Appendix A
SWMU Status Table

Corrective/ Remedial Action Release Unit #	Corrective/Remedial Action Unit Description	RRS Closure	Closure Date	ICM/ Remedial Action Conducted	Institutional Control Required	LTM Groundwater Required?	Inspection/ Maintenance Required?	2014 Maintenance?	Maintenance Type
AOC 4	Asbestos Installation (Plant-wide)	Admin Closure	2003	N	N	N	N		
AOC 9	Site-Wide, Underground Storage Tanks	Admin Closure	2003	N	N	N	N		
SWMU 100	Waste Accumulation Area, (Bldg 12-42)	Admin Closure	2003	N	N	N	N		
SWMU 101	Waste Accumulation Area, Bldg 12-59	Admin Closure	2003	D&D	N	N	N		
SWMU 102	Bldg 12-68 Batch Master, Northeast Corner	Admin Closure	1997, 2003	N	N	N	N		
SWMU 104	Waste Accumulation Area, (Bldg 12-82)	Admin Closure	2003	N	N	N	N		
SWMU 105	Waste Accumulation Area, (Bldg 12-84)	Admin Closure	2003	N	N	N	N		
SWMU 107	Bldg 16-5, Flammable Liquid Storage	Admin Closure	2003	N	N	N	N		
SWMU 111	Bldg 11-36 Solvent Tanks	Admin Closure	2001	N	N	N	N		
SWMU 112	Bldg 11-36 Solvent Tanks	Admin Closure	2001	N	N	N	N		
SWMU 114	Bldg 11-36 Scrubber System	Admin Closure	2001	D&D	N	N	N		
SWMU 115	Bldg 11-36 Carbon Filter	Admin Closure	2001	D&D	N	N	N		
SWMU 116	Bldg 11-36 Sludge Filters	Admin Closure	2001	D&D	N	N	N		
SWMU 124	Bldg 11-50 Waste water Treatment System	Admin Closure	2001	N	N	N	N		
SWMU 125	Bldg 12-43 HE Contaminated Charcoal Boxes	Admin Closure	2001	N	N	N	N		
SWMU 126	Miscellaneous HE Contaminated Waste Dumpsters	Admin Closure	2001	N	N	N	N		

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SWMU 127	Miscellaneous Non-hazardous Waste Dumpsters	Admin Closure	2001	N	N	N	N		
SWMU 128	Portable HE Waste water Tanks	Admin Closure	2001	N	N	N	N		
SWMU 129a	HE Contaminated Sludge Containers, Bldg 11-44	Admin Closure	2001	N	N	N	N		
SWMU 129b	HE Contaminated Sludge Containers Bldg 12-43	Admin Closure	2001	N	N	N	N		
SWMU 131	Portable Waste Oil Storage Tanks (Bldg 12-35)	Admin Closure	2001	N	N	N	N		
SWMU 132	Vacuum Guzzlers	Admin Closure	2001	N	N	N	N		
SWMU 134	Bldg 11-29 Silver Recovery	Admin Closure	2001	N	N	N	N		
SWMU 137	Bldg 12-41, Paint Shop Waste water Tank	Admin Closure	2003	N	N	N	N		
SWMU 138	Zone 12 Paint Shop Sandblaster Collection Cone	Admin Closure	2001	N	N	N	N		
SWMU 141	Classified Waste Incinerator	Admin Closure	2001	N	N	N	N		
SWMU 142	Miscellaneous Hood and Filter Systems, 24 Bldgs	Admin Closure	2001	N	N	N	N		
SWMU 59	Landfill East of Pad 11-13 (Duplicate of SVS 5)	Admin Closure	2003	N	N	N	N		
SWMU 62	Landfill 11	Admin Closure	2004	N	N	N	N		
SWMU 65	Landfill 14 (Duplicate of SVS 6)	Admin Closure	2003	N	N	N	N		
SWMU 76	Firing Site 18	Admin Closure	2001	N	N	N	N		

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SWMU 77	Firing Site 23, Filter/Exhaust System	Admin Closure	9/19/2001	N	N	N	N		
SWMU 83	Bldg 4-8, Container Storage Bldg, Asbestos Staging Area	Admin Closure	2001	N	N	N	N		
SWMU 85	MOCA Waste Accumulation Area, Bldg 12-16	Admin Closure	2001	N	N	N	N		
SWMU 88	11-41 Compressor Bldg Waste Accumulation	Admin Closure	2003	N	N	N	N		
SWMU 89	Waste Accumulation Area, Bldg 12-2 North Hall	Admin Closure	2003	N	N	N	N		
SWMU 90	Waste Accumulation Area, Bldg 12-9	Admin Closure	2003	N	N	N	N		
SWMU 91	Waste Accumulation Area, Bldg 12-9 Solvent Storage Shed	Admin Closure	2003	N	N	N	N		
SWMU 92	Waste Accumulation Area, Bldg 12-9 (outside)	Admin Closure	2003	N	N	N	N		
SWMU 93	Waste Accumulation Area, Bldg 12-111 Paint Shop	Admin Closure	2003	N	N	N	N		
SWMU 94	Waste Accumulation Area, Bldg 12-R-13 (outside)	Admin Closure	2003	N	N	N	N		
SWMU 95	Waste Accumulation Area, Bldg 12-18 (outside)	Admin Closure	2003	N	N	N	N		
SWMU 96	Waste Accumulation Area, Bldg 12-21	Admin Closure	2001	N	N	N	N		
SWMU 98	Bldg 12-38 Solvent Storage	Admin Closure	2003	N	N	N	N		

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SWMU 99	Waste Accumulation Area, Bldg 12-41	Admin Closure	2003	N	N	N	N		
Unassigned	Unlined Landfill/Landfill 10 North of Firing Site 1	Admin Closure	2004	N	N	N	N		
Pemitted Unit 53	Igloo 4-72 Storage	Active		N	N	N	N		
SVS 4	Old Pistol Range	Active		N	N	N	N		
SWMU 28	Active Burn Tray	Active		NA	N	N	N		
SWMU 29	Active Burn Tray	Active		NA	N	N	N		
SWMU 30	Active Burn Tray	Active		NA	N	N	N		
SWMU 31	Active Burn Tray	Active		NA	N	N	N		
SWMU 32	Active Burn Tray	Active		NA	N	N	N		
SWMU 33	Active Burn Tray	Active		NA	N	N	N		
SWMU 34	Active Burn Tray	Active		NA	N	N	N		
SWMU 35	Active Burn Tray	Active		NA	N	N	N		
SWMU 36	Active Burn Tray	Active		NA	N	N	N		
SWMU 69	Firing Site 4	Active		N	N	N	N		
SWMU 72	Firing Site 10	Active		N	N	N	N		
SWMU 74	Firing Site 21	Active		N	N	N	N		
SWMU 75	Firing Site 22	Active		N	N	N	N		
SWMU 78	Firing Site 24, Concrete Sump	Active		N	N	N	N		
AOC 1	Transformer Leak (Bldg 11-14A)	3		Excavation	Y	Y	N		
AOC 10a	Bldg 12-43A Pesticide Rinse Area	3		Excavation	Y	Y	N		
AOC 10b	Bldg 12-51 Pesticide Rinse Area	3		N	Y	Y	N		
AOC 11	Fire Training Area Burn Pits	3		Excavation	Y	Y	N		
AOC 12	Paint Shop/ Solvent Pit (Bldg 12-5D)	3		N	Y	Y	N		
AOC 13a	Former Cooling Tower in Zone 12 (Pad)	3		Excavation	Y	Y	N		

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AOC 13b	Former Cooling Tower in Zone 12 (Piping/Soil)	3		Excavation	Y	Y	N		
AOC 14	Battery Storage Area (Bldg 12-18)	3		N	Y	Y	N		
AOC 15	DDT Release (Bldg 12-35)	3		Excavation	Y	Y	N		
AOC 3a	Former Boiler House Areas	3		N	Y	Y	N		
AOC 3b	Zone 11 Former Boiler House Areas	3		N	Y	Y	N		
AOC 5	Electrical Equipment Bone Yard Near Bldg 12-5	3		N	Y	Y	N		
AOC 7a	Bldg 11-36 Sulfuric Acid Spills	3		N	Y	Y	N		
AOC 7c	Bldg 12-64 Sulfuric Acid Spills	3		Excavation	Y	Y	N		
AOC 8a	Pad 11-12 Solvent Leaks	3		N	Y	Y	N		
AOC 8b	Pad 11-13 Solvent Leaks	3		N	Y	Y	N		
AOC 8c	Bldg 11-17 Solvent Leaks	3		N	Y	Y	N		
AOC 8d	Pad 11-22 Solvent Leaks	3		N	Y	Y	N		
AOC 8e	Bldg 11-36 Solvent Leaks	3		N	Y	Y	N		
SVS 2	Parallel Depressions Bldg 11-26	3		N	Y	Y	N		
SVS 3 (SWMU 67)	Carbon Black Burial Area near Bldg 10-7	3		N	Y	Y	N		
SVS 5	Landfill East of Pad 11-13	3		N	Y	Y	Y		
SVS 6	Unnumbered Zone 7 Landfills	3		N	Y	Y	Y		

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SVS 7a&b	Magazine Demolition Debris Landfills (Zones 4 & 5)	3		N	Y	Y	Y		
SVS 8	Abandoned Zone 10 Landfill	3		Excavation	Y	Y	Y		
SWMU 1	Drainage Ditch (Bldg 12-17)	3		Excavation	Y	Y	N		
SWMU 10	Pantex Lake	3		N	Y	Y	N		
SWMU 103	Former Battery Storage Area, (Bldg 12-81)	3		N	Y	Y	N		
SWMU 113	Overflows from Bldg 11-36 Collection System/Sump	3		D&D /	Y	Y	N		
SWMU 117	High Explosives Settling Tank	3		D&D / Excavation	Y	Y	N		
SWMU 118	Equalization Basin	3		D&D / Excavation	Y	Y	N		
SWMU 119a	High Explosives Filters	3		D&D	Y	Y	N		
SWMU 119b	High Explosives Filters	3		D&D	Y	Y	N		
SWMU 12	Drainage Ditch Near Former 11-14 Pond	3		Excavation	Y	Y	N		
SWMU 120a	Carbon Filters	3		D&D	Y	Y	N		
SWMU 120b	Carbon Filters	3		D&D	Y	Y	N		
SWMU 121	High Explosives Settling Tank	3		D&D / Excavation	Y	Y	N		
SWMU 122a	Equalization Basin	3		D&D / Excavation	Y	Y	N		
SWMU 122b	Bldg 12-24N & Bldg 12-43 Upland Soil	3		Excavation / In Situ Treatment	Y	Y	N		
SWMU 123	Concrete Sump & Waste water Treatment Unit	3		D&D	Y	Y	N		
SWMU 13	Former Solar Evaporation Pond (Bldg 11-51)	3		N	Y	Y	N		

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SWMU 135	Leaching Bed (Bldg 12-44E)	3		N	Y	Y	N		
SWMU 136	Subsurface Leaching Bed (Bldg 12-59)	3		D&D	Y	Y	N		
SWMU 14*	Explosive Burn Pad 1 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 143a	Former Waste Drum Storage Areas (Bldg 10-9)	3		N	Y	Y	N		
SWMU 143b	Former Waste Drum Storage Areas (Bldg 10-7)	3		N	Y	Y	N		
SWMU 144	Zone 10 TNT Settling Pit (Bldg 10-13)	3		Excavation	Y	Y	N		
SWMU 145	Zone 10 TNT Settling Pit (Bldg 10-17)	3		Excavation	Y	Y	N		
SWMU 146	Zone 10 TNT Settling Pit (Bldg 10-26)	3		Excavation	Y	Y	N		
SWMU 147	Bldg 11-13 TNT Settling Pit	3		Excavation	Y	Y	N		
SWMU 148	Bldg 11-17 TNT Settling Pits	3		Excavation	Y	Y	N		
SWMU 149	Bldg 11-26 TNT Settling Pit	3		N	Y	Y	N		
SWMU 15*	Explosive Burn Pad 2 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 150	Bldg 11-12 TNT Settling Pit	3		Excavation	Y	Y	N		
SWMU 16*	Explosive Burn Pad 3 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 17*	Explosive Burn Pad 4 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		

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SWMU 18*	Explosive Burn Pad 5 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 19*	Explosive Burn Pad 6 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 2	Drainage Ditch (Bldg 12-43)	3		Ditch Lining	Y	Y	Y	Soil and debris in liner	Cleaned out in late 2014
SWMU 20*	Explosive Burn Pad 7 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 21*	Explosive Burn Pad 7A (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 22*	Explosive Burn Pad 8 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 23*	Explosive Burn Pad 9 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 24*	Explosive Burn Pad 10 (including ash disposal trench)	3		Soil Cover	Y	Y	Y		
SWMU 25*	Explosive Burn Pad 11 (Including Wash Rack)	3		Soil Cover	Y	Y	N		
SWMU 26*	Explosive Burn Pad 12	3		Soil Cover	Y	Y	N		
SWMU 27*	Explosive Burn Pad 13	3		Excavation	Y	Y	N		
SWMU 3	Drainage Ditch (Bldg 11-44)	3		Excavation	Y	Y	N		
SWMU 37	Burning Ground Landfill 1	3		Engineered Cover	Y	Y	Y		
SWMU 38	Burning Ground Landfill 2	3		Engineered Cover	Y	Y	Y		
SWMU 39	Burning Ground Landfill 3	3		Engineered Cover	Y	Y	Y		

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SWMU 4	Drainage Ditch (Bldg 11-50)	3		N	Y	Y	N		
SWMU 40	Burning Ground Landfill 4	3		Engineered Cover	Y	Y	Y		
SWMU 41	Burning Ground Landfill 5	3		Engineered Cover	Y	Y	Y		
SWMU 42	Burning Ground Landfill 6	3		Engineered Cover	Y	Y	Y		
SWMU 43	Burning Ground Landfill 7	3		Engineered Cover	Y	Y	Y		
SWMU 44	Burning Ground Landfill 8	3		Engineered Cover	Y	Y	Y		
SWMU 45	Explosive Burn Cage	3		D&D / Excavation	Y	Y	N		
SWMU 46	Explosive Burn Cage	3		D&D	Y	Y	N		
SWMU 47	Chemical Burn / Evaporation Pits	3		SVE System	Y	Y	N		
SWMU 48	Burning Ground Solvent Evap. Pans	3		D&D	Y	Y	N		
SWMU 49	Burning Ground Solvent Evap. Pans	3		D&D	Y	Y	N		
SWMU 50	Burning Ground Solvent Evap. Pans	3		D&D	Y	Y	N		
SWMU 5-01a	Drainage Ditch(es) (Bldg 12-5)	3		Excavation	Y	Y	N		
SWMU 5-01b	Drainage Ditch(es) (Bldg 12-5B)	3		Excavation	Y	Y	N		
SWMU 5-02a	Drainage Ditch (Bldg 12-51)	3		N	Y	Y	N		
SWMU 5-02b	Drainage Ditch (Bldg 12-67)	3		Excavation	Y	Y	N		
SWMU 5-02c	Drainage Ditch (Bldg 12-110)	3		N	Y	Y	N		
SWMU 5-04a	Bldg 12-19 Drainage Ditches	3		Excavation	Y	Y	N		
SWMU 5-04b	Bldg 12-73 Drainage Ditches	3		Excavation	Y	Y	N		

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SWMU 5-05	Drainage Ditch (Bldgs 12-21 & 12-24)	3		Ditch Lining	Y	Y	Y	Soil and debris in liner	Cleaned out late 2014
SWMU 5-06a	Drainage Ditch (Bldg 12-44E)	3		Excavation	Y	Y	N		
SWMU 5-06b	Drainage Ditch (Bldg 12-81)	3		Excavation	Y	Y	N		
SWMU 5-07	Bldg 12-41 Drainage Ditch	3		Excavation	Y	Y	N		
SWMU 5-08	Drainage Ditch (Bldg 11-36)	3		Excavation	Y	Y	N		
SWMU 5-09a	Drainage Ditch (Bldg 11-17)	3		N	Y	Y	N		
SWMU 5-09b	Drainage Ditch (Bldg 11-20)	3		N	Y	Y	N		
SWMU 51	Burning Ground Solvent Evap. Pans	3		D&D	Y	Y	N		
SWMU 5-11	Main Perimeter Ditch	3		N	Y	Y	N		
SWMU 5-12a	Main Perimeter Ditch	3		Excavation	Y	Y	N		
SWMU 5-12b	Perimeter Drainage Ditch from Zone 12 to SWMU 5-15	3		N	Y	Y	N		
SWMU 5-13a,b,c	Drainage Ditches to Playa 1	3		Excavation	Y	Y	N		
SWMU 5-15 a&b	Drainage Ditch to Playa 4	3		N	Y	Y	N		
SWMU 52	Burn Racks and Flashing Pits	3		D&D / Excavation	Y	Y	N		
SWMU 54	Landfill 3	3		Excavation/ Engineered Cover	Y	Y	Y		
SWMU 55	Landfill 4	3		N	Y	Y	Y		
SWMU 56	Landfill 5	3		N	Y	Y	Y		
SWMU 57	Landfill 6	3		Excavation	Y	Y	Y		
SWMU 58	Landfill 7	3		N	Y	Y	Y		
SWMU 6	Playa 1	3		N	Y	Y	N		
SWMU 60	Landfill 9	3		N	Y	Y	Y		

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SWMU 61	Landfill 10	3		N	Y	Y	Y		
SWMU 64	Landfill 13	3		Administrative Soil Cover	Y	Y	Y		
SWMU 66	Landfill 15	3		N	Y	Y	Y		
SWMU 68a	Original Landfill	3		N	Y	Y	Y		
SWMU 68b	Landfill 1	3		Administrative Soil Cover	Y	Y	Y		
SWMU 68c	Landfill 2	3		Administrative Soil Cover	Y	Y	Y		
SWMU 68d	Sanitary Landfill	3		N	Y	Y	Y		
SWMU 7	Playa 2	3		N	Y	Y	N		
SWMU 8	Playa 3	3		N	Y	Y	N		
SWMU 82	Nuclear Weapon Accident Residue Storage	3		Excavation	Y	Y	N		
SWMU 84	Scrap, Salvage, and Storage Yard (Bldg 10-9)	3		Excavation	Y	Y	N		
SWMU 86	11-14 Solvent Storage Shed	3		N	Y	Y	N		
SWMU 87	Bldg 11-20 Solvent Storage Shed	3		N	Y	Y	N		
SWMU 9	Playa 4	3		N	Y	Y	N		
Unassigned	Demonstration Facilities	3		Excavation	Y	Y	N		
Unassigned	Former 11-15 Pond	3		N	Y	Y	N		
Unassigned	Former Leaching Bed North of Bldg 11-50 and West of Bldg 11-36	3		Excavation	Y	Y	N		
Unassigned	Concrete Sump (near Bldg 12-5B)	3		N	Y	Y	N		
Unassigned AOC	Zone 10 Landfills West and Southwest of SWMU 84 Scrap and Salvage Yard	3		N	Y	Y	Y		
Unassigned SWMU	Zone 10 Berms	3		N	Y	Y	N		

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Unassigned SWMU	Evaporation Pit East of Bay 3 (Bldg 11-20)	3		Excavation	Y	Y	N		
Unassigned SWMU	Evaporation Pit South of Bay 11/West of Bay 6 (Bldg 11-20)	3		Backfill/Cover	Y	Y	N		
Unassigned SWMU	SWMU Capacitor Bank Rupture	3		N	Y	Y	N		
AOC 7b	Bldg 12-4 Sulfuric Acid Spill	2	2004	N	Y	N	N		
Permitted Unit 1	Container Storage 11-7N Pad	2	2005	N	Y	N	N		
SVS 1	Denuded Area near Playa 1	2	2005	N	Y	N	N		
SWMU 106	Waste Accumulation Site at Bldg 16-1	2	2005	Excavation	Y	N	N		
SWMU 109	Concrete Sump (Bldg 12-68)	2	2004	Sump removal/Excavation	Y	N	N		
SWMU 11	Surface Impoundment in Zone 5 (Bldg FS-16)	2	2005	D&D	Y	N	N		
SWMU 110	Bldg 12-68 Electroplating Waste Retention Basin (Moat)	2	1997	N	Y	N	N		
SWMU 139	Photo Processing Leaching Bed (Bldg FS-10)	2	2005	N	Y	N	N		
SWMU 140	Old Sewage Treatment Plant/Sludge Beds	2	2005	D&D / Excavation	Y	N	N		
SWMU 5-03a	Drainage Ditches (Bldg12-68)	2	2004	Excavation	Y	N	N		
SWMU 5-03b	Drainage Ditches (Bldg 12-18)	2	2004	N	Y	N	N		
SWMU 5-03c	Drainage Ditches (Bldg 12-9)	2	2004	N	Y	N	N		
SWMU 5-03d	Drainage Ditch (Bldg 12-10)	2	2004	N	Y	N	N		

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SWMU 5-10	Drainage Ditches near the Old Sewage Treatment Plant	2	2005	Excavation	Y	N	N		
SWMU 5-14	Drainage Ditch from Zone 11 to Playa 2	2	2005	N	Y	N	N		
SWMU 53	Temporary High Explosives Burning Ground	2	2005	Excavation	Y	N	N		
SWMU 63	Landfill 12	2	2005	Administrative Soil Cover	Y	N	Y		
SWMU 70	Firing Site 5	2	1999	D&D / Excavation, Fence	Y	N	Y		
SWMU 71	Firing Site 6	2	2000	N	Y	N	N		
SWMU 73	Firing Site 15	2	2000	N	Y	N	N		
SWMU 97	Waste Accumulation Area, Bldg 12-34	2	1999	N	Y	N	N		
Unassigned	Dumpster Area near FS-11	2	2005	N	Y	N	N		
Unassigned AOC	Bldg 12-1 Laundry Sump	2	2004	Decontamination	Y	N	N		
Unassigned SWMU	FS-22 Container Gun Barrel	2	1999	D&D	Y	N	N		
Unassigned SWMU	11-14 Hypalon Pond and Waste water Line	2	1995	Backfill/Cover	Y	N	N		
AOC 2	Main Electrical Substation (4-28)	1	1993	N	N	N	N		
AOC 6a	Gasoline Leaks at Bldgs 12-35	1	1999	Tank Removal / Excavation	N	N	N		
AOC 6b	Gasoline Leak at Bldg 16-1	1	1999	N	N	N	N		
Permitted Unit 10	Container Storage Area (Conex WM7)	1	2001	N	N	N	N		
Permitted Unit 11	Container Storage Area (Conex WM8)	1	2001	N	N	N	N		
Permitted Unit 36	Bldgs 11-9 Tank	1	1999	N	N	N	N		
Permitted Unit 37	Bldg 11-9 Tank	1	1999	N	N	N	N		

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Permitted Unit 38	Bldg 11-15a Tank	1	1999	N	N	N	N		
Permitted Unit 39	Bldg 11-15a Tank	1	1999	N	N	N	N		
Permitted Unit 40	Bldg 11-9 Container Storage Area	1	2002	D&D	N	N	N		
Permitted Unit 46	Container Storage Area (Conex WM1-A)	1	1998	N	N	N	N		
Permitted Unit 47	Container Storage Area (Conex WM1-B)	1	1998	N	N	N	N		
Permitted Unit 48	Container Storage Area (Conex WM3-A)	1	1998	N	N	N	N		
Permitted Unit 49	Container Storage Area (Conex WM5-A)	1	1998	N	N	N	N		
Permitted Unit 50	Container Storage Area (Conex WM5-B)	1	1998	N	N	N	N		
Permitted Unit 52	Igloo 4-46 Storage	1	1998	N	N	N	N		
Permitted Unit 54	Igloo 4-74 Storage	1	1998	N	N	N	N		
Permitted Unit 8	Container Storage Area (Conex WM5)	1	2001	N	N	N	N		
Permitted Unit 9	Container Storage Area (Conex WM6)	1	2001	N	N	N	N		
SWMU 108	Bldg 12-68 Batch Master	1	1997	D&D	N	N	N		
SWMU 130	Portable Waste Solvent Tanks	1	2001	Excavation	N	N	N		
SWMU 133	UST #30, Waste Oil Tank at Bldg 16-1	1	1999	N	N	N	N		
SWMU 79a	11-7A (Unit 41) Container	1	2005	N	N	N	N		
SWMU 79b	11-7B Pad (Unit 42) Container	1	2005	N	N	N	N		
SWMU 80	Container Storage Area Conex 1 (Permitted Unit 4) in Zone 4	1	2000	N	N	N	N		

Corrective/ Remedial Action Release Unit #	Corrective/Remedial Action Unit Description	RRS Closure	Closure Date	ICM/ Remedial Action Conducted	Institutional Control Required	LTM Groundwater Required?	Inspection/ Maintenance Required?	2014 Maintenance?	Maintenance Type
SWMU 80	Container Storage Area Conex 2 (Permitted Unit 5) in Zone 4	1	2000	N	N	N	N		
SWMU 80	Container Storage Area Conex 3 (Permitted Unit 6) in Zone 4	1	2000	N	N	N	N		
SWMU 80	Container Storage Area Conex 4 (Permitted Unit 7) in Zone 4	1	2000	N	N	N	N		
SWMU 81	Mixed Waste Storage, Magazine 4-19	1	1993	N	N	N	N		
Unassigned	UST #9 Bldg 12-17E	1	2004	Tank Removal / Excavation	N	N	N		
Unassigned	UST #7 Bldg 12-5B	1	1999	Tank Removal / Excavation	N	N	N		
Unassigned	UST #38 Bldg 12-98	1	1999	Tank Removal / Excavation	N	N	N		
Unassigned	UST #39 North of Bldg 12-84A	1	1999	Tank Removal / Excavation	N	N	N		

*SWMUs 14-27 at the Burning Ground consist of old burn pads that were carried through investigation and cleanup. Also included with those burn pads is an ash disposal trench that resulted from the disposal of ash from the burn pads. The final remedy for SWMUs 14-27 was a soil cover over the trench that must be inspected and maintained as necessary.

Administrative Closure – These sites were identified as potential release sites as part of the RCRA Facility Assessment. No evidence of release could be found upon further investigation, so these sites were not considered as a solid waste management unit and were closed.

RRS 1 – The sites were investigated and determined that all wastes and media were within background concentrations or below the PQL. These sites were closed with no further controls required.

RRS 2 – All wastes and contaminated media were remediated to health-based cleanup levels. Additionally, an ecological risk evaluation determined these sites posed no risk to the environment. These sites do not require post-closure care; however, deed recordation of the contaminated area was completed and the sites were restricted to industrial use.

RRS 3 - These sites required a human health and ecological risk assessment to determine the areas that required remedial action. All sites required deed recordation of the contamination, restriction of property use to industrial, and appropriate institutional controls to prevent contaminated groundwater usage and cross-contamination from perched groundwater to the drinking water aquifer. Some of these sites also require post-closure care such as maintenance of soil covers, fencing, and ditch liners.
Active – These sites are still in use for their intended purpose. These sites will undergo a full investigation and cleanup process once the site is no longer used by Pantex.

Appendix B
Extraction Well Flow Data

B. Extraction Well Flow Calculations

The flows included here have been calculated from information obtained from each pump and treat system at Pantex.

The P1PTS data acquisition system recorded hourly flow rates and well operation time. This was used to calculate the total flow from each well by month. The system also records total influent flow rates and total volume each day. 2014 SEPTS flow data was recorded in the I-Historian software and average hourly flow rates were downloaded from the I-Historian database. The total flow discussed in Chapter 2 is based on the influent flow volume which is easily calibrated and closely tracked. Because flow rates and operational status of the well is recorded hourly rather than each minute, there will be some inconsistencies between the total calculated flow from the wells vs. the influent flow into the system. These well flow calculations provide a basis for understanding the flow rate for each well, the amount of downtime, and allows for tracking of pumping rates for the wells. Changes in these rates can trigger maintenance at the wells.

B.1. P1PTS Flow Volumes

The P1PTS system was in its fifth full year of operation. Several wells had intermittent or prolonged wireless communication problems so were not pumping at various times of the year. Pumping was also affected by system downtime due to the WWTF and irrigation system being unable to receive water during maintenance and repairs or due to upgrades.

Table 1 presents a summary of well operation downtime by month. This shows the number of days a well pumped all or part of the day. All wells pumped more than 80% of the time. Well downtime was due primarily to pump failures and transducer failures. Table 2 presents the downtime contributors. The operation time for the system and the wells should continue to improve as the system continues to be optimized.

Table 1. Days Operated per Month for P1PTS Wells

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	2014 Well % Operation
PTX06-EW-69	31	15	24	30	30	30	31	29	30	31	30	31	342	93.7
PTX06-EW-70	24	4	24	30	30	30	31	27	30	31	30	31	322	88.2
PTX06-EW-71	31	15	24	30	30	30	31	29	30	31	30	31	342	93.7
PTX06-EW-72	31	15	24	30	30	30	31	27	30	31	28	31	338	92.6
PTX06-EW-73	31	15	24	30	30	30	31	29	30	31	30	31	342	93.7
PTX06-EW-74	31	15	24	30	30	30	31	27	30	31	30	31	340	93.2
PTX06-EW-75	31	15	24	30	30	30	31	29	30	31	30	31	342	93.7
PTX06-EW-78A	31	15	24	29	30	30	31	28	30	31	30	31	340	93.2
PTX06-EW-79	31	15	24	29	30	1	24	28	30	31	30	31	304	83.3
PTX06-EW-80	31	15	24	30	30	30	31	29	30	31	30	31	342	93.7

Table 2. P1PTS Well Downtime Contributors

Month	Operational Contributor	Well Contributions	# Wells Affected
January	WWTF	Bad pump/motor	1
February	WWTF	Bad pump/motor	1
March	WWTF	none	0
April	Power surge, boron resin exchange	Transducer, communications issues	2
May	WWTF, GAC exchange	Transducer issue	1
June	WWTF	Transducer issue	1
July		Transducer issue	1
August	WWTF, GAC exchange	Unknown shutdown	4
September	none	none	0
October	none	none	0
November	GAC exchange	Transducer issue	1
December	none	none	0

B.2. SEPTS Flow Volumes

The SEPTS has been operating since 1995 when it started as a treatability study. It has been expanded to become a corrective action for the southeastern portion of the perched groundwater plumes. Table 3 presents a summary of well operation time by month and the pumping priority for the well. Approximately 90% of the wells (55 of 61) pumped more than 50% of the time, considering the plant shutdown from late September through December for system upgrades. Well operation time has been impacted by various electrical and control problems, but the primary impact for the operation of many wells is due to the prioritization of

pumping from the well field. As discussed in Chapter 2, the SEPTS, as designed, can treat up to 300 gpm, although the system slightly exceeded 300 gpm at times. Since the system well field capacity exceeds 300 gpm, pumping priorities were established for extraction well operation (see Figure 2-13 in Chapter 2).

Table 4 provides a summary of well downtime contributions by month. Review of system logs indicates that the largest contributors to well downtime were various operational issues with individual wells, controls, and well prioritization. Although repairs are needed at some wells, the well field is still capable of reaching the 90% throughput goal.

Table 3. Days Operated per Month for SEPTS Wells

Well	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	2014 Well % Operation	Priority
PTX06-EW-01	0	11	21	30	31	30	31	25	30	N/A	N/A	N/A	209	71.3	7
PTX06-EW-02	0	15	21	30	31	30	31	30	30	N/A	N/A	N/A	218	74.4	7
PTX06-EW-03	9	22	24	30	31	30	31	30	30	N/A	N/A	N/A	237	80.9	7
PTX06-EW-04	30	13	22	30	31	30	31	30	29	N/A	N/A	N/A	246	84.0	1
PTX06-EW-06	20	12	5	15	26	0	18	24	15	N/A	N/A	N/A	135	46.1	7
PTX06-EW-07	30	18	24	30	31	30	31	30	29	N/A	N/A	N/A	253	86.3	1
PTX06-EW-09	30	25	24	30	31	30	31	30	0	N/A	N/A	N/A	231	78.8	4
PTX06-EW-10	30	25	24	30	31	30	31	30	0	N/A	N/A	N/A	231	78.8	2
PTX06-EW-12	22	18	24	30	31	30	31	30	29	N/A	N/A	N/A	245	83.6	1
PTX06-EW-15	0	15	24	30	27	19	31	30	0	N/A	N/A	N/A	176	60.1	6
PTX06-EW-16	30	18	22	29	31	30	31	16	29	N/A	N/A	N/A	236	80.5	1
PTX06-EW-17	30	18	24	30	31	26	31	16	29	N/A	N/A	N/A	235	80.2	1
PTX06-EW-18	30	18	24	30	31	30	31	16	29	N/A	N/A	N/A	239	81.6	1
PTX06-EW-19	30	18	24	30	31	26	31	16	0	N/A	N/A	N/A	206	70.3	1
PTX06-EW-20	20	25	24	22	27	19	28	30	30	N/A	N/A	N/A	225	76.8	7
PTX06-EW-21	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	0	0.0	7
PTX06-EW-22	29	18	16	24	26	25	3	17	30	N/A	N/A	N/A	188	64.2	7
PTX06-EW-23	0	22	21	30	27	19	31	30	30	N/A	N/A	N/A	210	71.7	5
PTX06-EW-24	0	11	21	18	27	19	31	27	30	N/A	N/A	N/A	184	62.8	7
PTX06-EW-25	0	11	21	30	27	19	3	17	30	N/A	N/A	N/A	158	53.9	7
PTX06-EW-26	0	15	21	30	31	30	31	30	30	N/A	N/A	N/A	218	74.4	5
PTX06-EW-27	30	18	24	30	31	30	31	30	30	N/A	N/A	N/A	254	86.7	1
PTX06-EW-28	0	11	24	6	1	0	0	26	25	N/A	N/A	N/A	93	31.7	6
PTX06-EW-29	30	18	21	6	5	30	25	29	22	N/A	N/A	N/A	186	63.5	7
PTX06-EW-30	9	7	21	30	31	30	31	30	30	N/A	N/A	N/A	219	74.7	5
PTX06-EW-31	15	10	21	30	31	30	31	30	30	N/A	N/A	N/A	228	77.8	5
PTX06-EW-32	30	25	24	30	31	30	31	30	30	N/A	N/A	N/A	261	89.1	3

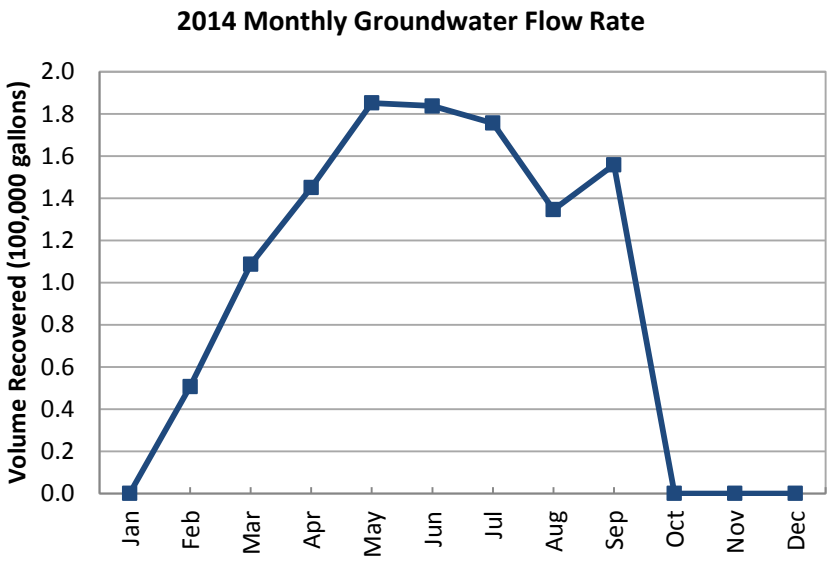
Well	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total	2014 Well % Operation	Priority
PTX06-EW-33	30	25	24	30	31	30	31	30	30	N/A	N/A	N/A	261	89.1	3
PTX06-EW-34	30	18	24	30	31	30	31	30	30	N/A	N/A	N/A	254	86.7	3
PTX06-EW-35	30	18	24	30	31	30	31	30	30	N/A	N/A	N/A	254	86.7	1
PTX06-EW-36	30	18	24	30	5	30	31	30	22	N/A	N/A	N/A	220	75.1	3
PTX06-EW-37	30	25	24	6	5	30	31	30	22	N/A	N/A	N/A	203	69.3	4
PTX06-EW-38	30	25	21	6	5	30	31	30	25	N/A	N/A	N/A	203	69.3	4
PTX06-EW-39	30	25	10	0	5	30	31	30	25	N/A	N/A	N/A	186	63.5	4
PTX06-EW-40	20	19	5	15	26	0	18	29	25	N/A	N/A	N/A	157	53.6	4
PTX06-EW-41	20	19	5	8	0	0	0	26	30	N/A	N/A	N/A	108	36.9	5
PTX06-EW-42	0	0	0	0	0	0	18	29	30	N/A	N/A	N/A	77	26.3	3
PTX06-EW-43	20	19	5	15	26	0	17	29	22	N/A	N/A	N/A	153	52.2	3
PTX06-EW-44	20	25	24	30	31	30	31	30	30	N/A	N/A	N/A	251	85.7	3
PTX06-EW-45	8	25	24	30	31	30	27	30	30	N/A	N/A	N/A	235	80.2	3
PTX06-EW-46	8	20	24	30	31	30	31	30	30	N/A	N/A	N/A	234	79.9	3
PTX06-EW-48	30	18	24	30	31	30	31	30	30	N/A	N/A	N/A	254	86.7	3
PTX06-EW-49	20	11	21	30	12	30	31	30	30	N/A	N/A	N/A	215	73.4	7
PTX06-EW-50	30	18	24	30	31	30	31	16	29	N/A	N/A	N/A	239	81.6	1
PTX06-EW-51	30	18	24	30	31	0	18	9	0	N/A	N/A	N/A	160	54.6	2
PTX06-EW-53	25	18	10	0	5	30	31	30	29	N/A	N/A	N/A	178	60.8	1
PTX06-EW-54	29	18	24	30	31	30	31	30	29	N/A	N/A	N/A	252	86.0	1
PTX06-EW-55	30	18	24	30	31	30	31	30	29	N/A	N/A	N/A	253	86.3	1
PTX06-EW-56	21	18	24	30	31	30	31	30	29	N/A	N/A	N/A	244	83.3	1
PTX06-EW-57	30	18	24	30	31	30	31	30	29	N/A	N/A	N/A	253	86.3	1
PTX06-EW-58	30	14	21	30	14	19	29	30	27	N/A	N/A	N/A	214	73.0	7
PTX06-EW-59	0	11	21	30	27	19	31	30	27	N/A	N/A	N/A	196	66.9	7
PTX06-EW-60	0	11	21	30	27	19	14	27	27	N/A	N/A	N/A	176	60.1	7
PTX06-EW-61	0	11	21	30	27	19	31	30	28	N/A	N/A	N/A	197	67.2	7
PTX06-EW-62	0	11	18	30	27	19	31	30	29	N/A	N/A	N/A	195	66.6	7
PTX06-EW-63	0	11	11	24	27	19	31	30	29	N/A	N/A	N/A	182	62.1	7
PTX06-EW-64	0	11	14	30	27	19	31	30	29	N/A	N/A	N/A	191	65.2	7
PTX06-EW-65	0	11	21	22	27	19	31	30	30	N/A	N/A	N/A	191	65.2	7
PTX06-EW-66	0	11	2	0	1	19	7	10	22	N/A	N/A	N/A	72	24.6	7
PTX06-EW-67	30	25	24	30	31	30	31	30	22	N/A	N/A	N/A	253	86.3	2
PTX06-EW-68	30	25	24	30	31	30	31	30	22	N/A	N/A	N/A	253	86.3	2

Table 4. SEPTS Well Downtime Contributors

Month	Operational Contributor	Well Contributions	# Wells Affected
Jan	WWTF, power loss	Unbalanced loading, loose wires, PLC issues	11
Feb	WWTF, power outage	LOTO, pump and motor & motor saver issues	8
Mar	WWTF	LLSD, LOTO, pump and motor issues	7
Apr	Power surge	Wiring issues, LOTO, LLSD, Pump & motor issues	8
May	WWTF	LLSD, motor saver problems, SCADA problems, O/L trip, flow meter issues, LOTO	7
Jun	WWTF	LOTO, pump and motor, transend issues	6
Jul	WWTF, Power outage	O/L trip, broken PRV, wiring, pump and motor issues	10
Aug	Power outage, system alarms	LOTO, pump and motor issues	13
Sep	System alarms	O/L trips, communications issues, Cr(VI) control	17
Oct	System reconfiguration shutdown	N/A	N/A
Nov	System reconfiguration shutdown	N/A	N/A
Dec	System reconfiguration shutdown	N/A	N/A

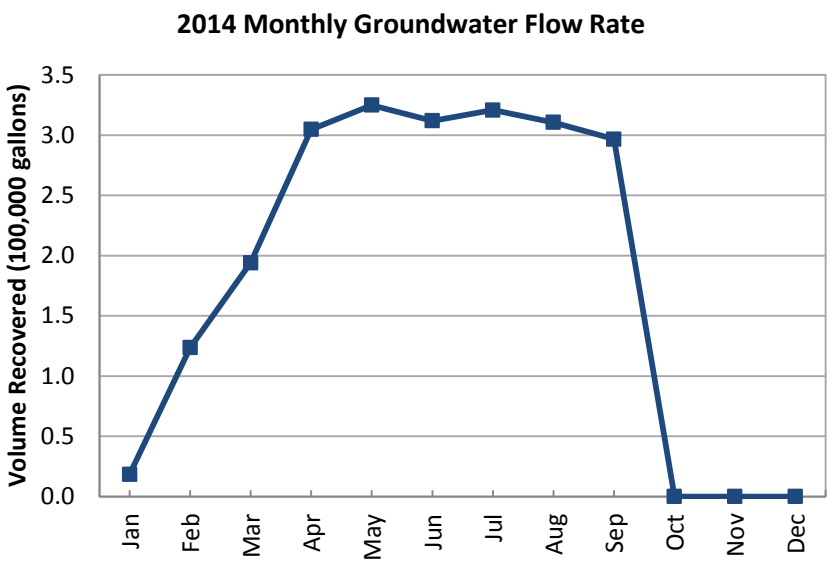
Southeast Pump and Treat System

PTX06-EW-1



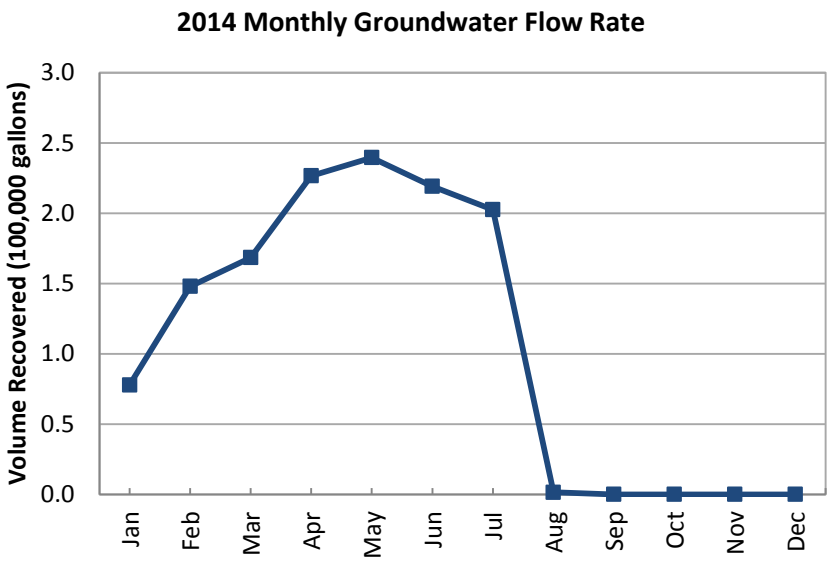
Month	Volume Recovered (gallons)
Jan	0
Feb	50,721
Mar	108,699
Apr	145,064
May	185,263
Jun	183,776
Jul	175,714
Aug	134,600
Sep	155,945
Oct	0
Nov	0
Dec	0
Total	**1,139,782**

PTX06-EW-2



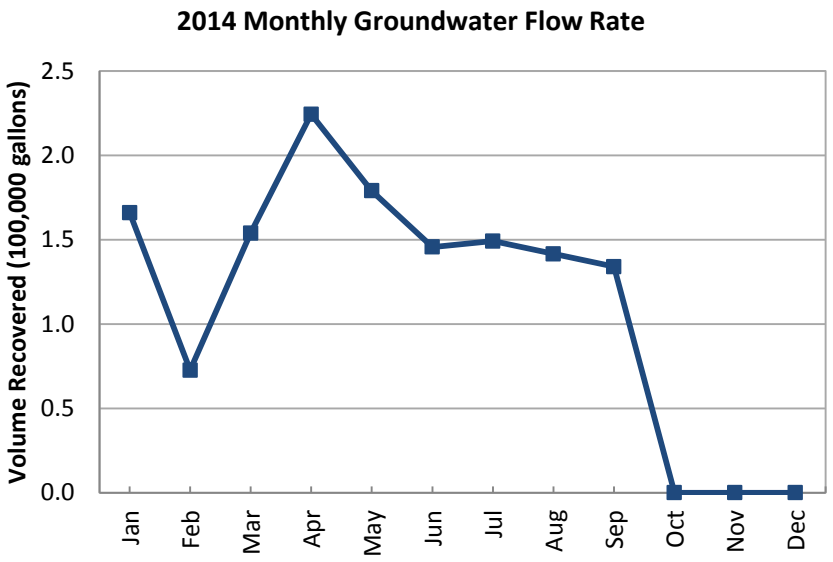
Month	Volume Recovered (gallons)
Jan	18,494
Feb	123,712
Mar	194,133
Apr	304,791
May	325,027
Jun	311,940
Jul	320,820
Aug	310,688
Sep	296,759
Oct	0
Nov	0
Dec	0
Total	**2,206,364**

PTX06-EW-3



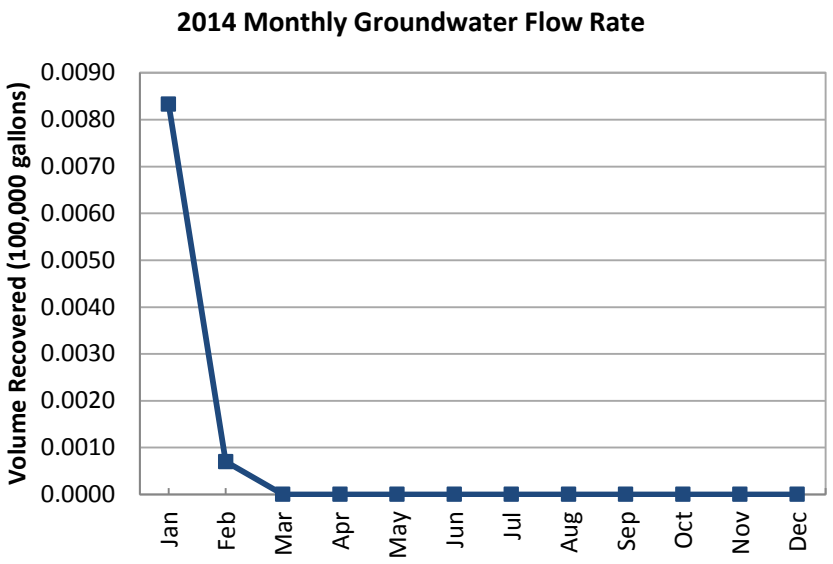
Month	Volume Recovered (gallons)
Jan	77,927
Feb	148,089
Mar	168,574
Apr	226,734
May	239,717
Jun	219,177
Jul	202,643
Aug	1,558
Sep	0
Oct	0
Nov	0
Dec	0
Total	**1,284,419**

PTX06-EW-4



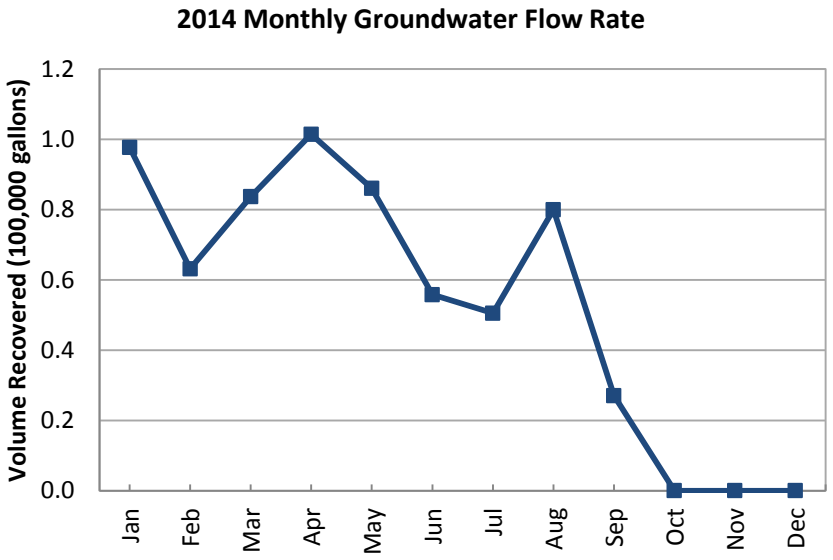
Month	Volume Recovered (gallons)
Jan	166,145
Feb	72,706
Mar	153,997
Apr	224,459
May	179,109
Jun	145,752
Jul	149,260
Aug	141,665
Sep	134,056
Oct	0
Nov	0
Dec	0
Total	**1,367,149**

PTX06-EW-6



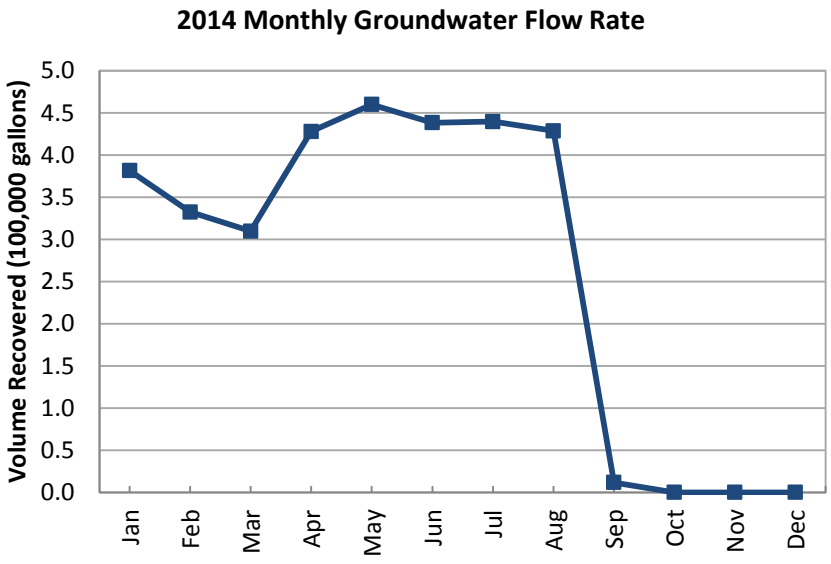
Month	Volume Recovered (gallons)
Jan	833
Feb	70
Mar	0
Apr	0
May	0
Jun	0
Jul	0
Aug	0
Sep	0
Oct	0
Nov	0
Dec	0
Total	**903**

PTX06-EW-7



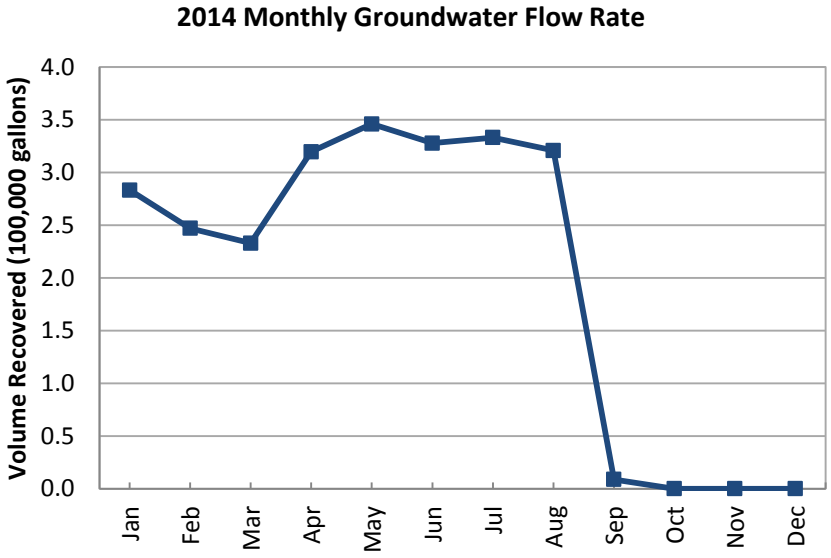
Month	Volume Recovered (gallons)
Jan	97,718
Feb	63,200
Mar	83,702
Apr	101,467
May	86,117
Jun	55,836
Jul	50,550
Aug	80,008
Sep	27,054
Oct	0
Nov	0
Dec	0
Total	**645,652**

PTX06-EW-9



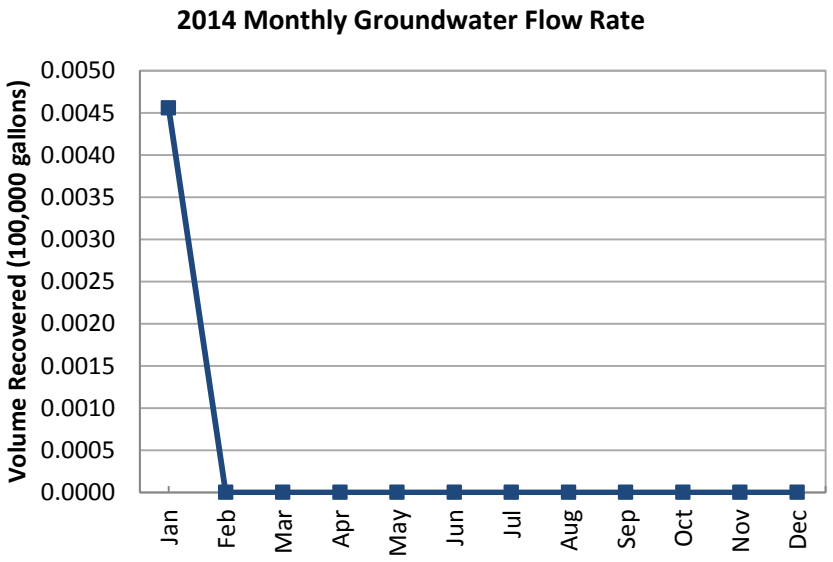
Month	Volume Recovered (gallons)
Jan	381,737
Feb	332,674
Mar	309,800
Apr	428,113
May	460,119
Jun	438,549
Jul	439,800
Aug	428,891
Sep	11,783
Oct	0
Nov	0
Dec	0
Total	**3,231,466**

PTX06-EW-10



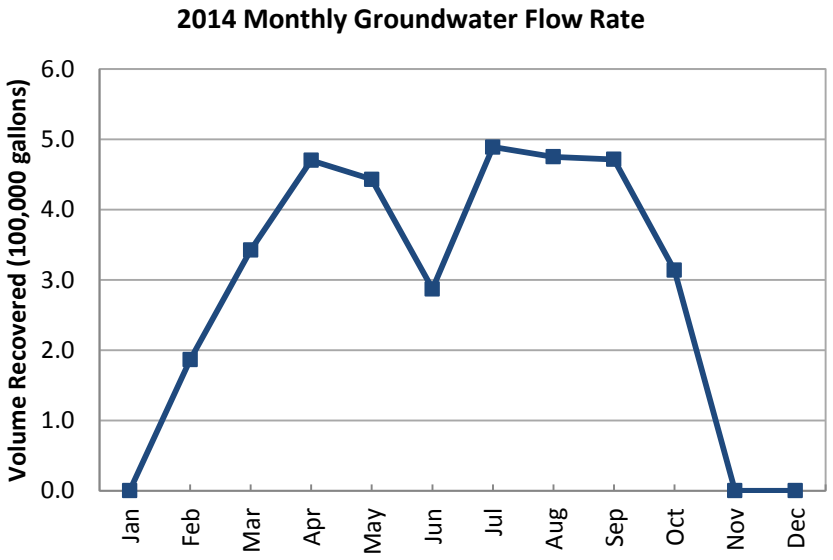
Month	Volume Recovered (gallons)
Jan	283,347
Feb	247,076
Mar	233,104
Apr	319,800
May	346,148
Jun	327,942
Jul	333,197
Aug	320,889
Sep	8,852
Oct	0
Nov	0
Dec	0
Total	**2,420,355**

PTX06-EW-12



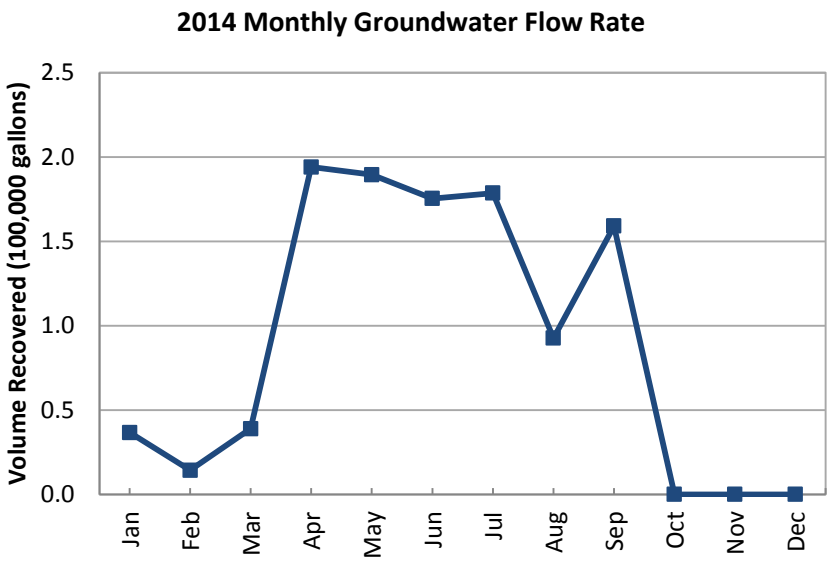
Month	Volume Recovered (gallons)
Jan	456
Feb	0
Mar	0
Apr	0
May	0
Jun	0
Jul	0
Aug	0
Sep	0
Oct	0
Nov	0
Dec	0
Total	**456**

PTX06-EW-15



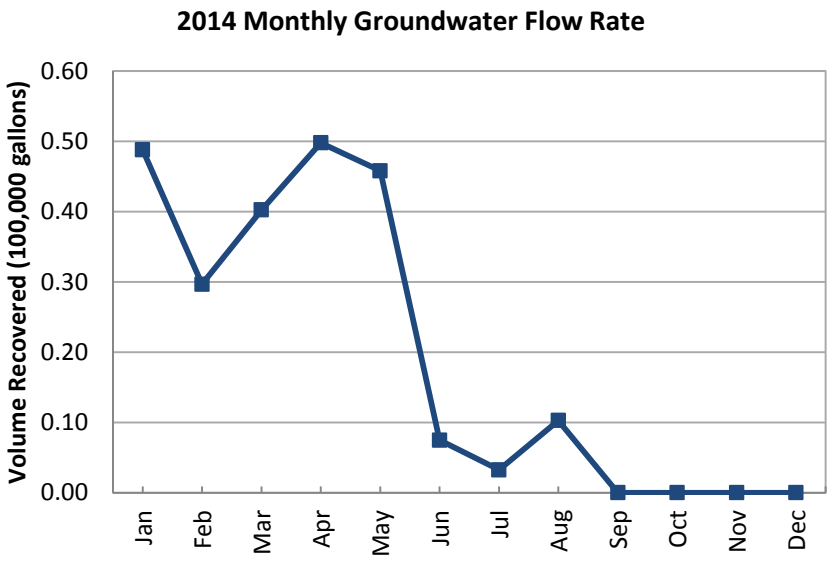
Month	Volume Recovered (gallons)
Jan	0
Feb	186,431
Mar	342,476
Apr	470,375
May	443,277
Jun	287,266
Jul	489,116
Aug	475,233
Sep	471,643
Oct	313,953
Nov	0
Dec	0
Total	**3,479,770**

PTX06-EW-16



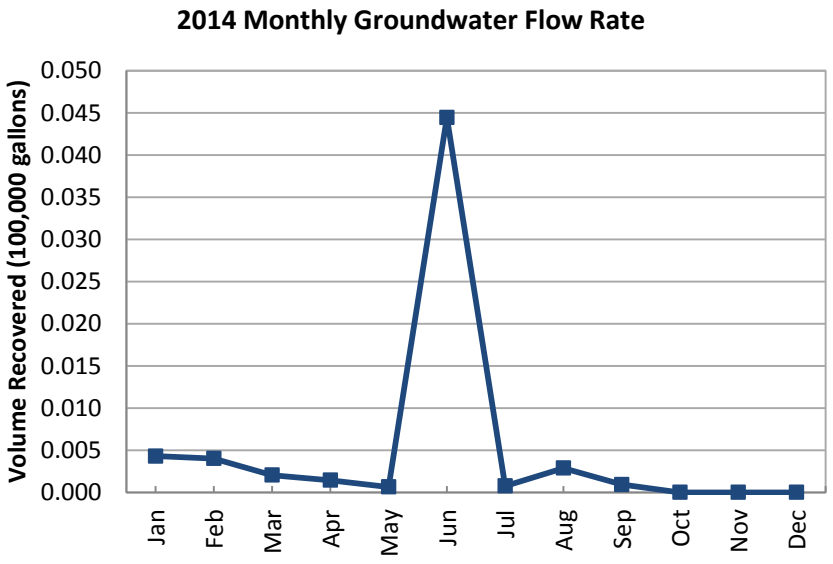
Month	Volume Recovered (gallons)
Jan	36,696
Feb	14,388
Mar	38,963
Apr	194,143
May	189,603
Jun	175,495
Jul	178,722
Aug	92,733
Sep	159,161
Oct	0
Nov	0
Dec	0
Total	**1,079,904**

PTX06-EW-17



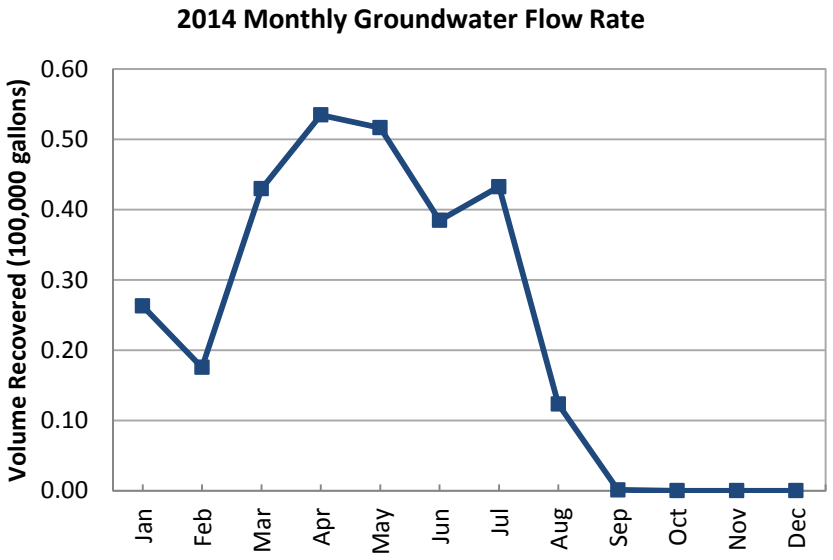
Month	Volume Recovered (gallons)
Jan	48,811
Feb	29,686
Mar	40,242
Apr	49,801
May	45,832
Jun	7,485
Jul	3,267
Aug	10,278
Sep	0
Oct	0
Nov	0
Dec	0
Total	**235,402**

PTX06-EW-18



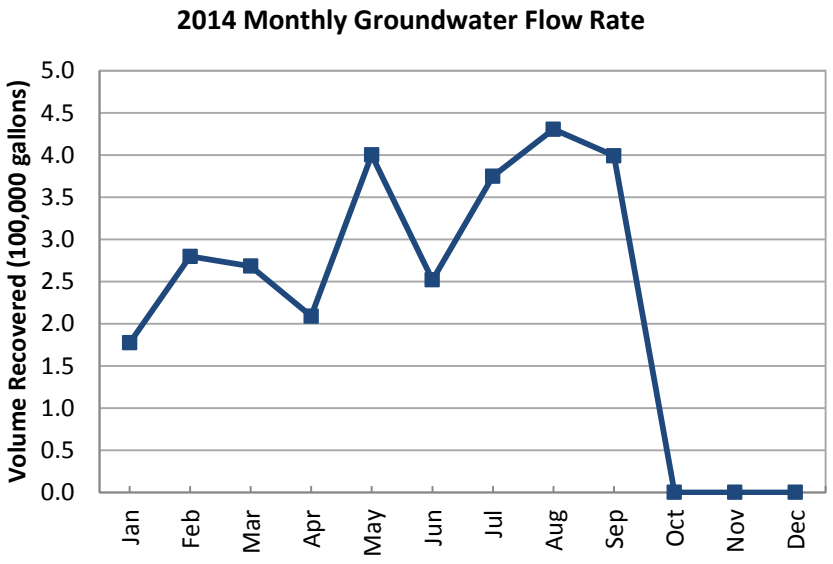
Month	Volume Recovered (gallons)
Jan	431
Feb	403
Mar	206
Apr	144
May	65
Jun	4,447
Jul	77
Aug	288
Sep	93
Oct	0
Nov	0
Dec	0
Total	**6,154**

PTX06-EW-19



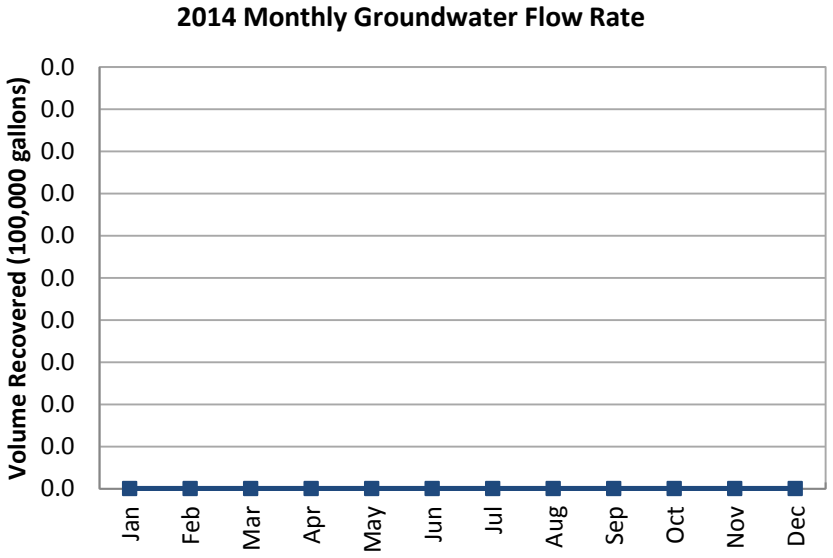
Month	Volume Recovered (gallons)
Jan	26,301
Feb	17,556
Mar	42,981
Apr	53,474
May	51,673
Jun	38,487
Jul	43,277
Aug	12,334
Sep	134
Oct	0
Nov	0
Dec	0
Total	**286,217**

PTX06-EW-20



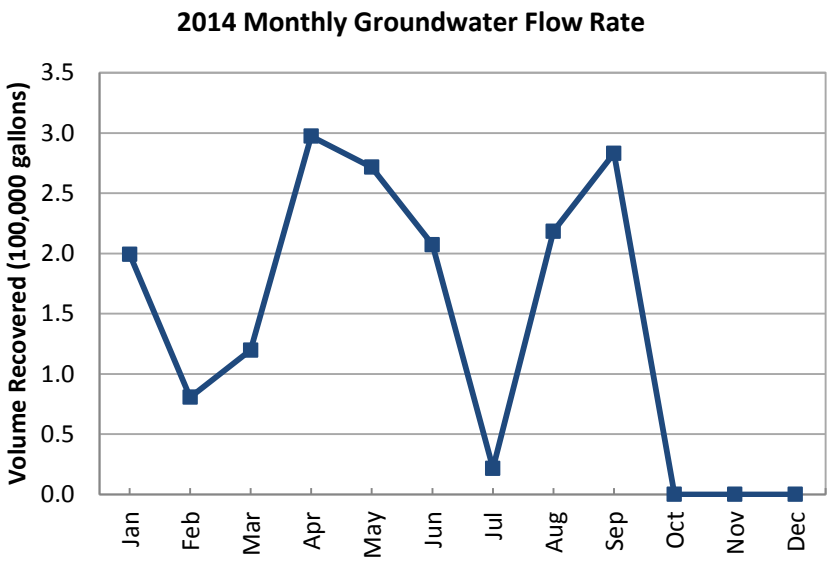
Month	Volume Recovered (gallons)
Jan	177,499
Feb	279,828
Mar	268,274
Apr	209,132
May	400,158
Jun	252,031
Jul	375,088
Aug	430,734
Sep	399,264
Oct	0
Nov	0
Dec	0
Total	**2,792,008**

PTX06-EW-21



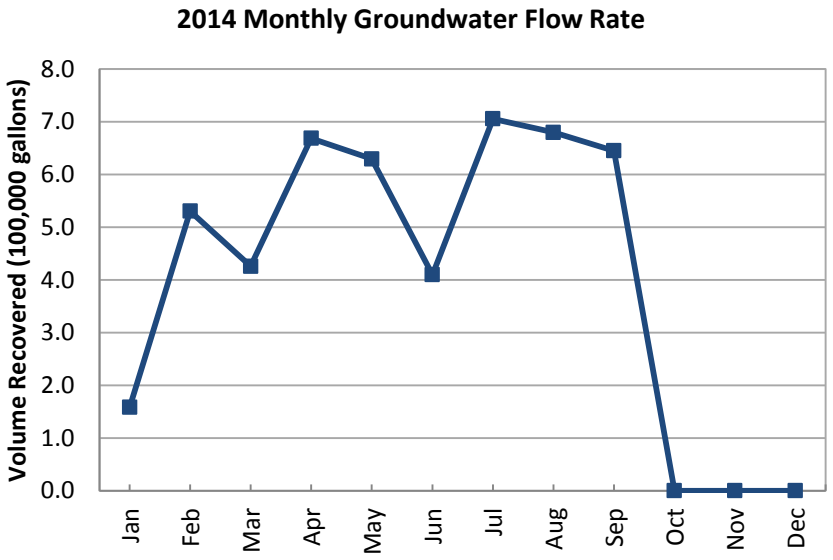
Month	Volume Recovered (gallons)
Jan	0
Feb	0
Mar	0
Apr	0
May	0
Jun	0
Jul	0
Aug	0
Sep	0
Oct	0
Nov	0
Dec	0
Total	**0**

PTX06-EW-22



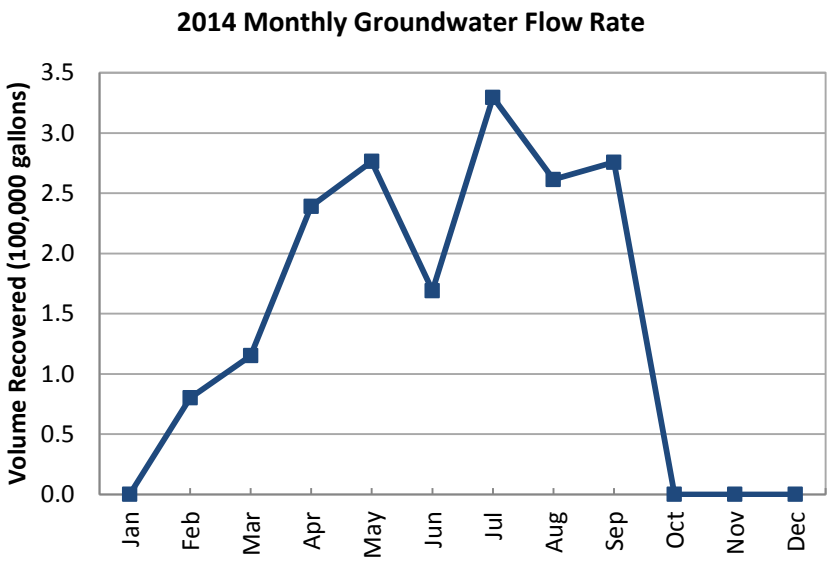
Month	Volume Recovered (gallons)
Jan	199,451
Feb	80,756
Mar	119,835
Apr	297,396
May	271,736
Jun	207,367
Jul	21,688
Aug	218,436
Sep	283,208
Oct	0
Nov	0
Dec	0
Total	**1,699,873**

PTX06-EW-23



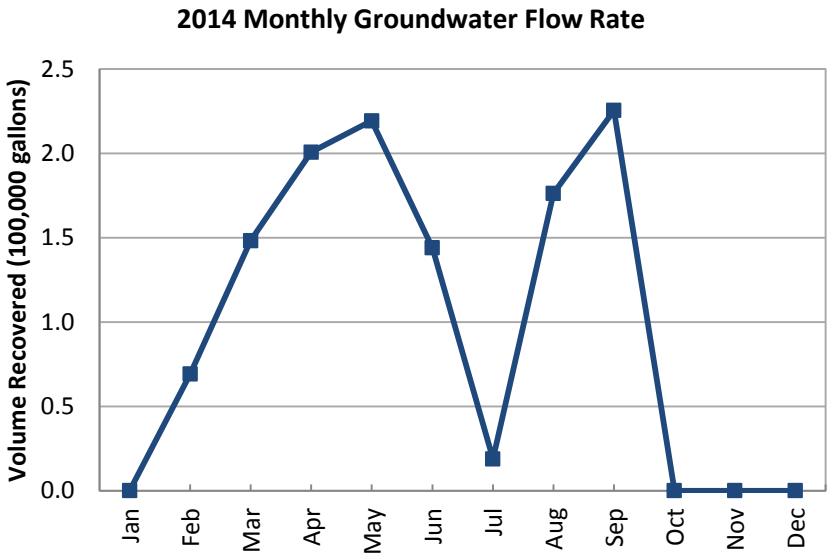
Month	Volume Recovered (gallons)
Jan	158,337
Feb	530,763
Mar	426,165
Apr	668,757
May	629,659
Jun	409,834
Jul	705,703
Aug	680,057
Sep	645,335
Oct	0
Nov	0
Dec	0
Total	**4,854,610**

PTX06-EW-24



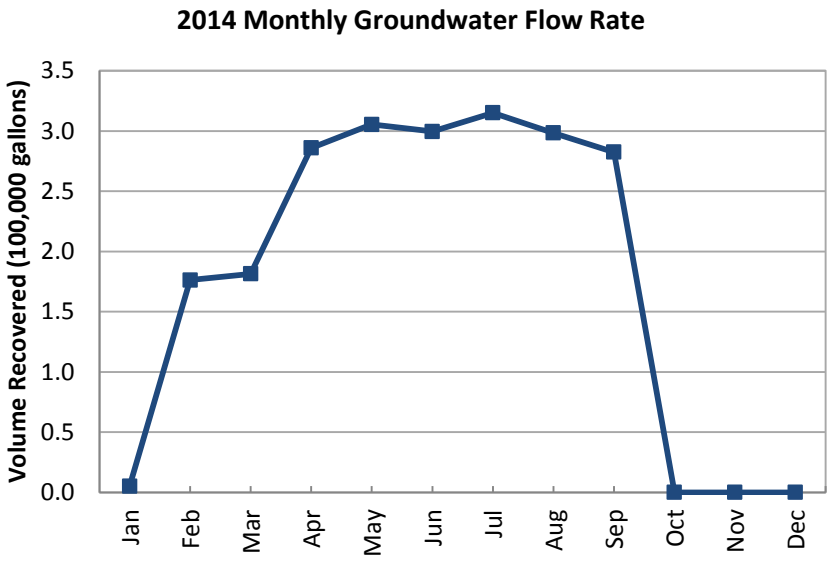
Month	Volume Recovered (gallons)
Jan	0
Feb	80,189
Mar	115,146
Apr	239,141
May	276,454
Jun	169,104
Jul	329,576
Aug	261,482
Sep	275,786
Oct	0
Nov	0
Dec	0
Total	**1,746,878**

PTX06-EW-25



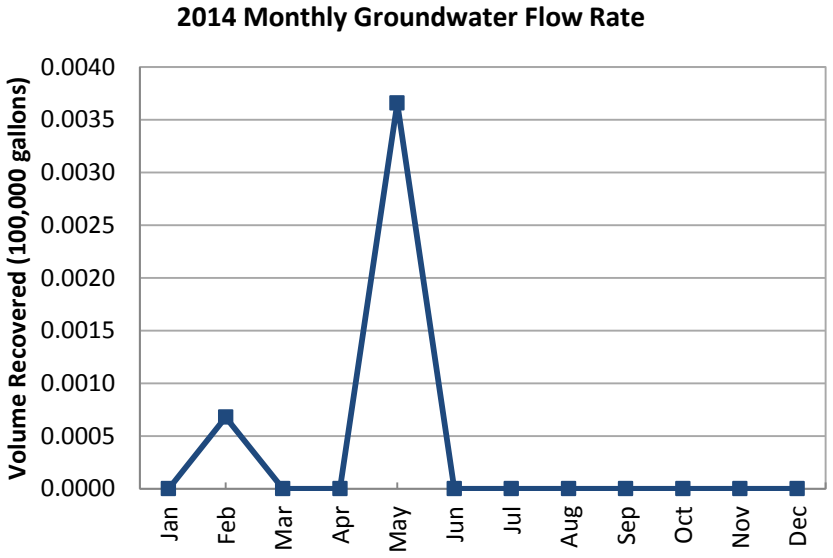
Month	Volume Recovered (gallons)
Jan	0
Feb	69,232
Mar	148,303
Apr	200,732
May	219,388
Jun	144,034
Jul	18,852
Aug	176,327
Sep	225,512
Oct	0
Nov	0
Dec	0
Total	**1,202,380**

PTX06-EW-26



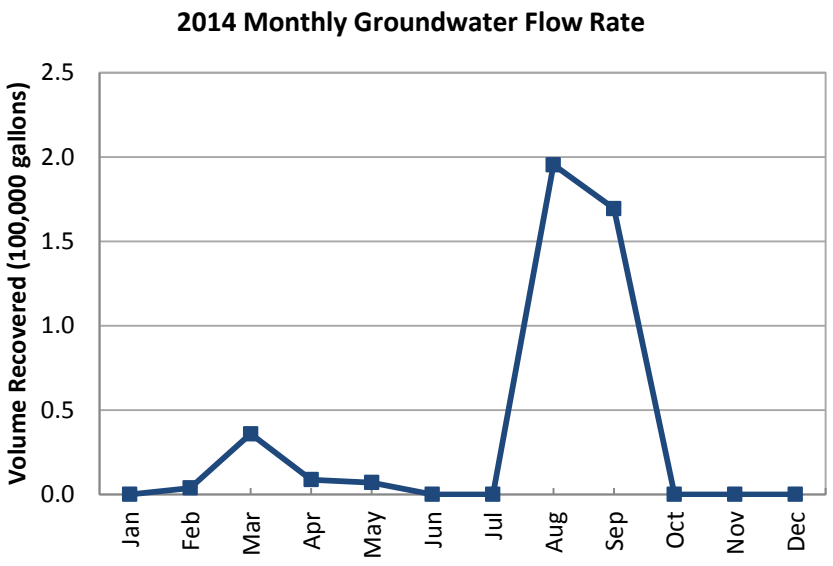
Month	Volume Recovered (gallons)
Jan	5,210
Feb	176,252
Mar	181,520
Apr	285,942
May	305,516
Jun	299,656
Jul	315,121
Aug	298,441
Sep	282,495
Oct	0
Nov	0
Dec	0
Total	**2,150,153**

PTX06-EW-27



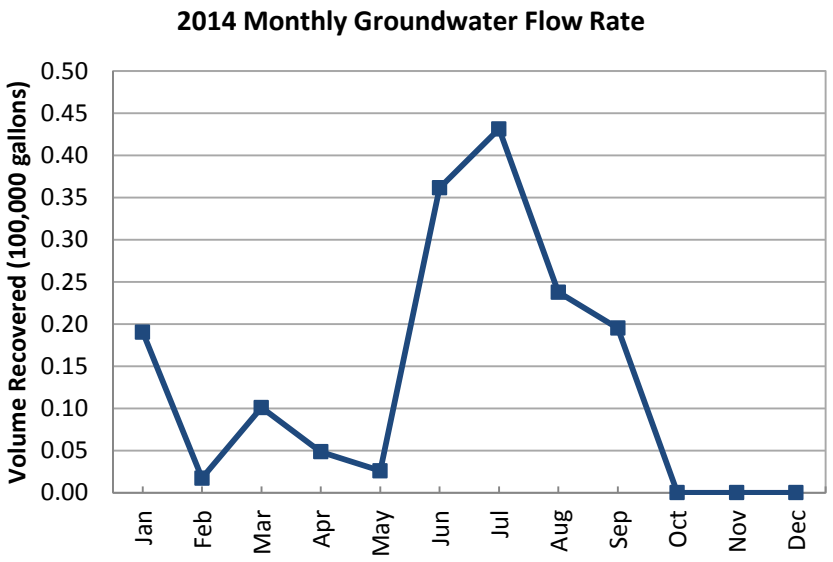
Month	Volume Recovered (gallons)
Jan	0
Feb	68
Mar	0
Apr	0
May	366
Jun	0
Jul	0
Aug	0
Sep	0
Oct	0
Nov	0
Dec	0
Total	**434**

PTX06-EW-28



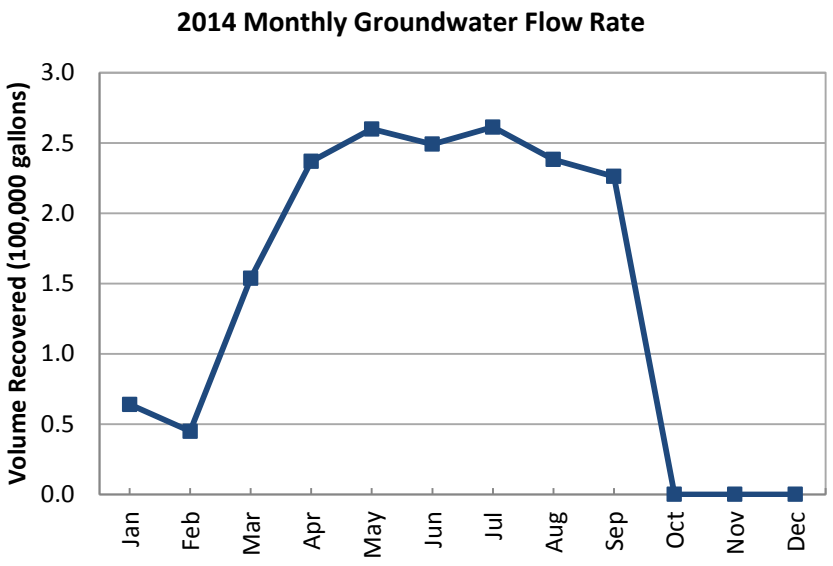
Month	Volume Recovered (gallons)
Jan	0
Feb	3,851
Mar	35,973
Apr	8,780
May	7,059
Jun	0
Jul	75
Aug	195,452
Sep	169,506
Oct	0
Nov	0
Dec	0
Total	**420,696**

PTX06-EW-29



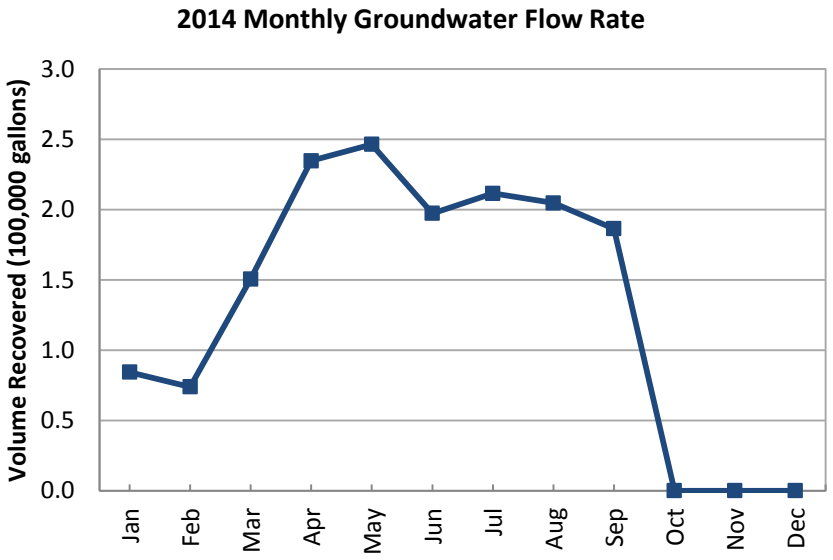
Month	Volume Recovered (gallons)
Jan	19,048
Feb	1,734
Mar	10,110
Apr	4,852
May	2,600
Jun	36,167
Jul	43,143
Aug	23,788
Sep	19,518
Oct	0
Nov	0
Dec	0
Total	**160,960**

PTX06-EW-30



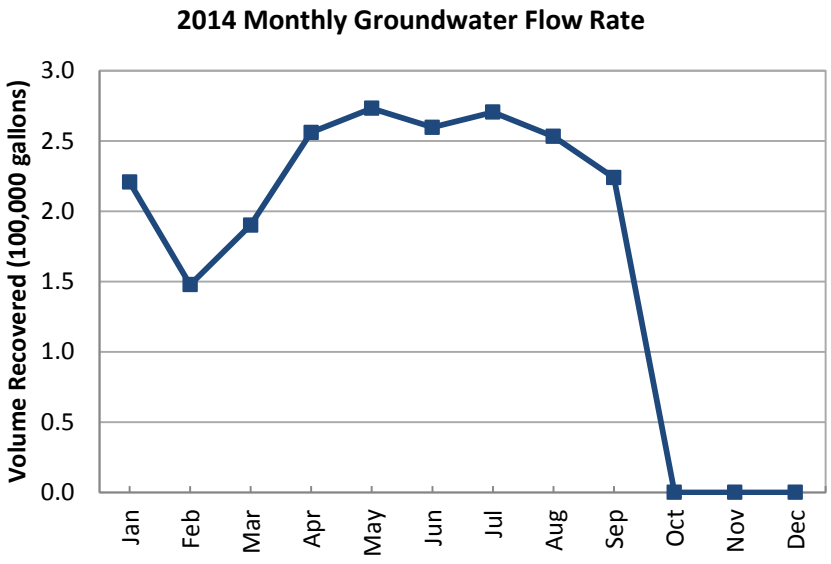
Month	Volume Recovered (gallons)
Jan	64,097
Feb	44,969
Mar	153,784
Apr	236,953
May	259,999
Jun	249,225
Jul	261,360
Aug	238,363
Sep	226,291
Oct	0
Nov	0
Dec	0
Total	**1,735,041**

PTX06-EW-31



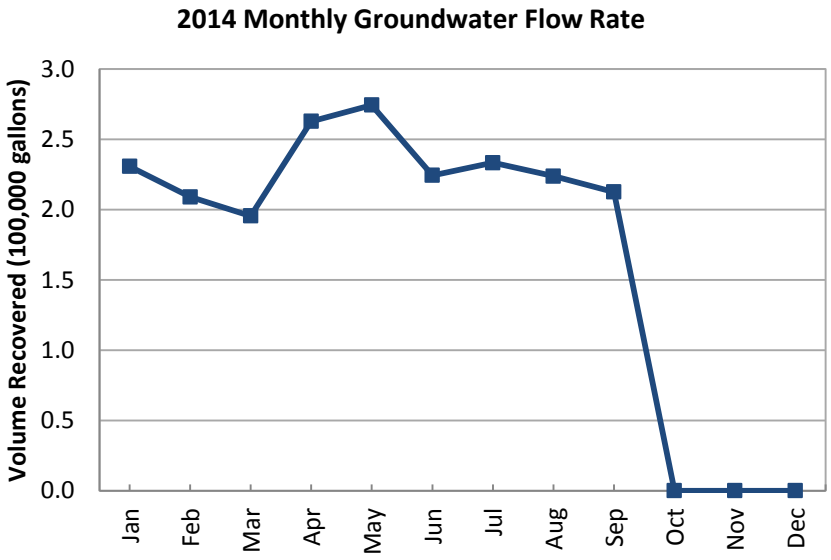
Month	Volume Recovered (gallons)
Jan	84,438
Feb	73,991
Mar	150,680
Apr	234,829
May	246,464
Jun	197,385
Jul	211,649
Aug	204,753
Sep	186,510
Oct	0
Nov	0
Dec	0
Total	**1,590,699**

PTX06-EW-32



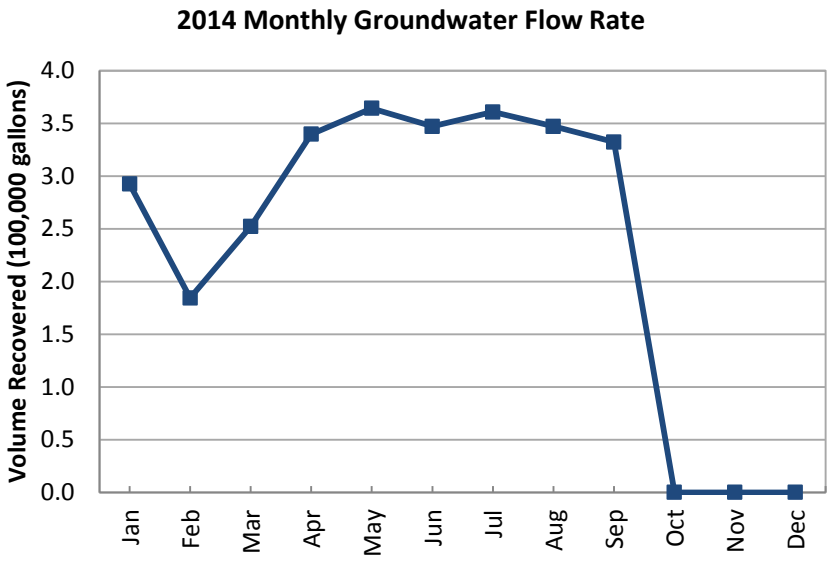
Month	Volume Recovered (gallons)
Jan	220,864
Feb	147,818
Mar	190,253
Apr	256,114
May	273,307
Jun	259,777
Jul	270,640
Aug	253,358
Sep	223,945
Oct	0
Nov	0
Dec	0
Total	**2,096,076**

PTX06-EW-33



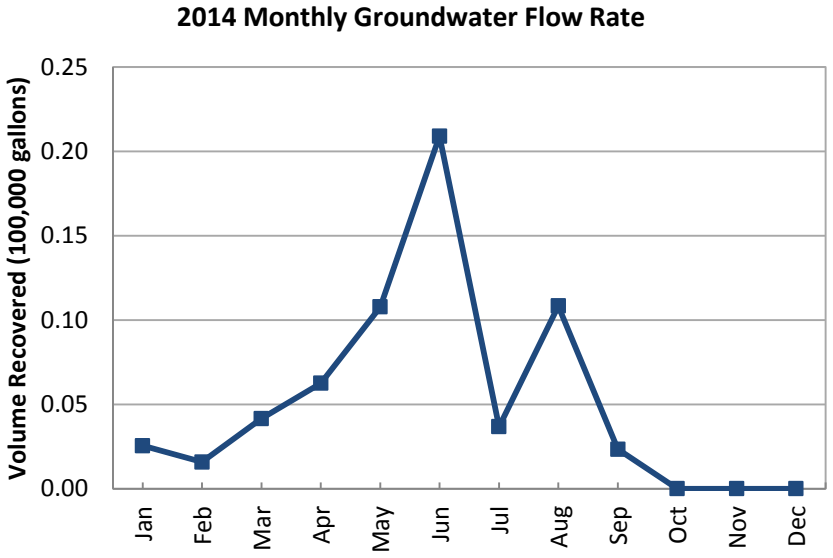
Month	Volume Recovered (gallons)
Jan	230,817
Feb	209,108
Mar	195,587
Apr	262,880
May	274,490
Jun	224,464
Jul	233,441
Aug	223,906
Sep	212,603
Oct	0
Nov	0
Dec	0
Total	**2,067,296**

PTX06-EW-34



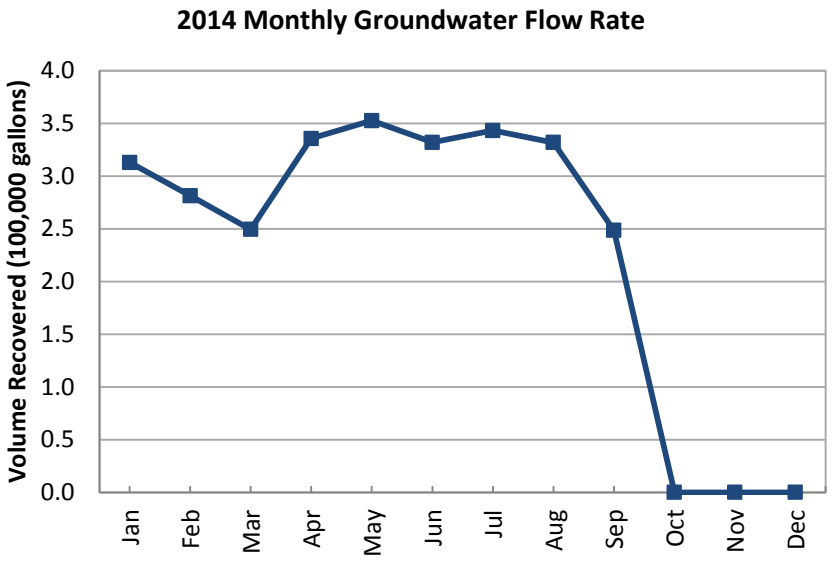
Month	Volume Recovered (gallons)
Jan	292,597
Feb	184,532
Mar	252,253
Apr	339,900
May	364,418
Jun	347,315
Jul	360,931
Aug	347,261
Sep	332,458
Oct	0
Nov	0
Dec	0
Total	**2,821,665**

PTX06-EW-35



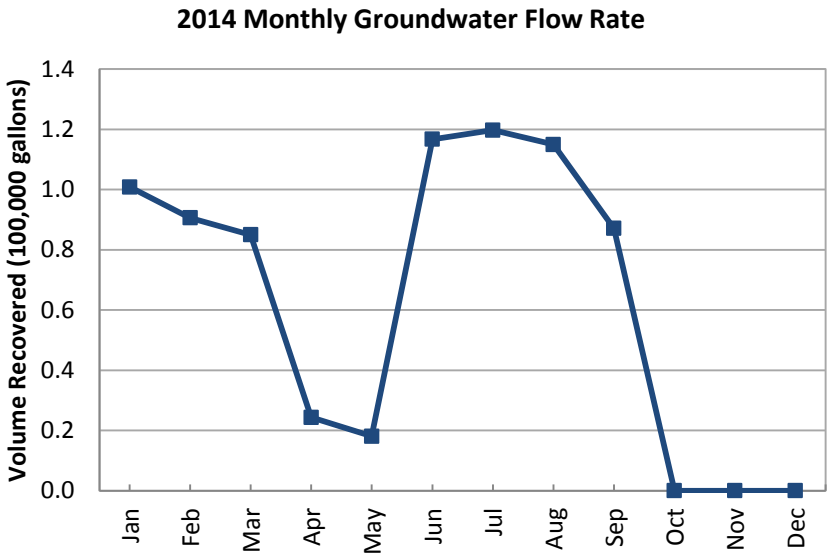
Month	Volume Recovered (gallons)
Jan	2,550
Feb	1,588
Mar	4,165
Apr	6,260
May	10,783
Jun	20,910
Jul	3,684
Aug	10,842
Sep	2,348
Oct	0
Nov	0
Dec	0
Total	**63,130**

PTX06-EW-36



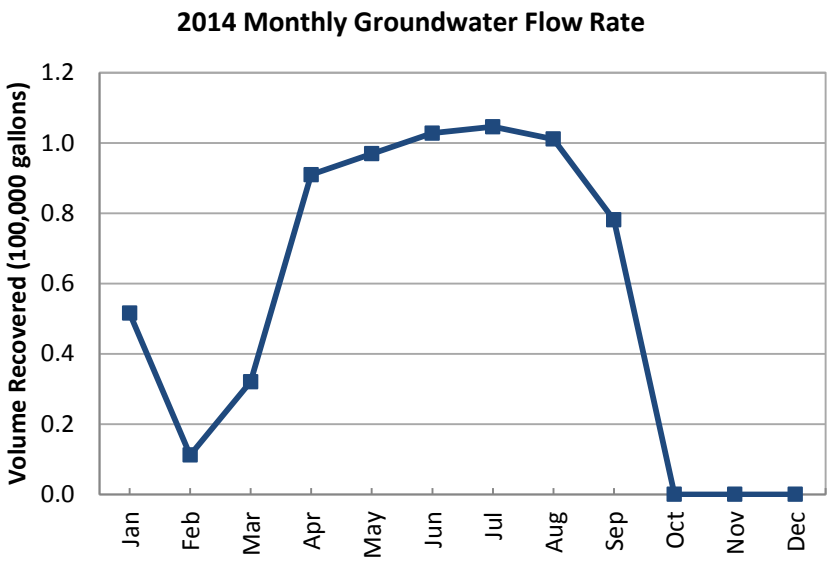
Month	Volume Recovered (gallons)
Jan	313,101
Feb	281,468
Mar	249,594
Apr	335,754
May	352,756
Jun	332,190
Jul	343,348
Aug	331,984
Sep	248,584
Oct	0
Nov	0
Dec	0
Total	**2,788,779**

PTX06-EW-37



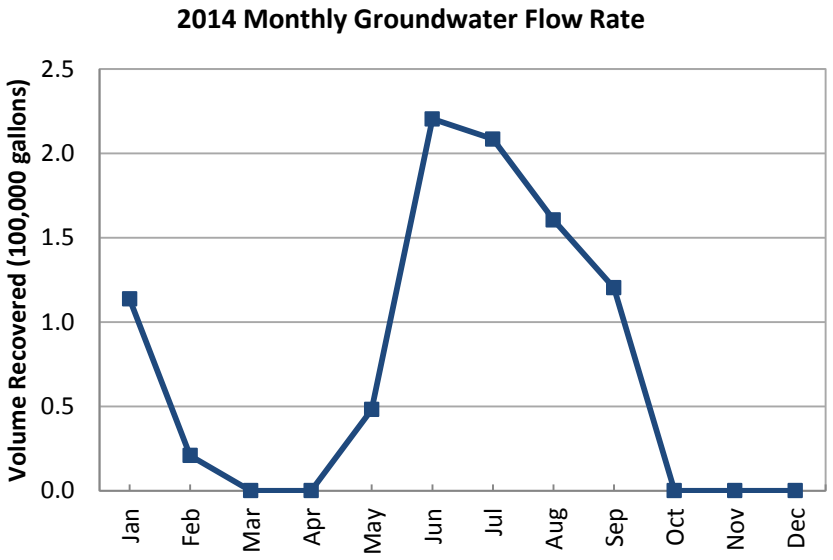
Month	Volume Recovered (gallons)
Jan	100,871
Feb	90,625
Mar	84,990
Apr	24,372
May	18,135
Jun	116,740
Jul	119,754
Aug	114,955
Sep	87,142
Oct	0
Nov	0
Dec	0
Total	**757,584**

PTX06-EW-38



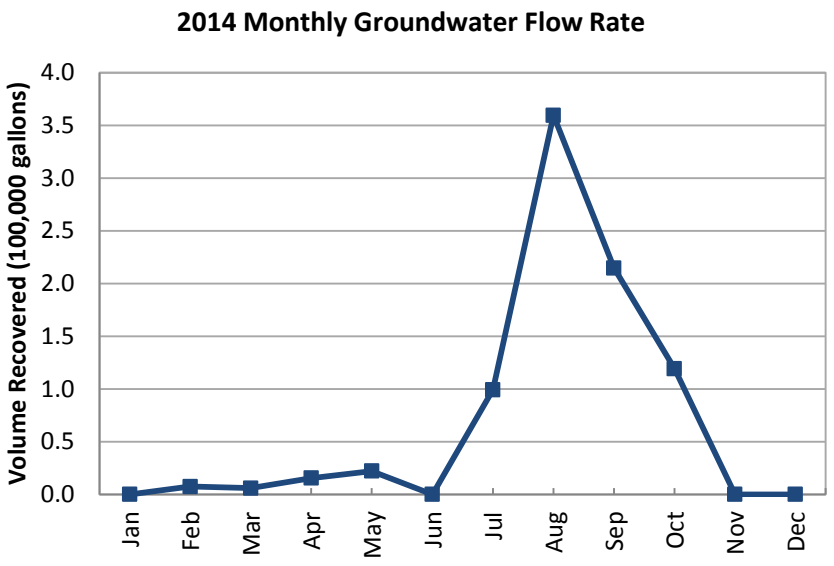
Month	Volume Recovered (gallons)
Jan	51,606
Feb	11,219
Mar	32,069
Apr	91,000
May	96,963
Jun	102,821
Jul	104,661
Aug	101,166
Sep	78,132
Oct	0
Nov	0
Dec	0
Total	**669,637**

PTX06-EW-39



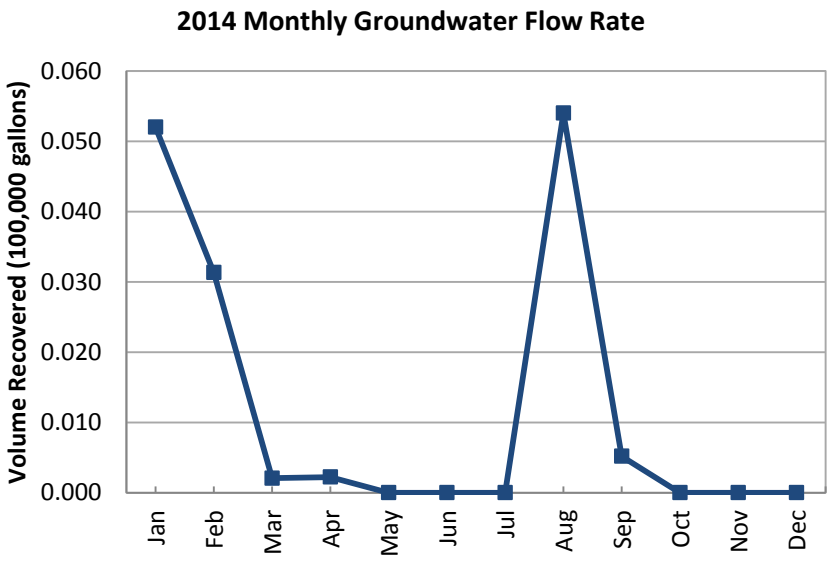
Month	Volume Recovered (gallons)
Jan	113,767
Feb	20,912
Mar	0
Apr	0
May	48,214
Jun	220,437
Jul	208,513
Aug	160,564
Sep	120,345
Oct	0
Nov	0
Dec	0
Total	**892,752**

PTX06-EW-40



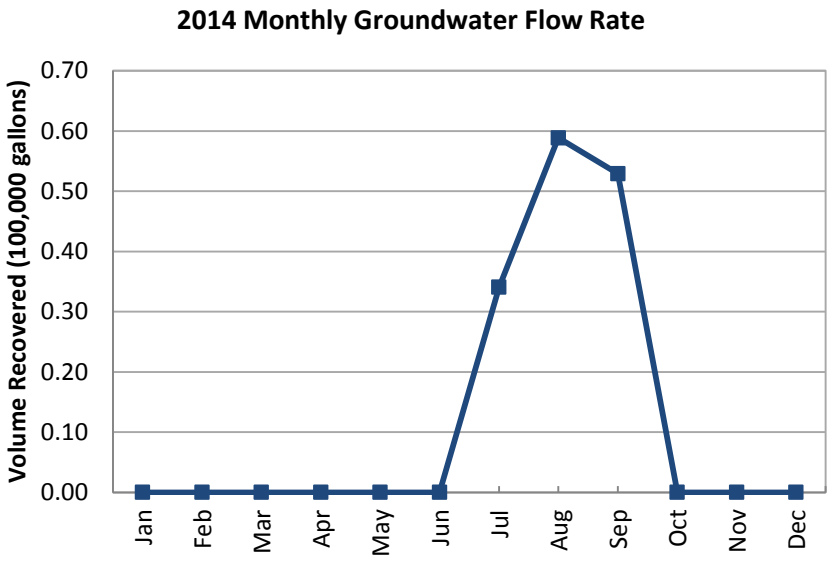
Month	Volume Recovered (gallons)
Jan	137
Feb	7,537
Mar	6,004
Apr	15,526
May	22,198
Jun	0
Jul	99,372
Aug	359,709
Sep	214,770
Oct	119,409
Nov	0
Dec	0
Total	**844,662**

PTX06-EW-41



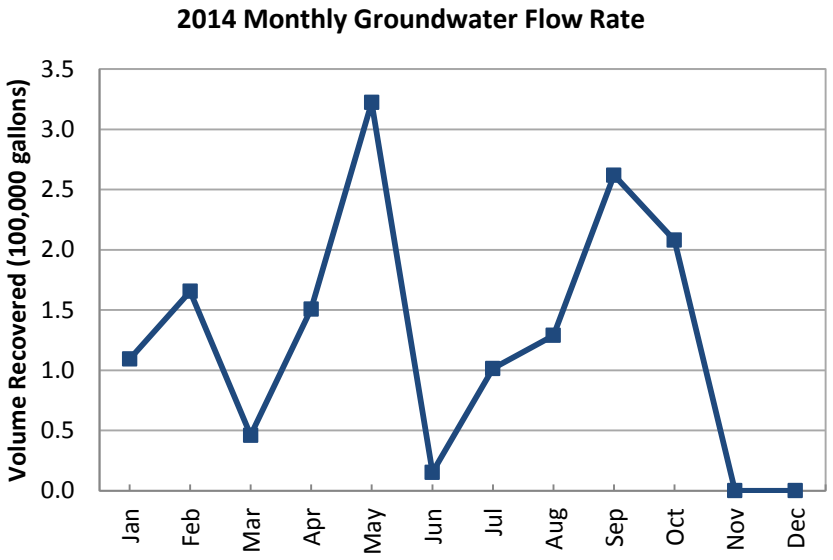
Month	Volume Recovered (gallons)
Jan	5,202
Feb	3,135
Mar	208
Apr	225
May	0
Jun	0
Jul	0
Aug	5,404
Sep	519
Oct	0
Nov	0
Dec	0
Total	**14,693**

PTX06-EW-42



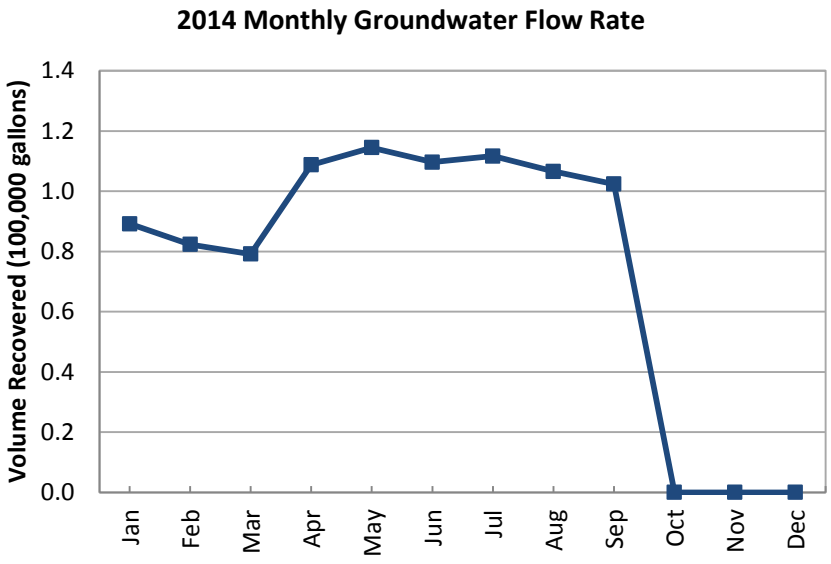
Month	Volume Recovered (gallons)
Jan	0
Feb	0
Mar	0
Apr	0
May	0
Jun	0
Jul	34,059
Aug	58,882
Sep	52,939
Oct	0
Nov	0
Dec	0
Total	**145,880**

PTX06-EW-43



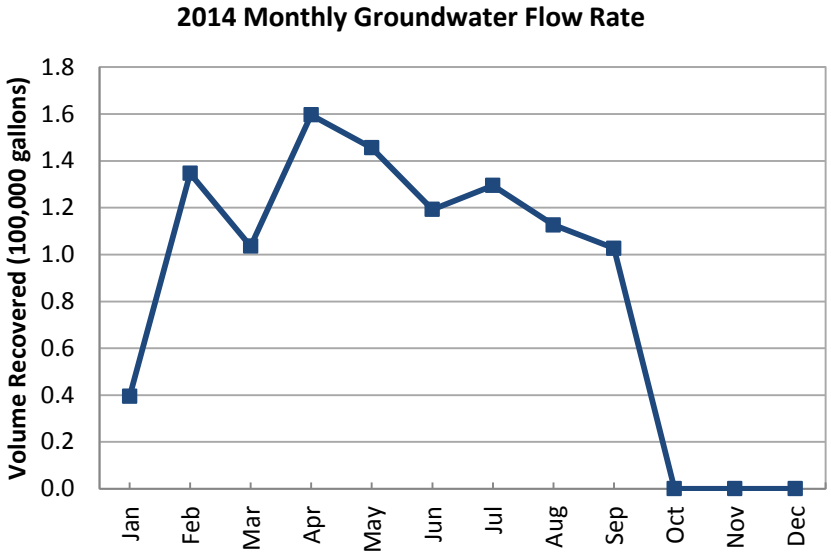
Month	Volume Recovered (gallons)
Jan	109,377
Feb	165,528
Mar	46,129
Apr	150,836
May	322,318
Jun	15,309
Jul	101,473
Aug	129,001
Sep	261,963
Oct	208,043
Nov	0
Dec	0
Total	**1,509,977**

PTX06-EW-44



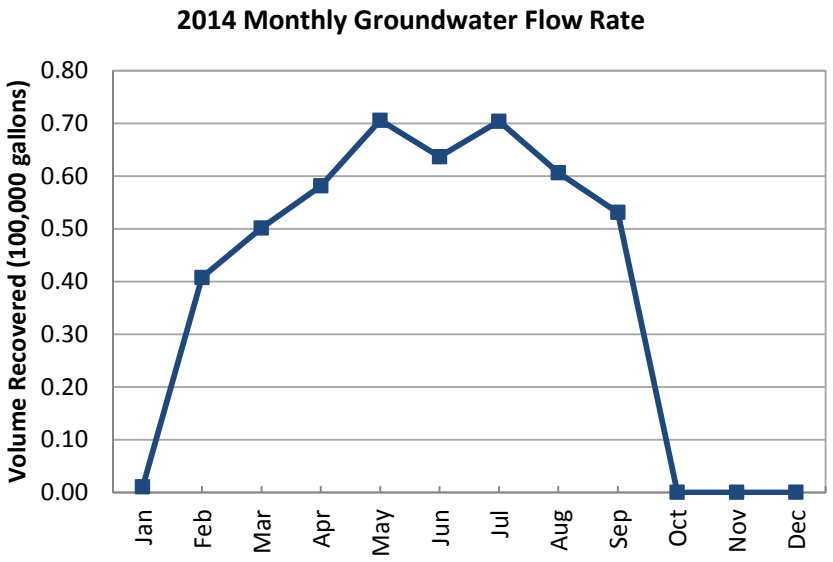
Month	Volume Recovered (gallons)
Jan	89,226
Feb	82,378
Mar	79,187
Apr	108,794
May	114,482
Jun	109,665
Jul	111,667
Aug	106,576
Sep	102,404
Oct	0
Nov	0
Dec	0
Total	**904,379**

PTX06-EW-45



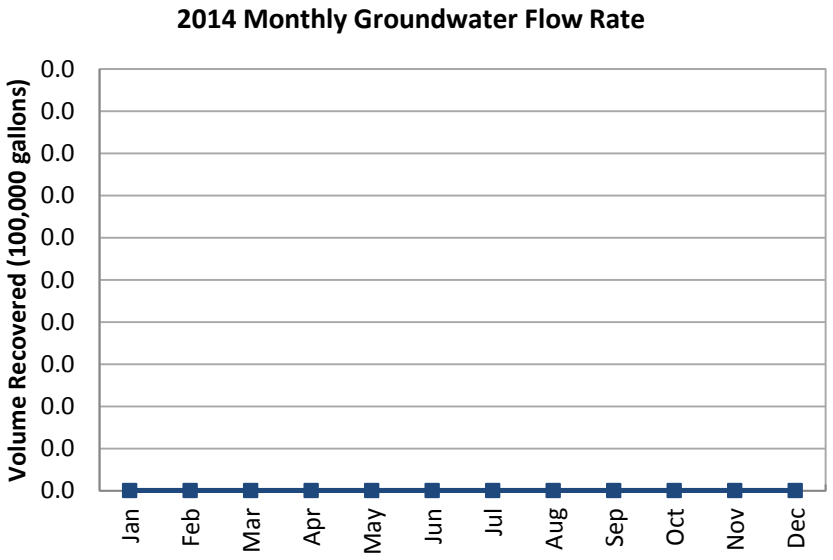
Month	Volume Recovered (gallons)
Jan	39,451
Feb	134,639
Mar	103,577
Apr	159,660
May	145,616
Jun	119,223
Jul	129,461
Aug	112,619
Sep	102,695
Oct	0
Nov	0
Dec	0
Total	**1,046,941**

PTX06-EW-46



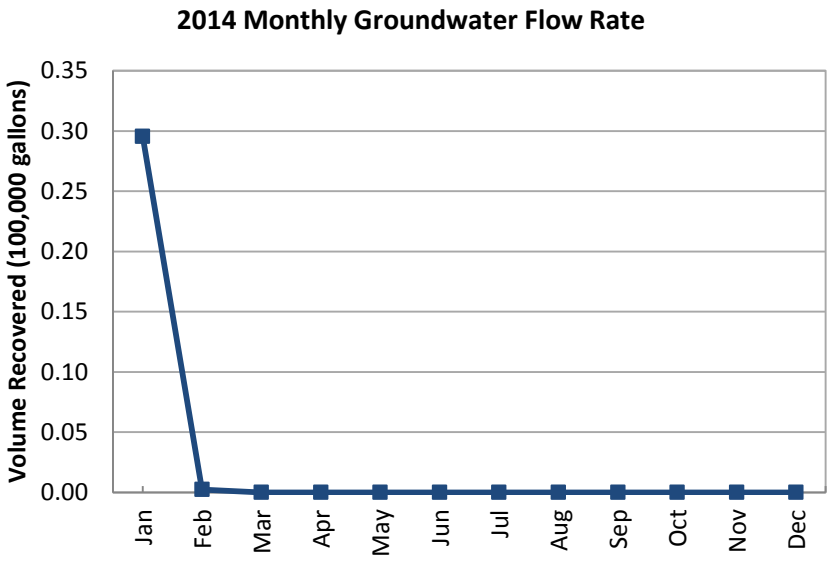
Month	Volume Recovered (gallons)
Jan	1,064
Feb	40,790
Mar	50,169
Apr	58,154
May	70,625
Jun	63,691
Jul	70,423
Aug	60,684
Sep	53,130
Oct	0
Nov	0
Dec	0
Total	**468,730**

PTX06-EW-47



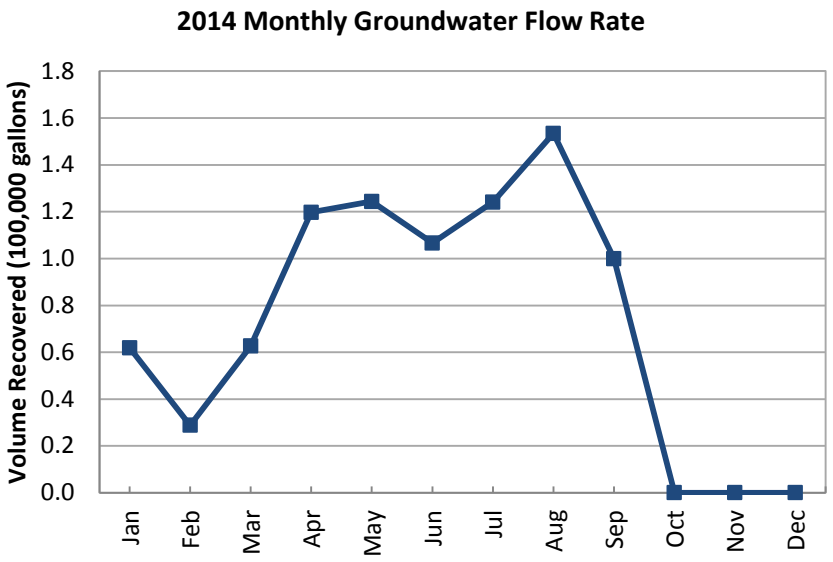
Month	Volume Recovered (gallons)
Jan	0
Feb	0
Mar	0
Apr	0
May	0
Jun	0
Jul	0
Aug	0
Sep	0
Oct	0
Nov	0
Dec	0
Total	**0**

PTX06-EW-48



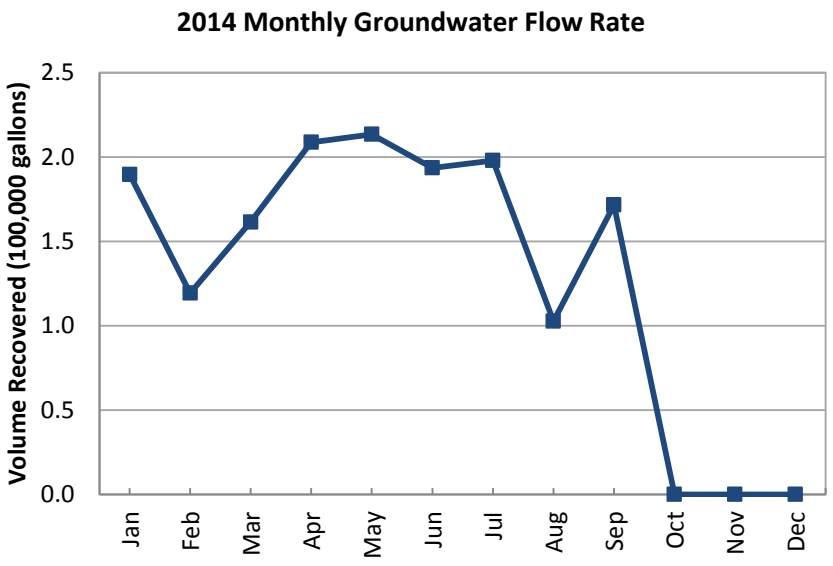
Month	Volume Recovered (gallons)
Jan	29,551
Feb	247
Mar	0
Apr	0
May	0
Jun	0
Jul	0
Aug	0
Sep	0
Oct	0
Nov	0
Dec	0
Total	**29,798**

PTX06-EW-49



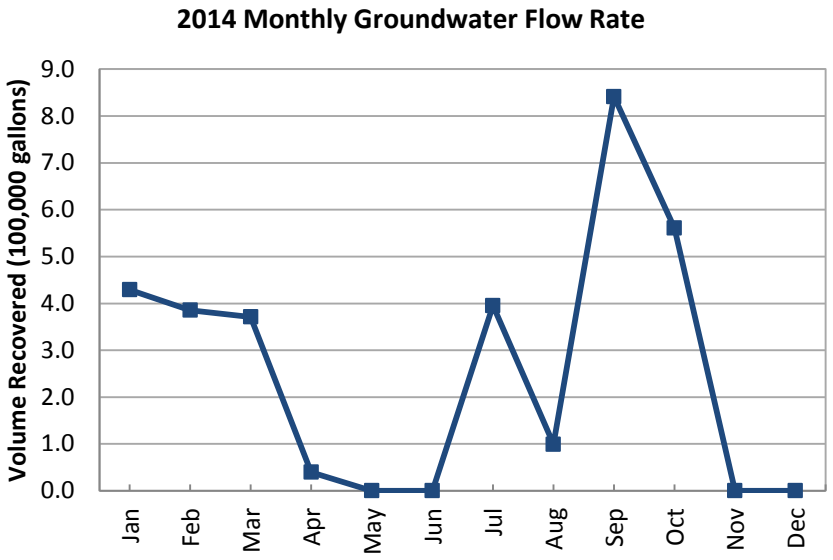
Month	Volume Recovered (gallons)
Jan	61,909
Feb	28,825
Mar	62,636
Apr	119,741
May	124,352
Jun	106,654
Jul	124,083
Aug	153,419
Sep	99,975
Oct	0
Nov	0
Dec	0
Total	**881,594**

PTX06-EW-50



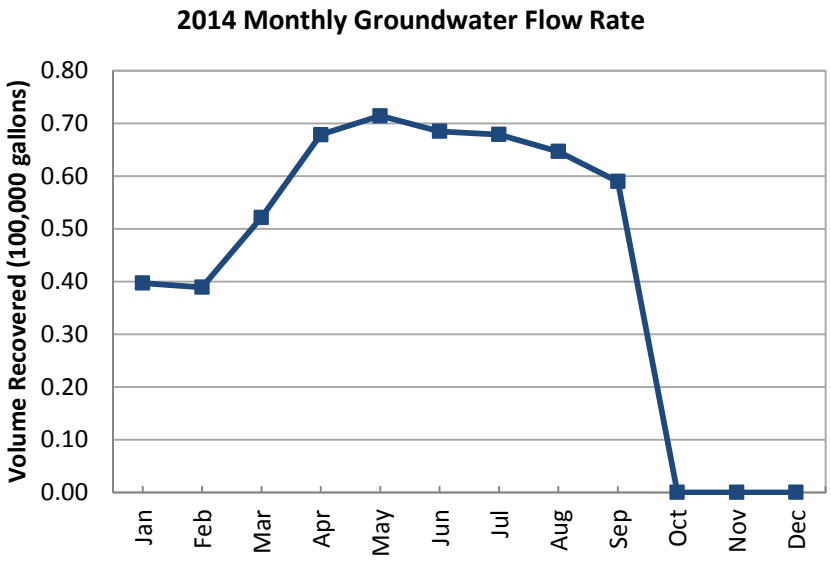
Month	Volume Recovered (gallons)
Jan	189,829
Feb	119,406
Mar	161,574
Apr	208,786
May	213,524
Jun	193,666
Jul	198,040
Aug	102,739
Sep	171,724
Oct	0
Nov	0
Dec	0
Total	**1,559,288**

PTX06-EW-51



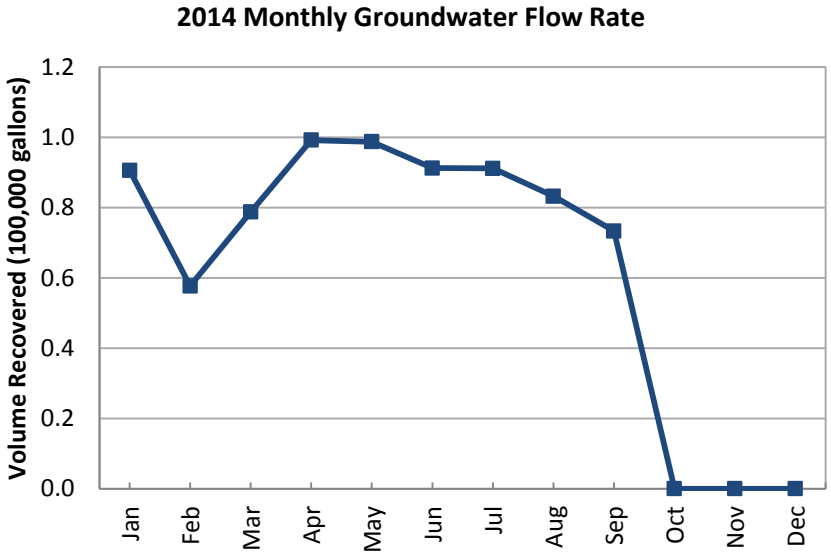
Month	Volume Recovered (gallons)
Jan	429,006
Feb	385,602
Mar	371,098
Apr	39,727
May	0
Jun	0
Jul	395,305
Aug	99,250
Sep	841,554
Oct	560,835
Nov	0
Dec	0
Total	**3,122,377**

PTX06-EW-54



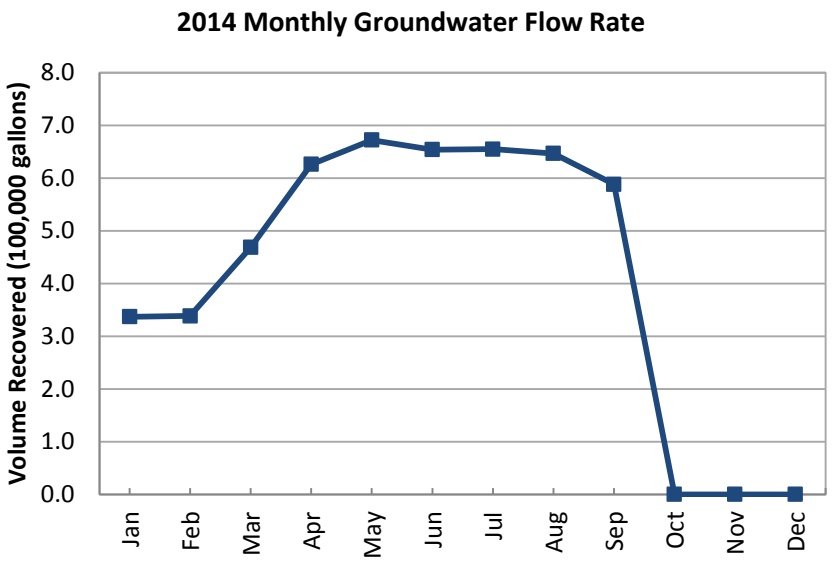
Month	Volume Recovered (gallons)
Jan	39,719
Feb	38,939
Mar	52,174
Apr	67,878
May	71,474
Jun	68,535
Jul	67,921
Aug	64,717
Sep	59,007
Oct	0
Nov	0
Dec	0
Total	**530,364**

PTX06-EW-55



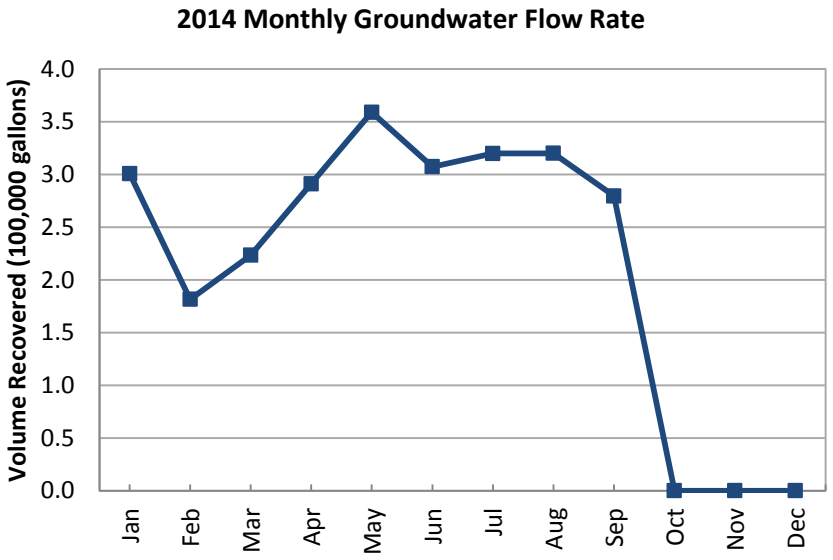
Month	Volume Recovered (gallons)
Jan	90,632
Feb	57,742
Mar	78,784
Apr	99,251
May	98,774
Jun	91,286
Jul	91,184
Aug	83,283
Sep	73,364
Oct	0
Nov	0
Dec	0
Total	**764,300**

PTX06-EW-56



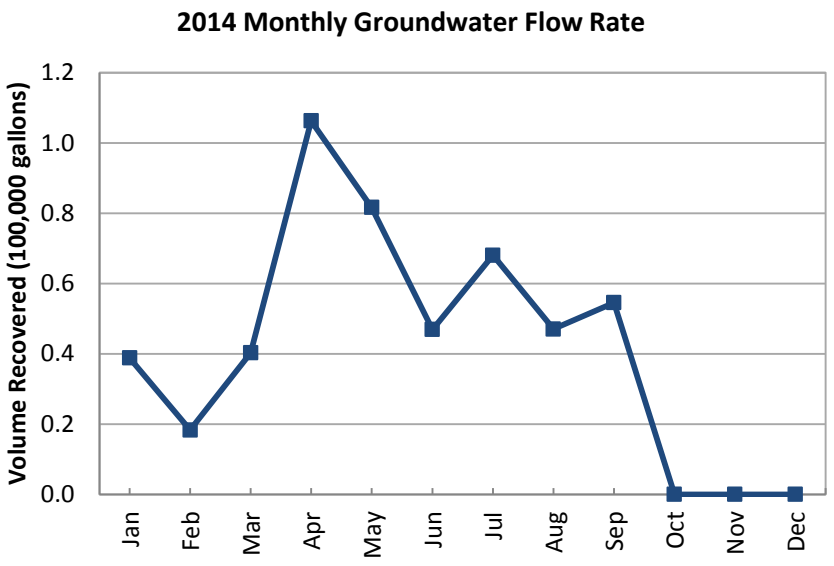
Month	Volume Recovered (gallons)
Jan	337,268
Feb	338,603
Mar	468,738
Apr	626,493
May	672,408
Jun	654,377
Jul	655,268
Aug	646,940
Sep	588,497
Oct	0
Nov	0
Dec	0
Total	**4,988,592**

PTX06-EW-57



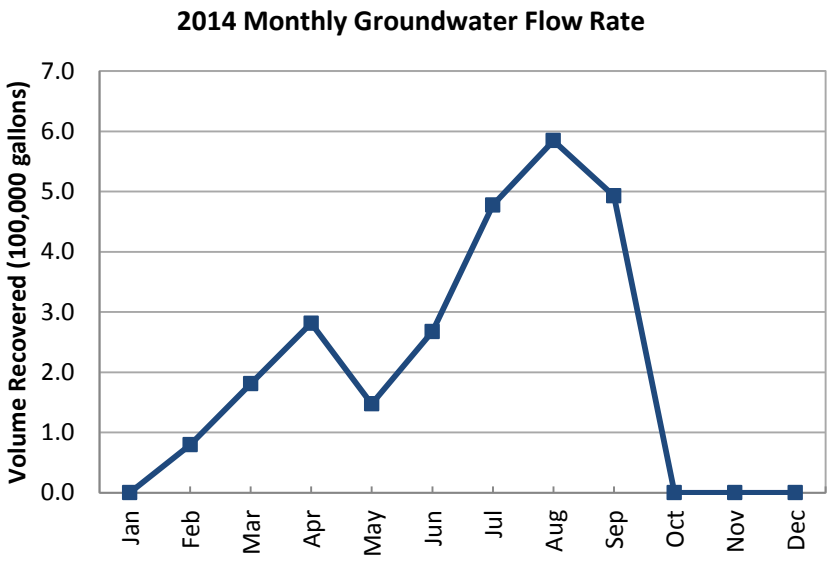
Month	Volume Recovered (gallons)
Jan	300,923
Feb	181,643
Mar	223,441
Apr	291,285
May	359,183
Jun	307,498
Jul	320,020
Aug	320,199
Sep	279,663
Oct	0
Nov	0
Dec	0
Total	**2,583,855**

PTX06-EW-58



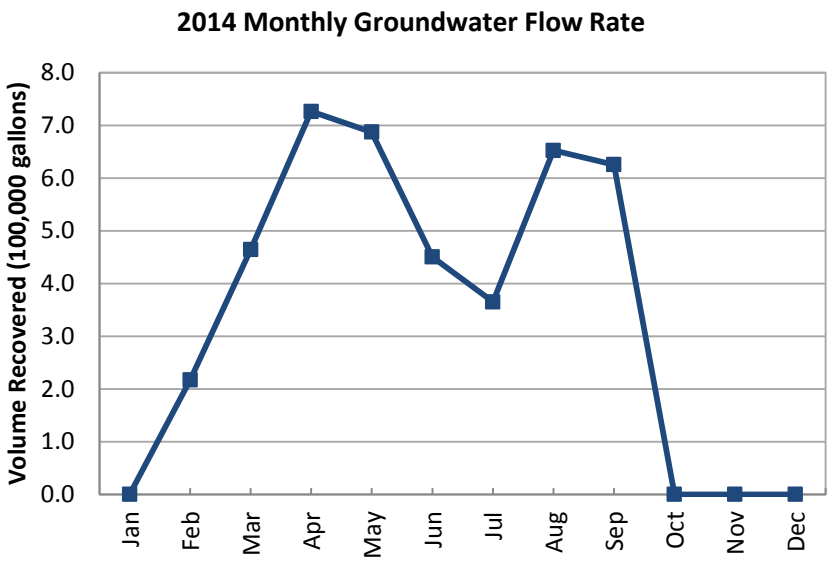
Month	Volume Recovered (gallons)
Jan	38,872
Feb	18,354
Mar	40,306
Apr	106,316
May	81,666
Jun	46,942
Jul	68,082
Aug	47,096
Sep	54,585
Oct	0
Nov	0
Dec	0
Total	**502,219**

PTX06-EW-59



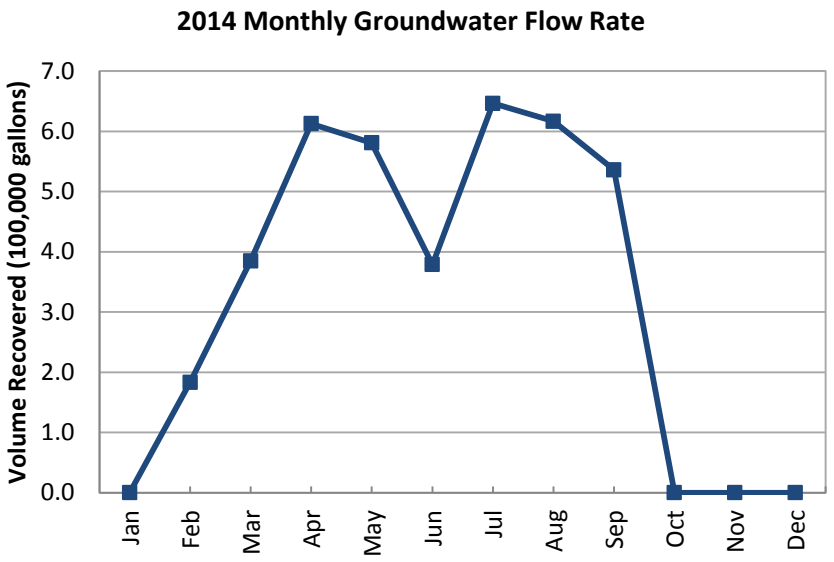
Month	Volume Recovered (gallons)
Jan	0
Feb	79,782
Mar	181,065
Apr	281,485
May	147,511
Jun	267,839
Jul	477,726
Aug	584,717
Sep	492,834
Oct	0
Nov	0
Dec	0
Total	**2,512,959**

PTX06-EW-60



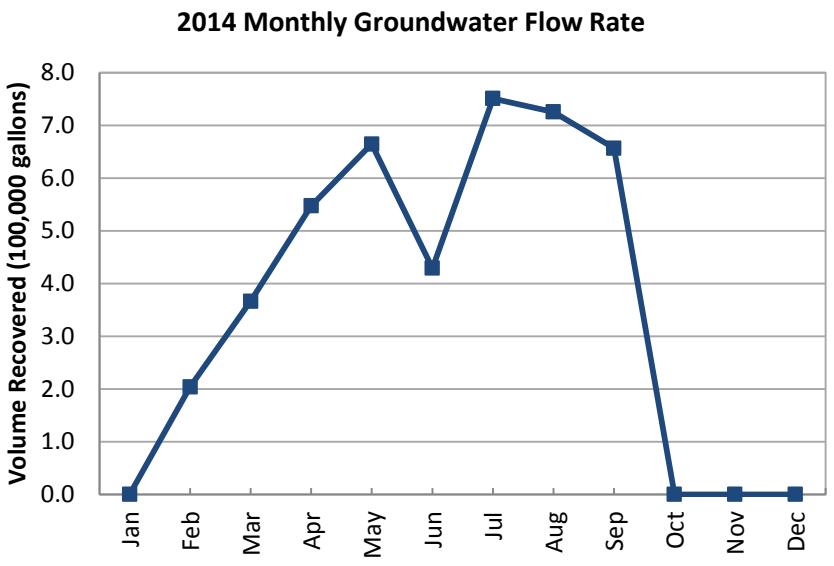
Month	Volume Recovered (gallons)
Jan	0
Feb	217,308
Mar	464,567
Apr	726,860
May	687,625
Jun	450,597
Jul	365,512
Aug	652,875
Sep	625,702
Oct	0
Nov	0
Dec	0
Total	**4,191,046**

PTX06-EW-61



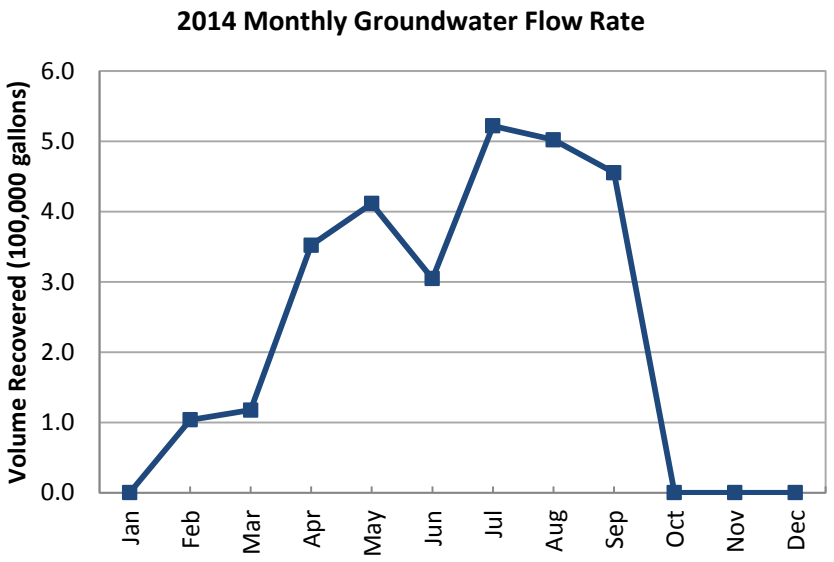
Month	Volume Recovered (gallons)
Jan	0
Feb	183,393
Mar	384,951
Apr	612,817
May	581,022
Jun	378,761
Jul	646,436
Aug	616,793
Sep	536,162
Oct	0
Nov	0
Dec	0
Total	**3,940,335**

PTX06-EW-62



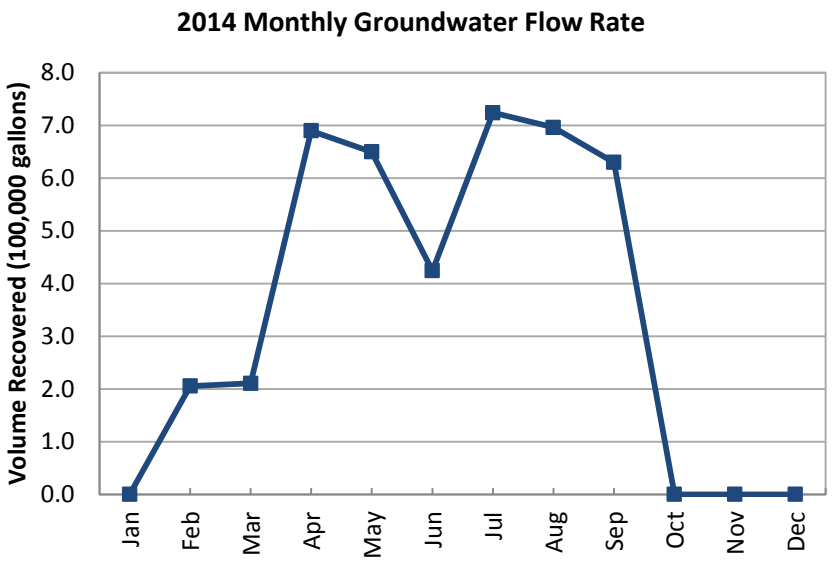
Month	Volume Recovered (gallons)
Jan	0
Feb	204,038
Mar	366,683
Apr	547,486
May	664,872
Jun	429,382
Jul	751,278
Aug	725,886
Sep	657,106
Oct	0
Nov	0
Dec	0
Total	**4,346,731**

PTX06-EW-63



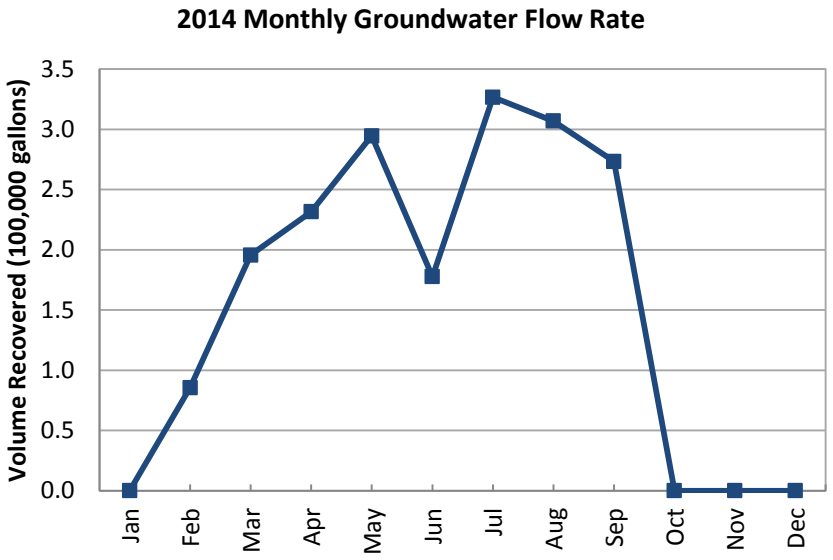
Month	Volume Recovered (gallons)
Jan	0
Feb	103,785
Mar	117,715
Apr	352,193
May	411,706
Jun	304,664
Jul	522,076
Aug	502,344
Sep	455,443
Oct	0
Nov	0
Dec	0
Total	**2,769,926**

PTX06-EW-64



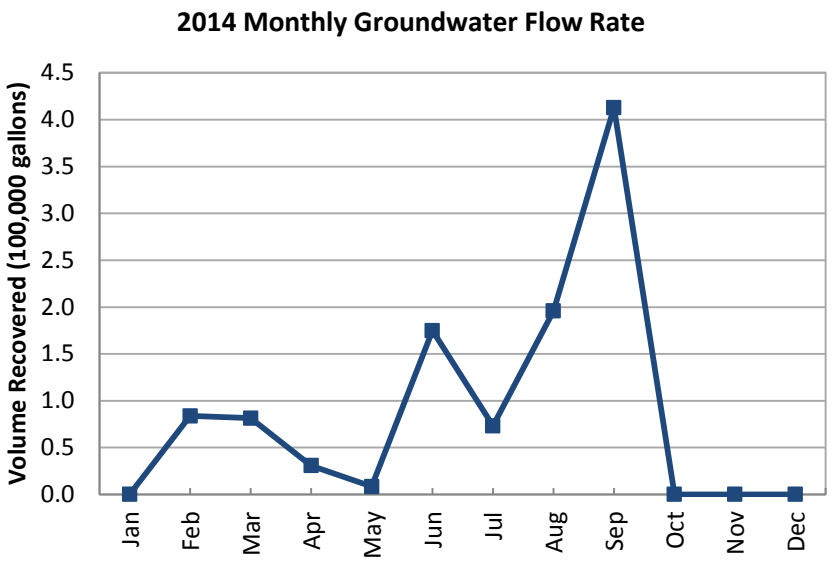
Month	Volume Recovered (gallons)
Jan	0
Feb	205,554
Mar	210,797
Apr	690,152
May	650,121
Jun	424,537
Jul	724,376
Aug	696,400
Sep	630,018
Oct	0
Nov	0
Dec	0
Total	**4,231,955**

PTX06-EW-65



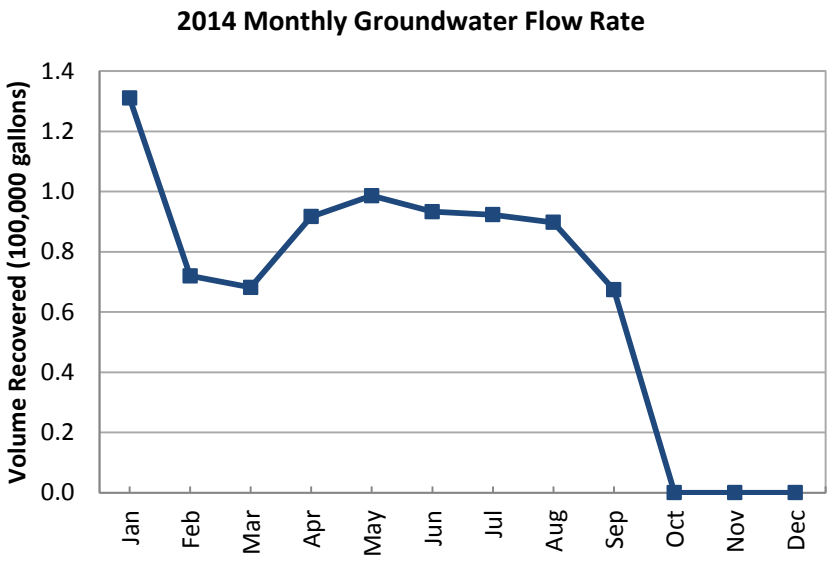
Month	Volume Recovered (gallons)
Jan	0
Feb	85,666
Mar	195,693
Apr	231,667
May	294,552
Jun	177,799
Jul	326,710
Aug	307,011
Sep	273,377
Oct	0
Nov	0
Dec	0
Total	**1,892,475**

PTX06-EW-66



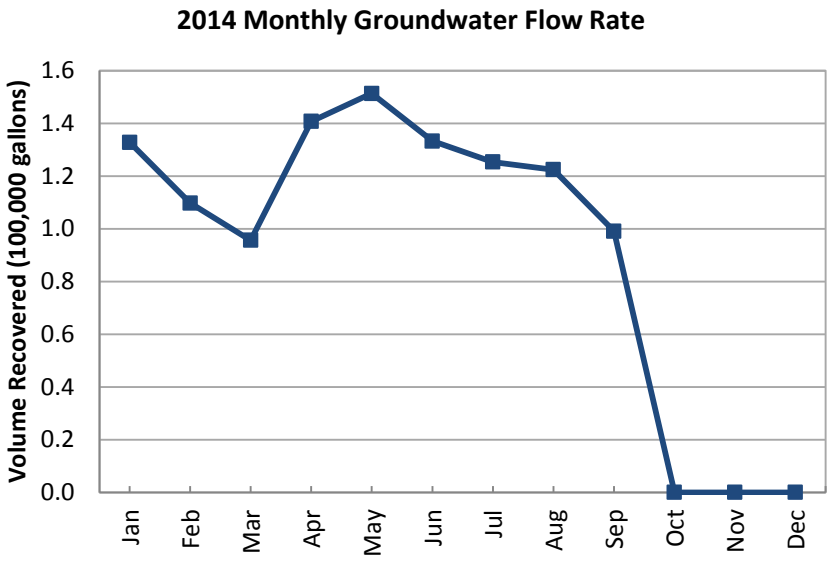
Month	Volume Recovered (gallons)
Jan	0
Feb	83,855
Mar	81,415
Apr	30,791
May	8,493
Jun	174,773
Jul	73,192
Aug	195,874
Sep	412,870
Oct	0
Nov	0
Dec	0
Total	**1,061,263**

PTX06-EW-67



Month	Volume Recovered (gallons)
Jan	131,080
Feb	72,031
Mar	68,182
Apr	91,667
May	98,647
Jun	93,340
Jul	92,321
Aug	89,786
Sep	67,421
Oct	0
Nov	0
Dec	0
Total	**804,475**

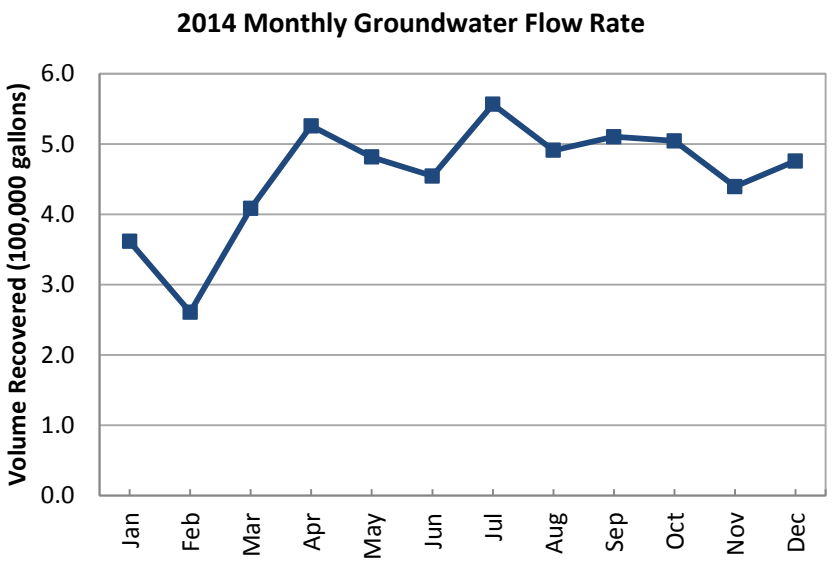
PTX06-EW-68



Month	Volume Recovered (gallons)
Jan	132,891
Feb	109,824
Mar	95,694
Apr	140,811
May	151,439
Jun	133,358
Jul	125,394
Aug	122,490
Sep	99,151
Oct	0
Nov	0
Dec	0
Total	**1,111,052**

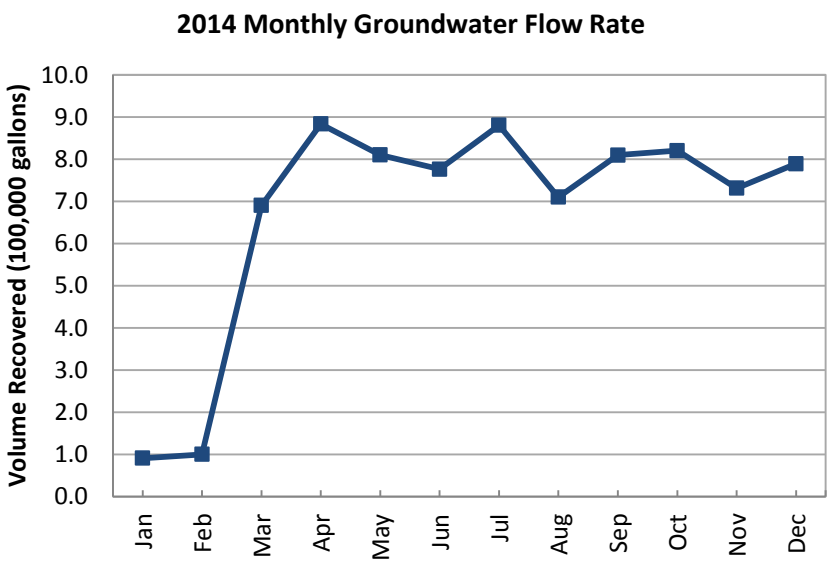
Playa 1 Pump and Treat System

PTX06-EW-69



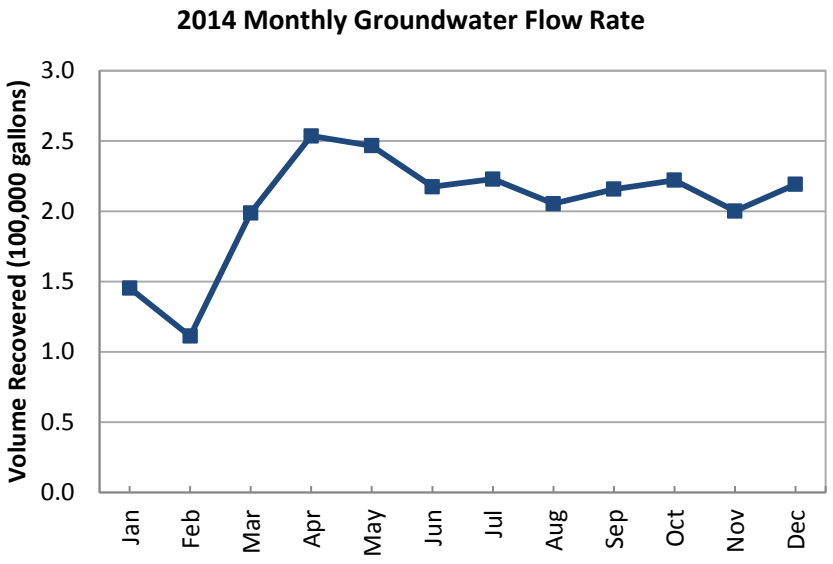
Month	Volume Recovered (gallons)
Jan	361,507
Feb	260,846
Mar	408,328
Apr	525,866
May	481,614
Jun	454,547
Jul	556,572
Aug	491,091
Sep	510,411
Oct	504,631
Nov	439,629
Dec	475,988
Total	**5,471,030**

PTX06-EW-70



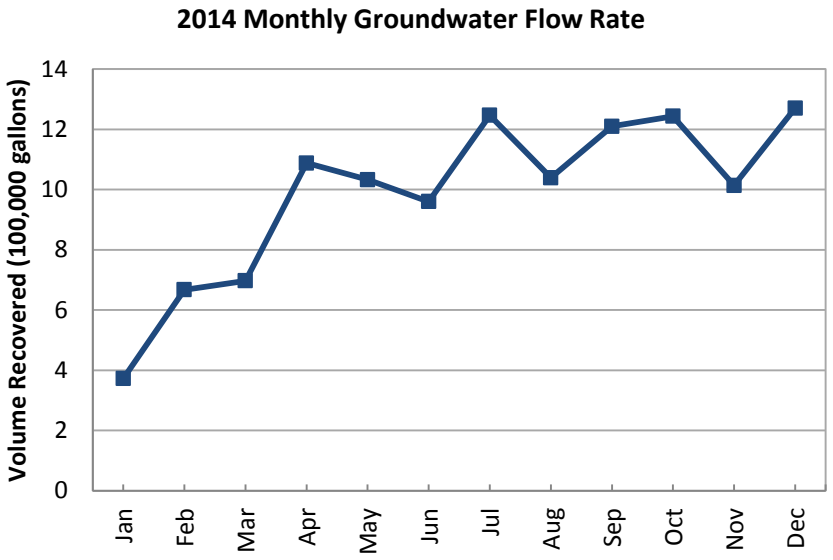
Month	Volume Recovered (gallons)
Jan	90,994
Feb	100,158
Mar	690,574
Apr	883,704
May	810,329
Jun	776,595
Jul	880,641
Aug	710,400
Sep	810,103
Oct	820,443
Nov	731,510
Dec	789,560
Total	**8,095,011**

PTX06-EW-71



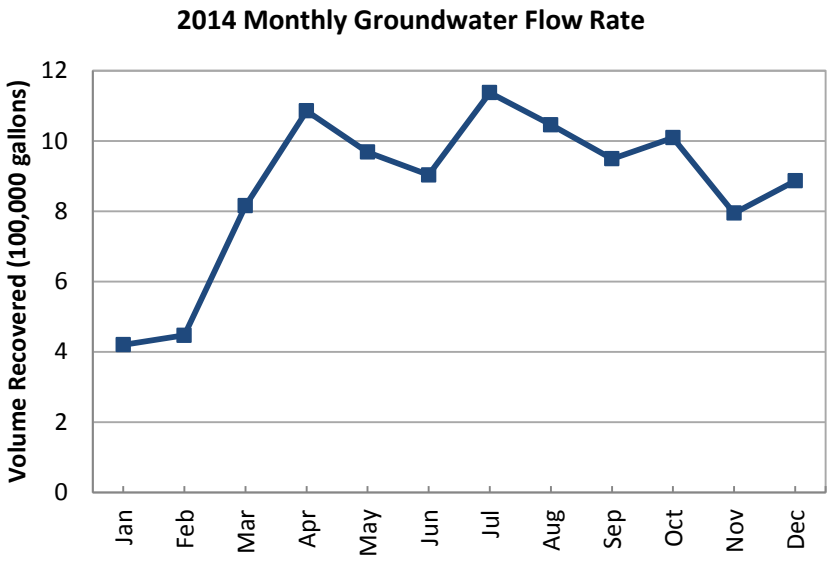
Month	Volume Recovered (gallons)
Jan	145,468
Feb	111,266
Mar	198,886
Apr	253,706
May	246,702
Jun	217,484
Jul	222,922
Aug	205,509
Sep	215,798
Oct	222,184
Nov	200,186
Dec	219,268
Total	**2,459,379**

PTX06-EW-72



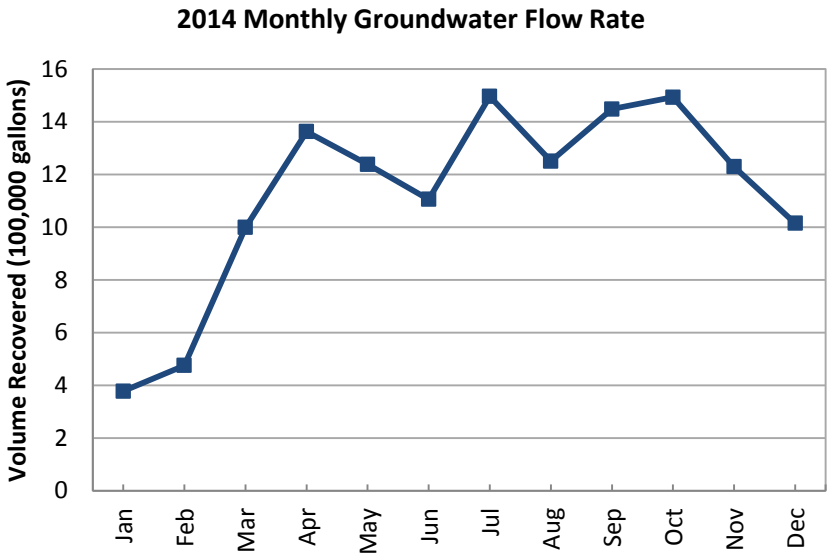
Month	Volume Recovered (gallons)
Jan	372,598
Feb	667,542
Mar	697,438
Apr	1,088,278
May	1,032,961
Jun	960,571
Jul	1,246,942
Aug	1,039,596
Sep	1,210,318
Oct	1,243,551
Nov	1,014,090
Dec	1,270,619
Total	**11,844,504**

PTX06-EW-73



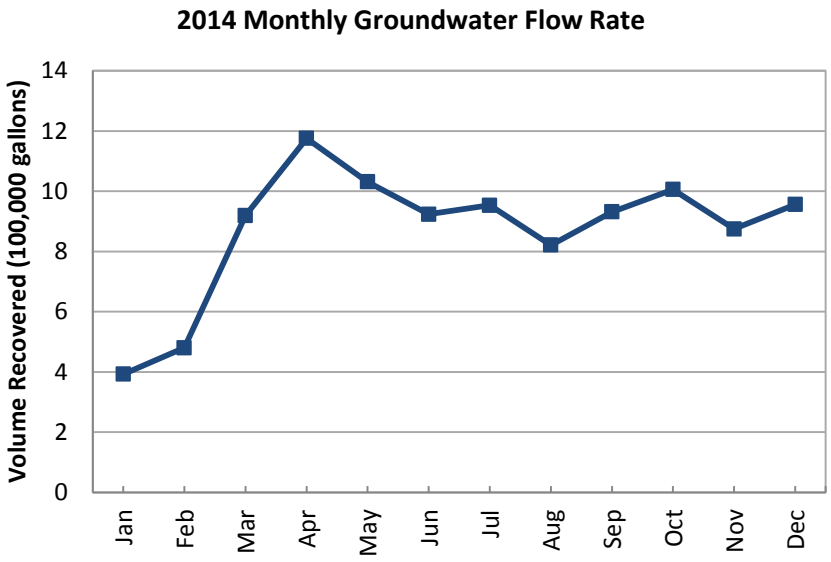
Month	Volume Recovered (gallons)
Jan	420,577
Feb	447,378
Mar	815,906
Apr	1,086,119
May	968,855
Jun	903,686
Jul	1,137,661
Aug	1,046,291
Sep	949,684
Oct	1,009,668
Nov	794,922
Dec	887,067
Total	**10,467,814**

PTX06-EW-74



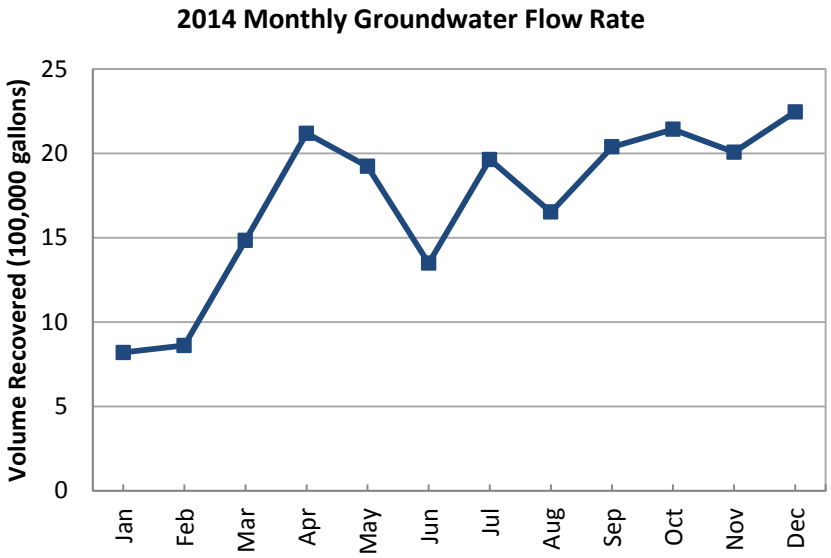
Month	Volume Recovered (gallons)
Jan	378,194
Feb	475,708
Mar	999,327
Apr	1,362,979
May	1,238,633
Jun	1,106,066
Jul	1,496,493
Aug	1,251,129
Sep	1,448,361
Oct	1,493,815
Nov	1,230,099
Dec	1,015,286
Total	**13,496,090**

PTX06-EW-75



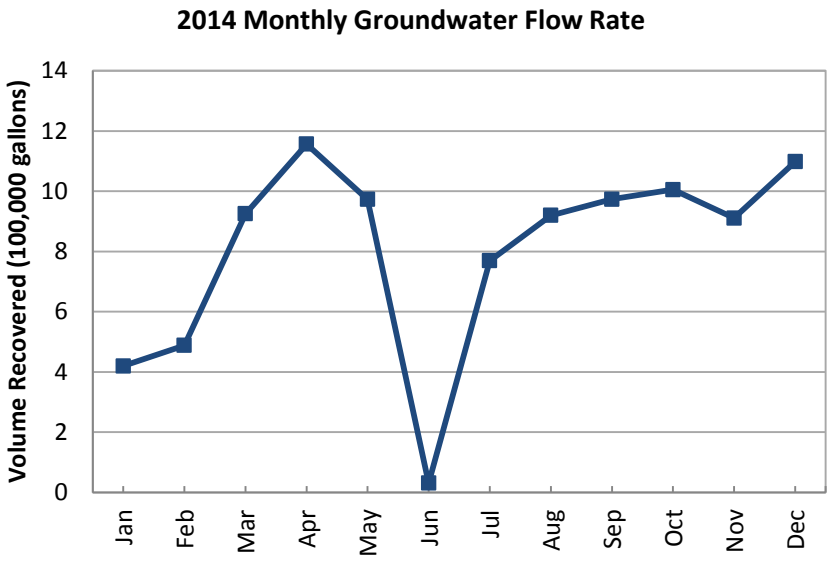
Month	Volume Recovered (gallons)
Jan	392,600
Feb	480,372
Mar	919,727
Apr	1,176,023
May	1,031,689
Jun	923,727
Jul	953,485
Aug	821,518
Sep	932,009
Oct	1,006,016
Nov	874,828
Dec	956,074
Total	**10,468,068**

PTX06-EW-78A



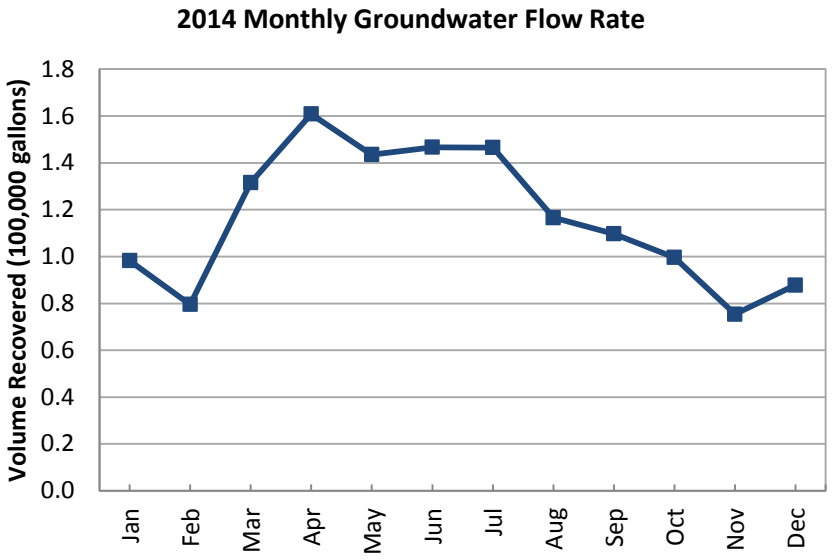
Month	Volume Recovered (gallons)
Jan	819,533
Feb	861,876
Mar	1,484,622
Apr	2,119,970
May	1,923,813
Jun	1,348,938
Jul	1,964,511
Aug	1,652,694
Sep	2,038,849
Oct	2,143,497
Nov	2,007,549
Dec	2,246,374
Total	**20,612,226**

PTX06-EW-79



Month	Volume Recovered (gallons)
Jan	420,046
Feb	488,067
Mar	925,229
Apr	1,156,618
May	973,097
Jun	31,041
Jul	769,524
Aug	920,039
Sep	973,951
Oct	1,005,781
Nov	911,086
Dec	1,098,518
Total	**9,672,997**

PTX06-EW-80



Month	Volume Recovered (gallons)
Jan	98,249
Feb	79,536
Mar	131,512
Apr	160,872
May	143,557
Jun	146,645
Jul	146,545
Aug	116,565
Sep	109,677
Oct	99,613
Nov	75,415
Dec	87,828
Total	**1,396,014**

Appendix C
Data Evaluation Table and Electronic Data

Table C-1. Data Exceeding GWPS

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
1114-MW4		4/30/2014	Perchlorate	101	24			0.85	26	Y
1114-MW4		4/30/2014	Perchlorate	102	24				26	Y
1114-MW4		4/30/2014	Trichloroethene	8.61	1			0.85	5	Y
1114-MW4		4/30/2014	Trichloroethene	8.61	1				5	Y
1114-MW4		11/13/2014	Perchlorate	95.7	24		J	0.9	26	Y
1114-MW4		11/13/2014	Trichloroethene	8.02	1			0.9	5	Y
OW-WR-38		5/7/2014	RDX	2.45	0.26			0.6	2	Y
PTX06-1002A		2/3/2014	RDX	9.67	0.687		J	15	2	Y
PTX06-1002A		2/3/2014	TNX	2.41	0.275		J	15	2	Y
PTX06-1002A		8/6/2014	RDX	2.7	0.254			13.3	2	Y
PTX06-1005		2/12/2014	4-Amino-2,6-Dinitrotoluene	3.4	0.263	Q	J+	1.94	1.2	Y
PTX06-1005		2/12/2014	2-Amino-4,6-Dinitrotoluene	4.25	0.263			1.94	1.2	Y
PTX06-1005		2/12/2014	RDX	237	13.2			1.94	2	Y
PTX06-1005		2/12/2014	1,3,5-Trinitrobenzene	269	13.2			1.94	220	Y
PTX06-1005		2/12/2014	TNX	5.98	0.263			1.94	2	Y
PTX06-1005		2/12/2014	Chromium, Total	114	10			1.94	100	Y
PTX06-1005		2/12/2014	Chromium, Hexavalent	108	20			1.94	100	Y
PTX06-1005		2/12/2014	Trichloroethene	26.2	1			1.94	5	Y
PTX06-1005		7/31/2014	RDX	307	25.8		J	2.52	2	Y
PTX06-1005		7/31/2014	2-Amino-4,6-Dinitrotoluene	3.66	0.258	H	J-	2.52	1.2	Y
PTX06-1005		7/31/2014	4-Amino-2,6-Dinitrotoluene	1.57	0.258	H	J-	2.52	1.2	Y
PTX06-1005		7/31/2014	TNX	2.53	0.258	H	J-	2.52	2	Y
PTX06-1005		7/31/2014	Trichloroethene	12.5	1			2.52	5	Y
PTX06-1006		5/19/2014	Perchlorate	120	24		J	1.14	26	Y
PTX06-1006		5/19/2014	4-Amino-2,6-Dinitrotoluene	6.7	0.255			1.14	1.2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1006		5/19/2014	RDX	2.19	0.255			1.14	2	Y
PTX06-1007		5/13/2014	4-Amino-2,6-Dinitrotoluene	25.8	1.32			46.6	1.2	Y
PTX06-1007		5/13/2014	Perchlorate	479	120			46.6	26	Y
PTX06-1008		5/15/2014	1,2-Dichloroethane	46.5	1			0.27	5	Y
PTX06-1010		5/20/2014	Chromium, Total	3260	500		J	8.9	100	Y
PTX06-1010		5/20/2014	RDX	2.09	0.266			8.9	2	Y
PTX06-1010		5/20/2014	Chromium, Hexavalent	2570	200			8.9	100	Y
PTX06-1010		11/10/2014	Chromium, Total	3090	100		J	8.5	100	Y
PTX06-1010		11/10/2014	Chromium, Hexavalent	3230	250			8.5	100	Y
PTX06-1011		5/20/2014	Trichloroethene	9.77	1			0	5	Y
PTX06-1012		2/24/2014	1,2-Dichloroethane	11	3			1.7	5	Y
PTX06-1012		2/24/2014	1,4-Dioxane	10	5			1.7	7.7	Y
PTX06-1012		2/24/2014	Trichloroethene	100	3			1.7	5	Y
PTX06-1012		4/28/2014	1,2-Dichloroethane	8.6	3		U	1.05	5	Y
PTX06-1012		4/28/2014	1,4-Dioxane	9.9	5			1.05	7.7	Y
PTX06-1012		4/28/2014	Trichloroethene	63	3			1.05	5	Y
PTX06-1012		7/14/2014	1,2-Dichloroethane	8.2	3			0.81	5	Y
PTX06-1012		7/14/2014	cis-1,2-Dichloroethene	82	5			0.81	70	Y
PTX06-1012		7/14/2014	1,4-Dioxane	11	5			0.81	7.7	Y
PTX06-1012		7/14/2014	Trichloroethene	24	3			0.81	5	Y
PTX06-1012		10/14/2014	1,2-Dichloroethane	9.6	3			0.06	5	Y
PTX06-1012		10/14/2014	cis-1,2-Dichloroethene	120	5			0.06	70	Y
PTX06-1012		10/14/2014	1,4-Dioxane	12	5			0.06	7.7	Y
PTX06-1012		10/14/2014	Trichloroethene	17	3			0.06	5	Y
PTX06-1013		5/7/2014	RDX	6.61	0.258			0	2	Y
PTX06-1014		7/21/2014	RDX	467	63.8		J	5.99	2	Y
PTX06-1014		7/21/2014	TNX	16.1	6.38		J	5.99	2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1014		7/21/2014	2,4-Dinitrotoluene	2.08	0.255			5.99	1	Y
PTX06-1014		7/21/2014	2-Amino-4,6-Dinitrotoluene	1.36	0.255			5.99	1.2	Y
PTX06-1014		7/21/2014	4-Amino-2,6-Dinitrotoluene	1.97	0.255			5.99	1.2	Y
PTX06-1015		2/11/2014	4-Amino-2,6-Dinitrotoluene	5.98	0.269	Q	J+	0.85	1.2	Y
PTX06-1015		2/11/2014	RDX	962	67.2			0.85	2	Y
PTX06-1015		2/11/2014	TNX	54.7	2.69			0.85	2	Y
PTX06-1015		8/4/2014	RDX	754	64.8		J	1	2	Y
PTX06-1015		8/4/2014	4-Amino-2,6-Dinitrotoluene	3.5	0.259		J-	1	1.2	Y
PTX06-1015		8/4/2014	TNX	42	6.48			1	2	Y
PTX06-1030		5/7/2014	2-Amino-4,6-Dinitrotoluene	4.98	0.258				1.2	Y
PTX06-1030		5/7/2014	4-Amino-2,6-Dinitrotoluene	14.6	6.44				1.2	Y
PTX06-1030		5/7/2014	RDX	1070	64.4				2	Y
PTX06-1030		5/7/2014	TNX	22.6	6.44				2	Y
PTX06-1030		10/28/2014	2-Amino-4,6-Dinitrotoluene	5.81	0.279				1.2	Y
PTX06-1030		10/28/2014	4-Amino-2,6-Dinitrotoluene	17.2	2.79				1.2	Y
PTX06-1030		10/28/2014	RDX	1010	69.8				2	Y
PTX06-1030		10/28/2014	TNX	19.2	2.79				2	Y
PTX06-1031	Compliance	5/6/2014	4-Amino-2,6-Dinitrotoluene	2.46	0.267			7.4	1.2	Y
PTX06-1031	Compliance	5/6/2014	RDX	530	26.7			7.4	2	Y
PTX06-1031	Compliance	5/6/2014	TNX	6.77	0.267			7.4	2	Y
PTX06-1031	Compliance	5/6/2014	Chromium, Total	150	10			7.4	100	Y
PTX06-1031	Compliance	10/28/2014	4-Amino-2,6-Dinitrotoluene	2.75	0.27			8.04	1.2	Y
PTX06-1031	Compliance	10/28/2014	RDX	525	27			8.04	2	Y
PTX06-1031	Compliance	10/28/2014	TNX	7.25	0.27			8.04	2	Y
PTX06-1031	Compliance	10/28/2014	Chromium, Total	202	10			8.04	100	Y
PTX06-1034	Compliance	2/3/2014	RDX	700	34		J	0.05	2	Y
PTX06-1034	Compliance	2/3/2014	TNX	71.5	2.72		J	0.05	2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1034	Compliance	2/3/2014	4-Amino-2,6-Dinitrotoluene	11	2.72			0.05	1.2	Y
PTX06-1034	Compliance	7/24/2014	RDX	929	67.9		J	0.4	2	Y
PTX06-1034	Compliance	7/24/2014	TNX	70.1	6.79		J	0.4	2	Y
PTX06-1034	Compliance	7/24/2014	4-Amino-2,6-Dinitrotoluene	7.99	0.272			0.4	1.2	Y
PTX06-1035		1/30/2014	Perchlorate	48.2	12	H	J-	1.8	26	Y
PTX06-1035		8/11/2014	Perchlorate	76	12			2.52	26	Y
PTX06-1037		4/29/2014	Arsenic	13	5			1.7	12	Y
PTX06-1037		8/7/2014	Arsenic	16	5			4.12	12	Y
PTX06-1037		8/7/2014	Manganese	1800	2	B		4.12	1715.5	Y
PTX06-1037		10/16/2014	Arsenic	17	5		J-	1.11	12	Y
PTX06-1038		1/29/2014	RDX	190	13.5		J-	0.75	2	Y
PTX06-1038		1/29/2014	2-Amino-4,6-Dinitrotoluene	7.98	0.27			0.75	1.2	Y
PTX06-1038		1/29/2014	4-Amino-2,6-Dinitrotoluene	15.6	1.35			0.75	1.2	Y
PTX06-1038		1/29/2014	DNX	2.12	0.27			0.75	2	Y
PTX06-1038		1/29/2014	TNT (2,4,6-Trinitrotoluene)	21.6	1.35			0.75	3.6	Y
PTX06-1038		1/29/2014	TNX	13	1.35			0.75	2	Y
PTX06-1038		7/31/2014	RDX	107	13		J	0.98	2	Y
PTX06-1038		7/31/2014	TNT (2,4,6-Trinitrotoluene)	15.5	2.59		J-	0.98	3.6	Y
PTX06-1038		7/31/2014	2-Amino-4,6-Dinitrotoluene	5.75	0.259			0.98	1.2	Y
PTX06-1038		7/31/2014	4-Amino-2,6-Dinitrotoluene	12	2.59			0.98	1.2	Y
PTX06-1038		7/31/2014	TNX	8.36	0.259			0.98	2	Y
PTX06-1039A		2/13/2014	2-Amino-4,6-Dinitrotoluene	10.1	5.21			0.48	1.2	Y
PTX06-1039A		2/13/2014	4-Amino-2,6-Dinitrotoluene	8.31	5.21			0.48	1.2	Y
PTX06-1039A		2/13/2014	DNX	5.97	0.26			0.48	2	Y
PTX06-1039A		2/13/2014	MNX	2.73	0.26			0.48	2	Y
PTX06-1039A		2/13/2014	RDX	617	65.1			0.48	2	Y
PTX06-1039A		2/13/2014	TNT (2,4,6-Trinitrotoluene)	47.7	5.21			0.48	3.6	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1039A		2/13/2014	TNX	36.9	5.21			0.48	2	Y
PTX06-1039A		7/31/2014	RDX	516	25.8		J	4.39	2	Y
PTX06-1039A		7/31/2014	TNT (2,4,6-Trinitrotoluene)	41.7	2.58		J-	4.39	3.6	Y
PTX06-1039A		7/31/2014	2-Amino-4,6-Dinitrotoluene	9.84	0.258			4.39	1.2	Y
PTX06-1039A		7/31/2014	4-Amino-2,6-Dinitrotoluene	12.8	2.58			4.39	1.2	Y
PTX06-1039A		7/31/2014	DNX	7.11	0.258			4.39	2	Y
PTX06-1039A		7/31/2014	MNX	3.05	0.258			4.39	2	Y
PTX06-1039A		7/31/2014	TNX	47	2.58			4.39	2	Y
PTX06-1040		2/13/2014	2-Amino-4,6-Dinitrotoluene	8.89	0.253			0.63	1.2	Y
PTX06-1040		2/13/2014	4-Amino-2,6-Dinitrotoluene	18.5	5.05			0.63	1.2	Y
PTX06-1040		2/13/2014	DNX	4.43	0.253			0.63	2	Y
PTX06-1040		2/13/2014	RDX	990	63.1			0.63	2	Y
PTX06-1040		2/13/2014	TNT (2,4,6-Trinitrotoluene)	12.8	5.05			0.63	3.6	Y
PTX06-1040		2/13/2014	TNX	44.4	5.05			0.63	2	Y
PTX06-1040		7/31/2014	RDX	1010	51.8		J	0.08	2	Y
PTX06-1040		7/31/2014	TNT (2,4,6-Trinitrotoluene)	33.7	2.59		J-	0.08	3.6	Y
PTX06-1040		7/31/2014	2-Amino-4,6-Dinitrotoluene	8.11	0.259			0.08	1.2	Y
PTX06-1040		7/31/2014	4-Amino-2,6-Dinitrotoluene	17.9	2.59			0.08	1.2	Y
PTX06-1040		7/31/2014	DNX	8.36	0.259			0.08	2	Y
PTX06-1040		7/31/2014	MNX	2.64	0.259			0.08	2	Y
PTX06-1040		7/31/2014	TNX	89.6	2.59			0.08	2	Y
PTX06-1041		2/19/2014	RDX	841	27.5		J	2.9	2	Y
PTX06-1041		2/19/2014	TNX	35.3	2.75		J	2.9	2	Y
PTX06-1041		2/19/2014	2-Amino-4,6-Dinitrotoluene	4.13	0.275		J+	2.9	1.2	Y
PTX06-1041		2/19/2014	4-Amino-2,6-Dinitrotoluene	16.7	2.75			2.9	1.2	Y
PTX06-1041		2/19/2014	DNX	4	0.275			2.9	2	Y
PTX06-1041		2/19/2014	TNT (2,4,6-Trinitrotoluene)	10.1	2.75			2.9	3.6	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1041		7/31/2014	RDX	1200	51	H	J	0.41	2	Y
PTX06-1041		7/31/2014	TNT (2,4,6-Trinitrotoluene)	7.48	0.255		J-	0.41	3.6	Y
PTX06-1041		7/31/2014	2-Amino-4,6-Dinitrotoluene	3.95	0.255			0.41	1.2	Y
PTX06-1041		7/31/2014	4-Amino-2,6-Dinitrotoluene	15.6	2.55			0.41	1.2	Y
PTX06-1041		7/31/2014	DNX	3.15	0.255			0.41	2	Y
PTX06-1041		7/31/2014	TNX	37.9	2.55			0.41	2	Y
PTX06-1042	Compliance	1/29/2014	RDX	583	26.7		J-	0.9	2	Y
PTX06-1042	Compliance	1/29/2014	4-Amino-2,6-Dinitrotoluene	10.3	1.34			0.9	1.2	Y
PTX06-1042	Compliance	1/29/2014	MNX	3.34	0.267			0.9	2	Y
PTX06-1042	Compliance	1/29/2014	TNX	13.2	1.34			0.9	2	Y
PTX06-1042	Compliance	7/31/2014	RDX	653	26.3		J	0.12	2	Y
PTX06-1042	Compliance	7/31/2014	MNX	2.14	0.263	H	J-	0.12	2	Y
PTX06-1042	Compliance	7/31/2014	4-Amino-2,6-Dinitrotoluene	10.5	2.63			0.12	1.2	Y
PTX06-1042	Compliance	7/31/2014	TNX	11.6	2.63			0.12	2	Y
PTX06-1046	Compliance	1/27/2014	RDX	1470	64.1		J-	0.2	2	Y
PTX06-1046	Compliance	1/27/2014	2-Amino-4,6-Dinitrotoluene	1.54	0.256			0.2	1.2	Y
PTX06-1046	Compliance	1/27/2014	4-Amino-2,6-Dinitrotoluene	6.34	0.256			0.2	1.2	Y
PTX06-1046	Compliance	1/27/2014	TNX	117	6.41			0.2	2	Y
PTX06-1046	Compliance	8/4/2014	RDX	1880	64.4	H	J	0	2	Y
PTX06-1046	Compliance	8/4/2014	2-Amino-4,6-Dinitrotoluene	1.59	0.258	H	J-	0	1.2	Y
PTX06-1046	Compliance	8/4/2014	4-Amino-2,6-Dinitrotoluene	5.35	0.258	H	J-	0	1.2	Y
PTX06-1046	Compliance	8/4/2014	TNX	117	25.8			0	2	Y
PTX06-1047A		1/27/2014	RDX	127	6.48		J-	3.1	2	Y
PTX06-1047A		1/27/2014	4-Amino-2,6-Dinitrotoluene	2.48	0.259			3.1	1.2	Y
PTX06-1047A		1/27/2014	TNX	8.55	0.259			3.1	2	Y
PTX06-1047A		8/4/2014	RDX	6.43	0.263		J	0.06	2	Y
PTX06-1049		5/14/2014	4-Amino-2,6-Dinitrotoluene	3.34	0.26			1.31	1.2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1049		5/14/2014	4-Amino-2,6-Dinitrotoluene	3.29	0.263				1.2	Y
PTX06-1049		5/14/2014	RDX	3.47	0.26			1.31	2	Y
PTX06-1049		5/14/2014	RDX	3.15	0.263				2	Y
PTX06-1049		10/29/2014	4-Amino-2,6-Dinitrotoluene	3.01	0.255			4.6	1.2	Y
PTX06-1049		10/29/2014	RDX	3.34	0.255			4.6	2	Y
PTX06-1050	Compliance	4/16/2014	4-Amino-2,6-Dinitrotoluene	8.53	0.263			0.5	1.2	Y
PTX06-1050	Compliance	4/16/2014	RDX	334	26.3			0.5	2	Y
PTX06-1050	Compliance	4/16/2014	TNX	14	26.3	J		0.5	2	Y
PTX06-1050	Compliance	11/13/2014	4-Amino-2,6-Dinitrotoluene	9.97	0.26	H	J-	6.1	1.2	Y
PTX06-1050	Compliance	11/13/2014	RDX	188	13	H	J-	6.1	2	Y
PTX06-1050	Compliance	11/13/2014	TNX	8.61	0.26	H	J-	6.1	2	Y
PTX06-1052	Compliance	2/11/2014	Chromium, Total	2320	500		J	7.3	100	Y
PTX06-1052	Compliance	2/11/2014	Chromium, Hexavalent	1960	400			7.3	100	Y
PTX06-1052	Compliance	8/4/2014	Chromium, Total	1860	400			0.07	100	Y
PTX06-1052	Compliance	8/4/2014	Chromium, Hexavalent	1500	150			0.07	100	Y
PTX06-1077A		7/23/2014	Trichloroethene	5.24	1			6.7	5	Y
PTX06-1088		5/20/2014	2,4-Dinitrotoluene	1.04	0.275			0.5	1	Y
PTX06-1088		5/20/2014	4-Amino-2,6-Dinitrotoluene	1.67	0.275			0.5	1.2	Y
PTX06-1088		5/20/2014	RDX	29.9	3.43			0.5	2	Y
PTX06-1088		5/20/2014	TNX	2.12	0.275			0.5	2	Y
PTX06-1088		5/20/2014	Trichloroethene	10	1			0.5	5	Y
PTX06-1088		11/10/2014	RDX	16	5.43	H	J-	2	2	Y
PTX06-1088		11/10/2014	Tetrachloroethene	5.49	1			2	5	Y
PTX06-1088		11/10/2014	Trichloroethene	13.5	1			2	5	Y
PTX06-1095A		1/30/2014	2-Amino-4,6-Dinitrotoluene	2.08	0.26			50	1.2	Y
PTX06-1095A		1/30/2014	4-Amino-2,6-Dinitrotoluene	2.93	0.26			50	1.2	Y
PTX06-1095A		1/30/2014	RDX	257	26			50	2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1095A		1/30/2014	TNX	7.45	0.26			50	2	Y
PTX06-1095A		1/30/2014	Chromium, Total	176	10			50	100	Y
PTX06-1095A		1/30/2014	Chromium, Hexavalent	148	20			50	100	Y
PTX06-1095A		1/30/2014	Trichloroethene	60.7	1			50	5	Y
PTX06-1095A		8/20/2014	4-Amino-2,6-Dinitrotoluene	1.47	0.269		J+	81.3	1.2	Y
PTX06-1095A		8/20/2014	2-Amino-4,6-Dinitrotoluene	2.74	0.269			81.3	1.2	Y
PTX06-1095A		8/20/2014	RDX	226	13.4			81.3	2	Y
PTX06-1095A		8/20/2014	TNX	4.23	0.269			81.3	2	Y
PTX06-1095A		8/20/2014	Chromium, Total	106	10			81.3	100	Y
PTX06-1095A		8/20/2014	Trichloroethene	41.8	1			81.3	5	Y
PTX06-1098		5/1/2014	Barium	6100	10		J	118	2000	Y
PTX06-1098		5/1/2014	Arsenic	20	5			118	12	Y
PTX06-1098		10/20/2014	Barium	5100	2		J	94	2000	Y
PTX06-1098		10/20/2014	Arsenic	20	5			94	12	Y
PTX06-1100		5/5/2014	Barium	9400	10	B	J	2.02	2000	Y
PTX06-1100		5/5/2014	Arsenic	20	5			2.02	12	Y
PTX06-1101		5/6/2014	RDX	9.4	1		J	1.28	2	Y
PTX06-1101		5/6/2014	Barium	4800	10		J	1.28	2000	Y
PTX06-1101		5/6/2014	Arsenic	17	5			1.28	12	Y
PTX06-1120		4/29/2014	2-Amino-4,6-Dinitrotoluene	6.53	0.265			9.2	1.2	Y
PTX06-1120		4/29/2014	4-Amino-2,6-Dinitrotoluene	11.2	3.31			9.2	1.2	Y
PTX06-1120		4/29/2014	RDX	2140	132			9.2	2	Y
PTX06-1120		4/29/2014	TNX	226	33.1			9.2	2	Y
PTX06-1120		10/27/2014	2-Amino-4,6-Dinitrotoluene	6.33	0.265			8.72	1.2	Y
PTX06-1120		10/27/2014	4-Amino-2,6-Dinitrotoluene	9.26	13.2	J		8.72	1.2	Y
PTX06-1120		10/27/2014	RDX	2470	66.1			8.72	2	Y
PTX06-1120		10/27/2014	TNX	222	13.2			8.72	2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1123		1/20/2014	Barium	2200	2		J-	3.3	2000	Y
PTX06-1123		1/20/2014	TNX	19	2.5			3.3	2	Y
PTX06-1123		4/30/2014	Barium	3200	2		J	5.19	2000	Y
PTX06-1123		4/30/2014	Arsenic	32	5			5.19	12	Y
PTX06-1123		8/7/2014	Barium	2600	2	B	J	3.5	2000	Y
PTX06-1123		8/7/2014	Arsenic	20	5			3.5	12	Y
PTX06-1123		10/16/2014	Barium	4300	2		J	2.82	2000	Y
PTX06-1123		10/16/2014	Arsenic	41	5		J-	2.82	12	Y
PTX06-1123		10/16/2014	Manganese	2000	2	B		2.82	1715.5	Y
PTX06-1126	Compliance	5/13/2014	1,2-Dichloroethane	9.57	1		J	3.75	5	Y
PTX06-1126	Compliance	5/13/2014	1,4-Dioxane	39	1		J	3.75	7.7	Y
PTX06-1126	Compliance	5/13/2014	Trichloroethene	319	5	H	J	3.75	5	Y
PTX06-1126	Compliance	5/13/2014	4-Amino-2,6-Dinitrotoluene	20.3	1.33			3.75	1.2	Y
PTX06-1126	Compliance	5/13/2014	Perchlorate	280	120			3.75	26	Y
PTX06-1126	Compliance	11/5/2014	4-Amino-2,6-Dinitrotoluene	22.6	1.28	H	J	7.6	1.2	Y
PTX06-1126	Compliance	11/5/2014	1,4-Dioxane	54.4	10		J	7.6	7.7	Y
PTX06-1126	Compliance	11/5/2014	Perchlorate	270	120			7.6	26	Y
PTX06-1126	Compliance	11/5/2014	1,2-Dichloroethane	7.58	1			7.6	5	Y
PTX06-1126	Compliance	11/5/2014	Trichloroethene	271	4			7.6	5	Y
PTX06-1127	Compliance	5/8/2014	4-Amino-2,6-Dinitrotoluene	24.8	1.33			1.1	1.2	Y
PTX06-1127	Compliance	5/8/2014	Perchlorate	439	120			1.1	26	Y
PTX06-1127	Compliance	5/8/2014	1,4-Dioxane	42	1			1.1	7.7	Y
PTX06-1127	Compliance	5/8/2014	Trichloroethene	8.38	1			1.1	5	Y
PTX06-1127	Compliance	11/5/2014	4-Amino-2,6-Dinitrotoluene	13.6	1.3	H	J	2.4	1.2	Y
PTX06-1127	Compliance	11/5/2014	1,4-Dioxane	34.8	10		J	2.4	7.7	Y
PTX06-1127	Compliance	11/5/2014	Perchlorate	515	120			2.4	26	Y
PTX06-1127	Compliance	11/5/2014	Trichloroethene	8.01	1			2.4	5	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1130	Compliance	2/3/2014	RDX	105	6.51		J	23	2	Y
PTX06-1130	Compliance	2/3/2014	TNX	6.99	0.26		J	23	2	Y
PTX06-1130	Compliance	2/3/2014	2-Amino-4,6-Dinitrotoluene	8.93	0.26			23	1.2	Y
PTX06-1130	Compliance	2/3/2014	4-Amino-2,6-Dinitrotoluene	8.23	0.26			23	1.2	Y
PTX06-1130	Compliance	8/6/2014	2-Amino-4,6-Dinitrotoluene	7.85	0.272			3.36	1.2	Y
PTX06-1130	Compliance	8/6/2014	4-Amino-2,6-Dinitrotoluene	7.97	0.272			3.36	1.2	Y
PTX06-1130	Compliance	8/6/2014	RDX	97.6	6.79			3.36	2	Y
PTX06-1130	Compliance	8/6/2014	TNX	5.65	0.272			3.36	2	Y
PTX06-1130	Compliance	8/6/2014	Chromium, Total	230	10			3.36	100	Y
PTX06-1134		4/23/2014	4-Amino-2,6-Dinitrotoluene	3.24	0.269			220	1.2	Y
PTX06-1134		10/27/2014	4-Amino-2,6-Dinitrotoluene	3.16	0.26	Q	J+	71.5	1.2	Y
PTX06-1146	Compliance	1/29/2014	RDX	1280	53.8	Q	J	0.55	2	Y
PTX06-1146	Compliance	1/29/2014	4-Amino-2,6-Dinitrotoluene	21.7	1.34			0.55	1.2	Y
PTX06-1146	Compliance	1/29/2014	TNX	21.2	1.34			0.55	2	Y
PTX06-1146	Compliance	8/6/2014	4-Amino-2,6-Dinitrotoluene	22.2	1.3			0.55	1.2	Y
PTX06-1146	Compliance	8/6/2014	RDX	974	65.1			0.55	2	Y
PTX06-1146	Compliance	8/6/2014	TNX	19.4	1.3			0.55	2	Y
PTX06-1147		5/6/2014	4-Amino-2,6-Dinitrotoluene	3.76	0.267			2.1	1.2	Y
PTX06-1147		5/6/2014	DNX	3.89	0.267			2.1	2	Y
PTX06-1147		5/6/2014	MNX	7.7	0.267			2.1	2	Y
PTX06-1147		5/6/2014	RDX	930	66.8			2.1	2	Y
PTX06-1147		5/6/2014	TNX	59.6	6.68			2.1	2	Y
PTX06-1147		10/28/2014	4-Amino-2,6-Dinitrotoluene	3.07	0.262			7.7	1.2	Y
PTX06-1147		10/28/2014	DNX	3.33	0.262			7.7	2	Y
PTX06-1147		10/28/2014	MNX	6.89	0.262			7.7	2	Y
PTX06-1147		10/28/2014	RDX	623	26.2			7.7	2	Y
PTX06-1147		10/28/2014	TNX	42.4	2.62			7.7	2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1148		1/23/2014	Perchlorate	890	120			240	26	Y
PTX06-1148		4/23/2014	Perchlorate	1100	12			169	26	Y
PTX06-1148		8/4/2014	Nickel	850	5			31.3	730	Y
PTX06-1148		8/4/2014	Perchlorate	810	120			31.3	26	Y
PTX06-1148		10/15/2014	Perchlorate	700	120			25.3	26	Y
PTX06-1149		1/23/2014	Arsenic	17	5		J-	7.9	12	Y
PTX06-1149		1/23/2014	Manganese	4600	2		J-	7.9	1715.5	Y
PTX06-1149		4/23/2014	Arsenic	25	5			2.43	12	Y
PTX06-1149		4/23/2014	Manganese	4100	2			2.43	1715.5	Y
PTX06-1149		8/4/2014	Arsenic	26	5			5.83	12	Y
PTX06-1149		8/4/2014	Manganese	1900	2	B		5.83	1715.5	Y
PTX06-1149		10/15/2014	Arsenic	36	5			2.02	12	Y
PTX06-1149		10/15/2014	Manganese	2100	2			2.02	1715.5	Y
PTX06-1150		1/27/2014	Perchlorate	160	12			9.3	26	Y
PTX06-1150		4/23/2014	Perchlorate	150	12			10.62	26	Y
PTX06-1150		8/4/2014	Perchlorate	140	12			17.7	26	Y
PTX06-1150		10/15/2014	Perchlorate	160	12			5.72	26	Y
PTX06-1151		2/19/2014	RDX	11.9	1.46		J	0.2	2	Y
PTX06-1151		2/19/2014	Trichloroethene	100	2		J-	0.2	5	Y
PTX06-1151		2/19/2014	Perchlorate	75.4	12			0.2	26	Y
PTX06-1151		2/19/2014	1,2-Dichloroethane	6.82	1			0.2	5	Y
PTX06-1151		8/12/2014	RDX	13.5	2.58		J	0.13	2	Y
PTX06-1151		8/12/2014	1,2-Dichloroethane	6.16	1		J-	0.13	5	Y
PTX06-1151		8/12/2014	Perchlorate	88.5	12			0.13	26	Y
PTX06-1151		8/12/2014	Trichloroethene	100	2			0.13	5	Y
PTX06-1153	Compliance	1/21/2014	2-Amino-4,6-Dinitrotoluene	2	1			0.95	1.2	Y
PTX06-1153	Compliance	1/21/2014	4-Amino-2,6-Dinitrotoluene	2.9	1			0.95	1.2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1153	Compliance	1/21/2014	MNX	3.4	2.5			0.95	2	Y
PTX06-1153	Compliance	1/21/2014	RDX	300	20			0.95	2	Y
PTX06-1153	Compliance	1/21/2014	TNX	4	2.5			0.95	2	Y
PTX06-1153	Compliance	1/21/2014	Chromium, Total	150	10			0.95	100	Y
PTX06-1153	Compliance	1/21/2014	Chromium, Hexavalent	159	20			0.95	100	Y
PTX06-1153	Compliance	5/1/2014	2-Amino-4,6-Dinitrotoluene	2.8	1			0.97	1.2	Y
PTX06-1153	Compliance	5/1/2014	4-Amino-2,6-Dinitrotoluene	3.4	1			0.97	1.2	Y
PTX06-1153	Compliance	5/1/2014	MNX	2.9	2.5			0.97	2	Y
PTX06-1153	Compliance	5/1/2014	RDX	400	20			0.97	2	Y
PTX06-1153	Compliance	5/1/2014	TNX	2.6	2.5			0.97	2	Y
PTX06-1153	Compliance	5/1/2014	Chromium, Total	160	10			0.97	100	Y
PTX06-1153	Compliance	5/1/2014	Chromium, Hexavalent	151	20			0.97	100	Y
PTX06-1153	Compliance	8/7/2014	2-Amino-4,6-Dinitrotoluene	2.4	0.2			2.15	1.2	Y
PTX06-1153	Compliance	8/7/2014	4-Amino-2,6-Dinitrotoluene	2.5	0.2			2.15	1.2	Y
PTX06-1153	Compliance	8/7/2014	MNX	2.9	0.5			2.15	2	Y
PTX06-1153	Compliance	8/7/2014	RDX	260	20			2.15	2	Y
PTX06-1153	Compliance	8/7/2014	TNX	2.2	0.5			2.15	2	Y
PTX06-1153	Compliance	8/7/2014	Chromium, Total	160	10			2.15	100	Y
PTX06-1153	Compliance	10/16/2014	RDX	210	40		J+	0.4	2	Y
PTX06-1153	Compliance	10/16/2014	2-Amino-4,6-Dinitrotoluene	2.7	1			0.4	1.2	Y
PTX06-1153	Compliance	10/16/2014	4-Amino-2,6-Dinitrotoluene	2.6	1			0.4	1.2	Y
PTX06-1153	Compliance	10/16/2014	MNX	2.8	5	J		0.4	2	Y
PTX06-1153	Compliance	10/16/2014	TNX	2.5	5	J		0.4	2	Y
PTX06-1153	Compliance	10/16/2014	Chromium, Total	180	10			0.4	100	Y
PTX06-1153	Compliance	10/16/2014	Chromium, Hexavalent	127	50			0.4	100	Y
PTX06-1154	Compliance	1/21/2014	Arsenic	59	5		J-	4.8	12	Y
PTX06-1154	Compliance	1/21/2014	Barium	13000	10		J-	4.8	2000	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-1154	Compliance	1/21/2014	TNX	2.2	2.5	J		4.8	2	Y
PTX06-1154	Compliance	4/30/2014	Barium	15000	10		J	4.76	2000	Y
PTX06-1154	Compliance	4/30/2014	Arsenic	71	5			4.76	12	Y
PTX06-1154	Compliance	8/7/2014	Barium	16000	10	B	J	5.46	2000	Y
PTX06-1154	Compliance	8/7/2014	Arsenic	73	5			5.46	12	Y
PTX06-1154	Compliance	10/16/2014	Barium	13000	5	^	J	3.13	2000	Y
PTX06-1154	Compliance	10/16/2014	Arsenic	63	5		J-	3.13	12	Y
PTX06-1155	Compliance	2/24/2014	Arsenic	31	5			3.2	12	Y
PTX06-1155	Compliance	2/24/2014	1,2-Dichloroethane	6.9	3			3.2	5	Y
PTX06-1155	Compliance	2/24/2014	cis-1,2-Dichloroethene	310	10			3.2	70	Y
PTX06-1155	Compliance	2/24/2014	1,4-Dioxane	12	5			3.2	7.7	Y
PTX06-1155	Compliance	4/28/2014	cis-1,2-Dichloroethene	340	10		J	1.15	70	Y
PTX06-1155	Compliance	4/28/2014	1,2-Dichloroethane	7.2	3		U	1.15	5	Y
PTX06-1155	Compliance	4/28/2014	Arsenic	30	5			1.15	12	Y
PTX06-1155	Compliance	4/28/2014	1,4-Dioxane	15	5			1.15	7.7	Y
PTX06-1155	Compliance	4/28/2014	Trichloroethene	5.4	3			1.15	5	Y
PTX06-1155	Compliance	7/14/2014	cis-1,2-Dichloroethene	340	10		J	0.81	70	Y
PTX06-1155	Compliance	7/14/2014	Arsenic	27	5			0.81	12	Y
PTX06-1155	Compliance	7/14/2014	1,2-Dichloroethane	8	3			0.81	5	Y
PTX06-1155	Compliance	7/14/2014	1,4-Dioxane	20	5			0.81	7.7	Y
PTX06-1155	Compliance	7/14/2014	Trichloroethene	110	3			0.81	5	Y
PTX06-1155	Compliance	10/14/2014	Arsenic	24	5			0.21	12	Y
PTX06-1155	Compliance	10/14/2014	1,2-Dichloroethane	8.3	3			0.21	5	Y
PTX06-1155	Compliance	10/14/2014	cis-1,2-Dichloroethene	450	25			0.21	70	Y
PTX06-1155	Compliance	10/14/2014	1,4-Dioxane	25	5			0.21	7.7	Y
PTX06-1155	Compliance	10/14/2014	Trichloroethene	48	3			0.21	5	Y
PTX06-1156	Compliance	1/22/2014	Arsenic	40	5		J-	6.8	12	Y

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PTX06-1156	Compliance	1/22/2014	Barium	2100	2		J-	6.8	2000	Y
PTX06-1156	Compliance	4/28/2014	Arsenic	39	5			0.35	12	Y
PTX06-1156	Compliance	4/28/2014	Barium	2300	2			0.35	2000	Y
PTX06-1156	Compliance	7/14/2014	Arsenic	35	5			1.34	12	Y
PTX06-1156	Compliance	10/14/2014	Arsenic	31	5			0.35	12	Y
PTX06-1159		1/28/2014	Perchlorate	145	24	H	J-	7.1	26	Y
PTX06-1159		1/28/2014	4-Amino-2,6-Dinitrotoluene	2.12	0.282			7.1	1.2	Y
PTX06-1159		1/28/2014	1,2-Dichloroethane	11.1	1			7.1	5	Y
PTX06-1159		1/28/2014	Trichloroethene	206	5			7.1	5	Y
PTX06-1159		8/11/2014	4-Amino-2,6-Dinitrotoluene	2.71	0.269			0	1.2	Y
PTX06-1159		8/11/2014	Perchlorate	203	60			0	26	Y
PTX06-1159		8/11/2014	1,2-Dichloroethane	12.9	1			0	5	Y
PTX06-1159		8/11/2014	Trichloroethene	308	5			0	5	Y
PTX06-1166		1/27/2014	RDX	17.7	1.28		J-	9.5	2	Y
PTX06-1166		1/27/2014	Trichloroethene	10.2	1			9.5	5	Y
PTX06-1166		8/4/2014	RDX	25.3	0.262		J	3.32	2	Y
PTX06-1166		8/4/2014	RDX	17.3	1.28		J		2	Y
PTX06-1166		8/4/2014	Trichloroethene	10	1			3.32	5	Y
PTX06-1166		8/4/2014	Trichloroethene	10.3	1				5	Y
PTX06-EW-1		6/16/2014	2,4-Dinitrotoluene	6.5	4				1	Y
PTX06-EW-1		6/16/2014	2-Amino-4,6-Dinitrotoluene	3.8	4	J			1.2	Y
PTX06-EW-1		6/16/2014	4-Amino-2,6-Dinitrotoluene	5.9	4				1.2	Y
PTX06-EW-1		6/16/2014	RDX	380	100				2	Y
PTX06-EW-1		6/16/2014	1,3,5-Trinitrobenzene	1000	100				220	Y
PTX06-EW-1		6/16/2014	TNX	22	10				2	Y
PTX06-EW-1		6/16/2014	Chromium, Hexavalent	545	100				100	Y
PTX06-EW-10		6/12/2014	Chromium, Total	650	10				100	Y

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PTX06-EW-10		6/12/2014	Chromium, Hexavalent	670	200				100	Y
PTX06-EW-10		6/17/2014	Chromium, Total	630	10				100	Y
PTX06-EW-10		6/17/2014	Chromium, Hexavalent	576	100				100	Y
PTX06-EW-12		6/3/2014	2-Amino-4,6-Dinitrotoluene	6.3	20	J	J		1.2	Y
PTX06-EW-12		6/3/2014	4-Amino-2,6-Dinitrotoluene	23	20		J		1.2	Y
PTX06-EW-12		6/3/2014	RDX	1100	100		J		2	Y
PTX06-EW-12		6/3/2014	TNX	27	50	J *	J		2	Y
PTX06-EW-12		6/3/2014	2,4-Dinitrotoluene	7.9	20	J			1	Y
PTX06-EW-12		6/3/2014	Chromium, Total	110	10				100	Y
PTX06-EW-15		6/12/2014	RDX	12	1				2	Y
PTX06-EW-16		6/3/2014	2-Amino-4,6-Dinitrotoluene	5.5	4.6		J		1.2	Y
PTX06-EW-16		6/3/2014	4-Amino-2,6-Dinitrotoluene	24	4.6		J		1.2	Y
PTX06-EW-16		6/3/2014	RDX	550	46		J		2	Y
PTX06-EW-16		6/3/2014	TNX	29	12	*	J		2	Y
PTX06-EW-16		6/3/2014	DNX	4.8	12	J	J+		2	Y
PTX06-EW-16		6/3/2014	2,4-Dinitrotoluene	3.1	4.6	J			1	Y
PTX06-EW-16		6/3/2014	TNT (2,4,6-Trinitrotoluene)	33	2.3				3.6	Y
PTX06-EW-17		6/3/2014	2-Amino-4,6-Dinitrotoluene	13	4		J		1.2	Y
PTX06-EW-17		6/3/2014	4-Amino-2,6-Dinitrotoluene	26	4		J		1.2	Y
PTX06-EW-17		6/3/2014	RDX	540	20		J		2	Y
PTX06-EW-17		6/3/2014	TNX	28	10	*	J		2	Y
PTX06-EW-17		6/3/2014	DNX	4	10	J	J+		2	Y
PTX06-EW-17		6/3/2014	2,4-Dinitrotoluene	5.1	4				1	Y
PTX06-EW-17		6/3/2014	TNT (2,4,6-Trinitrotoluene)	22	2				3.6	Y
PTX06-EW-18		6/3/2014	2-Amino-4,6-Dinitrotoluene	7.6	2		J		1.2	Y
PTX06-EW-18		6/3/2014	4-Amino-2,6-Dinitrotoluene	23	2		J		1.2	Y
PTX06-EW-18		6/3/2014	RDX	210	20		J		2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-EW-18		6/3/2014	TNX	14	5	*	J		2	Y
PTX06-EW-18		6/3/2014	DNX	2.1	5	J	J+		2	Y
PTX06-EW-18		6/3/2014	2,4-Dinitrotoluene	6.5	2				1	Y
PTX06-EW-18		6/3/2014	TNT (2,4,6-Trinitrotoluene)	33	1				3.6	Y
PTX06-EW-19		6/3/2014	2-Amino-4,6-Dinitrotoluene	9	1		J		1.2	Y
PTX06-EW-19		6/3/2014	4-Amino-2,6-Dinitrotoluene	9.5	1		J		1.2	Y
PTX06-EW-19		6/3/2014	RDX	130	20		J		2	Y
PTX06-EW-19		6/3/2014	TNX	7.3	2.5	*	J		2	Y
PTX06-EW-19		6/3/2014	2,4-Dinitrotoluene	1.7	1				1	Y
PTX06-EW-2		6/16/2014	2,4-Dinitrotoluene	8	4				1	Y
PTX06-EW-2		6/16/2014	2-Amino-4,6-Dinitrotoluene	5.5	4				1.2	Y
PTX06-EW-2		6/16/2014	4-Amino-2,6-Dinitrotoluene	5.4	4				1.2	Y
PTX06-EW-2		6/16/2014	RDX	390	40				2	Y
PTX06-EW-2		6/16/2014	1,3,5-Trinitrobenzene	540	40				220	Y
PTX06-EW-2		6/16/2014	TNT (2,4,6-Trinitrotoluene)	12	2				3.6	Y
PTX06-EW-2		6/16/2014	TNX	28	10				2	Y
PTX06-EW-20		6/12/2014	2,4-Dinitrotoluene	5.4	4				1	Y
PTX06-EW-20		6/12/2014	2-Amino-4,6-Dinitrotoluene	3.8	4	J			1.2	Y
PTX06-EW-20		6/12/2014	4-Amino-2,6-Dinitrotoluene	5.1	4				1.2	Y
PTX06-EW-20		6/12/2014	RDX	410	40				2	Y
PTX06-EW-20		6/12/2014	1,3,5-Trinitrobenzene	860	40				220	Y
PTX06-EW-20		6/12/2014	TNT (2,4,6-Trinitrotoluene)	6.7	2				3.6	Y
PTX06-EW-20		6/12/2014	TNX	25	10				2	Y
PTX06-EW-22A		6/12/2014	RDX	51	10				2	Y
PTX06-EW-22A		6/12/2014	TNT (2,4,6-Trinitrotoluene)	6.1	0.5				3.6	Y
PTX06-EW-22A		6/12/2014	TNX	4.9	2.5				2	Y
PTX06-EW-23A		7/22/2014	2-Amino-4,6-Dinitrotoluene	2	2		J		1.2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-EW-23A		7/22/2014	RDX	280	40		J		2	Y
PTX06-EW-23A		7/22/2014	TNX	17	5		J		2	Y
PTX06-EW-23A		7/22/2014	2,4-Dinitrotoluene	6.6	2				1	Y
PTX06-EW-23A		7/22/2014	4-Amino-2,6-Dinitrotoluene	2.3	2				1.2	Y
PTX06-EW-23A		7/22/2014	TNT (2,4,6-Trinitrotoluene)	15	1				3.6	Y
PTX06-EW-24		6/12/2014	2,4-Dinitrotoluene	5.7	4				1	Y
PTX06-EW-24		6/12/2014	2,4-Dinitrotoluene	5.7	4				1	Y
PTX06-EW-24		6/12/2014	2-Amino-4,6-Dinitrotoluene	4.1	4				1.2	Y
PTX06-EW-24		6/12/2014	2-Amino-4,6-Dinitrotoluene	3.6	4	J			1.2	Y
PTX06-EW-24		6/12/2014	4-Amino-2,6-Dinitrotoluene	3.8	4	J			1.2	Y
PTX06-EW-24		6/12/2014	4-Amino-2,6-Dinitrotoluene	4.7	4				1.2	Y
PTX06-EW-24		6/12/2014	RDX	390	40				2	Y
PTX06-EW-24		6/12/2014	RDX	490	40				2	Y
PTX06-EW-24		6/12/2014	1,3,5-Trinitrobenzene	860	40				220	Y
PTX06-EW-24		6/12/2014	1,3,5-Trinitrobenzene	890	40				220	Y
PTX06-EW-24		6/12/2014	TNT (2,4,6-Trinitrotoluene)	6.8	2				3.6	Y
PTX06-EW-24		6/12/2014	TNT (2,4,6-Trinitrotoluene)	6.8	2				3.6	Y
PTX06-EW-24		6/12/2014	TNX	29	10				2	Y
PTX06-EW-24		6/12/2014	TNX	26	10				2	Y
PTX06-EW-25		6/12/2014	RDX	56	10				2	Y
PTX06-EW-25		6/12/2014	TNT (2,4,6-Trinitrotoluene)	6.5	0.5				3.6	Y
PTX06-EW-25		6/12/2014	TNX	5	2.5				2	Y
PTX06-EW-26		7/10/2014	RDX	260	40		J		2	Y
PTX06-EW-26		7/10/2014	TNT (2,4,6-Trinitrotoluene)	9.7	5		J		3.6	Y
PTX06-EW-26		7/10/2014	TNX	14	25	J	J		2	Y
PTX06-EW-26		7/10/2014	2,4-Dinitrotoluene	5.7	0.2				1	Y
PTX06-EW-26		7/10/2014	2-Amino-4,6-Dinitrotoluene	1.8	0.2				1.2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-EW-26		7/10/2014	4-Amino-2,6-Dinitrotoluene	2	0.2				1.2	Y
PTX06-EW-27		6/3/2014	4-Amino-2,6-Dinitrotoluene	13	20	J	J		1.2	Y
PTX06-EW-27		6/3/2014	RDX	1100	100		J		2	Y
PTX06-EW-27		6/3/2014	TNX	26	50	J *	J		2	Y
PTX06-EW-27		6/3/2014	2,4-Dinitrotoluene	9.6	20	J			1	Y
PTX06-EW-27		6/3/2014	TNT (2,4,6-Trinitrotoluene)	5	10	J			3.6	Y
PTX06-EW-28		6/12/2014	2,4-Dinitrotoluene	4.9	0.2				1	Y
PTX06-EW-28		6/12/2014	2-Amino-4,6-Dinitrotoluene	1.9	0.2				1.2	Y
PTX06-EW-28		6/12/2014	RDX	37	4				2	Y
PTX06-EW-28		6/12/2014	TNT (2,4,6-Trinitrotoluene)	4.9	0.1				3.6	Y
PTX06-EW-29		6/12/2014	RDX	410	40		J+		2	Y
PTX06-EW-29		6/12/2014	2,4-Dinitrotoluene	1.1	2	J			1	Y
PTX06-EW-29		6/12/2014	2-Amino-4,6-Dinitrotoluene	2.1	2				1.2	Y
PTX06-EW-29		6/12/2014	4-Amino-2,6-Dinitrotoluene	6.1	2				1.2	Y
PTX06-EW-29		6/12/2014	TNX	12	5				2	Y
PTX06-EW-29		6/12/2014	Chromium, Total	170	10				100	Y
PTX06-EW-3		6/16/2014	2,4-Dinitrotoluene	2.5	4	J			1	Y
PTX06-EW-3		6/16/2014	RDX	78	4				2	Y
PTX06-EW-3		6/16/2014	1,3,5-Trinitrobenzene	750	40				220	Y
PTX06-EW-3		6/16/2014	TNX	3.3	10	J			2	Y
PTX06-EW-30		7/22/2014	2-Amino-4,6-Dinitrotoluene	2.7	2		J		1.2	Y
PTX06-EW-30		7/22/2014	RDX	340	40		J		2	Y
PTX06-EW-30		7/22/2014	TNX	23	5		J		2	Y
PTX06-EW-30		7/22/2014	2,4-Dinitrotoluene	6.9	2				1	Y
PTX06-EW-30		7/22/2014	4-Amino-2,6-Dinitrotoluene	2.5	2				1.2	Y
PTX06-EW-30		7/22/2014	TNT (2,4,6-Trinitrotoluene)	4.7	1				3.6	Y
PTX06-EW-31		8/13/2014	RDX	190	20		J		2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-EW-31		8/13/2014	TNX	7.9	5		J		2	Y
PTX06-EW-31		8/13/2014	2,4-Dinitrotoluene	4.4	2				1	Y
PTX06-EW-31		8/13/2014	2-Amino-4,6-Dinitrotoluene	2.2	2				1.2	Y
PTX06-EW-31		8/13/2014	TNT (2,4,6-Trinitrotoluene)	14	1				3.6	Y
PTX06-EW-32		7/22/2014	2-Amino-4,6-Dinitrotoluene	9.7	2		J		1.2	Y
PTX06-EW-32		7/22/2014	RDX	190	20		J		2	Y
PTX06-EW-32		7/22/2014	TNX	12	5		J		2	Y
PTX06-EW-32		7/22/2014	2,4-Dinitrotoluene	2.8	2				1	Y
PTX06-EW-32		7/22/2014	4-Amino-2,6-Dinitrotoluene	1.8	2	J			1.2	Y
PTX06-EW-33		7/10/2014	RDX	320	40		J		2	Y
PTX06-EW-33		7/10/2014	TNT (2,4,6-Trinitrotoluene)	6.6	5		J		3.6	Y
PTX06-EW-33		7/10/2014	TNX	17	25	J	J		2	Y
PTX06-EW-33		7/10/2014	2,4-Dinitrotoluene	5.7	10	J			1	Y
PTX06-EW-33		7/10/2014	2-Amino-4,6-Dinitrotoluene	2.4	0.2				1.2	Y
PTX06-EW-33		7/10/2014	4-Amino-2,6-Dinitrotoluene	2.1	0.2				1.2	Y
PTX06-EW-34		7/22/2014	2-Amino-4,6-Dinitrotoluene	6.6	4		J		1.2	Y
PTX06-EW-34		7/22/2014	RDX	1000	100		J		2	Y
PTX06-EW-34		7/22/2014	TNX	44	10		J		2	Y
PTX06-EW-34		7/22/2014	2,4-Dinitrotoluene	8.7	4				1	Y
PTX06-EW-34		7/22/2014	4-Amino-2,6-Dinitrotoluene	4.5	4				1.2	Y
PTX06-EW-34		7/22/2014	TNT (2,4,6-Trinitrotoluene)	6.8	2				3.6	Y
PTX06-EW-35		6/3/2014	4-Amino-2,6-Dinitrotoluene	19	20	J	J		1.2	Y
PTX06-EW-35		6/3/2014	RDX	1200	100		J		2	Y
PTX06-EW-35		6/3/2014	TNX	24	50	J *	J		2	Y
PTX06-EW-35		6/3/2014	2,4-Dinitrotoluene	5.9	20	J			1	Y
PTX06-EW-36		6/2/2014	RDX	1300	100		J+		2	Y
PTX06-EW-36		6/2/2014	4-Amino-2,6-Dinitrotoluene	5.9	0.2				1.2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-EW-36		6/2/2014	1,3,5-Trinitrobenzene	280	100				220	Y
PTX06-EW-36		6/2/2014	TNT (2,4,6-Trinitrotoluene)	4.6	0.1				3.6	Y
PTX06-EW-36		6/2/2014	TNX	29	250	J			2	Y
PTX06-EW-37		5/29/2014	RDX	3.2	0.2		J+		2	Y
PTX06-EW-37		5/29/2014	Chromium, Total	190	10				100	Y
PTX06-EW-37		5/29/2014	Chromium, Hexavalent	136	100				100	Y
PTX06-EW-38C		5/29/2014	RDX	17	2		J+		2	Y
PTX06-EW-38C		5/29/2014	2,4-Dinitrotoluene	1.1	0.2				1	Y
PTX06-EW-39		8/13/2014	RDX	93	4		J		2	Y
PTX06-EW-39		8/13/2014	2,4-Dinitrotoluene	7.2	0.4				1	Y
PTX06-EW-39		8/13/2014	2-Amino-4,6-Dinitrotoluene	2.1	0.4				1.2	Y
PTX06-EW-39		8/13/2014	TNT (2,4,6-Trinitrotoluene)	8.2	0.2				3.6	Y
PTX06-EW-4		6/3/2014	2-Amino-4,6-Dinitrotoluene	3.2	4	J	J		1.2	Y
PTX06-EW-4		6/3/2014	4-Amino-2,6-Dinitrotoluene	12	4		J		1.2	Y
PTX06-EW-4		6/3/2014	RDX	870	100		J		2	Y
PTX06-EW-4		6/3/2014	TNX	19	10	*	J		2	Y
PTX06-EW-4		6/3/2014	2,4-Dinitrotoluene	8	4				1	Y
PTX06-EW-4		6/3/2014	TNT (2,4,6-Trinitrotoluene)	5	2				3.6	Y
PTX06-EW-40		8/4/2014	2,4-Dinitrotoluene	9.7	2				1	Y
PTX06-EW-40		8/4/2014	2-Amino-4,6-Dinitrotoluene	3.1	2				1.2	Y
PTX06-EW-40		8/4/2014	4-Amino-2,6-Dinitrotoluene	1.6	2	J			1.2	Y
PTX06-EW-40		8/4/2014	RDX	190	20				2	Y
PTX06-EW-40		8/4/2014	TNT (2,4,6-Trinitrotoluene)	15	1				3.6	Y
PTX06-EW-40		8/4/2014	Chromium, Total	120	10				100	Y
PTX06-EW-41		8/4/2014	2,4-Dinitrotoluene	1.9	2	J			1	Y
PTX06-EW-41		8/4/2014	2-Amino-4,6-Dinitrotoluene	3.2	2				1.2	Y
PTX06-EW-41		8/4/2014	4-Amino-2,6-Dinitrotoluene	8	2				1.2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-EW-41		8/4/2014	RDX	320	20				2	Y
PTX06-EW-41		8/4/2014	TNX	5.9	5				2	Y
PTX06-EW-41		8/4/2014	Chromium, Total	130	10				100	Y
PTX06-EW-42A		8/4/2014	2,4-Dinitrotoluene	13	4				1	Y
PTX06-EW-42A		8/4/2014	2-Amino-4,6-Dinitrotoluene	8.5	4				1.2	Y
PTX06-EW-42A		8/4/2014	4-Amino-2,6-Dinitrotoluene	8.8	4				1.2	Y
PTX06-EW-42A		8/4/2014	RDX	1100	100				2	Y
PTX06-EW-42A		8/4/2014	TNT (2,4,6-Trinitrotoluene)	7.9	2				3.6	Y
PTX06-EW-42A		8/4/2014	TNX	12	10				2	Y
PTX06-EW-42A		8/4/2014	Chromium, Total	110	10				100	Y
PTX06-EW-43		8/4/2014	RDX	320	100		J+		2	Y
PTX06-EW-43		8/4/2014	2,4-Dinitrotoluene	17	4				1	Y
PTX06-EW-43		8/4/2014	2-Amino-4,6-Dinitrotoluene	3.5	4	J			1.2	Y
PTX06-EW-43		8/4/2014	4-Amino-2,6-Dinitrotoluene	5.6	4				1.2	Y
PTX06-EW-43		8/4/2014	TNT (2,4,6-Trinitrotoluene)	33	2				3.6	Y
PTX06-EW-43		8/4/2014	TNX	11	10				2	Y
PTX06-EW-43		8/4/2014	Chromium, Total	300	10				100	Y
PTX06-EW-43		8/4/2014	Chromium, Hexavalent	174	50				100	Y
PTX06-EW-44		5/29/2014	2,4-Dinitrotoluene	13	20	J	J-		1	Y
PTX06-EW-44		5/29/2014	2-Amino-4,6-Dinitrotoluene	7.8	20	J	J-		1.2	Y
PTX06-EW-44		5/29/2014	4-Amino-2,6-Dinitrotoluene	8.3	20	J	J-		1.2	Y
PTX06-EW-44		5/29/2014	TNT (2,4,6-Trinitrotoluene)	28	10		J-		3.6	Y
PTX06-EW-44		5/29/2014	TNX	44	50	J	J-		2	Y
PTX06-EW-44		5/29/2014	RDX	2000	100		J+		2	Y
PTX06-EW-45		5/29/2014	RDX	2200	200		J+		2	Y
PTX06-EW-45		5/29/2014	2,4-Dinitrotoluene	17	20	J			1	Y
PTX06-EW-45		5/29/2014	4-Amino-2,6-Dinitrotoluene	9.7	20	J			1.2	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-EW-45		5/29/2014	TNT (2,4,6-Trinitrotoluene)	30	10				3.6	Y
PTX06-EW-45		5/29/2014	TNX	72	50				2	Y
PTX06-EW-46		6/2/2014	TNX	130	250	J	J-		2	Y
PTX06-EW-46		6/2/2014	RDX	2200	100		J+		2	Y
PTX06-EW-46		6/2/2014	DNX	2.1	0.5				2	Y
PTX06-EW-48		7/22/2014	2-Amino-4,6-Dinitrotoluene	3.7	4	J	J		1.2	Y
PTX06-EW-48		7/22/2014	RDX	930	100		J		2	Y
PTX06-EW-48		7/22/2014	TNX	41	10		J		2	Y
PTX06-EW-48		7/22/2014	2,4-Dinitrotoluene	6.8	4				1	Y
PTX06-EW-48		7/22/2014	4-Amino-2,6-Dinitrotoluene	4.4	4				1.2	Y
PTX06-EW-48		7/22/2014	TNT (2,4,6-Trinitrotoluene)	7.7	2				3.6	Y
PTX06-EW-48		8/13/2014	RDX	1100	100		J		2	Y
PTX06-EW-48		8/13/2014	TNX	43	10		J		2	Y
PTX06-EW-48		8/13/2014	2,4-Dinitrotoluene	7.1	4				1	Y
PTX06-EW-48		8/13/2014	2-Amino-4,6-Dinitrotoluene	4.9	4				1.2	Y
PTX06-EW-48		8/13/2014	4-Amino-2,6-Dinitrotoluene	4.1	4				1.2	Y
PTX06-EW-48		8/13/2014	TNT (2,4,6-Trinitrotoluene)	7.2	2				3.6	Y
PTX06-EW-49		6/2/2014	RDX	540	40		J+		2	Y
PTX06-EW-49		6/2/2014	2,4-Dinitrotoluene	1.8	0.2				1	Y
PTX06-EW-49		6/2/2014	2-Amino-4,6-Dinitrotoluene	5.8	0.2				1.2	Y
PTX06-EW-49		6/2/2014	4-Amino-2,6-Dinitrotoluene	3.2	0.2				1.2	Y
PTX06-EW-49		6/2/2014	TNX	24	100	J			2	Y
PTX06-EW-50		6/3/2014	2-Amino-4,6-Dinitrotoluene	8.7	20	J	J		1.2	Y
PTX06-EW-50		6/3/2014	4-Amino-2,6-Dinitrotoluene	16	20	J	J		1.2	Y
PTX06-EW-50		6/3/2014	MNX	7.8	50	J	J		2	Y
PTX06-EW-50		6/3/2014	RDX	1100	100		J		2	Y
PTX06-EW-50		6/3/2014	TNX	96	50	*	J		2	Y

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PTX06-EW-50		6/3/2014	DNX	21	50	J	J+		2	Y
PTX06-EW-50		6/3/2014	TNT (2,4,6-Trinitrotoluene)	57	10				3.6	Y
PTX06-EW-51		8/4/2014	Chromium, Total	1500	10				100	Y
PTX06-EW-51		8/4/2014	Chromium, Hexavalent	846	100				100	Y
PTX06-EW-53		6/3/2014	4-Amino-2,6-Dinitrotoluene	6.6	20	J	J		1.2	Y
PTX06-EW-53		6/3/2014	RDX	1100	100		J		2	Y
PTX06-EW-53		6/3/2014	TNX	56	50	*	J		2	Y
PTX06-EW-53		6/3/2014	2,4-Dinitrotoluene	12	20	J			1	Y
PTX06-EW-54		6/3/2014	2-Amino-4,6-Dinitrotoluene	9.9	20	J	J		1.2	Y
PTX06-EW-54		6/3/2014	4-Amino-2,6-Dinitrotoluene	14	20	J	J		1.2	Y
PTX06-EW-54		6/3/2014	RDX	680	100		J		2	Y
PTX06-EW-54		6/3/2014	TNX	42	50	J *	J		2	Y
PTX06-EW-54		6/3/2014	DNX	7.7	50	J	J+		2	Y
PTX06-EW-54		6/3/2014	TNT (2,4,6-Trinitrotoluene)	66	10				3.6	Y
PTX06-EW-55		6/3/2014	2-Amino-4,6-Dinitrotoluene	9.9	20	J	J		1.2	Y
PTX06-EW-55		6/3/2014	4-Amino-2,6-Dinitrotoluene	17	20	J	J		1.2	Y
PTX06-EW-55		6/3/2014	RDX	960	100		J		2	Y
PTX06-EW-55		6/3/2014	TNX	58	50	*	J		2	Y
PTX06-EW-55		6/3/2014	DNX	7.6	50	J	J+		2	Y
PTX06-EW-55		6/3/2014	TNT (2,4,6-Trinitrotoluene)	51	10				3.6	Y
PTX06-EW-56		6/3/2014	2-Amino-4,6-Dinitrotoluene	6.5	20	J	J		1.2	Y
PTX06-EW-56		6/3/2014	4-Amino-2,6-Dinitrotoluene	23	20		J		1.2	Y
PTX06-EW-56		6/3/2014	RDX	1000	100		J		2	Y
PTX06-EW-56		6/3/2014	TNX	51	50	*	J		2	Y
PTX06-EW-56		6/3/2014	DNX	5.6	50	J	J+		2	Y
PTX06-EW-56		6/3/2014	2,4-Dinitrotoluene	6.3	20	J			1	Y
PTX06-EW-56		6/3/2014	TNT (2,4,6-Trinitrotoluene)	16	10				3.6	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-EW-57		6/3/2014	4-Amino-2,6-Dinitrotoluene	23	20		J		1.2	Y
PTX06-EW-57		6/3/2014	RDX	1500	100		J		2	Y
PTX06-EW-57		6/3/2014	TNX	34	50	J *	J		2	Y
PTX06-EW-57		6/3/2014	2,4-Dinitrotoluene	6.9	20	J			1	Y
PTX06-EW-57		6/3/2014	TNT (2,4,6-Trinitrotoluene)	23	10				3.6	Y
PTX06-EW-58		7/9/2014	DNX	7	10	J	J		2	Y
PTX06-EW-58		7/9/2014	RDX	690	100		J		2	Y
PTX06-EW-58		7/9/2014	TNT (2,4,6-Trinitrotoluene)	40	2		J		3.6	Y
PTX06-EW-58		7/9/2014	TNX	32	10		J		2	Y
PTX06-EW-58		7/9/2014	2,4-Dinitrotoluene	3	4	J	J-		1	Y
PTX06-EW-58		7/9/2014	2-Amino-4,6-Dinitrotoluene	17	4		J-		1.2	Y
PTX06-EW-58		7/9/2014	4-Amino-2,6-Dinitrotoluene	25	4		J-		1.2	Y
PTX06-EW-58		7/9/2014	MNX	2.7	10	J	J-		2	Y
PTX06-EW-59		7/9/2014	RDX	470	100		J		2	Y
PTX06-EW-59		7/9/2014	TNT (2,4,6-Trinitrotoluene)	45	2		J		3.6	Y
PTX06-EW-59		7/9/2014	TNX	24	10		J		2	Y
PTX06-EW-59		7/9/2014	DNX	4.3	10	J	J+		2	Y
PTX06-EW-59		7/9/2014	2,4-Dinitrotoluene	5	4				1	Y
PTX06-EW-59		7/9/2014	2-Amino-4,6-Dinitrotoluene	6.8	4				1.2	Y
PTX06-EW-59		7/9/2014	4-Amino-2,6-Dinitrotoluene	16	4				1.2	Y
PTX06-EW-6		8/4/2014	2,4-Dinitrotoluene	10	4				1	Y
PTX06-EW-6		8/4/2014	2-Amino-4,6-Dinitrotoluene	4.5	4				1.2	Y
PTX06-EW-6		8/4/2014	4-Amino-2,6-Dinitrotoluene	9.9	4				1.2	Y
PTX06-EW-6		8/4/2014	RDX	1200	100				2	Y
PTX06-EW-6		8/4/2014	TNT (2,4,6-Trinitrotoluene)	4.6	2				3.6	Y
PTX06-EW-6		8/4/2014	TNX	22	10				2	Y
PTX06-EW-6		8/4/2014	Chromium, Total	130	10				100	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX06-EW-60		7/9/2014	RDX	190	100		J		2	Y
PTX06-EW-60		7/9/2014	TNT (2,4,6-Trinitrotoluene)	31	1		J		3.6	Y
PTX06-EW-60		7/9/2014	TNX	15	5		J		2	Y
PTX06-EW-60		7/9/2014	2,4-Dinitrotoluene	3.8	2				1	Y
PTX06-EW-60		7/9/2014	2-Amino-4,6-Dinitrotoluene	1.7	2	J			1.2	Y
PTX06-EW-60		7/9/2014	4-Amino-2,6-Dinitrotoluene	3.8	2				1.2	Y
PTX06-EW-61		7/9/2014	RDX	100	10		J		2	Y
PTX06-EW-61		7/9/2014	TNT (2,4,6-Trinitrotoluene)	5.3	0.5		J		3.6	Y
PTX06-EW-61		7/9/2014	TNX	7.5	2.5		J		2	Y
PTX06-EW-61		7/9/2014	2,4-Dinitrotoluene	1.7	1				1	Y
PTX06-EW-62		7/9/2014	RDX	21	2		J		2	Y
PTX06-EW-62		7/9/2014	TNT (2,4,6-Trinitrotoluene)	13	1		J		3.6	Y
PTX06-EW-63		7/10/2014	RDX	110	20		J		2	Y
PTX06-EW-63		7/10/2014	TNT (2,4,6-Trinitrotoluene)	23	0.5		J		3.6	Y
PTX06-EW-63		7/10/2014	TNX	5.8	2.5		J		2	Y
PTX06-EW-63		7/10/2014	2,4-Dinitrotoluene	2.5	1				1	Y
PTX06-EW-63		7/10/2014	2-Amino-4,6-Dinitrotoluene	2	1				1.2	Y
PTX06-EW-64		7/10/2014	RDX	140	10		J		2	Y
PTX06-EW-64		7/10/2014	TNT (2,4,6-Trinitrotoluene)	14	5		J		3.6	Y
PTX06-EW-64		7/10/2014	TNX	7.5	25	J	J		2	Y
PTX06-EW-64		7/10/2014	2,4-Dinitrotoluene	2.7	0.2				1	Y
PTX06-EW-65		6/12/2014	2,4-Dinitrotoluene	5.4	4				1	Y
PTX06-EW-65		6/12/2014	2-Amino-4,6-Dinitrotoluene	4.8	4				1.2	Y
PTX06-EW-65		6/12/2014	4-Amino-2,6-Dinitrotoluene	4.5	4				1.2	Y
PTX06-EW-65		6/12/2014	RDX	660	100				2	Y
PTX06-EW-65		6/12/2014	1,3,5-Trinitrobenzene	890	100				220	Y
PTX06-EW-65		6/12/2014	TNT (2,4,6-Trinitrotoluene)	4.9	2				3.6	Y

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PTX06-EW-65		6/12/2014	TNX	28	10				2	Y
PTX06-EW-66		6/12/2014	2-Amino-4,6-Dinitrotoluene	1.8	2	J			1.2	Y
PTX06-EW-66		6/12/2014	4-Amino-2,6-Dinitrotoluene	5.7	2				1.2	Y
PTX06-EW-66		6/12/2014	RDX	280	40				2	Y
PTX06-EW-66		6/12/2014	TNX	11	5				2	Y
PTX06-EW-66		6/12/2014	Chromium, Total	340	10				100	Y
PTX06-EW-66		6/12/2014	Chromium, Hexavalent	292	100				100	Y
PTX06-EW-67		5/29/2014	Chromium, Total	210	10				100	Y
PTX06-EW-67		6/17/2014	Chromium, Total	230	10				100	Y
PTX06-EW-67		6/17/2014	Chromium, Hexavalent	195	100				100	Y
PTX06-EW-68		6/2/2014	RDX	2.4	0.2		J+		2	Y
PTX06-EW-68		6/2/2014	Chromium, Hexavalent	175	100		J+		100	Y
PTX06-EW-68		6/2/2014	Chromium, Total	240	10				100	Y
PTX06-EW-68		6/17/2014	RDX	2.2	0.2				2	Y
PTX06-EW-68		6/17/2014	Chromium, Total	220	10				100	Y
PTX06-EW-68		6/17/2014	Chromium, Hexavalent	265	100				100	Y
PTX06-EW-69		7/24/2014	RDX	18	4		J		2	Y
PTX06-EW-7		6/3/2014	4-Amino-2,6-Dinitrotoluene	13	20	J	J		1.2	Y
PTX06-EW-7		6/3/2014	RDX	1100	100		J		2	Y
PTX06-EW-7		6/3/2014	TNX	21	50	J *	J		2	Y
PTX06-EW-7		6/3/2014	2,4-Dinitrotoluene	11	20	J			1	Y
PTX06-EW-7		6/3/2014	TNT (2,4,6-Trinitrotoluene)	5.8	10	J			3.6	Y
PTX06-EW-70		7/24/2014	RDX	110	10		J		2	Y
PTX06-EW-70		7/24/2014	TNX	2.6	1		J		2	Y
PTX06-EW-70		7/24/2014	2-Amino-4,6-Dinitrotoluene	1.8	0.4				1.2	Y
PTX06-EW-70		7/24/2014	4-Amino-2,6-Dinitrotoluene	1.3	0.4				1.2	Y
PTX06-EW-71		7/24/2014	RDX	67	10		J		2	Y

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PTX06-EW-71		7/24/2014	TNX	5.4	2.5		J		2	Y
PTX06-EW-71		7/24/2014	DNX	2.4	2.5	J			2	Y
PTX06-EW-72		7/24/2014	RDX	12	2		J		2	Y
PTX06-EW-72		7/24/2014	TNX	2.3	0.5		J		2	Y
PTX06-EW-73		7/24/2014	RDX	9.1	1		J		2	Y
PTX06-EW-74		7/24/2014	RDX	21	1		J		2	Y
PTX06-EW-74		7/24/2014	TNX	2.7	0.5		J		2	Y
PTX06-EW-75		7/24/2014	RDX	73	4		J		2	Y
PTX06-EW-75		7/24/2014	TNX	4	1		J		2	Y
PTX06-EW-75		7/24/2014	2-Amino-4,6-Dinitrotoluene	1.8	0.4				1.2	Y
PTX06-EW-75		7/24/2014	4-Amino-2,6-Dinitrotoluene	2.6	0.4				1.2	Y
PTX06-EW-75		7/24/2014	DNX	2.2	1				2	Y
PTX06-EW-75		7/24/2014	TNT (2,4,6-Trinitrotoluene)	4.6	0.2				3.6	Y
PTX06-EW-78A		7/24/2014	RDX	5.3	0.2		J		2	Y
PTX06-EW-79		7/24/2014	RDX	340	100		J		2	Y
PTX06-EW-79		7/24/2014	TNX	39	250	J	J		2	Y
PTX06-EW-79		7/24/2014	2-Amino-4,6-Dinitrotoluene	6	1				1.2	Y
PTX06-EW-79		7/24/2014	4-Amino-2,6-Dinitrotoluene	16	1				1.2	Y
PTX06-EW-79		7/24/2014	DNX	9	2.5				2	Y
PTX06-EW-79		7/24/2014	MNX	6.8	2.5				2	Y
PTX06-EW-80		7/24/2014	RDX	300	100		J		2	Y
PTX06-EW-80		7/24/2014	TNX	43	25		J		2	Y
PTX06-EW-80		7/24/2014	2,4-Dinitrotoluene	1.3	1				1	Y
PTX06-EW-80		7/24/2014	2-Amino-4,6-Dinitrotoluene	4.8	1				1.2	Y
PTX06-EW-80		7/24/2014	4-Amino-2,6-Dinitrotoluene	13	1				1.2	Y
PTX06-EW-80		7/24/2014	DNX	11	2.5				2	Y
PTX06-EW-80		7/24/2014	MNX	7.5	2.5				2	Y

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PTX06-EW-80		7/24/2014	TNT (2,4,6-Trinitrotoluene)	12	0.5				3.6	Y
PTX06-ISB014		2/25/2014	Propionic Acid	35000	5000			500	18250	Y
PTX06-ISB014		5/7/2014	Arsenic	50	5			82.3	12	Y
PTX06-ISB014		8/11/2014	Arsenic	79	5			15.5	12	Y
PTX06-ISB014		10/21/2014	Arsenic	82	5			9.24	12	Y
PTX06-ISB019		2/26/2014	Arsenic	52	5			18	12	Y
PTX06-ISB024		3/4/2014	Arsenic	38	5			33	12	Y
PTX06-ISB024		5/12/2014	Arsenic	23	5			10.52	12	Y
PTX06-ISB024		8/11/2014	Arsenic	35	5			14.8	12	Y
PTX06-ISB024		10/23/2014	Arsenic	32	5			14.5	12	Y
PTX06-ISB038		3/6/2014	Arsenic	59	5			37	12	Y
PTX06-ISB038		5/14/2014	Arsenic	79	5			14.8	12	Y
PTX06-ISB038		8/5/2014	Arsenic	84	5			9.58	12	Y
PTX06-ISB038		8/5/2014	Arsenic	83	5				12	Y
PTX06-ISB038		10/27/2014	Arsenic	70	5			6.47	12	Y
PTX06-ISB038		10/27/2014	Arsenic	72	5				12	Y
PTX06-ISB042		3/12/2014	Arsenic	53	5			14	12	Y
PTX06-ISB042		5/14/2014	Arsenic	50	5			8.36	12	Y
PTX06-ISB042		8/12/2014	Arsenic	34	5			9.5	12	Y
PTX06-ISB042		10/27/2014	Arsenic	35	5			19.1	12	Y
PTX06-ISB046		3/13/2014	Arsenic	33	5			35	12	Y
PTX06-ISB046		3/13/2014	Arsenic	33	5				12	Y
PTX06-ISB046		5/15/2014	Arsenic	41	5			19	12	Y
PTX06-ISB046		5/15/2014	Arsenic	41	5				12	Y
PTX06-ISB046		8/13/2014	Arsenic	42	5			24.5	12	Y
PTX06-ISB046		10/28/2014	Arsenic	57	5			43.8	12	Y
PTX06-ISB048		3/12/2014	Arsenic	68	5			55	12	Y

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PTX06-ISB048		3/12/2014	Propionic Acid	200000	5000			55	18250	Y
PTX06-ISB048		5/15/2014	Arsenic	76	5			17.9	12	Y
PTX06-ISB048		8/13/2014	Arsenic	63	5			16.4	12	Y
PTX06-ISB048		10/28/2014	Arsenic	70	5			25.3	12	Y
PTX06-ISB055		1/28/2014	Arsenic	17	5			998	12	Y
PTX06-ISB055		4/7/2014	Arsenic	20	5			570	12	Y
PTX06-ISB055		11/3/2014	Arsenic	15	5			154	12	Y
PTX06-ISB063		2/3/2014	Arsenic	15	5			130	12	Y
PTX06-ISB063		4/10/2014	Arsenic	17	5			103.1	12	Y
PTX06-ISB063		4/10/2014	Hexanoic Acid	2400	5000	J		103.1	2336	Y
PTX06-ISB063		11/4/2014	Arsenic	17	5			107.2	12	Y
PTX06-ISB069A		2/10/2014	Arsenic	22	5			50	12	Y
PTX06-ISB069A		4/9/2014	Arsenic	25	5			46.7	12	Y
PTX06-ISB069A		11/5/2014	Arsenic	13	5			115	12	Y
PTX06-ISB073		2/12/2014	Arsenic	25	5			120	12	Y
PTX06-ISB073		4/16/2014	Arsenic	27	5			93.7	12	Y
PTX06-ISB075		2/18/2014	Arsenic	88	5			3.8	12	Y
PTX06-ISB075		2/18/2014	Arsenic	93	5				12	Y
PTX06-ISB075		2/18/2014	1,2-Dichloroethane	12	3			3.8	5	Y
PTX06-ISB075		2/18/2014	1,2-Dichloroethane	13	3				5	Y
PTX06-ISB075		2/18/2014	cis-1,2-Dichloroethene	400	13			3.8	70	Y
PTX06-ISB075		2/18/2014	cis-1,2-Dichloroethene	400	13				70	Y
PTX06-ISB075		2/18/2014	Vinyl Chloride	2.2	1				2	Y
PTX06-ISB075		4/21/2014	Arsenic	82	5			2.26	12	Y
PTX06-ISB075		4/21/2014	1,2-Dichloroethane	6	3			2.26	5	Y
PTX06-ISB075		4/21/2014	cis-1,2-Dichloroethene	200	5			2.26	70	Y
PTX06-ISB075		7/17/2014	cis-1,2-Dichloroethene	250	10		J-	4.14	70	Y

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PTX06-ISB075		7/17/2014	cis-1,2-Dichloroethene	240	10		J-		70	Y
PTX06-ISB075		7/17/2014	Arsenic	180	5			4.14	12	Y
PTX06-ISB075		7/17/2014	Arsenic	180	5				12	Y
PTX06-ISB075		7/17/2014	Butyric Acid	31000	500			4.14	18250	Y
PTX06-ISB075		7/17/2014	Butyric Acid	26000	5000				18250	Y
PTX06-ISB075		7/17/2014	1,2-Dichloroethane	6.7	3			4.14	5	Y
PTX06-ISB075		7/17/2014	1,2-Dichloroethane	6.8	3				5	Y
PTX06-ISB075		7/17/2014	Hexanoic Acid	4200	500			4.14	2336	Y
PTX06-ISB075		7/17/2014	Hexanoic Acid	4200	500				2336	Y
PTX06-ISB075		7/17/2014	Propionic Acid	310000	5000			4.14	18250	Y
PTX06-ISB075		7/17/2014	Propionic Acid	310000	5000				18250	Y
PTX06-ISB075		11/10/2014	Arsenic	220	5	B		5.55	12	Y
PTX06-ISB075		11/10/2014	1,2-Dichloroethane	6.4	3			5.55	5	Y
PTX06-ISB075		11/10/2014	cis-1,2-Dichloroethene	250	10			5.55	70	Y
PTX06-ISB077		11/18/2014	Arsenic	14	5			457	12	Y
PTX06-ISB081		2/19/2014	Arsenic	21	5			110	12	Y
PTX06-ISB081		4/15/2014	Arsenic	27	5			121	12	Y
PTX06-ISB081		11/19/2014	Arsenic	16	5			206	12	Y
PTX06-ISB081		11/19/2014	Arsenic	17	5				12	Y
PTX06-ISB081		11/19/2014	Manganese	1900	2	B		206	1715.5	Y
PTX06-ISB081		11/19/2014	Manganese	2000	2	B			1715.5	Y
PTX06-ISB082		11/19/2014	Arsenic	28	5			161	12	Y
PTX06-ISB085A		2/17/2014	Arsenic	44	5			150	12	Y
PTX06-ISB085A		4/22/2014	Arsenic	56	5			126	12	Y
PTX06-ISB085A		4/22/2014	Arsenic	57	5				12	Y
PTX06-ISB085A		11/18/2014	Arsenic	26	5			142	12	Y
PTX06-ISB096		7/22/2014	Trichloroethene	100	5		J-		5	Y

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PTX07-1O01		2/12/2014	RDX	14.2	0.679			0.16	2	Y
PTX07-1O03		8/7/2014	RDX	40.6	2.59			20.1	2	Y
PTX07-1O03		8/7/2014	TNX	2.92	0.259			20.1	2	Y
PTX08-1001		5/21/2014	RDX	12.3	0.651			0.15	2	Y
PTX08-1001		5/21/2014	TNX	2.84	0.26			0.15	2	Y
PTX08-1002		5/21/2014	2-Amino-4,6-Dinitrotoluene	2.97	0.263			5.66	1.2	Y
PTX08-1002		5/21/2014	4-Amino-2,6-Dinitrotoluene	3.82	0.263			5.66	1.2	Y
PTX08-1002		5/21/2014	DNX	2.09	0.263			5.66	2	Y
PTX08-1002		5/21/2014	RDX	60.5	2.63			5.66	2	Y
PTX08-1002		5/21/2014	TNT (2,4,6-Trinitrotoluene)	14	2.63			5.66	3.6	Y
PTX08-1002		5/21/2014	TNX	4.95	0.263			5.66	2	Y
PTX08-1002		11/4/2014	2-Amino-4,6-Dinitrotoluene	4.49	0.269	H	J	15	1.2	Y
PTX08-1002		11/4/2014	4-Amino-2,6-Dinitrotoluene	4.24	0.269	H	J	15	1.2	Y
PTX08-1002		11/4/2014	DNX	2.11	0.269	H	J	15	2	Y
PTX08-1002		11/4/2014	RDX	65.7	3.36	H	J	15	2	Y
PTX08-1002		11/4/2014	TNT (2,4,6-Trinitrotoluene)	21.5	3.36	H	J	15	3.6	Y
PTX08-1002		11/4/2014	TNX	5.43	0.269	H	J	15	2	Y
PTX08-1005		2/10/2014	4-Amino-2,6-Dinitrotoluene	3.11	0.26	Q	J+	0.05	1.2	Y
PTX08-1005		2/10/2014	Tetrachloroethene	6.23	1		J+	0.05	5	Y
PTX08-1005		2/10/2014	Perchlorate	34.5	12			0.05	26	Y
PTX08-1005		2/10/2014	Trichloroethene	91.7	2			0.05	5	Y
PTX08-1005		8/12/2014	1,2-Dichloroethane	5.2	1		J-	1.28	5	Y
PTX08-1005		8/12/2014	4-Amino-2,6-Dinitrotoluene	2.33	0.256			1.28	1.2	Y
PTX08-1005		8/12/2014	Perchlorate	60.2	12			1.28	26	Y
PTX08-1005		8/12/2014	Tetrachloroethene	5.19	1			1.28	5	Y
PTX08-1005		8/12/2014	Trichloroethene	98.6	1			1.28	5	Y
PTX08-1006		2/10/2014	1,4-Dioxane	33	1		J-	0.6	7.7	Y

Well ID	CP-50284 Designation	Sample Date	Analyte	Measured Value (ug or pCi/L)	Detection Limit (ug/L)	Lab Qualifier	PTX Qualifier	Turbidity	GWPS (ug or pCi/L)	>GWPS?
PTX08-1006		2/10/2014	1,4-Dioxane	22.9	5		J-	0.6	7.7	Y
PTX08-1006		2/10/2014	4-Amino-2,6-Dinitrotoluene	30.9	2.6	Q	J+	0.6	1.2	Y
PTX08-1006		2/10/2014	RDX	216	13			0.6	2	Y
PTX08-1006		2/10/2014	TNX	11.4	2.6			0.6	2	Y
PTX08-1006		2/10/2014	Perchlorate	608	120			0.6	26	Y
PTX08-1006		2/10/2014	1,2-Dichloroethane	5.32	1			0.6	5	Y
PTX08-1006		2/10/2014	Tetrachloroethene	8.5	1			0.6	5	Y
PTX08-1006		2/10/2014	Trichloroethene	25.2	1			0.6	5	Y
PTX08-1006		8/12/2014	RDX	186	13.2		J	0.31	2	Y
PTX08-1006		8/12/2014	TNX	8.76	0.263		J	0.31	2	Y
PTX08-1006		8/12/2014	4-Amino-2,6-Dinitrotoluene	17.1	2.63			0.31	1.2	Y
PTX08-1006		8/12/2014	Perchlorate	593	120			0.31	26	Y
PTX08-1006		8/12/2014	1,4-Dioxane	14.5	2			0.31	7.7	Y
PTX08-1006		8/12/2014	Trichloroethene	26.4	1			0.31	5	Y
PTX08-1007		5/19/2014	Trichloroethene	15.7	1		J	0.43	5	Y
PTX08-1007		5/19/2014	RDX	6.56	0.266			0.43	2	Y
PTX08-1007		5/19/2014	TNX	2.05	0.266			0.43	2	Y
PTX08-1008		5/21/2014	Chromium, Total	214	10			2.07	100	Y
PTX08-1008		5/21/2014	Chromium, Hexavalent	1530	100		J	2.07	100	Y
PTX08-1008		11/5/2014	Chromium, Total	146	10			5.1	100	Y
PTX08-1008		11/5/2014	Chromium, Hexavalent	117	10			5.1	100	Y
PTX08-1008		11/5/2014	Perchlorate	47.4	12			5.1	26	Y
PTX10-1014		5/15/2014	Trichloroethene	6.65	1			1.3	5	Y

*Arsenic, barium, and manganese are elevated in the ISPM wells because there is evidence that the treatment zone is extending beyond the ISB, pilot study, and PRB treatment systems. Volatile fatty acids, DO, and ORP have been affected in these wells (please refer to the electronic data CD in this appendix for data).

Appendix D
Expected Conditions Evaluation and COC Concentration Trends

Perched Aquifer Expected Conditions Evaluation and Concentration Trends

Perched Groundwater COC Trends Vs Expected Conditions
Trends Since Start of Remedial Action (2009)

Indicator Area	Well ID	LTM Objectives	Progress Report Metrics	COC Expected Condition - LTM Design	COC>GWPS	Indicator List Monitoring Frequency	Trend Since Start of Remedial Action			
							RDX	Perc	TCE	CR-6
Zone 11	1114-MW4	UM	Trend/Compare to GWPS	Long-term decreasing trend	PERC, TCE	Semi-Annual	N/A	Increasing	Decreasing	NT
North	OW-WR-38	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX	Annual	Decreasing	NT	No Trend	NT
Burning Ground	PTX01-1001	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	NONE	Semi-Annual	N/A	N/A	Decreasing	NT
Burning Ground	PTX01-1002	UM	Compare to GWPS	Below background/PQL and GWPS	NONE	Annual	N/A	ND	ND	NT
Burning Ground	PTX01-1004	PS	Dry			NA	Dry	Dry	Dry	Dry
Burning Ground	PTX01-1008	UM	Compare to GWPS	Below background/PQL and GWPS	NONE	Semi-Annual	N/A	ND	ND	NT
Burning Ground	PTX01-1009	PS	Dry			NA	Dry	Dry	Dry	Dry
Miscellaneous	PTX04-1001	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS		5 Yrs	NS	NS	NS	NS
Miscellaneous	PTX04-1002	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	NONE	Annual	No Trend	NT	Decreasing	NT
Southeast	PTX06-1002A	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX	Semi-Annual	Decreasing	NT	No Trend	ND
Southeast	PTX06-1003	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations		Annual	NS*	NS*	NS*	NS*
Southeast	PTX06-1005	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	DNT2A, DNT4A, RDX, TNB135, TNX, TCE, CR, CR-6	Semi-Annual	Decreasing	NT	Increasing	Increasing
Zone 11	PTX06-1006	PS	Trend/Compare to GWPS	Long-term decreasing trend	RDX, PERC, DNT4A	Annual	Decreasing	Decreasing	Decreasing	NT
Zone 11	PTX06-1007	UM	Trend/Compare to GWPS	Long-term decreasing trend	PERC, DNT4A	Annual	Decreasing	Increasing	N/A	NT
Southeast, Zone 11	PTX06-1008	UM	Trend/Compare to GWPS	Long-term decreasing trend	DCA12	Annual	ND	N/A	Decreasing	N/A
Southeast	PTX06-1010	UM	Trend/Compare to GWPS	Long-term decreasing trend	CR, CR6, RDX	Semi-Annual	Decreasing	NT	Decreasing	Increasing
Southeast, Zone 11	PTX06-1011	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	TCE	Annual	N/A	N/A	No Trend	Stable
Zone 11	PTX06-1012	PS, RAE	Trend/Compare to GWPS	Below GWPS in 2–5 years	DCA12, TCE, DCE12C, DIOXANE14	Quarterly	ND	Decreasing	Decreasing	NT
Southeast	PTX06-1013	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX	Semi-Annual	Decreasing	NT	ND	ND
Southeast	PTX06-1014	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT2A, DNT4A, DNT24	Annual	No Trend	NT	ND	NT
Southeast	PTX06-1015	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT4A	Semi-Annual	Decreasing	NT	Decreasing	No Trend
Southeast	PTX06-1023	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	NONE	Semi-Annual	Decreasing	NT	ND	N/A
Southeast	PTX06-1030	RAE	Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT2A, DNT4A	Semi-Annual	Decreasing	NT	N/A	Decreasing
Southeast	PTX06-1031	RAE	Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT4A, CR	Semi-Annual	No Trend	NT	No Trend	Decreasing
Southeast	PTX06-1034	RAE	Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT4A	Semi-Annual	Increasing	NT	No Trend	N/A
Zone 11	PTX06-1035	PS	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	PERC	Semi-Annual	ND	Increasing	No Trend	NT
Southeast	PTX06-1036	PS	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	NONE	Annual	Decreasing	NT	ND	N/A

Perched Groundwater COC Trends Vs Expected Conditions
Trends Since Start of Remedial Action (2009)

Indicator Area	Well ID	LTM Objectives	Progress Report Metrics	COC Expected Condition - LTM Design	COC>GWPS	Indicator List Monitoring Frequency	Trend Since Start of Remedial Action			
							RDX	Perc	TCE	CR-6
Southeast	PTX06-1037	RAE	Trend/Compare to GWPS	Below GWPS in 2–5 years	NONE	Quarterly	Decreasing	NT	Decreasing	ND
Southeast	PTX06-1038	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	TNT, RDX, DNX, TNX, DNT2A, DNT4A	Semi-Annual	Decreasing	NT	ND	Decreasing
Southeast	PTX06-1039A	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	TNT, RDX, DNX, TNX, DNT2A, DNT4A, MNX	Semi-Annual	Decreasing	NT	ND	N/A
Southeast	PTX06-1040	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, DNX, TNX, DNT2A, DNT4A, TNT, MNX	Semi-Annual	No Trend	NT	ND	Decreasing
Southeast	PTX06-1041	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	TNT, RDX, DNX, TNX, DNT2A, DNT4A	Semi-Annual	Increasing	NT	ND	N/A
Southeast	PTX06-1042	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, MNX, TNX, DNT4A	Semi-Annual	Increasing	NT	ND	N/A
Southeast	PTX06-1045	RAE	Trend/Compare to GWPS	Below GWPS in 2–5 years		Quarterly	NS*	NS*	NS*	NS*
Southeast	PTX06-1046	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT2A, DNT4A	Semi-Annual	Increasing	NT	No Trend	Decreasing
Southeast	PTX06-1047A	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT4A	Semi-Annual	Decreasing	NT	No Trend	N/A
North	PTX06-1048A	PS, RAE	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	NONE	Annual	ND	NT	No Trend	NT
Miscellaneous	PTX06-1049	PS, UM	Compare to GWPS	Below background/PQL and GWPS	DNT4A, RDX	Annual	Increasing	NT	Increasing	NT
North	PTX06-1050	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT4A	Semi-Annual	Increasing	NT	ND	NT
Southeast	PTX06-1051	PS	Dry			NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1052	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	CR,CR-6	Semi-Annual	N/A	NT	Stable	Decreasing
Southeast, Zone 11	PTX06-1053	PS, UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	NONE	Semi-Annual	N/A	ND	ND	N/A
Miscellaneous	PTX06-1055	PS	Dry			NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1069	PS	Trend/Compare to GWPS	Stable or decreasing trend below GWPS		Annual	NS*	NS*	NS*	NS*
Miscellaneous	PTX06-1071	UM	Compare to GWPS	Below background/PQL and GWPS		5 Yrs	NS	NS	NS	NS
Zone 11	PTX06-1073A	PS	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations		NA	NS*	NS*	NS*	NS*
Zone 11	PTX06-1077A	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	TCE	Annual	Decreasing	No Trend	Decreasing	NT
Miscellaneous	PTX06-1080	UM	Compare to GWPS	Below background/PQL and GWPS		5 Yrs	NS	NS	NS	NS
Miscellaneous	PTX06-1081	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	NONE	Annual	N/A	NT	Decreasing	NT
Miscellaneous	PTX06-1082	UM	Compare to GWPS	Below background/PQL and GWPS		5 Yrs	NS	NS	NS	NS
Miscellaneous	PTX06-1083	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS		5 Yrs	NS	NS	NS	NS
Miscellaneous	PTX06-1085	UM	Compare to GWPS	Below background/PQL and GWPS	NONE	Annual	ND	NT	ND	NT
Miscellaneous	PTX06-1086	UM	Compare to GWPS	Below background/PQL and GWPS	NONE	Annual	ND	NT	ND	NT

Perched Groundwater COC Trends Vs Expected Conditions
Trends Since Start of Remedial Action (2009)

Indicator Area	Well ID	LTM Objectives	Progress Report Metrics	COC Expected Condition - LTM Design	COC>GWPS	Indicator List Monitoring Frequency	Trend Since Start of Remedial Action			
							RDX	Perc	TCE	CR-6
Southeast	PTX06-1088	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	TCE, RDX, DNT24, DNT4A, PCE	Semi-Annual	Decreasing	NT	Decreasing	Decreasing
Southeast	PTX06-1089	PS	Dry			NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1090	PS	Dry			NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1091	PS	Dry			NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1093	PS	Dry			NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1094	PS	Dry			NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1095A	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT4A, DNT2A, TCE, CR, CR-6	Semi-Annual	Increasing	NT	No Trend	No Trend
Miscellaneous	PTX06-1096A	PS, UM	Dry	Remain dry		NA	Dry	Dry	Dry	Dry
Miscellaneous	PTX06-1097	PS, UM	Dry	Remain dry		NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1098	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	NONE	Semi-Annual	N/A	NT	ND	Decreasing
Southeast	PTX06-1100	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	NONE	Annual	ND	NT	N/A	Decreasing
Southeast	PTX06-1101	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX	Annual	N/A	NT	No Trend	Decreasing
Southeast	PTX06-1102	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations		Annual	NS*	NS*	NS*	NS*
Southeast	PTX06-1103	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations		Semi-Annual	NS*	NS*	NS*	NS*
Southeast	PTX06-1118	RAE	Trend/Compare to GWPS	Long-term stabilization of concentrations		Annual	NS*	NS*	NS*	NS*
Southeast	PTX06-1119	PS	Dry	Remain dry		NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1120	PS	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT2A, DNT4A	NA	Decreasing	NT	Decreasing	No Trend
Southeast	PTX06-1121	PS	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations		NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1122	PS	Dry	Remain dry		NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1123	RAE	Trend/Compare to GWPS	Below GWPS in 2–5 years	TNX	Quarterly	Decreasing	NT	No Trend	N/A
Southeast	PTX06-1124	PS	Dry	Remain dry		NA	Dry	Dry	Dry	Dry
Southeast	PTX06-1125	PS	Dry	Remain dry		NA	Dry	Dry	Dry	Dry
Zone 11	PTX06-1126	PS, UM	Trend/Compare to GWPS	Long-term decreasing trend	TCE, PERC, DIOXANE14, DNT4A, DCA12	Semi-Annual	Stable	Decreasing	Stable	N/A
Zone 11	PTX06-1127	PS, UM	Trend/Compare to GWPS	Long-term decreasing trend	TCE, PERC, DIOXANE14, DNT4A, DCA12	Semi-Annual	Increasing	Decreasing	Decreasing	N/A
Southeast	PTX06-1130	RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX, DNT2A, DNT4A, CR	Semi-Annual	Decreasing	NT	ND	Decreasing
Miscellaneous	PTX06-1131	UM	Compare to GWPS	Below background/PQL and GWPS	NONE	Semi-Annual	N/A	NT	ND	NT
Southeast	PTX06-1133A	PS	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations		Semi-Annual	NS*	NS*	NS*	NS*
Zone 11	PTX06-1134	PS	Trend/Compare to GWPS	Long-term decreasing trend	DNT4A	Semi-Annual	N/A	Decreasing	ND	NT
Southeast	PTX06-1135	PS	Trend/Compare to GWPS	Long-term decreasing trend	NONE	Semi-Annual	Decreasing	NT	ND	N/A
North	PTX06-1136	PS	Trend/Compare to GWPS	Long-term decreasing trend	NONE	Semi-Annual	ND	NT	N/A	NT

Perched Groundwater COC Trends Vs Expected Conditions
Trends Since Start of Remedial Action (2009)

Indicator Area	Well ID	LTM Objectives	Progress Report Metrics	COC Expected Condition - LTM Design	COC>GWPS	Indicator List Monitoring Frequency	Trend Since Start of Remedial Action			
							RDX	Perc	TCE	CR-6
Southeast	PTX06-1146	PS	Trend/Compare to GWPS	Long-term decreasing trend	RDX, TNX, DNT4A	Semi-Annual	Decreasing	NT	ND	No Trend
Southeast	PTX06-1147	PS	Trend/Compare to GWPS	Long-term decreasing trend	RDX, MNX, DNX, TNX, DNT4A	Semi-Annual	No Trend	NT	Decreasing	N/A
Zone 11	PTX06-1148	PS, RAE	Trend/Compare to GWPS	Below GWPS in 5 -10 years	PERC	Semi-Annual	Decreasing	No Trend	Increasing	NT
Zone 11	PTX06-1149	PS	Trend/Compare to GWPS	Below GWPS in 5 -10 years	NONE	Semi-Annual	ND	Decreasing	N/A	NT
Zone 11	PTX06-1150	PS, RAE	Trend/Compare to GWPS	Below GWPS in 5 -10 years	PERC	Semi-Annual	N/A	Increasing	Increasing	NT
Zone 11	PTX06-1151	PS	Trend/Compare to GWPS	Long-term decreasing trend	TCE, DCA12, RDX, PERC	Semi-Annual	Decreasing	Decreasing	Decreasing	NT
Southeast	PTX06-1153	RAE	Trend/Compare to GWPS	Below GWPS in 2–5 years	RDX, MNX, TNX, CR, CR-6, DNT4A, DNT2A	Quarterly	Increasing	NT	Decreasing	Increasing
Southeast	PTX06-1154	RAE	Trend/Compare to GWPS	Below GWPS in 2–5 years	TNX	Quarterly	Decreasing	NT	Decreasing	Decreasing
Zone 11	PTX06-1155	RAE	Trend/Compare to GWPS	Below GWPS in 2–5 years	TCE, DCA12, DCE12C, DIOXANE14	Quarterly	N/A	Decreasing	Decreasing	NT
Zone 11	PTX06-1156	RAE	Trend/Compare to GWPS	Below GWPS in 2–5 years	NONE	Quarterly	ND	Decreasing	Decreasing	NT
Southeast	PTX06-1158	PS	Water Level, Trend/Compare to GWPS	Long-term decreasing trend		Semi-Annual	Dry	Dry	Dry	Dry
Zone 11	PTX06-1159	PS, RAE	Trend/Compare to GWPS	Long-term decreasing trend	TCE, DCA12, PERC, DNT4A	Semi-Annual	N/A	Increasing	No Trend	NT
Zone 11	PTX06-1160	PS	Trend/Compare to GWPS	Long-term decreasing trend	NONE	Semi-Annual	ND	ND	ND	NT
Southeast	PTX06-1166	PS	Trend/Compare to GWPS	Long-term decreasing trend	RDX, TCE	Semi-Annual	No Trend	NT	Stable	N/A
Southeast	PTX06-1167	RAE	Trend/Compare to GWPS	Long-term decreasing trend		Semi-Annual	Dry	Dry	Dry	Dry
North	PTX07-1O01	PS, UM, RAE	Trend/Compare to GWPS	Long-term decreasing trend	RDX	Semi-Annual	Decreasing	NT	N/A	NT
North	PTX07-1O02	PS, UM, RAE	Trend/Compare to GWPS	Long-term decreasing trend	NONE	Semi-Annual	Decreasing	NT	Increasing	NT
North	PTX07-1O03	PS, UM, RAE	Trend/Compare to GWPS	Long-term decreasing trend	RDX, TNX	Annual	Increasing	NT	ND	NT
North	PTX07-1O06	PS, UM, RAE	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	NONE	Annual	NS*	NS*	NS*	NS*
Zone 11	PTX07-1P02	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	NONE	Semi-Annual	Decreasing	N/A	ND	NT
Zone 11	PTX07-1P05	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	RDX	Annual	NS*	NS*	NS*	NS*
Miscellaneous	PTX07-1Q01	UM	Compare to GWPS	Below background/PQL and GWPS	NONE	Annual	ND	NT	ND	NT
Miscellaneous	PTX07-1Q02	UM	Compare to GWPS	Below background/PQL and GWPS	NONE	Annual	ND	NT	ND	NT
Miscellaneous	PTX07-1Q03	UM	Compare to GWPS	Below background/PQL and GWPS	NONE	Annual	ND	NT	ND	NT
Miscellaneous	PTX07-1R03	UM	Compare to GWPS	Below background/PQL and GWPS		5 Yrs	NS	NS	NS	NS
Zone 11	PTX08-1001	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, TNX	Annual	No Trend	Stable	ND	NT
Southeast	PTX08-1002	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	RDX, MNX, TNX, DNT2A, DNT4A	Semi-Annual	Decreasing	NT	ND	ND
Zone 11	PTX08-1003	PS	Trend/Compare to GWPS	Stable or decreasing trend below GWPS	NONE	Annual	No Trend	Decreasing	No Trend	NT
Zone 11	PTX08-1005	UM	Trend/Compare to GWPS	Long-term decreasing trend	TCE, DNT4A	Semi-Annual	Decreasing	No Trend	Decreasing	NT

Perched Groundwater COC Trends Vs Expected Conditions
Trends Since Start of Remedial Action (2009)

Indicator Area	Well ID	LTM Objectives	Progress Report Metrics	COC Expected Condition - LTM Design	COC>GWPS	Indicator List Monitoring Frequency	Trend Since Start of Remedial Action			
							RDX	Perc	TCE	CR-6
Zone 11	PTX08-1006	UM	Trend/Compare to GWPS	Long-term decreasing trend	RDX, TNX, PERC, DNT4A, TCE, PCE, DIOXANE14, DCA12	Semi-Annual	Decreasing	Decreasing	Increasing	NT
Southeast, Zone 11	PTX08-1007	UM	Trend/Compare to GWPS	Long-term decreasing trend	TCE, RDX	Annual	No Trend	N/A	No Trend	N/A
Southeast, Zone 11	PTX08-1008	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	CR, CR-6	Semi-Annual	ND	Increasing	N/A	Decreasing
Southeast	PTX08-1009	UM, RAE	Water Level, Trend/Compare to GWPS	Long-term stabilization of concentrations	NONE	Semi-Annual	No Trend	NT	N/A	N/A
Miscellaneous	PTX08-1010	UM	Trend/Compare to GWPS	Stable or decreasing trend below GWPS		5 Yrs	NS	NS	NS	NS
Southeast, Zone 11	PTX10-1014	UM	Trend/Compare to GWPS	Long-term decreasing trend	TCE	Annual	Stable	N/A	Decreasing	N/A

NT - Trends were not calculated for this COC in this well. Well is dry or the COC was not sampled during 2013, based on SAP.
N/A - Trending could not be performed, either due to a) <4 samples in dataset or b) <2 Detections in dataset
ND - all samples were non-detect
UM = Uncertainty management
PS = Plume stability
RAE = Response action effectiveness
NS* = well not sampled due to either dry conditions or insufficient water for sampling

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
1114-MW4	RDX	3/19/1996	11/13/2014	29	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	2	0.00	N/A (<4 Detections in Dataset)
1114-MW4	HMX	3/19/1996	11/13/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
1114-MW4	TNT	3/19/1996	11/13/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
1114-MW4	DNT24	3/19/1996	11/13/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
1114-MW4	DNT26	3/19/1996	11/13/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
1114-MW4	DNT2A	3/19/1996	11/13/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
1114-MW4	DNT4A	3/19/1996	11/13/2014	29	13	0.94	Probably Increasing	4	4	1.00	Decreasing	11	9	1.00	Decreasing
1114-MW4	TNB135	3/19/1996	11/13/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
1114-MW4	DNB13	3/19/1996	11/13/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
1114-MW4	DIOXANE14	5/13/2003	11/13/2014	17	7	1.00	Decreasing	4	4	1.00	Decreasing	11	5	0.73	No Trend
1114-MW4	PCE	3/19/1996	11/13/2014	31	25	0.74	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
1114-MW4	TCE	3/19/1996	11/13/2014	32	32	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
1114-MW4	DCE12C	3/19/1996	11/13/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
1114-MW4	DCA12	3/19/1996	11/13/2014	30	17	0.96	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
1114-MW4	TCLME	3/19/1996	11/13/2014	30	20	0.94	Probably Increasing	4	4	0.38	Stable	11	10	1.00	Decreasing
1114-MW4	PERC	4/22/2002	11/13/2014	19	19	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Increasing
1114-MW4	B	3/19/1996	11/13/2014	26	24	1.00	Decreasing	4	4	0.96	Increasing	11	11	1.00	Decreasing
1114-MW4	MN	3/19/1996	4/30/2014	20	12	0.96	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
1114-MW4	AL	3/19/1996	4/30/2014	20	9	1.00	Increasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
1114-MW4	BA	3/19/1996	4/30/2014	21	21	1.00	Increasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
1114-MW4	CA	3/19/1996	4/30/2014	17	17	0.98	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
1114-MW4	FE	3/19/1996	4/30/2014	20	18	0.99	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
1114-MW4	K	3/19/1996	4/30/2014	17	17	0.64	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
1114-MW4	MG	3/19/1996	4/30/2014	20	20	1.00	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
1114-MW4	NA	3/19/1996	4/30/2014	17	17	0.99	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
OW-WR-38	RDX	1/16/1992	5/7/2014	19	16	1.00	Decreasing	4	4	0.83	No Trend	6	6	1.00	Decreasing
OW-WR-38	HMX	1/16/1992	5/7/2014	19	13	1.00	Decreasing	4	4	0.38	Stable	6	6	1.00	Decreasing
OW-WR-38	TNT	1/16/1992	5/7/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	DNT24	11/15/1995	5/7/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	DNT26	11/15/1995	5/7/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	DNT2A	11/15/1995	5/7/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	DNT4A	11/15/1995	5/7/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	TNB135	11/15/1995	5/7/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	DNB13	11/15/1995	5/7/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	PCE	4/12/1993	5/7/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	TCE	11/15/1995	5/7/2014	16	4	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	6	4	0.57	No Trend
OW-WR-38	DCE12C	3/20/1996	5/7/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	DCA12	11/15/1995	5/7/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	TCLME	4/12/1993	5/7/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
OW-WR-38	B	4/12/1993	5/7/2014	28	28	1.00	Decreasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
OW-WR-38	MN	1/16/1992	5/7/2014	27	22	1.00	Increasing	4	4	0.38	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
OW-WR-38	AL	4/12/1993	5/7/2014	25	11	0.78	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
OW-WR-38	BA	1/16/1992	5/7/2014	28	28	1.00	Increasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
OW-WR-38	CA	4/12/1993	5/7/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
OW-WR-38	FE	1/16/1992	5/7/2014	27	27	0.98	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
OW-WR-38	K	4/12/1993	5/7/2014	22	22	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
OW-WR-38	MG	4/12/1993	5/7/2014	25	25	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
OW-WR-38	NA	4/12/1993	5/7/2014	22	22	0.62	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1001	RDX	11/15/1995	10/29/2014	60	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	HMX	11/15/1995	10/29/2014	60	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	TNT	11/15/1995	10/29/2014	60	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	DNT24	11/15/1995	10/29/2014	60	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	DNT26	11/15/1995	10/29/2014	60	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	DNT2A	11/15/1995	10/29/2014	60	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	DNT4A	11/15/1995	10/29/2014	57	4	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	2	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	TNB135	11/15/1995	10/29/2014	60	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	DNB13	11/15/1995	10/29/2014	56	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	PCE	11/15/1995	10/29/2014	56	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	TCE	11/15/1995	10/29/2014	61	32	1.00	Increasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX01-1001	DCE12C	11/15/1995	10/29/2014	57	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	DCA12	11/15/1995	10/29/2014	56	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	TCLME	11/15/1995	10/29/2014	55	5	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1001	PERC	8/19/1999	10/29/2014	42	24	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	3	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	B	11/15/1995	10/29/2014	56	49	1.00	Increasing	4	4	0.38	Stable	11	11	0.68	No Trend
PTX01-1001	MN	11/15/1995	5/12/2014	50	21	1.00	Increasing	4	4	0.38	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1001	AL	11/15/1995	5/12/2014	50	24	1.00	Increasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX01-1001	BA	11/15/1995	5/12/2014	51	51	1.00	Increasing	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX01-1001	CA	11/15/1995	5/12/2014	30	30	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1001	FE	11/15/1995	5/12/2014	46	39	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1001	K	11/15/1995	5/12/2014	30	30	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1001	MG	11/15/1995	5/12/2014	50	50	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1001	NA	11/15/1995	5/12/2014	30	30	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1002	RDX	11/16/1995	4/16/2014	53	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX01-1002	HMX	11/16/1995	4/16/2014	53	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	TNT	11/16/1995	4/16/2014	53	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	DNT24	11/16/1995	4/16/2014	53	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	DNT26	11/16/1995	4/16/2014	53	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	DNT2A	11/16/1995	4/16/2014	53	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX01-1002	DNT4A	11/16/1995	4/16/2014	53	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	TNB135	11/16/1995	4/16/2014	53	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	DNB13	11/16/1995	4/16/2014	50	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	PCE	11/16/1995	4/16/2014	49	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	TCE	11/16/1995	4/16/2014	52	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	DCE12C	11/16/1995	4/16/2014	48	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	DCA12	11/16/1995	4/16/2014	49	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	TCLME	11/16/1995	4/16/2014	48	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	PERC	8/19/1999	4/16/2014	35	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX01-1002	B	11/16/1995	4/16/2014	50	41	1.00	Increasing	4	4	1.00	Decreasing	5	5	0.59	No Trend
PTX01-1002	MN	11/16/1995	4/16/2014	50	17	1.00	Increasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX01-1002	AL	11/16/1995	4/16/2014	50	21	1.00	Increasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX01-1002	BA	11/16/1995	4/16/2014	51	51	1.00	Increasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX01-1002	CA	11/16/1995	4/16/2014	30	30	0.97	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1002	FE	11/16/1995	4/16/2014	46	36	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1002	K	11/16/1995	4/16/2014	30	30	1.00	Decreasing	4	4	0.73	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1002	MG	11/16/1995	4/16/2014	50	50	1.00	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1002	NA	11/16/1995	4/16/2014	30	30	1.00	Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1008	RDX	4/4/2001	10/29/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	12	1	0.00	N/A (<4 Detections in Dataset)
PTX01-1008	HMX	4/4/2001	10/29/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	TNT	4/4/2001	10/29/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	DNT24	4/4/2001	10/29/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	DNT26	4/4/2001	10/29/2014	28	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	DNT2A	4/4/2001	10/29/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	DNT4A	4/4/2001	10/29/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	TNB135	4/4/2001	10/29/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	DNB13	4/4/2001	10/29/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	PCE	4/4/2001	10/29/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	TCE	4/4/2001	10/29/2014	29	6	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	DCE12C	7/31/2001	10/29/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	DCA12	4/4/2001	10/29/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	TCLME	4/4/2001	10/29/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	PERC	4/4/2001	10/29/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX01-1008	B	4/4/2001	10/29/2014	26	26	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.50	No Trend
PTX01-1008	MN	4/4/2001	5/12/2014	20	15	0.66	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1008	AL	4/4/2001	5/12/2014	20	16	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX01-1008	BA	4/4/2001	5/12/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX01-1008	CA	4/4/2001	5/12/2014	7	7	0.97	Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1008	FE	4/4/2001	5/12/2014	20	17	0.99	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1008	K	4/4/2001	5/12/2014	11	11	0.78	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1008	MG	4/4/2001	5/12/2014	20	20	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1008	NA	4/4/2001	5/12/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX04-1002	RDX	8/25/1998	7/21/2014	25	14	1.00	Decreasing	4	4	0.63	No Trend	5	5	0.50	No Trend
PTX04-1002	HMX	8/25/1998	7/21/2014	25	19	1.00	Increasing	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX04-1002	TNT	8/25/1998	7/21/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	DNT24	8/25/1998	7/21/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	DNT26	8/25/1998	7/21/2014	25	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	DNT2A	8/25/1998	7/21/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	DNT4A	8/25/1998	7/21/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	TNB135	8/25/1998	7/21/2014	25	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	DNB13	8/25/1998	7/21/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	PCE	8/25/1998	7/21/2014	23	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	TCE	8/25/1998	7/21/2014	27	22	1.00	Decreasing	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX04-1002	DCE12C	1/26/2000	7/21/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	DCA12	8/25/1998	7/21/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX04-1002	TCLME	8/25/1998	7/21/2014	22	4	1.00	Decreasing	4	0	0.00	All Non-Detect	5	1	0.00	N/A (<4 Detections in Dataset)
PTX04-1002	B	8/25/1998	7/21/2014	28	28	1.00	Increasing	4	4	0.50	No Trend	5	5	1.00	Decreasing
PTX04-1002	MN	8/25/1998	7/21/2014	27	22	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX04-1002	AL	8/25/1998	7/21/2014	28	21	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX04-1002	BA	8/25/1998	7/21/2014	29	29	1.00	Decreasing	4	4	0.38	Stable	4	4	0.38	Stable
PTX04-1002	CA	8/25/1998	7/21/2014	16	16	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX04-1002	FE	8/25/1998	7/21/2014	25	24	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX04-1002	K	8/25/1998	7/21/2014	17	17	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX04-1002	MG	8/25/1998	7/21/2014	28	28	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX04-1002	NA	8/25/1998	7/21/2014	17	17	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1002A	RDX	12/4/1995	8/6/2014	29	27	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1002A	HMX	12/4/1995	8/6/2014	29	21	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1002A	TNT	12/4/1995	8/6/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1002A	DNT24	12/4/1995	8/6/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1002A	DNT26	12/4/1995	8/6/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1002A	DNT2A	12/4/1995	8/6/2014	28	6	1.00	Decreasing	4	0	0.00	All Non-Detect	11	4	1.00	Decreasing
PTX06-1002A	DNT4A	12/4/1995	8/6/2014	27	17	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	8	1.00	Decreasing
PTX06-1002A	TNB135	12/4/1995	8/6/2014	28	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	DNB13	12/4/1995	8/6/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1002A	PCE	12/4/1995	8/6/2014	25	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1002A	TCE	12/4/1995	8/6/2014	26	13	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	9	0.68	No Trend
PTX06-1002A	DCE12C	12/4/1995	8/6/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1002A	DCA12	12/4/1995	8/6/2014	24	4	1.00	Decreasing	4	0	0.00	All Non-Detect	11	4	0.70	No Trend

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1002A	TCLME	12/4/1995	8/6/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1002A	B	12/4/1995	8/6/2014	28	28	0.84	No Trend	4	4	1.00	Decreasing	11	11	0.97	Increasing
PTX06-1002A	CR	12/4/1995	8/6/2014	28	17	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	CR-6	3/12/1996	8/6/2014	30	5	0.90	Probably Increasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	MN	12/4/1995	8/6/2014	27	11	0.97	Increasing	4	4	1.00	Decreasing	11	5	0.70	No Trend
PTX06-1002A	NI	12/4/1995	8/6/2014	27	25	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.73	No Trend
PTX06-1002A	MO	12/4/1995	8/6/2014	27	26	0.60	No Trend	4	4	0.96	Increasing	11	11	1.00	Increasing
PTX06-1002A	AL	12/4/1995	2/3/2014	19	7	1.00	Decreasing	4	0	0.00	All Non-Detect	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1002A	BA	12/4/1995	2/3/2014	20	20	1.00	Decreasing	4	4	0.38	Stable	4	4	0.38	Stable
PTX06-1002A	CA	12/4/1995	2/3/2014	12	12	0.86	No Trend	4	4	1.00	Decreasing	2	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1002A	FE	12/4/1995	8/6/2014	27	26	0.52	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1002A	K	12/4/1995	2/3/2014	15	15	0.54	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1002A	MG	12/4/1995	2/3/2014	18	18	1.00	Increasing	4	4	0.38	Stable	2	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1002A	NA	12/4/1995	2/3/2014	15	15	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1002A	V	12/4/1995	8/6/2014	25	24	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	10	1.00	Decreasing
PTX06-1005	RDX	11/20/1995	7/31/2014	30	30	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1005	HMX	11/20/1995	7/31/2014	30	29	1.00	Decreasing	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX06-1005	TNT	11/20/1995	7/31/2014	30	25	1.00	Decreasing	4	4	0.63	No Trend	11	11	0.56	No Trend
PTX06-1005	DNT24	11/20/1995	7/31/2014	30	21	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	10	1.00	Decreasing
PTX06-1005	DNT26	11/20/1995	7/31/2014	30	12	1.00	Decreasing	4	4	0.63	No Trend	11	11	0.89	No Trend
PTX06-1005	DNT2A	11/20/1995	7/31/2014	30	20	0.97	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1005	DNT4A	11/20/1995	7/31/2014	30	20	0.97	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1005	TNB135	11/20/1995	7/31/2014	30	29	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1005	DNB13	11/20/1995	7/31/2014	28	5	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1005	PCE	11/20/1995	7/31/2014	31	15	1.00	Increasing	4	4	0.63	No Trend	11	9	1.00	Increasing
PTX06-1005	TCE	11/20/1995	7/31/2014	32	29	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.94	Probably Increasing
PTX06-1005	DCE12C	11/20/1995	7/31/2014	28	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1005	DCA12	11/20/1995	7/31/2014	30	24	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1005	TCLME	11/20/1995	7/31/2014	30	16	0.89	No Trend	4	4	1.00	Decreasing	11	11	0.95	Probably Increasing
PTX06-1005	B	11/20/1995	7/31/2014	29	29	1.00	Decreasing	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX06-1005	CR	11/20/1995	7/31/2014	29	29	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.89	No Trend
PTX06-1005	CR-6	3/14/1996	7/31/2014	29	21	1.00	Increasing	4	4	1.00	Decreasing	11	10	0.94	Probably Increasing
PTX06-1005	MN	11/20/1995	7/31/2014	28	22	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	6	1.00	Decreasing
PTX06-1005	NI	11/20/1995	7/31/2014	28	22	1.00	Decreasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1005	MO	11/20/1995	7/31/2014	28	28	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1005	AL	11/20/1995	2/12/2014	20	12	0.84	No Trend	4	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1005	BA	11/20/1995	2/12/2014	21	21	1.00	Increasing	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX06-1005	CA	11/20/1995	2/12/2014	14	14	0.91	Probably Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1005	FE	11/20/1995	7/31/2014	28	25	1.00	Increasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	10	1.00	Decreasing
PTX06-1005	K	11/20/1995	2/12/2014	16	16	0.52	No Trend	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1005	MG	11/20/1995	2/12/2014	20	20	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1005	NA	11/20/1995	2/12/2014	16	16	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1005	V	11/20/1995	7/31/2014	26	26	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1006	RDX	12/7/1995	5/19/2014	17	7	0.97	Increasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1006	HMX	12/7/1995	5/19/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	TNT	12/7/1995	5/19/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	DNT24	12/7/1995	5/19/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	DNT26	12/7/1995	5/19/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	DNT2A	12/7/1995	5/19/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	DNT4A	12/7/1995	5/19/2014	16	9	0.98	Increasing	4	4	0.83	No Trend	6	6	0.77	No Trend
PTX06-1006	TNB135	12/7/1995	5/19/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	DNB13	12/7/1995	5/19/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	DIOXANE14	8/14/2002	5/19/2014	10	8	1.00	Decreasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1006	PCE	12/7/1995	5/19/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	TCE	12/7/1995	5/19/2014	17	5	1.00	Decreasing	4	4	1.00	Decreasing	6	4	1.00	Decreasing
PTX06-1006	DCE12C	12/7/1995	5/19/2014	12	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	DCA12	12/7/1995	5/19/2014	17	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	6	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1006	TCLME	12/7/1995	5/19/2014	17	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1006	PERC	7/27/2000	5/19/2014	13	9	0.93	Probably Increasing	4	4	0.63	No Trend	6	6	1.00	Decreasing
PTX06-1006	B	12/7/1995	5/19/2014	19	18	1.00	Increasing	4	4	0.83	No Trend	6	6	0.99	Increasing
PTX06-1006	MN	12/7/1995	5/19/2014	15	14	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1006	AL	12/7/1995	5/19/2014	15	10	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1006	BA	12/7/1995	5/19/2014	15	15	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1006	CA	12/7/1995	5/19/2014	12	12	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1006	FE	12/7/1995	5/19/2014	15	15	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1006	K	12/7/1995	5/19/2014	13	13	1.00	Decreasing	4	4	0.50	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1006	MG	12/7/1995	5/19/2014	15	15	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1006	NA	12/7/1995	5/19/2014	13	13	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1007	RDX	12/5/1995	5/13/2014	17	11	1.00	Decreasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1007	HMX	12/5/1995	5/13/2014	17	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1007	TNT	12/5/1995	5/13/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1007	DNT24	12/5/1995	5/13/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1007	DNT26	12/5/1995	5/13/2014	17	4	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	6	4	1.00	Decreasing
PTX06-1007	DNT2A	12/5/1995	5/13/2014	17	3	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	6	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	DNT4A	12/5/1995	5/13/2014	17	17	1.00	Increasing	4	4	0.63	No Trend	6	6	0.86	No Trend
PTX06-1007	TNB135	12/5/1995	5/13/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1007	DNB13	12/5/1995	5/13/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1007	DIOXANE14	10/24/2005	5/13/2014	9	6	1.00	Decreasing	4	4	1.00	Decreasing	6	6	0.86	No Trend

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1007	PCE	12/5/1995	5/13/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1007	TCE	12/5/1995	5/13/2014	21	11	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	6	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	DCE12C	12/5/1995	5/13/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1007	DCA12	12/5/1995	5/13/2014	20	5	1.00	Decreasing	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1007	TCLME	12/5/1995	5/13/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1007	PERC	7/27/2000	5/13/2014	15	15	1.00	Increasing	4	4	0.96	Increasing	6	6	0.99	Increasing
PTX06-1007	B	12/5/1995	5/13/2014	19	19	1.00	Decreasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1007	MN	12/5/1995	5/13/2014	17	17	0.92	Probably Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1007	AL	12/5/1995	5/13/2014	17	12	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1007	BA	12/5/1995	5/13/2014	18	18	0.86	No Trend	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1007	CA	12/5/1995	5/13/2014	13	13	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1007	FE	12/5/1995	5/13/2014	17	17	0.99	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1007	K	12/5/1995	5/13/2014	15	15	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1007	MG	12/5/1995	5/13/2014	17	17	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1007	NA	12/5/1995	5/13/2014	15	15	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1008	RDX	12/7/1995	5/15/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	HMX	12/7/1995	5/15/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	TNT	12/7/1995	5/15/2014	15	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	DNT24	12/7/1995	5/15/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	DNT26	12/7/1995	5/15/2014	15	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	DNT2A	12/7/1995	5/15/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	DNT4A	12/7/1995	5/15/2014	16	2	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	6	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	TNB135	12/7/1995	5/15/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	DNB13	12/7/1995	5/15/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	DIOXANE14	4/29/2003	5/15/2014	7	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	PCE	12/7/1995	5/15/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	TCE	12/7/1995	5/15/2014	18	18	1.00	Decreasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1008	DCE12C	12/7/1995	5/15/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1008	DCA12	12/7/1995	5/15/2014	18	16	1.00	Increasing	4	4	0.83	No Trend	6	6	0.99	Increasing
PTX06-1008	TCLME	12/7/1995	5/15/2014	18	18	0.99	Increasing	4	4	0.83	No Trend	6	6	0.97	Increasing
PTX06-1008	PERC	4/17/2001	5/15/2014	11	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	B	12/7/1995	5/15/2014	14	14	0.99	Increasing	4	4	1.00	Decreasing	6	6	0.50	No Trend
PTX06-1008	CR	12/7/1995	5/15/2014	15	15	0.84	No Trend	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1008	CR-6	3/13/1996	5/15/2014	16	3	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	6	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	MN	12/7/1995	5/15/2014	15	11	0.85	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	6	5	1.00	Decreasing
PTX06-1008	NI	12/7/1995	5/15/2014	15	14	0.58	No Trend	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1008	MO	12/7/1995	5/15/2014	15	15	0.62	No Trend	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1008	AL	12/7/1995	5/15/2014	12	5	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1008	BA	12/7/1995	5/15/2014	13	13	0.97	Increasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1008	CA	12/7/1995	5/15/2014	9	9	0.91	Probably Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1008	FE	12/7/1995	5/15/2014	15	15	1.00	Increasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1008	K	12/7/1995	5/15/2014	9	9	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1008	MG	12/7/1995	5/15/2014	12	12	0.98	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1008	NA	12/7/1995	5/15/2014	9	9	0.85	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1008	V	12/7/1995	5/15/2014	15	15	0.82	No Trend	4	4	0.63	No Trend	6	6	1.00	Decreasing
PTX06-1010	RDX	11/27/1995	11/10/2014	30	27	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1010	HMX	11/27/1995	11/10/2014	30	22	1.00	Decreasing	4	4	0.83	No Trend	11	11	0.96	Increasing
PTX06-1010	TNT	11/27/1995	11/10/2014	28	6	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1010	DNT24	11/27/1995	11/10/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1010	DNT26	11/27/1995	11/10/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1010	DNT2A	11/27/1995	11/10/2014	29	21	1.00	Decreasing	4	4	0.83	No Trend	11	10	1.00	Decreasing
PTX06-1010	DNT4A	11/27/1995	11/10/2014	30	14	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	6	1.00	Decreasing
PTX06-1010	TNB135	11/27/1995	11/10/2014	28	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1010	DNB13	11/27/1995	11/10/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1010	PCE	11/27/1995	11/10/2014	29	23	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1010	TCE	11/27/1995	11/10/2014	30	28	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1010	DCE12C	11/27/1995	11/10/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1010	DCA12	11/27/1995	11/10/2014	28	25	1.00	Decreasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1010	TCLME	11/27/1995	11/10/2014	28	19	0.99	Increasing	4	4	0.38	Stable	11	11	0.59	No Trend
PTX06-1010	B	11/27/1995	11/10/2014	27	27	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1010	CR	11/27/1995	11/10/2014	32	31	1.00	Decreasing	4	4	0.63	No Trend	12	12	0.99	Increasing
PTX06-1010	CR-6	11/27/1995	11/10/2014	33	32	1.00	Decreasing	4	4	0.96	Increasing	12	12	0.99	Increasing
PTX06-1010	MN	11/27/1995	11/10/2014	29	27	0.72	No Trend	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1010	NI	11/27/1995	11/10/2014	29	28	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.73	No Trend
PTX06-1010	MO	11/27/1995	11/10/2014	29	28	1.00	Decreasing	4	4	0.63	No Trend	11	11	0.62	No Trend
PTX06-1010	AL	11/27/1995	5/20/2014	21	20	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1010	BA	11/27/1995	5/20/2014	22	21	0.87	No Trend	4	4	0.38	Stable	4	4	0.38	Stable
PTX06-1010	CA	11/27/1995	5/20/2014	15	15	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1010	FE	11/27/1995	11/10/2014	28	28	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.73	No Trend
PTX06-1010	K	11/27/1995	5/20/2014	16	15	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1010	MG	11/27/1995	5/20/2014	21	20	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1010	NA	11/27/1995	5/20/2014	16	15	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1010	V	11/27/1995	11/10/2014	26	25	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.50	No Trend
PTX06-1011	RDX	11/27/1995	5/20/2014	20	9	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	6	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	HMX	11/27/1995	5/20/2014	20	3	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	6	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	TNT	11/27/1995	5/20/2014	20	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1011	DNT24	11/27/1995	5/20/2014	20	5	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	6	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	DNT26	11/27/1995	5/20/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1011	DNT2A	11/27/1995	5/20/2014	20	3	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	6	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	DNT4A	11/27/1995	5/20/2014	20	5	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	6	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	TNB135	11/27/1995	5/20/2014	20	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	6	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	DNB13	11/27/1995	5/20/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1011	DIOXANE14	7/31/2003	5/20/2014	9	5	1.00	Decreasing	4	4	1.00	Decreasing	6	5	0.42	Stable
PTX06-1011	PCE	11/27/1995	5/20/2014	21	17	1.00	Decreasing	4	4	1.00	Decreasing	6	6	0.77	No Trend
PTX06-1011	TCE	11/27/1995	5/20/2014	22	22	1.00	Decreasing	4	4	0.63	No Trend	6	6	0.86	No Trend
PTX06-1011	DCE12C	11/27/1995	5/20/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1011	DCA12	11/27/1995	5/20/2014	20	7	1.00	Decreasing	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1011	TCLME	11/27/1995	5/20/2014	20	3	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	6	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	PERC	4/23/2001	5/20/2014	14	3	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	6	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	B	11/27/1995	5/20/2014	22	22	1.00	Decreasing	4	4	0.38	Stable	6	6	0.77	No Trend
PTX06-1011	CR	11/27/1995	5/20/2014	22	22	0.56	No Trend	4	4	0.38	No Trend	6	6	0.64	No Trend
PTX06-1011	CR-6	11/27/1995	5/20/2014	22	15	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	6	4	0.42	Stable
PTX06-1011	MN	11/27/1995	5/20/2014	22	21	0.65	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	6	5	1.00	Decreasing
PTX06-1011	NI	11/27/1995	5/20/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1011	MO	11/27/1995	5/20/2014	22	22	0.65	No Trend	4	4	0.38	Stable	6	6	0.50	No Trend
PTX06-1011	AL	11/27/1995	5/20/2014	19	9	0.87	No Trend	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1011	BA	11/27/1995	5/20/2014	20	20	1.00	Increasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1011	CA	11/27/1995	5/20/2014	13	13	1.00	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1011	FE	11/27/1995	5/20/2014	22	22	0.92	Probably Increasing	4	4	0.38	Stable	6	6	0.50	No Trend
PTX06-1011	K	11/27/1995	5/20/2014	15	15	0.69	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1011	MG	11/27/1995	5/20/2014	19	19	0.99	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1011	NA	11/27/1995	5/20/2014	15	15	0.63	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1011	V	11/27/1995	5/20/2014	20	20	0.93	Probably Increasing	4	4	0.63	No Trend	6	6	0.86	No Trend
PTX06-1013	RDX	11/14/1995	5/7/2014	32	29	1.00	Decreasing	4	4	1.00	Decreasing	10	10	1.00	Decreasing
PTX06-1013	HMX	11/14/1995	5/7/2014	32	25	1.00	Decreasing	4	4	0.63	No Trend	10	10	1.00	Increasing
PTX06-1013	TNT	11/14/1995	5/7/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	DNT24	11/14/1995	5/7/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	DNT26	11/14/1995	5/7/2014	32	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	DNT2A	11/14/1995	5/7/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	DNT4A	11/14/1995	5/7/2014	31	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	TNB135	11/14/1995	5/7/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	DNB13	11/14/1995	5/7/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	PCE	11/14/1995	5/7/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	TCE	11/14/1995	5/7/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	DCE12C	11/14/1995	5/7/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	DCA12	11/14/1995	5/7/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	TCLME	11/14/1995	5/7/2014	30	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	B	11/14/1995	5/7/2014	32	32	1.00	Increasing	4	4	1.00	Decreasing	10	10	1.00	Decreasing
PTX06-1013	CR	11/14/1995	5/7/2014	32	32	1.00	Decreasing	4	4	1.00	Decreasing	10	10	1.00	Decreasing
PTX06-1013	CR-6	3/7/1996	5/7/2014	33	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1013	MN	11/14/1995	5/7/2014	31	31	1.00	Decreasing	4	4	1.00	Decreasing	10	10	1.00	Decreasing
PTX06-1013	NI	11/14/1995	5/7/2014	31	31	1.00	Decreasing	4	4	0.38	Stable	10	10	1.00	Increasing
PTX06-1013	MO	11/14/1995	5/7/2014	31	30	1.00	Decreasing	4	4	1.00	Decreasing	10	10	1.00	Decreasing
PTX06-1013	AL	11/14/1995	5/7/2014	24	20	0.73	No Trend	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1013	BA	11/14/1995	5/7/2014	24	24	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1013	CA	11/14/1995	5/7/2014	14	14	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1013	FE	11/14/1995	5/7/2014	31	31	1.00	Decreasing	4	4	1.00	Decreasing	10	10	1.00	Decreasing
PTX06-1013	K	11/14/1995	5/7/2014	17	17	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1013	MG	11/14/1995	5/7/2014	23	23	0.96	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1013	NA	11/14/1995	5/7/2014	17	17	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1013	V	11/14/1995	5/7/2014	29	29	1.00	Decreasing	4	4	0.38	Stable	10	10	1.00	Decreasing
PTX06-1014	RDX	3/13/1996	7/21/2014	30	30	1.00	Decreasing	4	4	0.38	Stable	5	5	0.76	No Trend
PTX06-1014	HMX	3/13/1996	7/21/2014	30	27	1.00	Decreasing	4	4	0.83	No Trend	5	5	0.76	No Trend
PTX06-1014	TNT	3/13/1996	7/21/2014	29	4	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	5	4	0.59	No Trend
PTX06-1014	DNT24	3/13/1996	7/21/2014	29	14	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	5	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1014	DNT26	3/13/1996	7/21/2014	30	12	0.92	Probably Increasing	4	3	0.00	N/A (<4 Detections in Dataset)	5	4	0.41	Stable
PTX06-1014	DNT2A	3/13/1996	7/21/2014	29	25	1.00	Decreasing	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX06-1014	DNT4A	3/13/1996	7/21/2014	29	24	1.00	Decreasing	4	4	1.00	Decreasing	5	5	0.59	No Trend
PTX06-1014	TNB135	3/13/1996	7/21/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1014	DNB13	3/13/1996	7/21/2014	25	4	1.00	Decreasing	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1014	PCE	3/13/1996	7/21/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1014	TCE	3/13/1996	7/21/2014	30	12	1.00	Decreasing	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1014	DCE12C	3/13/1996	7/21/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1014	DCA12	3/13/1996	7/21/2014	26	13	1.00	Decreasing	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1014	TCLME	3/13/1996	7/21/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1014	B	3/13/1996	7/21/2014	30	30	1.00	Decreasing	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX06-1014	CR	3/13/1996	7/21/2014	30	30	1.00	Decreasing	4	4	0.63	No Trend	5	5	1.00	Decreasing
PTX06-1014	MN	3/13/1996	7/21/2014	29	20	1.00	Decreasing	4	4	0.83	No Trend	5	5	0.59	No Trend
PTX06-1014	NI	3/13/1996	7/21/2014	28	23	1.00	Decreasing	4	4	0.96	Increasing	5	5	0.99	Increasing
PTX06-1014	MO	3/13/1996	7/21/2014	28	28	1.00	Decreasing	4	4	0.63	No Trend	5	5	0.41	Stable
PTX06-1014	AL	3/13/1996	7/21/2014	27	11	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1014	BA	3/13/1996	7/21/2014	27	27	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1014	CA	3/13/1996	7/21/2014	15	15	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1014	FE	3/13/1996	7/21/2014	29	29	1.00	Decreasing	4	4	0.38	Stable	5	5	0.76	No Trend
PTX06-1014	K	3/13/1996	7/21/2014	19	19	0.79	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1014	MG	3/13/1996	7/21/2014	27	27	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1014	NA	3/13/1996	7/21/2014	19	19	1.00	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1014	V	3/13/1996	7/21/2014	24	24	1.00	Decreasing	4	4	0.73	No Trend	5	5	0.92	Probably Increasing
PTX06-1015	RDX	11/13/1995	8/4/2014	36	36	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1015	HMX	11/13/1995	8/4/2014	36	20	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Increasing
PTX06-1015	TNT	11/13/1995	8/4/2014	36	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1015	DNT24	11/13/1995	8/4/2014	37	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1015	DNT26	11/13/1995	8/4/2014	37	7	1.00	Decreasing	4	0	0.00	All Non-Detect	11	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	DNT2A	11/13/1995	8/4/2014	36	10	0.58	No Trend	4	4	0.63	No Trend	11	6	1.00	Increasing
PTX06-1015	DNT4A	11/13/1995	8/4/2014	36	33	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.62	No Trend
PTX06-1015	TNB135	11/13/1995	2/11/2014	33	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	DNB13	11/13/1995	8/4/2014	33	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1015	PCE	11/13/1995	8/4/2014	34	10	1.00	Decreasing	4	4	0.83	No Trend	11	10	1.00	Decreasing
PTX06-1015	TCE	11/13/1995	8/4/2014	38	34	1.00	Decreasing	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX06-1015	DCE12C	11/13/1995	8/4/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1015	DCA12	11/13/1995	8/4/2014	34	25	1.00	Decreasing	4	4	0.83	No Trend	11	11	0.99	Increasing
PTX06-1015	TCLME	11/13/1995	8/4/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1015	B	11/13/1995	8/4/2014	38	38	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.53	No Trend
PTX06-1015	CR	11/13/1995	8/4/2014	38	37	0.99	Increasing	4	4	0.96	Increasing	11	11	1.00	Increasing
PTX06-1015	CR-6	11/13/1995	2/11/2014	37	16	0.98	Increasing	4	4	0.83	No Trend	10	5	0.89	No Trend
PTX06-1015	MN	11/13/1995	8/4/2014	37	26	1.00	Decreasing	4	4	0.63	No Trend	11	9	1.00	Decreasing
PTX06-1015	NI	11/13/1995	8/4/2014	36	28	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1015	MO	11/13/1995	8/4/2014	36	34	1.00	Decreasing	4	4	0.63	No Trend	11	11	0.75	No Trend
PTX06-1015	AL	11/13/1995	2/11/2014	29	14	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1015	BA	11/13/1995	2/11/2014	29	28	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1015	CA	11/13/1995	2/11/2014	17	17	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1015	FE	11/13/1995	8/4/2014	36	35	0.83	No Trend	4	4	0.83	No Trend	11	11	1.00	Decreasing
PTX06-1015	K	11/13/1995	2/11/2014	20	20	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1015	MG	11/13/1995	2/11/2014	29	29	0.62	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1015	NA	11/13/1995	2/11/2014	20	20	0.98	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1015	V	11/13/1995	8/4/2014	31	30	0.98	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1023	RDX	12/10/1995	8/7/2014	33	27	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	8	1.00	Decreasing
PTX06-1023	HMX	12/10/1995	8/7/2014	33	26	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	8	1.00	Decreasing
PTX06-1023	TNT	12/10/1995	8/7/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	DNT24	12/10/1995	8/7/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	DNT26	12/10/1995	8/7/2014	33	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	DNT2A	12/10/1995	8/7/2014	33	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	DNT4A	12/10/1995	8/7/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	TNB135	12/10/1995	8/7/2014	33	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	DNB13	12/10/1995	8/7/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	PCE	12/10/1995	8/7/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	TCE	12/10/1995	8/7/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	DCE12C	12/10/1995	8/7/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	DCA12	12/10/1995	8/7/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	TCLME	12/10/1995	8/7/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1023	B	10/18/1995	8/7/2014	35	35	1.00	Decreasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1023	CR	10/18/1995	8/7/2014	34	29	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	7	1.00	Decreasing
PTX06-1023	CR-6	3/5/1996	8/7/2014	36	9	0.56	No Trend	4	1	0.00	N/A (<4 Detections in Dataset)	12	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1023	MN	10/18/1995	8/7/2014	34	25	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	7	1.00	Decreasing
PTX06-1023	NI	10/18/1995	8/7/2014	33	33	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1023	MO	10/18/1995	8/7/2014	33	33	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1023	AL	10/18/1995	1/30/2014	26	11	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1023	BA	10/18/1995	1/30/2014	26	26	0.88	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1023	CA	10/18/1995	1/30/2014	16	16	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1023	FE	10/18/1995	8/7/2014	33	32	1.00	Decreasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1023	K	10/18/1995	1/30/2014	19	19	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1023	MG	10/18/1995	1/30/2014	26	26	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1023	NA	10/18/1995	1/30/2014	19	19	0.83	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1023	V	10/18/1995	8/7/2014	28	28	1.00	Increasing	4	4	0.38	Stable	11	11	0.59	No Trend
PTX06-1030	RDX	8/20/1996	10/28/2014	36	36	0.82	No Trend	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1030	HMX	8/20/1996	10/28/2014	36	30	1.00	Increasing	4	4	0.63	No Trend	11	11	0.96	Increasing
PTX06-1030	TNT	8/20/1996	10/28/2014	34	5	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1030	DNT24	8/20/1996	10/28/2014	35	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1030	DNT26	8/20/1996	10/28/2014	36	16	1.00	Decreasing	4	4	0.96	Increasing	11	10	0.95	Probably Increasing
PTX06-1030	DNT2A	8/20/1996	10/28/2014	34	18	1.00	Increasing	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX06-1030	DNT4A	8/20/1996	10/28/2014	34	31	1.00	Increasing	4	4	0.96	Increasing	11	11	0.94	Probably Increasing
PTX06-1030	TNB135	8/20/1996	10/28/2014	34	13	1.00	Decreasing	4	4	0.83	No Trend	11	8	1.00	Decreasing
PTX06-1030	DNB13	8/20/1996	10/28/2014	30	5	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1030	PCE	8/20/1996	5/7/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1030	TCE	8/20/1996	5/7/2014	36	15	1.00	Decreasing	4	0	0.00	All Non-Detect	10	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1030	DCE12C	8/20/1996	5/7/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1030	DCA12	8/20/1996	5/7/2014	31	24	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	10	8	1.00	Decreasing
PTX06-1030	TCLME	8/20/1996	5/7/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1030	B	8/20/1996	5/7/2014	36	36	1.00	Increasing	4	4	0.38	Stable	10	10	1.00	Decreasing
PTX06-1030	CR	8/20/1996	5/7/2014	36	35	0.53	No Trend	4	4	0.63	No Trend	10	10	1.00	Increasing
PTX06-1030	CR-6	8/20/1996	5/7/2014	36	17	0.75	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	10	6	1.00	Decreasing
PTX06-1030	MN	8/20/1996	5/7/2014	35	33	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	10	9	1.00	Decreasing
PTX06-1030	NI	8/20/1996	5/7/2014	34	34	1.00	Decreasing	4	4	0.83	No Trend	10	10	1.00	Decreasing
PTX06-1030	MO	8/20/1996	5/7/2014	34	33	1.00	Decreasing	4	4	0.63	No Trend	10	10	1.00	Increasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1030	AL	8/20/1996	5/7/2014	28	17	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1030	BA	8/20/1996	5/7/2014	28	28	0.59	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1030	CA	8/20/1996	5/7/2014	15	15	0.75	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1030	FE	8/20/1996	5/7/2014	33	32	0.63	No Trend	4	4	0.83	No Trend	10	10	1.00	Increasing
PTX06-1030	K	8/20/1996	5/7/2014	18	18	0.50	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1030	MG	8/20/1996	5/7/2014	27	27	0.99	Increasing	4	4	0.50	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1030	NA	8/20/1996	5/7/2014	18	18	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1030	V	8/20/1996	5/7/2014	28	27	0.99	Increasing	4	4	0.63	No Trend	10	10	1.00	Increasing
PTX06-1031	RDX	8/20/1996	10/28/2014	37	34	1.00	Increasing	4	4	0.83	No Trend	11	11	0.50	No Trend
PTX06-1031	HMX	8/20/1996	10/28/2014	35	24	1.00	Increasing	4	4	0.83	No Trend	11	11	0.96	Increasing
PTX06-1031	TNT	8/20/1996	10/28/2014	35	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1031	DNT24	8/20/1996	10/28/2014	36	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1031	DNT26	8/20/1996	10/28/2014	35	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1031	DNT2A	8/20/1996	10/28/2014	36	6	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1031	DNT4A	8/20/1996	10/28/2014	36	30	0.93	Probably Increasing	4	4	0.83	No Trend	11	9	1.00	Increasing
PTX06-1031	TNB135	8/20/1996	10/28/2014	34	11	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	6	1.00	Decreasing
PTX06-1031	DNB13	8/20/1996	10/28/2014	30	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1031	PCE	8/20/1996	10/28/2014	34	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1031	TCE	8/20/1996	10/28/2014	38	25	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	7	0.86	No Trend
PTX06-1031	DCE12C	8/20/1996	10/28/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1031	DCA12	8/20/1996	10/28/2014	33	21	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	4	0.53	No Trend
PTX06-1031	TCLME	8/20/1996	10/28/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1031	B	8/20/1996	10/28/2014	37	37	1.00	Increasing	4	4	0.96	Increasing	11	11	1.00	Decreasing
PTX06-1031	CR	8/20/1996	10/28/2014	37	37	1.00	Decreasing	4	4	0.83	No Trend	11	11	0.94	Probably Increasing
PTX06-1031	CR-6	8/20/1996	10/28/2014	37	13	0.96	Increasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	6	1.00	Decreasing
PTX06-1031	MN	8/20/1996	10/28/2014	36	33	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	10	0.68	No Trend
PTX06-1031	NI	8/20/1996	10/28/2014	35	34	1.00	Decreasing	4	4	0.63	No Trend	11	11	0.50	No Trend
PTX06-1031	MO	8/20/1996	10/28/2014	35	34	1.00	Decreasing	4	4	0.83	No Trend	11	11	0.86	No Trend
PTX06-1031	AL	8/20/1996	5/6/2014	28	12	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1031	BA	8/20/1996	5/6/2014	28	27	0.94	Probably Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1031	CA	8/20/1996	5/6/2014	15	15	0.78	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1031	FE	8/20/1996	10/28/2014	34	34	0.72	No Trend	4	4	0.96	Increasing	11	11	0.99	Increasing
PTX06-1031	K	8/20/1996	5/6/2014	18	18	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1031	MG	8/20/1996	5/6/2014	27	27	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1031	NA	8/20/1996	5/6/2014	18	18	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1031	V	8/20/1996	10/28/2014	29	29	0.83	No Trend	4	4	0.90	No Trend	11	11	0.95	Probably Increasing
PTX06-1034	RDX	5/6/1998	7/24/2014	35	25	1.00	Increasing	4	4	0.63	No Trend	11	11	1.00	Increasing
PTX06-1034	HMX	5/6/1998	7/24/2014	34	7	1.00	Decreasing	4	4	0.96	Increasing	11	6	0.99	Increasing
PTX06-1034	TNT	5/6/1998	7/24/2014	34	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1034	DNT24	5/6/1998	7/24/2014	34	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1034	DNT26	5/6/1998	7/24/2014	34	13	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1034	DNT2A	5/6/1998	7/24/2014	34	9	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1034	DNT4A	5/6/1998	7/24/2014	35	34	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.99	Increasing
PTX06-1034	TNB135	5/6/1998	7/24/2014	34	12	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	6	1.00	Decreasing
PTX06-1034	DNB13	5/6/1998	7/24/2014	30	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1034	PCE	5/6/1998	7/24/2014	31	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1034	TCE	5/6/1998	7/24/2014	35	20	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.78	No Trend
PTX06-1034	DCE12C	8/18/1998	7/24/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1034	DCA12	5/6/1998	7/24/2014	31	12	1.00	Decreasing	4	4	1.00	Decreasing	11	8	1.00	Decreasing
PTX06-1034	TCLME	5/6/1998	7/24/2014	30	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1034	B	5/6/1998	7/24/2014	35	35	1.00	Increasing	4	4	0.96	Increasing	11	11	1.00	Increasing
PTX06-1034	CR	5/6/1998	7/24/2014	35	34	1.00	Increasing	4	4	1.00	Decreasing	11	10	0.50	No Trend
PTX06-1034	CR-6	2/26/1998	7/24/2014	34	7	0.99	Increasing	4	1	0.00	N/A (<4 Detections in Dataset)	10	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1034	MN	5/6/1998	2/3/2014	26	19	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1034	AL	5/6/1998	2/3/2014	26	17	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1034	BA	5/6/1998	2/3/2014	26	26	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1034	CA	5/6/1998	2/3/2014	14	14	0.87	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1034	FE	5/6/1998	2/3/2014	25	19	0.99	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1034	K	5/6/1998	2/3/2014	17	17	0.98	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1034	MG	5/6/1998	2/3/2014	26	26	0.96	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1034	NA	5/6/1998	2/3/2014	17	17	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1035	RDX	8/26/1998	8/11/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	HMX	8/26/1998	8/11/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	TNT	8/26/1998	8/11/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	DNT24	8/26/1998	8/11/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	DNT26	8/26/1998	8/11/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	DNT2A	8/26/1998	8/11/2014	31	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	DNT4A	8/26/1998	8/11/2014	33	26	0.68	No Trend	4	4	1.00	Decreasing	11	9	0.59	No Trend
PTX06-1035	TNB135	8/26/1998	8/11/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	DNB13	8/26/1998	8/11/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	DIOXANE14	8/11/2005	8/11/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	PCE	8/26/1998	8/11/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	TCE	8/26/1998	8/11/2014	32	6	1.00	Decreasing	4	4	0.63	No Trend	11	6	0.86	No Trend
PTX06-1035	DCE12C	11/4/2002	8/11/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	DCA12	8/26/1998	8/11/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	TCLME	8/26/1998	8/11/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1035	PERC	4/19/2001	8/11/2014	28	13	1.00	Increasing	4	4	0.96	Increasing	11	11	1.00	Increasing
PTX06-1035	B	8/26/1998	8/11/2014	26	26	1.00	Increasing	4	4	0.90	No Trend	11	11	0.62	No Trend

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1035	MN	8/26/1998	1/30/2014	20	13	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1035	AL	8/26/1998	1/30/2014	20	7	1.00	Decreasing	4	0	0.00	All Non-Detect	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1035	BA	8/26/1998	1/30/2014	20	20	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1035	CA	8/26/1998	1/30/2014	11	11	0.94	Probably Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1035	FE	8/26/1998	1/30/2014	20	17	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1035	K	8/26/1998	1/30/2014	15	15	1.00	Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1035	MG	8/26/1998	1/30/2014	20	20	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1035	NA	8/26/1998	1/30/2014	15	15	1.00	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1036	RDX	8/26/1998	7/16/2014	26	16	1.00	Increasing	4	4	0.38	Stable	5	5	1.00	Decreasing
PTX06-1036	HMX	8/26/1998	7/16/2014	26	12	1.00	Increasing	4	4	0.38	Stable	5	5	0.76	No Trend
PTX06-1036	TNT	8/26/1998	7/16/2014	26	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNT24	8/26/1998	7/16/2014	26	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNT26	8/26/1998	7/16/2014	25	2	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNT2A	8/26/1998	7/16/2014	26	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNT4A	8/26/1998	7/16/2014	26	13	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	TNB135	8/26/1998	7/16/2014	25	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNB13	8/26/1998	7/16/2014	22	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	PCE	8/26/1998	7/16/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1036	TCE	8/26/1998	7/16/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1036	DCE12C	10/24/2001	7/16/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1036	DCA12	8/26/1998	7/16/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1036	TCLME	8/26/1998	7/16/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1036	B	8/26/1998	7/16/2014	26	26	1.00	Decreasing	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX06-1036	CR	8/26/1998	7/16/2014	26	23	0.99	Increasing	4	4	0.63	No Trend	5	5	0.76	No Trend
PTX06-1036	CR-6	8/26/1998	7/16/2014	26	9	0.98	Increasing	4	3	0.00	N/A (<4 Detections in Dataset)	5	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	MN	8/26/1998	7/16/2014	23	21	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1036	AL	8/26/1998	7/16/2014	23	20	1.00	Decreasing	4	4	0.38	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1036	BA	8/26/1998	7/16/2014	23	23	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1036	CA	8/26/1998	7/16/2014	11	11	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1036	FE	8/26/1998	7/16/2014	23	22	0.85	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1036	K	8/26/1998	7/16/2014	15	15	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1036	MG	8/26/1998	7/16/2014	23	23	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1036	NA	8/26/1998	7/16/2014	15	15	0.88	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1038	RDX	4/30/1998	7/31/2014	34	34	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1038	HMX	4/30/1998	7/31/2014	34	33	1.00	Decreasing	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX06-1038	TNT	4/30/1998	7/31/2014	34	31	0.99	Increasing	4	4	1.00	Decreasing	11	10	0.94	Probably Increasing
PTX06-1038	DNT24	4/30/1998	7/31/2014	34	20	1.00	Decreasing	4	0	0.00	All Non-Detect	11	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	DNT26	4/30/1998	7/31/2014	34	13	0.74	No Trend	4	4	1.00	Decreasing	11	10	0.78	No Trend
PTX06-1038	DNT2A	4/30/1998	7/31/2014	34	32	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1038	DNT4A	4/30/1998	7/31/2014	34	31	0.52	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1038	TNB135	4/30/1998	1/29/2014	32	21	0.88	No Trend	4	4	0.38	Stable	10	9	1.00	Decreasing
PTX06-1038	DNB13	4/30/1998	7/31/2014	29	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1038	PCE	4/30/1998	7/31/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	TCE	4/30/1998	7/31/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1038	DCE12C	5/11/1999	7/31/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1038	DCA12	4/30/1998	7/31/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1038	TCLME	4/30/1998	7/31/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1038	B	4/30/1998	7/31/2014	33	33	1.00	Decreasing	4	4	0.83	No Trend	11	11	1.00	Decreasing
PTX06-1038	CR	4/30/1998	7/31/2014	32	29	1.00	Decreasing	4	4	1.00	Decreasing	11	9	1.00	Decreasing
PTX06-1038	CR-6	8/31/1998	1/29/2014	30	16	1.00	Decreasing	4	4	1.00	Decreasing	10	4	1.00	Decreasing
PTX06-1038	MN	4/30/1998	1/29/2014	24	22	0.56	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1038	AL	4/30/1998	1/29/2014	24	17	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1038	BA	4/30/1998	1/29/2014	24	23	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1038	CA	4/30/1998	1/29/2014	12	12	0.99	Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1038	FE	4/30/1998	1/29/2014	24	19	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1038	K	4/30/1998	1/29/2014	16	16	0.98	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1038	MG	4/30/1998	1/29/2014	24	24	0.95	Probably Increasing	4	4	0.50	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1038	NA	4/30/1998	1/29/2014	16	16	0.99	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1039A	RDX	6/30/1998	7/31/2014	30	30	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1039A	HMX	6/30/1998	7/31/2014	30	29	0.50	No Trend	4	4	1.00	Decreasing	11	11	0.73	No Trend
PTX06-1039A	TNT	6/30/1998	7/31/2014	30	20	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1039A	DNT24	6/30/1998	7/31/2014	30	16	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	4	1.00	Decreasing
PTX06-1039A	DNT26	6/30/1998	7/31/2014	30	14	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.56	No Trend
PTX06-1039A	DNT2A	6/30/1998	7/31/2014	30	25	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1039A	DNT4A	6/30/1998	7/31/2014	30	27	0.60	No Trend	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX06-1039A	TNB135	6/30/1998	7/31/2014	29	18	0.94	Probably Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1039A	DNB13	6/30/1998	7/31/2014	27	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1039A	PCE	8/31/1998	7/31/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1039A	TCE	8/31/1998	7/31/2014	28	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1039A	DCE12C	5/11/1999	7/31/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1039A	DCA12	8/31/1998	7/31/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1039A	TCLME	8/31/1998	7/31/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1039A	B	8/31/1998	7/31/2014	28	28	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.73	No Trend
PTX06-1039A	CR	8/31/1998	7/31/2014	28	22	0.61	No Trend	4	2	0.00	N/A (<4 Detections in Dataset)	11	5	0.59	No Trend
PTX06-1039A	CR-6	8/31/1998	7/31/2014	30	8	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	12	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	MN	8/31/1998	2/13/2014	19	19	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1039A	AL	8/31/1998	2/13/2014	19	14	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1039A	BA	8/31/1998	2/13/2014	19	19	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1039A	CA	8/31/1998	2/13/2014	10	10	0.92	Probably Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1039A	FE	8/31/1998	2/13/2014	19	18	0.93	Probably Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1039A	K	8/31/1998	2/13/2014	12	12	0.99	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1039A	MG	8/31/1998	2/13/2014	19	19	0.99	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1039A	NA	8/31/1998	2/13/2014	12	12	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1040	RDX	6/30/1998	7/31/2014	34	34	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.65	No Trend
PTX06-1040	HMX	6/30/1998	7/31/2014	34	33	0.99	Increasing	4	4	0.63	No Trend	11	11	0.93	Probably Increasing
PTX06-1040	TNT	6/30/1998	7/31/2014	34	8	1.00	Decreasing	4	4	0.96	Increasing	11	7	1.00	Increasing
PTX06-1040	DNT24	6/30/1998	7/31/2014	33	7	1.00	Decreasing	4	0	0.00	All Non-Detect	11	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	DNT26	6/30/1998	7/31/2014	33	14	0.74	No Trend	4	4	1.00	Decreasing	11	10	0.99	Increasing
PTX06-1040	DNT2A	6/30/1998	7/31/2014	34	23	0.98	Increasing	4	4	0.83	No Trend	11	11	0.98	Increasing
PTX06-1040	DNT4A	6/30/1998	7/31/2014	34	33	0.55	No Trend	4	4	1.00	Decreasing	11	11	0.98	Increasing
PTX06-1040	TNB135	6/30/1998	7/31/2014	33	16	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1040	DNB13	6/30/1998	7/31/2014	28	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1040	PCE	8/31/1998	7/31/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1040	TCE	8/31/1998	7/31/2014	32	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1040	DCE12C	5/11/1999	7/31/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1040	DCA12	8/31/1998	7/31/2014	28	5	1.00	Decreasing	4	0	0.00	All Non-Detect	11	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	TCLME	8/31/1998	7/31/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1040	B	8/31/1998	7/31/2014	32	32	1.00	Decreasing	4	4	0.83	No Trend	11	11	1.00	Decreasing
PTX06-1040	CR	8/31/1998	7/31/2014	33	31	1.00	Decreasing	4	4	1.00	Decreasing	11	9	0.70	No Trend
PTX06-1040	CR-6	8/31/1998	2/13/2014	32	15	1.00	Decreasing	4	4	1.00	Decreasing	11	4	1.00	Decreasing
PTX06-1040	MN	8/31/1998	2/13/2014	24	24	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1040	AL	8/31/1998	2/13/2014	24	22	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1040	BA	8/31/1998	2/13/2014	24	24	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1040	CA	8/31/1998	2/13/2014	12	12	0.66	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1040	FE	8/31/1998	2/13/2014	23	22	0.89	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1040	K	8/31/1998	2/13/2014	15	15	0.87	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1040	MG	8/31/1998	2/13/2014	24	24	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1040	NA	8/31/1998	2/13/2014	15	15	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1041	RDX	10/7/1999	7/31/2014	28	28	1.00	Decreasing	4	4	0.50	No Trend	11	11	0.94	Probably Increasing
PTX06-1041	HMX	10/7/1999	7/31/2014	28	27	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.97	Increasing
PTX06-1041	TNT	10/7/1999	7/31/2014	27	19	0.96	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1041	DNT24	10/7/1999	7/31/2014	28	17	1.00	Decreasing	4	0	0.00	All Non-Detect	11	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	DNT26	10/7/1999	7/31/2014	28	12	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.89	No Trend
PTX06-1041	DNT2A	10/7/1999	7/31/2014	27	22	1.00	Decreasing	4	4	0.38	Stable	11	10	0.96	Increasing
PTX06-1041	DNT4A	10/7/1999	7/31/2014	28	28	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1041	TNB135	10/7/1999	2/19/2014	26	15	1.00	Increasing	4	4	0.38	Stable	10	10	1.00	Decreasing
PTX06-1041	DNB13	10/7/1999	7/31/2014	26	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1041	PCE	10/7/1999	7/31/2014	26	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1041	TCE	10/7/1999	7/31/2014	28	4	0.62	No Trend	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1041	DCE12C	10/23/2001	7/31/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1041	DCA12	10/7/1999	7/31/2014	27	6	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1041	TCLME	10/7/1999	7/31/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1041	B	10/7/1999	7/31/2014	28	28	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.65	No Trend
PTX06-1041	CR	10/7/1999	7/31/2014	28	22	0.81	No Trend	4	1	0.00	N/A (<4 Detections in Dataset)	11	5	1.00	Decreasing
PTX06-1041	CR-6	10/7/1999	7/31/2014	28	9	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	MN	10/7/1999	2/19/2014	19	18	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1041	AL	10/7/1999	2/19/2014	19	12	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1041	BA	10/7/1999	2/19/2014	19	19	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1041	CA	10/7/1999	2/19/2014	11	11	0.92	Probably Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1041	FE	10/7/1999	2/19/2014	19	15	0.74	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1041	K	10/7/1999	2/19/2014	13	13	0.94	Probably Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1041	MG	10/7/1999	2/19/2014	19	19	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1041	NA	10/7/1999	2/19/2014	13	13	0.96	Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1042	RDX	10/7/1999	7/31/2014	32	32	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.92	Probably Increasing
PTX06-1042	HMX	10/7/1999	7/31/2014	32	30	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1042	TNT	10/7/1999	7/31/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1042	DNT24	10/7/1999	7/31/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1042	DNT26	10/7/1999	7/31/2014	30	8	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	7	0.56	No Trend
PTX06-1042	DNT2A	10/7/1999	7/31/2014	31	24	0.56	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1042	DNT4A	10/7/1999	7/31/2014	32	27	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.96	Increasing
PTX06-1042	TNB135	10/7/1999	1/29/2014	30	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	DNB13	10/7/1999	7/31/2014	26	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1042	PCE	10/7/1999	7/31/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1042	TCE	10/7/1999	7/31/2014	32	12	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1042	DCE12C	10/23/2001	7/31/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1042	DCA12	10/7/1999	7/31/2014	28	13	1.00	Decreasing	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1042	TCLME	10/7/1999	7/31/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1042	B	10/7/1999	7/31/2014	32	32	0.87	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1042	CR	10/7/1999	7/31/2014	31	24	1.00	Increasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	5	0.59	No Trend
PTX06-1042	CR-6	10/7/1999	1/29/2014	31	7	0.76	No Trend	4	1	0.00	N/A (<4 Detections in Dataset)	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	MN	10/7/1999	1/29/2014	23	23	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1042	AL	10/7/1999	1/29/2014	23	8	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1042	BA	10/7/1999	1/29/2014	23	23	0.93	Probably Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1042	CA	10/7/1999	1/29/2014	11	11	0.82	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1042	FE	10/7/1999	1/29/2014	23	23	0.96	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1042	K	10/7/1999	1/29/2014	15	15	0.58	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1042	MG	10/7/1999	1/29/2014	23	23	0.80	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1042	NA	10/7/1999	1/29/2014	15	15	0.78	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1046	RDX	1/5/2000	8/4/2014	32	32	1.00	Increasing	4	4	0.83	No Trend	11	11	1.00	Increasing
PTX06-1046	HMX	1/5/2000	8/4/2014	31	26	1.00	Increasing	4	4	0.96	Increasing	11	11	1.00	Increasing
PTX06-1046	TNT	1/5/2000	8/4/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1046	DNT24	1/5/2000	8/4/2014	32	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1046	DNT26	1/5/2000	8/4/2014	31	7	1.00	Decreasing	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	DNT2A	1/5/2000	8/4/2014	31	12	1.00	Increasing	4	4	0.63	No Trend	11	11	1.00	Increasing
PTX06-1046	DNT4A	1/5/2000	8/4/2014	32	26	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.62	No Trend
PTX06-1046	TNB135	1/5/2000	1/27/2014	30	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1046	DNB13	1/5/2000	8/4/2014	28	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1046	PCE	9/11/2000	8/4/2014	27	4	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	TCE	9/11/2000	8/4/2014	31	30	1.00	Decreasing	4	4	1.00	Decreasing	11	10	0.73	No Trend
PTX06-1046	DCE12C	10/24/2001	8/4/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1046	DCA12	9/11/2000	8/4/2014	27	26	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1046	TCLME	9/11/2000	8/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1046	B	1/5/2000	8/4/2014	32	32	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Increasing
PTX06-1046	CR	1/5/2000	8/4/2014	32	23	1.00	Increasing	4	4	0.96	Increasing	11	5	0.86	No Trend
PTX06-1046	CR-6	9/11/2000	8/4/2014	32	11	0.99	Increasing	4	4	0.63	No Trend	12	5	1.00	Decreasing
PTX06-1046	MN	1/5/2000	1/27/2014	23	19	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1046	AL	1/5/2000	1/27/2014	23	12	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1046	BA	1/5/2000	1/27/2014	23	23	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1046	CA	1/5/2000	1/27/2014	11	11	0.99	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1046	FE	1/5/2000	1/27/2014	23	23	0.68	No Trend	4	4	0.38	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1046	K	1/5/2000	1/27/2014	15	15	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1046	MG	1/5/2000	1/27/2014	23	23	0.99	Increasing	4	4	0.73	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1046	NA	1/5/2000	1/27/2014	15	15	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1047A	RDX	9/11/2000	8/4/2014	27	19	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1047A	HMX	9/11/2000	8/4/2014	27	16	0.52	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1047A	TNT	9/11/2000	8/4/2014	27	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	DNT24	9/11/2000	1/27/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1047A	DNT26	9/11/2000	1/27/2014	26	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	DNT2A	9/11/2000	1/27/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1047A	DNT4A	9/11/2000	1/27/2014	26	18	0.95	Increasing	4	4	1.00	Decreasing	10	10	1.00	Decreasing
PTX06-1047A	TNB135	9/11/2000	1/27/2014	26	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1047A	DNB13	9/11/2000	1/27/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1047A	PCE	9/11/2000	8/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1047A	TCE	9/11/2000	8/4/2014	27	13	1.00	Decreasing	4	0	0.00	All Non-Detect	11	7	0.68	No Trend
PTX06-1047A	DCE12C	10/24/2001	8/4/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1047A	DCA12	9/11/2000	8/4/2014	25	12	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	9	1.00	Decreasing
PTX06-1047A	TCLME	9/11/2000	8/4/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1047A	B	9/11/2000	8/4/2014	27	27	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1047A	CR	9/11/2000	8/4/2014	27	16	1.00	Increasing	4	0	0.00	All Non-Detect	11	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	CR-6	9/11/2000	8/4/2014	28	4	0.82	No Trend	4	1	0.00	N/A (<4 Detections in Dataset)	12	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	MN	9/11/2000	1/27/2014	19	18	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	4	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	AL	9/11/2000	1/27/2014	18	15	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1047A	BA	9/11/2000	1/27/2014	18	18	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1047A	CA	9/11/2000	1/27/2014	9	9	0.58	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1047A	FE	9/11/2000	1/27/2014	19	18	1.00	Increasing	4	4	0.38	Stable	4	4	0.38	Stable
PTX06-1047A	K	9/11/2000	1/27/2014	11	11	0.90	Probably Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1047A	MG	9/11/2000	1/27/2014	18	18	1.00	Decreasing	4	4	0.50	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1047A	NA	9/11/2000	1/27/2014	11	11	0.98	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1048A	RDX	9/5/2000	4/23/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	HMX	9/5/2000	4/23/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	TNT	9/5/2000	4/23/2014	23	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	DNT24	9/5/2000	4/23/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	DNT26	9/5/2000	4/23/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	DNT2A	9/5/2000	4/23/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	DNT4A	9/5/2000	4/23/2014	23	11	1.00	Decreasing	4	4	1.00	Decreasing	5	4	1.00	Decreasing
PTX06-1048A	TNB135	9/5/2000	4/23/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	DNB13	9/5/2000	4/23/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	PCE	9/5/2000	4/23/2014	19	4	1.00	Decreasing	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	TCE	9/5/2000	4/23/2014	23	22	1.00	Decreasing	4	4	0.63	No Trend	5	4	0.76	No Trend
PTX06-1048A	DCE12C	5/21/2002	4/23/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1048A	DCA12	9/5/2000	4/23/2014	19	8	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	5	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	TCLME	9/5/2000	4/23/2014	18	5	0.96	Increasing	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	B	9/5/2000	4/23/2014	23	23	0.98	Increasing	4	4	0.63	No Trend	5	5	1.00	Decreasing
PTX06-1048A	MN	9/5/2000	4/23/2014	20	19	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1048A	AL	9/5/2000	4/23/2014	20	19	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1048A	BA	9/5/2000	4/23/2014	20	20	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1048A	CA	9/5/2000	4/23/2014	10	10	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1048A	FE	9/5/2000	4/23/2014	20	20	0.71	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1048A	K	9/5/2000	4/23/2014	14	14	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1048A	MG	9/5/2000	4/23/2014	20	20	0.94	Probably Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1048A	NA	9/5/2000	4/23/2014	14	14	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1049	RDX	9/7/2000	10/29/2014	20	8	1.00	Increasing	4	4	0.83	No Trend	10	8	1.00	Increasing
PTX06-1049	HMX	9/7/2000	10/29/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1049	TNT	9/7/2000	10/29/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1049	DNT24	9/7/2000	10/29/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1049	DNT26	9/7/2000	10/29/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1049	DNT2A	9/7/2000	10/29/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1049	DNT4A	9/7/2000	10/29/2014	20	9	1.00	Increasing	4	4	1.00	Decreasing	10	9	1.00	Increasing
PTX06-1049	TNB135	9/7/2000	10/29/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1049	DNB13	9/7/2000	10/29/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1049	PCE	9/7/2000	10/29/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1049	TCE	9/7/2000	10/29/2014	21	12	0.74	No Trend	4	4	0.96	Increasing	11	11	1.00	Increasing
PTX06-1049	DCE12C	8/12/2002	10/29/2014	16	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	DCA12	9/7/2000	10/29/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1049	TCLME	9/7/2000	10/29/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1049	B	9/7/2000	10/29/2014	21	21	0.82	No Trend	4	4	0.90	No Trend	10	10	1.00	Decreasing
PTX06-1049	MN	9/7/2000	5/14/2014	14	13	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1049	AL	9/7/2000	5/14/2014	14	11	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1049	BA	9/7/2000	5/14/2014	14	14	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1049	CA	9/7/2000	5/14/2014	7	7	0.81	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1049	FE	9/7/2000	5/14/2014	14	14	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1049	K	9/7/2000	5/14/2014	9	9	0.94	Probably Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1049	MG	9/7/2000	5/14/2014	14	14	1.00	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1049	NA	9/7/2000	5/14/2014	9	9	0.93	Probably Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1050	RDX	9/5/2000	11/13/2014	24	24	1.00	Decreasing	4	4	0.38	Stable	11	11	0.94	Probably Increasing
PTX06-1050	HMX	9/5/2000	11/13/2014	24	24	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1050	TNT	9/5/2000	11/13/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	DNT24	9/5/2000	11/13/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	DNT26	9/5/2000	11/13/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	DNT2A	9/5/2000	11/13/2014	24	21	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1050	DNT4A	9/5/2000	11/13/2014	24	22	1.00	Increasing	4	4	0.38	Stable	11	11	0.99	Increasing
PTX06-1050	TNB135	9/5/2000	11/13/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	DNB13	9/5/2000	11/13/2014	23	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	PCE	9/5/2000	11/13/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	TCE	9/5/2000	11/13/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	DCE12C	8/12/2002	11/13/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	DCA12	9/5/2000	11/13/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	TCLME	9/5/2000	11/13/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1050	B	9/5/2000	11/13/2014	23	23	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1050	MN	9/5/2000	4/16/2014	15	15	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1050	AL	9/5/2000	4/16/2014	15	13	0.48	Stable	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1050	BA	9/5/2000	4/16/2014	15	15	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1050	CA	9/5/2000	4/16/2014	10	10	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1050	FE	9/5/2000	4/16/2014	15	15	0.91	Probably Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1050	K	9/5/2000	4/16/2014	12	12	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1050	MG	9/5/2000	4/16/2014	15	15	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1050	NA	9/5/2000	4/16/2014	12	12	0.98	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1052	RDX	9/12/2000	8/4/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	HMX	9/12/2000	8/4/2014	30	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1052	TNT	9/12/2000	8/4/2014	30	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1052	DNT24	9/12/2000	8/4/2014	30	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1052	DNT26	9/12/2000	8/4/2014	30	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1052	DNT2A	9/12/2000	8/4/2014	30	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1052	DNT4A	9/12/2000	8/4/2014	30	10	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	7	1.00	Decreasing
PTX06-1052	TNB135	9/12/2000	2/11/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX06-1052	DNB13	9/12/2000	8/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1052	PCE	9/12/2000	8/4/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1052	TCE	9/12/2000	8/4/2014	29	11	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	4	0.47	Stable
PTX06-1052	DCE12C	5/9/2001	8/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1052	DCA12	9/12/2000	8/4/2014	25	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1052	TCLME	9/12/2000	8/4/2014	24	10	0.93	Probably Increasing	4	4	1.00	Decreasing	11	10	0.99	Increasing
PTX06-1052	B	9/12/2000	8/4/2014	30	30	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1052	CR	9/12/2000	8/4/2014	30	30	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1052	CR-6	9/12/2000	8/4/2014	29	29	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1052	MN	9/12/2000	2/11/2014	21	12	0.67	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1052	AL	9/12/2000	2/11/2014	21	10	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1052	BA	9/12/2000	2/11/2014	21	21	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1052	CA	9/12/2000	2/11/2014	11	11	0.53	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1052	FE	9/12/2000	2/11/2014	21	20	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1052	K	9/12/2000	2/11/2014	15	15	0.70	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1052	MG	9/12/2000	2/11/2014	21	21	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1052	NA	9/12/2000	2/11/2014	15	15	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1053	RDX	9/12/2000	10/27/2014	31	5	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	HMX	9/12/2000	10/27/2014	32	13	0.87	No Trend	4	4	0.38	Stable	11	9	1.00	Increasing
PTX06-1053	TNT	9/12/2000	10/27/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1053	DNT24	9/12/2000	10/27/2014	32	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1053	DNT26	9/12/2000	10/27/2014	32	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1053	DNT2A	9/12/2000	10/27/2014	32	4	1.00	Decreasing	4	4	0.96	Increasing	11	4	0.78	No Trend
PTX06-1053	DNT4A	9/12/2000	10/27/2014	32	27	0.61	No Trend	4	4	0.96	Increasing	11	9	1.00	Decreasing
PTX06-1053	TNB135	9/12/2000	10/27/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1053	DNB13	9/12/2000	10/27/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1053	DIOXANE14	7/26/2005	10/27/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1053	PCE	9/12/2000	10/27/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1053	TCE	9/12/2000	10/27/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1053	DCE12C	5/9/2001	10/27/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1053	DCA12	9/12/2000	10/27/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1053	TCLME	9/12/2000	10/27/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1053	PERC	9/12/2000	10/27/2014	30	4	0.94	Probably Increasing	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1053	B	9/12/2000	10/27/2014	31	31	1.00	Increasing	4	4	0.50	No Trend	11	11	1.00	Decreasing
PTX06-1053	CR	9/12/2000	10/27/2014	32	15	1.00	Increasing	4	1	0.00	N/A (<4 Detections in Dataset)	12	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	CR-6	9/12/2000	10/27/2014	33	3	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	13	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	MN	9/12/2000	4/28/2014	22	15	0.69	No Trend	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1053	AL	9/12/2000	4/28/2014	22	10	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1053	BA	9/12/2000	4/28/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1053	CA	9/12/2000	4/28/2014	10	10	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1053	FE	9/12/2000	4/28/2014	22	15	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1053	K	9/12/2000	4/28/2014	14	14	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1053	MG	9/12/2000	4/28/2014	22	22	0.72	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1053	NA	9/12/2000	4/28/2014	14	14	0.98	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1077A	RDX	2/20/2002	7/23/2014	11	5	0.65	No Trend	4	4	1.00	Decreasing	6	5	1.00	Decreasing
PTX06-1077A	HMX	2/20/2002	7/23/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	TNT	2/20/2002	7/23/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	DNT24	2/20/2002	7/23/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	DNT26	2/20/2002	7/23/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	DNT2A	2/20/2002	7/23/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	DNT4A	2/20/2002	7/23/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	TNB135	2/20/2002	7/23/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	DNB13	11/4/2002	7/23/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	DIOXANE14	11/4/2002	7/23/2014	10	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	PCE	2/20/2002	7/23/2014	13	5	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	6	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	TCE	2/20/2002	7/23/2014	15	13	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	6	5	1.00	Decreasing
PTX06-1077A	DCE12C	2/20/2002	7/23/2014	15	13	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	6	5	1.00	Decreasing
PTX06-1077A	DCA12	2/20/2002	7/23/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	TCLME	2/20/2002	7/23/2014	12	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1077A	PERC	2/20/2002	7/23/2014	13	9	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	6	4	0.81	No Trend
PTX06-1077A	B	2/20/2002	7/23/2014	10	10	0.95	Probably Increasing	4	4	1.00	Decreasing	6	6	0.64	No Trend
PTX06-1077A	MN	2/20/2002	7/23/2014	8	8	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1077A	AL	2/20/2002	7/23/2014	8	7	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1077A	BA	2/20/2002	7/23/2014	9	9	1.00	Decreasing	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX06-1077A	CA	8/25/2008	7/23/2014	4	4	0.63	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1077A	FE	2/20/2002	7/23/2014	8	8	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1077A	K	8/25/2008	7/23/2014	4	4	0.63	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1077A	MG	2/20/2002	7/23/2014	8	8	0.95	Probably Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1077A	NA	8/25/2008	7/23/2014	4	4	0.83	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1081	RDX	7/18/2002	7/24/2014	21	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1081	HMX	7/18/2002	7/24/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	TNT	7/18/2002	7/24/2014	21	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	DNT24	7/18/2002	7/24/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	DNT26	7/18/2002	7/24/2014	21	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	DNT2A	7/18/2002	7/24/2014	21	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	DNT4A	7/18/2002	7/24/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	TNB135	7/18/2002	7/24/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	DNB13	7/18/2002	7/24/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	PCE	7/18/2002	7/24/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	TCE	7/18/2002	7/24/2014	21	19	1.00	Decreasing	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX06-1081	DCE12C	7/18/2002	7/24/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	DCA12	7/18/2002	7/24/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	TCLME	7/18/2002	7/24/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX06-1081	B	7/18/2002	7/24/2014	18	18	1.00	Decreasing	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX06-1081	MN	7/18/2002	7/24/2014	18	14	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1081	AL	7/18/2002	7/24/2014	18	13	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1081	BA	7/18/2002	7/24/2014	18	18	0.74	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1081	CA	8/9/2005	7/24/2014	6	6	0.93	Probably Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1081	FE	7/18/2002	7/24/2014	18	16	0.71	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1081	K	8/9/2005	7/24/2014	10	10	0.99	Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1081	MG	7/18/2002	7/24/2014	18	18	0.87	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1081	NA	8/9/2005	7/24/2014	10	10	0.96	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1085	RDX	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	HMX	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	TNT	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	DNT24	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	DNT26	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	DNT2A	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	DNT4A	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	TNB135	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	DNB13	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	PCE	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	TCE	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	DCE12C	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	DCA12	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1085	TCLME	5/27/2003	4/22/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1085	B	5/27/2003	4/22/2014	10	10	1.00	Decreasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX06-1085	MN	5/27/2003	4/22/2014	7	5	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1085	AL	5/27/2003	4/22/2014	7	5	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1085	BA	5/27/2003	4/22/2014	8	8	1.00	Decreasing	4	4	0.38	Stable	4	4	0.38	Stable
PTX06-1085	CA	4/26/2010	4/22/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1085	FE	5/27/2003	4/22/2014	7	7	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1085	K	4/26/2010	4/22/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1085	MG	5/27/2003	4/22/2014	7	7	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1085	NA	4/26/2010	4/22/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1086	RDX	5/27/2003	4/22/2014	14	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	HMX	5/27/2003	4/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	TNT	5/27/2003	4/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	DNT24	5/27/2003	4/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	DNT26	5/27/2003	4/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	DNT2A	5/27/2003	4/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	DNT4A	5/27/2003	4/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	TNB135	5/27/2003	4/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	DNB13	5/27/2003	4/22/2014	12	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	PCE	5/27/2003	4/22/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	TCE	5/27/2003	4/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	DCE12C	5/27/2003	4/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	DCA12	5/27/2003	4/22/2014	12	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	TCLME	5/27/2003	4/22/2014	12	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX06-1086	B	5/27/2003	4/22/2014	14	14	1.00	Decreasing	4	4	0.63	No Trend	6	6	1.00	Decreasing
PTX06-1086	MN	5/27/2003	4/22/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1086	AL	5/27/2003	4/22/2014	11	7	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1086	BA	5/27/2003	4/22/2014	12	12	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1086	CA	4/26/2010	4/22/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1086	FE	5/27/2003	4/22/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1086	K	5/2/2006	4/22/2014	5	5	0.59	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1086	MG	5/27/2003	4/22/2014	11	11	0.56	No Trend	4	4	0.50	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1086	NA	5/2/2006	4/22/2014	5	5	0.76	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1088	RDX	6/11/2003	11/10/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1088	HMX	6/11/2003	11/10/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1088	TNT	6/11/2003	11/10/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1088	DNT24	6/11/2003	11/10/2014	22	16	0.84	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1088	DNT26	6/11/2003	11/10/2014	22	6	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	6	1.00	Decreasing
PTX06-1088	DNT2A	6/11/2003	11/10/2014	21	19	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1088	DNT4A	6/11/2003	11/10/2014	21	19	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1088	TNB135	6/11/2003	11/10/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1088	DNB13	6/11/2003	11/10/2014	20	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1088	PCE	6/11/2003	11/10/2014	21	21	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.96	Increasing
PTX06-1088	TCE	6/11/2003	11/10/2014	21	21	1.00	Decreasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1088	DCE12C	6/11/2003	11/10/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1088	DCA12	6/11/2003	11/10/2014	20	15	0.99	Increasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	9	0.90	Probably Increasing
PTX06-1088	TCLME	6/11/2003	11/10/2014	20	20	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.68	No Trend
PTX06-1088	B	6/11/2003	11/10/2014	19	19	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1088	CR	6/11/2003	11/10/2014	21	21	1.00	Decreasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1088	CR-6	6/11/2003	5/20/2014	19	18	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	10	9	1.00	Decreasing
PTX06-1088	MN	6/11/2003	5/20/2014	13	10	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1088	AL	6/11/2003	5/20/2014	13	11	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1088	BA	6/11/2003	5/20/2014	14	14	0.88	No Trend	4	4	0.63	No Trend	4	4	0.63	No Trend
PTX06-1088	CA	4/24/2008	5/20/2014	5	5	0.41	Stable	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1088	FE	6/11/2003	5/20/2014	13	12	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1088	K	5/4/2006	5/20/2014	7	7	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1088	MG	6/11/2003	5/20/2014	13	13	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1088	NA	5/4/2006	5/20/2014	7	7	0.61	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1095A	RDX	5/9/2005	8/20/2014	26	18	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.97	Increasing
PTX06-1095A	HMX	5/9/2005	8/20/2014	26	17	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.97	Increasing
PTX06-1095A	TNT	5/9/2005	8/20/2014	26	12	1.00	Increasing	4	4	0.63	No Trend	11	11	1.00	Increasing
PTX06-1095A	DNT24	5/9/2005	8/20/2014	26	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1095A	DNT26	5/9/2005	8/20/2014	26	2	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	11	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1095A	DNT2A	5/9/2005	8/20/2014	26	11	0.92	Probably Increasing	4	4	0.96	Increasing	11	10	1.00	Increasing
PTX06-1095A	DNT4A	5/9/2005	8/20/2014	26	12	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.98	Increasing
PTX06-1095A	TNB135	5/9/2005	8/20/2014	26	18	1.00	Increasing	4	4	0.83	No Trend	11	11	1.00	Decreasing
PTX06-1095A	DNB13	5/9/2005	8/20/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1095A	PCE	5/9/2005	8/20/2014	20	5	0.88	No Trend	4	2	0.00	N/A (<4 Detections in Dataset)	11	5	0.75	No Trend
PTX06-1095A	TCE	5/9/2005	8/20/2014	25	14	1.00	Increasing	4	4	0.83	No Trend	11	11	0.56	No Trend
PTX06-1095A	DCE12C	5/9/2005	8/20/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1095A	DCA12	5/9/2005	8/20/2014	18	8	0.54	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	11	8	1.00	Decreasing
PTX06-1095A	TCLME	5/9/2005	8/20/2014	18	5	0.82	No Trend	4	2	0.00	N/A (<4 Detections in Dataset)	11	5	0.99	Increasing
PTX06-1095A	B	5/9/2005	8/20/2014	24	24	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1095A	CR	5/9/2005	8/20/2014	24	11	1.00	Increasing	4	4	0.63	No Trend	11	7	0.78	No Trend
PTX06-1095A	CR-6	9/13/2005	8/20/2014	23	5	1.00	Increasing	4	4	0.83	No Trend	11	5	0.75	No Trend
PTX06-1095A	MN	5/9/2005	8/20/2014	23	23	0.99	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1095A	NI	5/9/2005	8/20/2014	23	21	1.00	Increasing	4	4	0.83	No Trend	11	11	1.00	Increasing
PTX06-1095A	MO	5/9/2005	8/20/2014	22	22	1.00	Decreasing	4	4	0.83	No Trend	11	11	0.86	No Trend

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1095A	AL	5/9/2005	1/30/2014	14	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1095A	BA	5/9/2005	1/30/2014	15	15	1.00	Increasing	4	4	0.73	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1095A	CA	2/27/2008	1/30/2014	5	5	0.88	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1095A	FE	5/9/2005	8/20/2014	23	23	1.00	Increasing	4	4	0.83	No Trend	11	11	1.00	Increasing
PTX06-1095A	K	1/19/2006	1/30/2014	12	12	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1095A	MG	5/9/2005	1/30/2014	15	15	1.00	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1095A	NA	1/19/2006	1/30/2014	12	12	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1095A	V	5/9/2005	8/20/2014	16	11	0.98	Increasing	4	4	1.00	Decreasing	11	10	0.86	No Trend
PTX06-1120	RDX	10/13/2010	10/27/2014	9	9	1.00	Decreasing	4	4	1.00	Decreasing	9	9	1.00	Decreasing
PTX06-1120	HMX	10/13/2010	10/27/2014	9	9	1.00	Decreasing	4	4	0.63	No Trend	9	9	1.00	Decreasing
PTX06-1120	TNT	10/13/2010	10/27/2014	9	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX06-1120	DNT24	10/13/2010	10/27/2014	9	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX06-1120	DNT26	10/13/2010	10/27/2014	9	7	1.00	Increasing	4	4	0.90	No Trend	9	7	1.00	Increasing
PTX06-1120	DNT2A	10/13/2010	10/27/2014	9	9	1.00	Increasing	4	4	0.63	No Trend	9	9	1.00	Increasing
PTX06-1120	DNT4A	10/13/2010	10/27/2014	9	9	0.96	Increasing	4	4	1.00	Decreasing	9	9	0.96	Increasing
PTX06-1120	TNB135	10/13/2010	10/27/2014	9	5	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	9	5	1.00	Decreasing
PTX06-1120	DNB13	10/13/2010	10/27/2014	9	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX06-1120	PCE	10/13/2010	10/27/2014	9	4	0.89	No Trend	4	0	0.00	All Non-Detect	9	4	0.89	No Trend
PTX06-1120	TCE	10/13/2010	10/27/2014	9	9	1.00	Decreasing	4	4	1.00	Decreasing	9	9	1.00	Decreasing
PTX06-1120	DCE12C	10/13/2010	10/27/2014	9	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX06-1120	DCA12	10/13/2010	10/27/2014	9	9	1.00	Decreasing	4	4	0.83	No Trend	9	9	1.00	Decreasing
PTX06-1120	TCLME	10/13/2010	10/27/2014	9	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX06-1120	B	10/13/2010	10/27/2014	9	9	1.00	Decreasing	4	4	0.83	No Trend	9	9	1.00	Decreasing
PTX06-1120	CR	10/13/2010	10/27/2014	9	9	0.97	Increasing	4	4	0.38	Stable	9	9	0.97	Increasing
PTX06-1120	CR-6	10/13/2010	10/27/2014	9	6	0.82	No Trend	4	4	0.83	No Trend	9	6	0.82	No Trend
PTX06-1120	MN	10/13/2010	10/27/2014	9	9	1.00	Decreasing	4	4	1.00	Decreasing	9	9	1.00	Decreasing
PTX06-1120	NI	10/13/2010	10/27/2014	9	9	1.00	Decreasing	4	4	1.00	Decreasing	9	9	1.00	Decreasing
PTX06-1120	MO	10/13/2010	10/27/2014	9	9	0.46	Stable	4	4	0.38	Stable	9	9	0.46	Stable
PTX06-1120	AL	5/31/2012	4/29/2014	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1120	BA	5/31/2012	4/29/2014	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1120	CA	5/31/2012	4/29/2014	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1120	FE	10/13/2010	10/27/2014	9	9	0.94	Probably Increasing	4	4	0.63	No Trend	9	9	0.94	Probably Increasing
PTX06-1120	K	5/31/2012	4/29/2014	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1120	MG	5/31/2012	4/29/2014	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1120	NA	5/31/2012	4/29/2014	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)	2	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1120	V	10/13/2010	10/27/2014	9	9	0.98	Increasing	4	4	1.00	Decreasing	9	9	0.98	Increasing
PTX06-1126	RDX	2/7/2008	11/5/2014	19	13	0.50	No Trend	4	4	1.00	Decreasing	12	12	0.47	Stable
PTX06-1126	HMX	2/7/2008	11/5/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX06-1126	TNT	2/7/2008	11/5/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX06-1126	DNT24	2/7/2008	11/5/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX06-1126	DNT26	2/7/2008	11/5/2014	19	2	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	12	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	DNT2A	2/7/2008	11/5/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX06-1126	DNT4A	2/7/2008	11/5/2014	19	17	1.00	Increasing	4	4	0.96	Increasing	12	10	1.00	Increasing
PTX06-1126	TNB135	2/7/2008	11/5/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX06-1126	DNB13	2/7/2008	11/5/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX06-1126	DIOXANE14	2/14/2008	11/5/2014	18	18	1.00	Increasing	4	4	0.83	No Trend	12	12	0.98	Increasing
PTX06-1126	PCE	2/7/2008	11/5/2014	19	17	1.00	Increasing	4	4	0.38	Stable	12	12	1.00	Increasing
PTX06-1126	TCE	2/7/2008	11/5/2014	19	19	0.95	Probably Increasing	4	4	0.38	Stable	12	12	0.47	Stable
PTX06-1126	DCE12C	2/7/2008	11/5/2014	19	19	1.00	Decreasing	4	4	1.00	Decreasing	12	12	1.00	Decreasing
PTX06-1126	DCA12	2/7/2008	11/5/2014	19	19	1.00	Increasing	4	4	1.00	Decreasing	12	12	0.99	Increasing
PTX06-1126	TCLME	2/7/2008	11/5/2014	19	19	1.00	Increasing	4	4	1.00	Decreasing	12	12	1.00	Increasing
PTX06-1126	PERC	2/7/2008	11/5/2014	19	19	1.00	Decreasing	4	4	0.83	No Trend	12	12	1.00	Decreasing
PTX06-1126	B	9/8/2009	11/5/2014	12	12	1.00	Decreasing	4	4	0.63	No Trend	12	12	1.00	Decreasing
PTX06-1126	CR	2/7/2008	11/5/2014	8	8	0.80	No Trend	4	4	0.38	No Trend	4	4	0.38	No Trend
PTX06-1126	CR-6	2/7/2008	11/5/2014	5	3	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	MN	2/7/2008	5/13/2014	7	7	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1126	AL	2/7/2008	5/13/2014	7	3	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1126	BA	2/7/2008	5/13/2014	8	8	1.00	Increasing	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX06-1126	CA	2/7/2008	5/13/2014	7	7	0.97	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1126	FE	2/7/2008	5/13/2014	7	7	0.81	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1126	K	2/7/2008	5/13/2014	7	7	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1126	MG	2/7/2008	5/13/2014	7	7	0.88	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1126	NA	2/7/2008	5/13/2014	7	7	0.61	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1127	RDX	2/7/2008	11/5/2014	18	7	0.74	No Trend	4	4	0.83	No Trend	11	7	0.99	Increasing
PTX06-1127	HMX	2/7/2008	11/5/2014	18	2	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	11	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	TNT	2/7/2008	11/5/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1127	DNT24	2/7/2008	11/5/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1127	DNT26	2/7/2008	11/5/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1127	DNT2A	2/7/2008	11/5/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1127	DNT4A	2/7/2008	11/5/2014	17	15	1.00	Increasing	4	4	1.00	Decreasing	11	9	1.00	Increasing
PTX06-1127	TNB135	2/7/2008	11/5/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1127	DNB13	2/7/2008	11/5/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1127	DIOXANE14	2/14/2008	11/5/2014	17	17	1.00	Increasing	4	4	1.00	Decreasing	11	11	0.82	No Trend
PTX06-1127	PCE	2/7/2008	11/5/2014	18	8	1.00	Increasing	4	4	0.38	Stable	11	8	1.00	Increasing
PTX06-1127	TCE	2/7/2008	11/5/2014	18	18	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1127	DCE12C	2/7/2008	11/5/2014	18	18	1.00	Decreasing	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX06-1127	DCA12	2/7/2008	11/5/2014	18	18	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1127	TCLME	2/7/2008	11/5/2014	18	18	1.00	Increasing	4	4	0.38	Stable	11	11	1.00	Increasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1127	PERC	2/7/2008	11/5/2014	18	18	1.00	Decreasing	4	4	0.83	No Trend	11	11	1.00	Decreasing
PTX06-1127	B	9/8/2009	11/5/2014	11	11	0.73	No Trend	4	4	0.96	Increasing	11	11	0.73	No Trend
PTX06-1127	CR	2/7/2008	11/5/2014	8	8	0.97	Increasing	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX06-1127	CR-6	2/7/2008	11/5/2014	5	2	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	MN	2/7/2008	5/8/2014	7	7	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1127	AL	2/7/2008	5/8/2014	7	3	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1127	BA	2/7/2008	5/8/2014	8	8	1.00	Decreasing	4	4	0.38	Stable	4	4	0.38	Stable
PTX06-1127	CA	2/7/2008	5/8/2014	7	7	0.85	No Trend	4	4	0.90	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1127	FE	2/7/2008	5/8/2014	7	7	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1127	K	2/7/2008	5/8/2014	7	7	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1127	MG	2/7/2008	5/8/2014	7	7	0.50	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1127	NA	2/7/2008	5/8/2014	7	7	0.44	Stable	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1130	RDX	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1130	HMX	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1130	TNT	9/2/2009	8/6/2014	11	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1130	DNT24	9/2/2009	8/6/2014	11	10	1.00	Decreasing	4	4	0.96	Increasing	11	10	1.00	Decreasing
PTX06-1130	DNT26	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1130	DNT2A	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1130	DNT4A	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1130	TNB135	9/2/2009	8/6/2014	11	9	1.00	Decreasing	4	4	1.00	Decreasing	11	9	1.00	Decreasing
PTX06-1130	DNB13	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1130	PCE	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1130	TCE	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1130	DCE12C	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1130	DCA12	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1130	TCLME	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1130	B	9/2/2009	8/6/2014	11	11	0.56	No Trend	4	4	0.38	Stable	11	11	0.56	No Trend
PTX06-1130	CR	9/2/2009	8/6/2014	11	11	0.98	Increasing	4	4	0.63	No Trend	11	11	0.98	Increasing
PTX06-1130	CR-6	9/2/2009	8/6/2014	12	5	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	12	5	1.00	Decreasing
PTX06-1130	MN	9/2/2009	8/6/2014	11	10	1.00	Increasing	4	4	0.63	No Trend	11	10	1.00	Increasing
PTX06-1130	NI	9/2/2009	8/6/2014	11	11	1.00	Increasing	4	4	0.83	No Trend	11	11	1.00	Increasing
PTX06-1130	MO	9/2/2009	8/6/2014	11	11	1.00	Increasing	4	4	0.96	Increasing	11	11	1.00	Increasing
PTX06-1130	AL	1/26/2010	2/3/2014	3	1	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1130	BA	1/26/2010	2/3/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1130	CA	1/26/2010	2/3/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1130	FE	9/2/2009	8/6/2014	11	11	0.94	Probably Increasing	4	4	0.63	No Trend	11	11	0.94	Probably Increasing
PTX06-1130	K	1/26/2010	2/3/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1130	MG	1/26/2010	2/3/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1130	NA	1/26/2010	2/3/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1130	V	9/2/2009	8/6/2014	11	11	0.96	Increasing	4	4	0.63	No Trend	11	11	0.96	Increasing
PTX06-1131	RDX	8/24/2009	2/18/2014	11	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1131	HMX	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	TNT	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	DNT24	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	DNT26	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	DNT2A	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	DNT4A	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	TNB135	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	DNB13	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	PCE	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	TCE	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	DCE12C	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	DCA12	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	TCLME	8/24/2009	2/18/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1131	B	8/24/2009	2/18/2014	10	10	1.00	Decreasing	4	4	1.00	Decreasing	10	10	1.00	Decreasing
PTX06-1131	MN	3/4/2010	2/18/2014	3	2	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX06-1131	AL	3/4/2010	2/18/2014	3	0	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1131	BA	3/4/2010	2/18/2014	4	4	0.38	Stable	4	4	0.38	Stable	4	4	0.38	Stable
PTX06-1131	CA	3/4/2010	2/18/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1131	FE	3/4/2010	2/18/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1131	K	3/4/2010	2/18/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1131	MG	3/4/2010	2/18/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1131	NA	3/4/2010	2/18/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1134	RDX	8/27/2009	10/27/2014	11	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1134	HMX	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	TNT	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	DNT24	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	DNT26	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	DNT2A	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	DNT4A	8/27/2009	10/27/2014	11	11	1.00	Decreasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1134	TNB135	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	DNB13	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	DIOXANE14	8/27/2009	10/27/2014	11	8	0.98	Increasing	4	4	0.73	No Trend	11	8	0.98	Increasing
PTX06-1134	PCE	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	TCE	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	DCE12C	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	DCA12	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1134	TCLME	8/27/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1134	PERC	8/27/2009	10/27/2014	11	10	1.00	Decreasing	4	4	0.63	No Trend	11	10	1.00	Decreasing
PTX06-1134	B	8/27/2009	10/27/2014	11	11	0.92	Probably Increasing	4	4	0.83	No Trend	11	11	0.92	Probably Increasing
PTX06-1134	MN	5/6/2010	4/23/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1134	AL	5/6/2010	4/23/2014	3	0	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1134	BA	5/6/2010	4/23/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1134	CA	5/6/2010	4/23/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1134	FE	5/6/2010	4/23/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1134	K	5/6/2010	4/23/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1134	MG	5/6/2010	4/23/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1134	NA	5/6/2010	4/23/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1135	RDX	9/14/2009	10/27/2014	11	11	1.00	Decreasing	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX06-1135	HMX	9/14/2009	10/27/2014	11	11	1.00	Decreasing	4	4	0.96	Increasing	11	11	1.00	Decreasing
PTX06-1135	TNT	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	DNT24	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	DNT26	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	DNT2A	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	DNT4A	9/14/2009	10/27/2014	11	4	1.00	Decreasing	4	4	0.96	Increasing	11	4	1.00	Decreasing
PTX06-1135	TNB135	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	DNB13	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	PCE	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	TCE	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	DCE12C	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	DCA12	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	TCLME	9/14/2009	10/27/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1135	B	9/14/2009	10/27/2014	11	11	0.90	Probably Increasing	4	4	0.63	No Trend	11	11	0.90	Probably Increasing
PTX06-1135	CR	12/11/2008	10/27/2014	12	11	1.00	Increasing	4	4	0.38	No Trend	11	10	0.99	Increasing
PTX06-1135	CR-6	12/11/2008	10/27/2014	12	2	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	11	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1135	MN	9/14/2009	10/27/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1135	NI	9/14/2009	10/27/2014	11	11	1.00	Decreasing	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX06-1135	MO	9/14/2009	10/27/2014	11	11	0.50	No Trend	4	4	0.38	Stable	11	11	0.50	No Trend
PTX06-1135	AL	5/11/2010	4/28/2014	3	0	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1135	BA	5/11/2010	4/28/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1135	CA	5/11/2010	4/28/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1135	FE	9/14/2009	10/27/2014	11	11	0.86	No Trend	4	4	1.00	Decreasing	11	11	0.86	No Trend
PTX06-1135	K	5/11/2010	4/28/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1135	MG	5/11/2010	4/28/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1135	NA	5/11/2010	4/28/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1135	V	9/14/2009	10/27/2014	11	11	1.00	Increasing	4	4	0.38	Stable	11	11	1.00	Increasing
PTX06-1136	RDX	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	HMX	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	TNT	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	DNT24	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	DNT26	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	DNT2A	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	DNT4A	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	TNB135	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	DNB13	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	PCE	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	TCE	9/14/2009	5/14/2014	10	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	10	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1136	DCE12C	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	DCA12	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	TCLME	9/14/2009	5/14/2014	10	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX06-1136	B	9/14/2009	5/14/2014	10	10	1.00	Decreasing	4	4	1.00	Decreasing	10	10	1.00	Decreasing
PTX06-1136	MN	3/29/2010	5/14/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1136	AL	3/29/2010	5/14/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1136	BA	3/29/2010	5/14/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1136	CA	3/29/2010	5/14/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1136	FE	3/29/2010	5/14/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1136	K	3/29/2010	5/14/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1136	MG	3/29/2010	5/14/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1136	NA	3/29/2010	5/14/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1146	RDX	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX06-1146	HMX	9/2/2009	8/6/2014	11	11	0.92	Probably Increasing	4	4	0.83	No Trend	11	11	0.92	Probably Increasing
PTX06-1146	TNT	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1146	DNT24	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1146	DNT26	9/2/2009	8/6/2014	11	10	1.00	Decreasing	4	4	1.00	Decreasing	11	10	1.00	Decreasing
PTX06-1146	DNT2A	9/2/2009	8/6/2014	11	8	1.00	Increasing	4	4	0.83	No Trend	11	8	1.00	Increasing
PTX06-1146	DNT4A	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1146	TNB135	9/2/2009	8/6/2014	11	5	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	5	1.00	Decreasing
PTX06-1146	DNB13	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1146	PCE	9/2/2009	8/6/2014	11	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1146	TCE	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1146	DCE12C	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1146	DCA12	9/2/2009	8/6/2014	11	4	0.93	Probably Increasing	4	0	0.00	All Non-Detect	11	4	0.93	Probably Increasing
PTX06-1146	TCLME	9/2/2009	8/6/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1146	B	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1146	CR	9/2/2009	8/6/2014	11	11	0.96	Increasing	4	4	1.00	Decreasing	11	11	0.96	Increasing
PTX06-1146	CR-6	9/2/2009	8/6/2014	11	6	0.68	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	11	6	0.68	No Trend

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1146	MN	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1146	NI	9/2/2009	8/6/2014	11	11	0.82	No Trend	4	4	1.00	Decreasing	11	11	0.82	No Trend
PTX06-1146	MO	9/2/2009	8/6/2014	11	11	0.89	No Trend	4	4	1.00	Decreasing	11	11	0.89	No Trend
PTX06-1146	AL	3/23/2010	1/29/2014	3	0	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1146	BA	3/23/2010	1/29/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1146	CA	3/23/2010	1/29/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1146	FE	9/2/2009	8/6/2014	11	11	1.00	Decreasing	4	4	0.96	Increasing	11	11	1.00	Decreasing
PTX06-1146	K	3/23/2010	1/29/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1146	MG	3/23/2010	1/29/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1146	NA	3/23/2010	1/29/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1146	V	9/2/2009	8/6/2014	11	11	0.73	No Trend	4	4	1.00	Decreasing	11	11	0.73	No Trend
PTX06-1147	RDX	9/2/2009	10/28/2014	11	11	0.86	No Trend	4	4	1.00	Decreasing	11	11	0.86	No Trend
PTX06-1147	HMX	9/2/2009	10/28/2014	11	11	0.90	Probably Increasing	4	4	1.00	Decreasing	11	11	0.90	Probably Increasing
PTX06-1147	TNT	9/2/2009	10/28/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1147	DNT24	9/2/2009	10/28/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1147	DNT26	9/2/2009	10/28/2014	11	4	1.00	Decreasing	4	0	0.00	All Non-Detect	11	4	1.00	Decreasing
PTX06-1147	DNT2A	9/2/2009	10/28/2014	11	4	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	4	1.00	Decreasing
PTX06-1147	DNT4A	9/2/2009	10/28/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1147	TNB135	9/2/2009	10/28/2014	11	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1147	DNB13	9/2/2009	10/28/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1147	PCE	9/2/2009	10/28/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1147	TCE	9/2/2009	10/28/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1147	DCE12C	9/2/2009	10/28/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1147	DCA12	9/2/2009	10/28/2014	11	6	1.00	Decreasing	4	0	0.00	All Non-Detect	11	6	1.00	Decreasing
PTX06-1147	TCLME	9/2/2009	10/28/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1147	B	9/2/2009	10/28/2014	11	11	0.98	Increasing	4	4	1.00	Decreasing	11	11	0.98	Increasing
PTX06-1147	CR	9/2/2009	10/28/2014	11	11	0.50	No Trend	4	4	1.00	Decreasing	11	11	0.50	No Trend
PTX06-1147	CR-6	9/2/2009	10/28/2014	11	3	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	11	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1147	MN	9/2/2009	10/28/2014	11	11	0.47	Stable	4	4	0.38	Stable	11	11	0.47	Stable
PTX06-1147	NI	9/2/2009	10/28/2014	11	11	0.94	Probably Increasing	4	4	0.38	Stable	11	11	0.94	Probably Increasing
PTX06-1147	MO	9/2/2009	10/28/2014	11	11	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Increasing
PTX06-1147	AL	4/27/2010	5/6/2014	3	0	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1147	BA	4/27/2010	5/6/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1147	CA	4/27/2010	5/6/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1147	FE	9/2/2009	10/28/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1147	K	4/27/2010	5/6/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1147	MG	4/27/2010	5/6/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1147	NA	4/27/2010	5/6/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1147	V	9/2/2009	10/28/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1151	RDX	9/1/2009	8/12/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1151	HMX	9/1/2009	8/12/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1151	TNT	9/1/2009	8/12/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1151	DNT24	9/1/2009	8/12/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1151	DNT26	9/1/2009	8/12/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1151	DNT2A	9/1/2009	8/12/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1151	DNT4A	9/1/2009	8/12/2014	11	9	0.99	Increasing	4	4	0.38	Stable	11	9	0.99	Increasing
PTX06-1151	TNB135	9/1/2009	8/12/2014	11	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1151	DNB13	9/1/2009	8/12/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX06-1151	DIOXANE14	9/1/2009	8/12/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1151	PCE	5/20/2009	8/12/2014	12	12	1.00	Increasing	4	4	0.83	No Trend	11	11	1.00	Increasing
PTX06-1151	TCE	5/20/2009	8/12/2014	12	12	0.66	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1151	DCE12C	5/20/2009	8/12/2014	12	12	0.88	No Trend	4	4	1.00	Decreasing	11	11	0.78	No Trend
PTX06-1151	DCA12	5/20/2009	8/12/2014	12	12	0.89	No Trend	4	4	1.00	Decreasing	11	11	0.90	Probably Increasing
PTX06-1151	TCLME	5/20/2009	8/12/2014	12	12	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Increasing
PTX06-1151	PERC	9/1/2009	8/12/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX06-1151	B	9/1/2009	8/12/2014	11	11	1.00	Decreasing	4	4	0.50	No Trend	11	11	1.00	Decreasing
PTX06-1151	MN	3/30/2010	2/19/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1151	AL	3/30/2010	2/19/2014	3	1	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1151	BA	3/30/2010	2/19/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1151	CA	3/30/2010	2/19/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1151	FE	3/30/2010	2/19/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1151	K	3/30/2010	2/19/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1151	MG	3/30/2010	2/19/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1151	NA	3/30/2010	2/19/2014	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1159	RDX	1/29/2013	8/11/2014	4	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	HMX	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1159	TNT	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1159	DNT24	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1159	DNT26	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1159	DNT2A	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1159	DNT4A	1/29/2013	8/11/2014	4	4	0.83	No Trend	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX06-1159	TNB135	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1159	DNB13	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1159	DIOXANE14	1/29/2013	8/11/2014	4	4	0.96	Increasing	4	4	0.96	Increasing	4	4	0.96	Increasing
PTX06-1159	PCE	1/29/2013	8/11/2014	4	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	TCE	1/29/2013	8/11/2014	4	4	0.63	No Trend	4	4	0.63	No Trend	4	4	0.63	No Trend
PTX06-1159	DCE12C	1/29/2013	8/11/2014	4	4	0.73	No Trend	4	4	0.73	No Trend	4	4	0.73	No Trend
PTX06-1159	DCA12	1/29/2013	8/11/2014	4	4	0.63	No Trend	4	4	0.63	No Trend	4	4	0.63	No Trend

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1159	TCLME	1/29/2013	8/11/2014	4	4	0.63	No Trend	4	4	0.63	No Trend	4	4	0.63	No Trend
PTX06-1159	PERC	1/29/2013	8/11/2014	4	4	0.96	Increasing	4	4	0.96	Increasing	4	4	0.96	Increasing
PTX06-1159	B	1/29/2013	8/11/2014	4	4	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1159	MN	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1159	AL	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1159	BA	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1159	CA	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1159	FE	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1159	K	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1159	MG	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1159	NA	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1160	RDX	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	HMX	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	TNT	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	DNT24	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	DNT26	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	DNT2A	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	DNT4A	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	TNB135	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	DNB13	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	DIOXANE14	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	PCE	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	TCE	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	DCE12C	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	DCA12	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	TCLME	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	PERC	1/29/2013	8/11/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1160	B	1/29/2013	8/11/2014	4	4	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1160	MN	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1160	AL	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1160	BA	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1160	CA	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1160	FE	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1160	K	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1160	MG	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1160	NA	1/28/2014	1/28/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1166	RDX	1/28/2013	8/4/2014	4	4	0.63	No Trend	4	4	0.63	No Trend	4	4	0.63	No Trend
PTX06-1166	HMX	1/28/2013	8/4/2014	4	4	0.96	Increasing	4	4	0.96	Increasing	4	4	0.96	Increasing
PTX06-1166	TNT	1/28/2013	8/4/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1166	DNT24	1/28/2013	8/4/2014	4	4	0.63	No Trend	4	4	0.63	No Trend	4	4	0.63	No Trend
PTX06-1166	DNT26	1/28/2013	8/4/2014	4	4	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1166	DNT2A	1/28/2013	8/4/2014	4	4	0.83	No Trend	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX06-1166	DNT4A	1/28/2013	8/4/2014	4	4	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1166	TNB135	1/28/2013	1/27/2014	3	0	0.00	N/A (<4 Samples in Dataset)	3	3	0.00	N/A (<4 Samples in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX06-1166	DNB13	1/28/2013	8/4/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1166	PCE	1/28/2013	8/4/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1166	TCE	1/28/2013	8/4/2014	4	4	0.38	Stable	4	4	0.38	Stable	4	4	0.38	Stable
PTX06-1166	DCE12C	1/28/2013	8/4/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1166	DCA12	1/28/2013	8/4/2014	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect
PTX06-1166	TCLME	1/28/2013	8/4/2014	4	4	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1166	B	1/28/2013	8/4/2014	4	4	0.38	Stable	4	4	0.38	Stable	4	4	0.38	Stable
PTX06-1166	CR	1/28/2013	8/4/2014	4	4	0.83	No Trend	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX06-1166	CR-6	1/28/2013	8/4/2014	4	3	0.00	N/A (<4 Detections in Dataset)	4	3	0.00	N/A (<4 Detections in Dataset)	4	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1166	MN	1/28/2013	8/4/2014	4	4	0.63	No Trend	4	4	0.63	No Trend	4	4	0.63	No Trend
PTX06-1166	NI	1/28/2013	8/4/2014	4	4	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1166	MO	1/28/2013	8/4/2014	4	4	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX06-1166	AL	1/27/2014	1/27/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1166	BA	1/27/2014	1/27/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1166	CA	1/27/2014	1/27/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1166	FE	1/28/2013	8/4/2014	4	4	0.63	No Trend	4	4	0.63	No Trend	4	4	0.63	No Trend
PTX06-1166	K	1/27/2014	1/27/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1166	MG	1/27/2014	1/27/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1166	NA	1/27/2014	1/27/2014	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)	1	1	0.00	N/A (<4 Samples in Dataset)
PTX06-1166	V	1/28/2013	8/4/2014	4	4	0.83	No Trend	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX07-1O01	RDX	12/10/1995	2/12/2014	28	28	1.00	Decreasing	4	4	0.38	Stable	9	9	1.00	Decreasing
PTX07-1O01	HMX	12/10/1995	2/12/2014	28	22	1.00	Decreasing	4	4	0.96	Increasing	9	9	1.00	Decreasing
PTX07-1O01	TNT	12/10/1995	2/12/2014	26	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX07-1O01	DNT24	12/10/1995	2/12/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX07-1O01	DNT26	12/10/1995	2/12/2014	28	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX07-1O01	DNT2A	12/10/1995	2/12/2014	28	19	1.00	Decreasing	4	4	0.50	No Trend	9	9	0.66	No Trend
PTX07-1O01	DNT4A	12/10/1995	2/12/2014	27	18	1.00	Decreasing	4	4	0.83	No Trend	9	8	0.98	Increasing
PTX07-1O01	TNB135	12/10/1995	2/12/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX07-1O01	DNB13	12/10/1995	2/12/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX07-1O01	PCE	12/10/1995	2/12/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX07-1O01	TCE	12/10/1995	2/12/2014	24	3	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	9	1	0.00	N/A (<4 Detections in Dataset)
PTX07-1O01	DCE12C	12/10/1995	2/12/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX07-1O01	DCA12	12/10/1995	2/12/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect
PTX07-1O01	TCLME	12/10/1995	2/12/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	9	0	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX07-1O01	B	12/10/1995	2/12/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	9	9	0.73	No Trend
PTX07-1O01	MN	12/10/1995	2/12/2014	18	13	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX07-1O01	AL	12/10/1995	2/12/2014	18	9	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX07-1O01	BA	12/10/1995	2/12/2014	19	19	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX07-1O01	CA	12/10/1995	2/12/2014	14	14	1.00	Decreasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O01	FE	12/10/1995	2/12/2014	17	17	0.78	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O01	K	12/10/1995	2/12/2014	15	15	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O01	MG	12/10/1995	2/12/2014	18	18	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O01	NA	12/10/1995	2/12/2014	15	15	1.00	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O02	RDX	12/14/1995	8/7/2014	26	17	1.00	Decreasing	4	4	0.83	No Trend	11	11	1.00	Decreasing
PTX07-1O02	HMX	12/14/1995	8/7/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	10	0	0.00	All Non-Detect
PTX07-1O02	TNT	12/14/1995	8/7/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	DNT24	12/14/1995	8/7/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	DNT26	12/14/1995	8/7/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	DNT2A	12/14/1995	8/7/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	DNT4A	12/14/1995	8/7/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	TNB135	12/14/1995	8/7/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	DNB13	12/14/1995	8/7/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	PCE	12/14/1995	8/7/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	TCE	12/14/1995	8/7/2014	27	26	1.00	Decreasing	4	4	0.38	Stable	11	11	0.90	Probably Increasing
PTX07-1O02	DCE12C	12/14/1995	8/7/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	DCA12	12/14/1995	8/7/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1O02	TCLME	12/14/1995	8/7/2014	25	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX07-1O02	B	12/14/1995	8/7/2014	25	23	0.93	Probably Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX07-1O02	MN	12/14/1995	2/12/2014	19	18	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O02	AL	12/14/1995	2/12/2014	19	15	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O02	BA	12/14/1995	2/12/2014	20	20	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX07-1O02	CA	12/14/1995	2/12/2014	17	17	0.79	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O02	FE	12/14/1995	2/12/2014	18	18	0.73	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O02	K	12/14/1995	2/12/2014	18	18	0.75	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O02	MG	12/14/1995	2/12/2014	19	19	0.77	No Trend	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O02	NA	12/14/1995	2/12/2014	18	18	0.99	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O03	RDX	12/6/1995	8/7/2014	23	23	1.00	Decreasing	4	4	0.83	No Trend	6	6	0.93	Probably Increasing
PTX07-1O03	HMX	12/6/1995	8/7/2014	23	18	1.00	Decreasing	4	4	0.83	No Trend	6	6	0.86	No Trend
PTX07-1O03	TNT	12/6/1995	8/7/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	DNT24	12/6/1995	8/7/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	DNT26	12/6/1995	8/7/2014	23	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	DNT2A	12/6/1995	8/7/2014	22	10	1.00	Increasing	4	4	0.63	No Trend	6	6	0.86	No Trend
PTX07-1O03	DNT4A	12/6/1995	8/7/2014	22	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	TNB135	12/6/1995	8/7/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	DNB13	12/6/1995	8/7/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	PCE	12/6/1995	8/7/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	TCE	12/6/1995	8/7/2014	19	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	6	1	0.00	N/A (<4 Detections in Dataset)
PTX07-1O03	DCE12C	12/6/1995	8/7/2014	15	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	DCA12	12/6/1995	8/7/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	TCLME	12/6/1995	8/7/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1O03	B	12/6/1995	8/7/2014	20	20	1.00	Decreasing	4	4	0.96	Increasing	6	6	0.97	Increasing
PTX07-1O03	MN	12/6/1995	8/7/2014	18	11	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX07-1O03	AL	12/6/1995	8/7/2014	18	7	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX07-1O03	BA	12/6/1995	8/7/2014	19	19	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX07-1O03	CA	12/6/1995	8/7/2014	12	12	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O03	FE	12/6/1995	8/7/2014	18	18	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O03	K	12/6/1995	8/7/2014	14	14	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O03	MG	12/6/1995	8/7/2014	18	18	0.62	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1O03	NA	12/6/1995	8/7/2014	14	14	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1P02	RDX	12/13/1995	11/4/2014	26	21	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	8	1.00	Decreasing
PTX07-1P02	HMX	12/13/1995	11/4/2014	26	9	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	6	0.75	No Trend
PTX07-1P02	TNT	12/13/1995	11/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	DNT24	12/13/1995	11/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	DNT26	12/13/1995	11/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	DNT2A	12/13/1995	11/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	DNT4A	12/13/1995	11/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	TNB135	12/13/1995	11/4/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	DNB13	12/13/1995	11/4/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	DIOXANE14	4/27/2006	11/4/2014	13	11	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.93	Probably Increasing
PTX07-1P02	PCE	12/13/1995	11/4/2014	25	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	TCE	12/13/1995	11/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	DCE12C	12/13/1995	11/4/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	DCA12	12/13/1995	11/4/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	TCLME	12/13/1995	11/4/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX07-1P02	PERC	1/23/2001	11/4/2014	18	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX07-1P02	B	12/13/1995	11/4/2014	25	25	0.76	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX07-1P02	MN	12/13/1995	5/22/2014	17	17	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1P02	AL	12/13/1995	5/22/2014	17	5	1.00	Decreasing	4	0	0.00	All Non-Detect	3	0	0.00	N/A (<4 Samples in Dataset)
PTX07-1P02	BA	12/13/1995	5/22/2014	18	18	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX07-1P02	CA	12/13/1995	5/22/2014	11	11	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1P02	FE	12/13/1995	5/22/2014	17	17	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1P02	K	12/13/1995	5/22/2014	13	13	0.98	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX07-1P02	MG	12/13/1995	5/22/2014	17	17	0.99	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1P02	NA	12/13/1995	5/22/2014	13	13	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q01	RDX	12/12/1995	7/22/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	HMX	12/12/1995	7/22/2014	19	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	TNT	12/12/1995	7/22/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	DNT24	12/12/1995	7/22/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	DNT26	12/12/1995	7/22/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	DNT2A	12/12/1995	7/22/2014	19	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	DNT4A	12/12/1995	7/22/2014	19	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	TNB135	12/12/1995	7/22/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	DNB13	12/12/1995	7/22/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	PCE	12/12/1995	7/22/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	TCE	12/12/1995	7/22/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	DCE12C	12/12/1995	7/22/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	DCA12	12/12/1995	7/22/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	TCLME	12/12/1995	7/22/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q01	B	12/12/1995	7/22/2014	16	16	1.00	Decreasing	4	4	1.00	Decreasing	6	6	1.00	Decreasing
PTX07-1Q01	MN	12/12/1995	7/22/2014	13	8	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q01	AL	12/12/1995	7/22/2014	13	7	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q01	BA	12/12/1995	7/22/2014	14	14	1.00	Decreasing	4	4	0.38	Stable	4	4	0.38	Stable
PTX07-1Q01	CA	12/12/1995	7/22/2014	10	10	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q01	FE	12/12/1995	7/22/2014	13	9	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q01	K	12/12/1995	7/22/2014	11	11	0.96	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q01	MG	12/12/1995	7/22/2014	13	13	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q01	NA	12/12/1995	7/22/2014	11	11	0.89	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q02	RDX	11/1/1995	7/22/2014	20	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	HMX	11/1/1995	7/22/2014	20	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	TNT	11/1/1995	7/22/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	DNT24	11/1/1995	7/22/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	DNT26	11/1/1995	7/22/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	DNT2A	11/1/1995	7/22/2014	20	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	DNT4A	11/1/1995	7/22/2014	20	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	TNB135	11/1/1995	7/22/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	DNB13	11/1/1995	7/22/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	PCE	11/1/1995	7/22/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	TCE	11/1/1995	7/22/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	DCE12C	11/1/1995	7/22/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	DCA12	11/1/1995	7/22/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	TCLME	11/1/1995	7/22/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q02	B	11/1/1995	7/22/2014	15	14	1.00	Increasing	4	4	0.38	Stable	6	6	1.00	Decreasing
PTX07-1Q02	MN	11/1/1995	7/22/2014	12	7	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q02	AL	11/1/1995	7/22/2014	12	6	1.00	Decreasing	4	0	0.00	All Non-Detect	3	0	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q02	BA	11/1/1995	7/22/2014	13	13	0.85	No Trend	4	4	0.38	Stable	4	4	0.38	Stable
PTX07-1Q02	CA	11/1/1995	7/22/2014	9	9	0.66	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q02	FE	11/1/1995	7/22/2014	12	10	0.63	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q02	K	11/1/1995	7/22/2014	10	10	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q02	MG	11/1/1995	7/22/2014	12	12	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q02	NA	11/1/1995	7/22/2014	10	10	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q03	RDX	12/12/1995	7/23/2014	20	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	HMX	12/12/1995	7/23/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	TNT	12/12/1995	7/23/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	DNT24	12/12/1995	7/23/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	DNT26	12/12/1995	7/23/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	DNT2A	12/12/1995	7/23/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	DNT4A	12/12/1995	7/23/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	TNB135	12/12/1995	7/23/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	DNB13	12/12/1995	7/23/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	PCE	12/12/1995	7/23/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	TCE	12/12/1995	7/23/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	DCE12C	12/12/1995	7/23/2014	15	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	DCA12	12/12/1995	7/23/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	TCLME	12/12/1995	7/23/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	6	0	0.00	All Non-Detect
PTX07-1Q03	B	12/12/1995	7/23/2014	17	16	0.70	No Trend	4	4	0.38	Stable	6	6	1.00	Decreasing
PTX07-1Q03	MN	12/12/1995	7/23/2014	14	8	0.78	No Trend	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q03	AL	12/12/1995	7/23/2014	14	7	0.56	No Trend	4	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q03	BA	12/12/1995	7/23/2014	15	15	1.00	Decreasing	4	4	0.63	No Trend	4	4	0.63	No Trend
PTX07-1Q03	CA	12/12/1995	7/23/2014	10	10	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q03	FE	12/12/1995	7/23/2014	14	13	0.88	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q03	K	12/12/1995	7/23/2014	10	10	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q03	MG	12/12/1995	7/23/2014	14	14	0.74	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q03	NA	12/12/1995	7/23/2014	10	9	0.99	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1001	RDX	12/11/1995	5/21/2014	19	11	0.87	No Trend	4	4	0.38	Stable	5	5	0.76	No Trend
PTX08-1001	HMX	12/11/1995	5/21/2014	19	6	1.00	Decreasing	4	4	0.83	No Trend	5	5	0.96	Increasing
PTX08-1001	TNT	12/11/1995	5/21/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	DNT24	12/11/1995	5/21/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	DNT26	12/11/1995	5/21/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	DNT2A	12/11/1995	5/21/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	DNT4A	12/11/1995	5/21/2014	19	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX08-1001	TNB135	12/11/1995	5/21/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	DNB13	12/11/1995	5/21/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	DIOXANE14	4/27/2006	5/21/2014	7	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	PCE	12/11/1995	5/21/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	TCE	12/11/1995	5/21/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	DCE12C	12/11/1995	5/21/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	DCA12	12/11/1995	5/21/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	TCLME	12/11/1995	5/21/2014	17	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1001	PERC	4/19/2001	5/21/2014	13	13	1.00	Decreasing	4	4	0.38	Stable	5	5	0.41	Stable
PTX08-1001	B	12/11/1995	5/21/2014	21	21	1.00	Increasing	4	4	0.83	No Trend	5	5	0.76	No Trend
PTX08-1001	MN	12/11/1995	5/21/2014	20	18	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX08-1001	AL	12/11/1995	5/21/2014	20	11	1.00	Decreasing	4	0	0.00	All Non-Detect	3	0	0.00	N/A (<4 Samples in Dataset)
PTX08-1001	BA	12/11/1995	5/21/2014	21	20	1.00	Increasing	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX08-1001	CA	12/11/1995	5/21/2014	12	12	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1001	FE	12/11/1995	5/21/2014	20	20	0.66	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1001	K	12/11/1995	5/21/2014	15	15	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1001	MG	12/11/1995	5/21/2014	19	19	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1001	NA	12/11/1995	5/21/2014	15	15	0.90	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1002	RDX	12/14/1995	11/4/2014	28	27	1.00	Decreasing	4	4	1.00	Decreasing	8	8	1.00	Decreasing
PTX08-1002	HMX	12/14/1995	11/4/2014	28	27	1.00	Decreasing	4	4	0.83	No Trend	8	8	0.91	Probably Increasing
PTX08-1002	TNT	12/14/1995	11/4/2014	28	25	1.00	Decreasing	4	4	0.83	No Trend	8	8	0.99	Increasing
PTX08-1002	DNT24	12/14/1995	11/4/2014	27	23	1.00	Decreasing	4	4	0.96	Increasing	8	7	0.99	Increasing
PTX08-1002	DNT26	12/14/1995	11/4/2014	26	3	0.00	N/A (<4 Detections in Dataset)	4	2	0.00	N/A (<4 Detections in Dataset)	8	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1002	DNT2A	12/14/1995	11/4/2014	26	21	1.00	Decreasing	4	4	0.83	No Trend	8	8	0.97	Increasing
PTX08-1002	DNT4A	12/14/1995	11/4/2014	26	15	0.97	Increasing	4	4	1.00	Decreasing	8	8	0.64	No Trend
PTX08-1002	TNB135	12/14/1995	11/4/2014	28	25	1.00	Decreasing	4	4	0.96	Increasing	8	8	0.97	Increasing
PTX08-1002	DNB13	12/14/1995	11/4/2014	26	3	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	8	0	0.00	All Non-Detect
PTX08-1002	PCE	12/14/1995	11/4/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	8	0	0.00	All Non-Detect
PTX08-1002	TCE	12/14/1995	11/4/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	8	0	0.00	All Non-Detect
PTX08-1002	DCE12C	12/14/1995	11/4/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	8	0	0.00	All Non-Detect
PTX08-1002	DCA12	12/14/1995	11/4/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	8	0	0.00	All Non-Detect
PTX08-1002	TCLME	12/14/1995	11/4/2014	22	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	8	0	0.00	All Non-Detect
PTX08-1002	B	12/14/1995	11/4/2014	26	26	1.00	Decreasing	4	4	1.00	Decreasing	8	8	1.00	Decreasing
PTX08-1002	CR	12/14/1995	11/4/2014	29	20	0.50	No Trend	4	0	0.00	All Non-Detect	8	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1002	CR-6	3/5/1996	11/4/2014	28	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	8	0	0.00	All Non-Detect
PTX08-1002	MN	12/14/1995	5/21/2014	27	17	0.78	No Trend	4	4	0.83	No Trend	7	7	0.93	Probably Increasing
PTX08-1002	AL	12/14/1995	5/21/2014	24	9	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX08-1002	BA	12/14/1995	5/21/2014	25	25	1.00	Decreasing	4	4	0.96	Increasing	4	4	0.96	Increasing
PTX08-1002	CA	12/14/1995	5/21/2014	18	18	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1002	FE	12/14/1995	5/21/2014	24	23	0.88	No Trend	4	4	0.38	Stable	7	7	1.00	Decreasing
PTX08-1002	K	12/14/1995	5/21/2014	17	17	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1002	MG	12/14/1995	5/21/2014	23	23	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1002	NA	12/14/1995	5/21/2014	17	17	0.97	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1003	RDX	11/29/1995	4/30/2014	21	7	1.00	Decreasing	4	4	0.96	Increasing	7	7	0.88	No Trend
PTX08-1003	HMX	11/29/1995	4/30/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	TNT	11/29/1995	4/30/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	DNT24	11/29/1995	4/30/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	DNT26	11/29/1995	4/30/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	DNT2A	11/29/1995	4/30/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	DNT4A	11/29/1995	4/30/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	TNB135	11/29/1995	4/30/2014	21	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	DNB13	11/29/1995	4/30/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	DIOXANE14	11/11/2002	4/30/2014	11	1	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	7	1	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	PCE	11/29/1995	4/30/2014	19	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	TCE	11/29/1995	4/30/2014	21	6	1.00	Increasing	4	4	1.00	Decreasing	7	6	0.81	No Trend
PTX08-1003	DCE12C	11/29/1995	4/30/2014	17	5	0.99	Increasing	4	4	0.38	Stable	7	5	0.81	No Trend
PTX08-1003	DCA12	11/29/1995	4/30/2014	20	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	TCLME	11/29/1995	4/30/2014	18	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	7	0	0.00	All Non-Detect
PTX08-1003	PERC	10/19/2000	4/30/2014	16	16	1.00	Decreasing	4	4	1.00	Decreasing	7	7	1.00	Decreasing
PTX08-1003	B	11/29/1995	4/30/2014	21	20	1.00	Increasing	4	4	1.00	Decreasing	7	7	1.00	Decreasing
PTX08-1003	MN	11/29/1995	4/30/2014	18	17	0.97	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1003	AL	11/29/1995	4/30/2014	18	10	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX08-1003	BA	11/29/1995	4/30/2014	18	18	0.97	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1003	CA	11/29/1995	4/30/2014	13	13	1.00	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1003	FE	11/29/1995	4/30/2014	18	18	0.98	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1003	K	11/29/1995	4/30/2014	15	15	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1003	MG	11/29/1995	4/30/2014	18	18	1.00	Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1003	NA	11/29/1995	4/30/2014	15	15	0.80	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1005	RDX	11/29/1995	8/12/2014	28	27	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1005	HMX	11/29/1995	8/12/2014	28	26	1.00	Decreasing	4	4	0.63	No Trend	11	11	1.00	Decreasing
PTX08-1005	TNT	11/29/1995	8/12/2014	28	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1005	DNT24	11/29/1995	8/12/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1005	DNT26	11/29/1995	8/12/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1005	DNT2A	11/29/1995	8/12/2014	28	11	1.00	Decreasing	4	0	0.00	All Non-Detect	11	1	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	DNT4A	11/29/1995	8/12/2014	28	26	0.80	No Trend	4	4	0.73	No Trend	11	9	0.94	Probably Increasing
PTX08-1005	TNB135	11/29/1995	8/12/2014	28	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1005	DNB13	11/29/1995	8/12/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1005	DIOXANE14	11/6/2003	8/12/2014	18	16	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX08-1005	PCE	11/29/1995	8/12/2014	29	21	0.54	No Trend	4	4	0.63	No Trend	11	11	0.99	Increasing
PTX08-1005	TCE	11/29/1995	8/12/2014	31	31	0.97	Increasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX08-1005	DCE12C	11/29/1995	8/12/2014	26	21	0.99	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1005	DCA12	11/29/1995	8/12/2014	30	26	1.00	Decreasing	4	4	0.96	Increasing	11	11	1.00	Decreasing
PTX08-1005	TCLME	11/29/1995	8/12/2014	29	23	0.97	Increasing	4	4	0.96	Increasing	11	11	1.00	Decreasing
PTX08-1005	PERC	4/25/2000	8/12/2014	22	22	1.00	Decreasing	4	4	0.96	Increasing	11	11	0.50	No Trend
PTX08-1005	B	11/29/1995	8/12/2014	25	25	0.99	Increasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX08-1005	CR	11/29/1995	8/12/2014	20	19	0.98	Increasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1005	CR-6	3/5/1996	8/12/2014	15	8	0.91	Probably Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1005	MN	11/29/1995	2/10/2014	20	9	0.75	No Trend	4	2	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX08-1005	AL	11/29/1995	2/10/2014	20	6	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX08-1005	BA	11/29/1995	2/10/2014	21	21	0.66	No Trend	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX08-1005	CA	11/29/1995	2/10/2014	16	16	0.96	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1005	FE	11/29/1995	2/10/2014	19	13	0.83	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1005	K	11/29/1995	2/10/2014	17	17	1.00	Decreasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1005	MG	11/29/1995	2/10/2014	20	20	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1005	NA	11/29/1995	2/10/2014	17	17	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1006	RDX	11/28/1995	8/12/2014	30	27	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1006	HMX	11/28/1995	8/12/2014	30	18	0.96	Increasing	4	4	0.83	No Trend	11	11	1.00	Increasing
PTX08-1006	TNT	11/28/1995	8/12/2014	29	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1006	DNT24	11/28/1995	8/12/2014	31	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1006	DNT26	11/28/1995	8/12/2014	30	7	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	5	1.00	Decreasing
PTX08-1006	DNT2A	11/28/1995	8/12/2014	30	11	0.49	No Trend	4	4	0.38	Stable	11	10	1.00	Increasing
PTX08-1006	DNT4A	11/28/1995	8/12/2014	30	28	1.00	Decreasing	4	4	1.00	Decreasing	11	11	0.78	No Trend
PTX08-1006	TNB135	11/28/1995	8/12/2014	30	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1006	DNB13	11/28/1995	8/12/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1006	DIOXANE14	11/11/2002	8/12/2014	20	20	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1006	PCE	11/28/1995	8/12/2014	32	24	1.00	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1006	TCE	11/28/1995	8/12/2014	33	32	1.00	Increasing	4	4	0.96	Increasing	11	11	1.00	Increasing
PTX08-1006	DCE12C	11/28/1995	8/12/2014	28	24	0.59	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1006	DCA12	11/28/1995	8/12/2014	31	31	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1006	TCLME	11/28/1995	8/12/2014	31	30	0.88	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1006	PERC	4/25/2000	8/12/2014	25	25	0.96	Increasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1006	B	11/28/1995	8/12/2014	26	26	1.00	Increasing	4	4	0.38	Stable	11	11	1.00	Decreasing
PTX08-1006	MN	11/28/1995	2/10/2014	21	13	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX08-1006	AL	11/28/1995	2/10/2014	21	6	1.00	Decreasing	4	0	0.00	All Non-Detect	3	0	0.00	N/A (<4 Samples in Dataset)
PTX08-1006	BA	11/28/1995	2/10/2014	22	22	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX08-1006	CA	11/28/1995	2/10/2014	14	14	0.99	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1006	FE	11/28/1995	2/10/2014	21	16	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1006	K	11/28/1995	2/10/2014	17	17	0.72	No Trend	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1006	MG	11/28/1995	2/10/2014	21	21	1.00	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1006	NA	11/28/1995	2/10/2014	17	17	1.00	Increasing	4	4	0.38	Stable	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1007	RDX	3/11/1996	5/19/2014	13	9	0.99	Increasing	4	4	0.83	No Trend	5	5	0.88	No Trend
PTX08-1007	HMX	3/11/1996	5/19/2014	13	4	1.00	Decreasing	4	4	0.96	Increasing	5	4	0.96	Increasing
PTX08-1007	TNT	3/11/1996	5/19/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1007	DNT24	3/11/1996	5/19/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1007	DNT26	3/11/1996	5/19/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1007	DNT2A	3/11/1996	5/19/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1007	DNT4A	3/11/1996	5/19/2014	12	3	0.00	N/A (<4 Detections in Dataset)	4	3	0.00	N/A (<4 Detections in Dataset)	5	3	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	TNB135	3/11/1996	5/19/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1007	DNB13	3/11/1996	5/19/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1007	DIOXANE14	8/7/2002	5/19/2014	6	4	0.42	Stable	4	3	0.00	N/A (<4 Detections in Dataset)	5	4	0.82	No Trend
PTX08-1007	PCE	3/11/1996	5/19/2014	16	8	1.00	Decreasing	4	4	0.38	Stable	5	5	1.00	Decreasing
PTX08-1007	TCE	3/11/1996	5/19/2014	16	16	0.90	Probably Increasing	4	4	0.38	Stable	5	5	0.59	No Trend
PTX08-1007	DCE12C	3/11/1996	5/19/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX08-1007	DCA12	3/11/1996	5/19/2014	16	13	0.55	No Trend	4	4	0.38	Stable	5	5	0.76	No Trend
PTX08-1007	TCLME	3/11/1996	5/19/2014	16	16	1.00	Decreasing	4	4	0.38	Stable	5	5	0.41	Stable
PTX08-1007	PERC	4/23/2001	5/19/2014	10	4	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	B	12/20/1995	5/19/2014	15	14	1.00	Increasing	4	4	0.83	No Trend	5	5	0.88	No Trend
PTX08-1007	CR	12/20/1995	5/19/2014	18	17	0.59	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	6	5	1.00	Decreasing
PTX08-1007	CR-6	3/11/1996	5/19/2014	15	8	0.63	No Trend	4	1	0.00	N/A (<4 Detections in Dataset)	6	3	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	MN	12/20/1995	5/19/2014	17	14	0.79	No Trend	4	3	0.00	N/A (<4 Detections in Dataset)	5	4	1.00	Decreasing
PTX08-1007	AL	12/20/1995	5/19/2014	15	9	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX08-1007	BA	12/20/1995	5/19/2014	16	16	1.00	Decreasing	4	4	0.38	Stable	4	4	0.38	Stable
PTX08-1007	CA	12/20/1995	5/19/2014	13	13	0.83	No Trend	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1007	FE	12/20/1995	5/19/2014	17	17	0.90	No Trend	4	4	0.38	Stable	5	5	1.00	Decreasing
PTX08-1007	K	12/20/1995	5/19/2014	13	13	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1007	MG	12/20/1995	5/19/2014	15	15	1.00	Increasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1007	NA	12/20/1995	5/19/2014	13	13	1.00	Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1008	RDX	11/14/1995	11/5/2014	33	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	HMX	11/14/1995	11/5/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	TNT	11/14/1995	11/5/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	DNT24	11/14/1995	11/5/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	DNT26	11/14/1995	11/5/2014	33	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	DNT2A	11/14/1995	11/5/2014	33	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	DNT4A	11/14/1995	11/5/2014	33	10	1.00	Decreasing	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	TNB135	11/14/1995	11/5/2014	33	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	DNB13	11/14/1995	11/5/2014	28	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX08-1008	DIOXANE14	2/10/2004	11/5/2014	21	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	PCE	11/14/1995	11/5/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	TCE	11/14/1995	11/5/2014	33	10	1.00	Decreasing	4	0	0.00	All Non-Detect	12	3	0.00	N/A (<4 Detections in Dataset)
PTX08-1008	DCE12C	11/14/1995	11/5/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	DCA12	11/14/1995	11/5/2014	28	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	12	0	0.00	All Non-Detect
PTX08-1008	TCLME	11/14/1995	11/5/2014	28	21	1.00	Decreasing	4	4	0.83	No Trend	12	11	0.89	No Trend
PTX08-1008	PERC	8/23/1999	11/5/2014	29	9	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	12	8	0.90	Probably Increasing
PTX08-1008	B	11/14/1995	11/5/2014	38	38	1.00	Increasing	4	4	0.90	No Trend	12	12	0.68	No Trend
PTX08-1008	CR	11/14/1995	11/5/2014	39	39	1.00	Decreasing	4	4	1.00	Decreasing	12	12	1.00	Decreasing
PTX08-1008	CR-6	11/14/1995	11/5/2014	39	39	1.00	Decreasing	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1008	MN	11/14/1995	11/5/2014	38	22	1.00	Increasing	4	4	0.83	No Trend	12	12	0.68	No Trend
PTX08-1008	NI	11/14/1995	11/5/2014	37	32	1.00	Decreasing	4	4	1.00	Decreasing	12	12	1.00	Decreasing
PTX08-1008	MO	11/14/1995	11/5/2014	37	30	1.00	Decreasing	4	4	1.00	Decreasing	12	12	1.00	Decreasing
PTX08-1008	AL	11/14/1995	5/21/2014	29	14	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Samples in Dataset)
PTX08-1008	BA	11/14/1995	5/21/2014	30	29	1.00	Decreasing	4	4	0.83	No Trend	4	4	0.83	No Trend
PTX08-1008	CA	11/14/1995	5/21/2014	18	18	0.93	Probably Increasing	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1008	FE	11/14/1995	11/5/2014	36	27	1.00	Increasing	4	4	0.38	Stable	12	12	1.00	Decreasing
PTX08-1008	K	11/14/1995	5/21/2014	21	21	1.00	Decreasing	4	4	0.96	Increasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1008	MG	11/14/1995	5/21/2014	28	28	0.82	No Trend	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1008	NA	11/14/1995	5/21/2014	21	21	0.50	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1008	V	11/14/1995	11/5/2014	31	31	0.83	No Trend	4	4	0.63	No Trend	12	12	1.00	Decreasing
PTX08-1009	RDX	11/14/1995	11/4/2014	27	17	1.00	Decreasing	4	4	0.38	Stable	11	11	0.82	No Trend
PTX08-1009	HMX	11/14/1995	11/4/2014	27	8	1.00	Decreasing	4	4	0.83	No Trend	11	8	0.99	Increasing
PTX08-1009	TNT	11/14/1995	11/4/2014	27	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1009	DNT24	11/14/1995	11/4/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1009	DNT26	11/14/1995	11/4/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1009	DNT2A	11/14/1995	11/4/2014	27	1	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1009	DNT4A	11/14/1995	11/4/2014	27	9	1.00	Decreasing	4	0	0.00	All Non-Detect	11	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	TNB135	11/14/1995	11/4/2014	27	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1009	DNB13	11/14/1995	11/4/2014	24	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1009	PCE	11/14/1995	11/4/2014	29	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1009	TCE	11/14/1995	11/4/2014	30	16	1.00	Decreasing	4	0	0.00	All Non-Detect	11	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	DCE12C	11/14/1995	11/4/2014	26	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1009	DCA12	11/14/1995	11/4/2014	27	2	0.00	N/A (<4 Detections in Dataset)	4	0	0.00	All Non-Detect	11	0	0.00	All Non-Detect
PTX08-1009	TCLME	11/14/1995	11/4/2014	28	11	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	11	5	0.62	No Trend
PTX08-1009	B	11/14/1995	11/4/2014	27	27	1.00	Increasing	4	4	0.83	No Trend	11	11	0.65	No Trend
PTX08-1009	CR	11/14/1995	11/4/2014	30	28	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	9	1.00	Decreasing
PTX08-1009	CR-6	11/14/1995	11/4/2014	30	19	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	12	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	MN	11/14/1995	11/4/2014	28	18	1.00	Increasing	4	1	0.00	N/A (<4 Detections in Dataset)	11	7	1.00	Decreasing
PTX08-1009	NI	11/14/1995	11/4/2014	28	24	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	10	1.00	Decreasing
PTX08-1009	MO	11/14/1995	11/4/2014	29	25	0.86	No Trend	4	4	1.00	Decreasing	11	11	1.00	Decreasing
PTX08-1009	AL	11/14/1995	5/8/2014	21	4	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Samples in Dataset)
PTX08-1009	BA	11/14/1995	5/8/2014	22	21	0.86	No Trend	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX08-1009	CA	11/14/1995	5/8/2014	14	14	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1009	FE	11/14/1995	11/4/2014	29	25	0.97	Increasing	4	3	0.00	N/A (<4 Detections in Dataset)	11	10	1.00	Decreasing
PTX08-1009	K	11/14/1995	5/8/2014	17	17	1.00	Decreasing	4	4	0.63	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1009	MG	11/14/1995	5/8/2014	20	20	0.78	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1009	NA	11/14/1995	5/8/2014	17	17	0.89	No Trend	4	4	0.83	No Trend	3	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1009	V	11/14/1995	11/4/2014	27	27	0.98	Increasing	4	4	1.00	Decreasing	11	11	0.62	No Trend
PTX10-1014	RDX	11/28/1995	5/15/2014	13	10	1.00	Increasing	4	4	1.00	Decreasing	5	5	0.41	Stable
PTX10-1014	HMX	11/28/1995	5/15/2014	13	6	1.00	Decreasing	4	4	1.00	Decreasing	5	4	0.41	Stable
PTX10-1014	TNT	11/28/1995	5/15/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	DNT24	7/7/1992	5/15/2014	14	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	DNT26	11/28/1995	5/15/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	DNT2A	11/28/1995	5/15/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	DNT4A	11/28/1995	5/15/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	TNB135	11/28/1995	5/15/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	DNB13	11/28/1995	5/15/2014	13	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	DIOXANE14	5/23/2002	5/15/2014	6	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	PCE	7/7/1992	5/15/2014	16	5	0.55	No Trend	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX10-1014	TCE	7/7/1992	5/15/2014	16	15	1.00	Decreasing	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX10-1014	DCE12C	11/28/1995	5/15/2014	11	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	DCA12	7/7/1992	5/15/2014	16	0	0.00	All Non-Detect	4	0	0.00	All Non-Detect	5	0	0.00	All Non-Detect
PTX10-1014	TCLME	7/7/1992	5/15/2014	16	5	0.48	No Trend	4	4	0.63	No Trend	5	5	1.00	Decreasing
PTX10-1014	PERC	7/31/2000	5/15/2014	9	6	1.00	Decreasing	4	2	0.00	N/A (<4 Detections in Dataset)	5	2	0.00	N/A (<4 Detections in Dataset)
PTX10-1014	B	11/28/1995	5/15/2014	16	16	0.99	Increasing	4	4	1.00	Decreasing	5	5	0.59	No Trend
PTX10-1014	CR	7/7/1992	5/15/2014	17	15	1.00	Decreasing	4	3	0.00	N/A (<4 Detections in Dataset)	5	4	0.76	No Trend
PTX10-1014	CR-6	11/28/1995	5/15/2014	14	2	0.00	N/A (<4 Detections in Dataset)	4	1	0.00	N/A (<4 Detections in Dataset)	5	1	0.00	N/A (<4 Detections in Dataset)
PTX10-1014	MN	11/28/1995	5/15/2014	16	16	0.67	No Trend	4	4	1.00	Decreasing	5	5	1.00	Decreasing
PTX10-1014	NI	11/28/1995	5/15/2014	16	16	0.66	No Trend	4	4	1.00	Decreasing	5	5	0.41	Stable
PTX10-1014	MO	11/28/1995	5/15/2014	16	16	1.00	Decreasing	4	4	0.83	No Trend	5	5	0.59	No Trend
PTX10-1014	AL	11/28/1995	5/15/2014	14	6	1.00	Decreasing	4	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Samples in Dataset)
PTX10-1014	BA	7/7/1992	5/15/2014	16	16	1.00	Decreasing	4	4	1.00	Decreasing	4	4	1.00	Decreasing
PTX10-1014	CA	11/28/1995	5/15/2014	12	12	0.98	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX10-1014	FE	11/28/1995	5/15/2014	16	16	1.00	Decreasing	4	4	0.38	Stable	5	5	0.76	No Trend
PTX10-1014	K	11/28/1995	5/15/2014	12	12	1.00	Decreasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX10-1014	MG	11/28/1995	5/15/2014	14	14	0.99	Increasing	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)
PTX10-1014	NA	11/28/1995	5/15/2014	12	12	0.89	No Trend	4	4	1.00	Decreasing	3	3	0.00	N/A (<4 Samples in Dataset)

Perched LTM Mann-Kendall Concentration Trends

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX10-1014	V	11/28/1995	5/15/2014	16	16	1.00	Decreasing	4	4	0.63	No Trend	5	5	0.59	No Trend

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
1114-MW4	RDX	3/19/1996	11/13/2014	2	27	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	9	0.00	N/A (<4 Detections in Dataset)
1114-MW4	HMX	3/19/1996	11/13/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
1114-MW4	TNT	3/19/1996	11/13/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
1114-MW4	DNT24	3/19/1996	11/13/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
1114-MW4	DNT26	3/19/1996	11/13/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
1114-MW4	DNT2A	3/19/1996	11/13/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
1114-MW4	DNT4A	3/19/1996	11/13/2014	13	16	0.99	Decreasing	4	0	0.91	Probably Decreasing	9	2	1.00	Decreasing
1114-MW4	TNB135	3/19/1996	11/13/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
1114-MW4	DNB13	3/19/1996	11/13/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
1114-MW4	DIOXANE14	5/13/2003	11/13/2014	7	10	0.90	No Trend	4	0	0.96	Decreasing	5	6	0.64	Stable
1114-MW4	PCE	3/19/1996	11/13/2014	25	6	1.00	Increasing	4	0	0.87	Stable	11	0	1.00	Decreasing
1114-MW4	TCE	3/19/1996	11/13/2014	32	0	1.00	Increasing	4	0	0.84	Stable	11	0	1.00	Decreasing
1114-MW4	DCE12C	3/19/1996	11/13/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
1114-MW4	DCA12	3/19/1996	11/13/2014	17	13	1.00	Decreasing	4	0	0.94	Probably Decreasing	11	0	1.00	Decreasing
1114-MW4	TCLME	3/19/1996	11/13/2014	20	10	0.84	Stable	4	0	0.65	Stable	10	1	1.00	Decreasing
1114-MW4	PERC	4/22/2002	11/13/2014	19	0	1.00	Decreasing	4	0	1.00	Increasing	11	0	1.00	Increasing
1114-MW4	B	3/19/1996	11/13/2014	24	2	0.99	Decreasing	4	0	0.94	Probably Increasing	11	0	0.85	Stable
1114-MW4	MN	3/19/1996	4/30/2014	12	8	0.87	No Trend	4	0	0.86	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
1114-MW4	AL	3/19/1996	4/30/2014	9	11	0.82	No Trend	4	0	0.92	Probably Decreasing	1	2	0.00	N/A (<4 Detections in Dataset)
1114-MW4	BA	3/19/1996	4/30/2014	21	0	1.00	Increasing	4	0	0.96	Decreasing	4	0	0.96	Decreasing
1114-MW4	CA	3/19/1996	4/30/2014	17	0	1.00	Increasing	4	0	0.95	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
1114-MW4	FE	3/19/1996	4/30/2014	18	2	1.00	Increasing	4	0	0.71	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
1114-MW4	K	3/19/1996	4/30/2014	17	0	0.98	Increasing	4	0	0.85	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
1114-MW4	MG	3/19/1996	4/30/2014	20	0	1.00	Increasing	4	0	0.84	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
1114-MW4	NA	3/19/1996	4/30/2014	17	0	1.00	Increasing	4	0	0.77	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
OW-WR-38	RDX	1/16/1992	5/7/2014	16	3	1.00	Decreasing	4	0	0.77	No Trend	6	0	0.78	Stable
OW-WR-38	HMX	1/16/1992	5/7/2014	13	6	0.89	Stable	4	0	0.79	Stable	6	0	0.97	Decreasing
OW-WR-38	TNT	1/16/1992	5/7/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	DNT24	11/15/1995	5/7/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	DNT26	11/15/1995	5/7/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	DNT2A	11/15/1995	5/7/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	DNT4A	11/15/1995	5/7/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	TNB135	11/15/1995	5/7/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	DNB13	11/15/1995	5/7/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	PCE	4/12/1993	5/7/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	TCE	11/15/1995	5/7/2014	4	12	0.56	Stable	4	0	0.56	Stable	4	2	0.56	Stable
OW-WR-38	DCE12C	3/20/1996	5/7/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	DCA12	11/15/1995	5/7/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	TCLME	4/12/1993	5/7/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
OW-WR-38	B	4/12/1993	5/7/2014	28	0	1.00	Decreasing	4	0	0.81	Stable	6	0	0.89	Stable
OW-WR-38	MN	1/16/1992	5/7/2014	22	5	1.00	Increasing	4	0	0.67	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
OW-WR-38	AL	4/12/1993	5/7/2014	11	14	0.56	No Trend	4	0	0.58	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
OW-WR-38	BA	1/16/1992	5/7/2014	28	0	0.95	Increasing	4	0	0.76	Stable	4	0	0.73	Stable
OW-WR-38	CA	4/12/1993	5/7/2014	22	0	1.00	Decreasing	4	0	0.79	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
OW-WR-38	FE	1/16/1992	5/7/2014	27	0	0.95	Increasing	4	0	0.98	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
OW-WR-38	K	4/12/1993	5/7/2014	22	0	0.90	Probably Decreasing	4	0	0.73	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
OW-WR-38	MG	4/12/1993	5/7/2014	25	0	0.97	Decreasing	4	0	0.67	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
OW-WR-38	NA	4/12/1993	5/7/2014	22	0	0.99	Decreasing	4	0	0.85	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	RDX	11/15/1995	10/29/2014	1	59	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	HMX	11/15/1995	10/29/2014	0	60	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	TNT	11/15/1995	10/29/2014	0	60	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	DNT24	11/15/1995	10/29/2014	0	60	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	DNT26	11/15/1995	10/29/2014	0	60	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	DNT2A	11/15/1995	10/29/2014	0	60	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	DNT4A	11/15/1995	10/29/2014	4	53	0.63	Stable	4	0	0.63	Stable	2	9	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	TNB135	11/15/1995	10/29/2014	0	60	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	DNB13	11/15/1995	10/29/2014	0	56	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	PCE	11/15/1995	10/29/2014	0	56	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	TCE	11/15/1995	10/29/2014	32	29	1.00	Decreasing	4	0	0.79	Stable	11	0	0.71	Stable
PTX01-1001	DCE12C	11/15/1995	10/29/2014	0	57	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	DCA12	11/15/1995	10/29/2014	0	56	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1001	TCLME	11/15/1995	10/29/2014	5	50	0.98	Decreasing	4	0	0.98	Decreasing	0	11	0.00	All Non-Detect
PTX01-1001	PERC	8/19/1999	10/29/2014	24	18	0.99	Decreasing	4	0	0.77	No Trend	3	8	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	B	11/15/1995	10/29/2014	49	7	0.93	Probably Increasing	4	0	0.75	No Trend	11	0	0.78	No Trend
PTX01-1001	MN	11/15/1995	5/12/2014	21	29	0.93	Probably Increasing	4	0	0.67	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	AL	11/15/1995	5/12/2014	24	26	0.95	Probably Decreasing	4	0	0.91	Probably Increasing	0	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1001	BA	11/15/1995	5/12/2014	51	0	1.00	Increasing	4	0	0.92	Probably Increasing	4	0	0.95	Increasing
PTX01-1001	CA	11/15/1995	5/12/2014	30	0	0.88	No Trend	4	0	0.60	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	FE	11/15/1995	5/12/2014	39	7	1.00	Increasing	4	0	1.00	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	K	11/15/1995	5/12/2014	30	0	1.00	Decreasing	4	0	0.79	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	MG	11/15/1995	5/12/2014	50	0	1.00	Increasing	4	0	0.89	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1001	NA	11/15/1995	5/12/2014	30	0	0.71	No Trend	4	0	0.66	Stable	3	0	0.00	N/A (<4 Detections in Dataset)

Perched LTM Linear Regression Concentration Trends

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX01-1002	RDX	11/16/1995	4/16/2014	1	52	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	4	0.00	N/A (<4 Detections in Dataset)
PTX01-1002	HMX	11/16/1995	4/16/2014	0	53	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	TNT	11/16/1995	4/16/2014	0	53	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	DNT24	11/16/1995	4/16/2014	0	53	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	DNT26	11/16/1995	4/16/2014	0	53	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	DNT2A	11/16/1995	4/16/2014	0	53	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	DNT4A	11/16/1995	4/16/2014	0	53	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	TNB135	11/16/1995	4/16/2014	0	53	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	DNB13	11/16/1995	4/16/2014	0	50	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	PCE	11/16/1995	4/16/2014	0	49	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	TCE	11/16/1995	4/16/2014	0	52	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	DCE12C	11/16/1995	4/16/2014	0	48	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	DCA12	11/16/1995	4/16/2014	0	49	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	TCLME	11/16/1995	4/16/2014	0	48	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX01-1002	PERC	8/19/1999	4/16/2014	2	33	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX01-1002	B	11/16/1995	4/16/2014	41	9	0.85	No Trend	4	0	0.75	Stable	5	0	0.82	No Trend
PTX01-1002	MN	11/16/1995	4/16/2014	17	33	0.75	No Trend	4	0	0.60	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX01-1002	AL	11/16/1995	4/16/2014	21	29	0.97	Decreasing	4	0	0.64	No Trend	0	3	0.00	N/A (<4 Samples in Dataset)
PTX01-1002	BA	11/16/1995	4/16/2014	51	0	1.00	Decreasing	4	0	0.89	Stable	4	0	0.87	Stable
PTX01-1002	CA	11/16/1995	4/16/2014	30	0	1.00	Decreasing	4	0	0.86	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1002	FE	11/16/1995	4/16/2014	36	10	1.00	Increasing	4	0	0.86	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1002	K	11/16/1995	4/16/2014	30	0	0.79	No Trend	4	0	0.86	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1002	MG	11/16/1995	4/16/2014	50	0	0.94	Probably Increasing	4	0	0.86	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1002	NA	11/16/1995	4/16/2014	30	0	1.00	Increasing	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1008	RDX	4/4/2001	10/29/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	11	0.00	N/A (<4 Detections in Dataset)
PTX01-1008	HMX	4/4/2001	10/29/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	TNT	4/4/2001	10/29/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	DNT24	4/4/2001	10/29/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	DNT26	4/4/2001	10/29/2014	1	27	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX01-1008	DNT2A	4/4/2001	10/29/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	DNT4A	4/4/2001	10/29/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	TNB135	4/4/2001	10/29/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	DNB13	4/4/2001	10/29/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	PCE	4/4/2001	10/29/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	TCE	4/4/2001	10/29/2014	6	23	0.99	Decreasing	4	0	0.97	Decreasing	0	11	0.00	All Non-Detect
PTX01-1008	DCE12C	7/31/2001	10/29/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	DCA12	4/4/2001	10/29/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	TCLME	4/4/2001	10/29/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	PERC	4/4/2001	10/29/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX01-1008	B	4/4/2001	10/29/2014	26	0	1.00	Increasing	4	0	0.91	Probably Decreasing	11	0	1.00	Decreasing
PTX01-1008	MN	4/4/2001	5/12/2014	15	5	0.75	No Trend	4	0	0.76	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1008	AL	4/4/2001	5/12/2014	16	4	0.83	Stable	4	0	0.86	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX01-1008	BA	4/4/2001	5/12/2014	22	0	1.00	Decreasing	4	0	0.72	Stable	4	0	0.72	Stable
PTX01-1008	CA	4/4/2001	5/12/2014	7	0	0.97	Increasing	4	0	0.99	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1008	FE	4/4/2001	5/12/2014	17	3	1.00	Increasing	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1008	K	4/4/2001	5/12/2014	11	0	0.96	Increasing	4	0	0.60	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1008	MG	4/4/2001	5/12/2014	20	0	1.00	Decreasing	4	0	0.73	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX01-1008	NA	4/4/2001	5/12/2014	11	0	0.96	Decreasing	4	0	0.88	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX04-1002	RDX	8/25/1998	7/21/2014	14	11	0.63	No Trend	4	0	0.77	No Trend	5	0	0.83	No Trend
PTX04-1002	HMX	8/25/1998	7/21/2014	19	6	1.00	Increasing	4	0	0.61	Stable	5	0	0.82	Stable
PTX04-1002	TNT	8/25/1998	7/21/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX04-1002	DNT24	8/25/1998	7/21/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX04-1002	DNT26	8/25/1998	7/21/2014	1	24	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX04-1002	DNT2A	8/25/1998	7/21/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX04-1002	DNT4A	8/25/1998	7/21/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX04-1002	TNB135	8/25/1998	7/21/2014	1	24	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX04-1002	DNB13	8/25/1998	7/21/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX04-1002	PCE	8/25/1998	7/21/2014	2	21	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX04-1002	TCE	8/25/1998	7/21/2014	22	5	1.00	Decreasing	4	0	0.62	Stable	5	0	0.88	Stable
PTX04-1002	DCE12C	1/26/2000	7/21/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX04-1002	DCA12	8/25/1998	7/21/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX04-1002	TCLME	8/25/1998	7/21/2014	4	18	0.54	Stable	4	0	0.54	Stable	1	4	0.00	N/A (<4 Detections in Dataset)
PTX04-1002	B	8/25/1998	7/21/2014	28	0	1.00	Increasing	4	0	0.67	No Trend	5	0	1.00	Decreasing
PTX04-1002	MN	8/25/1998	7/21/2014	22	5	0.93	Probably Decreasing	4	0	0.97	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX04-1002	AL	8/25/1998	7/21/2014	21	7	0.99	Decreasing	4	0	0.89	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX04-1002	BA	8/25/1998	7/21/2014	29	0	1.00	Decreasing	4	0	0.67	Stable	4	0	1.00	Decreasing
PTX04-1002	CA	8/25/1998	7/21/2014	16	0	1.00	Decreasing	4	0	0.80	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX04-1002	FE	8/25/1998	7/21/2014	24	1	0.99	Increasing	4	0	0.92	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX04-1002	K	8/25/1998	7/21/2014	17	0	0.98	Decreasing	4	0	0.97	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX04-1002	MG	8/25/1998	7/21/2014	28	0	1.00	Decreasing	4	0	0.99	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX04-1002	NA	8/25/1998	7/21/2014	17	0	1.00	Increasing	4	0	0.97	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	RDX	12/4/1995	8/6/2014	27	2	1.00	Decreasing	4	0	0.98	Decreasing	11	0	1.00	Decreasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1002A	HMX	12/4/1995	8/6/2014	21	8	0.99	Decreasing	4	0	0.98	Decreasing	11	0	0.98	Decreasing
PTX06-1002A	TNT	12/4/1995	8/6/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1002A	DNT24	12/4/1995	8/6/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1002A	DNT26	12/4/1995	8/6/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1002A	DNT2A	12/4/1995	8/6/2014	6	22	0.98	Decreasing	4	0	0.90	Probably Decreasing	4	7	0.82	Stable
PTX06-1002A	DNT4A	12/4/1995	8/6/2014	17	10	1.00	Decreasing	4	0	0.95	Decreasing	8	3	1.00	Decreasing
PTX06-1002A	TNB135	12/4/1995	8/6/2014	2	26	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	DNB13	12/4/1995	8/6/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1002A	PCE	12/4/1995	8/6/2014	1	24	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1002A	TCE	12/4/1995	8/6/2014	13	13	0.89	No Trend	4	0	0.99	Decreasing	9	2	0.89	No Trend
PTX06-1002A	DCE12C	12/4/1995	8/6/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1002A	DCA12	12/4/1995	8/6/2014	4	20	0.81	No Trend	4	0	0.81	No Trend	4	7	0.81	No Trend
PTX06-1002A	TCLME	12/4/1995	8/6/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1002A	B	12/4/1995	8/6/2014	28	0	1.00	Increasing	4	0	0.64	Stable	11	0	0.99	Increasing
PTX06-1002A	CR	12/4/1995	8/6/2014	17	11	1.00	Decreasing	4	0	0.62	Stable	2	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	CR-6	3/12/1996	8/6/2014	5	25	0.66	No Trend	4	0	0.84	No Trend	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	MN	12/4/1995	8/6/2014	11	16	0.95	Increasing	4	0	0.70	Stable	5	6	0.66	No Trend
PTX06-1002A	NI	12/4/1995	8/6/2014	25	2	1.00	Decreasing	4	0	0.98	Decreasing	11	0	0.79	No Trend
PTX06-1002A	MO	12/4/1995	8/6/2014	26	1	0.69	No Trend	4	0	0.97	Increasing	11	0	1.00	Increasing
PTX06-1002A	AL	12/4/1995	2/3/2014	7	12	0.99	Decreasing	4	0	0.74	Stable	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1002A	BA	12/4/1995	2/3/2014	20	0	1.00	Decreasing	4	0	0.74	Stable	4	0	0.80	Stable
PTX06-1002A	CA	12/4/1995	2/3/2014	12	0	0.74	Stable	4	0	0.90	Probably Decreasing	2	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	FE	12/4/1995	8/6/2014	26	1	0.71	No Trend	4	0	0.79	Stable	11	0	0.97	Decreasing
PTX06-1002A	K	12/4/1995	2/3/2014	15	0	1.00	Increasing	4	0	0.95	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	MG	12/4/1995	2/3/2014	18	0	1.00	Increasing	4	0	0.51	No Trend	2	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	NA	12/4/1995	2/3/2014	15	0	1.00	Increasing	4	0	0.97	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1002A	V	12/4/1995	8/6/2014	24	1	0.99	Decreasing	4	0	0.98	Decreasing	10	1	0.98	Decreasing
PTX06-1005	RDX	11/20/1995	7/31/2014	30	0	0.91	Probably Decreasing	4	0	0.80	Stable	11	0	0.96	Decreasing
PTX06-1005	HMX	11/20/1995	7/31/2014	29	1	1.00	Decreasing	4	0	0.89	No Trend	11	0	0.97	Decreasing
PTX06-1005	TNT	11/20/1995	7/31/2014	25	5	1.00	Decreasing	4	0	0.84	No Trend	11	0	0.90	No Trend
PTX06-1005	DNT24	11/20/1995	7/31/2014	21	9	1.00	Decreasing	4	0	0.67	Stable	10	1	1.00	Decreasing
PTX06-1005	DNT26	11/20/1995	7/31/2014	12	18	0.99	Decreasing	4	0	0.67	No Trend	11	0	0.93	Probably Increasing
PTX06-1005	DNT2A	11/20/1995	7/31/2014	20	10	0.79	Stable	4	0	0.93	Probably Decreasing	11	0	0.97	Decreasing
PTX06-1005	DNT4A	11/20/1995	7/31/2014	20	10	0.72	Stable	4	0	0.93	Probably Decreasing	11	0	0.72	Stable
PTX06-1005	TNB135	11/20/1995	7/31/2014	29	1	0.94	Probably Decreasing	4	0	0.90	Stable	11	0	0.69	No Trend
PTX06-1005	DNB13	11/20/1995	7/31/2014	5	23	0.55	No Trend	4	0	0.56	No Trend	0	11	0.00	All Non-Detect
PTX06-1005	PCE	11/20/1995	7/31/2014	15	16	1.00	Increasing	4	0	0.74	No Trend	9	2	1.00	Increasing
PTX06-1005	TCE	11/20/1995	7/31/2014	29	3	1.00	Increasing	4	0	0.97	Decreasing	11	0	0.99	Increasing
PTX06-1005	DCE12C	11/20/1995	7/31/2014	1	27	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1005	DCA12	11/20/1995	7/31/2014	24	6	1.00	Decreasing	4	0	0.88	Stable	11	0	0.91	Probably Decreasing
PTX06-1005	TCLME	11/20/1995	7/31/2014	16	14	1.00	Increasing	4	0	0.94	Probably Decreasing	11	0	0.95	Increasing
PTX06-1005	B	11/20/1995	7/31/2014	29	0	1.00	Decreasing	4	0	0.55	No Trend	11	0	0.84	Stable
PTX06-1005	CR	11/20/1995	7/31/2014	29	0	1.00	Increasing	4	0	0.99	Decreasing	11	0	0.98	Increasing
PTX06-1005	CR-6	3/14/1996	7/31/2014	21	8	1.00	Increasing	4	0	0.99	Decreasing	10	1	0.96	Increasing
PTX06-1005	MN	11/20/1995	7/31/2014	22	6	0.74	No Trend	4	0	0.93	Probably Increasing	6	5	0.88	No Trend
PTX06-1005	NI	11/20/1995	7/31/2014	22	6	0.81	No Trend	4	0	1.00	Increasing	11	0	0.82	Stable
PTX06-1005	MO	11/20/1995	7/31/2014	28	0	1.00	Decreasing	4	0	0.93	Probably Decreasing	11	0	1.00	Decreasing
PTX06-1005	AL	11/20/1995	2/12/2014	12	8	0.88	No Trend	4	0	0.50	No Trend	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1005	BA	11/20/1995	2/12/2014	21	0	1.00	Increasing	4	0	0.90	No Trend	4	0	0.94	Probably Increasing
PTX06-1005	CA	11/20/1995	2/12/2014	14	0	0.94	Probably Increasing	4	0	0.91	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1005	FE	11/20/1995	7/31/2014	25	3	1.00	Increasing	4	0	0.65	No Trend	10	1	0.86	Stable
PTX06-1005	K	11/20/1995	2/12/2014	16	0	1.00	Decreasing	4	0	0.95	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1005	MG	11/20/1995	2/12/2014	20	0	1.00	Increasing	4	0	0.93	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1005	NA	11/20/1995	2/12/2014	16	0	1.00	Decreasing	4	0	0.92	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1005	V	11/20/1995	7/31/2014	26	0	0.95	Probably Decreasing	4	0	0.67	Stable	11	0	0.65	No Trend
PTX06-1006	RDX	12/7/1995	5/19/2014	7	10	0.51	Stable	4	0	0.98	Decreasing	6	0	0.98	Decreasing
PTX06-1006	HMX	12/7/1995	5/19/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1006	TNT	12/7/1995	5/19/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1006	DNT24	12/7/1995	5/19/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1006	DNT26	12/7/1995	5/19/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1006	DNT2A	12/7/1995	5/19/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1006	DNT4A	12/7/1995	5/19/2014	9	7	0.54	No Trend	4	0	0.95	Probably Increasing	6	0	0.83	No Trend
PTX06-1006	TNB135	12/7/1995	5/19/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1006	DNB13	12/7/1995	5/19/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1006	DIOXANE14	8/14/2002	5/19/2014	8	2	0.98	Decreasing	4	0	0.70	Stable	6	0	0.90	Probably Decreasing
PTX06-1006	PCE	12/7/1995	5/19/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1006	TCE	12/7/1995	5/19/2014	5	12	0.85	No Trend	4	0	0.71	No Trend	4	2	1.00	Decreasing
PTX06-1006	DCE12C	12/7/1995	5/19/2014	0	12	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1006	DCA12	12/7/1995	5/19/2014	1	16	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	5	0.00	N/A (<4 Detections in Dataset)
PTX06-1006	TCLME	12/7/1995	5/19/2014	2	15	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX06-1006	PERC	7/27/2000	5/19/2014	9	4	0.92	Probably Decreasing	4	0	0.89	No Trend	6	0	0.57	Stable
PTX06-1006	B	12/7/1995	5/19/2014	18	1	1.00	Increasing	4	0	0.98	Increasing	6	0	0.99	Increasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1006	MN	12/7/1995	5/19/2014	14	1	0.84	No Trend	4	0	0.97	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1006	AL	12/7/1995	5/19/2014	10	5	0.70	No Trend	4	0	0.55	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1006	BA	12/7/1995	5/19/2014	15	0	1.00	Increasing	4	0	0.84	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1006	CA	12/7/1995	5/19/2014	12	0	0.99	Decreasing	4	0	0.67	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1006	FE	12/7/1995	5/19/2014	15	0	0.92	Probably Increasing	4	0	0.99	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1006	K	12/7/1995	5/19/2014	13	0	0.98	Decreasing	4	0	0.54	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1006	MG	12/7/1995	5/19/2014	15	0	0.99	Decreasing	4	0	0.90	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1006	NA	12/7/1995	5/19/2014	13	0	1.00	Increasing	4	0	0.82	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	RDX	12/5/1995	5/13/2014	11	6	0.58	No Trend	4	0	0.89	No Trend	6	0	0.91	Probably Decreasing
PTX06-1007	HMX	12/5/1995	5/13/2014	1	16	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX06-1007	TNT	12/5/1995	5/13/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1007	DNT24	12/5/1995	5/13/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1007	DNT26	12/5/1995	5/13/2014	4	13	0.53	No Trend	4	0	0.53	No Trend	4	2	0.53	No Trend
PTX06-1007	DNT2A	12/5/1995	5/13/2014	3	14	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	2	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	DNT4A	12/5/1995	5/13/2014	17	0	1.00	Increasing	4	0	0.65	No Trend	6	0	0.91	Probably Increasing
PTX06-1007	TNB135	12/5/1995	5/13/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1007	DNB13	12/5/1995	5/13/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1007	DIOXANE14	10/24/2005	5/13/2014	6	3	0.93	Probably Increasing	4	0	0.54	No Trend	6	0	0.93	Probably Increasing
PTX06-1007	PCE	12/5/1995	5/13/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1007	TCE	12/5/1995	5/13/2014	11	10	0.95	Decreasing	4	0	0.60	Stable	3	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	DCE12C	12/5/1995	5/13/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1007	DCA12	12/5/1995	5/13/2014	5	15	1.00	Decreasing	4	0	0.95	Probably Decreasing	0	6	0.00	All Non-Detect
PTX06-1007	TCLME	12/5/1995	5/13/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1007	PERC	7/27/2000	5/13/2014	15	0	1.00	Increasing	4	0	0.94	Probably Increasing	6	0	1.00	Increasing
PTX06-1007	B	12/5/1995	5/13/2014	19	0	1.00	Increasing	4	0	0.72	Stable	6	0	0.55	No Trend
PTX06-1007	MN	12/5/1995	5/13/2014	17	0	0.92	Probably Increasing	4	0	0.98	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	AL	12/5/1995	5/13/2014	12	5	1.00	Decreasing	4	0	0.79	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	BA	12/5/1995	5/13/2014	18	0	0.76	No Trend	4	0	0.95	Decreasing	4	0	0.91	Probably Decreasing
PTX06-1007	CA	12/5/1995	5/13/2014	13	0	1.00	Decreasing	4	0	0.70	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	FE	12/5/1995	5/13/2014	17	0	1.00	Increasing	4	0	0.83	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	K	12/5/1995	5/13/2014	15	0	0.96	Decreasing	4	0	0.91	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	MG	12/5/1995	5/13/2014	17	0	0.86	Stable	4	0	0.74	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1007	NA	12/5/1995	5/13/2014	15	0	0.88	No Trend	4	0	0.56	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	RDX	12/7/1995	5/15/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	HMX	12/7/1995	5/15/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	TNT	12/7/1995	5/15/2014	0	15	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	DNT24	12/7/1995	5/15/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	DNT26	12/7/1995	5/15/2014	0	15	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	DNT2A	12/7/1995	5/15/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	DNT4A	12/7/1995	5/15/2014	2	14	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	TNB135	12/7/1995	5/15/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	DNB13	12/7/1995	5/15/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	DIOXANE14	4/29/2003	5/15/2014	0	7	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	PCE	12/7/1995	5/15/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	TCE	12/7/1995	5/15/2014	18	0	1.00	Decreasing	4	0	0.99	Decreasing	6	0	1.00	Decreasing
PTX06-1008	DCE12C	12/7/1995	5/15/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1008	DCA12	12/7/1995	5/15/2014	16	2	1.00	Increasing	4	0	0.94	Probably Increasing	6	0	1.00	Increasing
PTX06-1008	TCLME	12/7/1995	5/15/2014	18	0	1.00	Increasing	4	0	0.93	Probably Increasing	6	0	0.99	Increasing
PTX06-1008	PERC	4/17/2001	5/15/2014	3	8	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	1	5	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	B	12/7/1995	5/15/2014	14	0	0.95	Probably Increasing	4	0	0.71	Stable	6	0	1.00	Decreasing
PTX06-1008	CR	12/7/1995	5/15/2014	15	0	0.90	No Trend	4	0	0.79	No Trend	6	0	0.96	Decreasing
PTX06-1008	CR-6	3/13/1996	5/15/2014	3	13	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	1	5	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	MN	12/7/1995	5/15/2014	11	4	0.76	No Trend	4	0	0.53	No Trend	5	1	0.75	Stable
PTX06-1008	NI	12/7/1995	5/15/2014	14	1	0.69	No Trend	4	0	0.73	No Trend	6	0	0.95	Probably Decreasing
PTX06-1008	MO	12/7/1995	5/15/2014	15	0	0.75	No Trend	4	0	0.72	Stable	6	0	0.96	Decreasing
PTX06-1008	AL	12/7/1995	5/15/2014	5	7	0.82	Stable	4	0	0.59	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	BA	12/7/1995	5/15/2014	13	0	0.95	Probably Increasing	4	0	0.95	Decreasing	4	0	0.88	Stable
PTX06-1008	CA	12/7/1995	5/15/2014	9	0	0.89	No Trend	4	0	0.90	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	FE	12/7/1995	5/15/2014	15	0	0.96	Increasing	4	0	0.72	No Trend	6	0	0.95	Probably Decreasing
PTX06-1008	K	12/7/1995	5/15/2014	9	0	0.81	Stable	4	0	0.90	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	MG	12/7/1995	5/15/2014	12	0	0.97	Increasing	4	0	0.70	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	NA	12/7/1995	5/15/2014	9	0	0.88	No Trend	4	0	0.72	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1008	V	12/7/1995	5/15/2014	15	0	0.87	No Trend	4	0	0.60	Stable	6	0	0.76	Stable
PTX06-1010	RDX	11/27/1995	11/10/2014	27	3	1.00	Decreasing	4	0	1.00	Decreasing	11	0	0.99	Decreasing
PTX06-1010	HMX	11/27/1995	11/10/2014	22	8	1.00	Decreasing	4	0	0.91	Probably Increasing	11	0	0.98	Increasing
PTX06-1010	TNT	11/27/1995	11/10/2014	6	22	0.85	Stable	4	0	0.75	Stable	0	11	0.00	All Non-Detect
PTX06-1010	DNT24	11/27/1995	11/10/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1010	DNT26	11/27/1995	11/10/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1010	DNT2A	11/27/1995	11/10/2014	21	8	1.00	Decreasing	4	0	0.78	No Trend	10	1	0.91	Probably Decreasing
PTX06-1010	DNT4A	11/27/1995	11/10/2014	14	16	1.00	Decreasing	4	0	0.75	No Trend	6	5	0.89	No Trend
PTX06-1010	TNB135	11/27/1995	11/10/2014	2	26	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1010	DNB13	11/27/1995	11/10/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1010	PCE	11/27/1995	11/10/2014	23	6	0.99	Decreasing	4	0	0.88	Stable	11	0	0.95	Decreasing
PTX06-1010	TCE	11/27/1995	11/10/2014	28	2	1.00	Decreasing	4	0	0.76	Stable	11	0	0.81	Stable
PTX06-1010	DCE12C	11/27/1995	11/10/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1010	DCA12	11/27/1995	11/10/2014	25	3	1.00	Decreasing	4	0	0.52	No Trend	11	0	0.96	Decreasing
PTX06-1010	TCLME	11/27/1995	11/10/2014	19	9	0.99	Increasing	4	0	0.78	No Trend	11	0	0.63	Stable
PTX06-1010	B	11/27/1995	11/10/2014	27	0	0.97	Decreasing	4	0	0.79	Stable	11	0	0.99	Decreasing
PTX06-1010	CR	11/27/1995	11/10/2014	31	1	1.00	Decreasing	4	0	0.83	No Trend	12	0	0.97	Increasing
PTX06-1010	CR-6	11/27/1995	11/10/2014	32	1	0.98	Decreasing	4	0	0.99	Increasing	12	0	0.97	Increasing
PTX06-1010	MN	11/27/1995	11/10/2014	27	2	0.54	No Trend	4	0	0.65	No Trend	11	0	0.64	No Trend
PTX06-1010	NI	11/27/1995	11/10/2014	28	1	0.92	Probably Decreasing	4	0	0.68	Stable	11	0	0.57	No Trend
PTX06-1010	MO	11/27/1995	11/10/2014	28	1	0.99	Decreasing	4	0	0.85	No Trend	11	0	0.66	No Trend
PTX06-1010	AL	11/27/1995	5/20/2014	20	1	0.71	No Trend	4	0	0.57	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1010	BA	11/27/1995	5/20/2014	21	1	0.71	No Trend	4	0	0.64	Stable	4	0	0.65	Stable
PTX06-1010	CA	11/27/1995	5/20/2014	15	0	0.77	No Trend	4	0	0.90	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1010	FE	11/27/1995	11/10/2014	28	0	1.00	Decreasing	4	0	0.52	Stable	11	0	0.64	No Trend
PTX06-1010	K	11/27/1995	5/20/2014	15	1	0.99	Decreasing	4	0	1.00	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1010	MG	11/27/1995	5/20/2014	20	1	1.00	Decreasing	4	0	0.57	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1010	NA	11/27/1995	5/20/2014	15	1	1.00	Increasing	4	0	0.91	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1010	V	11/27/1995	11/10/2014	25	1	0.83	No Trend	4	0	0.57	Stable	11	0	0.66	No Trend
PTX06-1011	RDX	11/27/1995	5/20/2014	9	11	0.93	Probably Decreasing	4	0	0.59	No Trend	2	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	HMX	11/27/1995	5/20/2014	3	17	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	1	5	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	TNT	11/27/1995	5/20/2014	1	19	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX06-1011	DNT24	11/27/1995	5/20/2014	5	15	1.00	Decreasing	4	0	0.99	Decreasing	1	5	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	DNT26	11/27/1995	5/20/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1011	DNT2A	11/27/1995	5/20/2014	3	17	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	1	5	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	DNT4A	11/27/1995	5/20/2014	5	15	1.00	Decreasing	4	0	0.99	Decreasing	1	5	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	TNB135	11/27/1995	5/20/2014	1	19	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	5	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	DNB13	11/27/1995	5/20/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1011	DIOXANE14	7/31/2003	5/20/2014	5	4	0.71	Stable	4	0	0.63	Stable	5	1	0.71	Stable
PTX06-1011	PCE	11/27/1995	5/20/2014	17	4	1.00	Decreasing	4	0	0.79	Stable	6	0	0.88	No Trend
PTX06-1011	TCE	11/27/1995	5/20/2014	22	0	0.71	Stable	4	0	0.56	No Trend	6	0	0.88	No Trend
PTX06-1011	DCE12C	11/27/1995	5/20/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1011	DCA12	11/27/1995	5/20/2014	7	13	0.98	Decreasing	4	0	0.98	Decreasing	0	6	0.00	All Non-Detect
PTX06-1011	TCLME	11/27/1995	5/20/2014	3	17	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	PERC	4/23/2001	5/20/2014	3	11	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	B	11/27/1995	5/20/2014	22	0	1.00	Decreasing	4	0	0.58	Stable	6	0	0.66	No Trend
PTX06-1011	CR	11/27/1995	5/20/2014	22	0	0.58	No Trend	4	0	0.58	No Trend	6	0	0.65	No Trend
PTX06-1011	CR-6	11/27/1995	5/20/2014	15	7	1.00	Decreasing	4	0	0.79	Stable	4	2	0.66	Stable
PTX06-1011	MN	11/27/1995	5/20/2014	21	1	0.86	No Trend	4	0	0.72	Stable	5	1	0.92	Probably Decreasing
PTX06-1011	NI	11/27/1995	5/20/2014	22	0	0.92	Probably Decreasing	4	0	0.91	Probably Decreasing	6	0	0.99	Decreasing
PTX06-1011	MO	11/27/1995	5/20/2014	22	0	0.67	No Trend	4	0	0.52	No Trend	6	0	0.65	No Trend
PTX06-1011	AL	11/27/1995	5/20/2014	9	10	0.95	Probably Increasing	4	0	0.70	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	BA	11/27/1995	5/20/2014	20	0	0.97	Increasing	4	0	0.64	Stable	4	0	0.66	Stable
PTX06-1011	CA	11/27/1995	5/20/2014	13	0	0.83	No Trend	4	0	0.65	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	FE	11/27/1995	5/20/2014	22	0	0.85	No Trend	4	0	0.63	Stable	6	0	0.63	Stable
PTX06-1011	K	11/27/1995	5/20/2014	15	0	0.84	No Trend	4	0	0.53	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	MG	11/27/1995	5/20/2014	19	0	1.00	Increasing	4	0	0.74	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	NA	11/27/1995	5/20/2014	15	0	1.00	Increasing	4	0	0.55	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1011	V	11/27/1995	5/20/2014	20	0	0.83	No Trend	4	0	0.56	No Trend	6	0	0.75	No Trend
PTX06-1013	RDX	11/14/1995	5/7/2014	29	3	0.65	Stable	4	0	0.63	No Trend	10	0	0.66	Stable
PTX06-1013	HMX	11/14/1995	5/7/2014	25	7	1.00	Increasing	4	0	0.67	No Trend	10	0	0.65	No Trend
PTX06-1013	TNT	11/14/1995	5/7/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	DNT24	11/14/1995	5/7/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	DNT26	11/14/1995	5/7/2014	3	29	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	0	10	0.00	All Non-Detect
PTX06-1013	DNT2A	11/14/1995	5/7/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	DNT4A	11/14/1995	5/7/2014	1	30	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	10	0.00	All Non-Detect
PTX06-1013	TNB135	11/14/1995	5/7/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	DNB13	11/14/1995	5/7/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	PCE	11/14/1995	5/7/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	TCE	11/14/1995	5/7/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	DCE12C	11/14/1995	5/7/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	DCA12	11/14/1995	5/7/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	TCLME	11/14/1995	5/7/2014	0	30	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1013	B	11/14/1995	5/7/2014	32	0	1.00	Increasing	4	0	0.58	Stable	10	0	0.83	Stable
PTX06-1013	CR	11/14/1995	5/7/2014	32	0	1.00	Decreasing	4	0	0.80	No Trend	10	0	0.58	No Trend
PTX06-1013	CR-6	3/7/1996	5/7/2014	3	30	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	0	10	0.00	All Non-Detect
PTX06-1013	MN	11/14/1995	5/7/2014	31	0	0.96	Decreasing	4	0	0.66	Stable	10	0	0.65	Stable
PTX06-1013	NI	11/14/1995	5/7/2014	31	0	1.00	Decreasing	4	0	0.53	No Trend	10	0	0.63	No Trend
PTX06-1013	MO	11/14/1995	5/7/2014	30	1	0.98	Decreasing	4	0	0.87	Stable	10	0	0.63	Stable
PTX06-1013	AL	11/14/1995	5/7/2014	20	4	0.94	Probably Increasing	4	0	0.87	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1013	BA	11/14/1995	5/7/2014	24	0	1.00	Decreasing	4	0	0.94	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1013	CA	11/14/1995	5/7/2014	14	0	0.89	Stable	4	0	0.84	Stable	3	0	0.00	N/A (<4 Detections in Dataset)

Perched LTM Linear Regression Concentration Trends

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1013	FE	11/14/1995	5/7/2014	31	0	0.89	No Trend	4	0	0.87	Stable	10	0	0.96	Decreasing
PTX06-1013	K	11/14/1995	5/7/2014	17	0	1.00	Decreasing	4	0	0.88	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1013	MG	11/14/1995	5/7/2014	23	0	0.91	Probably Increasing	4	0	0.66	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1013	NA	11/14/1995	5/7/2014	17	0	1.00	Increasing	4	0	0.67	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1013	V	11/14/1995	5/7/2014	29	0	1.00	Decreasing	4	0	0.66	Stable	10	0	0.85	Stable
PTX06-1014	RDX	3/13/1996	7/21/2014	30	0	0.97	Decreasing	4	0	0.63	No Trend	5	0	0.89	No Trend
PTX06-1014	HMX	3/13/1996	7/21/2014	27	3	1.00	Decreasing	4	0	0.76	No Trend	5	0	0.91	Probably Increasing
PTX06-1014	TNT	3/13/1996	7/21/2014	4	25	0.96	Increasing	4	0	0.96	Increasing	4	1	0.96	Increasing
PTX06-1014	DNT24	3/13/1996	7/21/2014	14	15	0.76	No Trend	4	0	0.53	Stable	2	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1014	DNT26	3/13/1996	7/21/2014	12	18	0.88	No Trend	4	0	0.99	Increasing	4	1	0.94	Probably Increasing
PTX06-1014	DNT2A	3/13/1996	7/21/2014	25	4	1.00	Decreasing	4	0	0.86	Stable	5	0	0.96	Decreasing
PTX06-1014	DNT4A	3/13/1996	7/21/2014	24	5	1.00	Decreasing	4	0	0.79	Stable	5	0	0.85	No Trend
PTX06-1014	TNB135	3/13/1996	7/21/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX06-1014	DNB13	3/13/1996	7/21/2014	4	21	0.83	No Trend	4	0	0.83	No Trend	0	5	0.00	All Non-Detect
PTX06-1014	PCE	3/13/1996	7/21/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1014	TCE	3/13/1996	7/21/2014	12	18	0.95	Probably Decreasing	4	0	0.99	Decreasing	0	5	0.00	All Non-Detect
PTX06-1014	DCE12C	3/13/1996	7/21/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1014	DCA12	3/13/1996	7/21/2014	13	13	0.82	Stable	4	0	0.97	Decreasing	0	5	0.00	All Non-Detect
PTX06-1014	TCLME	3/13/1996	7/21/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1014	B	3/13/1996	7/21/2014	30	0	1.00	Decreasing	4	0	0.96	Decreasing	5	0	0.97	Decreasing
PTX06-1014	CR	3/13/1996	7/21/2014	30	0	0.97	Decreasing	4	0	0.62	No Trend	5	0	0.54	Stable
PTX06-1014	MN	3/13/1996	7/21/2014	20	9	0.95	Decreasing	4	0	0.97	Increasing	5	0	0.89	No Trend
PTX06-1014	NI	3/13/1996	7/21/2014	23	5	0.99	Decreasing	4	0	0.91	Probably Increasing	5	0	0.95	Increasing
PTX06-1014	MO	3/13/1996	7/21/2014	28	0	1.00	Decreasing	4	0	0.87	No Trend	5	0	0.86	No Trend
PTX06-1014	AL	3/13/1996	7/21/2014	11	16	0.99	Decreasing	4	0	0.71	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1014	BA	3/13/1996	7/21/2014	27	0	1.00	Decreasing	4	0	0.98	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1014	CA	3/13/1996	7/21/2014	15	0	1.00	Increasing	4	0	0.91	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1014	FE	3/13/1996	7/21/2014	29	0	0.78	No Trend	4	0	0.70	No Trend	5	0	0.85	No Trend
PTX06-1014	K	3/13/1996	7/21/2014	19	0	1.00	Increasing	4	0	0.68	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1014	MG	3/13/1996	7/21/2014	27	0	1.00	Increasing	4	0	0.87	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1014	NA	3/13/1996	7/21/2014	19	0	1.00	Increasing	4	0	0.83	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1014	V	3/13/1996	7/21/2014	24	0	0.93	Probably Decreasing	4	0	0.78	No Trend	5	0	0.94	Probably Increasing
PTX06-1015	RDX	11/13/1995	8/4/2014	36	0	1.00	Increasing	4	0	0.93	Probably Decreasing	11	0	1.00	Increasing
PTX06-1015	HMX	11/13/1995	8/4/2014	20	16	1.00	Increasing	4	0	0.67	Stable	11	0	1.00	Increasing
PTX06-1015	TNT	11/13/1995	8/4/2014	1	35	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1015	DNT24	11/13/1995	8/4/2014	0	37	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1015	DNT26	11/13/1995	8/4/2014	7	30	0.90	Probably Decreasing	4	0	0.96	Decreasing	2	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	DNT2A	11/13/1995	8/4/2014	10	26	0.82	Stable	4	0	0.68	No Trend	6	5	0.99	Increasing
PTX06-1015	DNT4A	11/13/1995	8/4/2014	33	3	1.00	Decreasing	4	0	0.98	Decreasing	11	0	0.88	No Trend
PTX06-1015	TNB135	11/13/1995	2/11/2014	3	30	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	2	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	DNB13	11/13/1995	8/4/2014	3	30	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1015	PCE	11/13/1995	8/4/2014	10	24	0.74	Stable	4	0	0.90	Probably Increasing	10	1	0.74	Stable
PTX06-1015	TCE	11/13/1995	8/4/2014	34	4	1.00	Decreasing	4	0	0.54	Stable	11	0	0.74	Stable
PTX06-1015	DCE12C	11/13/1995	8/4/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1015	DCA12	11/13/1995	8/4/2014	25	9	1.00	Decreasing	4	0	0.83	No Trend	11	0	0.99	Increasing
PTX06-1015	TCLME	11/13/1995	8/4/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1015	B	11/13/1995	8/4/2014	38	0	1.00	Increasing	4	0	0.95	Probably Decreasing	11	0	0.84	No Trend
PTX06-1015	CR	11/13/1995	8/4/2014	37	1	0.80	No Trend	4	0	0.99	Increasing	11	0	1.00	Increasing
PTX06-1015	CR-6	11/13/1995	2/11/2014	16	21	0.63	Stable	4	0	0.83	No Trend	5	5	0.56	No Trend
PTX06-1015	MN	11/13/1995	8/4/2014	26	11	1.00	Decreasing	4	0	0.81	No Trend	9	2	0.82	Stable
PTX06-1015	NI	11/13/1995	8/4/2014	28	8	1.00	Decreasing	4	0	0.84	Stable	11	0	0.88	Stable
PTX06-1015	MO	11/13/1995	8/4/2014	34	2	0.95	Decreasing	4	0	0.77	No Trend	11	0	0.74	No Trend
PTX06-1015	AL	11/13/1995	2/11/2014	14	15	1.00	Decreasing	4	0	0.93	Probably Increasing	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	BA	11/13/1995	2/11/2014	28	1	1.00	Decreasing	4	0	0.97	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	CA	11/13/1995	2/11/2014	17	0	0.99	Decreasing	4	0	0.92	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	FE	11/13/1995	8/4/2014	35	1	0.69	No Trend	4	0	0.83	No Trend	11	0	0.98	Decreasing
PTX06-1015	K	11/13/1995	2/11/2014	20	0	1.00	Decreasing	4	0	0.51	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	MG	11/13/1995	2/11/2014	29	0	1.00	Increasing	4	0	0.79	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	NA	11/13/1995	2/11/2014	20	0	0.93	Probably Increasing	4	0	0.70	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1015	V	11/13/1995	8/4/2014	30	1	0.90	No Trend	4	0	0.94	Probably Decreasing	11	0	0.93	Probably Decreasing
PTX06-1023	RDX	12/10/1995	8/7/2014	27	6	1.00	Decreasing	4	0	0.74	No Trend	8	3	0.59	Stable
PTX06-1023	HMX	12/10/1995	8/7/2014	26	7	1.00	Decreasing	4	0	0.93	Probably Increasing	8	3	0.67	Stable
PTX06-1023	TNT	12/10/1995	8/7/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1023	DNT24	12/10/1995	8/7/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1023	DNT26	12/10/1995	8/7/2014	3	30	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1023	DNT2A	12/10/1995	8/7/2014	2	31	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1023	DNT4A	12/10/1995	8/7/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1023	TNB135	12/10/1995	8/7/2014	1	32	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1023	DNB13	12/10/1995	8/7/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1023	PCE	12/10/1995	8/7/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1023	TCE	12/10/1995	8/7/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1023	DCE12C	12/10/1995	8/7/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1023	DCA12	12/10/1995	8/7/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1023	TCLME	12/10/1995	8/7/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1023	B	10/18/1995	8/7/2014	35	0	1.00	Decreasing	4	0	0.61	No Trend	11	0	0.95	Decreasing
PTX06-1023	CR	10/18/1995	8/7/2014	29	5	0.97	Decreasing	4	0	0.85	Stable	7	4	0.96	Decreasing
PTX06-1023	CR-6	3/5/1996	8/7/2014	9	27	0.95	Probably Decreasing	4	0	0.92	Probably Increasing	1	11	0.00	N/A (<4 Detections in Dataset)
PTX06-1023	MN	10/18/1995	8/7/2014	25	9	0.99	Decreasing	4	0	0.64	Stable	7	4	0.93	Probably Decreasing
PTX06-1023	NI	10/18/1995	8/7/2014	33	0	1.00	Decreasing	4	0	0.77	Stable	11	0	1.00	Decreasing
PTX06-1023	MO	10/18/1995	8/7/2014	33	0	0.93	Probably Decreasing	4	0	0.72	Stable	11	0	1.00	Decreasing
PTX06-1023	AL	10/18/1995	1/30/2014	11	15	0.98	Decreasing	4	0	0.67	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1023	BA	10/18/1995	1/30/2014	26	0	0.70	No Trend	4	0	0.82	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1023	CA	10/18/1995	1/30/2014	16	0	1.00	Decreasing	4	0	0.99	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1023	FE	10/18/1995	8/7/2014	32	1	0.82	No Trend	4	0	0.77	Stable	11	0	1.00	Decreasing
PTX06-1023	K	10/18/1995	1/30/2014	19	0	1.00	Decreasing	4	0	0.88	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1023	MG	10/18/1995	1/30/2014	26	0	0.99	Decreasing	4	0	0.78	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1023	NA	10/18/1995	1/30/2014	19	0	1.00	Increasing	4	0	0.88	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1023	V	10/18/1995	8/7/2014	28	0	0.66	No Trend	4	0	0.61	No Trend	11	0	1.00	Increasing
PTX06-1030	RDX	8/20/1996	10/28/2014	36	0	1.00	Increasing	4	0	0.58	No Trend	11	0	0.94	Probably Decreasing
PTX06-1030	HMX	8/20/1996	10/28/2014	30	6	1.00	Increasing	4	0	0.94	Probably Increasing	11	0	0.98	Increasing
PTX06-1030	TNT	8/20/1996	10/28/2014	5	29	0.72	Stable	4	0	0.76	Stable	0	11	0.00	All Non-Detect
PTX06-1030	DNT24	8/20/1996	10/28/2014	0	35	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1030	DNT26	8/20/1996	10/28/2014	16	20	1.00	Decreasing	4	0	0.97	Increasing	10	1	1.00	Increasing
PTX06-1030	DNT2A	8/20/1996	10/28/2014	18	16	1.00	Increasing	4	0	0.92	Probably Increasing	11	0	0.93	Probably Decreasing
PTX06-1030	DNT4A	8/20/1996	10/28/2014	31	3	0.97	Increasing	4	0	1.00	Increasing	11	0	0.96	Increasing
PTX06-1030	TNB135	8/20/1996	10/28/2014	13	21	0.98	Decreasing	4	0	0.93	Probably Increasing	8	3	0.87	Stable
PTX06-1030	DNB13	8/20/1996	10/28/2014	5	25	0.99	Increasing	4	0	0.88	No Trend	0	11	0.00	All Non-Detect
PTX06-1030	PCE	8/20/1996	5/7/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1030	TCE	8/20/1996	5/7/2014	15	21	1.00	Decreasing	4	0	0.70	No Trend	1	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1030	DCE12C	8/20/1996	5/7/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1030	DCA12	8/20/1996	5/7/2014	24	7	1.00	Decreasing	4	0	0.80	Stable	8	2	0.99	Decreasing
PTX06-1030	TCLME	8/20/1996	5/7/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1030	B	8/20/1996	5/7/2014	36	0	1.00	Increasing	4	0	0.70	Stable	10	0	0.98	Decreasing
PTX06-1030	CR	8/20/1996	5/7/2014	35	1	0.79	No Trend	4	0	0.72	No Trend	10	0	0.79	No Trend
PTX06-1030	CR-6	8/20/1996	5/7/2014	17	19	0.85	Stable	4	0	0.91	Probably Decreasing	6	4	0.71	Stable
PTX06-1030	MN	8/20/1996	5/7/2014	33	2	1.00	Decreasing	4	0	0.95	Probably Decreasing	9	1	0.96	Decreasing
PTX06-1030	NI	8/20/1996	5/7/2014	34	0	1.00	Decreasing	4	0	0.84	No Trend	10	0	0.79	No Trend
PTX06-1030	MO	8/20/1996	5/7/2014	33	1	0.99	Decreasing	4	0	0.59	No Trend	10	0	0.80	No Trend
PTX06-1030	AL	8/20/1996	5/7/2014	17	11	0.52	No Trend	4	0	0.82	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1030	BA	8/20/1996	5/7/2014	28	0	1.00	Decreasing	4	0	0.84	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1030	CA	8/20/1996	5/7/2014	15	0	1.00	Decreasing	4	0	0.94	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1030	FE	8/20/1996	5/7/2014	32	1	1.00	Increasing	4	0	0.82	No Trend	10	0	0.79	No Trend
PTX06-1030	K	8/20/1996	5/7/2014	18	0	0.84	Stable	4	0	0.67	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1030	MG	8/20/1996	5/7/2014	27	0	0.99	Increasing	4	0	0.66	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1030	NA	8/20/1996	5/7/2014	18	0	1.00	Increasing	4	0	0.58	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1030	V	8/20/1996	5/7/2014	27	1	0.96	Increasing	4	0	0.95	Probably Increasing	10	0	0.87	No Trend
PTX06-1031	RDX	8/20/1996	10/28/2014	34	3	1.00	Increasing	4	0	0.97	Increasing	11	0	0.58	No Trend
PTX06-1031	HMX	8/20/1996	10/28/2014	24	11	1.00	Increasing	4	0	0.93	Probably Increasing	11	0	0.97	Increasing
PTX06-1031	TNT	8/20/1996	10/28/2014	0	35	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1031	DNT24	8/20/1996	10/28/2014	0	36	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1031	DNT26	8/20/1996	10/28/2014	1	34	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1031	DNT2A	8/20/1996	10/28/2014	6	30	0.90	Probably Increasing	4	0	0.55	Stable	0	11	0.00	All Non-Detect
PTX06-1031	DNT4A	8/20/1996	10/28/2014	30	6	0.91	Probably Increasing	4	0	0.89	No Trend	9	2	0.97	Increasing
PTX06-1031	TNB135	8/20/1996	10/28/2014	11	23	0.81	Stable	4	0	0.71	Stable	6	5	0.91	Probably Decreasing
PTX06-1031	DNB13	8/20/1996	10/28/2014	2	28	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1031	PCE	8/20/1996	10/28/2014	0	34	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1031	TCE	8/20/1996	10/28/2014	25	13	1.00	Decreasing	4	0	0.52	Stable	7	4	0.98	Increasing
PTX06-1031	DCE12C	8/20/1996	10/28/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1031	DCA12	8/20/1996	10/28/2014	21	12	1.00	Decreasing	4	0	0.95	Increasing	4	7	0.98	Increasing
PTX06-1031	TCLME	8/20/1996	10/28/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1031	B	8/20/1996	10/28/2014	37	0	1.00	Increasing	4	0	0.97	Increasing	11	0	0.85	Stable
PTX06-1031	CR	8/20/1996	10/28/2014	37	0	0.66	No Trend	4	0	0.91	Probably Increasing	11	0	0.97	Increasing
PTX06-1031	CR-6	8/20/1996	10/28/2014	13	24	1.00	Increasing	4	0	0.75	Stable	6	5	0.82	Stable
PTX06-1031	MN	8/20/1996	10/28/2014	33	3	0.87	Stable	4	0	0.72	Stable	10	1	0.73	No Trend
PTX06-1031	NI	8/20/1996	10/28/2014	34	1	0.97	Decreasing	4	0	0.57	No Trend	11	0	0.53	No Trend
PTX06-1031	MO	8/20/1996	10/28/2014	34	1	0.72	No Trend	4	0	0.99	Increasing	11	0	0.87	No Trend
PTX06-1031	AL	8/20/1996	5/6/2014	12	16	0.62	No Trend	4	0	0.67	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1031	BA	8/20/1996	5/6/2014	27	1	1.00	Increasing	4	0	0.70	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1031	CA	8/20/1996	5/6/2014	15	0	1.00	Increasing	4	0	0.71	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1031	FE	8/20/1996	10/28/2014	34	0	0.90	Probably Increasing	4	0	0.95	Probably Increasing	11	0	0.94	Probably Increasing
PTX06-1031	K	8/20/1996	5/6/2014	18	0	0.82	Stable	4	0	0.69	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1031	MG	8/20/1996	5/6/2014	27	0	0.99	Increasing	4	0	0.77	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1031	NA	8/20/1996	5/6/2014	18	0	1.00	Increasing	4	0	0.79	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1031	V	8/20/1996	10/28/2014	29	0	0.62	Stable	4	0	0.98	Increasing	11	0	0.89	No Trend

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1034	RDX	5/6/1998	7/24/2014	25	10	1.00	Increasing	4	0	0.78	No Trend	11	0	1.00	Increasing
PTX06-1034	HMX	5/6/1998	7/24/2014	7	27	0.67	No Trend	4	0	0.92	Probably Increasing	6	5	0.98	Increasing
PTX06-1034	TNT	5/6/1998	7/24/2014	1	33	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1034	DNT24	5/6/1998	7/24/2014	2	32	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1034	DNT26	5/6/1998	7/24/2014	13	21	1.00	Decreasing	4	0	0.96	Decreasing	11	0	0.74	Stable
PTX06-1034	DNT2A	5/6/1998	7/24/2014	9	25	0.93	Probably Increasing	4	0	0.62	No Trend	0	11	0.00	All Non-Detect
PTX06-1034	DNT4A	5/6/1998	7/24/2014	34	1	1.00	Increasing	4	0	0.95	Decreasing	11	0	0.99	Increasing
PTX06-1034	TNB135	5/6/1998	7/24/2014	12	22	0.62	No Trend	4	0	0.93	Probably Decreasing	6	5	0.99	Decreasing
PTX06-1034	DNB13	5/6/1998	7/24/2014	1	29	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1034	PCE	5/6/1998	7/24/2014	1	30	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1034	TCE	5/6/1998	7/24/2014	20	15	0.91	Probably Increasing	4	0	0.71	Stable	11	0	0.95	Increasing
PTX06-1034	DCE12C	8/18/1998	7/24/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1034	DCA12	5/6/1998	7/24/2014	12	19	1.00	Decreasing	4	0	0.74	Stable	8	3	0.68	Stable
PTX06-1034	TCLME	5/6/1998	7/24/2014	0	30	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1034	B	5/6/1998	7/24/2014	35	0	1.00	Increasing	4	0	0.99	Increasing	11	0	1.00	Increasing
PTX06-1034	CR	5/6/1998	7/24/2014	34	1	1.00	Increasing	4	0	0.84	Stable	10	1	0.78	No Trend
PTX06-1034	CR-6	2/26/1998	7/24/2014	7	27	1.00	Increasing	4	0	0.92	Probably Increasing	2	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1034	MN	5/6/1998	2/3/2014	19	7	0.96	Decreasing	4	0	0.78	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1034	AL	5/6/1998	2/3/2014	17	9	1.00	Decreasing	4	0	0.80	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1034	BA	5/6/1998	2/3/2014	26	0	1.00	Decreasing	4	0	0.95	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1034	CA	5/6/1998	2/3/2014	14	0	0.91	Probably Increasing	4	0	0.93	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1034	FE	5/6/1998	2/3/2014	19	6	0.99	Increasing	4	0	0.61	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1034	K	5/6/1998	2/3/2014	17	0	1.00	Increasing	4	0	0.91	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1034	MG	5/6/1998	2/3/2014	26	0	1.00	Increasing	4	0	0.56	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1034	NA	5/6/1998	2/3/2014	17	0	1.00	Decreasing	4	0	0.92	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1035	RDX	8/26/1998	8/11/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	HMX	8/26/1998	8/11/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	TNT	8/26/1998	8/11/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	DNT24	8/26/1998	8/11/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	DNT26	8/26/1998	8/11/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	DNT2A	8/26/1998	8/11/2014	2	29	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1035	DNT4A	8/26/1998	8/11/2014	26	7	0.79	No Trend	4	0	0.72	Stable	9	2	0.97	Decreasing
PTX06-1035	TNB135	8/26/1998	8/11/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	DNB13	8/26/1998	8/11/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	DIOXANE14	8/11/2005	8/11/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	PCE	8/26/1998	8/11/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	TCE	8/26/1998	8/11/2014	6	26	0.89	No Trend	4	0	0.79	No Trend	6	5	0.89	No Trend
PTX06-1035	DCE12C	11/4/2002	8/11/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	DCA12	8/26/1998	8/11/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	TCLME	8/26/1998	8/11/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1035	PERC	4/19/2001	8/11/2014	13	15	1.00	Increasing	4	0	0.96	Increasing	11	0	1.00	Increasing
PTX06-1035	B	8/26/1998	8/11/2014	26	0	1.00	Increasing	4	0	0.94	Probably Increasing	11	0	0.80	No Trend
PTX06-1035	MN	8/26/1998	1/30/2014	13	7	0.65	No Trend	4	0	0.60	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1035	AL	8/26/1998	1/30/2014	7	13	0.78	No Trend	4	0	0.81	No Trend	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1035	BA	8/26/1998	1/30/2014	20	0	1.00	Decreasing	4	0	0.96	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1035	CA	8/26/1998	1/30/2014	11	0	0.99	Increasing	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1035	FE	8/26/1998	1/30/2014	17	3	1.00	Increasing	4	0	0.82	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1035	K	8/26/1998	1/30/2014	15	0	0.99	Increasing	4	0	0.93	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1035	MG	8/26/1998	1/30/2014	20	0	1.00	Increasing	4	0	0.92	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1035	NA	8/26/1998	1/30/2014	15	0	1.00	Increasing	4	0	0.84	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	RDX	8/26/1998	7/16/2014	16	10	1.00	Increasing	4	0	0.95	Probably Decreasing	5	0	0.89	Stable
PTX06-1036	HMX	8/26/1998	7/16/2014	12	14	1.00	Increasing	4	0	0.62	Stable	5	0	0.70	No Trend
PTX06-1036	TNT	8/26/1998	7/16/2014	1	25	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNT24	8/26/1998	7/16/2014	1	25	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNT26	8/26/1998	7/16/2014	2	23	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	1	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNT2A	8/26/1998	7/16/2014	1	25	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNT4A	8/26/1998	7/16/2014	13	13	1.00	Decreasing	4	0	0.74	Stable	1	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	TNB135	8/26/1998	7/16/2014	1	24	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	DNB13	8/26/1998	7/16/2014	1	21	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	PCE	8/26/1998	7/16/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1036	TCE	8/26/1998	7/16/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1036	DCE12C	10/24/2001	7/16/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1036	DCA12	8/26/1998	7/16/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1036	TCLME	8/26/1998	7/16/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1036	B	8/26/1998	7/16/2014	26	0	1.00	Decreasing	4	0	0.99	Decreasing	5	0	0.67	Stable
PTX06-1036	CR	8/26/1998	7/16/2014	23	3	0.99	Increasing	4	0	0.74	No Trend	5	0	0.86	No Trend
PTX06-1036	CR-6	8/26/1998	7/16/2014	9	17	0.71	No Trend	4	0	1.00	Increasing	3	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	MN	8/26/1998	7/16/2014	21	2	0.85	No Trend	4	0	0.69	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	AL	8/26/1998	7/16/2014	20	3	0.86	No Trend	4	0	0.64	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	BA	8/26/1998	7/16/2014	23	0	1.00	Decreasing	4	0	0.87	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	CA	8/26/1998	7/16/2014	11	0	0.97	Decreasing	4	0	0.74	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	FE	8/26/1998	7/16/2014	22	1	0.85	No Trend	4	0	0.61	Stable	3	0	0.00	N/A (<4 Detections in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1036	K	8/26/1998	7/16/2014	15	0	1.00	Decreasing	4	0	0.82	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	MG	8/26/1998	7/16/2014	23	0	0.97	Decreasing	4	0	0.65	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1036	NA	8/26/1998	7/16/2014	15	0	0.86	No Trend	4	0	0.62	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	RDX	4/30/1998	7/31/2014	34	0	0.99	Decreasing	4	0	0.98	Decreasing	11	0	1.00	Decreasing
PTX06-1038	HMX	4/30/1998	7/31/2014	33	1	0.85	Stable	4	0	0.86	No Trend	11	0	0.99	Decreasing
PTX06-1038	TNT	4/30/1998	7/31/2014	31	3	0.99	Increasing	4	0	0.91	Probably Decreasing	10	1	0.99	Increasing
PTX06-1038	DNT24	4/30/1998	7/31/2014	20	14	1.00	Decreasing	4	0	0.94	Probably Decreasing	2	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	DNT26	4/30/1998	7/31/2014	13	21	1.00	Decreasing	4	0	0.94	Probably Decreasing	10	1	0.61	No Trend
PTX06-1038	DNT2A	4/30/1998	7/31/2014	32	2	0.96	Decreasing	4	0	0.98	Decreasing	11	0	1.00	Decreasing
PTX06-1038	DNT4A	4/30/1998	7/31/2014	31	3	0.79	No Trend	4	0	0.95	Probably Decreasing	11	0	0.57	No Trend
PTX06-1038	TNB135	4/30/1998	1/29/2014	21	11	0.96	Increasing	4	0	1.00	Decreasing	9	1	0.96	Increasing
PTX06-1038	DNB13	4/30/1998	7/31/2014	2	27	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1038	PCE	4/30/1998	7/31/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	TCE	4/30/1998	7/31/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1038	DCE12C	5/11/1999	7/31/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1038	DCA12	4/30/1998	7/31/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1038	TCLME	4/30/1998	7/31/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1038	B	4/30/1998	7/31/2014	33	0	1.00	Decreasing	4	0	0.98	Increasing	11	0	1.00	Decreasing
PTX06-1038	CR	4/30/1998	7/31/2014	29	3	0.94	Probably Decreasing	4	0	0.99	Decreasing	9	2	0.91	Probably Decreasing
PTX06-1038	CR-6	8/31/1998	1/29/2014	16	14	0.95	Probably Decreasing	4	0	0.77	Stable	4	6	0.75	Stable
PTX06-1038	MN	4/30/1998	1/29/2014	22	2	0.73	Stable	4	0	0.73	Stable	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	AL	4/30/1998	1/29/2014	17	7	0.72	No Trend	4	0	0.77	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	BA	4/30/1998	1/29/2014	23	1	0.88	Stable	4	0	0.83	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	CA	4/30/1998	1/29/2014	12	0	0.78	No Trend	4	0	0.95	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	FE	4/30/1998	1/29/2014	19	5	1.00	Increasing	4	0	0.76	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	K	4/30/1998	1/29/2014	16	0	0.99	Increasing	4	0	0.94	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	MG	4/30/1998	1/29/2014	24	0	0.83	No Trend	4	0	0.59	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1038	NA	4/30/1998	1/29/2014	16	0	1.00	Increasing	4	0	0.59	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	RDX	6/30/1998	7/31/2014	30	0	0.90	Stable	4	0	0.95	Probably Decreasing	11	0	0.72	Stable
PTX06-1039A	HMX	6/30/1998	7/31/2014	29	1	0.64	No Trend	4	0	0.94	Probably Decreasing	11	0	0.88	No Trend
PTX06-1039A	TNT	6/30/1998	7/31/2014	20	10	1.00	Increasing	4	0	0.98	Decreasing	11	0	0.96	Decreasing
PTX06-1039A	DNT24	6/30/1998	7/31/2014	16	14	1.00	Decreasing	4	0	0.97	Decreasing	4	7	0.84	Stable
PTX06-1039A	DNT26	6/30/1998	7/31/2014	14	16	0.80	Stable	4	0	0.85	Stable	11	0	0.70	No Trend
PTX06-1039A	DNT2A	6/30/1998	7/31/2014	25	5	1.00	Increasing	4	0	0.94	Probably Decreasing	11	0	0.98	Decreasing
PTX06-1039A	DNT4A	6/30/1998	7/31/2014	27	3	0.84	No Trend	4	0	0.81	No Trend	11	0	1.00	Decreasing
PTX06-1039A	TNB135	6/30/1998	7/31/2014	18	11	0.92	Probably Increasing	4	0	0.88	Stable	11	0	0.94	Probably Decreasing
PTX06-1039A	DNB13	6/30/1998	7/31/2014	1	26	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1039A	PCE	8/31/1998	7/31/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1039A	TCE	8/31/1998	7/31/2014	1	27	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1039A	DCE12C	5/11/1999	7/31/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1039A	DCA12	8/31/1998	7/31/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1039A	TCLME	8/31/1998	7/31/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1039A	B	8/31/1998	7/31/2014	28	0	1.00	Increasing	4	0	0.99	Decreasing	11	0	0.73	No Trend
PTX06-1039A	CR	8/31/1998	7/31/2014	22	6	0.61	Stable	4	0	0.61	Stable	5	6	0.73	No Trend
PTX06-1039A	CR-6	8/31/1998	7/31/2014	8	22	0.80	Stable	4	0	0.93	Probably Increasing	1	11	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	MN	8/31/1998	2/13/2014	19	0	0.56	No Trend	4	0	0.79	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	AL	8/31/1998	2/13/2014	14	5	0.93	Probably Decreasing	4	0	0.91	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	BA	8/31/1998	2/13/2014	19	0	1.00	Decreasing	4	0	0.94	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	CA	8/31/1998	2/13/2014	10	0	0.66	No Trend	4	0	0.95	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	FE	8/31/1998	2/13/2014	18	1	1.00	Increasing	4	0	0.52	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	K	8/31/1998	2/13/2014	12	0	1.00	Increasing	4	0	0.96	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	MG	8/31/1998	2/13/2014	19	0	1.00	Increasing	4	0	0.73	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1039A	NA	8/31/1998	2/13/2014	12	0	1.00	Increasing	4	0	0.97	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	RDX	6/30/1998	7/31/2014	34	0	1.00	Increasing	4	0	0.83	Stable	11	0	0.56	No Trend
PTX06-1040	HMX	6/30/1998	7/31/2014	33	1	1.00	Increasing	4	0	0.67	No Trend	11	0	0.91	Probably Increasing
PTX06-1040	TNT	6/30/1998	7/31/2014	8	26	0.60	No Trend	4	0	0.98	Increasing	7	4	1.00	Increasing
PTX06-1040	DNT24	6/30/1998	7/31/2014	7	26	0.54	Stable	4	0	0.97	Decreasing	3	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	DNT26	6/30/1998	7/31/2014	14	19	0.97	Increasing	4	0	0.90	Probably Decreasing	10	1	1.00	Increasing
PTX06-1040	DNT2A	6/30/1998	7/31/2014	23	11	1.00	Increasing	4	0	0.96	Increasing	11	0	0.82	No Trend
PTX06-1040	DNT4A	6/30/1998	7/31/2014	33	1	0.76	Stable	4	0	0.92	Probably Decreasing	11	0	0.97	Increasing
PTX06-1040	TNB135	6/30/1998	7/31/2014	16	17	0.61	No Trend	4	0	0.78	Stable	11	0	0.82	Stable
PTX06-1040	DNB13	6/30/1998	7/31/2014	2	26	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1040	PCE	8/31/1998	7/31/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1040	TCE	8/31/1998	7/31/2014	1	31	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1040	DCE12C	5/11/1999	7/31/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1040	DCA12	8/31/1998	7/31/2014	5	23	0.68	Stable	4	0	0.70	Stable	2	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	TCLME	8/31/1998	7/31/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1040	B	8/31/1998	7/31/2014	32	0	0.95	Increasing	4	0	0.96	Increasing	11	0	0.71	Stable
PTX06-1040	CR	8/31/1998	7/31/2014	31	2	0.80	Stable	4	0	0.99	Decreasing	9	2	0.53	Stable
PTX06-1040	CR-6	8/31/1998	2/13/2014	15	17	0.92	Probably Decreasing	4	0	0.96	Decreasing	4	7	0.99	Decreasing
PTX06-1040	MN	8/31/1998	2/13/2014	24	0	1.00	Decreasing	4	0	0.80	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	AL	8/31/1998	2/13/2014	22	2	0.97	Decreasing	4	0	0.77	Stable	3	0	0.00	N/A (<4 Detections in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1040	BA	8/31/1998	2/13/2014	24	0	1.00	Decreasing	4	0	0.70	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	CA	8/31/1998	2/13/2014	12	0	1.00	Increasing	4	0	0.85	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	FE	8/31/1998	2/13/2014	22	1	0.68	No Trend	4	0	0.82	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	K	8/31/1998	2/13/2014	15	0	0.90	Probably Increasing	4	0	0.93	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	MG	8/31/1998	2/13/2014	24	0	0.99	Increasing	4	0	0.78	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1040	NA	8/31/1998	2/13/2014	15	0	1.00	Increasing	4	0	0.91	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	RDX	10/7/1999	7/31/2014	28	0	0.80	Stable	4	0	0.55	Stable	11	0	0.96	Increasing
PTX06-1041	HMX	10/7/1999	7/31/2014	27	1	1.00	Decreasing	4	0	0.74	Stable	11	0	0.93	Probably Increasing
PTX06-1041	TNT	10/7/1999	7/31/2014	19	8	0.89	No Trend	4	0	0.95	Decreasing	11	0	1.00	Decreasing
PTX06-1041	DNT24	10/7/1999	7/31/2014	17	11	1.00	Decreasing	4	0	0.88	Stable	3	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	DNT26	10/7/1999	7/31/2014	12	16	0.97	Increasing	4	0	0.99	Decreasing	11	0	0.92	Probably Increasing
PTX06-1041	DNT2A	10/7/1999	7/31/2014	22	5	0.94	Probably Decreasing	4	0	0.52	Stable	10	1	0.83	No Trend
PTX06-1041	DNT4A	10/7/1999	7/31/2014	28	0	1.00	Decreasing	4	0	0.84	Stable	11	0	0.98	Decreasing
PTX06-1041	TNB135	10/7/1999	2/19/2014	15	11	1.00	Increasing	4	0	1.00	Increasing	10	0	0.82	Stable
PTX06-1041	DNB13	10/7/1999	7/31/2014	2	24	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1041	PCE	10/7/1999	7/31/2014	1	25	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1041	TCE	10/7/1999	7/31/2014	4	24	0.68	Stable	4	0	0.68	Stable	0	11	0.00	All Non-Detect
PTX06-1041	DCE12C	10/23/2001	7/31/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1041	DCA12	10/7/1999	7/31/2014	6	21	0.97	Decreasing	4	0	0.85	Stable	0	11	0.00	All Non-Detect
PTX06-1041	TCLME	10/7/1999	7/31/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1041	B	10/7/1999	7/31/2014	28	0	1.00	Increasing	4	0	0.96	Decreasing	11	0	0.88	No Trend
PTX06-1041	CR	10/7/1999	7/31/2014	22	6	0.61	No Trend	4	0	0.71	Stable	5	6	0.93	Probably Decreasing
PTX06-1041	CR-6	10/7/1999	7/31/2014	9	19	0.66	Stable	4	0	0.60	No Trend	3	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	MN	10/7/1999	2/19/2014	18	1	0.82	No Trend	4	0	0.54	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	AL	10/7/1999	2/19/2014	12	7	0.99	Decreasing	4	0	0.76	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	BA	10/7/1999	2/19/2014	19	0	1.00	Decreasing	4	0	0.89	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	CA	10/7/1999	2/19/2014	11	0	0.83	No Trend	4	0	0.90	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	FE	10/7/1999	2/19/2014	15	4	0.87	No Trend	4	0	0.70	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	K	10/7/1999	2/19/2014	13	0	0.90	Probably Increasing	4	0	0.90	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	MG	10/7/1999	2/19/2014	19	0	1.00	Increasing	4	0	0.66	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1041	NA	10/7/1999	2/19/2014	13	0	0.94	Probably Increasing	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	RDX	10/7/1999	7/31/2014	32	0	1.00	Decreasing	4	0	0.86	Stable	11	0	0.80	No Trend
PTX06-1042	HMX	10/7/1999	7/31/2014	30	2	0.77	Stable	4	0	0.98	Decreasing	11	0	0.64	Stable
PTX06-1042	TNT	10/7/1999	7/31/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1042	DNT24	10/7/1999	7/31/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1042	DNT26	10/7/1999	7/31/2014	8	22	0.85	Stable	4	0	0.68	Stable	7	4	0.81	No Trend
PTX06-1042	DNT2A	10/7/1999	7/31/2014	24	7	0.65	Stable	4	0	0.95	Decreasing	11	0	0.99	Decreasing
PTX06-1042	DNT4A	10/7/1999	7/31/2014	27	5	0.92	Probably Increasing	4	0	0.93	Probably Decreasing	11	0	0.96	Increasing
PTX06-1042	TNB135	10/7/1999	1/29/2014	1	29	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	DNB13	10/7/1999	7/31/2014	3	23	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1042	PCE	10/7/1999	7/31/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1042	TCE	10/7/1999	7/31/2014	12	20	1.00	Decreasing	4	0	0.96	Decreasing	0	11	0.00	All Non-Detect
PTX06-1042	DCE12C	10/23/2001	7/31/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1042	DCA12	10/7/1999	7/31/2014	13	15	1.00	Decreasing	4	0	0.83	Stable	0	11	0.00	All Non-Detect
PTX06-1042	TCLME	10/7/1999	7/31/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1042	B	10/7/1999	7/31/2014	32	0	0.97	Increasing	4	0	0.96	Decreasing	11	0	0.63	No Trend
PTX06-1042	CR	10/7/1999	7/31/2014	24	7	0.97	Increasing	4	0	0.61	Stable	5	6	0.69	Stable
PTX06-1042	CR-6	10/7/1999	1/29/2014	7	24	0.72	Stable	4	0	0.86	No Trend	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	MN	10/7/1999	1/29/2014	23	0	0.92	Probably Decreasing	4	0	0.70	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	AL	10/7/1999	1/29/2014	8	15	0.77	No Trend	4	0	0.93	Probably Increasing	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	BA	10/7/1999	1/29/2014	23	0	0.85	No Trend	4	0	0.85	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	CA	10/7/1999	1/29/2014	11	0	0.72	No Trend	4	0	0.94	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	FE	10/7/1999	1/29/2014	23	0	0.96	Increasing	4	0	0.60	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	K	10/7/1999	1/29/2014	15	0	1.00	Increasing	4	0	0.80	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	MG	10/7/1999	1/29/2014	23	0	1.00	Increasing	4	0	0.82	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1042	NA	10/7/1999	1/29/2014	15	0	0.86	No Trend	4	0	0.83	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	RDX	1/5/2000	8/4/2014	32	0	1.00	Increasing	4	0	0.93	Probably Increasing	11	0	1.00	Increasing
PTX06-1046	HMX	1/5/2000	8/4/2014	26	5	1.00	Increasing	4	0	1.00	Increasing	11	0	1.00	Increasing
PTX06-1046	TNT	1/5/2000	8/4/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1046	DNT24	1/5/2000	8/4/2014	1	31	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1046	DNT26	1/5/2000	8/4/2014	7	24	0.87	No Trend	4	0	0.83	No Trend	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	DNT2A	1/5/2000	8/4/2014	12	19	1.00	Increasing	4	0	0.97	Increasing	11	0	1.00	Increasing
PTX06-1046	DNT4A	1/5/2000	8/4/2014	26	6	0.61	Stable	4	0	0.98	Decreasing	11	0	0.93	Probably Increasing
PTX06-1046	TNB135	1/5/2000	1/27/2014	1	29	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	10	0.00	All Non-Detect
PTX06-1046	DNB13	1/5/2000	8/4/2014	2	26	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1046	PCE	9/11/2000	8/4/2014	4	23	0.76	No Trend	4	0	0.76	No Trend	3	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	TCE	9/11/2000	8/4/2014	30	1	1.00	Decreasing	4	0	0.83	Stable	10	1	0.74	No Trend
PTX06-1046	DCE12C	10/24/2001	8/4/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1046	DCA12	9/11/2000	8/4/2014	26	1	1.00	Decreasing	4	0	0.99	Decreasing	11	0	1.00	Decreasing
PTX06-1046	TCLME	9/11/2000	8/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1046	B	1/5/2000	8/4/2014	32	0	1.00	Increasing	4	0	0.88	Stable	11	0	1.00	Increasing
PTX06-1046	CR	1/5/2000	8/4/2014	23	9	1.00	Increasing	4	0	0.99	Increasing	5	6	0.98	Increasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1046	CR-6	9/11/2000	8/4/2014	11	21	1.00	Increasing	4	0	0.88	No Trend	5	7	0.89	No Trend
PTX06-1046	MN	1/5/2000	1/27/2014	19	4	0.53	No Trend	4	0	0.67	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	AL	1/5/2000	1/27/2014	12	11	0.79	No Trend	4	0	1.00	Decreasing	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	BA	1/5/2000	1/27/2014	23	0	0.93	Probably Decreasing	4	0	0.88	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	CA	1/5/2000	1/27/2014	11	0	1.00	Increasing	4	0	0.84	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	FE	1/5/2000	1/27/2014	23	0	0.67	No Trend	4	0	1.00	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	K	1/5/2000	1/27/2014	15	0	0.93	Probably Increasing	4	0	0.58	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	MG	1/5/2000	1/27/2014	23	0	1.00	Increasing	4	0	0.82	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1046	NA	1/5/2000	1/27/2014	15	0	0.99	Increasing	4	0	0.55	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	RDX	9/11/2000	8/4/2014	19	8	0.99	Increasing	4	0	0.96	Decreasing	11	0	0.99	Decreasing
PTX06-1047A	HMX	9/11/2000	8/4/2014	16	11	0.64	No Trend	4	0	0.94	Probably Decreasing	11	0	1.00	Decreasing
PTX06-1047A	TNT	9/11/2000	8/4/2014	1	26	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	DNT24	9/11/2000	1/27/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1047A	DNT26	9/11/2000	1/27/2014	1	25	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	DNT2A	9/11/2000	1/27/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1047A	DNT4A	9/11/2000	1/27/2014	18	8	0.86	No Trend	4	0	0.99	Decreasing	10	0	0.87	No Trend
PTX06-1047A	TNB135	9/11/2000	1/27/2014	1	25	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	10	0.00	All Non-Detect
PTX06-1047A	DNB13	9/11/2000	1/27/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1047A	PCE	9/11/2000	8/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1047A	TCE	9/11/2000	8/4/2014	13	14	0.99	Decreasing	4	0	0.92	Probably Decreasing	7	4	0.74	Stable
PTX06-1047A	DCE12C	10/24/2001	8/4/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1047A	DCA12	9/11/2000	8/4/2014	12	13	1.00	Decreasing	4	0	0.99	Decreasing	9	2	1.00	Decreasing
PTX06-1047A	TCLME	9/11/2000	8/4/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1047A	B	9/11/2000	8/4/2014	27	0	1.00	Increasing	4	0	0.98	Decreasing	11	0	1.00	Decreasing
PTX06-1047A	CR	9/11/2000	8/4/2014	16	11	1.00	Increasing	4	0	0.60	Stable	2	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	CR-6	9/11/2000	8/4/2014	4	24	0.52	Stable	4	0	0.52	Stable	1	11	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	MN	9/11/2000	1/27/2014	18	1	0.74	No Trend	4	0	0.88	No Trend	3	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	AL	9/11/2000	1/27/2014	15	3	0.67	No Trend	4	0	0.73	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	BA	9/11/2000	1/27/2014	18	0	1.00	Increasing	4	0	0.83	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	CA	9/11/2000	1/27/2014	9	0	1.00	Increasing	4	0	0.65	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	FE	9/11/2000	1/27/2014	18	1	1.00	Increasing	4	0	0.67	No Trend	4	0	0.64	No Trend
PTX06-1047A	K	9/11/2000	1/27/2014	11	0	0.97	Increasing	4	0	0.86	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	MG	9/11/2000	1/27/2014	18	0	1.00	Decreasing	4	0	0.64	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1047A	NA	9/11/2000	1/27/2014	11	0	0.99	Increasing	4	0	0.77	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	RDX	9/5/2000	4/23/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1048A	HMX	9/5/2000	4/23/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1048A	TNT	9/5/2000	4/23/2014	1	22	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX06-1048A	DNT24	9/5/2000	4/23/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1048A	DNT26	9/5/2000	4/23/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1048A	DNT2A	9/5/2000	4/23/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1048A	DNT4A	9/5/2000	4/23/2014	11	12	0.90	Probably Increasing	4	0	0.96	Decreasing	4	1	0.93	Probably Decreasing
PTX06-1048A	TNB135	9/5/2000	4/23/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1048A	DNB13	9/5/2000	4/23/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1048A	PCE	9/5/2000	4/23/2014	4	15	0.87	No Trend	4	0	0.87	No Trend	0	5	0.00	All Non-Detect
PTX06-1048A	TCE	9/5/2000	4/23/2014	22	1	1.00	Decreasing	4	0	0.58	No Trend	4	1	0.62	No Trend
PTX06-1048A	DCE12C	5/21/2002	4/23/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1048A	DCA12	9/5/2000	4/23/2014	8	11	0.93	Probably Decreasing	4	0	0.52	No Trend	2	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	TCLME	9/5/2000	4/23/2014	5	13	0.89	No Trend	4	0	0.52	No Trend	1	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	B	9/5/2000	4/23/2014	23	0	0.99	Increasing	4	0	0.68	No Trend	5	0	0.77	Stable
PTX06-1048A	MN	9/5/2000	4/23/2014	19	1	0.98	Decreasing	4	0	0.55	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	AL	9/5/2000	4/23/2014	19	1	0.88	No Trend	4	0	0.80	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	BA	9/5/2000	4/23/2014	20	0	1.00	Decreasing	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	CA	9/5/2000	4/23/2014	10	0	0.99	Decreasing	4	0	0.83	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	FE	9/5/2000	4/23/2014	20	0	0.69	No Trend	4	0	0.63	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	K	9/5/2000	4/23/2014	14	0	0.98	Decreasing	4	0	0.55	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	MG	9/5/2000	4/23/2014	20	0	0.85	No Trend	4	0	0.65	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1048A	NA	9/5/2000	4/23/2014	14	0	0.92	Probably Decreasing	4	0	0.56	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	RDX	9/7/2000	10/29/2014	8	12	1.00	Increasing	4	0	0.94	Probably Increasing	8	2	1.00	Increasing
PTX06-1049	HMX	9/7/2000	10/29/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	TNT	9/7/2000	10/29/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	DNT24	9/7/2000	10/29/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	DNT26	9/7/2000	10/29/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	DNT2A	9/7/2000	10/29/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	DNT4A	9/7/2000	10/29/2014	9	11	1.00	Increasing	4	0	0.75	Stable	9	1	1.00	Increasing
PTX06-1049	TNB135	9/7/2000	10/29/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	DNB13	9/7/2000	10/29/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	PCE	9/7/2000	10/29/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	TCE	9/7/2000	10/29/2014	12	9	0.53	No Trend	4	0	0.95	Probably Increasing	11	0	0.74	No Trend
PTX06-1049	DCE12C	8/12/2002	10/29/2014	1	15	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	DCA12	9/7/2000	10/29/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	TCLME	9/7/2000	10/29/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1049	B	9/7/2000	10/29/2014	21	0	0.81	No Trend	4	0	0.95	Increasing	10	0	0.67	Stable

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1049	MN	9/7/2000	5/14/2014	13	1	0.75	Stable	4	0	0.89	Stable	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	AL	9/7/2000	5/14/2014	11	3	0.78	No Trend	4	0	0.75	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	BA	9/7/2000	5/14/2014	14	0	0.99	Increasing	4	0	0.83	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	CA	9/7/2000	5/14/2014	7	0	1.00	Increasing	4	0	0.84	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	FE	9/7/2000	5/14/2014	14	0	0.60	No Trend	4	0	0.94	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	K	9/7/2000	5/14/2014	9	0	0.95	Probably Increasing	4	0	0.64	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	MG	9/7/2000	5/14/2014	14	0	1.00	Increasing	4	0	0.64	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1049	NA	9/7/2000	5/14/2014	9	0	0.91	Probably Increasing	4	0	0.71	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1050	RDX	9/5/2000	11/13/2014	24	0	0.97	Decreasing	4	0	0.53	No Trend	11	0	0.98	Increasing
PTX06-1050	HMX	9/5/2000	11/13/2014	24	0	1.00	Decreasing	4	0	0.93	Probably Decreasing	11	0	1.00	Decreasing
PTX06-1050	TNT	9/5/2000	11/13/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1050	DNT24	9/5/2000	11/13/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1050	DNT26	9/5/2000	11/13/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1050	DNT2A	9/5/2000	11/13/2014	21	3	0.57	No Trend	4	0	0.86	Stable	11	0	1.00	Decreasing
PTX06-1050	DNT4A	9/5/2000	11/13/2014	22	2	0.95	Probably Increasing	4	0	0.97	Increasing	11	0	0.98	Increasing
PTX06-1050	TNB135	9/5/2000	11/13/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1050	DNB13	9/5/2000	11/13/2014	1	22	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1050	PCE	9/5/2000	11/13/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1050	TCE	9/5/2000	11/13/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1050	DCE12C	8/12/2002	11/13/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1050	DCA12	9/5/2000	11/13/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1050	TCLME	9/5/2000	11/13/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1050	B	9/5/2000	11/13/2014	23	0	1.00	Decreasing	4	0	0.93	Probably Decreasing	11	0	1.00	Decreasing
PTX06-1050	MN	9/5/2000	4/16/2014	15	0	0.89	Stable	4	0	0.61	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1050	AL	9/5/2000	4/16/2014	13	2	0.83	Stable	4	0	0.79	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1050	BA	9/5/2000	4/16/2014	15	0	1.00	Decreasing	4	0	0.99	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1050	CA	9/5/2000	4/16/2014	10	0	1.00	Decreasing	4	0	0.81	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1050	FE	9/5/2000	4/16/2014	15	0	0.96	Increasing	4	0	0.80	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1050	K	9/5/2000	4/16/2014	12	0	0.99	Decreasing	4	0	0.66	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1050	MG	9/5/2000	4/16/2014	15	0	0.98	Decreasing	4	0	0.92	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1050	NA	9/5/2000	4/16/2014	12	0	0.98	Increasing	4	0	0.68	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	RDX	9/12/2000	8/4/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	HMX	9/12/2000	8/4/2014	0	30	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1052	TNT	9/12/2000	8/4/2014	0	30	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1052	DNT24	9/12/2000	8/4/2014	1	29	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1052	DNT26	9/12/2000	8/4/2014	0	30	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1052	DNT2A	9/12/2000	8/4/2014	0	30	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1052	DNT4A	9/12/2000	8/4/2014	10	20	0.88	Stable	4	0	0.99	Decreasing	7	4	0.91	Probably Decreasing
PTX06-1052	TNB135	9/12/2000	2/11/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX06-1052	DNB13	9/12/2000	8/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1052	PCE	9/12/2000	8/4/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1052	TCE	9/12/2000	8/4/2014	11	18	0.99	Decreasing	4	0	0.51	Stable	4	7	0.53	Stable
PTX06-1052	DCE12C	5/9/2001	8/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1052	DCA12	9/12/2000	8/4/2014	2	23	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1052	TCLME	9/12/2000	8/4/2014	10	14	0.96	Increasing	4	0	0.97	Decreasing	10	1	0.96	Increasing
PTX06-1052	B	9/12/2000	8/4/2014	30	0	1.00	Decreasing	4	0	0.95	Decreasing	11	0	0.61	Stable
PTX06-1052	CR	9/12/2000	8/4/2014	30	0	0.92	Probably Decreasing	4	0	0.95	Probably Decreasing	11	0	0.98	Decreasing
PTX06-1052	CR-6	9/12/2000	8/4/2014	29	0	0.94	Probably Decreasing	4	0	0.98	Decreasing	11	0	0.99	Decreasing
PTX06-1052	MN	9/12/2000	2/11/2014	12	9	0.53	No Trend	4	0	0.73	Stable	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	AL	9/12/2000	2/11/2014	10	11	0.99	Decreasing	4	0	0.82	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	BA	9/12/2000	2/11/2014	21	0	1.00	Decreasing	4	0	0.93	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	CA	9/12/2000	2/11/2014	11	0	1.00	Increasing	4	0	0.94	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	FE	9/12/2000	2/11/2014	20	1	0.90	No Trend	4	0	0.67	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	K	9/12/2000	2/11/2014	15	0	1.00	Increasing	4	0	0.90	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	MG	9/12/2000	2/11/2014	21	0	1.00	Increasing	4	0	0.76	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1052	NA	9/12/2000	2/11/2014	15	0	1.00	Decreasing	4	0	0.68	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	RDX	9/12/2000	10/27/2014	5	26	0.97	Decreasing	4	0	0.67	Stable	3	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	HMX	9/12/2000	10/27/2014	13	19	1.00	Increasing	4	0	0.56	No Trend	9	2	1.00	Increasing
PTX06-1053	TNT	9/12/2000	10/27/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1053	DNT24	9/12/2000	10/27/2014	0	32	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1053	DNT26	9/12/2000	10/27/2014	2	30	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1053	DNT2A	9/12/2000	10/27/2014	4	28	1.00	Increasing	4	0	1.00	Increasing	4	7	1.00	Increasing
PTX06-1053	DNT4A	9/12/2000	10/27/2014	27	5	0.57	No Trend	4	0	0.88	No Trend	9	2	1.00	Decreasing
PTX06-1053	TNB135	9/12/2000	10/27/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1053	DNB13	9/12/2000	10/27/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1053	DIOXANE14	7/26/2005	10/27/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1053	PCE	9/12/2000	10/27/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1053	TCE	9/12/2000	10/27/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1053	DCE12C	5/9/2001	10/27/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1053	DCA12	9/12/2000	10/27/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1053	TCLME	9/12/2000	10/27/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1053	PERC	9/12/2000	10/27/2014	4	26	0.59	Stable	4	0	0.59	Stable	0	10	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1053	B	9/12/2000	10/27/2014	31	0	1.00	Increasing	4	0	0.62	No Trend	11	0	0.59	Stable
PTX06-1053	CR	9/12/2000	10/27/2014	15	17	1.00	Decreasing	4	0	0.84	Stable	2	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	CR-6	9/12/2000	10/27/2014	3	30	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	2	11	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	MN	9/12/2000	4/28/2014	15	7	0.73	No Trend	4	0	0.53	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	AL	9/12/2000	4/28/2014	10	12	0.99	Decreasing	4	0	0.63	Stable	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1053	BA	9/12/2000	4/28/2014	22	0	1.00	Decreasing	4	0	0.94	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	CA	9/12/2000	4/28/2014	10	0	1.00	Decreasing	4	0	0.79	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	FE	9/12/2000	4/28/2014	15	7	1.00	Increasing	4	0	0.83	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	K	9/12/2000	4/28/2014	14	0	0.99	Decreasing	4	0	0.60	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	MG	9/12/2000	4/28/2014	22	0	1.00	Increasing	4	0	0.65	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1053	NA	9/12/2000	4/28/2014	14	0	1.00	Increasing	4	0	0.94	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	RDX	2/20/2002	7/23/2014	5	6	0.98	Decreasing	4	0	0.90	Stable	5	1	0.98	Decreasing
PTX06-1077A	HMX	2/20/2002	7/23/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	TNT	2/20/2002	7/23/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	DNT24	2/20/2002	7/23/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	DNT26	2/20/2002	7/23/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	DNT2A	2/20/2002	7/23/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	DNT4A	2/20/2002	7/23/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	TNB135	2/20/2002	7/23/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	DNB13	11/4/2002	7/23/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	DIOXANE14	11/4/2002	7/23/2014	1	9	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	5	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	PCE	2/20/2002	7/23/2014	5	8	0.63	Stable	4	0	0.68	Stable	2	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	TCE	2/20/2002	7/23/2014	13	2	0.93	Probably Decreasing	4	0	0.80	Stable	5	1	0.99	Decreasing
PTX06-1077A	DCE12C	2/20/2002	7/23/2014	13	2	0.99	Decreasing	4	0	0.81	Stable	5	1	1.00	Decreasing
PTX06-1077A	DCA12	2/20/2002	7/23/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	TCLME	2/20/2002	7/23/2014	0	12	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1077A	PERC	2/20/2002	7/23/2014	9	4	0.87	Stable	4	0	0.68	Stable	4	2	0.70	Stable
PTX06-1077A	B	2/20/2002	7/23/2014	10	0	0.98	Increasing	4	0	0.89	Stable	6	0	0.62	No Trend
PTX06-1077A	MN	2/20/2002	7/23/2014	8	0	0.90	Probably Decreasing	4	0	0.79	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	AL	2/20/2002	7/23/2014	7	1	0.82	No Trend	4	0	0.91	Probably Increasing	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	BA	2/20/2002	7/23/2014	9	0	1.00	Decreasing	4	0	0.94	Probably Increasing	4	0	0.89	No Trend
PTX06-1077A	CA	8/25/2008	7/23/2014	4	0	0.75	No Trend	4	0	0.75	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	FE	2/20/2002	7/23/2014	8	0	0.76	No Trend	4	0	0.87	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	K	8/25/2008	7/23/2014	4	0	1.00	Increasing	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	MG	2/20/2002	7/23/2014	8	0	0.99	Increasing	4	0	0.62	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1077A	NA	8/25/2008	7/23/2014	4	0	0.88	No Trend	4	0	0.88	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1081	RDX	7/18/2002	7/24/2014	1	20	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	4	0.00	N/A (<4 Detections in Dataset)
PTX06-1081	HMX	7/18/2002	7/24/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1081	TNT	7/18/2002	7/24/2014	1	20	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX06-1081	DNT24	7/18/2002	7/24/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1081	DNT26	7/18/2002	7/24/2014	1	20	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX06-1081	DNT2A	7/18/2002	7/24/2014	1	20	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX06-1081	DNT4A	7/18/2002	7/24/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1081	TNB135	7/18/2002	7/24/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1081	DNB13	7/18/2002	7/24/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1081	PCE	7/18/2002	7/24/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1081	TCE	7/18/2002	7/24/2014	19	2	0.97	Decreasing	4	0	0.57	Stable	5	0	0.89	Stable
PTX06-1081	DCE12C	7/18/2002	7/24/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1081	DCA12	7/18/2002	7/24/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1081	TCLME	7/18/2002	7/24/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX06-1081	B	7/18/2002	7/24/2014	18	0	1.00	Increasing	4	0	0.85	Stable	5	0	0.97	Decreasing
PTX06-1081	MN	7/18/2002	7/24/2014	14	4	0.97	Decreasing	4	0	0.98	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1081	AL	7/18/2002	7/24/2014	13	5	0.99	Decreasing	4	0	0.70	No Trend	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1081	BA	7/18/2002	7/24/2014	18	0	0.94	Probably Increasing	4	0	0.93	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1081	CA	8/9/2005	7/24/2014	6	0	0.99	Increasing	4	0	0.88	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1081	FE	7/18/2002	7/24/2014	16	2	0.84	No Trend	4	0	0.94	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1081	K	8/9/2005	7/24/2014	10	0	1.00	Increasing	4	0	0.96	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1081	MG	7/18/2002	7/24/2014	18	0	0.91	Probably Increasing	4	0	0.77	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1081	NA	8/9/2005	7/24/2014	10	0	0.95	Increasing	4	0	0.61	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1085	RDX	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	HMX	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	TNT	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	DNT24	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	DNT26	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	DNT2A	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	DNT4A	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	TNB135	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	DNB13	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	PCE	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	TCE	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	DCE12C	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	DCA12	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1085	TCLME	5/27/2003	4/22/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1085	B	5/27/2003	4/22/2014	10	0	0.89	Stable	4	0	0.62	Stable	6	0	0.84	Stable
PTX06-1085	MN	5/27/2003	4/22/2014	5	2	0.98	Decreasing	4	0	0.79	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1085	AL	5/27/2003	4/22/2014	5	2	0.92	Probably Decreasing	4	0	0.97	Decreasing	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1085	BA	5/27/2003	4/22/2014	8	0	0.91	Probably Decreasing	4	0	0.68	Stable	4	0	0.68	Stable
PTX06-1085	CA	4/26/2010	4/22/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1085	FE	5/27/2003	4/22/2014	7	0	0.60	No Trend	4	0	0.75	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1085	K	4/26/2010	4/22/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1085	MG	5/27/2003	4/22/2014	7	0	1.00	Decreasing	4	0	0.97	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1085	NA	4/26/2010	4/22/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1086	RDX	5/27/2003	4/22/2014	1	13	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX06-1086	HMX	5/27/2003	4/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	TNT	5/27/2003	4/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	DNT24	5/27/2003	4/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	DNT26	5/27/2003	4/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	DNT2A	5/27/2003	4/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	DNT4A	5/27/2003	4/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	TNB135	5/27/2003	4/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	DNB13	5/27/2003	4/22/2014	0	12	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	PCE	5/27/2003	4/22/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	TCE	5/27/2003	4/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	DCE12C	5/27/2003	4/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	DCA12	5/27/2003	4/22/2014	0	12	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	TCLME	5/27/2003	4/22/2014	0	12	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX06-1086	B	5/27/2003	4/22/2014	14	0	1.00	Increasing	4	0	0.57	No Trend	6	0	0.77	Stable
PTX06-1086	MN	5/27/2003	4/22/2014	11	0	0.97	Decreasing	4	0	0.85	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1086	AL	5/27/2003	4/22/2014	7	4	0.99	Decreasing	4	0	0.80	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1086	BA	5/27/2003	4/22/2014	12	0	0.98	Decreasing	4	0	0.90	Probably Decreasing	4	0	0.89	Stable
PTX06-1086	CA	4/26/2010	4/22/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1086	FE	5/27/2003	4/22/2014	11	0	0.67	Stable	4	0	0.99	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1086	K	5/2/2006	4/22/2014	5	0	1.00	Increasing	4	0	0.75	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1086	MG	5/27/2003	4/22/2014	11	0	1.00	Increasing	4	0	0.55	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1086	NA	5/2/2006	4/22/2014	5	0	0.88	No Trend	4	0	0.71	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1088	RDX	6/11/2003	11/10/2014	22	0	1.00	Decreasing	4	0	0.97	Decreasing	11	0	1.00	Decreasing
PTX06-1088	HMX	6/11/2003	11/10/2014	22	0	1.00	Decreasing	4	0	0.88	Stable	11	0	1.00	Decreasing
PTX06-1088	TNT	6/11/2003	11/10/2014	22	0	1.00	Decreasing	4	0	0.91	Probably Decreasing	11	0	1.00	Decreasing
PTX06-1088	DNT24	6/11/2003	11/10/2014	16	6	1.00	Decreasing	4	0	0.98	Decreasing	11	0	0.99	Decreasing
PTX06-1088	DNT26	6/11/2003	11/10/2014	6	16	0.57	Stable	4	0	0.61	Stable	6	5	0.57	Stable
PTX06-1088	DNT2A	6/11/2003	11/10/2014	19	2	1.00	Decreasing	4	0	0.92	Probably Decreasing	11	0	1.00	Decreasing
PTX06-1088	DNT4A	6/11/2003	11/10/2014	19	2	0.99	Decreasing	4	0	0.89	Stable	11	0	1.00	Decreasing
PTX06-1088	TNB135	6/11/2003	11/10/2014	22	0	1.00	Decreasing	4	0	0.99	Decreasing	11	0	1.00	Decreasing
PTX06-1088	DNB13	6/11/2003	11/10/2014	2	18	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1088	PCE	6/11/2003	11/10/2014	21	0	1.00	Increasing	4	0	0.66	Stable	11	0	0.94	Probably Increasing
PTX06-1088	TCE	6/11/2003	11/10/2014	21	0	1.00	Decreasing	4	0	0.54	No Trend	11	0	0.67	Stable
PTX06-1088	DCE12C	6/11/2003	11/10/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1088	DCA12	6/11/2003	11/10/2014	15	5	0.99	Increasing	4	0	0.98	Decreasing	9	2	0.93	Probably Increasing
PTX06-1088	TCLME	6/11/2003	11/10/2014	20	0	0.78	Stable	4	0	0.70	Stable	11	0	0.61	Stable
PTX06-1088	B	6/11/2003	11/10/2014	19	0	1.00	Decreasing	4	0	0.88	Stable	11	0	1.00	Decreasing
PTX06-1088	CR	6/11/2003	11/10/2014	21	0	1.00	Decreasing	4	0	0.62	No Trend	11	0	1.00	Decreasing
PTX06-1088	CR-6	6/11/2003	5/20/2014	18	1	1.00	Decreasing	4	0	0.56	No Trend	9	1	1.00	Decreasing
PTX06-1088	MN	6/11/2003	5/20/2014	10	3	0.97	Decreasing	4	0	0.54	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1088	AL	6/11/2003	5/20/2014	11	2	0.87	No Trend	4	0	0.76	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1088	BA	6/11/2003	5/20/2014	14	0	0.89	No Trend	4	0	0.79	No Trend	4	0	0.77	No Trend
PTX06-1088	CA	4/24/2008	5/20/2014	5	0	0.66	No Trend	4	0	0.92	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1088	FE	6/11/2003	5/20/2014	12	1	0.62	No Trend	4	0	0.63	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1088	K	5/4/2006	5/20/2014	7	0	1.00	Increasing	4	0	0.97	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1088	MG	6/11/2003	5/20/2014	13	0	0.77	No Trend	4	0	0.93	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1088	NA	5/4/2006	5/20/2014	7	0	0.96	Increasing	4	0	0.91	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1095A	RDX	5/9/2005	8/20/2014	18	8	1.00	Increasing	4	0	0.98	Decreasing	11	0	1.00	Increasing
PTX06-1095A	HMX	5/9/2005	8/20/2014	17	9	1.00	Increasing	4	0	0.94	Probably Decreasing	11	0	1.00	Increasing
PTX06-1095A	TNT	5/9/2005	8/20/2014	12	14	0.66	No Trend	4	0	0.66	Stable	11	0	0.96	Increasing
PTX06-1095A	DNT24	5/9/2005	8/20/2014	1	25	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX06-1095A	DNT26	5/9/2005	8/20/2014	2	24	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1095A	DNT2A	5/9/2005	8/20/2014	11	15	0.96	Increasing	4	0	0.98	Increasing	10	1	1.00	Increasing
PTX06-1095A	DNT4A	5/9/2005	8/20/2014	12	14	1.00	Increasing	4	0	0.82	Stable	11	0	0.99	Increasing
PTX06-1095A	TNB135	5/9/2005	8/20/2014	18	8	0.87	No Trend	4	0	0.97	Increasing	11	0	0.53	No Trend
PTX06-1095A	DNB13	5/9/2005	8/20/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1095A	PCE	5/9/2005	8/20/2014	5	15	0.98	Increasing	4	0	0.85	No Trend	5	6	0.98	Increasing
PTX06-1095A	TCE	5/9/2005	8/20/2014	14	11	0.85	No Trend	4	0	0.87	No Trend	11	0	0.84	No Trend
PTX06-1095A	DCE12C	5/9/2005	8/20/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1095A	DCA12	5/9/2005	8/20/2014	8	10	0.61	Stable	4	0	0.95	Increasing	8	3	0.61	Stable
PTX06-1095A	TCLME	5/9/2005	8/20/2014	5	13	0.99	Increasing	4	0	0.84	No Trend	5	6	0.99	Increasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1095A	B	5/9/2005	8/20/2014	24	0	0.81	Stable	4	0	0.96	Decreasing	11	0	0.96	Decreasing
PTX06-1095A	CR	5/9/2005	8/20/2014	11	13	1.00	Increasing	4	0	0.88	No Trend	7	4	0.89	No Trend
PTX06-1095A	CR-6	9/13/2005	8/20/2014	5	18	0.76	No Trend	4	0	0.87	No Trend	5	6	0.76	No Trend
PTX06-1095A	MN	5/9/2005	8/20/2014	23	0	0.88	No Trend	4	0	0.89	Stable	11	0	0.93	Probably Decreasing
PTX06-1095A	NI	5/9/2005	8/20/2014	21	2	1.00	Increasing	4	0	0.86	No Trend	11	0	1.00	Increasing
PTX06-1095A	MO	5/9/2005	8/20/2014	22	0	1.00	Decreasing	4	0	0.92	Probably Increasing	11	0	0.86	No Trend
PTX06-1095A	AL	5/9/2005	1/30/2014	2	12	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1095A	BA	5/9/2005	1/30/2014	15	0	1.00	Increasing	4	0	0.80	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1095A	CA	2/27/2008	1/30/2014	5	0	0.94	Probably Increasing	4	0	0.84	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1095A	FE	5/9/2005	8/20/2014	23	0	1.00	Increasing	4	0	0.90	Probably Increasing	11	0	1.00	Increasing
PTX06-1095A	K	1/19/2006	1/30/2014	12	0	1.00	Decreasing	4	0	0.95	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1095A	MG	5/9/2005	1/30/2014	15	0	1.00	Increasing	4	0	0.71	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1095A	NA	1/19/2006	1/30/2014	12	0	1.00	Decreasing	4	0	0.78	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1095A	V	5/9/2005	8/20/2014	11	5	0.83	No Trend	4	0	0.95	Decreasing	10	1	0.90	No Trend
PTX06-1120	RDX	10/13/2010	10/27/2014	9	0	0.71	Stable	4	0	0.75	Stable	9	0	0.71	Stable
PTX06-1120	HMX	10/13/2010	10/27/2014	9	0	0.75	Stable	4	0	0.65	No Trend	9	0	0.75	Stable
PTX06-1120	TNT	10/13/2010	10/27/2014	0	9	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX06-1120	DNT24	10/13/2010	10/27/2014	0	9	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX06-1120	DNT26	10/13/2010	10/27/2014	7	2	1.00	Increasing	4	0	0.97	Increasing	7	2	1.00	Increasing
PTX06-1120	DNT2A	10/13/2010	10/27/2014	9	0	1.00	Increasing	4	0	0.76	No Trend	9	0	1.00	Increasing
PTX06-1120	DNT4A	10/13/2010	10/27/2014	9	0	0.96	Increasing	4	0	0.80	Stable	9	0	0.96	Increasing
PTX06-1120	TNB135	10/13/2010	10/27/2014	5	4	0.78	No Trend	4	0	0.78	No Trend	5	4	0.78	No Trend
PTX06-1120	DNB13	10/13/2010	10/27/2014	0	9	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX06-1120	PCE	10/13/2010	10/27/2014	4	5	0.82	Stable	4	0	0.82	Stable	4	5	0.82	Stable
PTX06-1120	TCE	10/13/2010	10/27/2014	9	0	1.00	Decreasing	4	0	0.67	Stable	9	0	1.00	Decreasing
PTX06-1120	DCE12C	10/13/2010	10/27/2014	0	9	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX06-1120	DCA12	10/13/2010	10/27/2014	9	0	0.81	Stable	4	0	0.95	Probably Increasing	9	0	0.81	Stable
PTX06-1120	TCLME	10/13/2010	10/27/2014	0	9	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX06-1120	B	10/13/2010	10/27/2014	9	0	1.00	Increasing	4	0	0.86	No Trend	9	0	1.00	Increasing
PTX06-1120	CR	10/13/2010	10/27/2014	9	0	0.99	Increasing	4	0	0.56	No Trend	9	0	0.99	Increasing
PTX06-1120	CR-6	10/13/2010	10/27/2014	6	3	0.98	Increasing	4	0	0.86	No Trend	6	3	0.98	Increasing
PTX06-1120	MN	10/13/2010	10/27/2014	9	0	0.66	Stable	4	0	0.54	Stable	9	0	0.66	Stable
PTX06-1120	NI	10/13/2010	10/27/2014	9	0	0.99	Decreasing	4	0	0.90	Stable	9	0	0.99	Decreasing
PTX06-1120	MO	10/13/2010	10/27/2014	9	0	0.84	Stable	4	0	1.00	Decreasing	9	0	0.84	Stable
PTX06-1120	AL	5/31/2012	4/29/2014	2	0	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1120	BA	5/31/2012	4/29/2014	2	0	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1120	CA	5/31/2012	4/29/2014	2	0	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1120	FE	10/13/2010	10/27/2014	9	0	0.95	Increasing	4	0	0.69	No Trend	9	0	0.95	Increasing
PTX06-1120	K	5/31/2012	4/29/2014	2	0	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1120	MG	5/31/2012	4/29/2014	2	0	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1120	NA	5/31/2012	4/29/2014	2	0	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1120	V	10/13/2010	10/27/2014	9	0	0.96	Increasing	4	0	0.65	Stable	9	0	0.96	Increasing
PTX06-1126	RDX	2/7/2008	11/5/2014	13	6	1.00	Decreasing	4	0	0.54	No Trend	12	0	0.69	No Trend
PTX06-1126	HMX	2/7/2008	11/5/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX06-1126	TNT	2/7/2008	11/5/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX06-1126	DNT24	2/7/2008	11/5/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX06-1126	DNT26	2/7/2008	11/5/2014	2	17	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	DNT2A	2/7/2008	11/5/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX06-1126	DNT4A	2/7/2008	11/5/2014	17	2	1.00	Increasing	4	0	0.95	Probably Increasing	10	2	1.00	Increasing
PTX06-1126	TNB135	2/7/2008	11/5/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX06-1126	DNB13	2/7/2008	11/5/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX06-1126	DIOXANE14	2/14/2008	11/5/2014	18	0	1.00	Increasing	4	0	0.94	Probably Increasing	12	0	0.86	No Trend
PTX06-1126	PCE	2/7/2008	11/5/2014	17	2	1.00	Increasing	4	0	0.59	No Trend	12	0	1.00	Increasing
PTX06-1126	TCE	2/7/2008	11/5/2014	19	0	0.95	Probably Increasing	4	0	0.54	No Trend	12	0	0.75	Stable
PTX06-1126	DCE12C	2/7/2008	11/5/2014	19	0	0.99	Decreasing	4	0	0.74	Stable	12	0	1.00	Decreasing
PTX06-1126	DCA12	2/7/2008	11/5/2014	19	0	1.00	Increasing	4	0	0.82	Stable	12	0	1.00	Increasing
PTX06-1126	TCLME	2/7/2008	11/5/2014	19	0	1.00	Increasing	4	0	0.79	Stable	12	0	1.00	Increasing
PTX06-1126	PERC	2/7/2008	11/5/2014	19	0	1.00	Decreasing	4	0	0.87	No Trend	12	0	0.99	Decreasing
PTX06-1126	B	9/8/2009	11/5/2014	12	0	1.00	Decreasing	4	0	0.77	No Trend	12	0	1.00	Decreasing
PTX06-1126	CR	2/7/2008	11/5/2014	8	0	0.75	No Trend	4	0	0.73	No Trend	4	0	0.69	No Trend
PTX06-1126	CR-6	2/7/2008	11/5/2014	3	2	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	MN	2/7/2008	5/13/2014	7	0	0.83	Stable	4	0	0.59	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	AL	2/7/2008	5/13/2014	3	4	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	BA	2/7/2008	5/13/2014	8	0	1.00	Increasing	4	0	0.99	Increasing	4	0	0.91	Probably Increasing
PTX06-1126	CA	2/7/2008	5/13/2014	7	0	0.97	Increasing	4	0	0.63	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	FE	2/7/2008	5/13/2014	7	0	0.62	No Trend	4	0	0.92	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	K	2/7/2008	5/13/2014	7	0	1.00	Increasing	4	0	0.74	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	MG	2/7/2008	5/13/2014	7	0	0.90	Probably Increasing	4	0	0.66	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1126	NA	2/7/2008	5/13/2014	7	0	0.60	No Trend	4	0	0.70	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	RDX	2/7/2008	11/5/2014	7	11	1.00	Increasing	4	0	0.89	No Trend	7	4	1.00	Increasing
PTX06-1127	HMX	2/7/2008	11/5/2014	2	16	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	TNT	2/7/2008	11/5/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1127	DNT24	2/7/2008	11/5/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1127	DNT26	2/7/2008	11/5/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1127	DNT2A	2/7/2008	11/5/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1127	DNT4A	2/7/2008	11/5/2014	15	2	1.00	Increasing	4	0	0.73	Stable	9	2	1.00	Increasing
PTX06-1127	TNB135	2/7/2008	11/5/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1127	DNB13	2/7/2008	11/5/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1127	DIOXANE14	2/14/2008	11/5/2014	17	0	1.00	Increasing	4	0	0.81	Stable	11	0	0.68	No Trend
PTX06-1127	PCE	2/7/2008	11/5/2014	8	10	1.00	Increasing	4	0	0.63	No Trend	8	3	1.00	Increasing
PTX06-1127	TCE	2/7/2008	11/5/2014	18	0	1.00	Decreasing	4	0	0.58	Stable	11	0	1.00	Decreasing
PTX06-1127	DCE12C	2/7/2008	11/5/2014	18	0	1.00	Decreasing	4	0	0.83	No Trend	11	0	0.99	Decreasing
PTX06-1127	DCA12	2/7/2008	11/5/2014	18	0	0.98	Decreasing	4	0	0.98	Decreasing	11	0	1.00	Decreasing
PTX06-1127	TCLME	2/7/2008	11/5/2014	18	0	1.00	Increasing	4	0	0.59	Stable	11	0	1.00	Increasing
PTX06-1127	PERC	2/7/2008	11/5/2014	18	0	1.00	Decreasing	4	0	0.94	Probably Increasing	11	0	1.00	Decreasing
PTX06-1127	B	9/8/2009	11/5/2014	11	0	0.75	No Trend	4	0	0.97	Increasing	11	0	0.75	No Trend
PTX06-1127	CR	2/7/2008	11/5/2014	8	0	0.91	Probably Increasing	4	0	0.95	Probably Increasing	4	0	0.92	Probably Increasing
PTX06-1127	CR-6	2/7/2008	11/5/2014	2	3	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	MN	2/7/2008	5/8/2014	7	0	0.95	Probably Decreasing	4	0	0.89	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	AL	2/7/2008	5/8/2014	3	4	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1127	BA	2/7/2008	5/8/2014	8	0	0.99	Decreasing	4	0	0.53	No Trend	4	0	1.00	Decreasing
PTX06-1127	CA	2/7/2008	5/8/2014	7	0	0.82	No Trend	4	0	0.89	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	FE	2/7/2008	5/8/2014	7	0	0.82	Stable	4	0	0.67	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	K	2/7/2008	5/8/2014	7	0	1.00	Decreasing	4	0	0.93	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	MG	2/7/2008	5/8/2014	7	0	1.00	Increasing	4	0	0.67	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1127	NA	2/7/2008	5/8/2014	7	0	1.00	Increasing	4	0	0.61	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1130	RDX	9/2/2009	8/6/2014	11	0	1.00	Decreasing	4	0	0.82	Stable	11	0	1.00	Decreasing
PTX06-1130	HMX	9/2/2009	8/6/2014	11	0	0.97	Decreasing	4	0	0.93	Probably Decreasing	11	0	0.97	Decreasing
PTX06-1130	TNT	9/2/2009	8/6/2014	3	8	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1130	DNT24	9/2/2009	8/6/2014	10	1	0.70	Stable	4	0	0.96	Increasing	10	1	0.70	Stable
PTX06-1130	DNT26	9/2/2009	8/6/2014	11	0	0.99	Decreasing	4	0	0.60	No Trend	11	0	0.99	Decreasing
PTX06-1130	DNT2A	9/2/2009	8/6/2014	11	0	1.00	Decreasing	4	0	0.94	Probably Decreasing	11	0	1.00	Decreasing
PTX06-1130	DNT4A	9/2/2009	8/6/2014	11	0	0.51	No Trend	4	0	0.95	Probably Decreasing	11	0	0.51	No Trend
PTX06-1130	TNB135	9/2/2009	8/6/2014	9	2	1.00	Decreasing	4	0	0.97	Decreasing	9	2	1.00	Decreasing
PTX06-1130	DNB13	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1130	PCE	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1130	TCE	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1130	DCE12C	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1130	DCA12	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1130	TCLME	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1130	B	9/2/2009	8/6/2014	11	0	0.80	Stable	4	0	0.67	Stable	11	0	0.80	Stable
PTX06-1130	CR	9/2/2009	8/6/2014	11	0	0.96	Increasing	4	0	0.86	No Trend	11	0	0.96	Increasing
PTX06-1130	CR-6	9/2/2009	8/6/2014	5	7	1.00	Decreasing	4	0	0.93	Probably Decreasing	5	7	1.00	Decreasing
PTX06-1130	MN	9/2/2009	8/6/2014	10	1	1.00	Increasing	4	0	0.79	No Trend	10	1	1.00	Increasing
PTX06-1130	NI	9/2/2009	8/6/2014	11	0	1.00	Increasing	4	0	0.88	No Trend	11	0	1.00	Increasing
PTX06-1130	MO	9/2/2009	8/6/2014	11	0	0.99	Increasing	4	0	0.97	Increasing	11	0	0.99	Increasing
PTX06-1130	AL	1/26/2010	2/3/2014	1	2	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1130	BA	1/26/2010	2/3/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1130	CA	1/26/2010	2/3/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1130	FE	9/2/2009	8/6/2014	11	0	0.96	Increasing	4	0	0.87	No Trend	11	0	0.96	Increasing
PTX06-1130	K	1/26/2010	2/3/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1130	MG	1/26/2010	2/3/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1130	NA	1/26/2010	2/3/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1130	V	9/2/2009	8/6/2014	11	0	0.97	Increasing	4	0	0.58	No Trend	11	0	0.97	Increasing
PTX06-1131	RDX	8/24/2009	2/18/2014	1	10	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1131	HMX	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	TNT	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	DNT24	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	DNT26	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	DNT2A	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	DNT4A	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	TNB135	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	DNB13	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	PCE	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	TCE	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	DCE12C	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	DCA12	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	TCLME	8/24/2009	2/18/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1131	B	8/24/2009	2/18/2014	10	0	0.86	Stable	4	0	0.71	Stable	10	0	0.86	Stable
PTX06-1131	MN	3/4/2010	2/18/2014	2	1	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1131	AL	3/4/2010	2/18/2014	0	3	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1131	BA	3/4/2010	2/18/2014	4	0	0.85	No Trend	4	0	0.85	No Trend	4	0	0.85	No Trend
PTX06-1131	CA	3/4/2010	2/18/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1131	FE	3/4/2010	2/18/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1131	K	3/4/2010	2/18/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1131	MG	3/4/2010	2/18/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1131	NA	3/4/2010	2/18/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1134	RDX	8/27/2009	10/27/2014	1	10	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1134	HMX	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	TNT	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	DNT24	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	DNT26	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	DNT2A	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	DNT4A	8/27/2009	10/27/2014	11	0	0.88	No Trend	4	0	0.65	No Trend	11	0	0.88	No Trend
PTX06-1134	TNB135	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	DNB13	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	DIOXANE14	8/27/2009	10/27/2014	8	3	0.96	Increasing	4	0	0.87	No Trend	8	3	0.96	Increasing
PTX06-1134	PCE	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	TCE	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	DCE12C	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	DCA12	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	TCLME	8/27/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1134	PERC	8/27/2009	10/27/2014	10	1	0.96	Decreasing	4	0	0.67	No Trend	10	1	0.96	Decreasing
PTX06-1134	B	8/27/2009	10/27/2014	11	0	0.88	No Trend	4	0	0.86	No Trend	11	0	0.88	No Trend
PTX06-1134	MN	5/6/2010	4/23/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1134	AL	5/6/2010	4/23/2014	0	3	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1134	BA	5/6/2010	4/23/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1134	CA	5/6/2010	4/23/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1134	FE	5/6/2010	4/23/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1134	K	5/6/2010	4/23/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1134	MG	5/6/2010	4/23/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1134	NA	5/6/2010	4/23/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1135	RDX	9/14/2009	10/27/2014	11	0	1.00	Decreasing	4	0	0.77	No Trend	11	0	1.00	Decreasing
PTX06-1135	HMX	9/14/2009	10/27/2014	11	0	1.00	Decreasing	4	0	0.95	Increasing	11	0	1.00	Decreasing
PTX06-1135	TNT	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	DNT24	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	DNT26	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	DNT2A	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	DNT4A	9/14/2009	10/27/2014	4	7	0.98	Increasing	4	0	0.98	Increasing	4	7	0.98	Increasing
PTX06-1135	TNB135	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	DNB13	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	PCE	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	TCE	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	DCE12C	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	DCA12	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	TCLME	9/14/2009	10/27/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1135	B	9/14/2009	10/27/2014	11	0	0.88	No Trend	4	0	1.00	Decreasing	11	0	0.88	No Trend
PTX06-1135	CR	12/11/2008	10/27/2014	11	1	1.00	Increasing	4	0	0.54	No Trend	10	1	0.99	Increasing
PTX06-1135	CR-6	12/11/2008	10/27/2014	2	10	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1135	MN	9/14/2009	10/27/2014	11	0	0.61	Stable	4	0	0.56	Stable	11	0	0.61	Stable
PTX06-1135	NI	9/14/2009	10/27/2014	11	0	0.54	No Trend	4	0	0.75	No Trend	11	0	0.54	No Trend
PTX06-1135	MO	9/14/2009	10/27/2014	11	0	0.55	No Trend	4	0	0.53	Stable	11	0	0.55	No Trend
PTX06-1135	AL	5/11/2010	4/28/2014	0	3	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1135	BA	5/11/2010	4/28/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1135	CA	5/11/2010	4/28/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1135	FE	9/14/2009	10/27/2014	11	0	0.91	Probably Increasing	4	0	0.55	No Trend	11	0	0.91	Probably Increasing
PTX06-1135	K	5/11/2010	4/28/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1135	MG	5/11/2010	4/28/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1135	NA	5/11/2010	4/28/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1135	V	9/14/2009	10/27/2014	11	0	0.94	Probably Increasing	4	0	0.55	Stable	11	0	0.94	Probably Increasing
PTX06-1136	RDX	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	HMX	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	TNT	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	DNT24	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	DNT26	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	DNT2A	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	DNT4A	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	TNB135	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	DNB13	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	PCE	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	TCE	9/14/2009	5/14/2014	1	9	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	9	0.00	N/A (<4 Detections in Dataset)
PTX06-1136	DCE12C	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	DCA12	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	TCLME	9/14/2009	5/14/2014	0	10	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX06-1136	B	9/14/2009	5/14/2014	10	0	0.97	Decreasing	4	0	0.72	Stable	10	0	0.97	Decreasing
PTX06-1136	MN	3/29/2010	5/14/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1136	AL	3/29/2010	5/14/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1136	BA	3/29/2010	5/14/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1136	CA	3/29/2010	5/14/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1136	FE	3/29/2010	5/14/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1136	K	3/29/2010	5/14/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1136	MG	3/29/2010	5/14/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1136	NA	3/29/2010	5/14/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1146	RDX	9/2/2009	8/6/2014	11	0	0.98	Decreasing	4	0	0.55	Stable	11	0	0.98	Decreasing
PTX06-1146	HMX	9/2/2009	8/6/2014	11	0	0.94	Probably Increasing	4	0	0.90	Probably Increasing	11	0	0.94	Probably Increasing
PTX06-1146	TNT	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1146	DNT24	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1146	DNT26	9/2/2009	8/6/2014	10	1	1.00	Decreasing	4	0	0.81	Stable	10	1	1.00	Decreasing
PTX06-1146	DNT2A	9/2/2009	8/6/2014	8	3	1.00	Increasing	4	0	0.97	Increasing	8	3	1.00	Increasing
PTX06-1146	DNT4A	9/2/2009	8/6/2014	11	0	0.80	No Trend	4	0	0.93	Probably Decreasing	11	0	0.80	No Trend
PTX06-1146	TNB135	9/2/2009	8/6/2014	5	6	0.79	Stable	4	0	0.99	Decreasing	5	6	0.79	Stable
PTX06-1146	DNB13	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1146	PCE	9/2/2009	8/6/2014	1	10	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1146	TCE	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1146	DCE12C	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1146	DCA12	9/2/2009	8/6/2014	4	7	0.68	No Trend	4	0	0.68	No Trend	4	7	0.68	No Trend
PTX06-1146	TCLME	9/2/2009	8/6/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1146	B	9/2/2009	8/6/2014	11	0	0.99	Decreasing	4	0	0.90	Probably Decreasing	11	0	0.99	Decreasing
PTX06-1146	CR	9/2/2009	8/6/2014	11	0	0.93	Probably Increasing	4	0	0.75	No Trend	11	0	0.93	Probably Increasing
PTX06-1146	CR-6	9/2/2009	8/6/2014	6	5	0.91	Probably Increasing	4	0	0.64	Stable	6	5	0.91	Probably Increasing
PTX06-1146	MN	9/2/2009	8/6/2014	11	0	1.00	Decreasing	4	0	0.93	Probably Decreasing	11	0	1.00	Decreasing
PTX06-1146	NI	9/2/2009	8/6/2014	11	0	0.76	No Trend	4	0	0.88	Stable	11	0	0.76	No Trend
PTX06-1146	MO	9/2/2009	8/6/2014	11	0	0.87	No Trend	4	0	0.79	Stable	11	0	0.87	No Trend
PTX06-1146	AL	3/23/2010	1/29/2014	0	3	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1146	BA	3/23/2010	1/29/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1146	CA	3/23/2010	1/29/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1146	FE	9/2/2009	8/6/2014	11	0	0.86	Stable	4	0	0.98	Increasing	11	0	0.86	Stable
PTX06-1146	K	3/23/2010	1/29/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1146	MG	3/23/2010	1/29/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1146	NA	3/23/2010	1/29/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1146	V	9/2/2009	8/6/2014	11	0	0.88	No Trend	4	0	0.94	Probably Decreasing	11	0	0.88	No Trend
PTX06-1147	RDX	9/2/2009	10/28/2014	11	0	0.99	Increasing	4	0	0.92	Probably Decreasing	11	0	0.99	Increasing
PTX06-1147	HMX	9/2/2009	10/28/2014	11	0	1.00	Increasing	4	0	0.86	Stable	11	0	1.00	Increasing
PTX06-1147	TNT	9/2/2009	10/28/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1147	DNT24	9/2/2009	10/28/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1147	DNT26	9/2/2009	10/28/2014	4	7	0.91	Probably Decreasing	4	0	0.91	Probably Decreasing	4	7	0.91	Probably Decreasing
PTX06-1147	DNT2A	9/2/2009	10/28/2014	4	7	0.91	Probably Increasing	4	0	0.91	Probably Increasing	4	7	0.91	Probably Increasing
PTX06-1147	DNT4A	9/2/2009	10/28/2014	11	0	0.83	No Trend	4	0	0.99	Decreasing	11	0	0.83	No Trend
PTX06-1147	TNB135	9/2/2009	10/28/2014	3	8	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1147	DNB13	9/2/2009	10/28/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1147	PCE	9/2/2009	10/28/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1147	TCE	9/2/2009	10/28/2014	11	0	1.00	Decreasing	4	0	0.70	Stable	11	0	1.00	Decreasing
PTX06-1147	DCE12C	9/2/2009	10/28/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1147	DCA12	9/2/2009	10/28/2014	6	5	0.97	Decreasing	4	0	0.95	Decreasing	6	5	0.97	Decreasing
PTX06-1147	TCLME	9/2/2009	10/28/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1147	B	9/2/2009	10/28/2014	11	0	1.00	Increasing	4	0	0.92	Probably Decreasing	11	0	1.00	Increasing
PTX06-1147	CR	9/2/2009	10/28/2014	11	0	0.66	No Trend	4	0	0.96	Decreasing	11	0	0.66	No Trend
PTX06-1147	CR-6	9/2/2009	10/28/2014	3	8	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	8	0.00	N/A (<4 Detections in Dataset)
PTX06-1147	MN	9/2/2009	10/28/2014	11	0	0.64	No Trend	4	0	0.55	No Trend	11	0	0.64	No Trend
PTX06-1147	NI	9/2/2009	10/28/2014	11	0	0.98	Increasing	4	0	0.60	No Trend	11	0	0.98	Increasing
PTX06-1147	MO	9/2/2009	10/28/2014	11	0	1.00	Increasing	4	0	0.56	Stable	11	0	1.00	Increasing
PTX06-1147	AL	4/27/2010	5/6/2014	0	3	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1147	BA	4/27/2010	5/6/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1147	CA	4/27/2010	5/6/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1147	FE	9/2/2009	10/28/2014	11	0	0.77	Stable	4	0	0.95	Decreasing	11	0	0.77	Stable
PTX06-1147	K	4/27/2010	5/6/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1147	MG	4/27/2010	5/6/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1147	NA	4/27/2010	5/6/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1147	V	9/2/2009	10/28/2014	11	0	0.83	No Trend	4	0	0.95	Decreasing	11	0	0.83	No Trend
PTX06-1151	RDX	9/1/2009	8/12/2014	11	0	1.00	Decreasing	4	0	0.79	Stable	11	0	1.00	Decreasing
PTX06-1151	HMX	9/1/2009	8/12/2014	11	0	1.00	Decreasing	4	0	0.61	Stable	11	0	1.00	Decreasing
PTX06-1151	TNT	9/1/2009	8/12/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1151	DNT24	9/1/2009	8/12/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1151	DNT26	9/1/2009	8/12/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1151	DNT2A	9/1/2009	8/12/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX06-1151	DNT4A	9/1/2009	8/12/2014	9	2	0.94	Probably Increasing	4	0	0.72	No Trend	9	2	0.94	Probably Increasing
PTX06-1151	TNB135	9/1/2009	8/12/2014	1	10	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX06-1151	DNB13	9/1/2009	8/12/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1151	DIOXANE14	9/1/2009	8/12/2014	11	0	0.69	Stable	4	0	0.95	Probably Decreasing	11	0	0.69	Stable
PTX06-1151	PCE	5/20/2009	8/12/2014	12	0	1.00	Increasing	4	0	0.85	No Trend	11	0	1.00	Increasing
PTX06-1151	TCE	5/20/2009	8/12/2014	12	0	0.56	Stable	4	0	0.97	Decreasing	11	0	0.80	Stable
PTX06-1151	DCE12C	5/20/2009	8/12/2014	12	0	0.97	Increasing	4	0	0.81	Stable	11	0	0.94	Probably Increasing
PTX06-1151	DCA12	5/20/2009	8/12/2014	12	0	0.92	Probably Increasing	4	0	1.00	Decreasing	11	0	0.89	No Trend
PTX06-1151	TCLME	5/20/2009	8/12/2014	12	0	1.00	Increasing	4	0	0.88	Stable	11	0	1.00	Increasing
PTX06-1151	PERC	9/1/2009	8/12/2014	11	0	0.98	Decreasing	4	0	0.89	Stable	11	0	0.98	Decreasing
PTX06-1151	B	9/1/2009	8/12/2014	11	0	0.87	Stable	4	0	0.61	No Trend	11	0	0.87	Stable
PTX06-1151	MN	3/30/2010	2/19/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1151	AL	3/30/2010	2/19/2014	1	2	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	2	0.00	N/A (<4 Detections in Dataset)
PTX06-1151	BA	3/30/2010	2/19/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1151	CA	3/30/2010	2/19/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1151	FE	3/30/2010	2/19/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1151	K	3/30/2010	2/19/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1151	MG	3/30/2010	2/19/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1151	NA	3/30/2010	2/19/2014	3	0	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	RDX	1/29/2013	8/11/2014	1	3	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	HMX	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1159	TNT	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1159	DNT24	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1159	DNT26	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1159	DNT2A	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1159	DNT4A	1/29/2013	8/11/2014	4	0	0.93	Probably Increasing	4	0	0.93	Probably Increasing	4	0	0.93	Probably Increasing
PTX06-1159	TNB135	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1159	DNB13	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1159	DIOXANE14	1/29/2013	8/11/2014	4	0	0.97	Increasing	4	0	0.97	Increasing	4	0	0.97	Increasing
PTX06-1159	PCE	1/29/2013	8/11/2014	1	3	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	TCE	1/29/2013	8/11/2014	4	0	0.86	No Trend	4	0	0.86	No Trend	4	0	0.86	No Trend
PTX06-1159	DCE12C	1/29/2013	8/11/2014	4	0	0.86	No Trend	4	0	0.86	No Trend	4	0	0.86	No Trend
PTX06-1159	DCA12	1/29/2013	8/11/2014	4	0	0.83	No Trend	4	0	0.83	No Trend	4	0	0.83	No Trend
PTX06-1159	TCLME	1/29/2013	8/11/2014	4	0	0.76	No Trend	4	0	0.76	No Trend	4	0	0.76	No Trend
PTX06-1159	PERC	1/29/2013	8/11/2014	4	0	1.00	Increasing	4	0	1.00	Increasing	4	0	1.00	Increasing
PTX06-1159	B	1/29/2013	8/11/2014	4	0	0.96	Decreasing	4	0	0.96	Decreasing	4	0	0.96	Decreasing
PTX06-1159	MN	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	AL	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	BA	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	CA	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	FE	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	K	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	MG	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1159	NA	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1160	RDX	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	HMX	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	TNT	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	DNT24	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	DNT26	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	DNT2A	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	DNT4A	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	TNB135	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	DNB13	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	DIOXANE14	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	PCE	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	TCE	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	DCE12C	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	DCA12	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	TCLME	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	PERC	1/29/2013	8/11/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1160	B	1/29/2013	8/11/2014	4	0	0.67	Stable	4	0	0.67	Stable	4	0	0.67	Stable
PTX06-1160	MN	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1160	AL	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1160	BA	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1160	CA	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1160	FE	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1160	K	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1160	MG	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1160	NA	1/28/2014	1/28/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1166	RDX	1/28/2013	8/4/2014	4	0	0.74	No Trend	4	0	0.74	No Trend	4	0	0.74	No Trend
PTX06-1166	HMX	1/28/2013	8/4/2014	4	0	0.98	Increasing	4	0	0.98	Increasing	4	0	0.98	Increasing
PTX06-1166	TNT	1/28/2013	8/4/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1166	DNT24	1/28/2013	8/4/2014	4	0	0.75	No Trend	4	0	0.75	No Trend	4	0	0.75	No Trend
PTX06-1166	DNT26	1/28/2013	8/4/2014	4	0	0.76	Stable	4	0	0.76	Stable	4	0	0.76	Stable
PTX06-1166	DNT2A	1/28/2013	8/4/2014	4	0	0.89	No Trend	4	0	0.89	No Trend	4	0	0.89	No Trend

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1166	DNT4A	1/28/2013	8/4/2014	4	0	0.68	Stable	4	0	0.68	Stable	4	0	0.68	Stable
PTX06-1166	TNB135	1/28/2013	1/27/2014	0	3	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	3	0.00	N/A (<4 Samples in Dataset)
PTX06-1166	DNB13	1/28/2013	8/4/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1166	PCE	1/28/2013	8/4/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1166	TCE	1/28/2013	8/4/2014	4	0	0.52	No Trend	4	0	0.52	No Trend	4	0	0.52	No Trend
PTX06-1166	DCE12C	1/28/2013	8/4/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1166	DCA12	1/28/2013	8/4/2014	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	4	0.00	All Non-Detect
PTX06-1166	TCLME	1/28/2013	8/4/2014	4	0	0.87	Stable	4	0	0.87	Stable	4	0	0.87	Stable
PTX06-1166	B	1/28/2013	8/4/2014	4	0	0.52	No Trend	4	0	0.52	No Trend	4	0	0.52	No Trend
PTX06-1166	CR	1/28/2013	8/4/2014	4	0	0.91	Probably Increasing	4	0	0.91	Probably Increasing	4	0	0.91	Probably Increasing
PTX06-1166	CR-6	1/28/2013	8/4/2014	3	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)
PTX06-1166	MN	1/28/2013	8/4/2014	4	0	0.63	No Trend	4	0	0.63	No Trend	4	0	0.63	No Trend
PTX06-1166	NI	1/28/2013	8/4/2014	4	0	0.93	Probably Decreasing	4	0	0.93	Probably Decreasing	4	0	0.93	Probably Decreasing
PTX06-1166	MO	1/28/2013	8/4/2014	4	0	0.94	Probably Decreasing	4	0	0.94	Probably Decreasing	4	0	0.94	Probably Decreasing
PTX06-1166	AL	1/27/2014	1/27/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1166	BA	1/27/2014	1/27/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1166	CA	1/27/2014	1/27/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1166	FE	1/28/2013	8/4/2014	4	0	0.85	No Trend	4	0	0.85	No Trend	4	0	0.85	No Trend
PTX06-1166	K	1/27/2014	1/27/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1166	MG	1/27/2014	1/27/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1166	NA	1/27/2014	1/27/2014	1	0	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	0	0.00	N/A (<4 Detections in Dataset)
PTX06-1166	V	1/28/2013	8/4/2014	4	0	0.92	Probably Increasing	4	0	0.92	Probably Increasing	4	0	0.92	Probably Increasing
PTX07-1O01	RDX	12/10/1995	2/12/2014	28	0	1.00	Decreasing	4	0	0.71	Stable	9	0	0.78	Stable
PTX07-1O01	HMX	12/10/1995	2/12/2014	22	6	1.00	Decreasing	4	0	0.89	No Trend	9	0	0.87	No Trend
PTX07-1O01	TNT	12/10/1995	2/12/2014	1	25	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	9	0.00	All Non-Detect
PTX07-1O01	DNT24	12/10/1995	2/12/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX07-1O01	DNT26	12/10/1995	2/12/2014	1	27	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	9	0.00	All Non-Detect
PTX07-1O01	DNT2A	12/10/1995	2/12/2014	19	9	1.00	Decreasing	4	0	1.00	Increasing	9	0	0.84	No Trend
PTX07-1O01	DNT4A	12/10/1995	2/12/2014	18	9	1.00	Decreasing	4	0	0.96	Increasing	8	1	0.88	No Trend
PTX07-1O01	TNB135	12/10/1995	2/12/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX07-1O01	DNB13	12/10/1995	2/12/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX07-1O01	PCE	12/10/1995	2/12/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX07-1O01	TCE	12/10/1995	2/12/2014	3	21	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	1	8	0.00	N/A (<4 Detections in Dataset)
PTX07-1O01	DCE12C	12/10/1995	2/12/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX07-1O01	DCA12	12/10/1995	2/12/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX07-1O01	TCLME	12/10/1995	2/12/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	9	0.00	All Non-Detect
PTX07-1O01	B	12/10/1995	2/12/2014	22	0	1.00	Decreasing	4	0	0.74	Stable	9	0	0.96	Increasing
PTX07-1O01	MN	12/10/1995	2/12/2014	13	5	0.85	No Trend	4	0	0.82	Stable	2	1	0.00	N/A (<4 Detections in Dataset)
PTX07-1O01	AL	12/10/1995	2/12/2014	9	9	0.87	Stable	4	0	1.00	Increasing	1	2	0.00	N/A (<4 Detections in Dataset)
PTX07-1O01	BA	12/10/1995	2/12/2014	19	0	0.99	Decreasing	4	0	0.89	Stable	4	0	0.99	Decreasing
PTX07-1O01	CA	12/10/1995	2/12/2014	14	0	0.99	Decreasing	4	0	0.70	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O01	FE	12/10/1995	2/12/2014	17	0	0.87	No Trend	4	0	0.52	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O01	K	12/10/1995	2/12/2014	15	0	0.93	Probably Decreasing	4	0	0.66	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O01	MG	12/10/1995	2/12/2014	18	0	1.00	Decreasing	4	0	0.60	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O01	NA	12/10/1995	2/12/2014	15	0	1.00	Increasing	4	0	0.75	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O02	RDX	12/14/1995	8/7/2014	17	9	1.00	Decreasing	4	0	0.76	No Trend	11	0	1.00	Decreasing
PTX07-1O02	HMX	12/14/1995	8/7/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	10	0.00	All Non-Detect
PTX07-1O02	TNT	12/14/1995	8/7/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	DNT24	12/14/1995	8/7/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	DNT26	12/14/1995	8/7/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	DNT2A	12/14/1995	8/7/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	DNT4A	12/14/1995	8/7/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	TNB135	12/14/1995	8/7/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	DNB13	12/14/1995	8/7/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	PCE	12/14/1995	8/7/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	TCE	12/14/1995	8/7/2014	26	1	0.99	Decreasing	4	0	0.64	Stable	11	0	0.89	No Trend
PTX07-1O02	DCE12C	12/14/1995	8/7/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	DCA12	12/14/1995	8/7/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1O02	TCLME	12/14/1995	8/7/2014	1	24	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX07-1O02	B	12/14/1995	8/7/2014	23	2	0.96	Increasing	4	0	0.79	Stable	11	0	0.98	Decreasing
PTX07-1O02	MN	12/14/1995	2/12/2014	18	1	0.89	No Trend	4	0	0.61	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O02	AL	12/14/1995	2/12/2014	15	4	0.99	Decreasing	4	0	0.89	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O02	BA	12/14/1995	2/12/2014	20	0	0.88	Stable	4	0	0.84	Stable	4	0	0.83	Stable
PTX07-1O02	CA	12/14/1995	2/12/2014	17	0	1.00	Increasing	4	0	0.87	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O02	FE	12/14/1995	2/12/2014	18	0	0.65	No Trend	4	0	0.96	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O02	K	12/14/1995	2/12/2014	18	0	0.81	No Trend	4	0	0.68	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O02	MG	12/14/1995	2/12/2014	19	0	1.00	Increasing	4	0	0.96	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O02	NA	12/14/1995	2/12/2014	18	0	1.00	Increasing	4	0	0.85	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O03	RDX	12/6/1995	8/7/2014	23	0	1.00	Decreasing	4	0	0.92	Probably Increasing	6	0	0.97	Increasing
PTX07-1O03	HMX	12/6/1995	8/7/2014	18	5	0.87	Stable	4	0	0.87	No Trend	6	0	0.95	Increasing
PTX07-1O03	TNT	12/6/1995	8/7/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1O03	DNT24	12/6/1995	8/7/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX07-1O03	DNT26	12/6/1995	8/7/2014	0	23	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1O03	DNT2A	12/6/1995	8/7/2014	10	12	0.98	Increasing	4	0	0.94	Probably Increasing	6	0	0.96	Increasing
PTX07-1O03	DNT4A	12/6/1995	8/7/2014	3	19	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX07-1O03	TNB135	12/6/1995	8/7/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1O03	DNB13	12/6/1995	8/7/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1O03	PCE	12/6/1995	8/7/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1O03	TCE	12/6/1995	8/7/2014	1	18	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	5	0.00	N/A (<4 Detections in Dataset)
PTX07-1O03	DCE12C	12/6/1995	8/7/2014	0	15	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1O03	DCA12	12/6/1995	8/7/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1O03	TCLME	12/6/1995	8/7/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1O03	B	12/6/1995	8/7/2014	20	0	1.00	Decreasing	4	0	0.99	Increasing	6	0	0.99	Increasing
PTX07-1O03	MN	12/6/1995	8/7/2014	11	7	0.99	Decreasing	4	0	0.52	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX07-1O03	AL	12/6/1995	8/7/2014	7	11	0.64	Stable	4	0	0.90	Probably Increasing	2	1	0.00	N/A (<4 Detections in Dataset)
PTX07-1O03	BA	12/6/1995	8/7/2014	19	0	1.00	Decreasing	4	0	0.82	Stable	4	0	0.76	Stable
PTX07-1O03	CA	12/6/1995	8/7/2014	12	0	0.89	Stable	4	0	0.75	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O03	FE	12/6/1995	8/7/2014	18	0	0.80	Stable	4	0	0.86	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O03	K	12/6/1995	8/7/2014	14	0	0.99	Decreasing	4	0	0.80	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O03	MG	12/6/1995	8/7/2014	18	0	1.00	Increasing	4	0	0.93	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1O03	NA	12/6/1995	8/7/2014	14	0	1.00	Increasing	4	0	0.71	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1P02	RDX	12/13/1995	11/4/2014	21	5	1.00	Decreasing	4	0	0.78	No Trend	8	3	0.67	No Trend
PTX07-1P02	HMX	12/13/1995	11/4/2014	9	17	0.99	Decreasing	4	0	0.87	Stable	6	5	0.86	No Trend
PTX07-1P02	TNT	12/13/1995	11/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	DNT24	12/13/1995	11/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	DNT26	12/13/1995	11/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	DNT2A	12/13/1995	11/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	DNT4A	12/13/1995	11/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	TNB135	12/13/1995	11/4/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	DNB13	12/13/1995	11/4/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	DIOXANE14	4/27/2006	11/4/2014	11	2	0.93	Probably Increasing	4	0	0.79	Stable	11	0	0.93	Probably Increasing
PTX07-1P02	PCE	12/13/1995	11/4/2014	0	25	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	TCE	12/13/1995	11/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	DCE12C	12/13/1995	11/4/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	DCA12	12/13/1995	11/4/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	TCLME	12/13/1995	11/4/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX07-1P02	PERC	1/23/2001	11/4/2014	1	17	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	10	0.00	N/A (<4 Detections in Dataset)
PTX07-1P02	B	12/13/1995	11/4/2014	25	0	0.90	Probably Increasing	4	0	0.68	Stable	11	0	0.98	Decreasing
PTX07-1P02	MN	12/13/1995	5/22/2014	17	0	1.00	Decreasing	4	0	0.99	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1P02	AL	12/13/1995	5/22/2014	5	12	0.95	Decreasing	4	0	0.94	Probably Decreasing	0	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1P02	BA	12/13/1995	5/22/2014	18	0	1.00	Decreasing	4	0	0.99	Decreasing	4	0	0.99	Decreasing
PTX07-1P02	CA	12/13/1995	5/22/2014	11	0	1.00	Decreasing	4	0	0.98	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1P02	FE	12/13/1995	5/22/2014	17	0	1.00	Decreasing	4	0	0.92	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1P02	K	12/13/1995	5/22/2014	13	0	0.97	Increasing	4	0	0.86	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1P02	MG	12/13/1995	5/22/2014	17	0	0.99	Increasing	4	0	0.93	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1P02	NA	12/13/1995	5/22/2014	13	0	0.99	Increasing	4	0	0.98	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q01	RDX	12/12/1995	7/22/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	HMX	12/12/1995	7/22/2014	1	18	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX07-1Q01	TNT	12/12/1995	7/22/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	DNT24	12/12/1995	7/22/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	DNT26	12/12/1995	7/22/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	DNT2A	12/12/1995	7/22/2014	1	18	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX07-1Q01	DNT4A	12/12/1995	7/22/2014	1	18	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX07-1Q01	TNB135	12/12/1995	7/22/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	DNB13	12/12/1995	7/22/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	PCE	12/12/1995	7/22/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	TCE	12/12/1995	7/22/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	DCE12C	12/12/1995	7/22/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	DCA12	12/12/1995	7/22/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	TCLME	12/12/1995	7/22/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q01	B	12/12/1995	7/22/2014	16	0	0.96	Decreasing	4	0	0.90	Probably Decreasing	6	0	0.53	Stable
PTX07-1Q01	MN	12/12/1995	7/22/2014	8	5	0.73	Stable	4	0	0.81	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q01	AL	12/12/1995	7/22/2014	7	6	0.58	No Trend	4	0	0.70	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q01	BA	12/12/1995	7/22/2014	14	0	1.00	Decreasing	4	0	0.51	Stable	4	0	0.58	Stable
PTX07-1Q01	CA	12/12/1995	7/22/2014	10	0	1.00	Decreasing	4	0	0.93	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q01	FE	12/12/1995	7/22/2014	9	4	0.82	Stable	4	0	0.79	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q01	K	12/12/1995	7/22/2014	11	0	0.96	Increasing	4	0	0.88	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q01	MG	12/12/1995	7/22/2014	13	0	1.00	Decreasing	4	0	0.73	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q01	NA	12/12/1995	7/22/2014	11	0	0.63	No Trend	4	0	0.61	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q02	RDX	11/1/1995	7/22/2014	1	19	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX07-1Q02	HMX	11/1/1995	7/22/2014	1	19	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX07-1Q02	TNT	11/1/1995	7/22/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q02	DNT24	11/1/1995	7/22/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q02	DNT26	11/1/1995	7/22/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX07-1Q02	DNT2A	11/1/1995	7/22/2014	1	19	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX07-1Q02	DNT4A	11/1/1995	7/22/2014	1	19	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX07-1Q02	TNB135	11/1/1995	7/22/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q02	DNB13	11/1/1995	7/22/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q02	PCE	11/1/1995	7/22/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q02	TCE	11/1/1995	7/22/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q02	DCE12C	11/1/1995	7/22/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q02	DCA12	11/1/1995	7/22/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q02	TCLME	11/1/1995	7/22/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q02	B	11/1/1995	7/22/2014	14	1	0.99	Increasing	4	0	1.00	Decreasing	6	0	0.78	Stable
PTX07-1Q02	MN	11/1/1995	7/22/2014	7	5	1.00	Decreasing	4	0	1.00	Decreasing	2	1	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q02	AL	11/1/1995	7/22/2014	6	6	0.76	Stable	4	0	0.84	No Trend	0	3	0.00	N/A (<4 Samples in Dataset)
PTX07-1Q02	BA	11/1/1995	7/22/2014	13	0	0.89	No Trend	4	0	0.94	Probably Increasing	4	0	0.84	No Trend
PTX07-1Q02	CA	11/1/1995	7/22/2014	9	0	0.78	No Trend	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q02	FE	11/1/1995	7/22/2014	10	2	0.59	No Trend	4	0	0.63	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q02	K	11/1/1995	7/22/2014	10	0	1.00	Decreasing	4	0	0.83	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q02	MG	11/1/1995	7/22/2014	12	0	0.84	Stable	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q02	NA	11/1/1995	7/22/2014	10	0	1.00	Increasing	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q03	RDX	12/12/1995	7/23/2014	1	19	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	6	0.00	All Non-Detect
PTX07-1Q03	HMX	12/12/1995	7/23/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	TNT	12/12/1995	7/23/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	DNT24	12/12/1995	7/23/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	DNT26	12/12/1995	7/23/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	DNT2A	12/12/1995	7/23/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	DNT4A	12/12/1995	7/23/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	TNB135	12/12/1995	7/23/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	DNB13	12/12/1995	7/23/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	PCE	12/12/1995	7/23/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	TCE	12/12/1995	7/23/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	DCE12C	12/12/1995	7/23/2014	0	15	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	DCA12	12/12/1995	7/23/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	TCLME	12/12/1995	7/23/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	6	0.00	All Non-Detect
PTX07-1Q03	B	12/12/1995	7/23/2014	16	1	0.66	No Trend	4	0	0.59	Stable	6	0	0.97	Decreasing
PTX07-1Q03	MN	12/12/1995	7/23/2014	8	6	0.74	No Trend	4	0	0.96	Increasing	1	2	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q03	AL	12/12/1995	7/23/2014	7	7	0.61	Stable	4	0	0.72	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q03	BA	12/12/1995	7/23/2014	15	0	0.99	Decreasing	4	0	0.75	No Trend	4	0	0.80	No Trend
PTX07-1Q03	CA	12/12/1995	7/23/2014	10	0	0.84	Stable	4	0	0.69	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q03	FE	12/12/1995	7/23/2014	13	1	0.99	Increasing	4	0	0.58	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q03	K	12/12/1995	7/23/2014	10	0	1.00	Increasing	4	0	0.63	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q03	MG	12/12/1995	7/23/2014	14	0	1.00	Increasing	4	0	0.55	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX07-1Q03	NA	12/12/1995	7/23/2014	9	1	0.94	Probably Increasing	4	0	0.73	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1001	RDX	12/11/1995	5/21/2014	11	8	0.98	Increasing	4	0	0.61	No Trend	5	0	0.81	No Trend
PTX08-1001	HMX	12/11/1995	5/21/2014	6	13	0.94	Probably Increasing	4	0	0.86	No Trend	5	0	0.97	Increasing
PTX08-1001	TNT	12/11/1995	5/21/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	DNT24	12/11/1995	5/21/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	DNT26	12/11/1995	5/21/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	DNT2A	12/11/1995	5/21/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	DNT4A	12/11/1995	5/21/2014	1	18	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	5	0.00	All Non-Detect
PTX08-1001	TNB135	12/11/1995	5/21/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	DNB13	12/11/1995	5/21/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	DIOXANE14	4/27/2006	5/21/2014	0	7	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	PCE	12/11/1995	5/21/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	TCE	12/11/1995	5/21/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	DCE12C	12/11/1995	5/21/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	DCA12	12/11/1995	5/21/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	TCLME	12/11/1995	5/21/2014	0	17	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1001	PERC	4/19/2001	5/21/2014	13	0	0.99	Decreasing	4	0	0.53	No Trend	5	0	1.00	Decreasing
PTX08-1001	B	12/11/1995	5/21/2014	21	0	0.99	Increasing	4	0	0.90	Probably Increasing	5	0	0.96	Increasing
PTX08-1001	MN	12/11/1995	5/21/2014	18	2	0.64	No Trend	4	0	0.83	Stable	2	1	0.00	N/A (<4 Detections in Dataset)
PTX08-1001	AL	12/11/1995	5/21/2014	11	9	0.68	No Trend	4	0	0.97	Decreasing	0	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1001	BA	12/11/1995	5/21/2014	20	1	0.98	Increasing	4	0	0.86	No Trend	4	0	0.83	No Trend
PTX08-1001	CA	12/11/1995	5/21/2014	12	0	0.92	Probably Decreasing	4	0	0.98	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1001	FE	12/11/1995	5/21/2014	20	0	0.66	No Trend	4	0	0.95	Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1001	K	12/11/1995	5/21/2014	15	0	1.00	Decreasing	4	0	0.58	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1001	MG	12/11/1995	5/21/2014	19	0	1.00	Decreasing	4	0	0.54	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1001	NA	12/11/1995	5/21/2014	15	0	0.69	No Trend	4	0	0.53	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1002	RDX	12/14/1995	11/4/2014	27	1	0.99	Decreasing	4	0	0.80	Stable	8	0	0.60	No Trend
PTX08-1002	HMX	12/14/1995	11/4/2014	27	1	1.00	Decreasing	4	0	0.91	Probably Increasing	8	0	1.00	Increasing
PTX08-1002	TNT	12/14/1995	11/4/2014	25	3	0.99	Decreasing	4	0	0.86	No Trend	8	0	1.00	Increasing
PTX08-1002	DNT24	12/14/1995	11/4/2014	23	4	1.00	Decreasing	4	0	0.99	Increasing	7	1	0.97	Increasing
PTX08-1002	DNT26	12/14/1995	11/4/2014	3	23	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	2	6	0.00	N/A (<4 Detections in Dataset)
PTX08-1002	DNT2A	12/14/1995	11/4/2014	21	5	0.99	Decreasing	4	0	0.81	No Trend	8	0	0.98	Increasing

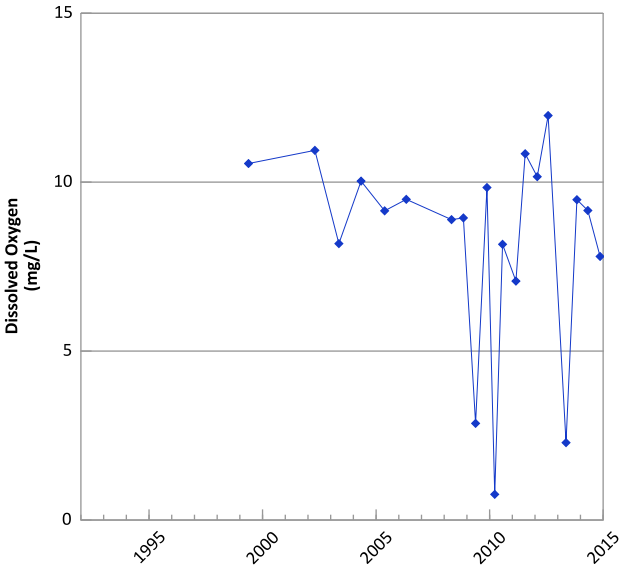
				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX08-1002	DNT4A	12/14/1995	11/4/2014	15	11	0.85	No Trend	4	0	0.92	Probably Decreasing	8	0	0.81	No Trend
PTX08-1002	TNB135	12/14/1995	11/4/2014	25	3	1.00	Decreasing	4	0	0.93	Probably Increasing	8	0	1.00	Increasing
PTX08-1002	DNB13	12/14/1995	11/4/2014	3	23	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	0	8	0.00	All Non-Detect
PTX08-1002	PCE	12/14/1995	11/4/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	8	0.00	All Non-Detect
PTX08-1002	TCE	12/14/1995	11/4/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	8	0.00	All Non-Detect
PTX08-1002	DCE12C	12/14/1995	11/4/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	8	0.00	All Non-Detect
PTX08-1002	DCA12	12/14/1995	11/4/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	8	0.00	All Non-Detect
PTX08-1002	TCLME	12/14/1995	11/4/2014	0	22	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	8	0.00	All Non-Detect
PTX08-1002	B	12/14/1995	11/4/2014	26	0	1.00	Decreasing	4	0	0.95	Decreasing	8	0	1.00	Decreasing
PTX08-1002	CR	12/14/1995	11/4/2014	20	9	0.65	No Trend	4	0	0.59	No Trend	2	6	0.00	N/A (<4 Detections in Dataset)
PTX08-1002	CR-6	3/5/1996	11/4/2014	2	26	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	8	0.00	All Non-Detect
PTX08-1002	MN	12/14/1995	5/21/2014	17	10	0.86	No Trend	4	0	0.93	Probably Increasing	7	0	0.99	Increasing
PTX08-1002	AL	12/14/1995	5/21/2014	9	15	0.84	No Trend	4	0	0.61	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1002	BA	12/14/1995	5/21/2014	25	0	1.00	Decreasing	4	0	0.98	Increasing	4	0	0.98	Increasing
PTX08-1002	CA	12/14/1995	5/21/2014	18	0	0.99	Decreasing	4	0	0.95	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1002	FE	12/14/1995	5/21/2014	23	1	0.91	Probably Increasing	4	0	0.57	Stable	7	0	0.76	Stable
PTX08-1002	K	12/14/1995	5/21/2014	17	0	1.00	Decreasing	4	0	0.77	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1002	MG	12/14/1995	5/21/2014	23	0	0.98	Decreasing	4	0	0.52	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1002	NA	12/14/1995	5/21/2014	17	0	0.96	Increasing	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	RDX	11/29/1995	4/30/2014	7	14	0.68	No Trend	4	0	0.97	Increasing	7	0	0.68	No Trend
PTX08-1003	HMX	11/29/1995	4/30/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	TNT	11/29/1995	4/30/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	DNT24	11/29/1995	4/30/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	DNT26	11/29/1995	4/30/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	DNT2A	11/29/1995	4/30/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	DNT4A	11/29/1995	4/30/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	TNB135	11/29/1995	4/30/2014	0	21	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	DNB13	11/29/1995	4/30/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	DIOXANE14	11/11/2002	4/30/2014	1	10	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	1	6	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	PCE	11/29/1995	4/30/2014	0	19	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	TCE	11/29/1995	4/30/2014	6	15	0.92	Probably Increasing	4	0	0.79	Stable	6	1	0.92	Probably Increasing
PTX08-1003	DCE12C	11/29/1995	4/30/2014	5	12	0.81	Stable	4	0	0.57	Stable	5	2	0.81	Stable
PTX08-1003	DCA12	11/29/1995	4/30/2014	0	20	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	TCLME	11/29/1995	4/30/2014	0	18	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	7	0.00	All Non-Detect
PTX08-1003	PERC	10/19/2000	4/30/2014	16	0	1.00	Decreasing	4	0	0.91	Probably Decreasing	7	0	1.00	Decreasing
PTX08-1003	B	11/29/1995	4/30/2014	20	1	0.97	Increasing	4	0	0.79	Stable	7	0	0.85	Stable
PTX08-1003	MN	11/29/1995	4/30/2014	17	1	0.75	No Trend	4	0	0.68	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	AL	11/29/1995	4/30/2014	10	8	0.96	Decreasing	4	0	0.81	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	BA	11/29/1995	4/30/2014	18	0	0.92	Probably Increasing	4	0	0.95	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	CA	11/29/1995	4/30/2014	13	0	1.00	Increasing	4	0	0.54	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	FE	11/29/1995	4/30/2014	18	0	0.90	No Trend	4	0	0.88	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	K	11/29/1995	4/30/2014	15	0	0.98	Increasing	4	0	0.69	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	MG	11/29/1995	4/30/2014	18	0	1.00	Increasing	4	0	0.97	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1003	NA	11/29/1995	4/30/2014	15	0	1.00	Increasing	4	0	1.00	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	RDX	11/29/1995	8/12/2014	27	1	1.00	Decreasing	4	0	0.63	No Trend	11	0	1.00	Decreasing
PTX08-1005	HMX	11/29/1995	8/12/2014	26	2	1.00	Decreasing	4	0	0.83	No Trend	11	0	1.00	Decreasing
PTX08-1005	TNT	11/29/1995	8/12/2014	1	27	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX08-1005	DNT24	11/29/1995	8/12/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1005	DNT26	11/29/1995	8/12/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1005	DNT2A	11/29/1995	8/12/2014	11	17	1.00	Decreasing	4	0	0.89	Stable	1	10	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	DNT4A	11/29/1995	8/12/2014	26	2	0.95	Probably Increasing	4	0	0.61	Stable	9	2	0.96	Increasing
PTX08-1005	TNB135	11/29/1995	8/12/2014	1	27	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX08-1005	DNB13	11/29/1995	8/12/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1005	DIOXANE14	11/6/2003	8/12/2014	16	2	0.85	No Trend	4	0	0.94	Probably Decreasing	11	0	1.00	Decreasing
PTX08-1005	PCE	11/29/1995	8/12/2014	21	8	1.00	Decreasing	4	0	0.79	No Trend	11	0	0.99	Increasing
PTX08-1005	TCE	11/29/1995	8/12/2014	31	0	0.97	Increasing	4	0	0.57	Stable	11	0	0.57	Stable
PTX08-1005	DCE12C	11/29/1995	8/12/2014	21	5	1.00	Increasing	4	0	0.87	Stable	11	0	0.99	Decreasing
PTX08-1005	DCA12	11/29/1995	8/12/2014	26	4	1.00	Decreasing	4	0	0.99	Increasing	11	0	0.96	Decreasing
PTX08-1005	TCLME	11/29/1995	8/12/2014	23	6	0.64	No Trend	4	0	0.97	Increasing	11	0	0.55	No Trend
PTX08-1005	PERC	4/25/2000	8/12/2014	22	0	1.00	Decreasing	4	0	0.96	Increasing	11	0	0.68	No Trend
PTX08-1005	B	11/29/1995	8/12/2014	25	0	0.87	No Trend	4	0	0.59	No Trend	11	0	0.88	Stable
PTX08-1005	CR	11/29/1995	8/12/2014	19	1	0.98	Increasing	4	0	0.50	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	CR-6	3/5/1996	8/12/2014	8	7	0.93	Probably Increasing	4	0	0.78	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	MN	11/29/1995	2/10/2014	9	11	1.00	Decreasing	4	0	0.59	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	AL	11/29/1995	2/10/2014	6	14	0.96	Decreasing	4	0	0.82	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	BA	11/29/1995	2/10/2014	21	0	1.00	Increasing	4	0	0.76	Stable	4	0	0.74	Stable
PTX08-1005	CA	11/29/1995	2/10/2014	16	0	0.99	Increasing	4	0	0.52	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	FE	11/29/1995	2/10/2014	13	6	0.92	Probably Increasing	4	0	0.78	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	K	11/29/1995	2/10/2014	17	0	0.87	Stable	4	0	0.55	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	MG	11/29/1995	2/10/2014	20	0	1.00	Increasing	4	0	0.76	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1005	NA	11/29/1995	2/10/2014	17	0	1.00	Decreasing	4	0	0.74	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1006	RDX	11/28/1995	8/12/2014	27	3	1.00	Increasing	4	0	1.00	Decreasing	11	0	0.57	Stable

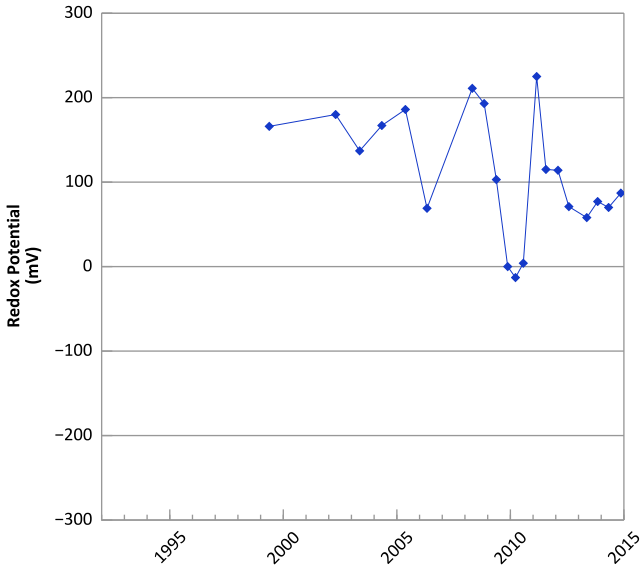
				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX08-1006	HMX	11/28/1995	8/12/2014	18	12	1.00	Increasing	4	0	0.82	No Trend	11	0	1.00	Increasing
PTX08-1006	TNT	11/28/1995	8/12/2014	1	28	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX08-1006	DNT24	11/28/1995	8/12/2014	0	31	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1006	DNT26	11/28/1995	8/12/2014	7	23	1.00	Decreasing	4	0	1.00	Decreasing	5	6	0.94	Probably Decreasing
PTX08-1006	DNT2A	11/28/1995	8/12/2014	11	19	1.00	Decreasing	4	0	0.87	No Trend	10	1	1.00	Increasing
PTX08-1006	DNT4A	11/28/1995	8/12/2014	28	2	0.92	Probably Decreasing	4	0	0.86	Stable	11	0	0.93	Probably Increasing
PTX08-1006	TNB135	11/28/1995	8/12/2014	2	28	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	2	9	0.00	N/A (<4 Detections in Dataset)
PTX08-1006	DNB13	11/28/1995	8/12/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1006	DIOXANE14	11/11/2002	8/12/2014	20	0	0.98	Decreasing	4	0	0.93	Probably Decreasing	11	0	1.00	Decreasing
PTX08-1006	PCE	11/28/1995	8/12/2014	24	8	0.98	Increasing	4	0	0.97	Decreasing	11	0	0.77	Stable
PTX08-1006	TCE	11/28/1995	8/12/2014	32	1	0.99	Increasing	4	0	0.94	Probably Increasing	11	0	1.00	Increasing
PTX08-1006	DCE12C	11/28/1995	8/12/2014	24	4	0.90	Stable	4	0	0.88	Stable	11	0	0.86	Stable
PTX08-1006	DCA12	11/28/1995	8/12/2014	31	0	0.63	Stable	4	0	0.99	Decreasing	11	0	1.00	Decreasing
PTX08-1006	TCLME	11/28/1995	8/12/2014	30	1	0.99	Increasing	4	0	0.99	Decreasing	11	0	1.00	Decreasing
PTX08-1006	PERC	4/25/2000	8/12/2014	25	0	1.00	Increasing	4	0	0.82	Stable	11	0	1.00	Decreasing
PTX08-1006	B	11/28/1995	8/12/2014	26	0	1.00	Increasing	4	0	0.64	Stable	11	0	0.95	Decreasing
PTX08-1006	MN	11/28/1995	2/10/2014	13	8	0.57	No Trend	4	0	0.71	No Trend	1	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1006	AL	11/28/1995	2/10/2014	6	15	1.00	Decreasing	4	0	0.84	Stable	0	3	0.00	N/A (<4 Samples in Dataset)
PTX08-1006	BA	11/28/1995	2/10/2014	22	0	1.00	Decreasing	4	0	0.54	Stable	4	0	1.00	Decreasing
PTX08-1006	CA	11/28/1995	2/10/2014	14	0	1.00	Increasing	4	0	0.52	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1006	FE	11/28/1995	2/10/2014	16	5	0.99	Increasing	4	0	0.90	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1006	K	11/28/1995	2/10/2014	17	0	1.00	Increasing	4	0	0.58	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1006	MG	11/28/1995	2/10/2014	21	0	1.00	Increasing	4	0	0.72	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1006	NA	11/28/1995	2/10/2014	17	0	1.00	Increasing	4	0	0.53	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	RDX	3/11/1996	5/19/2014	9	4	0.97	Increasing	4	0	0.90	No Trend	5	0	0.87	No Trend
PTX08-1007	HMX	3/11/1996	5/19/2014	4	9	1.00	Increasing	4	0	1.00	Increasing	4	1	1.00	Increasing
PTX08-1007	TNT	3/11/1996	5/19/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1007	DNT24	3/11/1996	5/19/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1007	DNT26	3/11/1996	5/19/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1007	DNT2A	3/11/1996	5/19/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1007	DNT4A	3/11/1996	5/19/2014	3	9	0.00	N/A (<4 Detections in Dataset)	3	1	0.00	N/A (<4 Detections in Dataset)	3	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	TNB135	3/11/1996	5/19/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1007	DNB13	3/11/1996	5/19/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1007	DIOXANE14	8/7/2002	5/19/2014	4	2	0.93	Probably Increasing	4	0	0.93	Probably Increasing	4	1	0.93	Probably Increasing
PTX08-1007	PCE	3/11/1996	5/19/2014	8	8	0.98	Decreasing	4	0	0.79	No Trend	5	0	0.65	Stable
PTX08-1007	TCE	3/11/1996	5/19/2014	16	0	0.89	No Trend	4	0	0.58	No Trend	5	0	0.79	No Trend
PTX08-1007	DCE12C	3/11/1996	5/19/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX08-1007	DCA12	3/11/1996	5/19/2014	13	3	0.72	No Trend	4	0	0.55	No Trend	5	0	0.73	No Trend
PTX08-1007	TCLME	3/11/1996	5/19/2014	16	0	0.75	Stable	4	0	0.51	Stable	5	0	0.61	Stable
PTX08-1007	PERC	4/23/2001	5/19/2014	4	6	0.89	Stable	4	0	0.89	Stable	1	4	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	B	12/20/1995	5/19/2014	14	1	1.00	Increasing	4	0	0.87	No Trend	5	0	0.86	No Trend
PTX08-1007	CR	12/20/1995	5/19/2014	17	1	0.86	No Trend	4	0	1.00	Decreasing	5	1	1.00	Decreasing
PTX08-1007	CR-6	3/11/1996	5/19/2014	8	7	0.99	Increasing	4	0	0.69	No Trend	3	3	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	MN	12/20/1995	5/19/2014	14	3	0.91	Probably Increasing	4	0	0.99	Decreasing	4	1	0.96	Decreasing
PTX08-1007	AL	12/20/1995	5/19/2014	9	6	0.96	Decreasing	4	0	0.59	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	BA	12/20/1995	5/19/2014	16	0	0.77	Stable	4	0	0.56	Stable	4	0	1.00	Increasing
PTX08-1007	CA	12/20/1995	5/19/2014	13	0	0.95	Probably Increasing	4	0	0.98	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	FE	12/20/1995	5/19/2014	17	0	0.95	Increasing	4	0	0.77	Stable	5	0	0.94	Probably Decreasing
PTX08-1007	K	12/20/1995	5/19/2014	13	0	1.00	Increasing	4	0	0.97	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	MG	12/20/1995	5/19/2014	15	0	1.00	Increasing	4	0	0.96	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1007	NA	12/20/1995	5/19/2014	13	0	0.80	No Trend	4	0	0.94	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1008	RDX	11/14/1995	11/5/2014	2	31	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	12	0.00	All Non-Detect
PTX08-1008	HMX	11/14/1995	11/5/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX08-1008	TNT	11/14/1995	11/5/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX08-1008	DNT24	11/14/1995	11/5/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX08-1008	DNT26	11/14/1995	11/5/2014	1	32	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	12	0.00	All Non-Detect
PTX08-1008	DNT2A	11/14/1995	11/5/2014	1	32	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	12	0.00	All Non-Detect
PTX08-1008	DNT4A	11/14/1995	11/5/2014	10	23	0.95	Increasing	4	0	0.97	Decreasing	0	12	0.00	All Non-Detect
PTX08-1008	TNB135	11/14/1995	11/5/2014	0	33	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX08-1008	DNB13	11/14/1995	11/5/2014	1	27	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	12	0.00	All Non-Detect
PTX08-1008	DIOXANE14	2/10/2004	11/5/2014	1	20	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	12	0.00	All Non-Detect
PTX08-1008	PCE	11/14/1995	11/5/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX08-1008	TCE	11/14/1995	11/5/2014	10	23	1.00	Decreasing	4	0	0.98	Decreasing	3	9	0.00	N/A (<4 Detections in Dataset)
PTX08-1008	DCE12C	11/14/1995	11/5/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX08-1008	DCA12	11/14/1995	11/5/2014	0	28	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	12	0.00	All Non-Detect
PTX08-1008	TCLME	11/14/1995	11/5/2014	21	7	1.00	Decreasing	4	0	0.96	Increasing	11	1	0.81	No Trend
PTX08-1008	PERC	8/23/1999	11/5/2014	9	20	0.77	No Trend	4	0	0.73	No Trend	8	4	0.94	Probably Increasing
PTX08-1008	B	11/14/1995	11/5/2014	38	0	1.00	Increasing	4	0	0.97	Increasing	12	0	0.67	No Trend
PTX08-1008	CR	11/14/1995	11/5/2014	39	0	1.00	Decreasing	4	0	0.97	Decreasing	12	0	0.90	Probably Decreasing
PTX08-1008	CR-6	11/14/1995	11/5/2014	39	0	1.00	Decreasing	4	0	0.95	Probably Decreasing	11	0	0.93	Probably Decreasing
PTX08-1008	MN	11/14/1995	11/5/2014	22	16	0.93	Probably Increasing	4	0	0.74	No Trend	12	0	0.58	No Trend
PTX08-1008	NI	11/14/1995	11/5/2014	32	5	1.00	Decreasing	4	0	0.92	Probably Decreasing	12	0	0.76	Stable

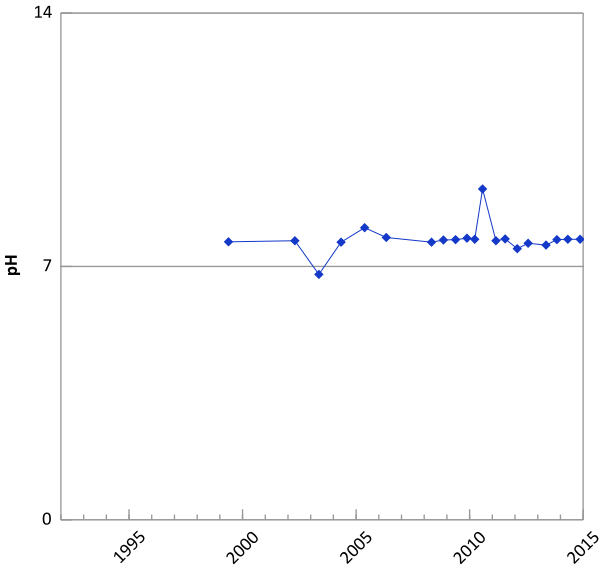
Perched LTM Linear Regression Concentration Trends

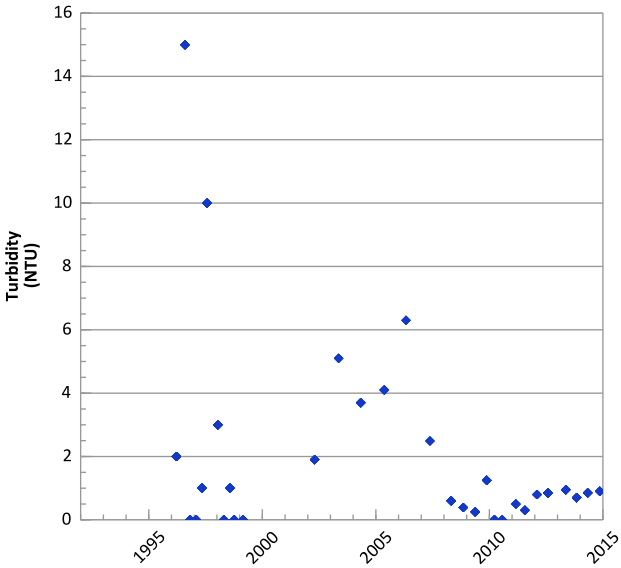
				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX08-1008	MO	11/14/1995	11/5/2014	30	7	0.96	Decreasing	4	0	0.68	Stable	12	0	0.98	Decreasing
PTX08-1008	AL	11/14/1995	5/21/2014	14	15	0.90	Stable	4	0	0.84	No Trend	2	1	0.00	N/A (<4 Detections in Dataset)
PTX08-1008	BA	11/14/1995	5/21/2014	29	1	0.90	Stable	4	0	0.93	Probably Increasing	4	0	0.88	No Trend
PTX08-1008	CA	11/14/1995	5/21/2014	18	0	1.00	Increasing	4	0	0.95	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1008	FE	11/14/1995	11/5/2014	27	9	1.00	Increasing	4	0	0.73	No Trend	12	0	0.73	Stable
PTX08-1008	K	11/14/1995	5/21/2014	21	0	1.00	Decreasing	4	0	0.97	Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1008	MG	11/14/1995	5/21/2014	28	0	0.82	No Trend	4	0	0.81	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1008	NA	11/14/1995	5/21/2014	21	0	1.00	Decreasing	4	0	0.82	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1008	V	11/14/1995	11/5/2014	31	0	0.93	Probably Increasing	4	0	0.61	No Trend	12	0	0.93	Probably Decreasing
PTX08-1009	RDX	11/14/1995	11/4/2014	17	10	0.91	Probably Decreasing	4	0	0.62	No Trend	11	0	0.89	No Trend
PTX08-1009	HMX	11/14/1995	11/4/2014	8	19	1.00	Increasing	4	0	0.95	Probably Increasing	8	3	1.00	Increasing
PTX08-1009	TNT	11/14/1995	11/4/2014	2	25	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX08-1009	DNT24	11/14/1995	11/4/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1009	DNT26	11/14/1995	11/4/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1009	DNT2A	11/14/1995	11/4/2014	1	26	0.00	N/A (<4 Detections in Dataset)	1	3	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX08-1009	DNT4A	11/14/1995	11/4/2014	9	18	0.69	No Trend	4	0	0.96	Decreasing	2	9	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	TNB135	11/14/1995	11/4/2014	0	27	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1009	DNB13	11/14/1995	11/4/2014	0	24	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1009	PCE	11/14/1995	11/4/2014	0	29	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1009	TCE	11/14/1995	11/4/2014	16	14	1.00	Decreasing	4	0	0.66	Stable	2	9	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	DCE12C	11/14/1995	11/4/2014	0	26	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	11	0.00	All Non-Detect
PTX08-1009	DCA12	11/14/1995	11/4/2014	2	25	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	0	11	0.00	All Non-Detect
PTX08-1009	TCLME	11/14/1995	11/4/2014	11	17	0.67	Stable	4	0	0.95	Increasing	5	6	0.78	No Trend
PTX08-1009	B	11/14/1995	11/4/2014	27	0	1.00	Increasing	4	0	0.93	Probably Increasing	11	0	1.00	Increasing
PTX08-1009	CR	11/14/1995	11/4/2014	28	2	1.00	Decreasing	4	0	0.73	No Trend	9	2	0.81	Stable
PTX08-1009	CR-6	11/14/1995	11/4/2014	19	11	1.00	Decreasing	4	0	0.66	No Trend	2	10	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	MN	11/14/1995	11/4/2014	18	10	0.99	Increasing	4	0	0.94	Probably Decreasing	7	4	0.74	No Trend
PTX08-1009	NI	11/14/1995	11/4/2014	24	4	1.00	Decreasing	4	0	0.58	Stable	10	1	0.94	Probably Decreasing
PTX08-1009	MO	11/14/1995	11/4/2014	25	4	0.99	Increasing	4	0	0.67	Stable	11	0	1.00	Decreasing
PTX08-1009	AL	11/14/1995	5/8/2014	4	17	0.82	Stable	4	0	0.82	Stable	1	2	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	BA	11/14/1995	5/8/2014	21	1	0.92	Probably Increasing	4	0	0.84	Stable	4	0	0.75	Stable
PTX08-1009	CA	11/14/1995	5/8/2014	14	0	1.00	Decreasing	4	0	0.79	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	FE	11/14/1995	11/4/2014	25	4	0.99	Increasing	4	0	0.99	Decreasing	10	1	0.94	Probably Decreasing
PTX08-1009	K	11/14/1995	5/8/2014	17	0	0.80	Stable	4	0	0.55	No Trend	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	MG	11/14/1995	5/8/2014	20	0	0.86	No Trend	4	0	0.56	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	NA	11/14/1995	5/8/2014	17	0	1.00	Increasing	4	0	0.92	Probably Increasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX08-1009	V	11/14/1995	11/4/2014	27	0	0.99	Increasing	4	0	0.77	Stable	11	0	0.72	No Trend
PTX10-1014	RDX	11/28/1995	5/15/2014	10	3	0.97	Decreasing	4	0	0.88	Stable	5	0	0.59	No Trend
PTX10-1014	HMX	11/28/1995	5/15/2014	6	7	1.00	Decreasing	4	0	0.78	Stable	4	1	0.73	Stable
PTX10-1014	TNT	11/28/1995	5/15/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	DNT24	7/7/1992	5/15/2014	0	14	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	DNT26	11/28/1995	5/15/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	DNT2A	11/28/1995	5/15/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	DNT4A	11/28/1995	5/15/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	TNB135	11/28/1995	5/15/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	DNB13	11/28/1995	5/15/2014	0	13	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	DIOXANE14	5/23/2002	5/15/2014	0	6	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	PCE	7/7/1992	5/15/2014	5	11	0.77	Stable	4	0	0.94	Probably Decreasing	5	0	0.77	Stable
PTX10-1014	TCE	7/7/1992	5/15/2014	15	1	1.00	Decreasing	4	0	0.96	Decreasing	5	0	0.97	Decreasing
PTX10-1014	DCE12C	11/28/1995	5/15/2014	0	11	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	DCA12	7/7/1992	5/15/2014	0	16	0.00	All Non-Detect	0	4	0.00	All Non-Detect	0	5	0.00	All Non-Detect
PTX10-1014	TCLME	7/7/1992	5/15/2014	5	11	0.54	Stable	4	0	0.82	No Trend	5	0	0.54	Stable
PTX10-1014	PERC	7/31/2000	5/15/2014	6	3	0.99	Decreasing	4	0	0.88	Stable	2	3	0.00	N/A (<4 Detections in Dataset)
PTX10-1014	B	11/28/1995	5/15/2014	16	0	0.86	No Trend	4	0	0.77	Stable	5	0	0.67	No Trend
PTX10-1014	CR	7/7/1992	5/15/2014	15	2	1.00	Decreasing	4	0	0.88	No Trend	4	1	0.82	No Trend
PTX10-1014	CR-6	11/28/1995	5/15/2014	2	12	0.00	N/A (<4 Detections in Dataset)	2	2	0.00	N/A (<4 Detections in Dataset)	1	4	0.00	N/A (<4 Detections in Dataset)
PTX10-1014	MN	11/28/1995	5/15/2014	16	0	0.75	No Trend	4	0	0.82	Stable	5	0	0.84	Stable
PTX10-1014	NI	11/28/1995	5/15/2014	16	0	0.82	Stable	4	0	0.82	Stable	5	0	0.79	Stable
PTX10-1014	MO	11/28/1995	5/15/2014	16	0	0.83	Stable	4	0	0.93	Probably Increasing	5	0	0.83	No Trend
PTX10-1014	AL	11/28/1995	5/15/2014	6	8	0.81	Stable	4	0	0.64	Stable	0	3	0.00	N/A (<4 Samples in Dataset)
PTX10-1014	BA	7/7/1992	5/15/2014	16	0	0.99	Decreasing	4	0	0.88	Stable	4	0	0.91	Probably Decreasing
PTX10-1014	CA	11/28/1995	5/15/2014	12	0	1.00	Increasing	4	0	0.95	Probably Decreasing	3	0	0.00	N/A (<4 Detections in Dataset)
PTX10-1014	FE	11/28/1995	5/15/2014	16	0	1.00	Decreasing	4	0	0.51	No Trend	5	0	0.68	No Trend
PTX10-1014	K	11/28/1995	5/15/2014	12	0	0.96	Decreasing	4	0	0.82	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX10-1014	MG	11/28/1995	5/15/2014	14	0	1.00	Increasing	4	0	0.81	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX10-1014	NA	11/28/1995	5/15/2014	12	0	1.00	Increasing	4	0	0.81	Stable	3	0	0.00	N/A (<4 Detections in Dataset)
PTX10-1014	V	11/28/1995	5/15/2014	16	0	0.99	Decreasing	4	0	0.78	No Trend	5	0	0.77	No Trend

1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



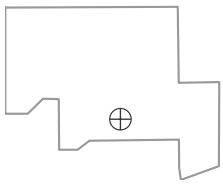






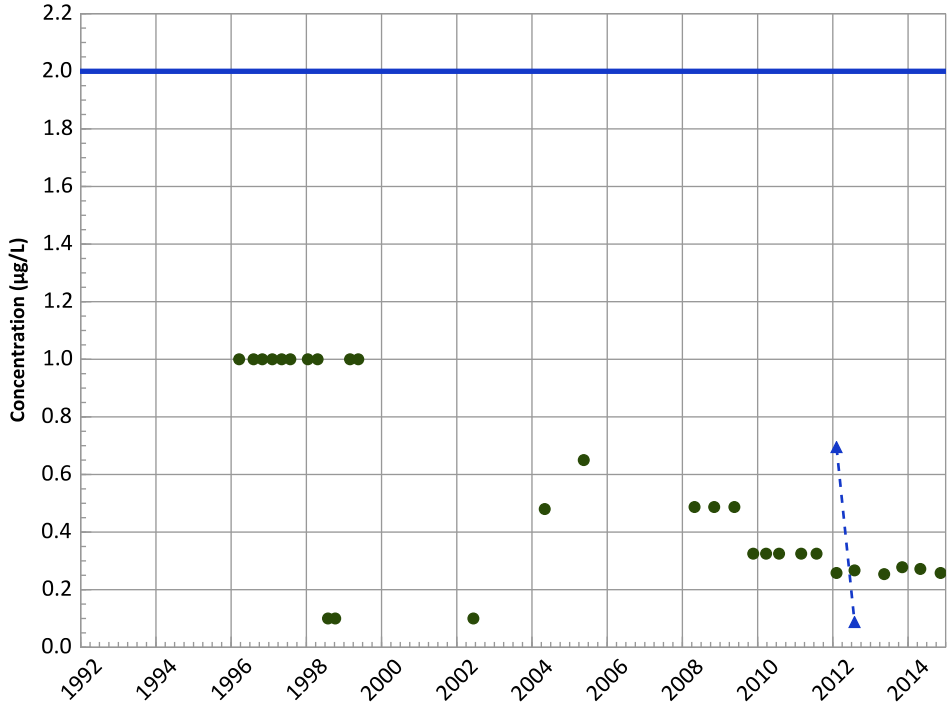
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

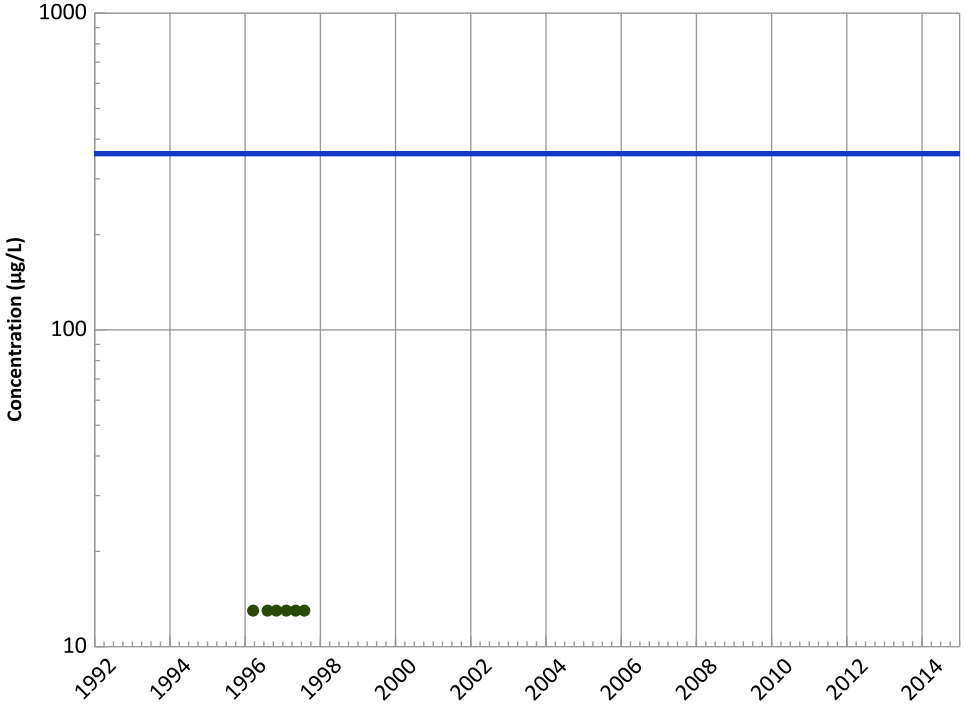


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

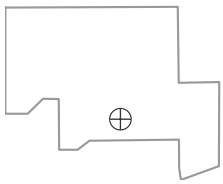
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

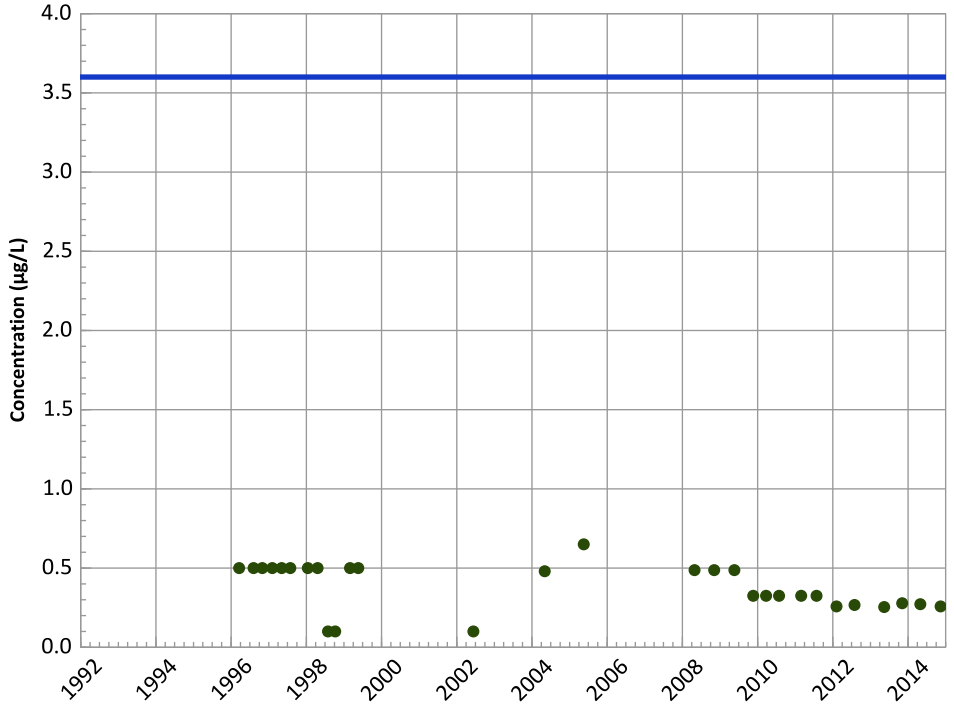
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

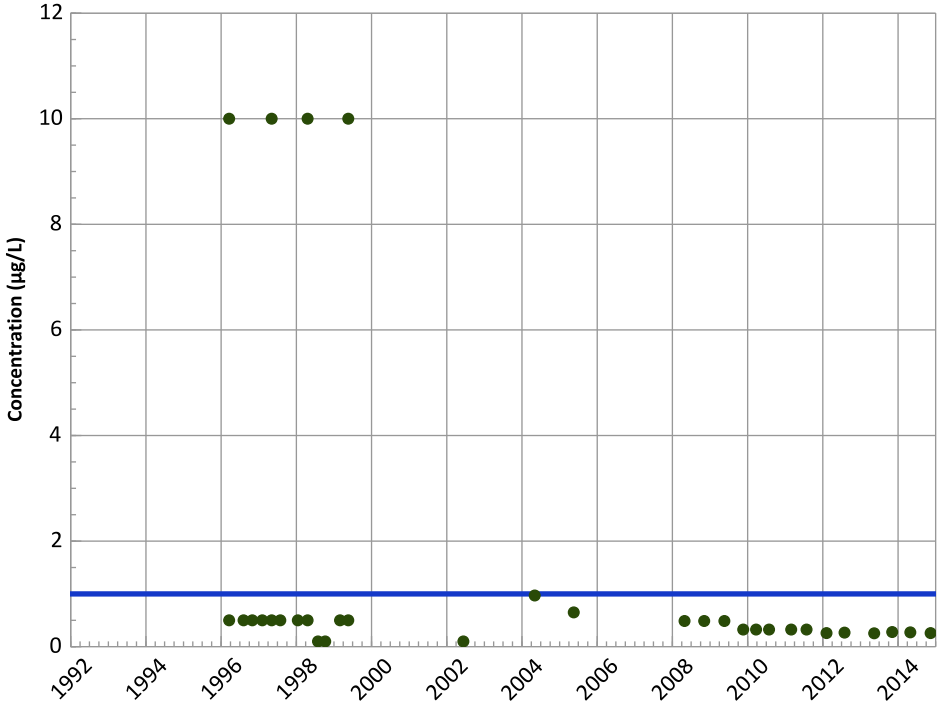


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

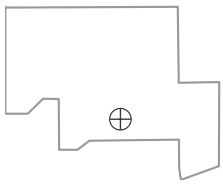
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

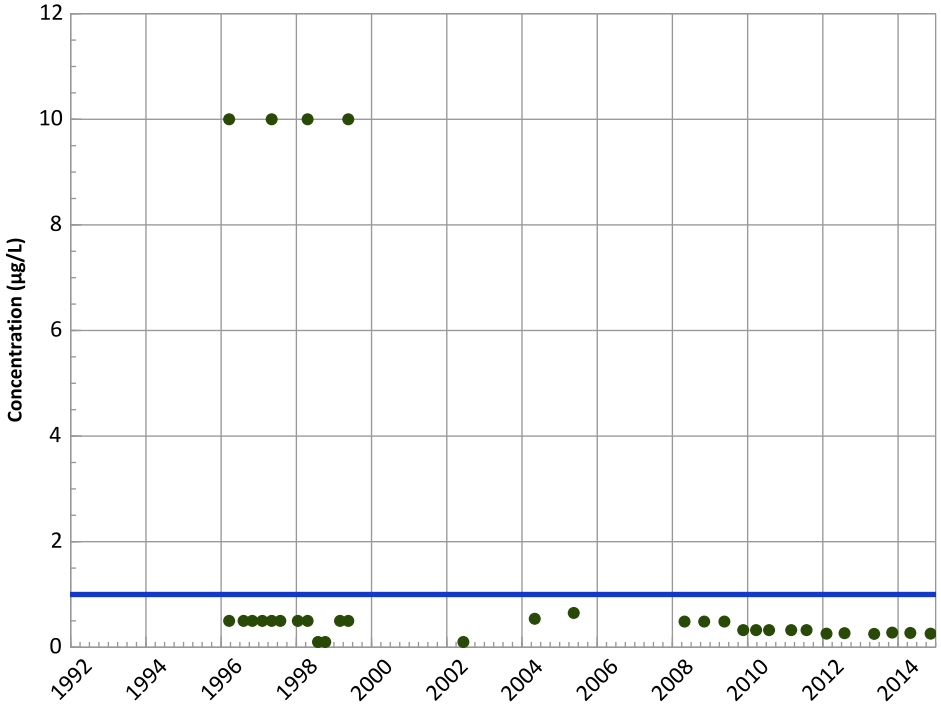
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

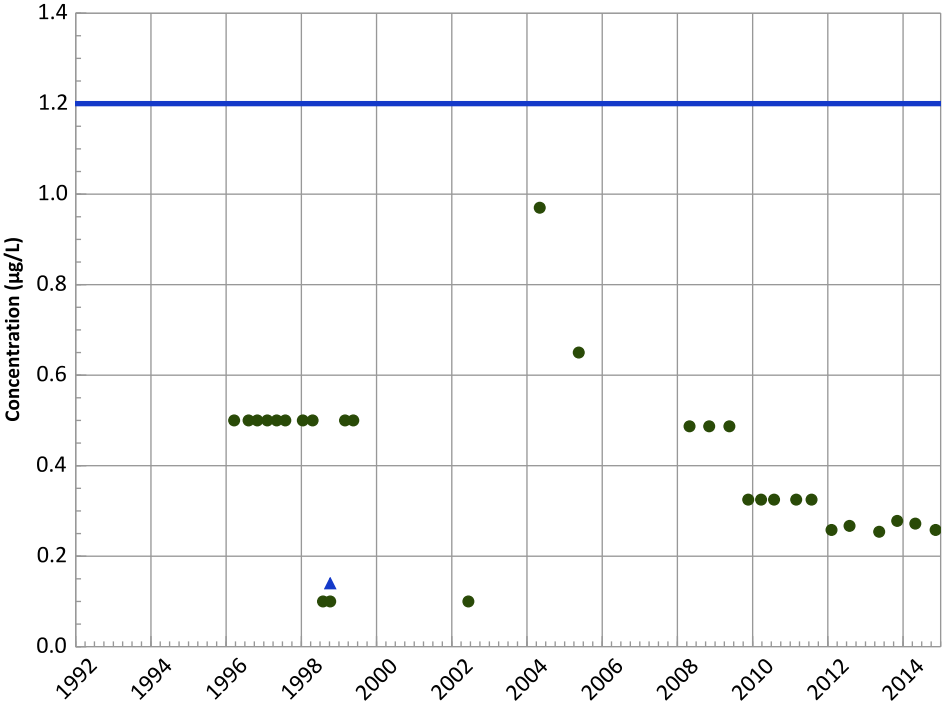


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

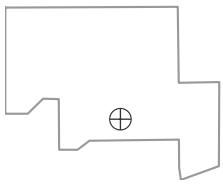
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

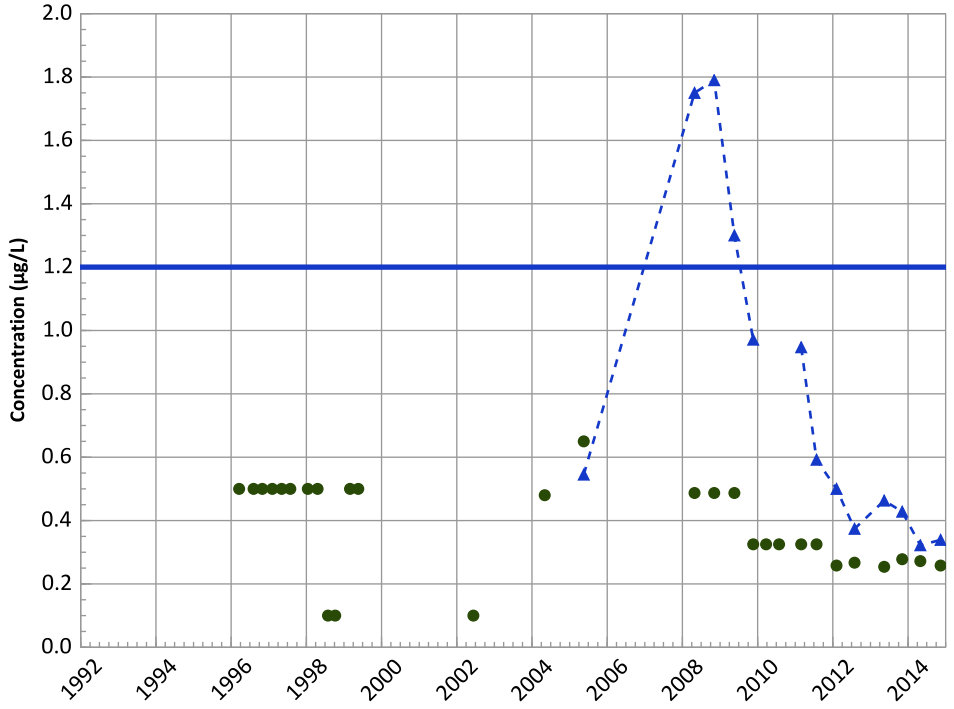
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

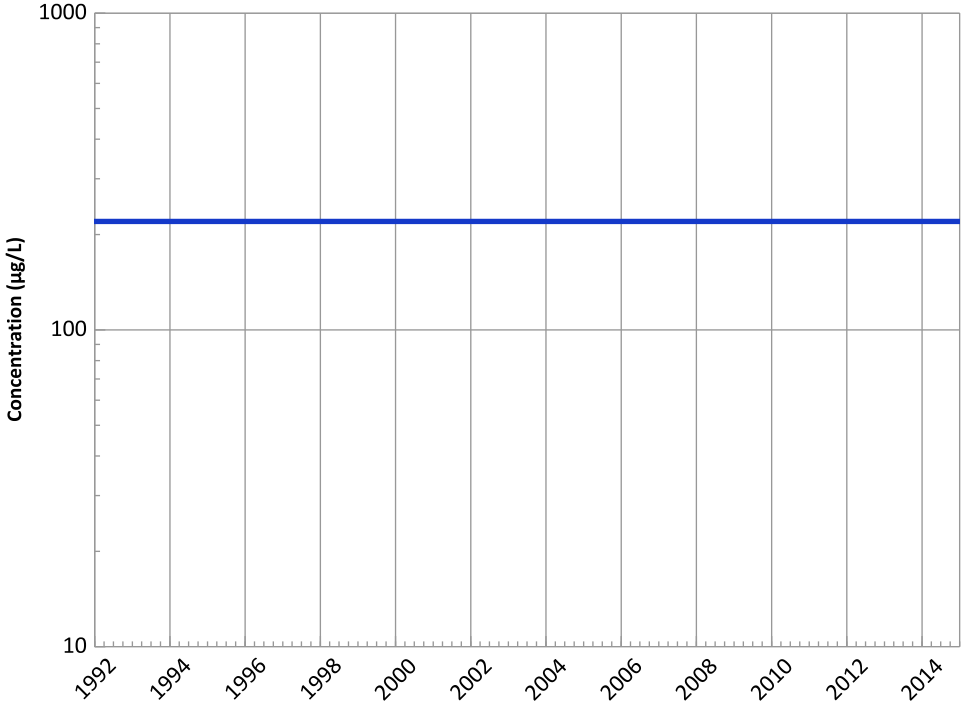


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

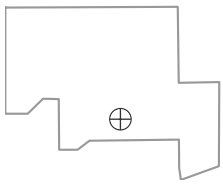
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

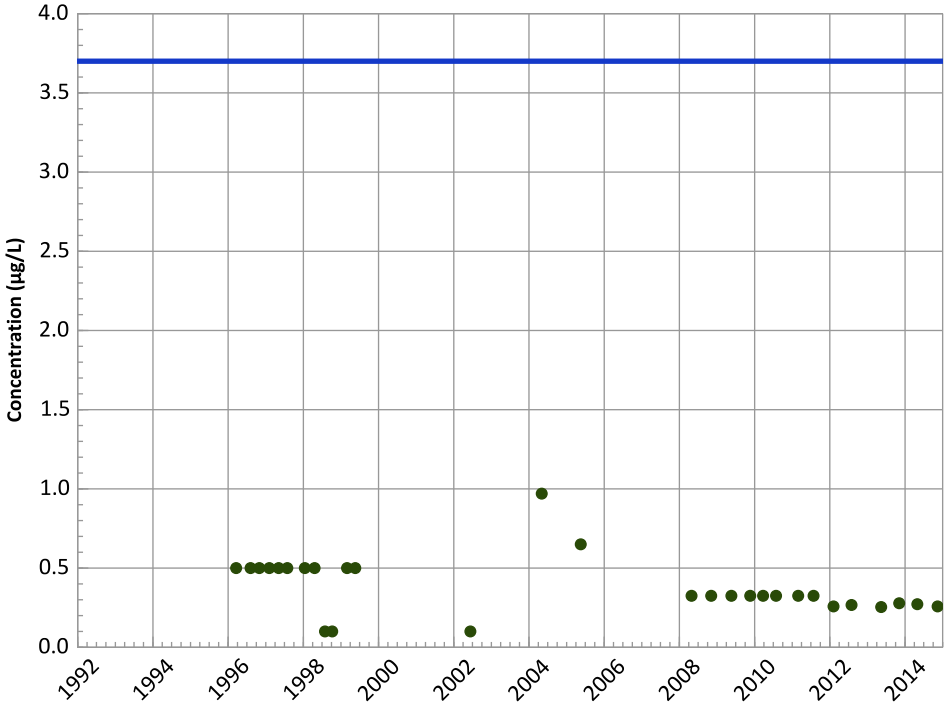
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

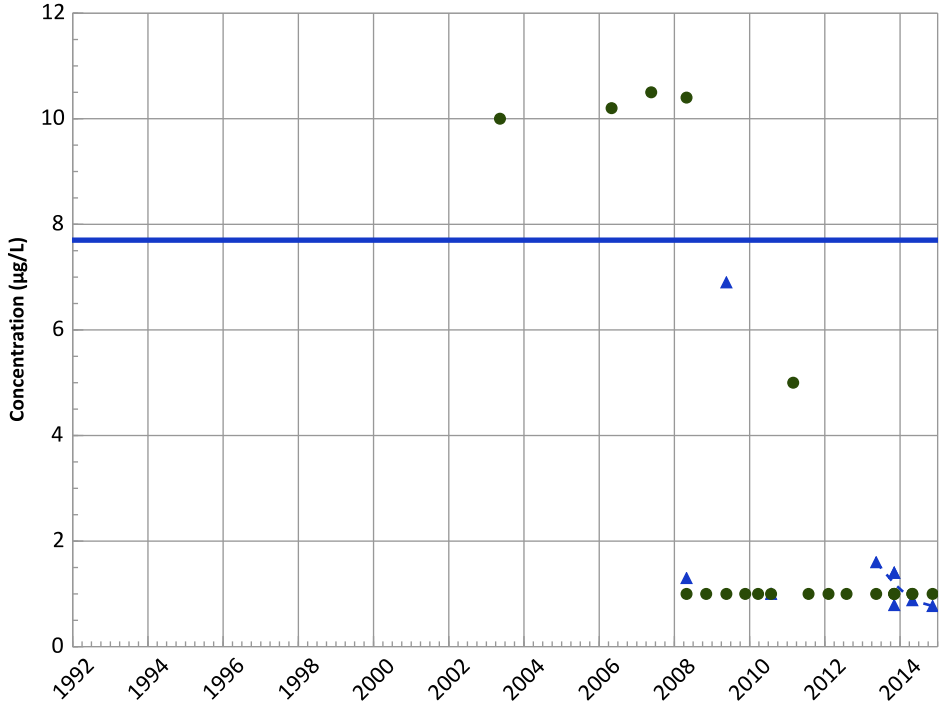


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

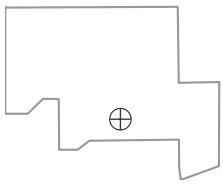
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

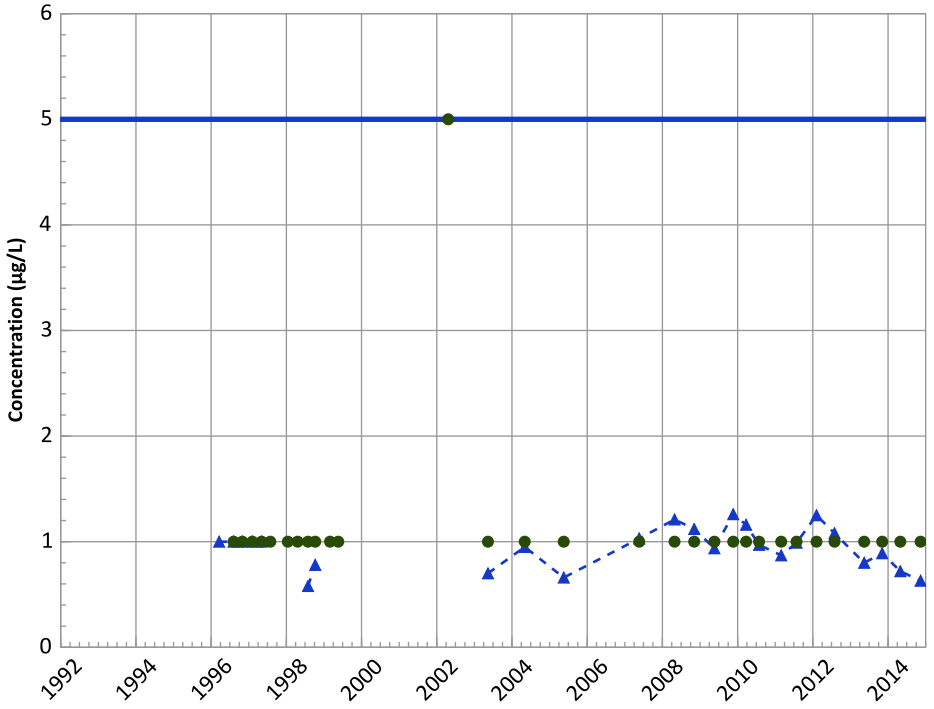
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

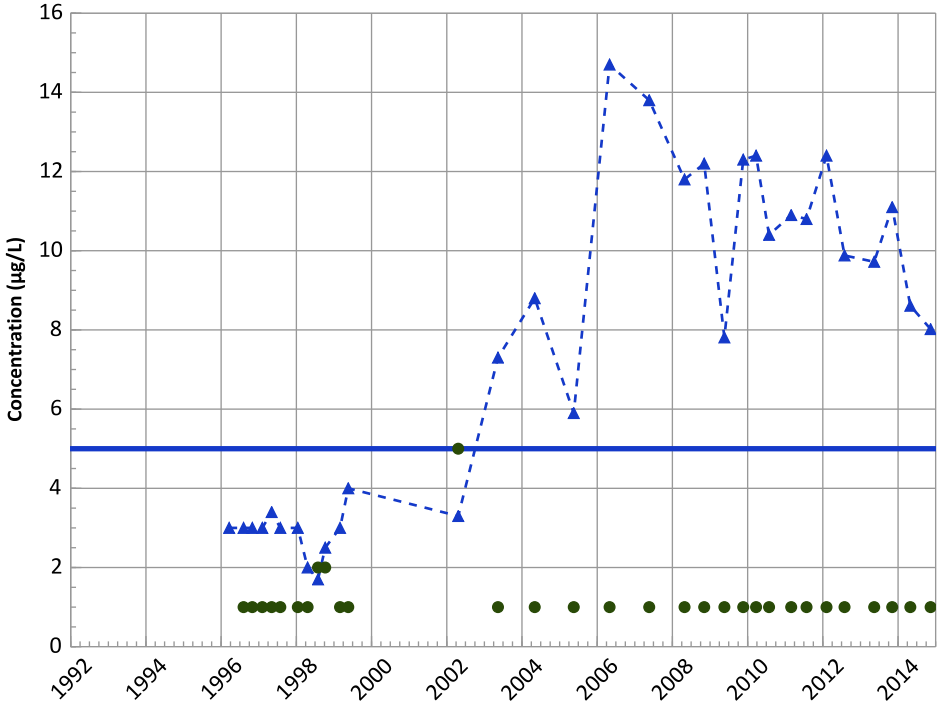


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Trichloroethene Trend



Concentration Trend

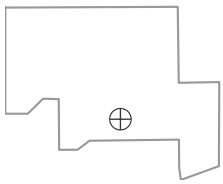
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

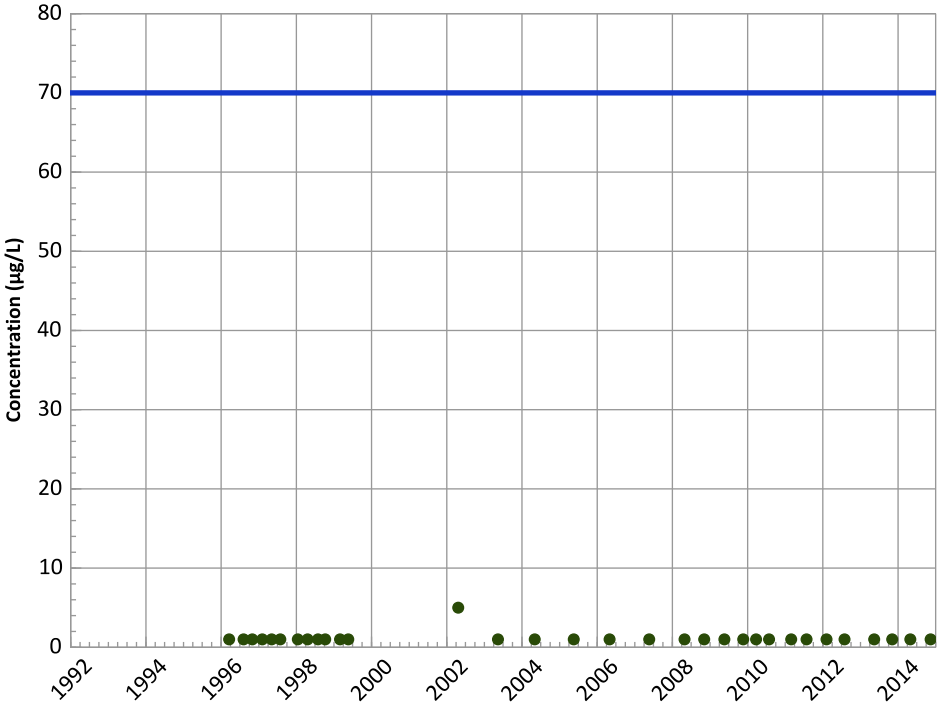
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

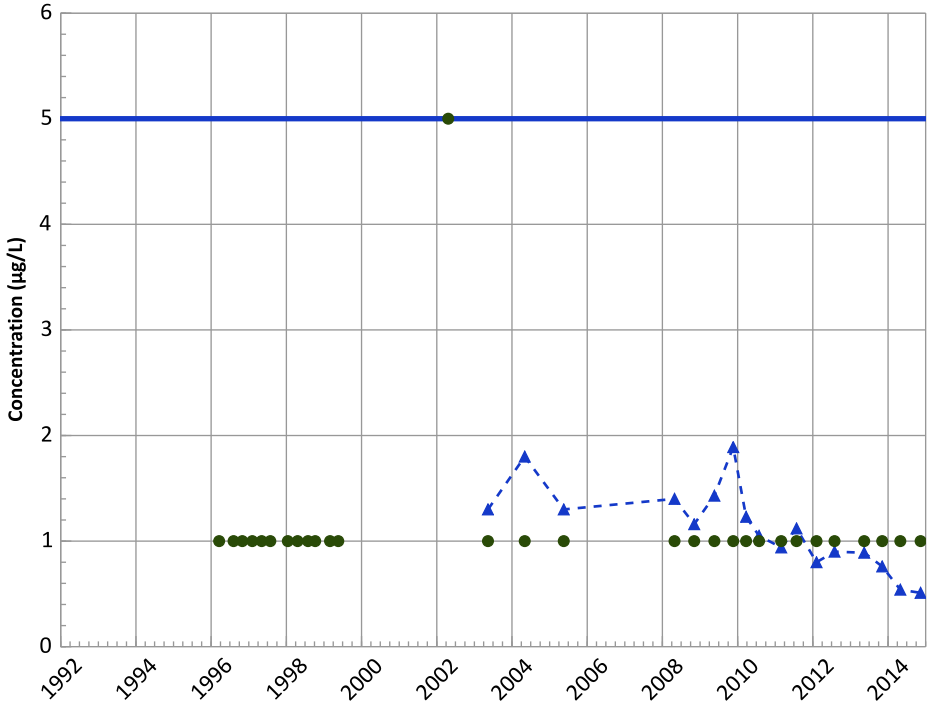


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

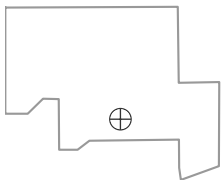
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

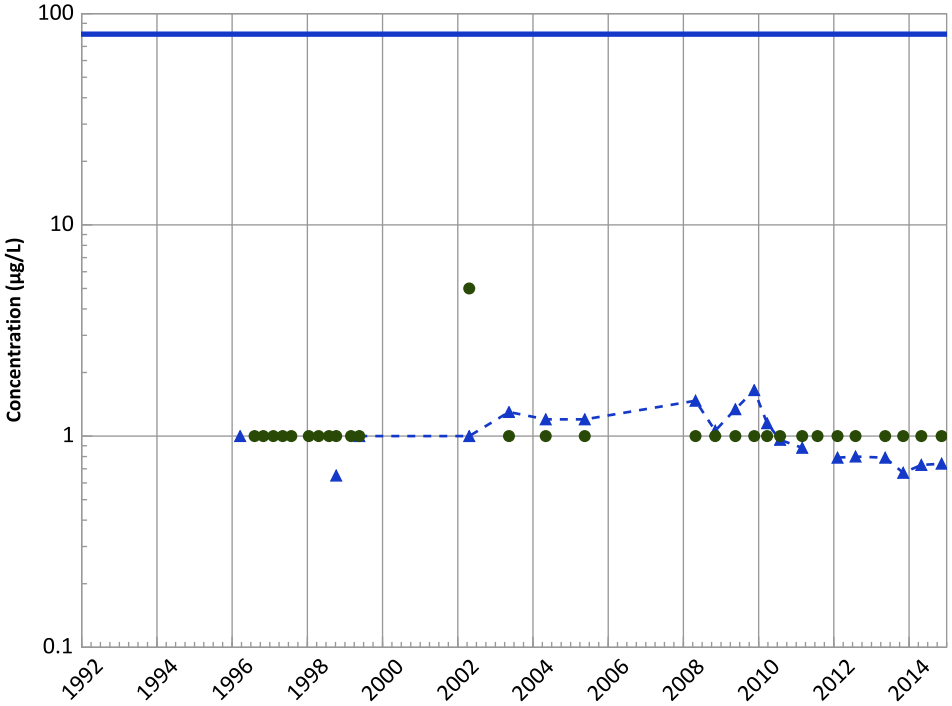
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

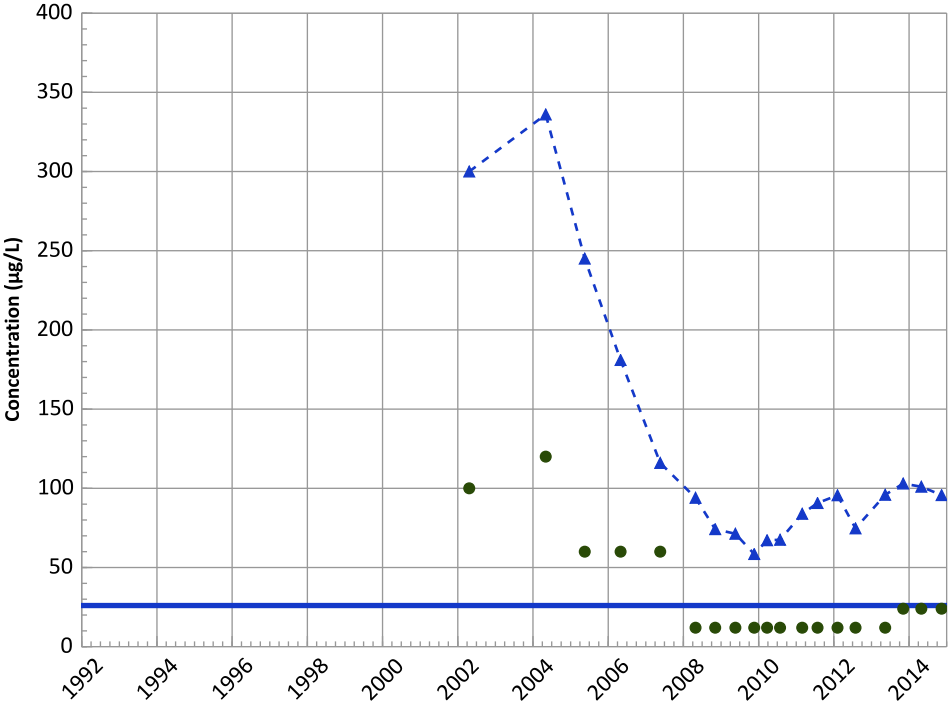


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

Perchlorate Trend



Concentration Trend

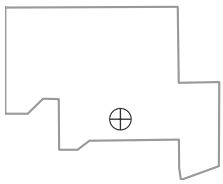
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

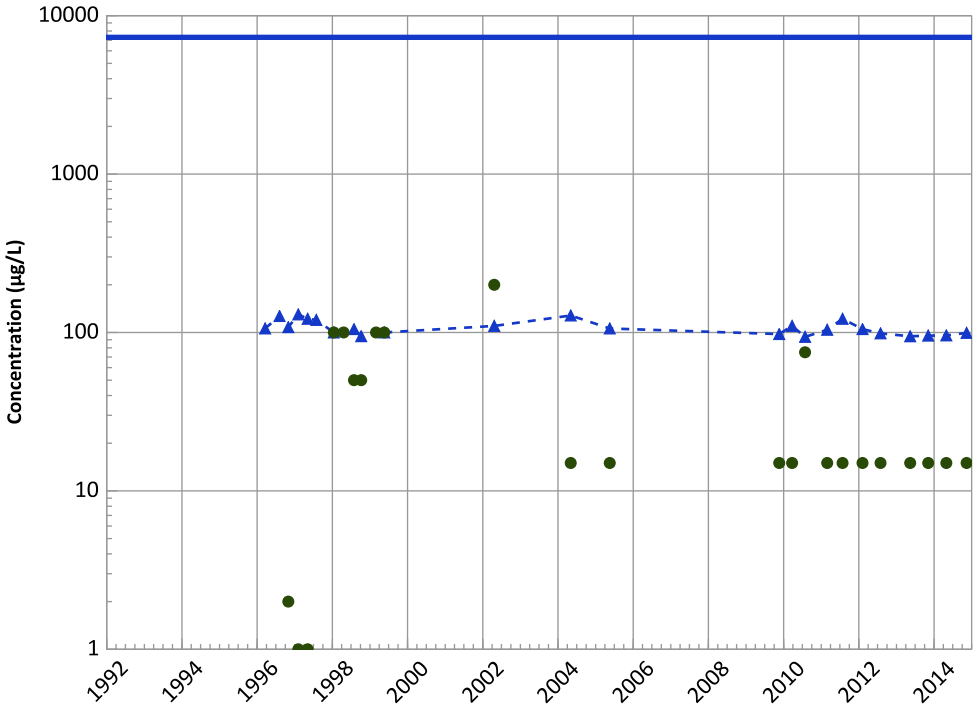
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

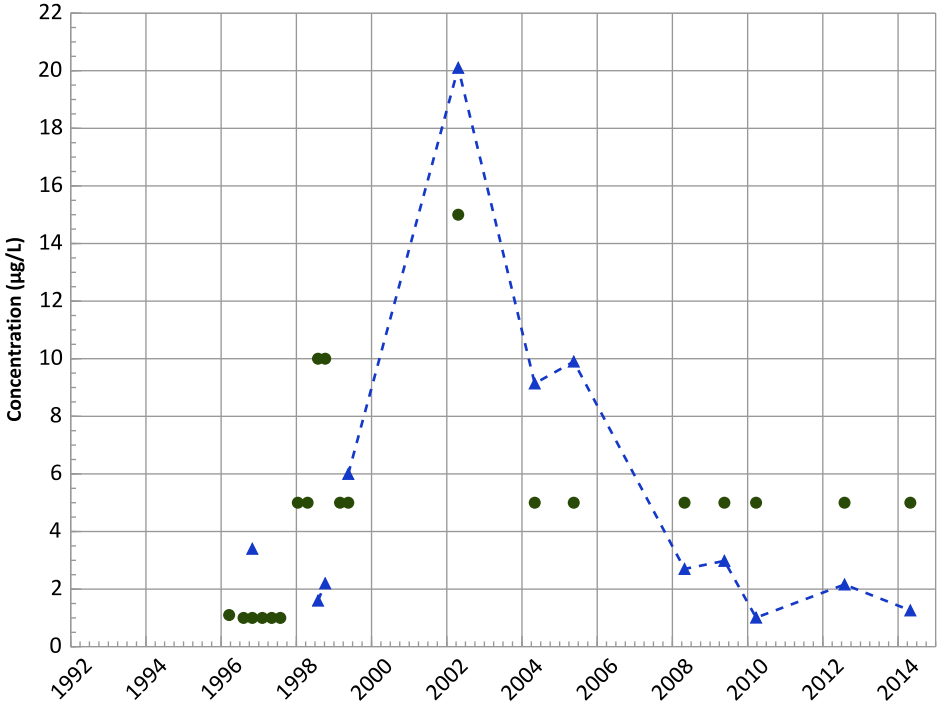


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Manganese Trend



Concentration Trend

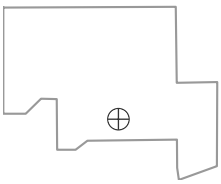
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

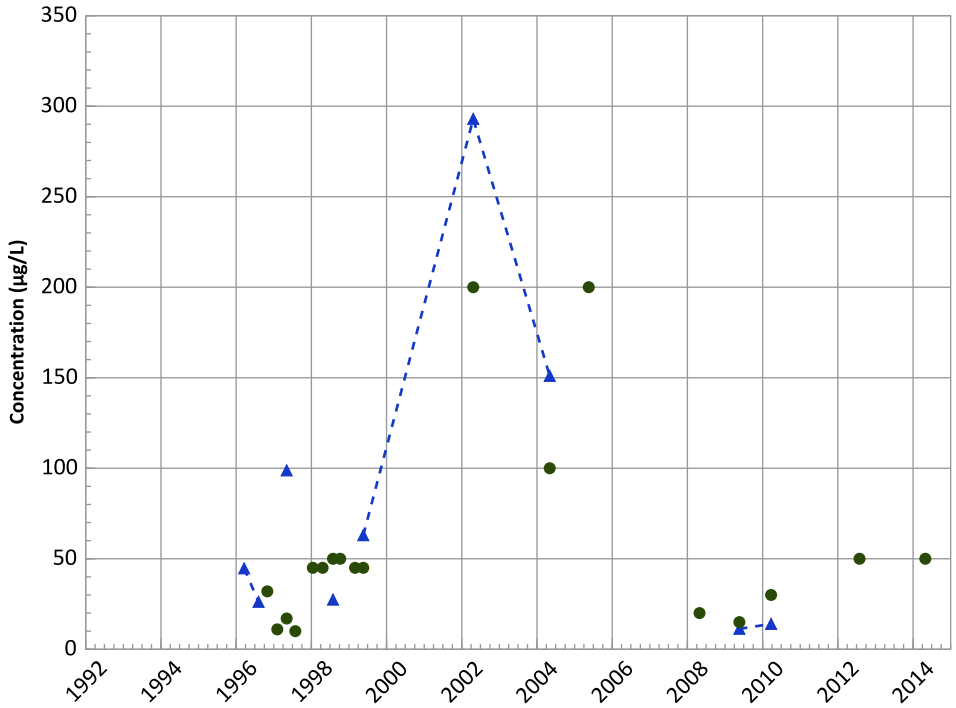
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

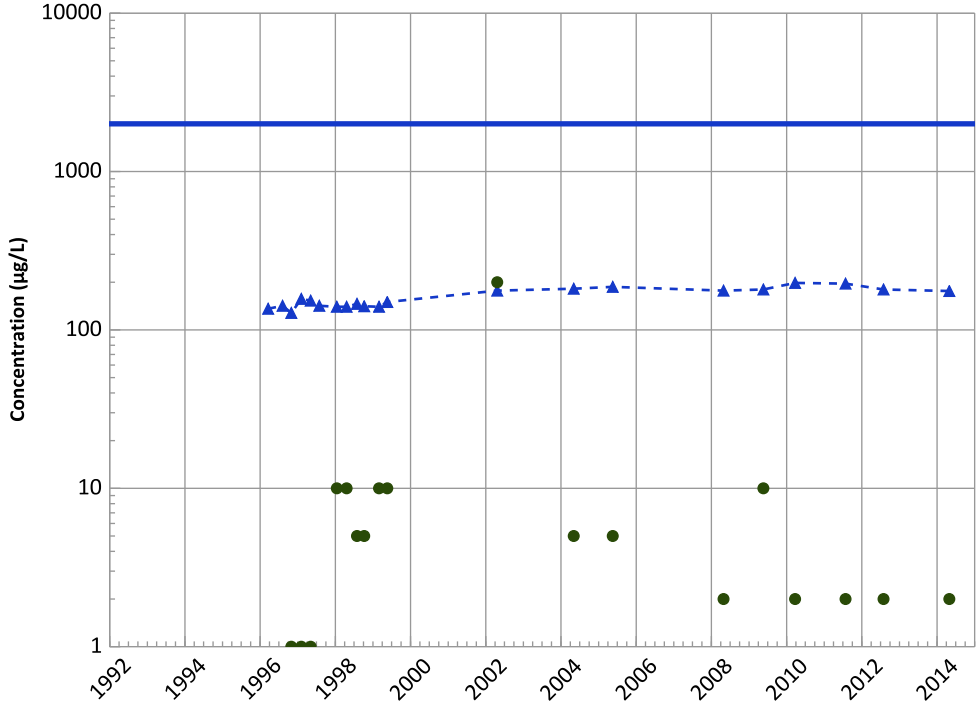


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

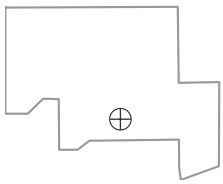
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

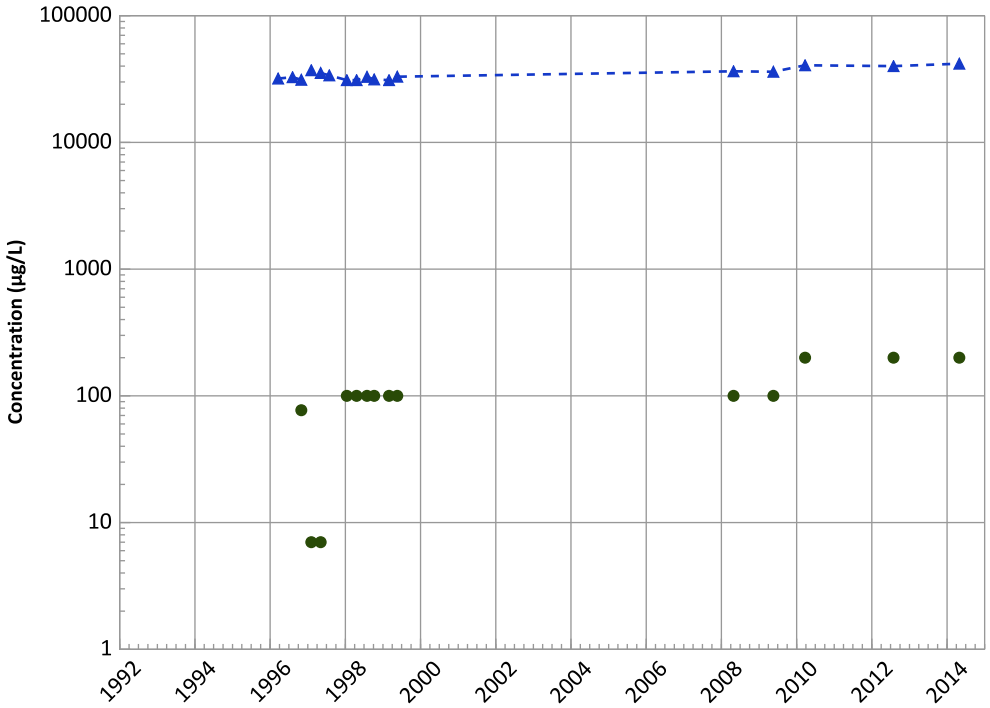
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

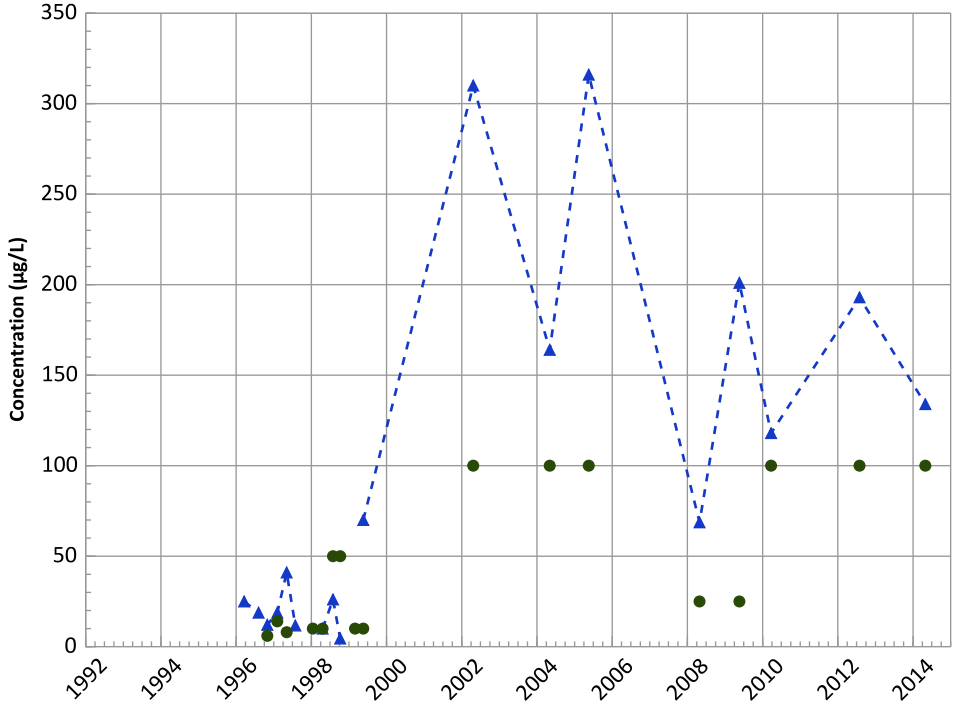


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

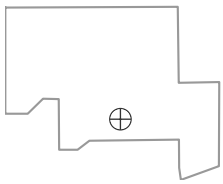
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

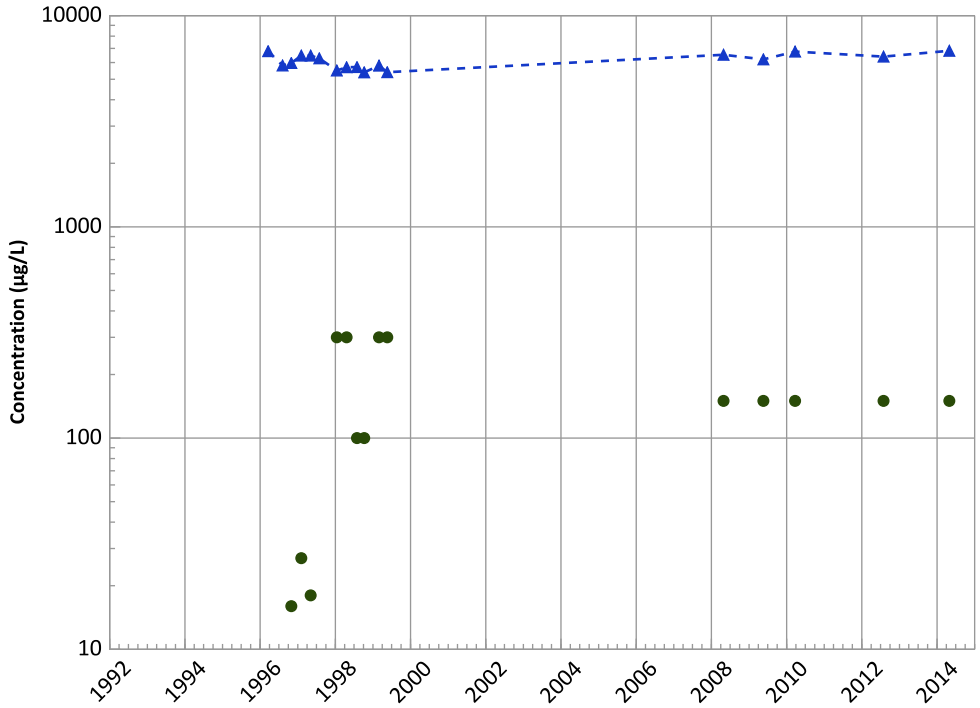
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

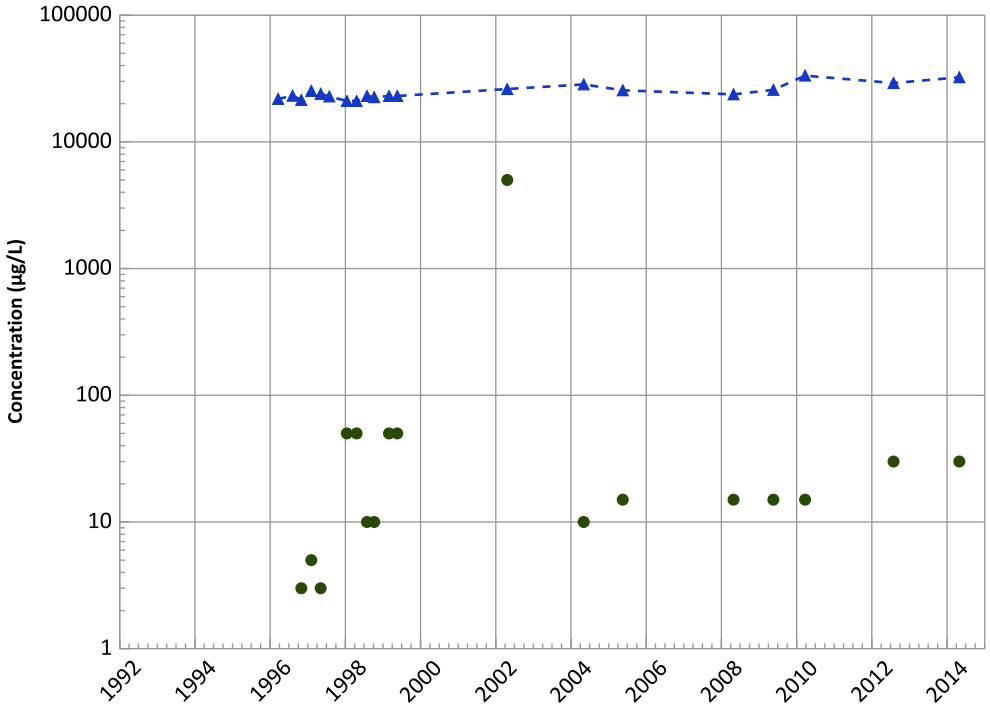


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

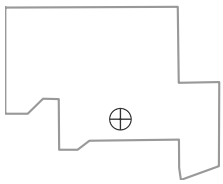
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

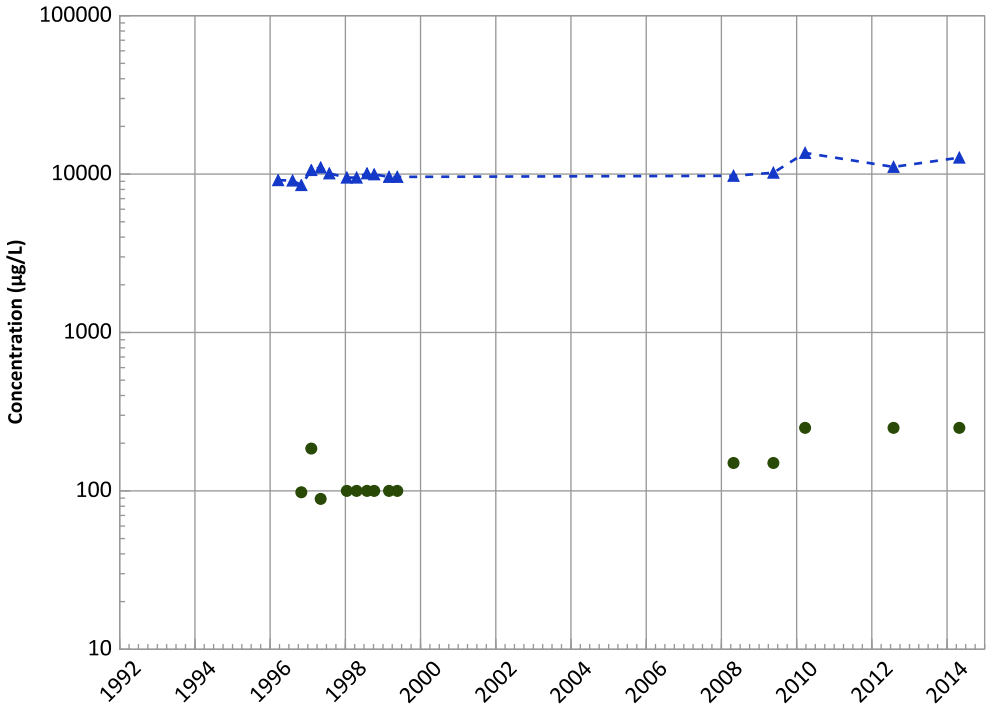
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



1114-MW4 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

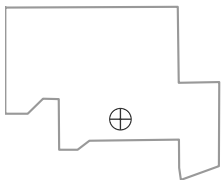
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

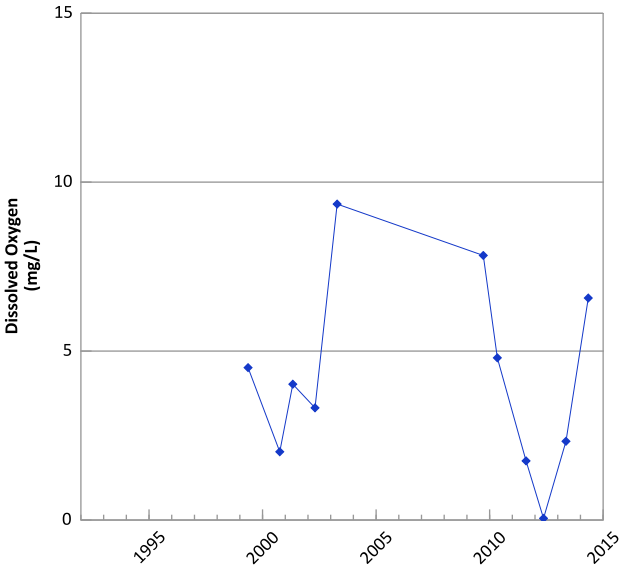
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/19/1996 to 11/13/2014
Analysis Date: 03/19/2015

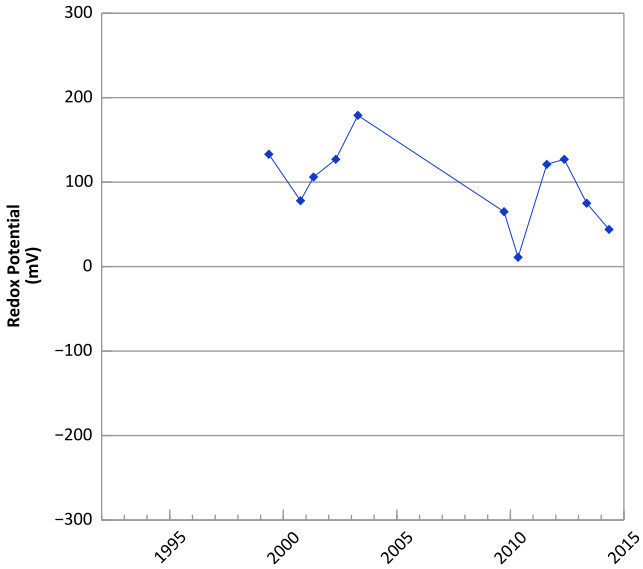
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

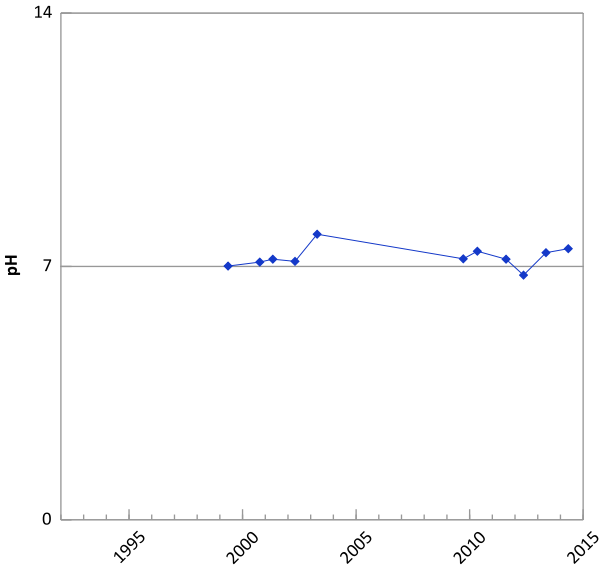
Well Location

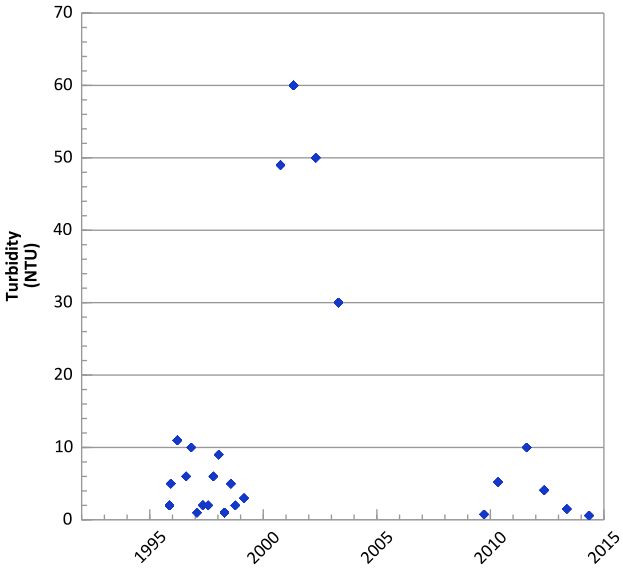


OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



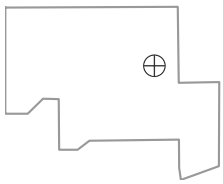






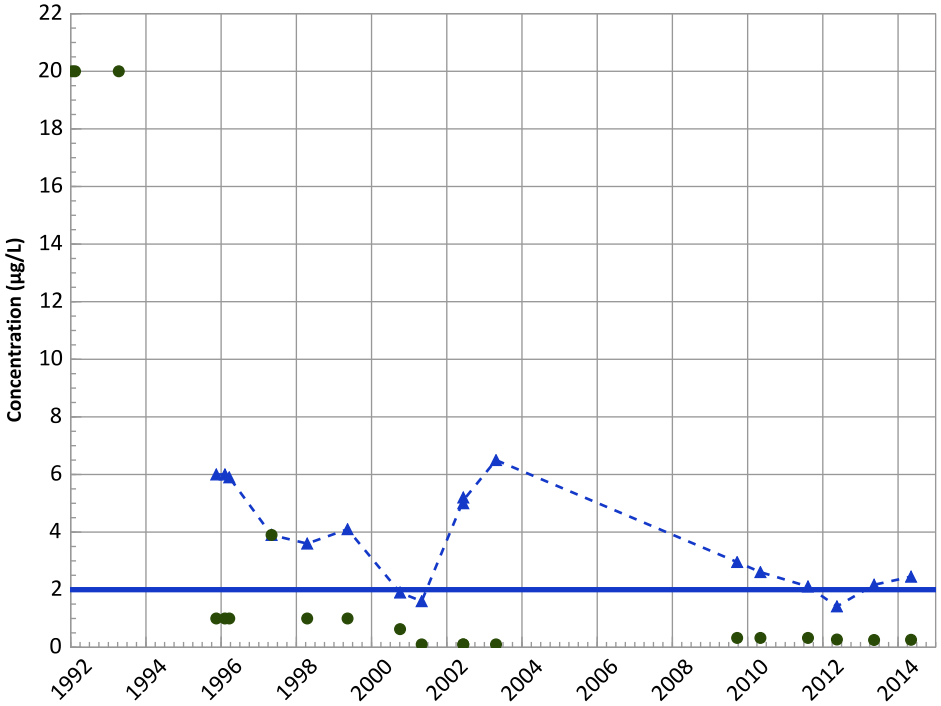
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

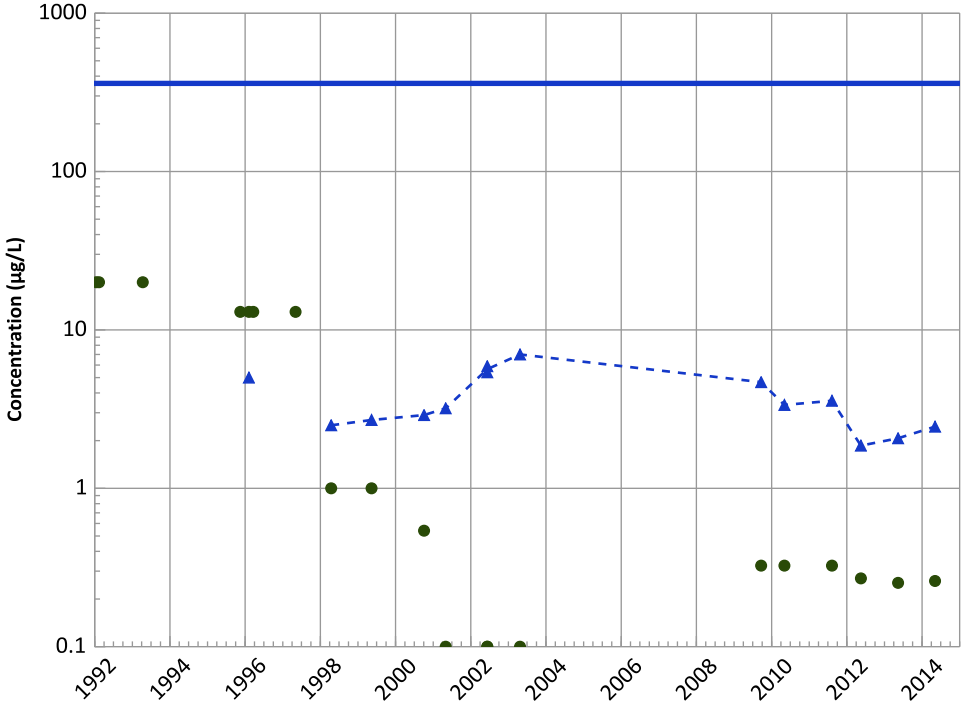


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

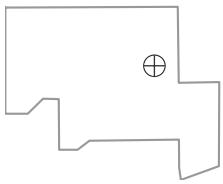
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

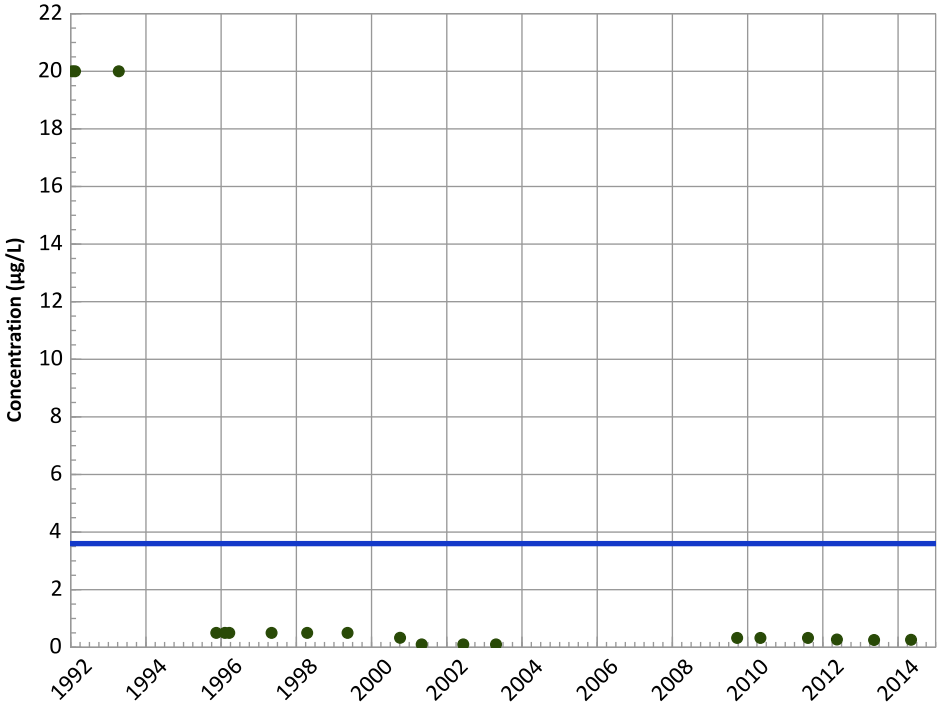
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

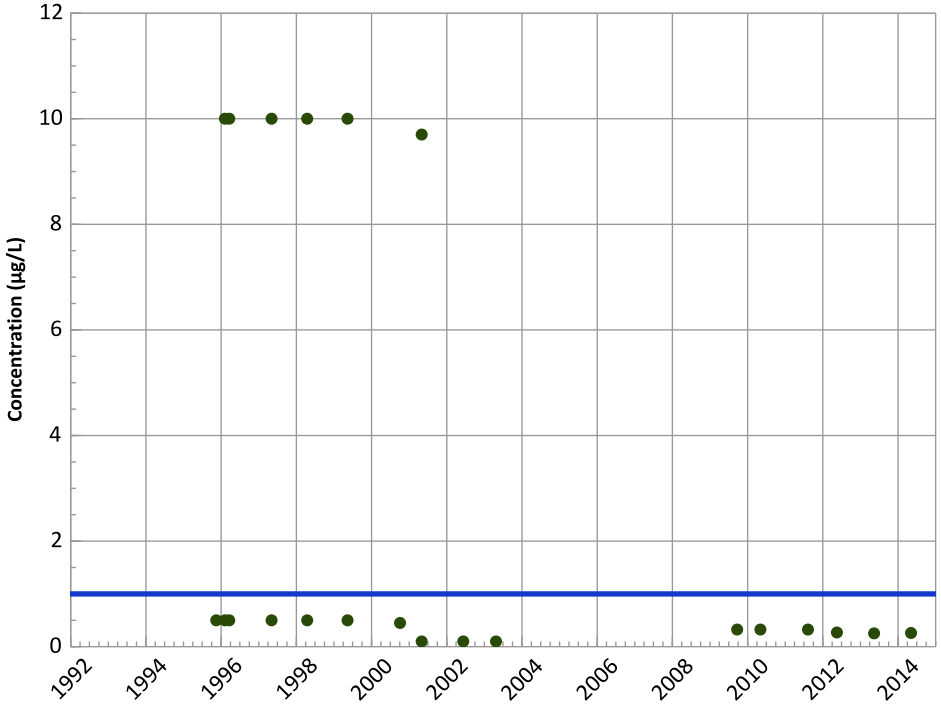


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

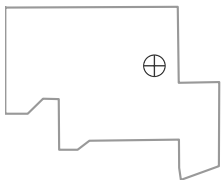
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

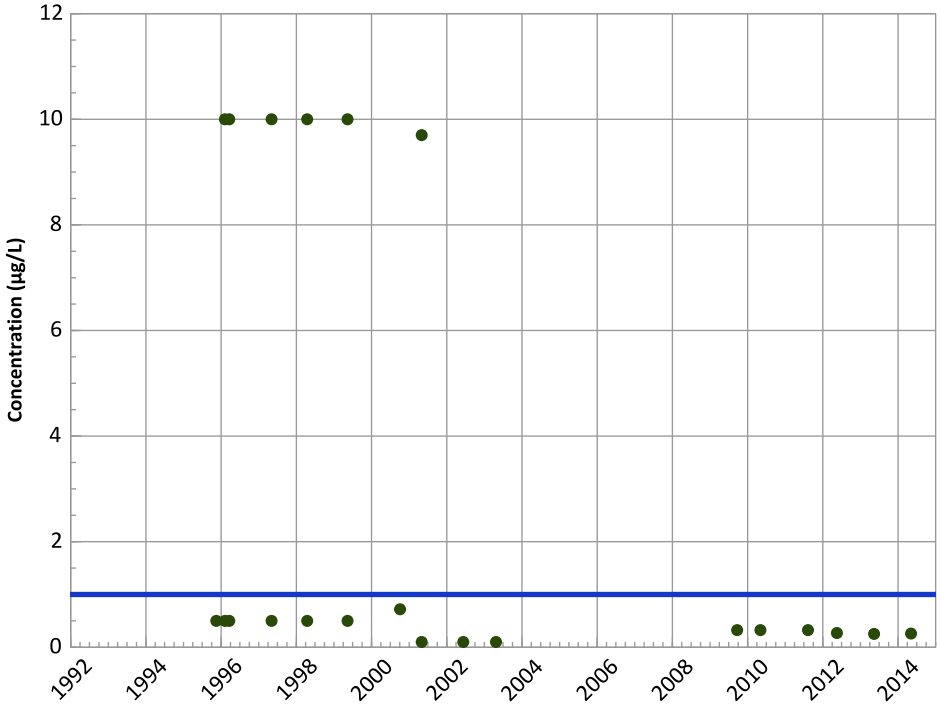
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

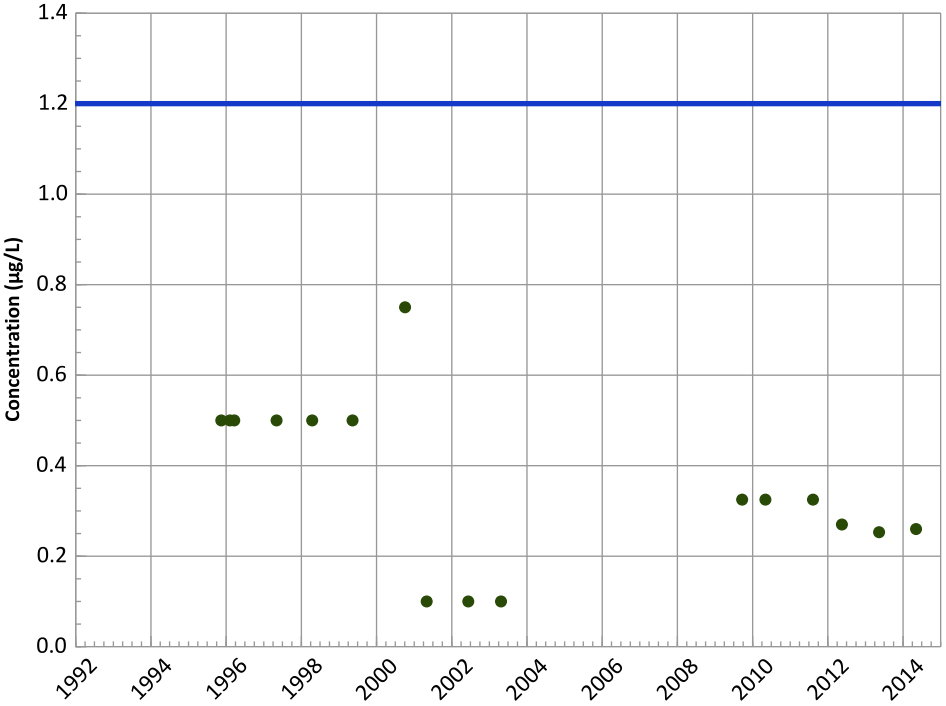


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

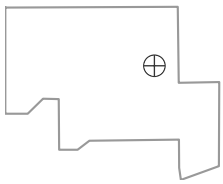
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

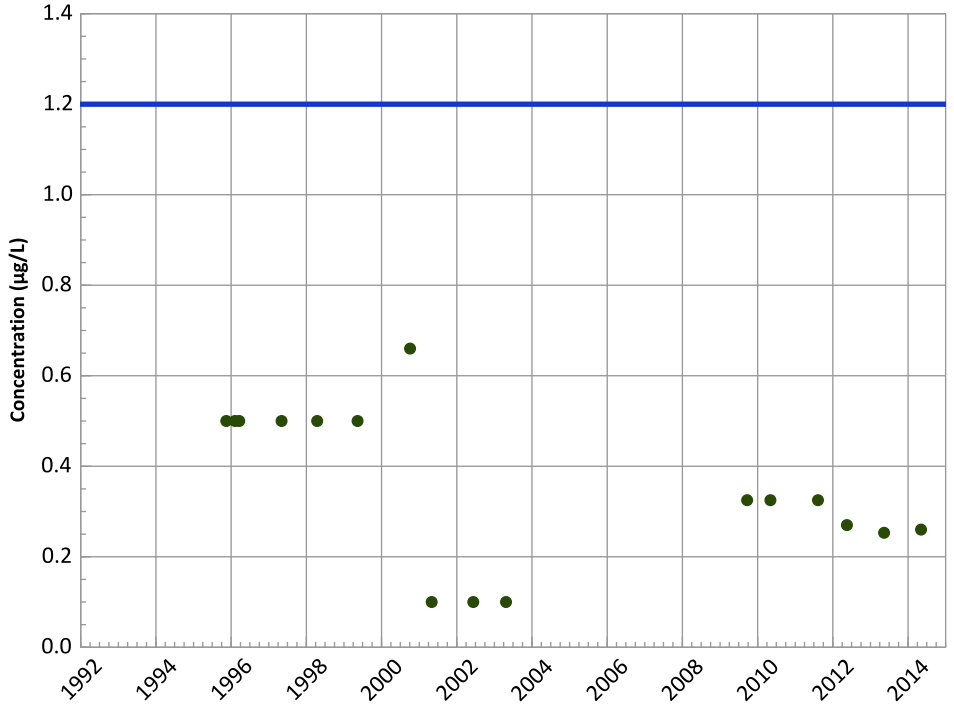
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

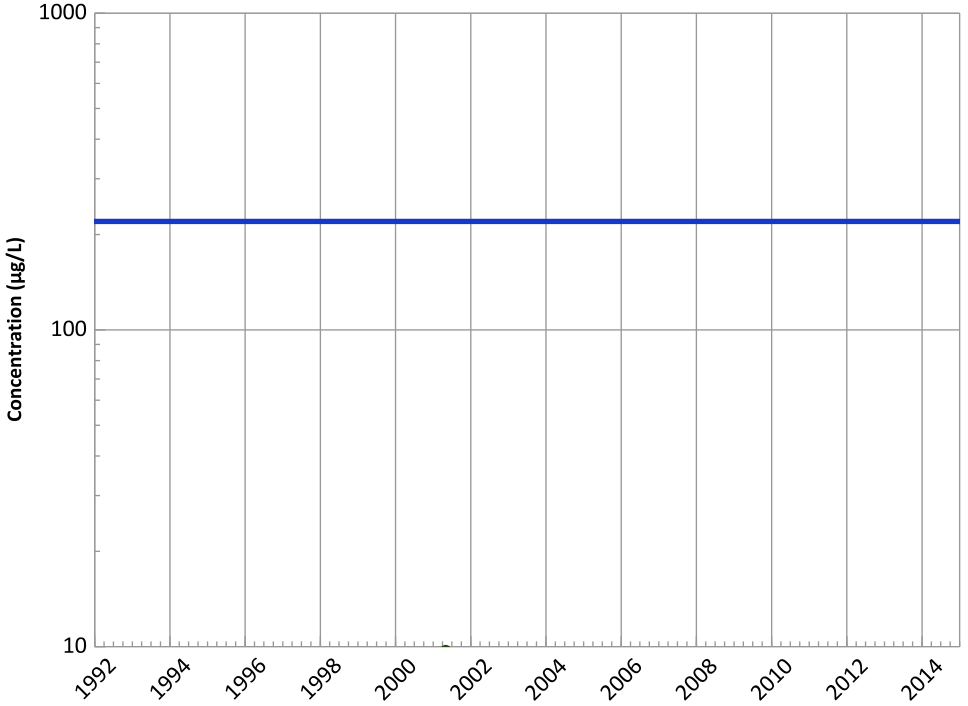


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

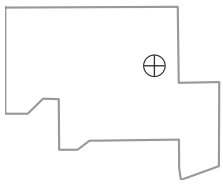
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

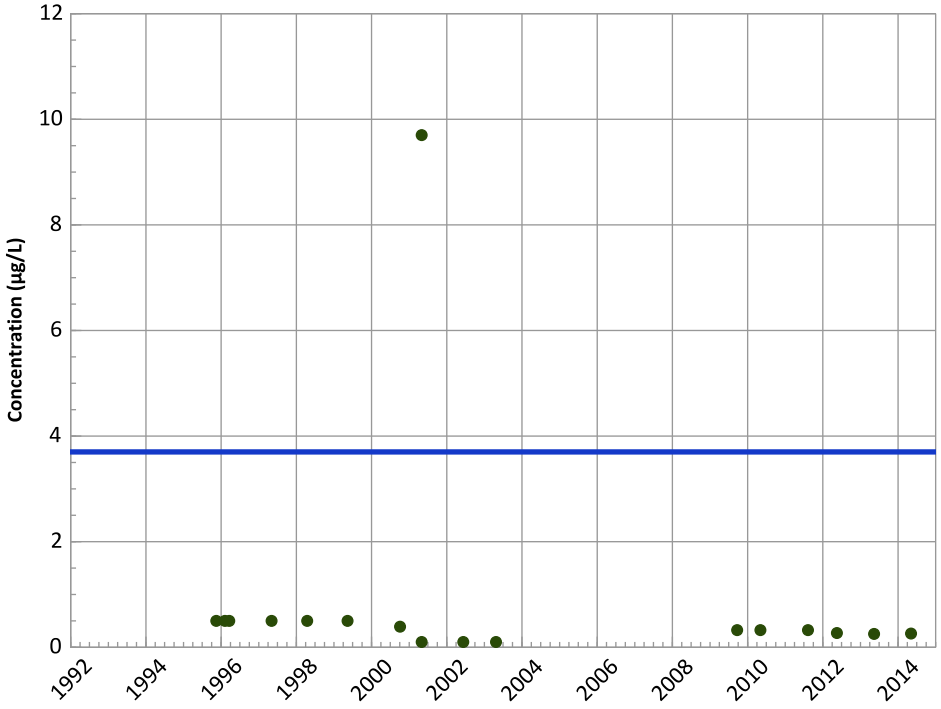
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

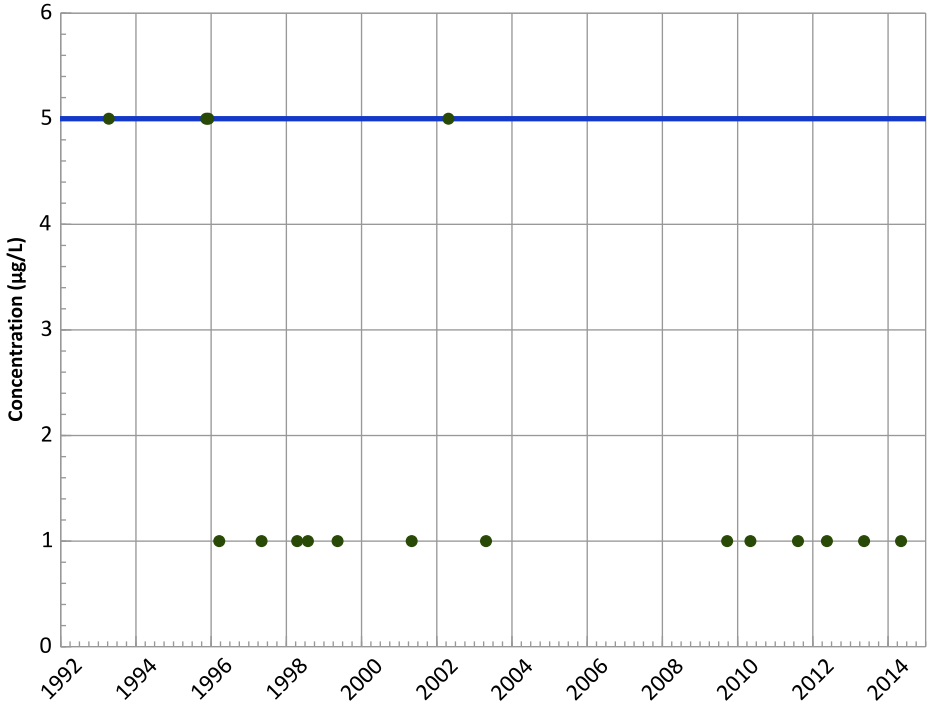


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

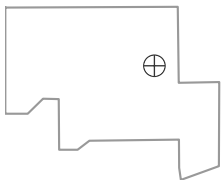
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

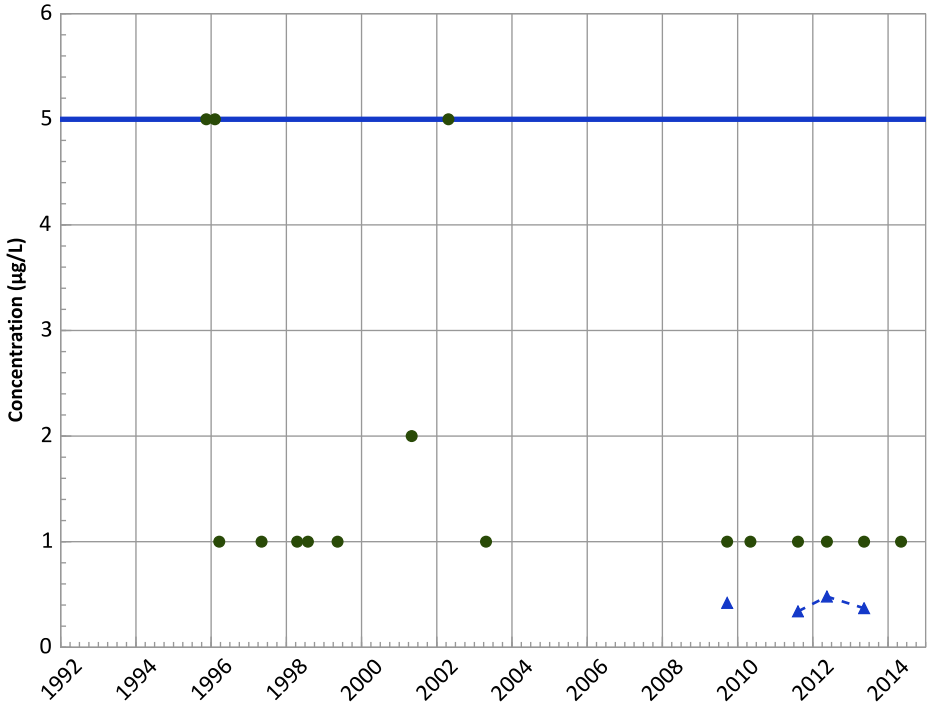
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

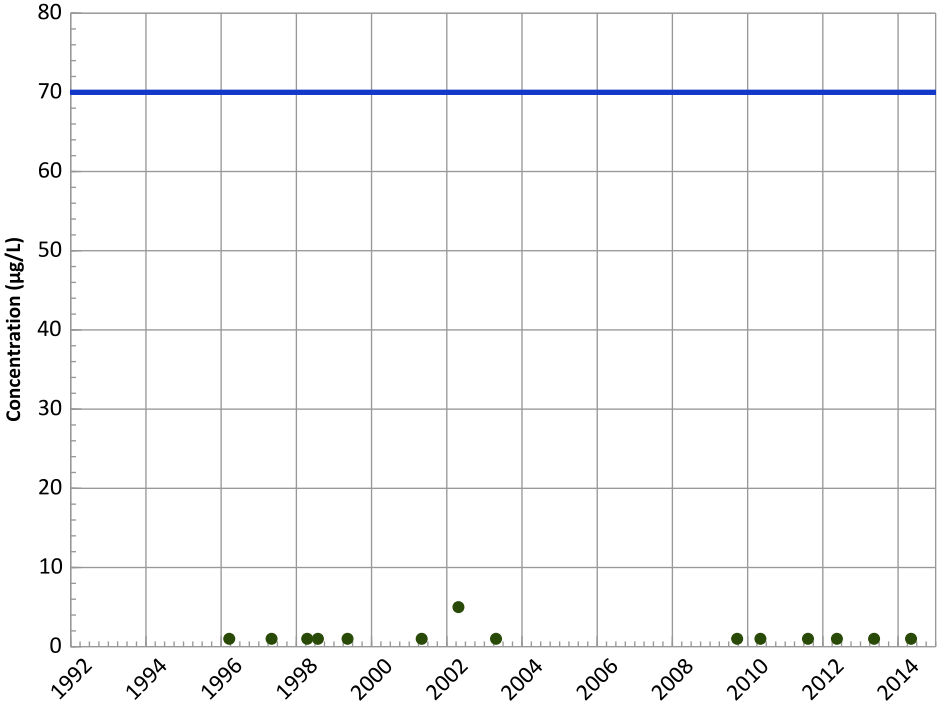


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

cis-1,2-Dichloroethene Trend



Concentration Trend

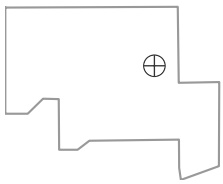
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

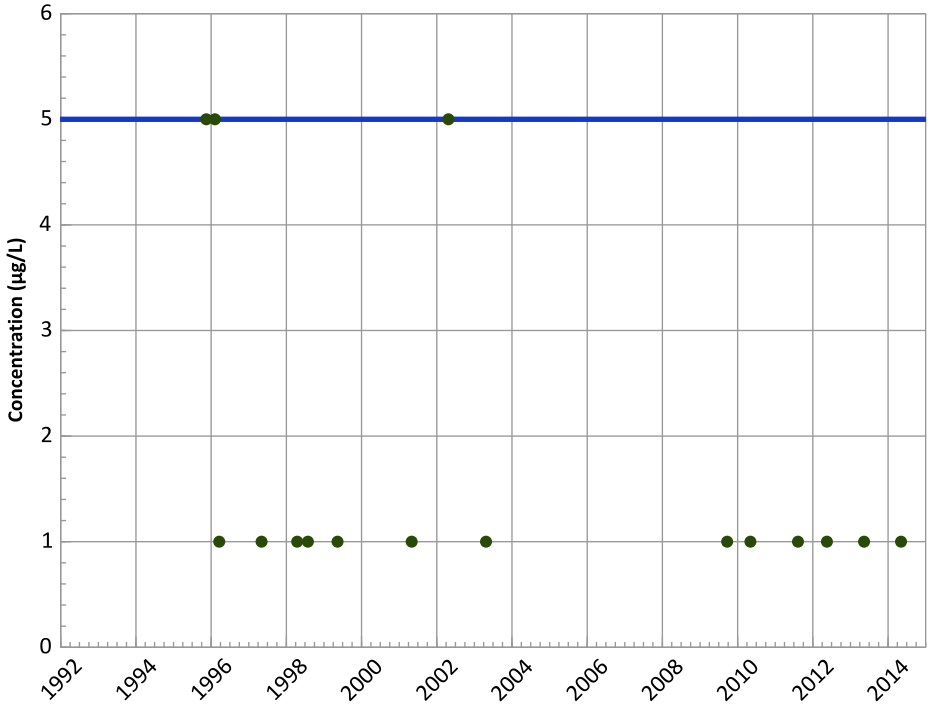
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

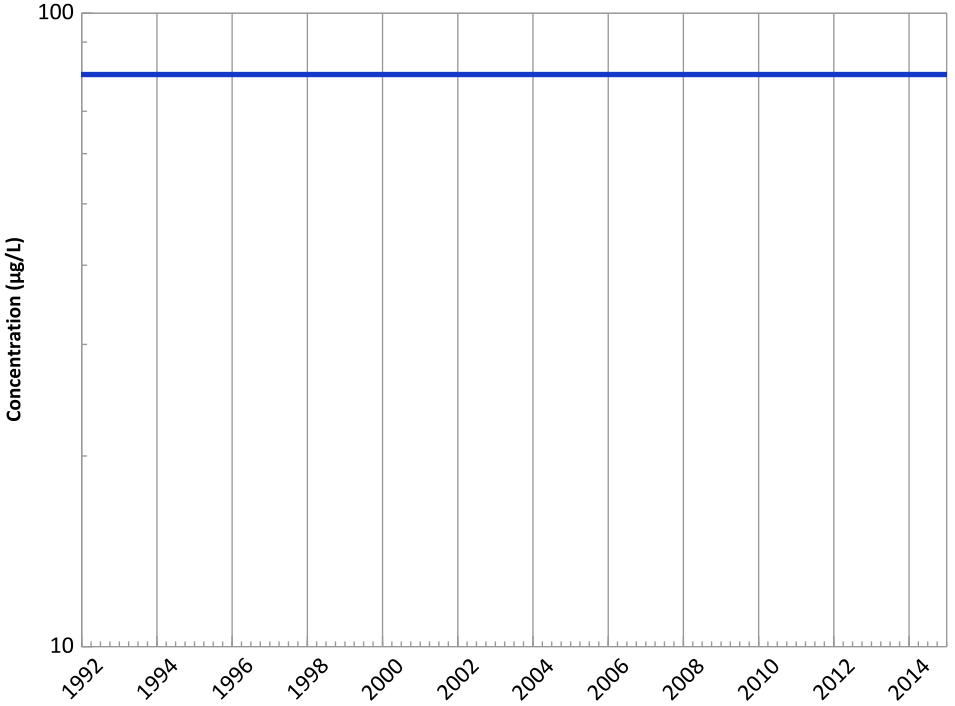


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

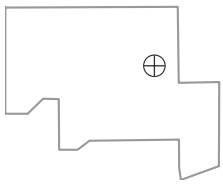
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

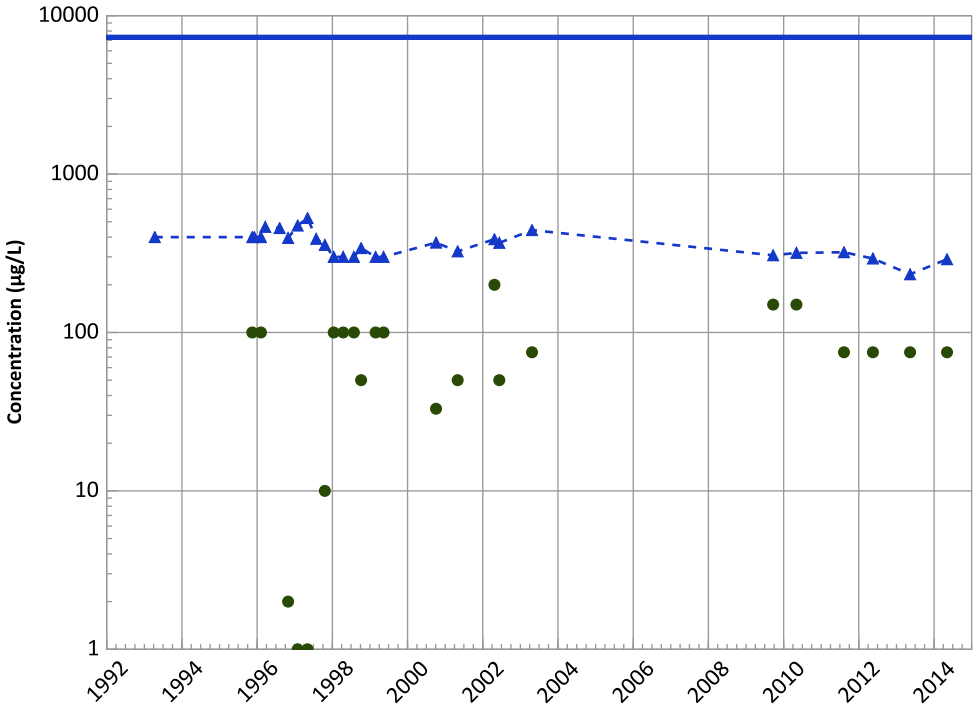
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

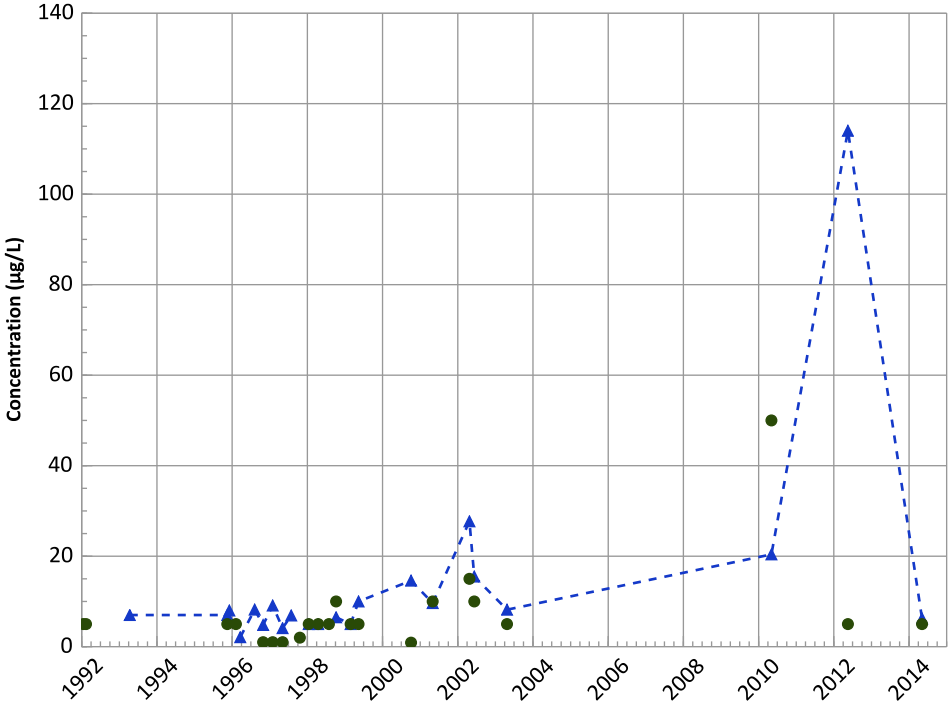


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Manganese Trend



Concentration Trend

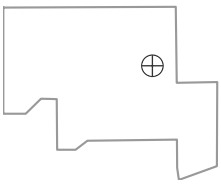
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

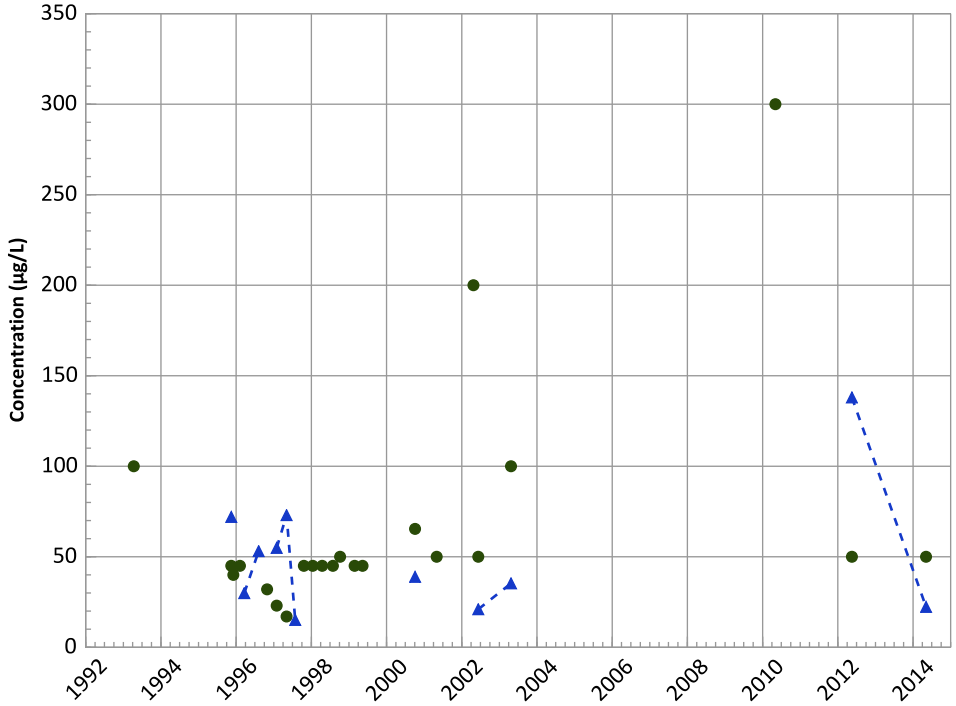
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

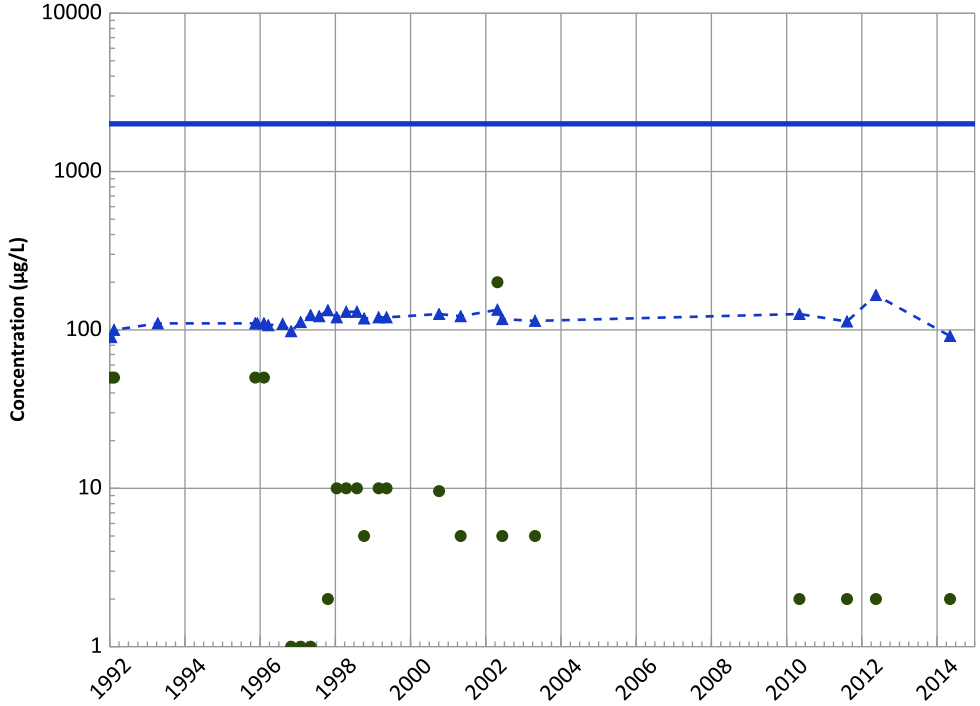


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

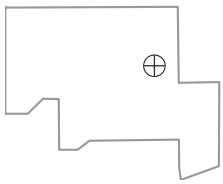
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

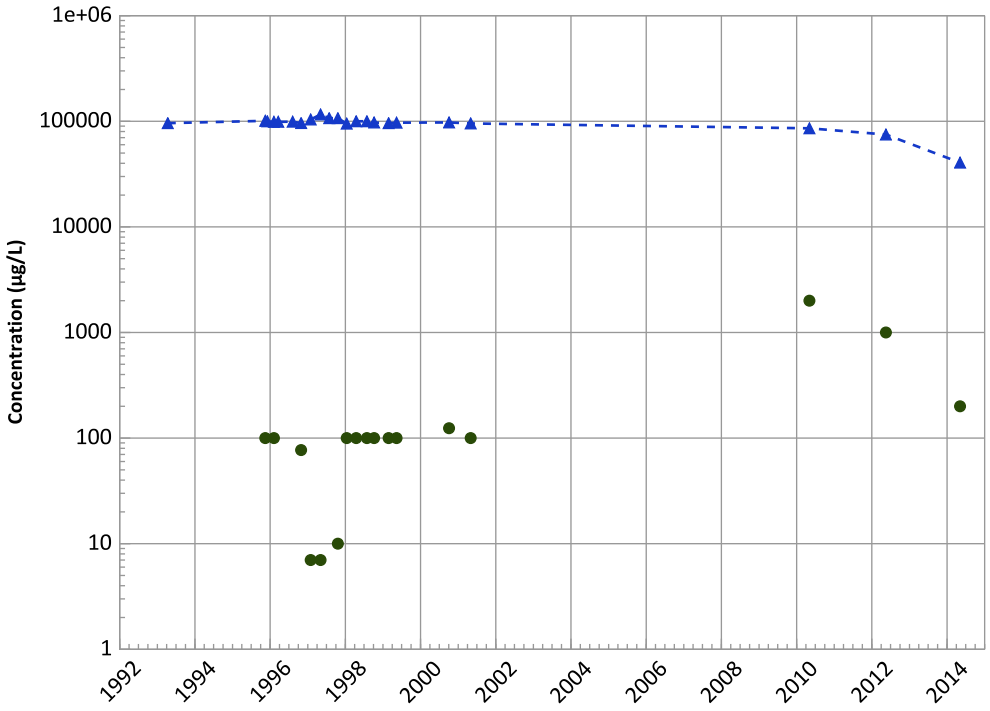
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

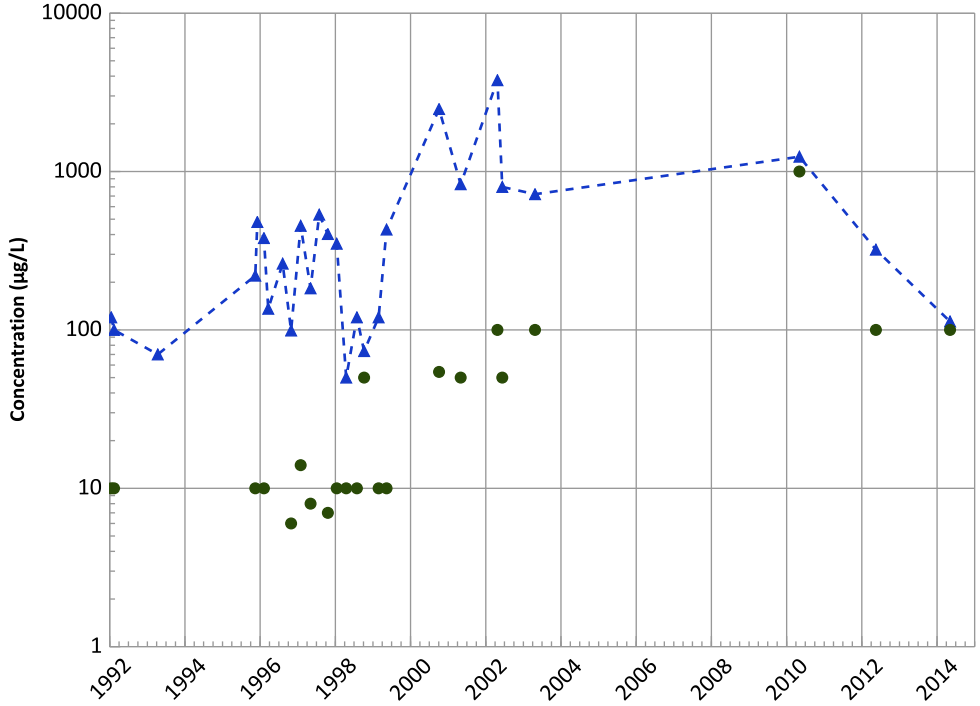


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

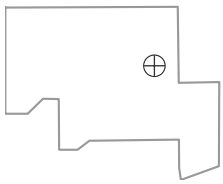
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

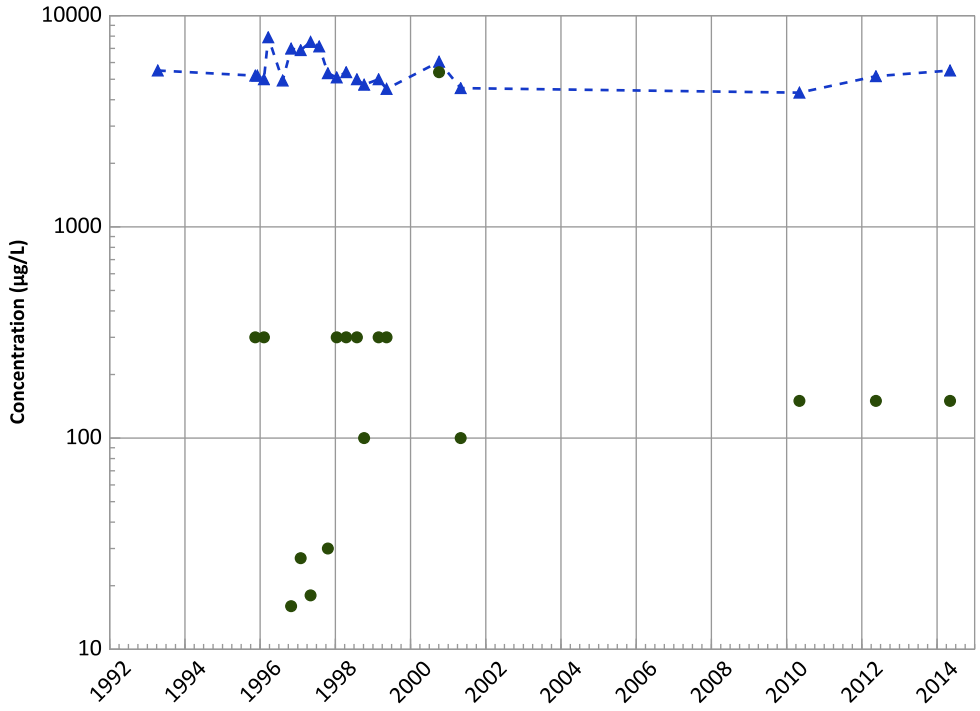
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

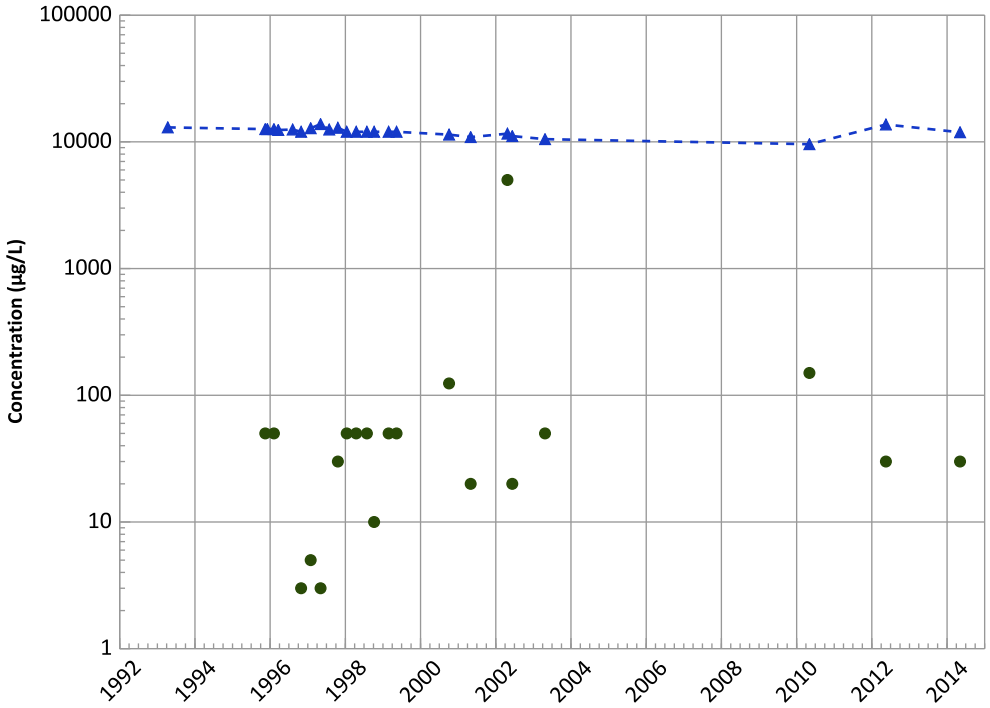


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Magnesium Trend



Concentration Trend

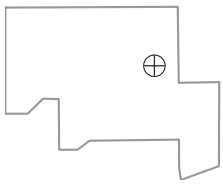
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

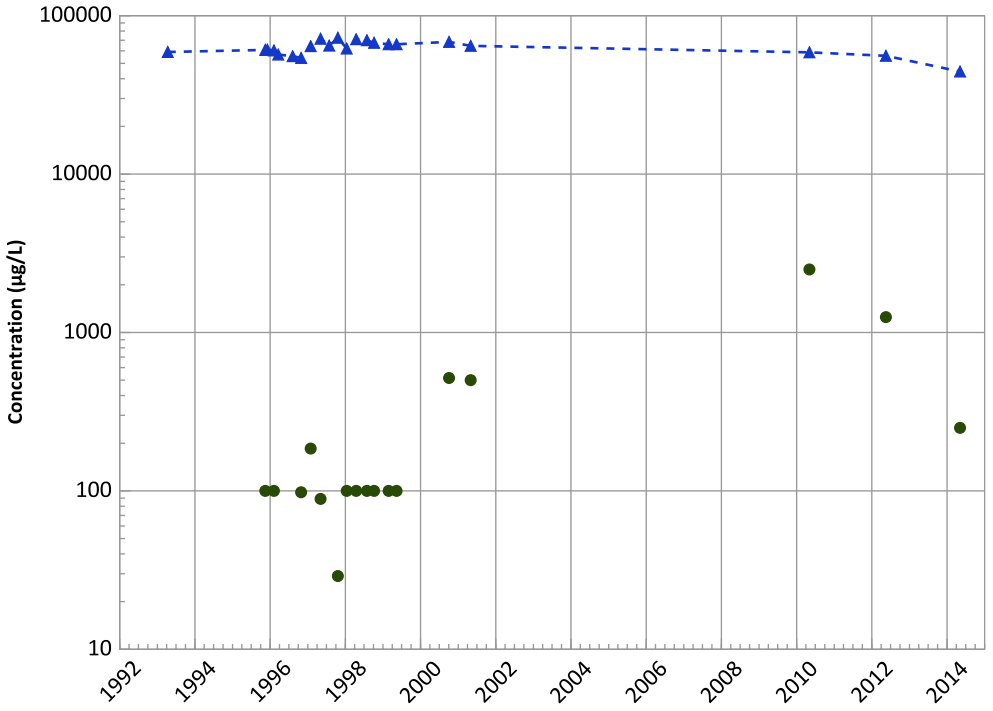
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



OW-WR-38 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

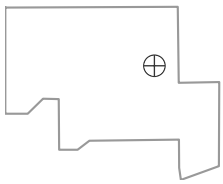
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

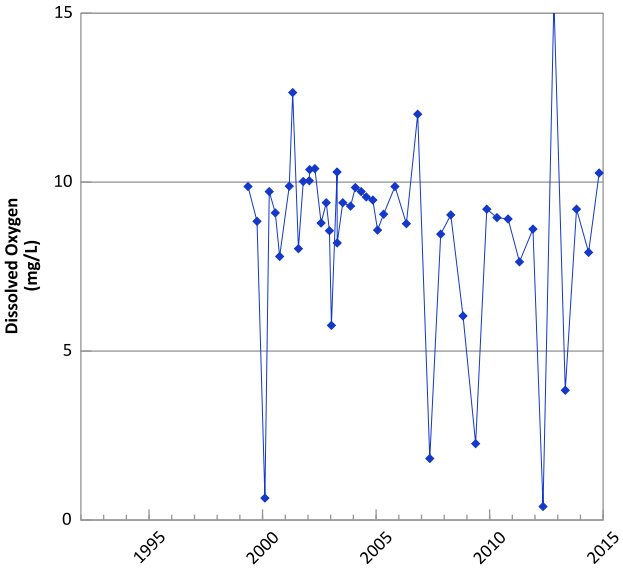
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/16/1992 to 05/07/2014
Analysis Date: 03/19/2015

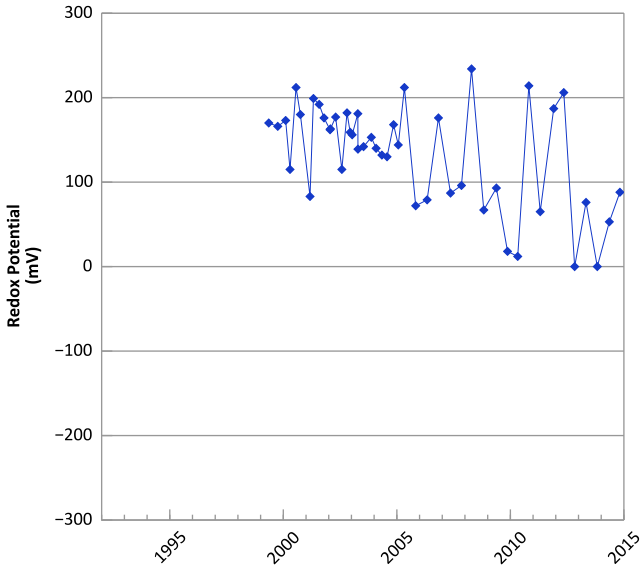
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

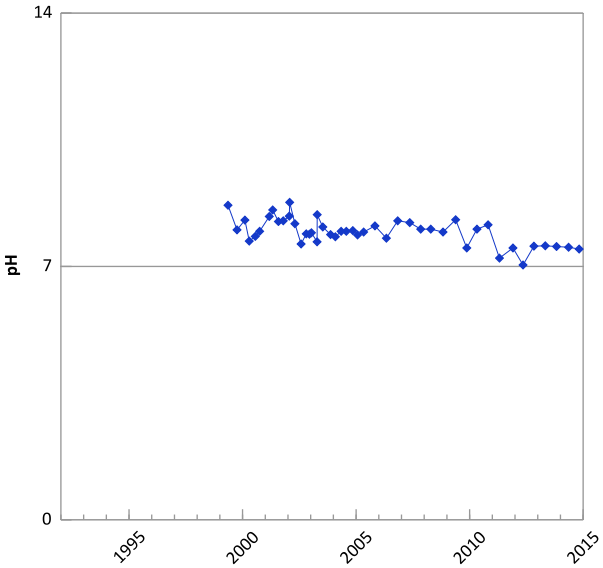
Well Location

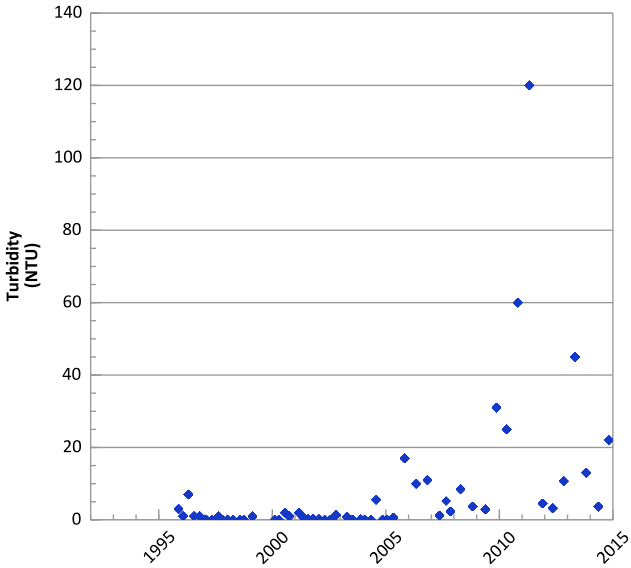


PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



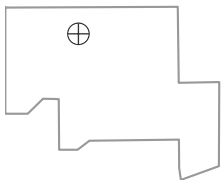






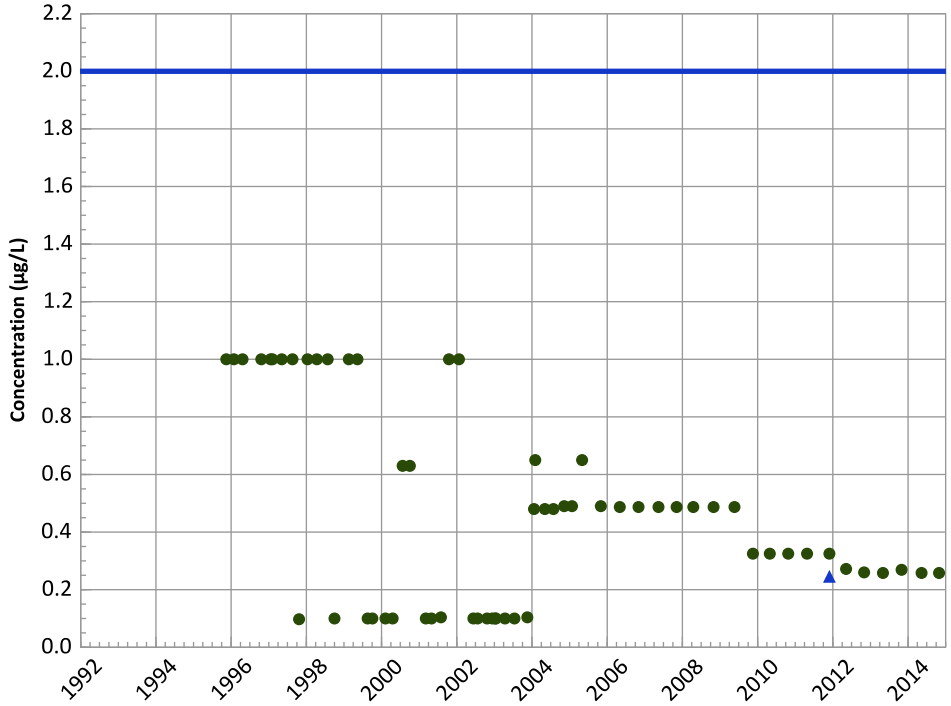
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

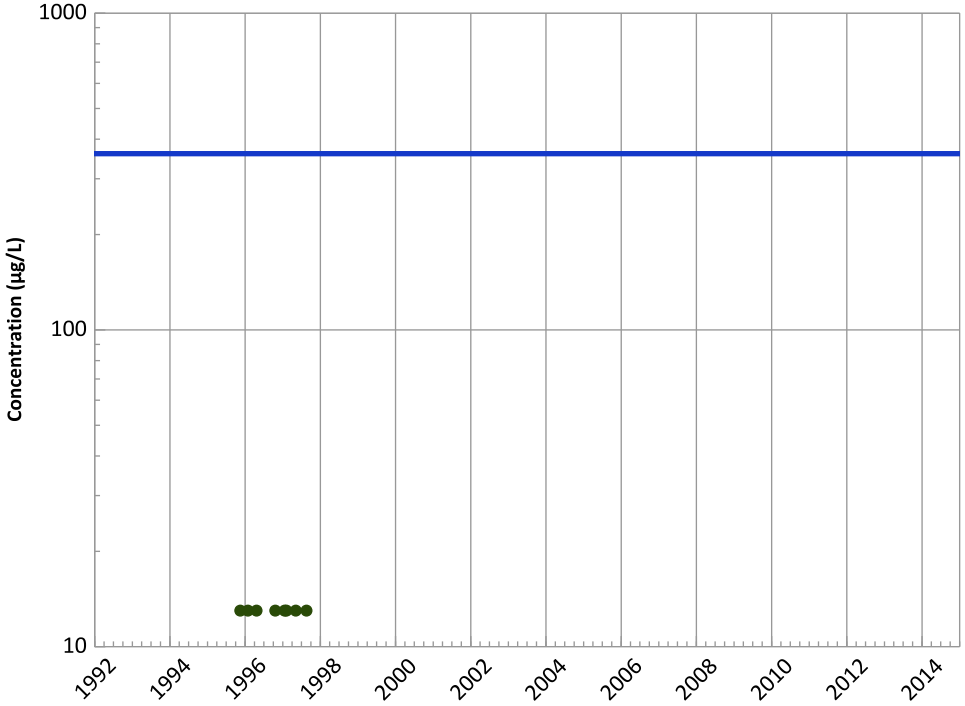


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

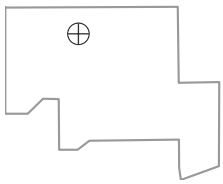
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

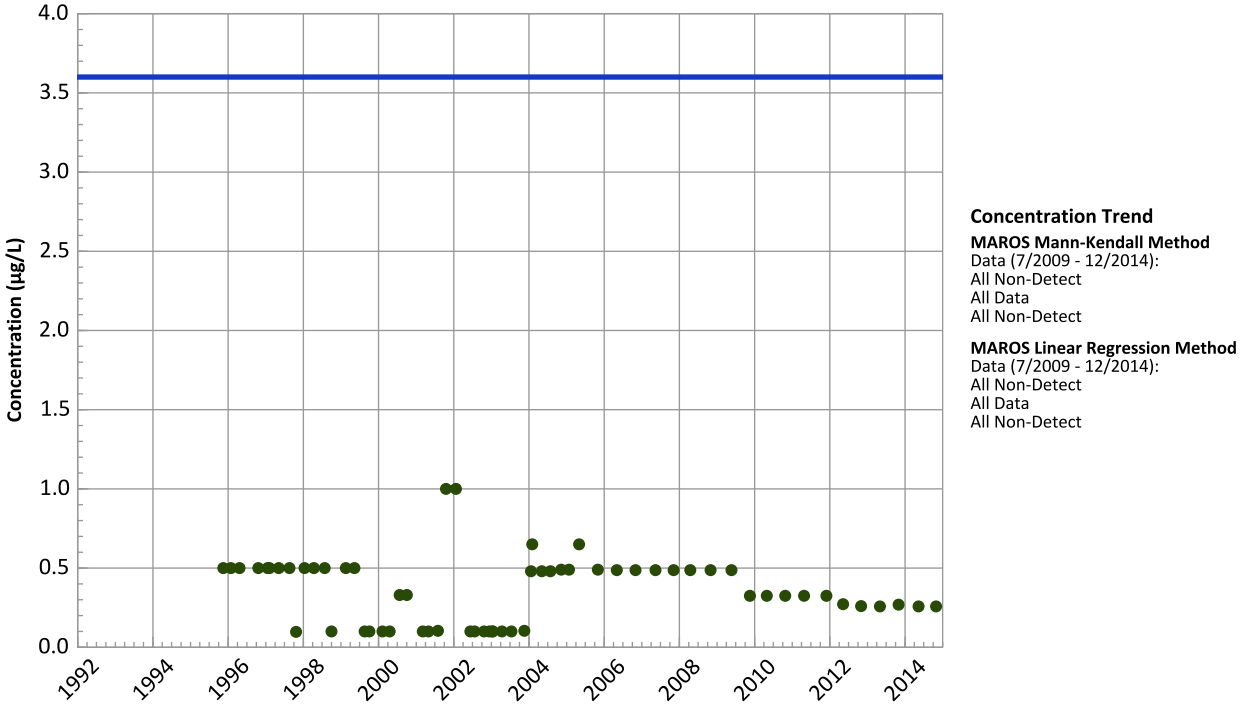
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

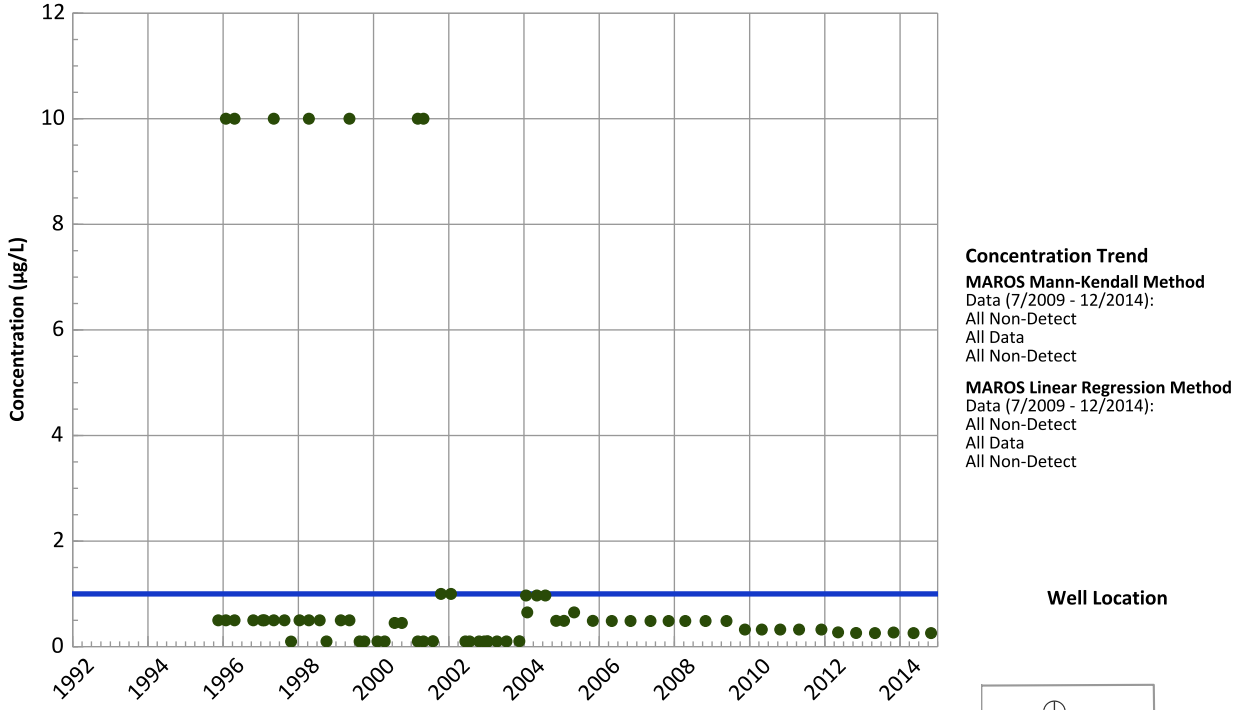


PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



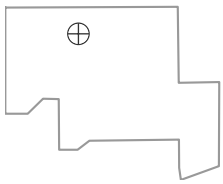
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

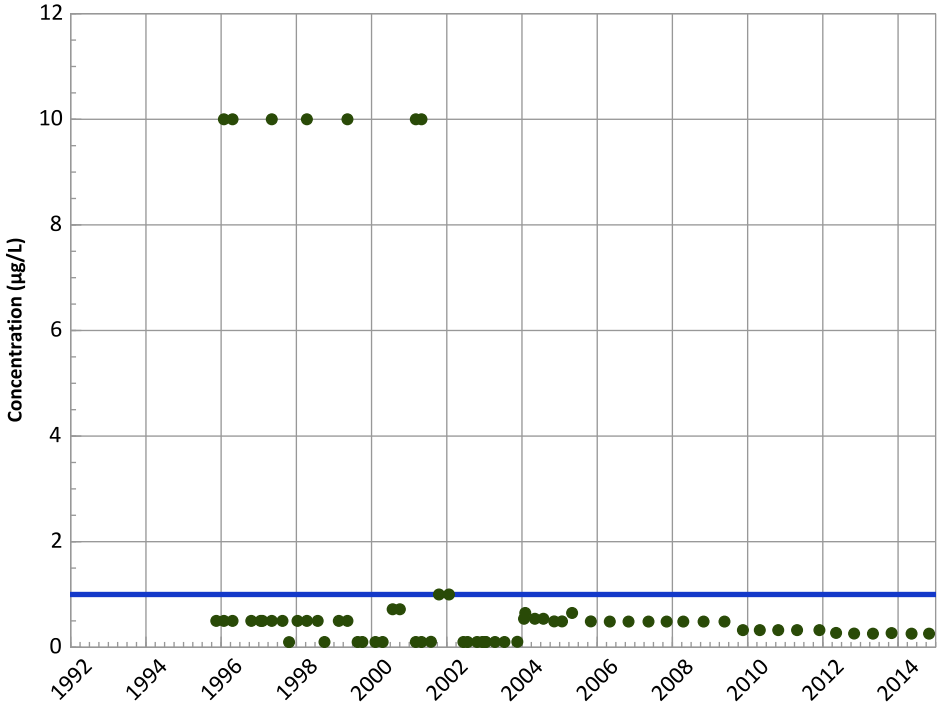
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

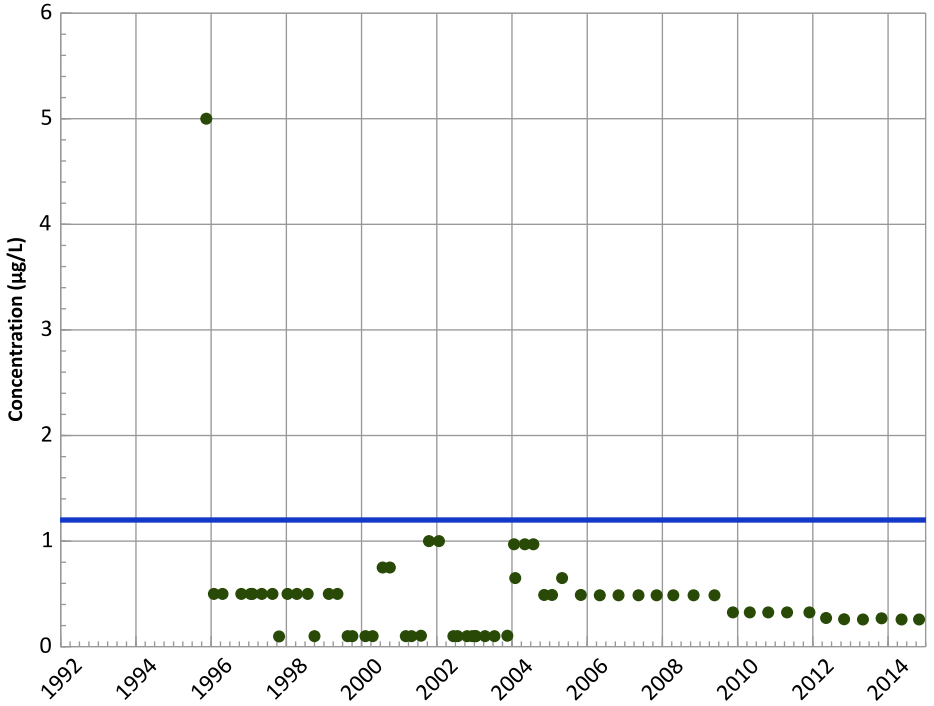


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

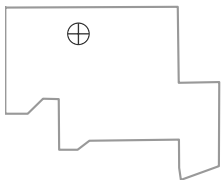
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

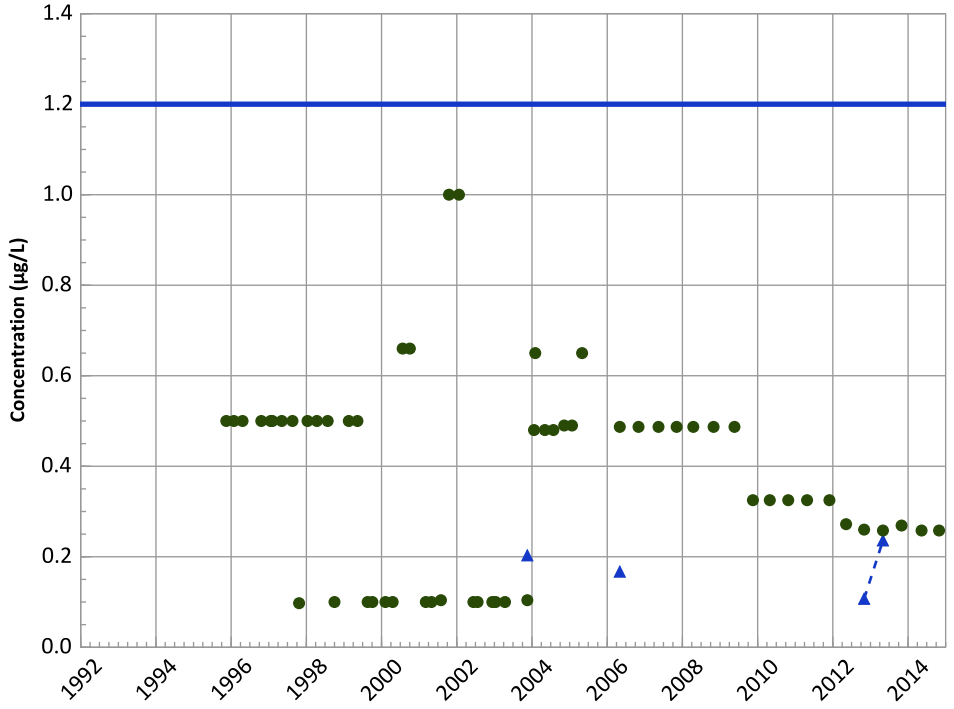
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

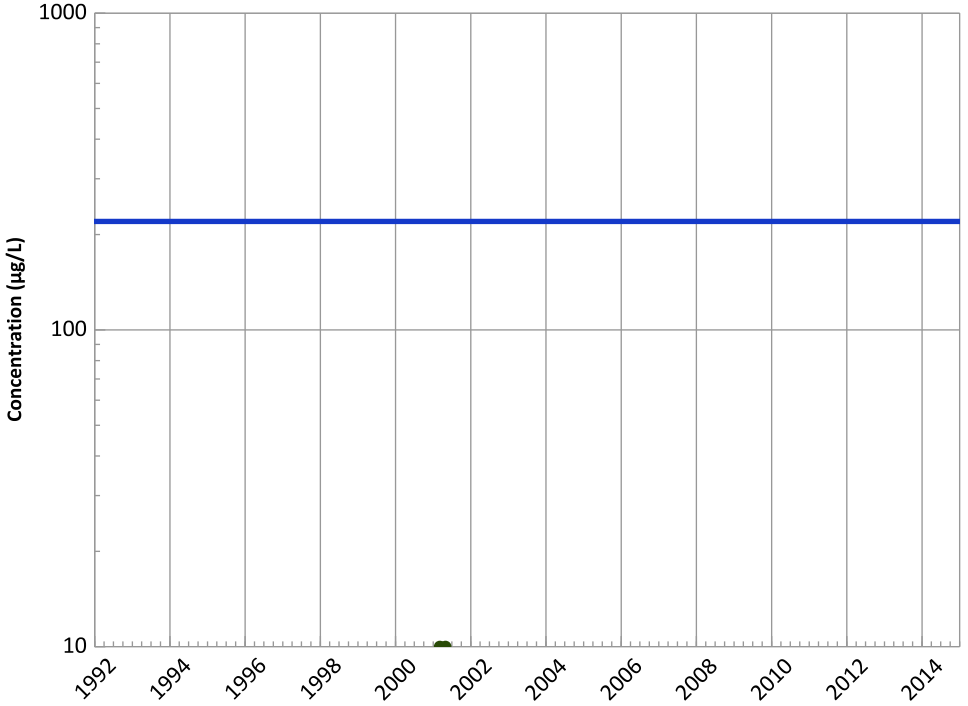


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

1,3,5-Trinitrobenzene Trend



Concentration Trend

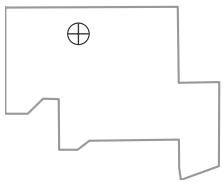
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

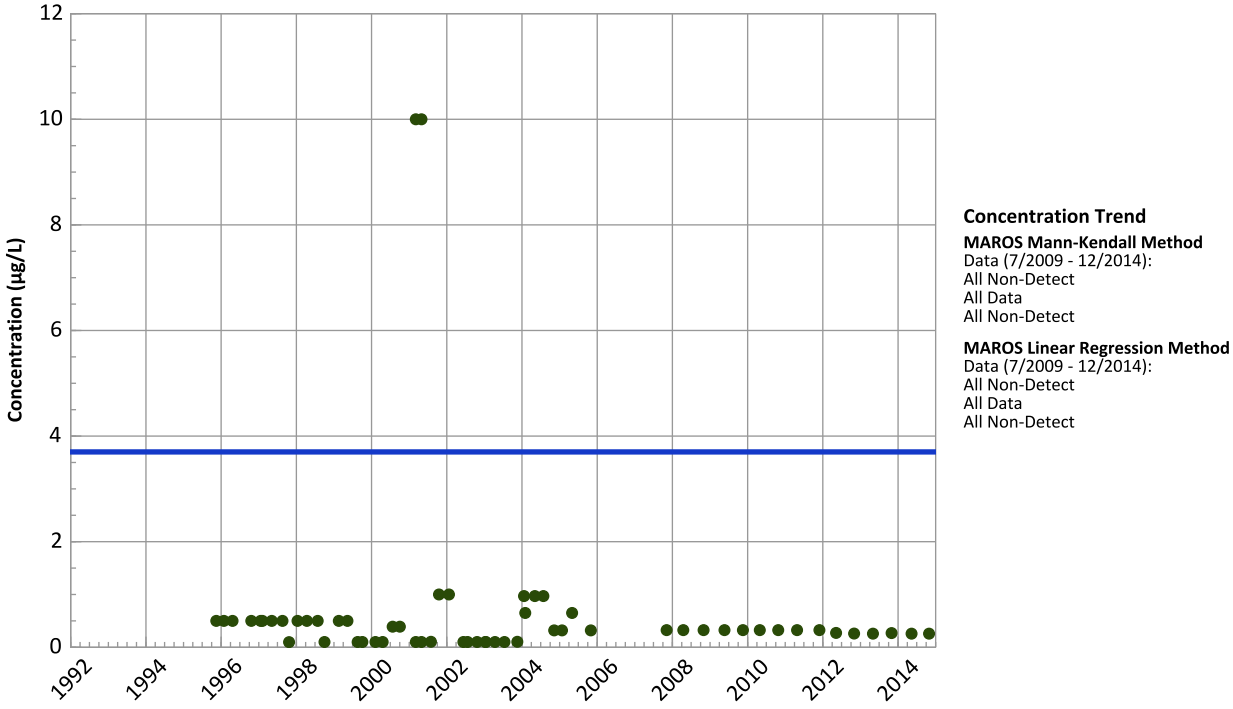
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ═══ Groundwater Protection Standard

Well Location

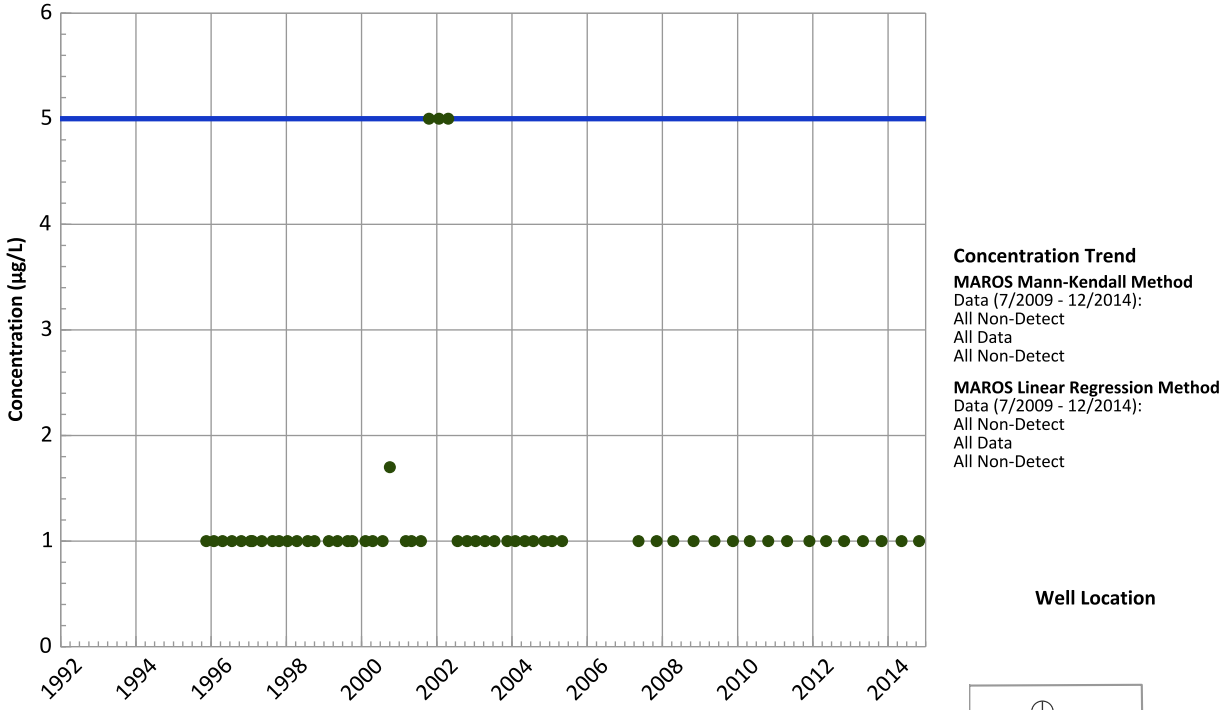


PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



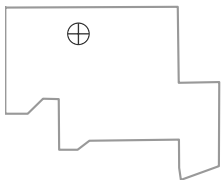
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

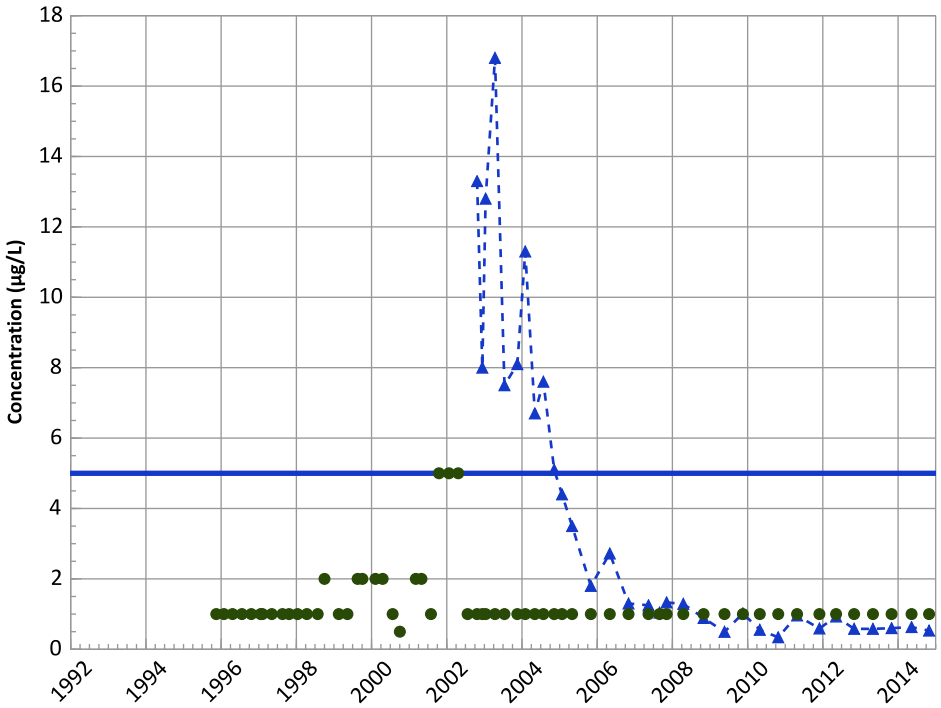
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

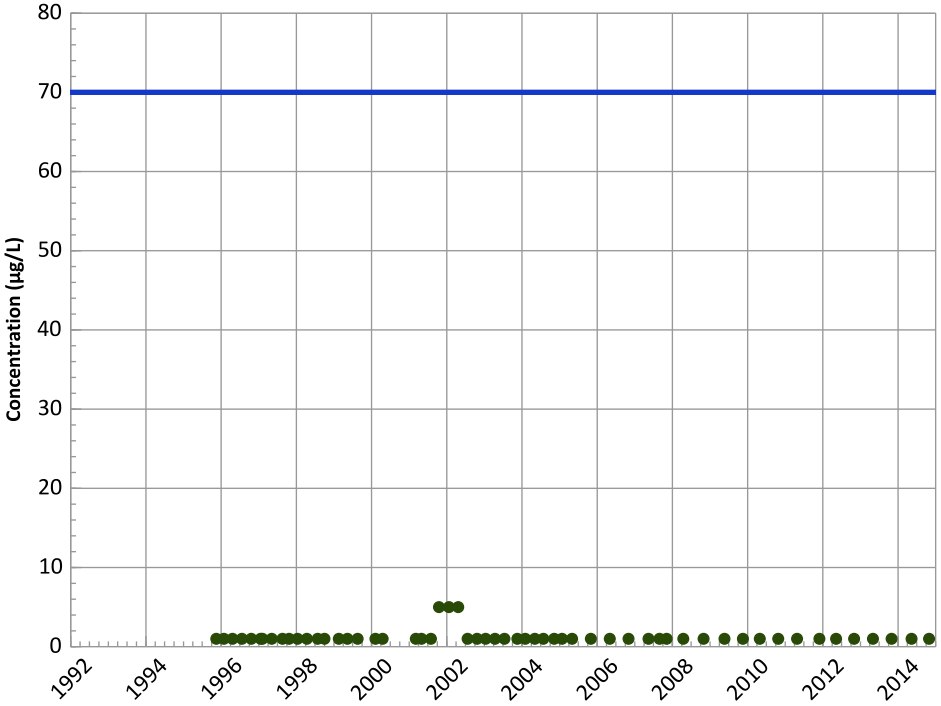


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

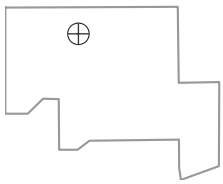
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

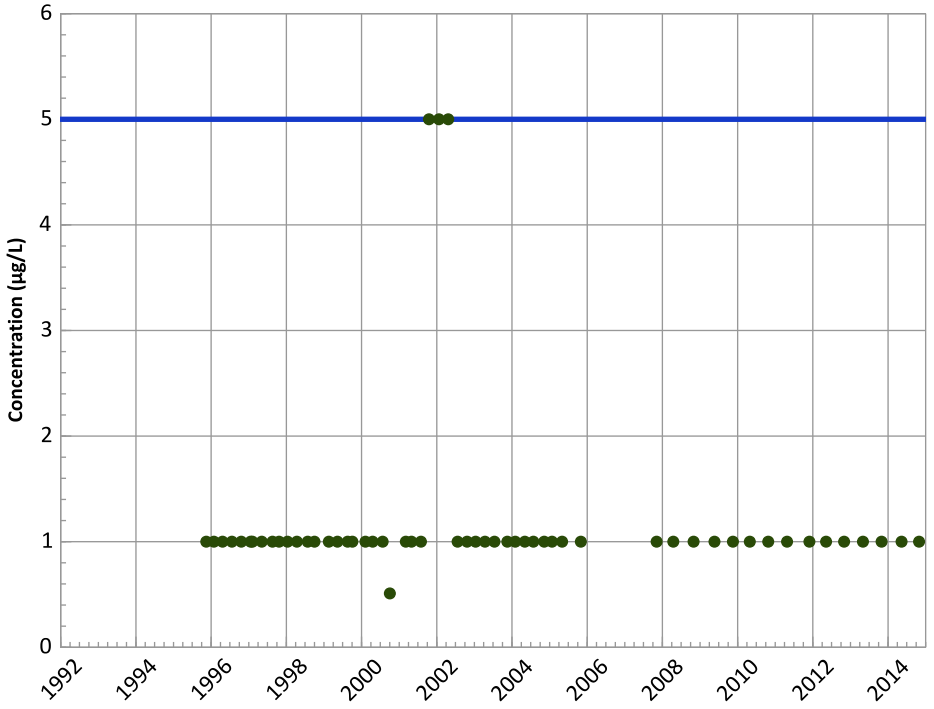
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

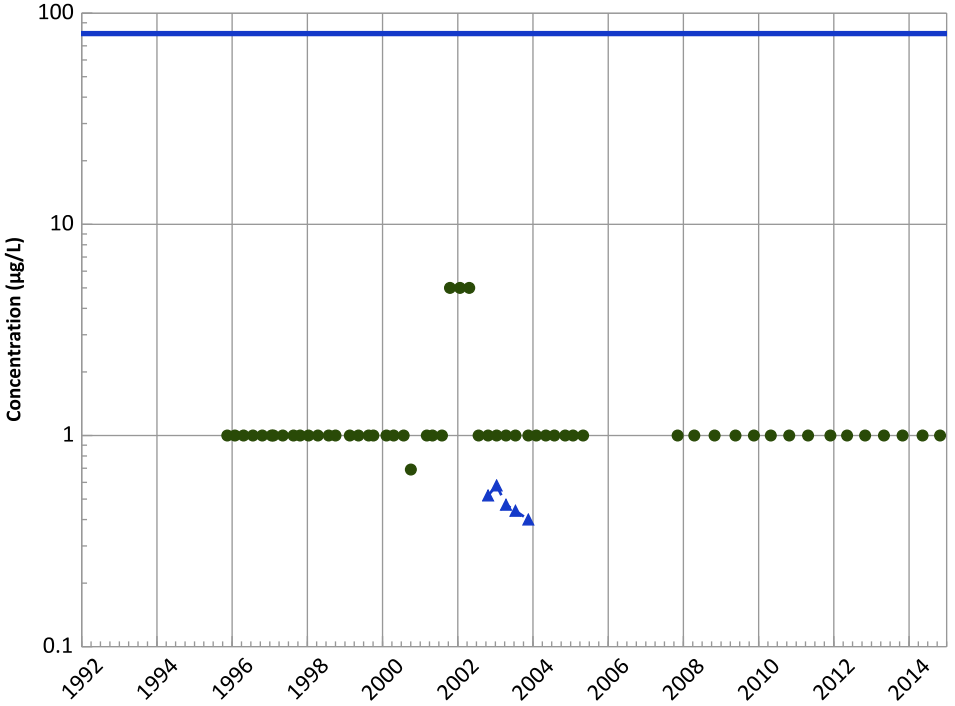


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

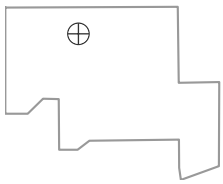
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

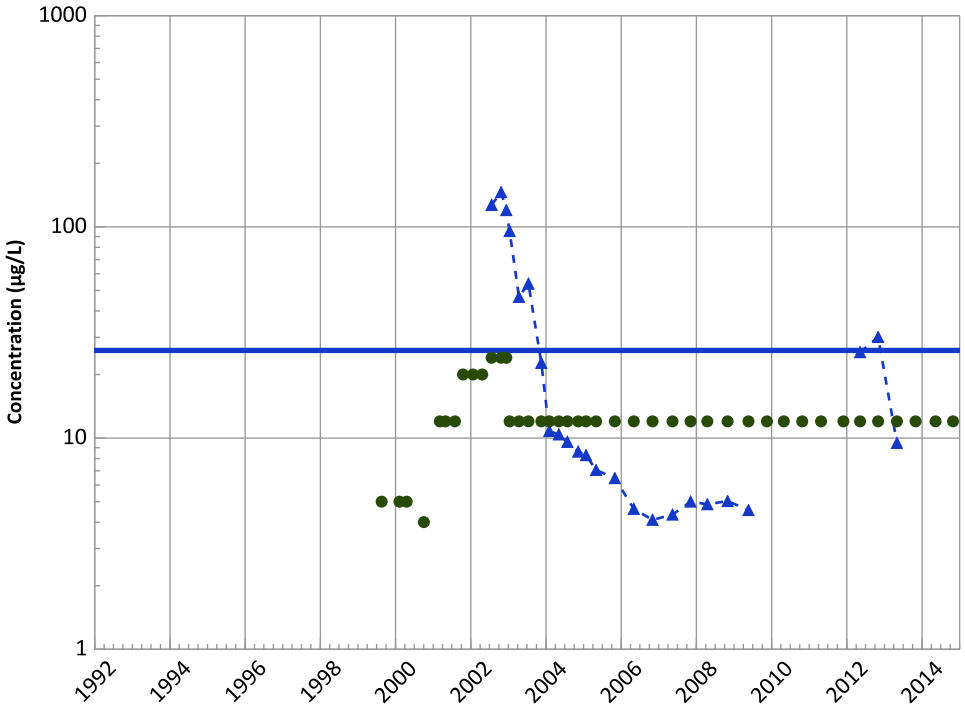
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

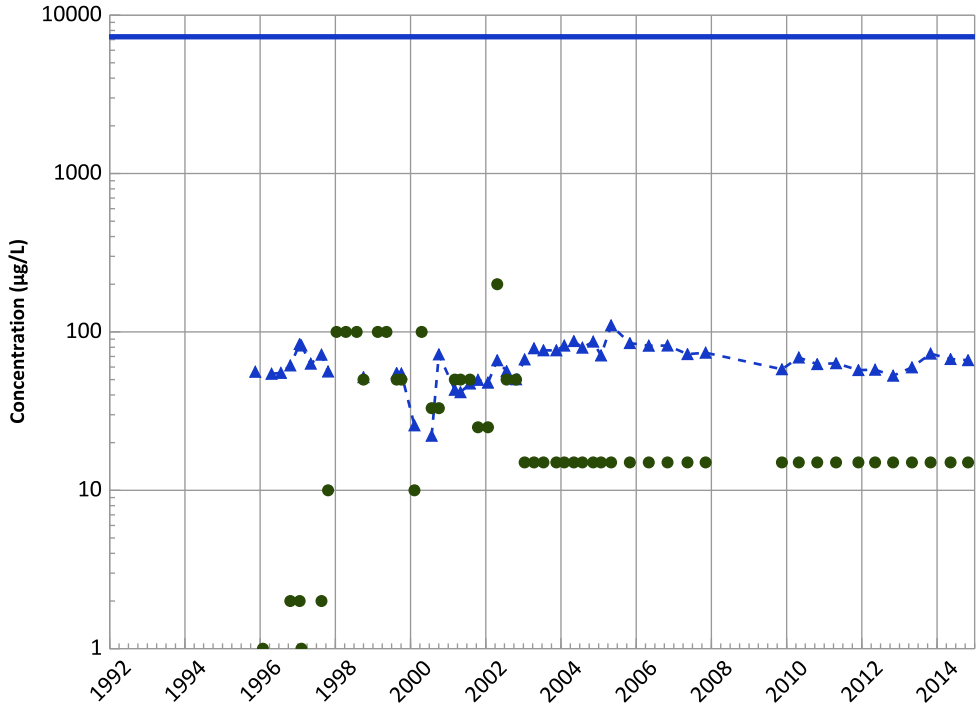


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Boron Trend



Concentration Trend

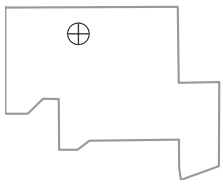
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

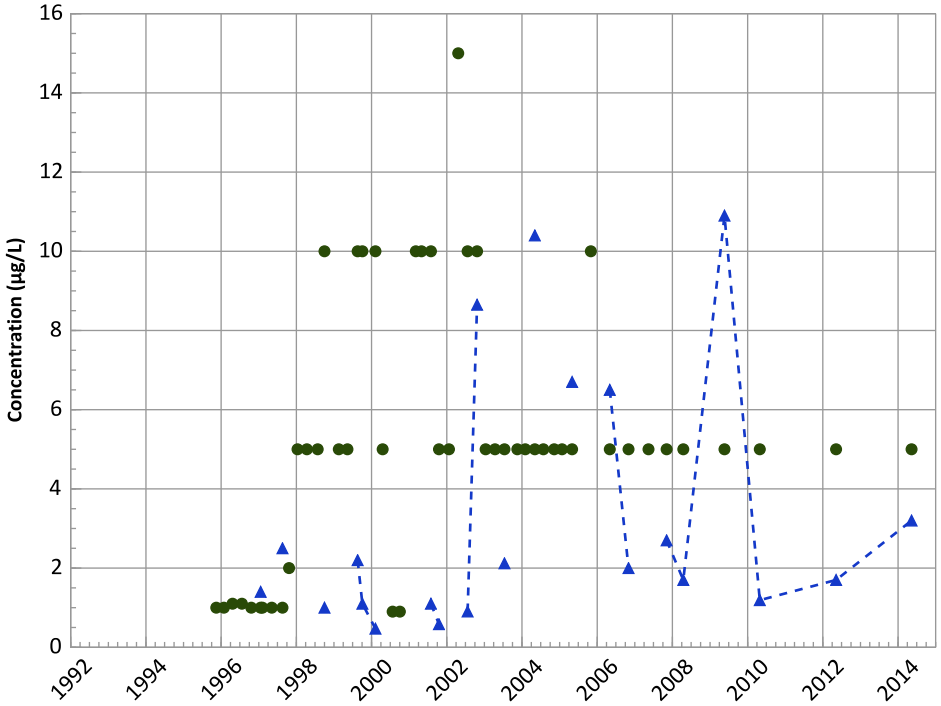
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

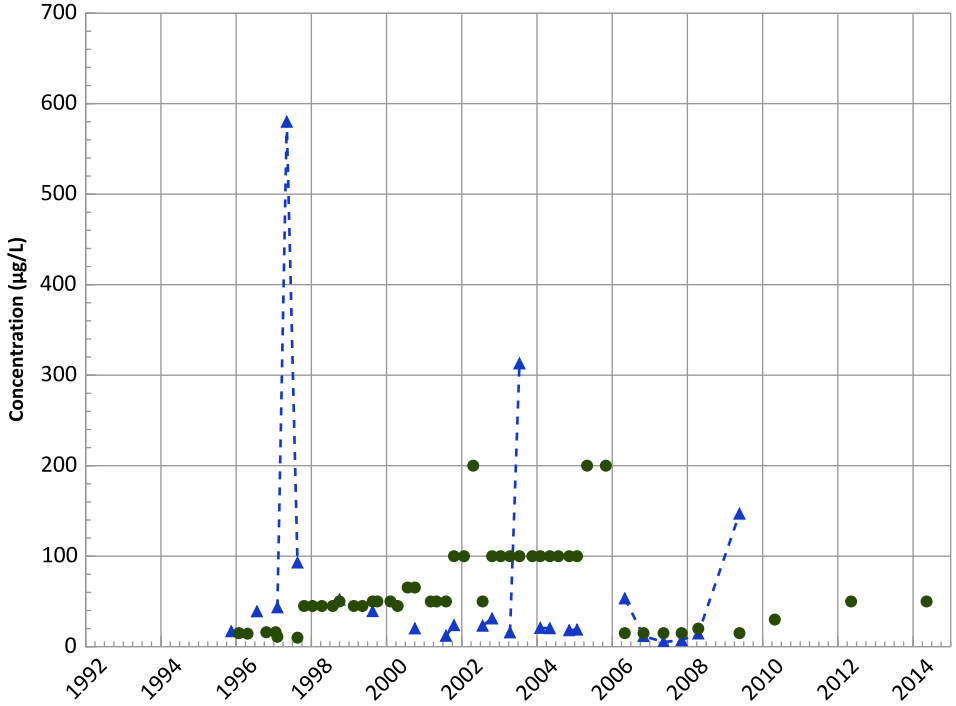


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Aluminum Trend



Concentration Trend

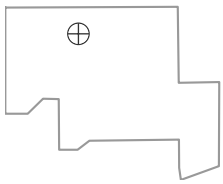
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

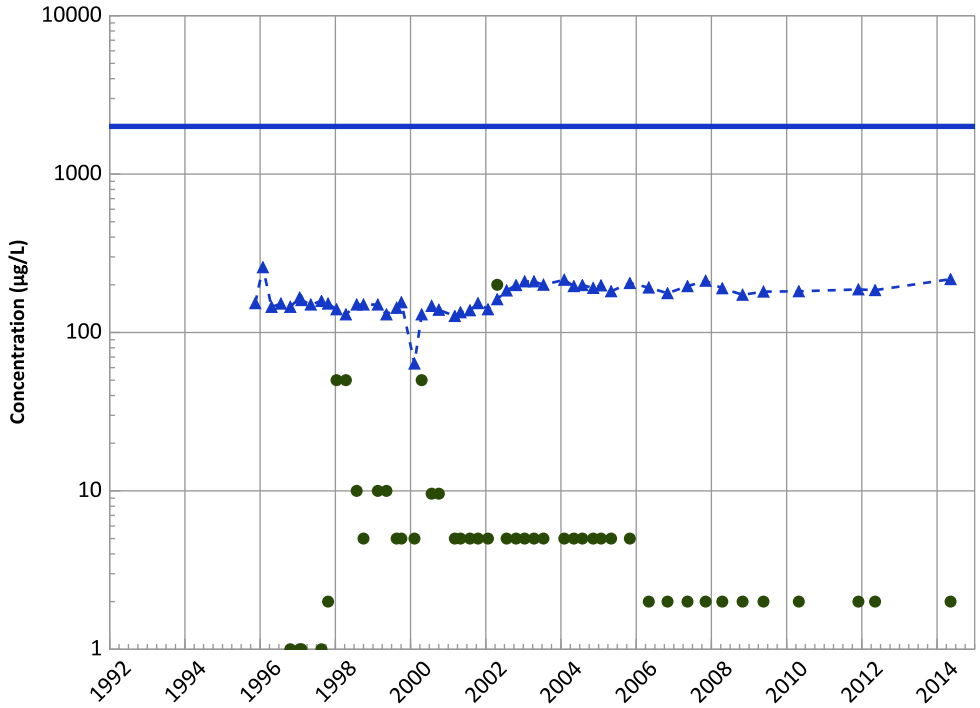
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

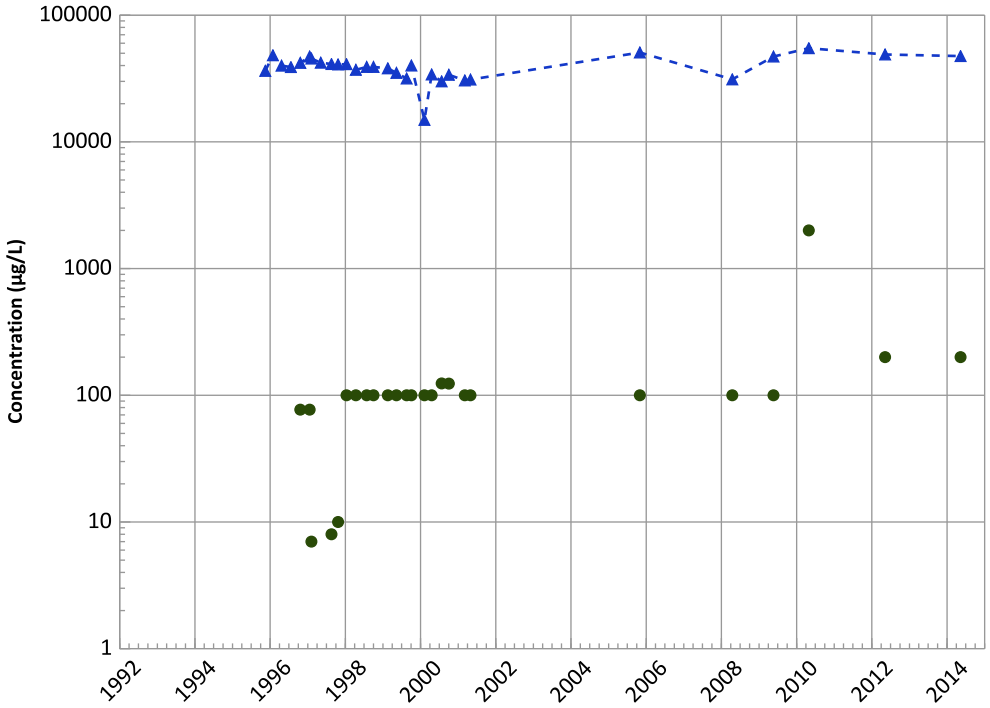


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Calcium Trend



Concentration Trend

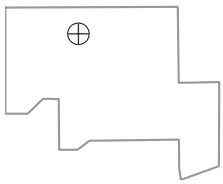
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

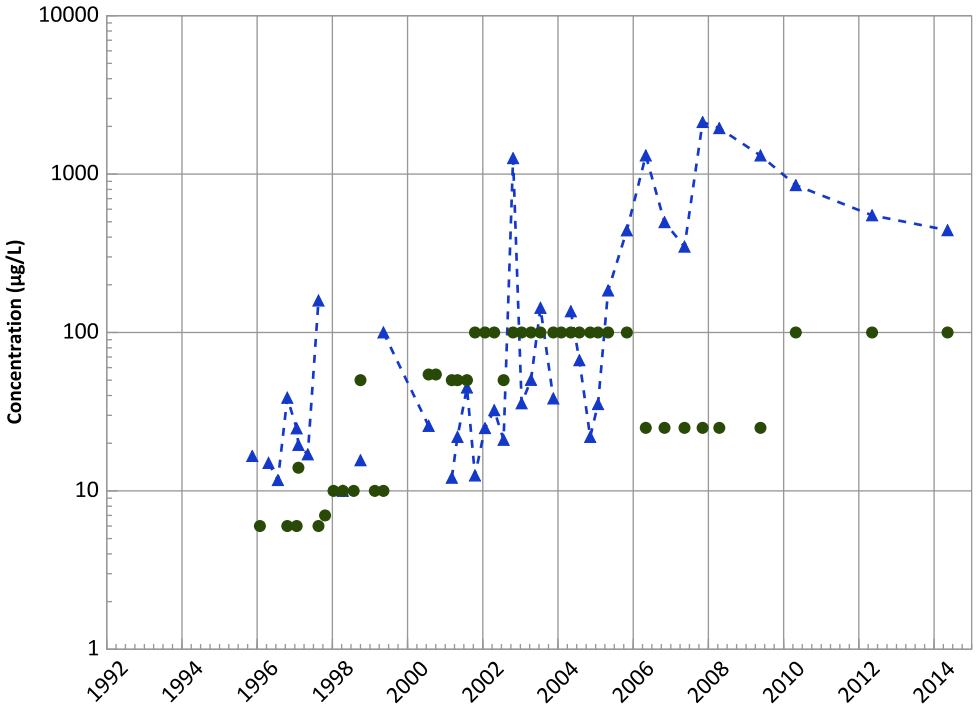
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

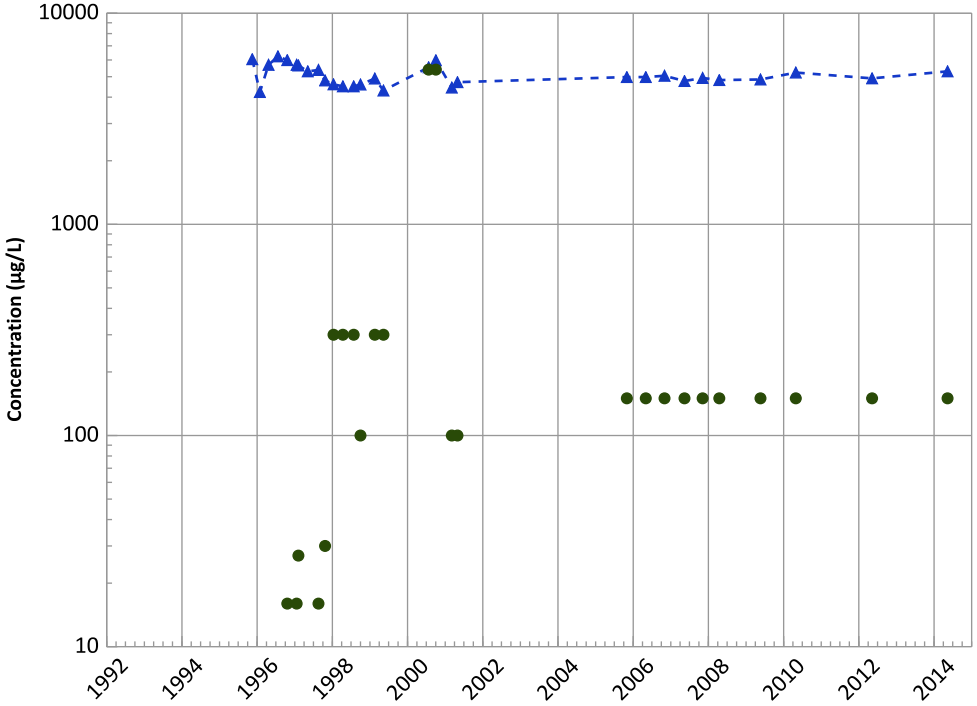


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Potassium Trend



Concentration Trend

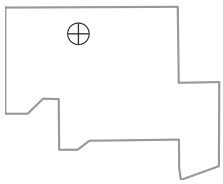
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

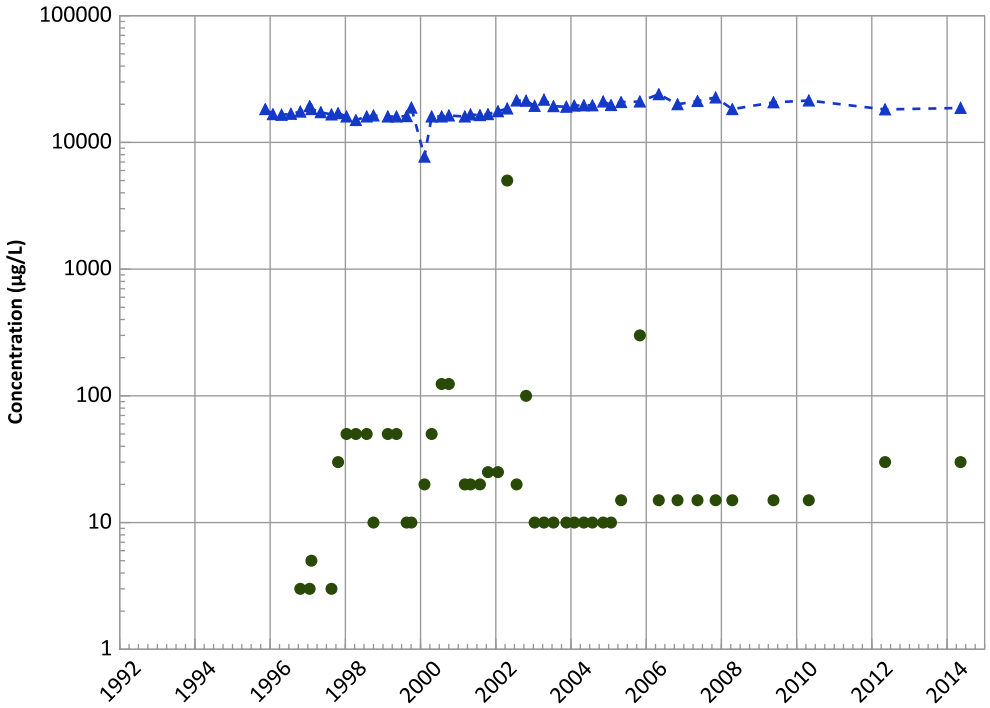
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

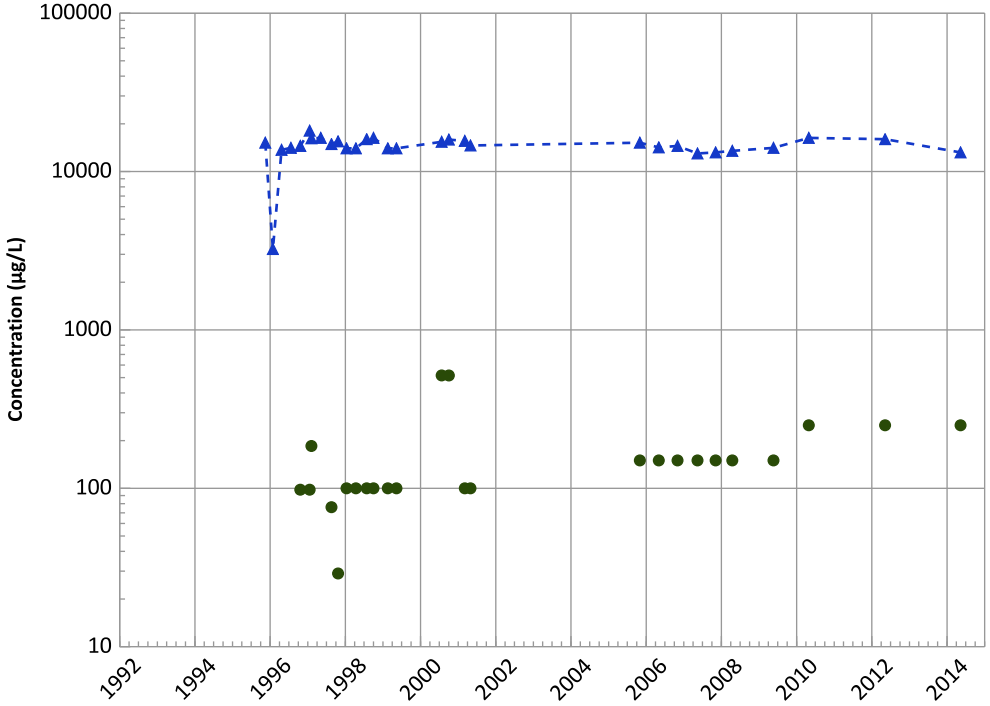


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Sodium Trend



Concentration Trend

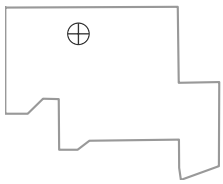
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

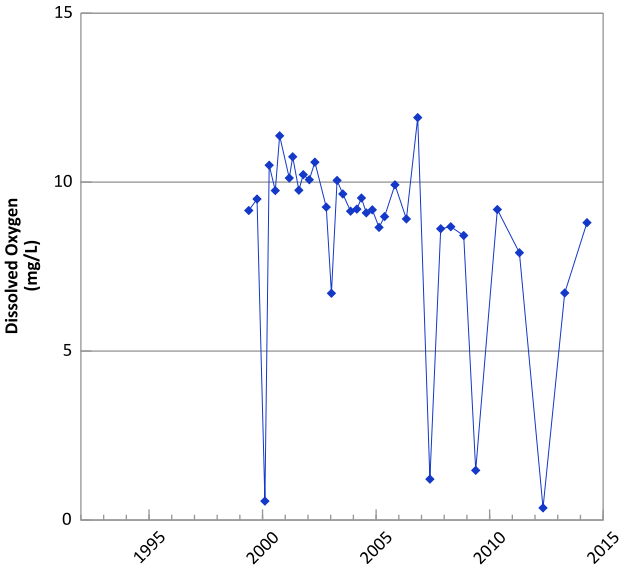
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/15/1995 to 10/29/2014
Analysis Date: 03/19/2015

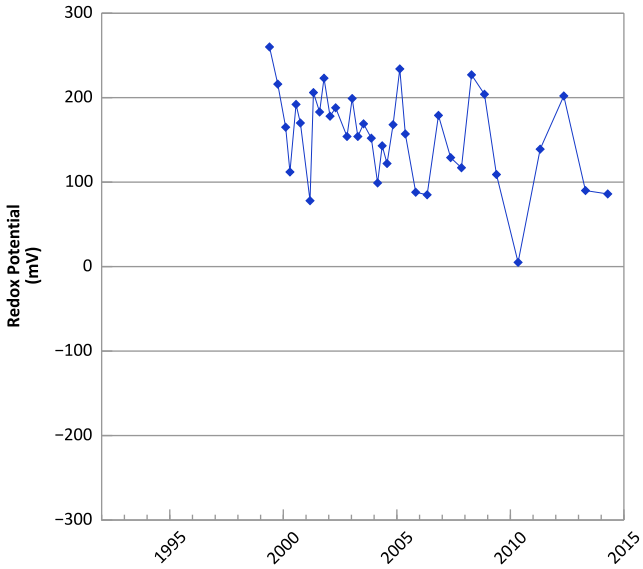
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

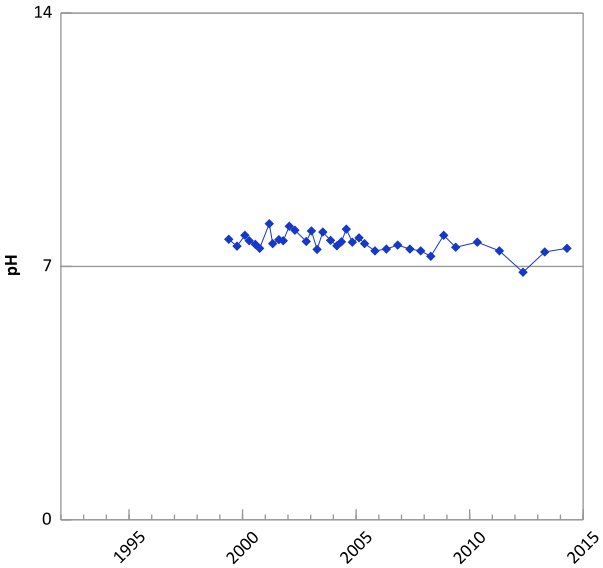
Well Location

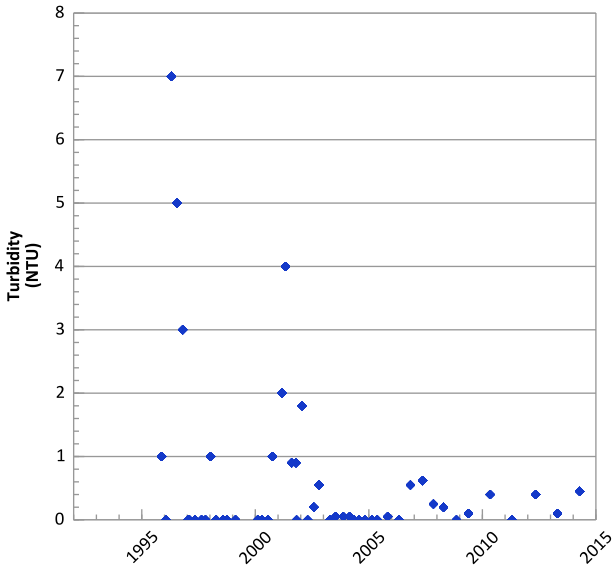


PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



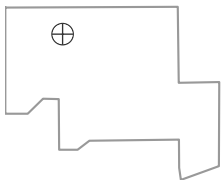






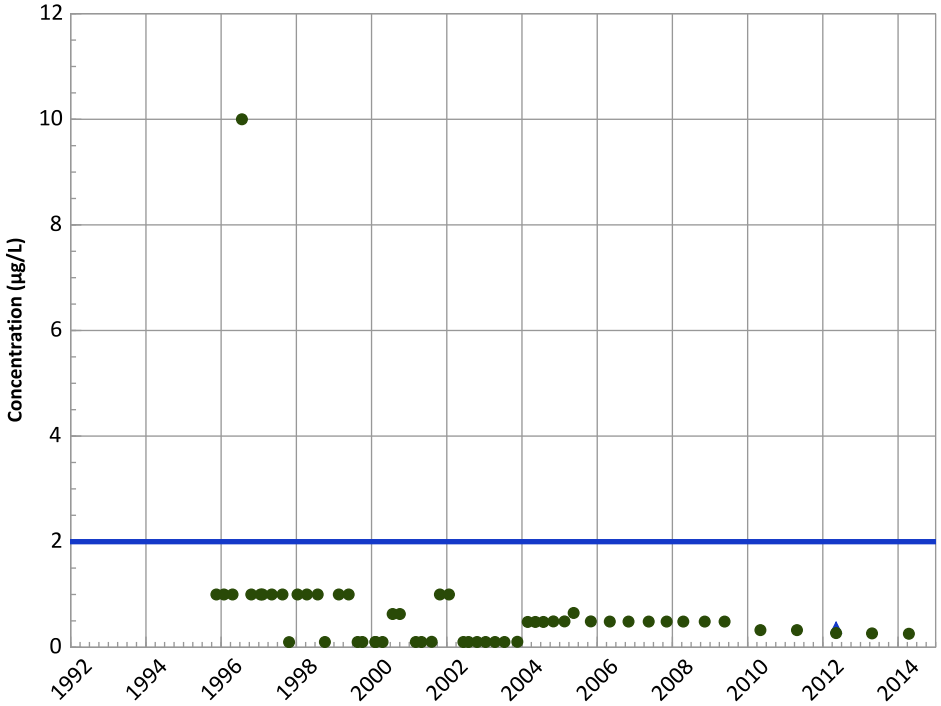
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

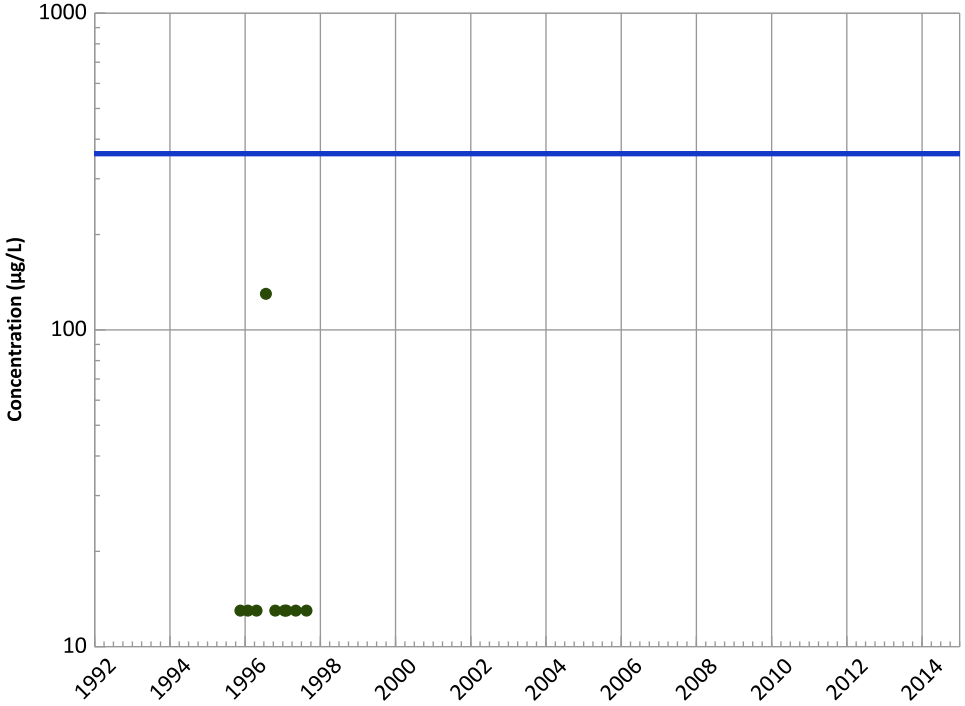


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

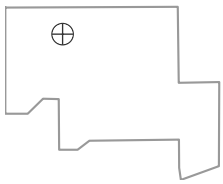
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

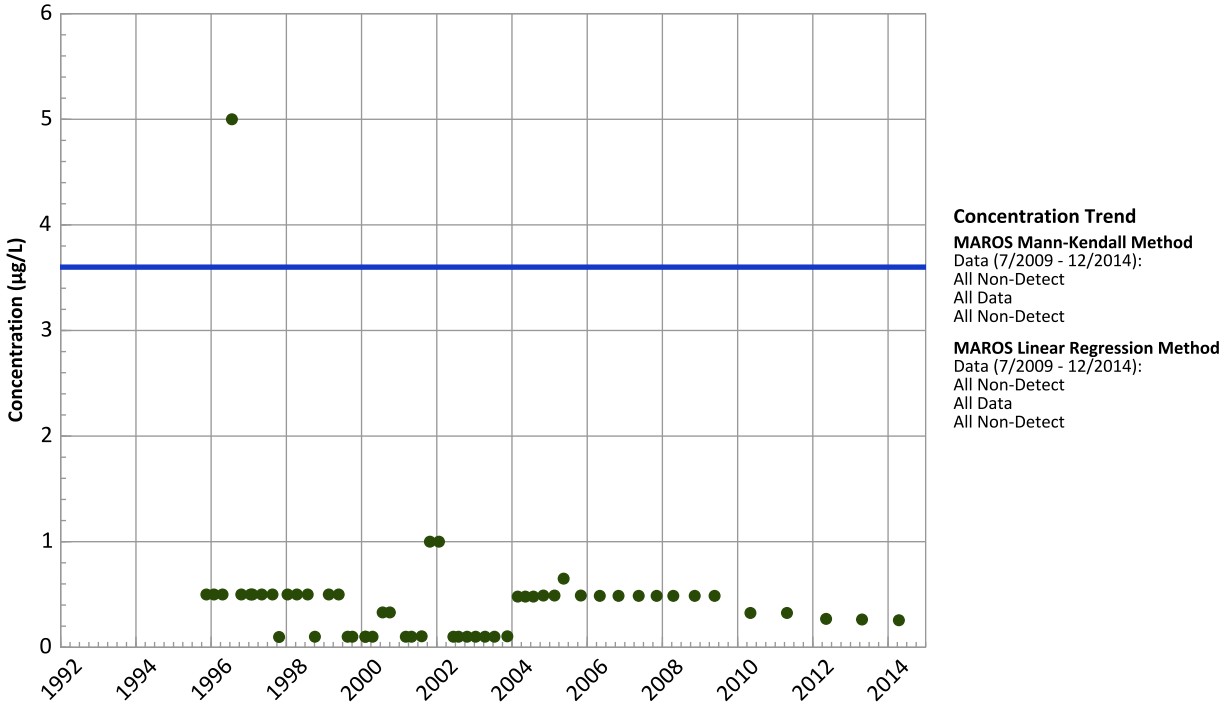
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

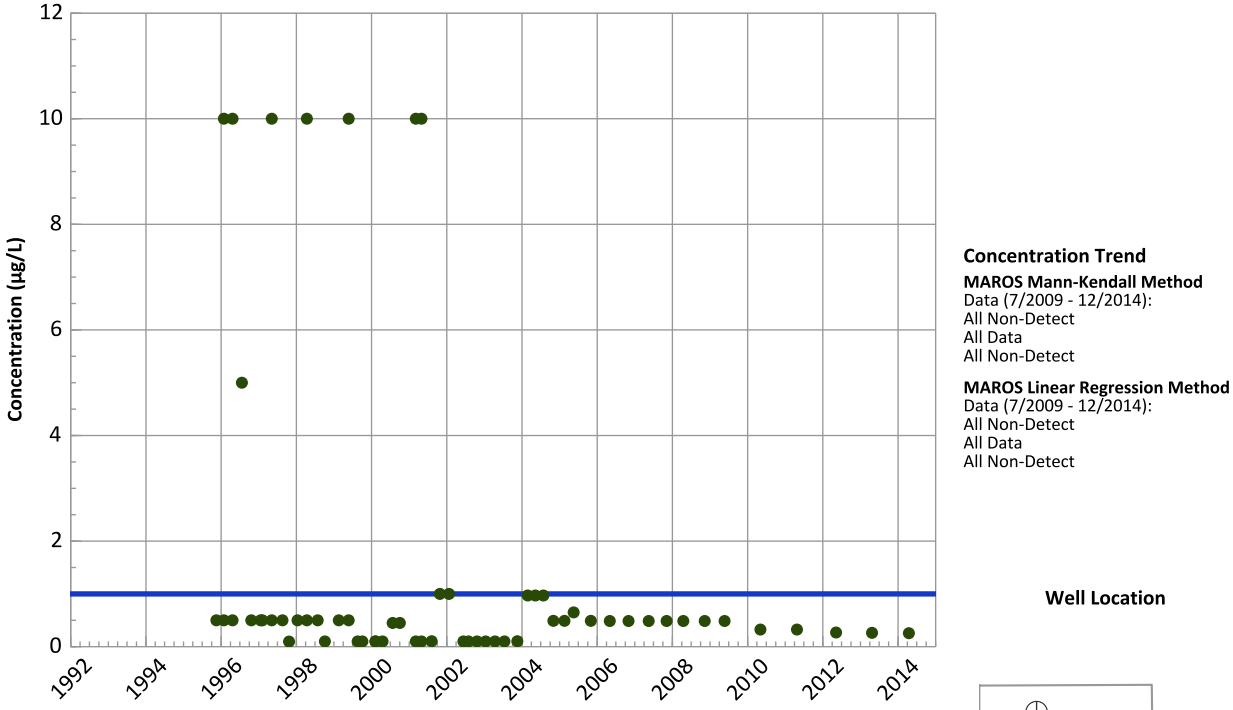


PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



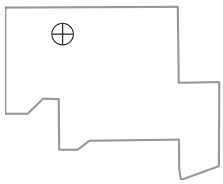
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

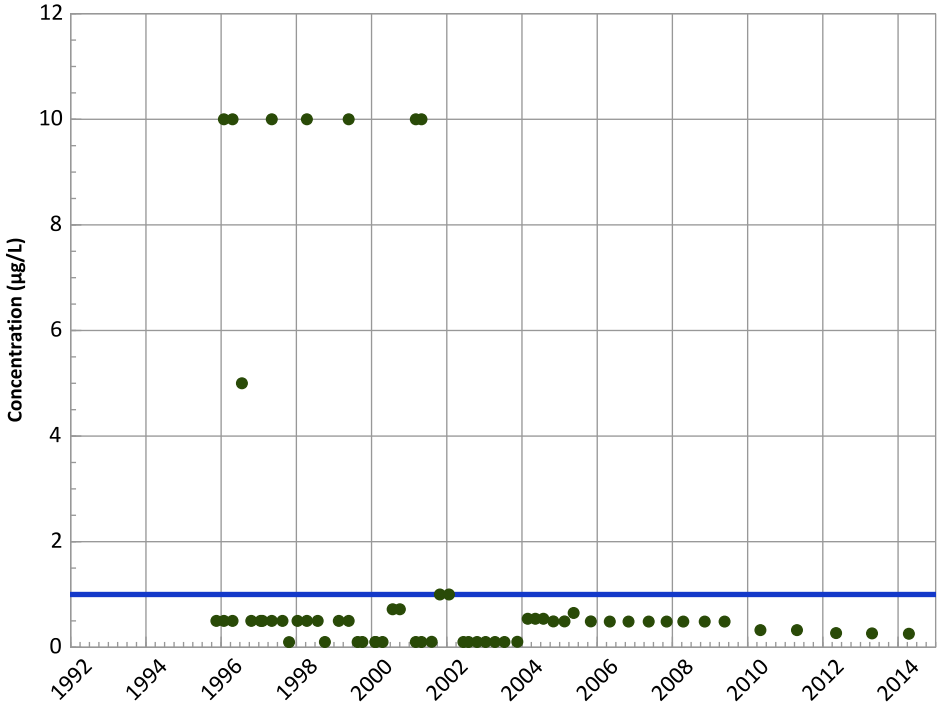
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

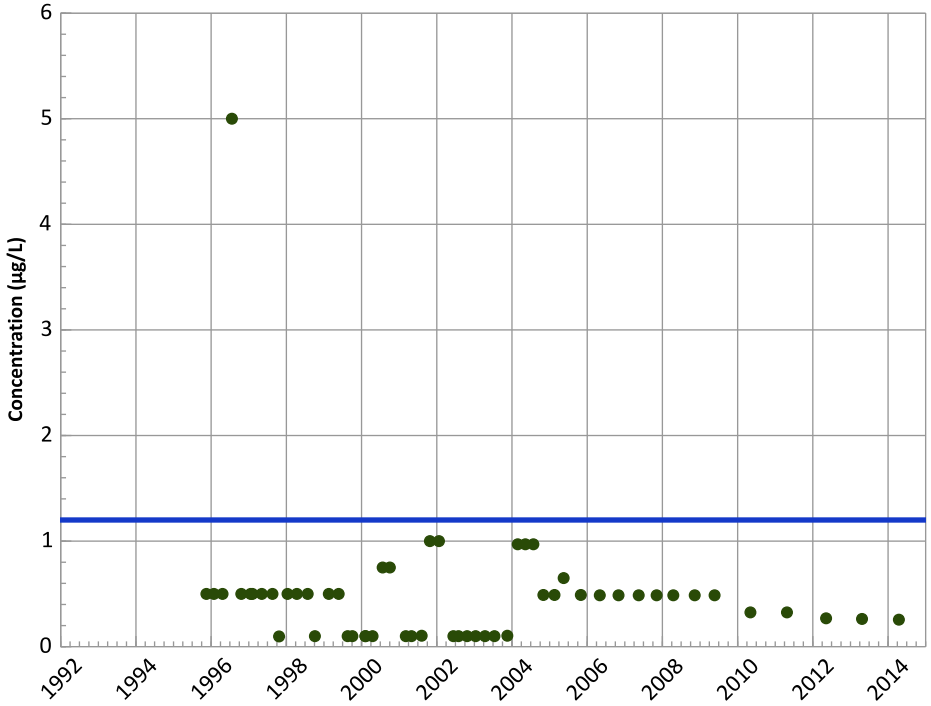


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

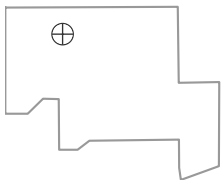
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

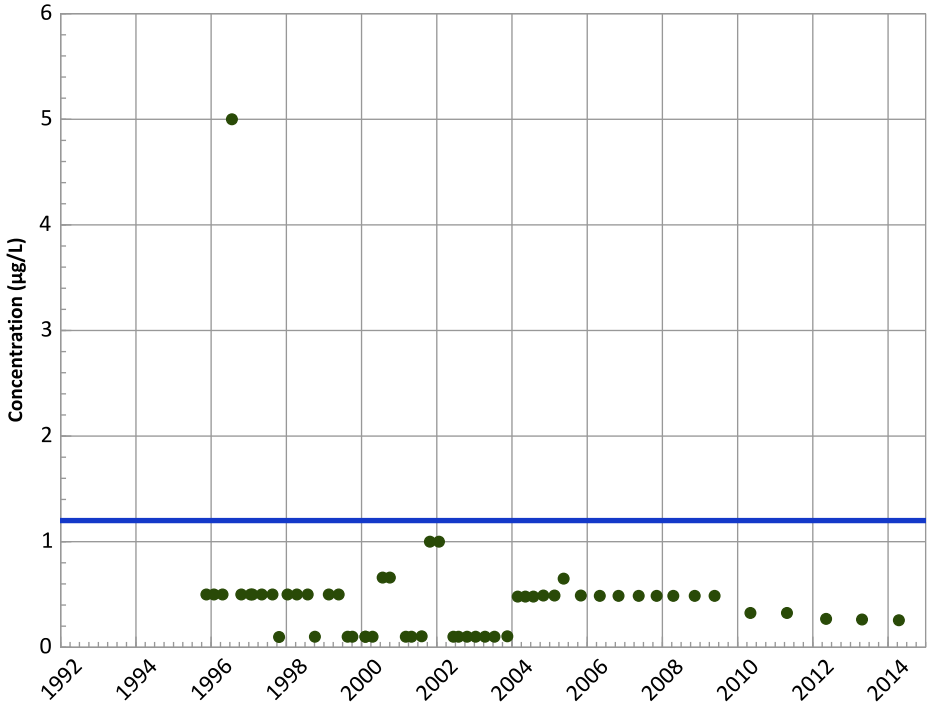
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

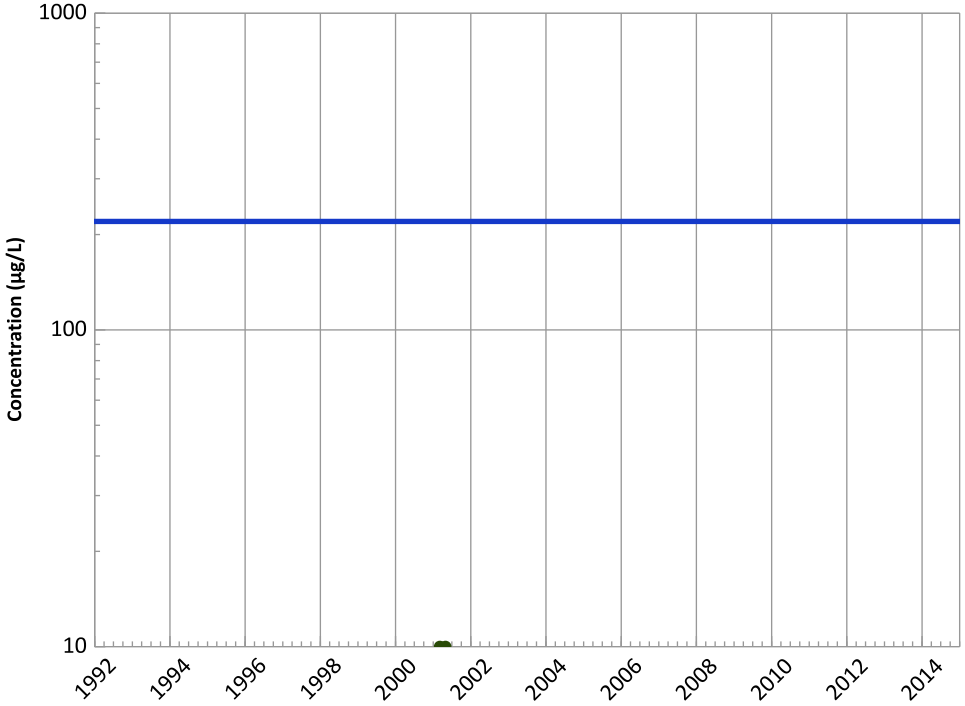


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

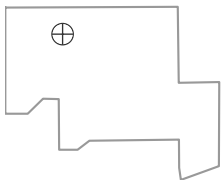
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

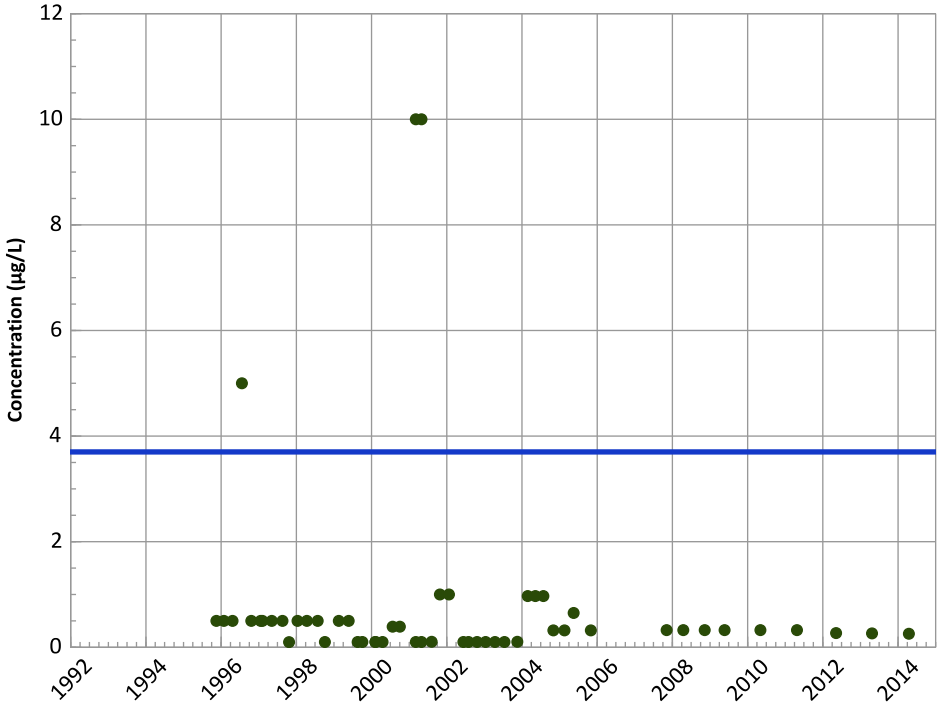
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

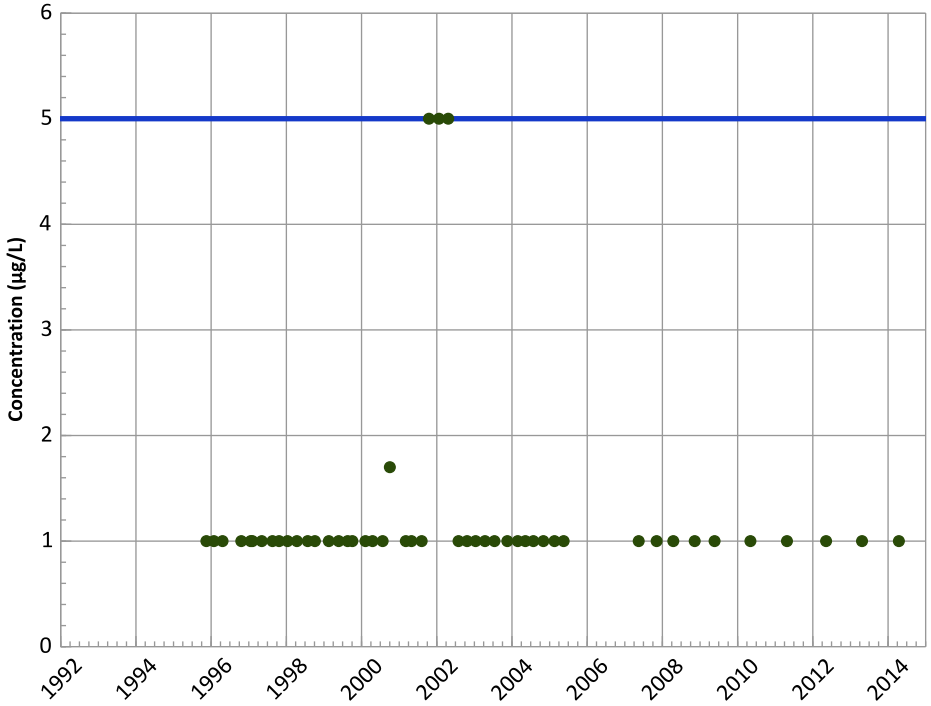


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

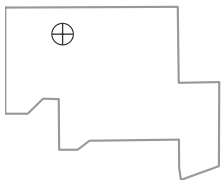
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

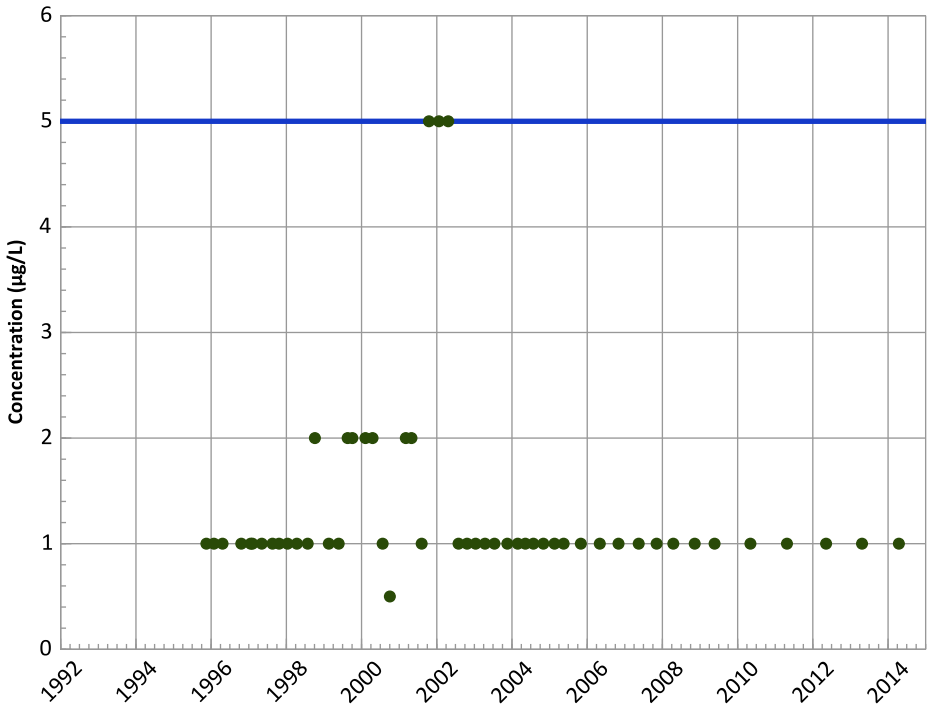
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

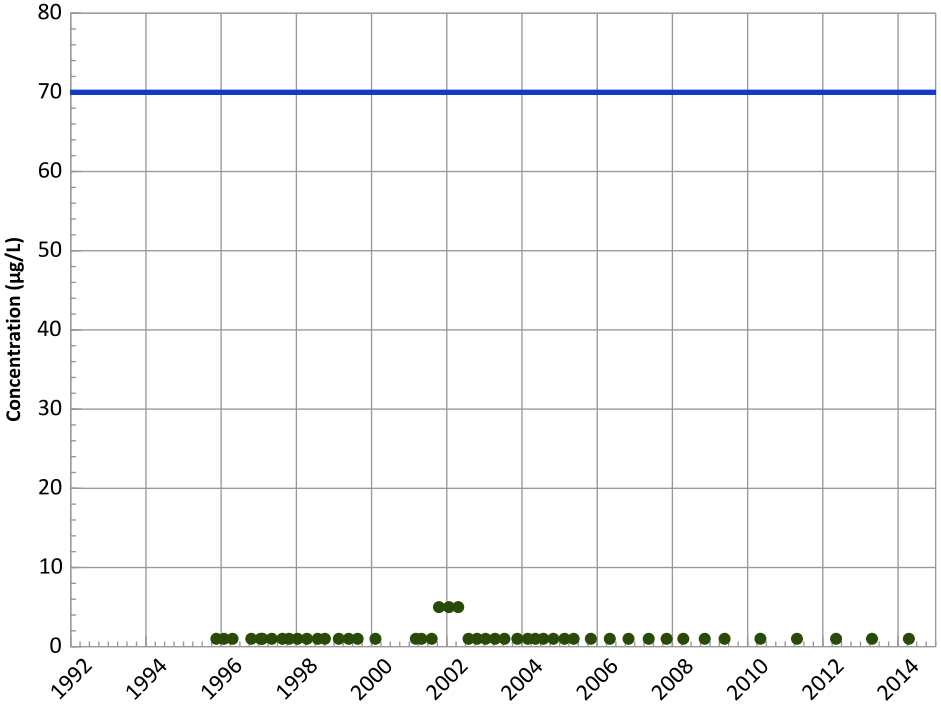


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

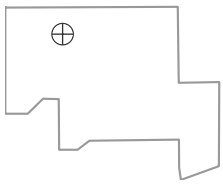
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

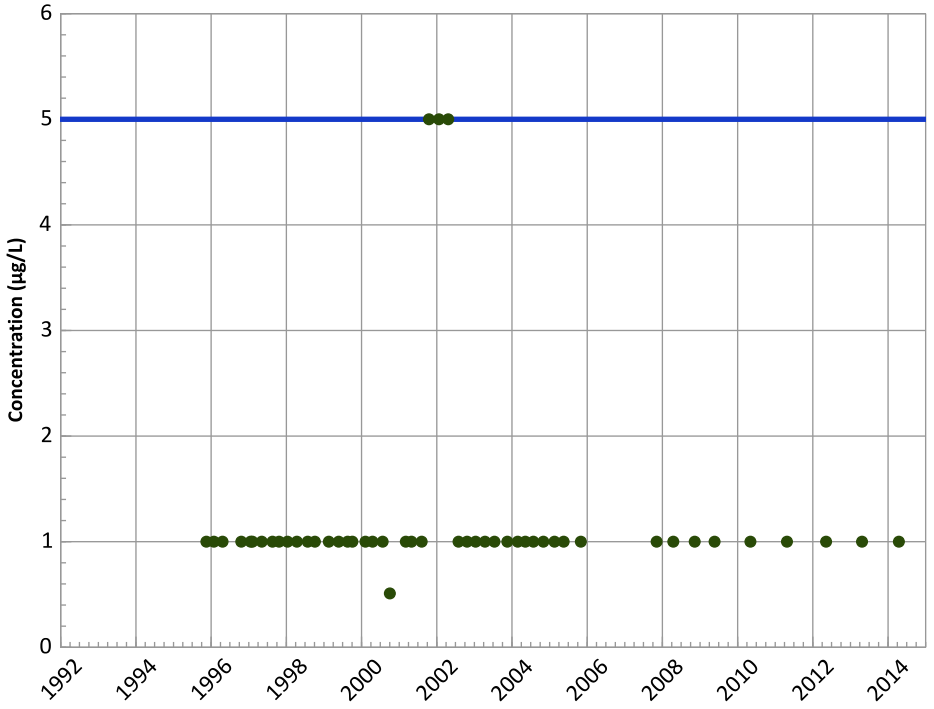
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

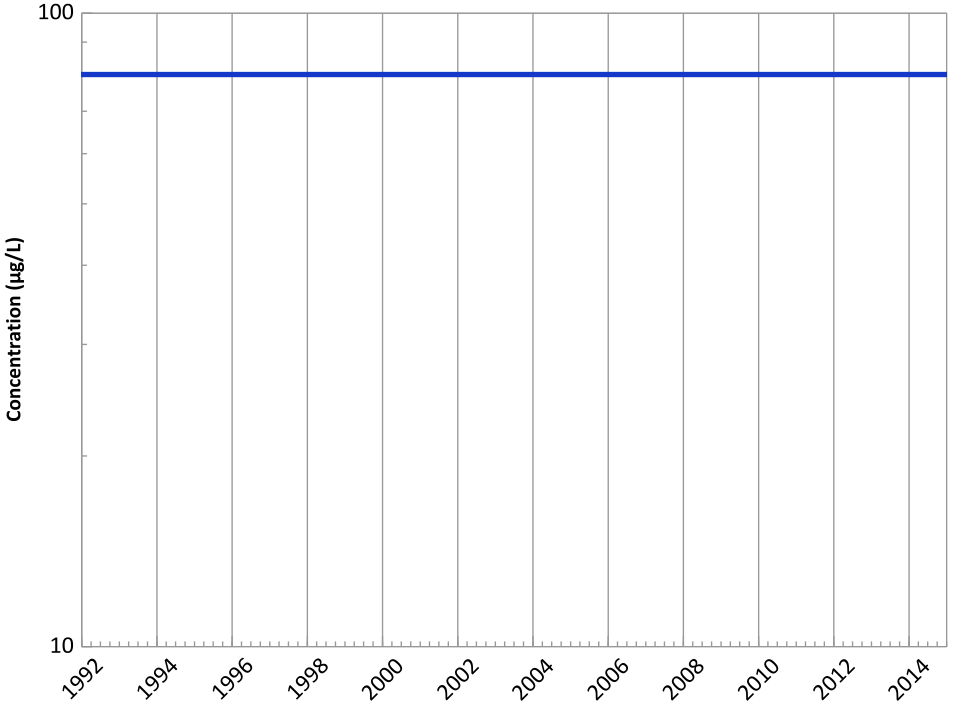


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

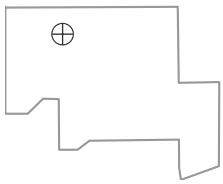
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

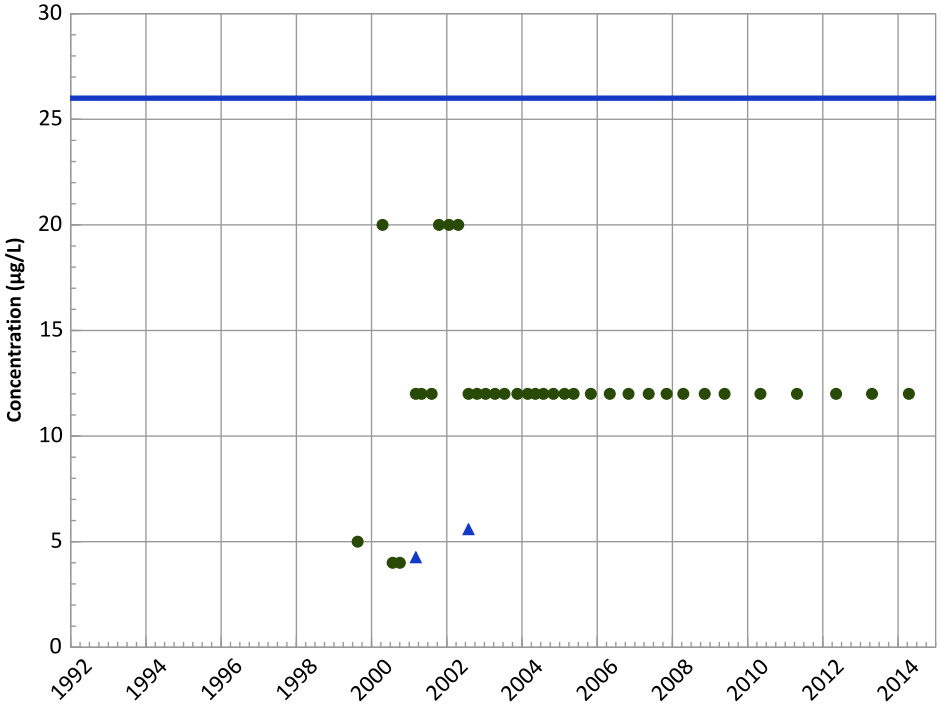
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

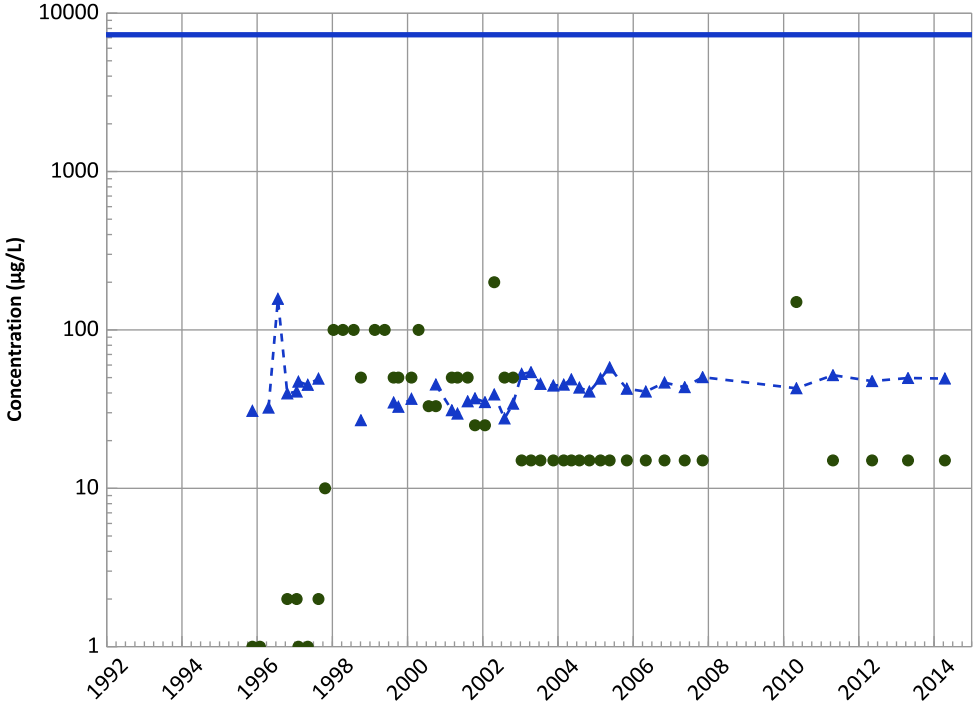


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Boron Trend



Concentration Trend

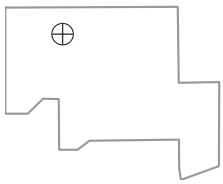
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

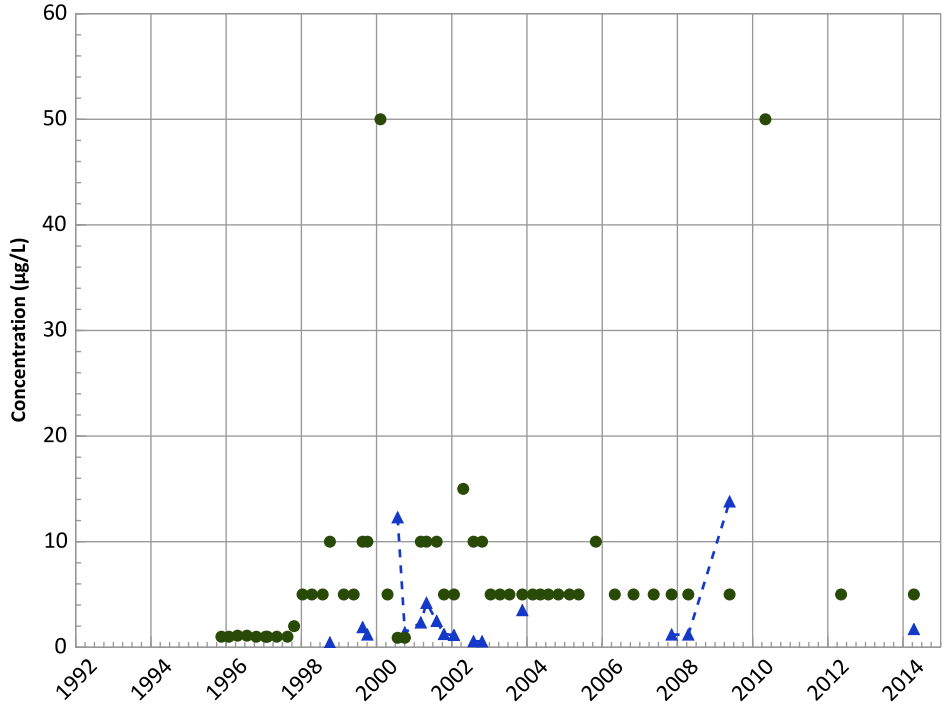
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

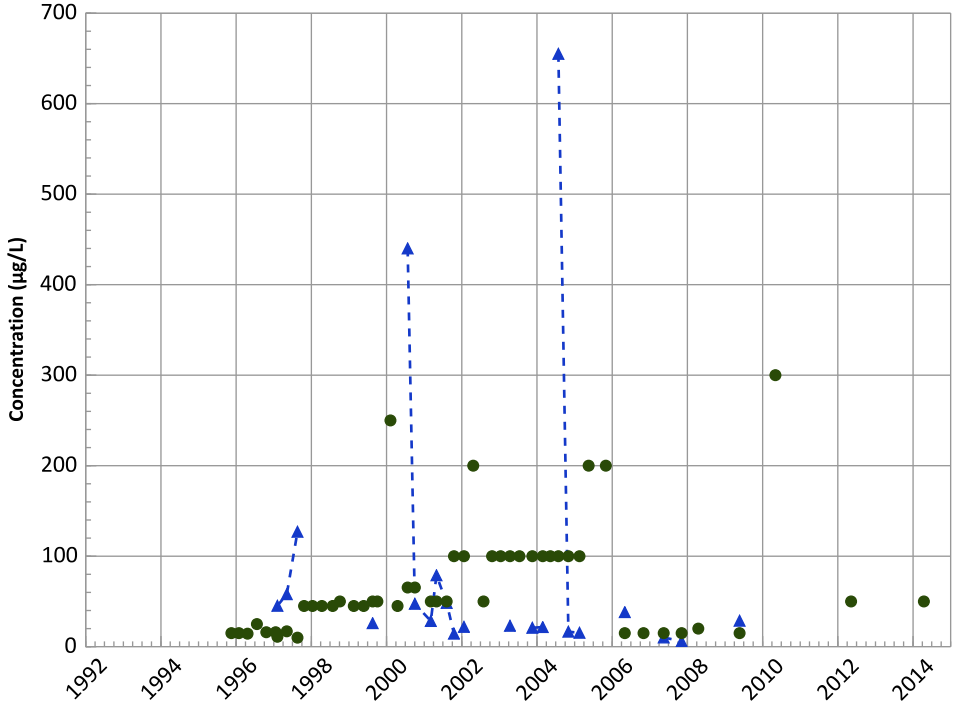


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Aluminum Trend



Concentration Trend

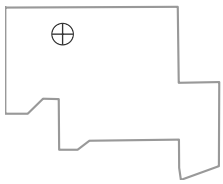
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

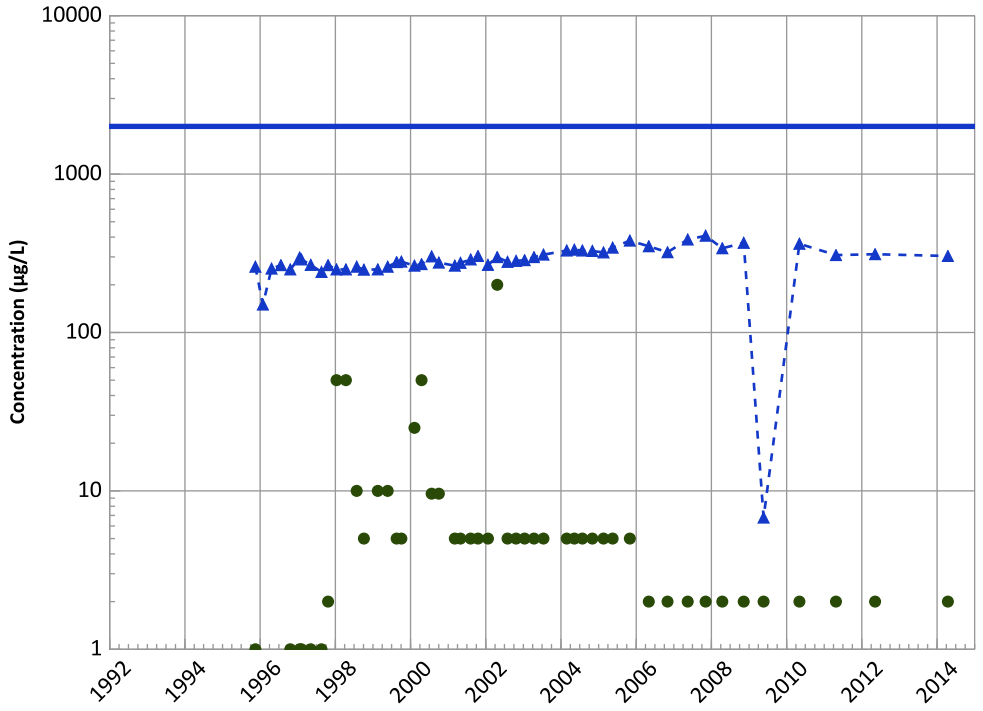
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

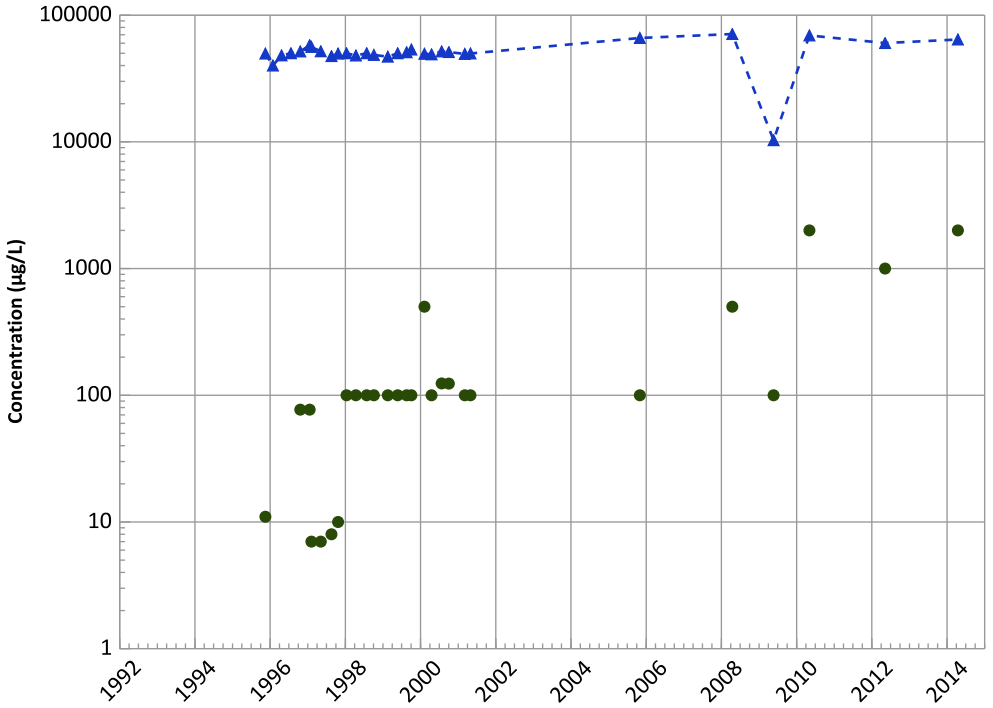


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Calcium Trend



Concentration Trend

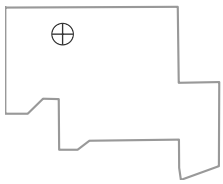
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

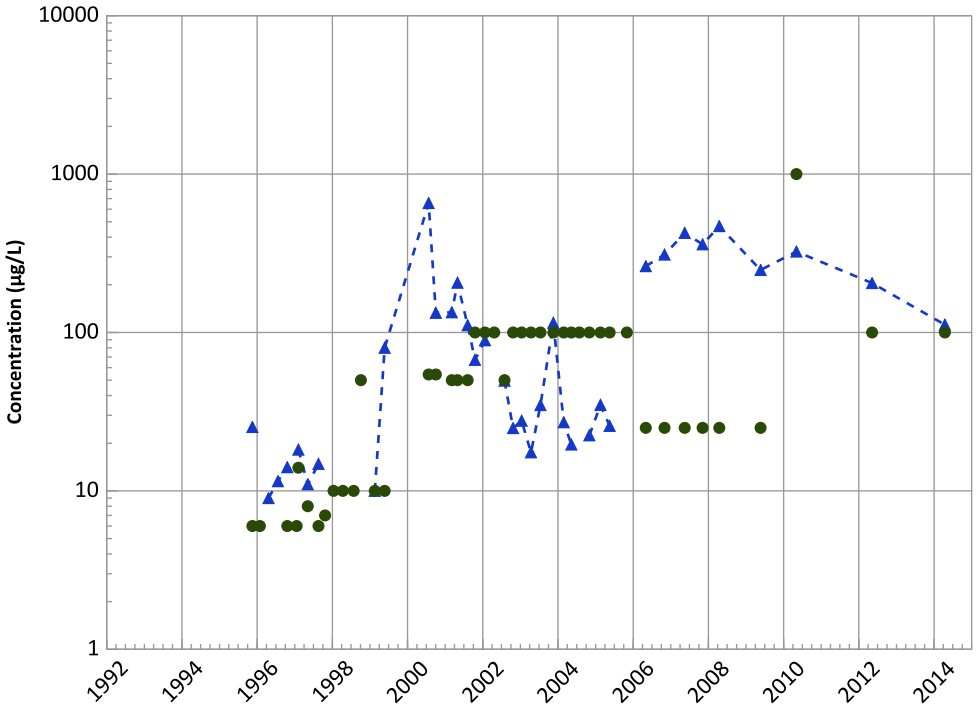
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

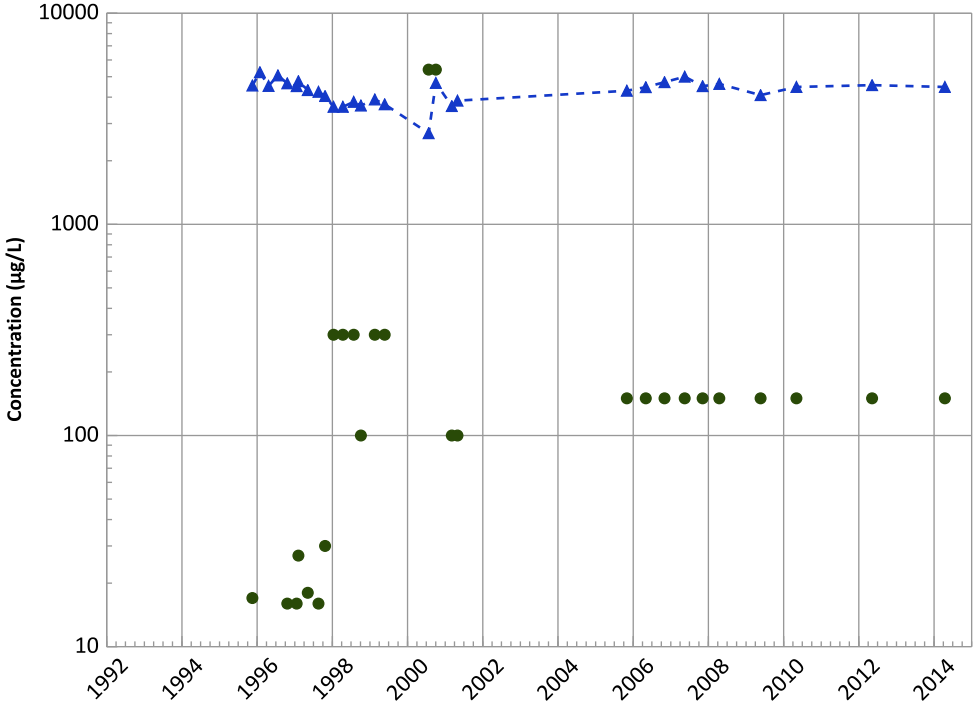


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Potassium Trend



Concentration Trend

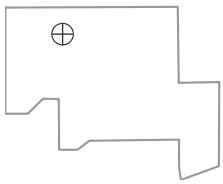
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

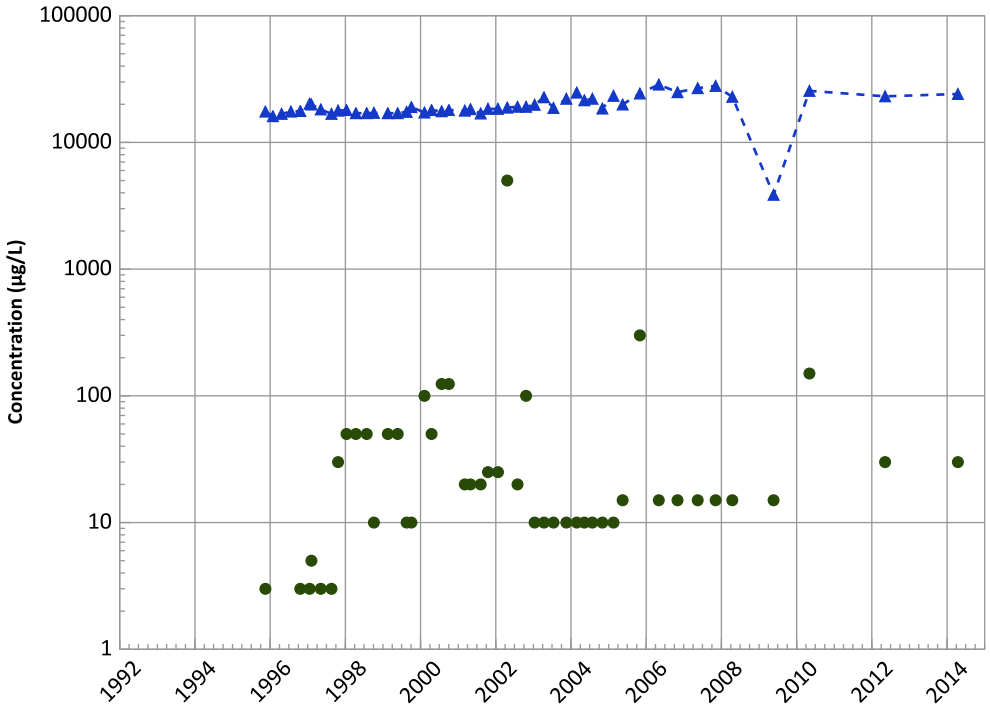
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

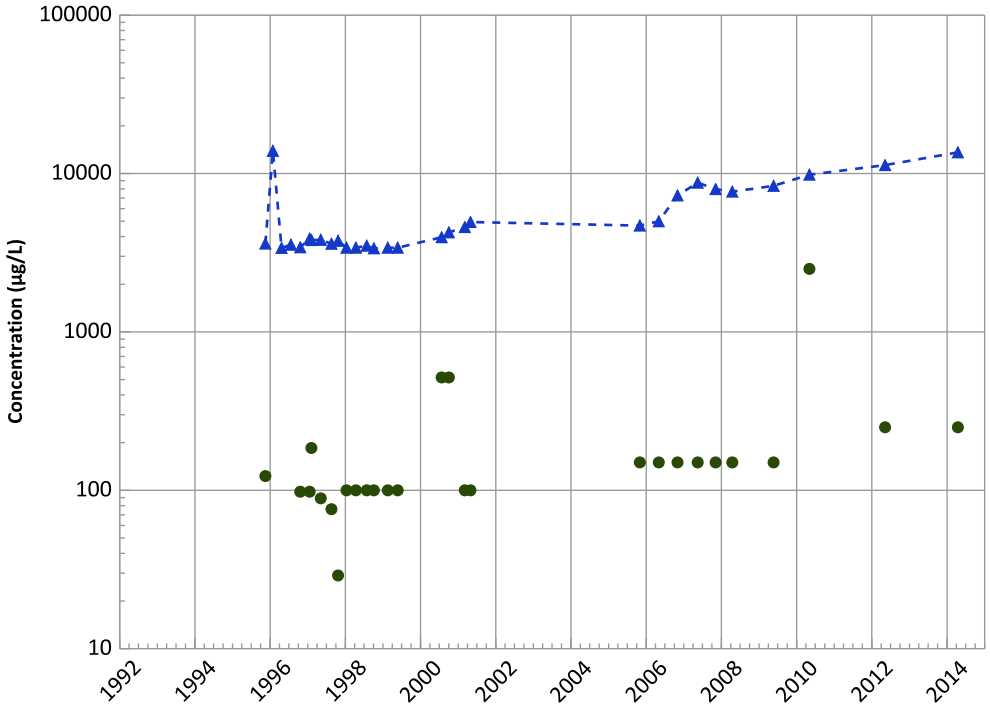


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Sodium Trend



Concentration Trend

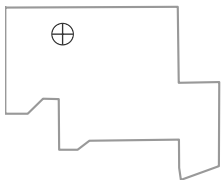
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

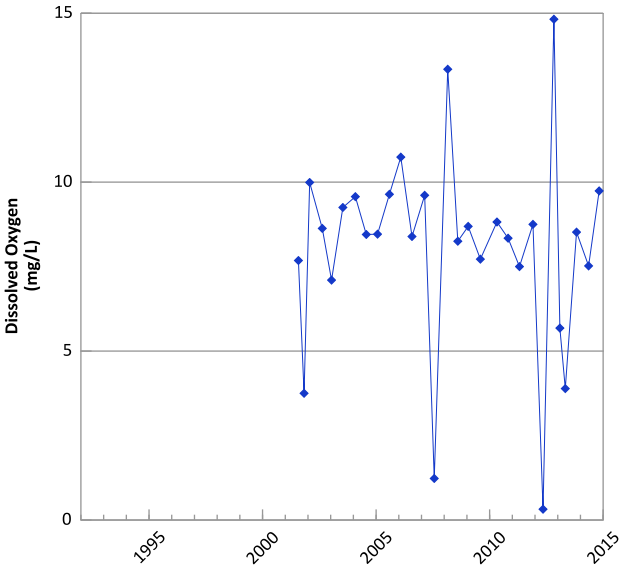
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/16/1995 to 04/16/2014
Analysis Date: 03/19/2015

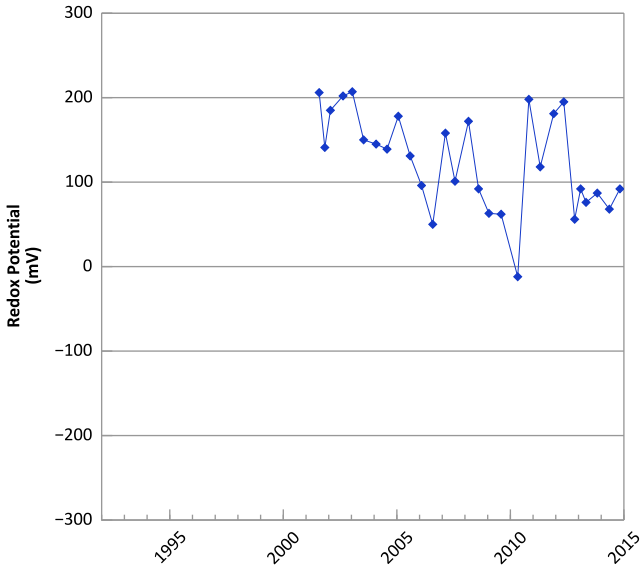
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

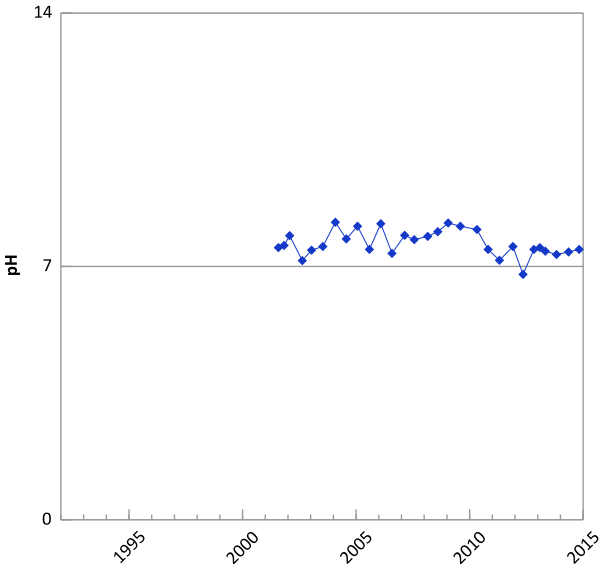
Well Location

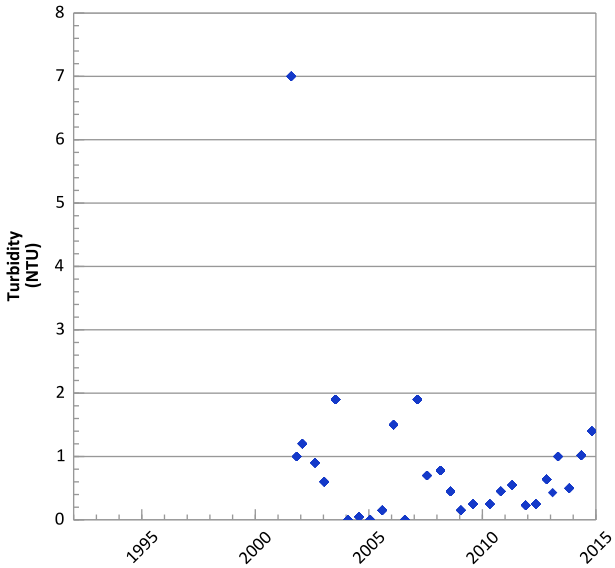


PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



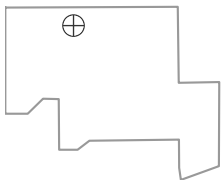






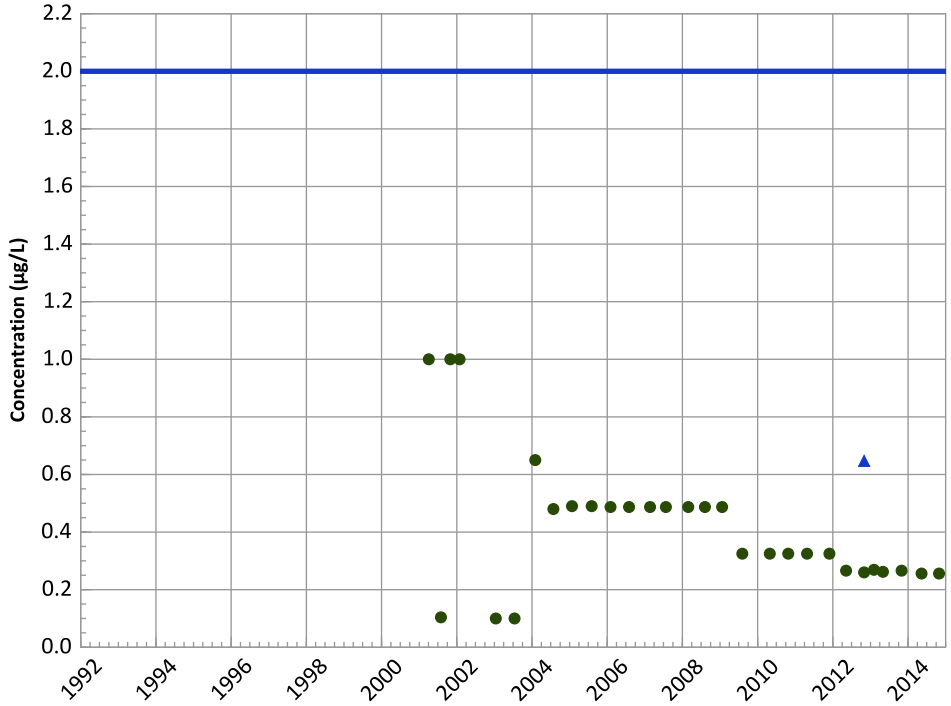
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

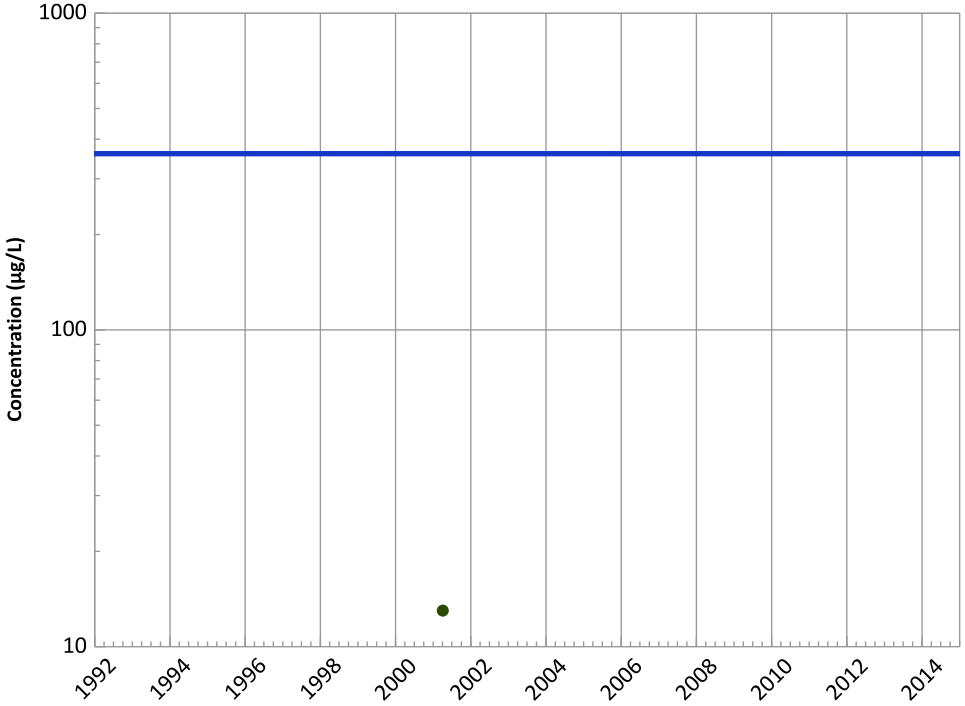


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

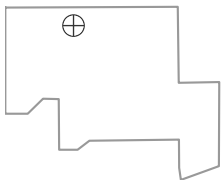
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

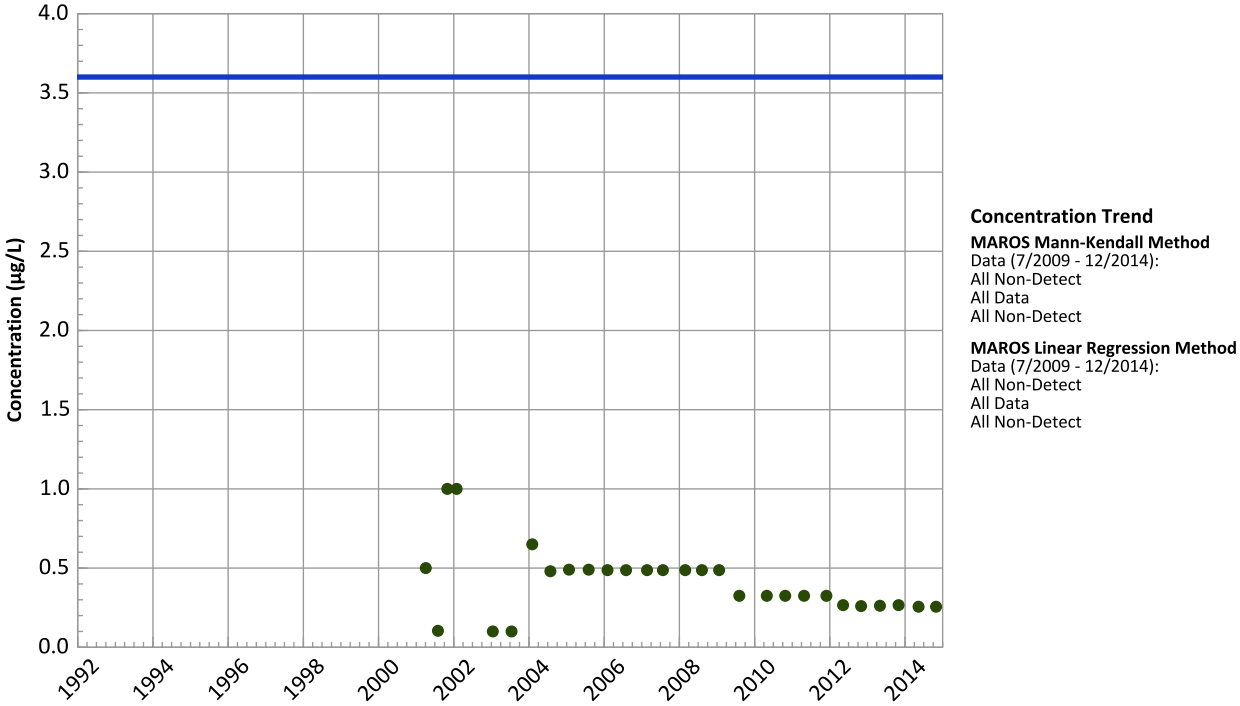
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

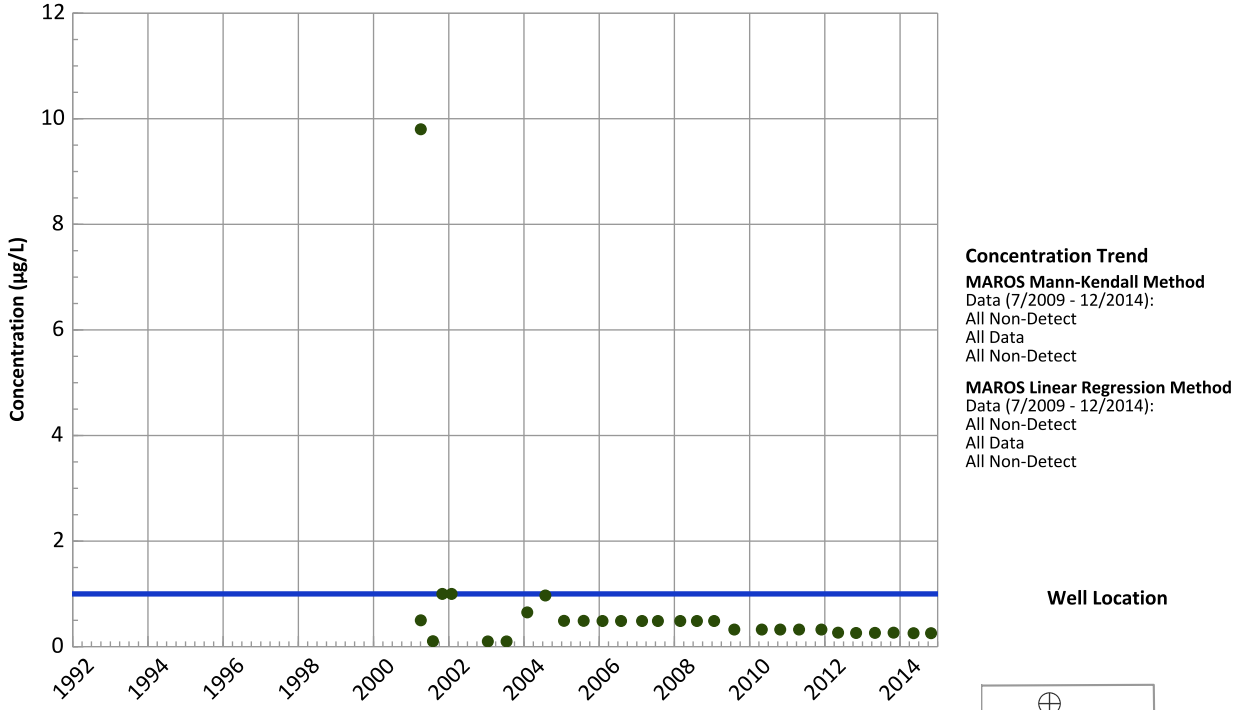


PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



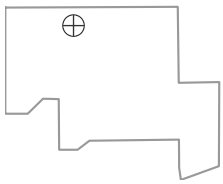
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

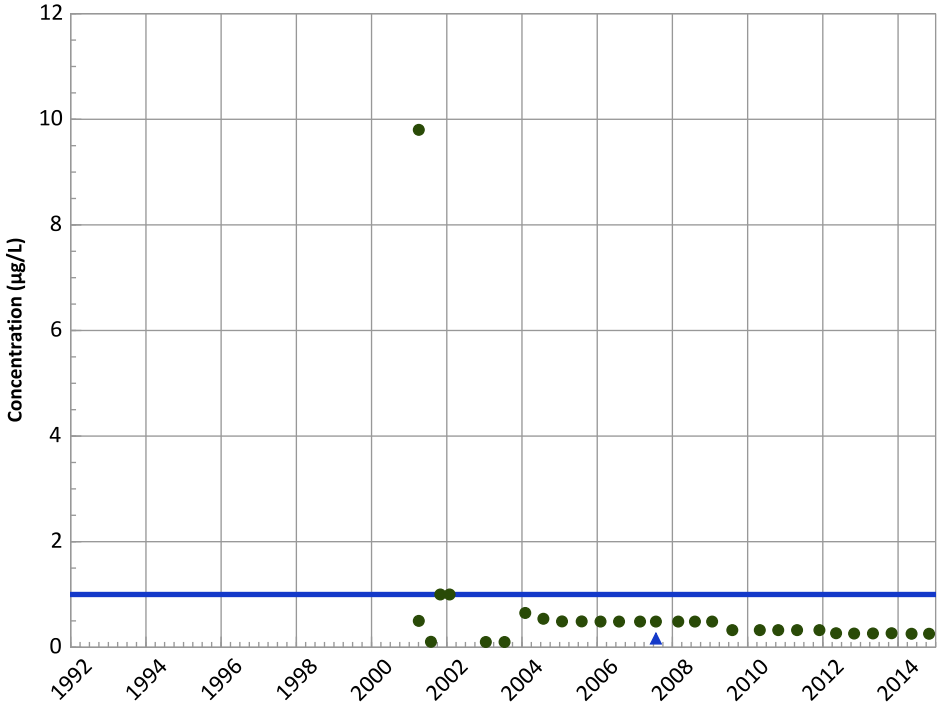
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

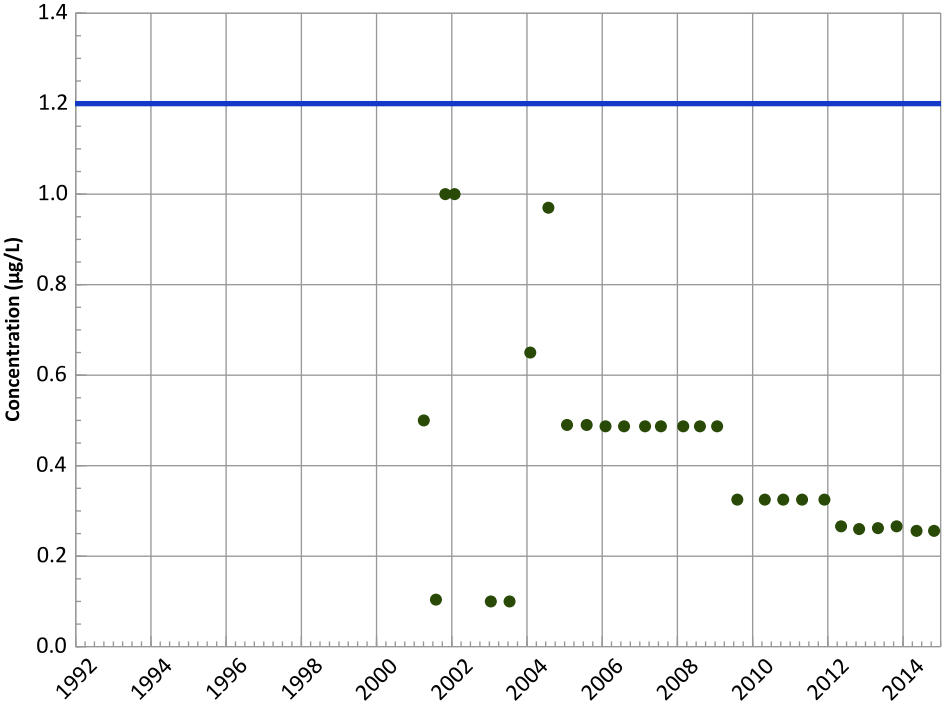


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

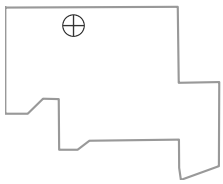
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

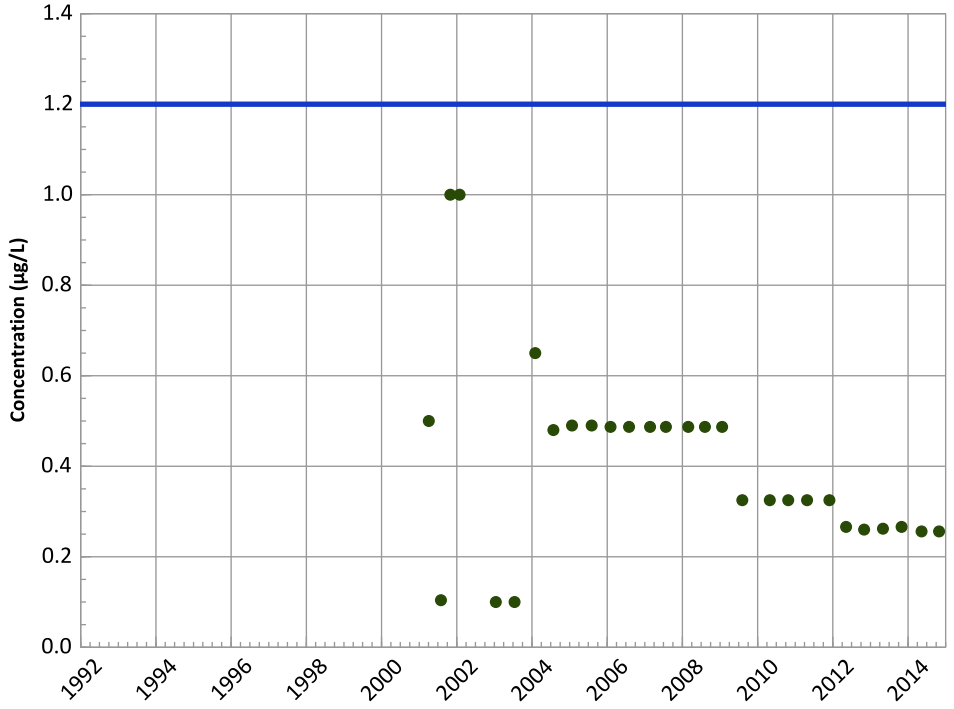
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

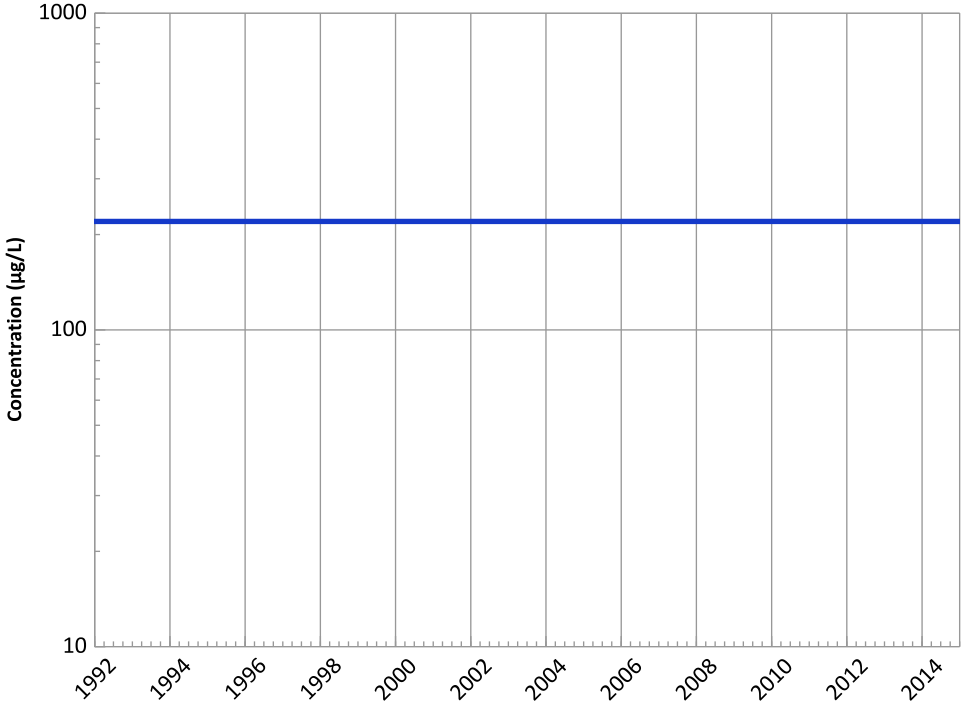


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

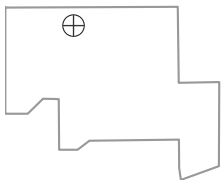
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

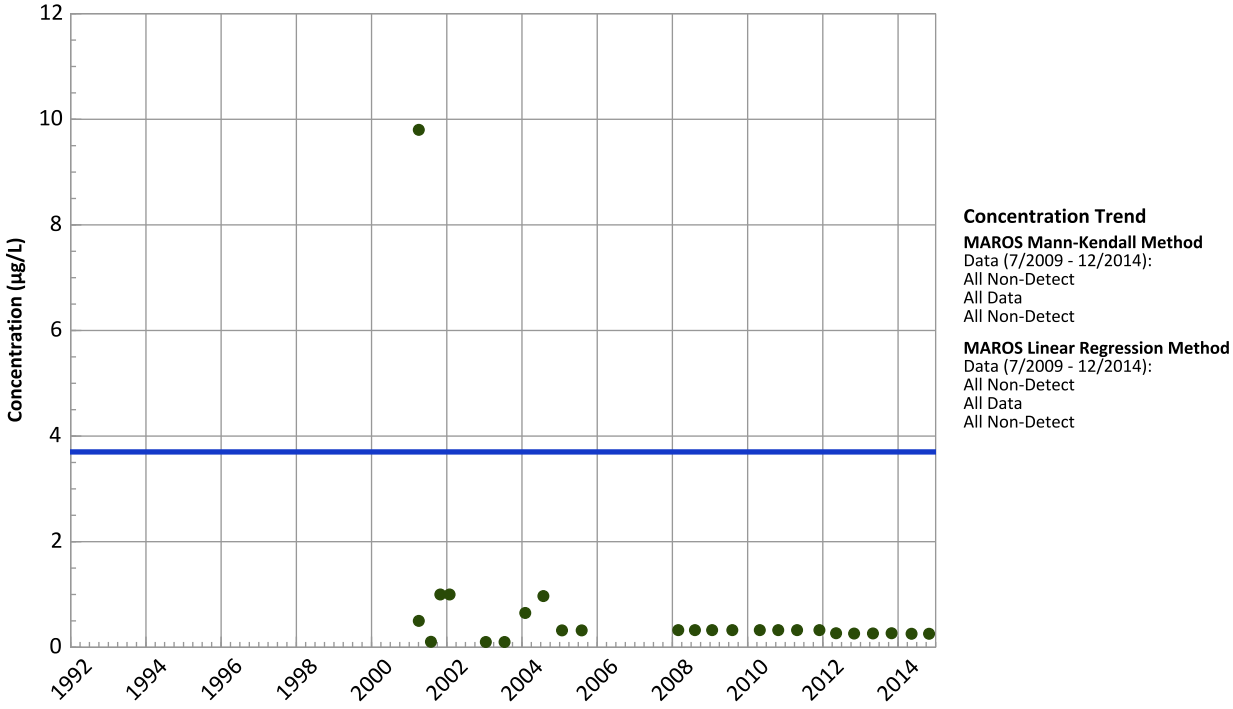
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

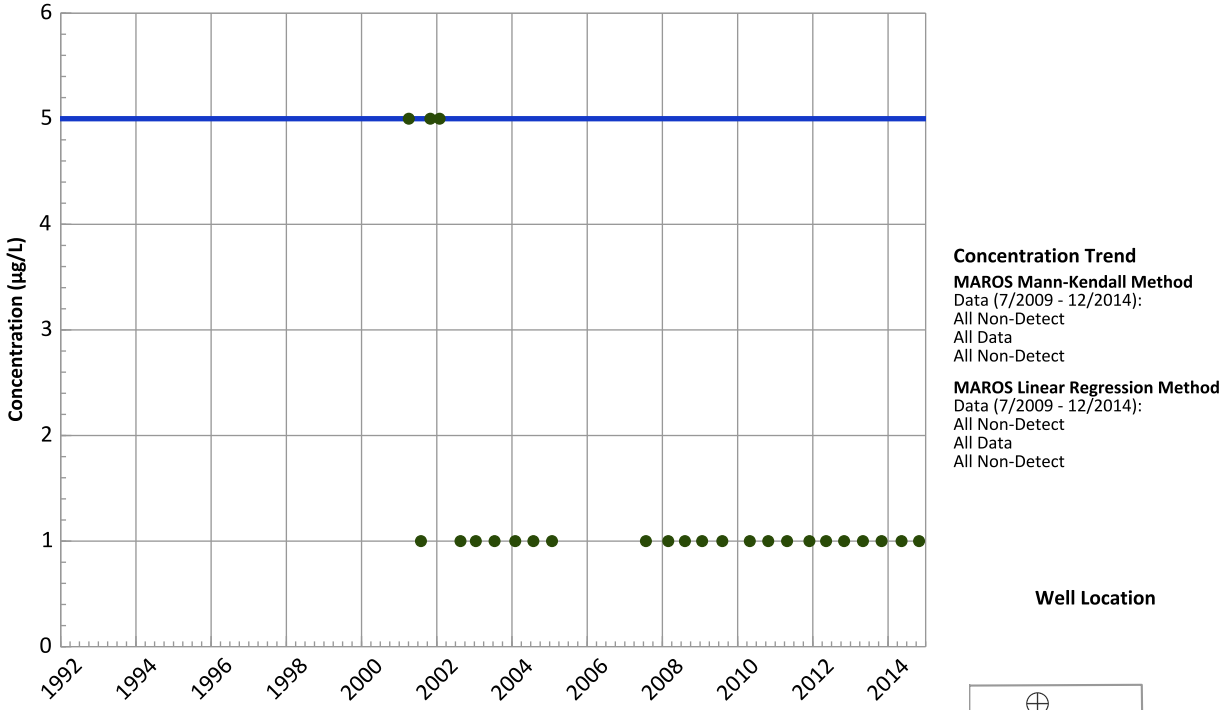


PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



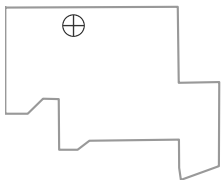
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

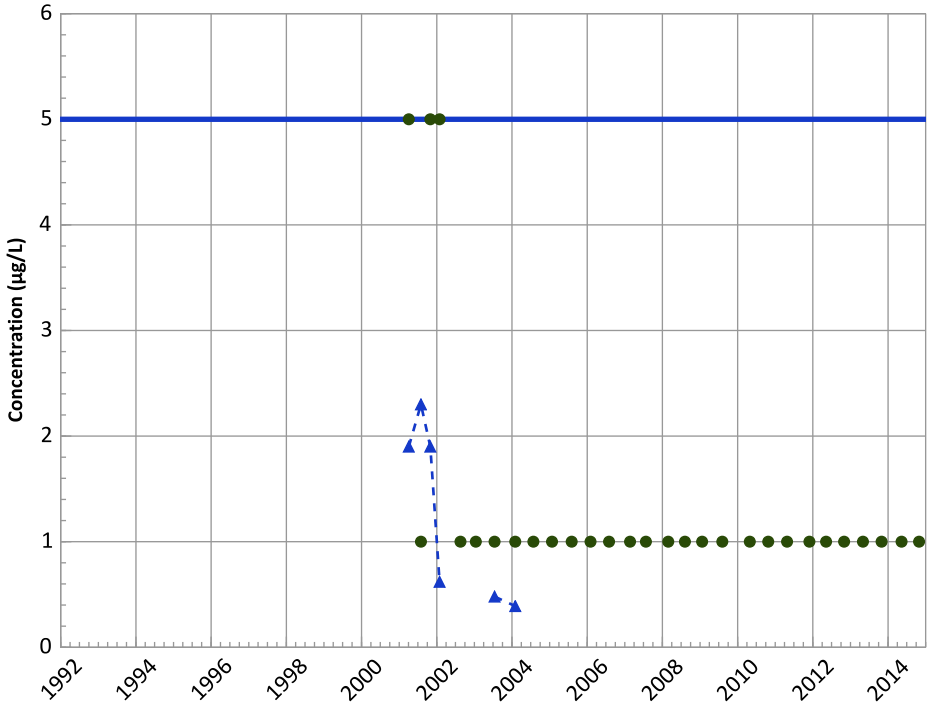
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

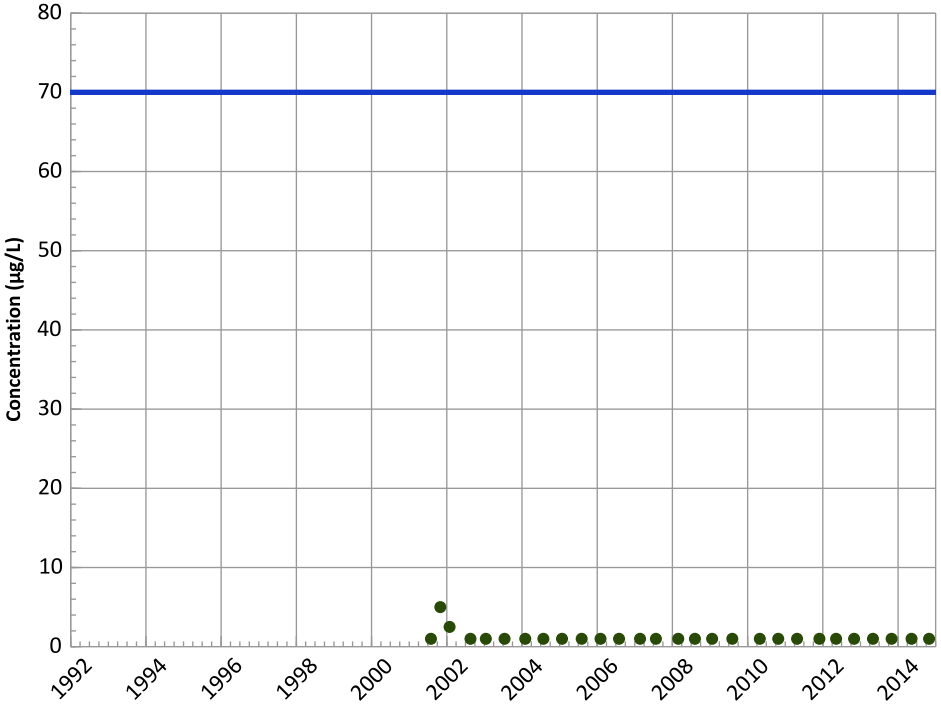


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

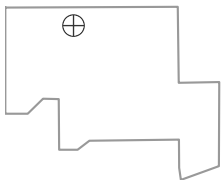
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

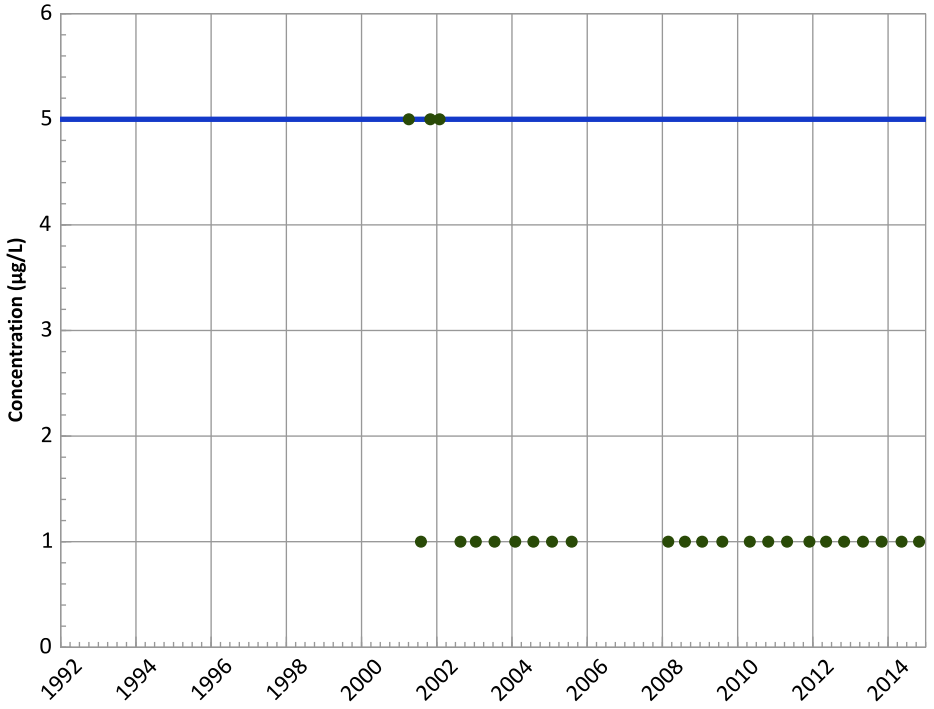
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

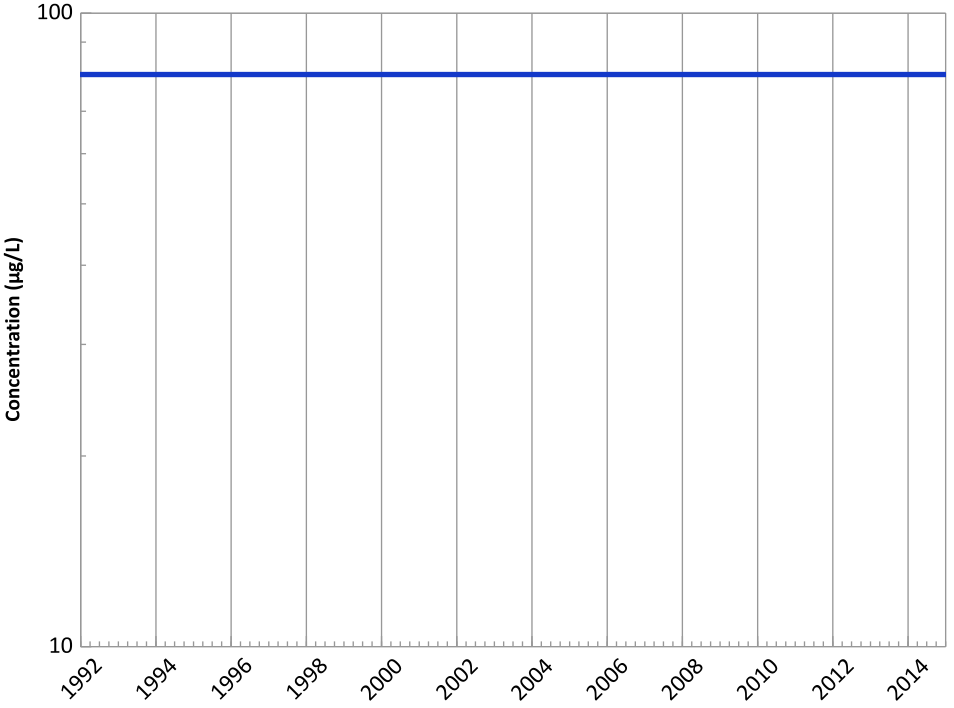


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

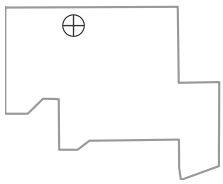
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

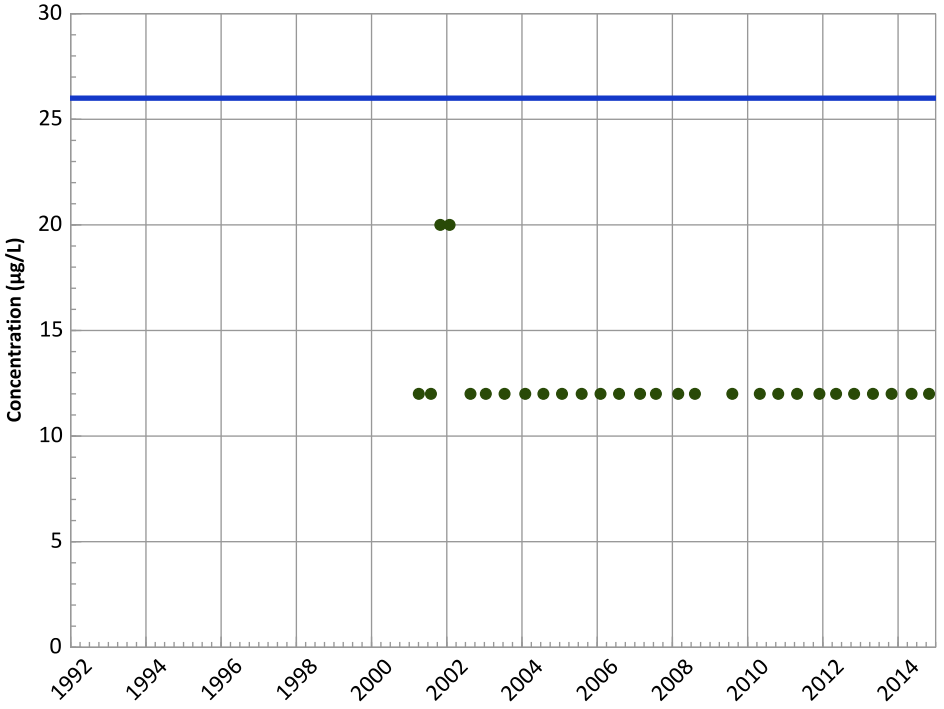
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

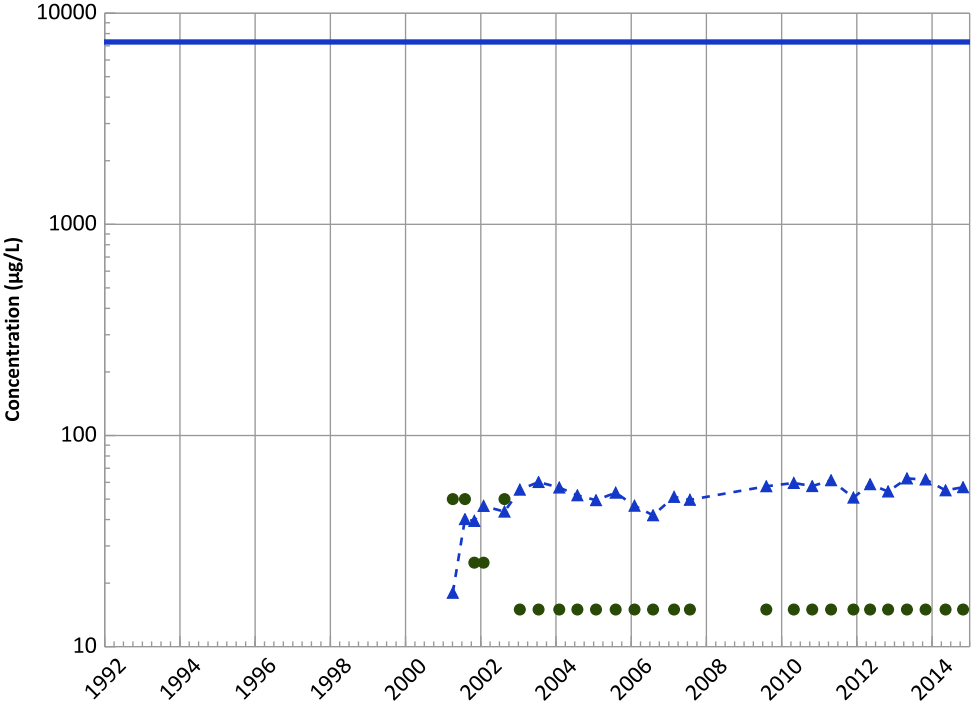


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Boron Trend



Concentration Trend

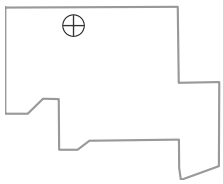
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

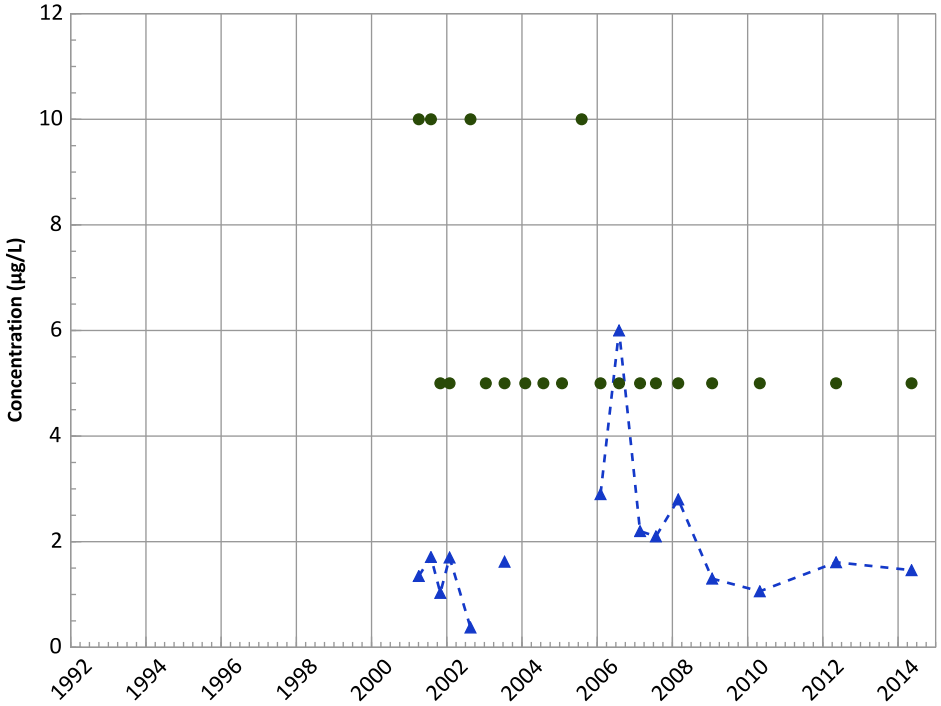
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

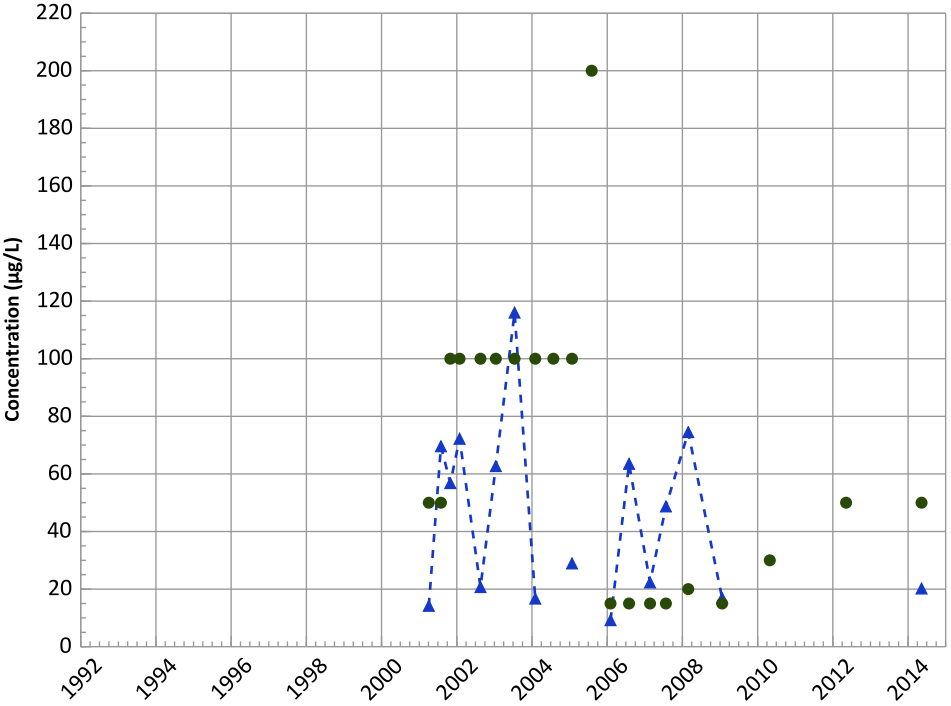


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Aluminum Trend



Concentration Trend

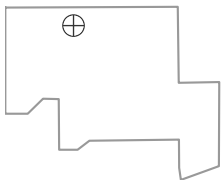
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

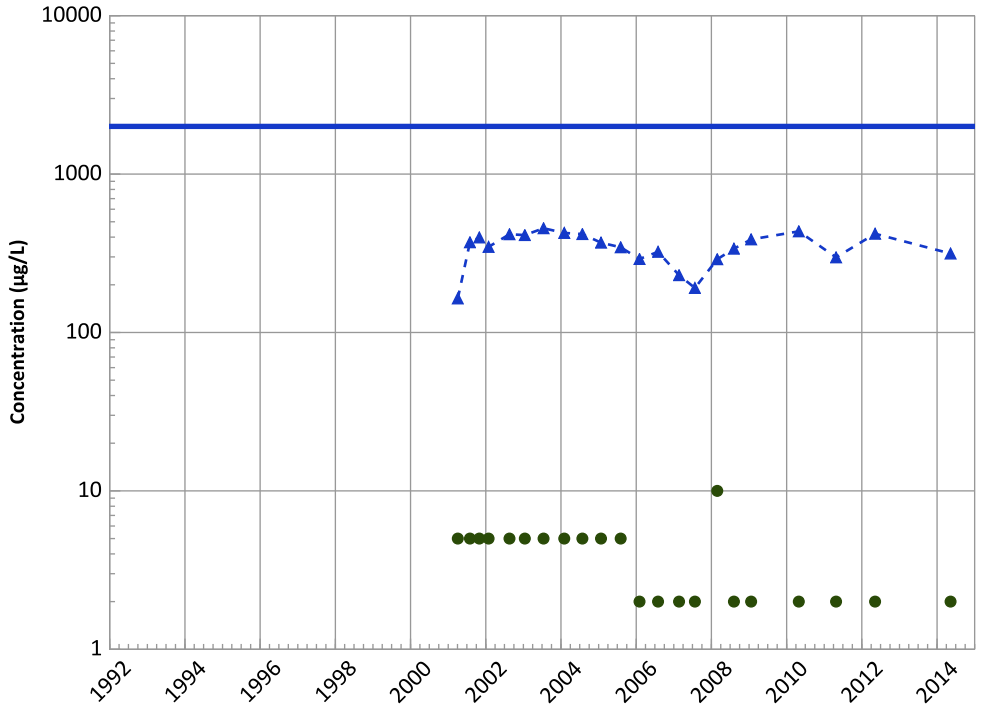
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

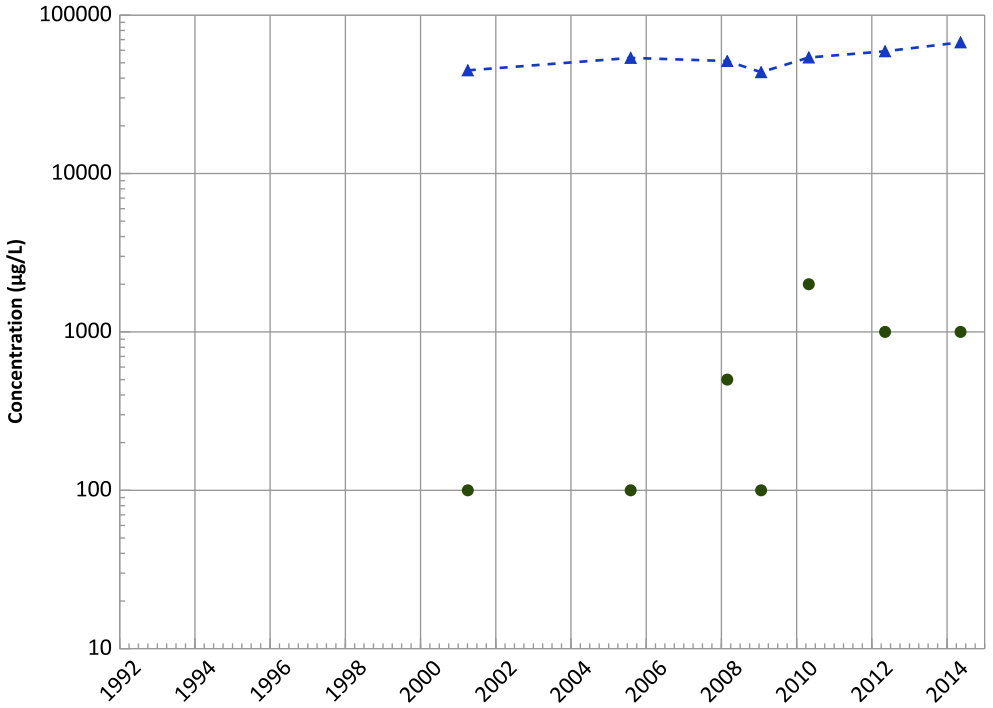


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Calcium Trend



Concentration Trend

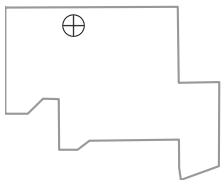
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

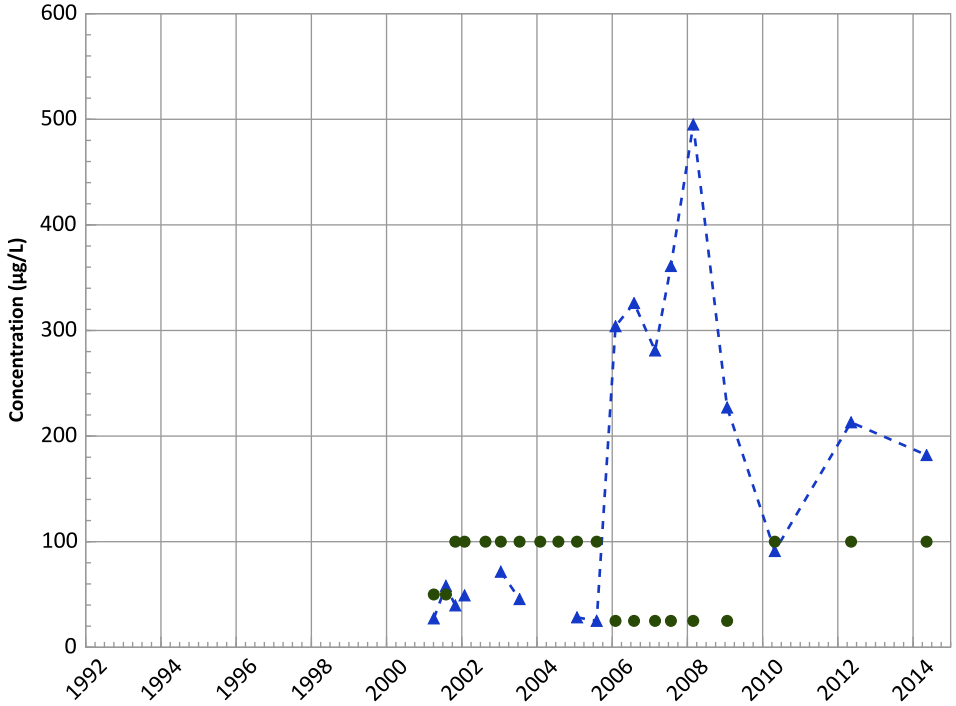
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

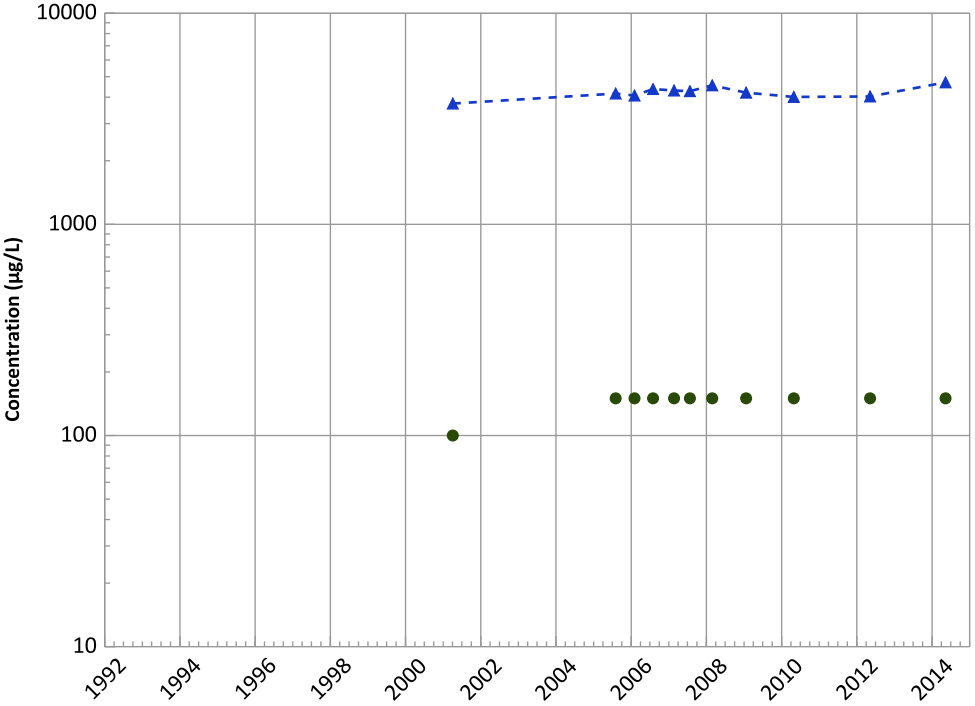


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Potassium Trend



Concentration Trend

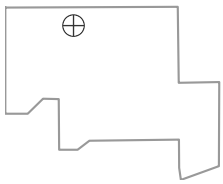
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

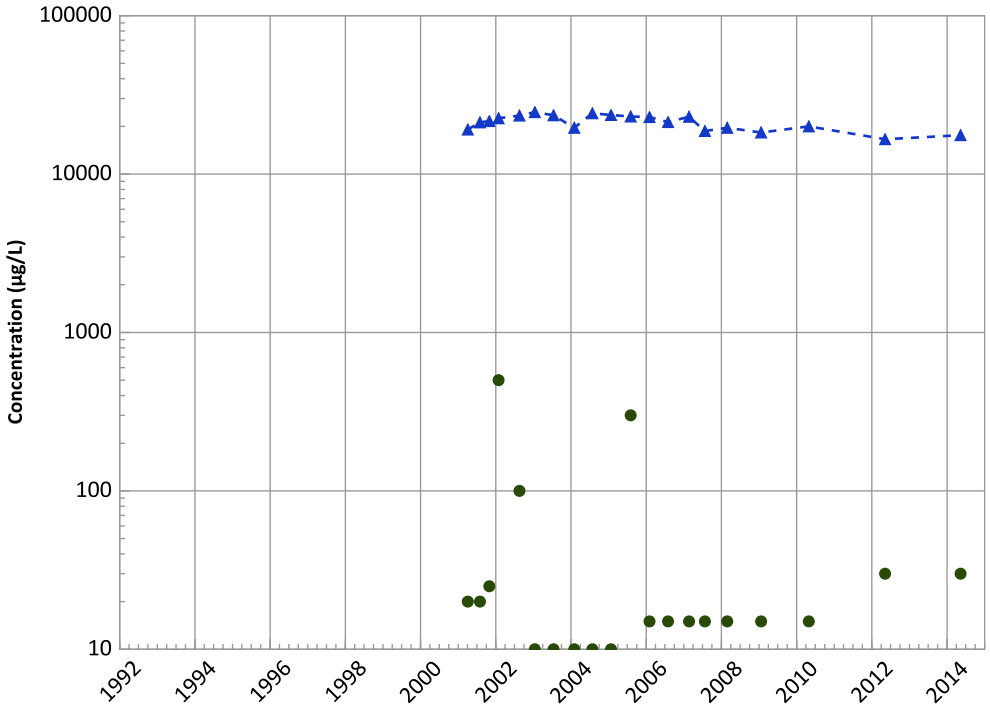
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

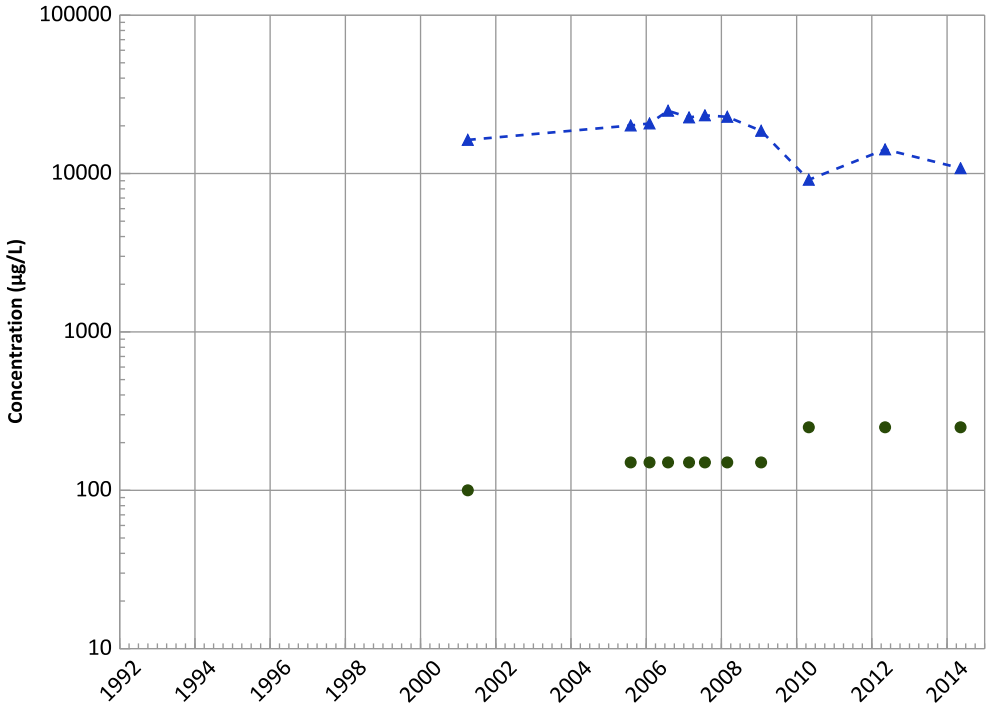


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Sodium Trend



Concentration Trend

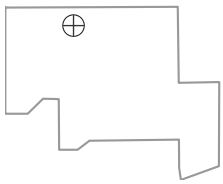
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

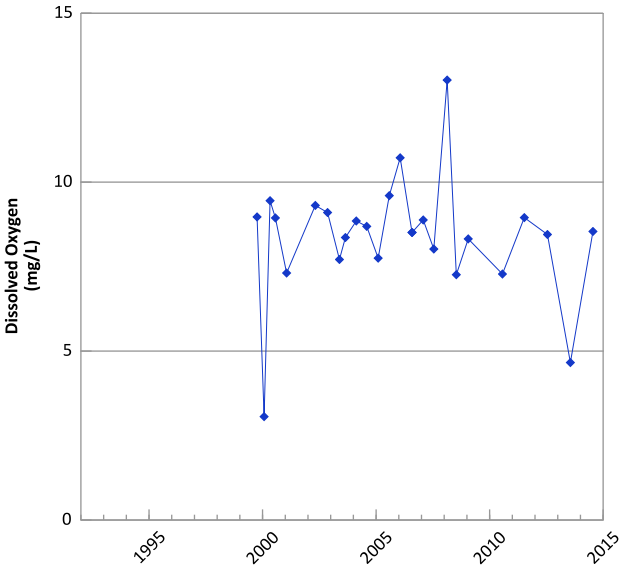
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 10/29/2014
Analysis Date: 03/19/2015

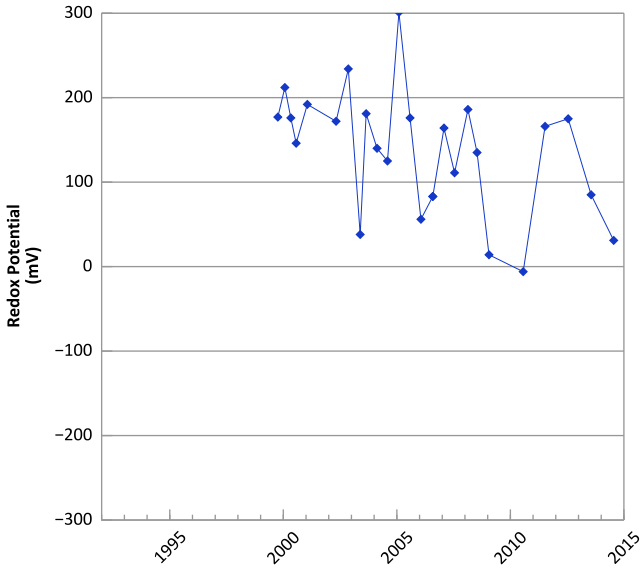
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

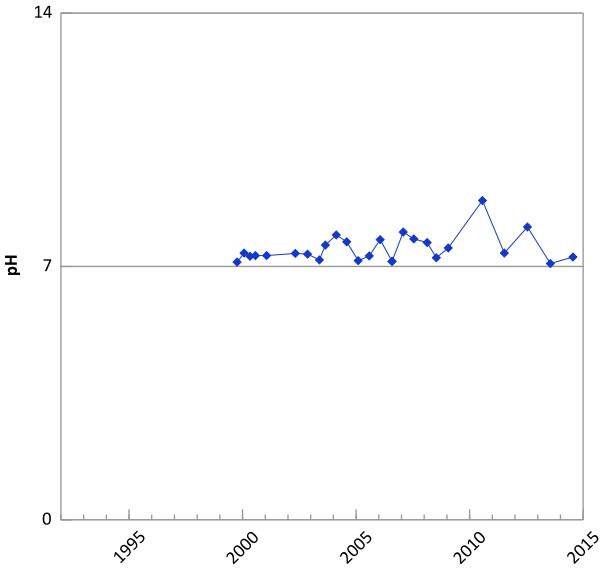
Well Location

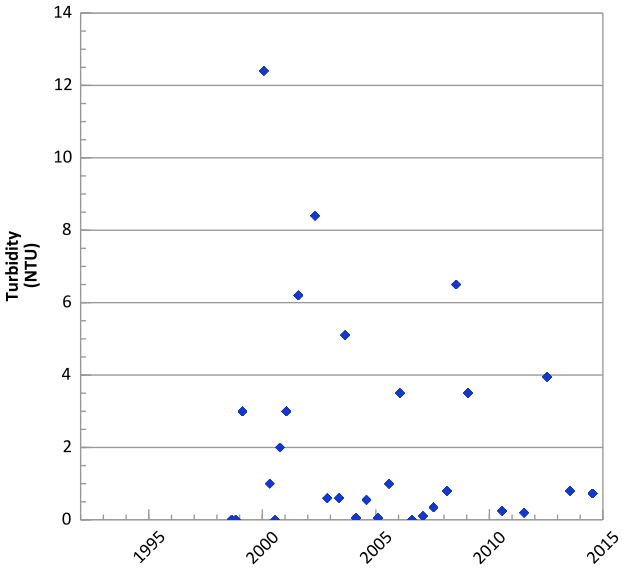


PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



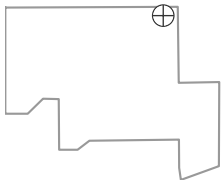






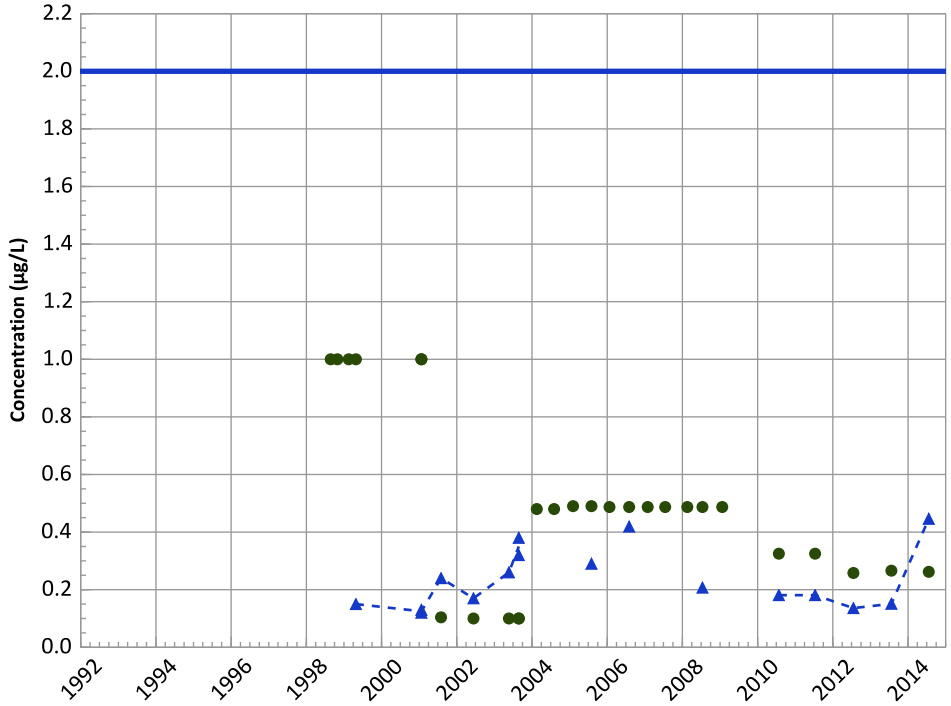
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

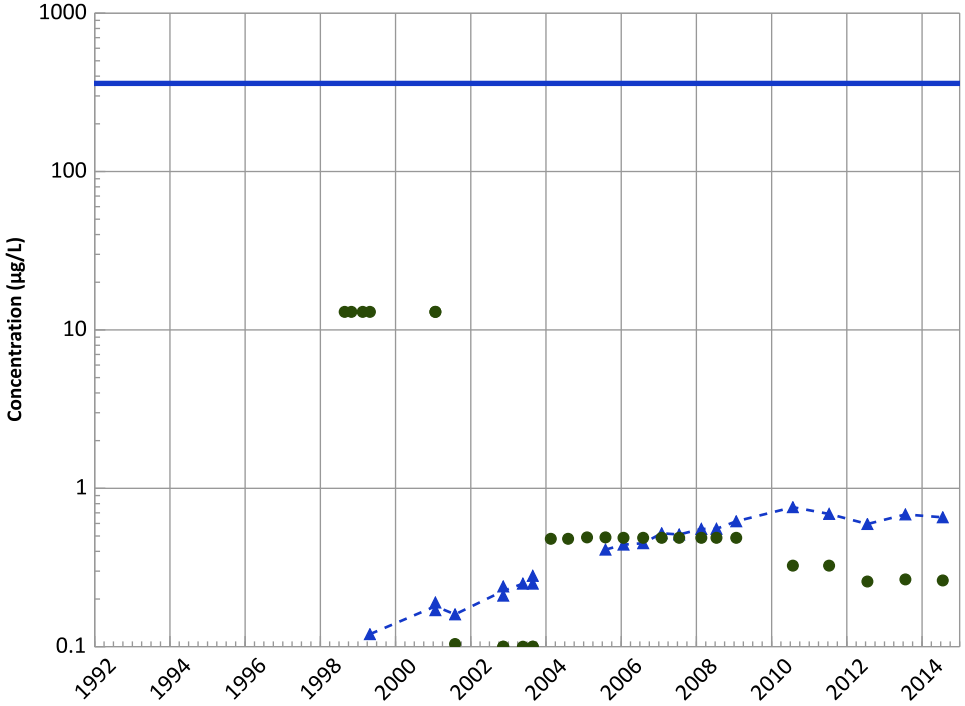


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

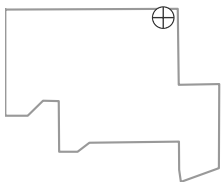
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

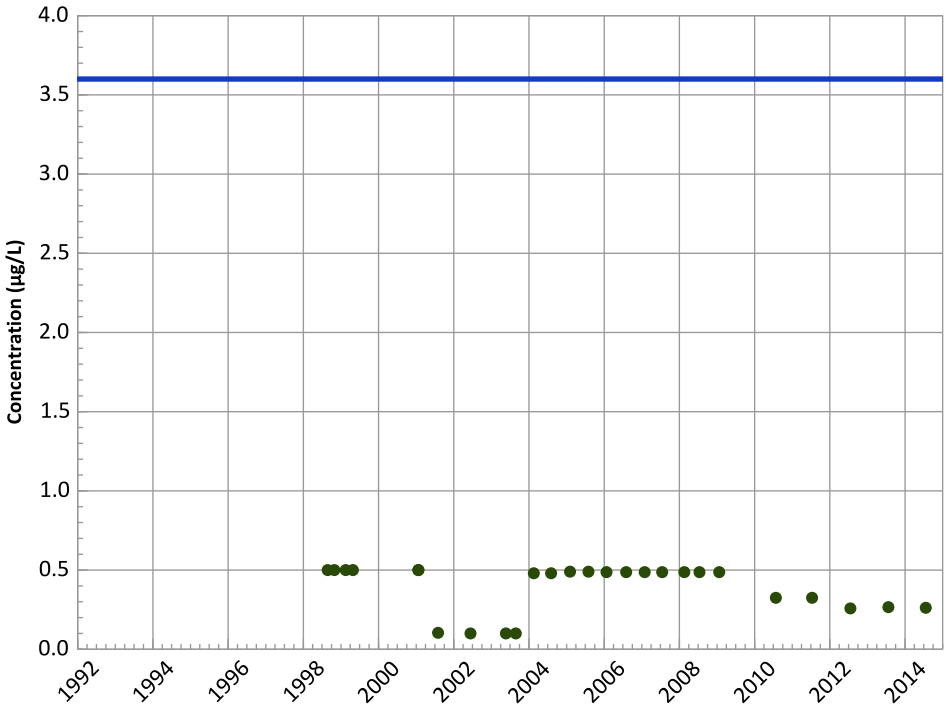
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

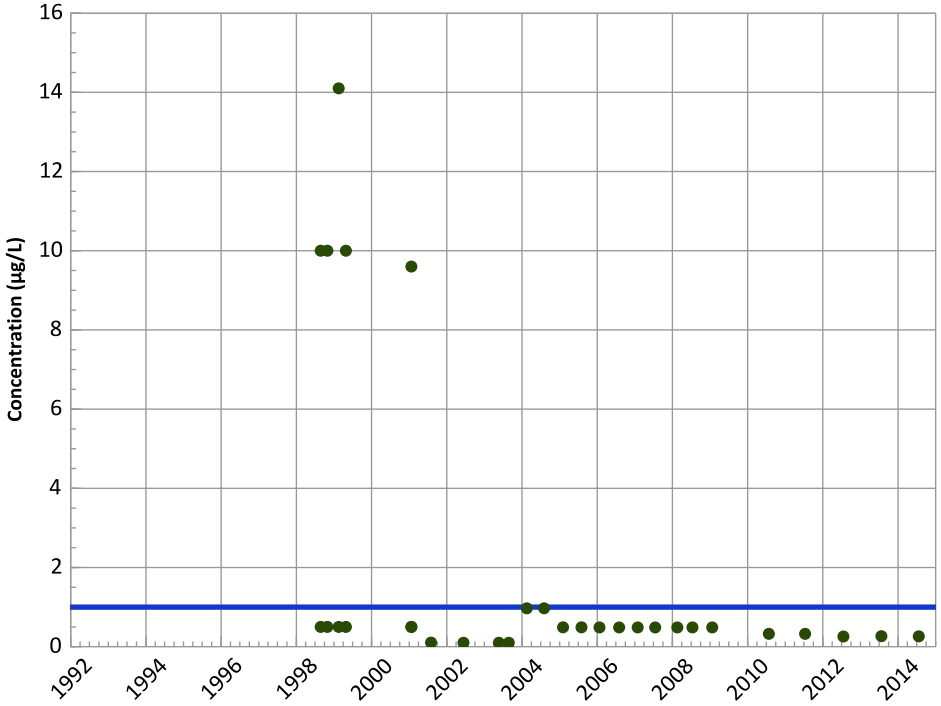


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

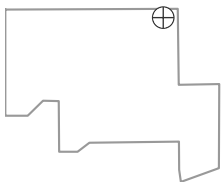
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

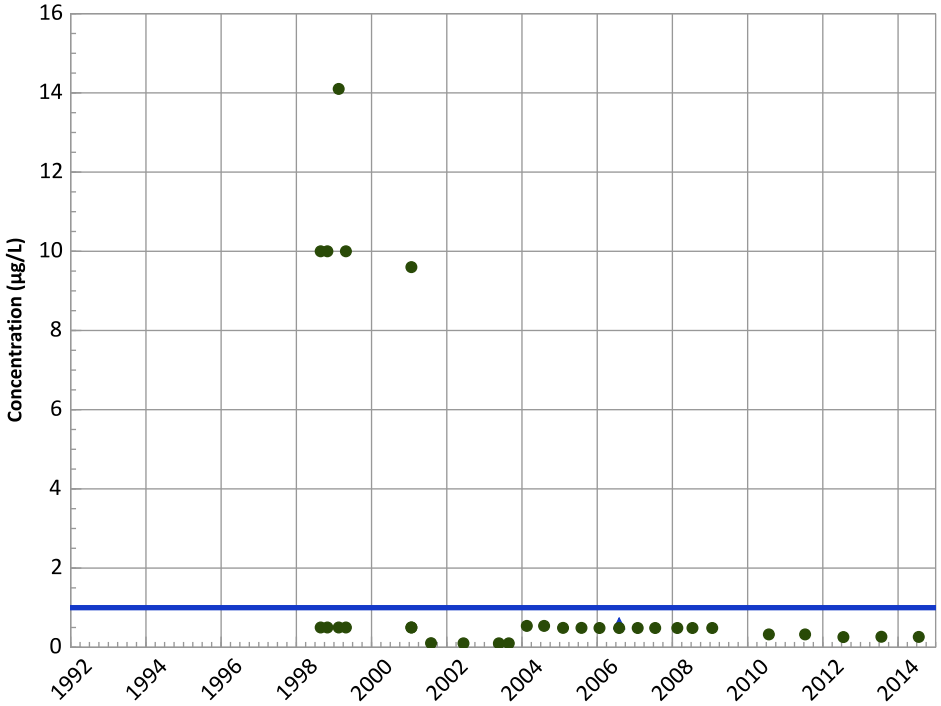
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

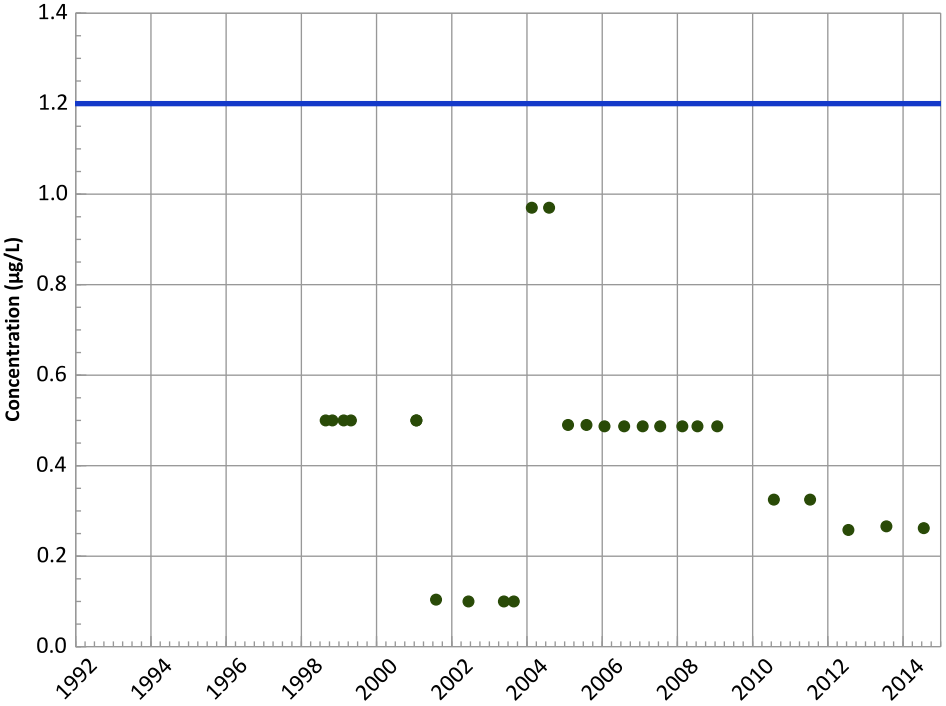


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

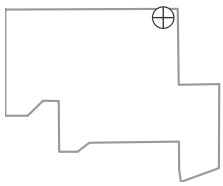
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

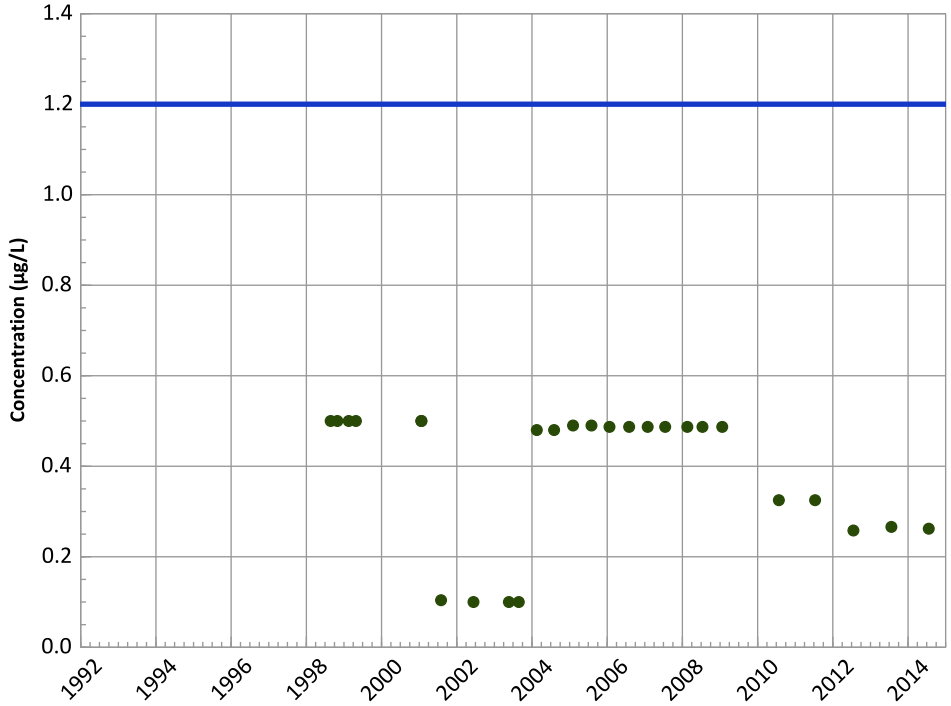
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

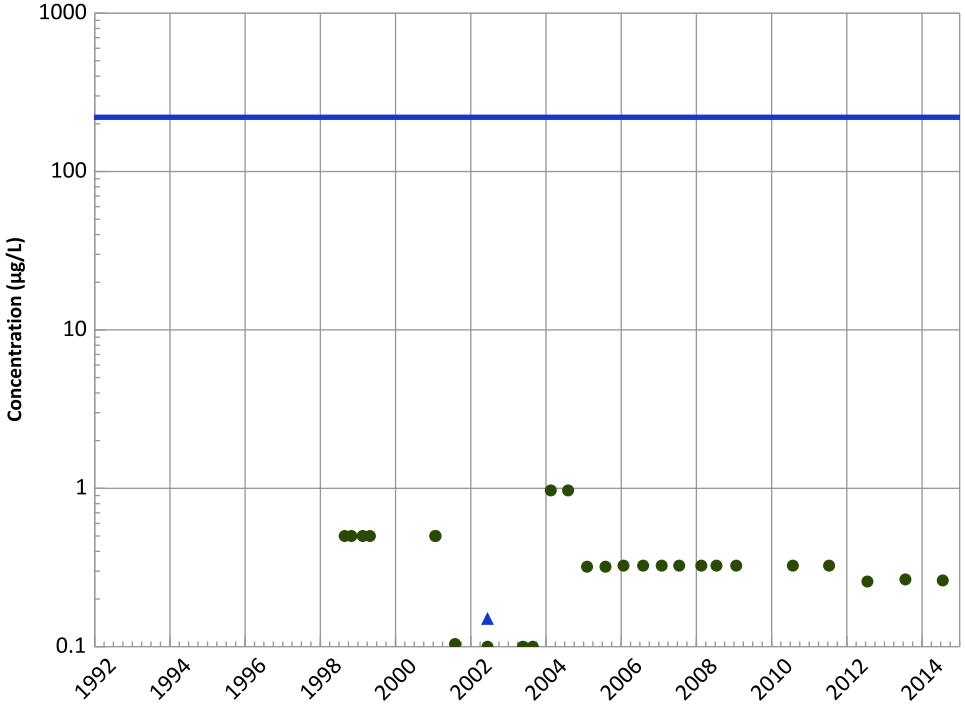


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

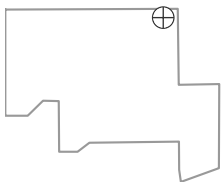
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

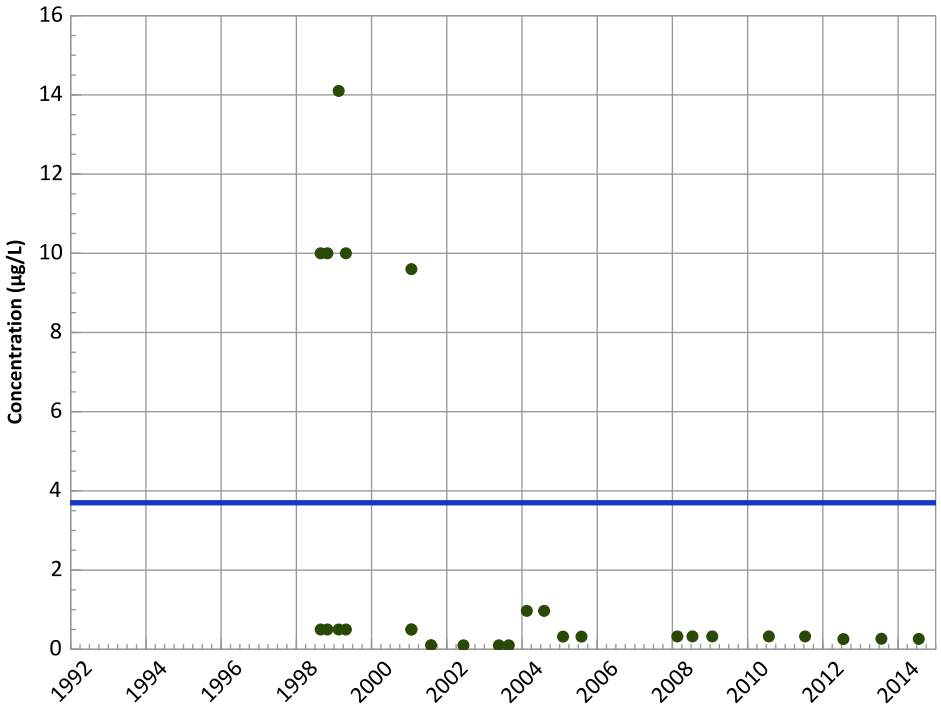
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

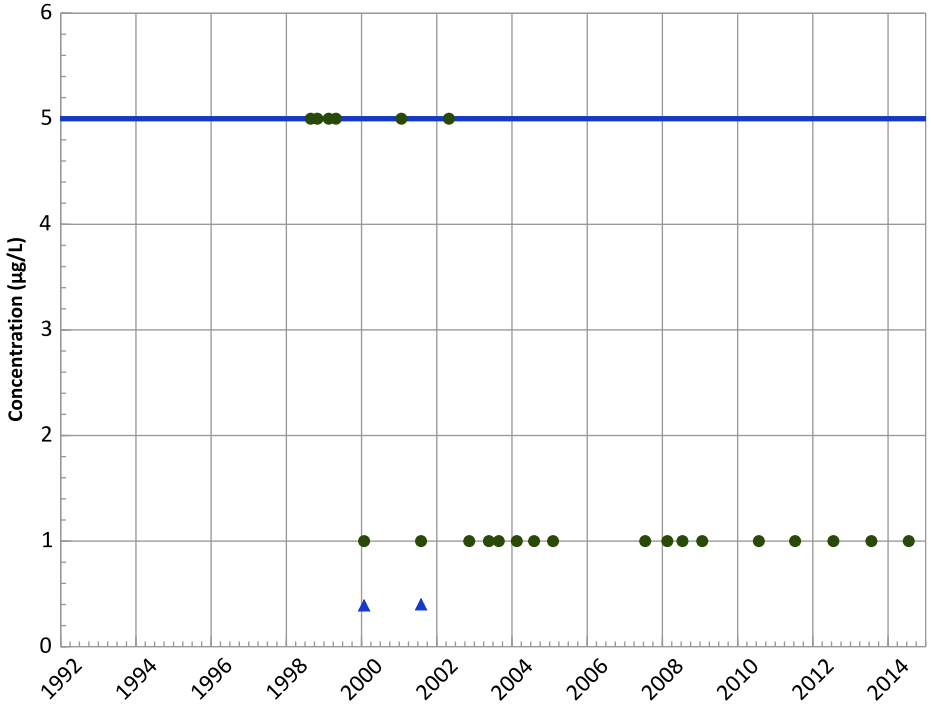


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

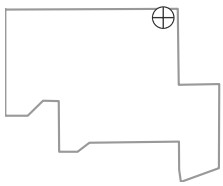
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

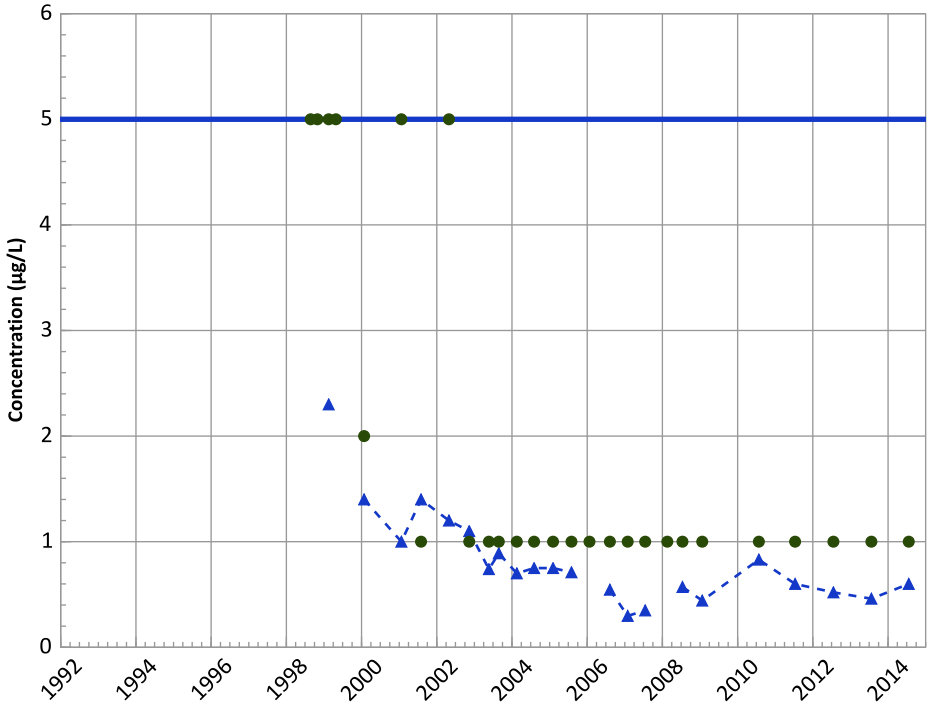
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

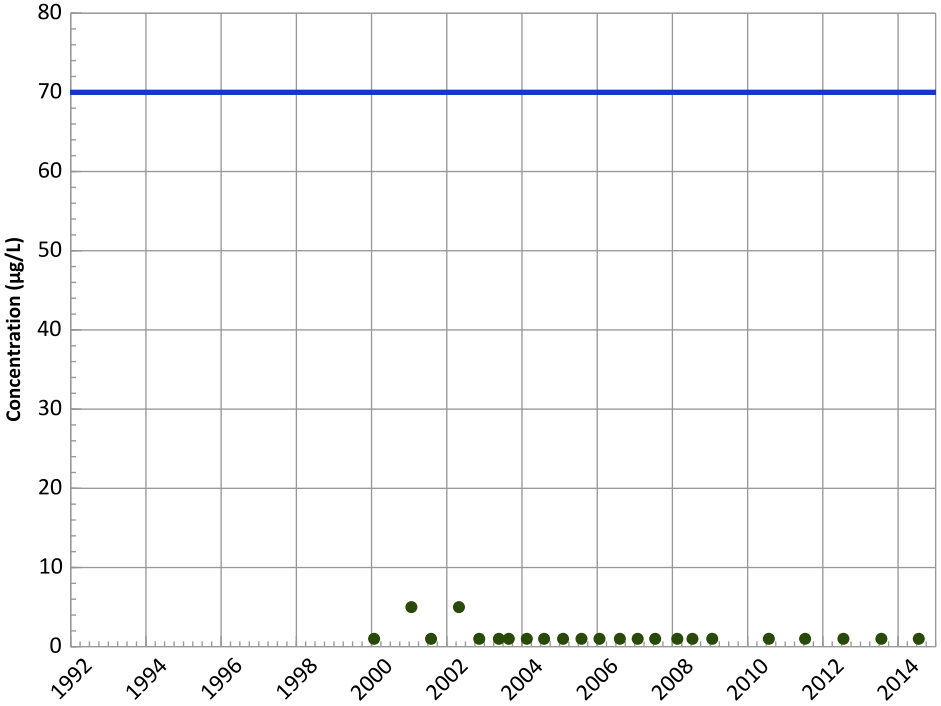


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

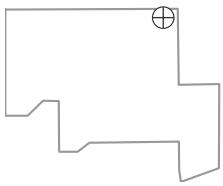
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

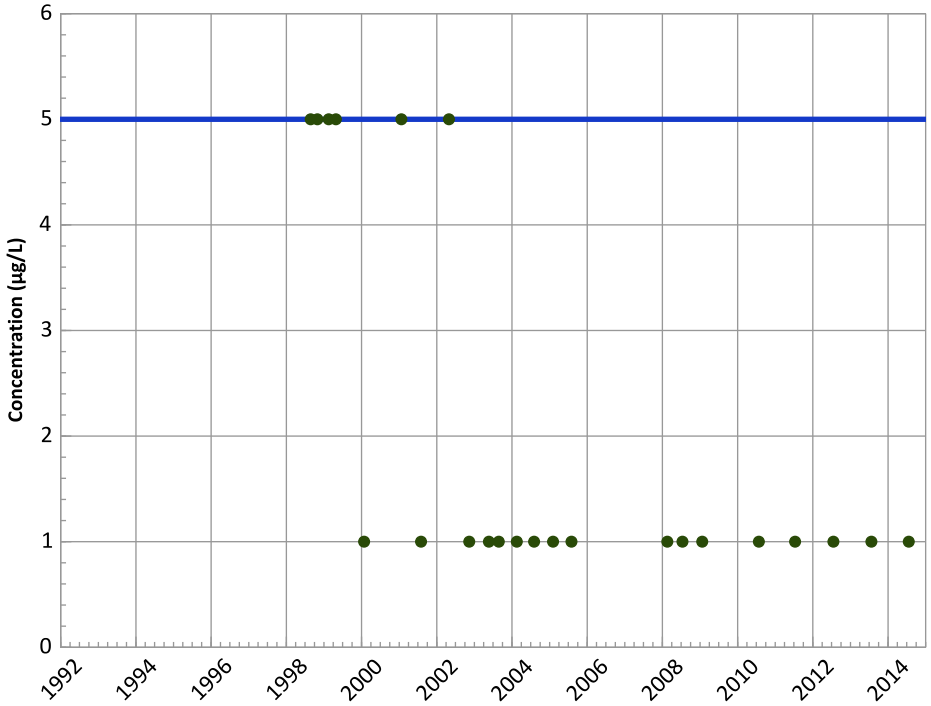
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

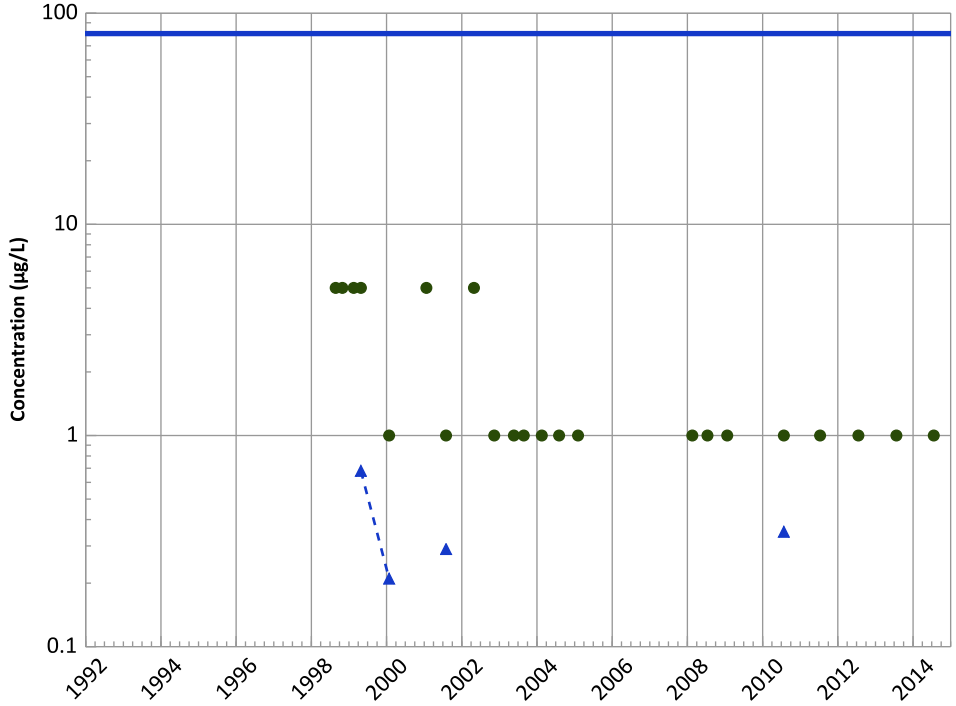


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

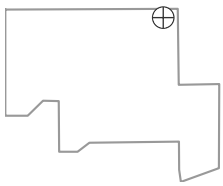
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

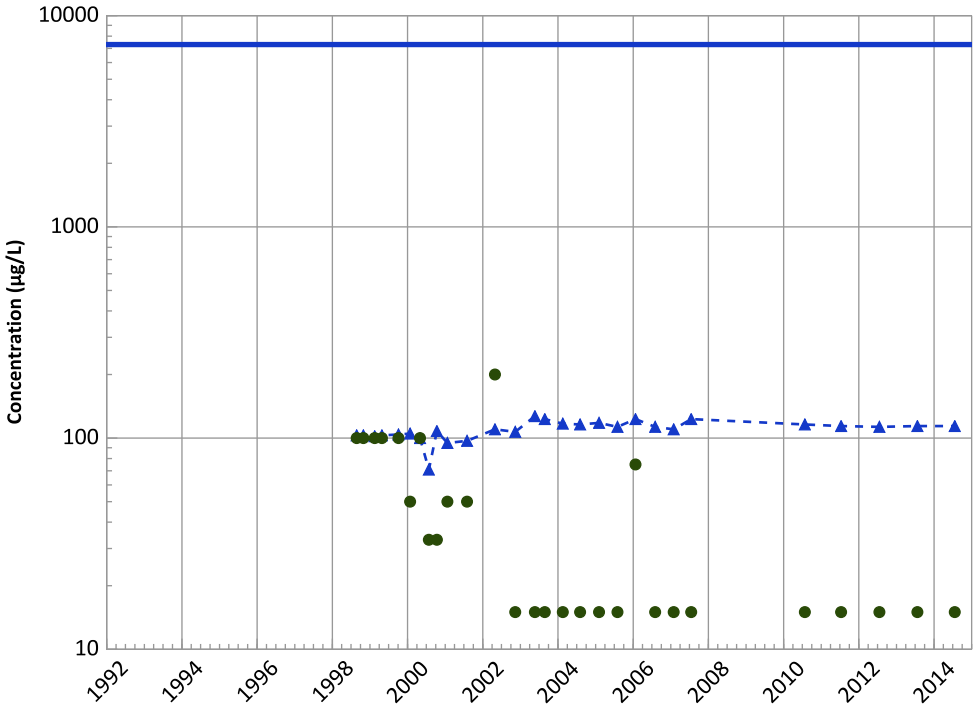
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

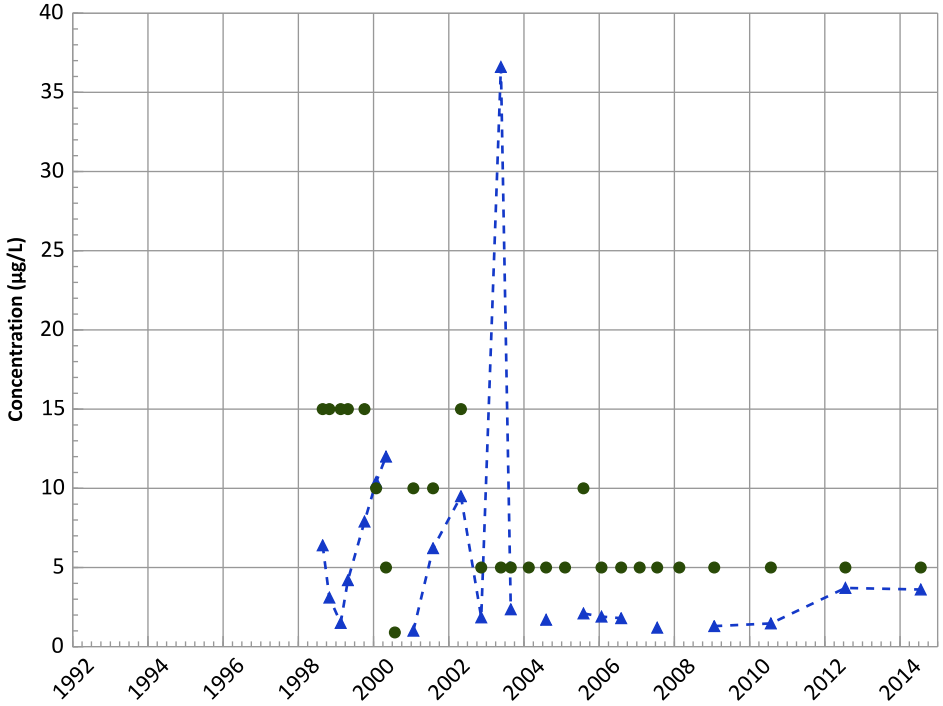


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Manganese Trend



Concentration Trend

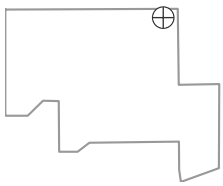
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

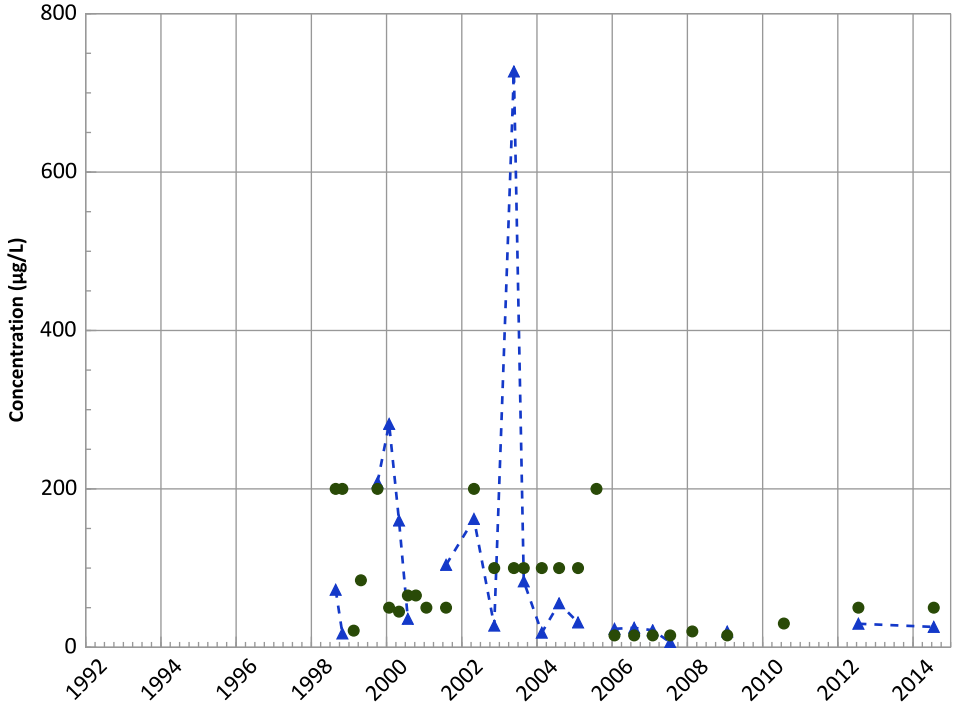
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

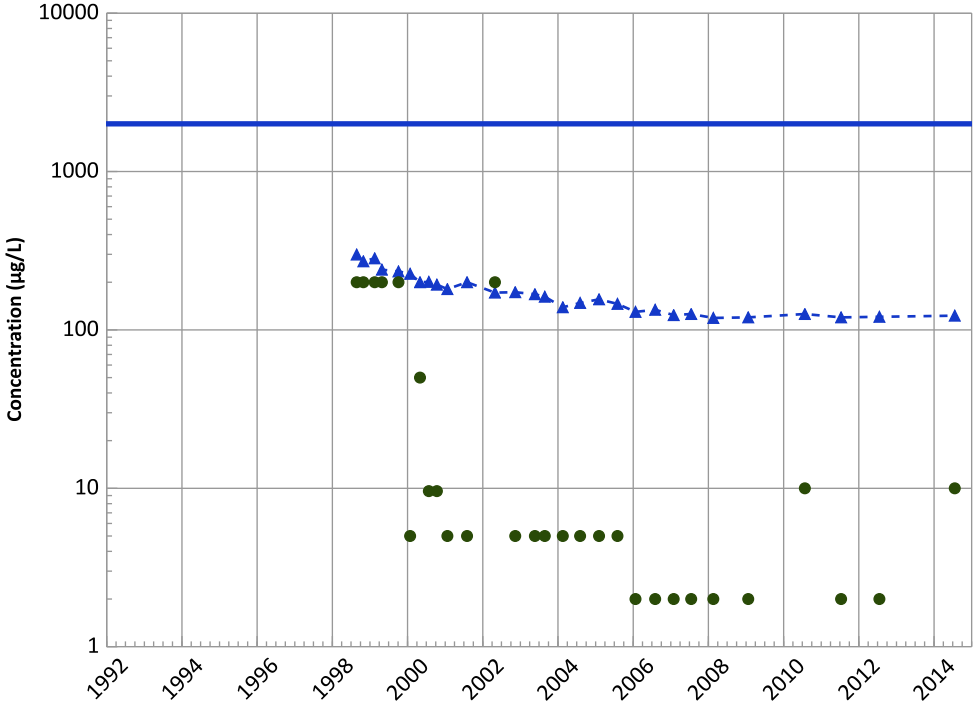


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

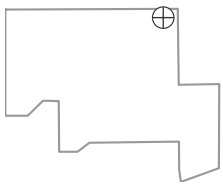
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

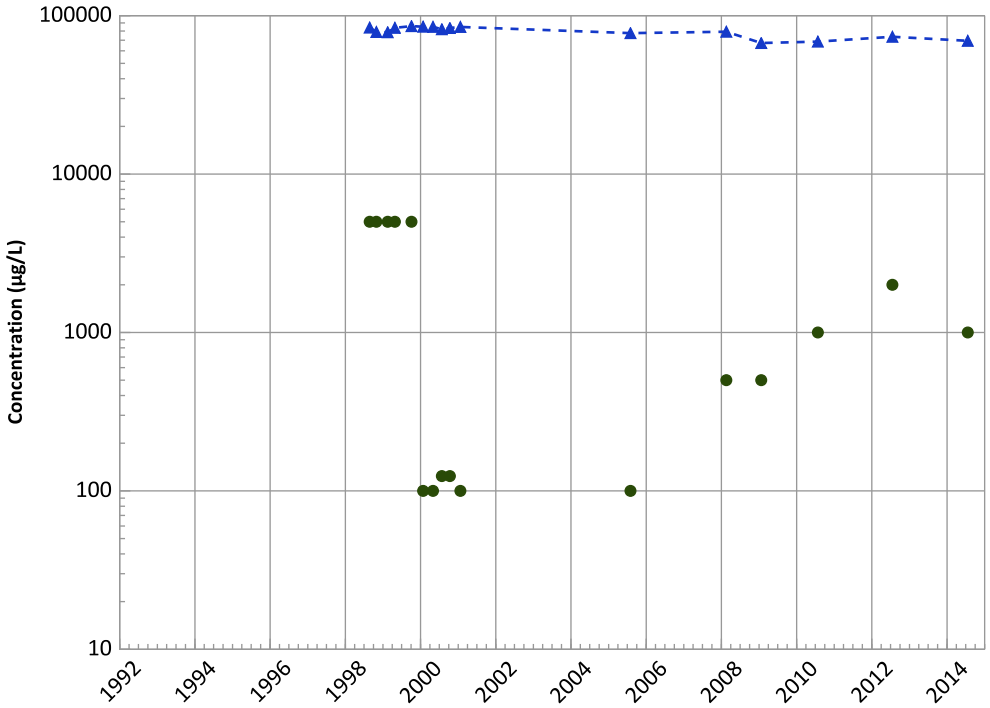
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

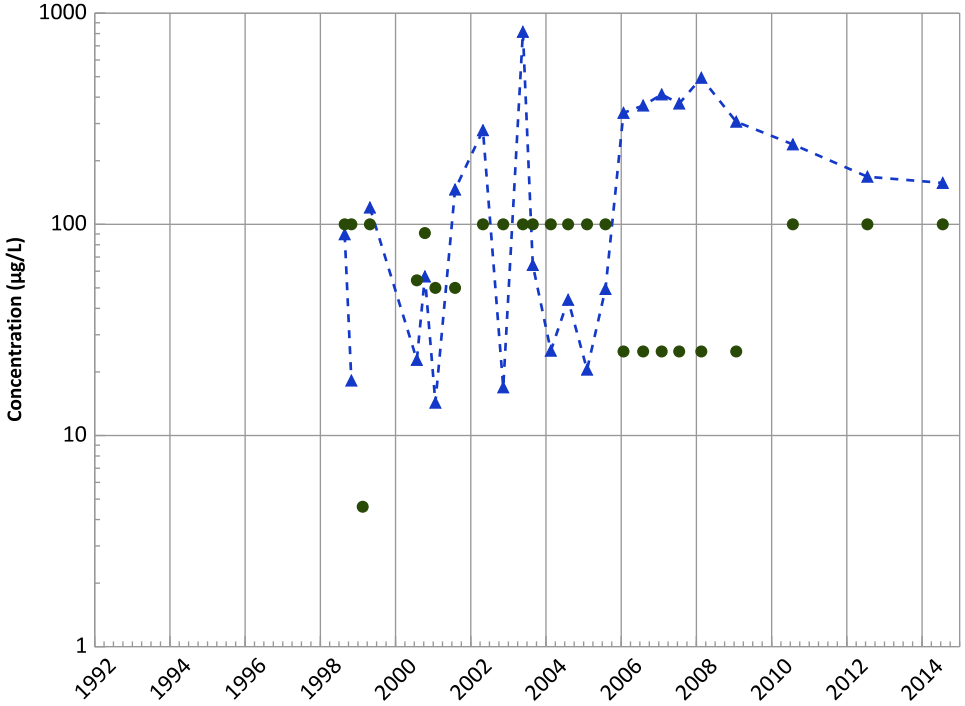


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

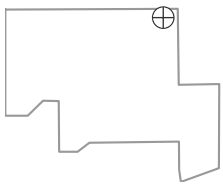
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

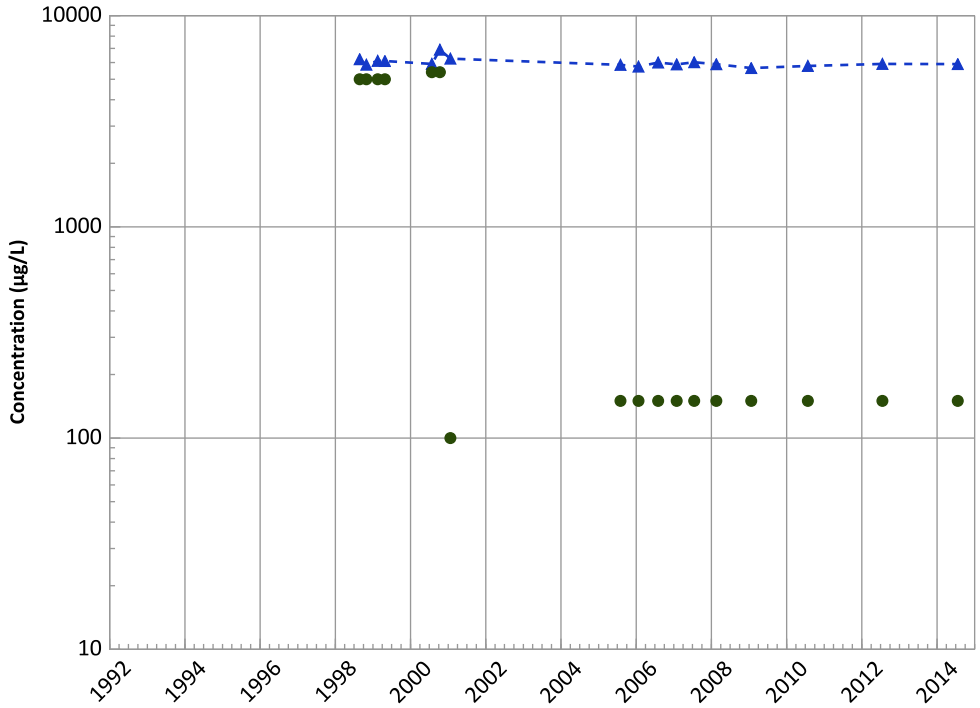
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

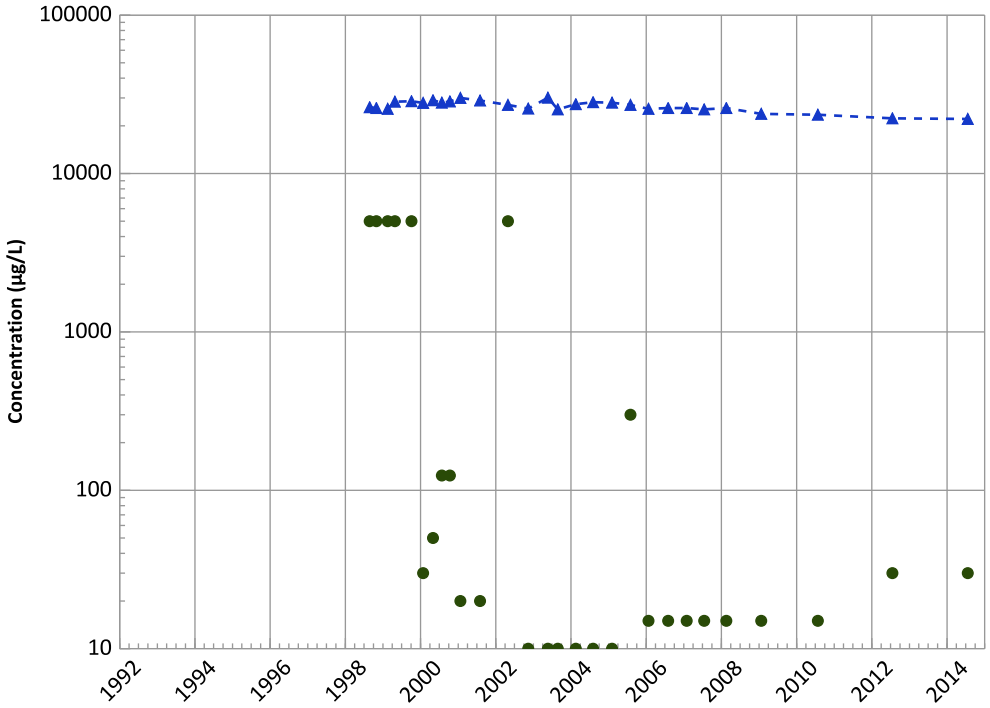


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

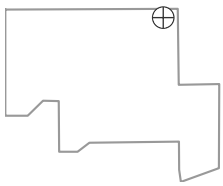
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

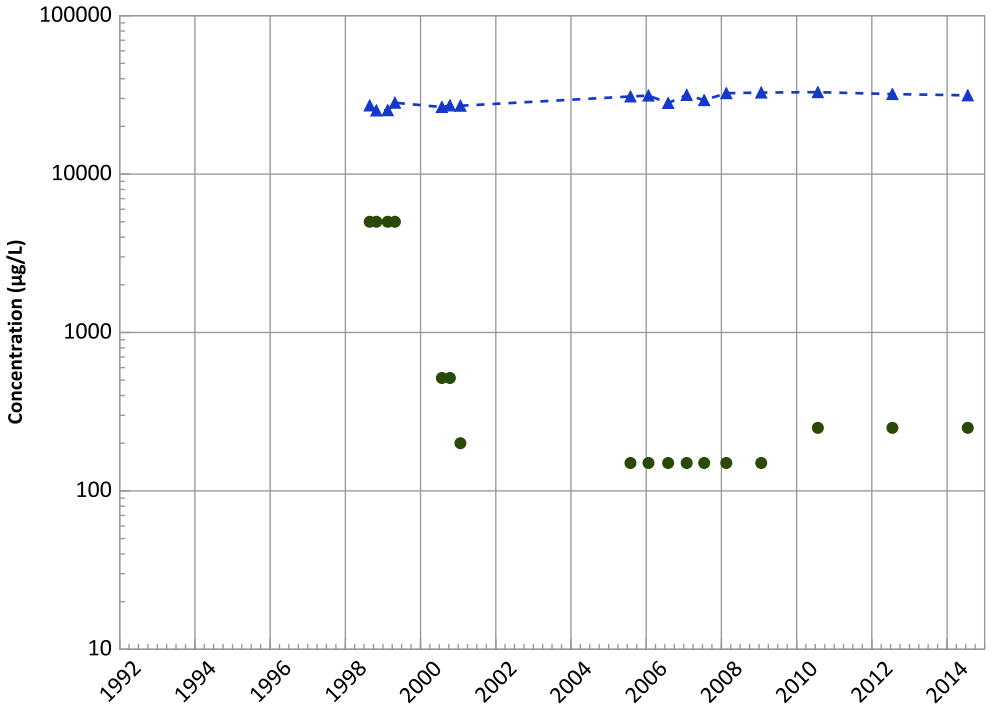
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX04-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

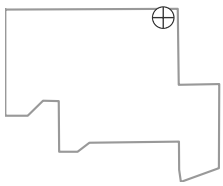
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

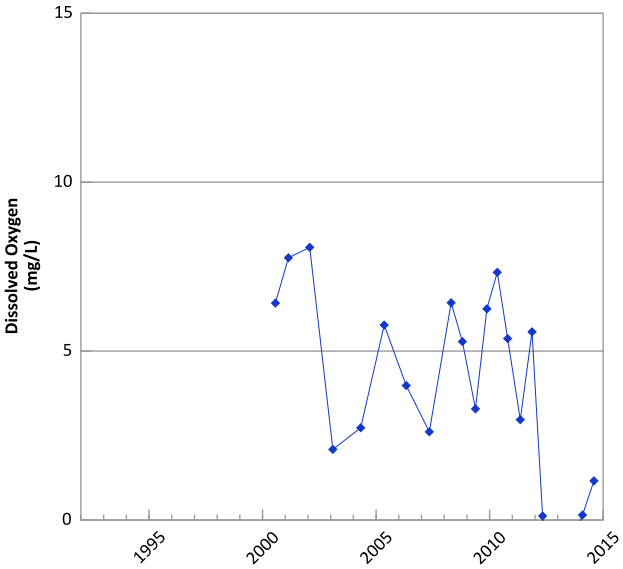
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/25/1998 to 07/21/2014
Analysis Date: 03/19/2015

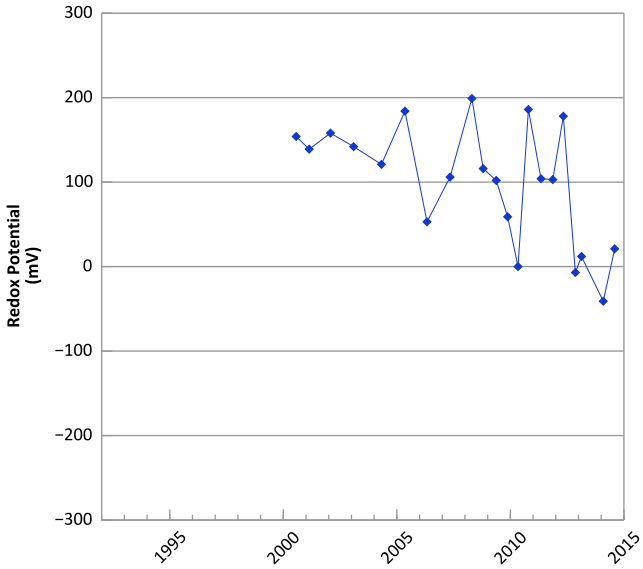
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

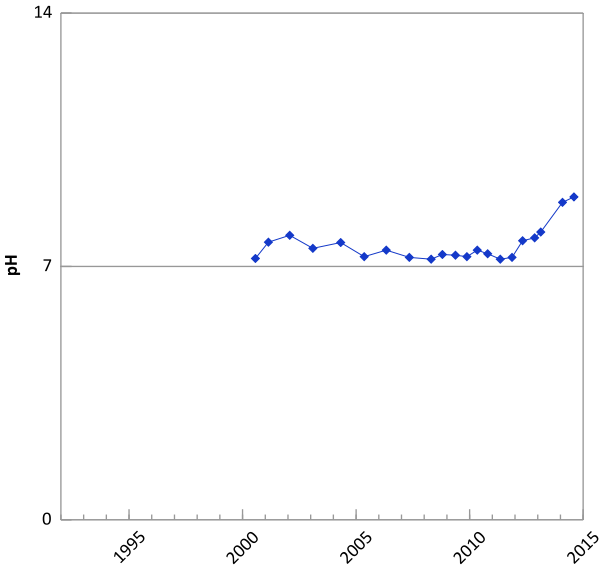
Well Location

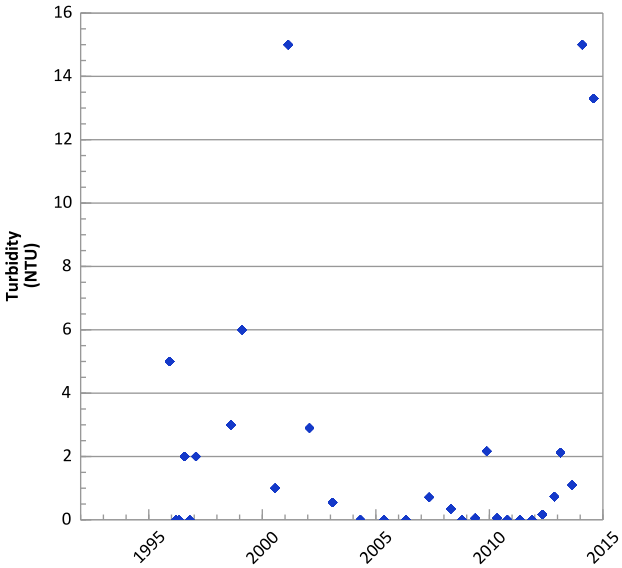


PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



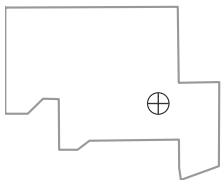






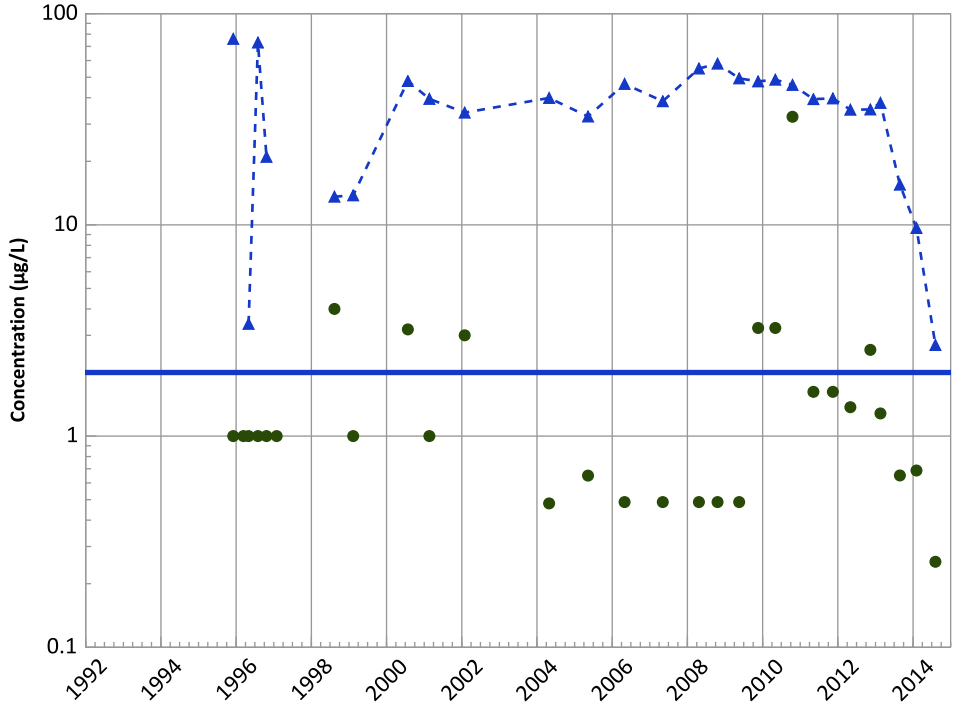
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

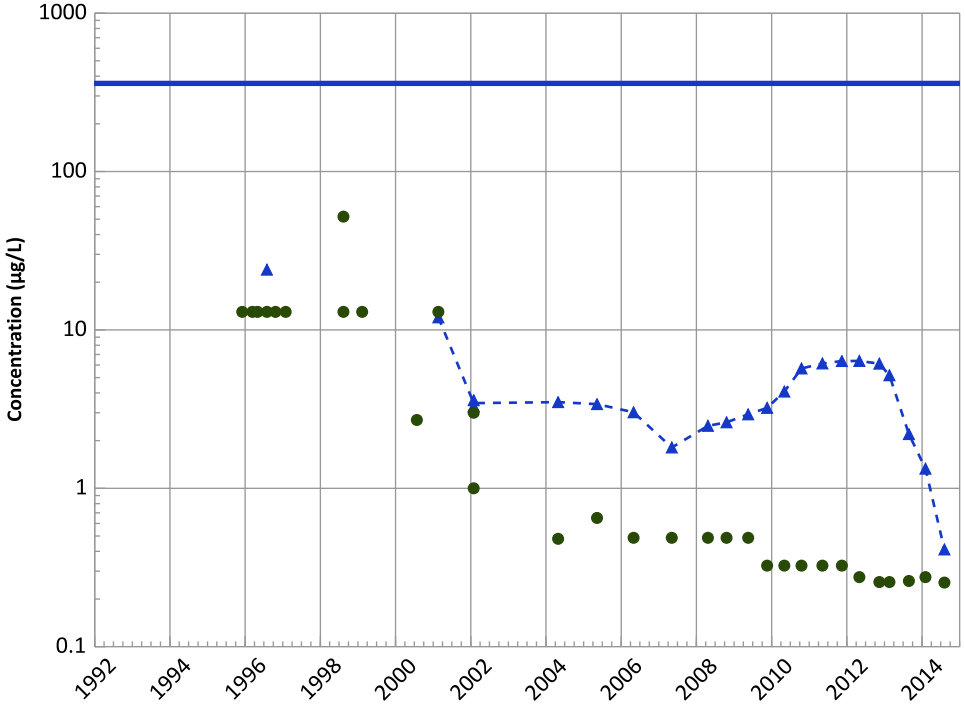


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

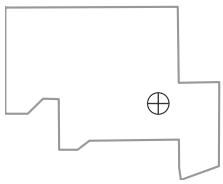
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

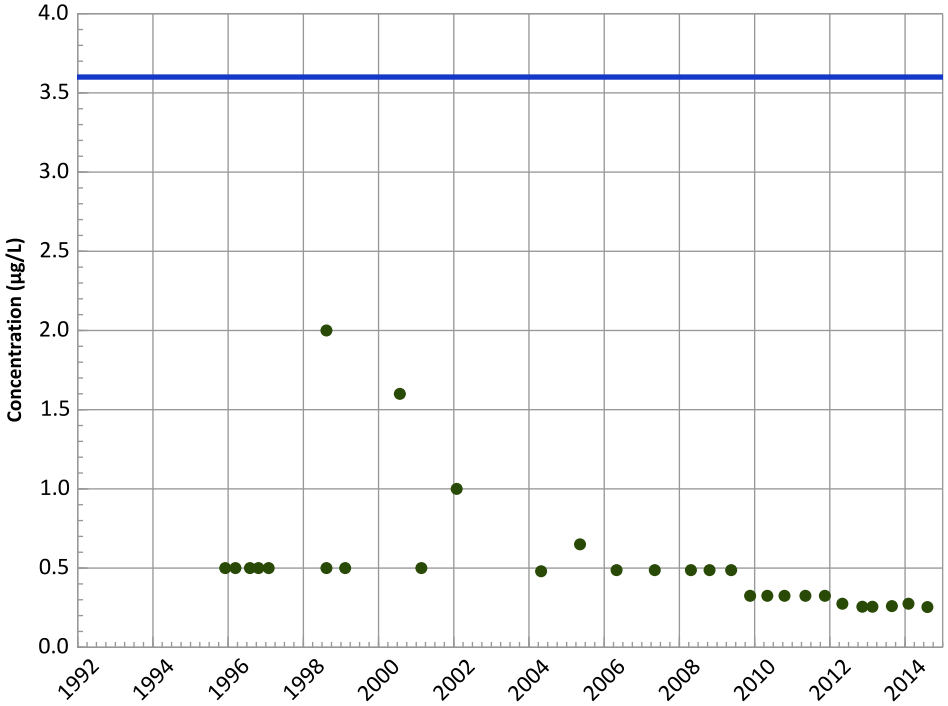
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

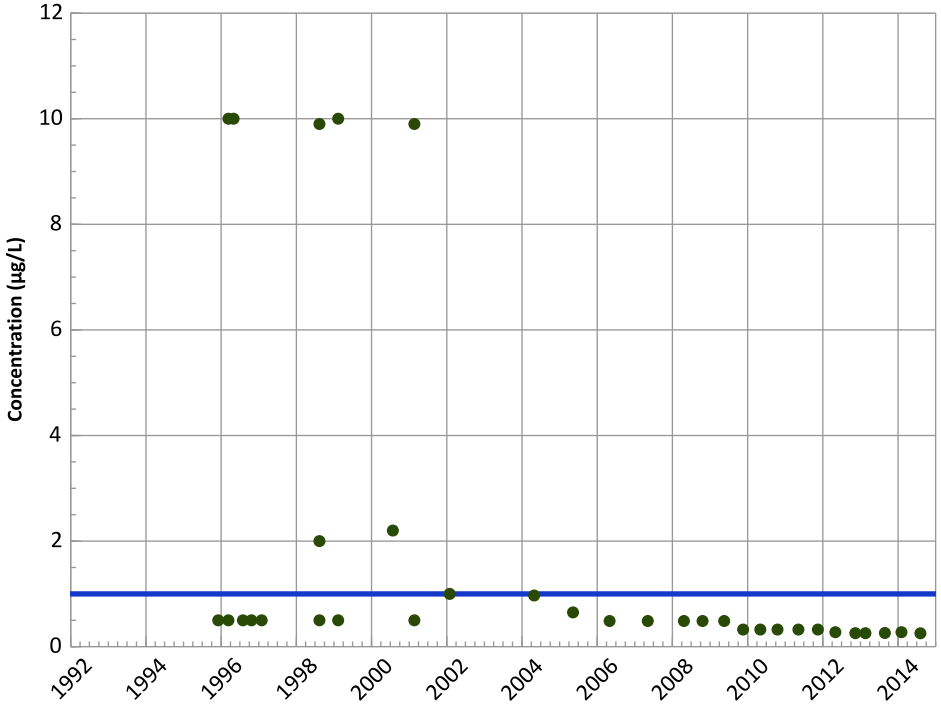


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

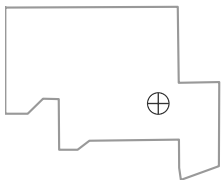
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

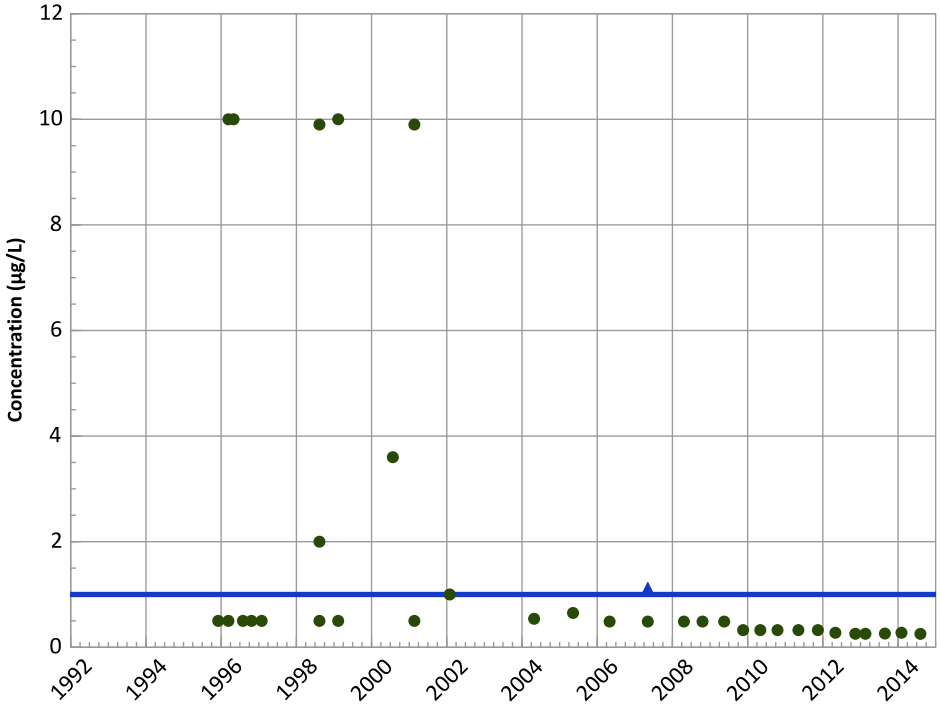
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

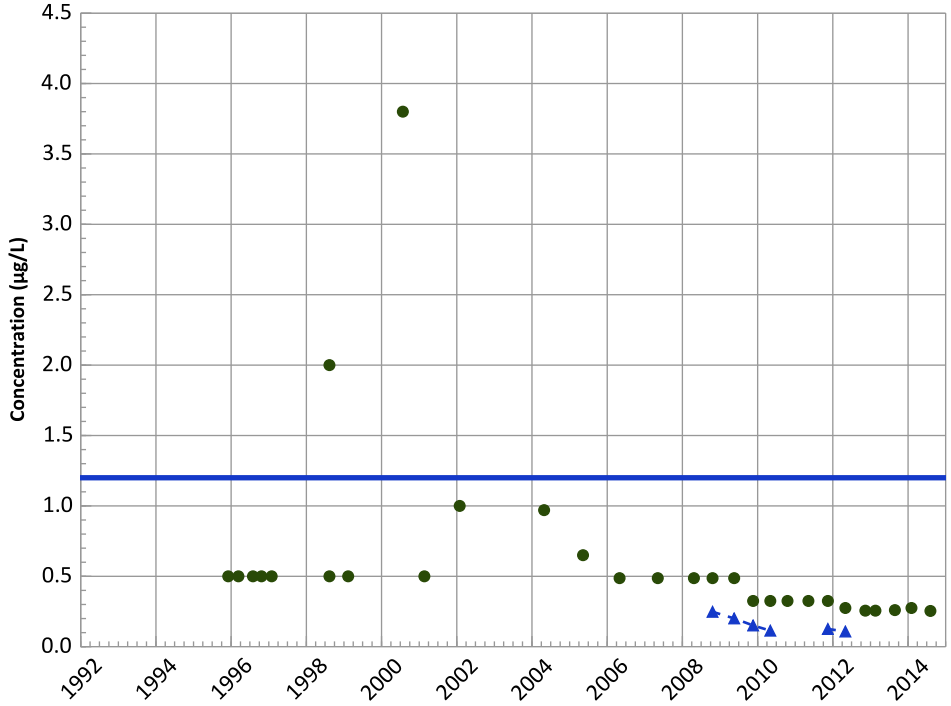


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

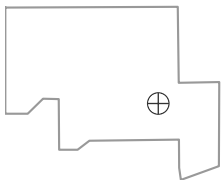
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

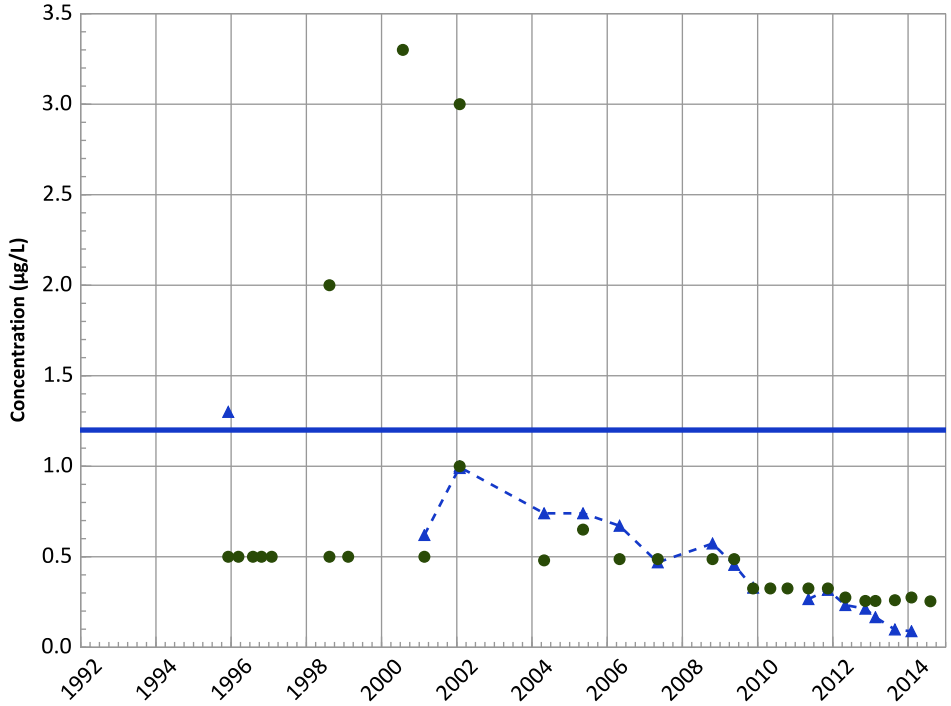
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

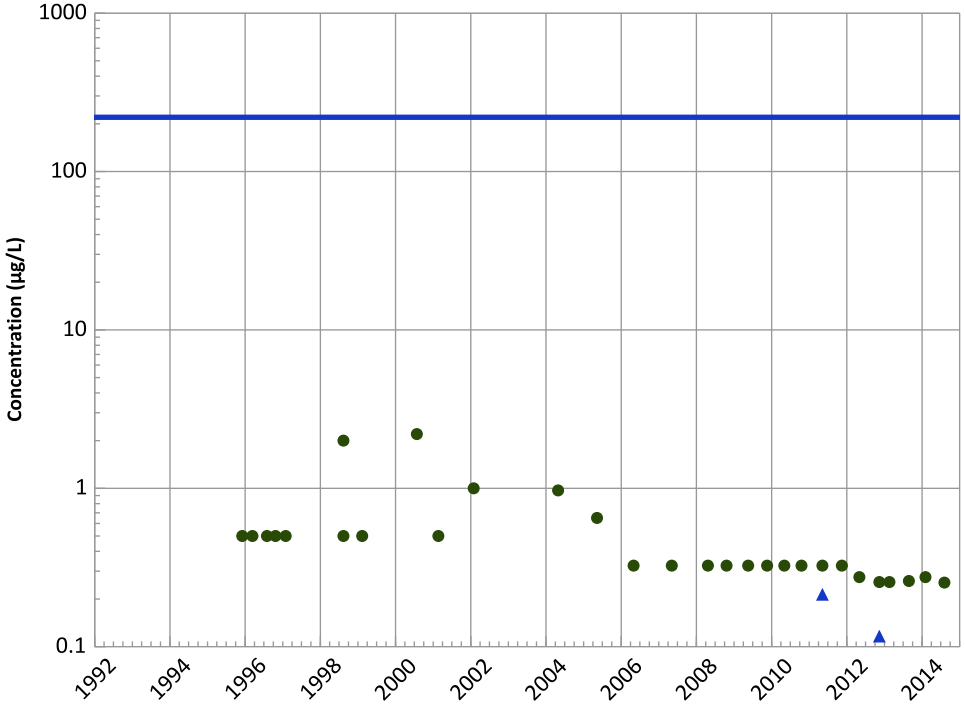


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

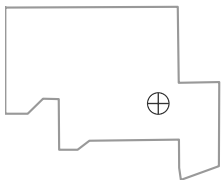
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

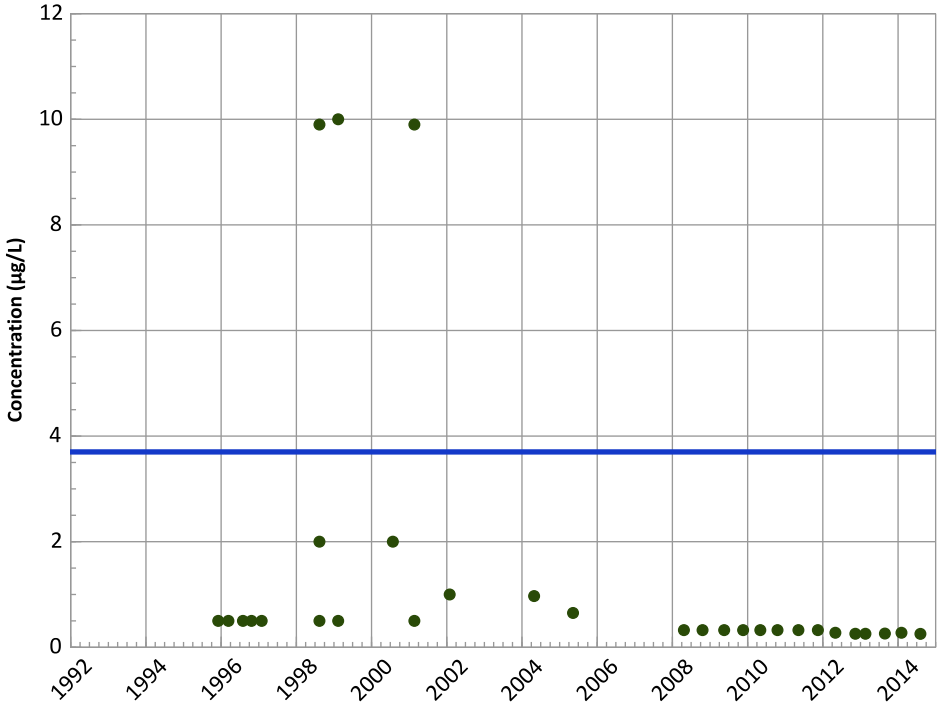
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

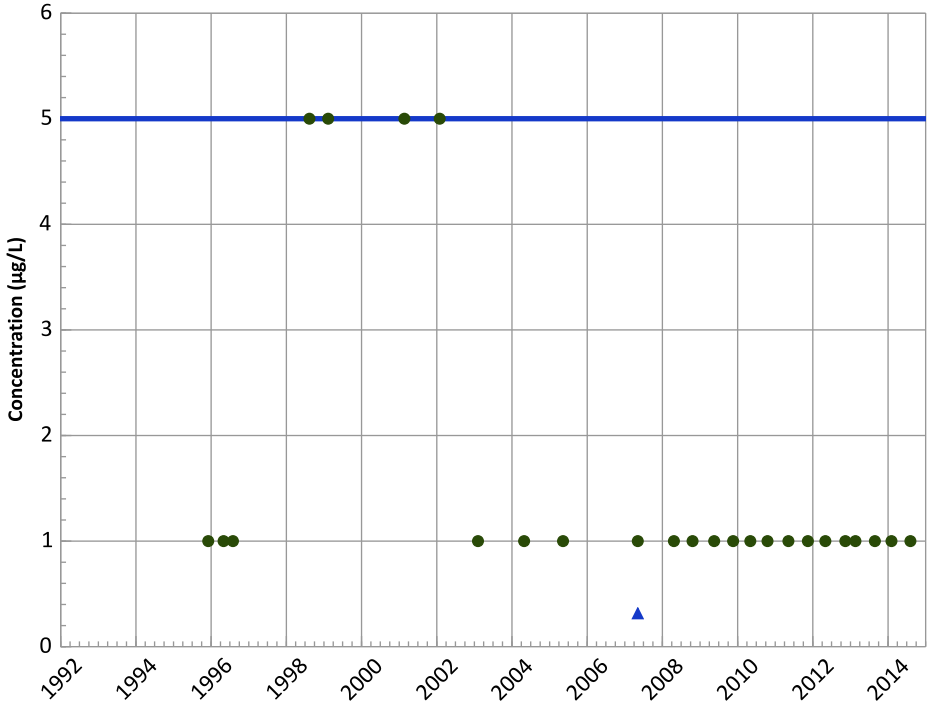


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

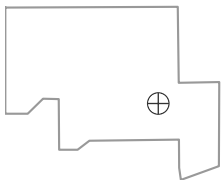
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

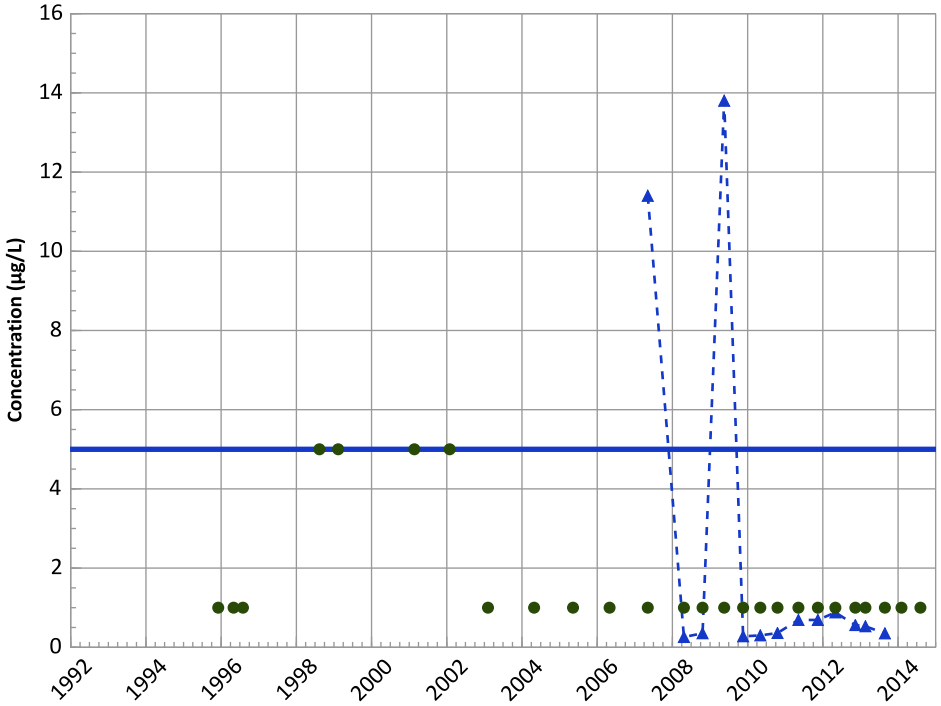
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

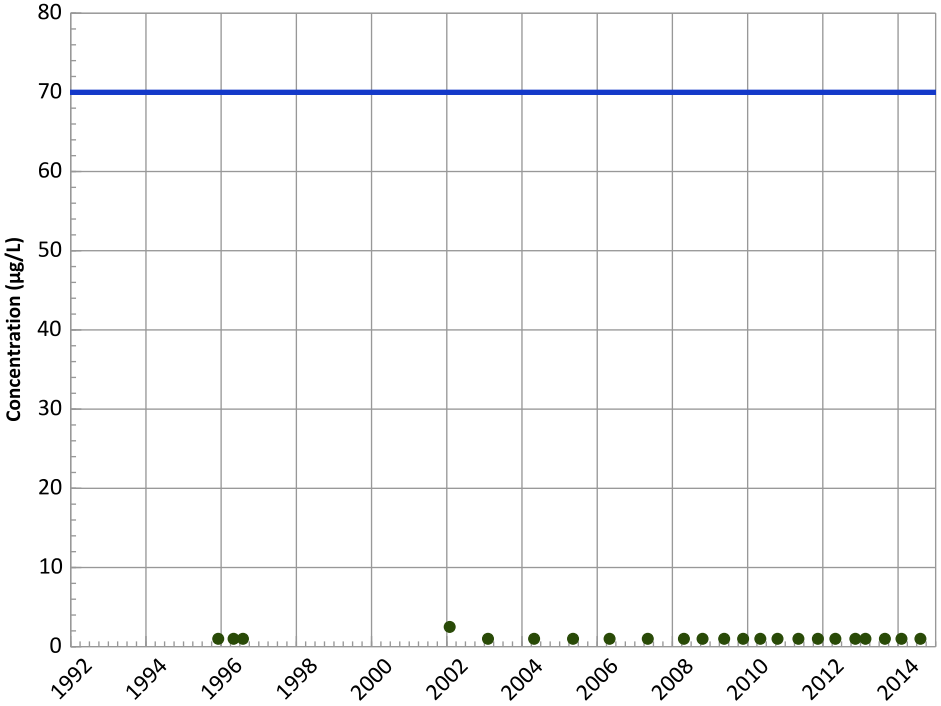


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

cis-1,2-Dichloroethene Trend



Concentration Trend

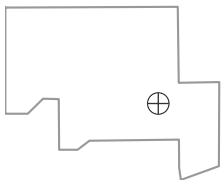
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

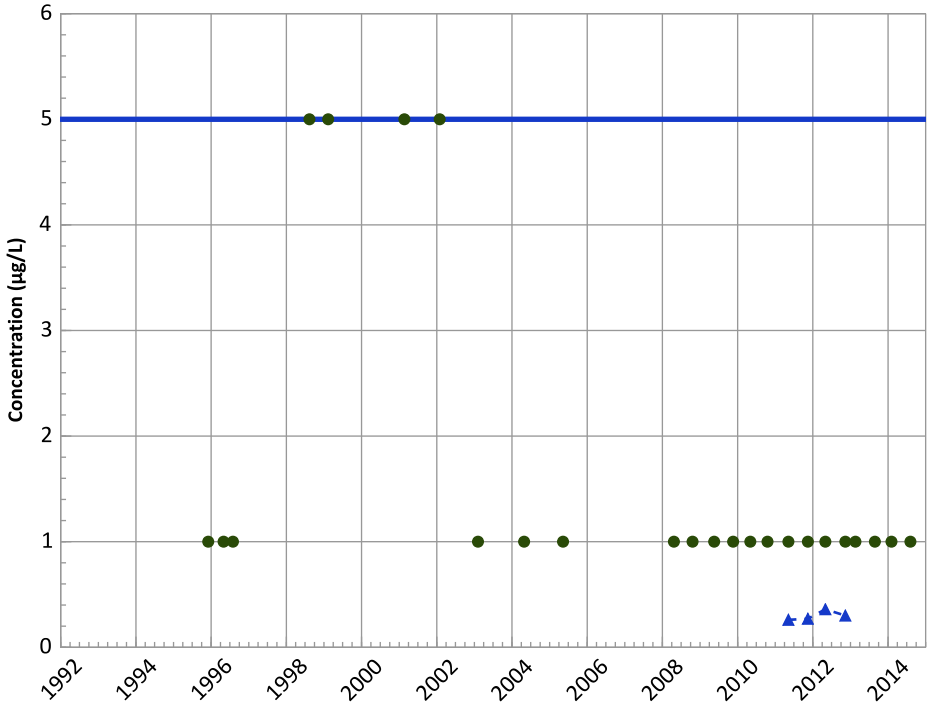
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

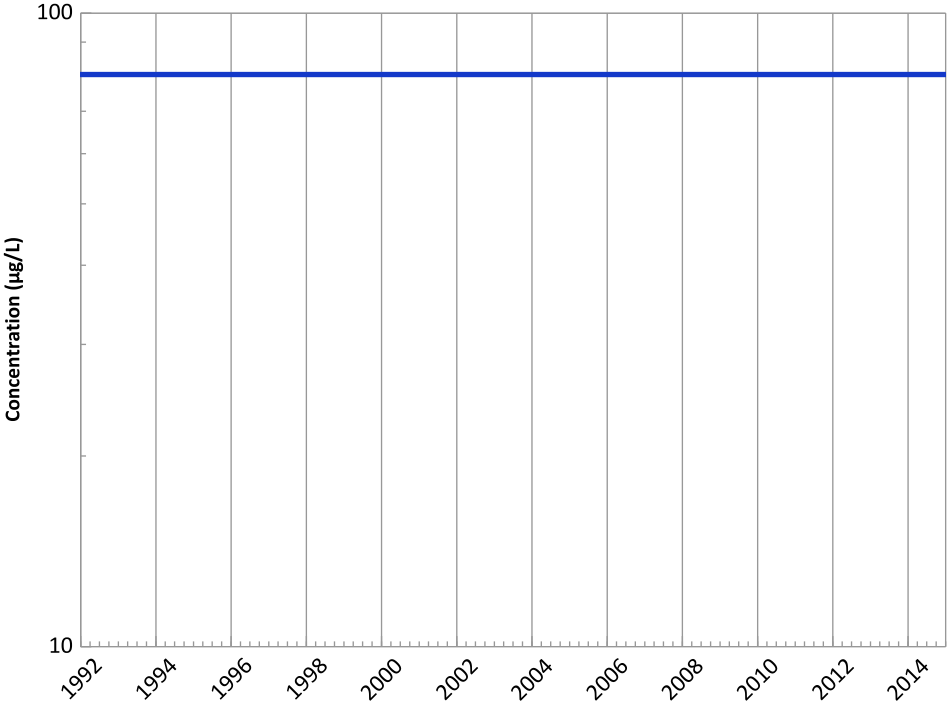


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chloroform Trend



Concentration Trend

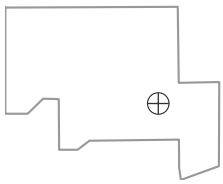
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

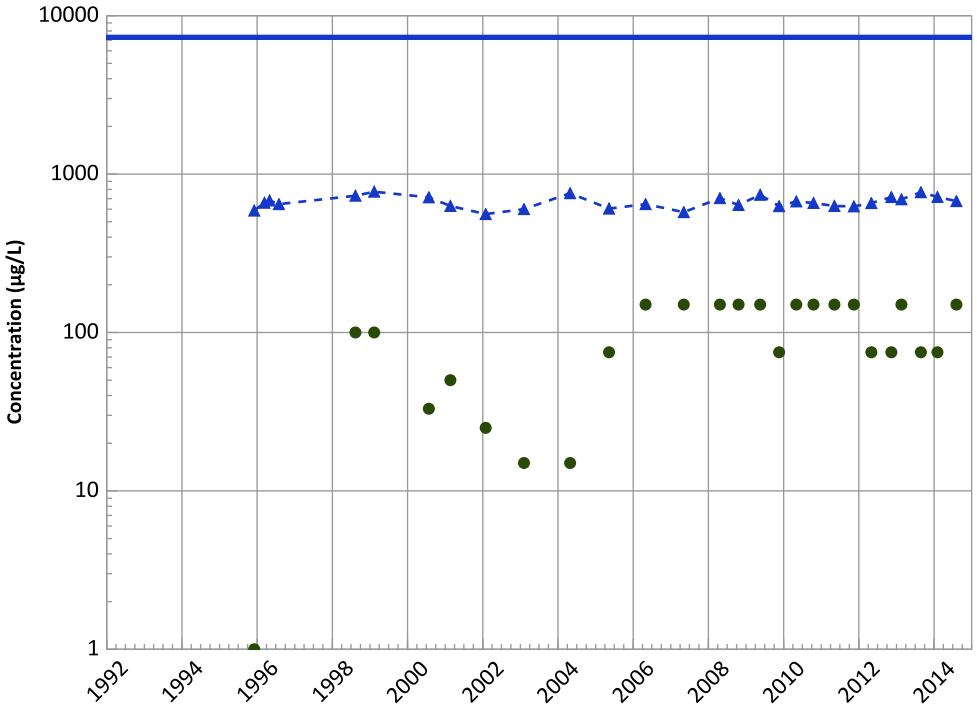
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

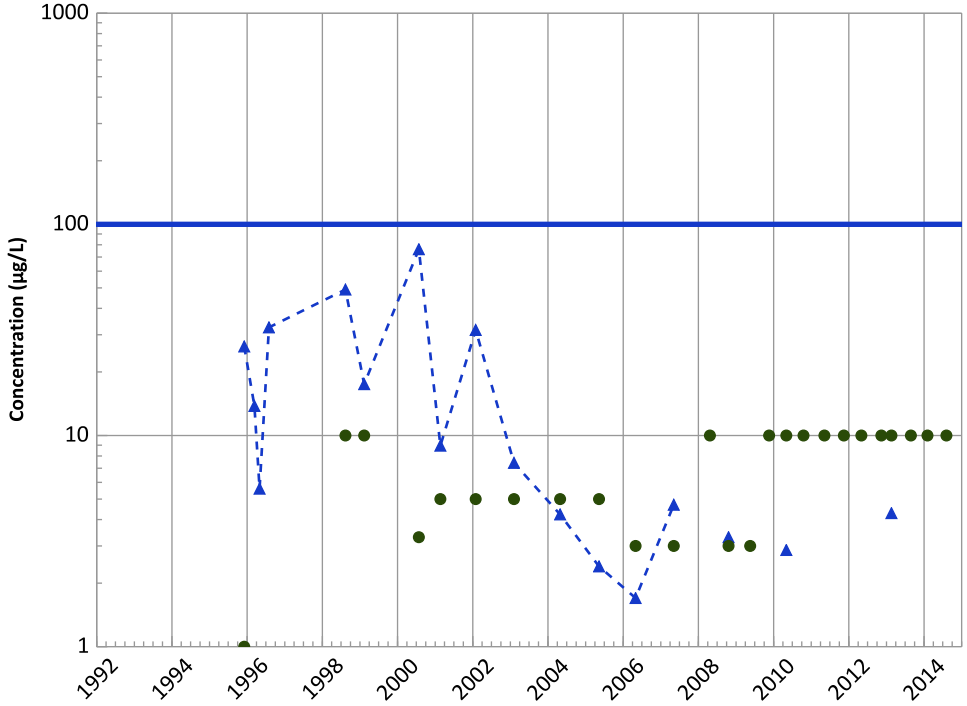


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

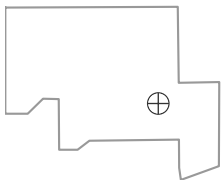
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

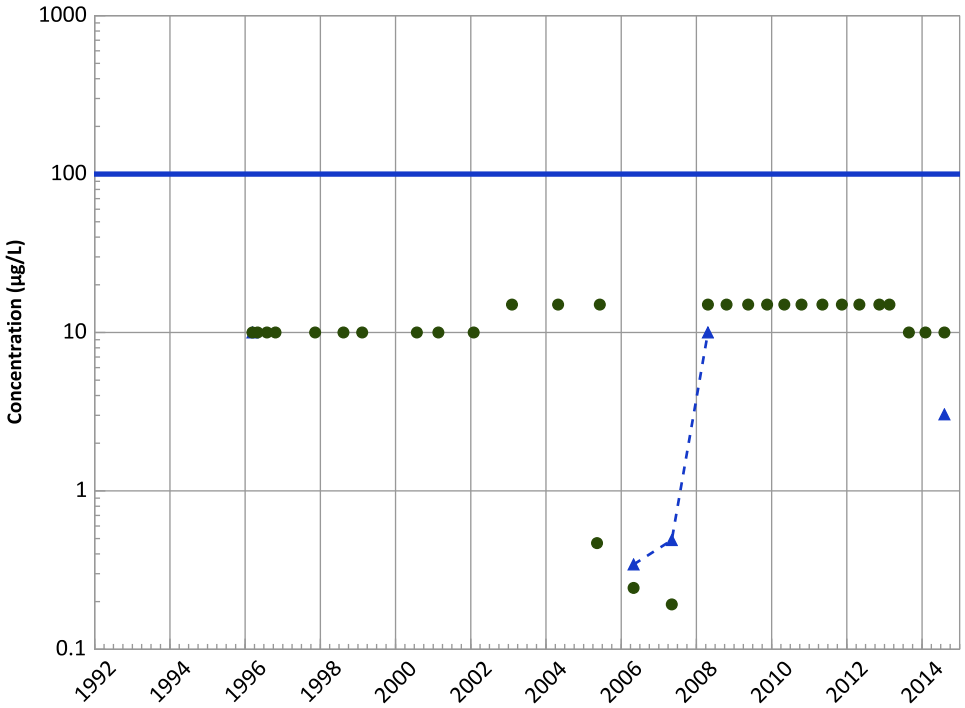
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

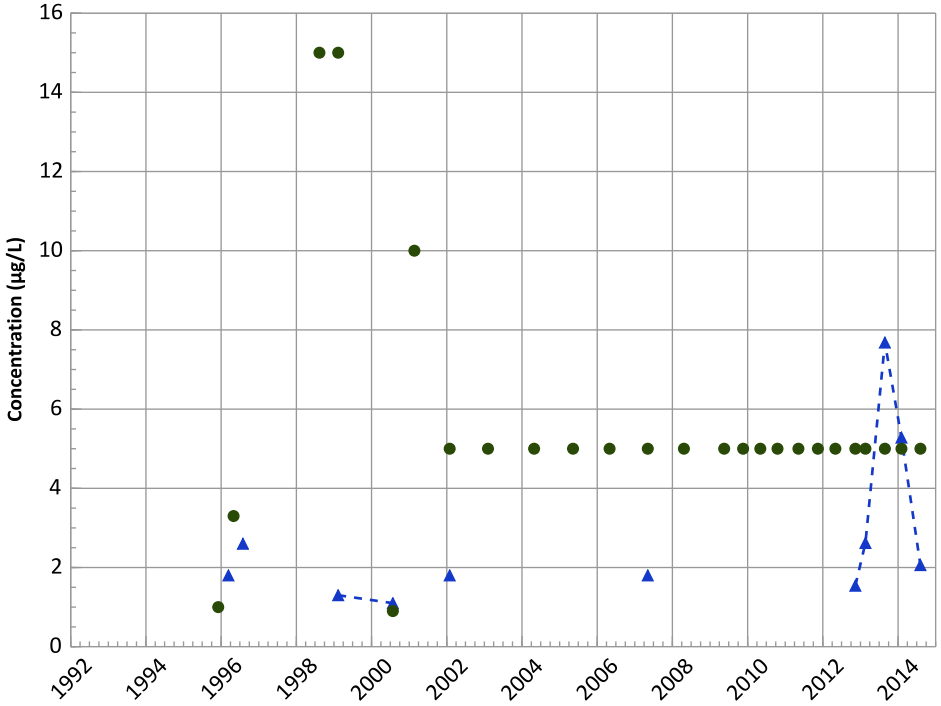


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Manganese Trend



Concentration Trend

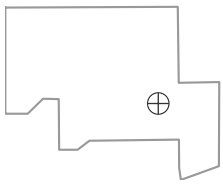
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

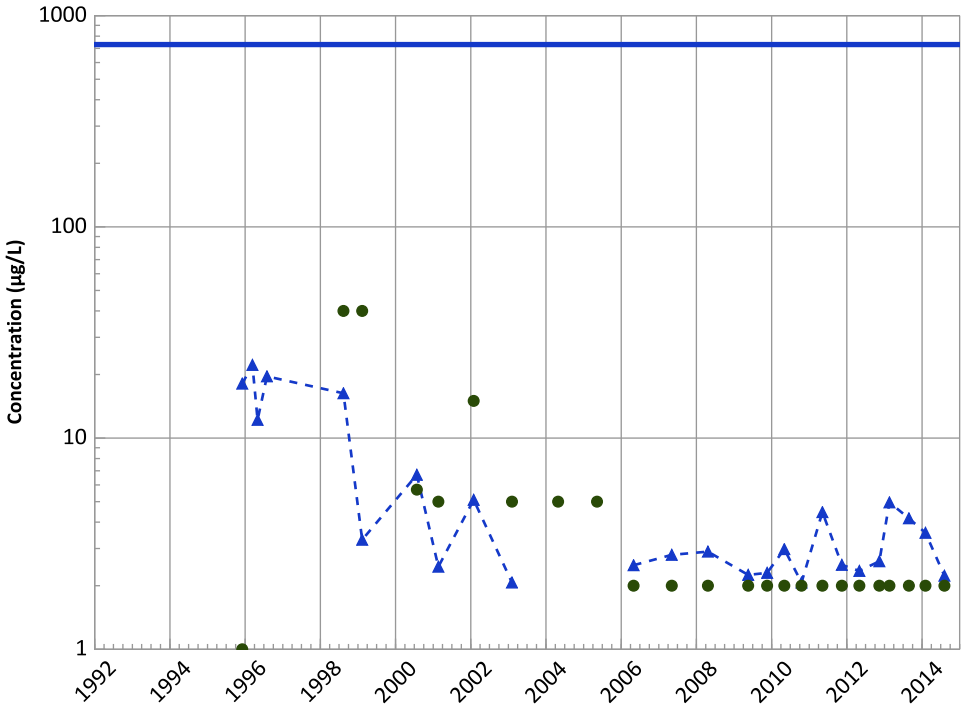
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

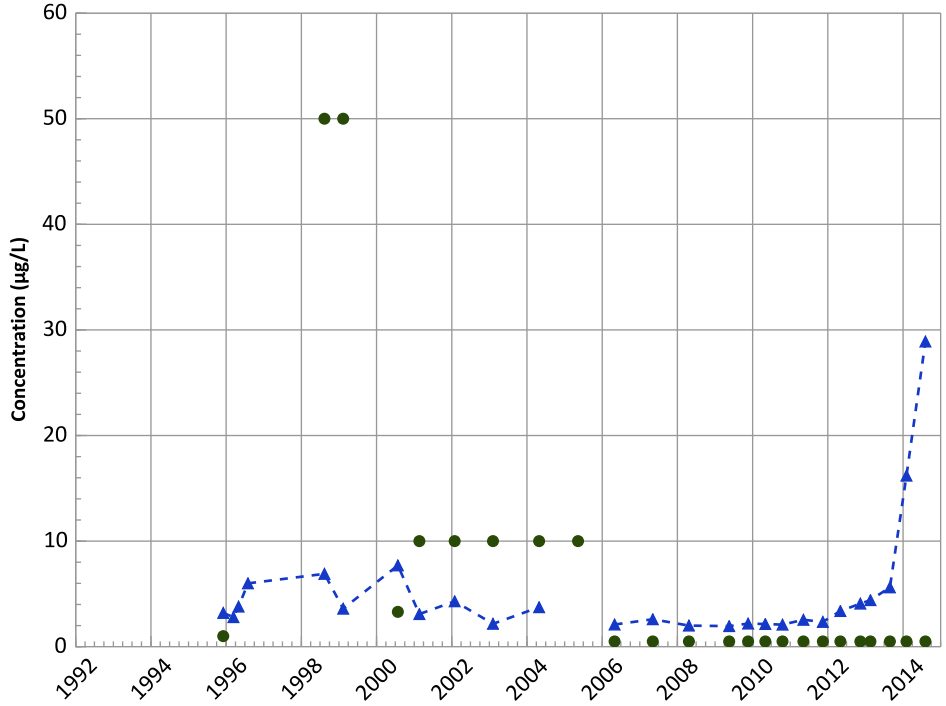


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Molybdenum Trend



Concentration Trend

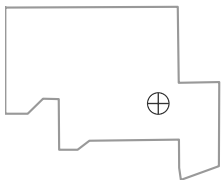
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

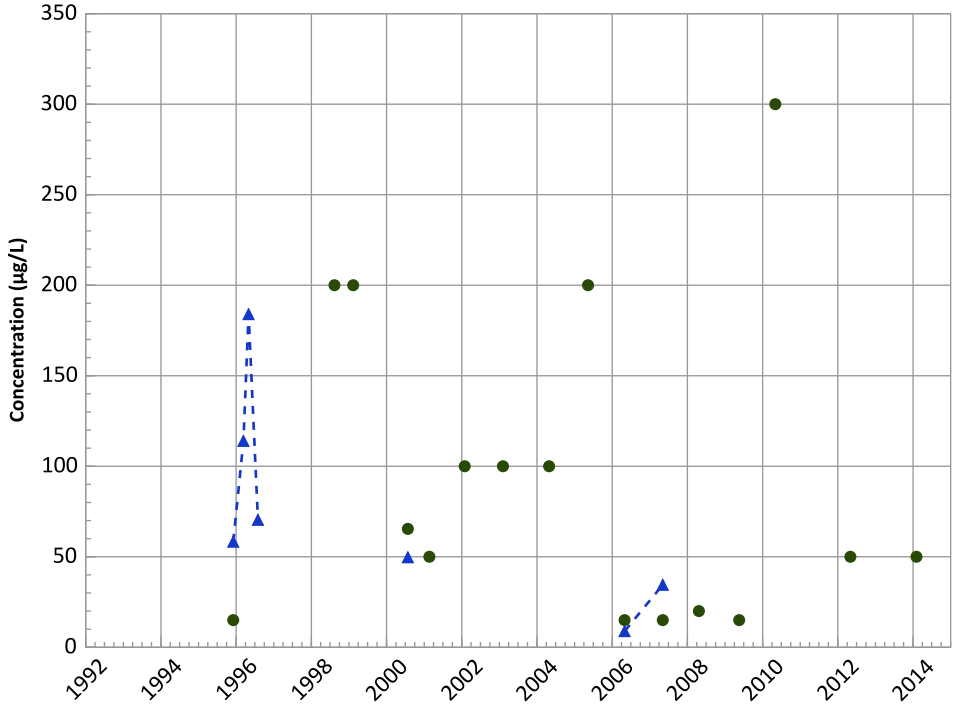
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

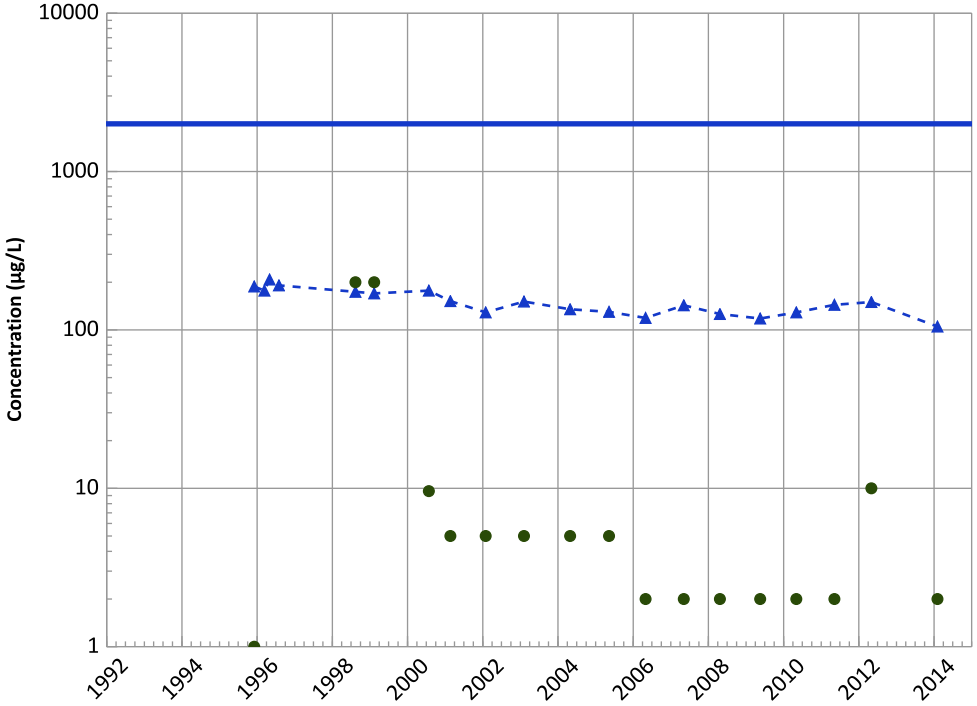


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

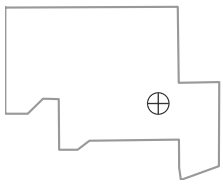
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

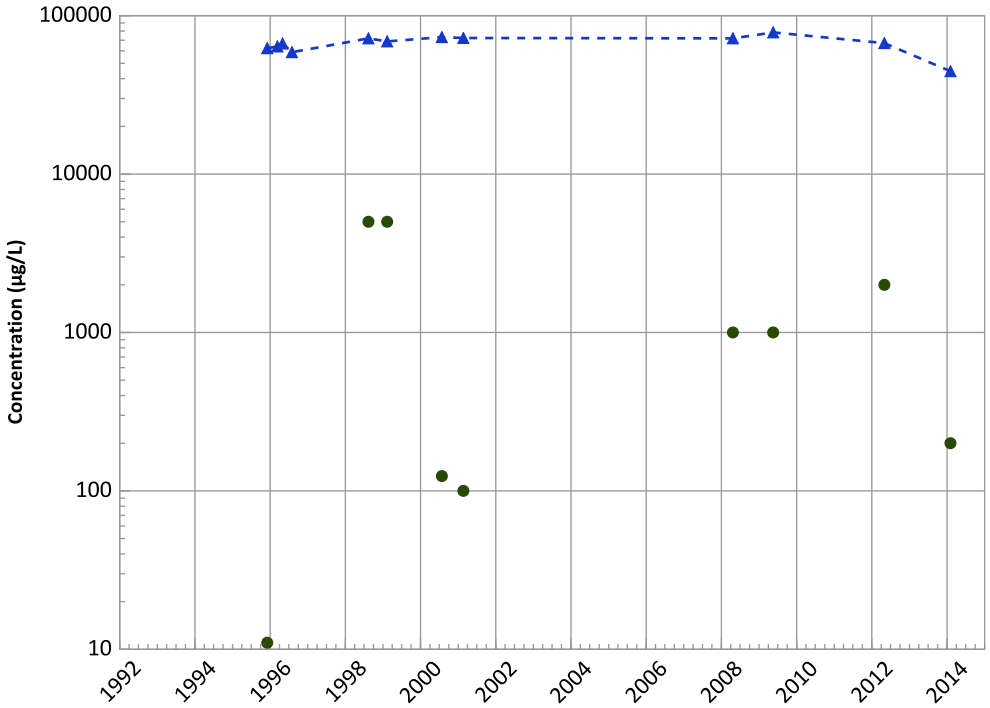
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

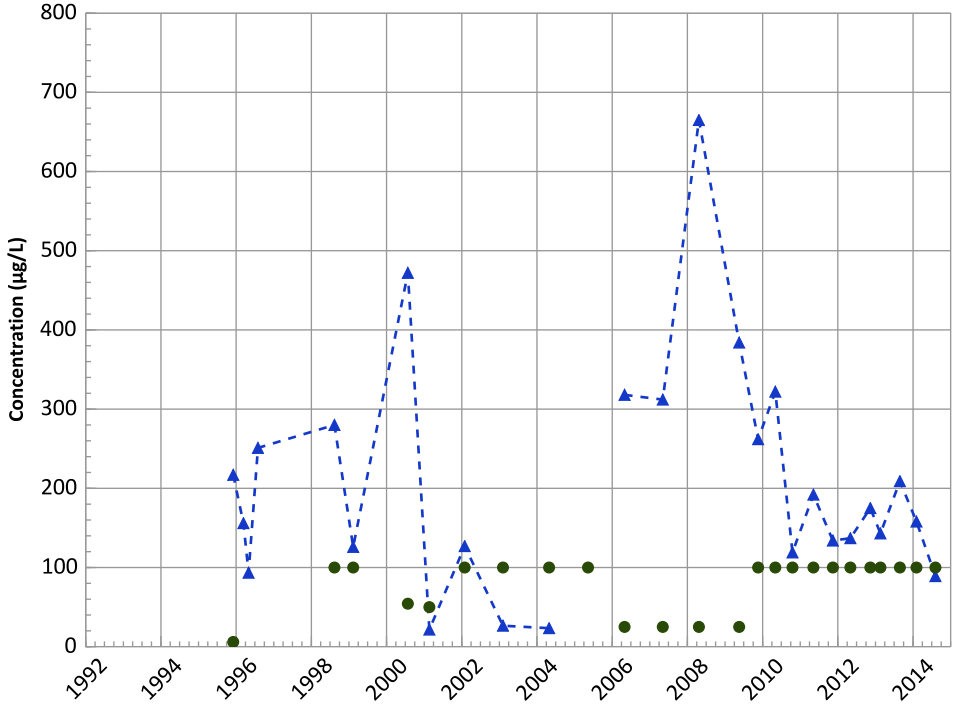


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Iron Trend



Concentration Trend

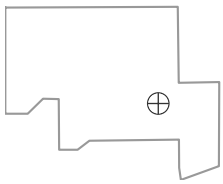
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

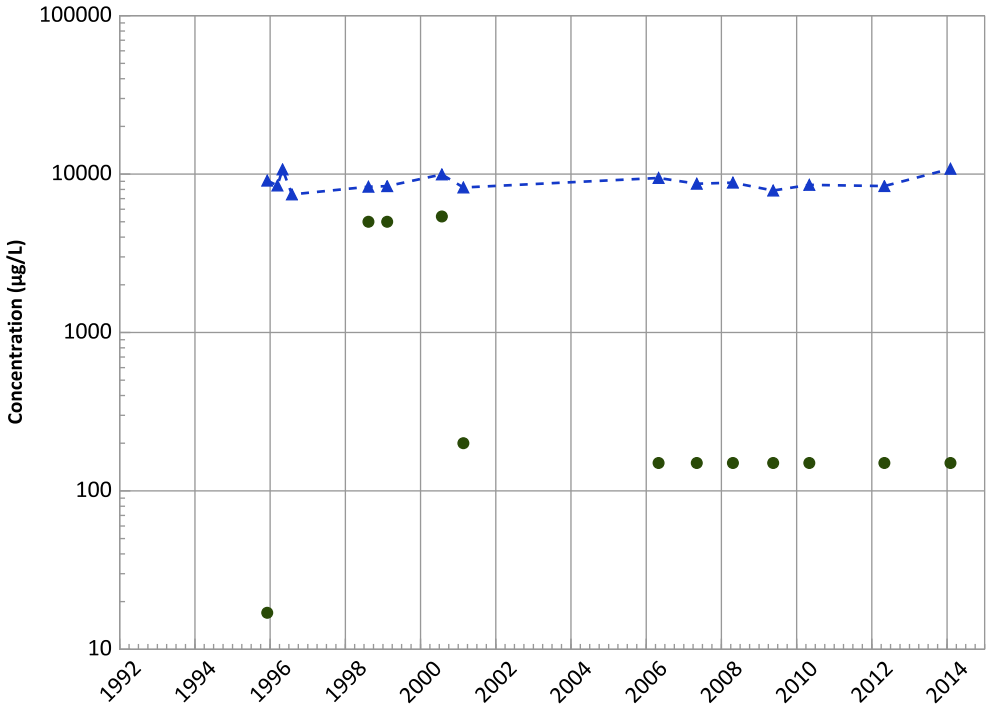
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

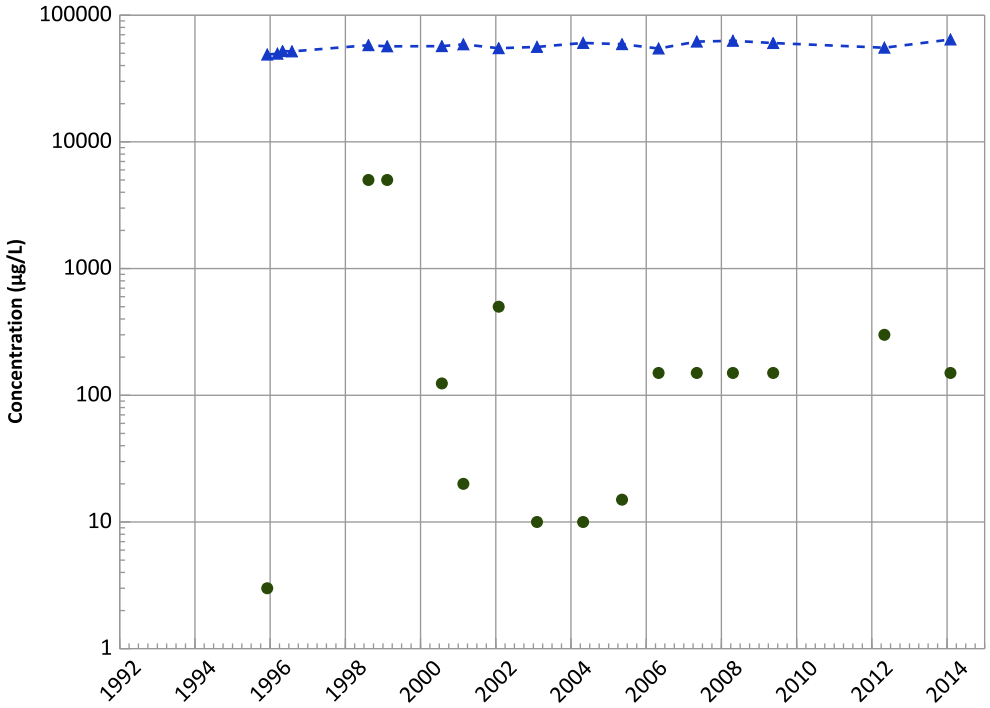


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

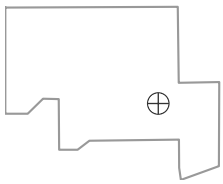
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

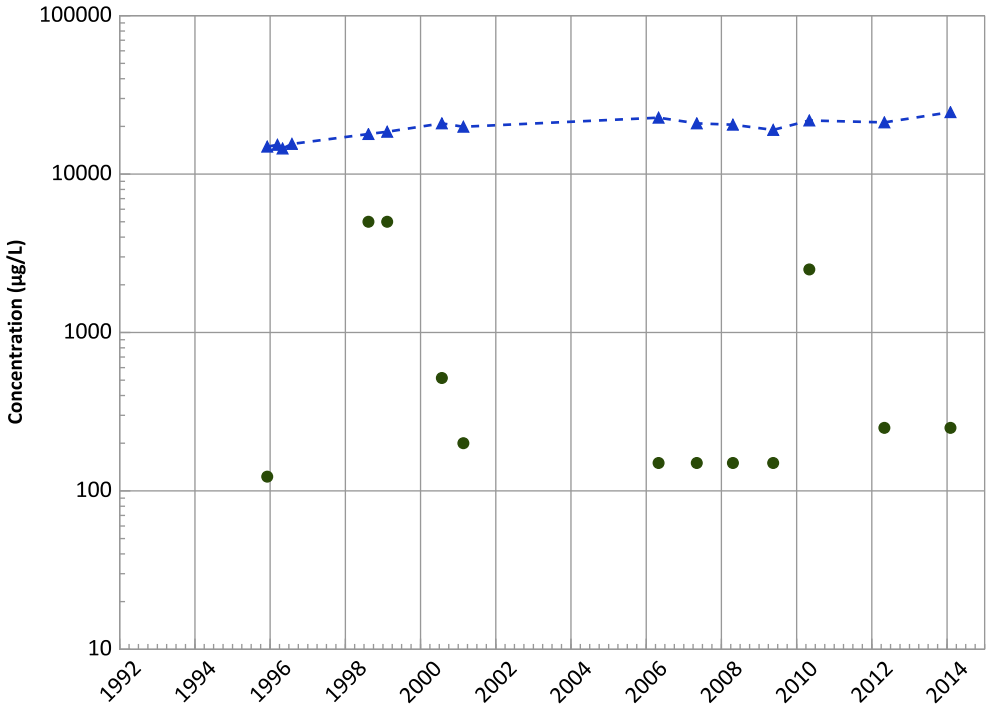
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1002A in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

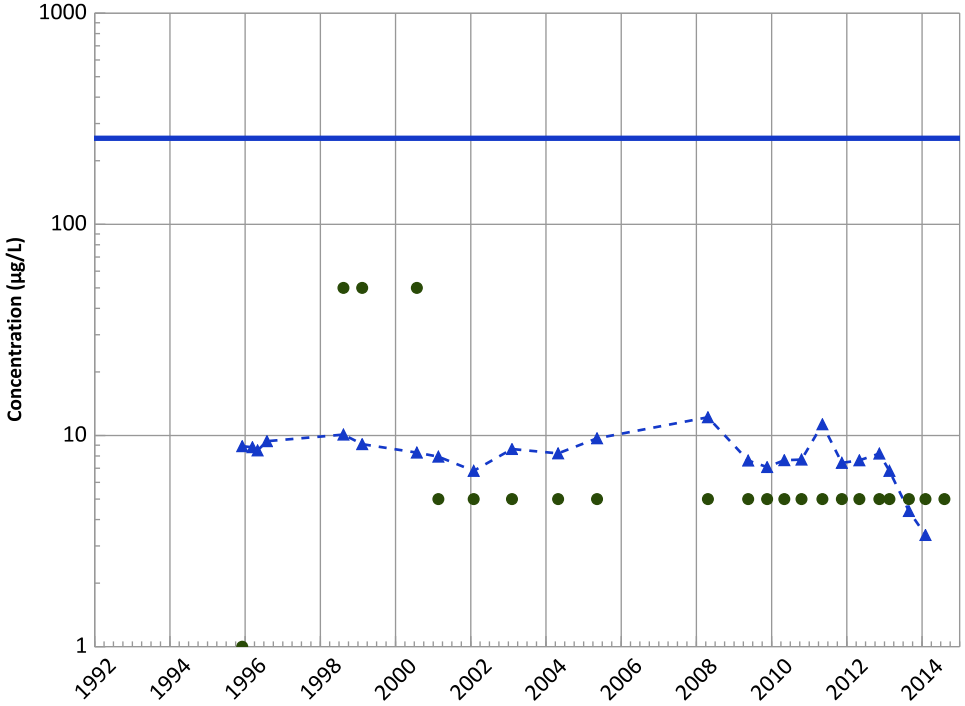


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Vanadium Trend



Concentration Trend

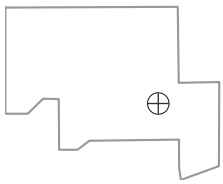
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

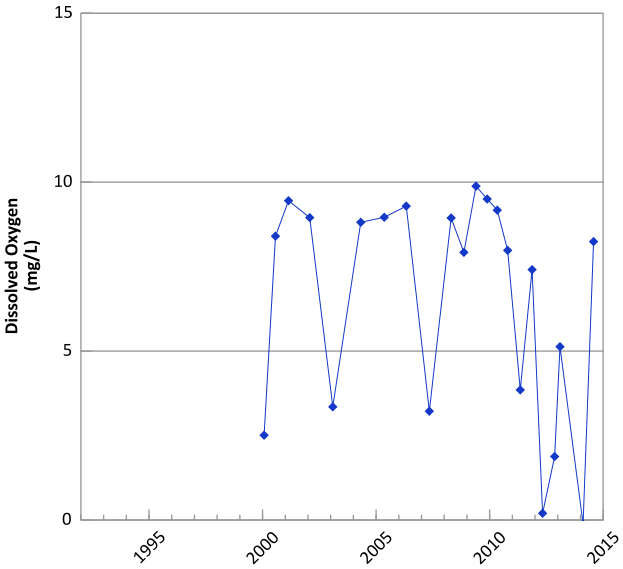
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/04/1995 to 08/06/2014
Analysis Date: 03/19/2015

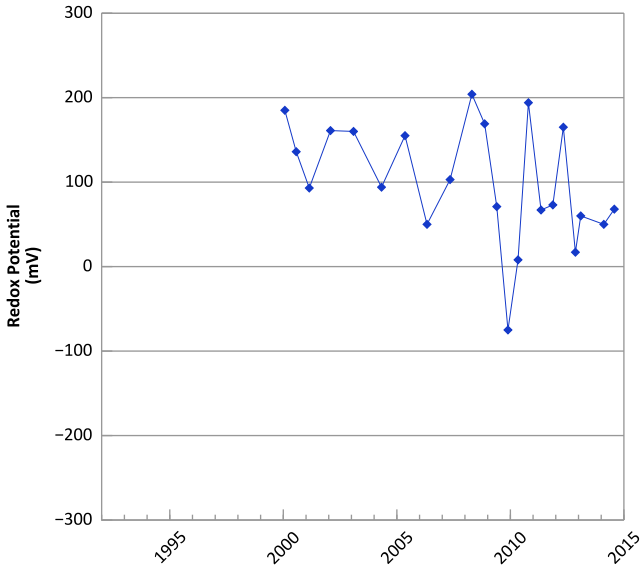
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

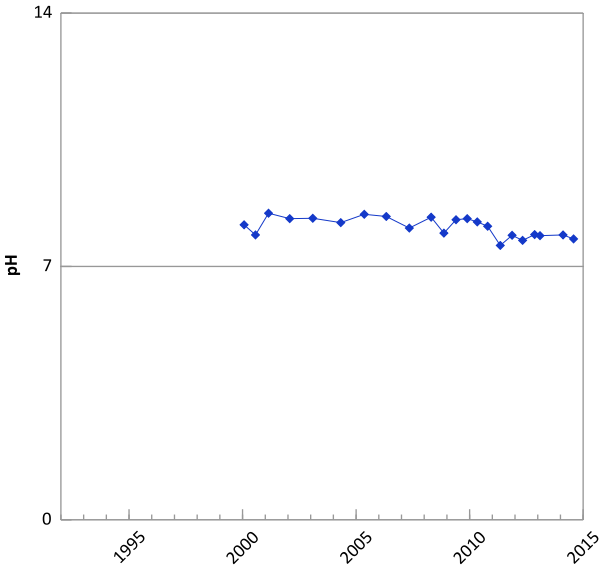
Well Location

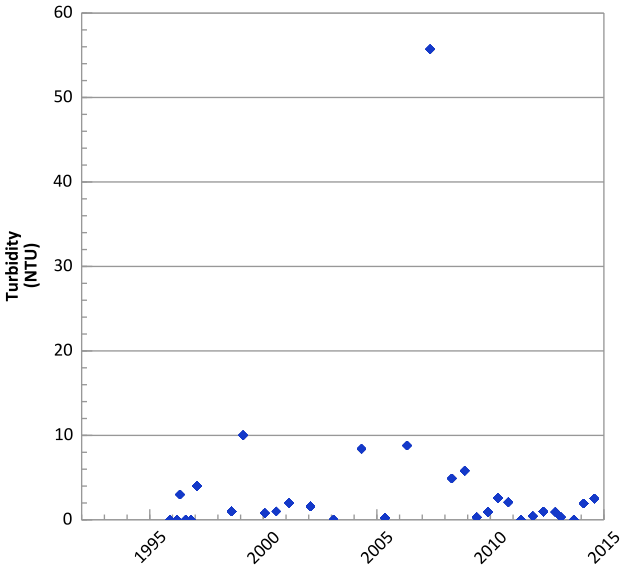


PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



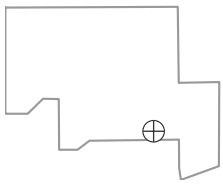






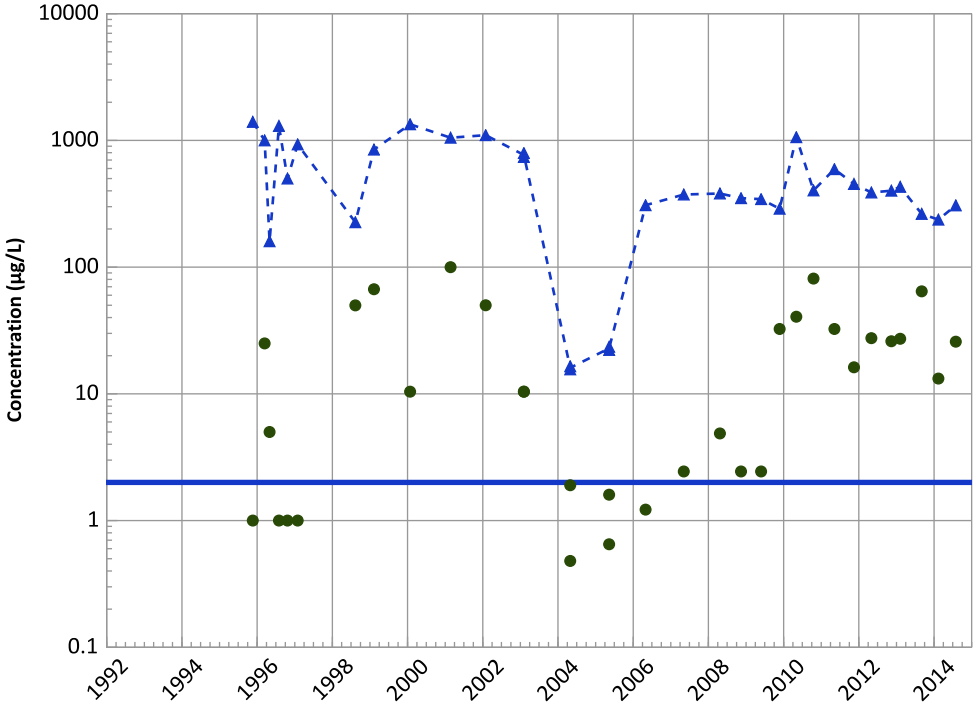
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

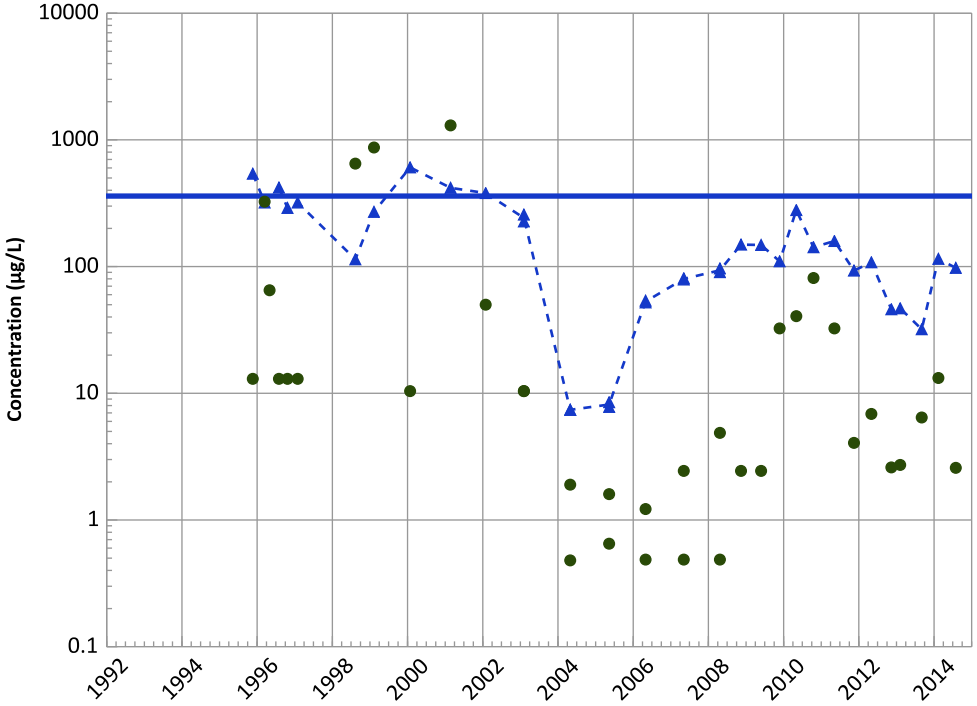


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

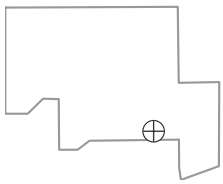
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

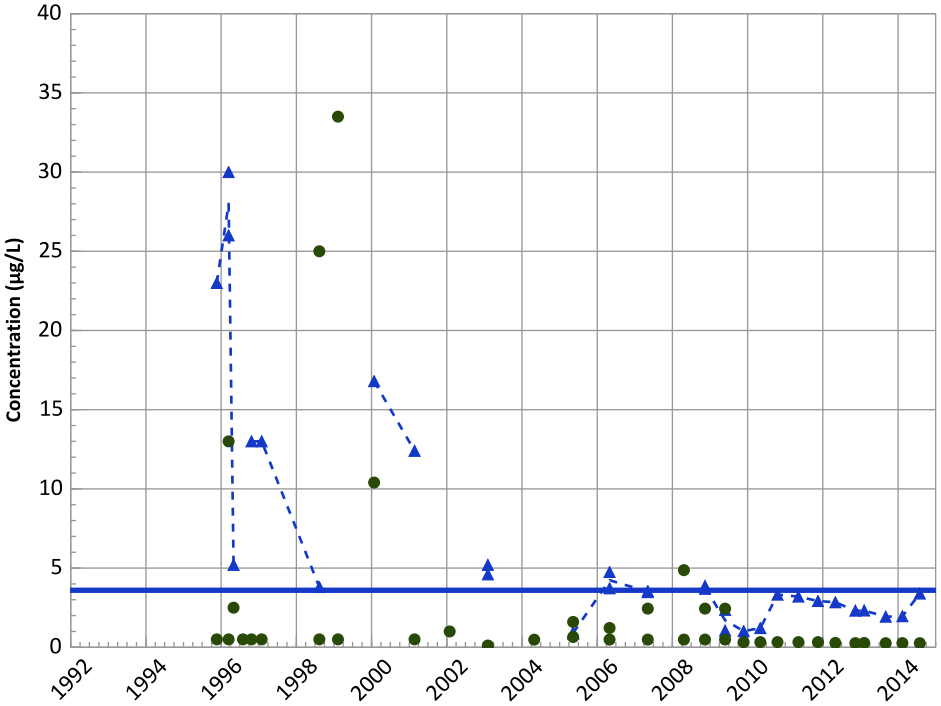
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

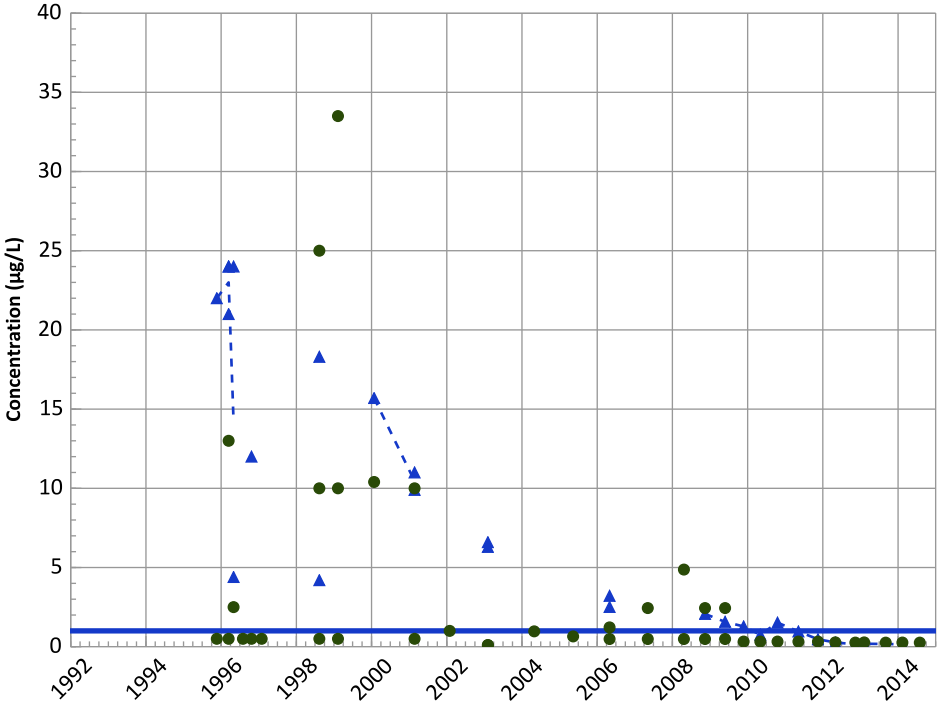


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

2,4-Dinitrotoluene Trend



Concentration Trend

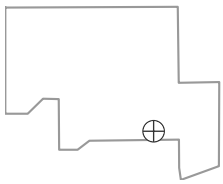
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

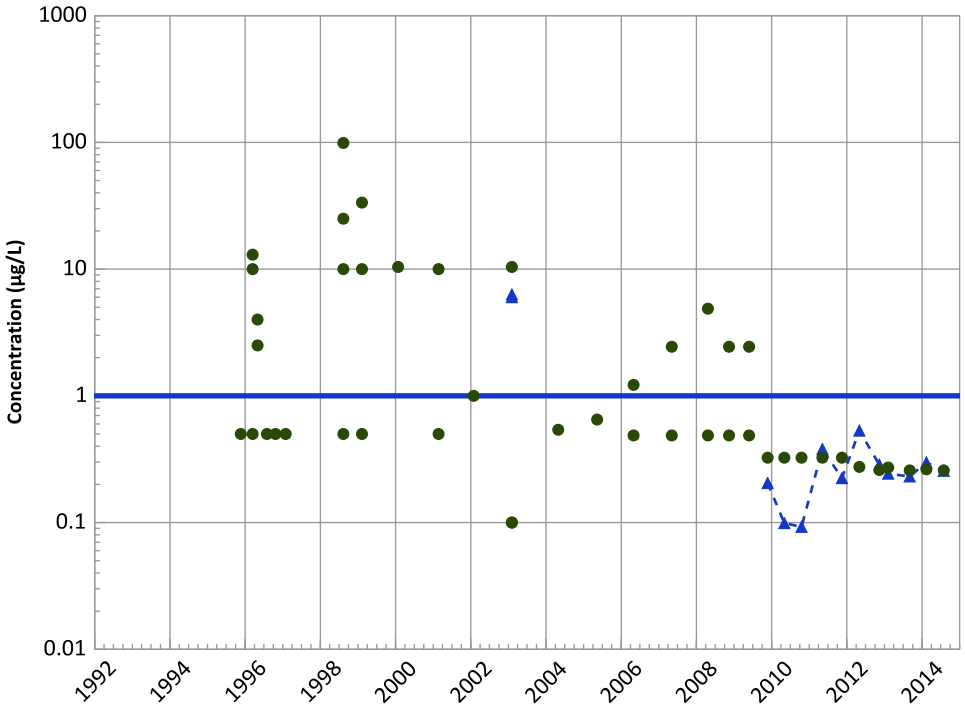
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

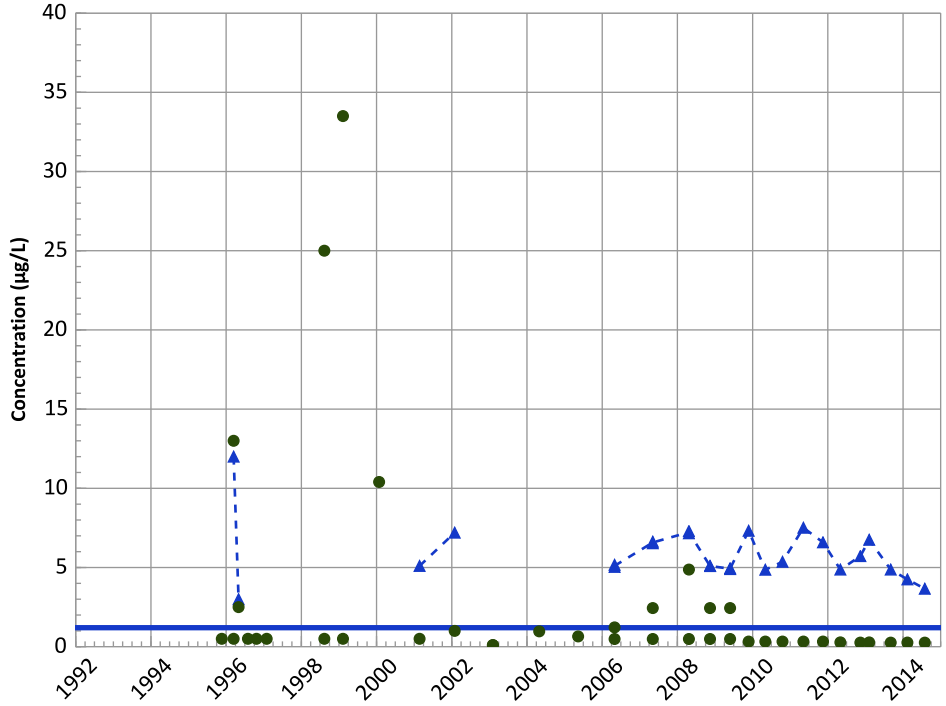


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

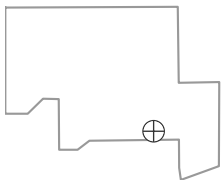
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

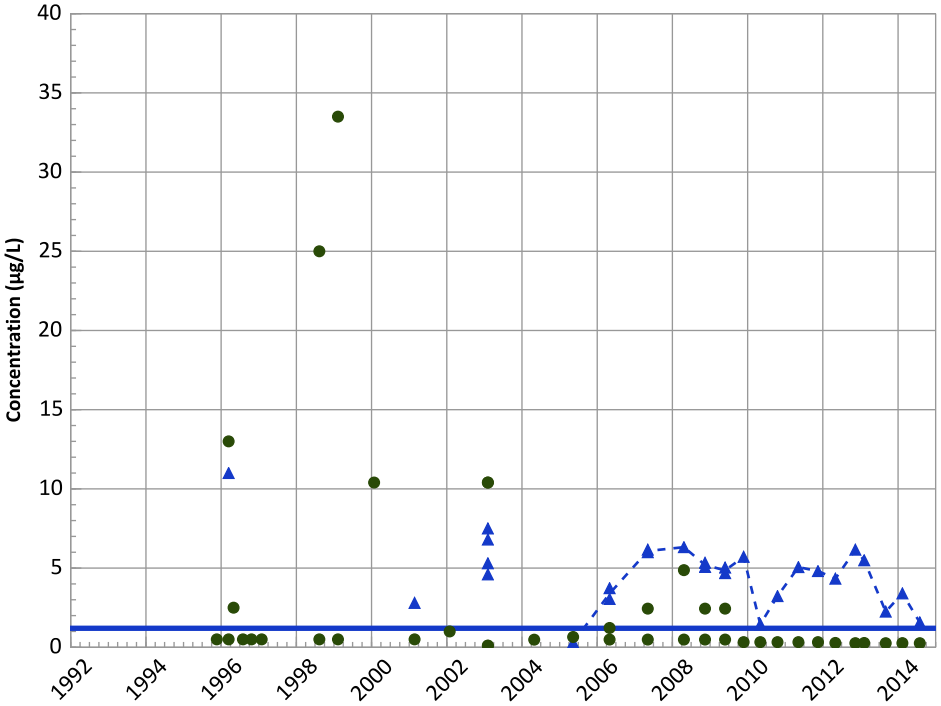
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

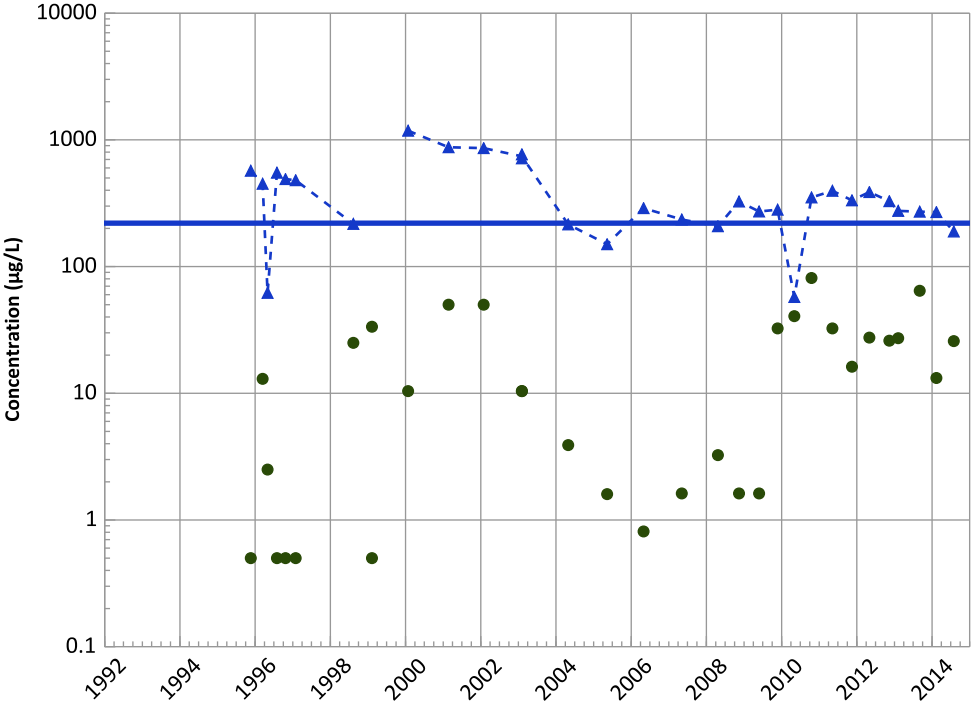


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

1,3,5-Trinitrobenzene Trend



Concentration Trend

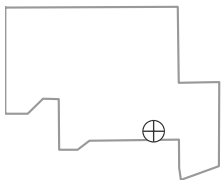
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

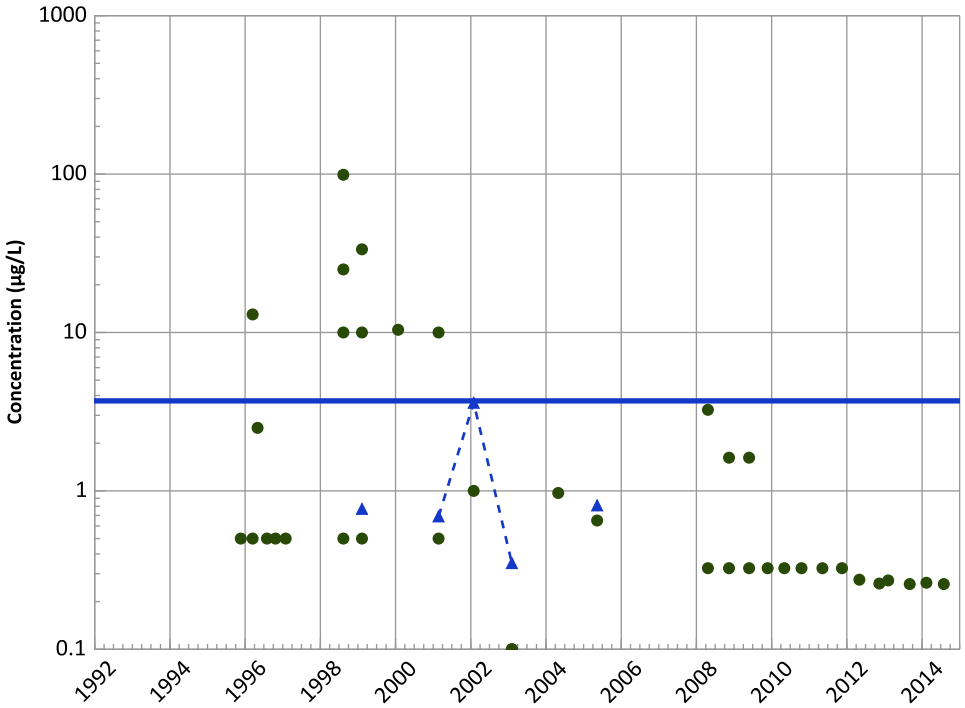
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

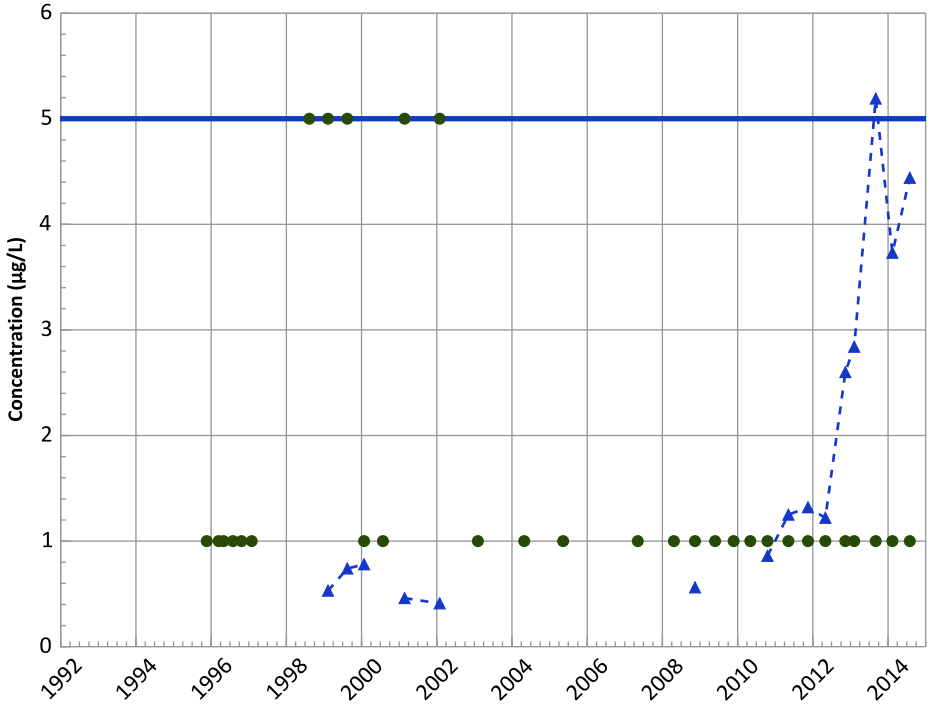


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
No Trend

Tetrachloroethylene (PCE) Trend



Concentration Trend

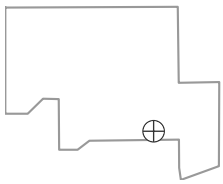
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

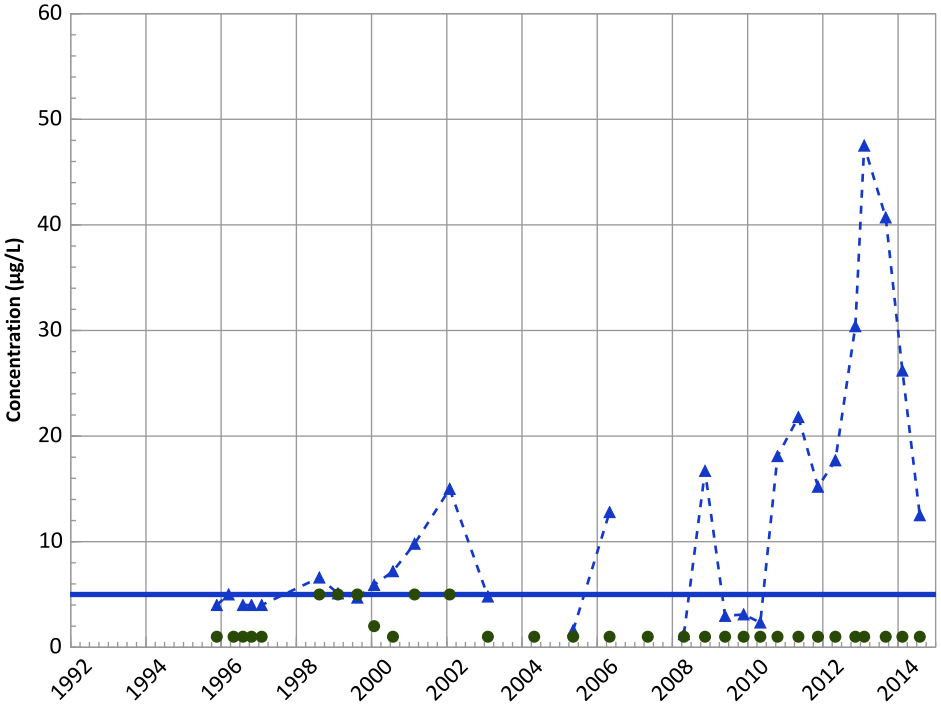
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

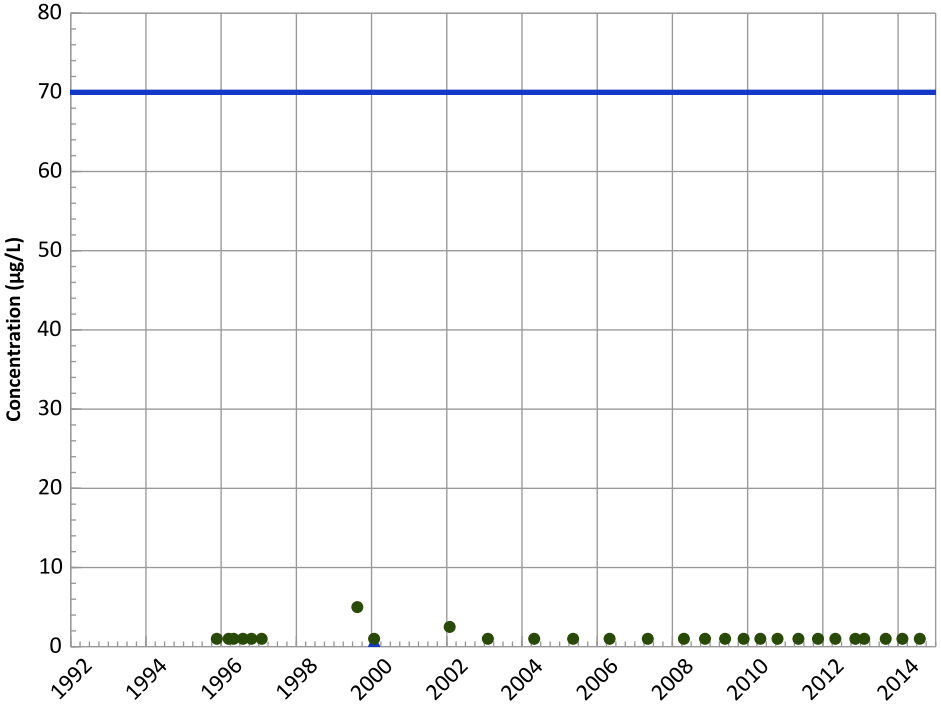


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

cis-1,2-Dichloroethene Trend



Concentration Trend

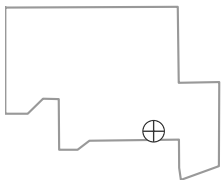
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

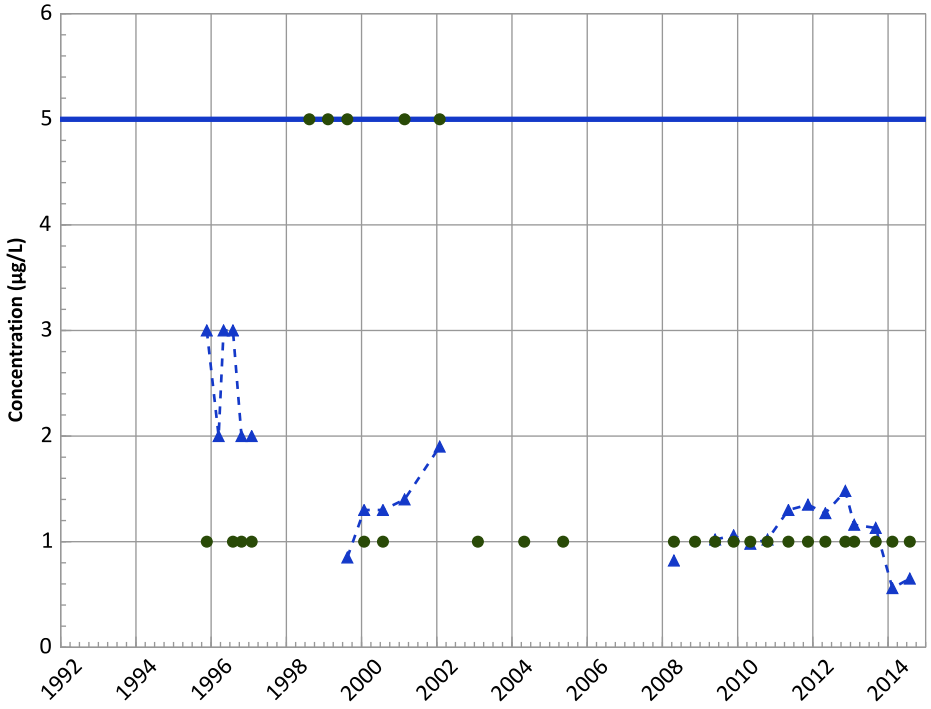
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

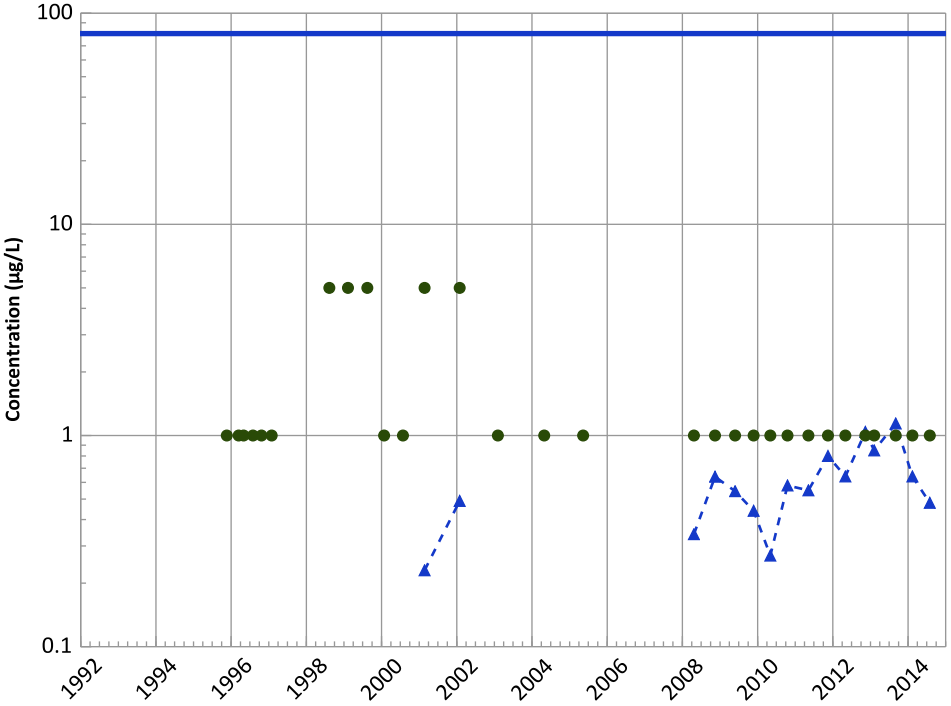


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Chloroform Trend



Concentration Trend

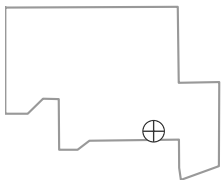
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

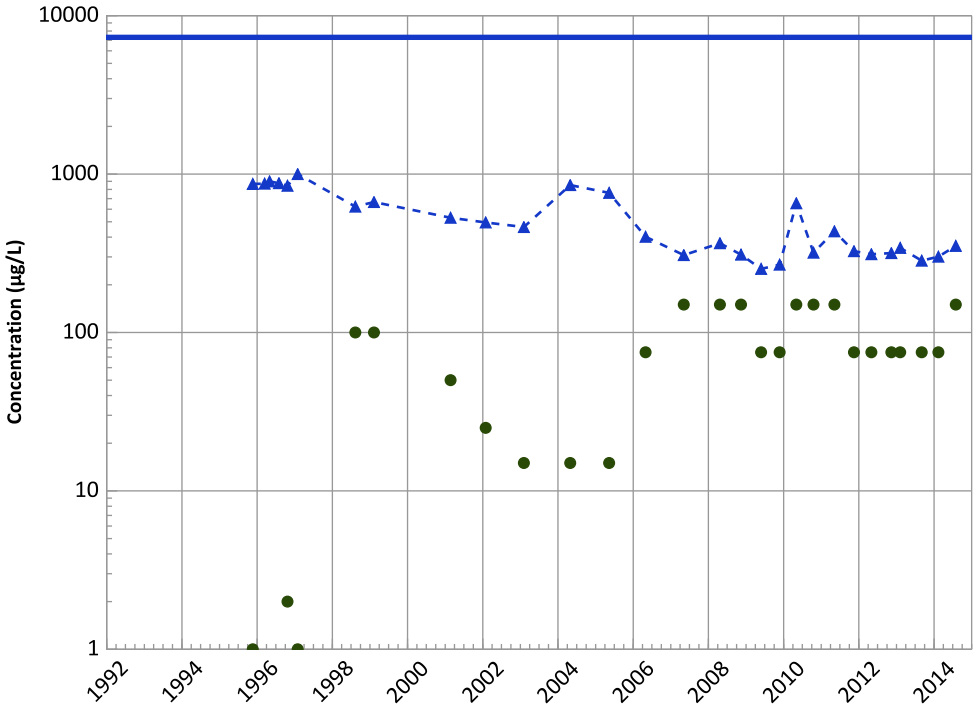
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

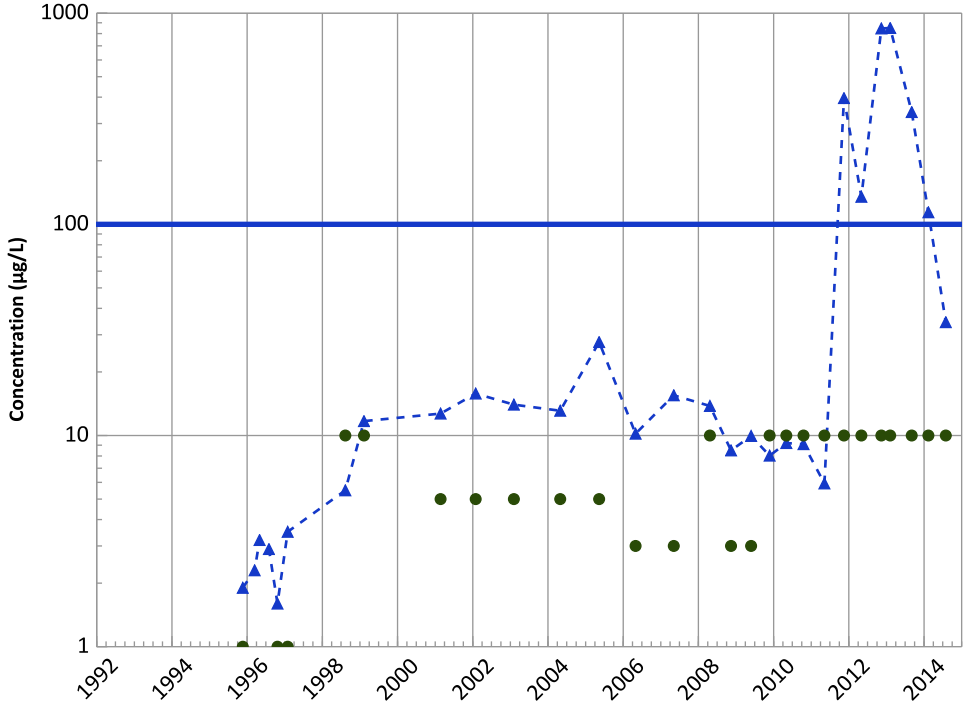


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

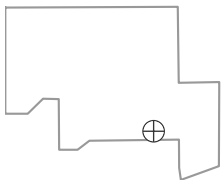
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

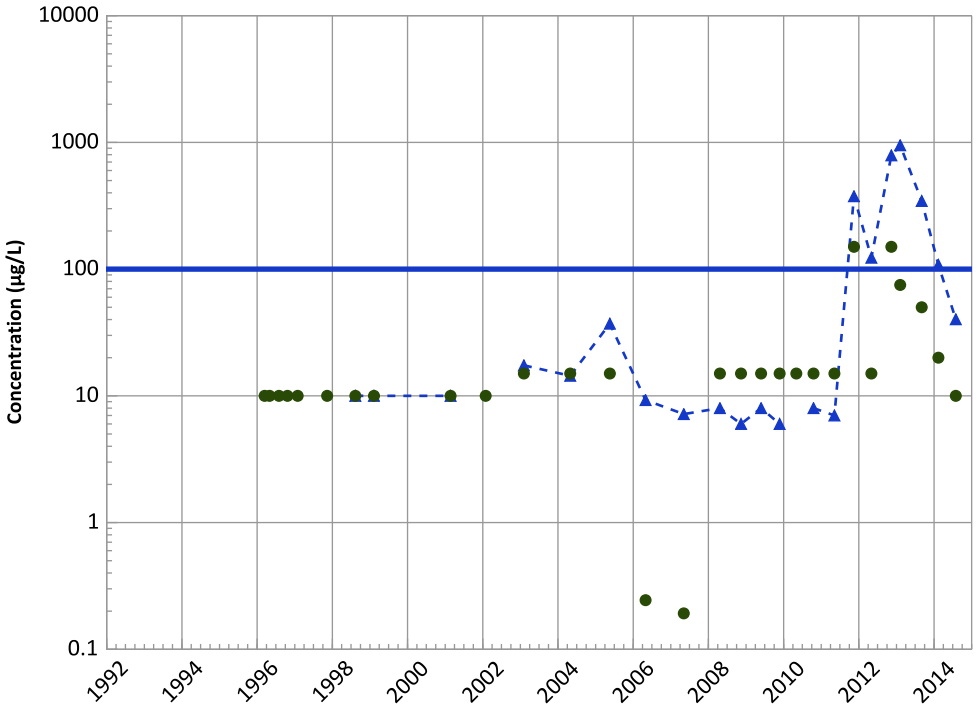
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

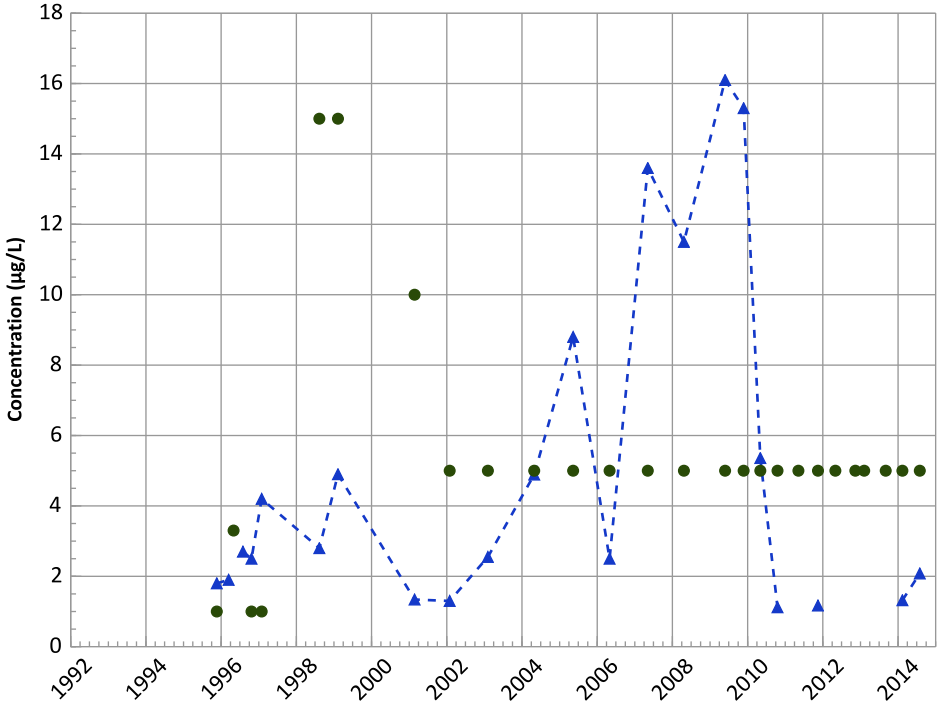


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Manganese Trend



Concentration Trend

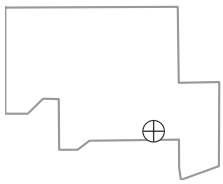
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

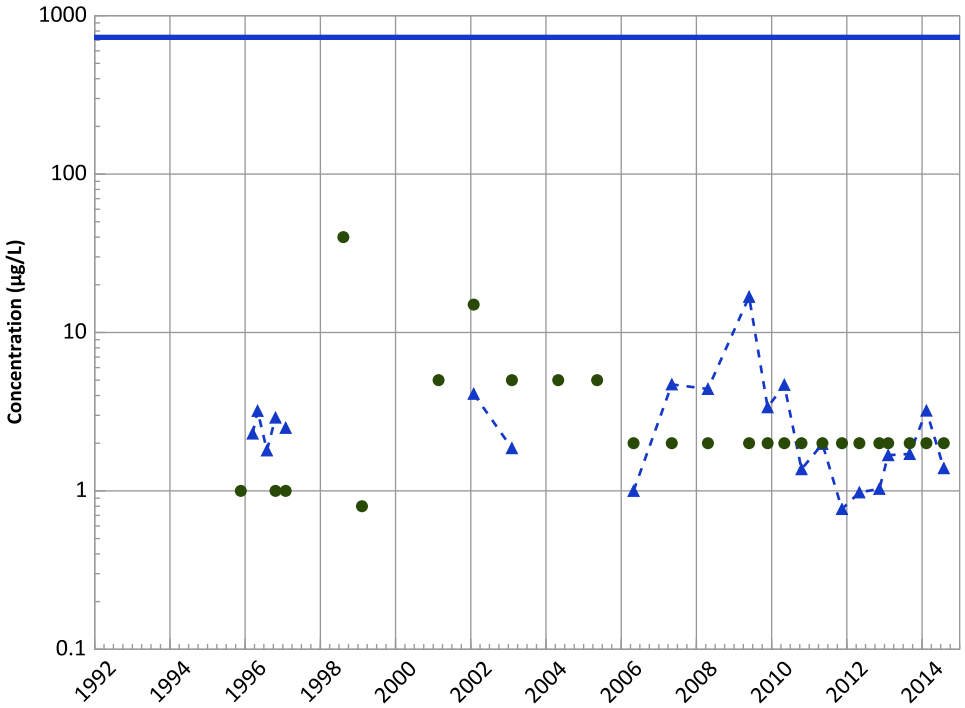
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

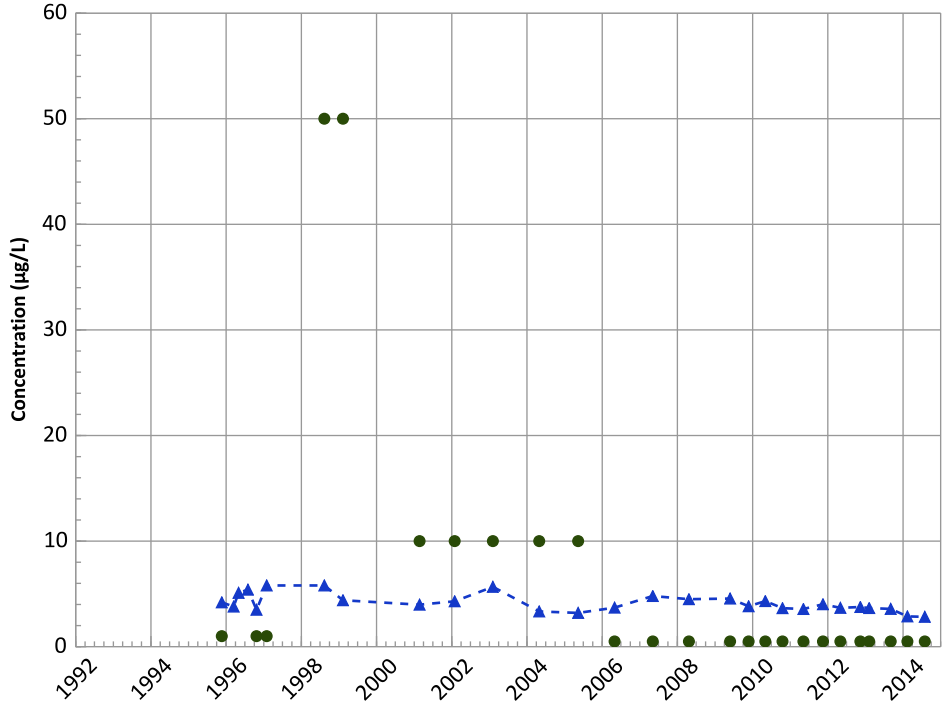


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Molybdenum Trend



Concentration Trend

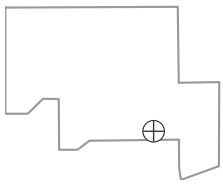
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

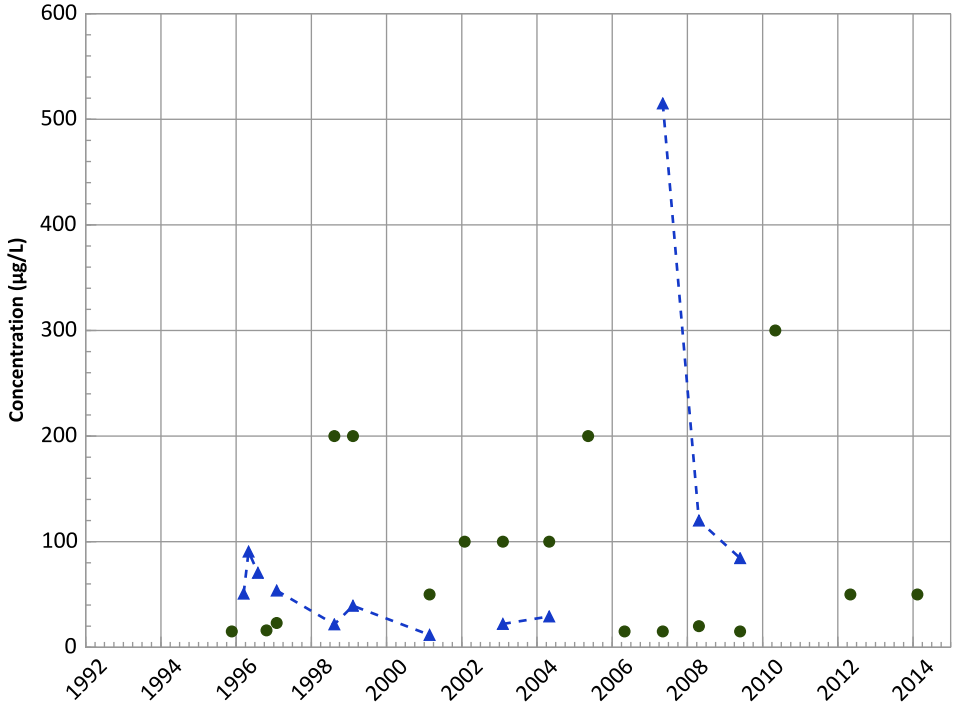
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

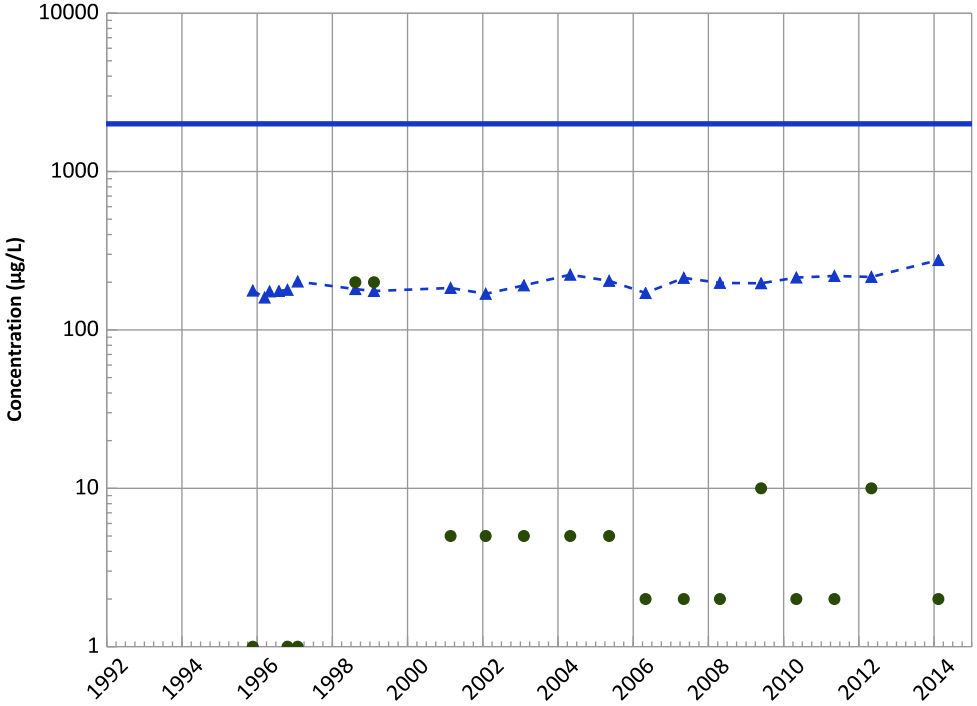


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

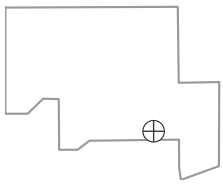
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

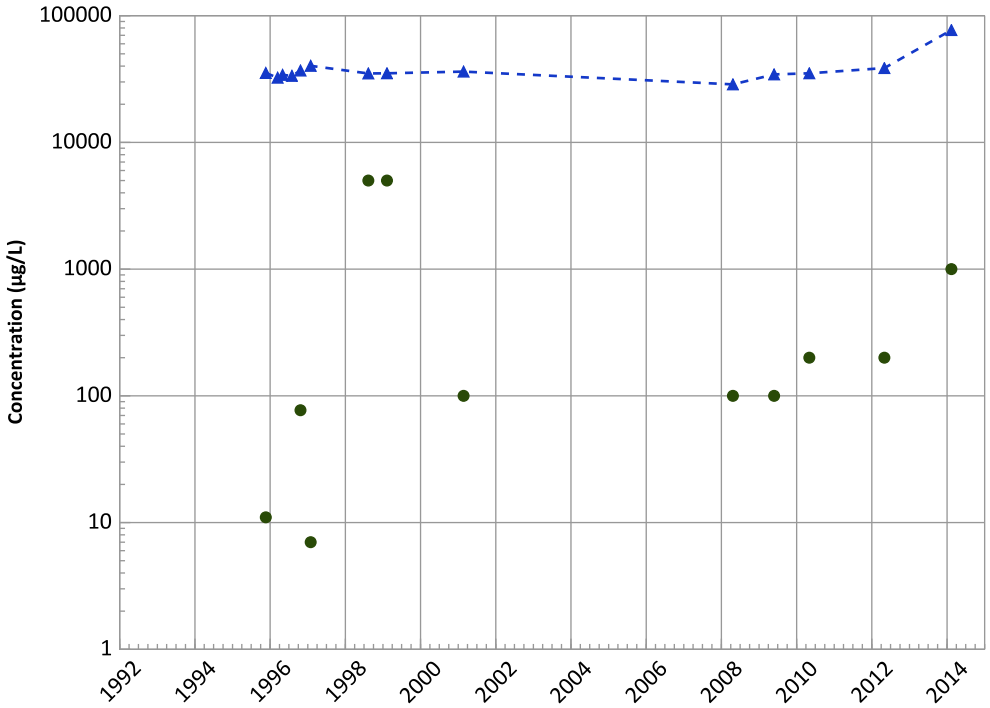
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

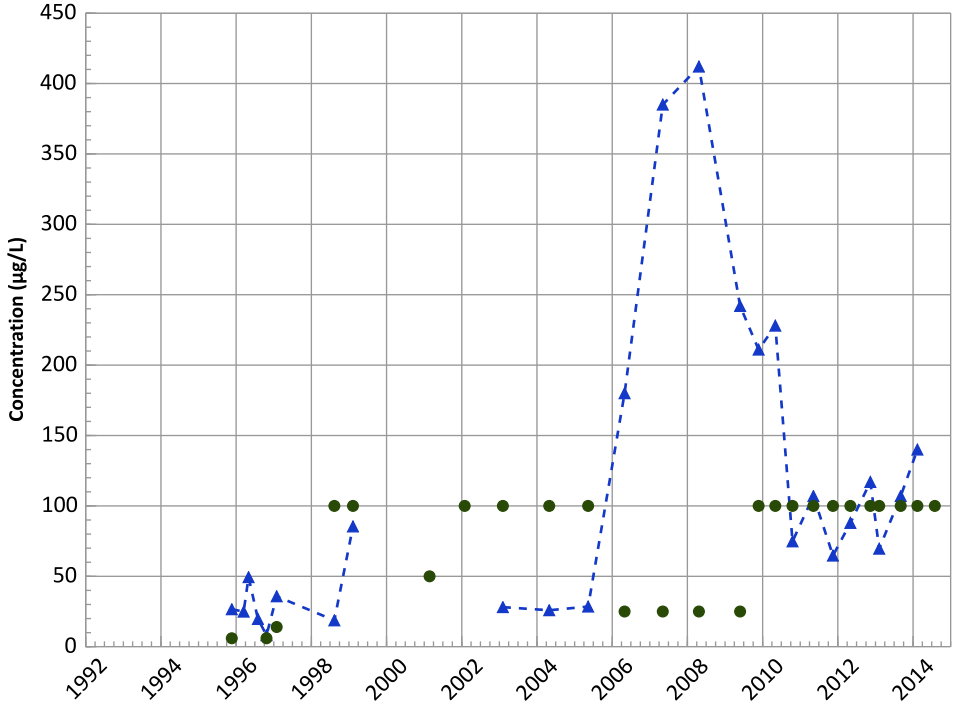


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Iron Trend



Concentration Trend

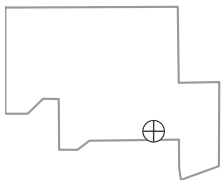
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

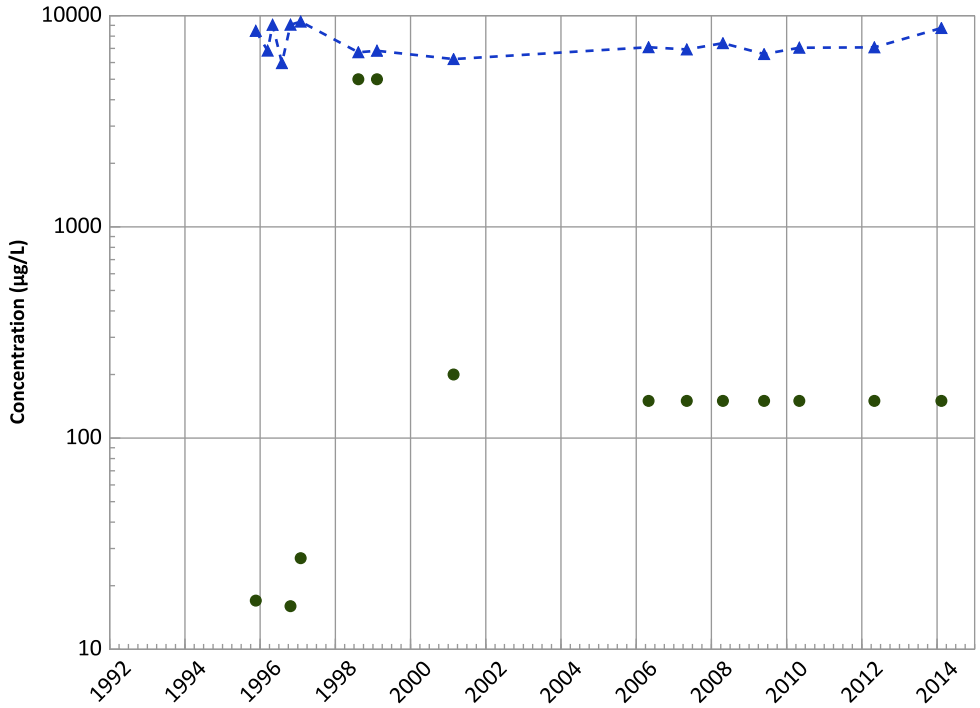
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

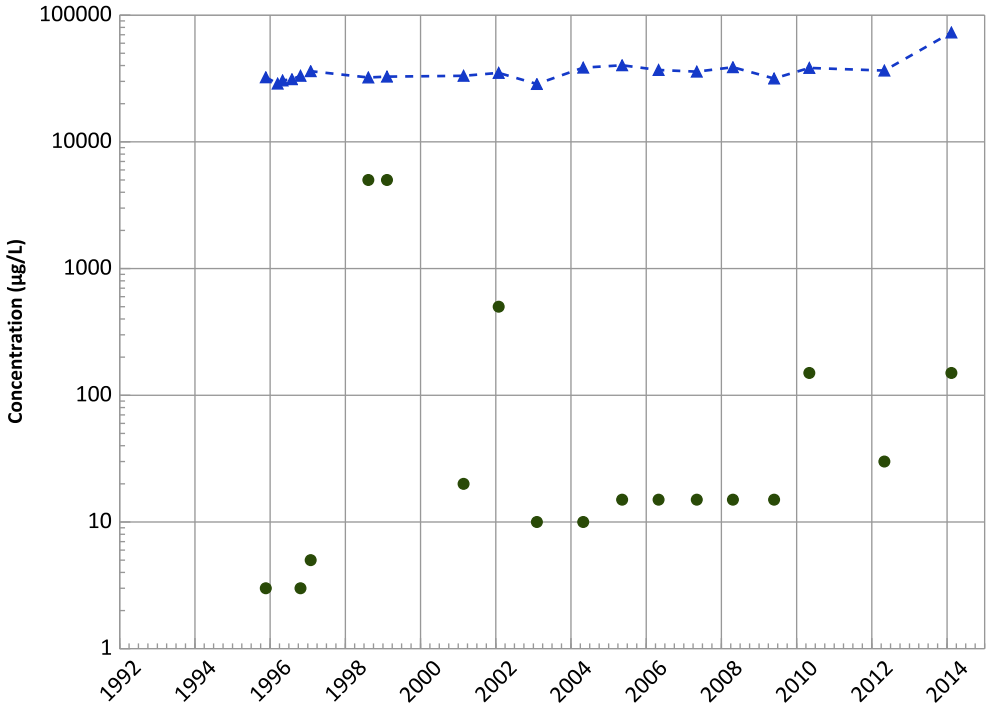


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

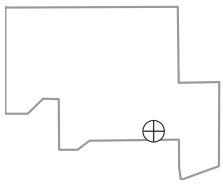
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

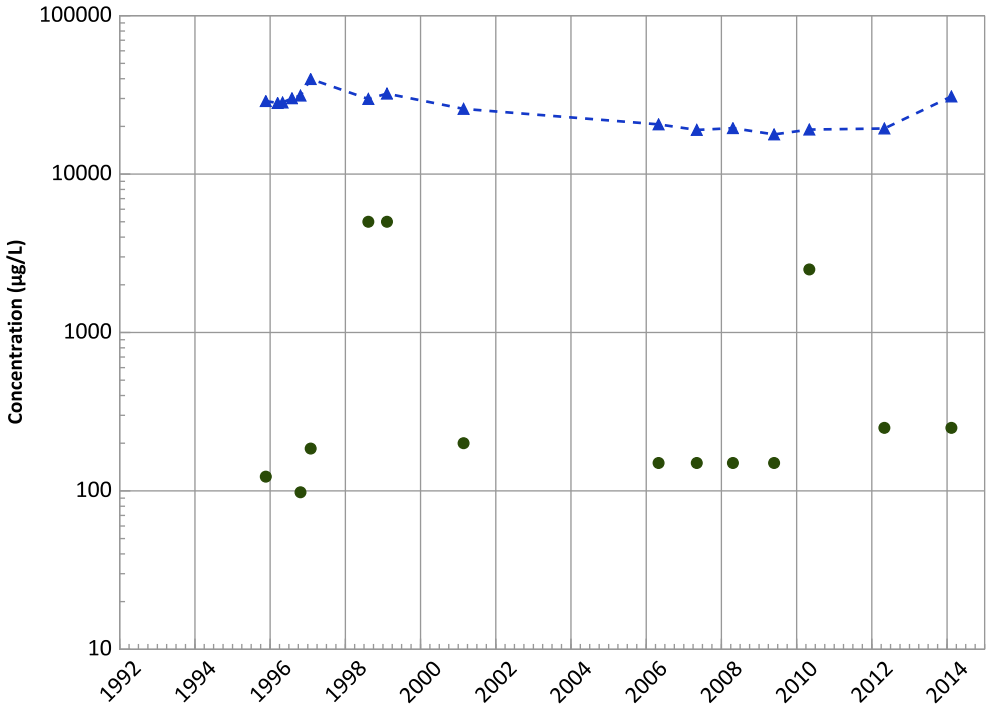
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

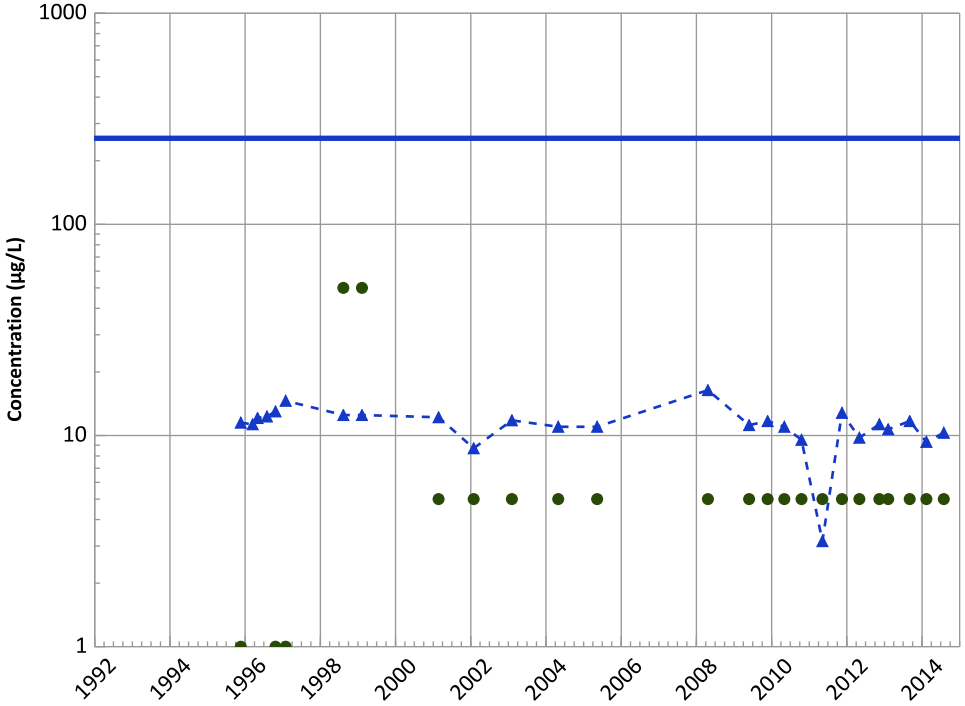


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Vanadium Trend



Concentration Trend

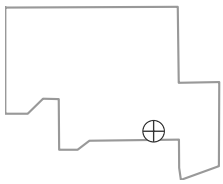
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Decreasing

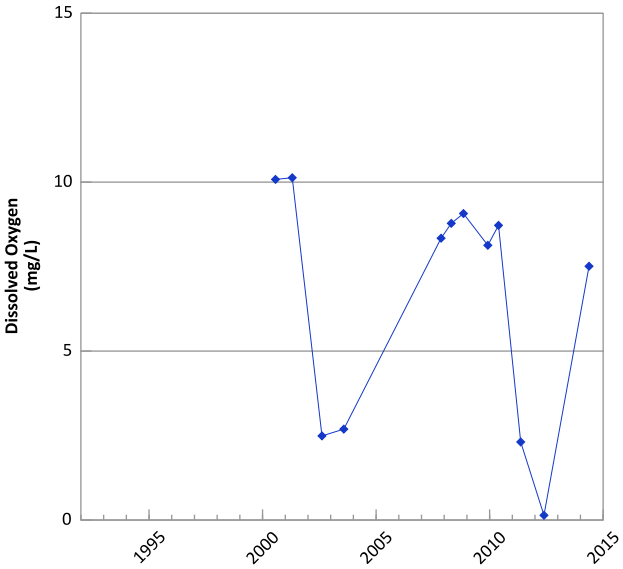
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/20/1995 to 07/31/2014
Analysis Date: 03/19/2015

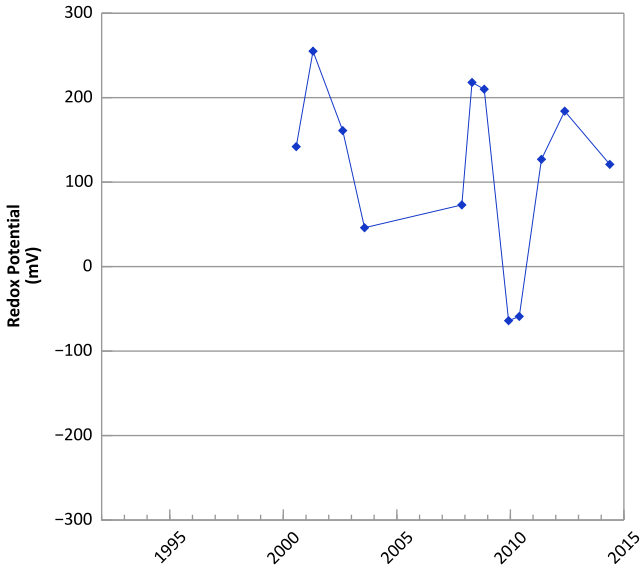
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

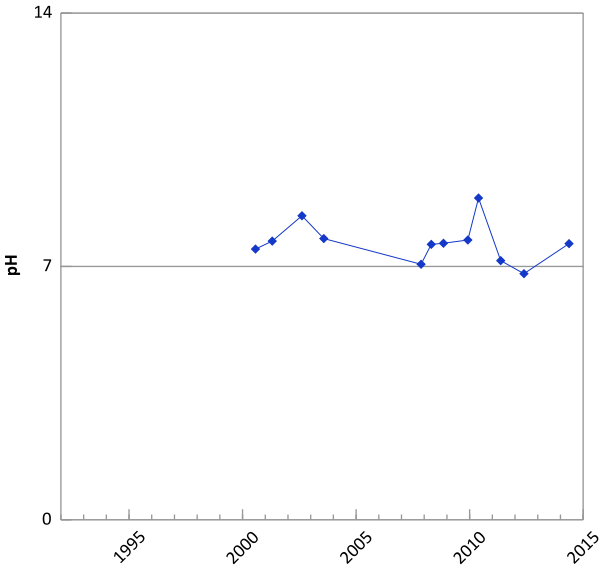
Well Location

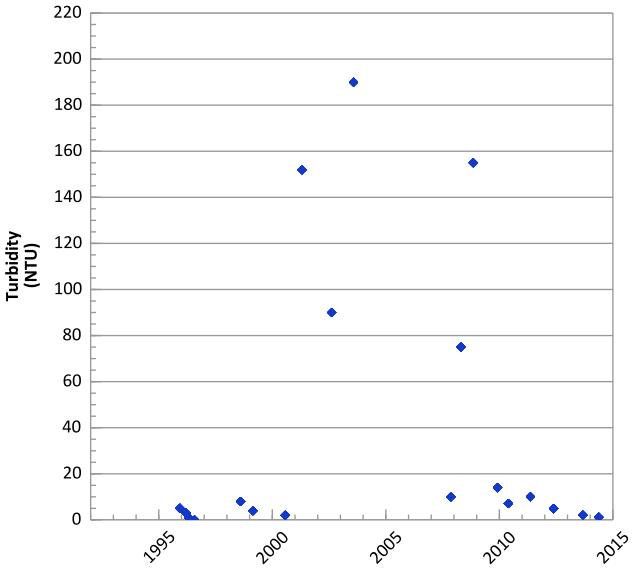


PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



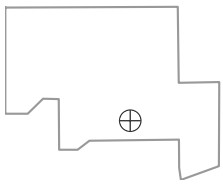






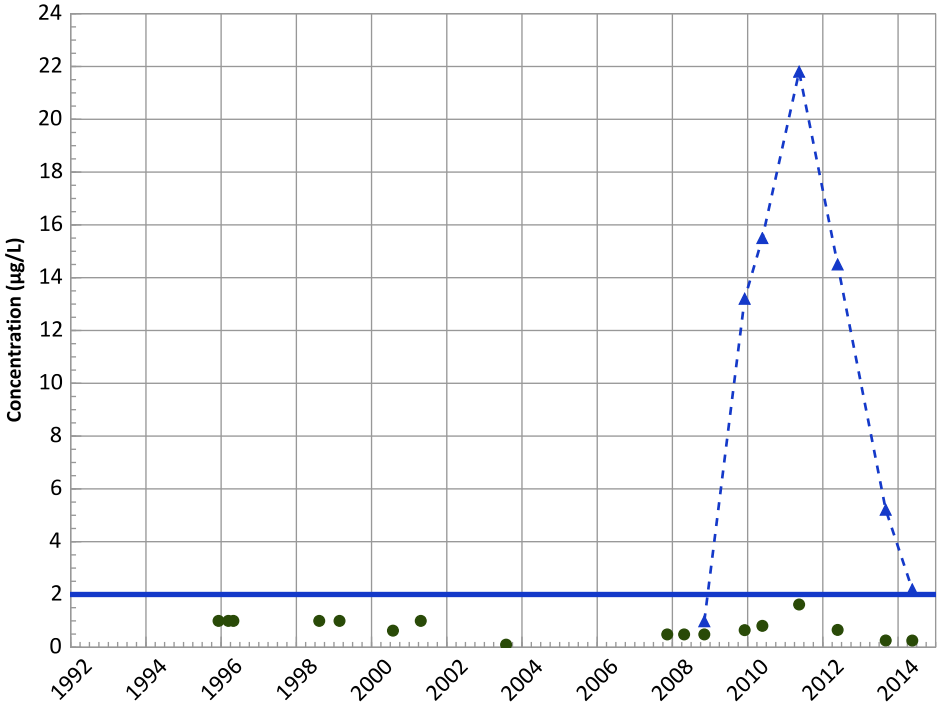
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

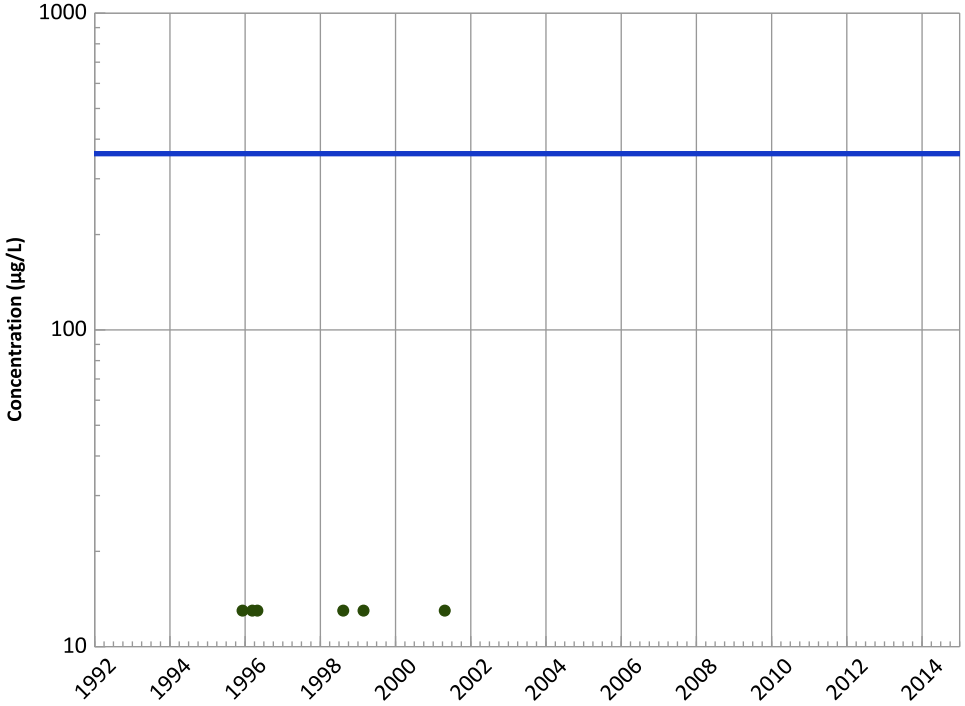


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

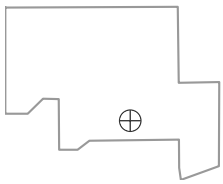
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

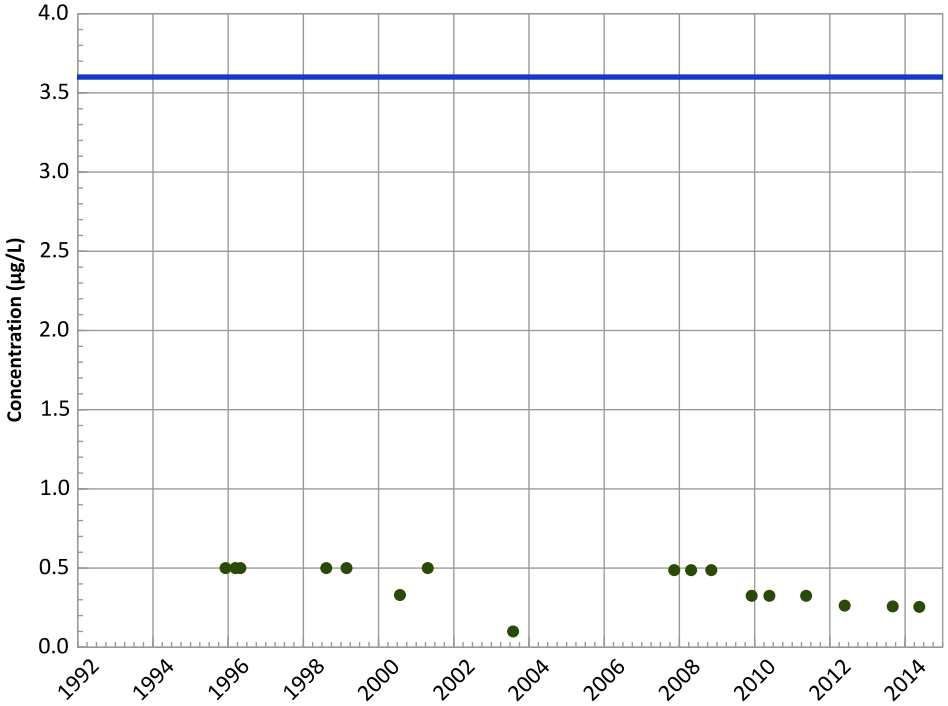
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

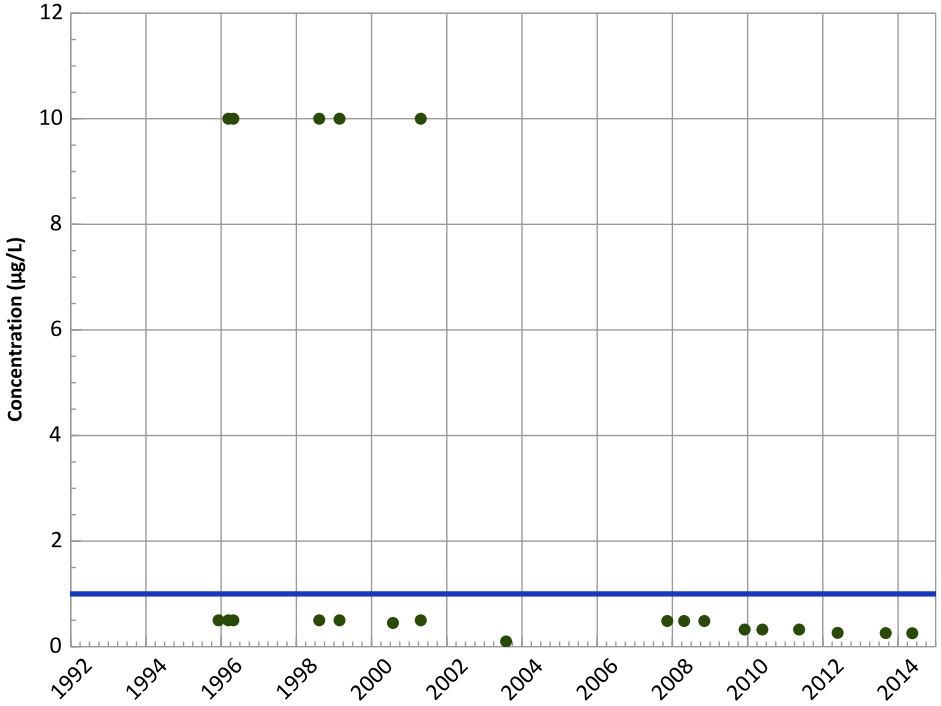


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

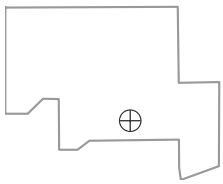
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

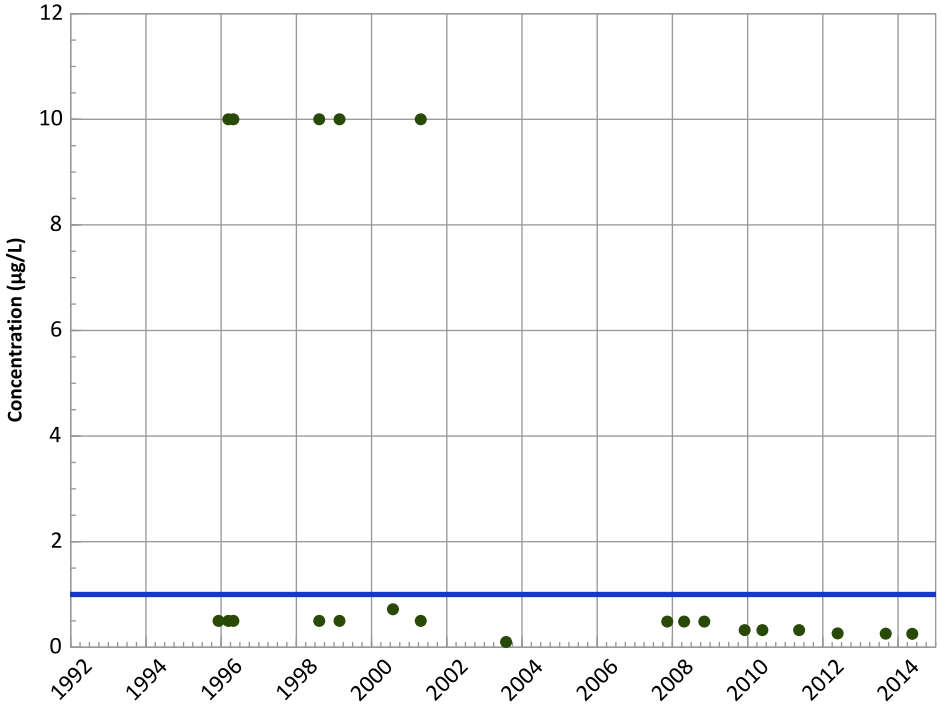
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

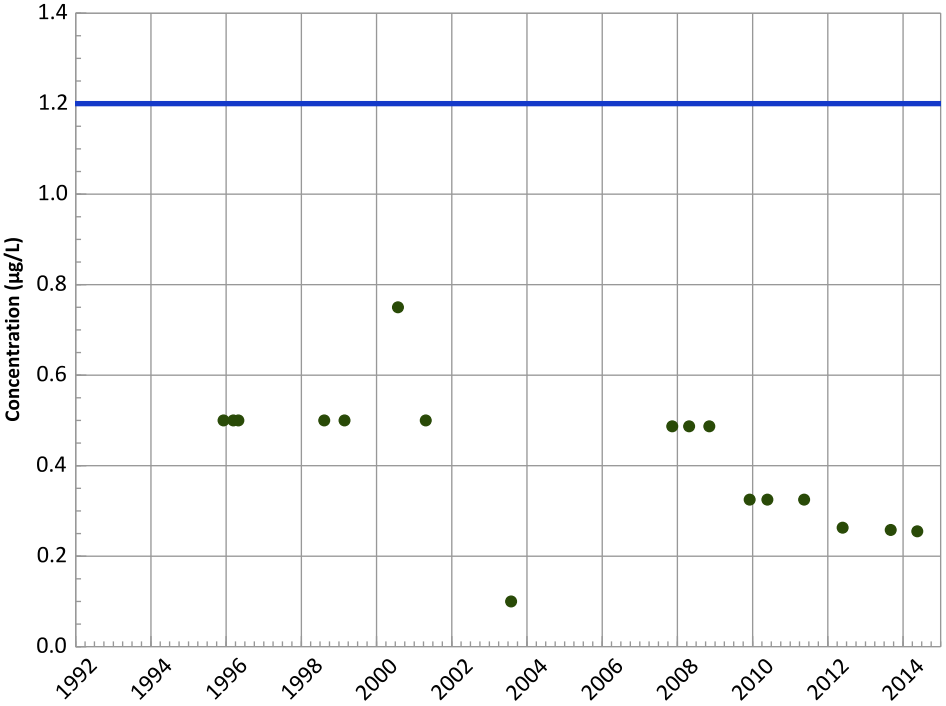


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

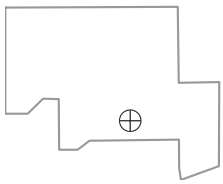
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

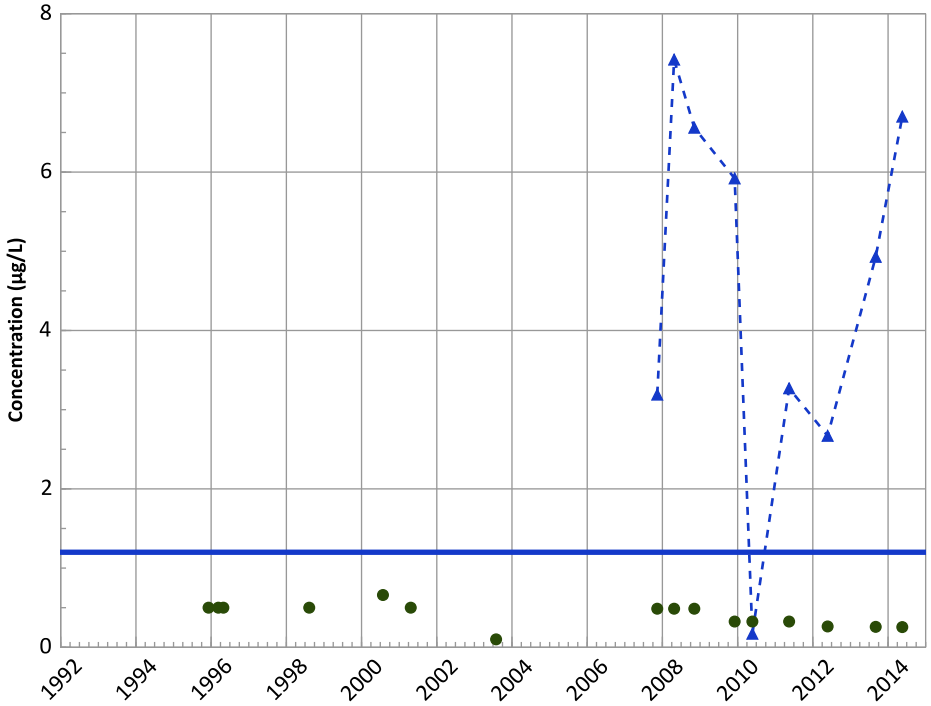
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

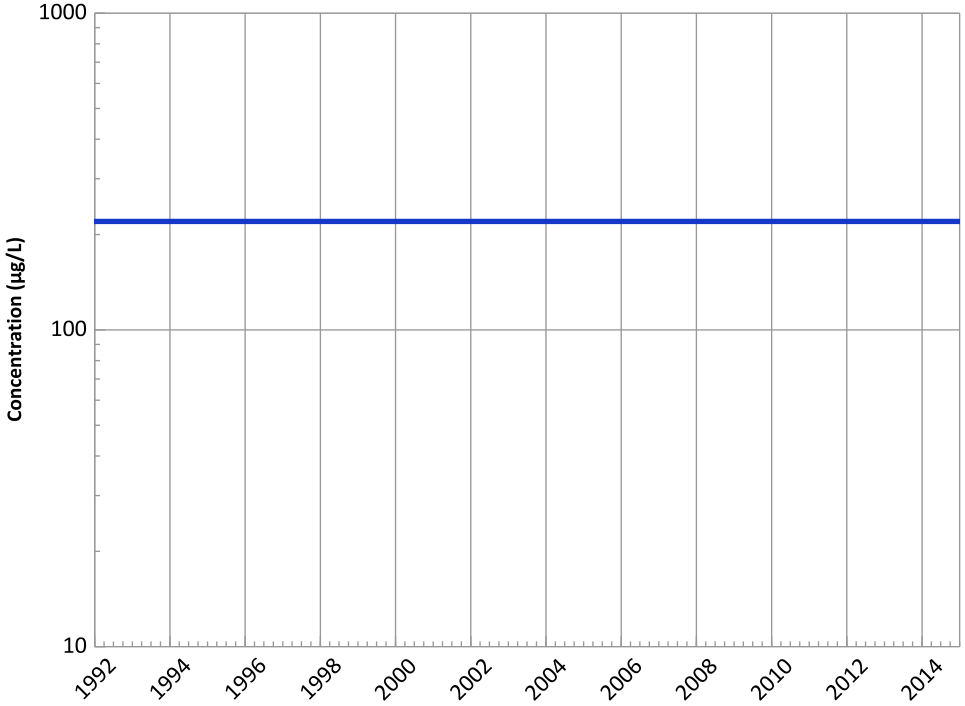


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

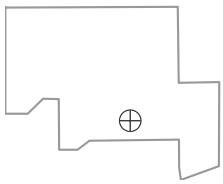
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

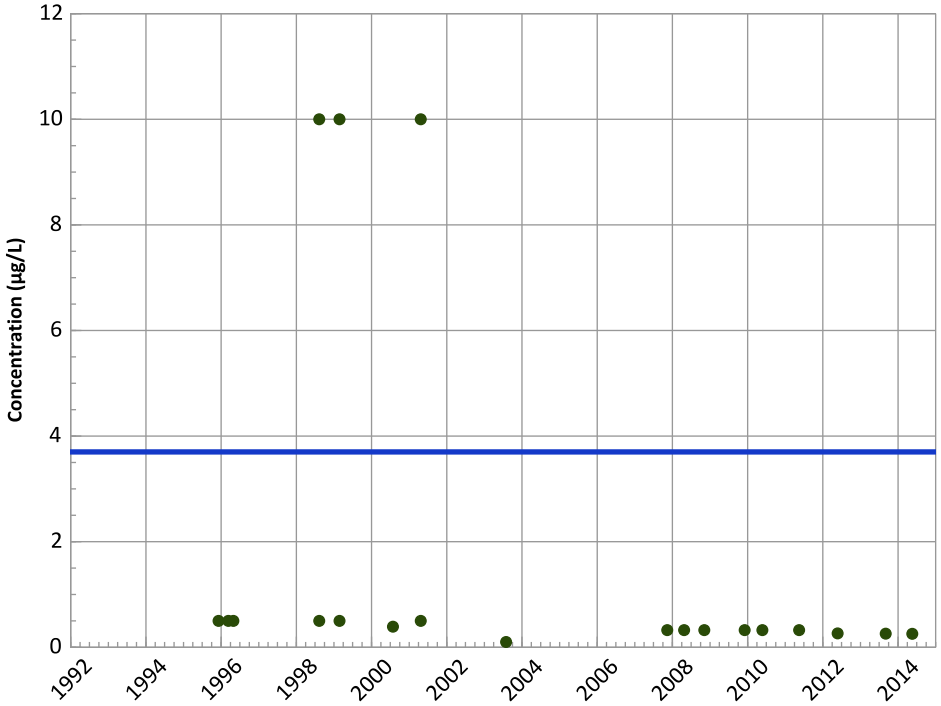
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

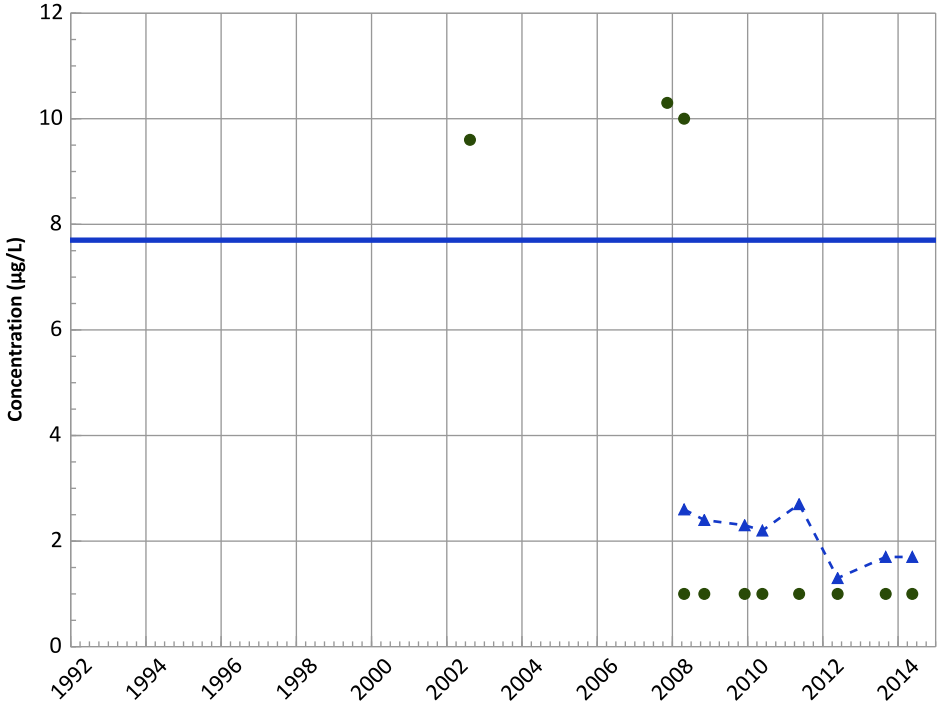


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

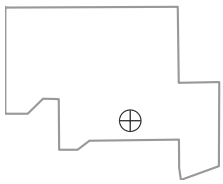
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

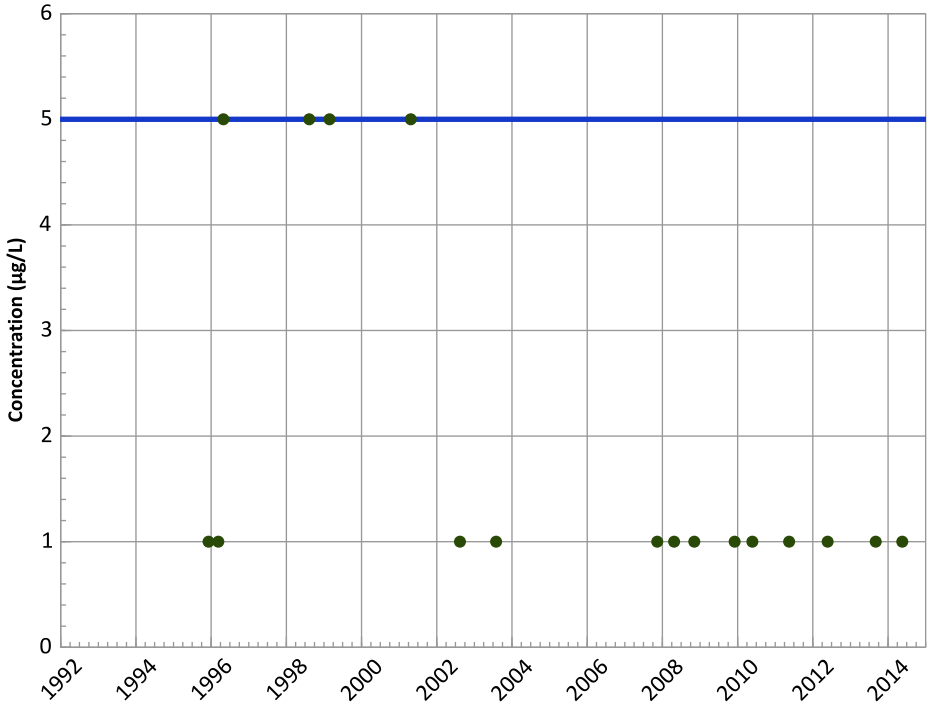
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

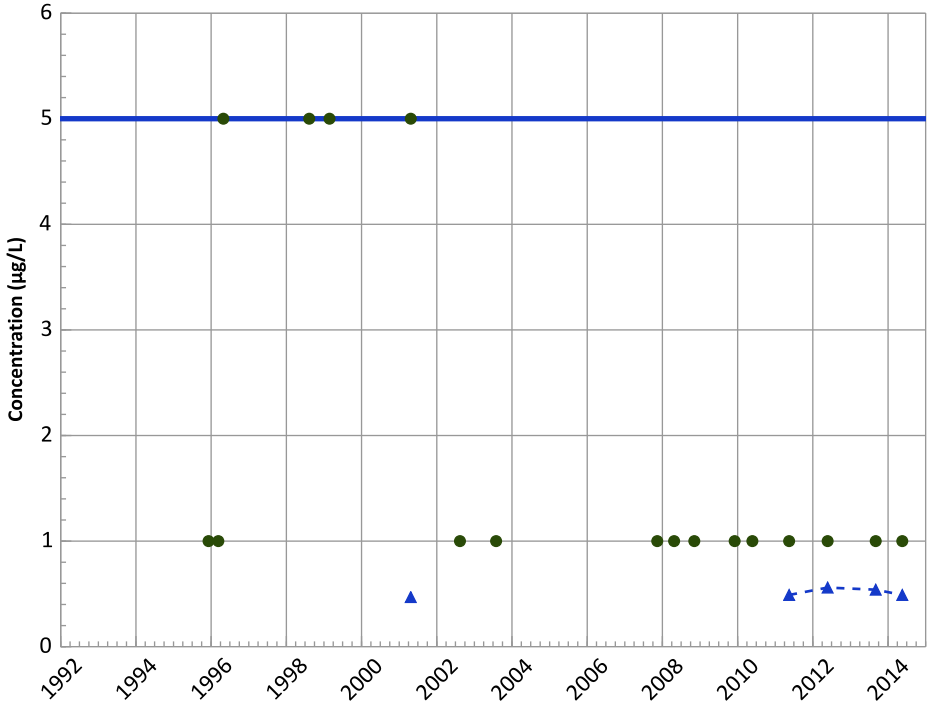


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

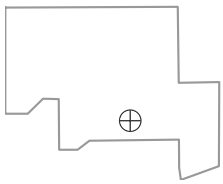
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

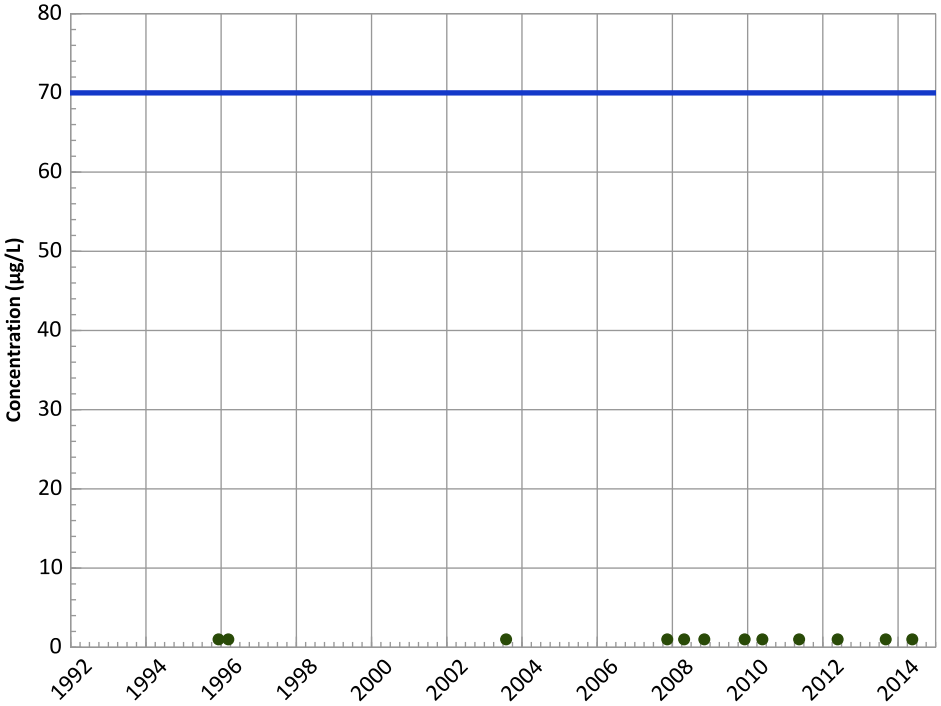
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

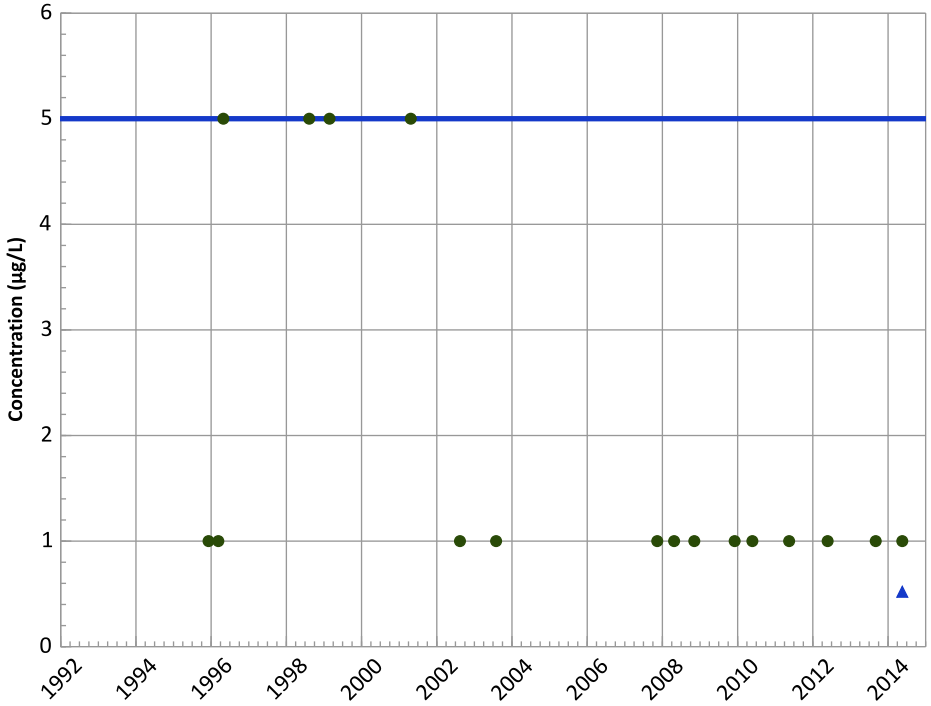


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

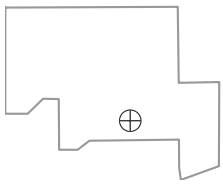
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

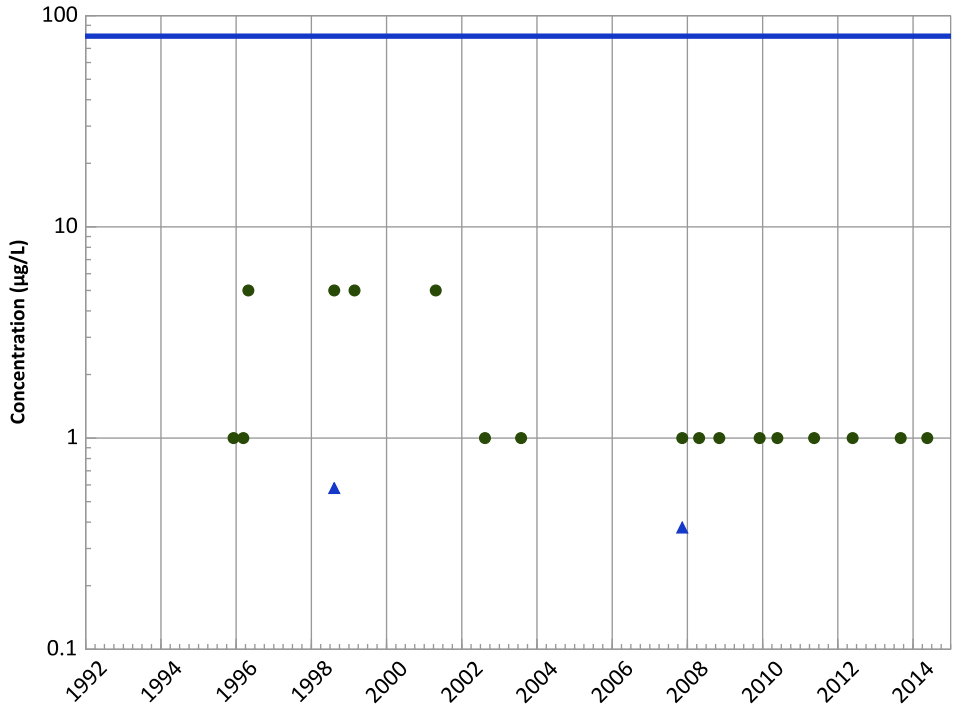
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

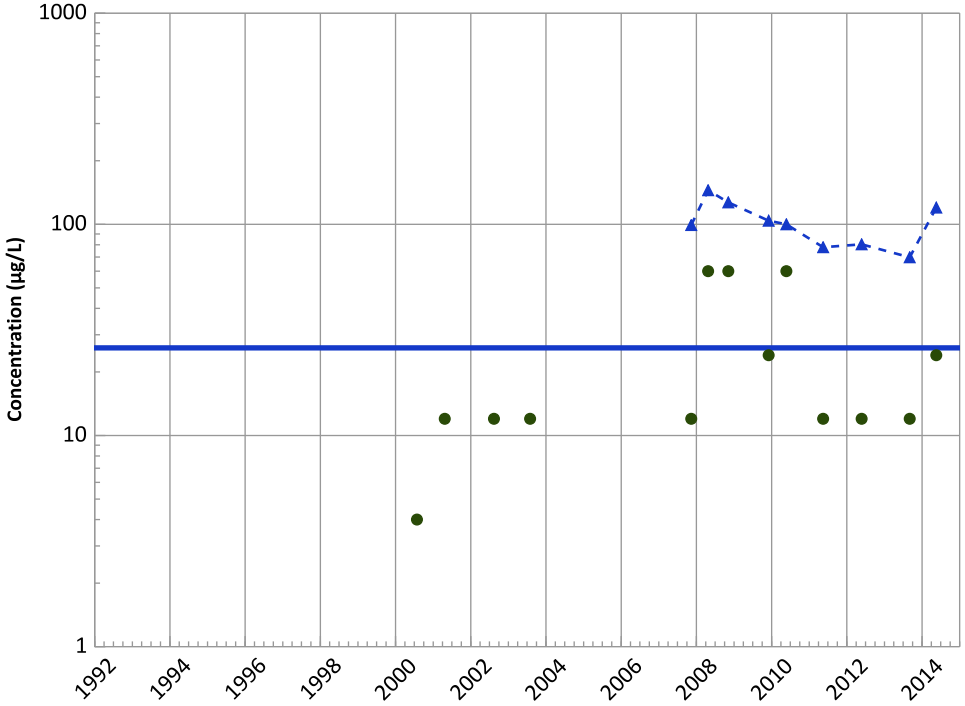


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Perchlorate Trend



Concentration Trend

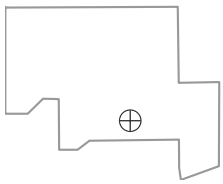
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

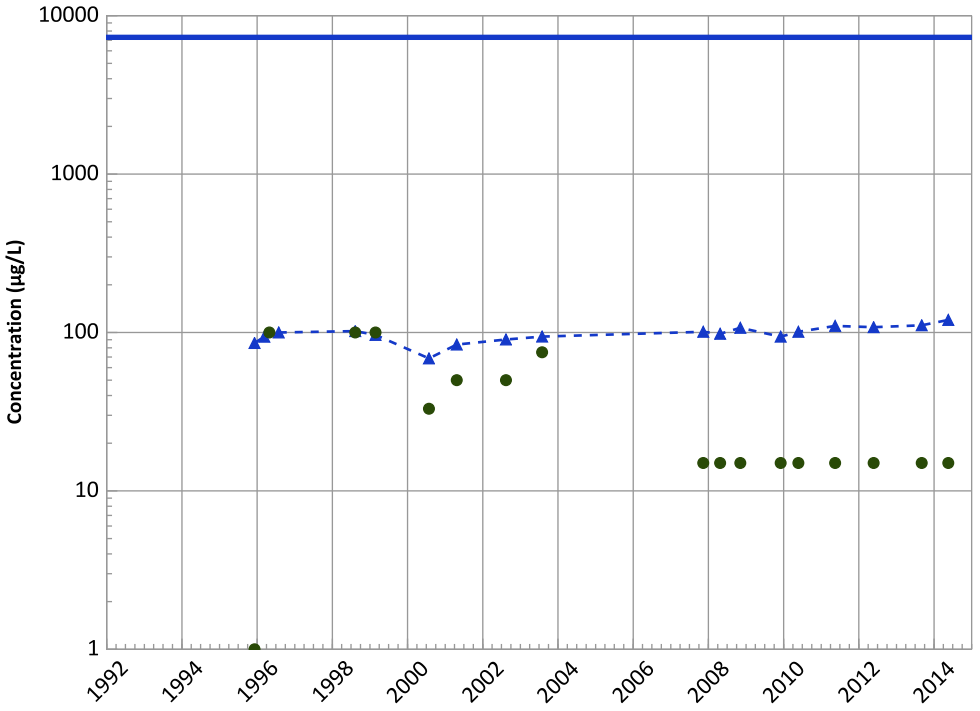
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

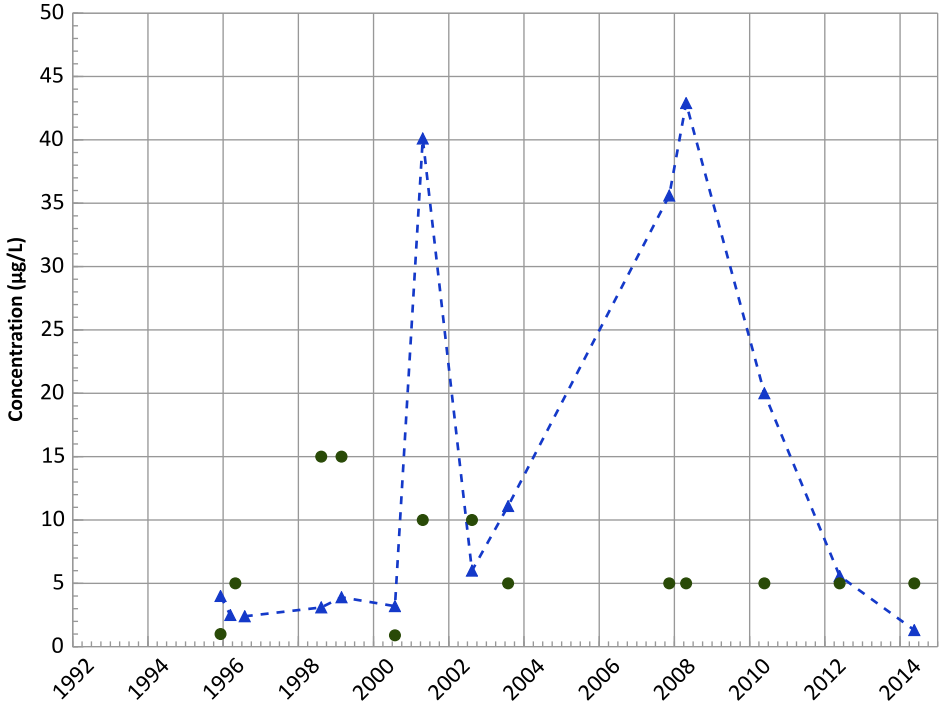


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Manganese Trend



Concentration Trend

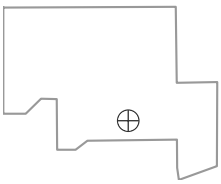
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

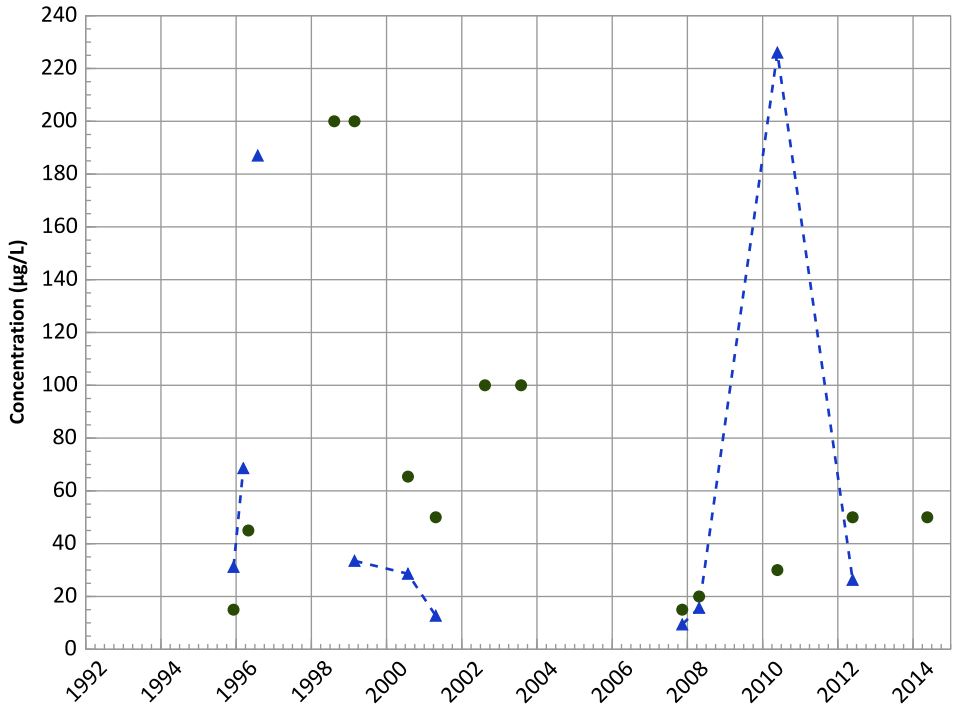
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

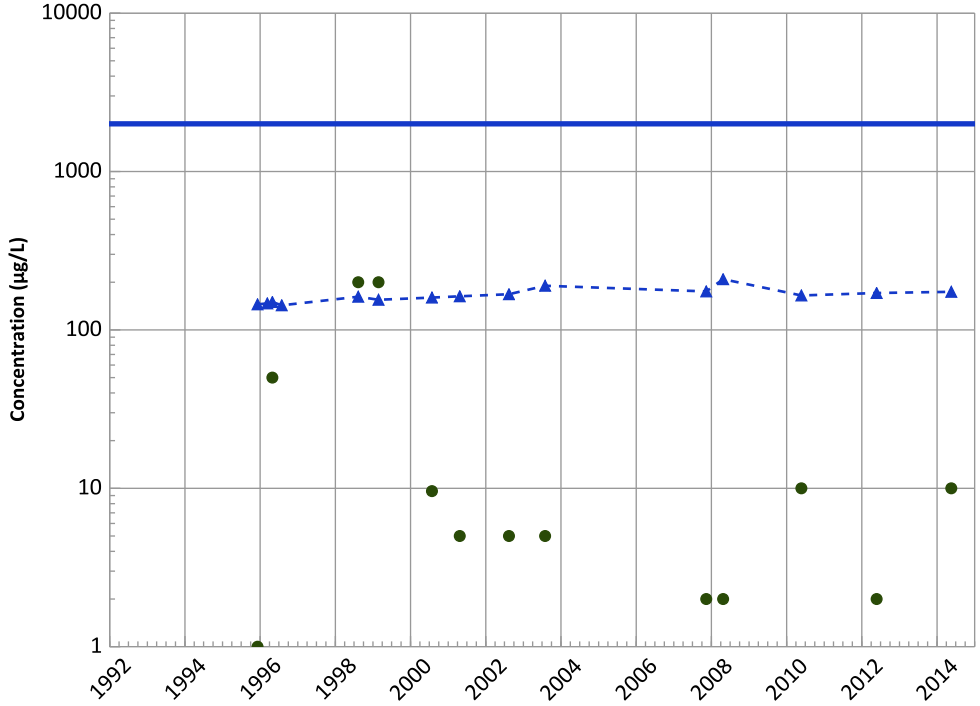


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

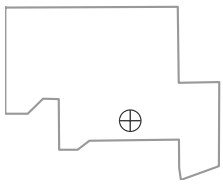
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

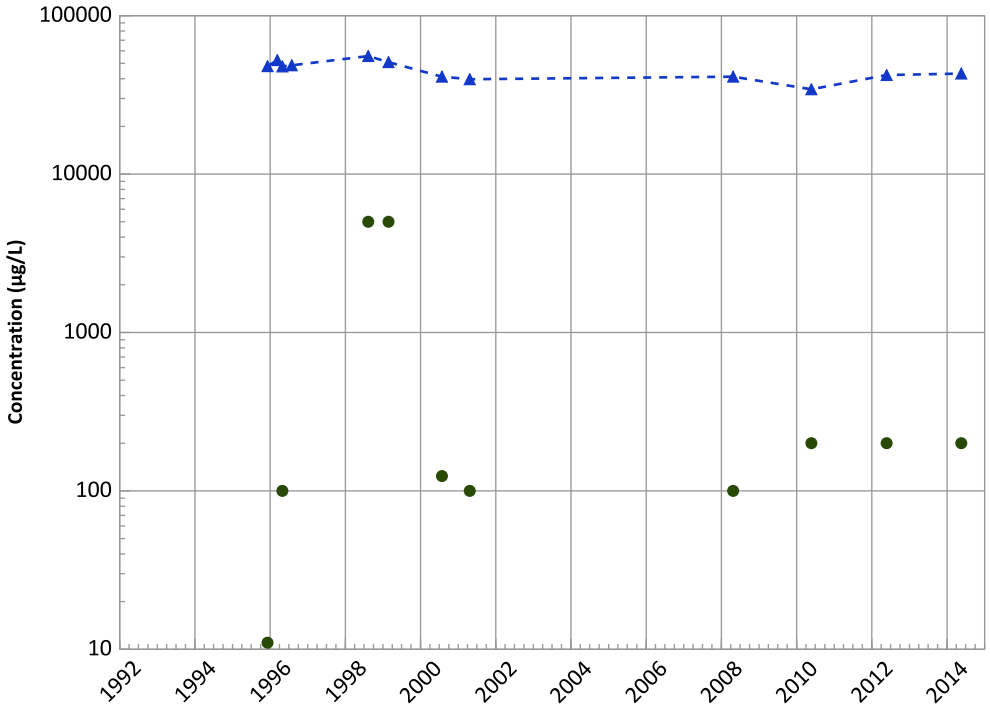
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

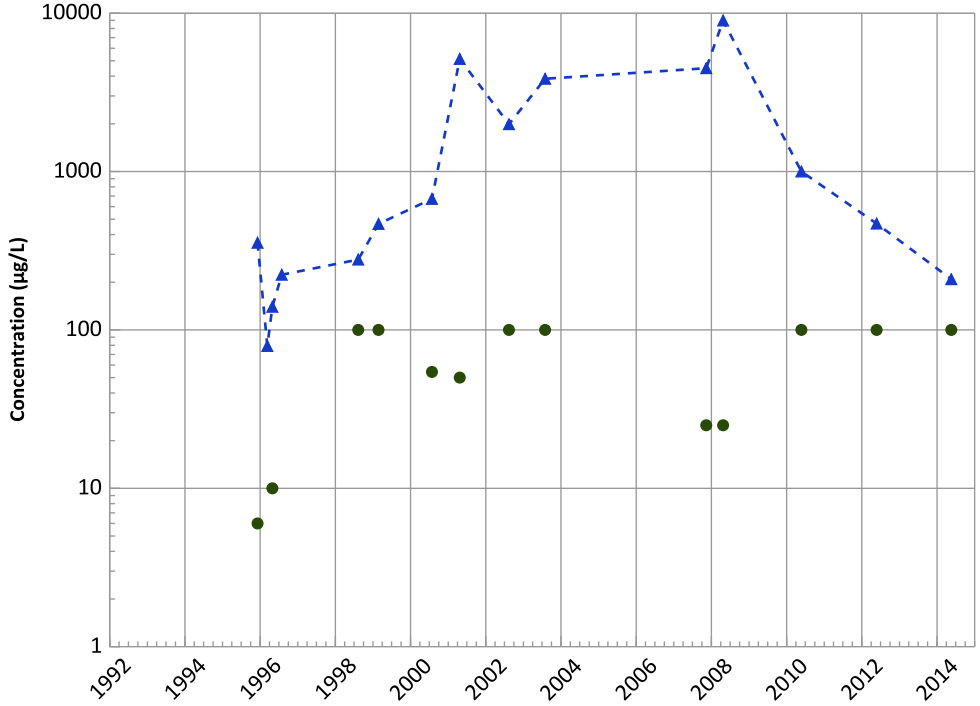


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

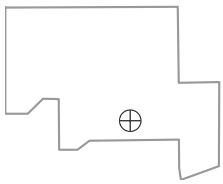
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

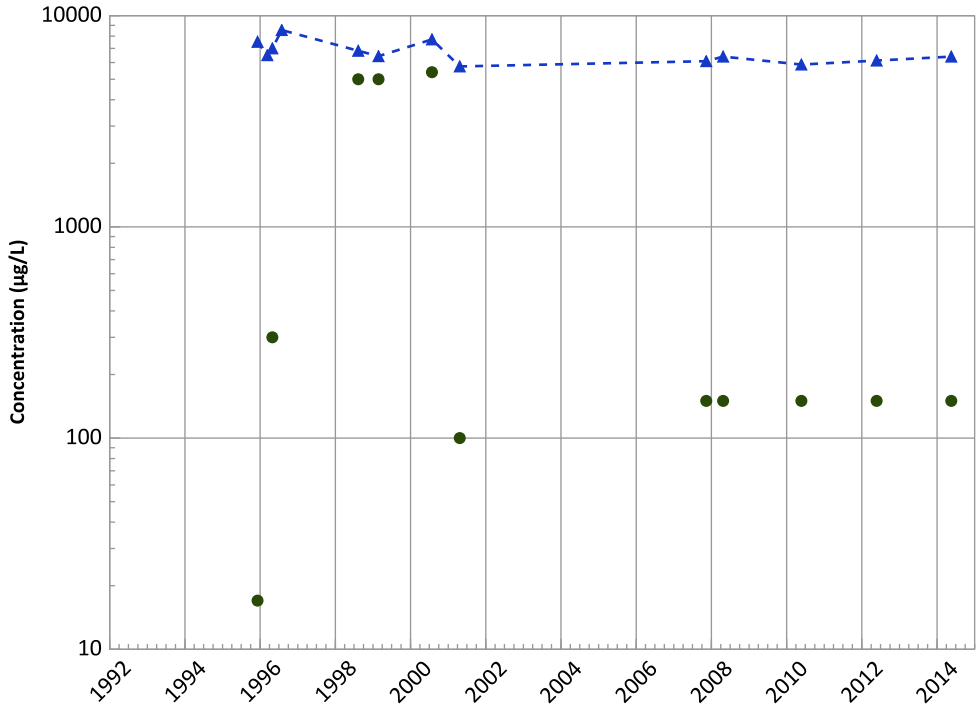
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

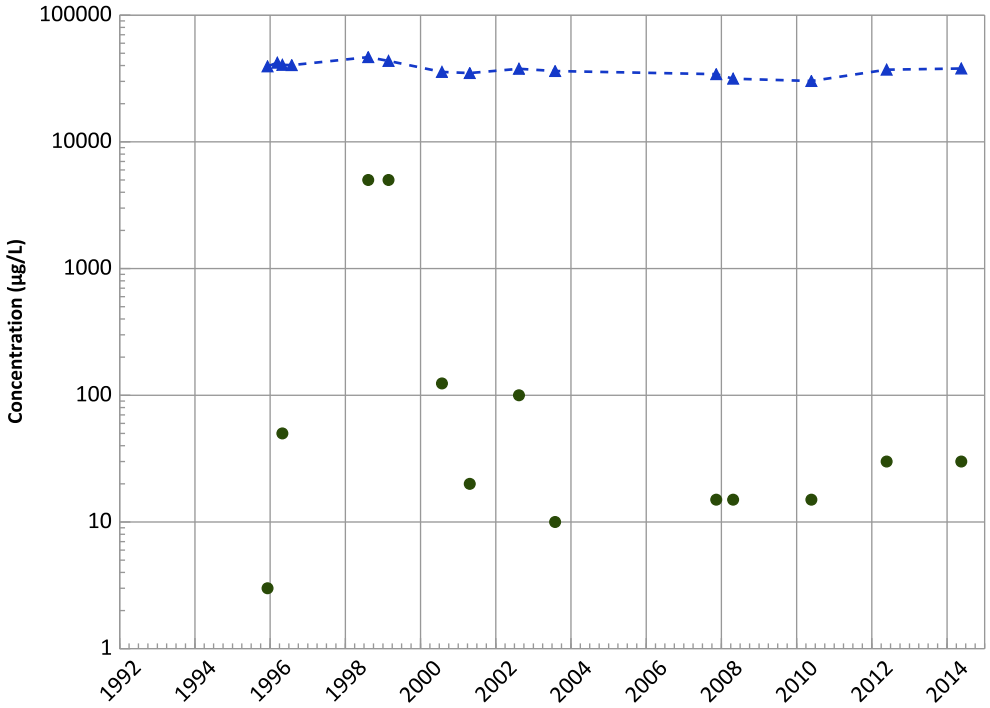


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

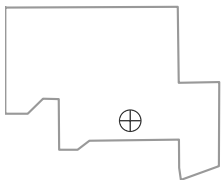
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

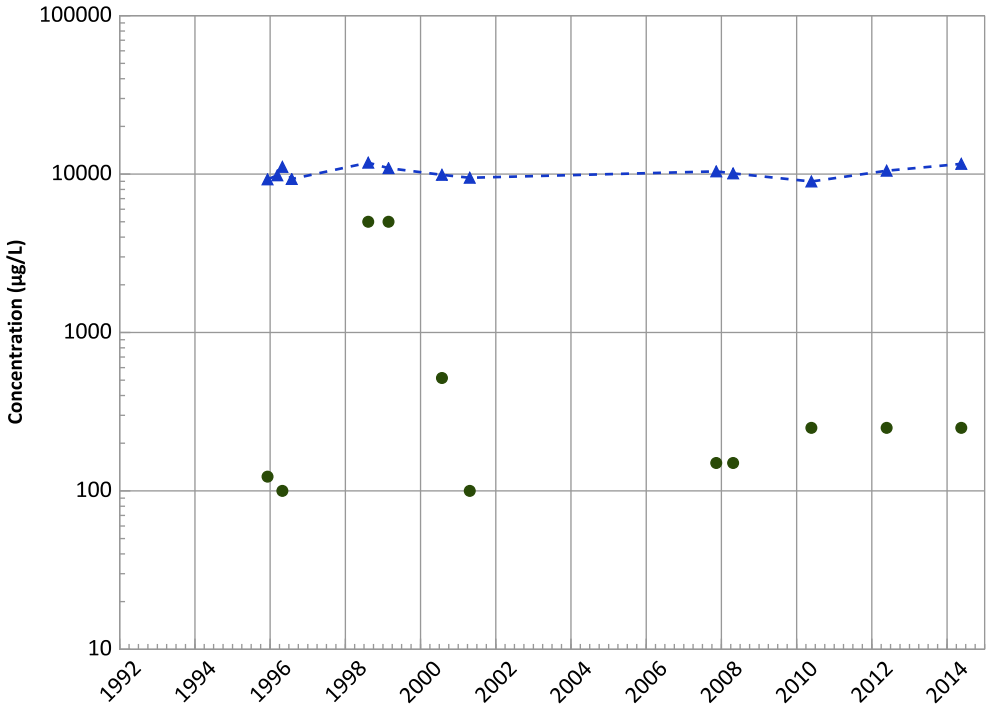
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

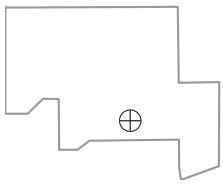
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

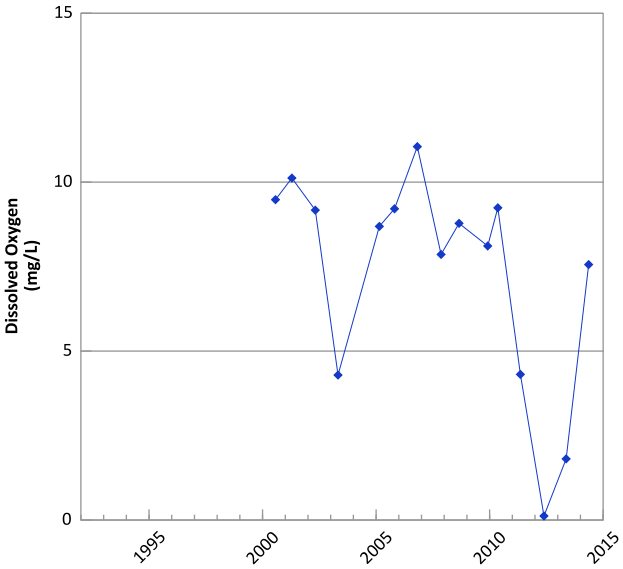
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/19/2014
Analysis Date: 03/19/2015

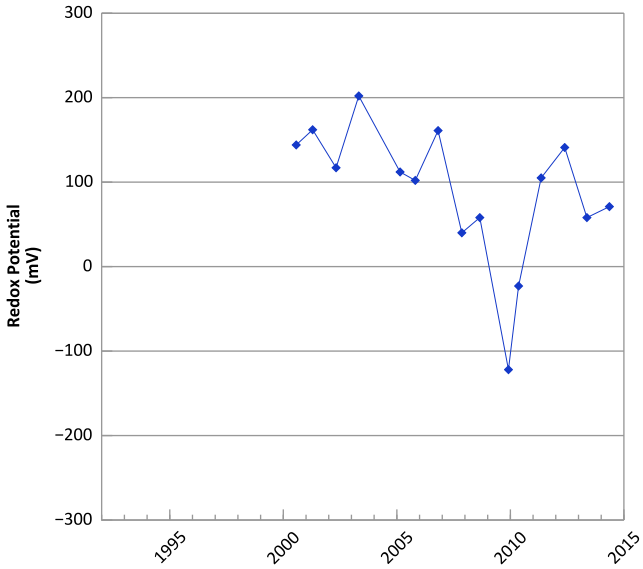
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

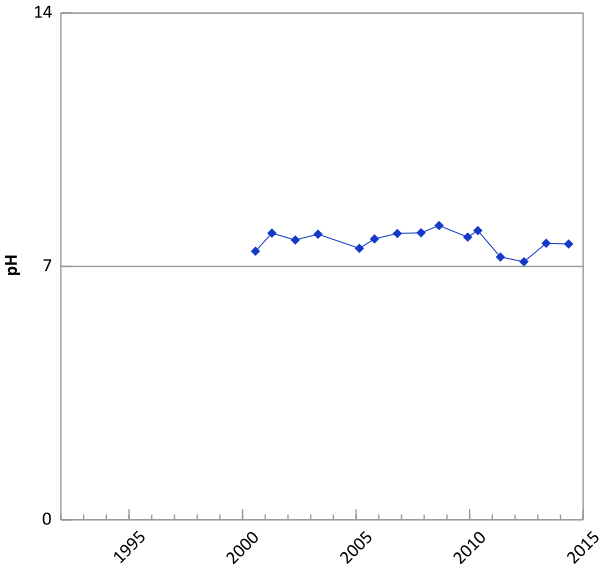
Well Location

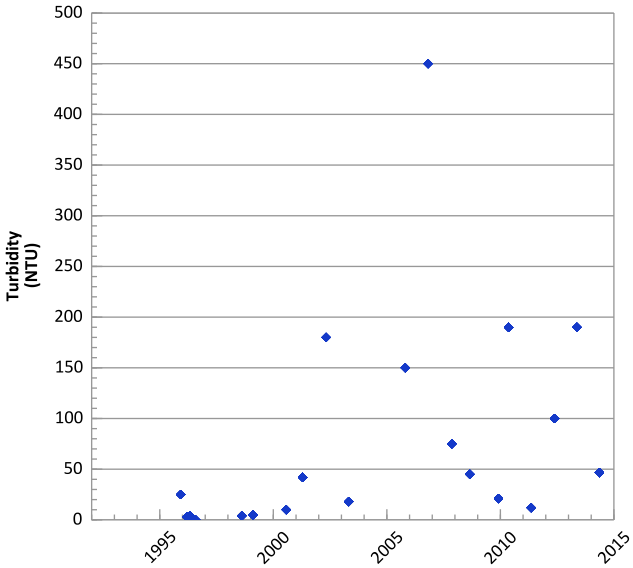


PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



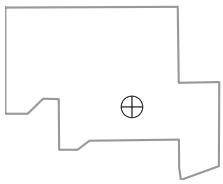






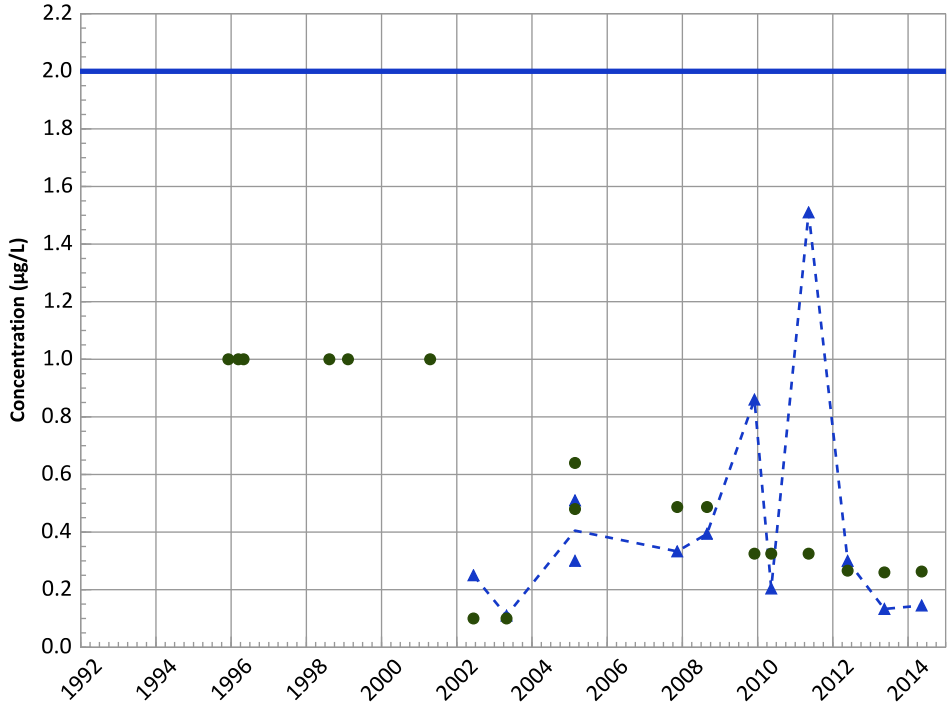
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

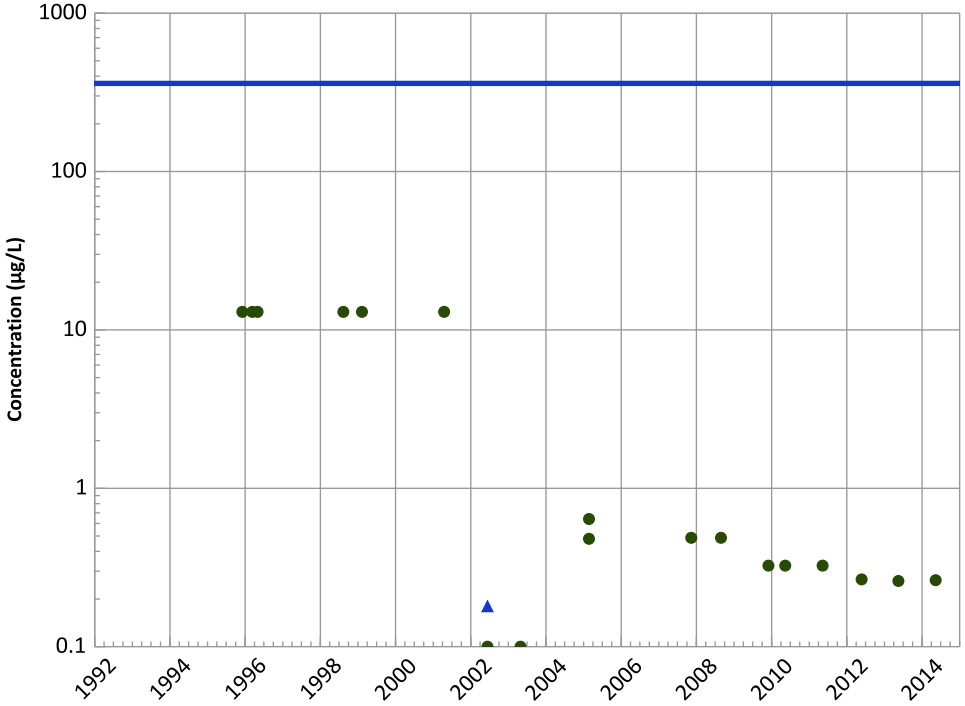


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

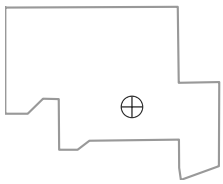
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

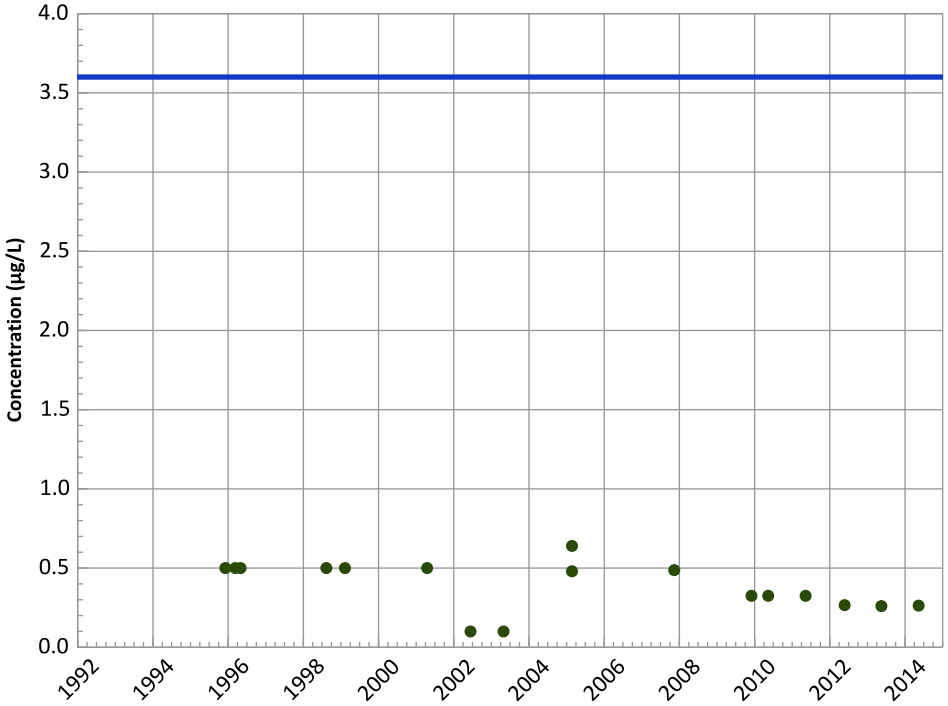
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

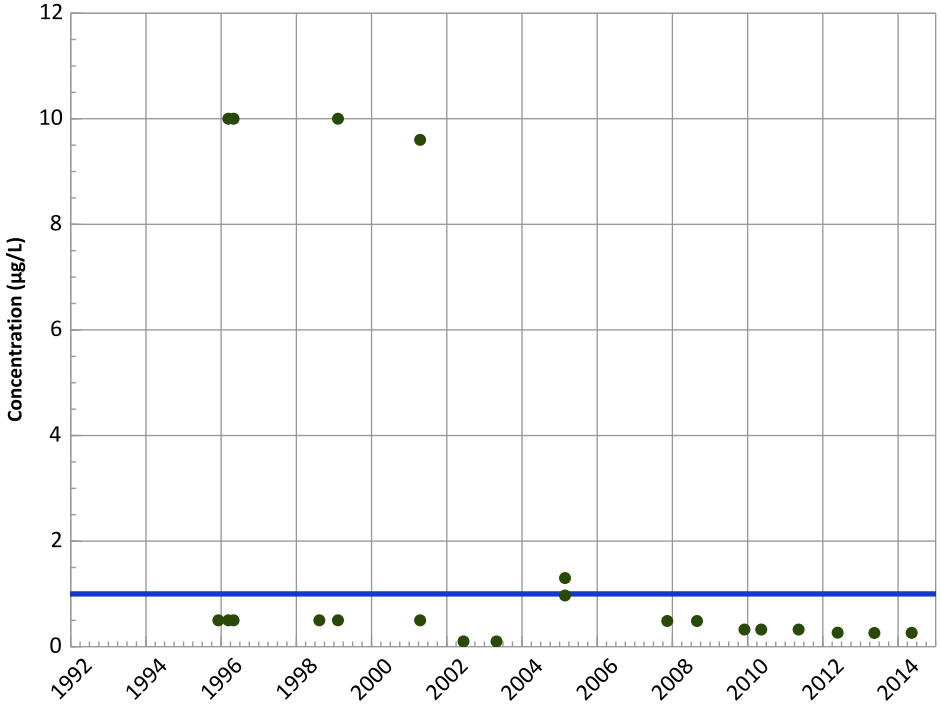


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

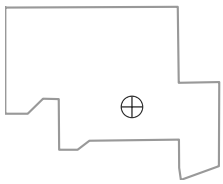
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

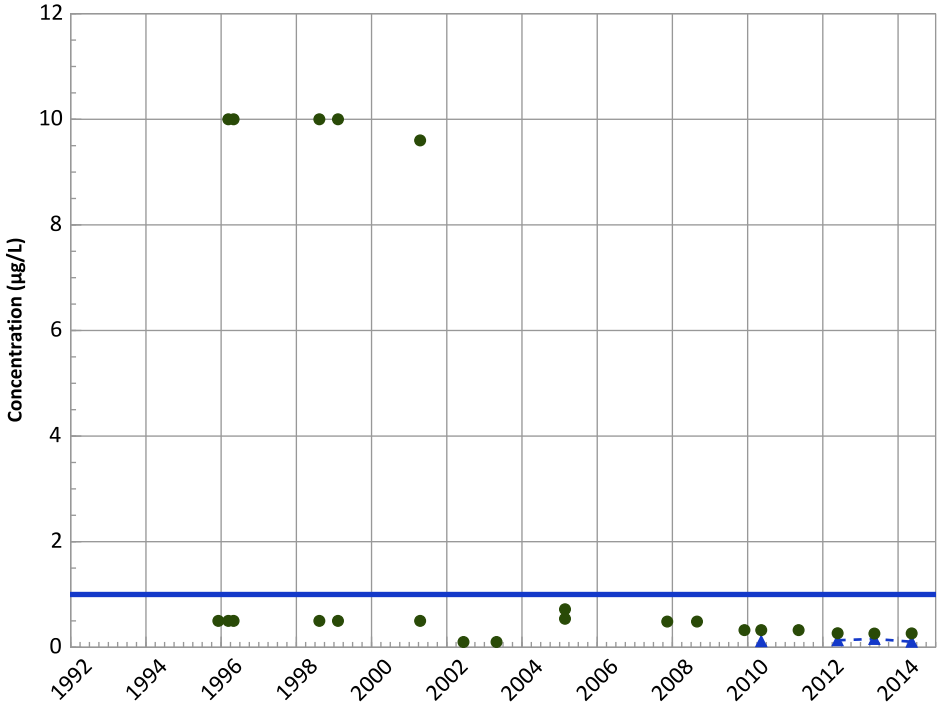
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

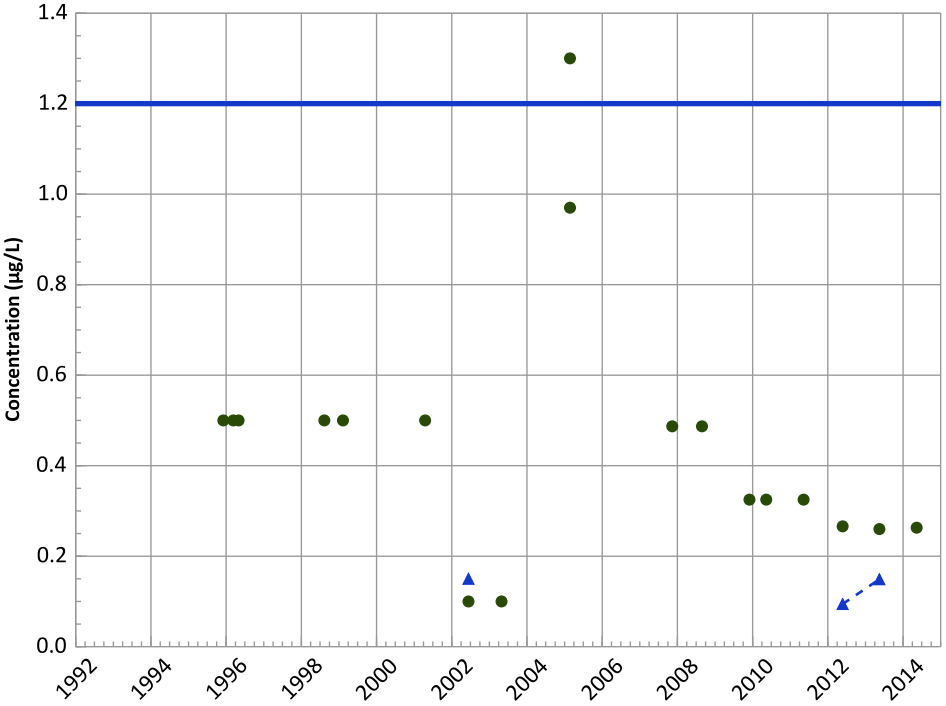


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

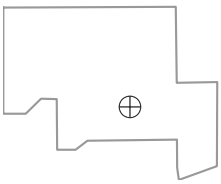
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

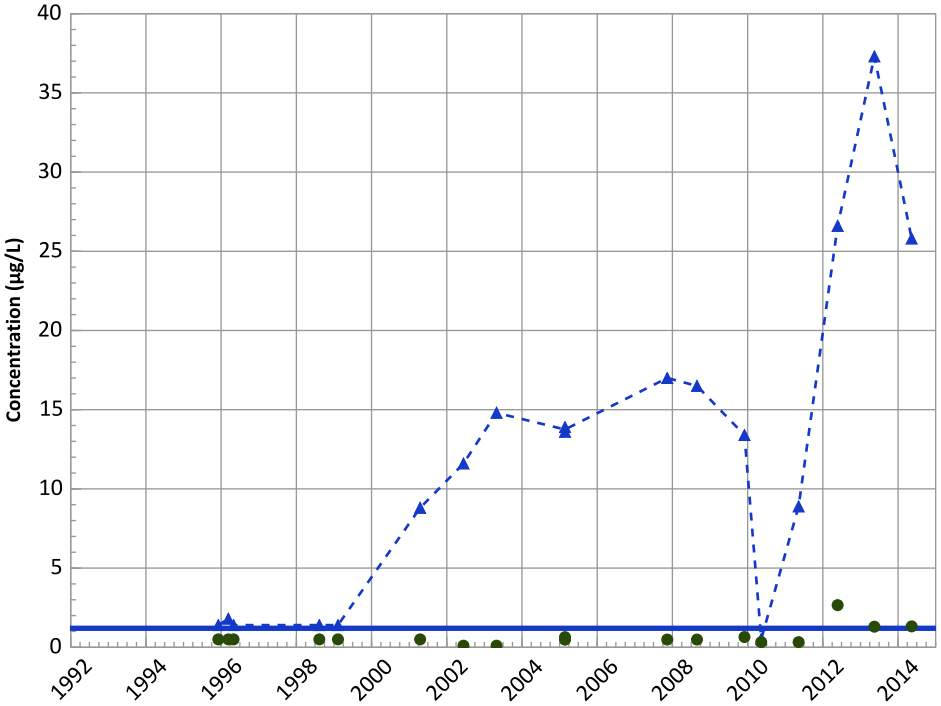
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

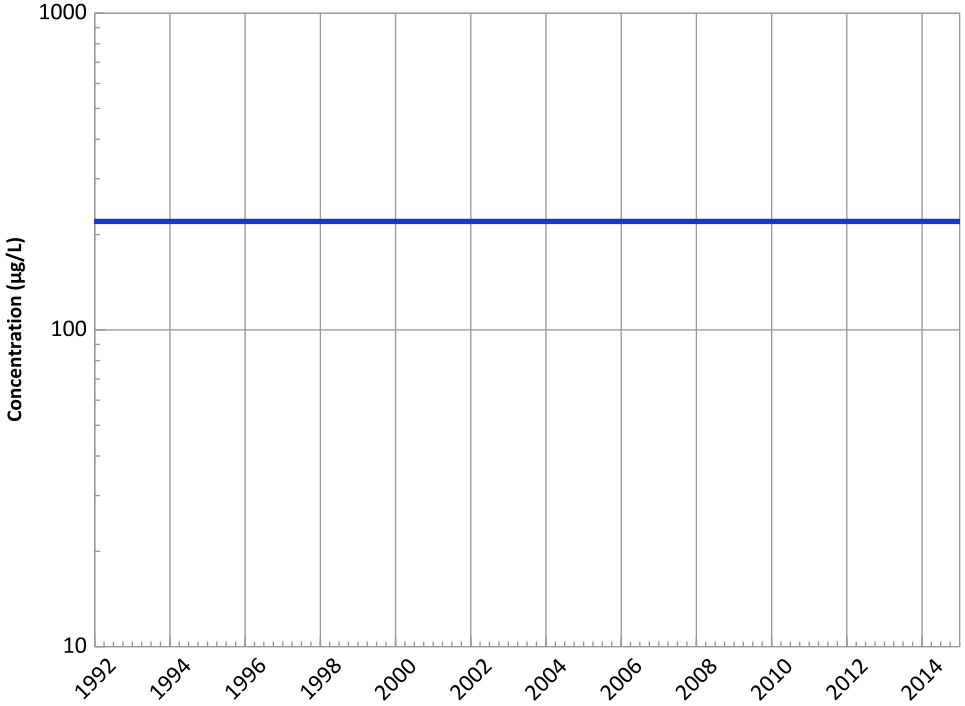


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

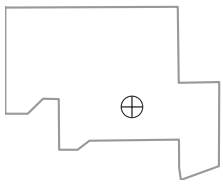
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

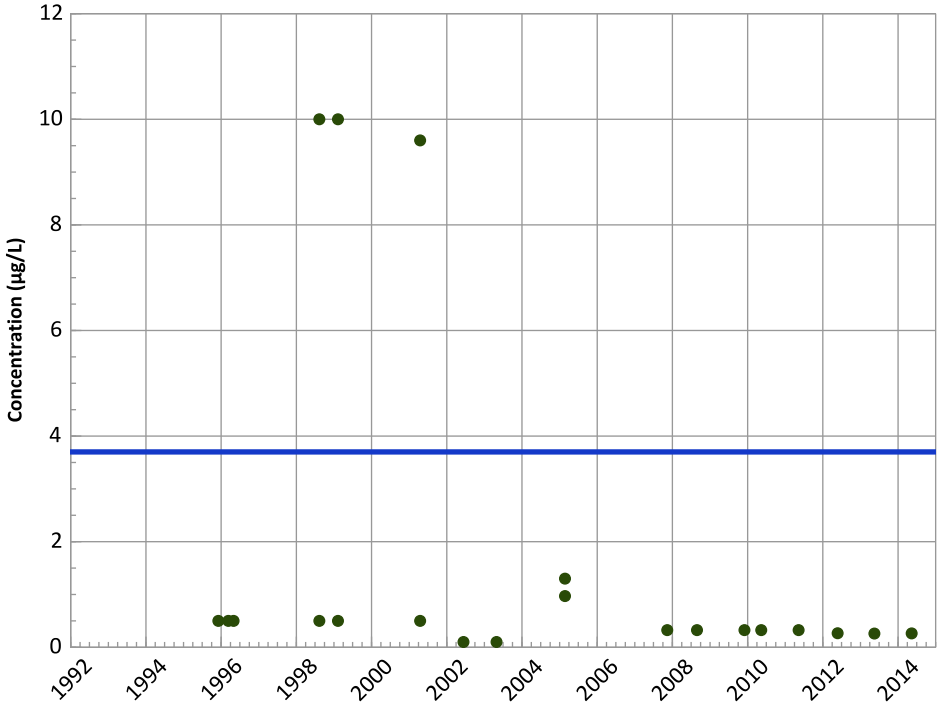
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

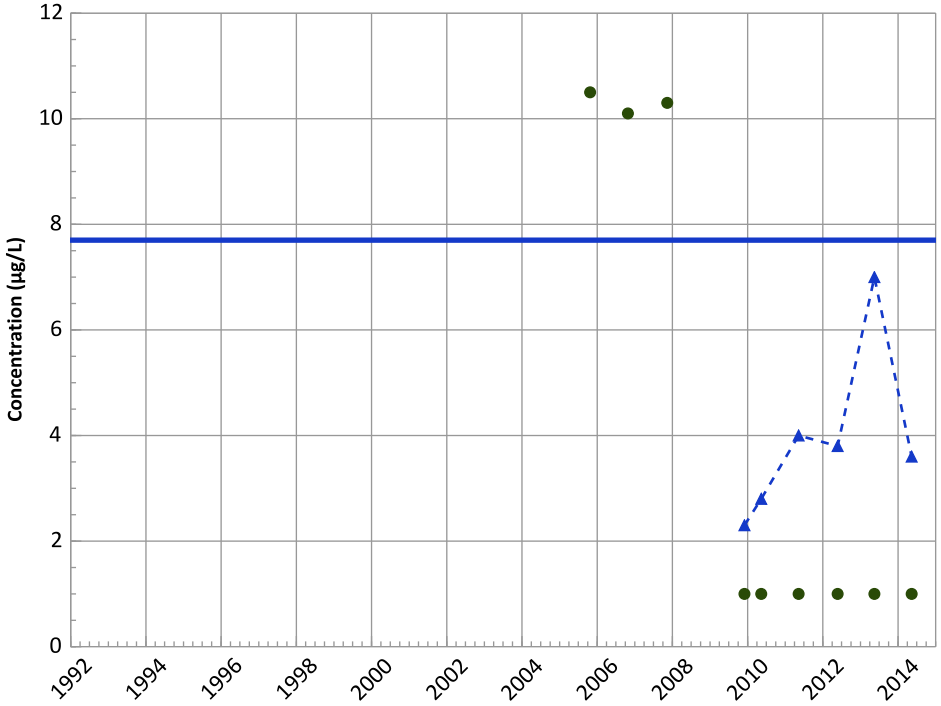


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

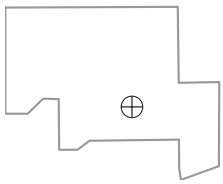
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

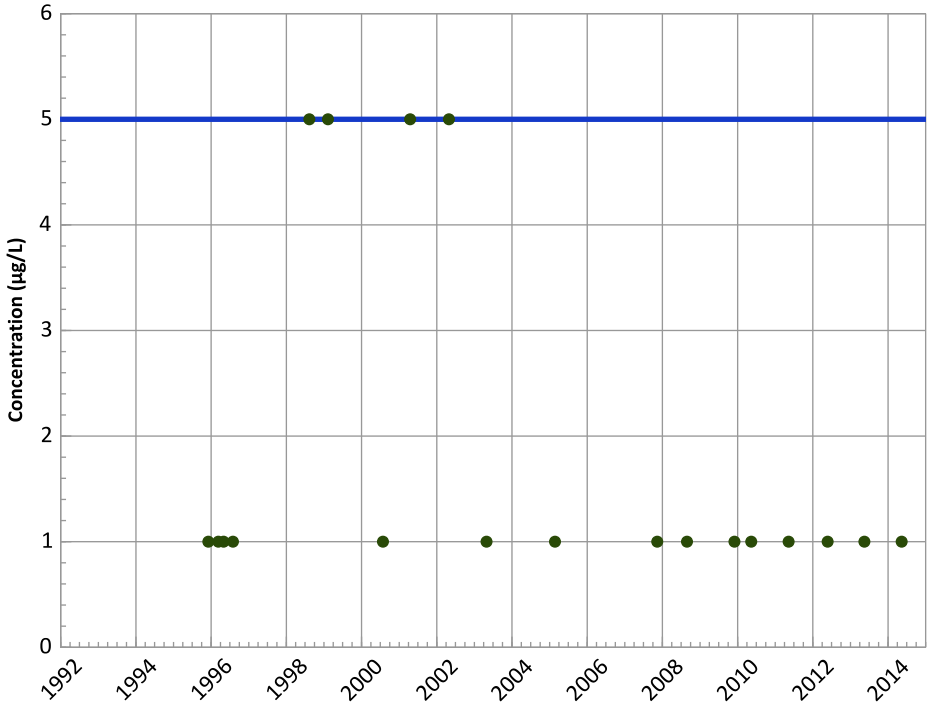
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

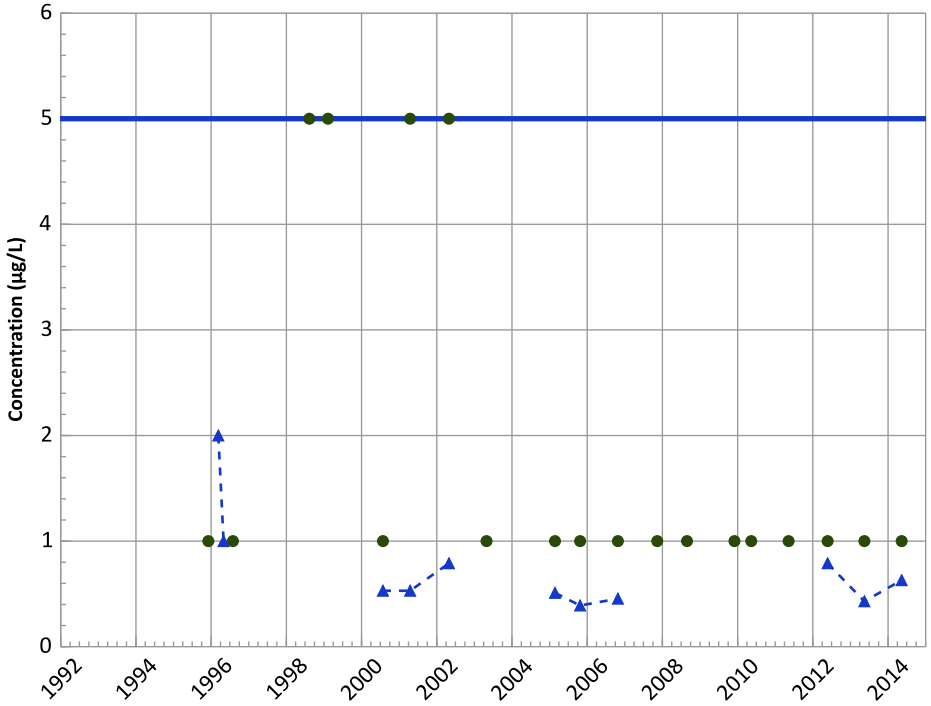


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

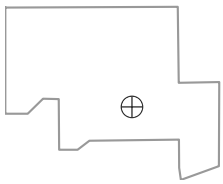
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

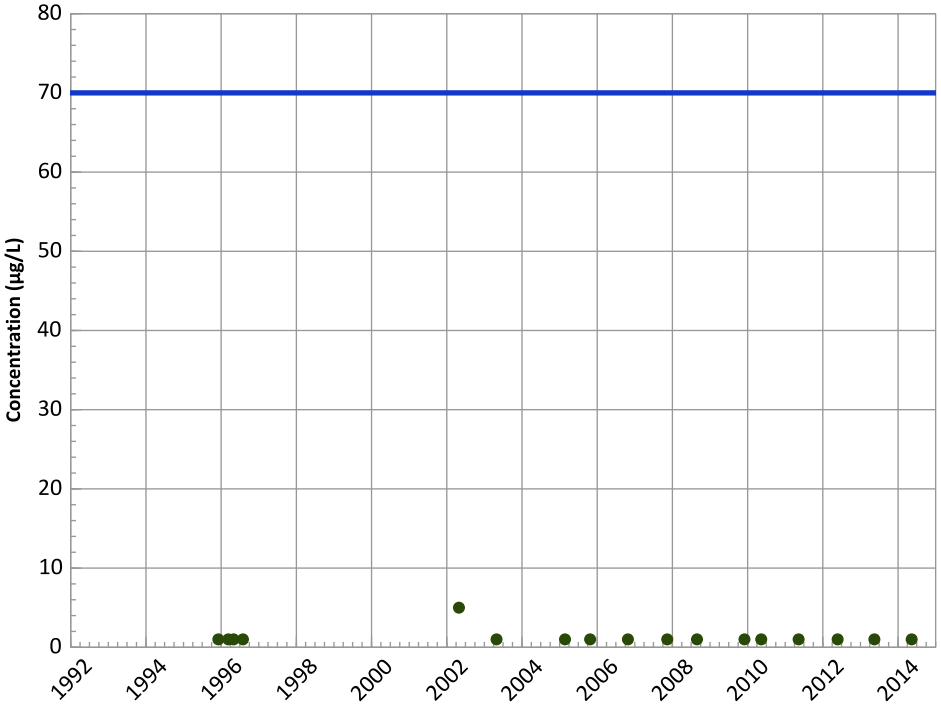
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

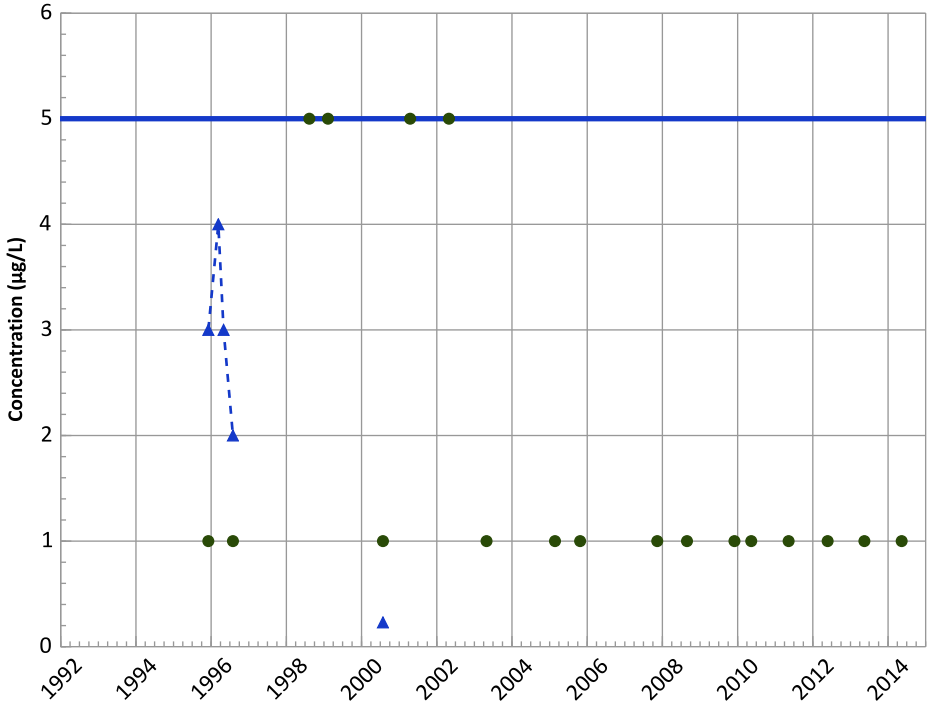


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

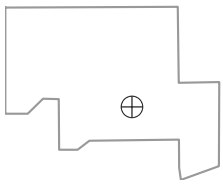
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

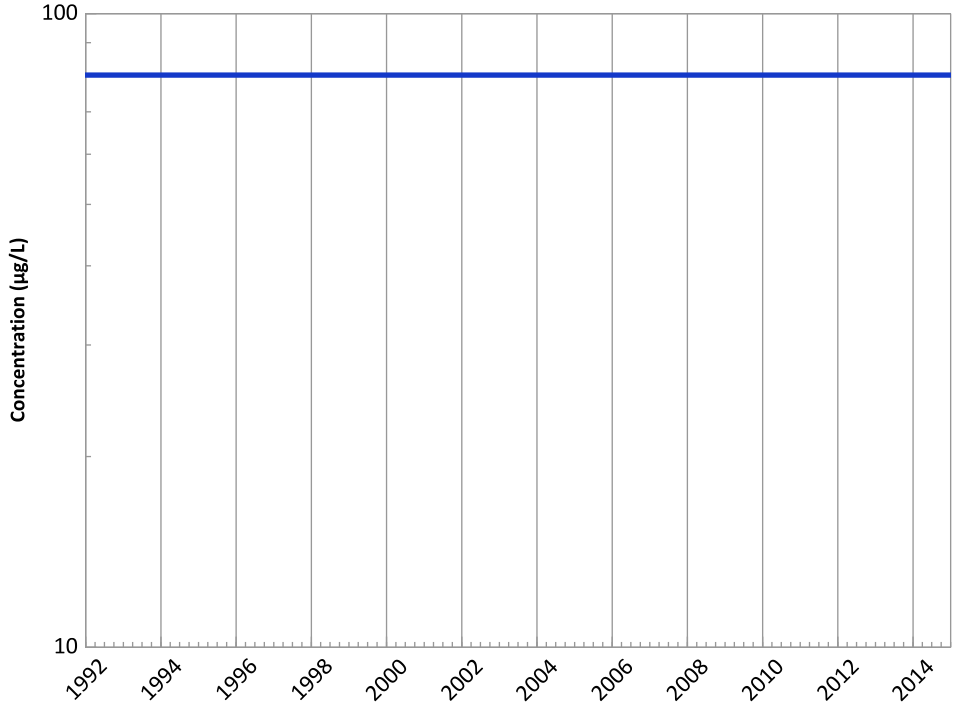
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

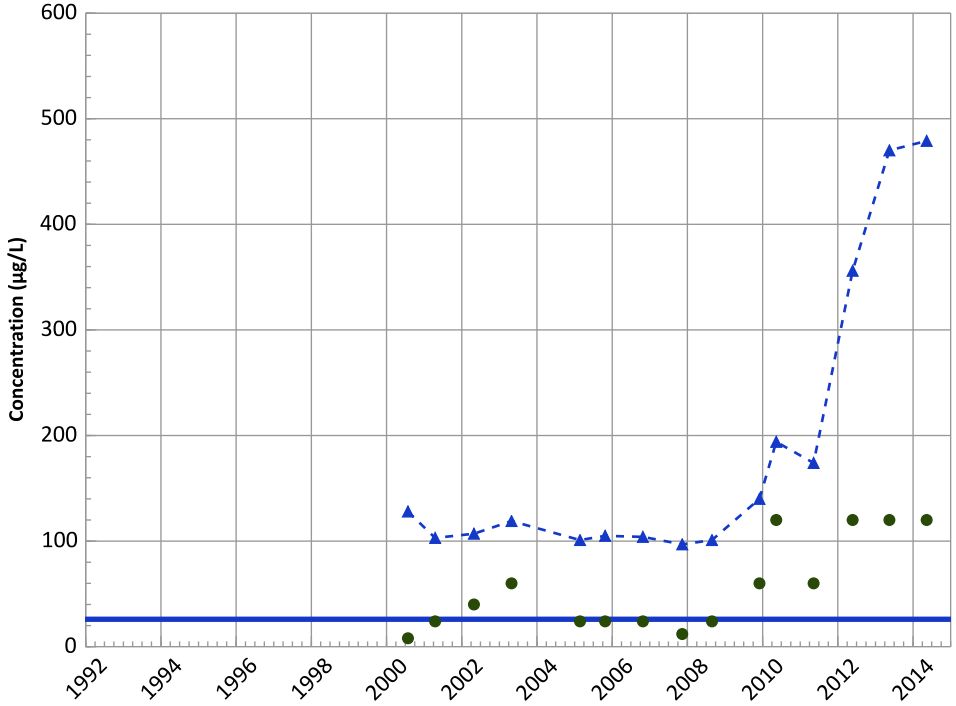


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

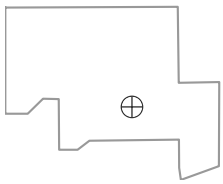
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

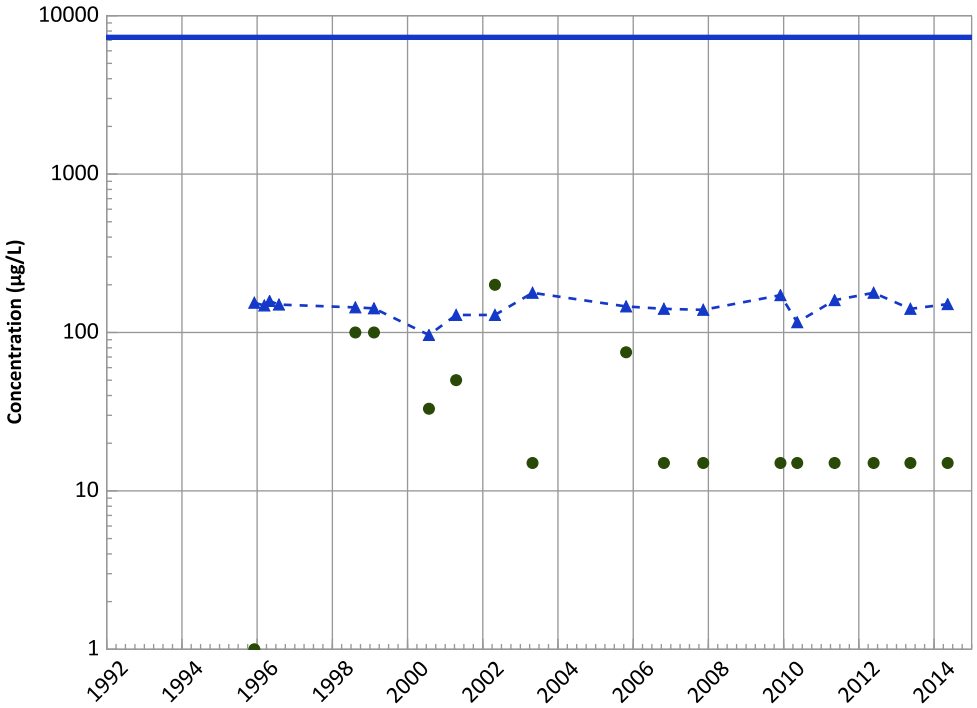
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

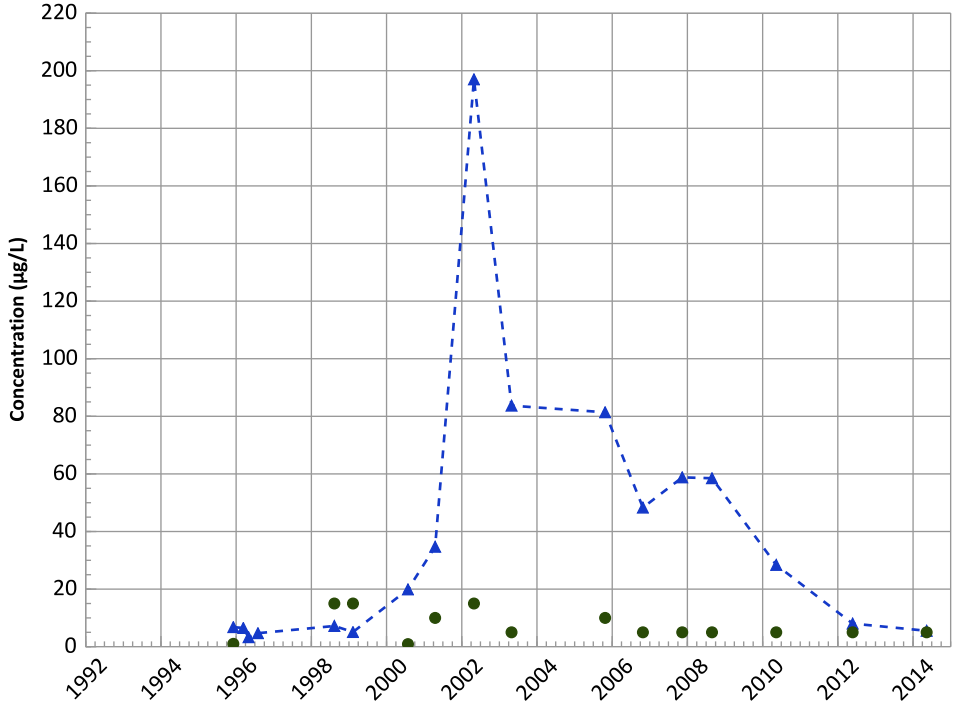


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Manganese Trend



Concentration Trend

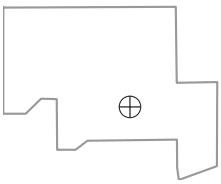
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

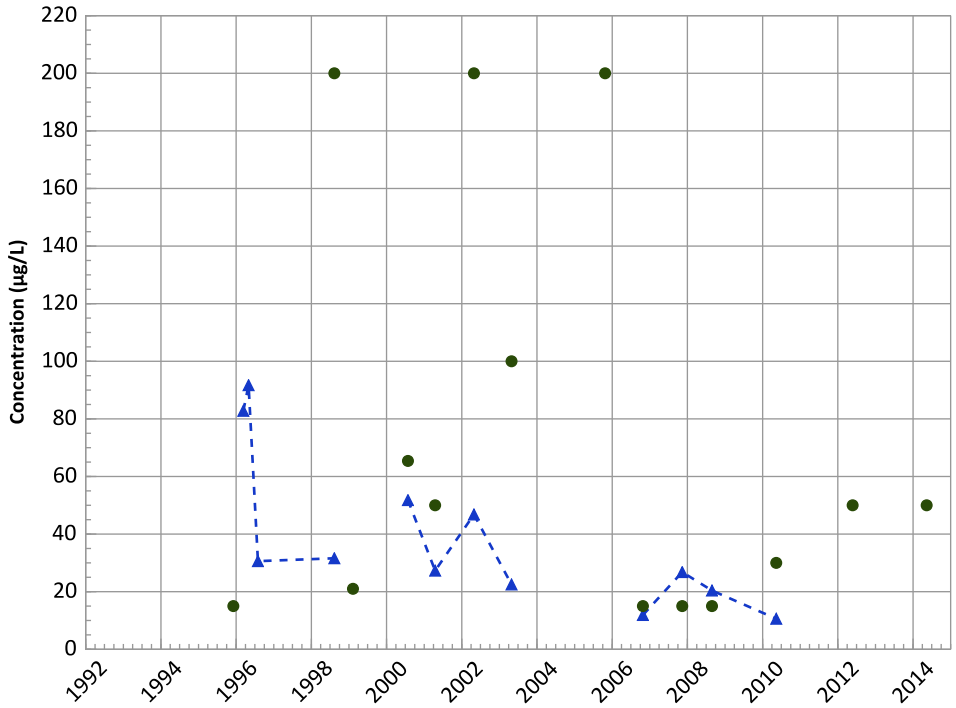
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

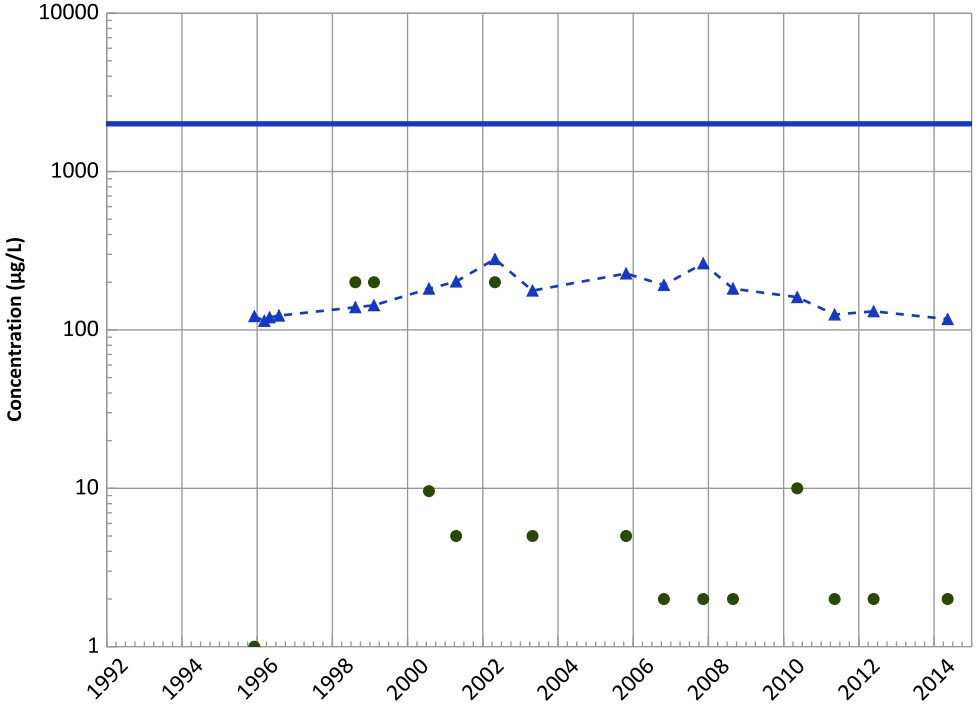


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

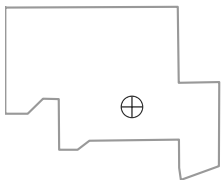
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

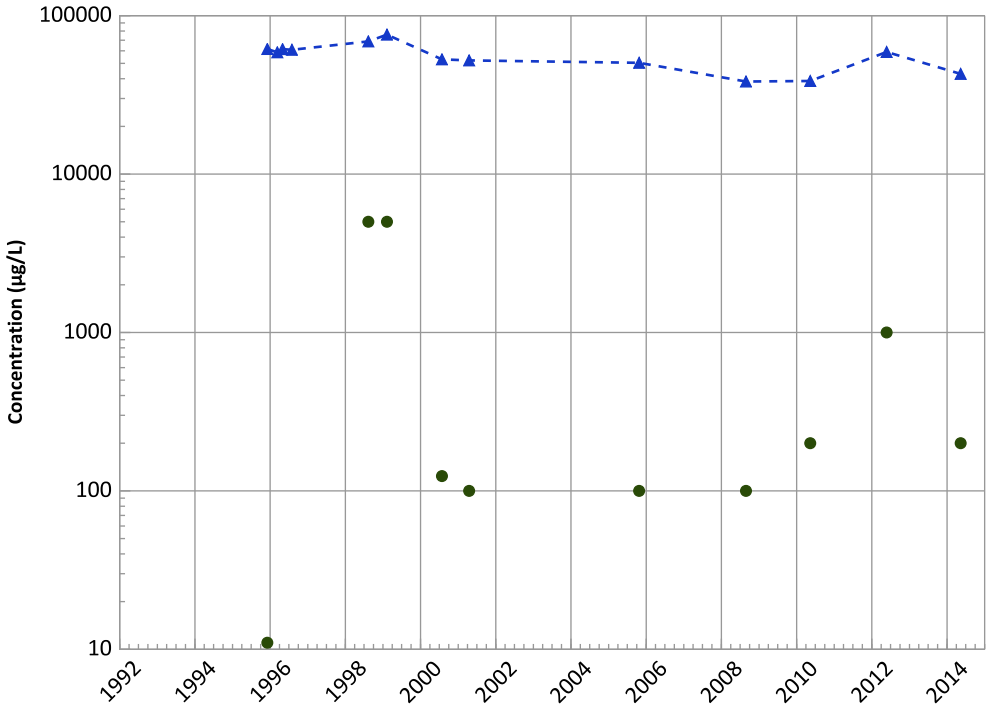
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

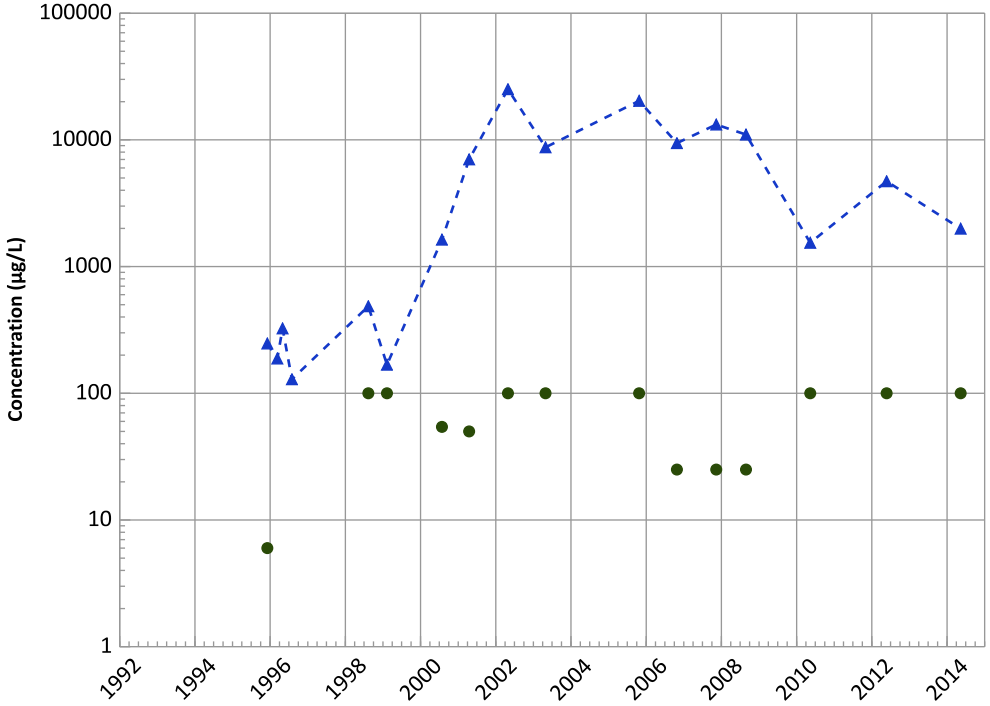


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

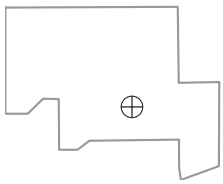
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

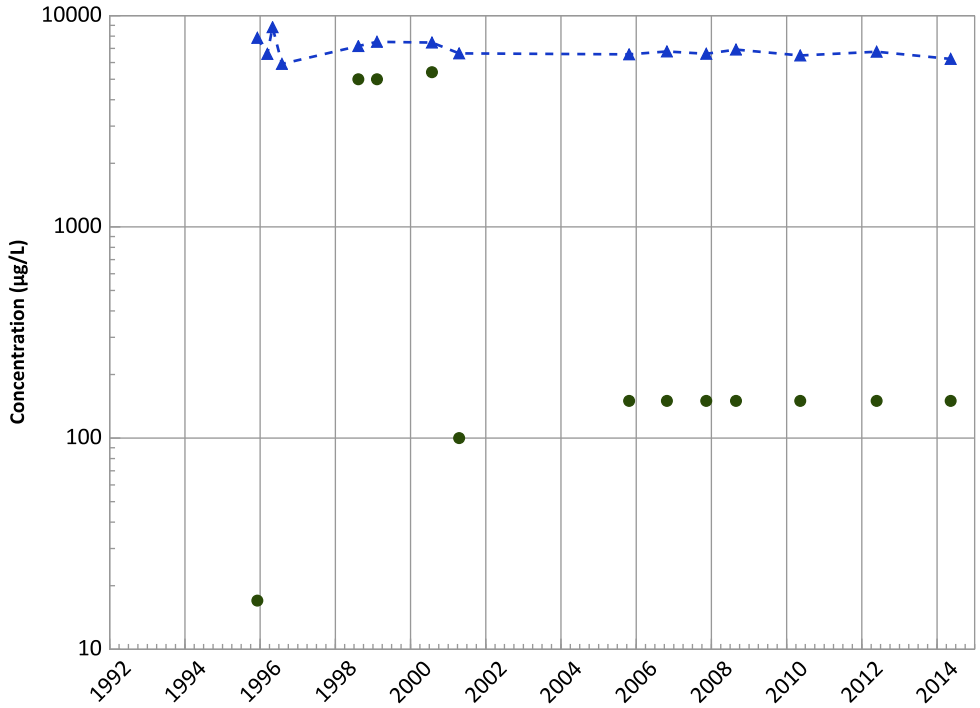
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

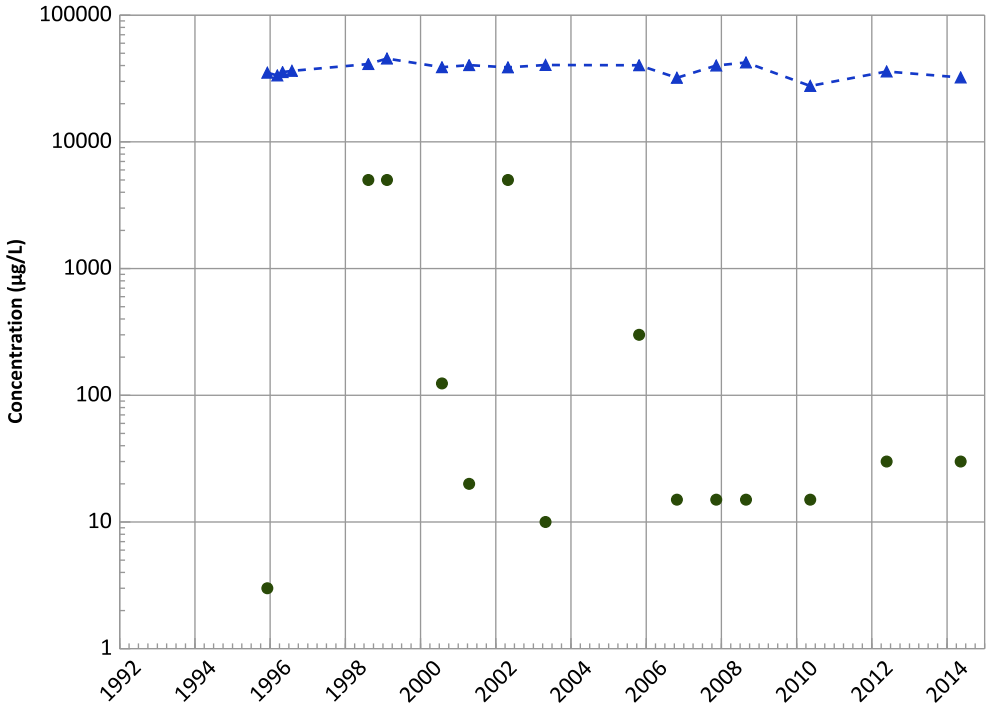


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

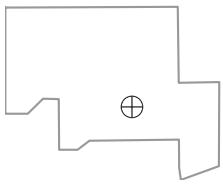
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

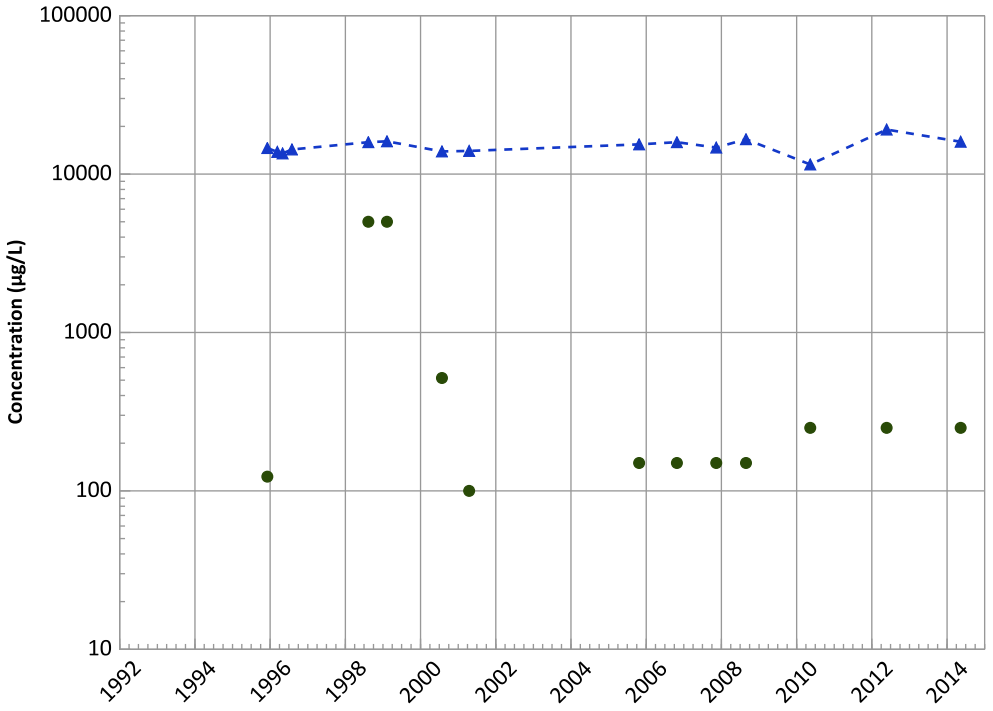
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

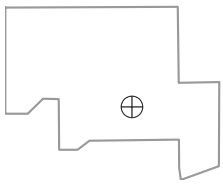
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

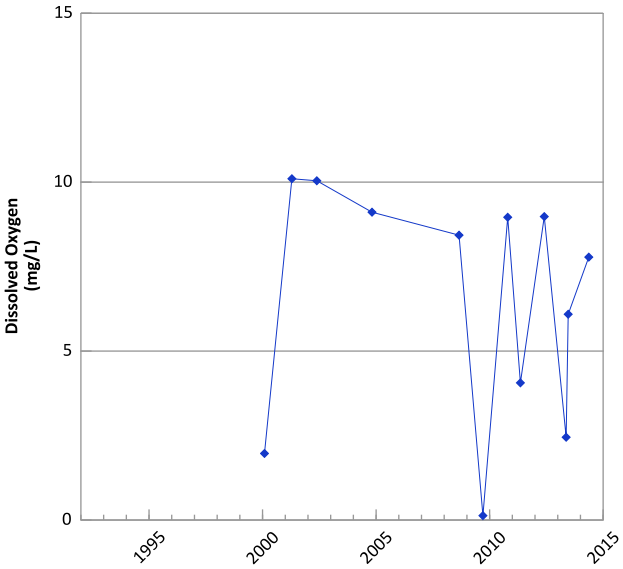
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/05/1995 to 05/13/2014
Analysis Date: 03/19/2015

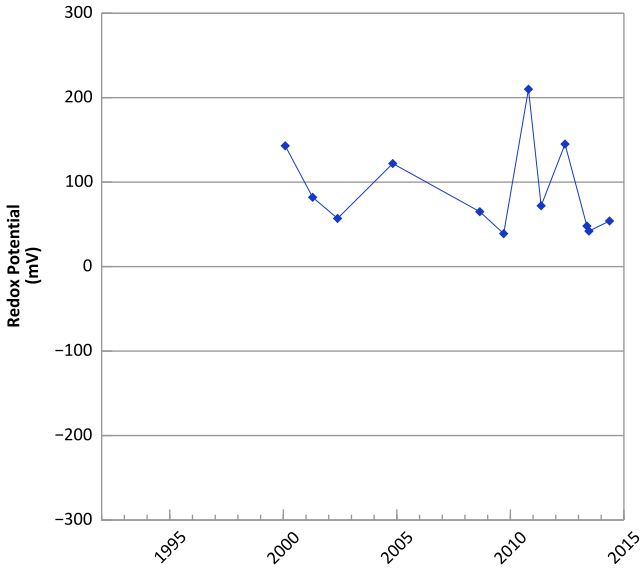
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

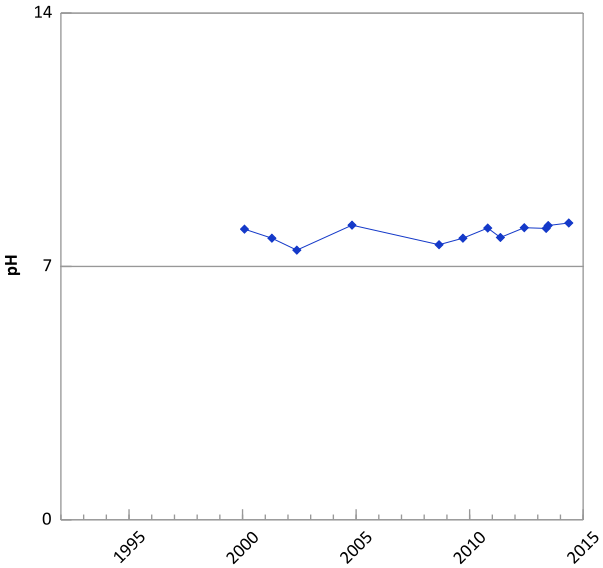
Well Location

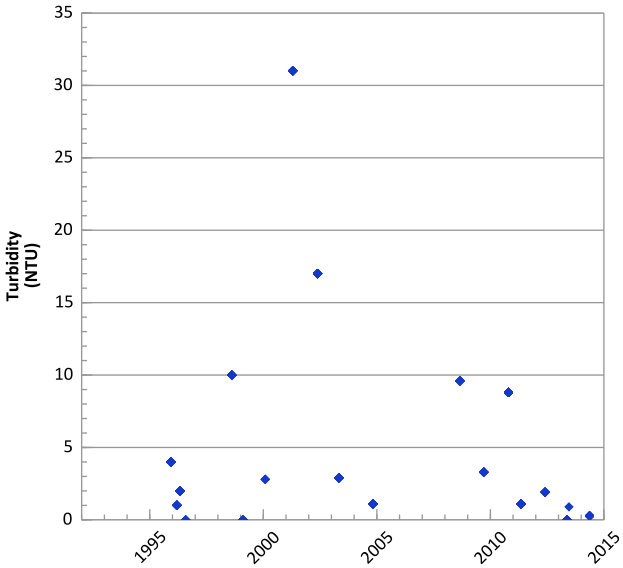


PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



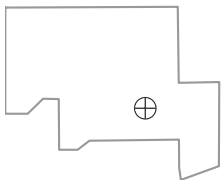






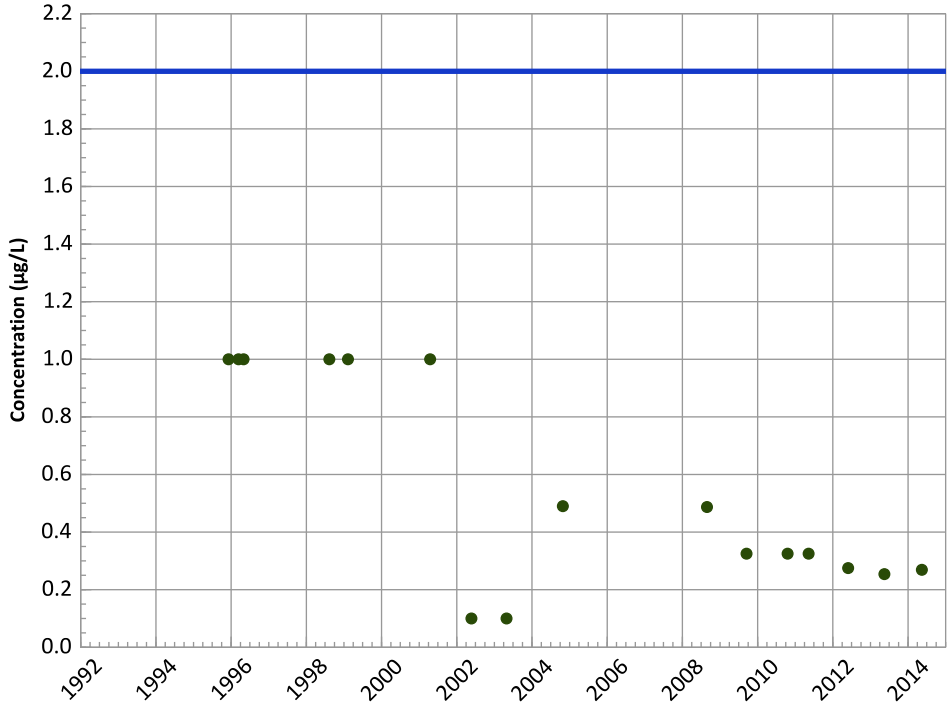
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

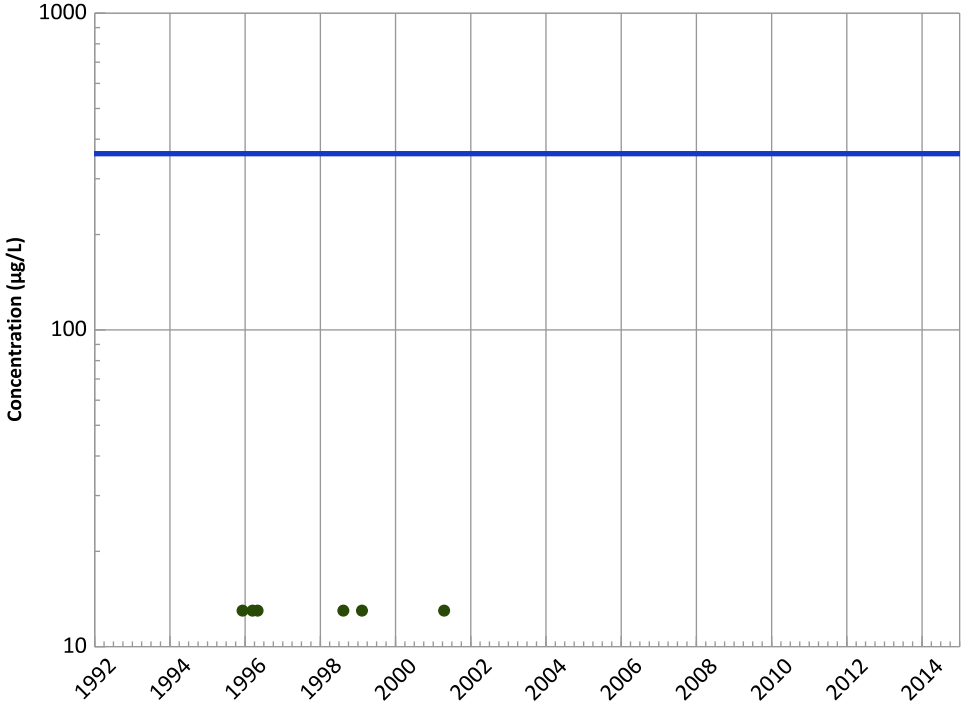


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

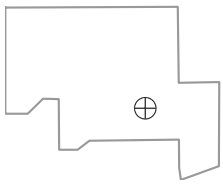
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

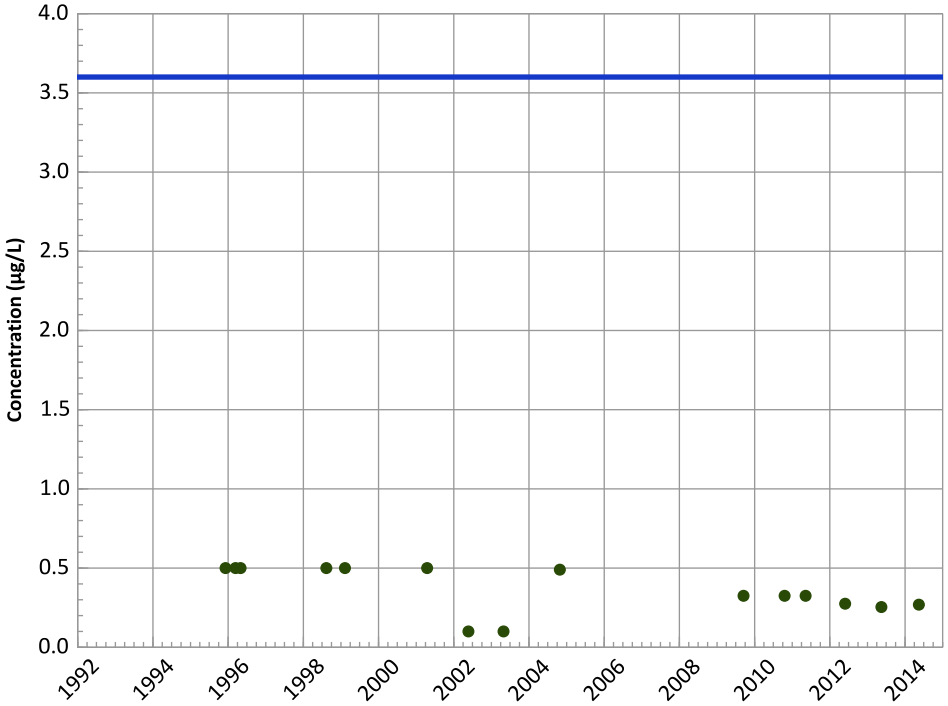
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

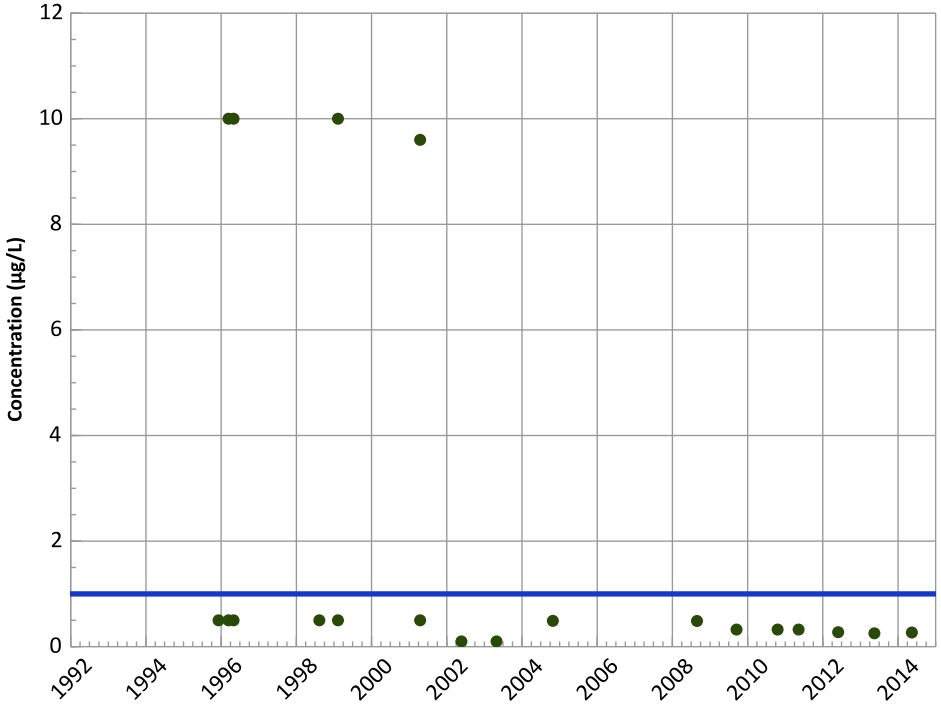


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

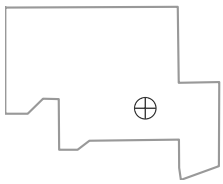
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

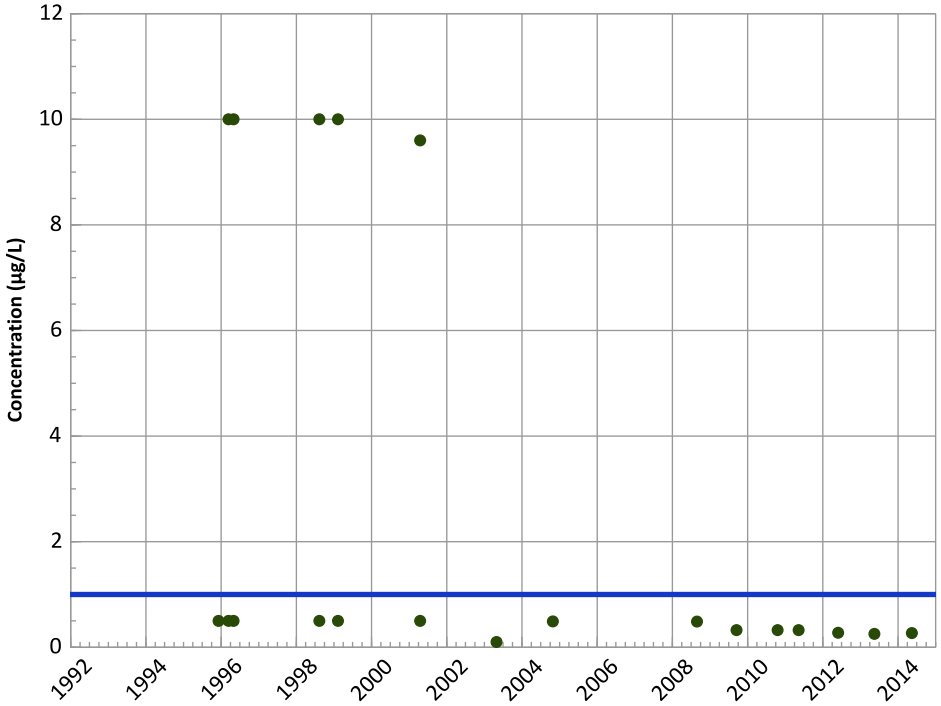
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

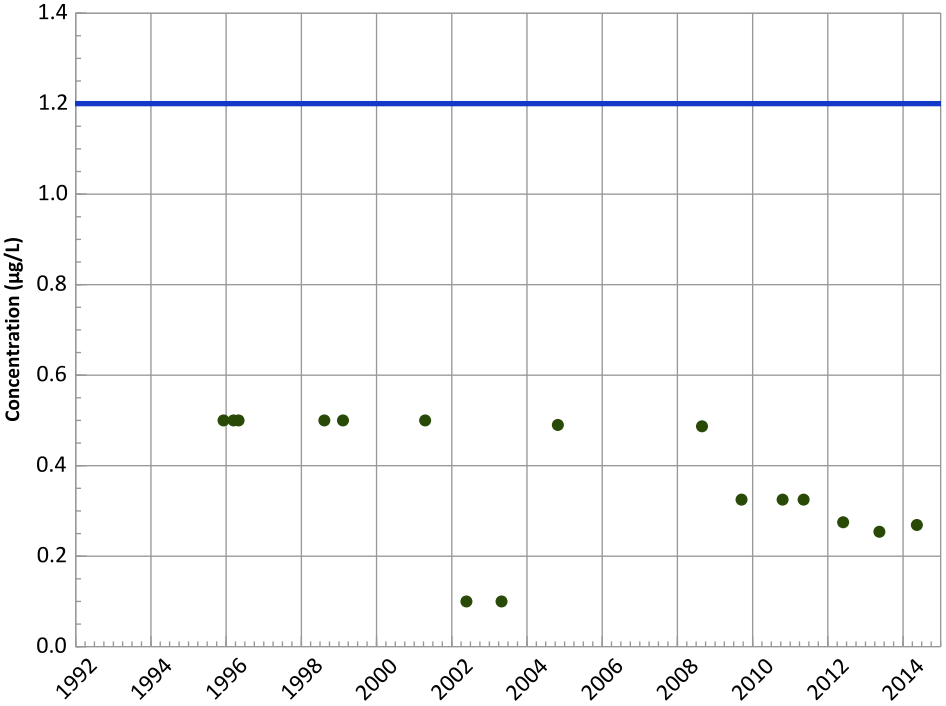


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

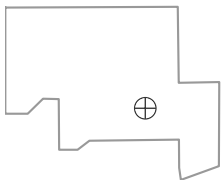
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

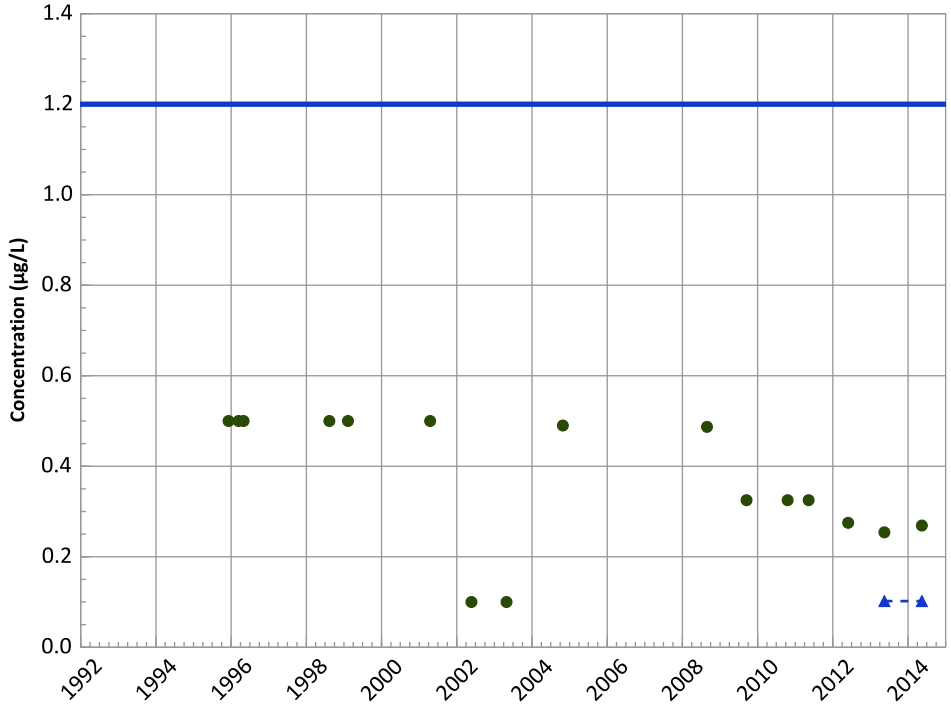
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

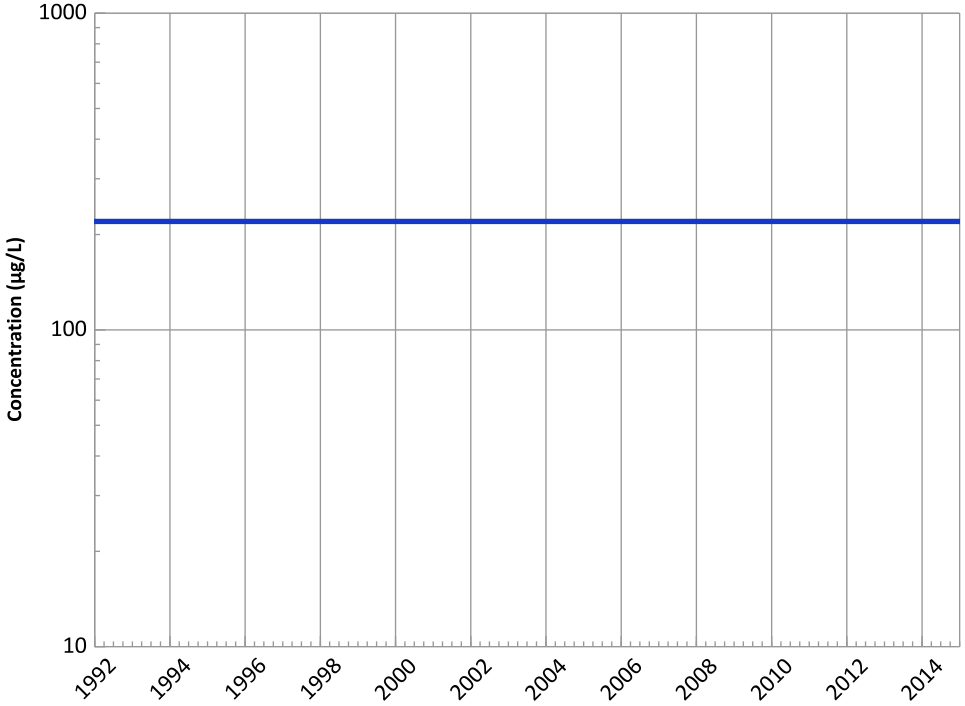


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

1,3,5-Trinitrobenzene Trend



Concentration Trend

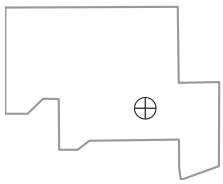
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

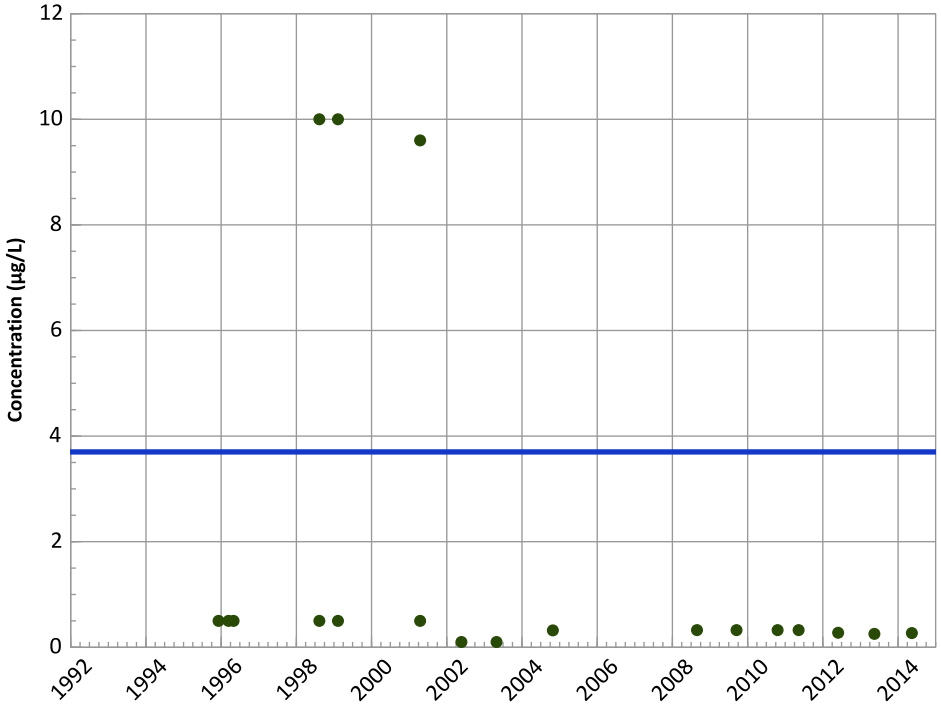
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━ Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

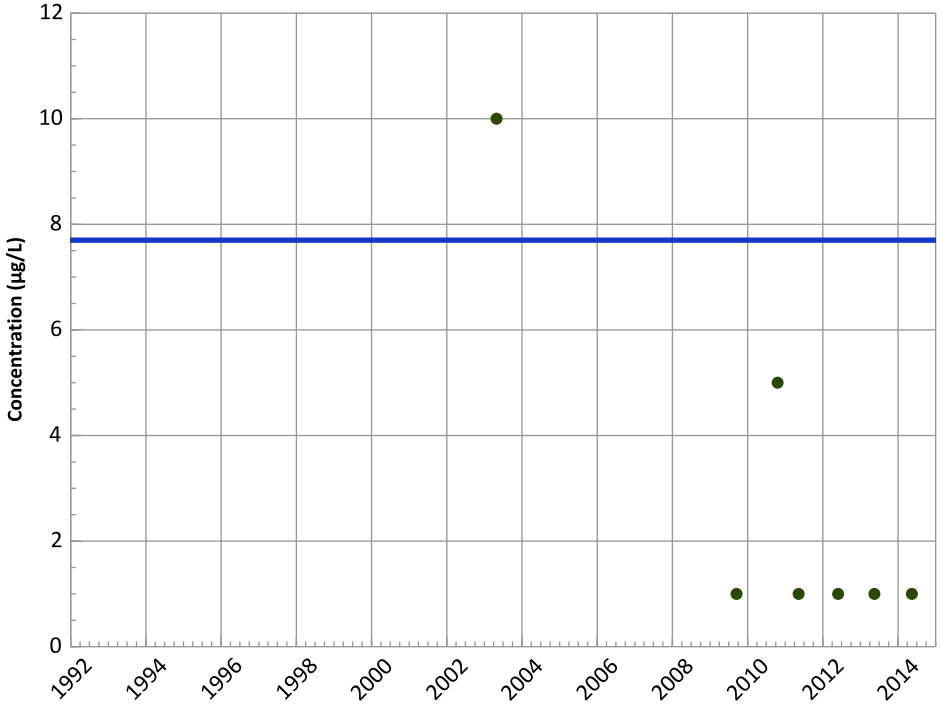


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

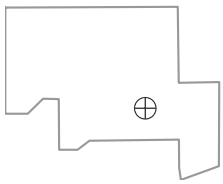
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

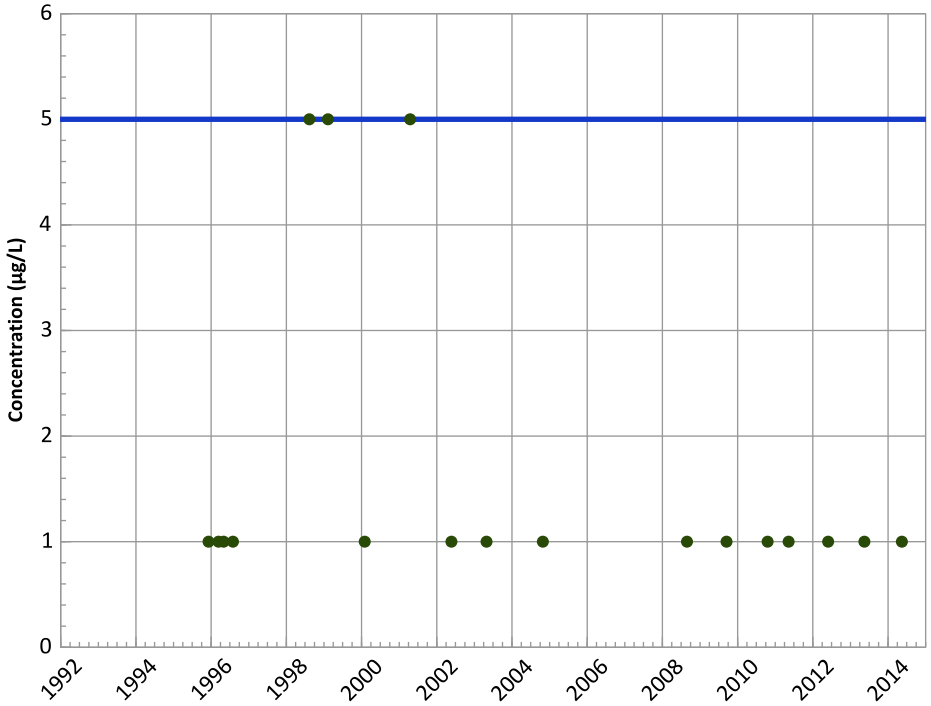
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

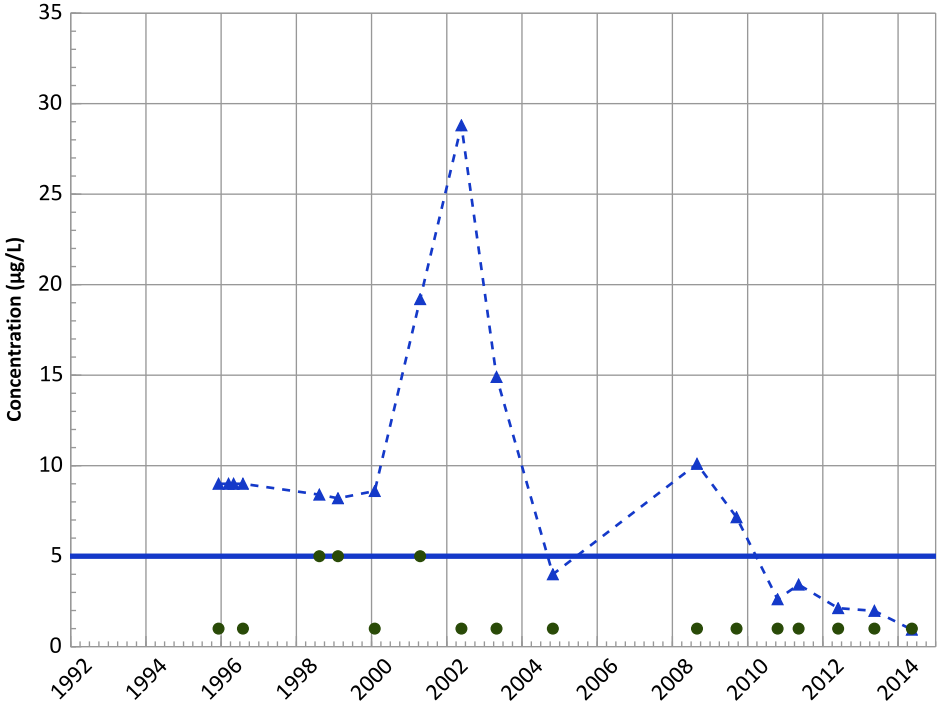


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

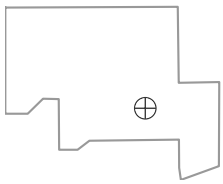
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

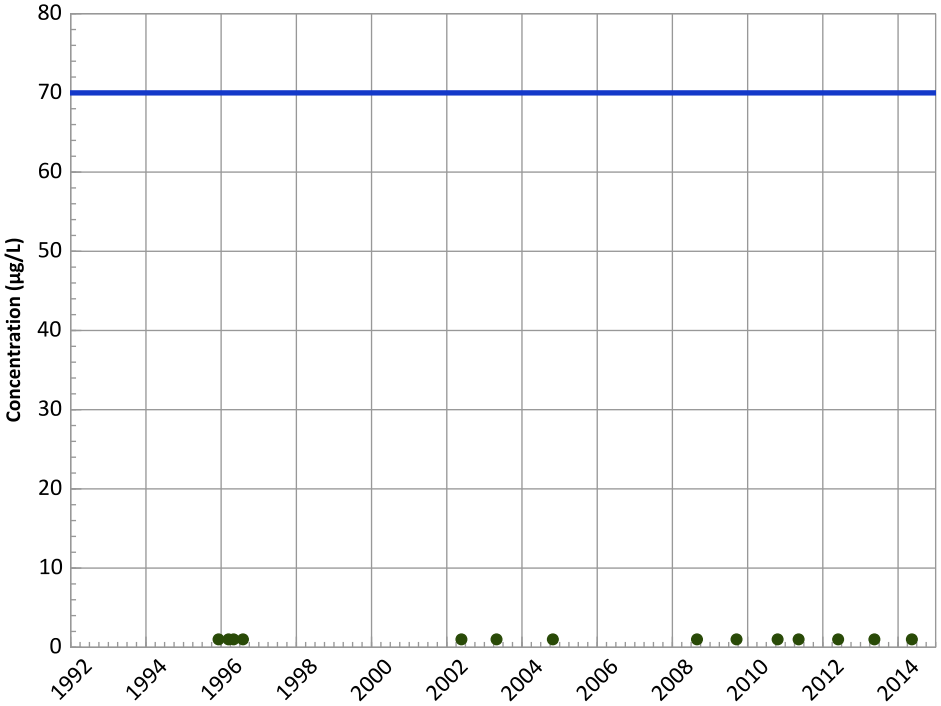
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

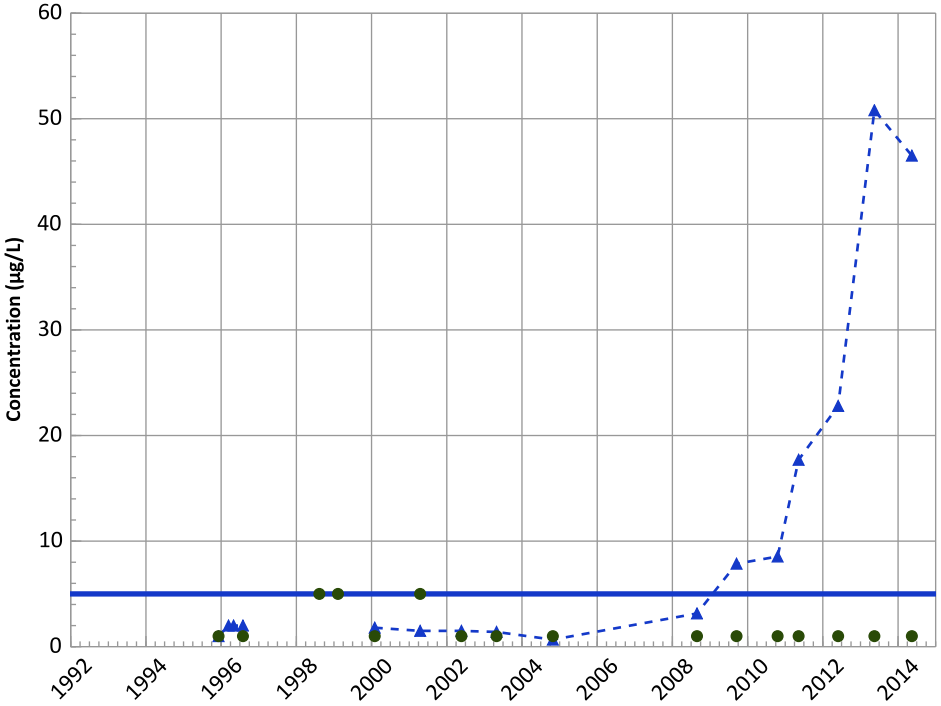


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

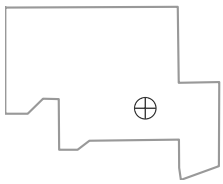
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

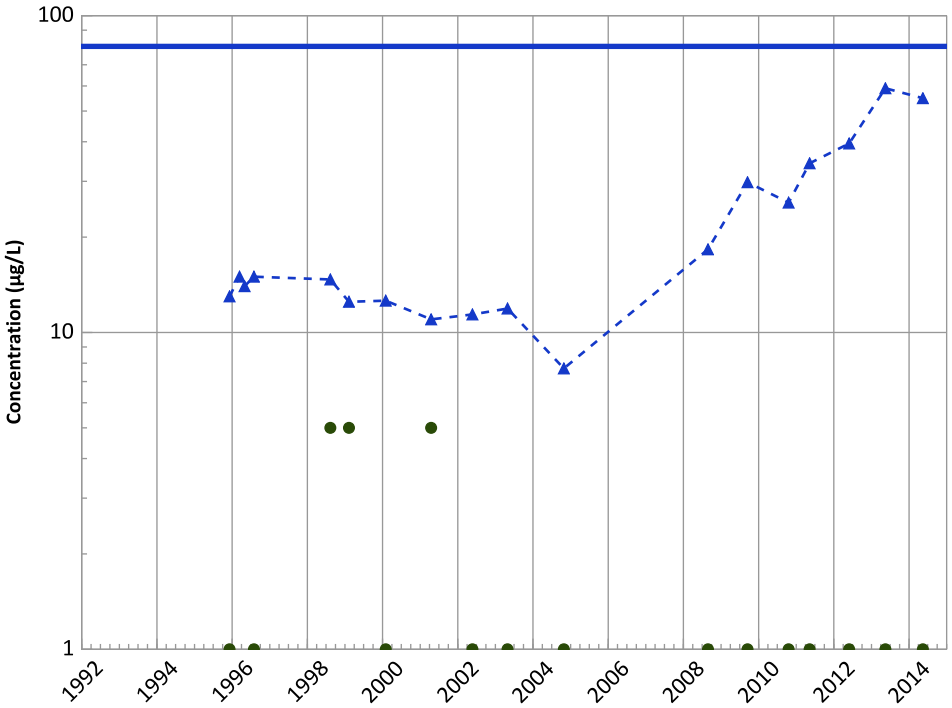
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

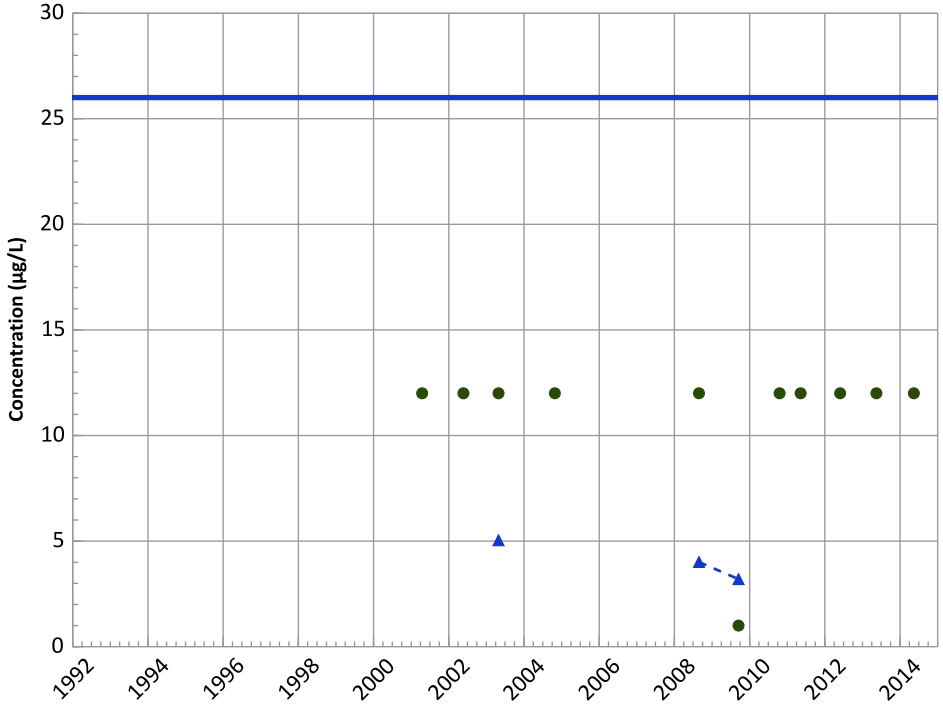


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Perchlorate Trend



Concentration Trend

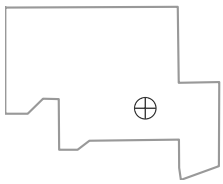
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

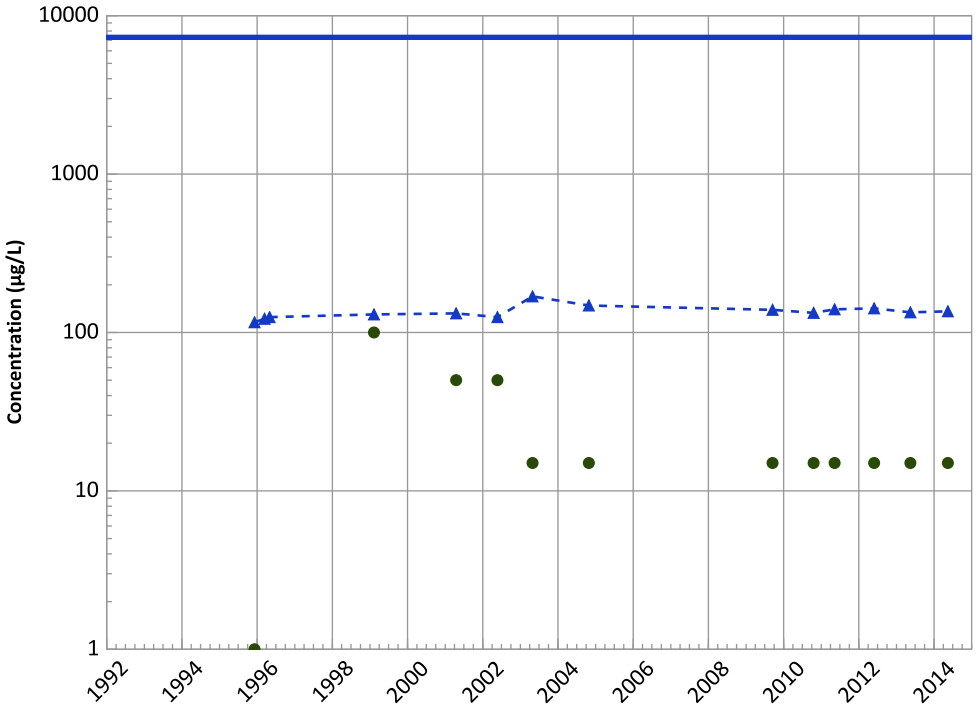
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

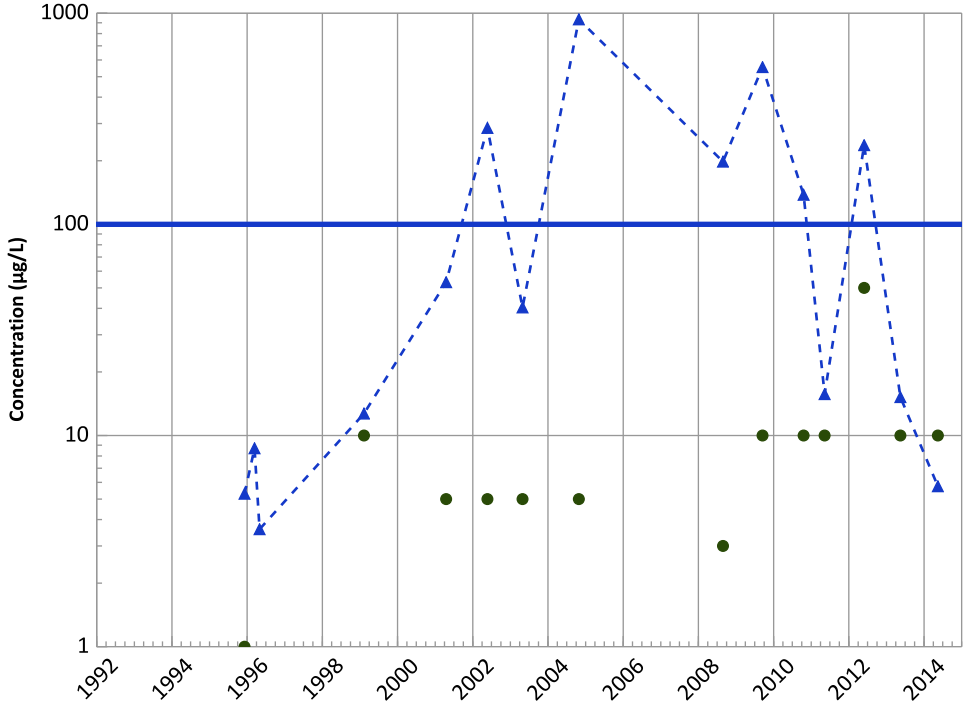


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

Chromium, Total Trend



Concentration Trend

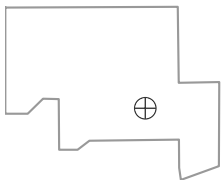
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

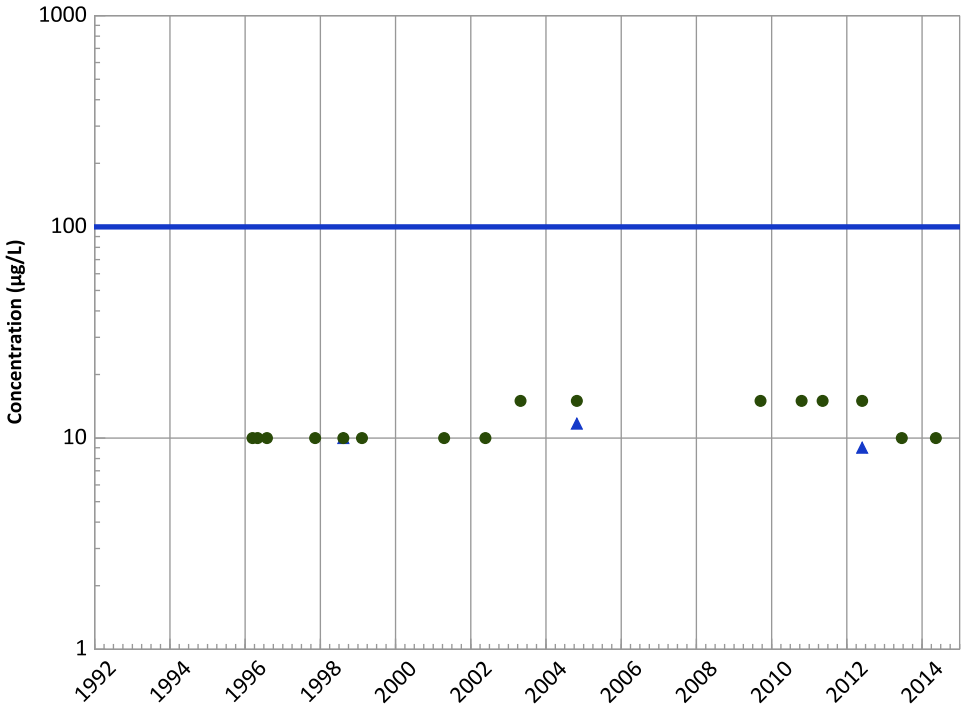
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

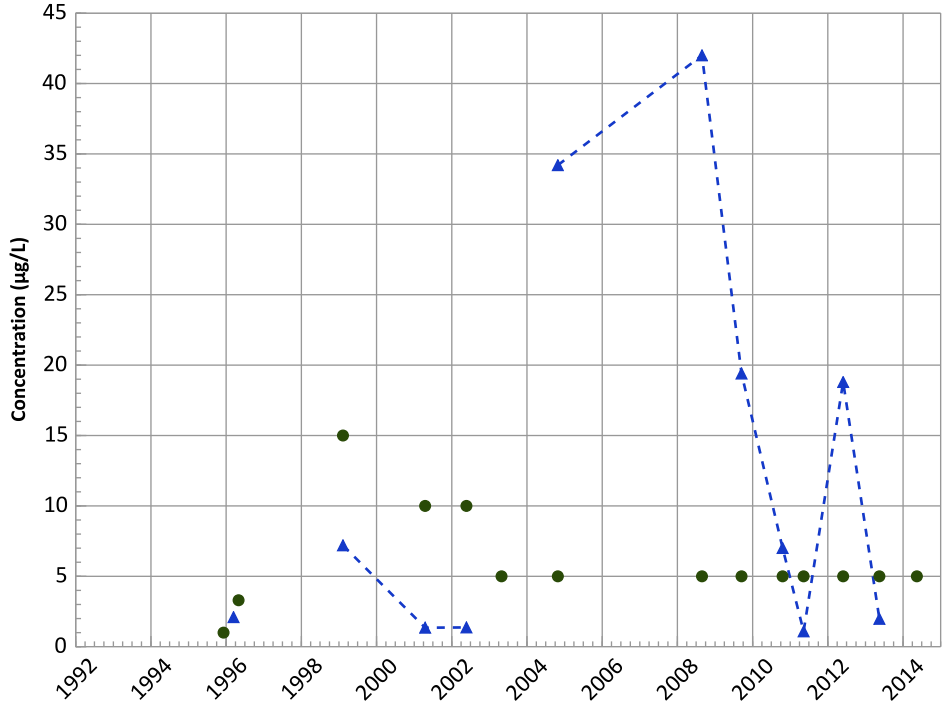


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

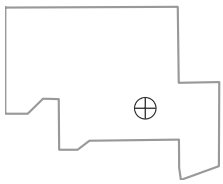
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

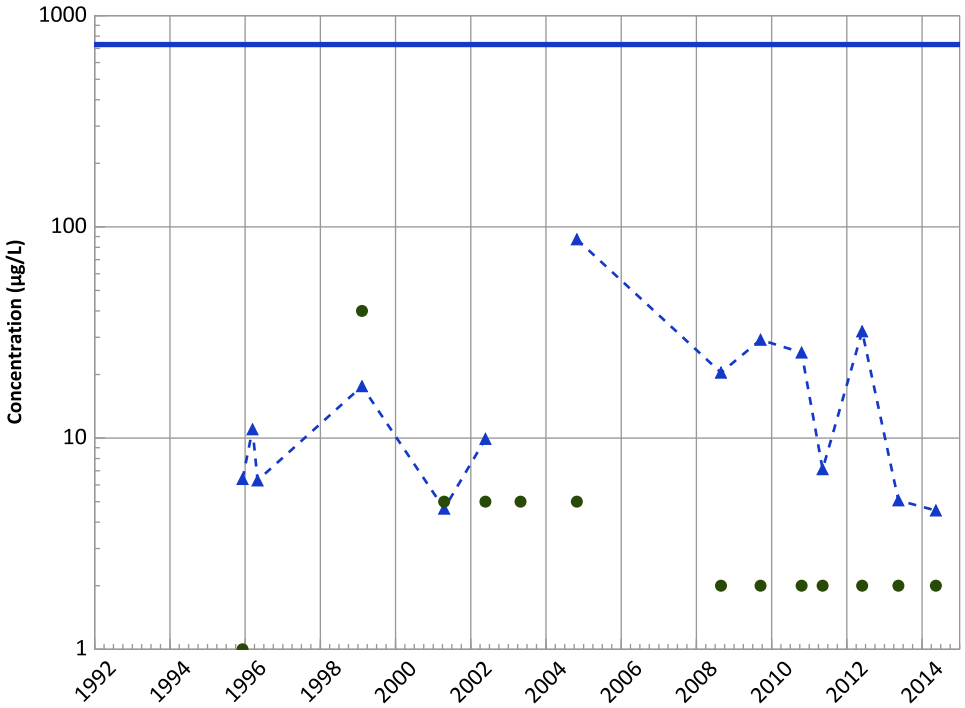
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

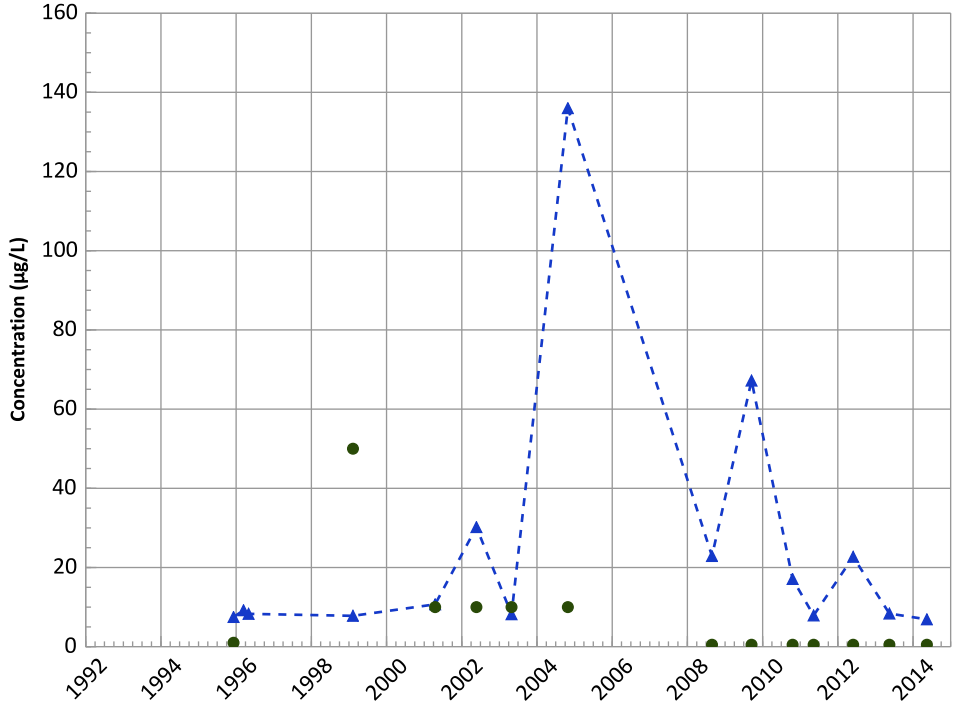


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

Molybdenum Trend



Concentration Trend

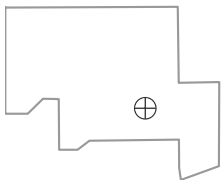
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

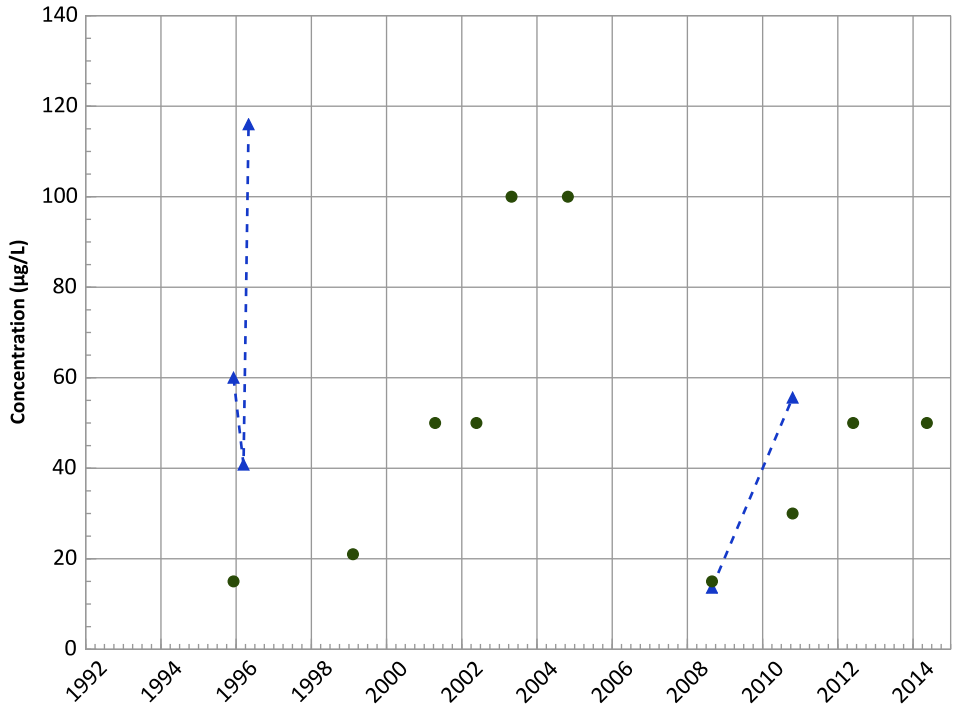
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

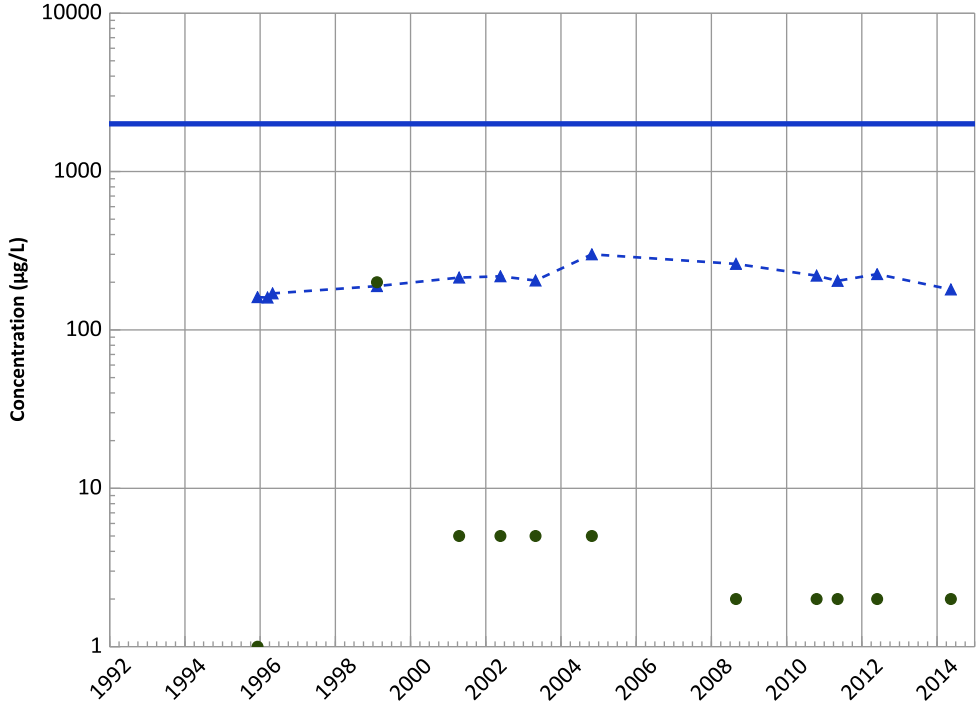


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

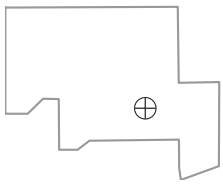
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

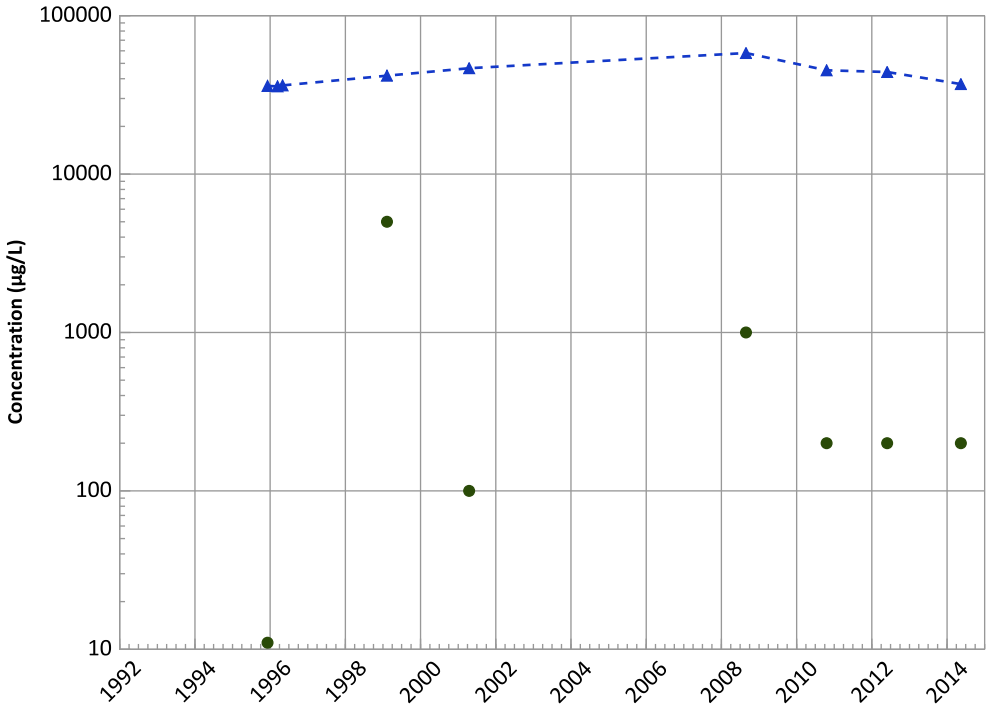
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

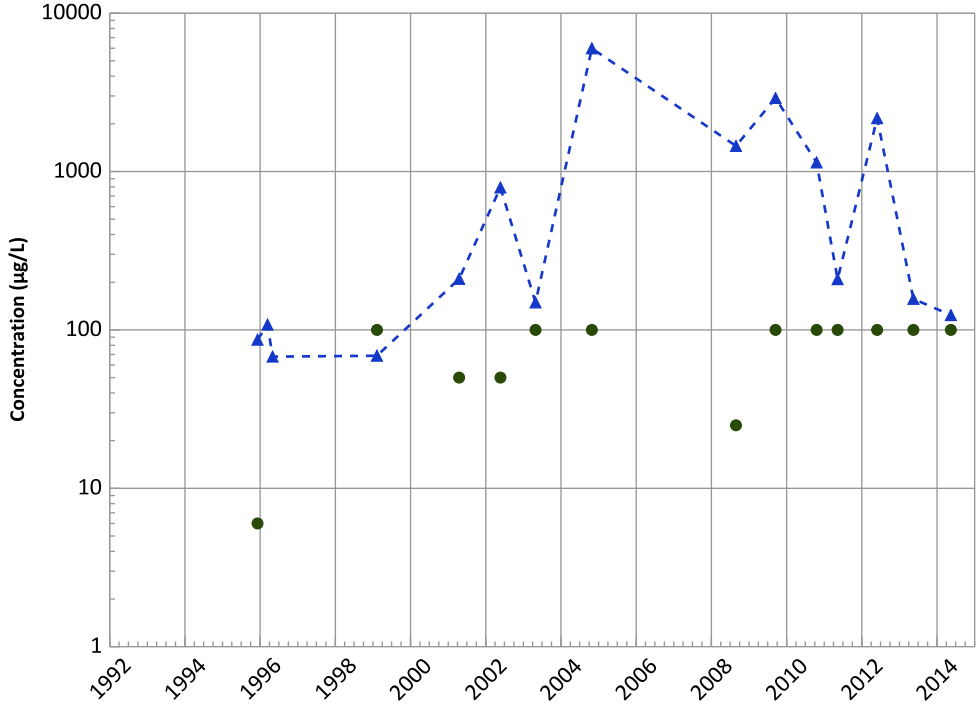


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

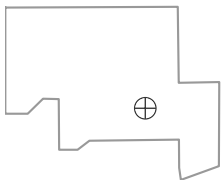
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

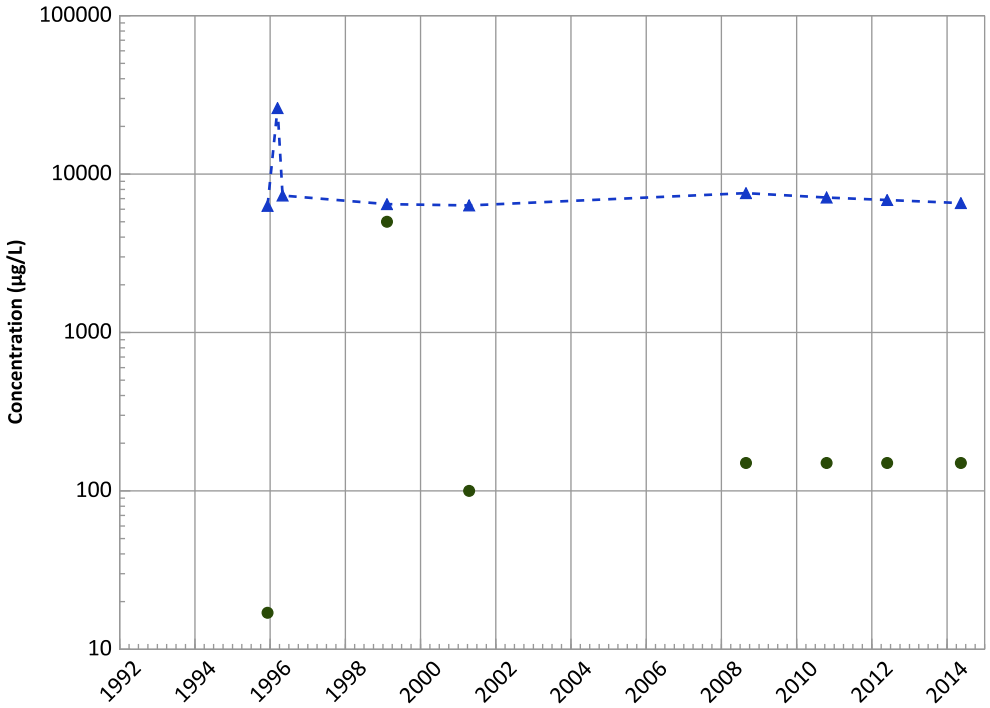
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

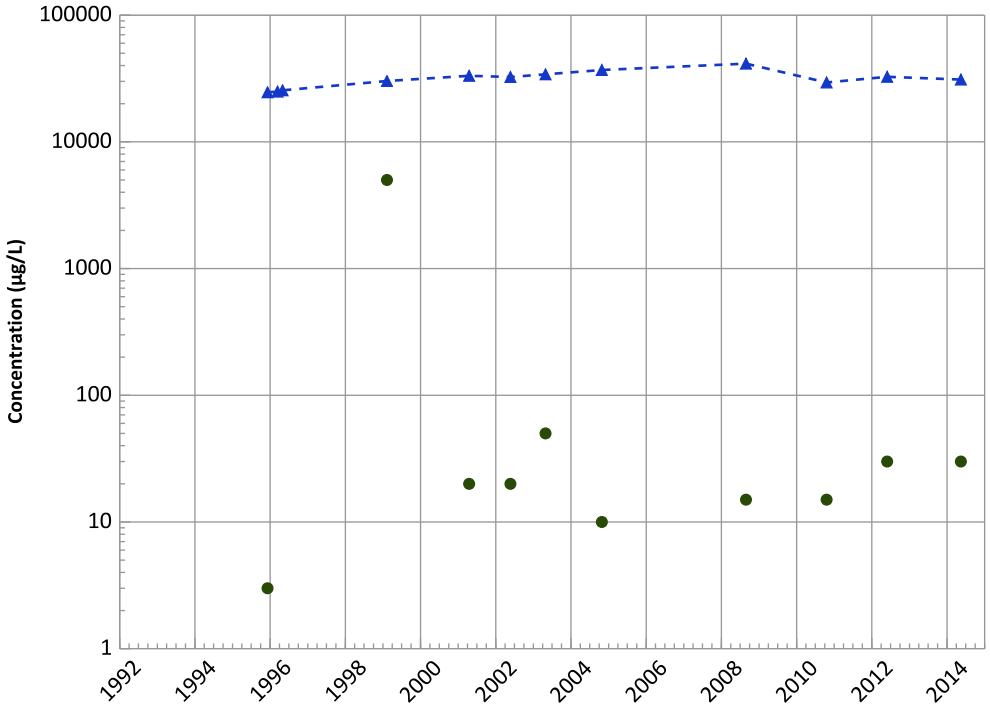


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Magnesium Trend



Concentration Trend

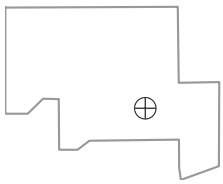
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

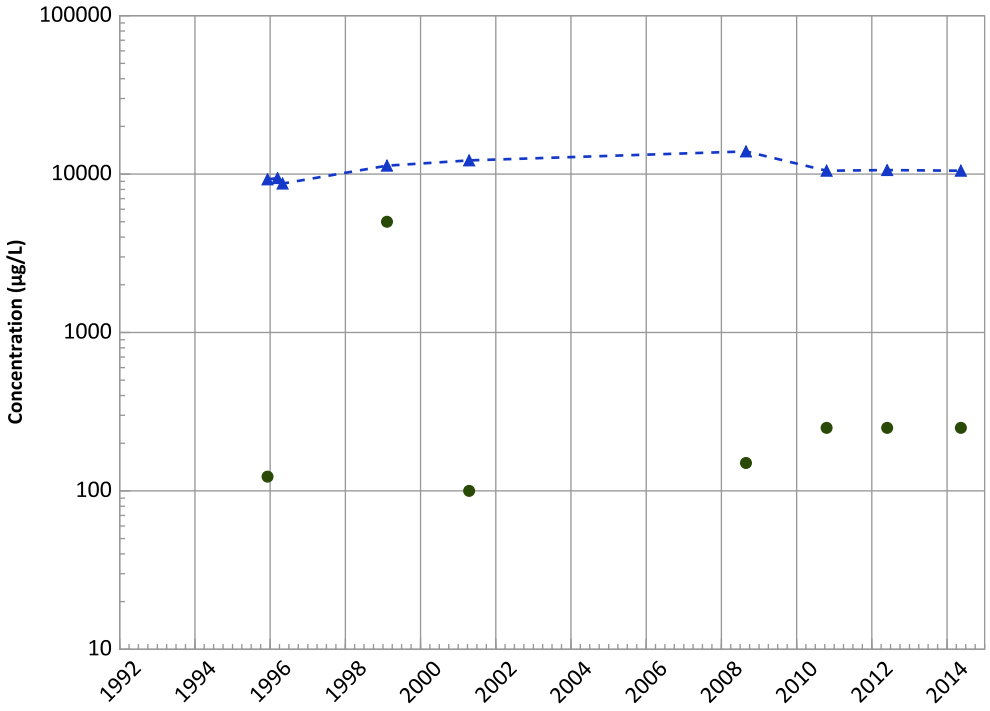
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

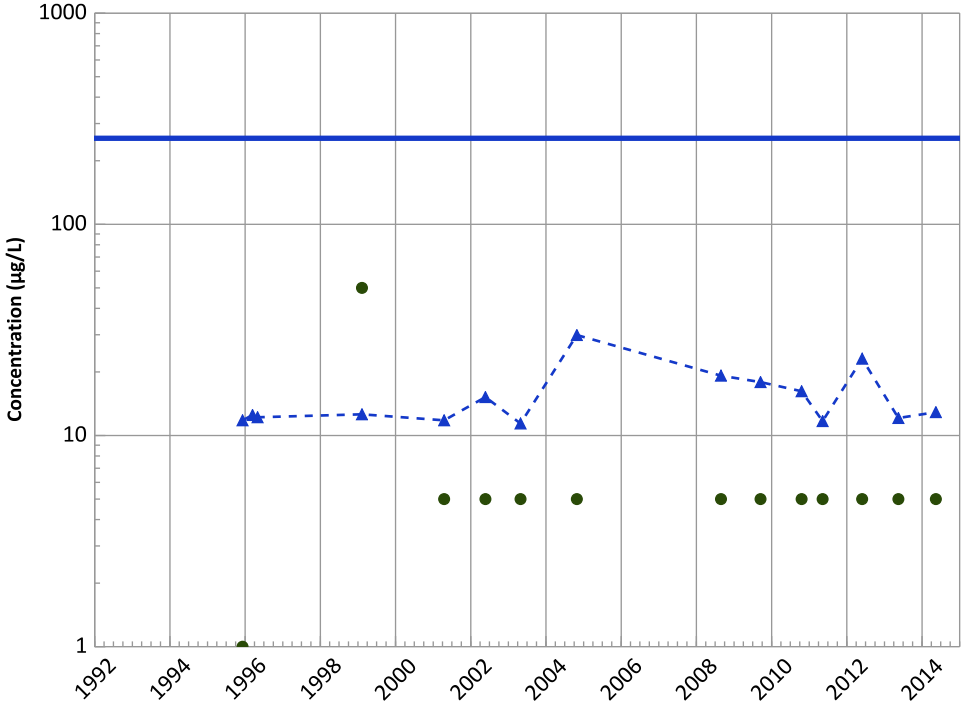


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Vanadium Trend



Concentration Trend

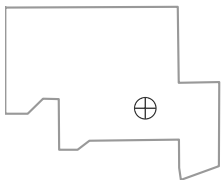
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

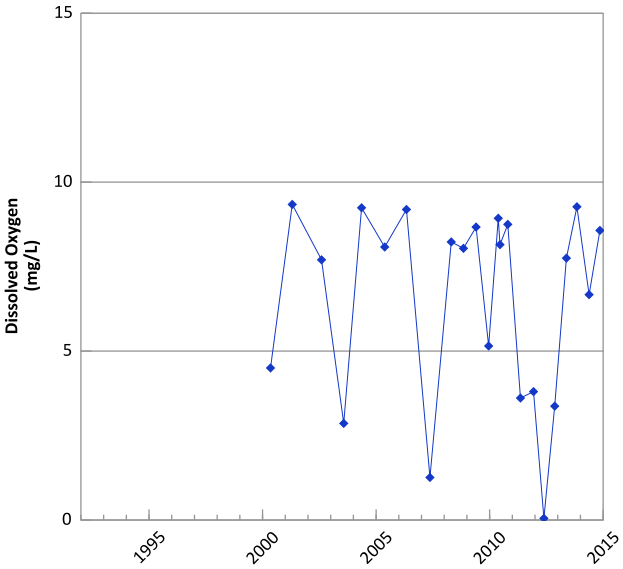
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/07/1995 to 05/15/2014
Analysis Date: 03/19/2015

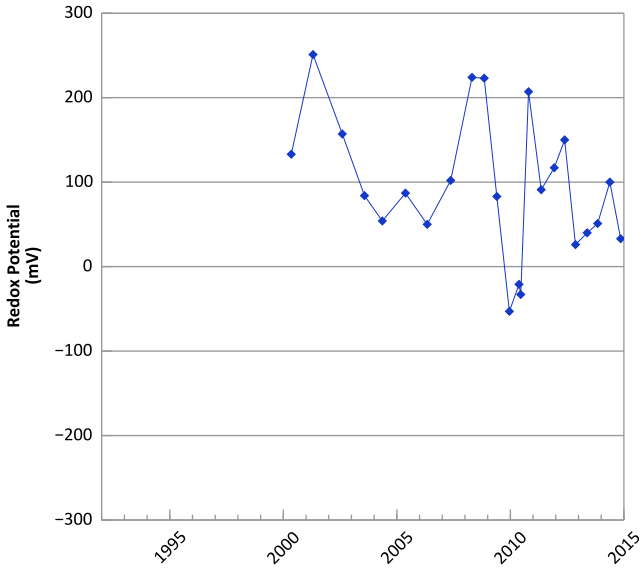
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

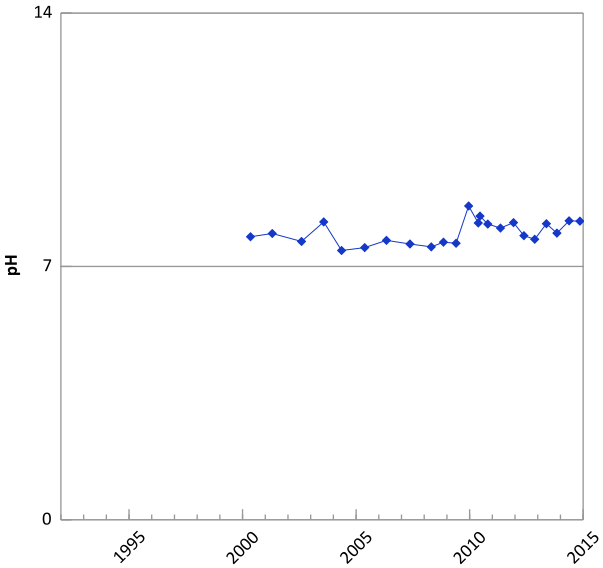
Well Location

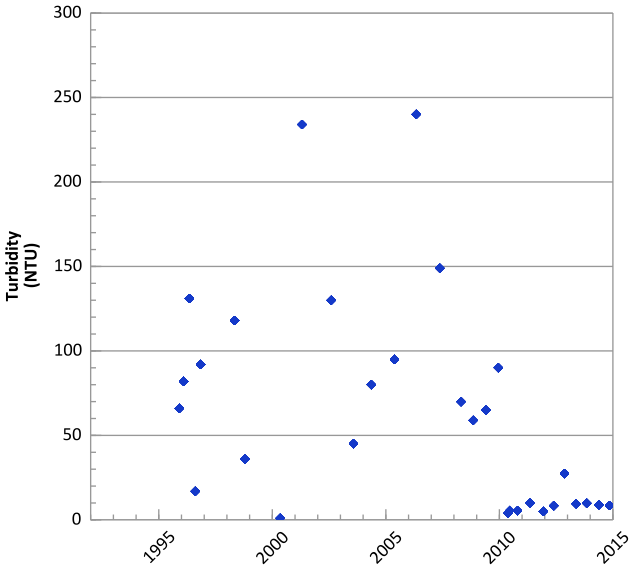


PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



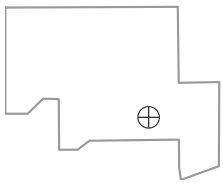






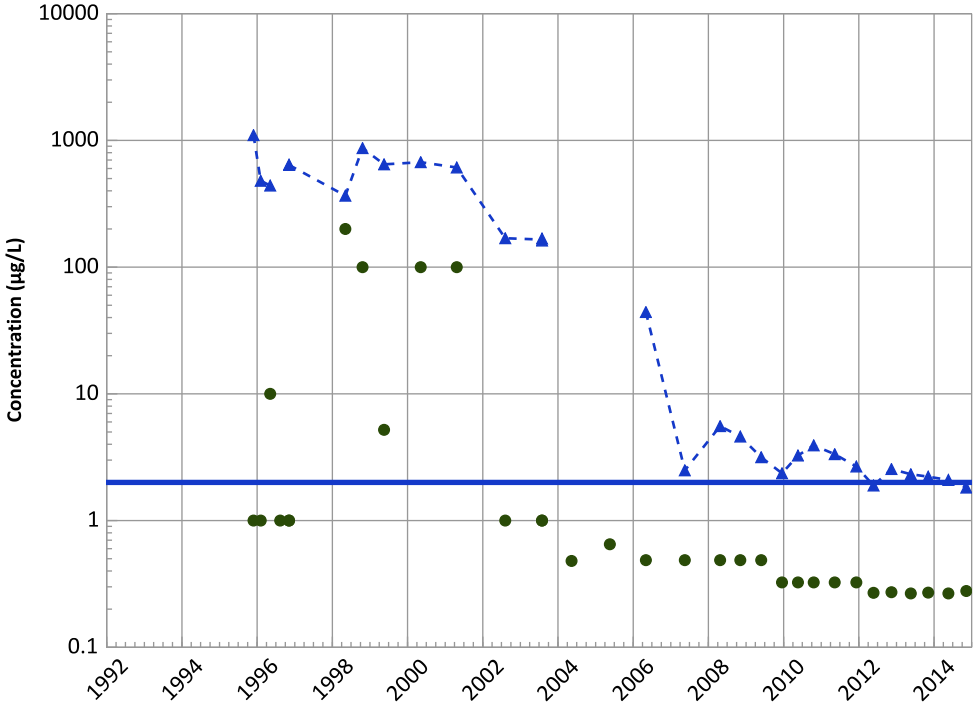
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

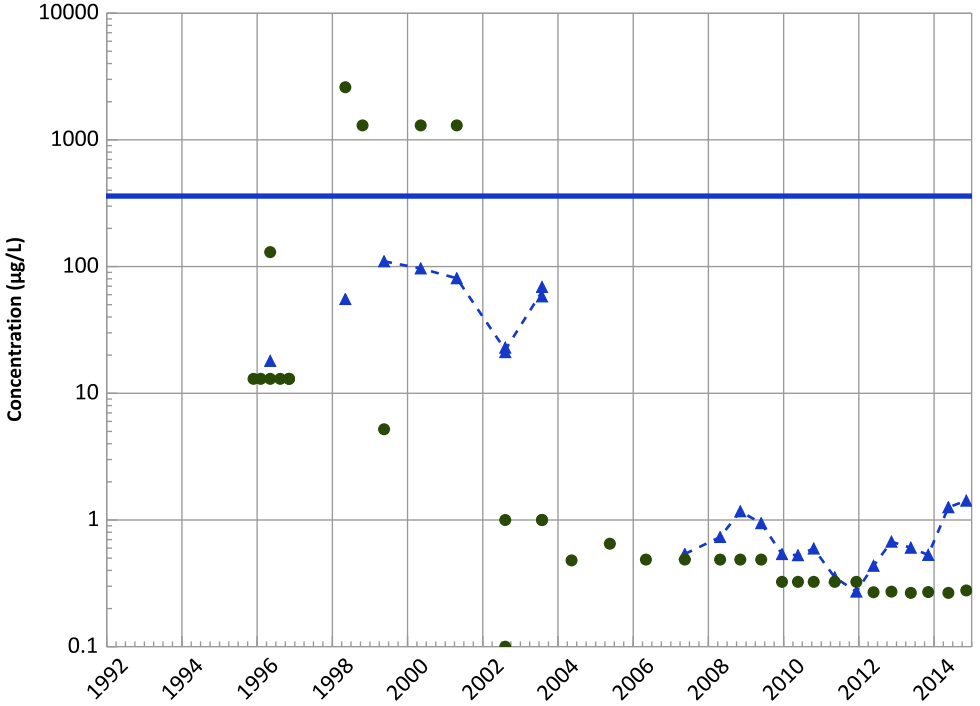


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

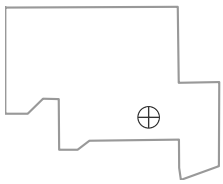
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

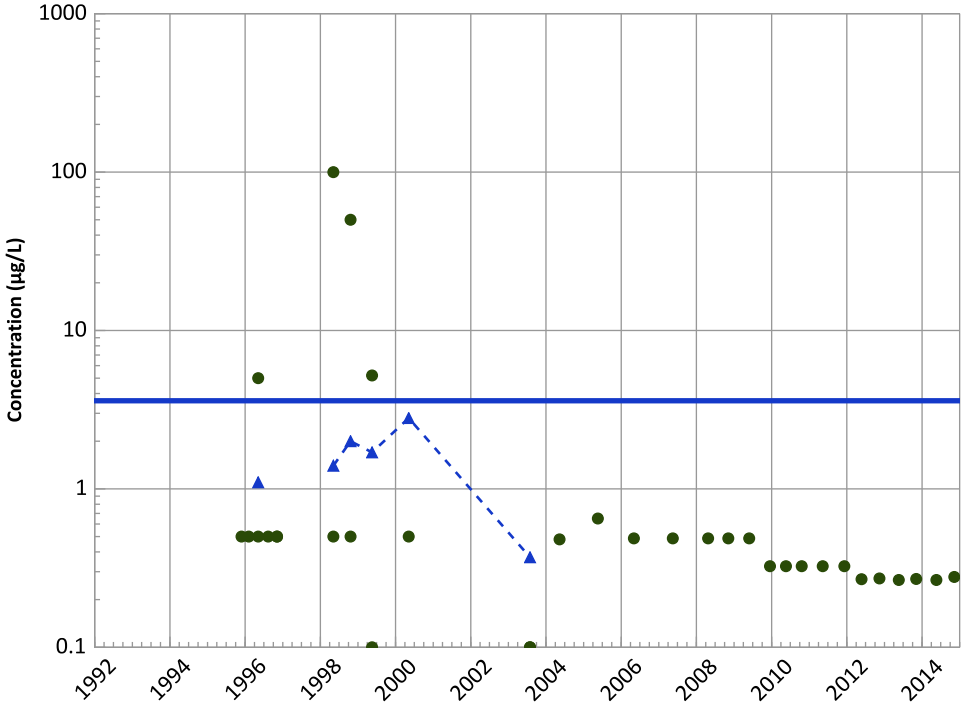
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

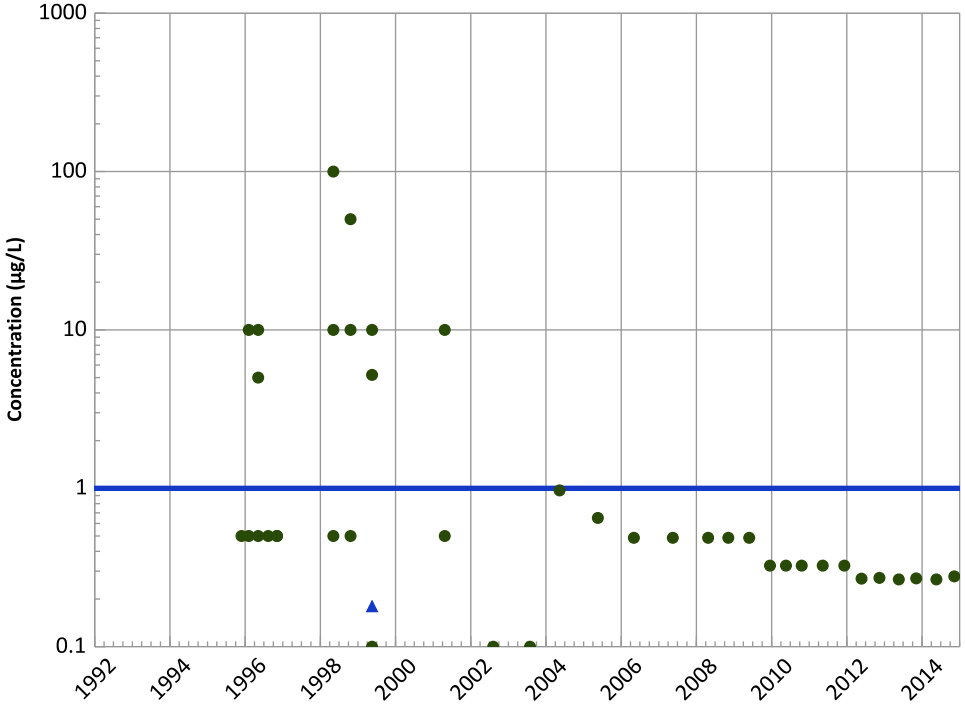


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Stable

2,4-Dinitrotoluene Trend



Concentration Trend

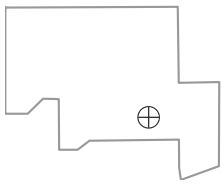
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

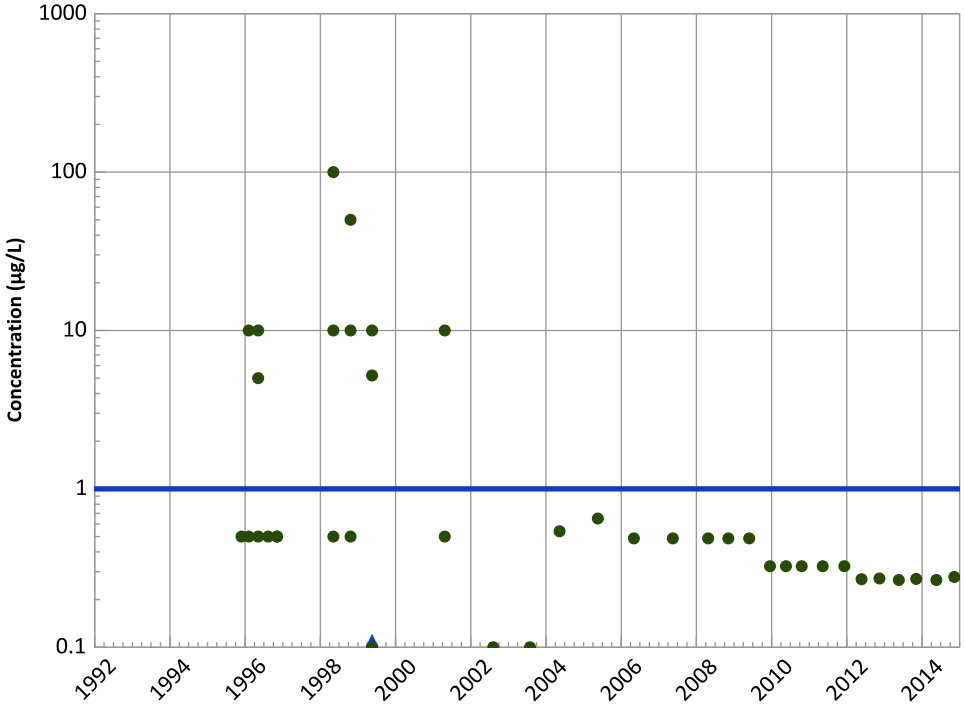
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

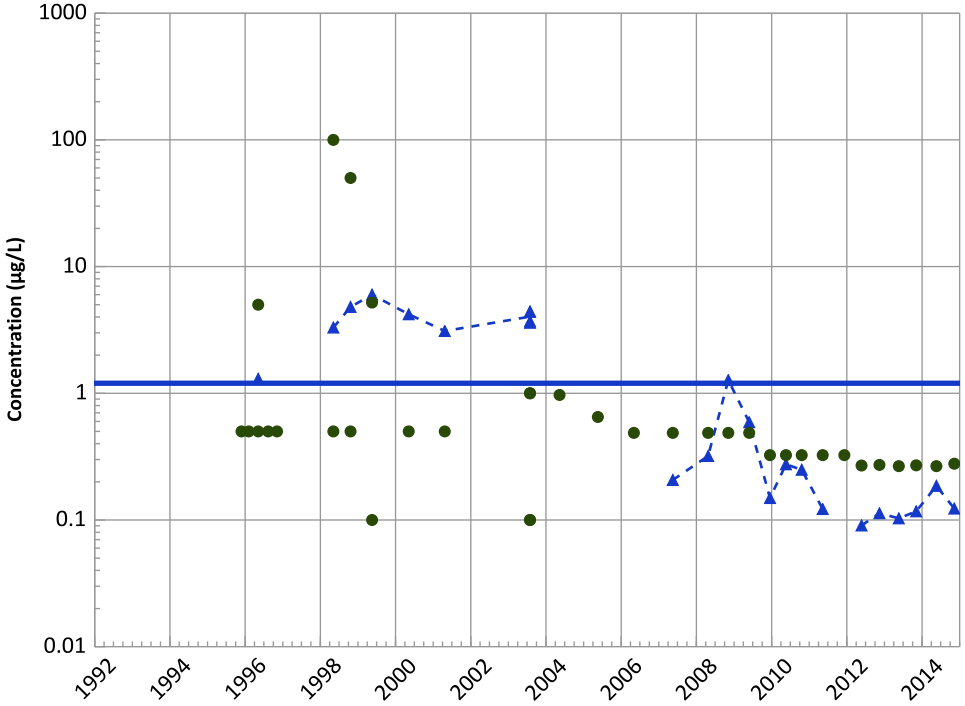


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

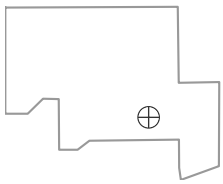
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

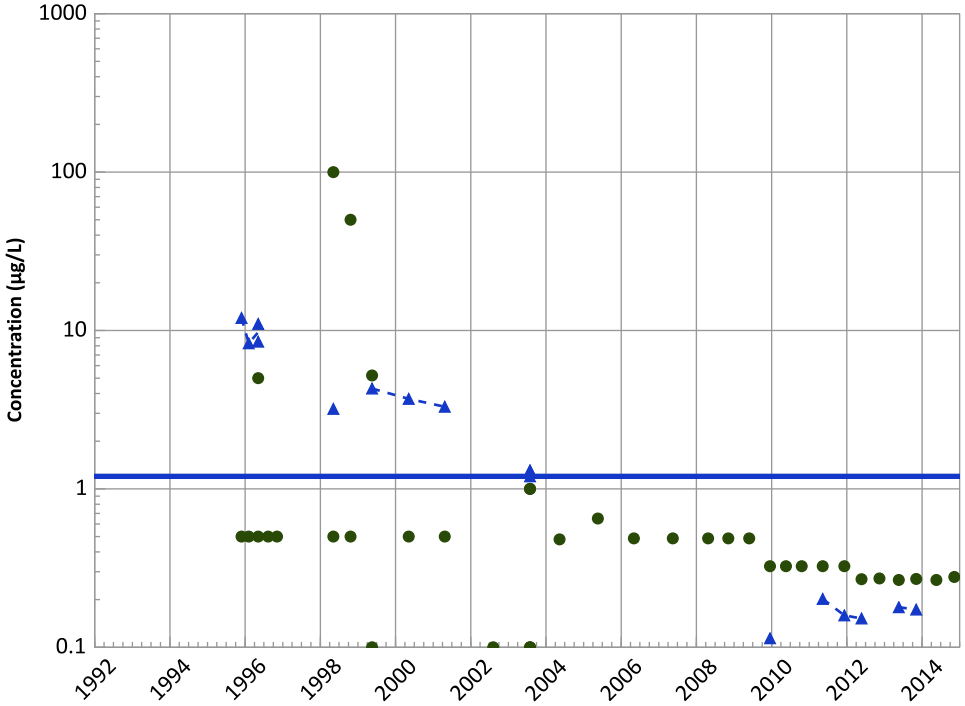
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

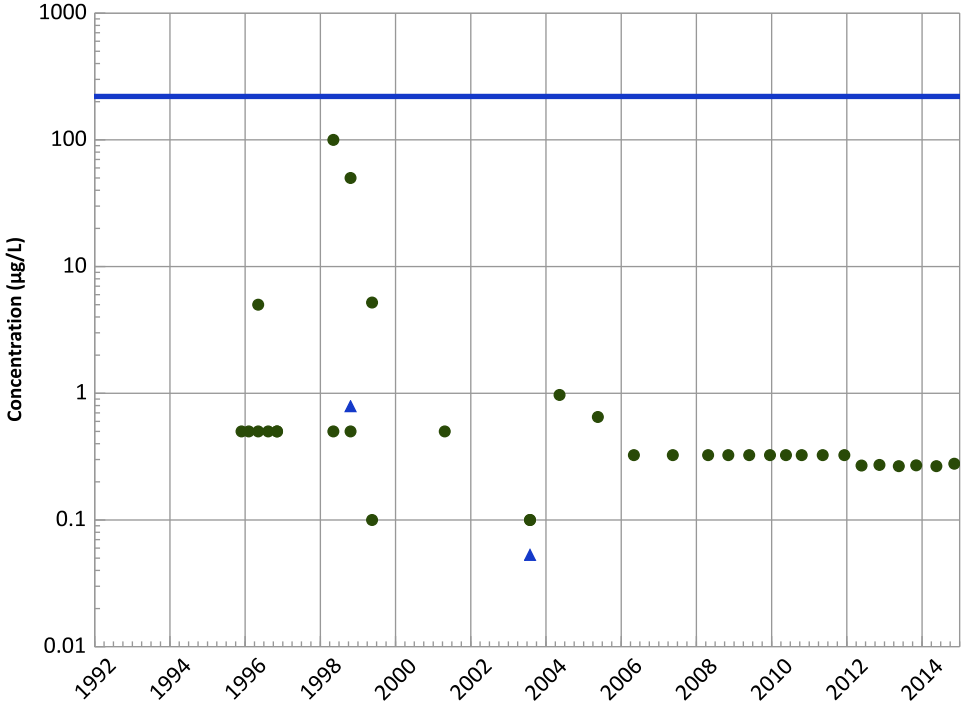


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

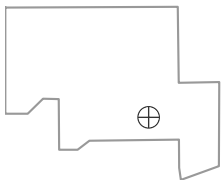
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

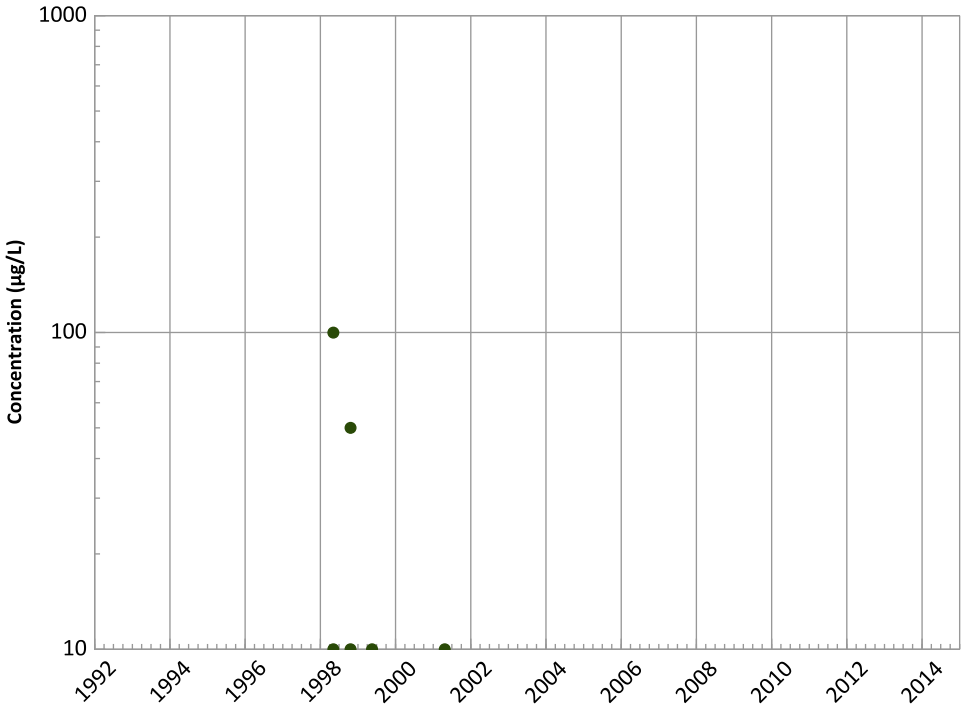
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

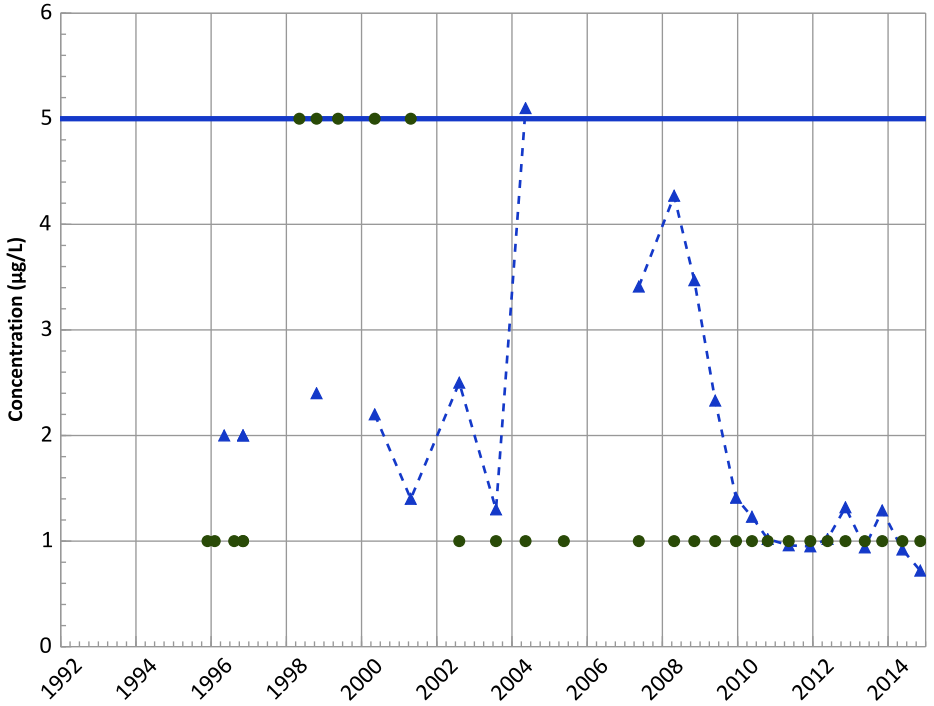


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

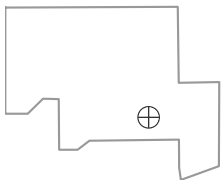
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

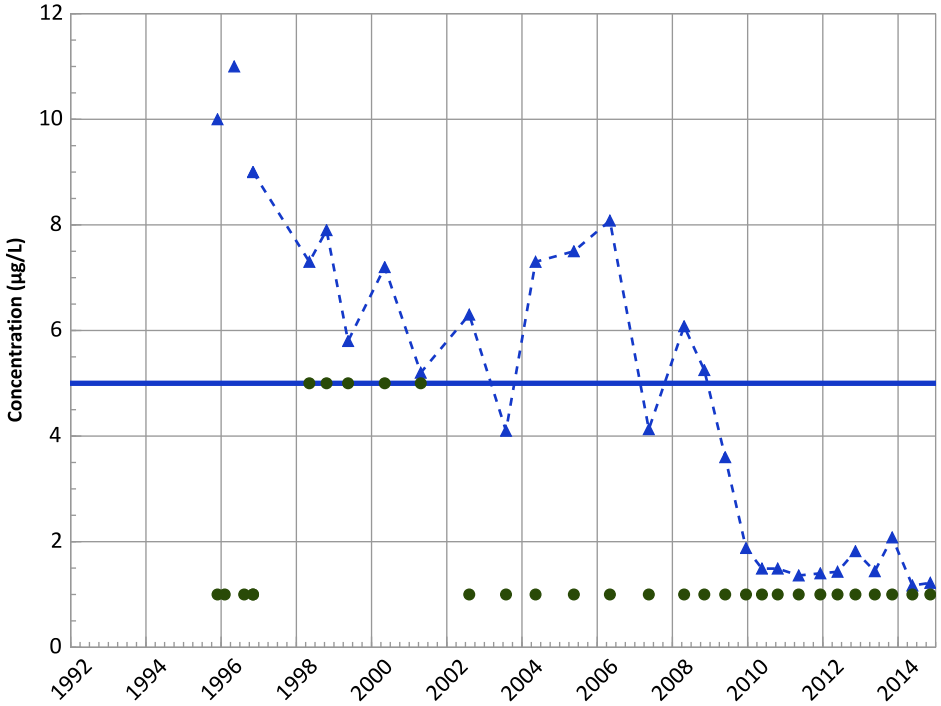
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

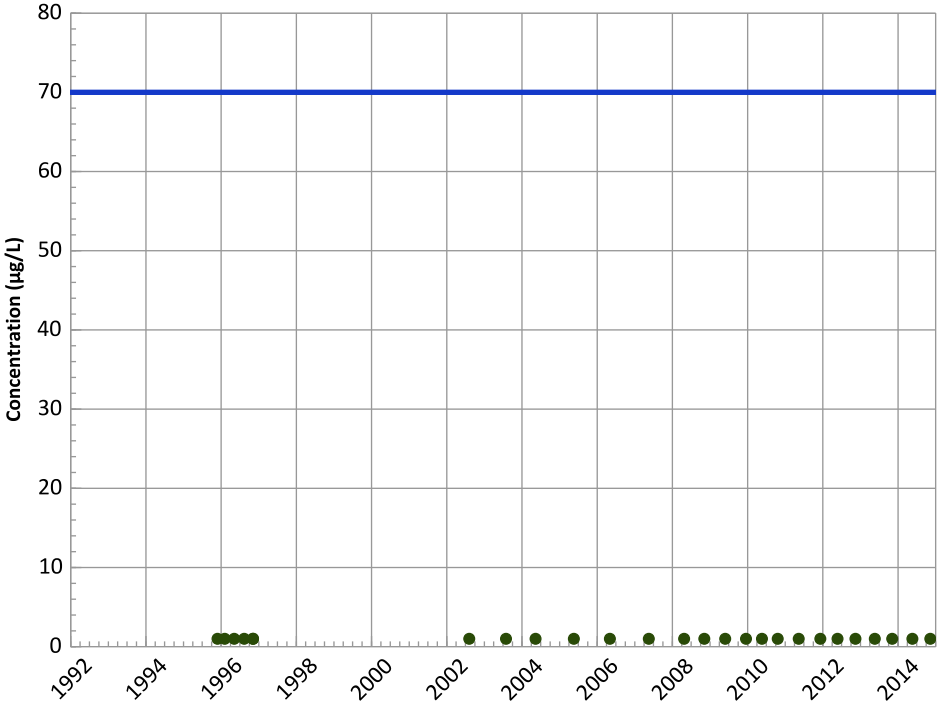


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

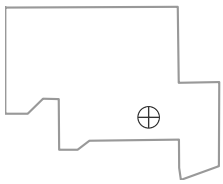
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

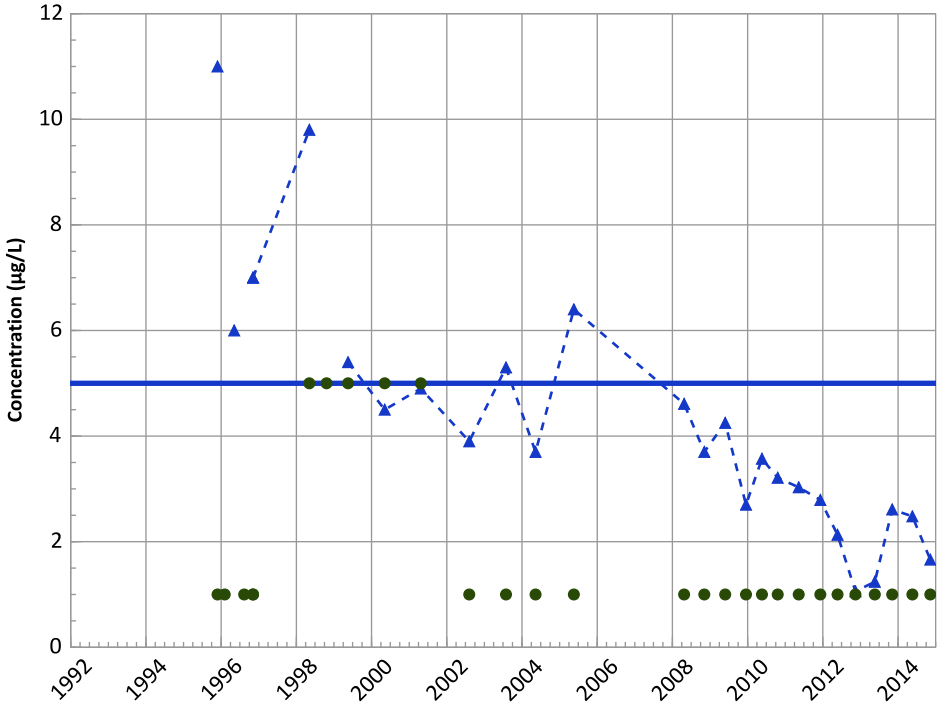
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

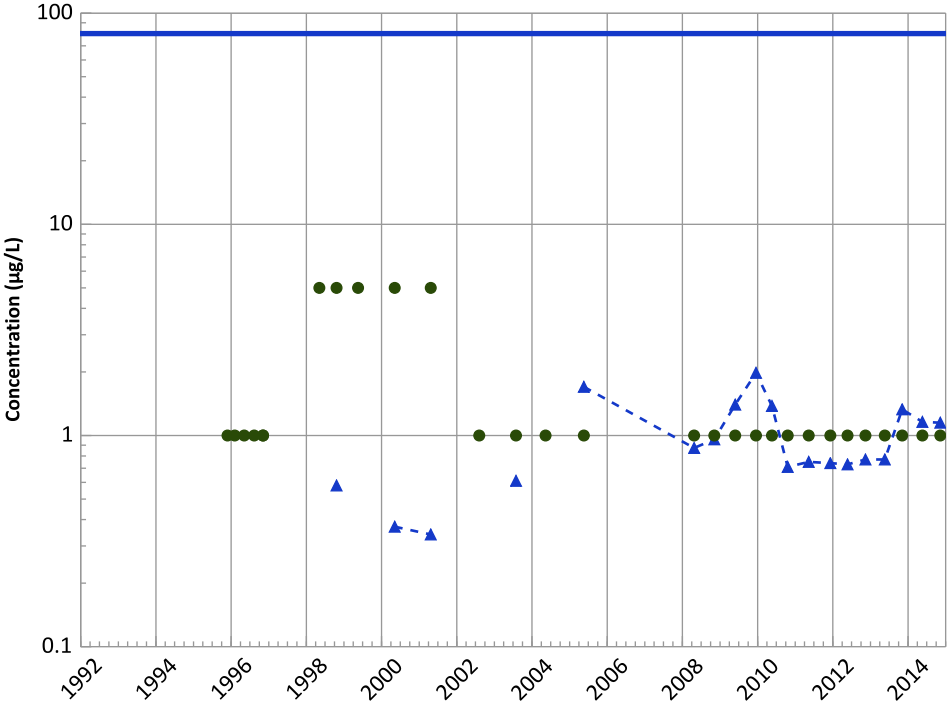


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chloroform Trend



Concentration Trend

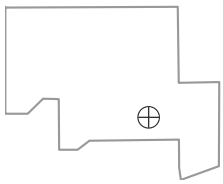
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

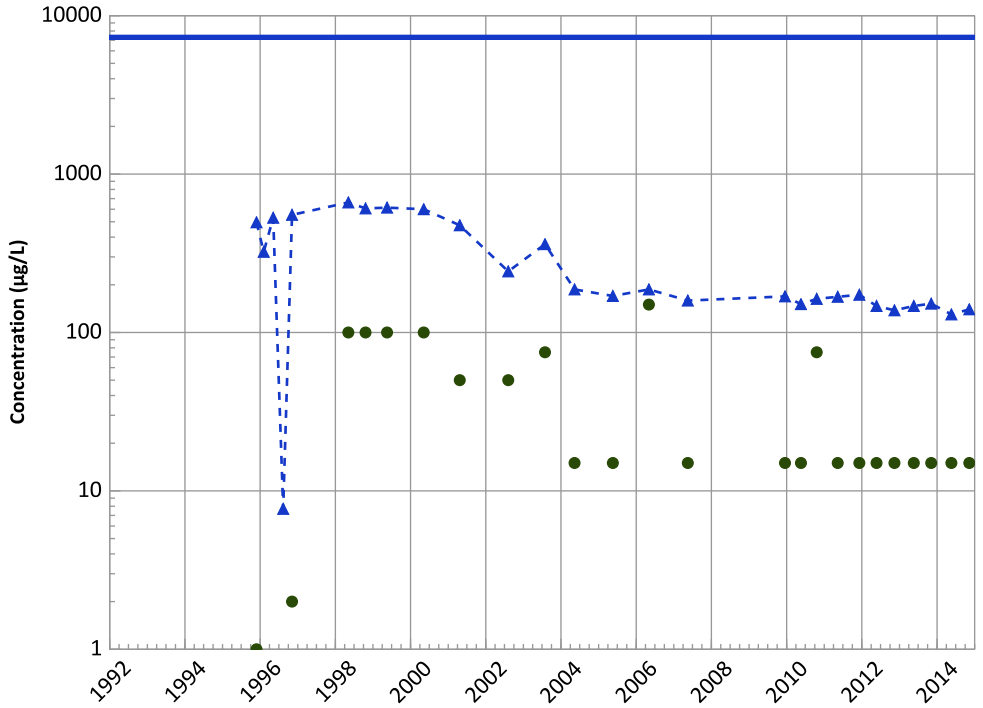
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

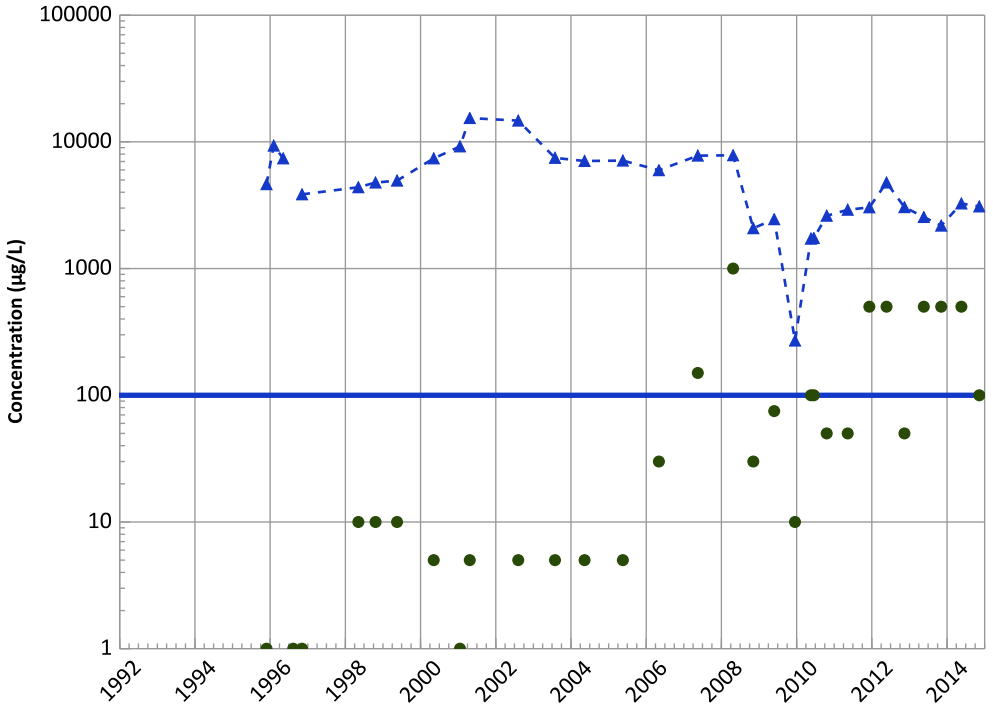


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

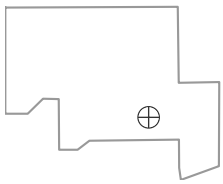
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

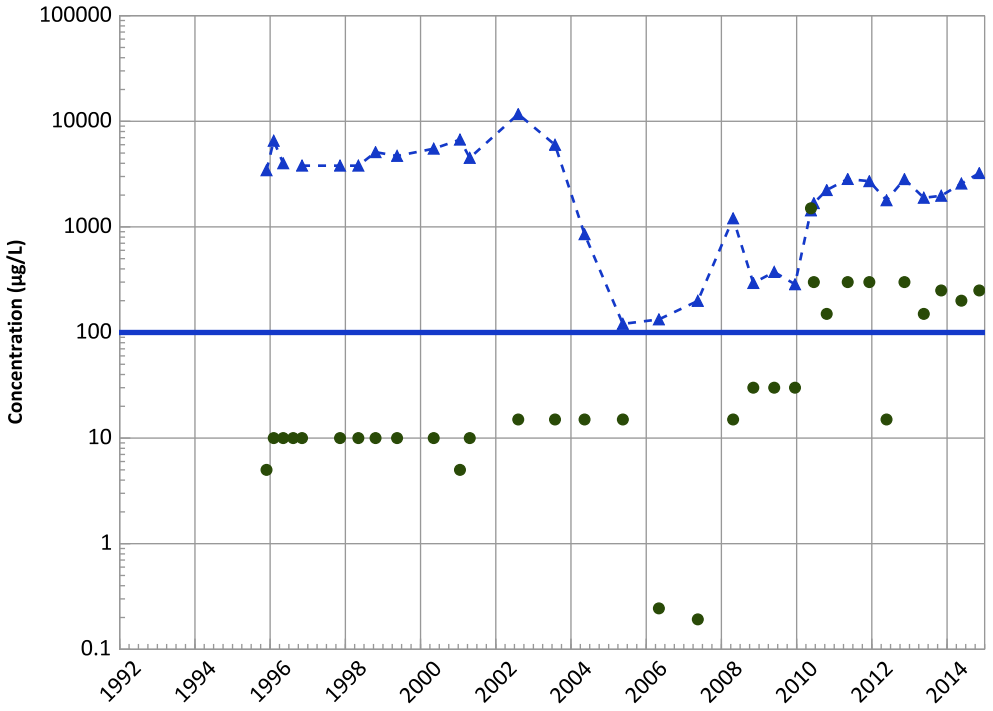
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

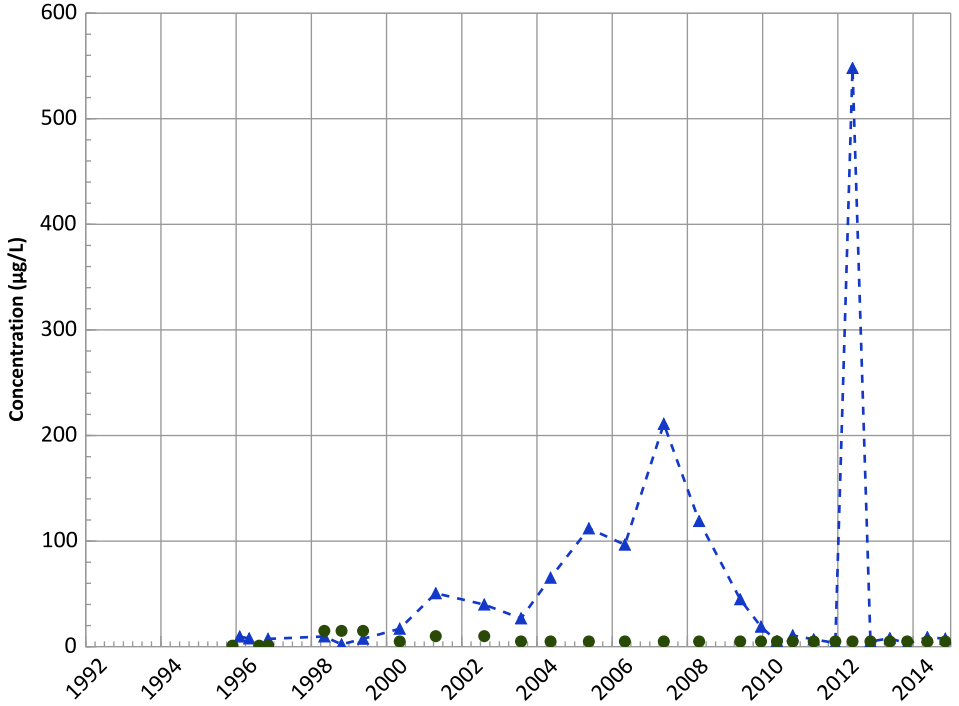


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Manganese Trend



Concentration Trend

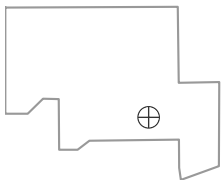
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

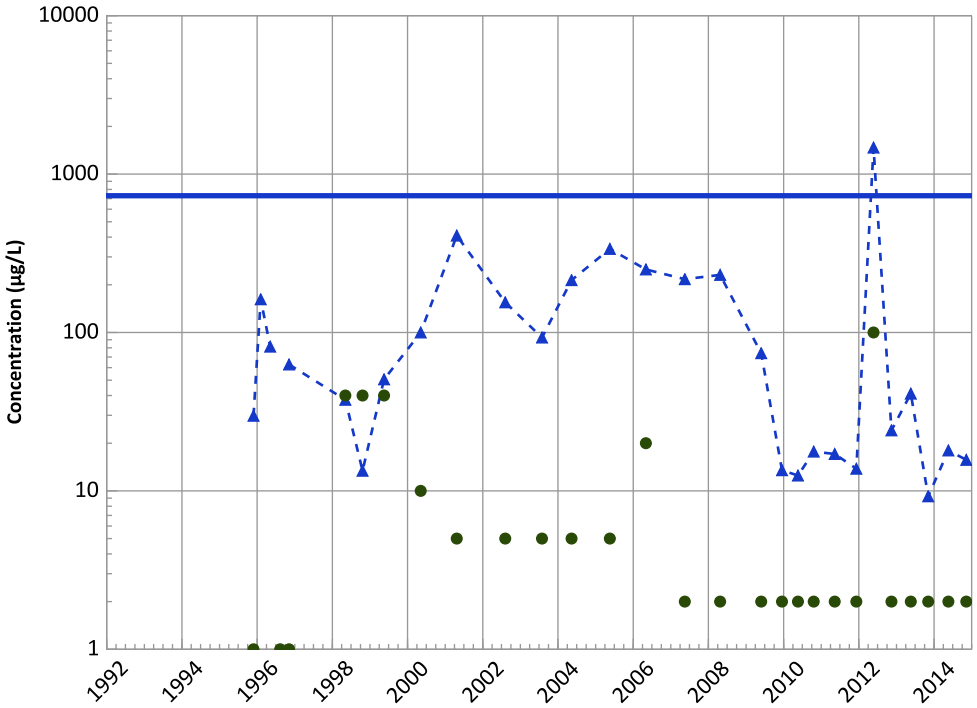
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

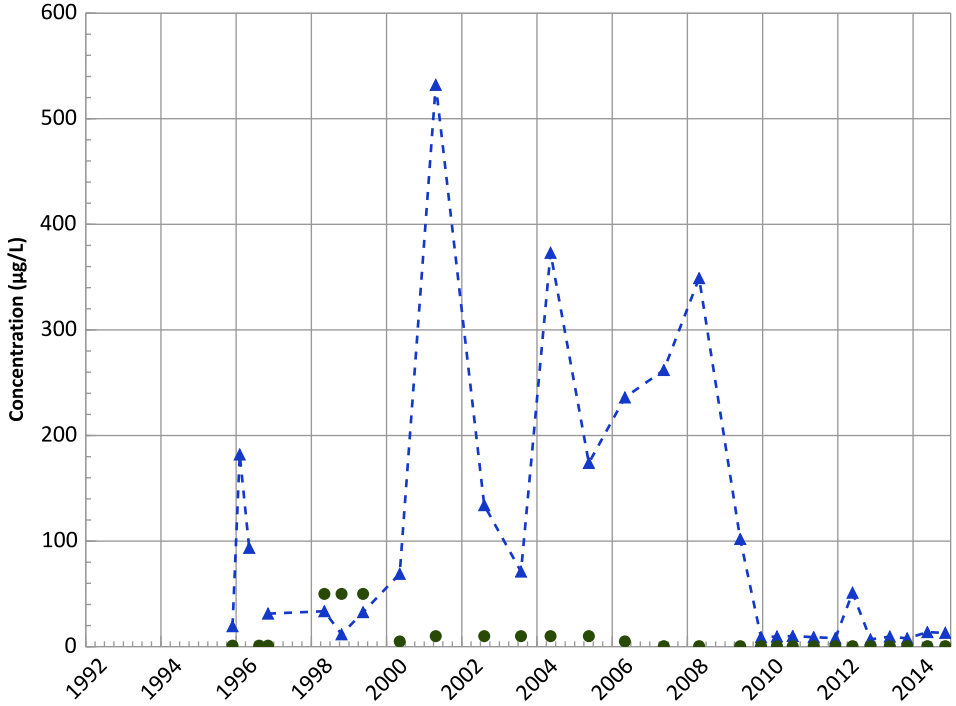


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Decreasing

Molybdenum Trend



Concentration Trend

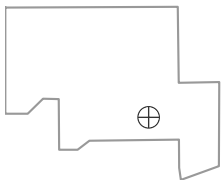
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

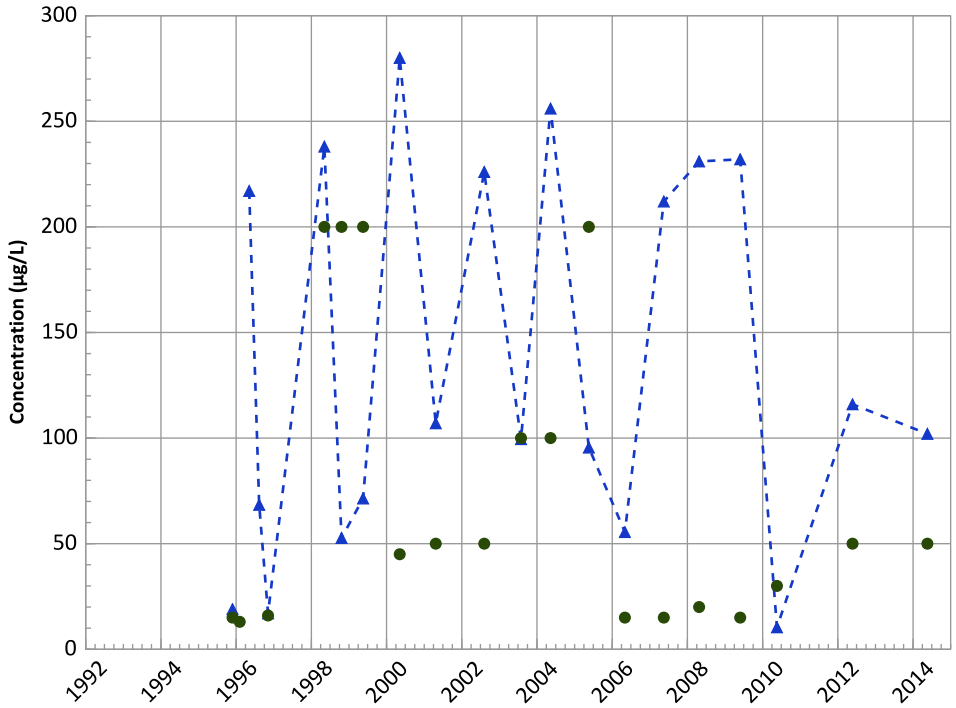
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

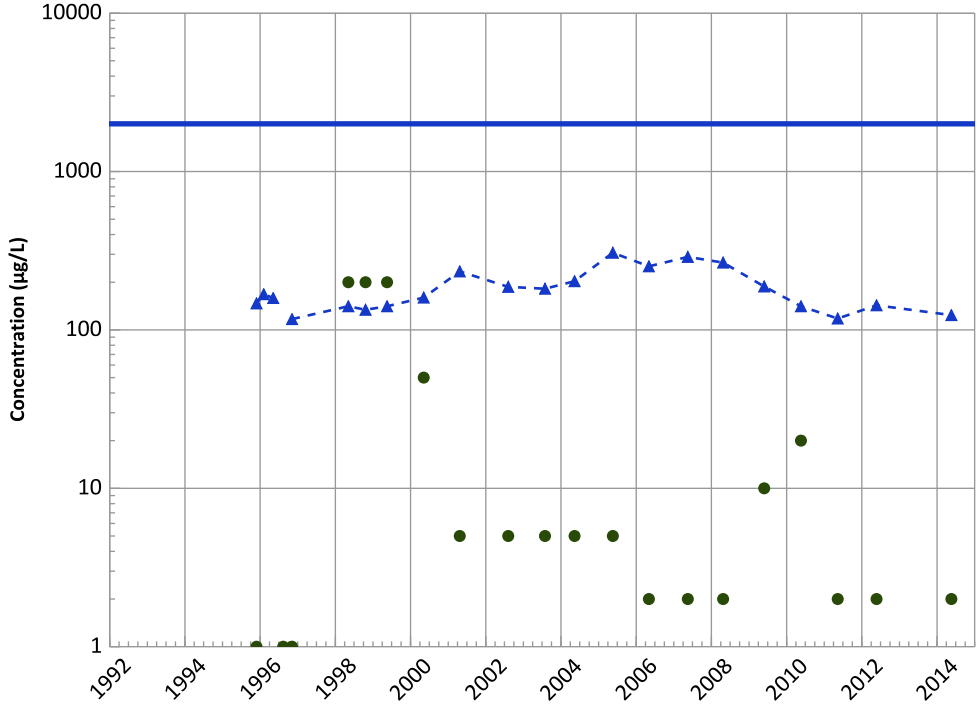


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

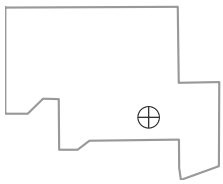
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

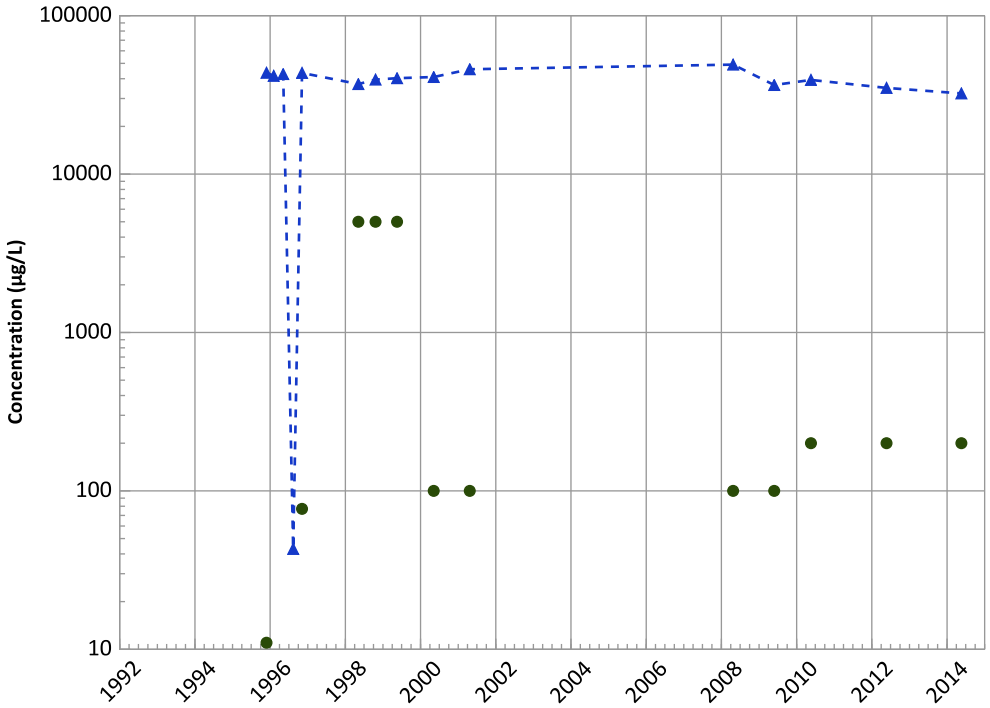
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

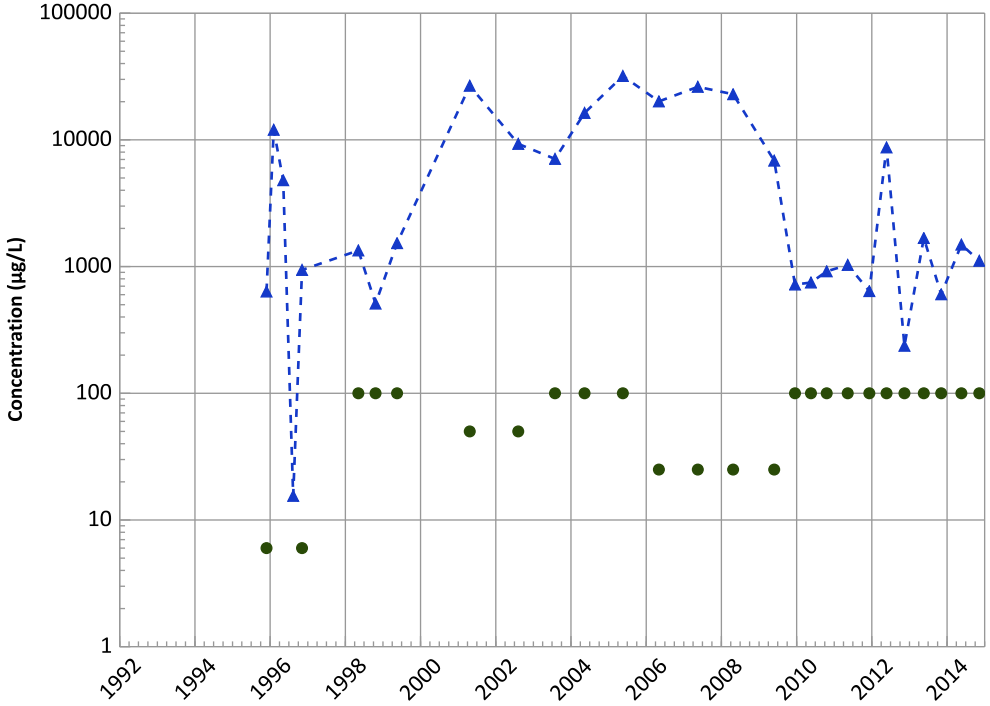


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

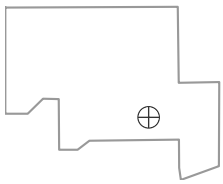
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

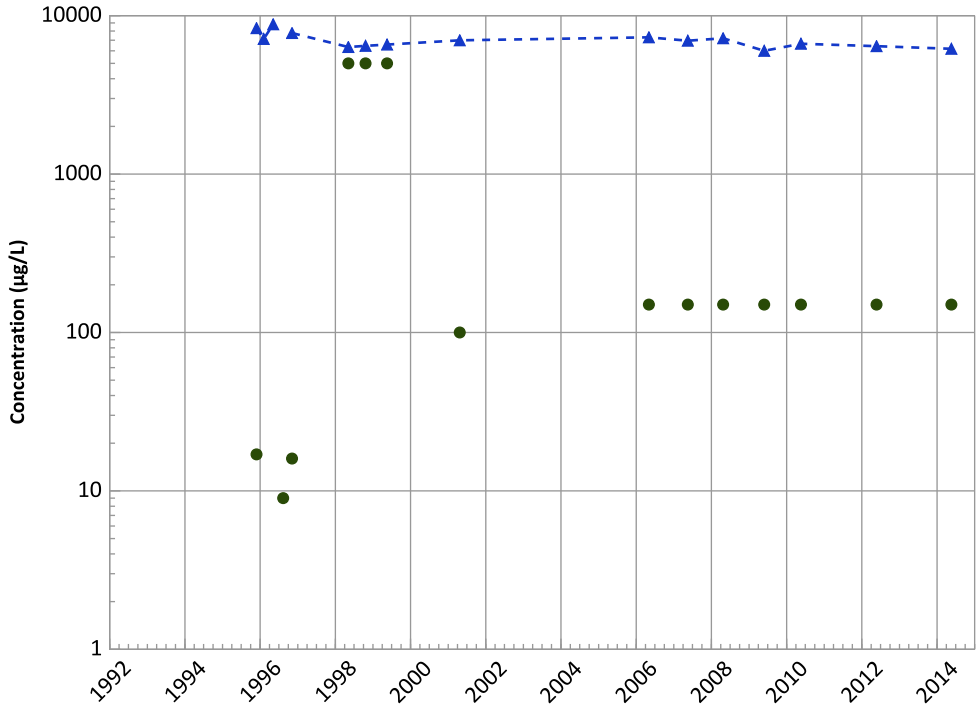
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

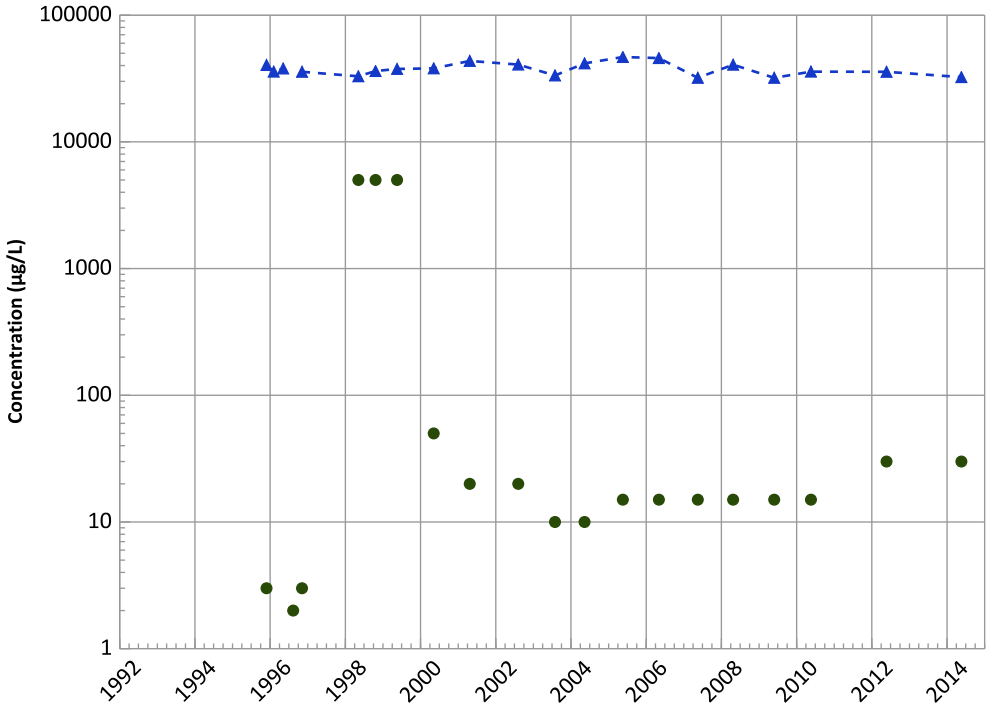


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

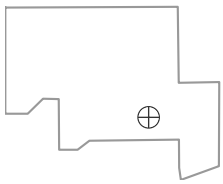
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

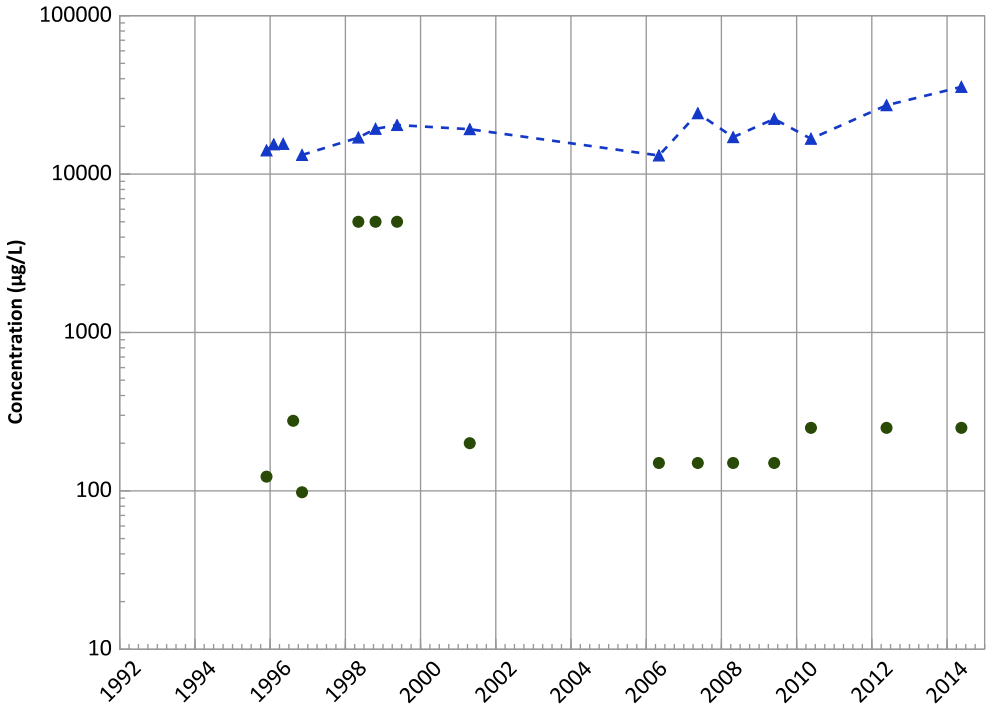
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1010 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

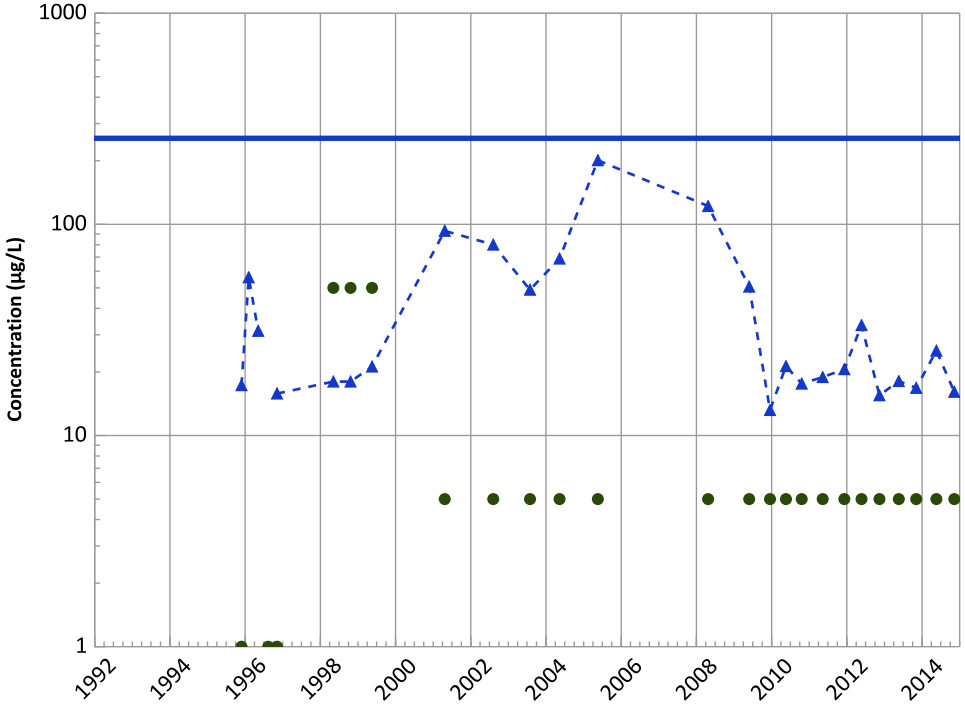


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Vanadium Trend



Concentration Trend

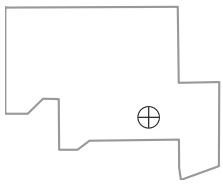
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

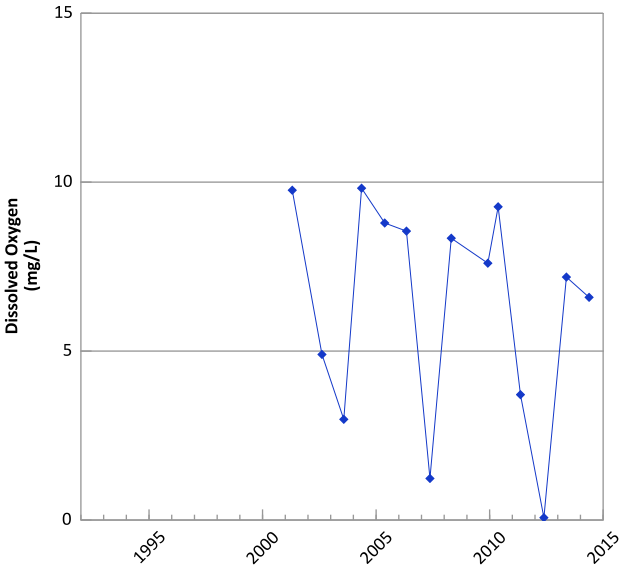
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 11/10/2014
Analysis Date: 03/19/2015

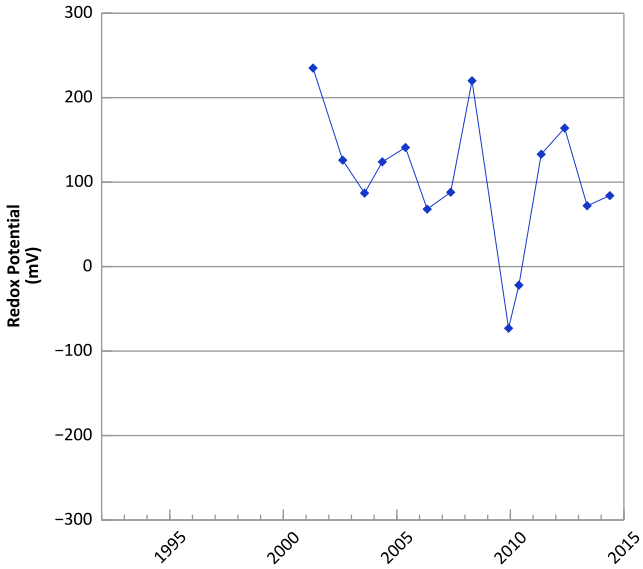
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

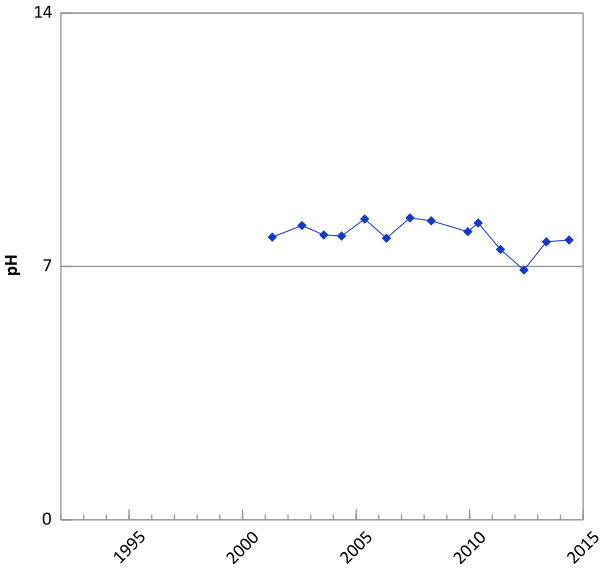
Well Location

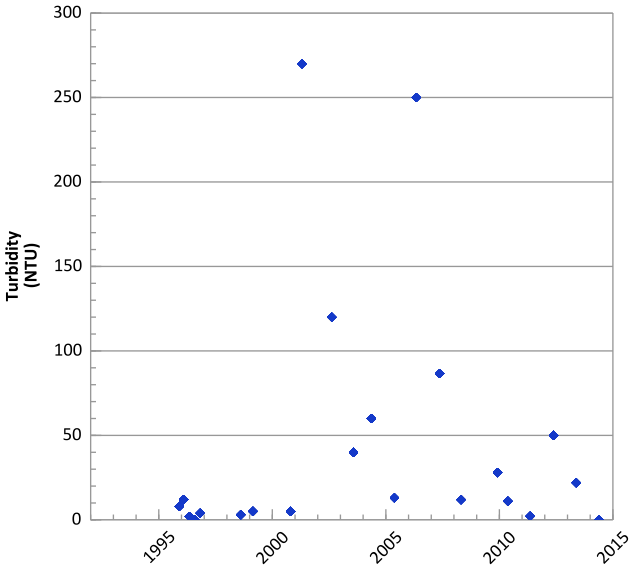


PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



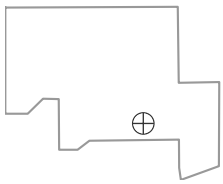






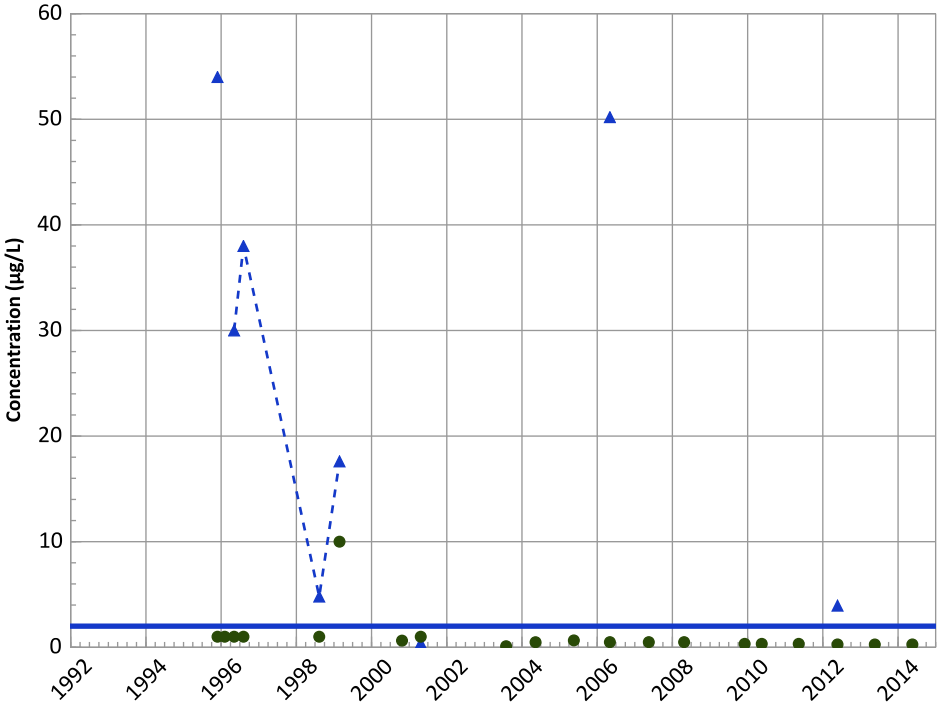
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

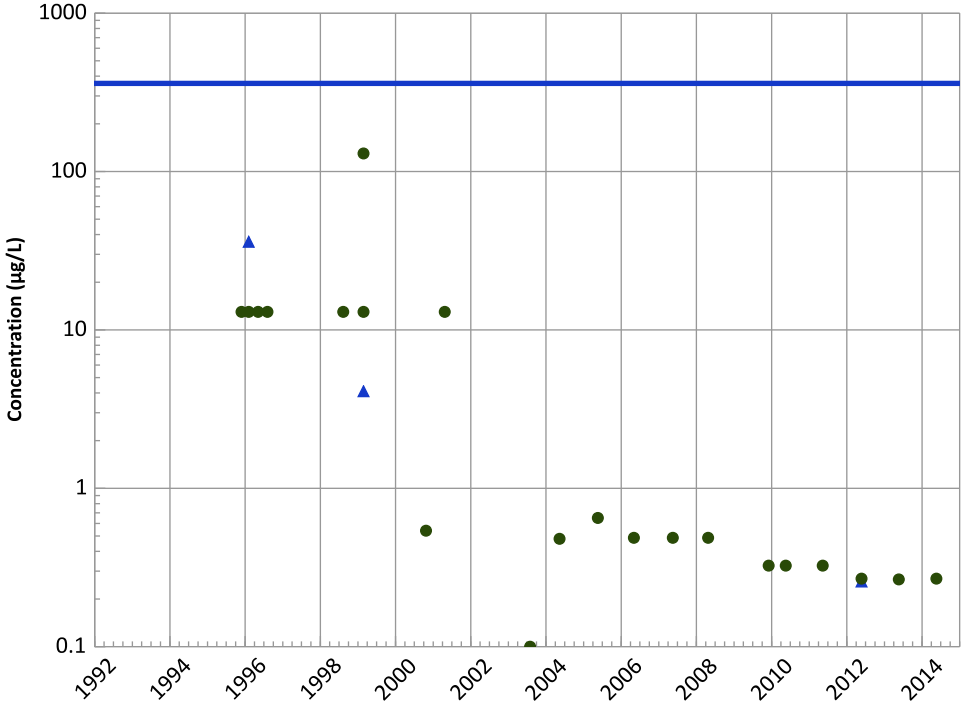


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

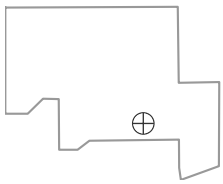
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

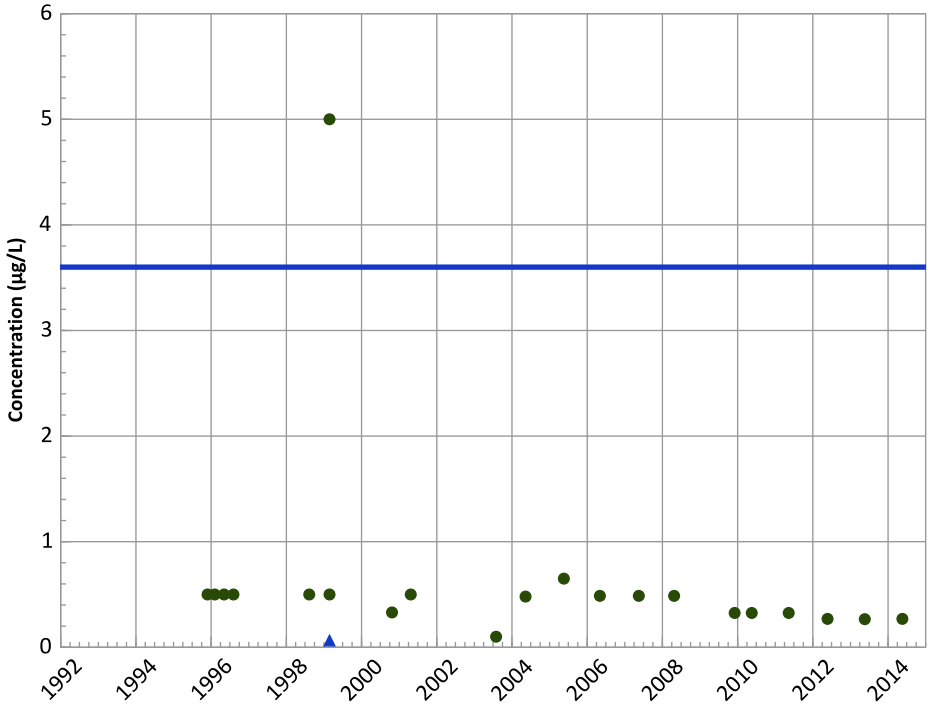
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

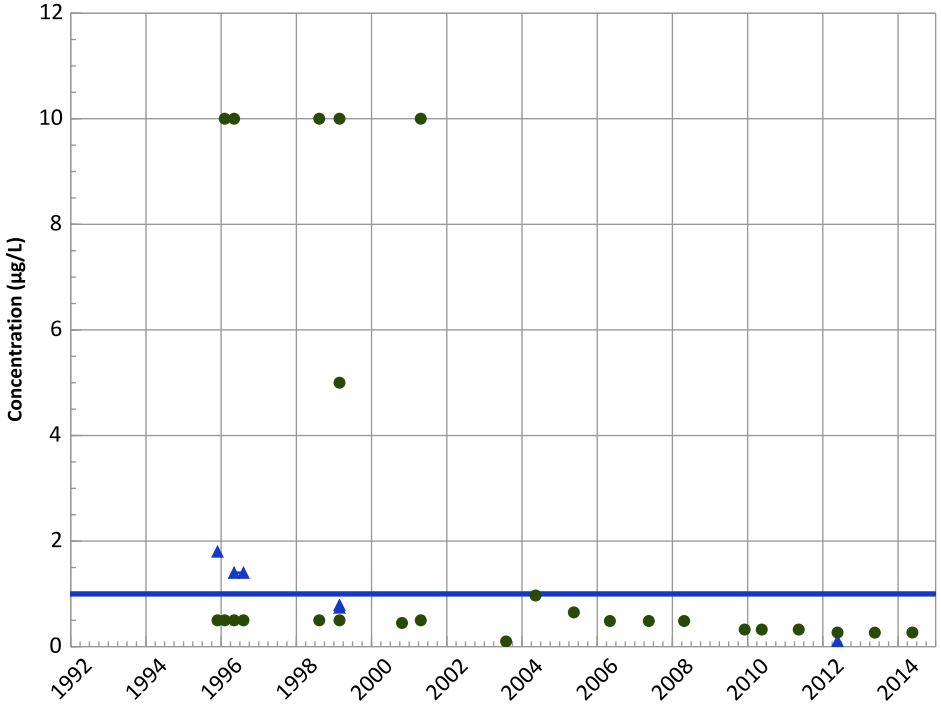


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

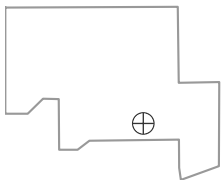
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

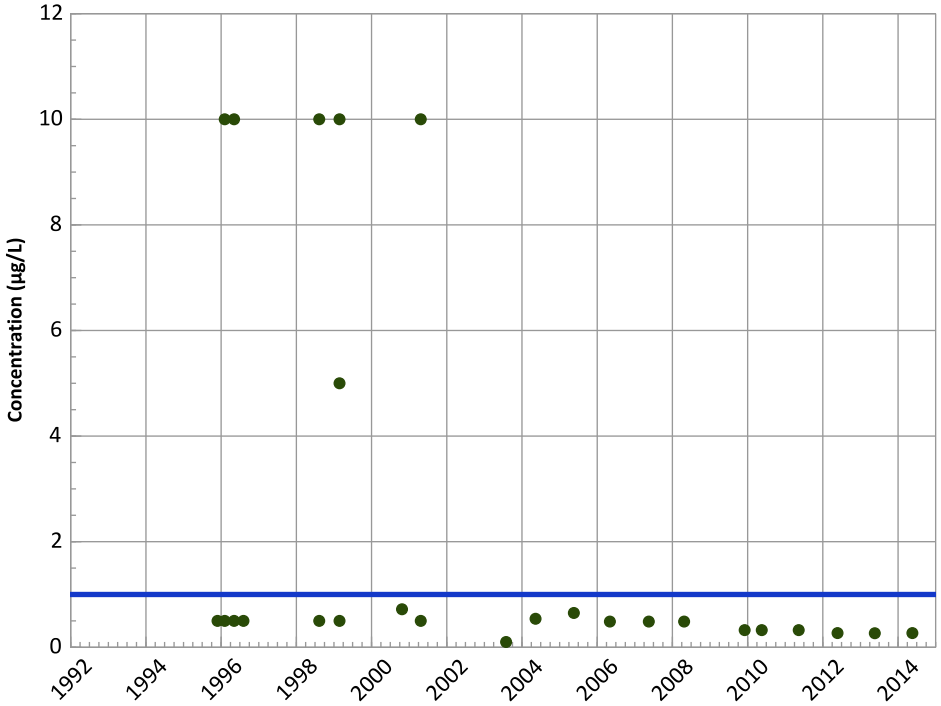
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

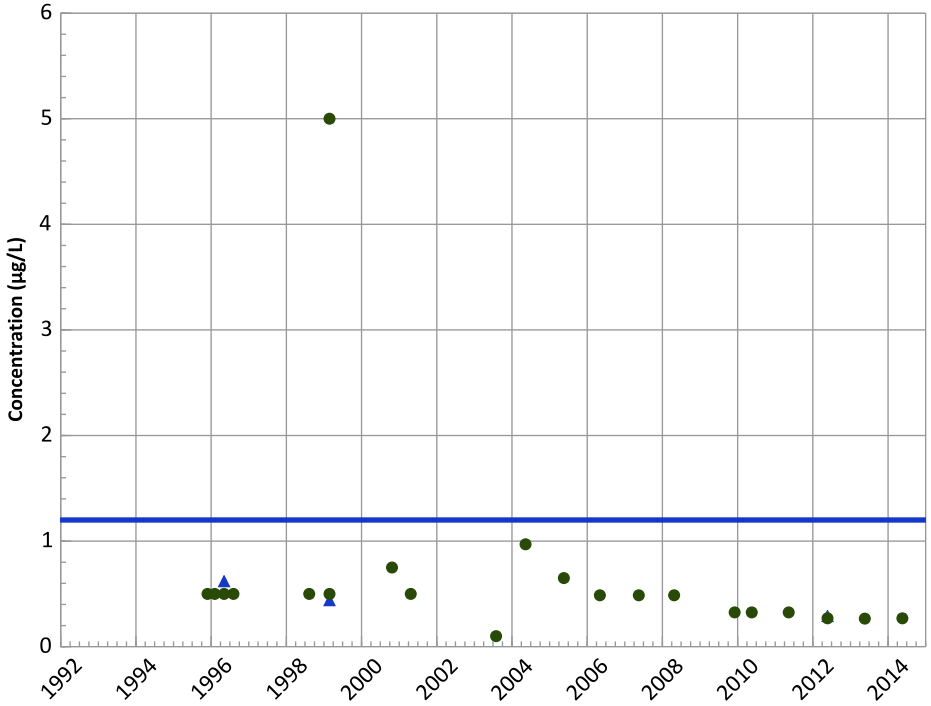


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

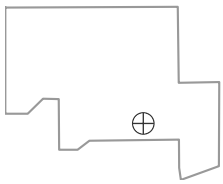
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

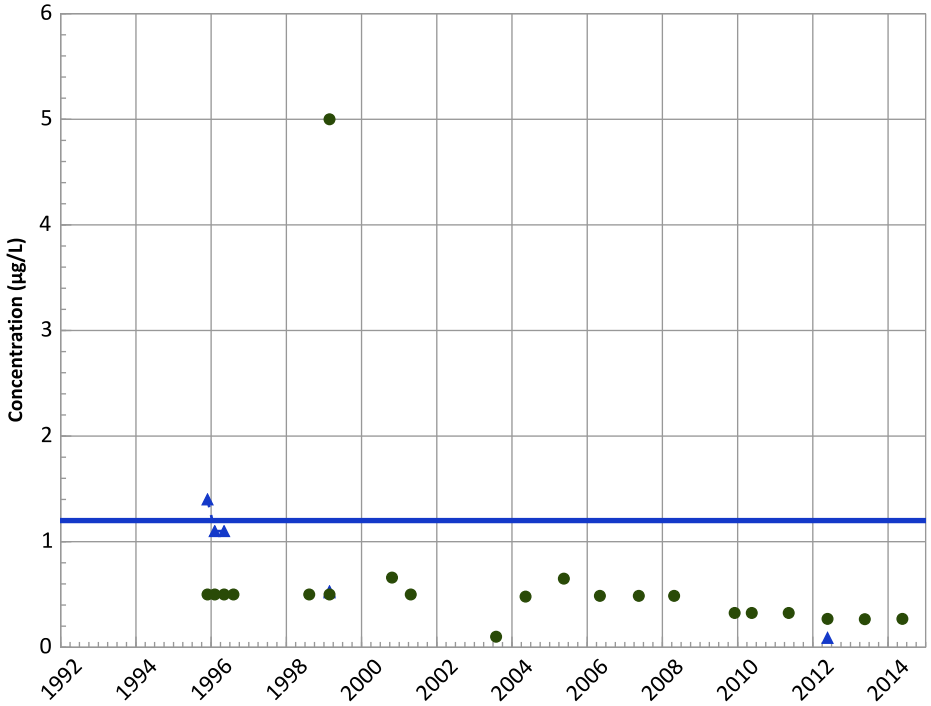
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

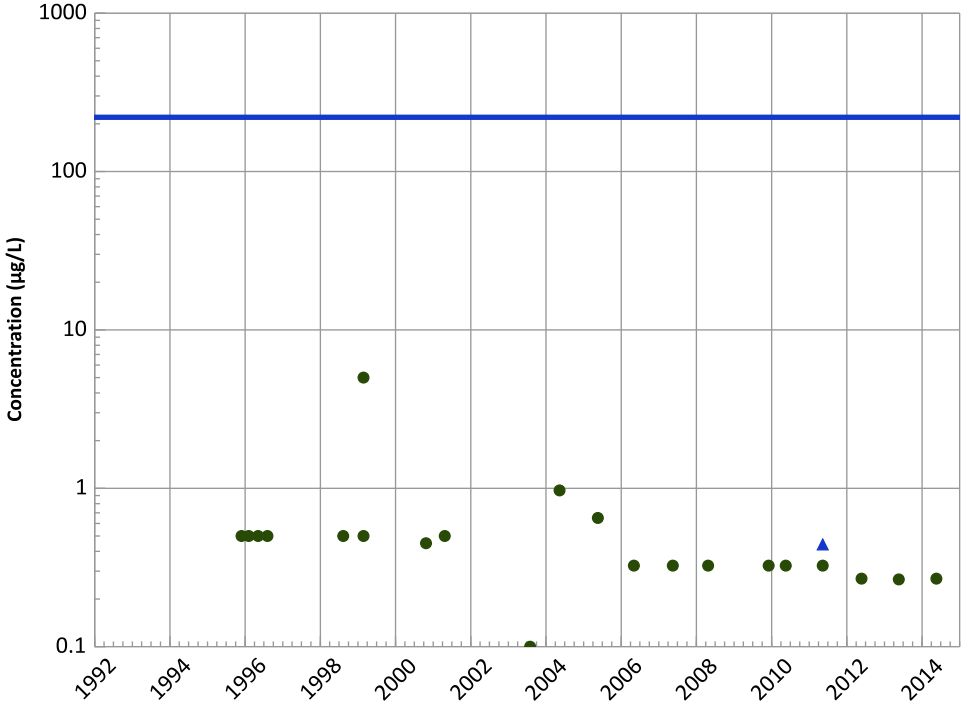


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

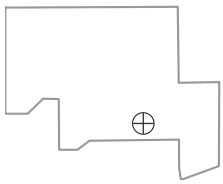
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

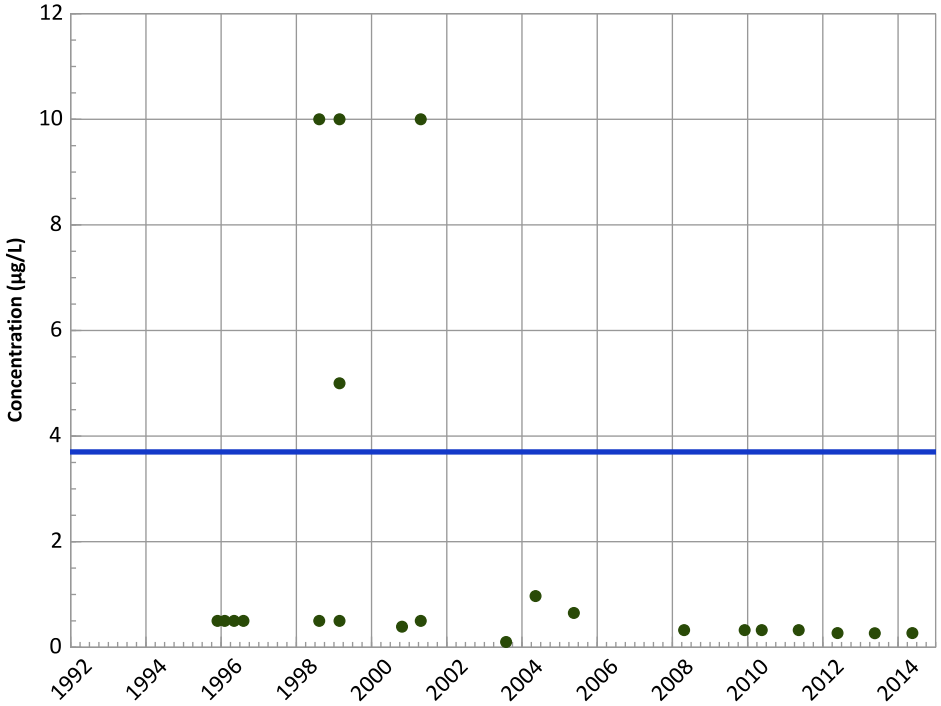
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

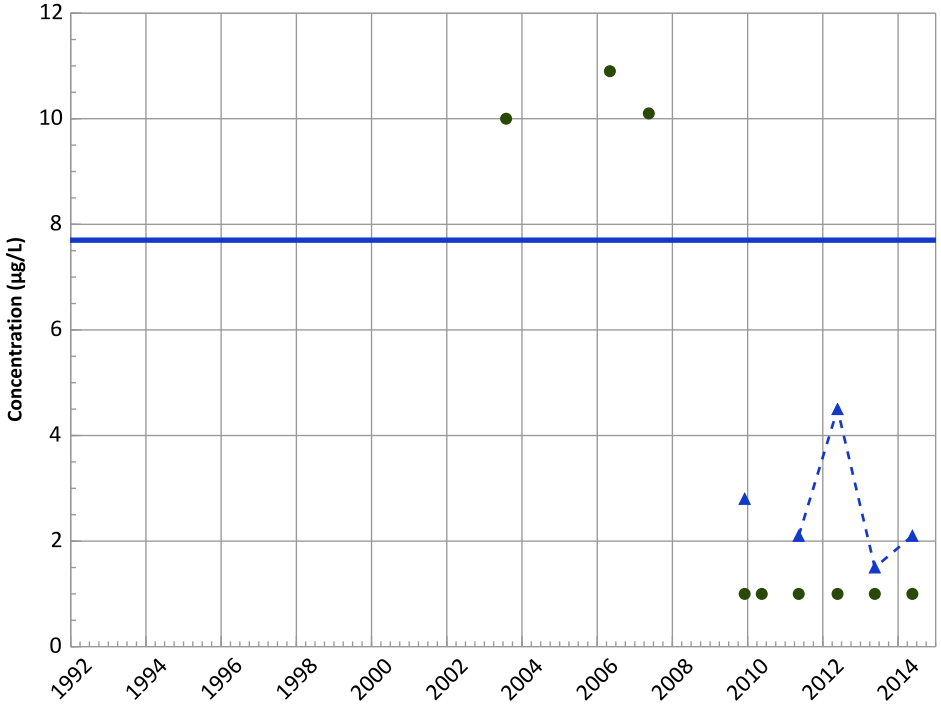


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

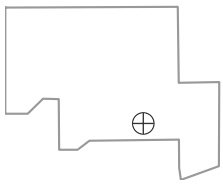
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

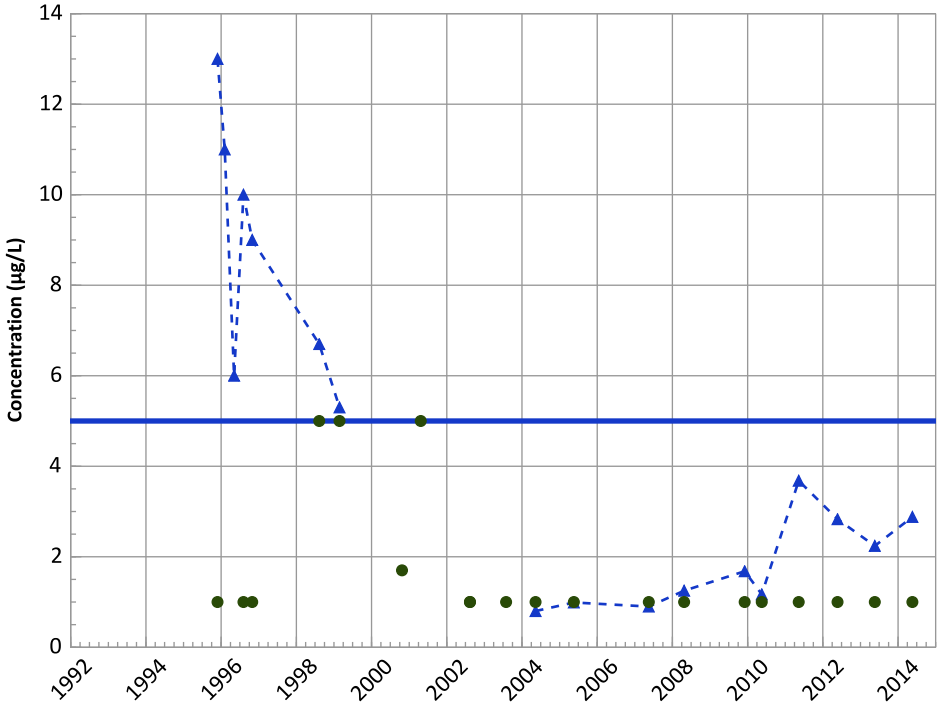
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

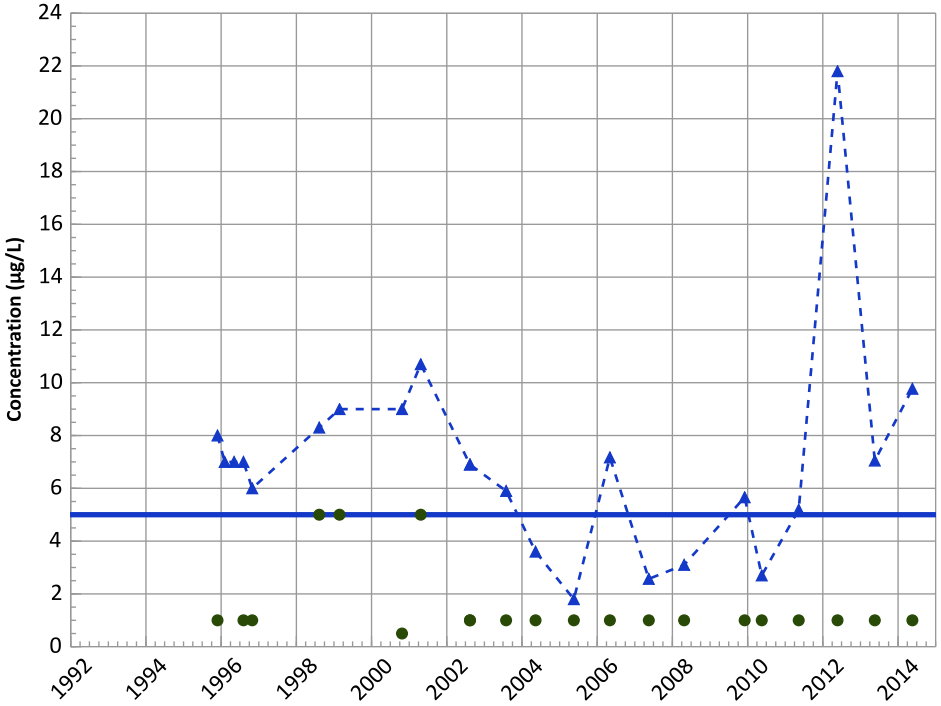


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Trichloroethene Trend



Concentration Trend

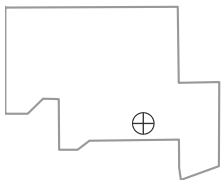
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

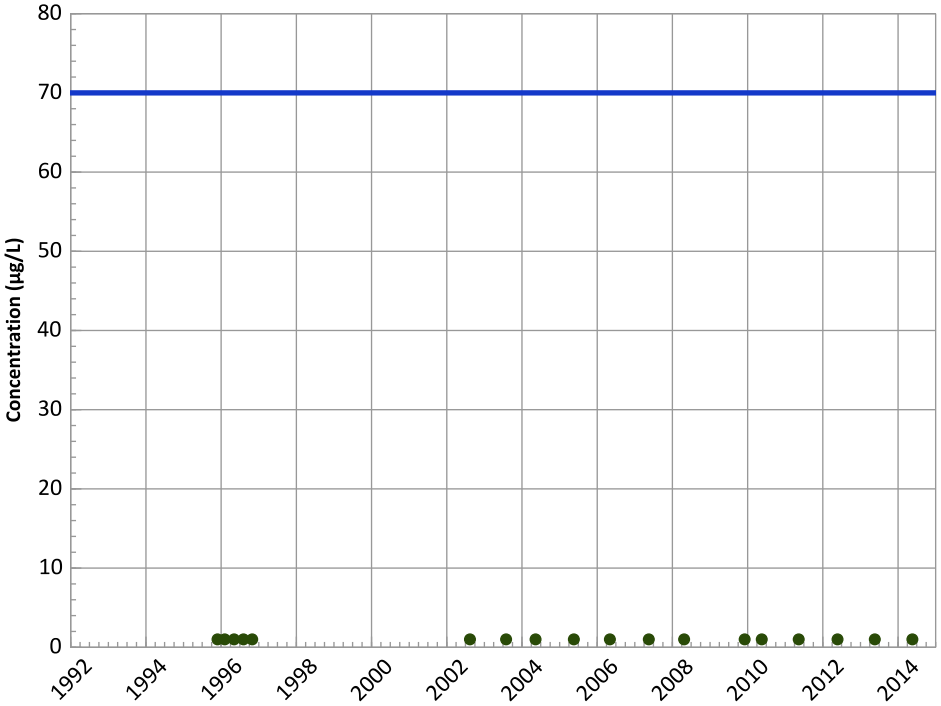
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

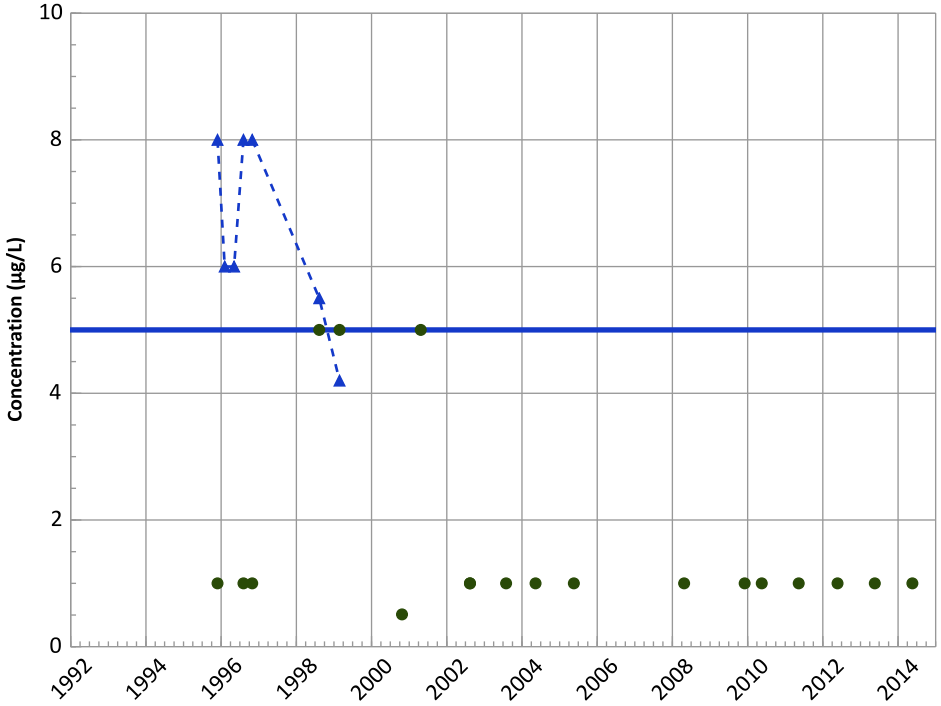


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

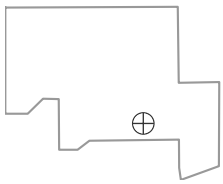
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

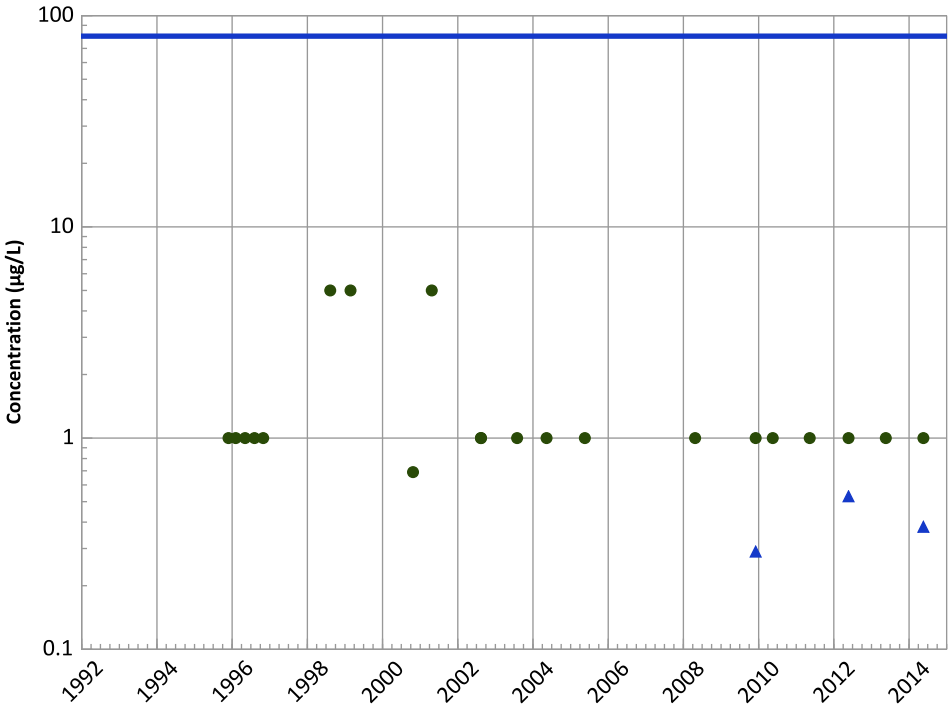
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

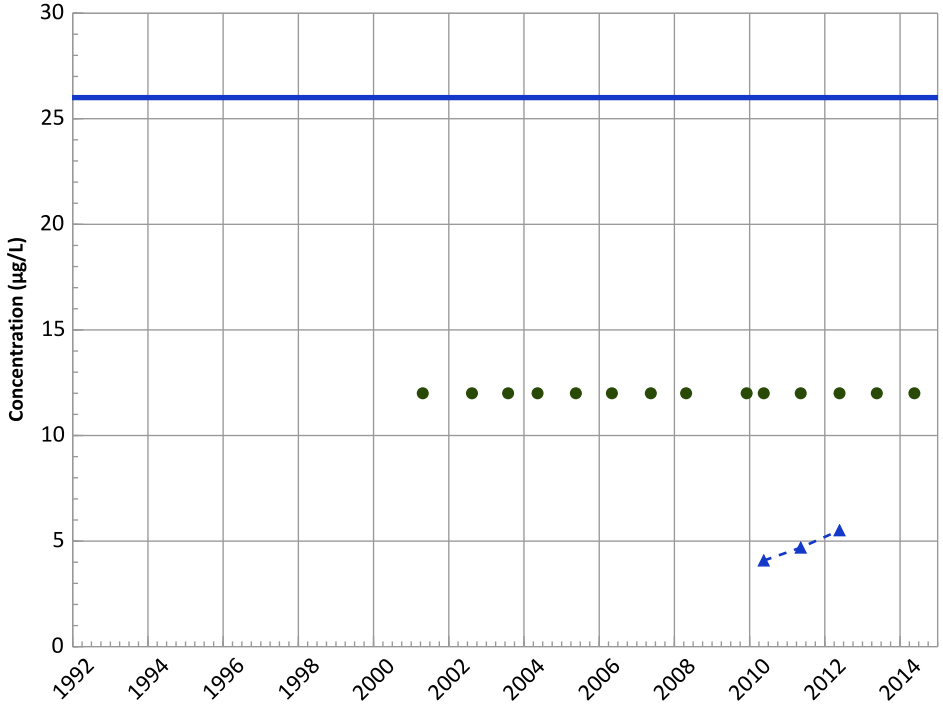


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Perchlorate Trend



Concentration Trend

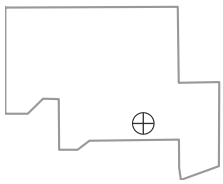
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

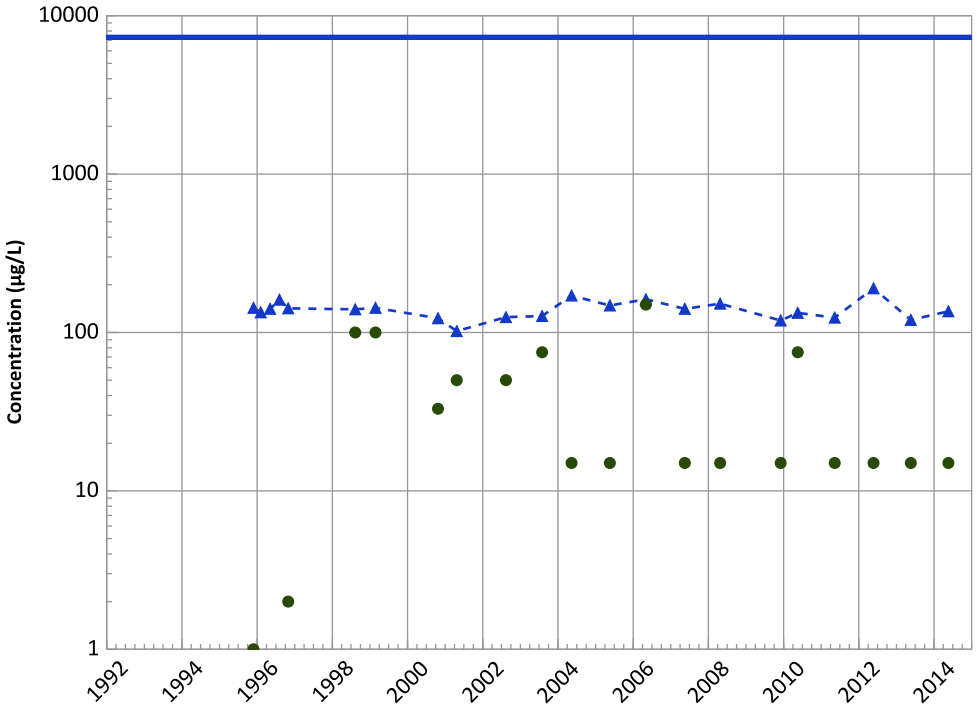
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

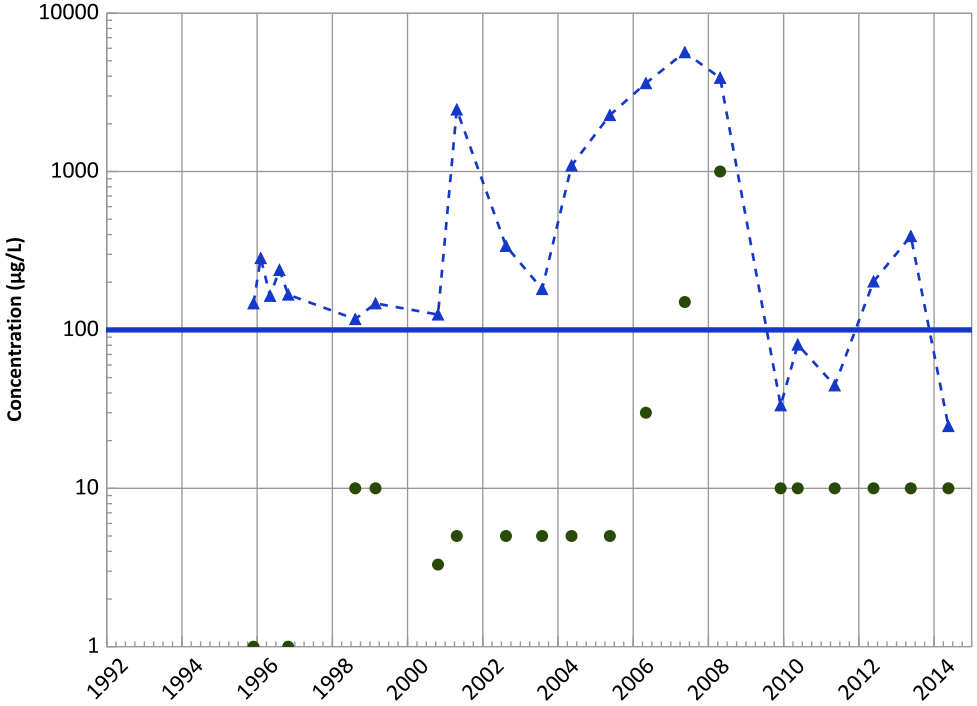


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

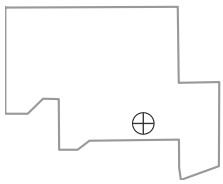
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

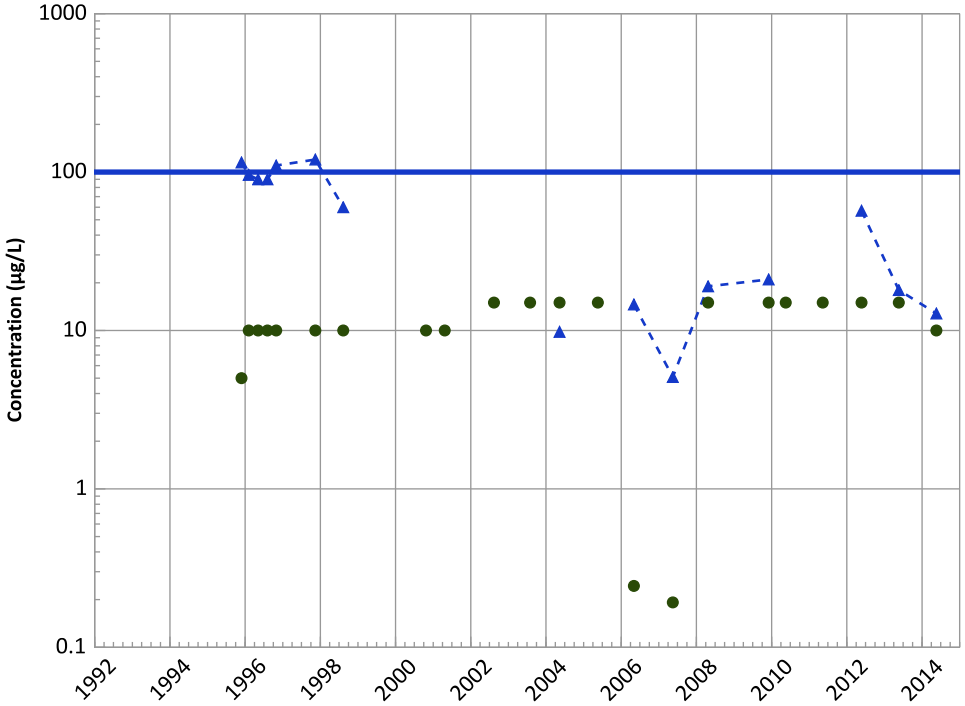
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

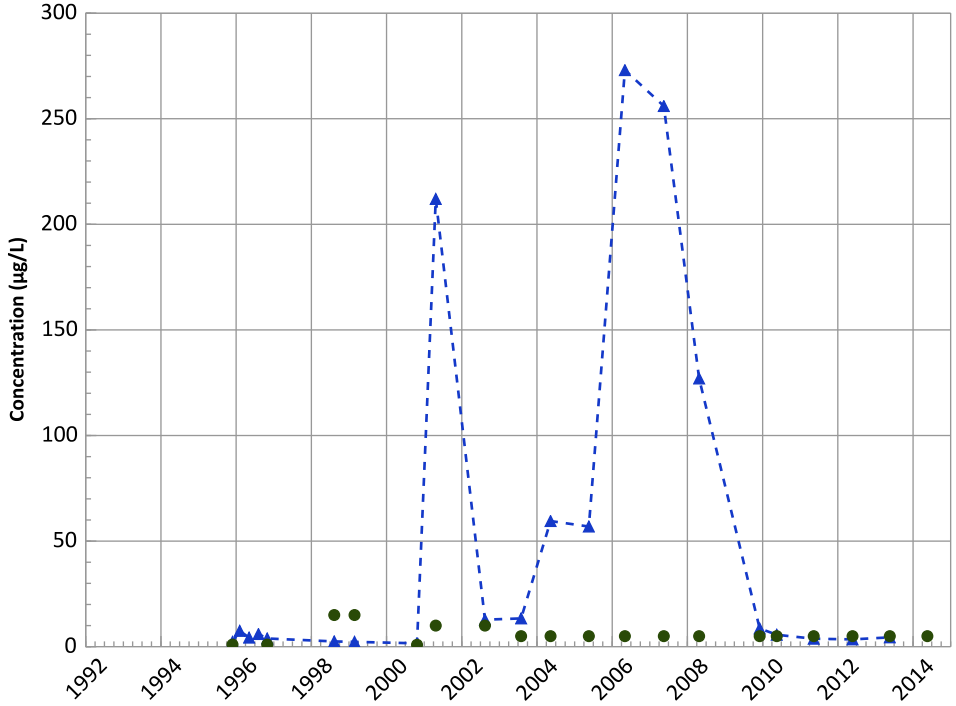


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Manganese Trend



Concentration Trend

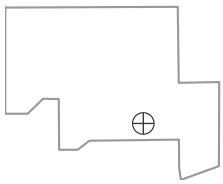
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

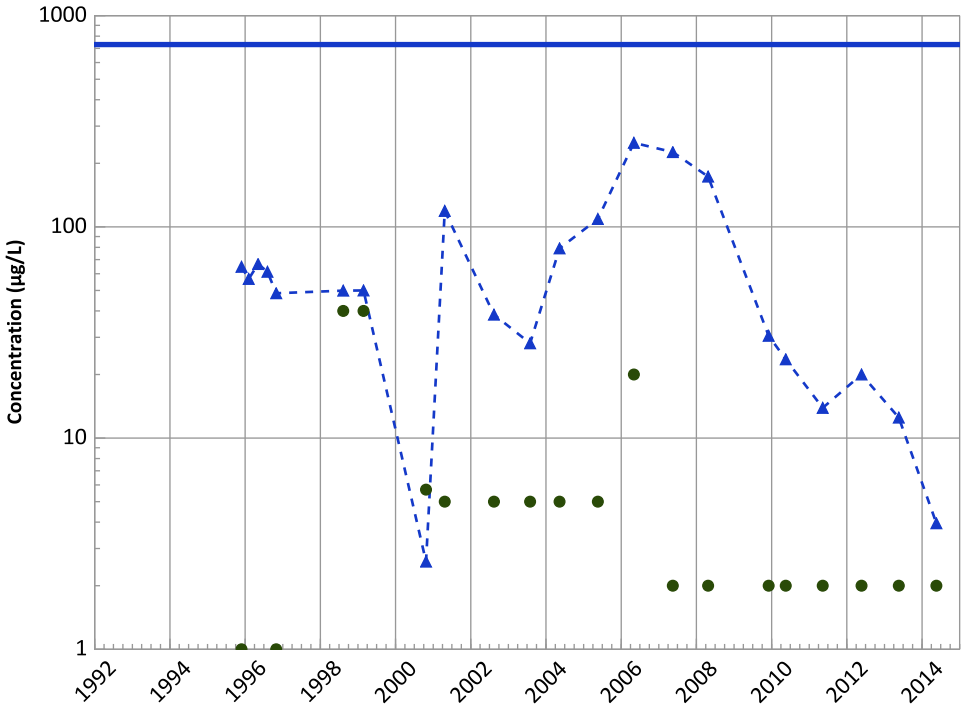
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

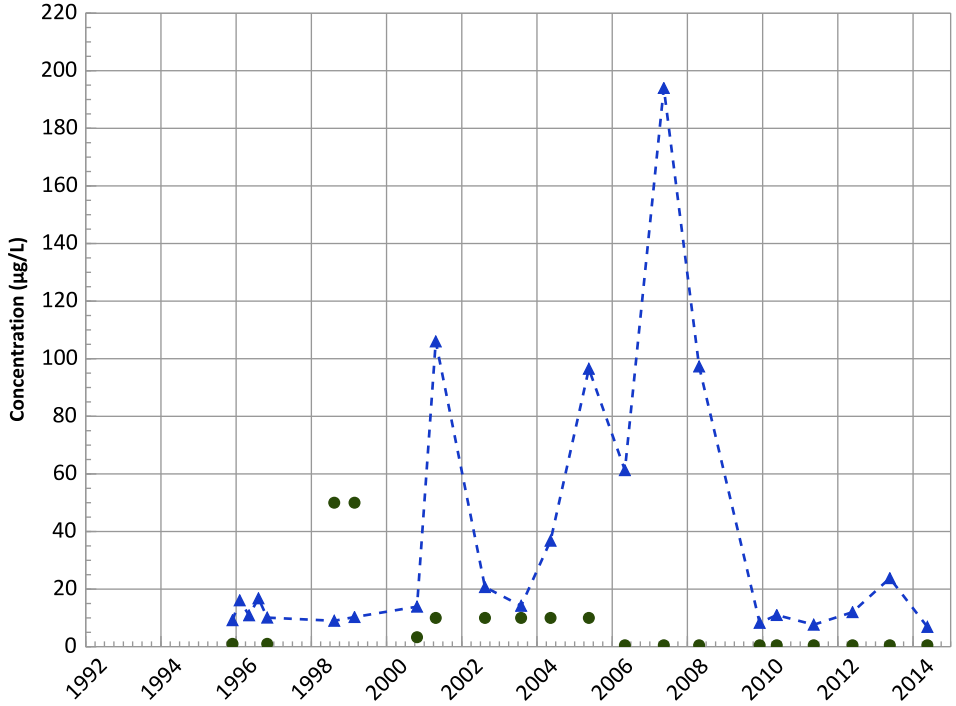


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Decreasing

Molybdenum Trend



Concentration Trend

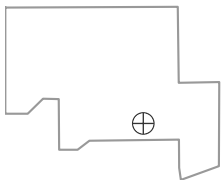
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

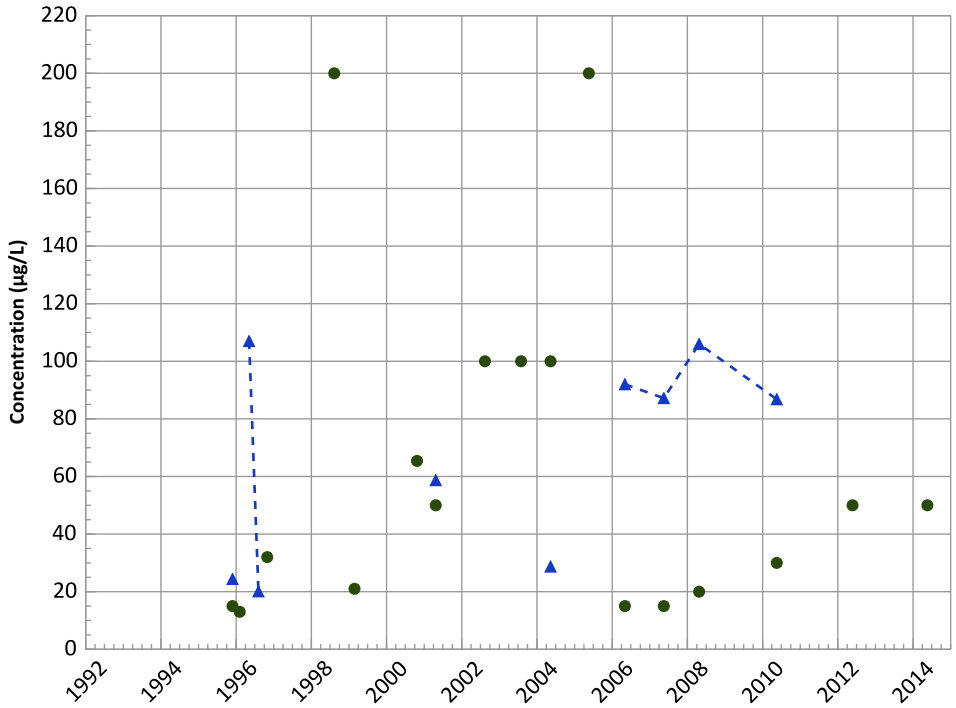
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

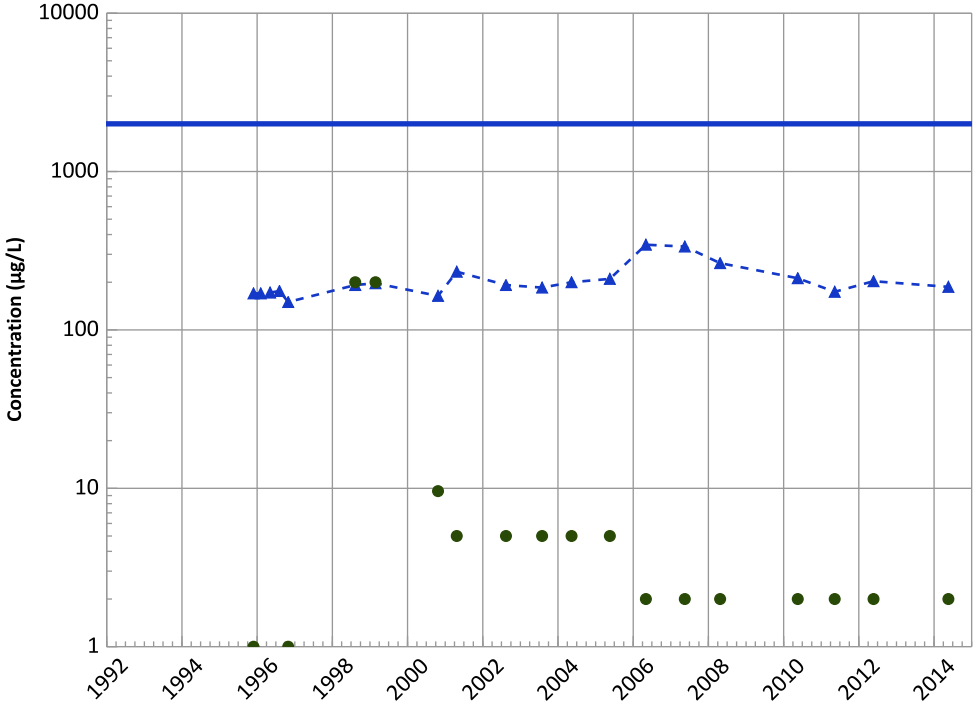


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Barium Trend



Concentration Trend

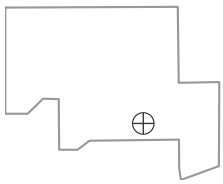
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

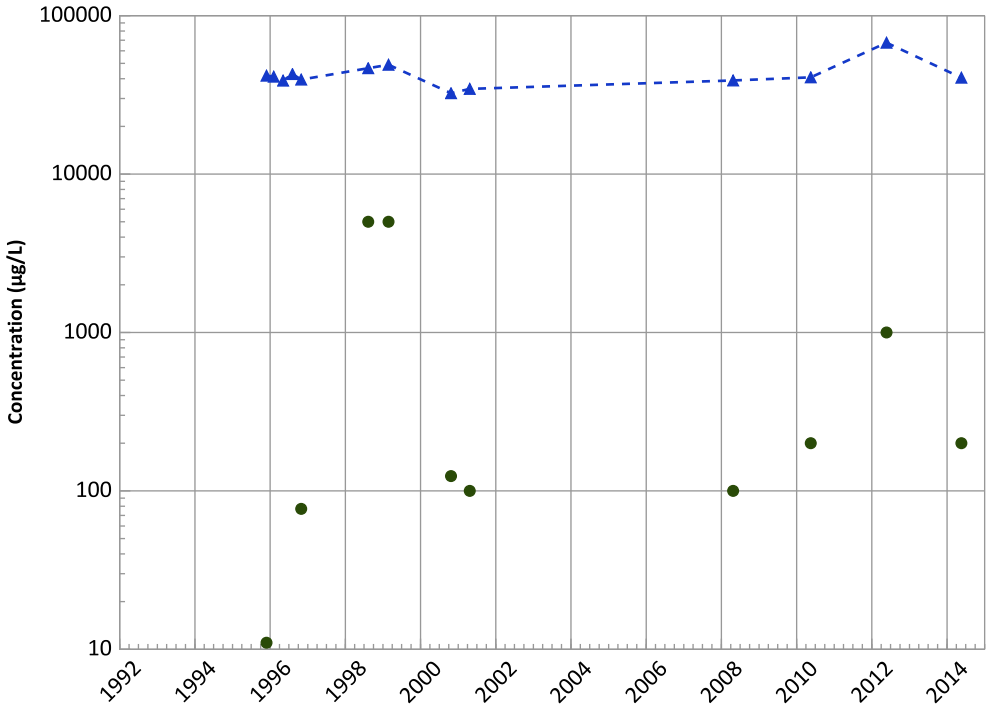
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

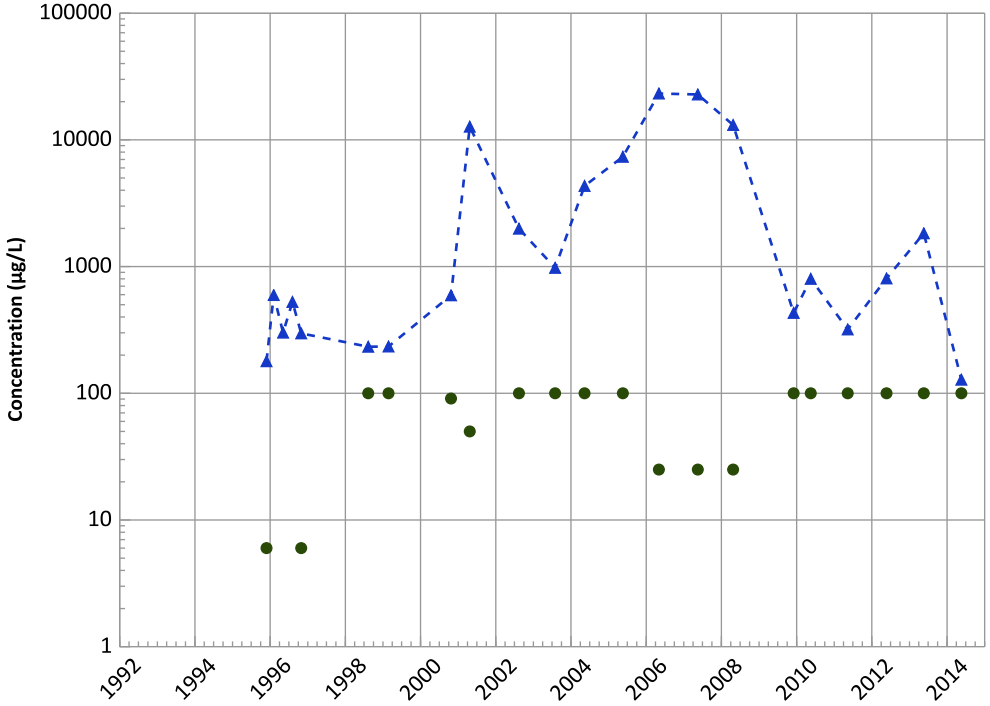


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

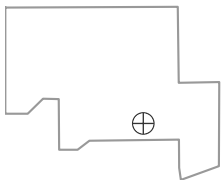
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

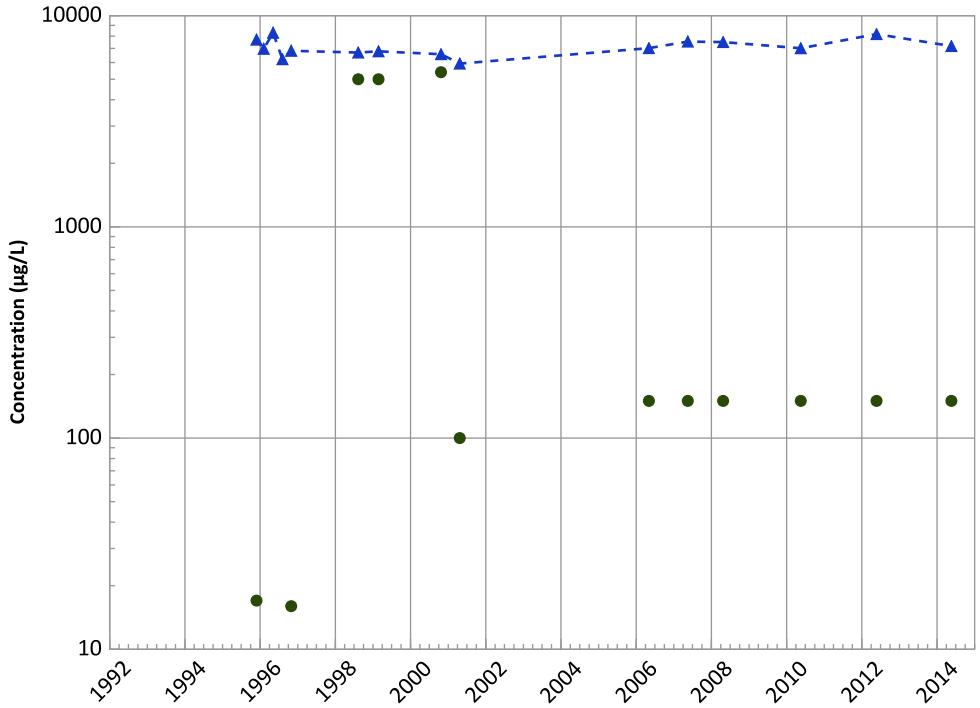
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

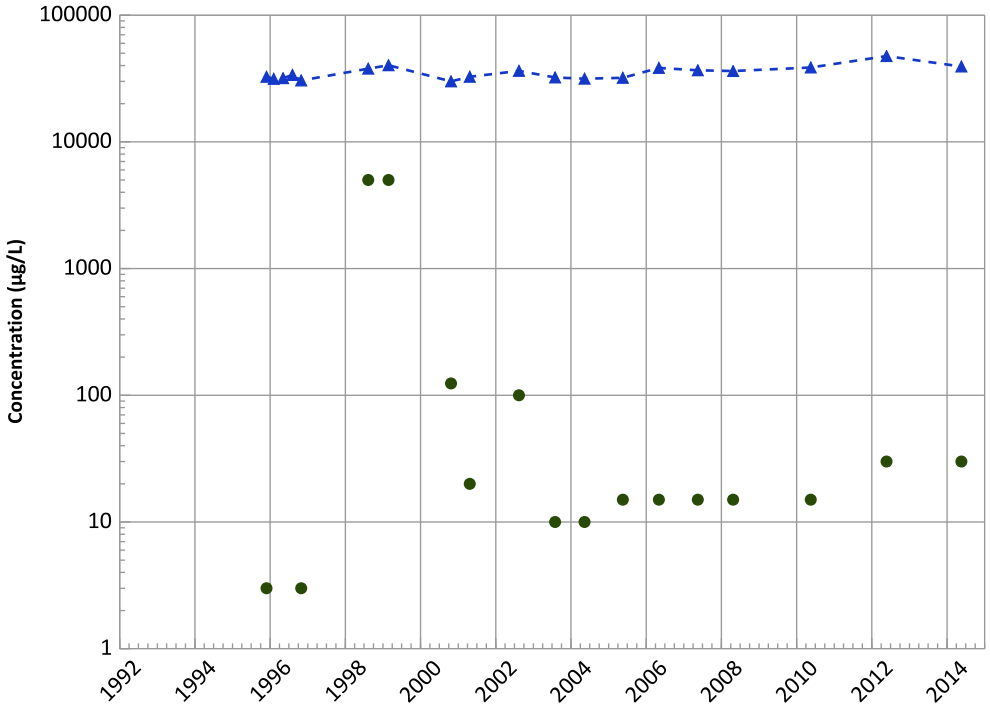


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Magnesium Trend



Concentration Trend

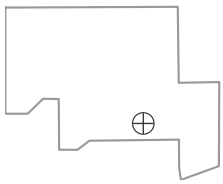
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

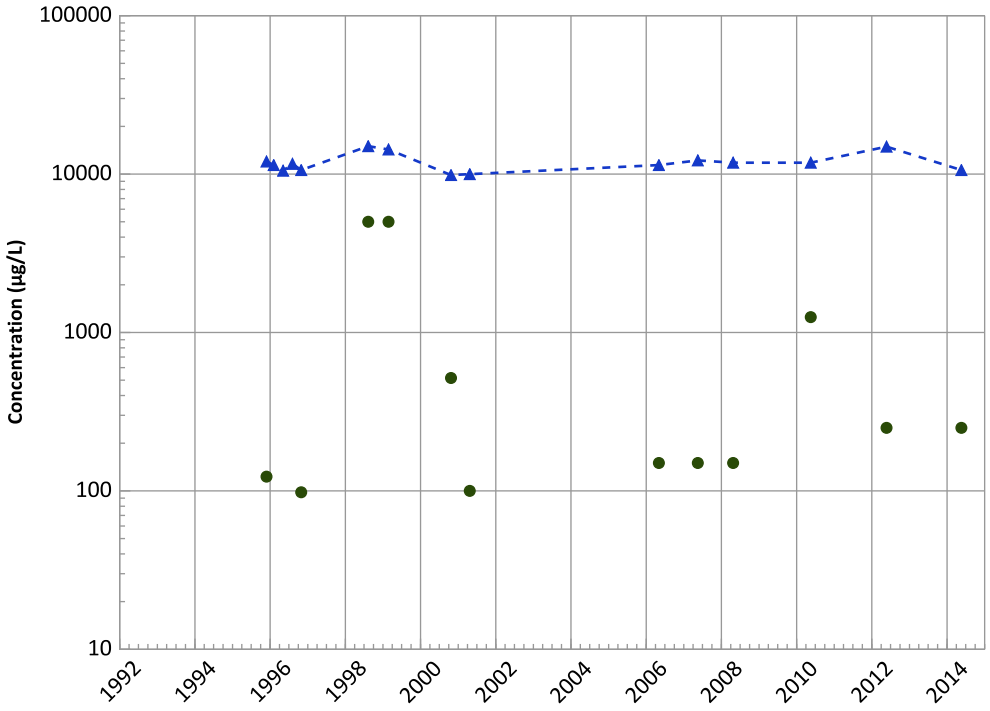
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1011 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

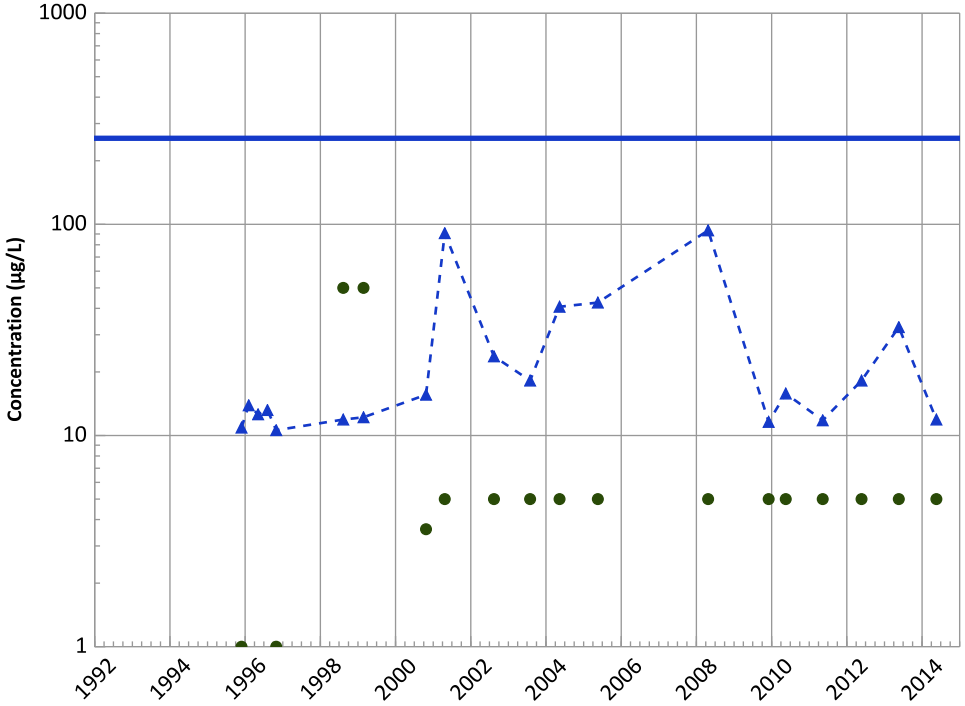


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Vanadium Trend



Concentration Trend

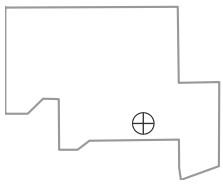
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

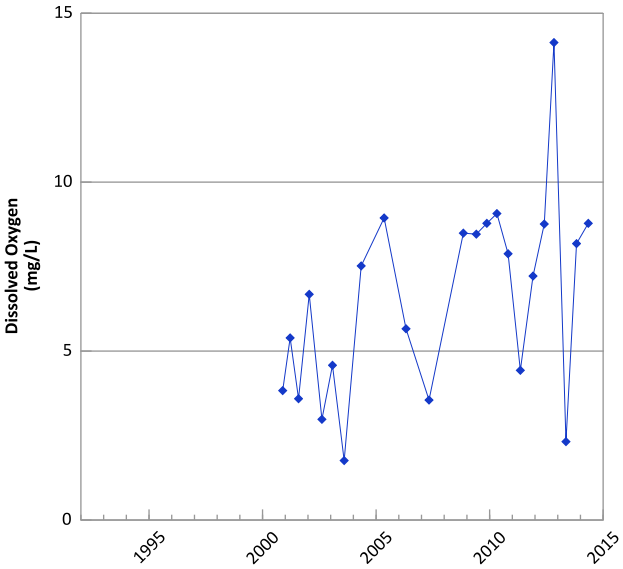
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/27/1995 to 05/20/2014
Analysis Date: 03/19/2015

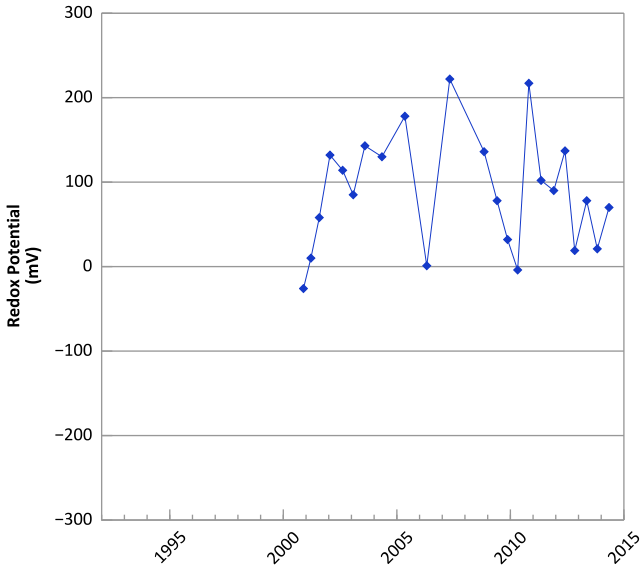
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

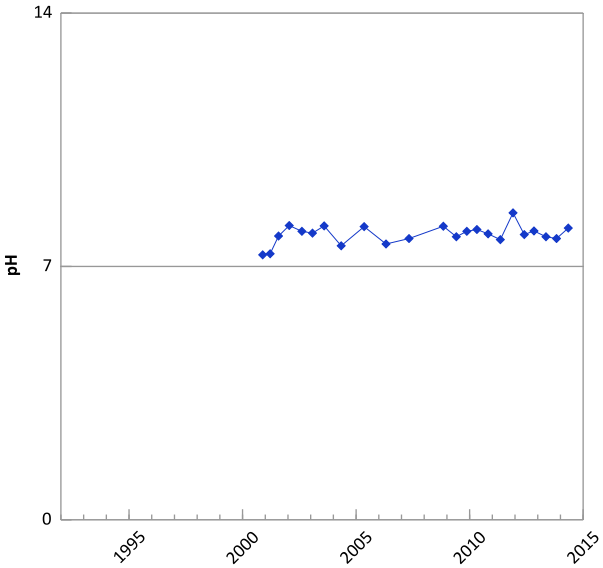
Well Location

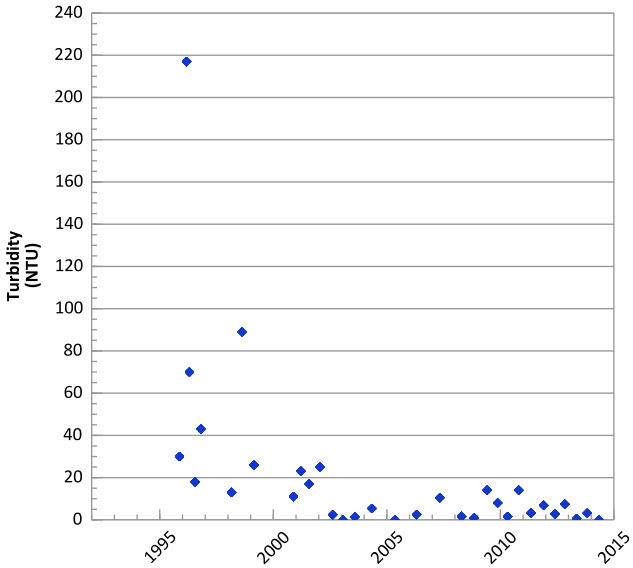


PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



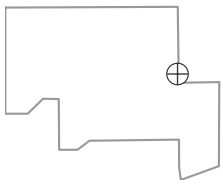






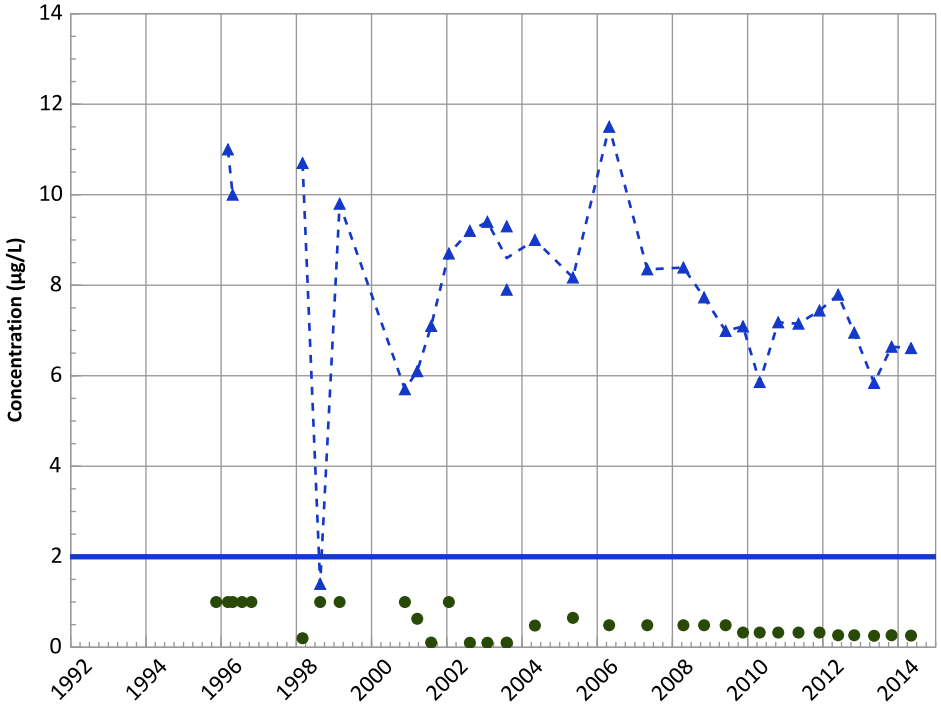
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

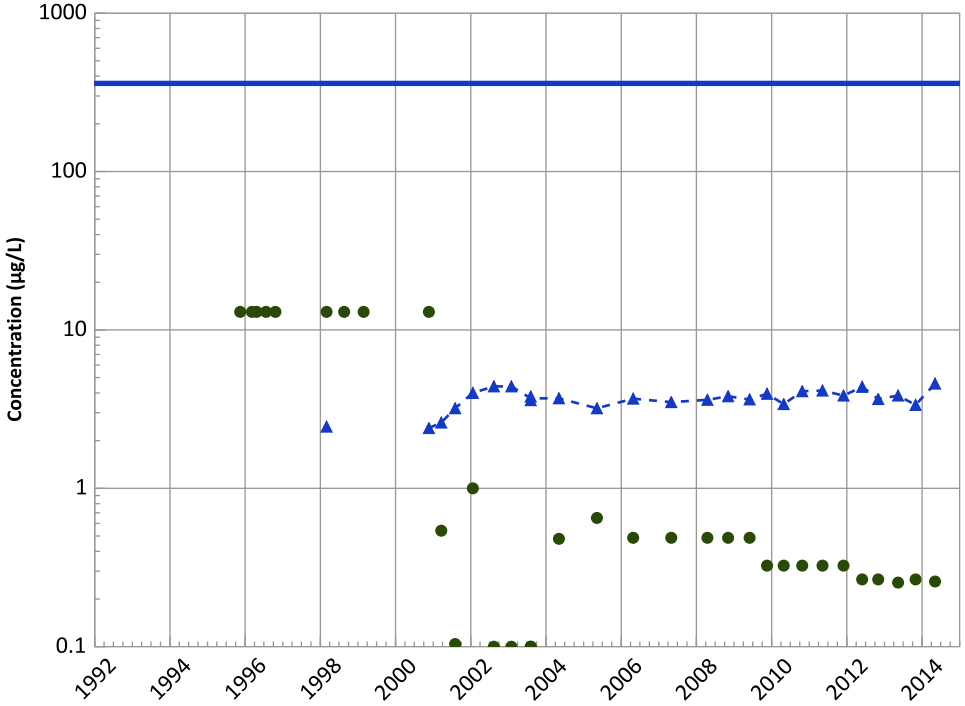


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

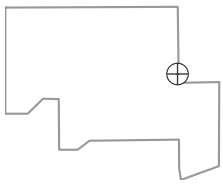
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

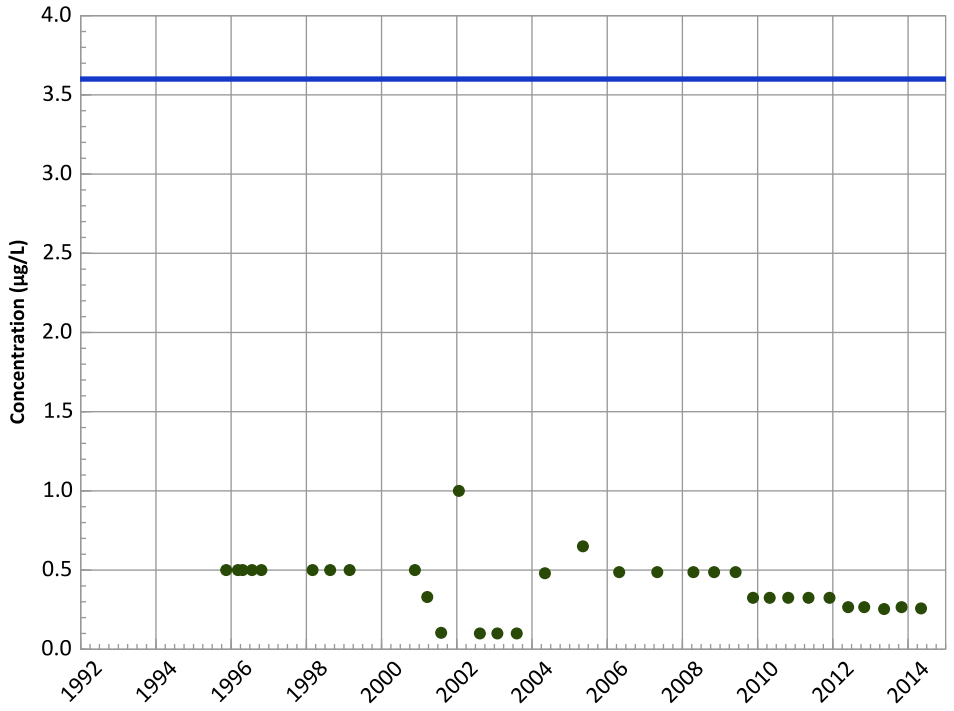
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

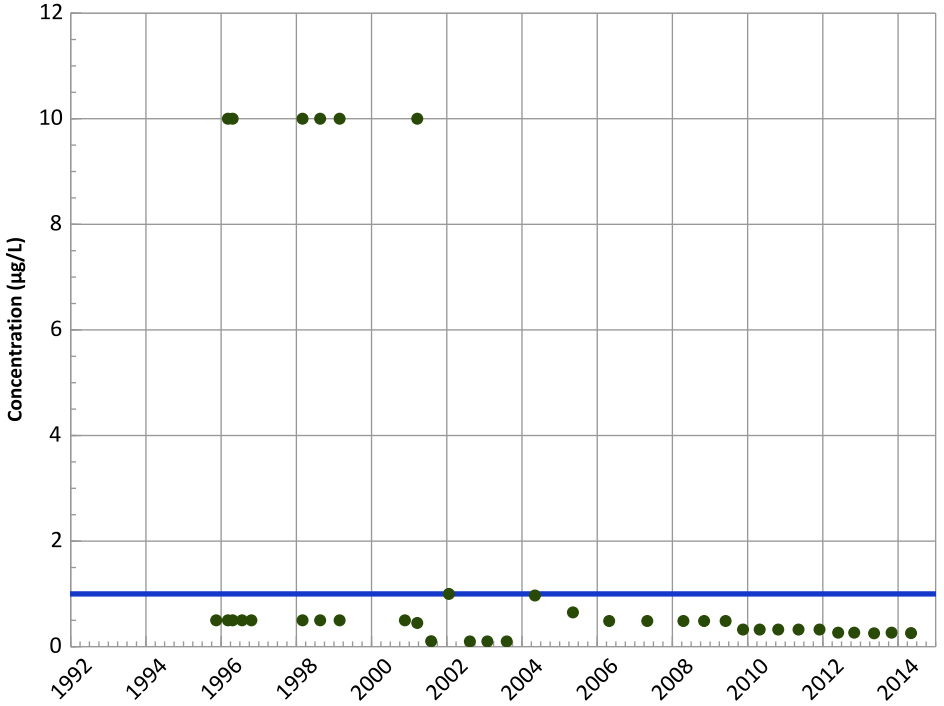


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

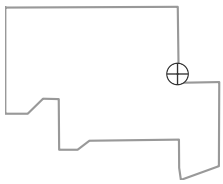
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

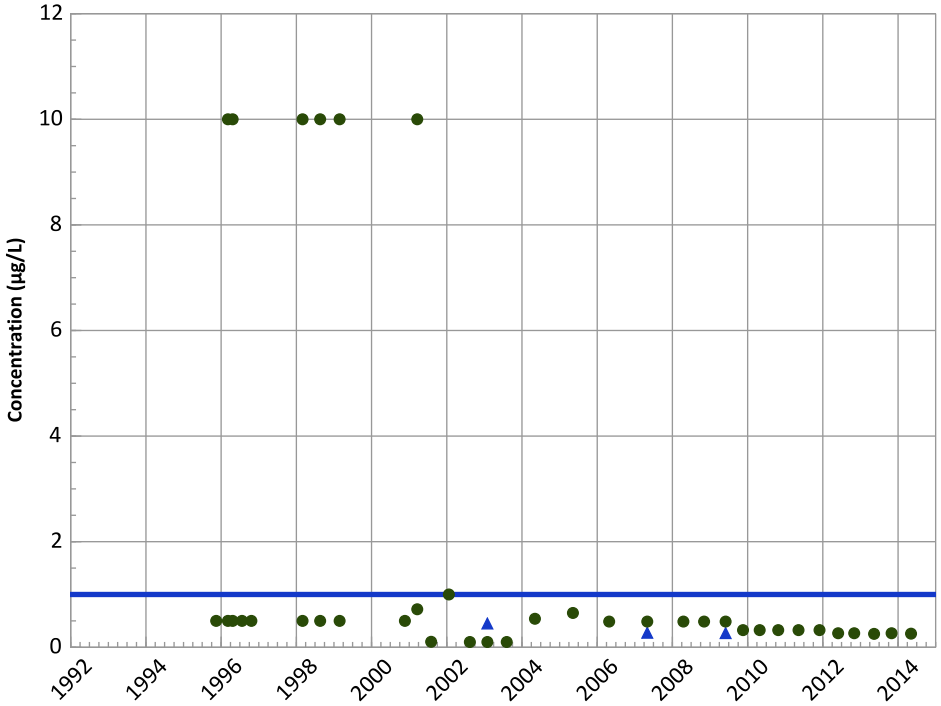
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

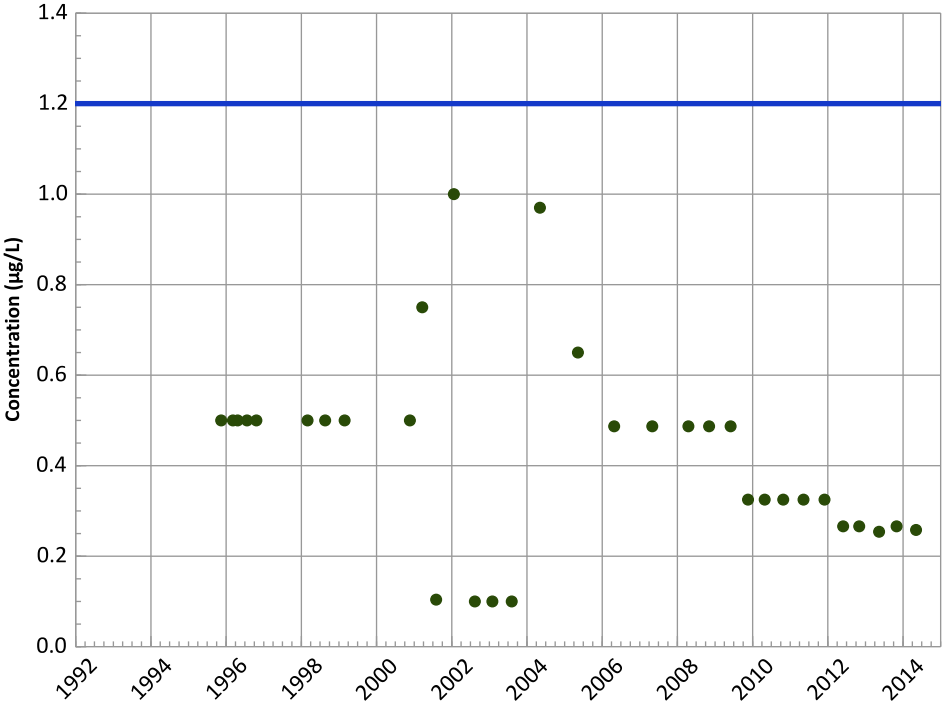


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

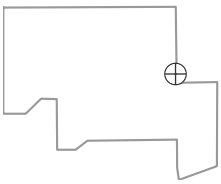
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

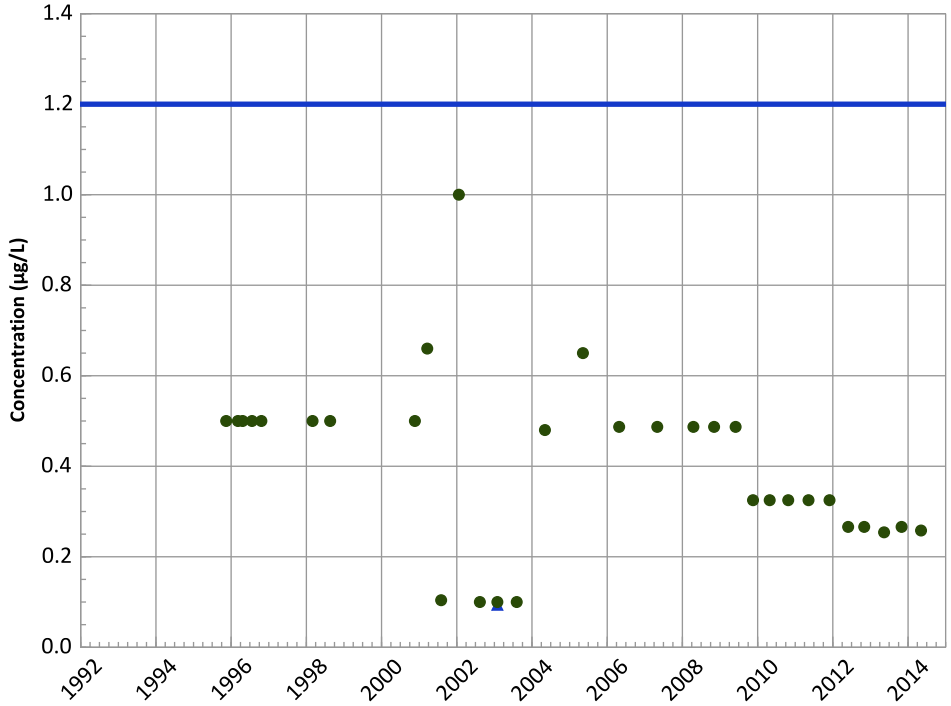
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

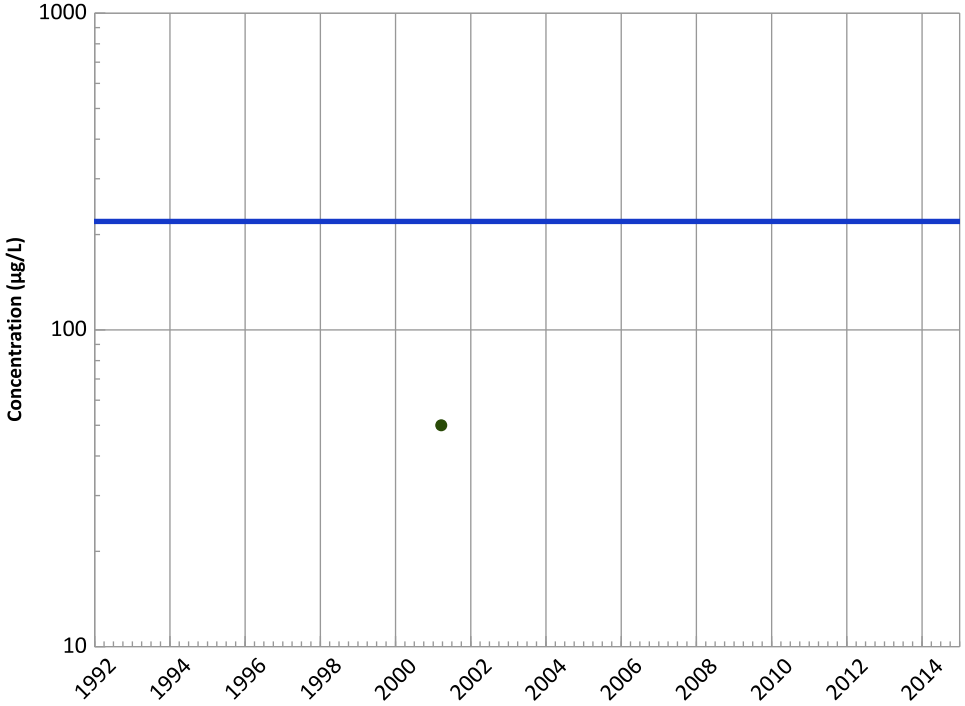


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

1,3,5-Trinitrobenzene Trend



Concentration Trend

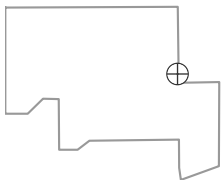
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

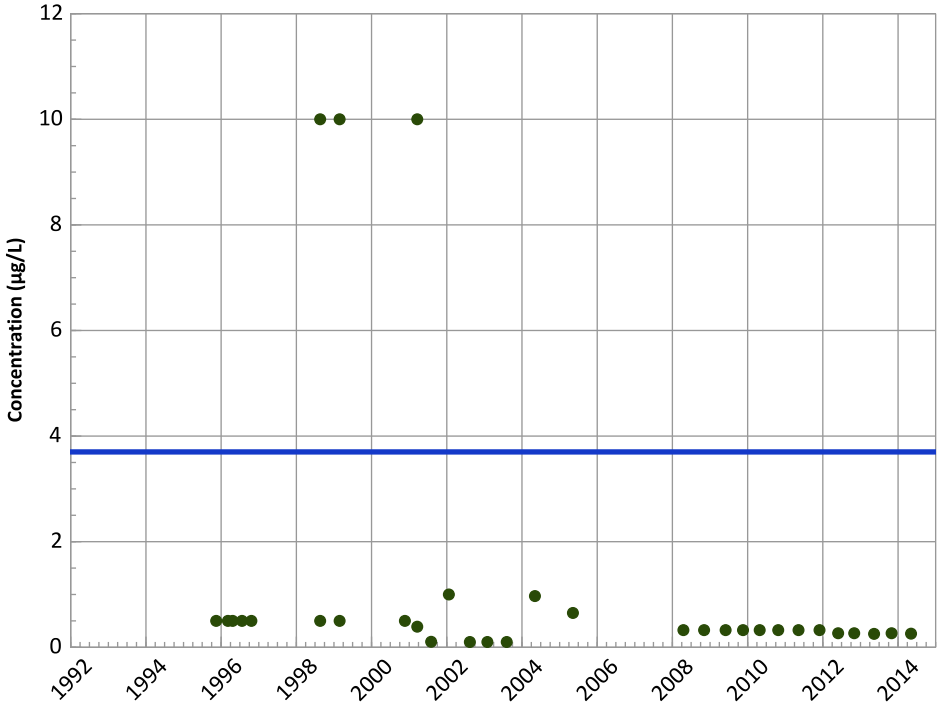
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

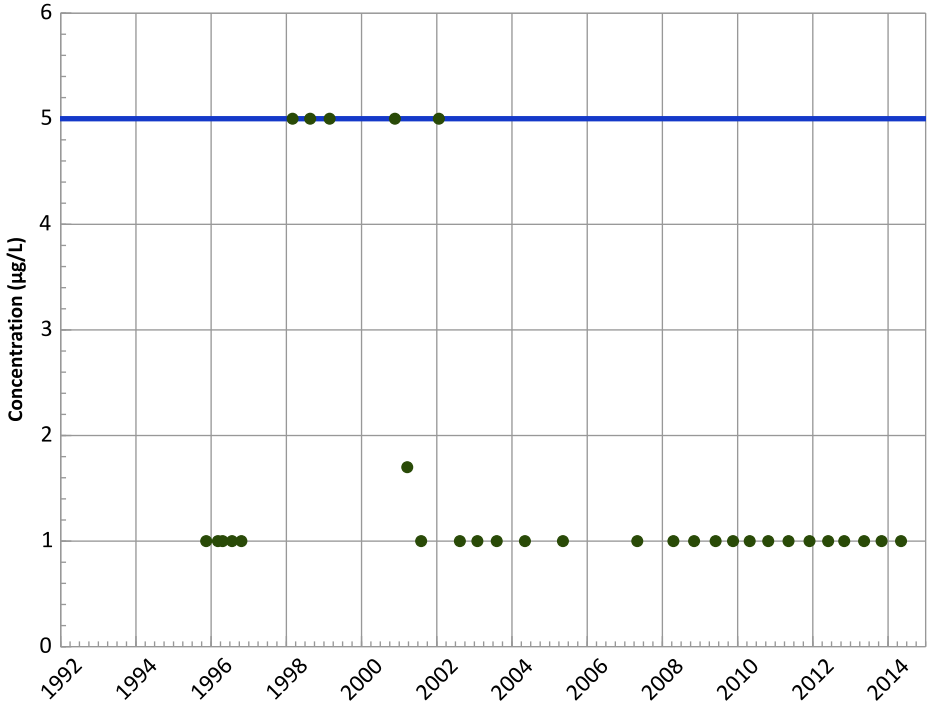


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

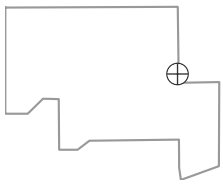
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

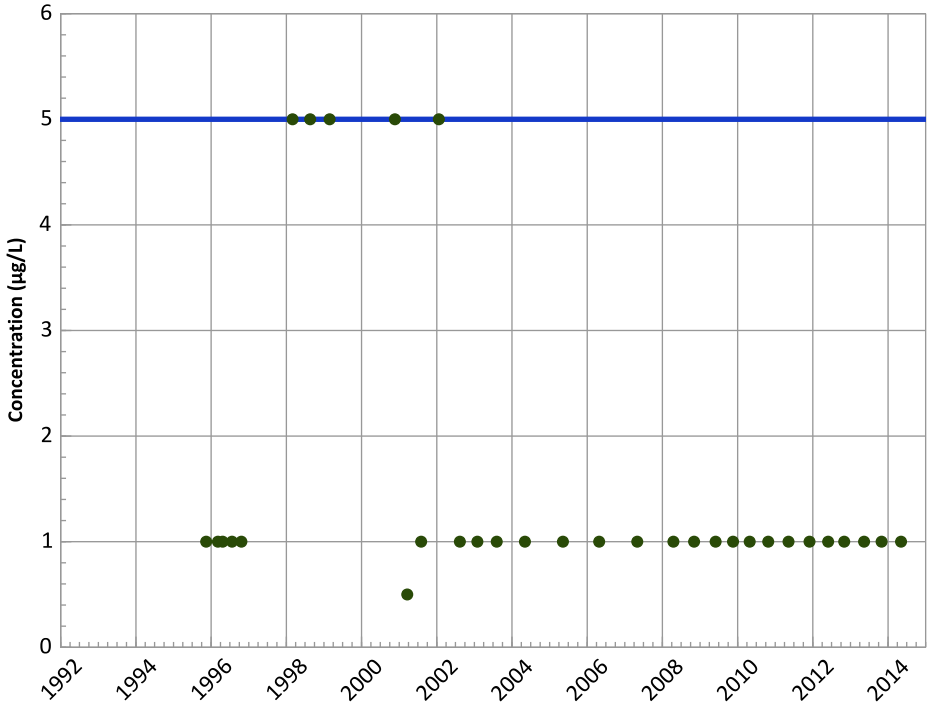
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

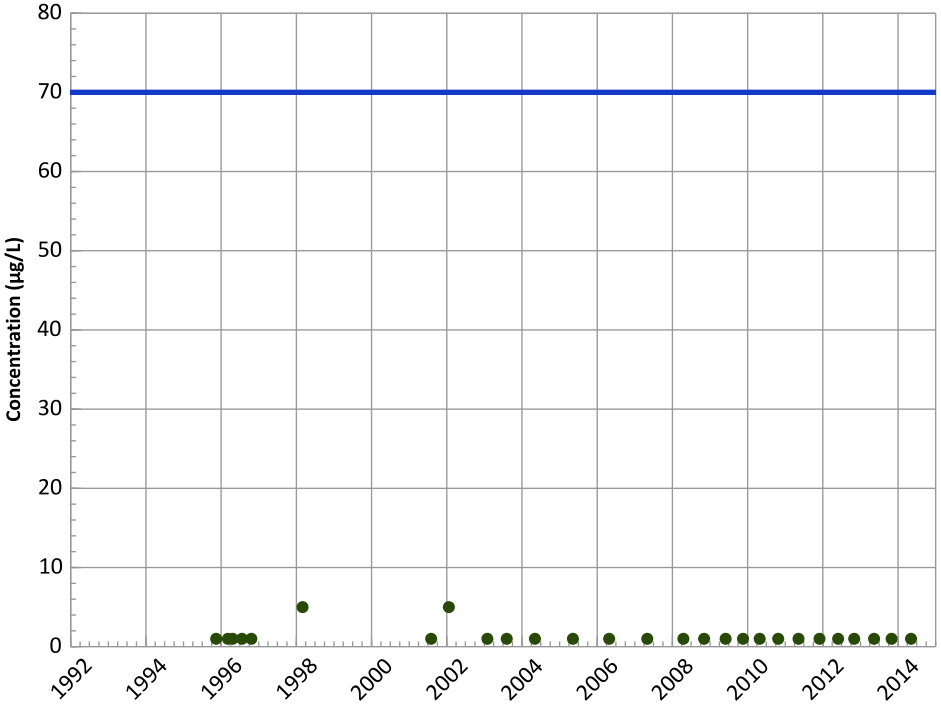


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

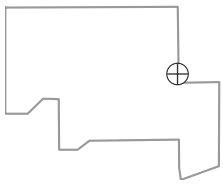
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

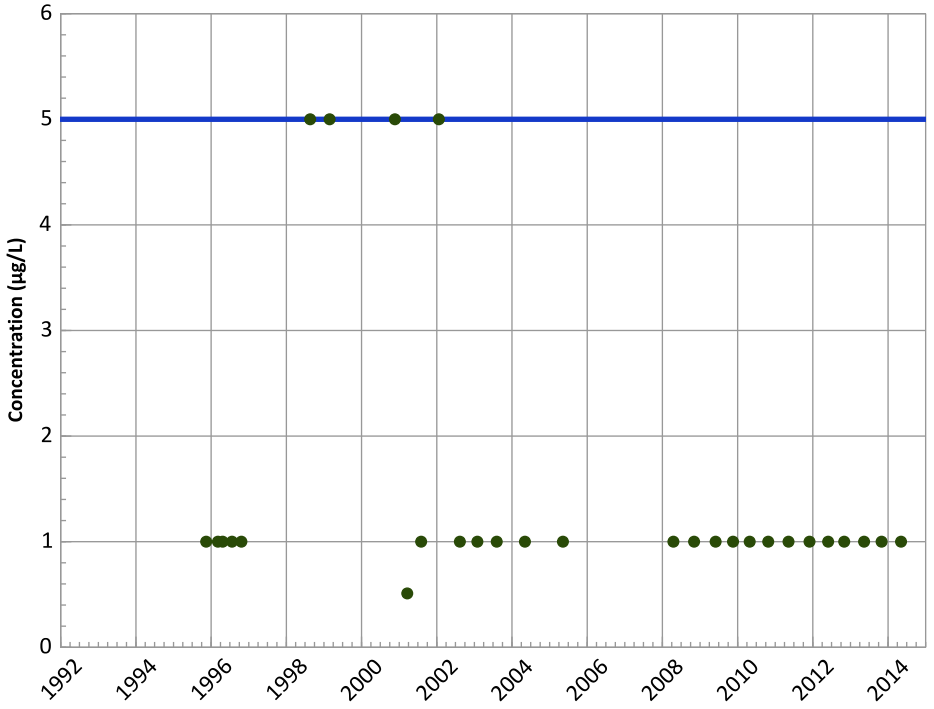
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

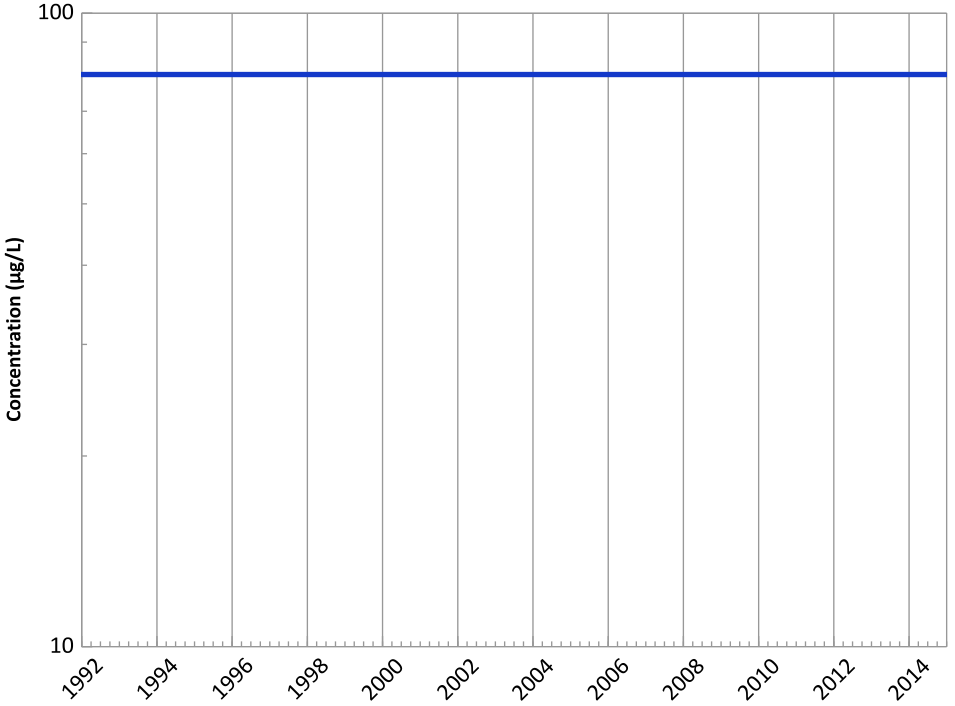


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

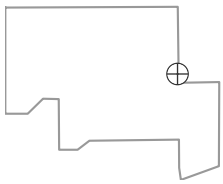
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

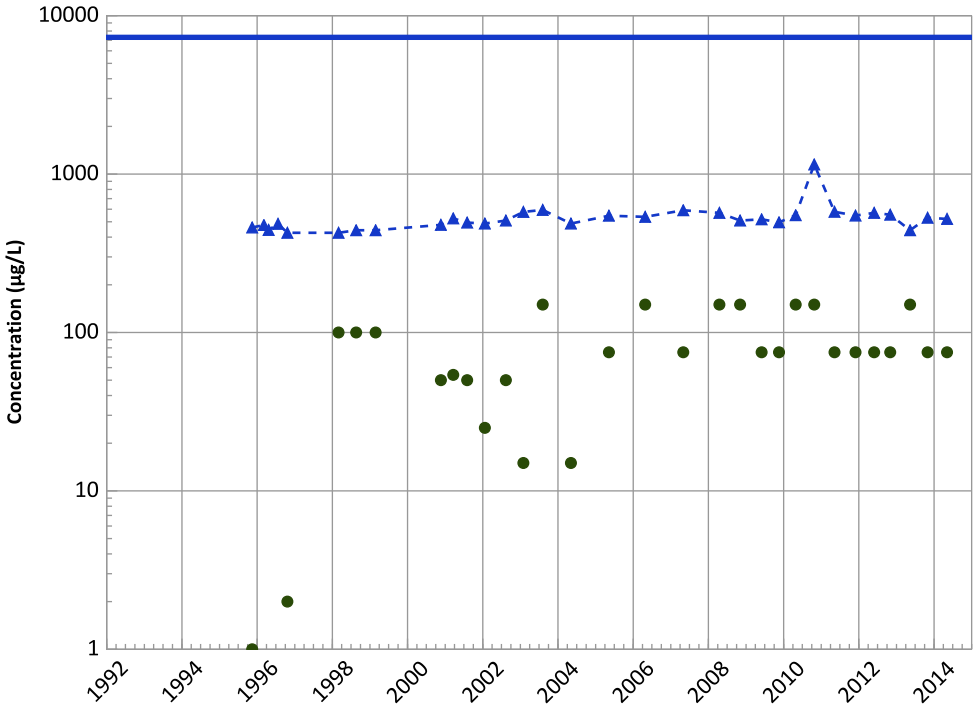
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

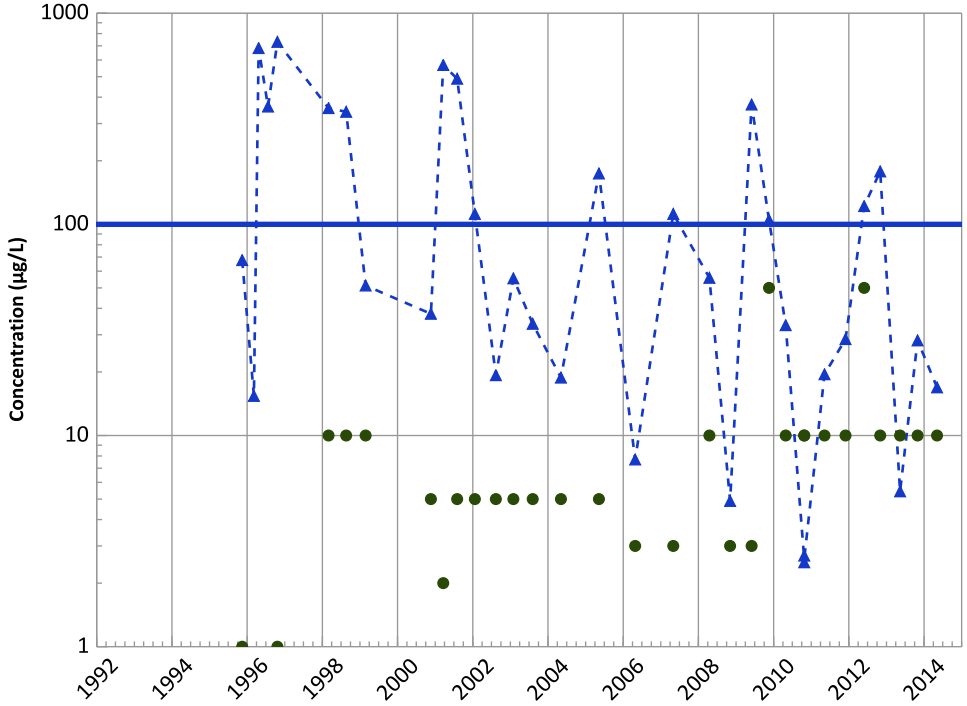


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Chromium, Total Trend



Concentration Trend

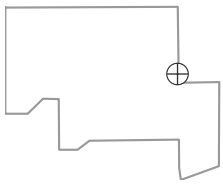
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

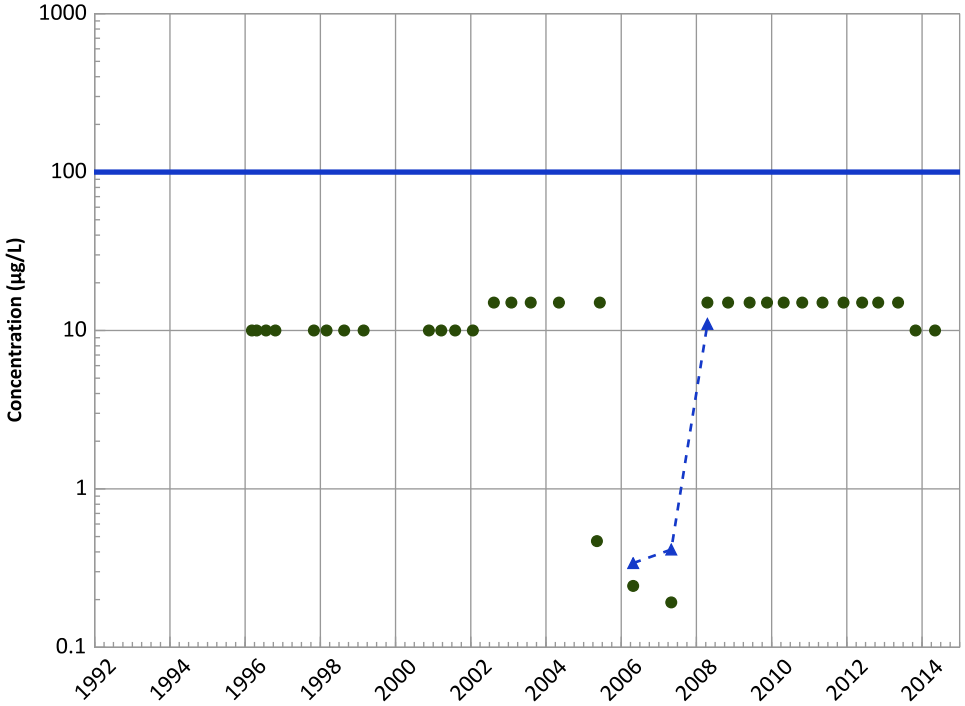
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

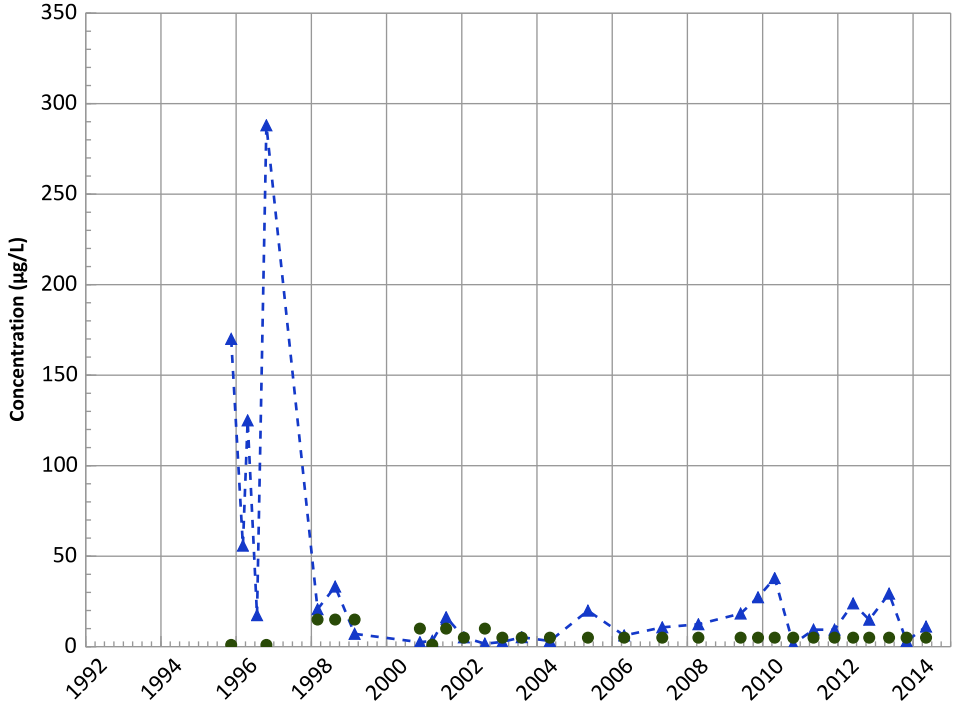


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

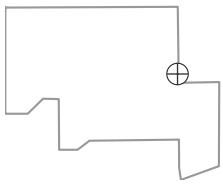
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

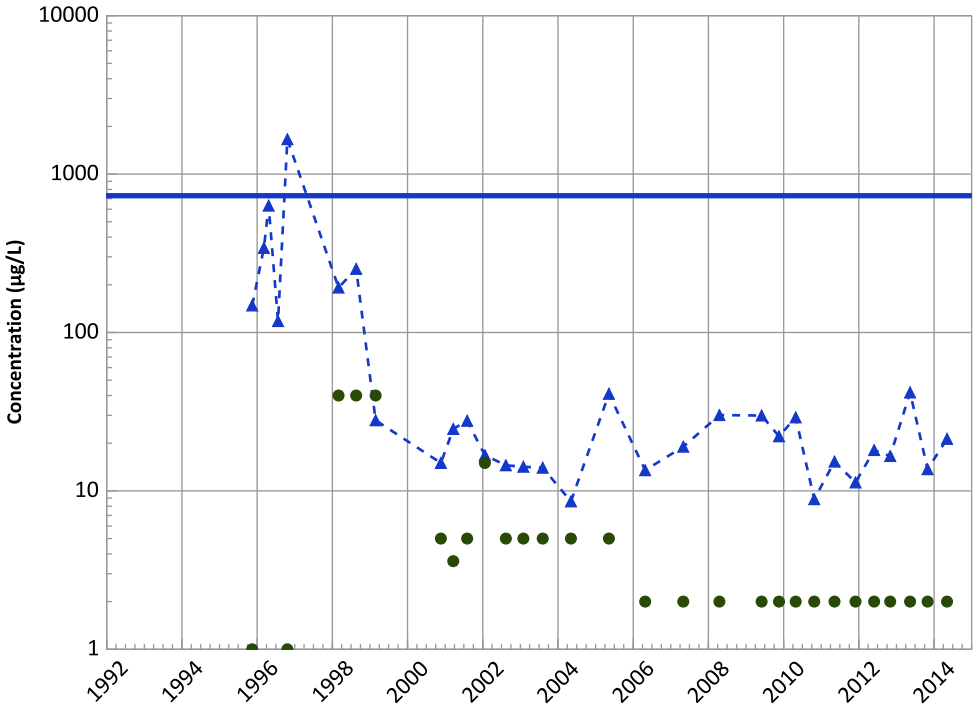
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

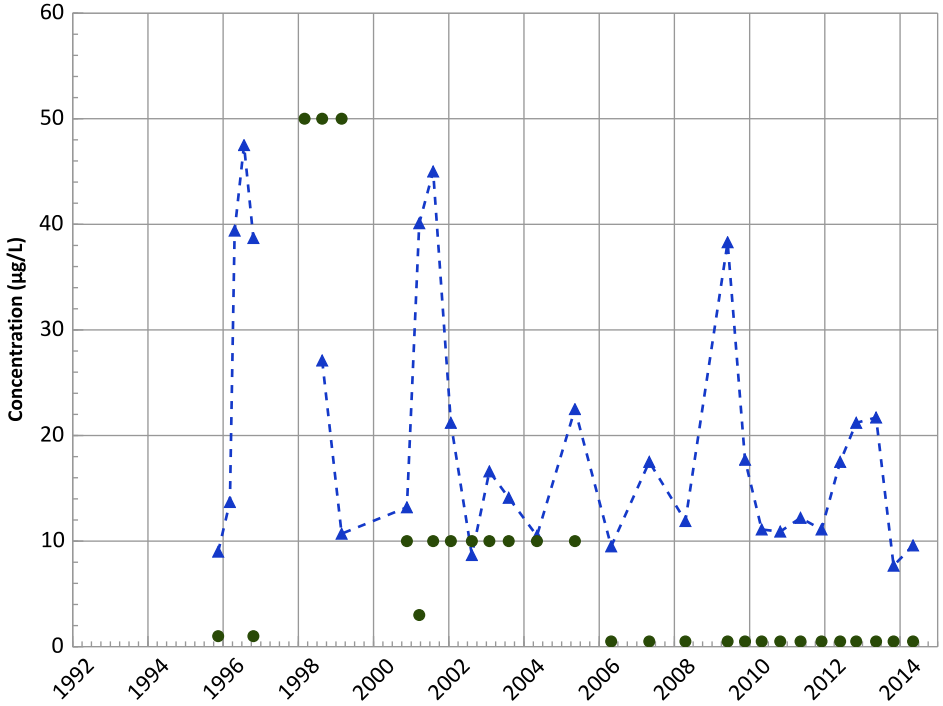


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Molybdenum Trend



Concentration Trend

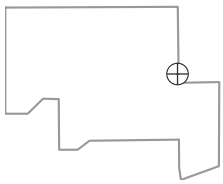
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

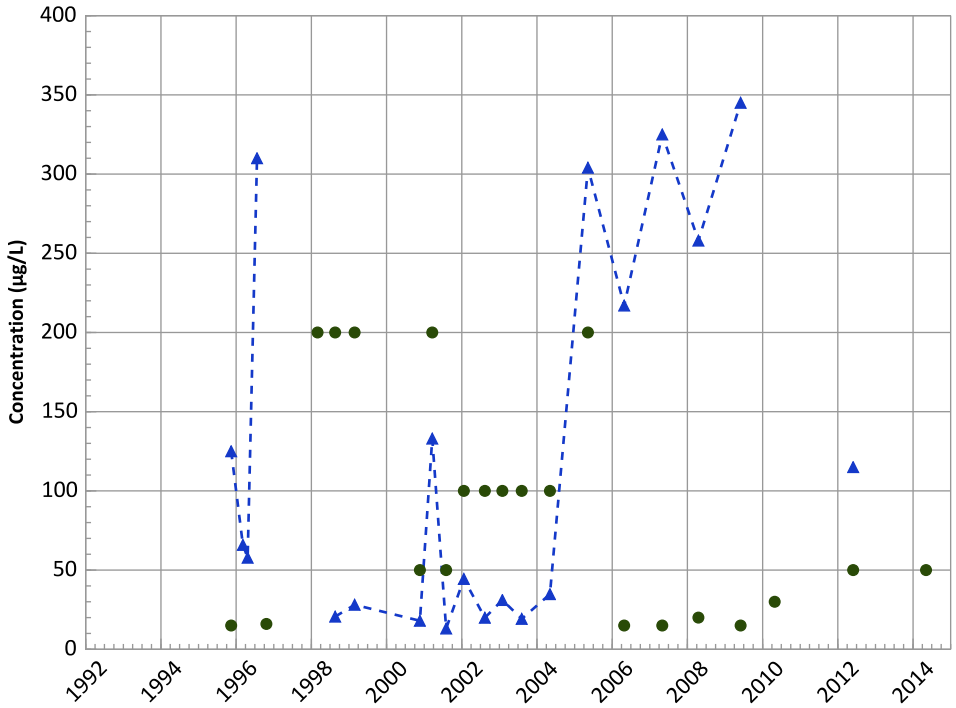
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

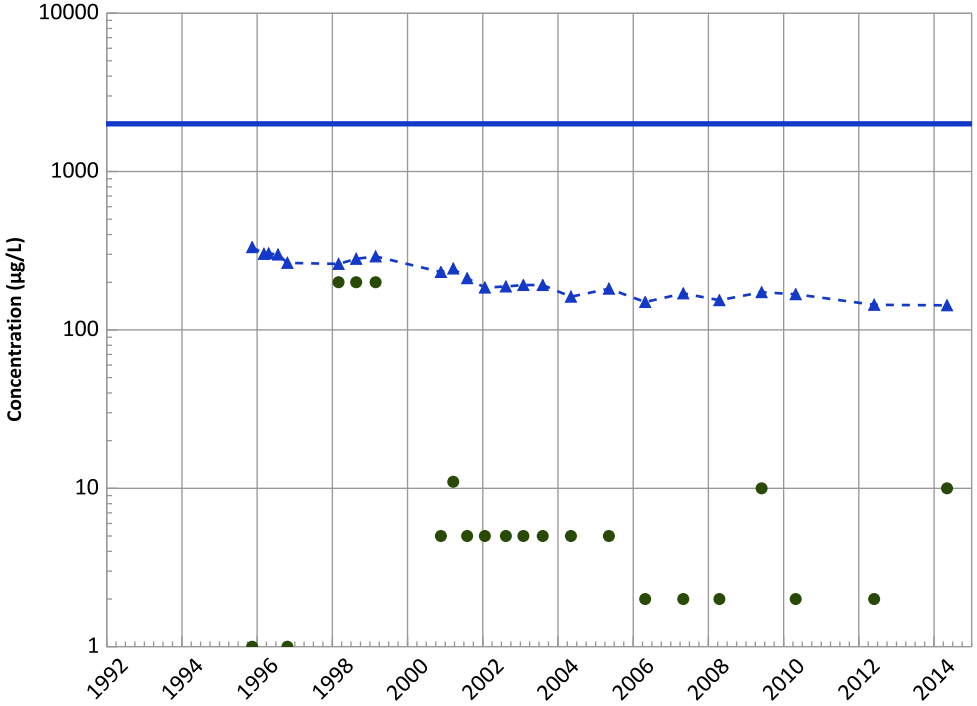


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Barium Trend



Concentration Trend

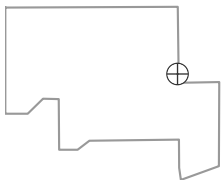
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

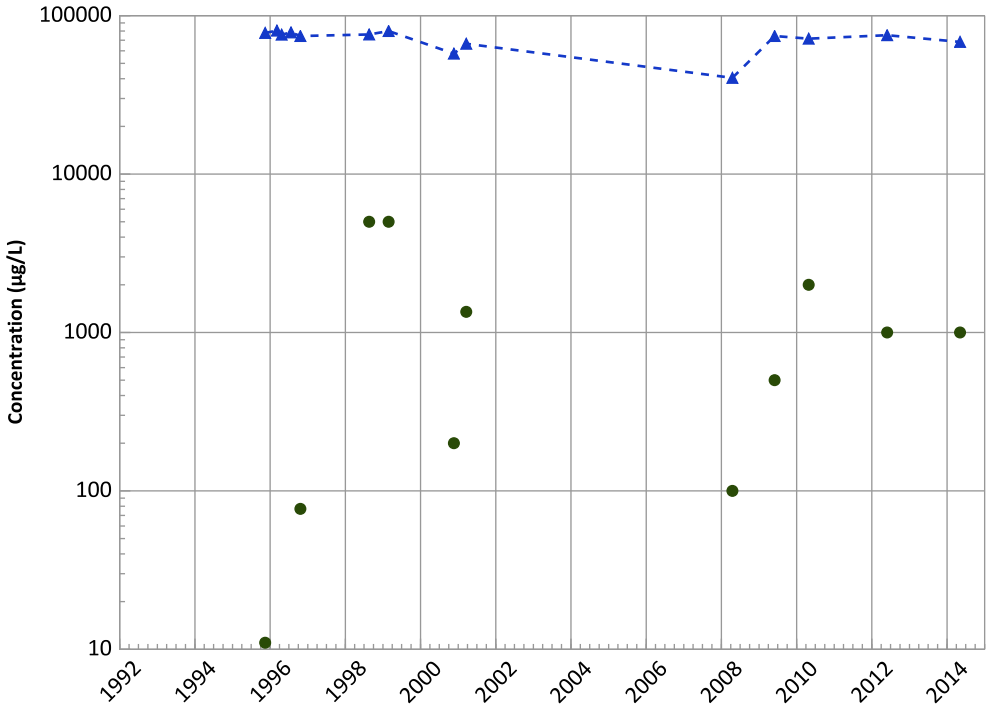
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

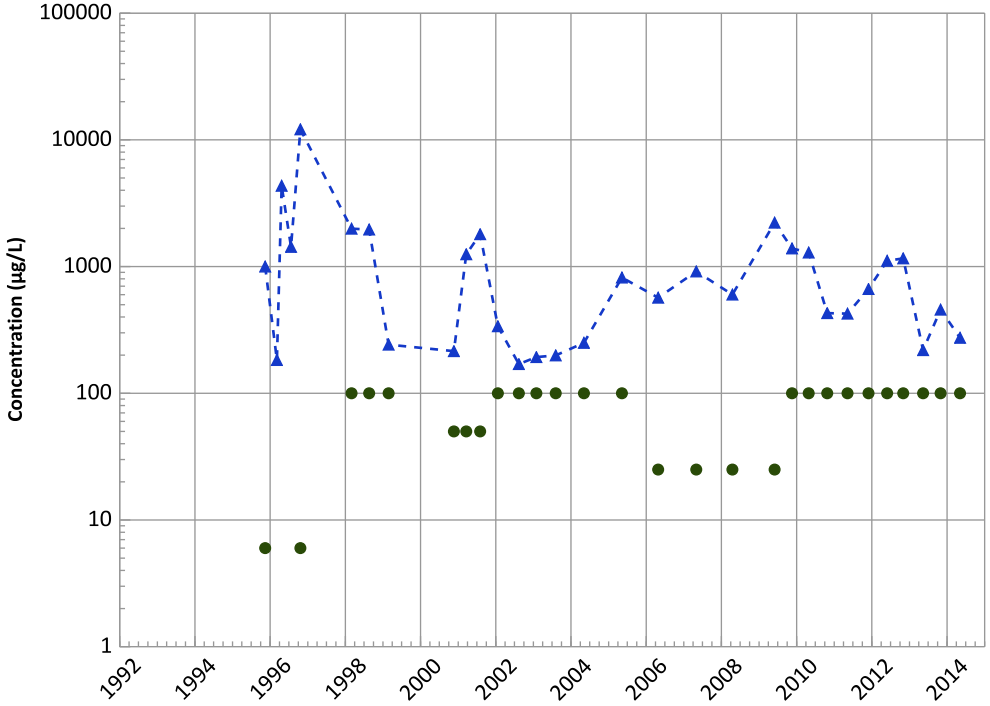


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Iron Trend



Concentration Trend

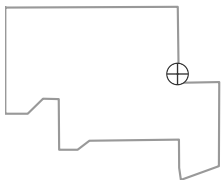
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

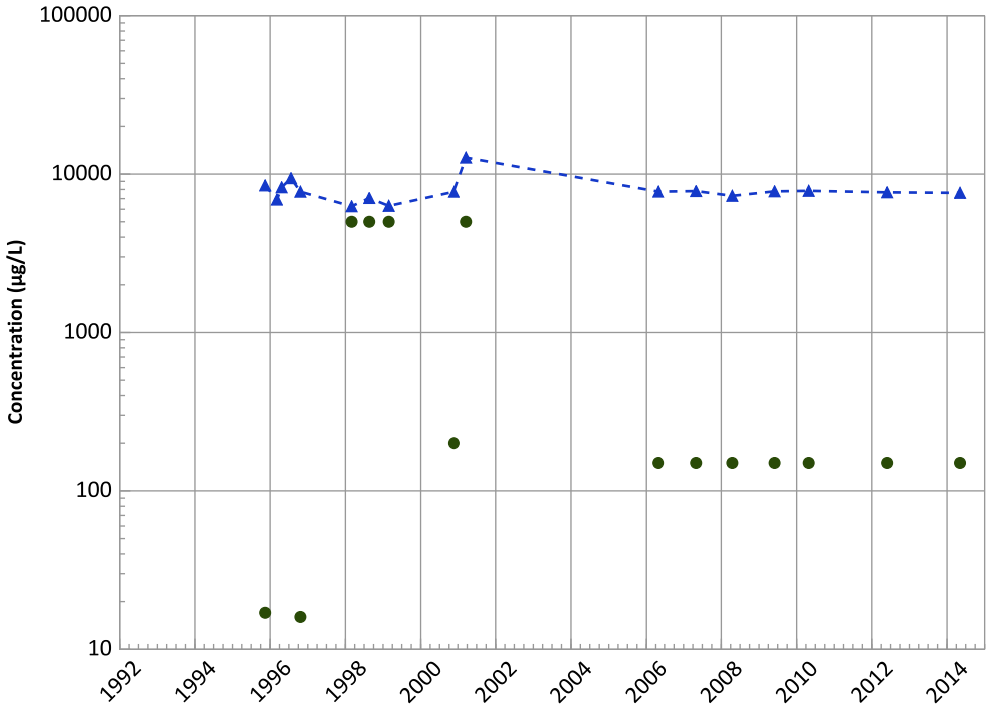
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

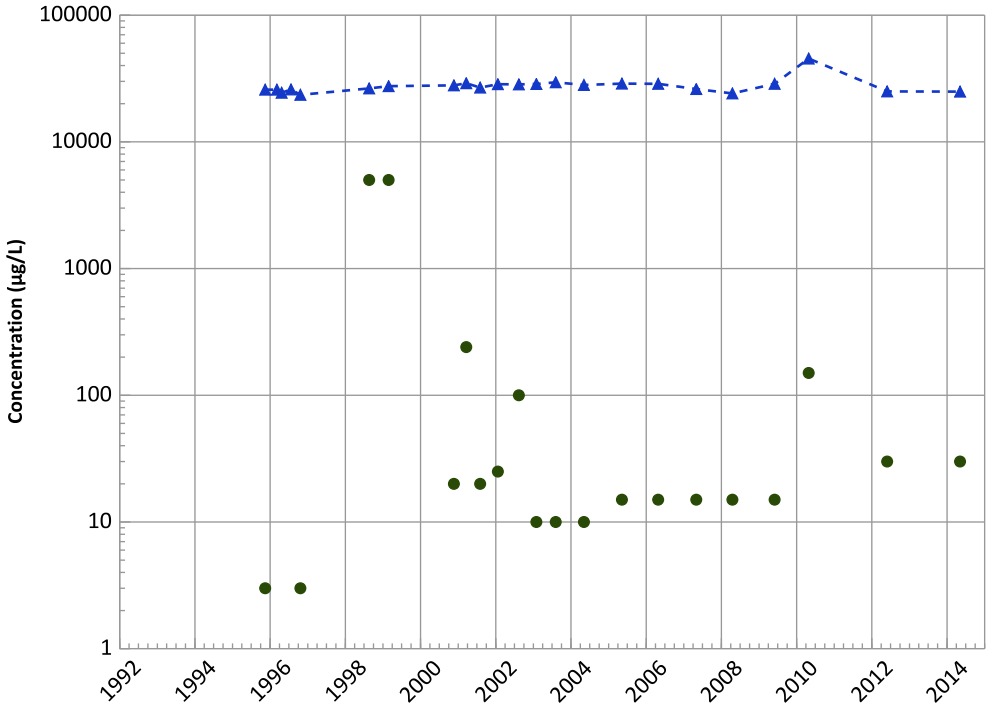


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

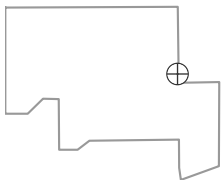
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

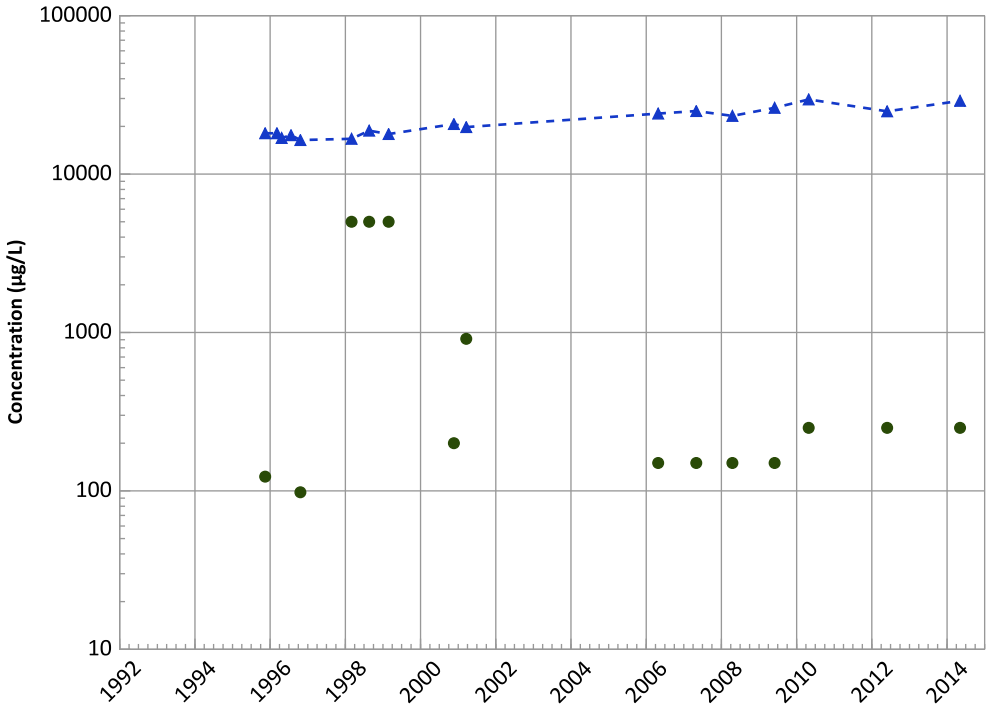
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1013 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

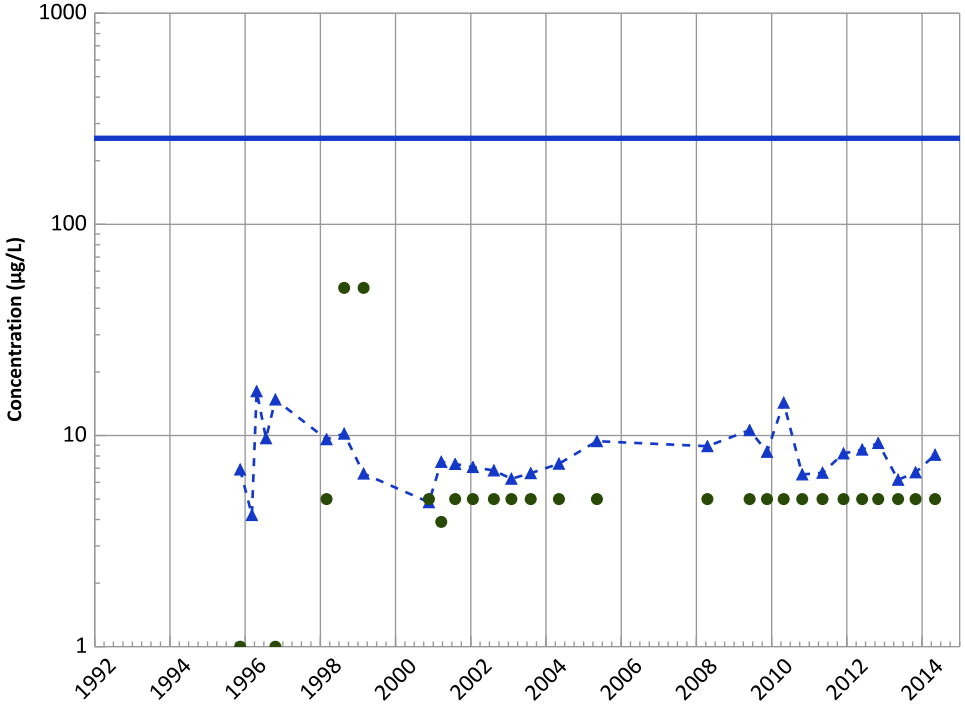


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Vanadium Trend



Concentration Trend

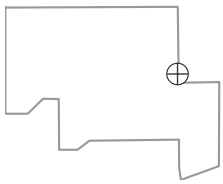
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

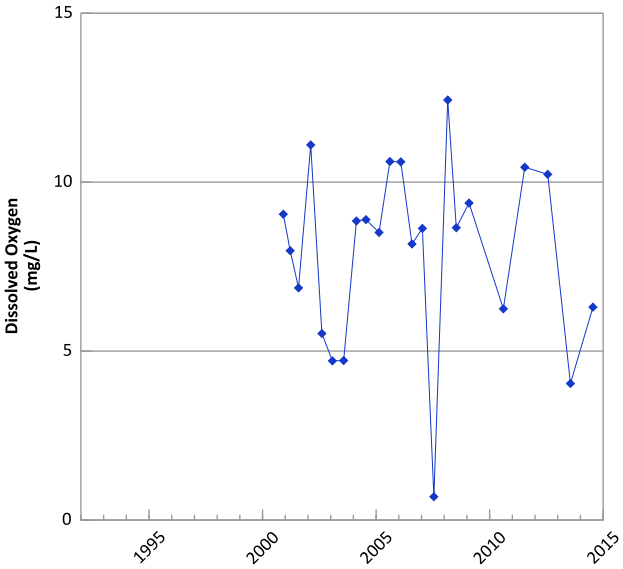
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 05/07/2014
Analysis Date: 03/19/2015

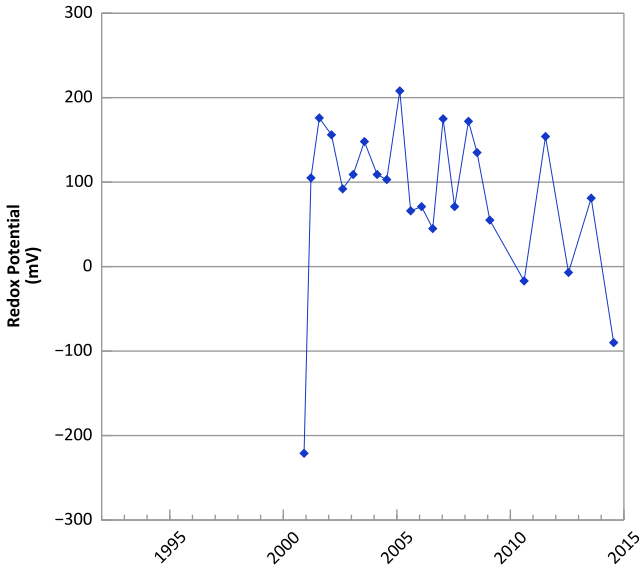
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

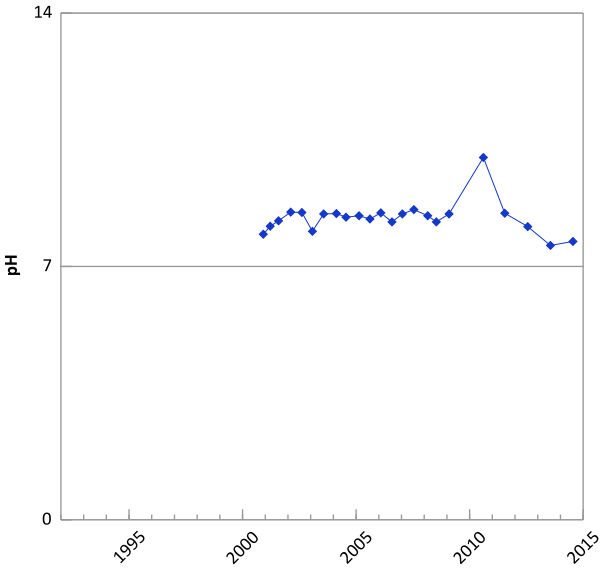
Well Location

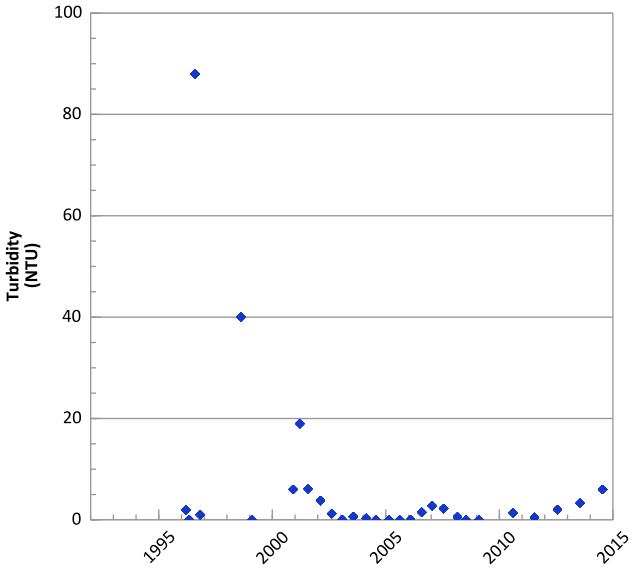


PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



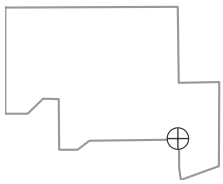






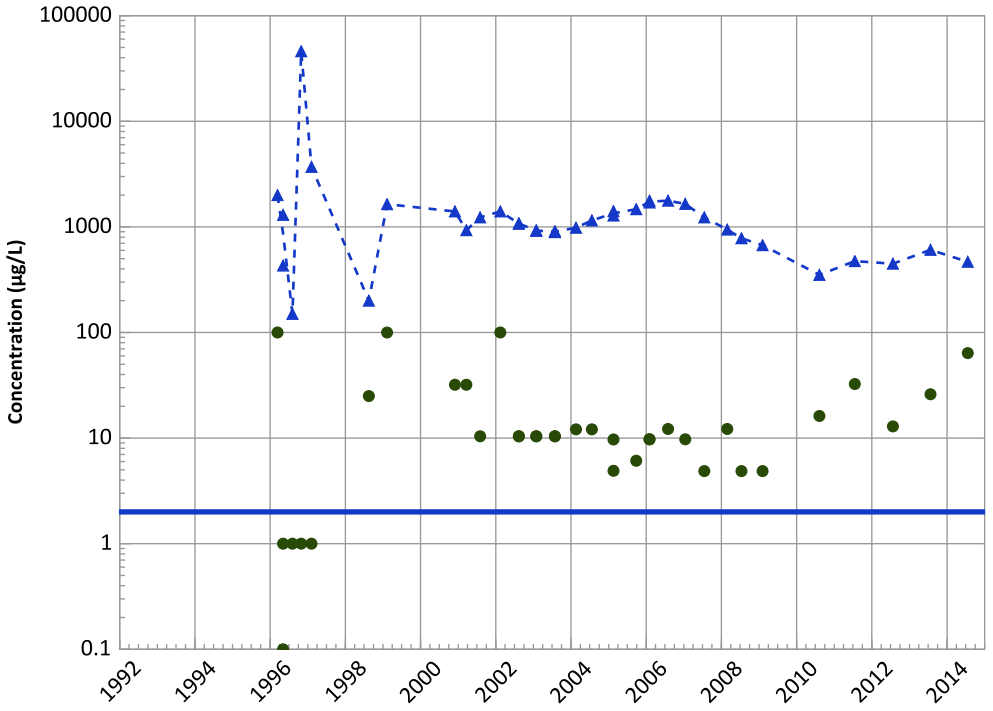
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

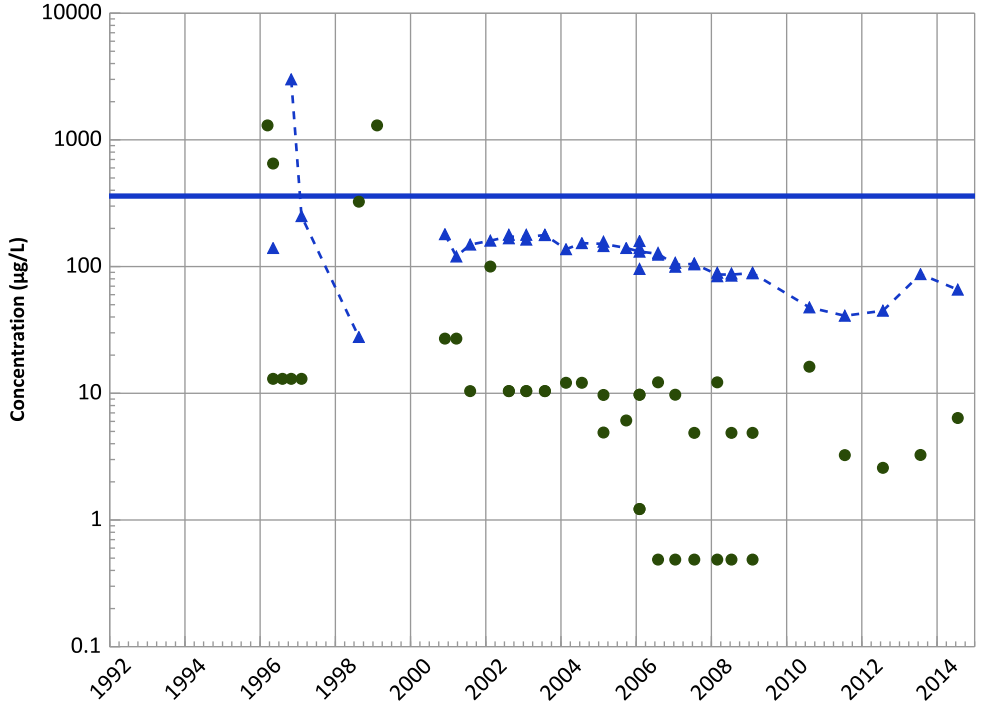


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

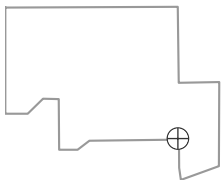
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

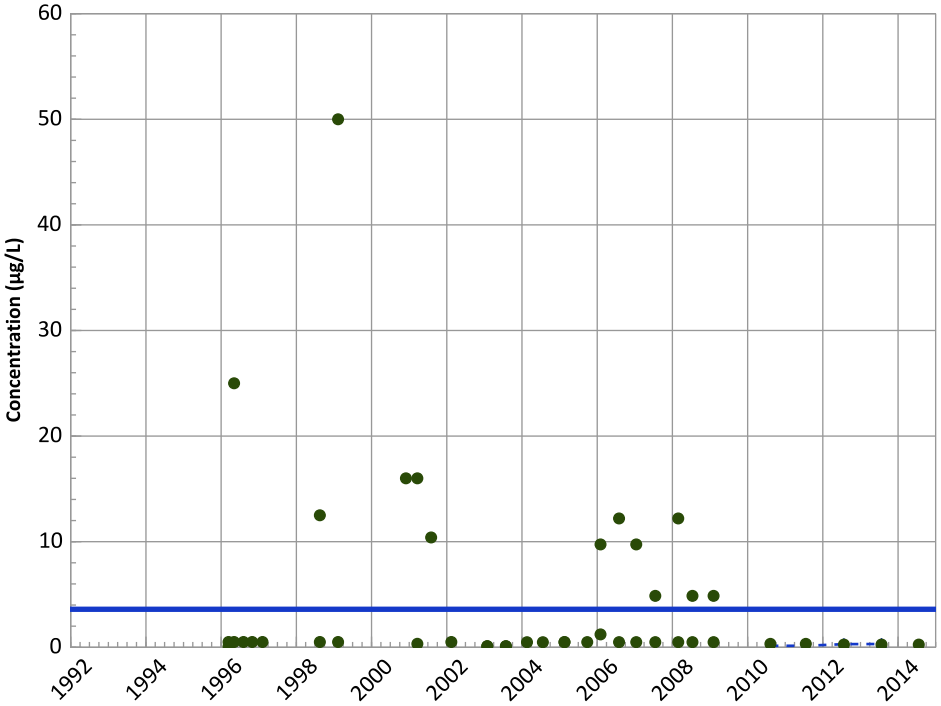
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

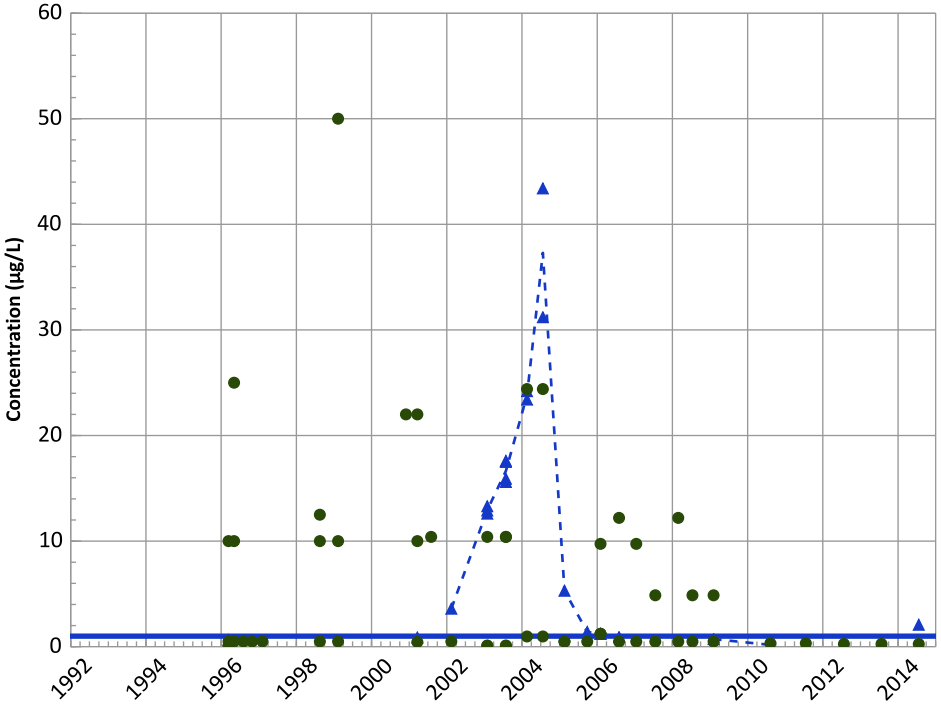


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

2,4-Dinitrotoluene Trend



Concentration Trend

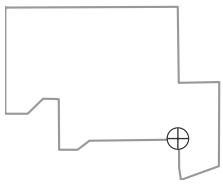
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

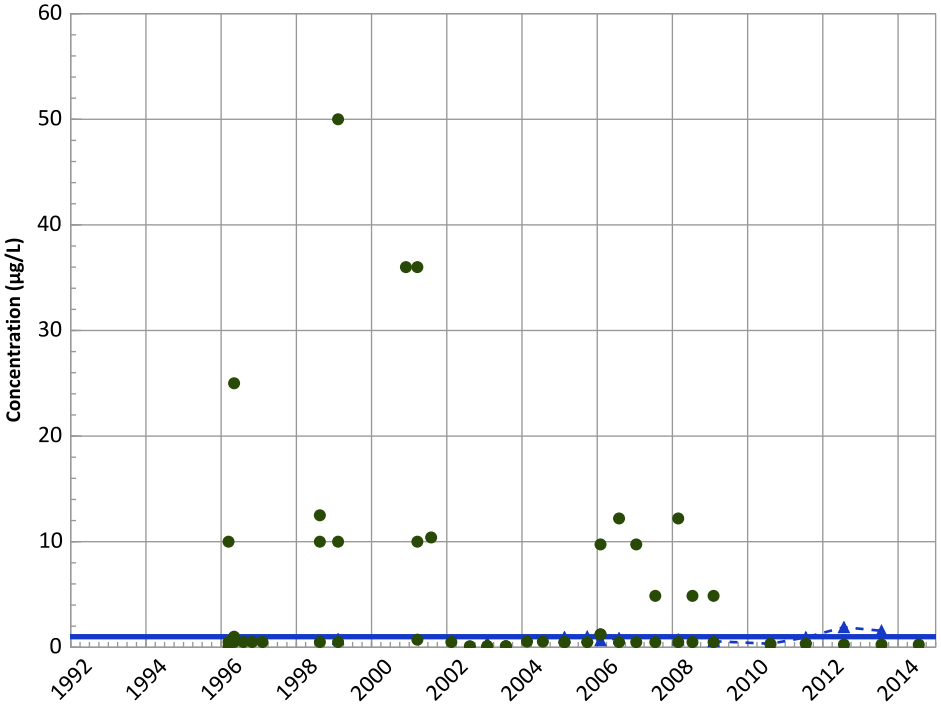
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

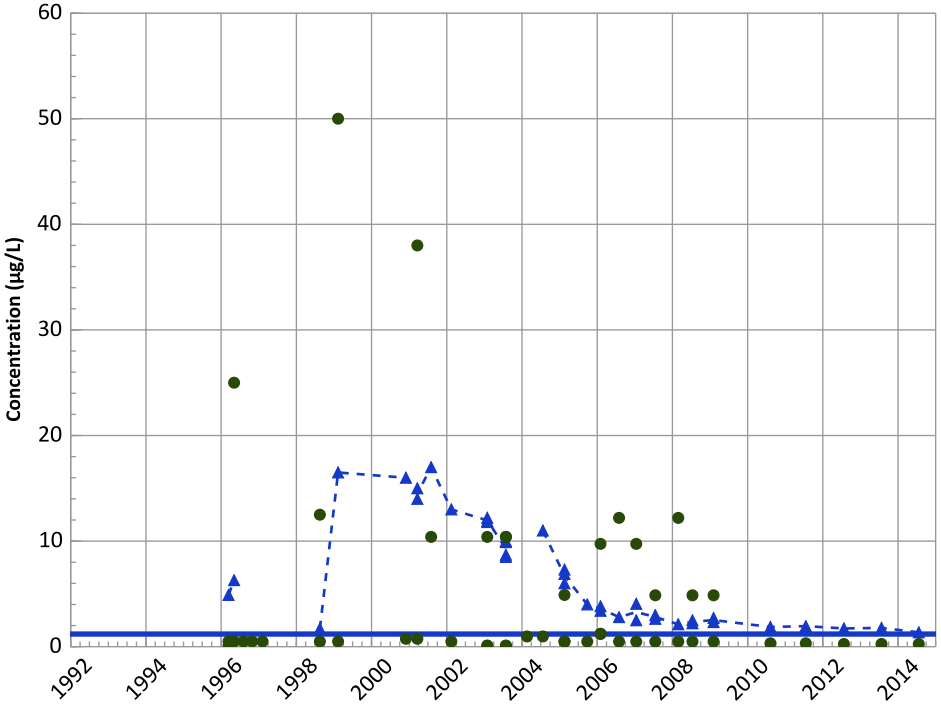


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
No Trend

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

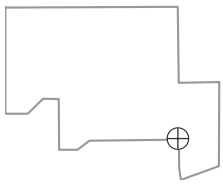
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

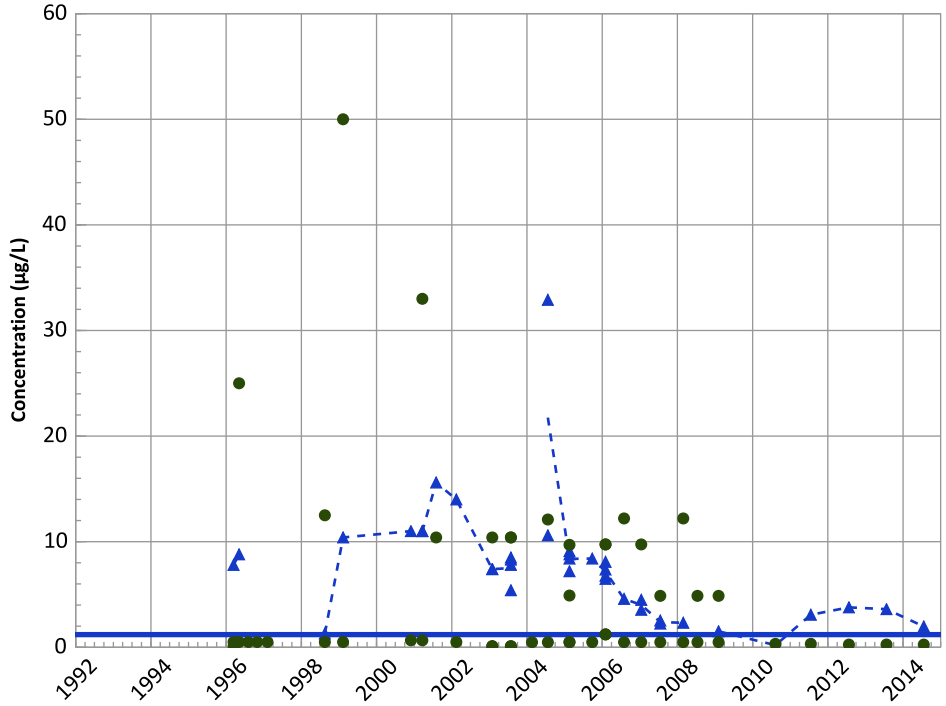
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

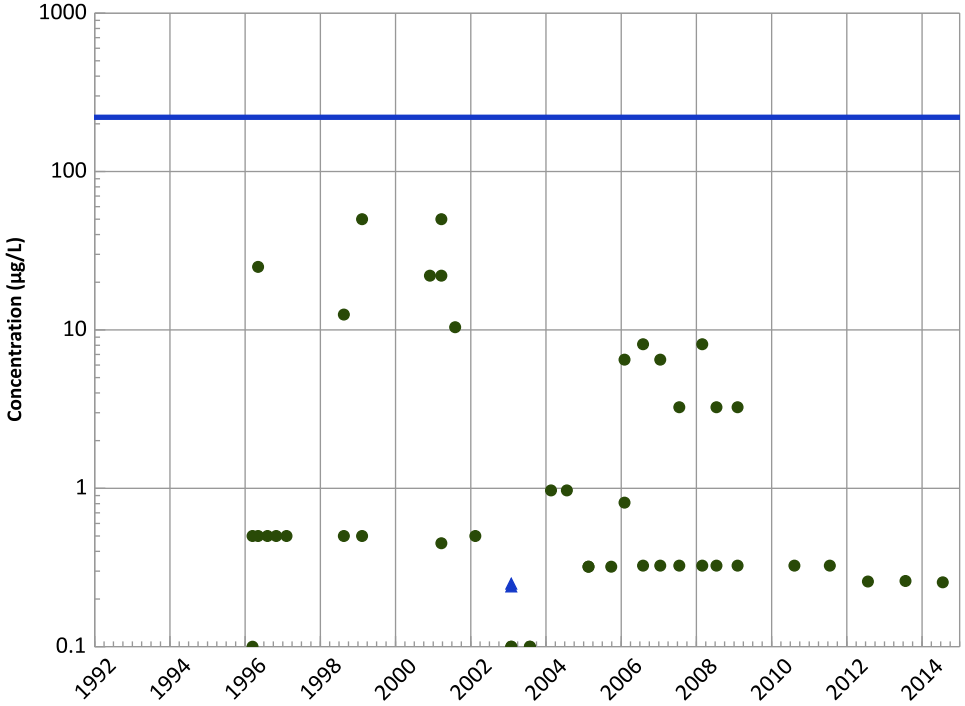


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

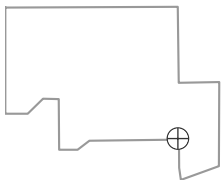
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

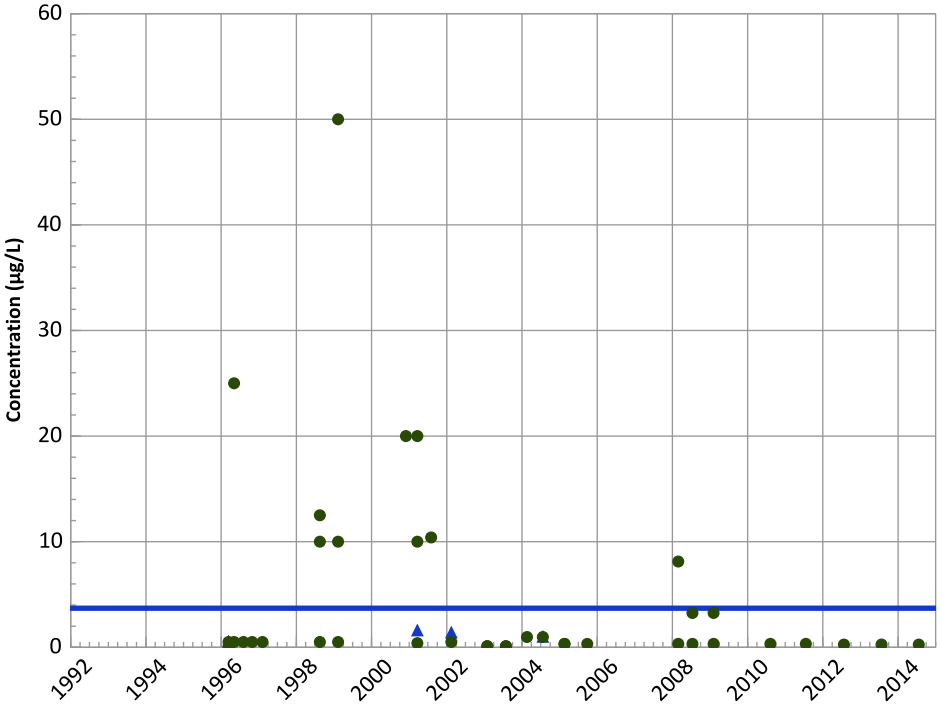
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

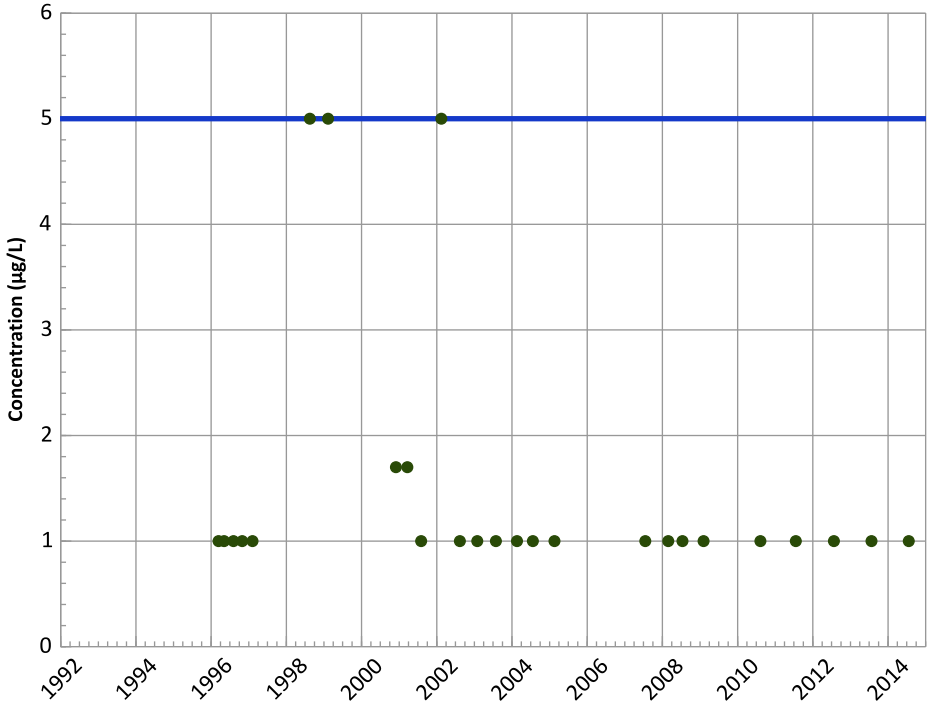


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
No Trend

Tetrachloroethylene (PCE) Trend



Concentration Trend

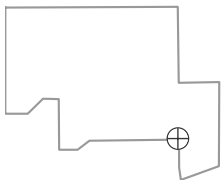
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

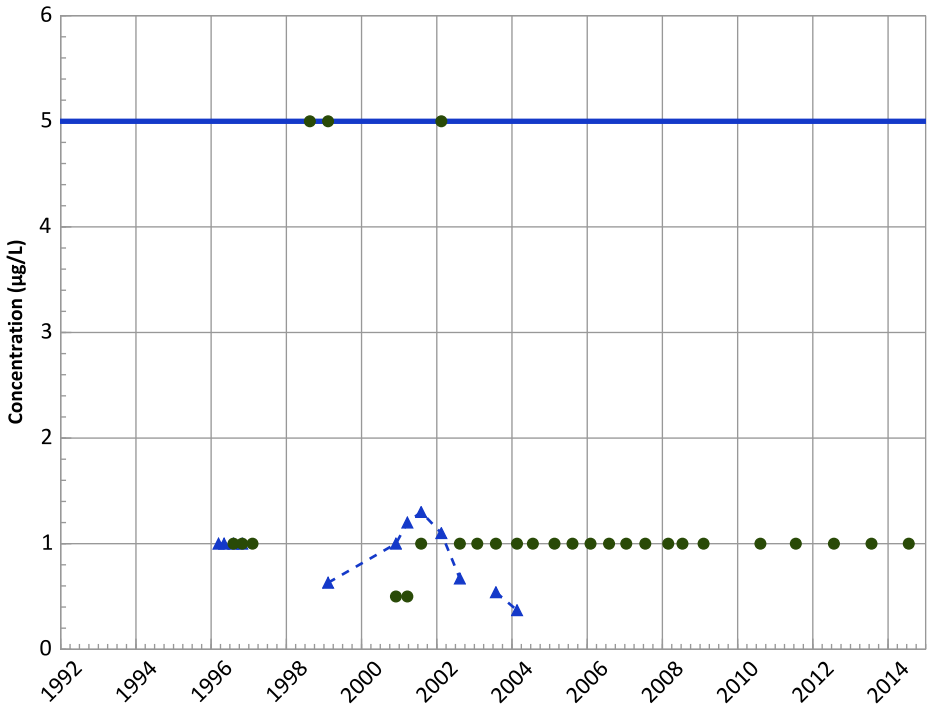
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

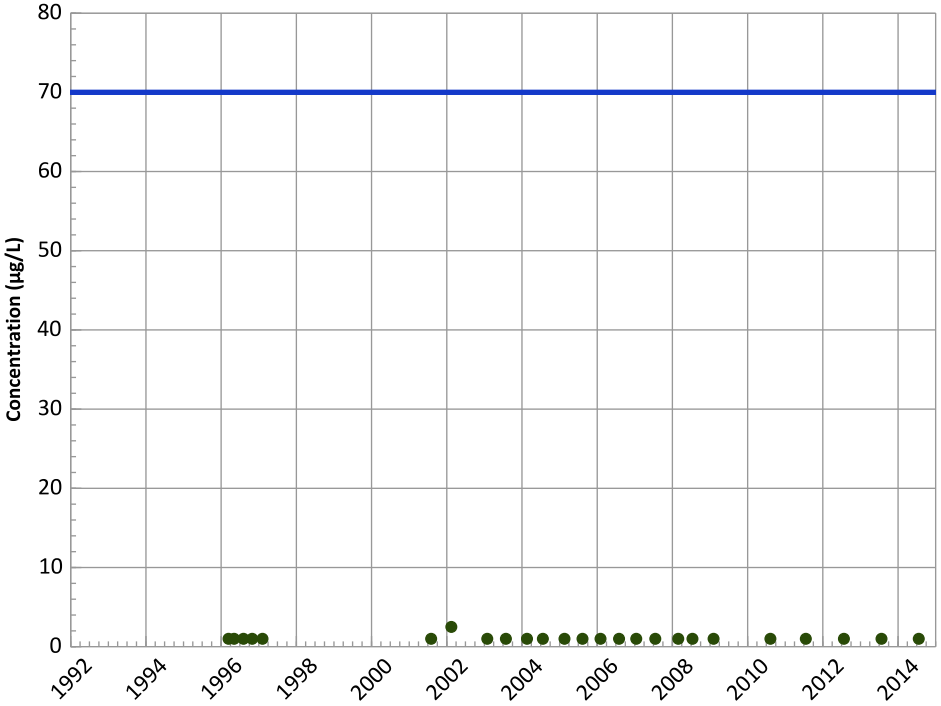


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Probably Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

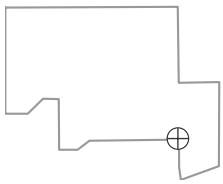
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

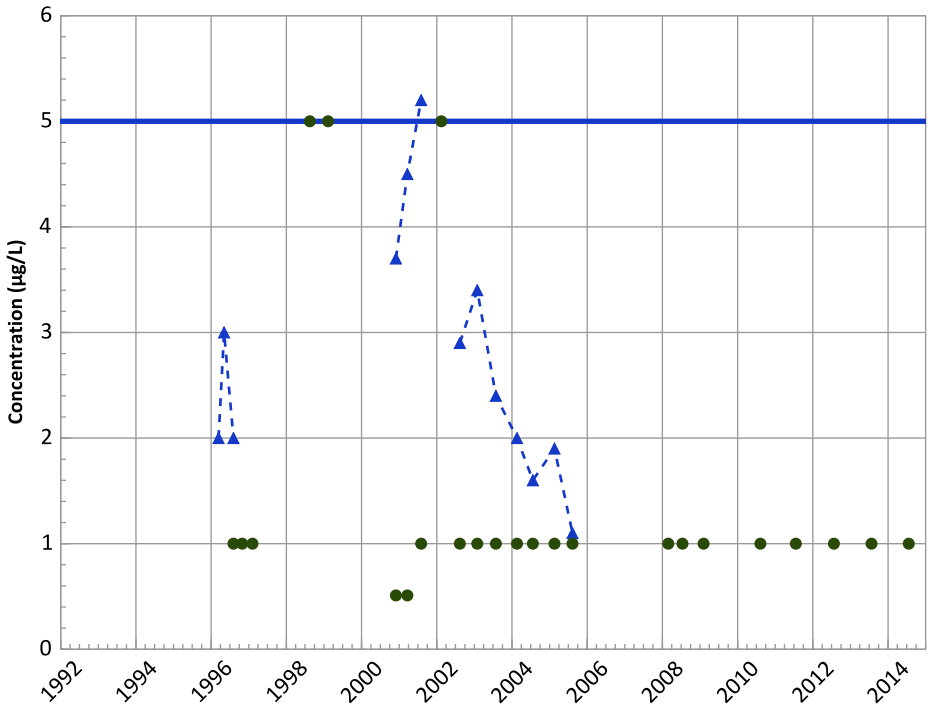
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

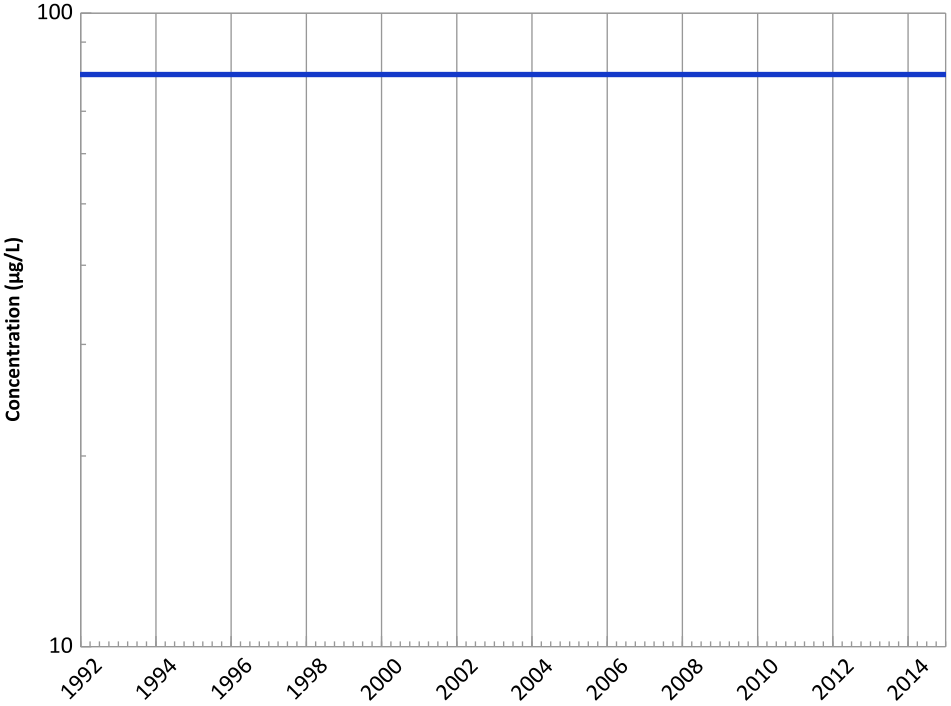


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Stable

Chloroform Trend



Concentration Trend

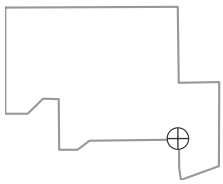
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

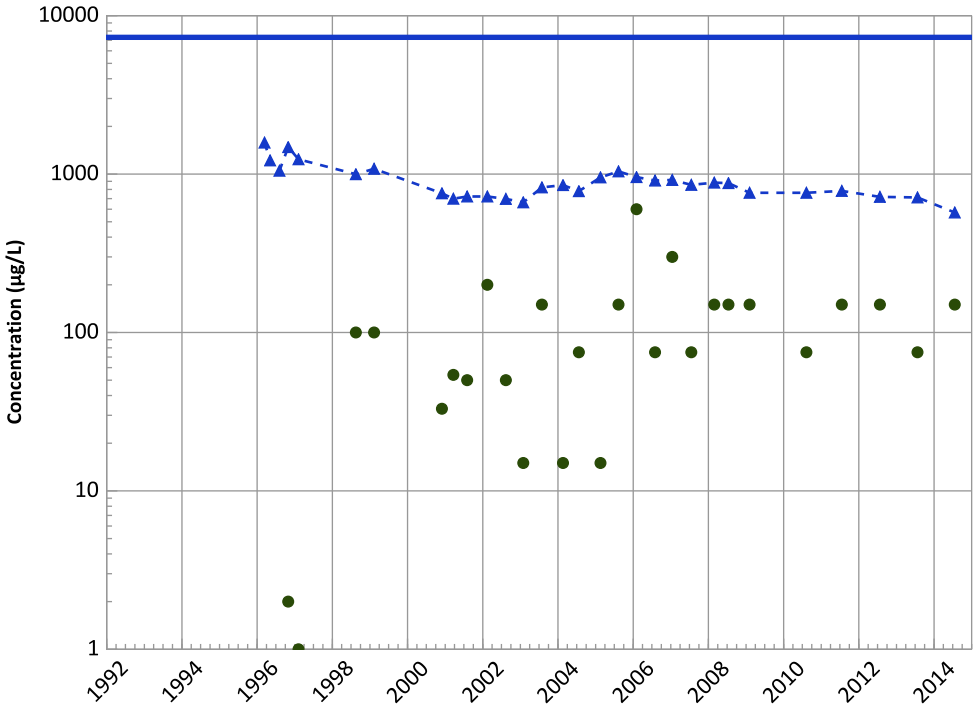
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

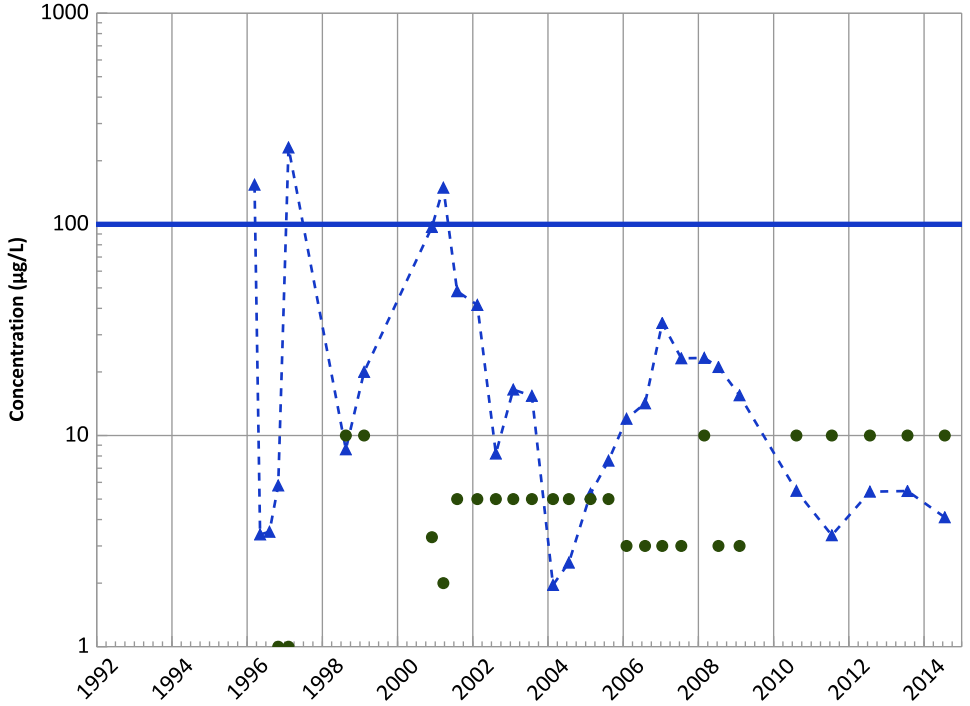


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

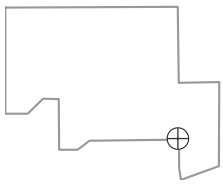
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

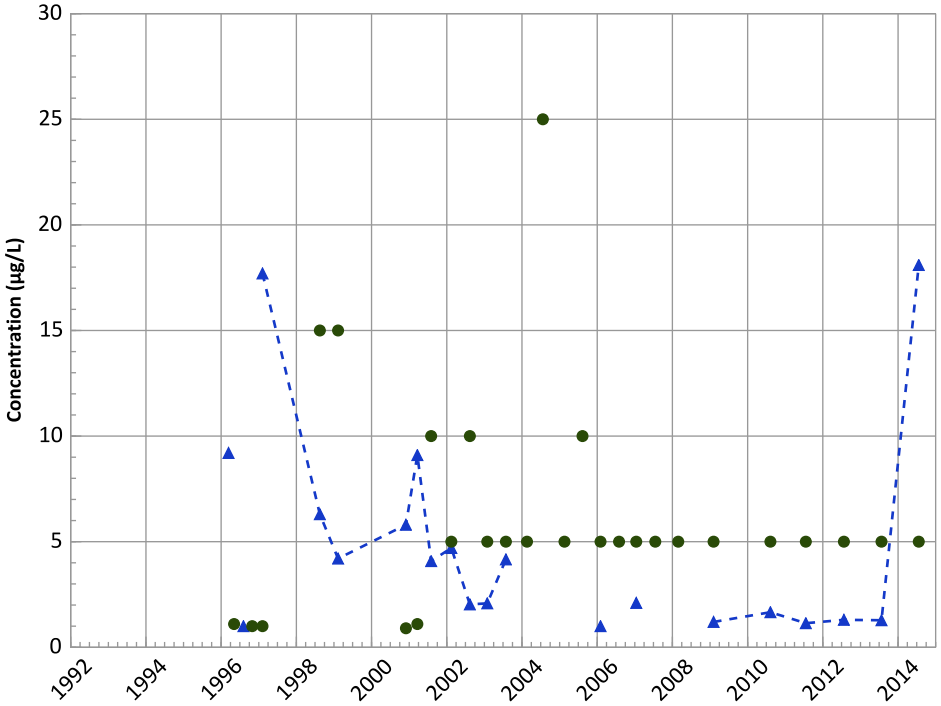
▲ Measured Value
● Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

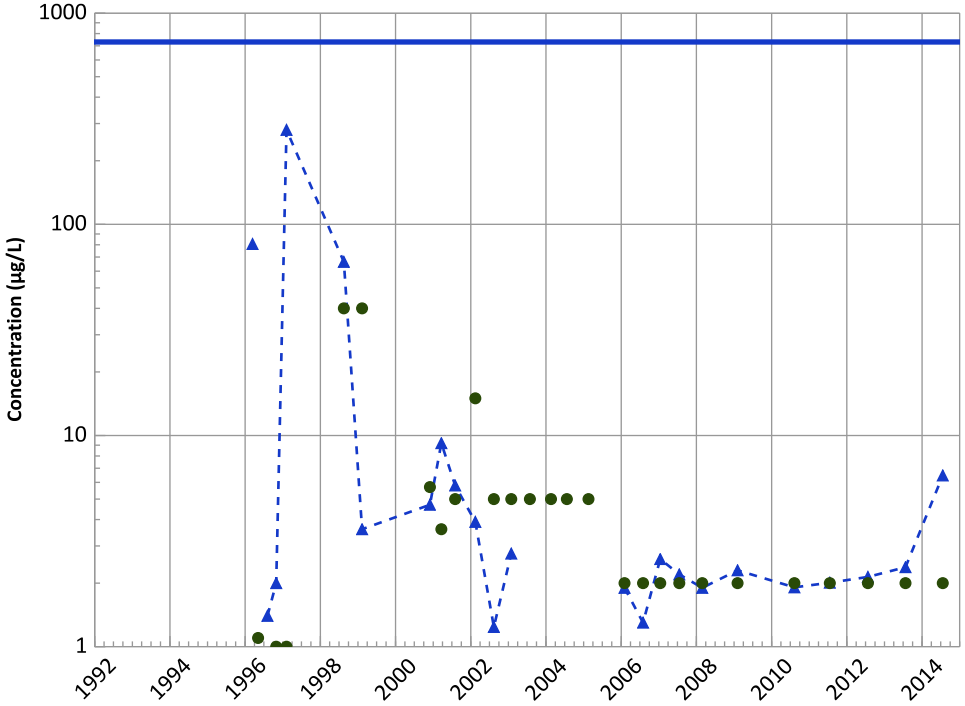


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Nickel Trend



Concentration Trend

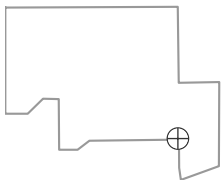
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

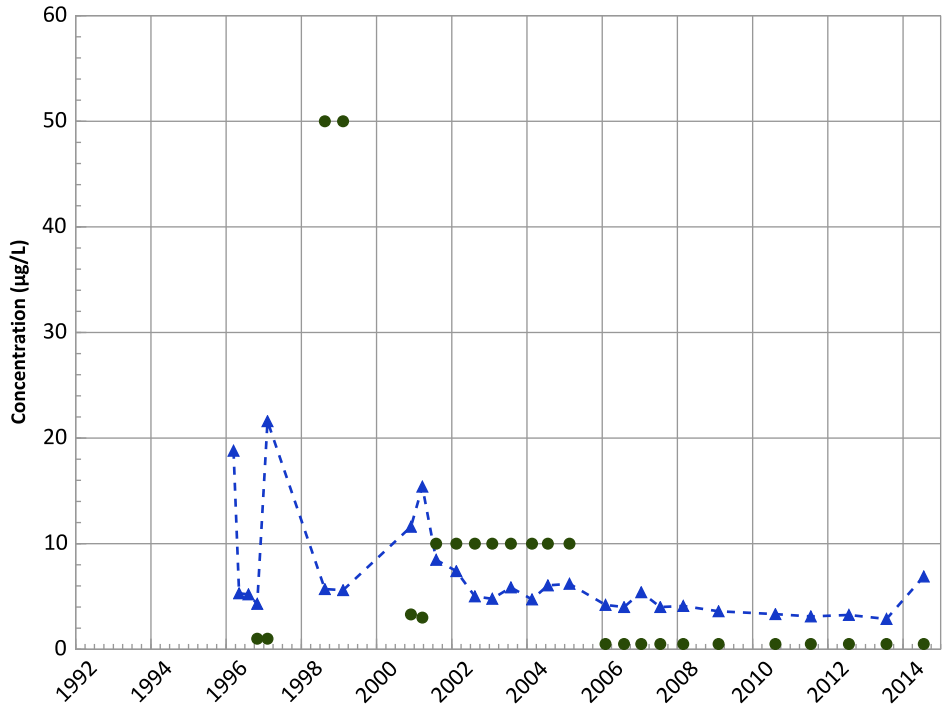
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Molybdenum Trend

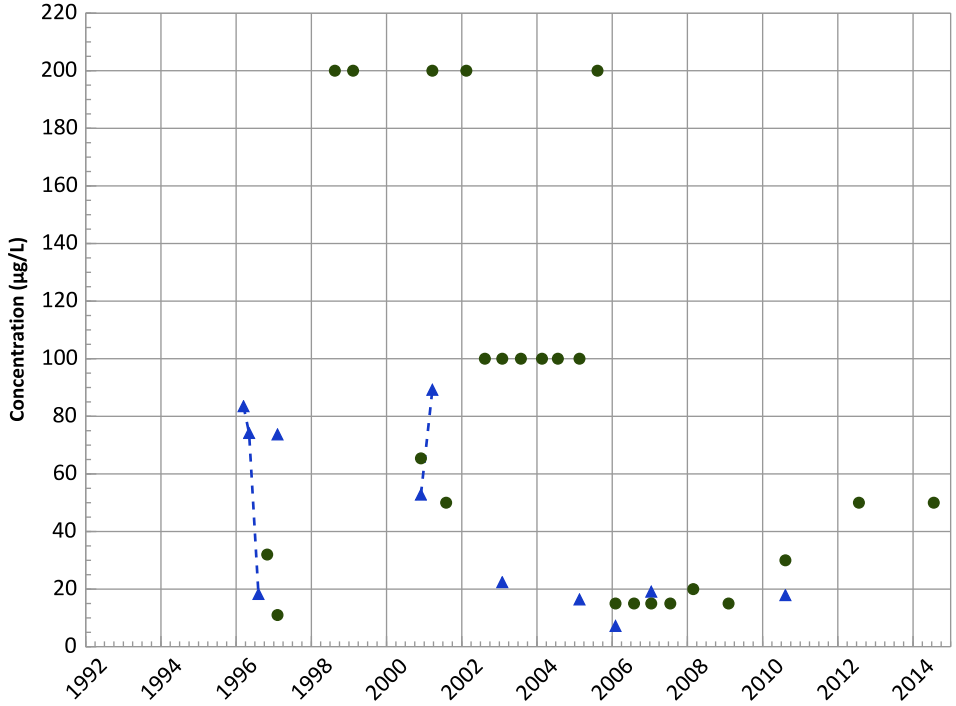


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Aluminum Trend



Concentration Trend

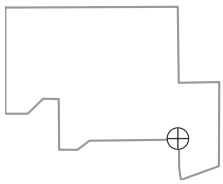
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

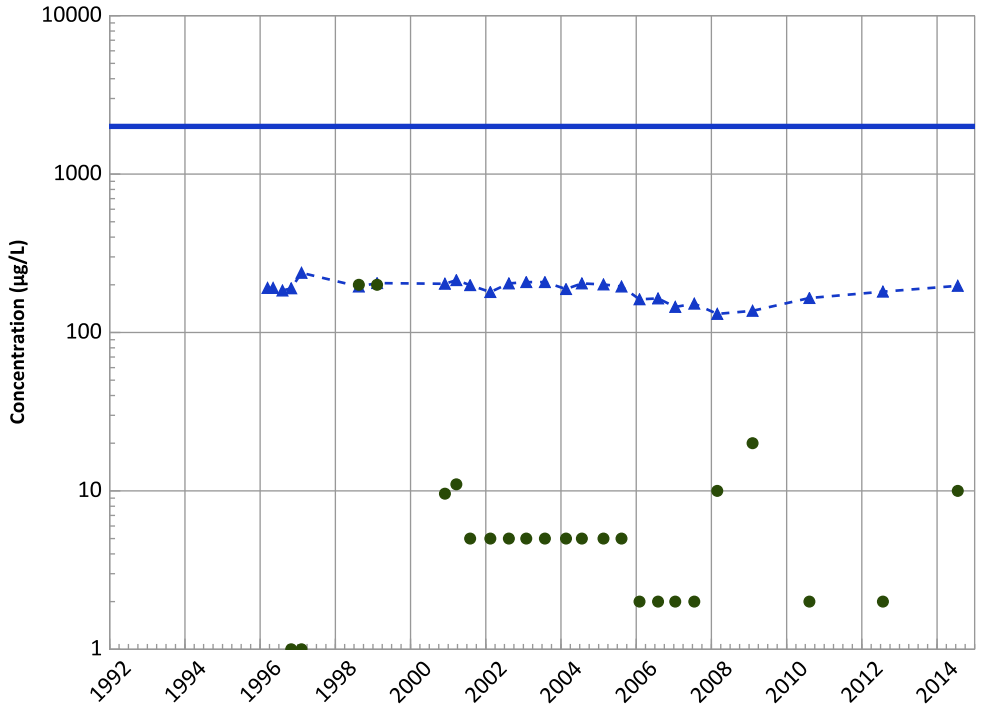
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

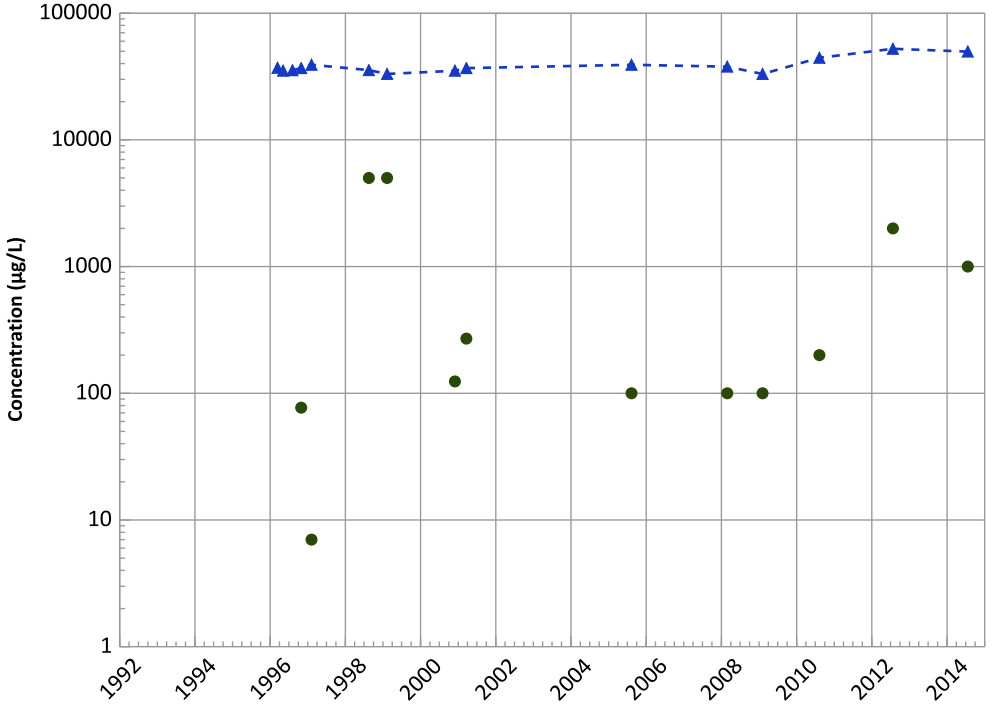


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Calcium Trend



Concentration Trend

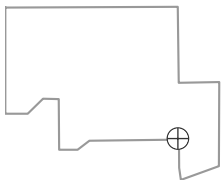
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

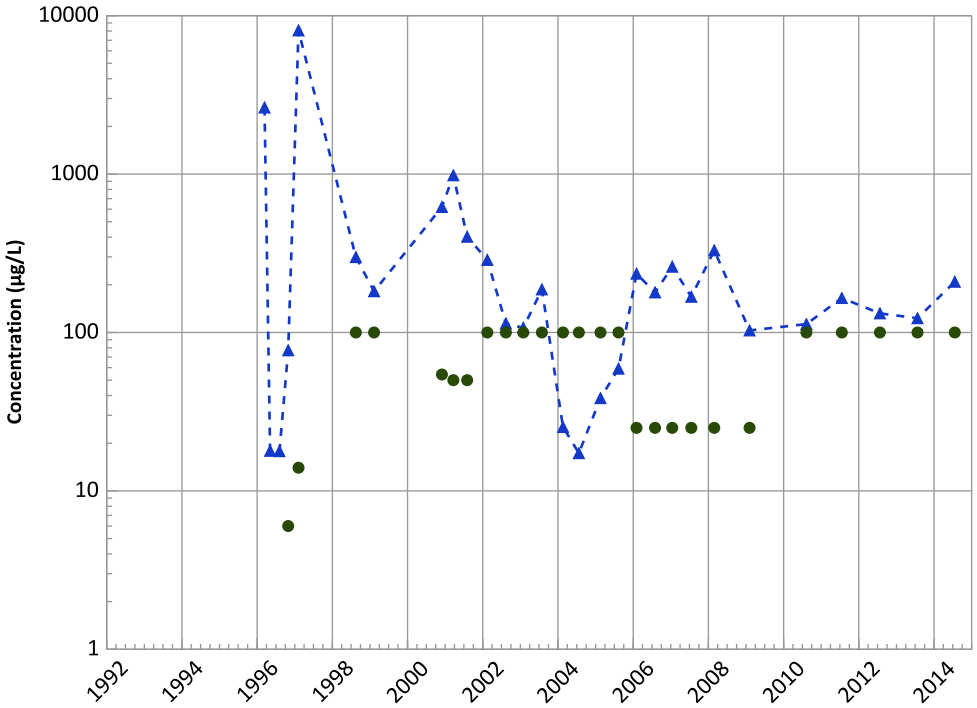
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

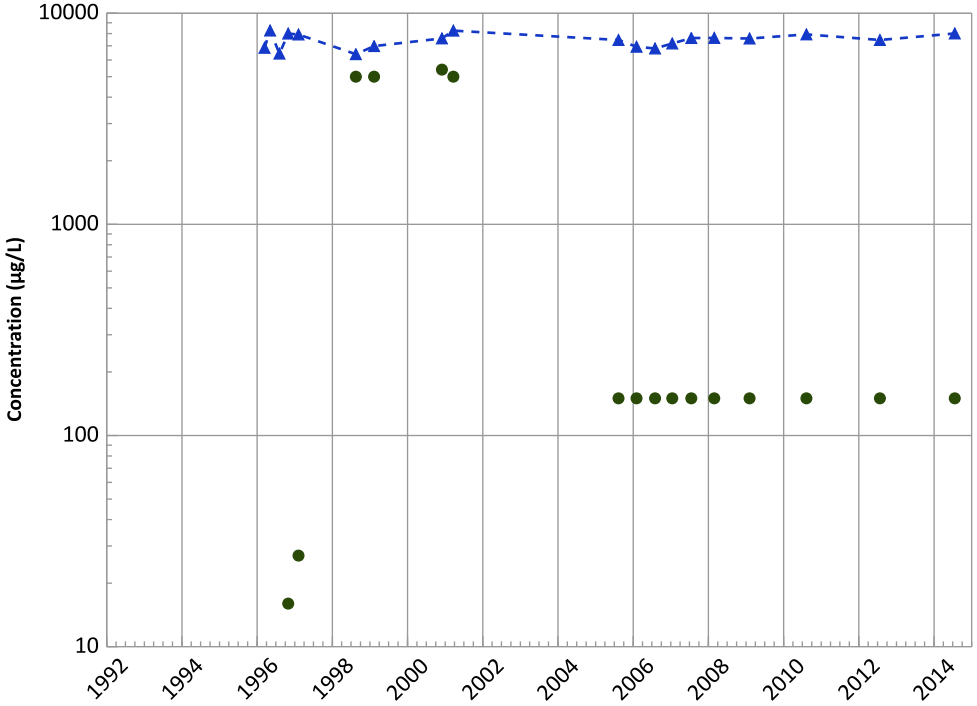


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Potassium Trend



Concentration Trend

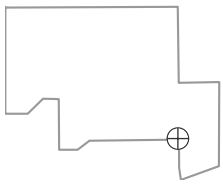
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

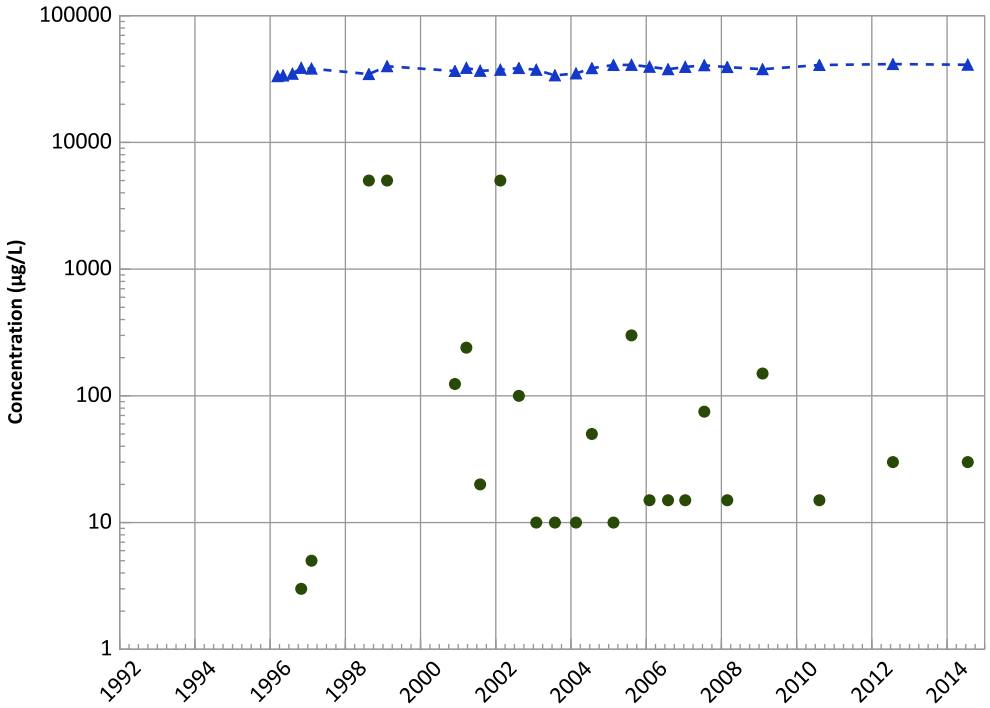
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

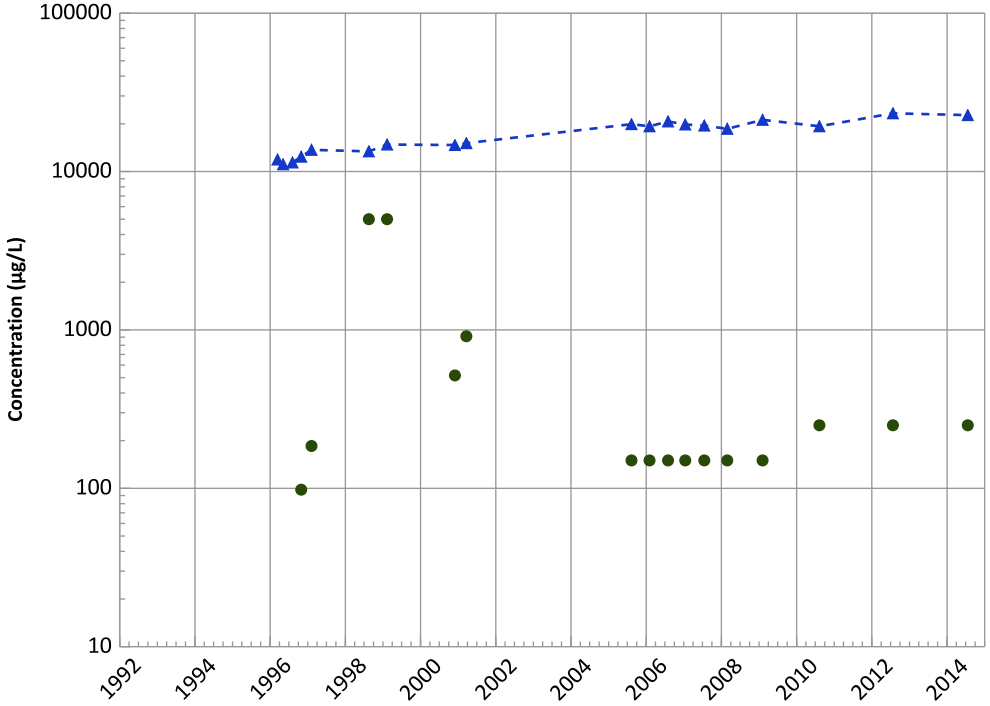


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Sodium Trend



Concentration Trend

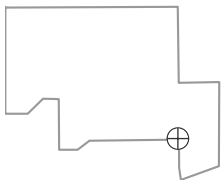
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

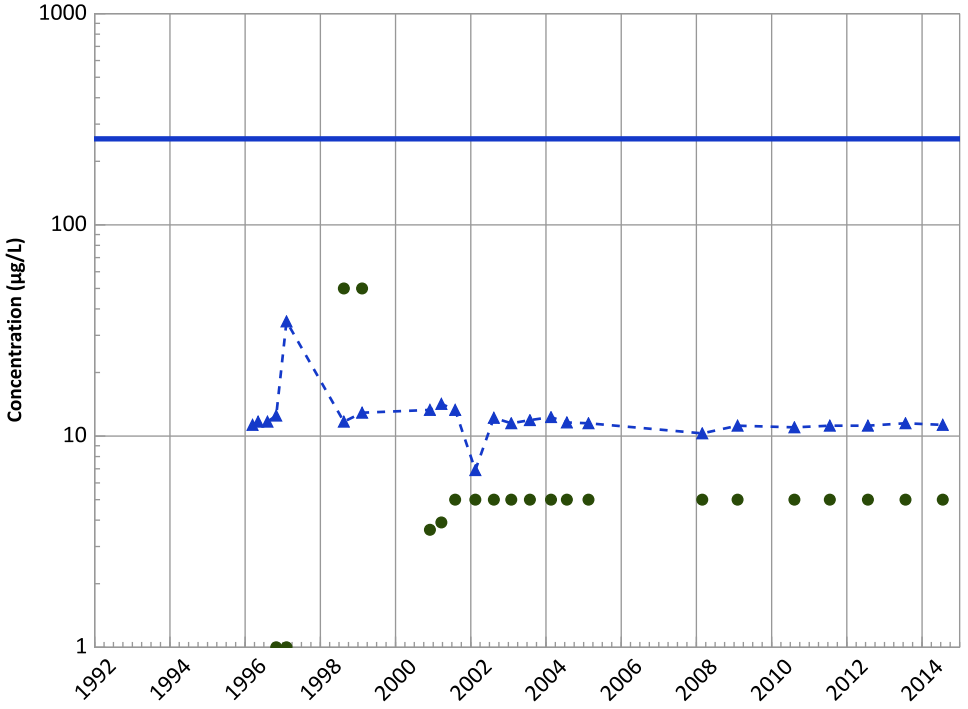
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Vanadium Trend



Concentration Trend

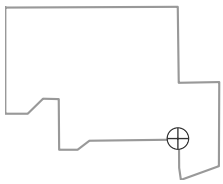
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Decreasing

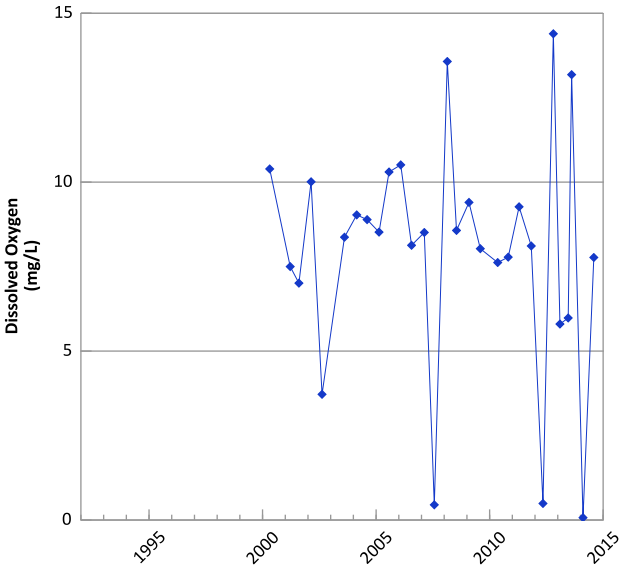
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 03/13/1996 to 07/21/2014
Analysis Date: 03/19/2015

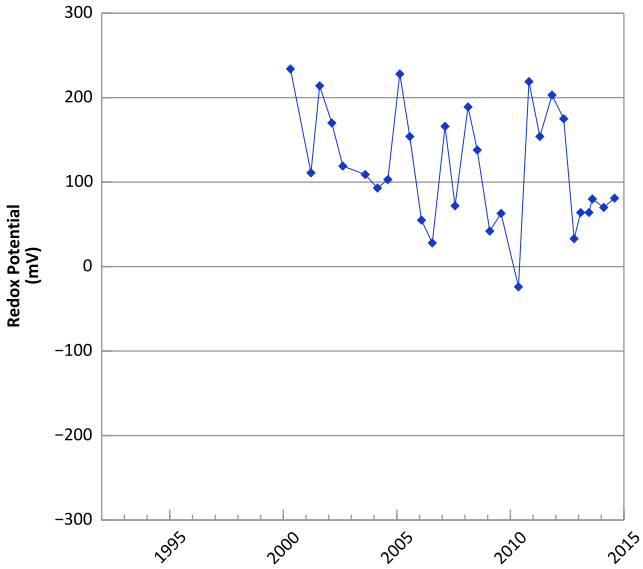
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

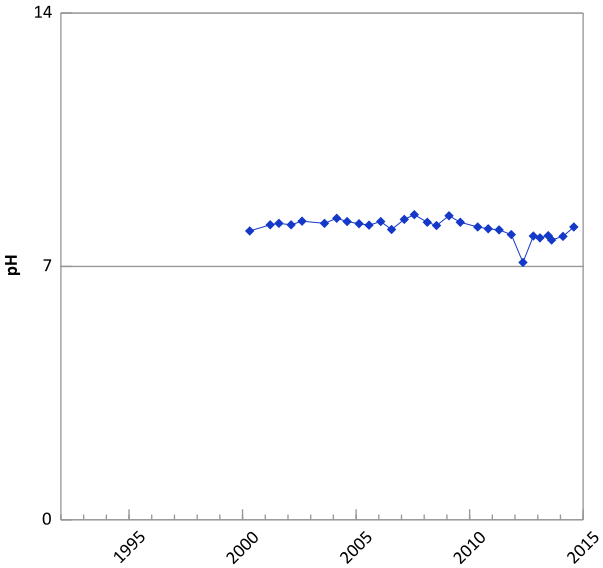
Well Location

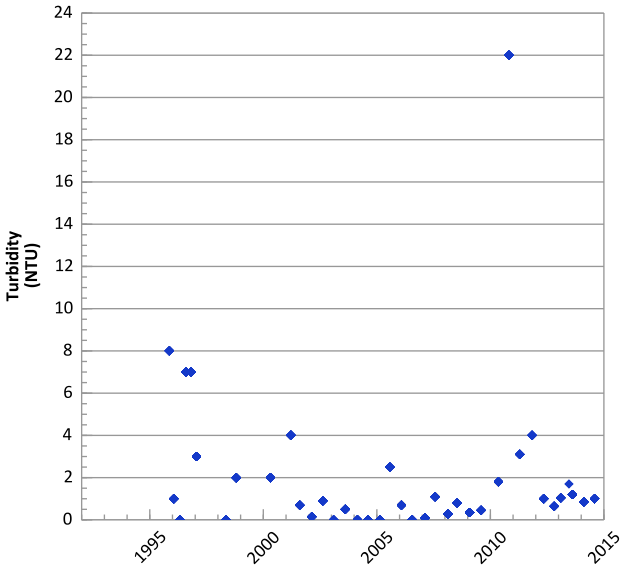


PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



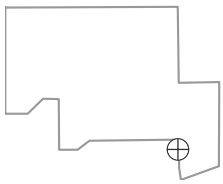






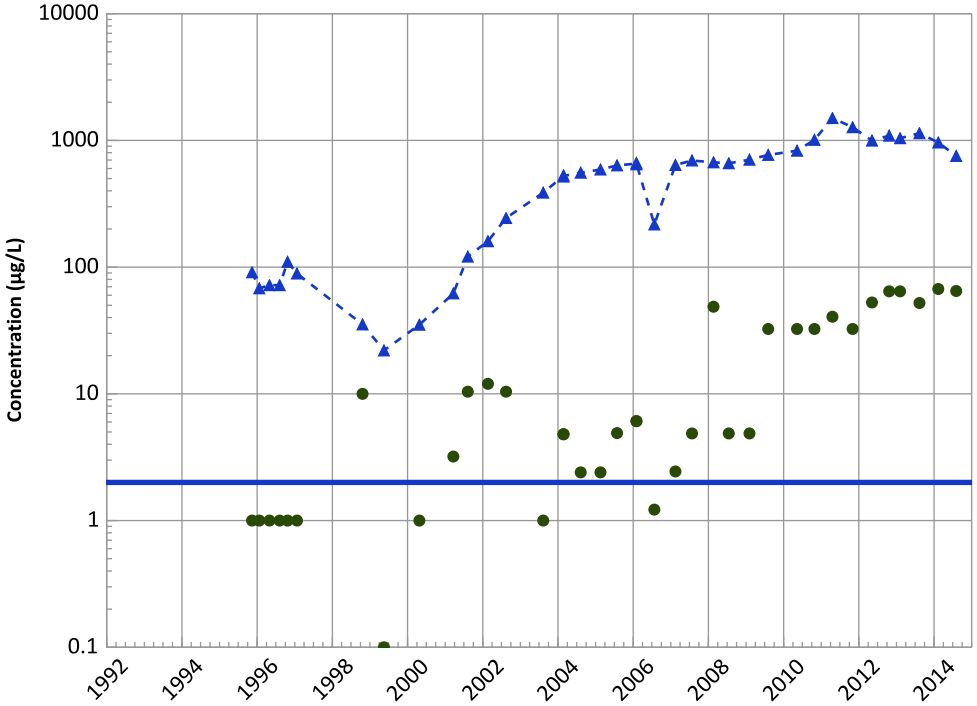
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

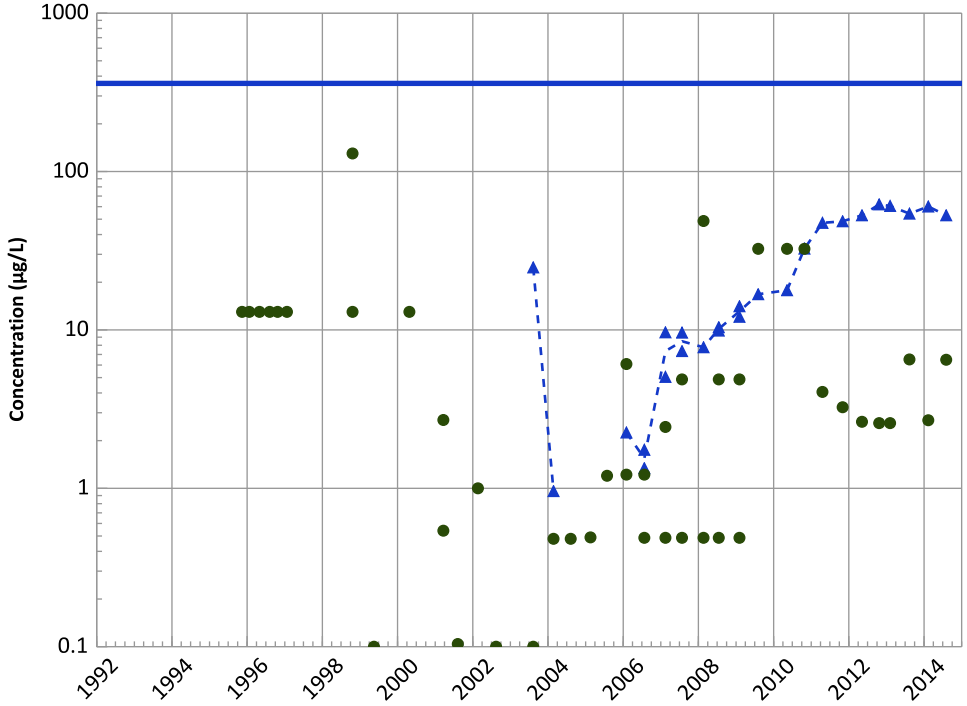


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

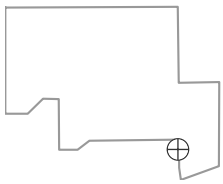
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

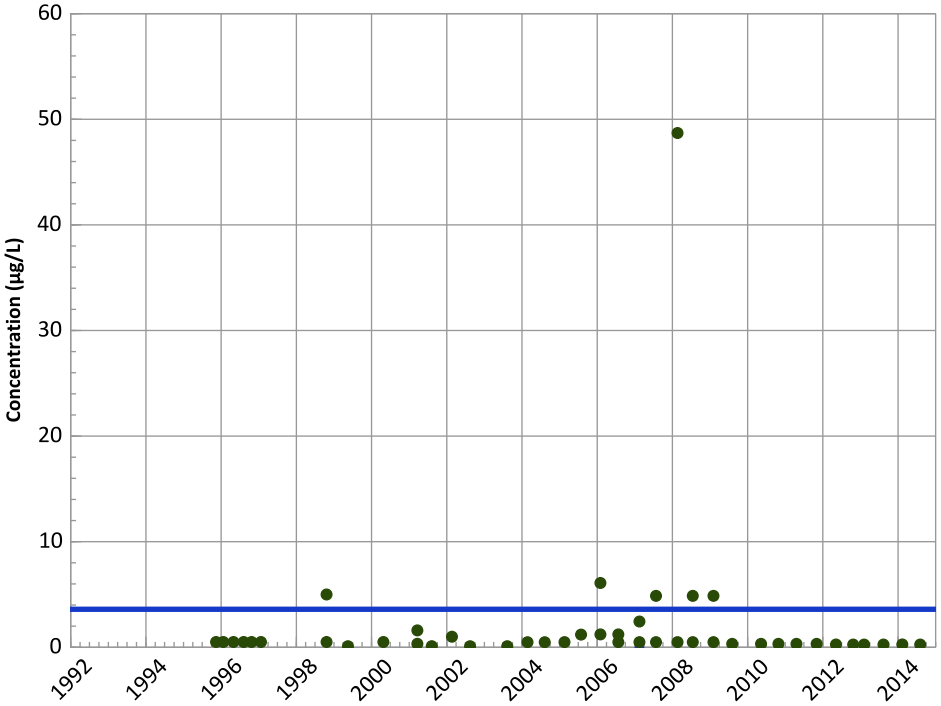
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

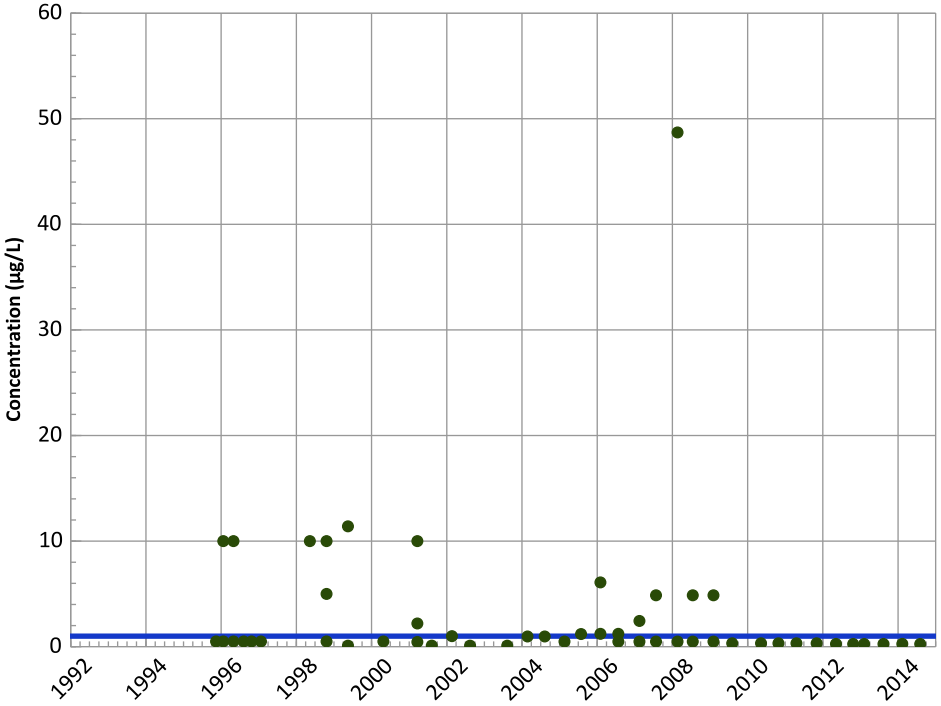


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

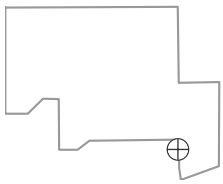
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

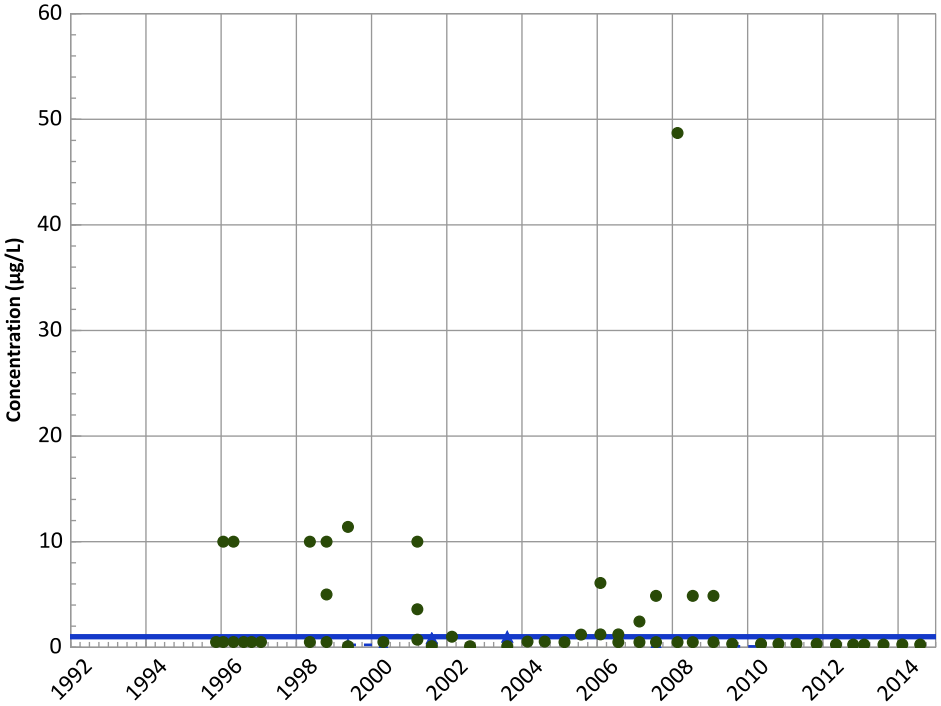
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

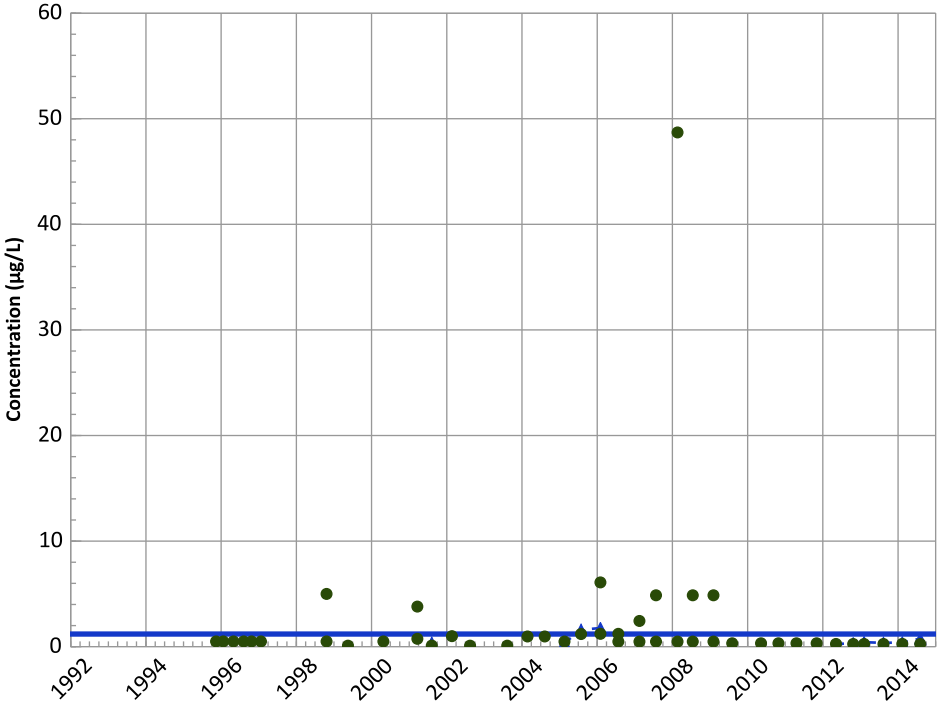


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

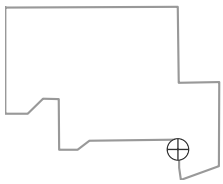
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

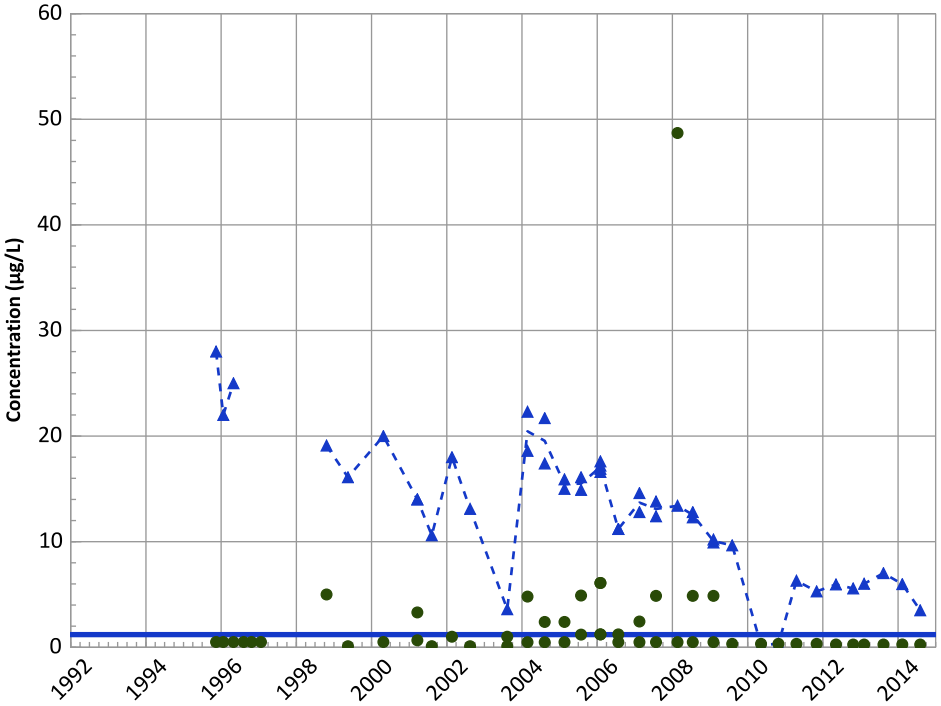
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

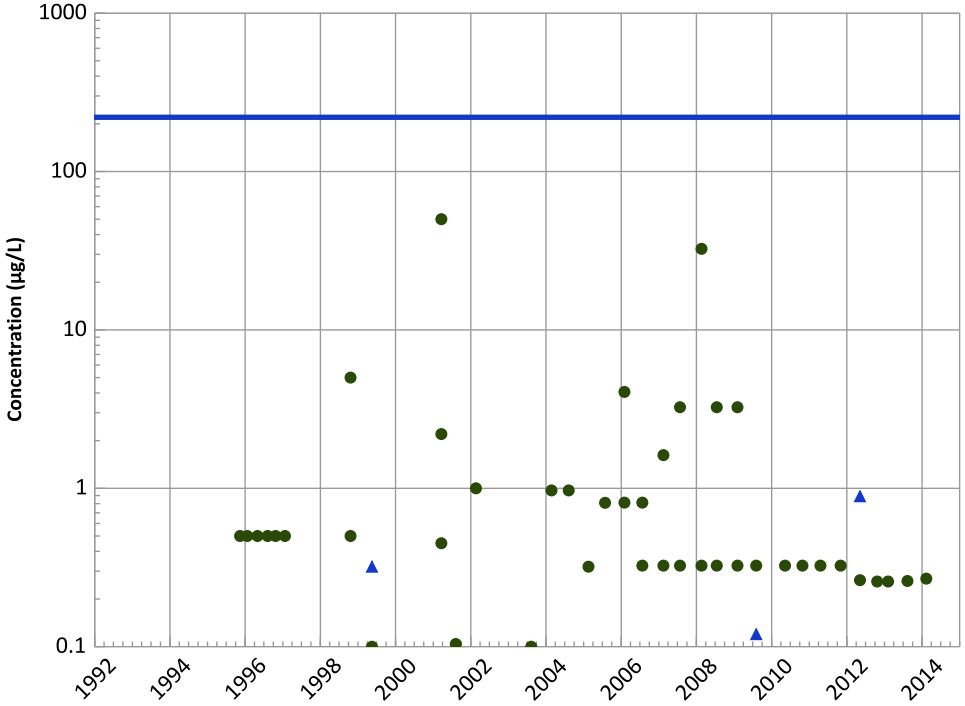


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

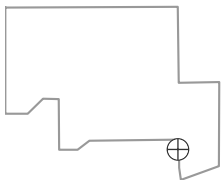
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

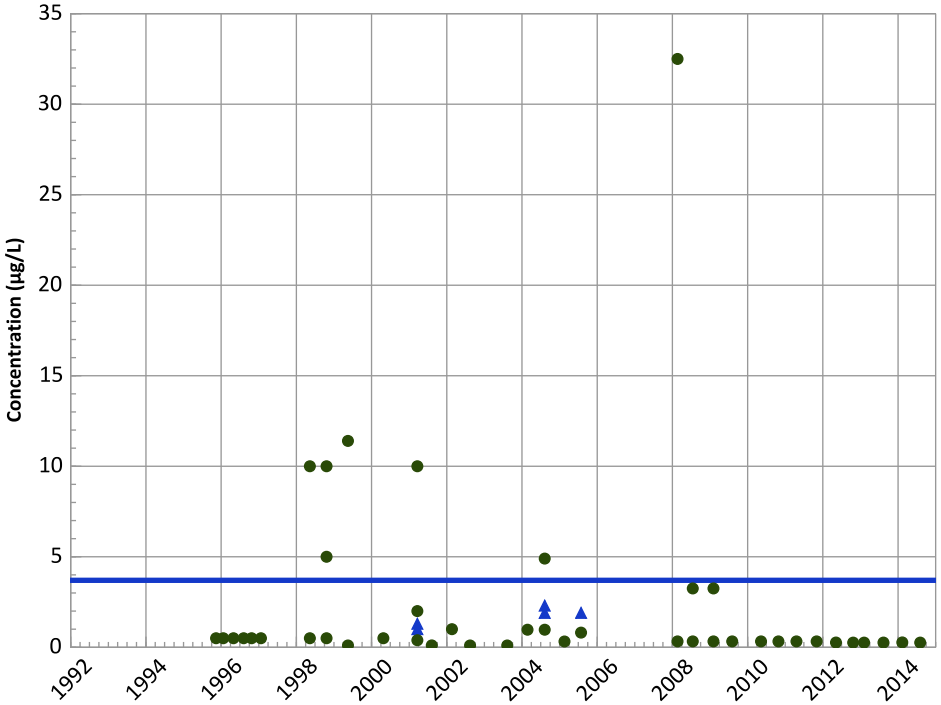
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

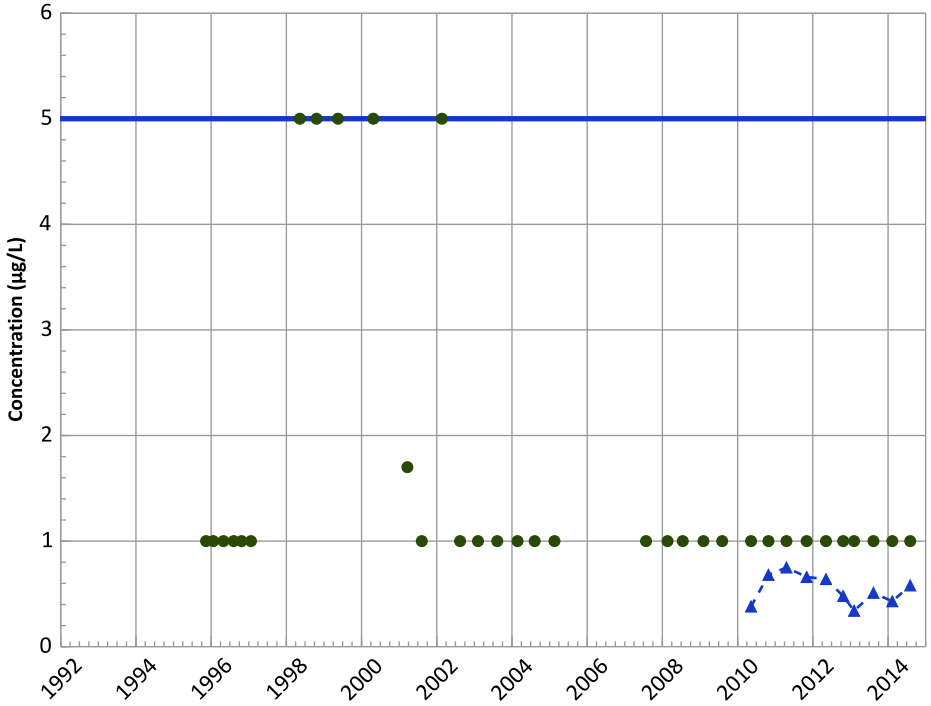


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

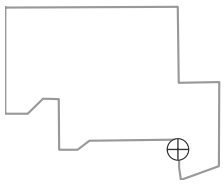
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

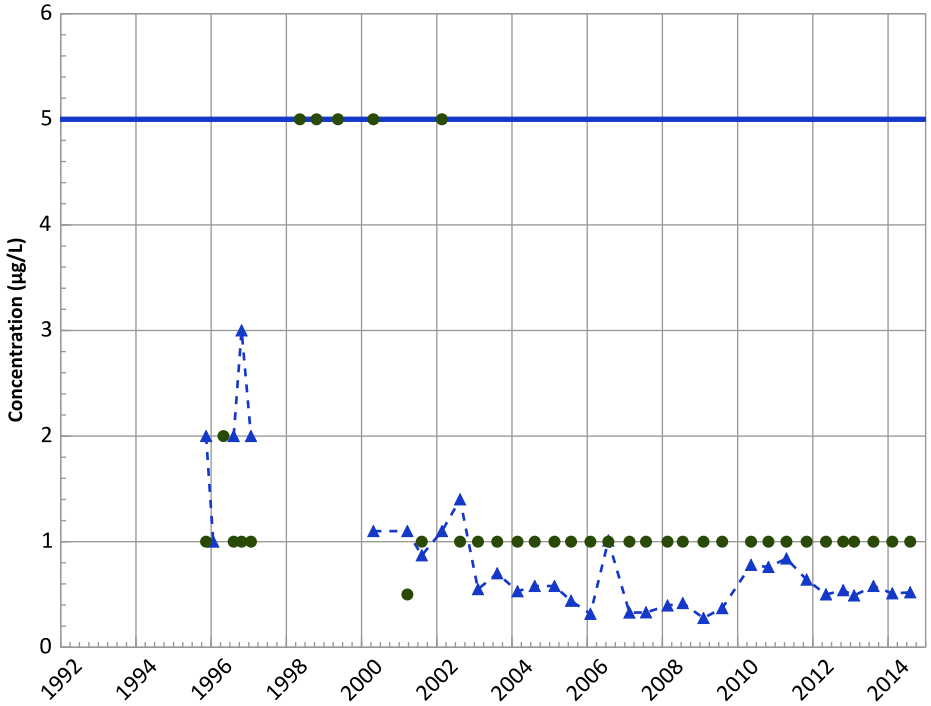
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

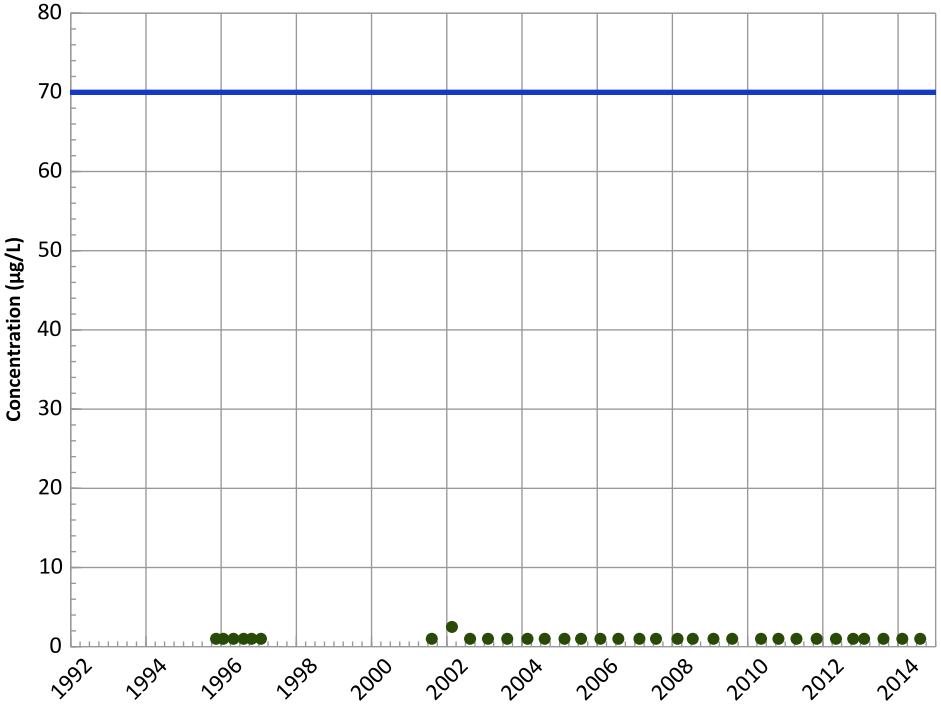


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

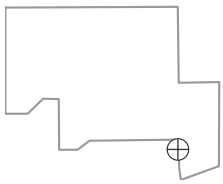
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

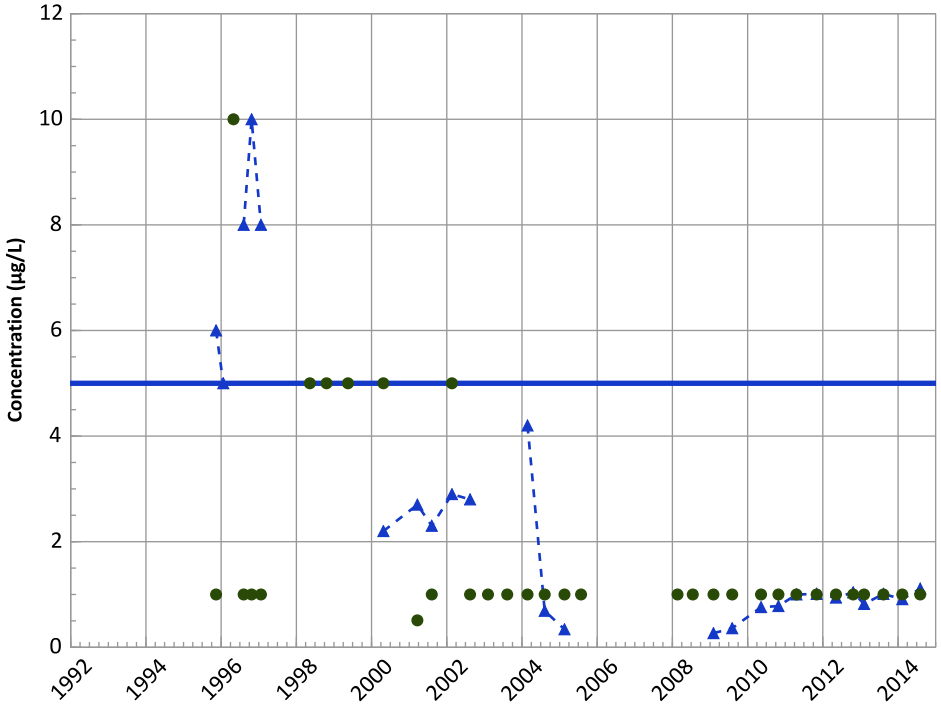
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

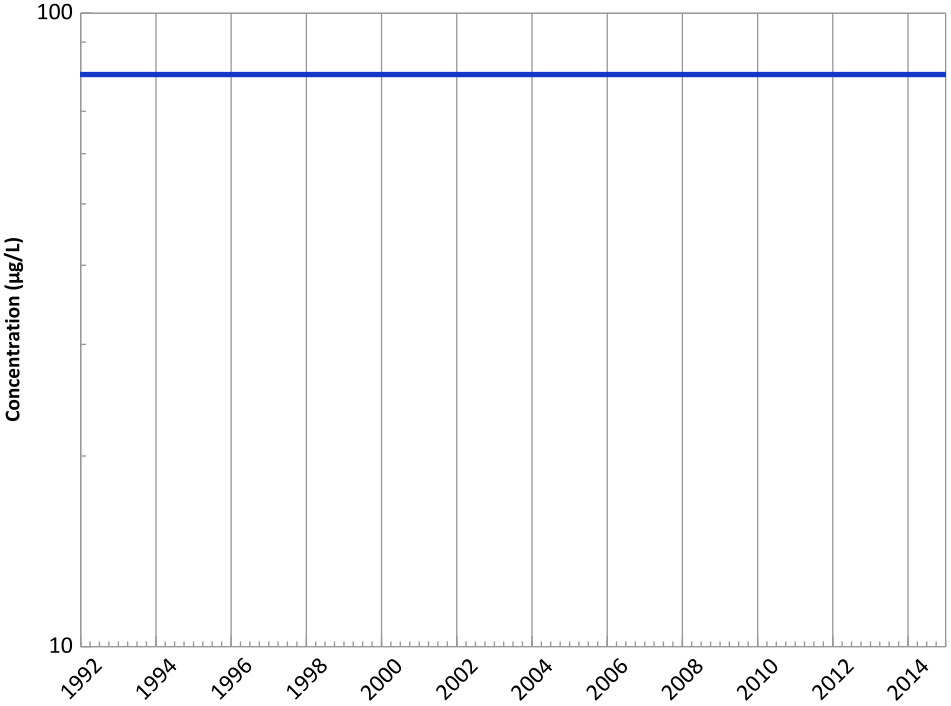


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Chloroform Trend



Concentration Trend

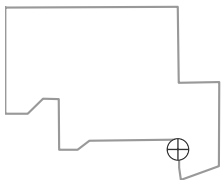
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

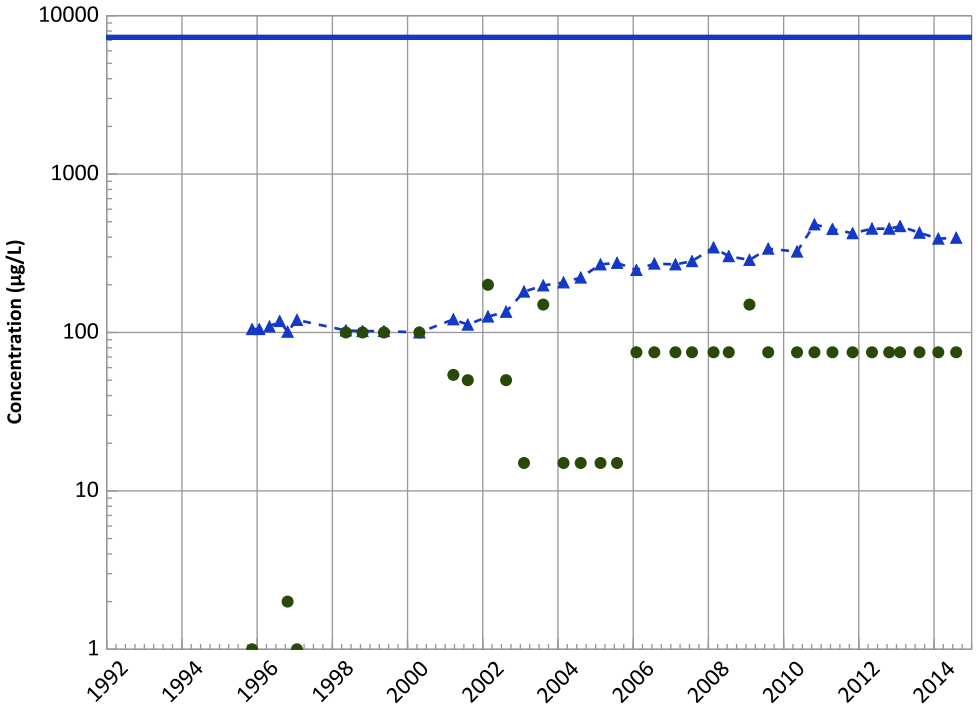
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

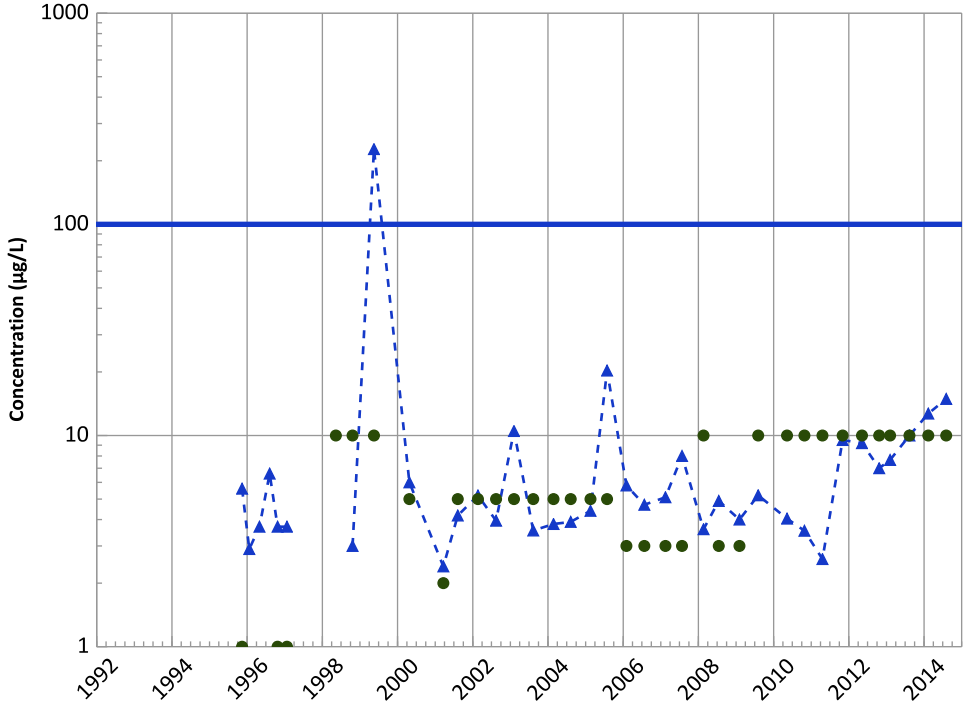


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Chromium, Total Trend



Concentration Trend

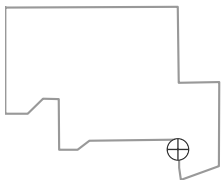
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

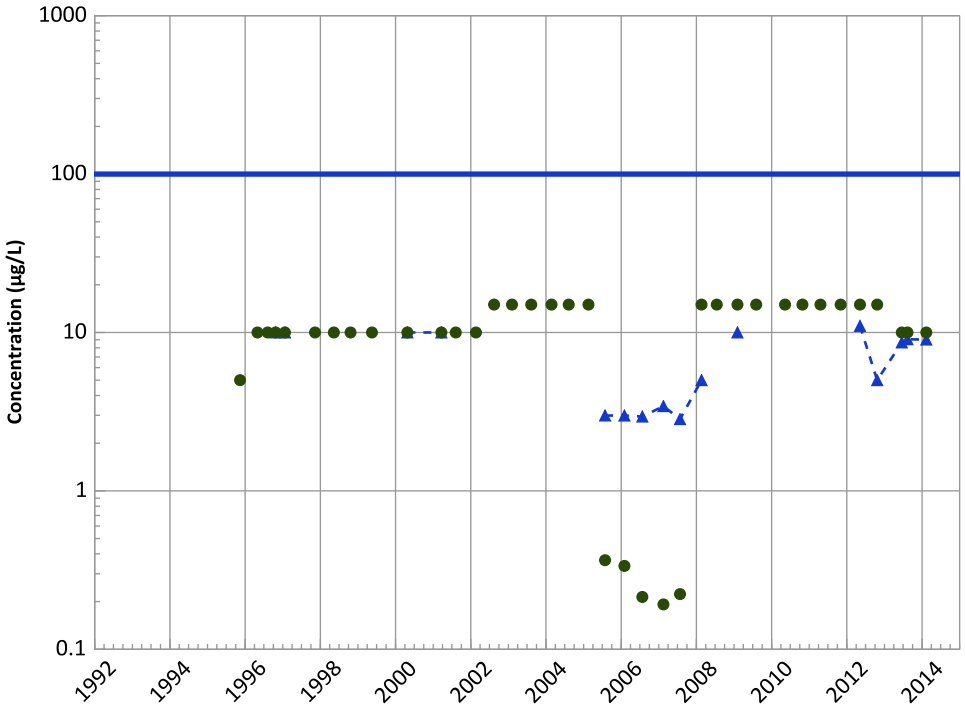
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

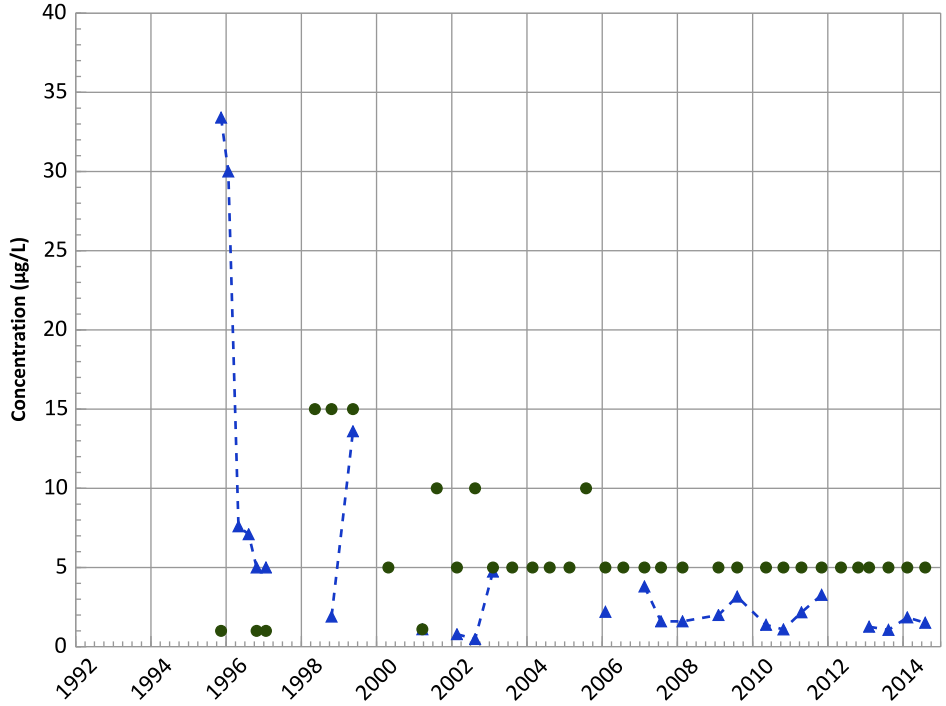


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

Manganese Trend



Concentration Trend

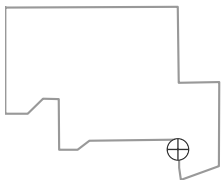
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

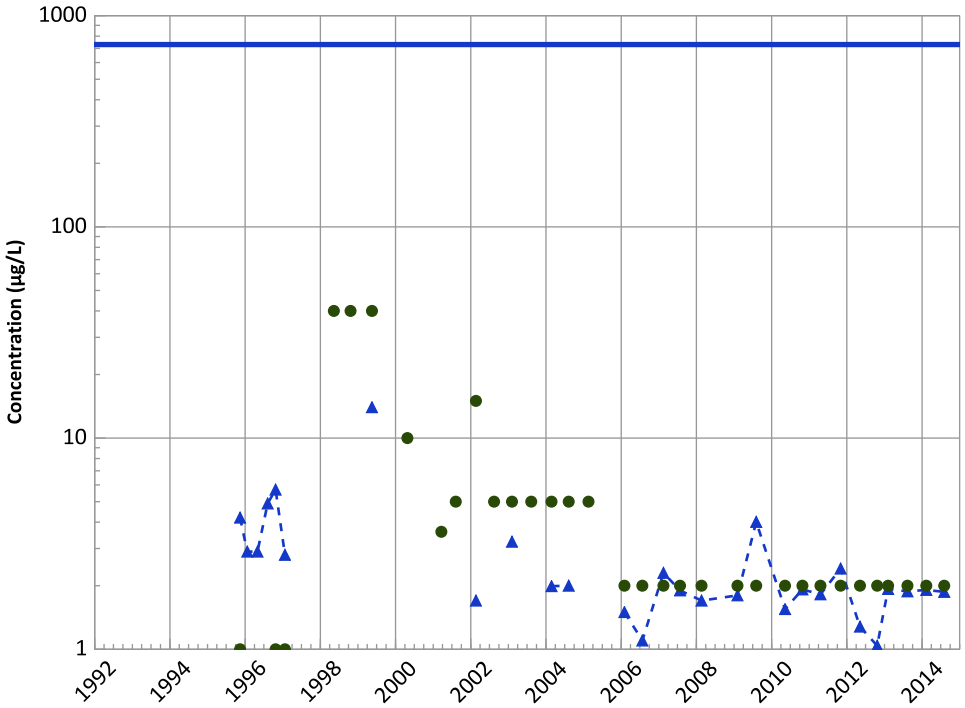
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

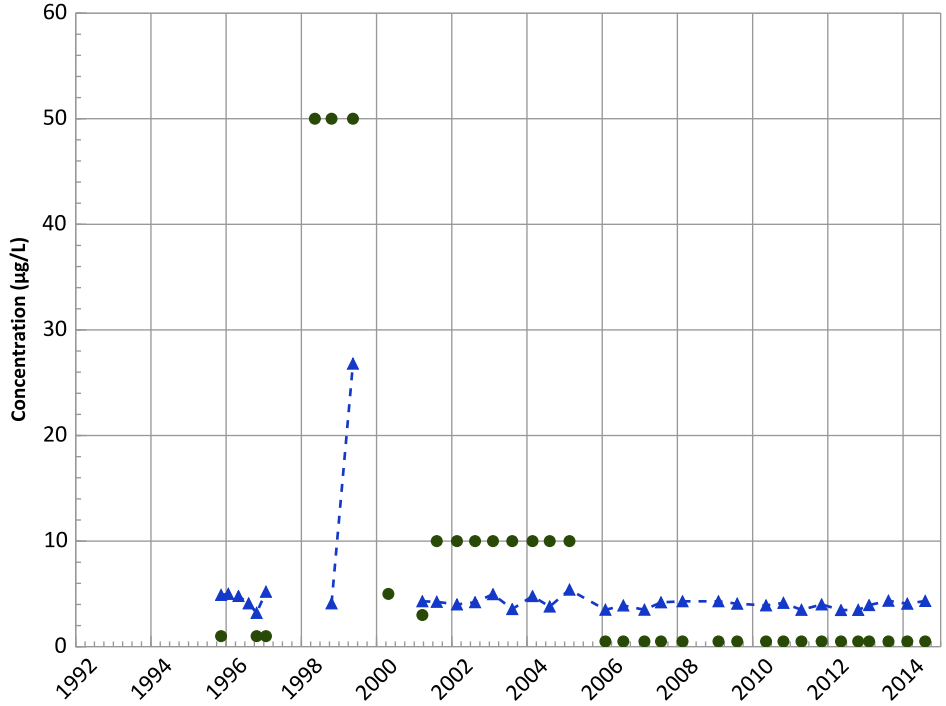


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Molybdenum Trend



Concentration Trend

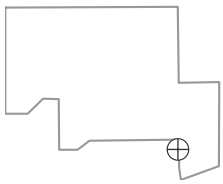
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

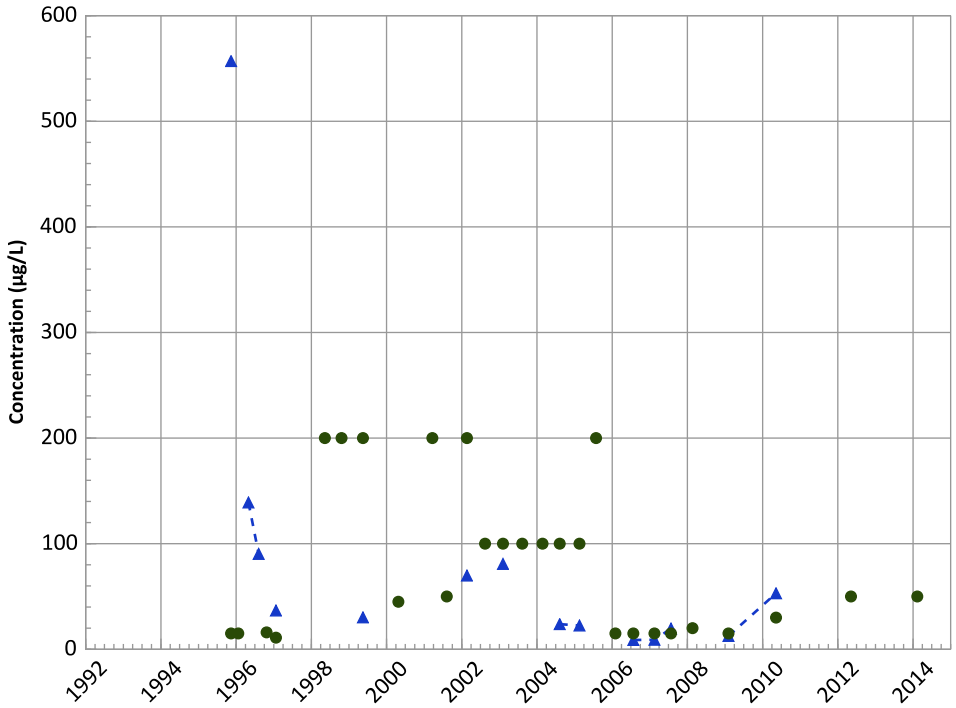
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

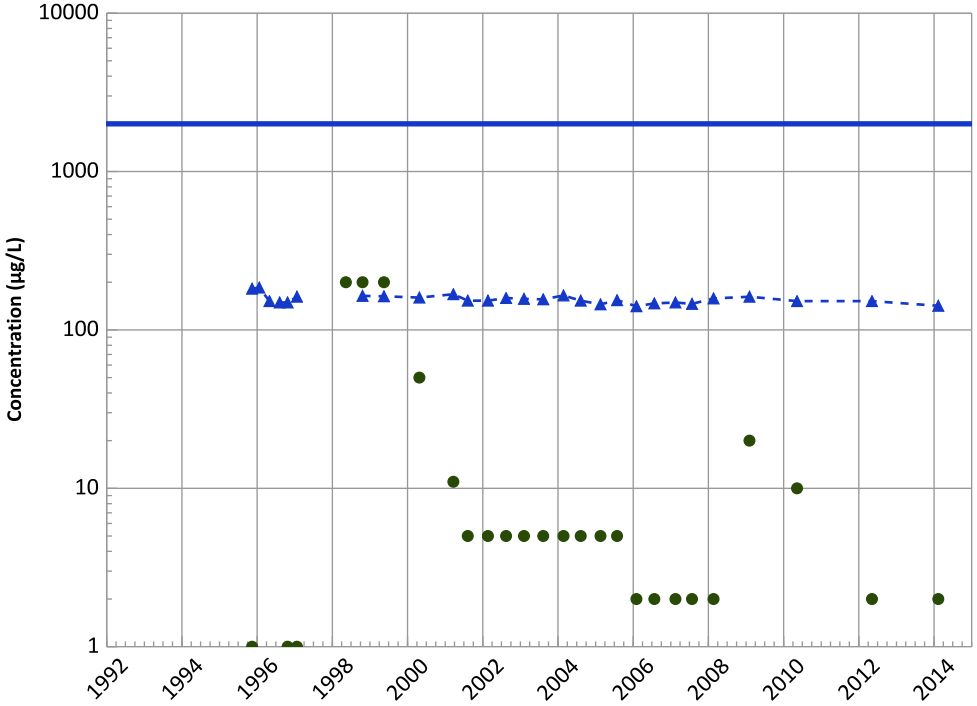


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

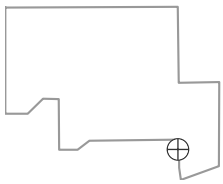
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

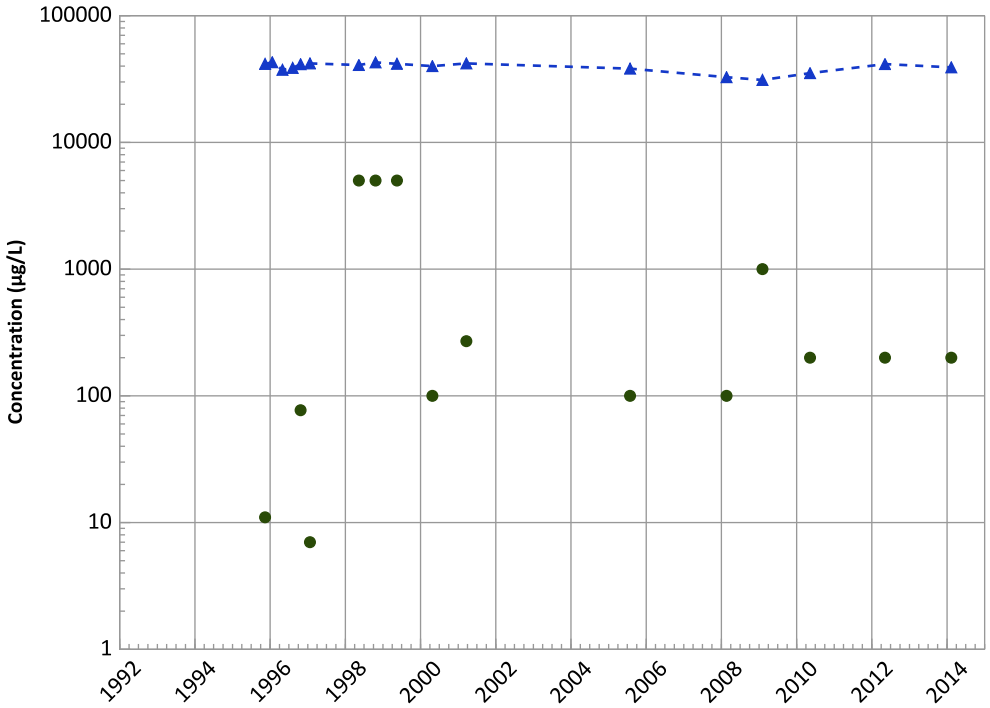
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

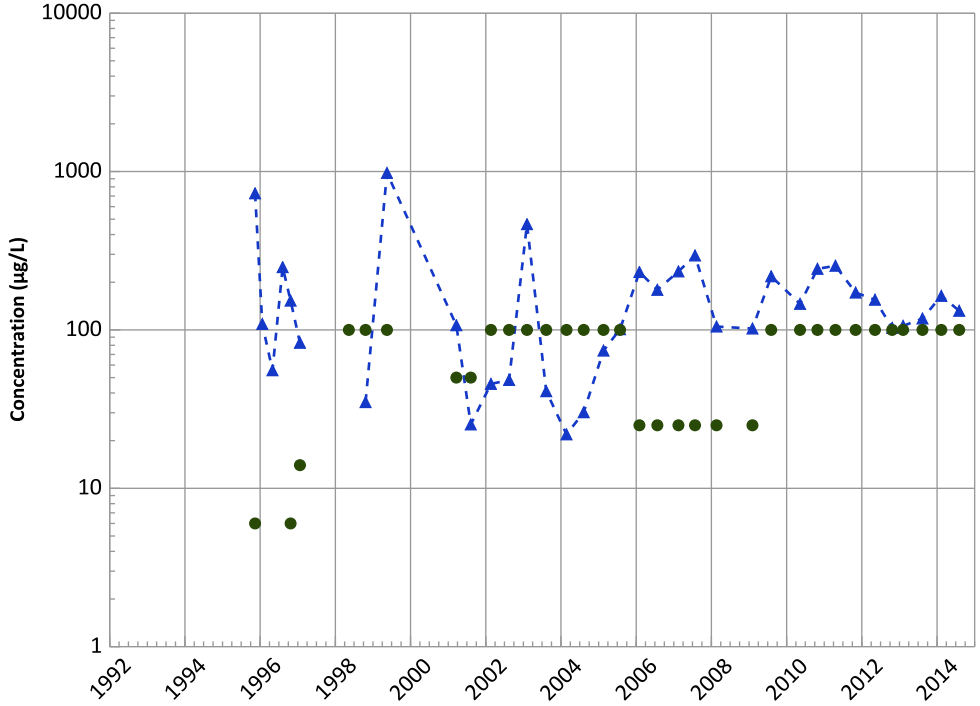


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

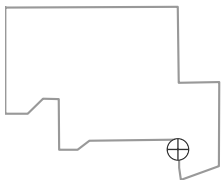
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

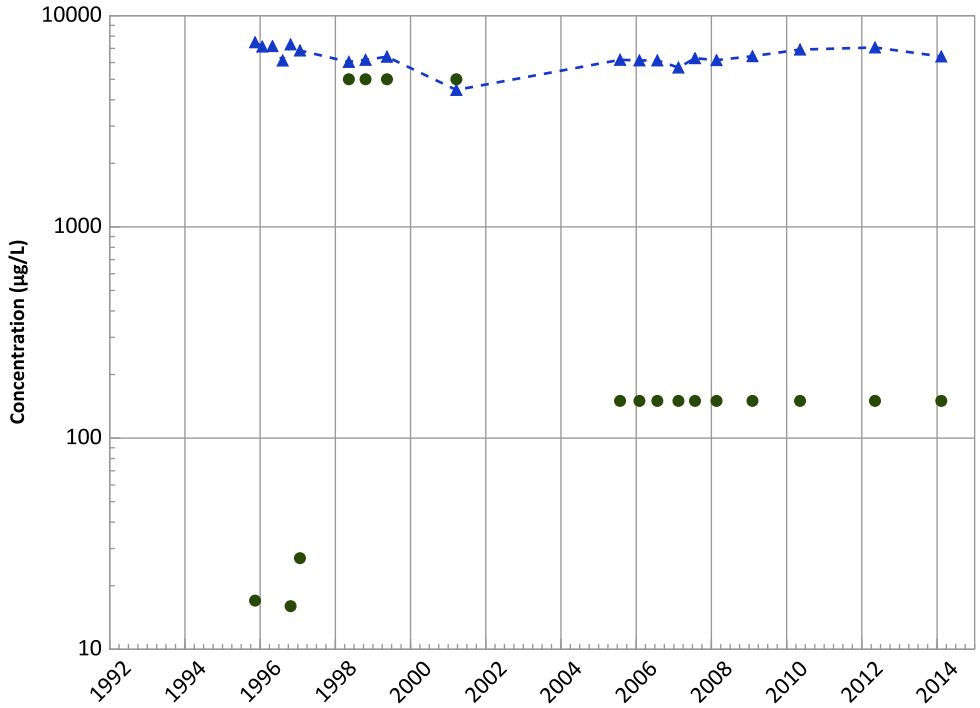
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

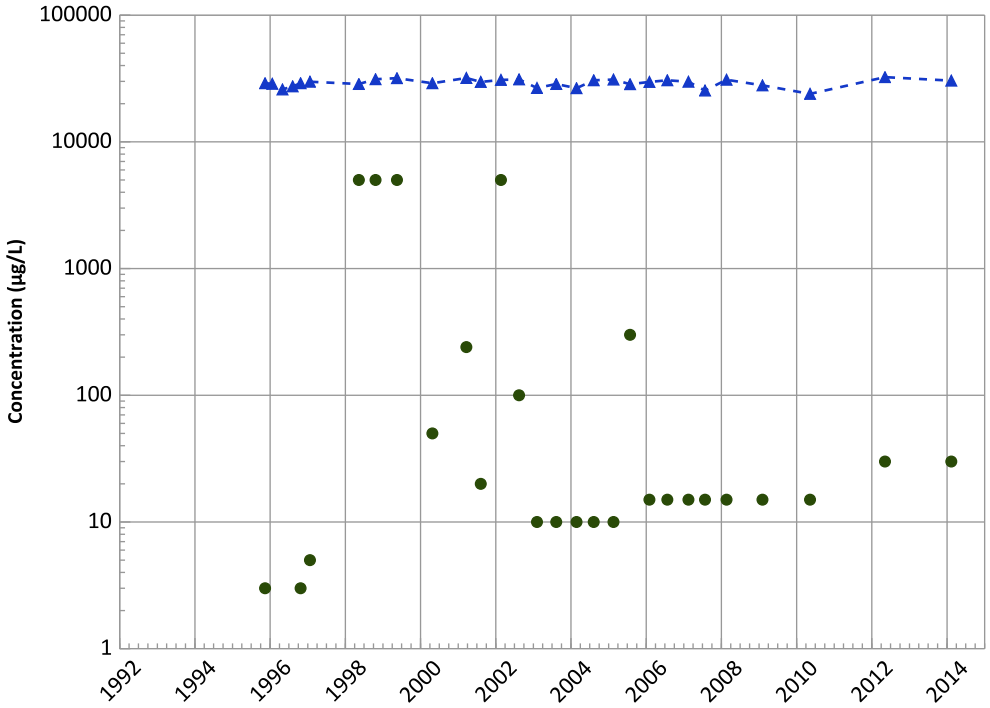


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

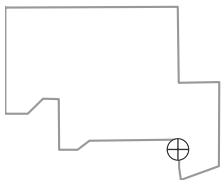
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

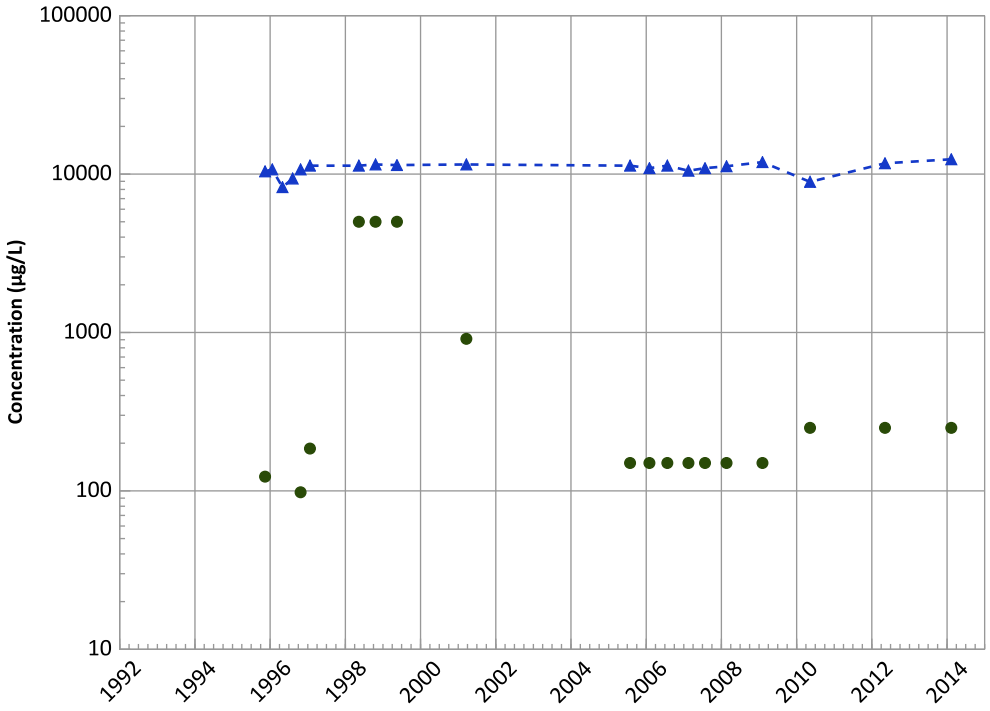
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1015 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

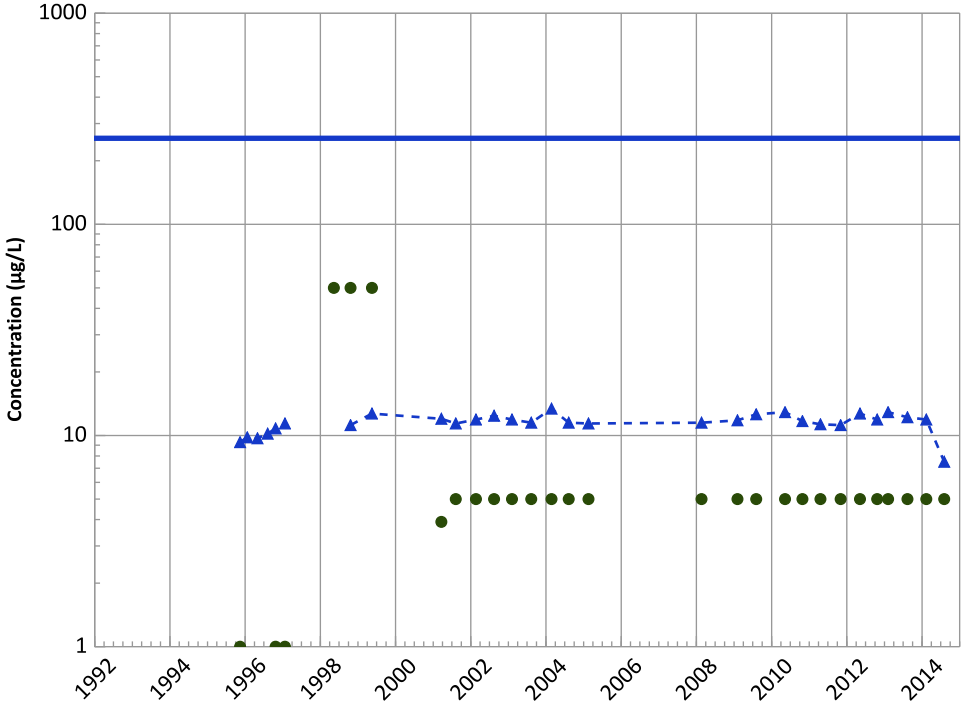


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Vanadium Trend



Concentration Trend

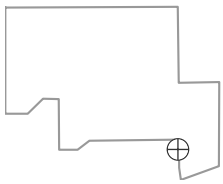
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

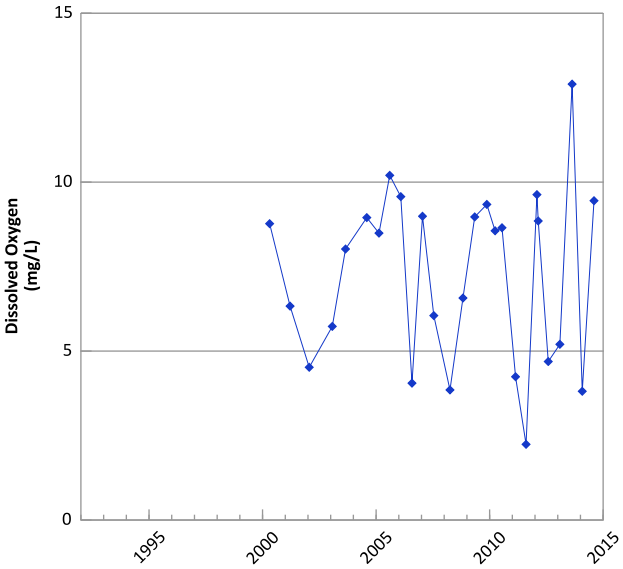
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/13/1995 to 08/04/2014
Analysis Date: 03/19/2015

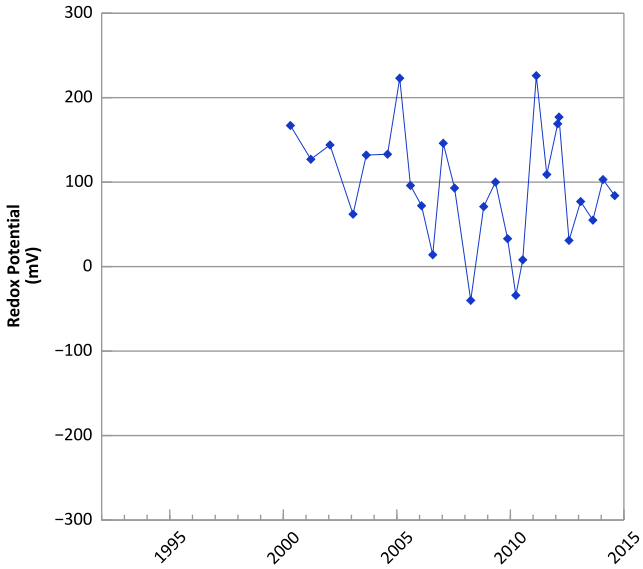
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

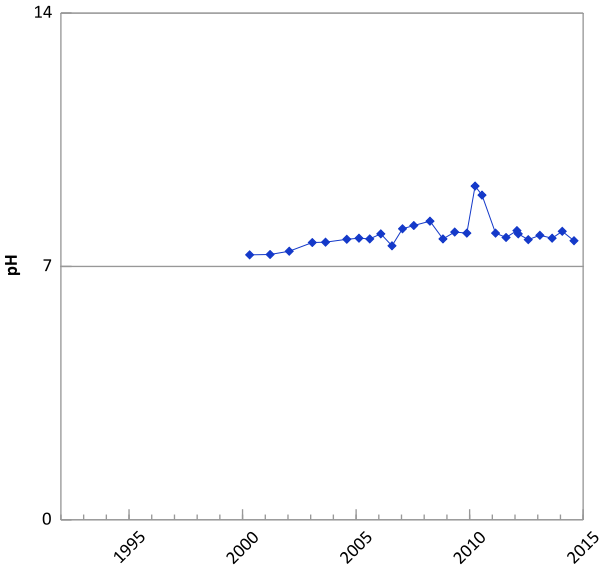
Well Location

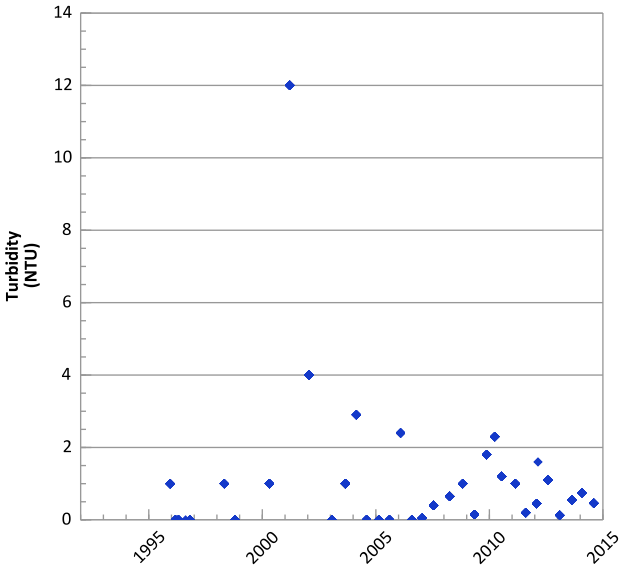


PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



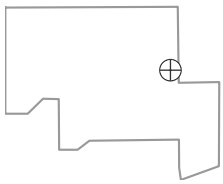






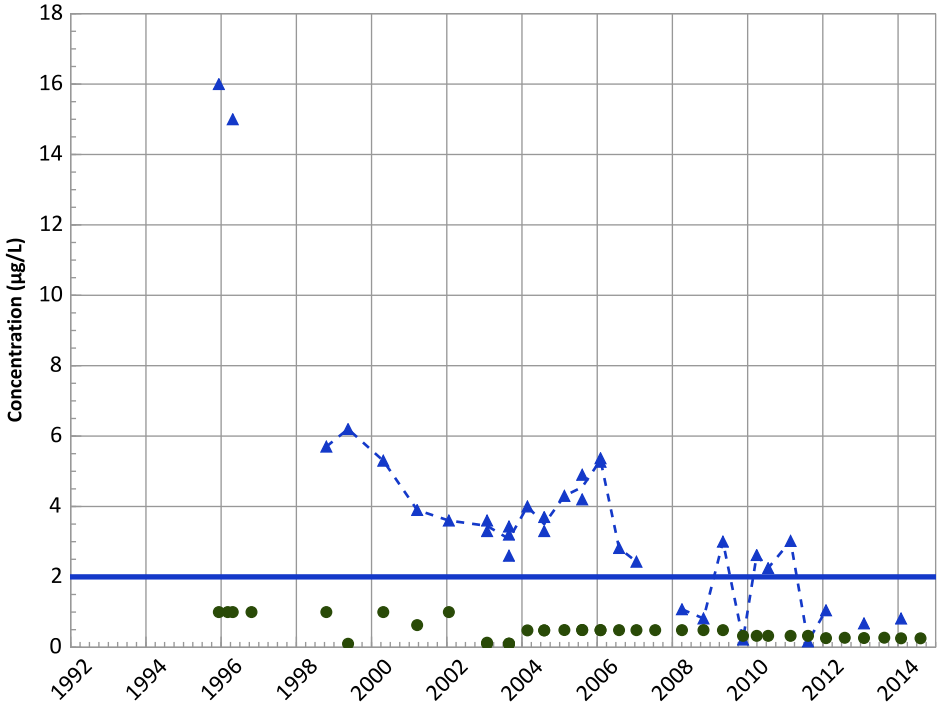
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

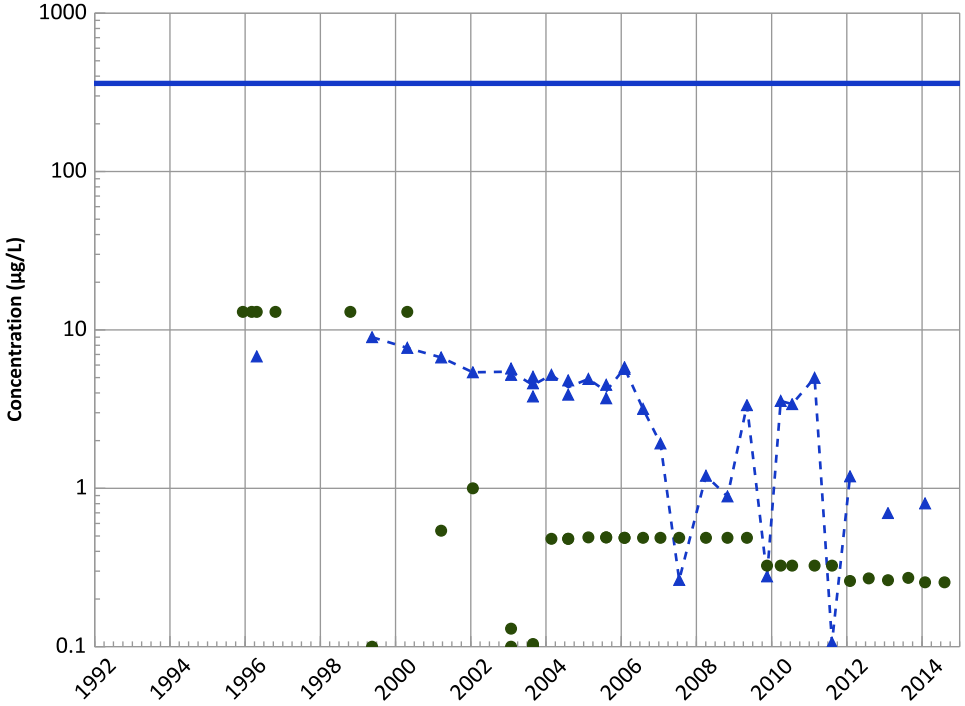


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

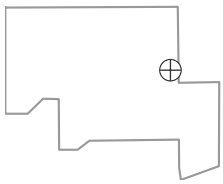
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

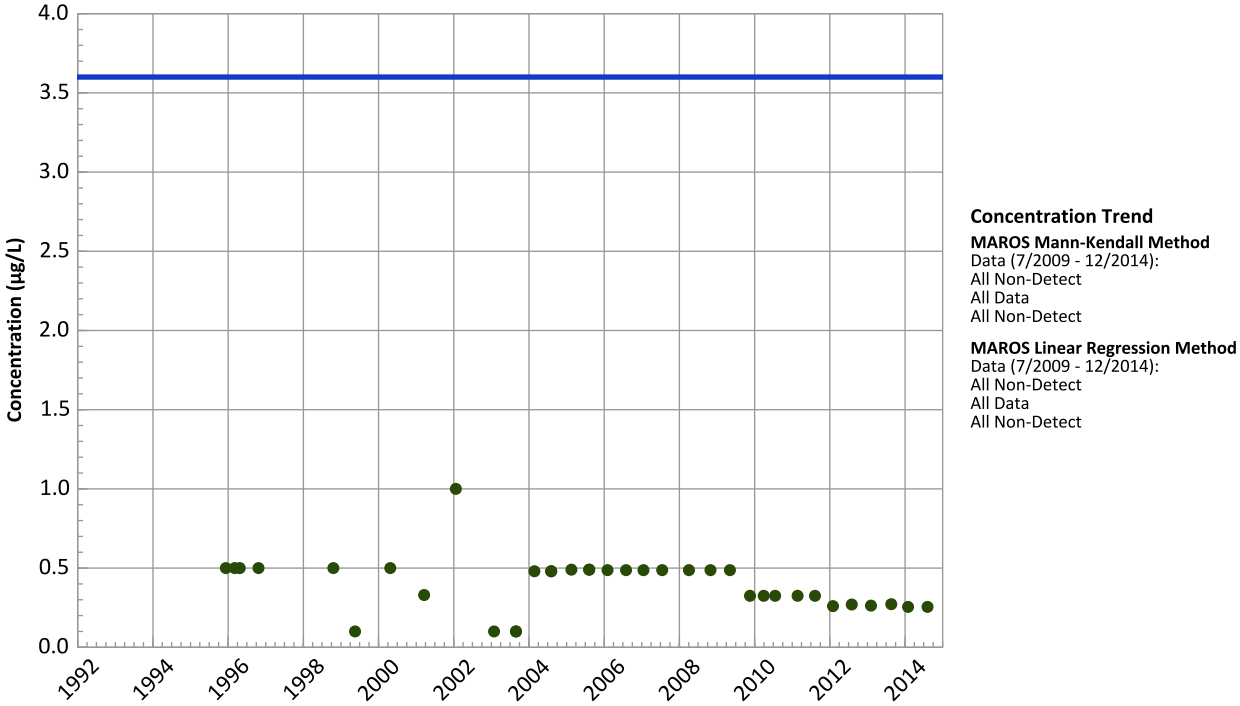
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

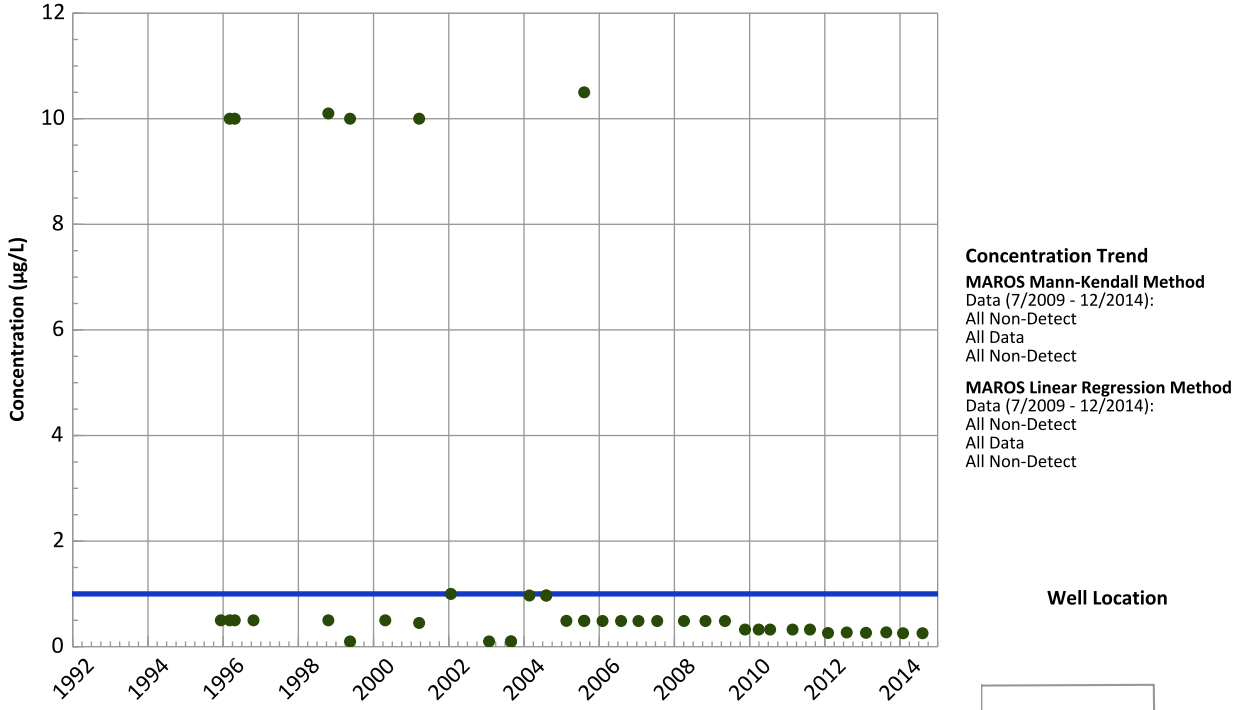


PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



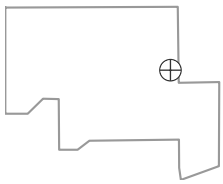
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

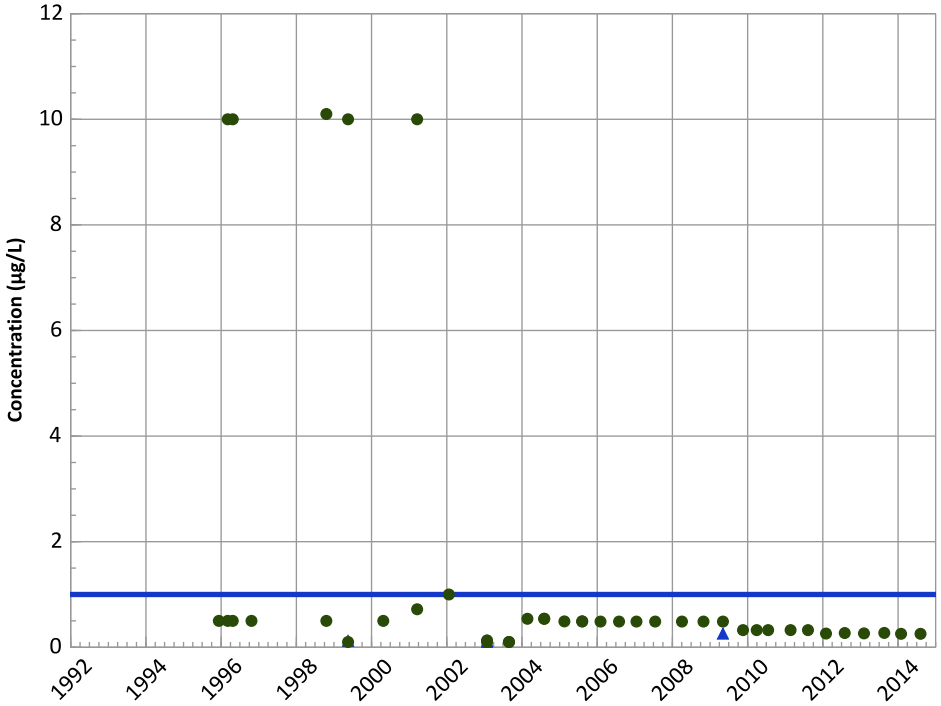
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

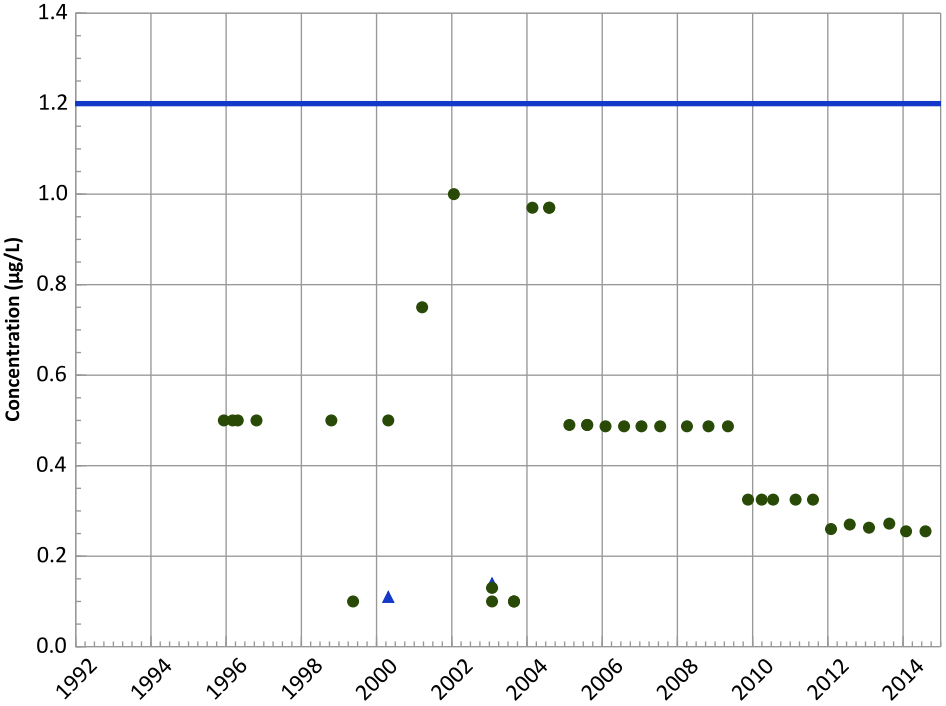


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

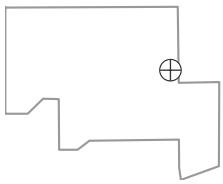
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

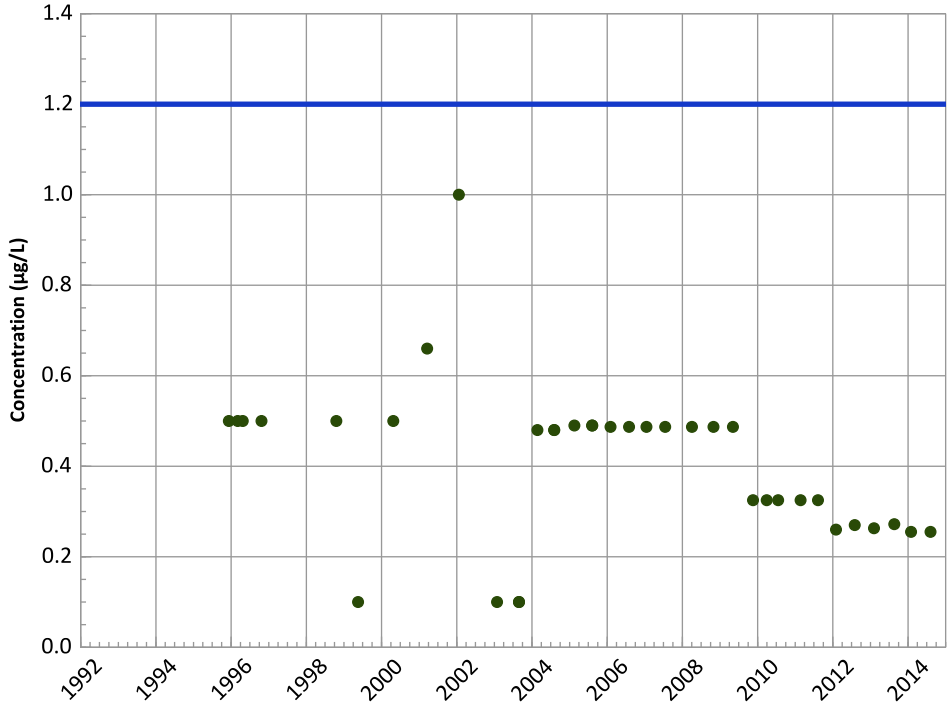
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

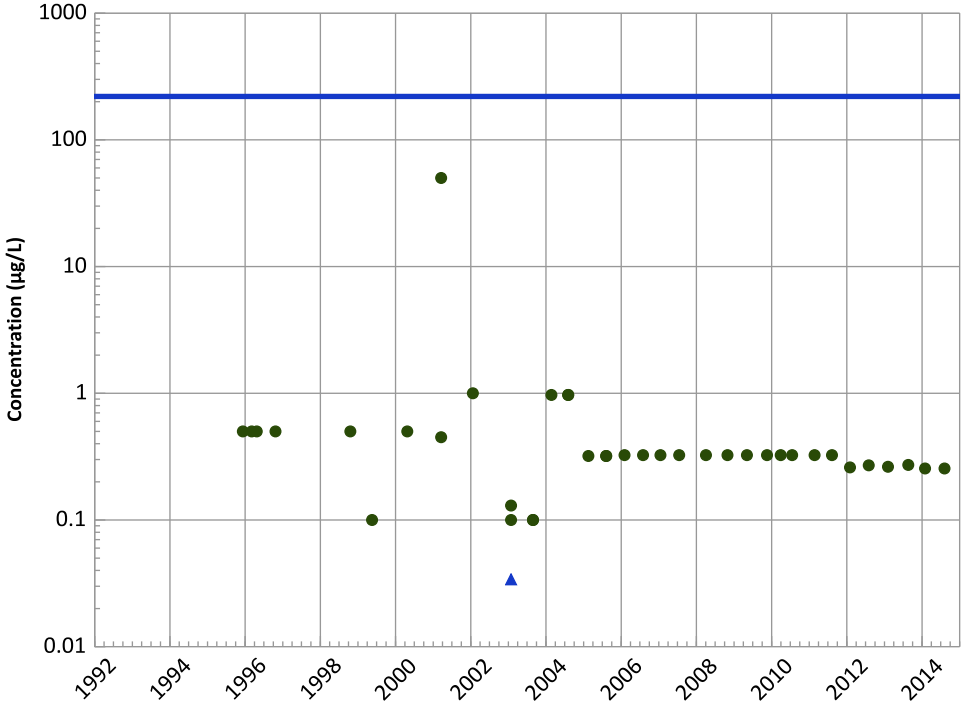


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

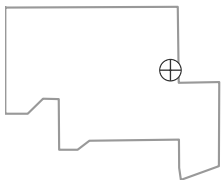
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

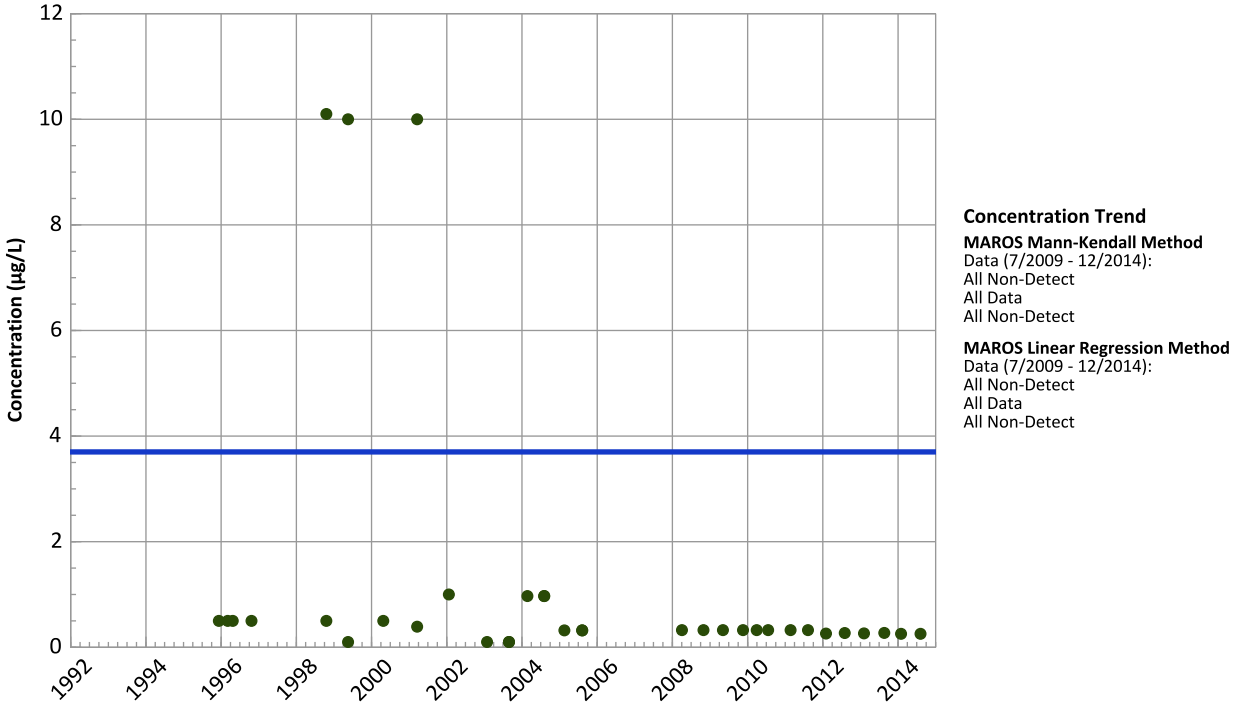
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

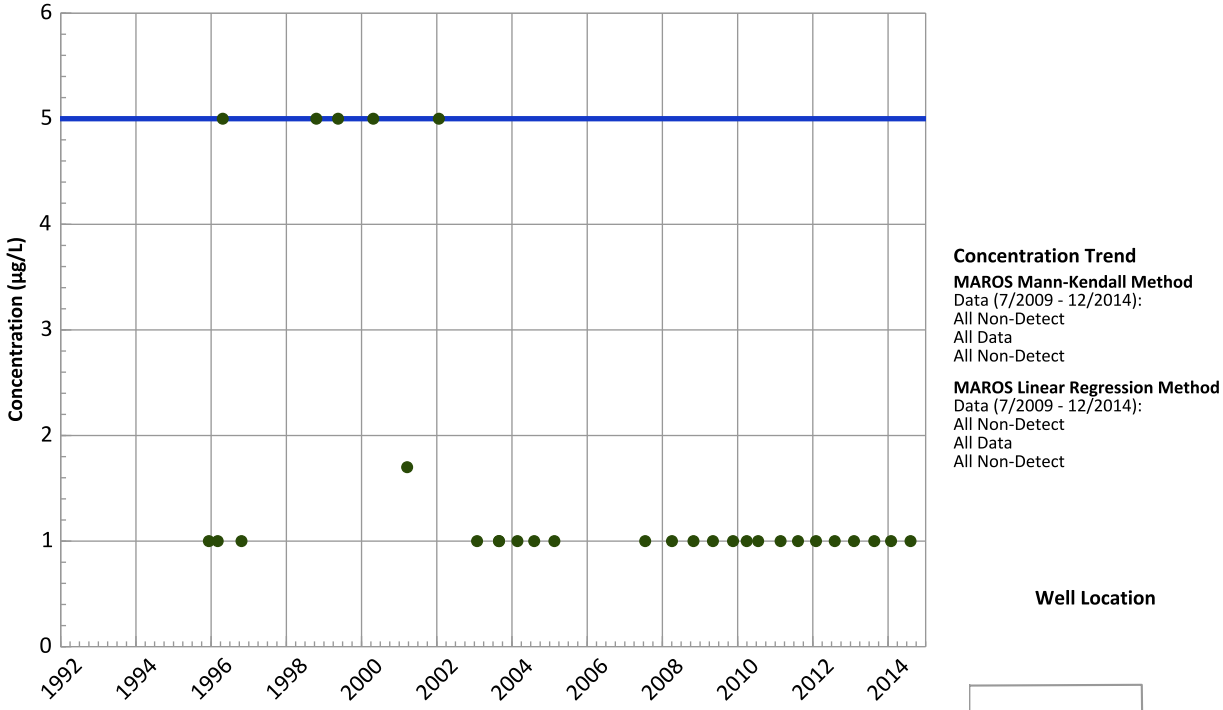


PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



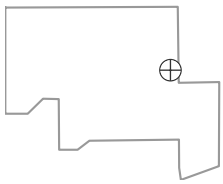
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

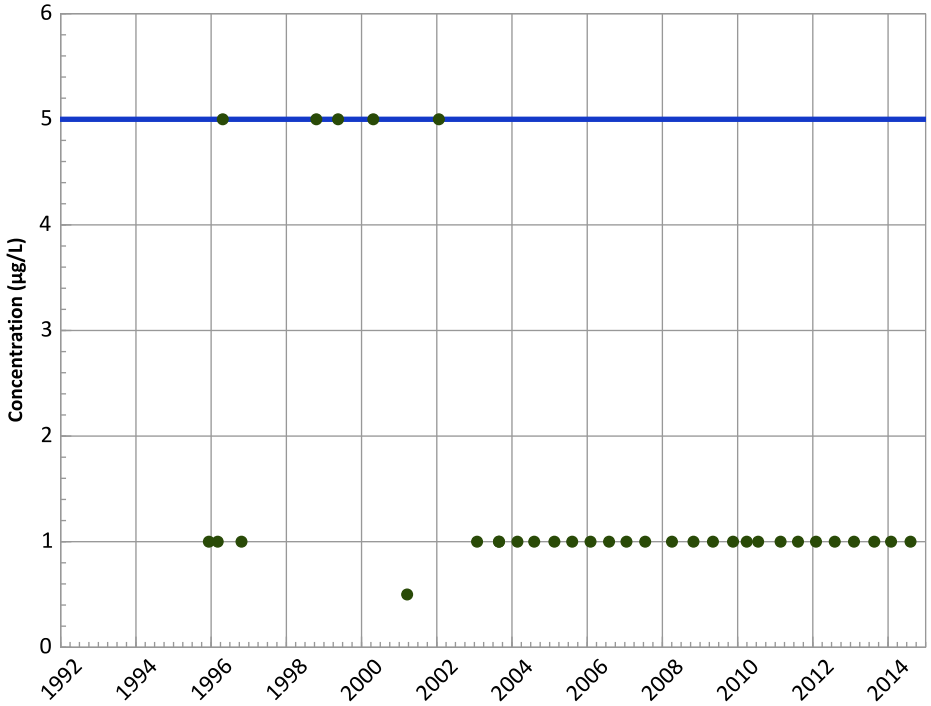
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

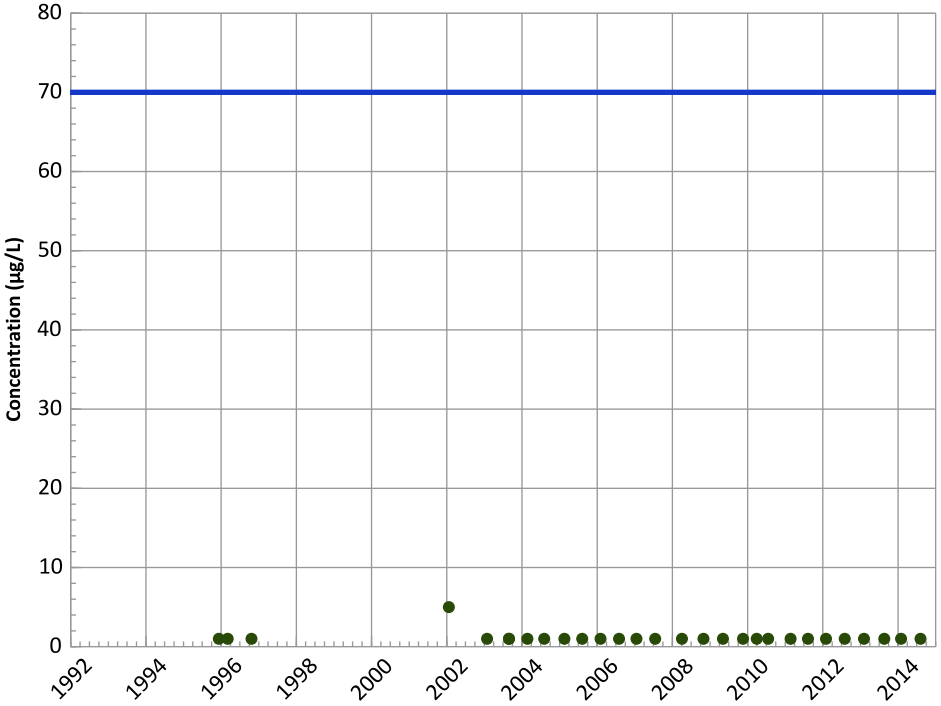


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

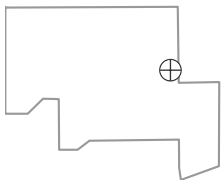
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

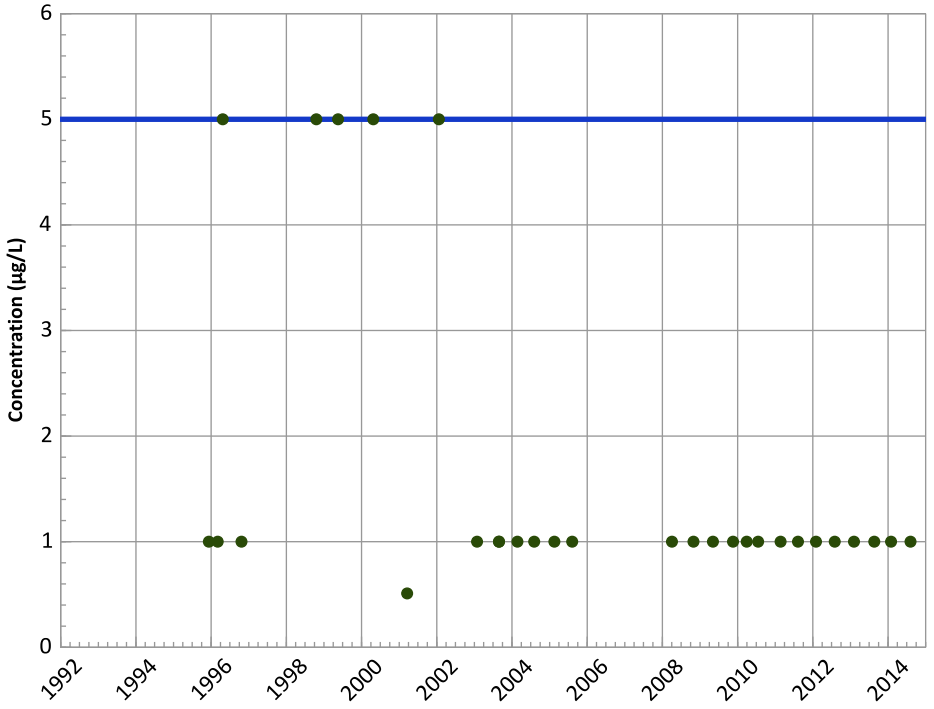
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

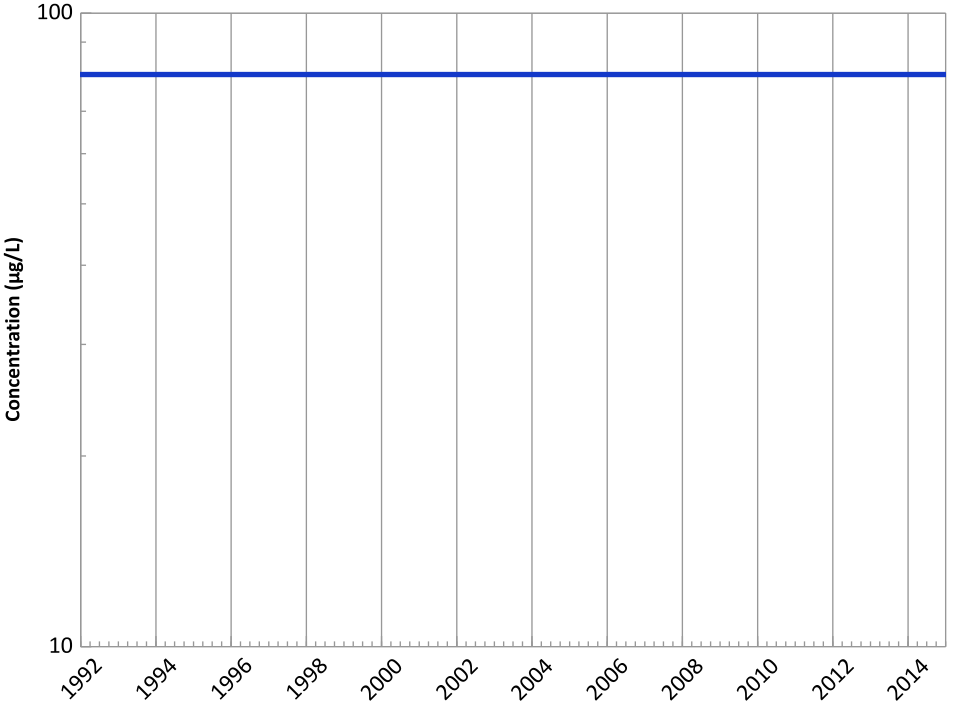


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

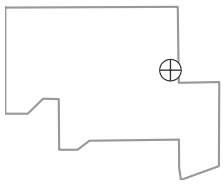
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

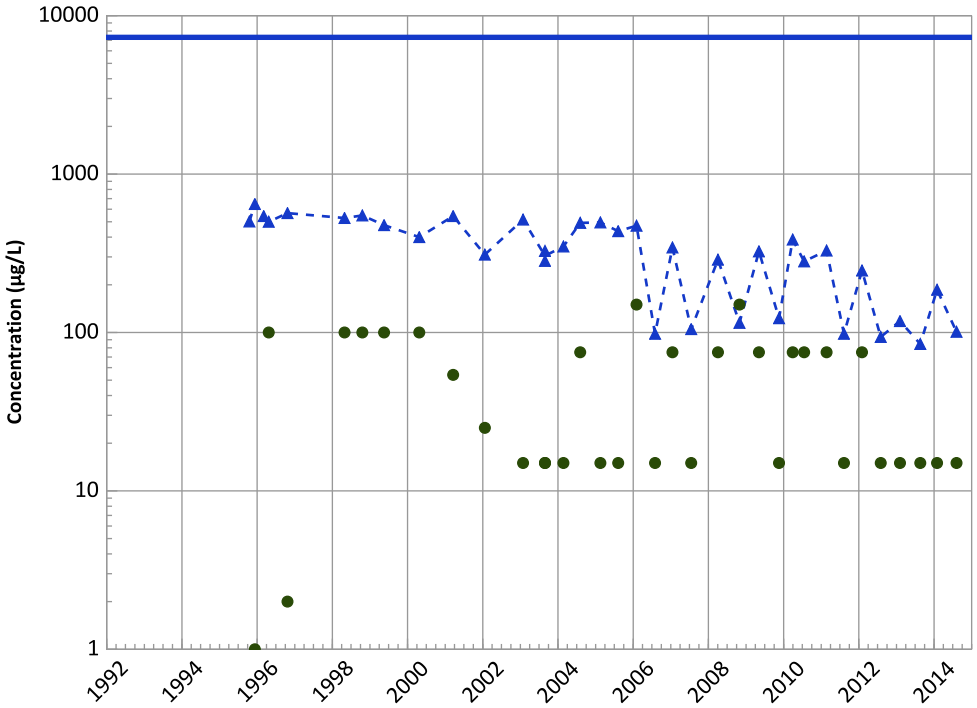
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

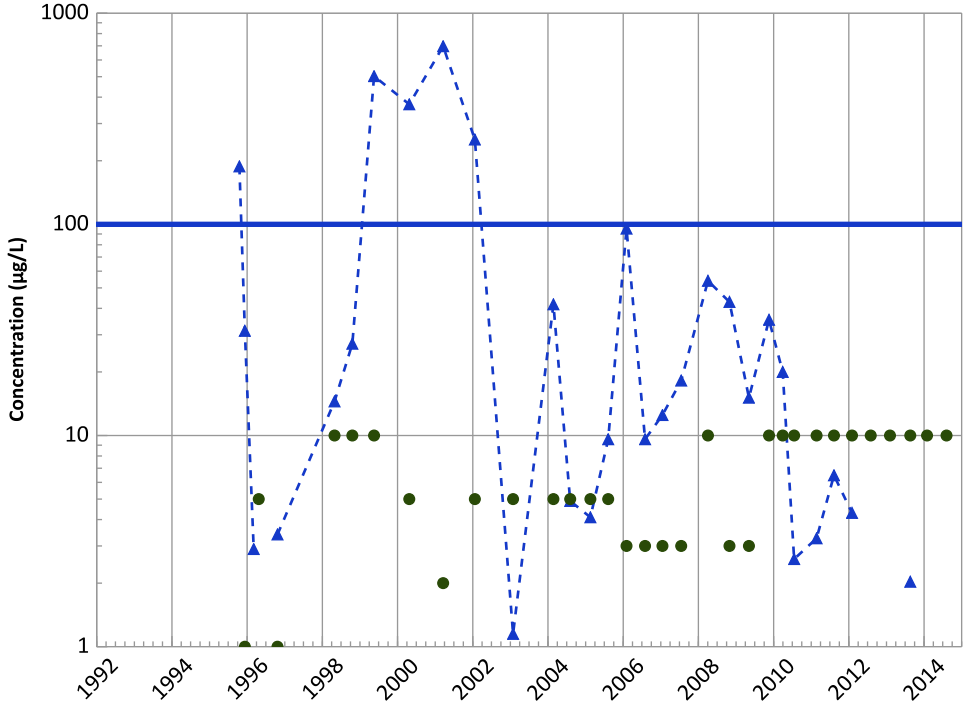


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

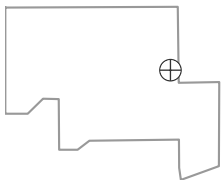
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

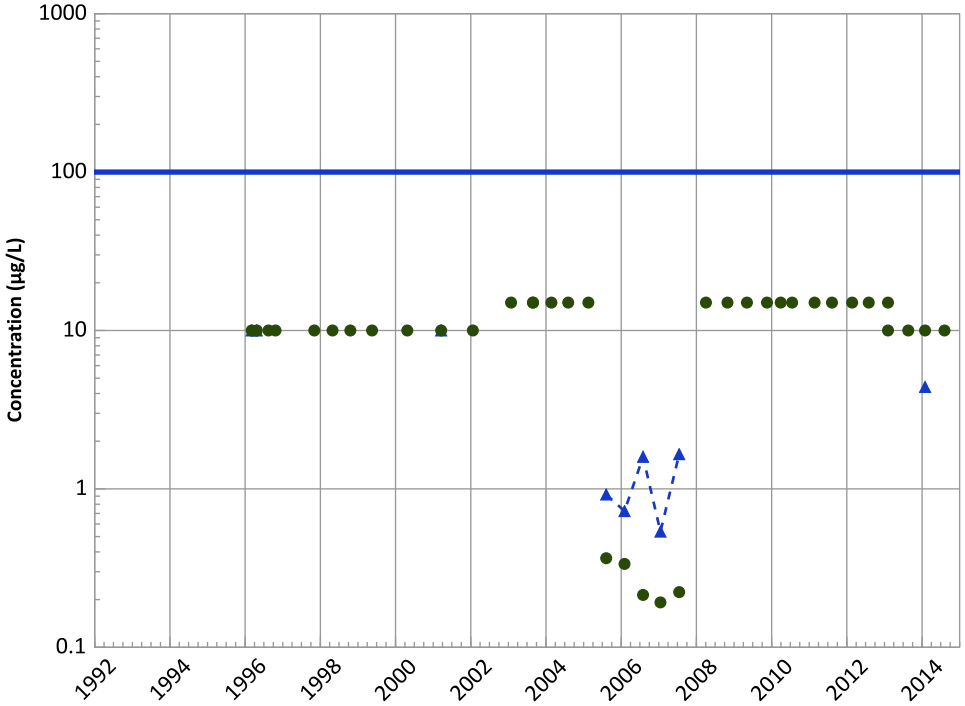
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

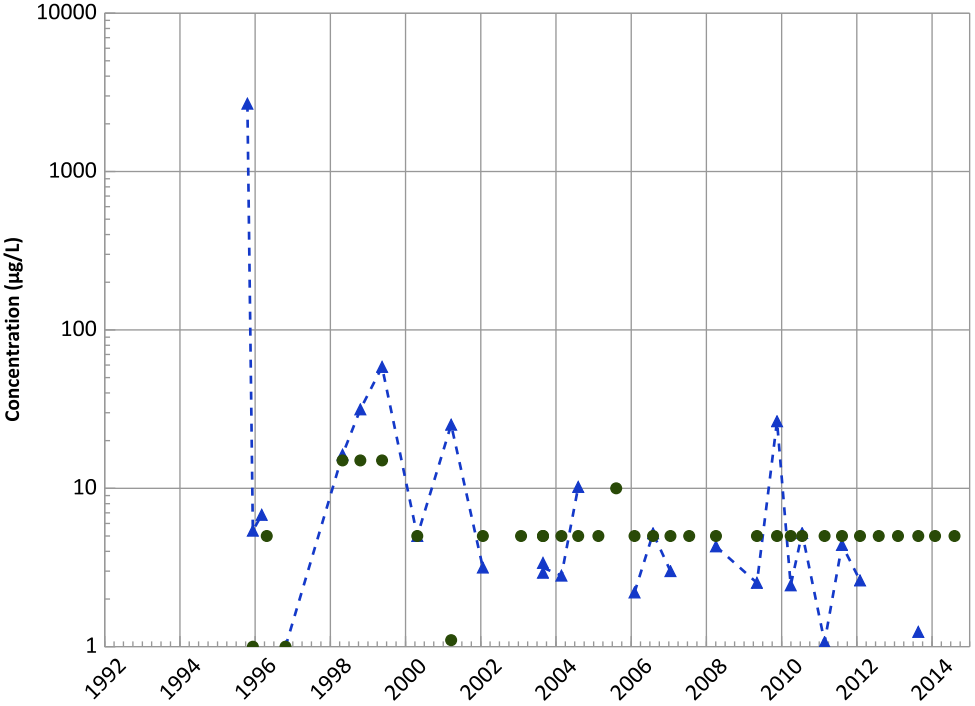


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Manganese Trend



Concentration Trend

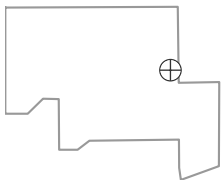
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

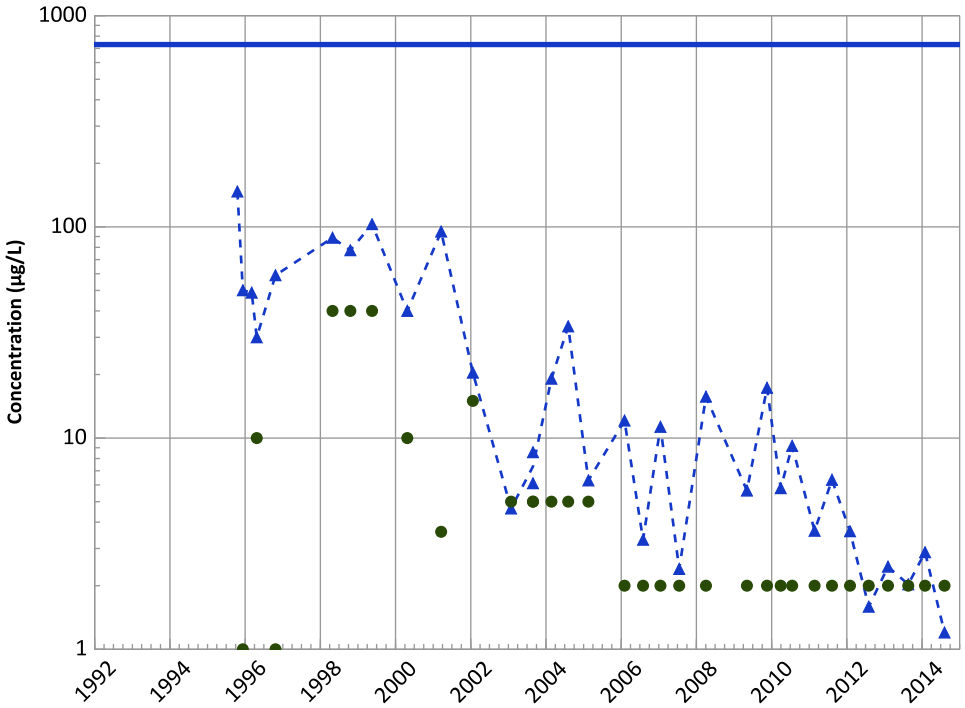
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

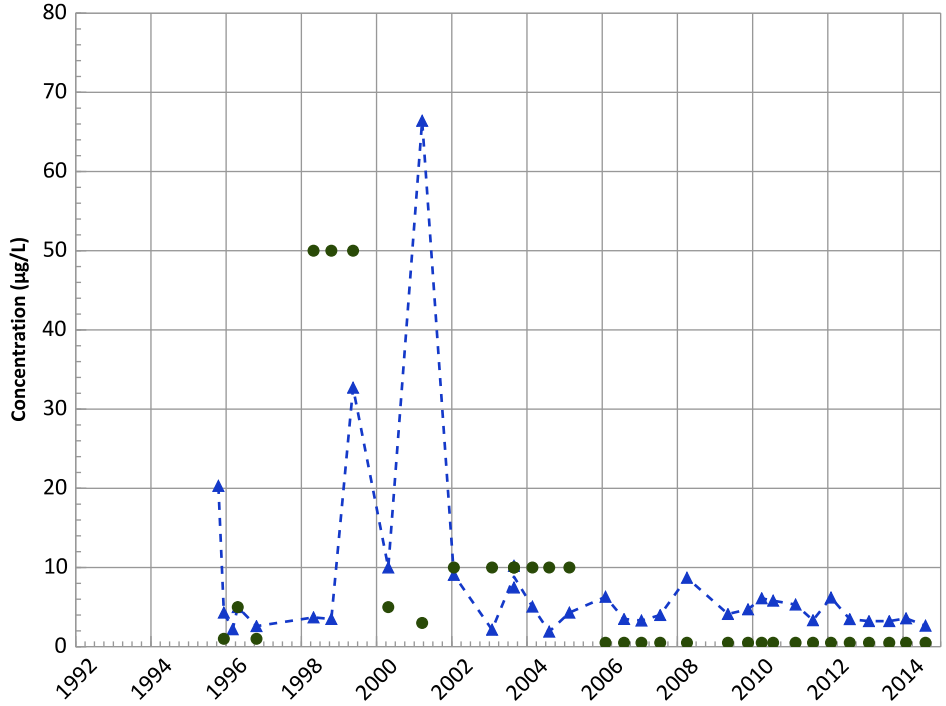


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Molybdenum Trend



Concentration Trend

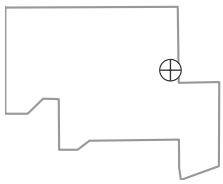
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

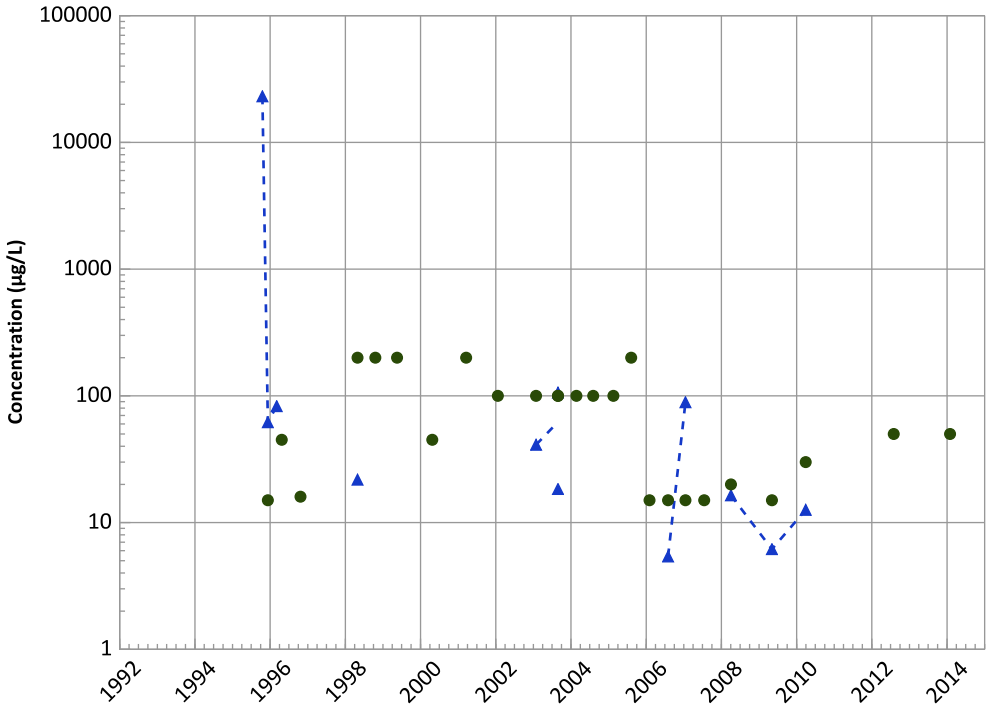
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

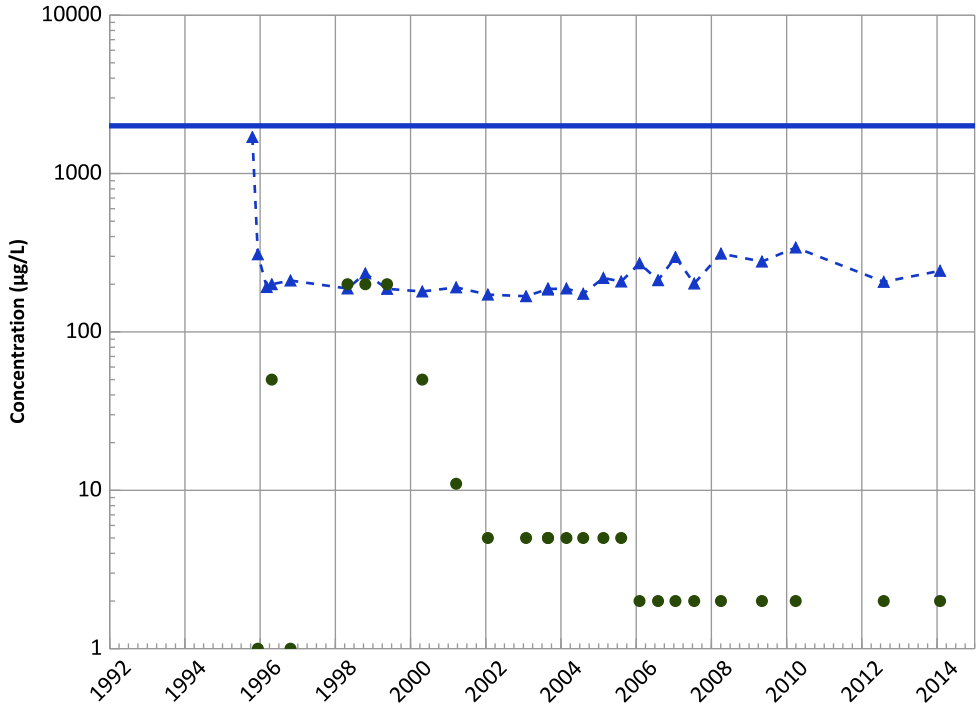


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

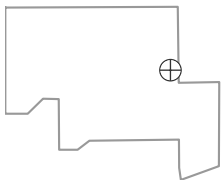
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

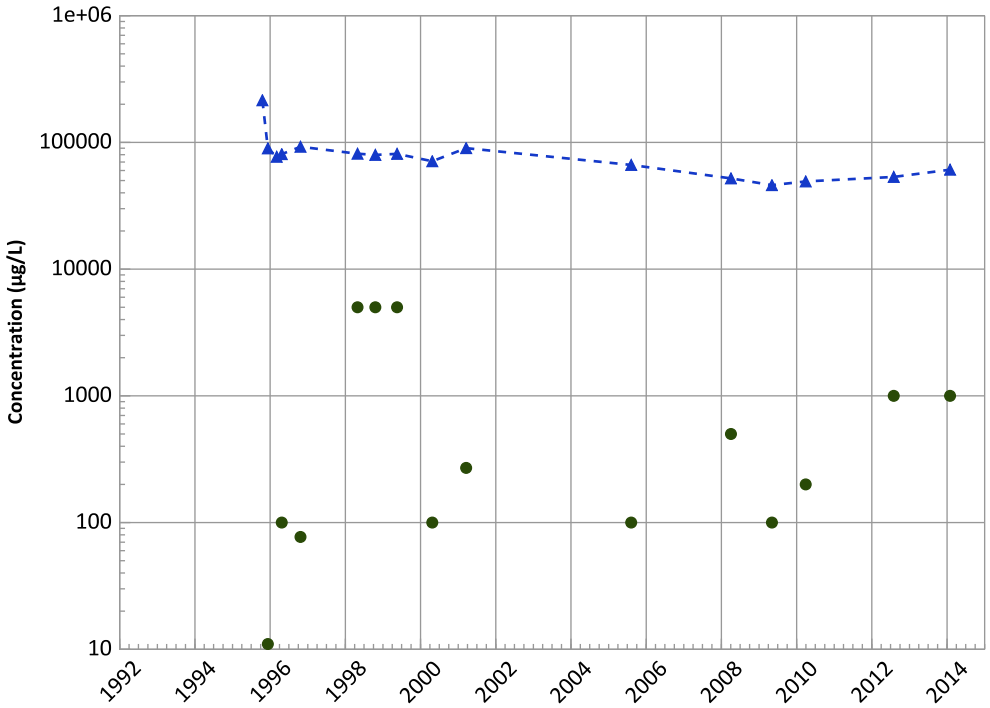
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

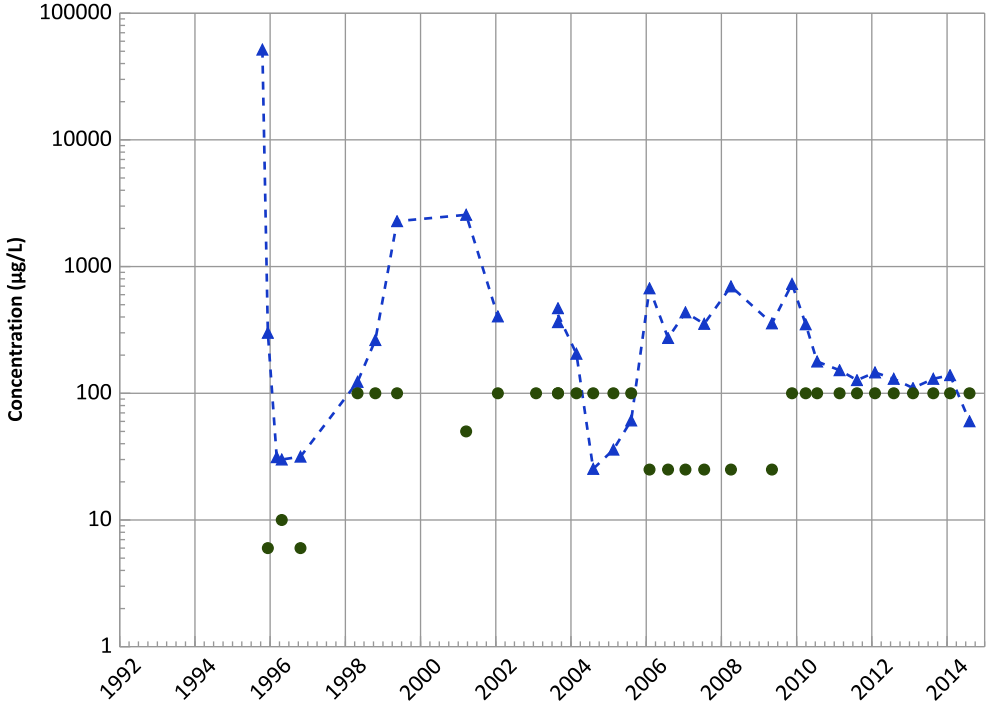


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

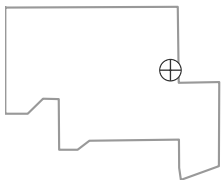
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

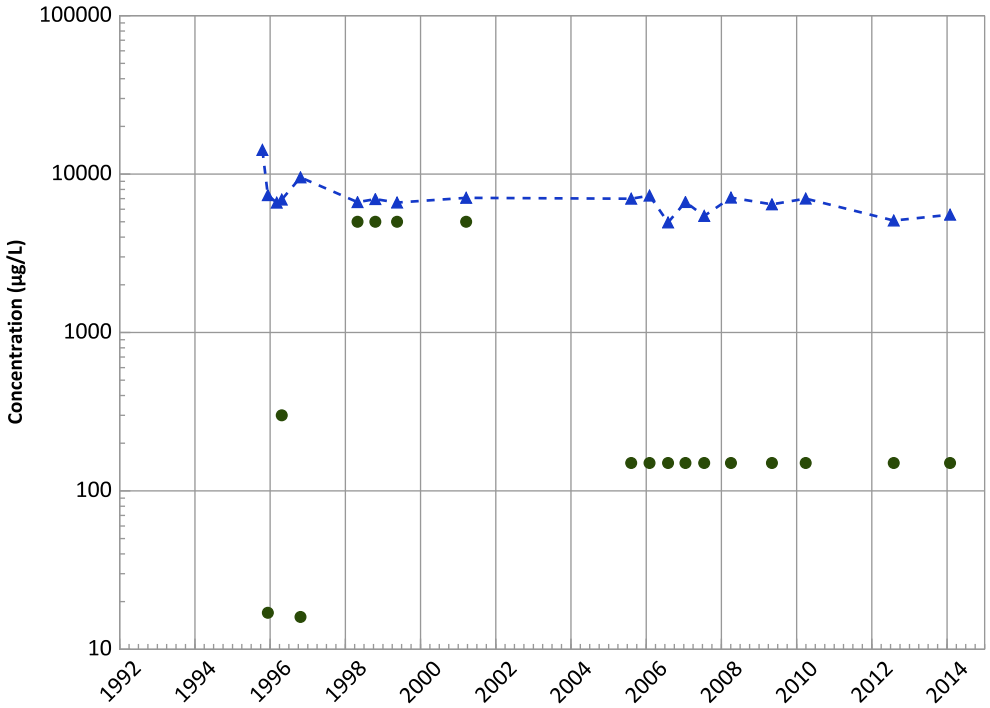
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

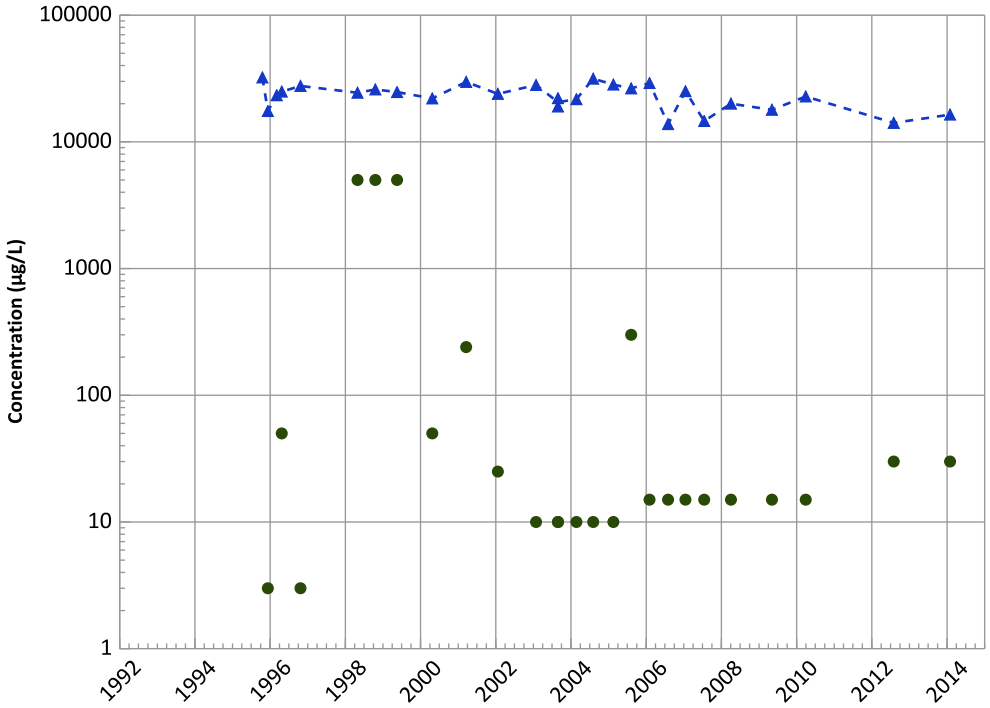


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

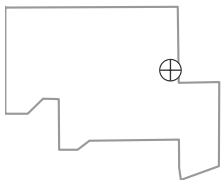
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

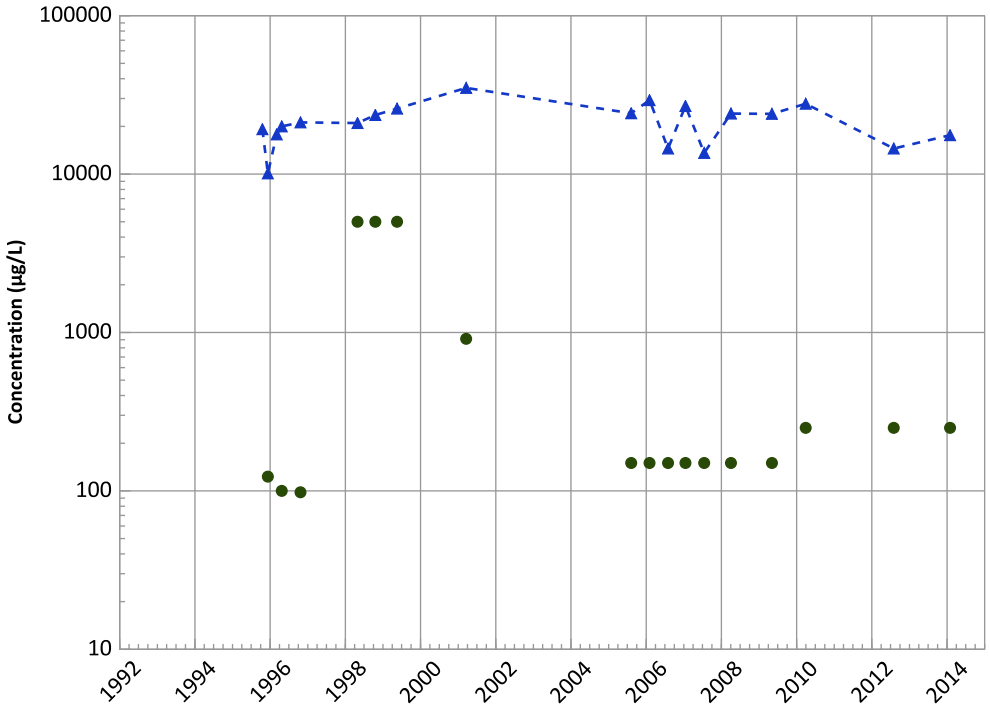
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1023 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

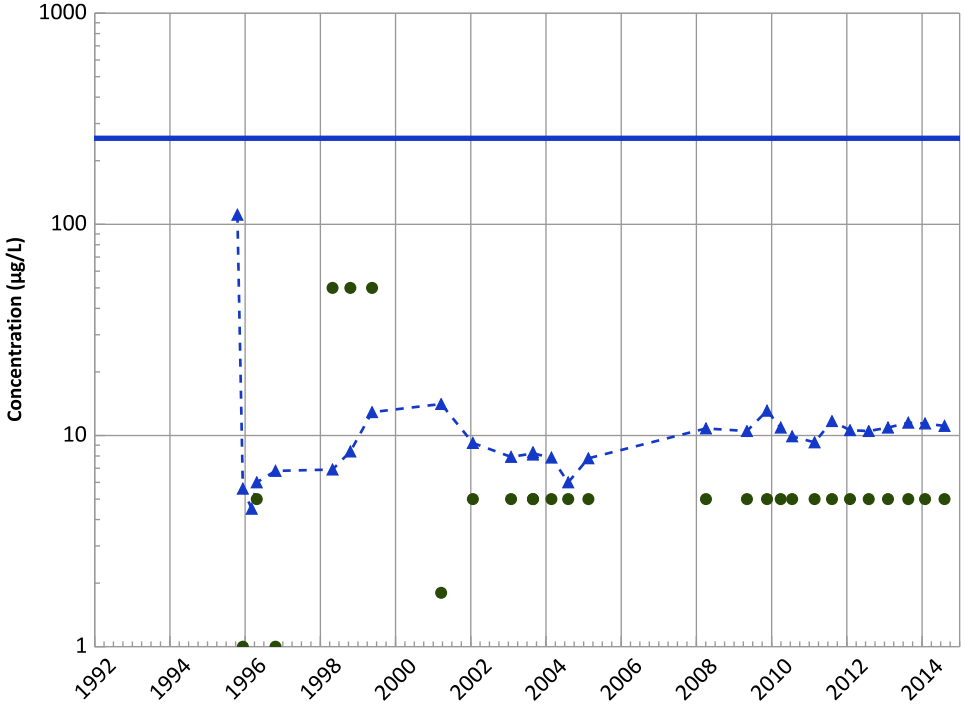


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Vanadium Trend



Concentration Trend

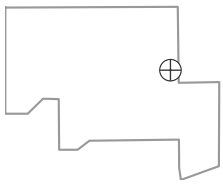
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

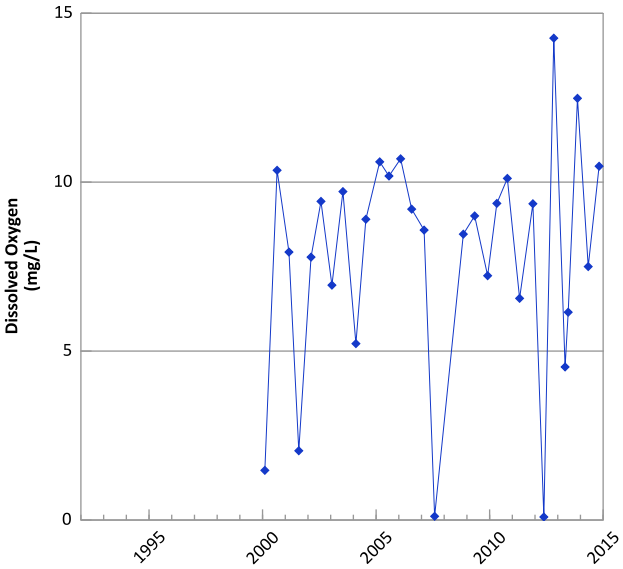
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/18/1995 to 08/07/2014
Analysis Date: 03/19/2015

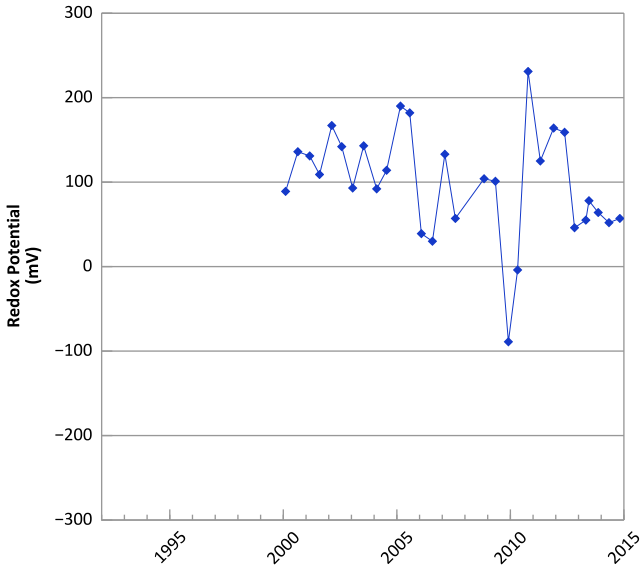
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

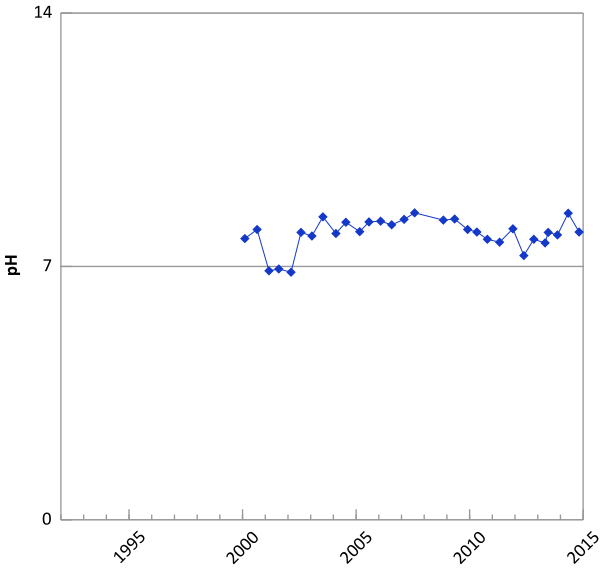
Well Location

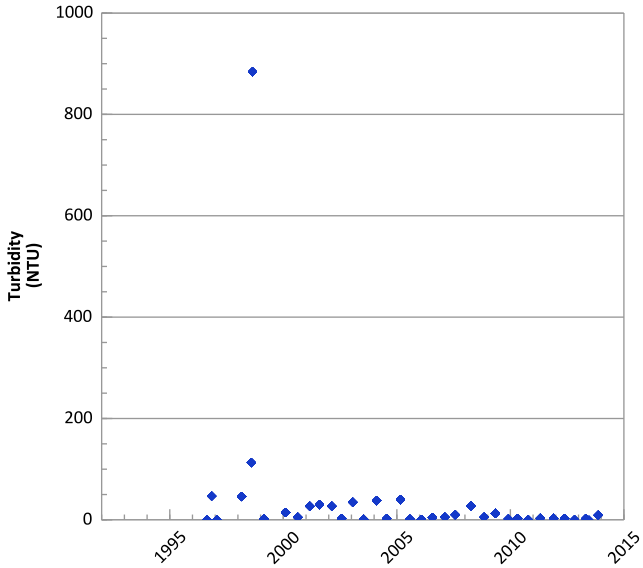


PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



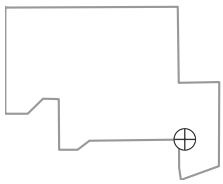






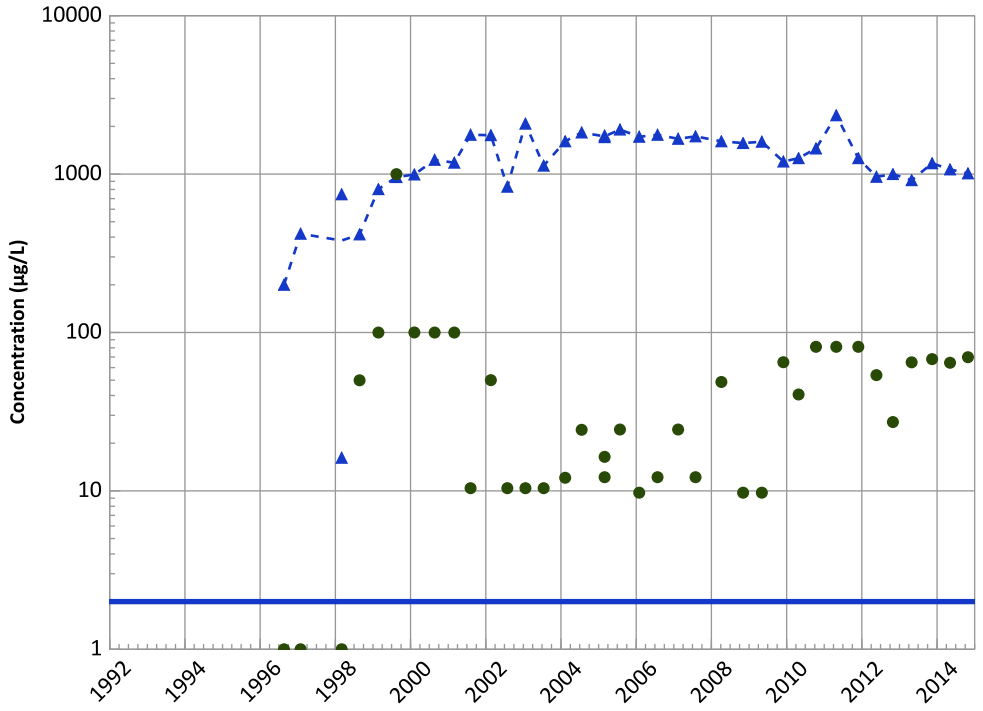
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

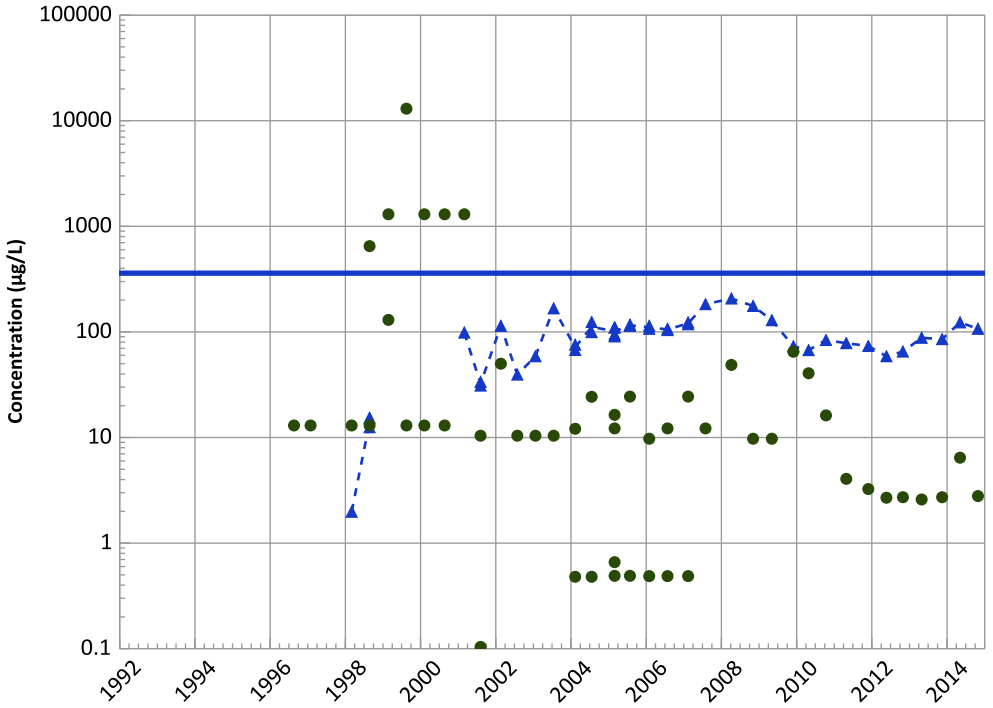


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

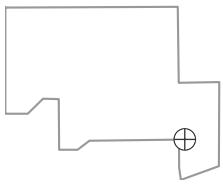
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

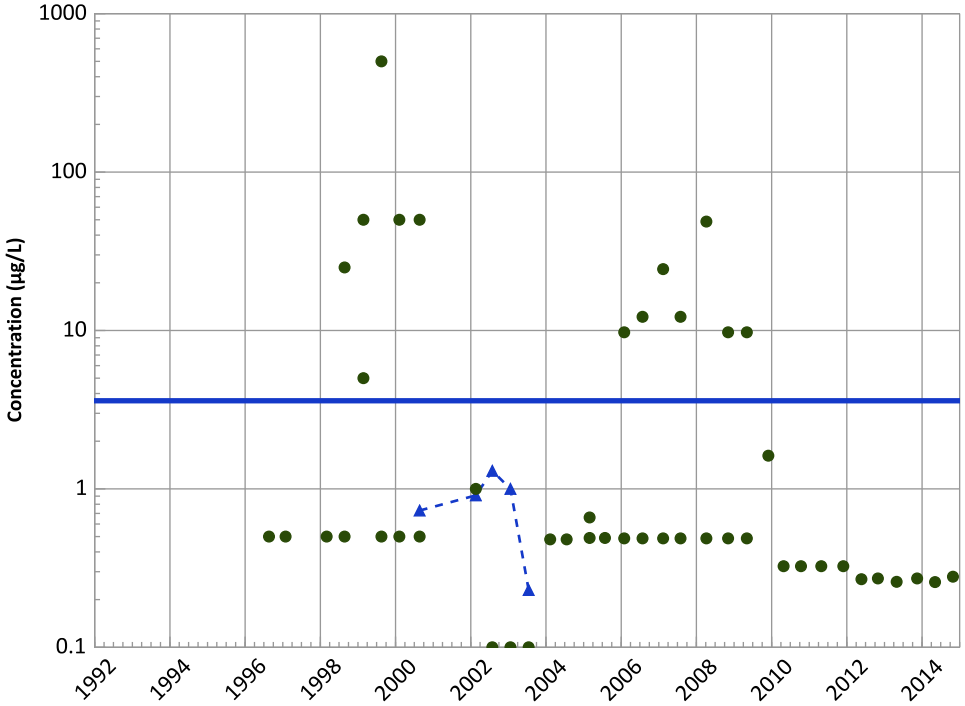
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

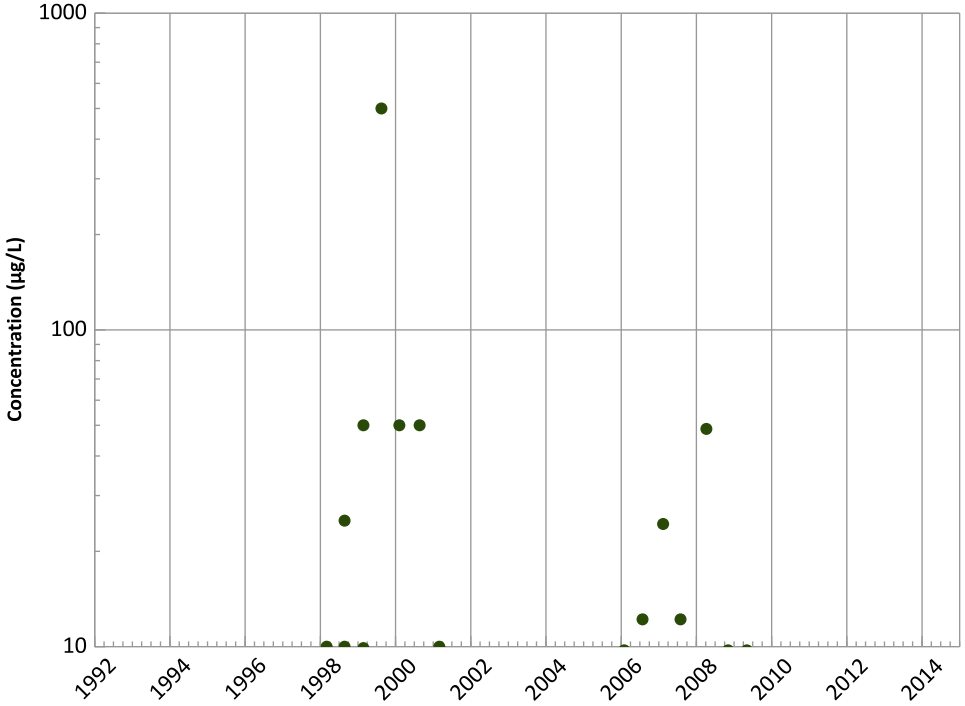


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Stable

2,4-Dinitrotoluene Trend



Concentration Trend

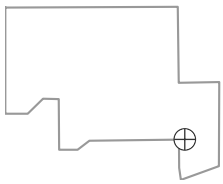
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

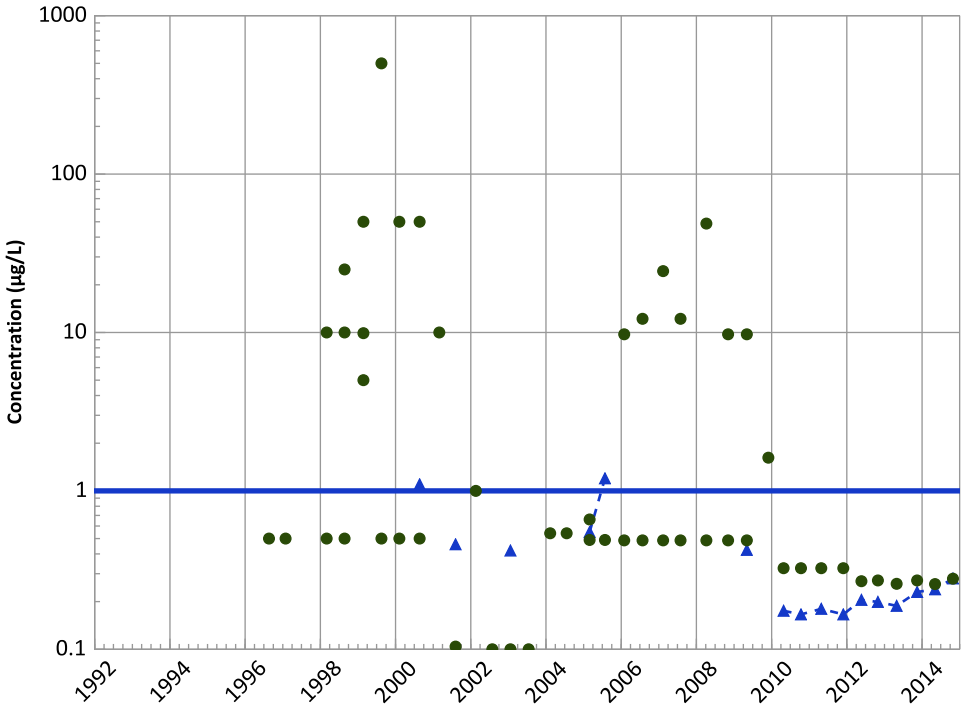
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

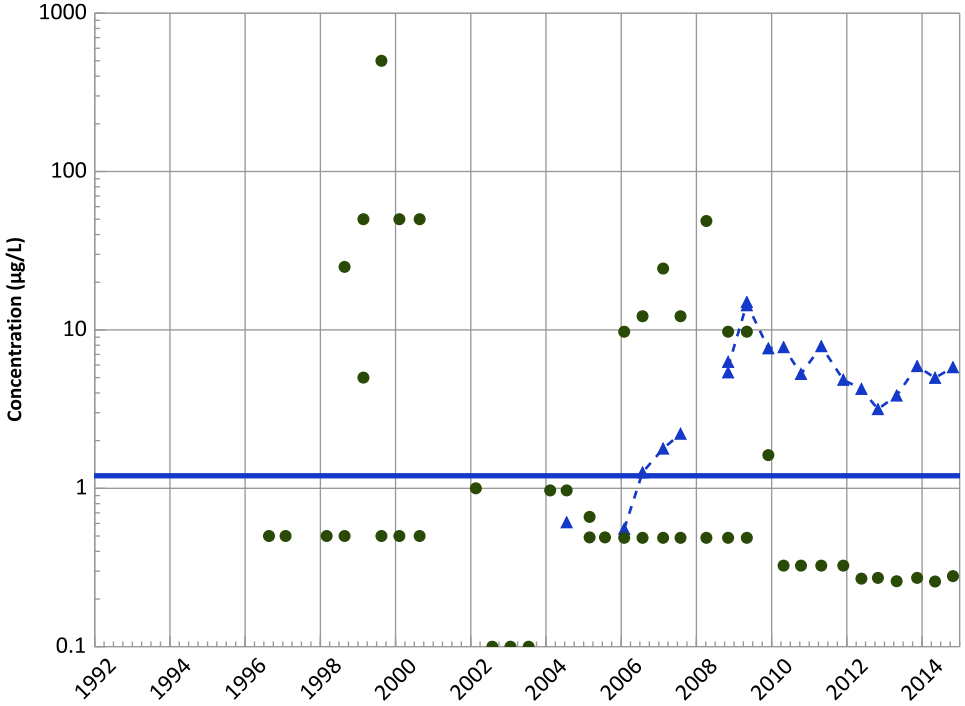


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

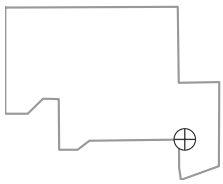
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

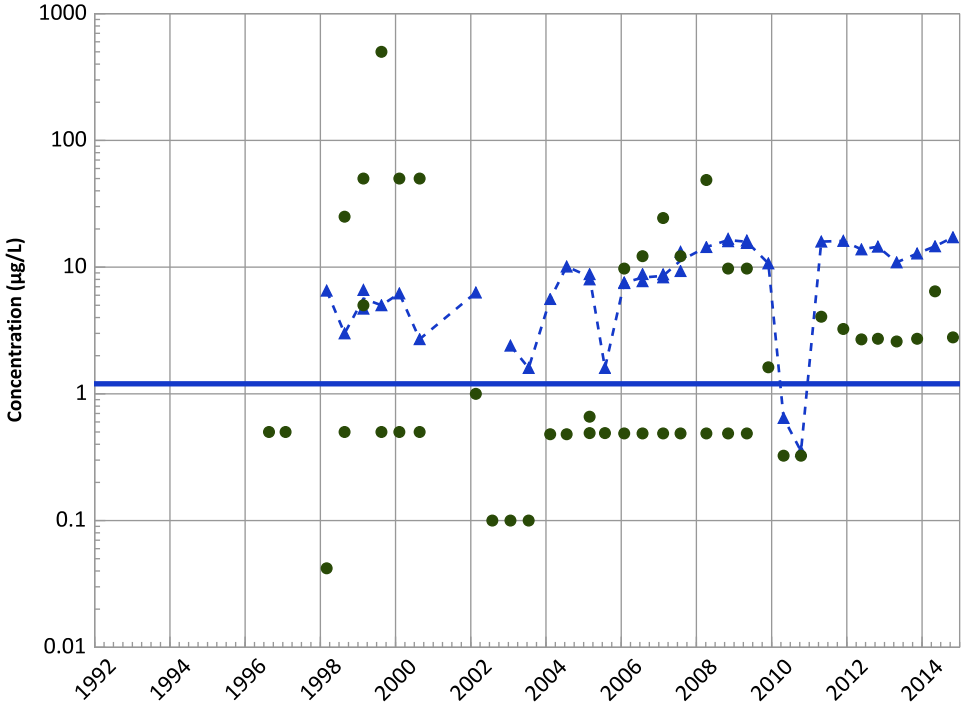
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

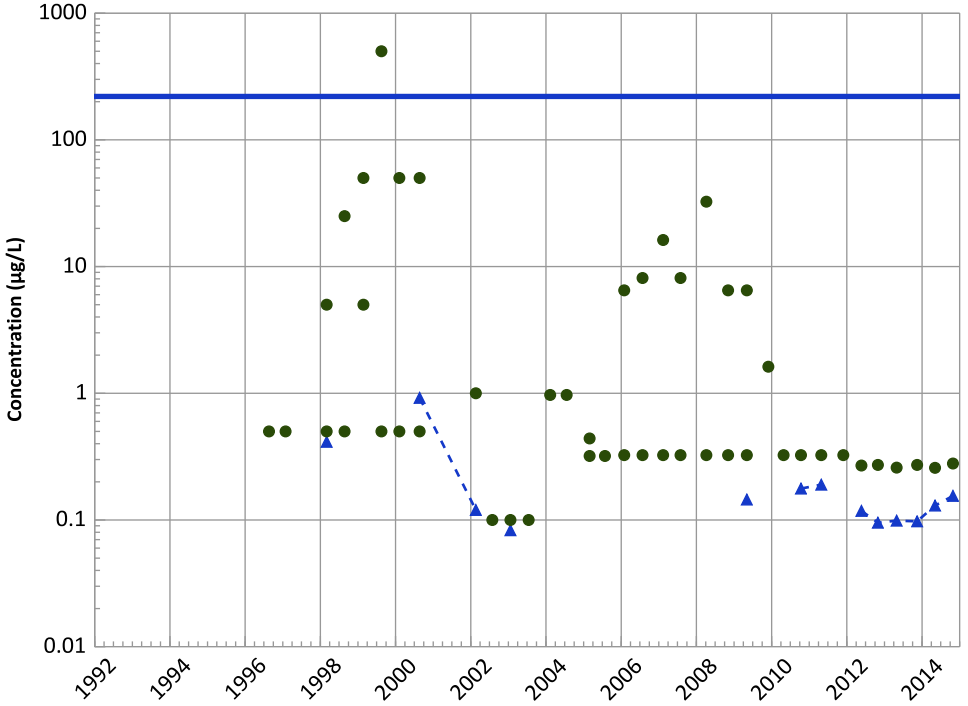


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

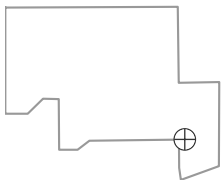
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

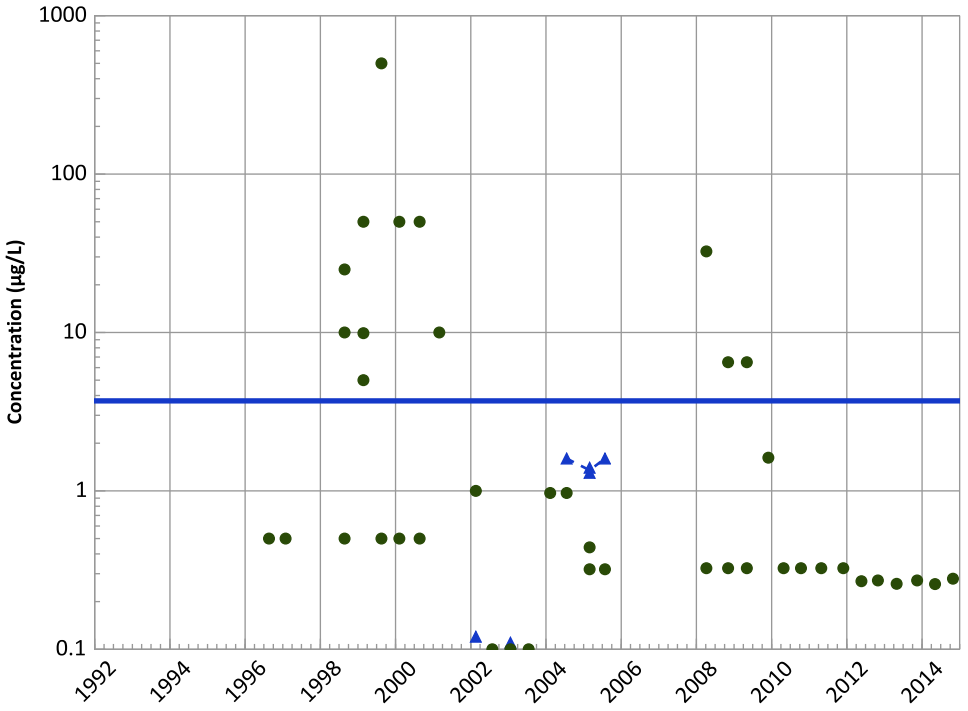
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

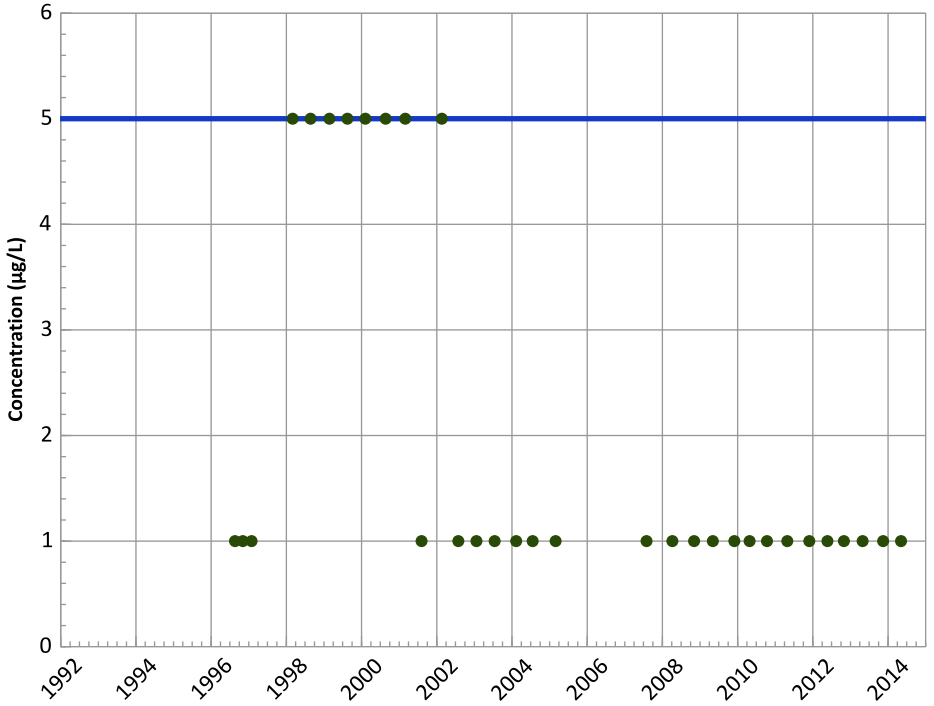


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Increasing

Tetrachloroethylene (PCE) Trend



Concentration Trend

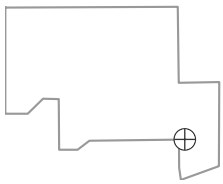
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

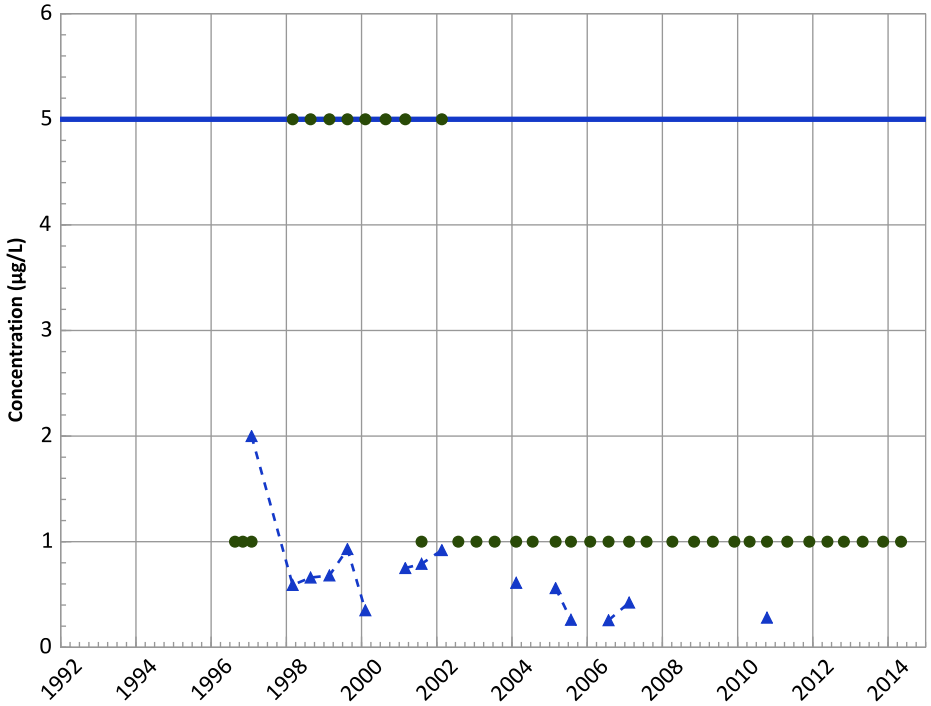
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

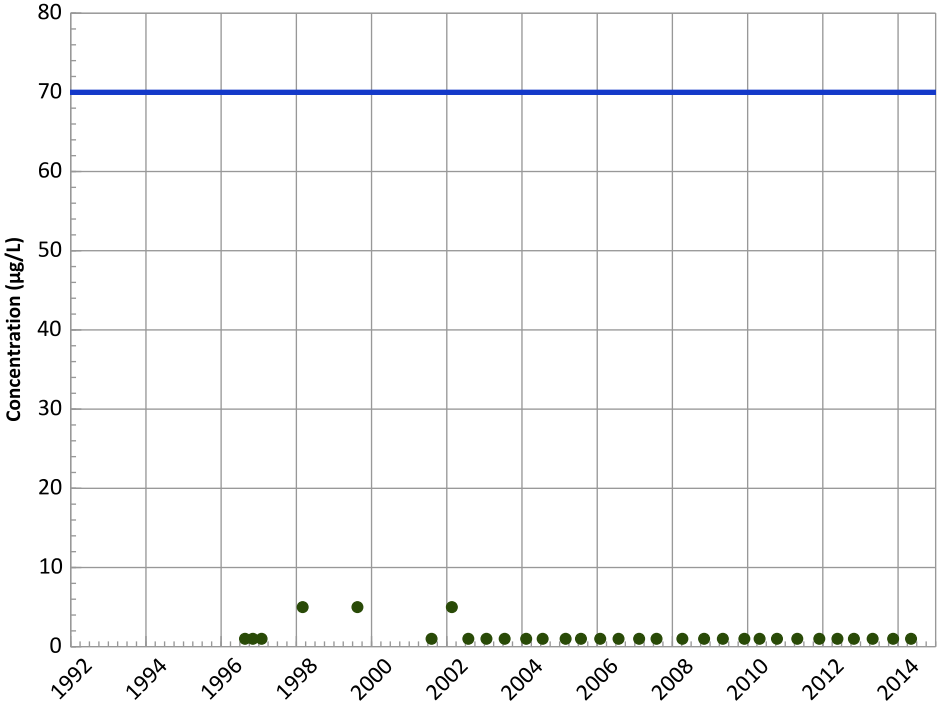


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

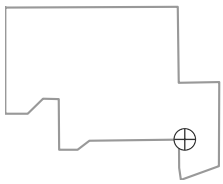
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

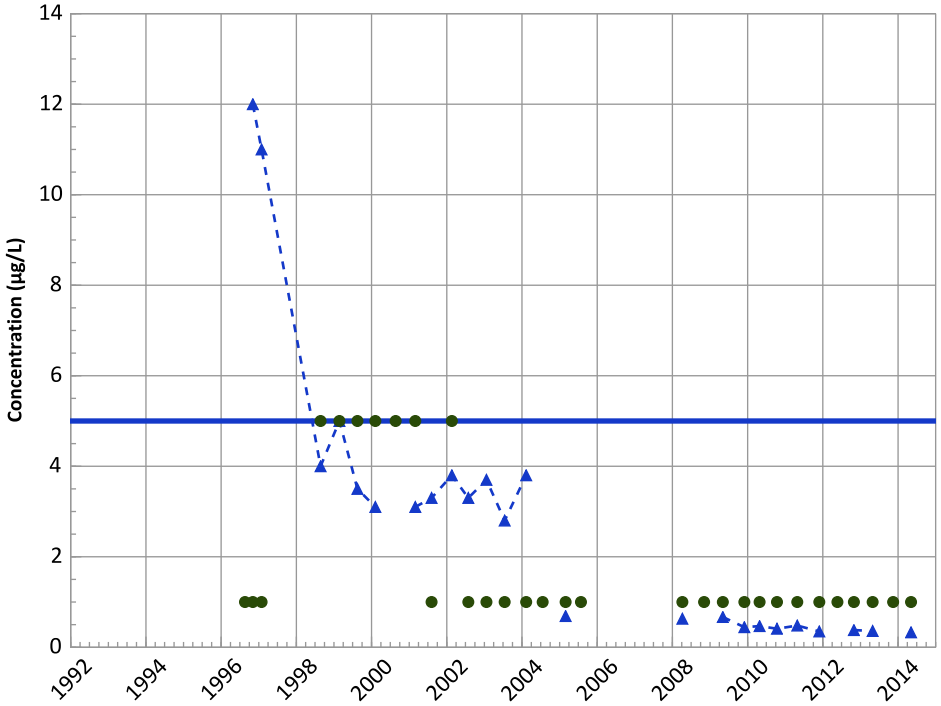
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

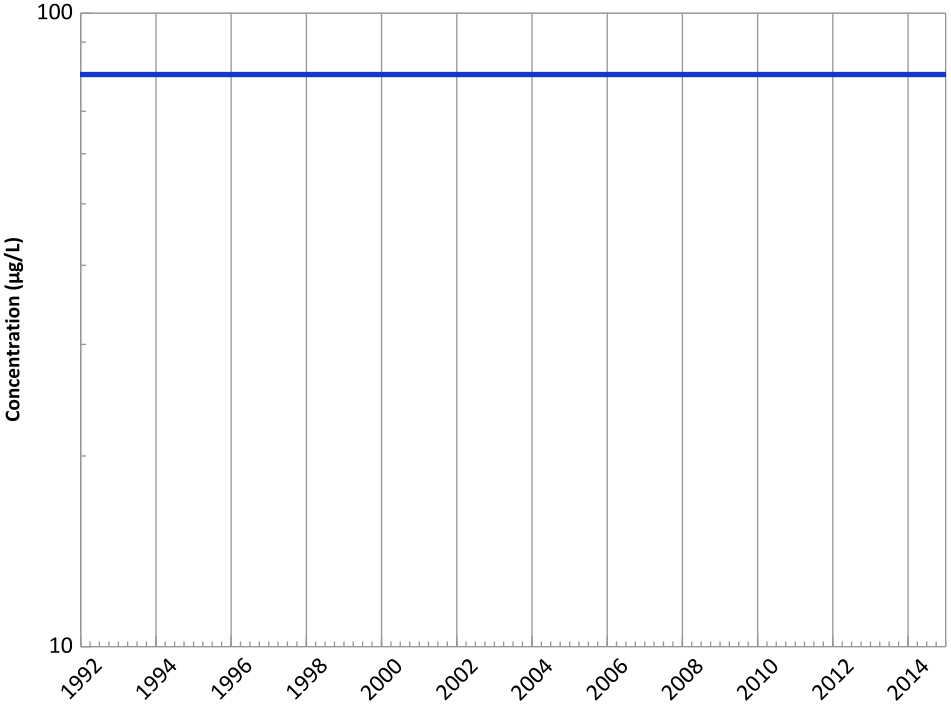


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chloroform Trend



Concentration Trend

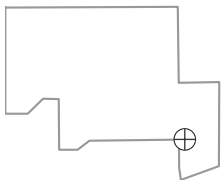
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

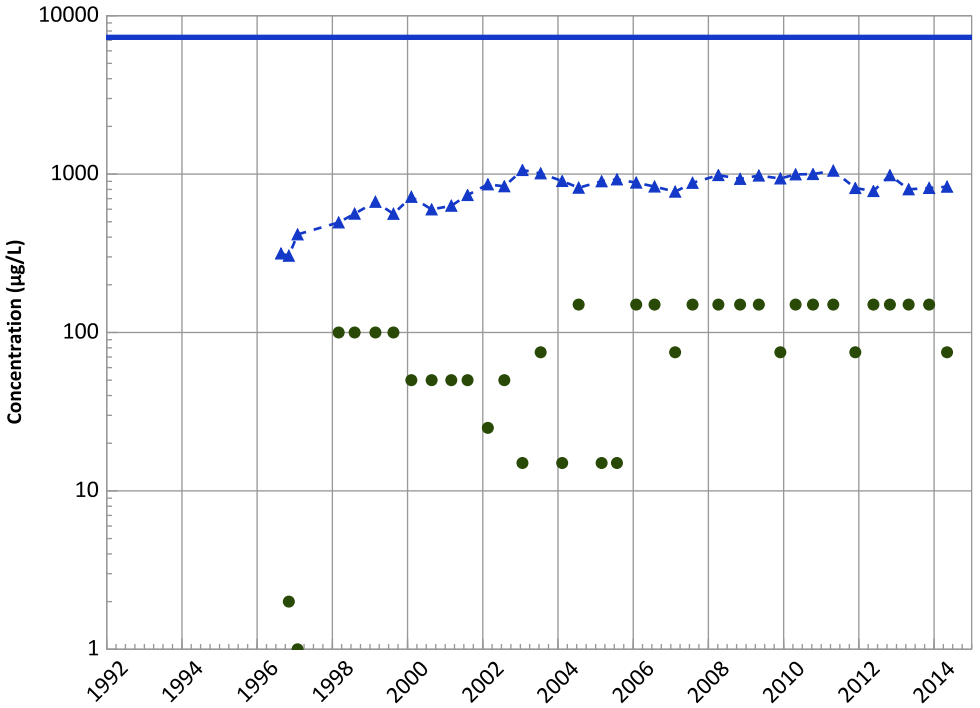
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

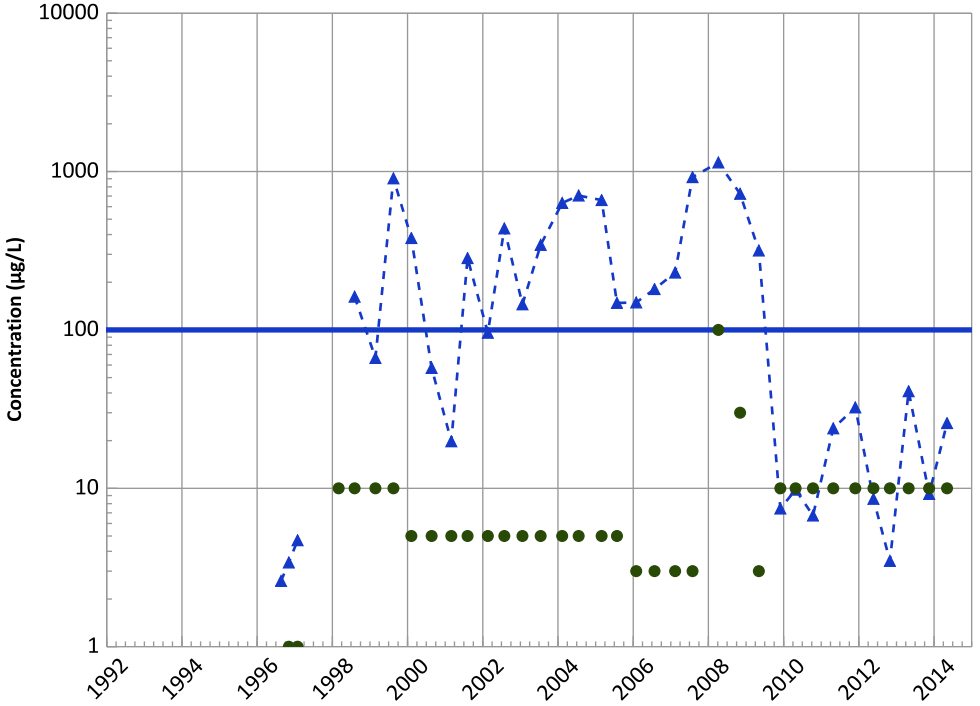


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

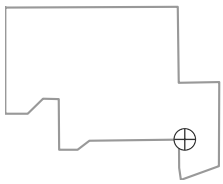
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

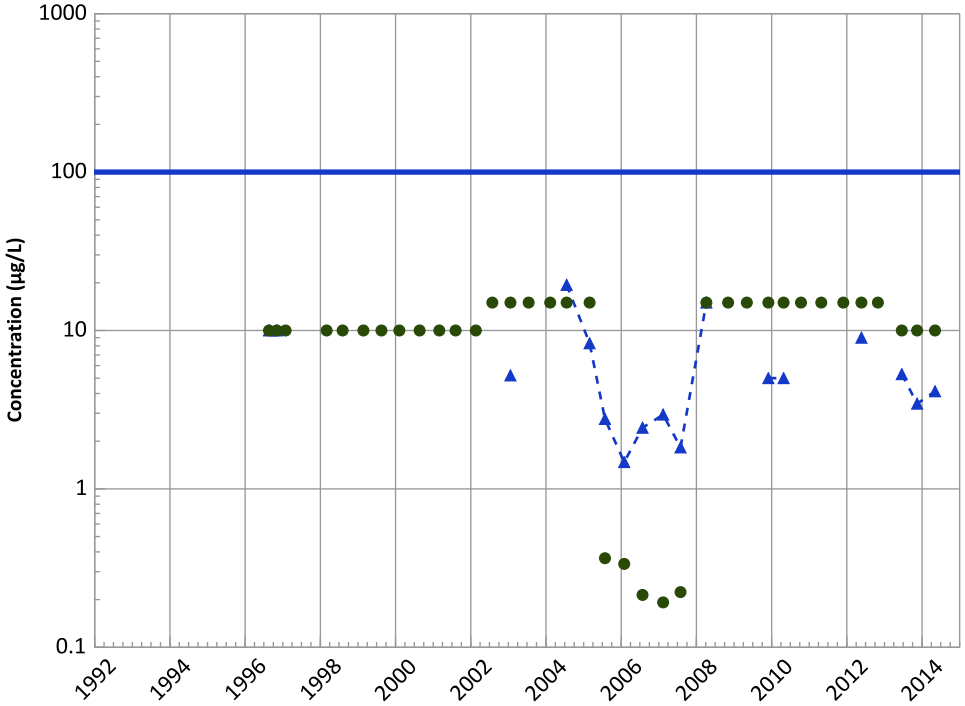
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

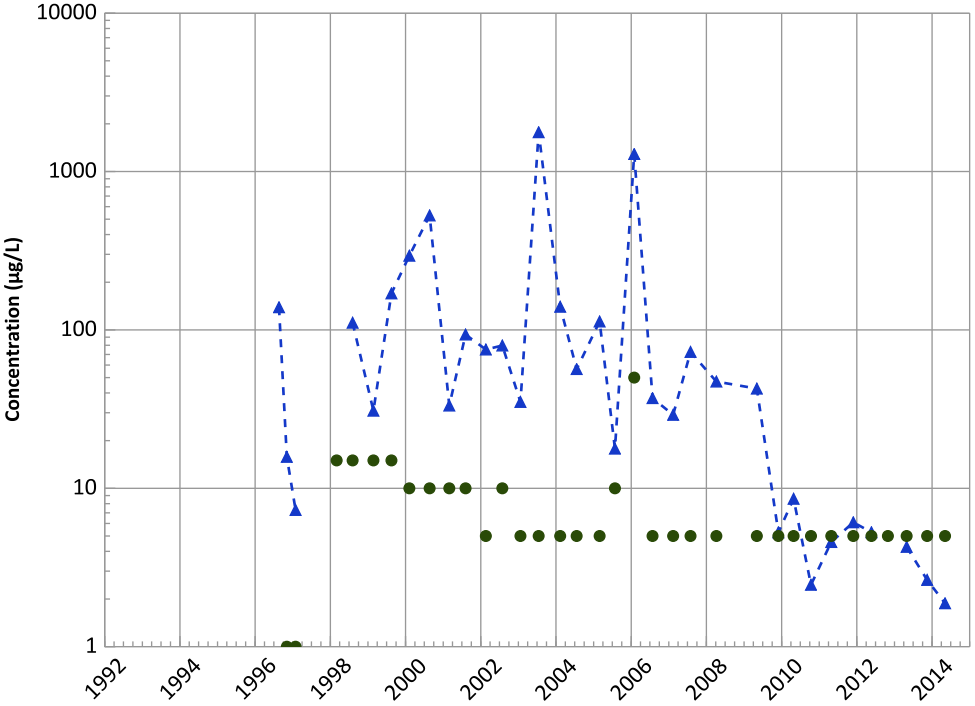


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Manganese Trend



Concentration Trend

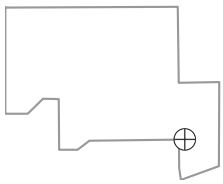
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

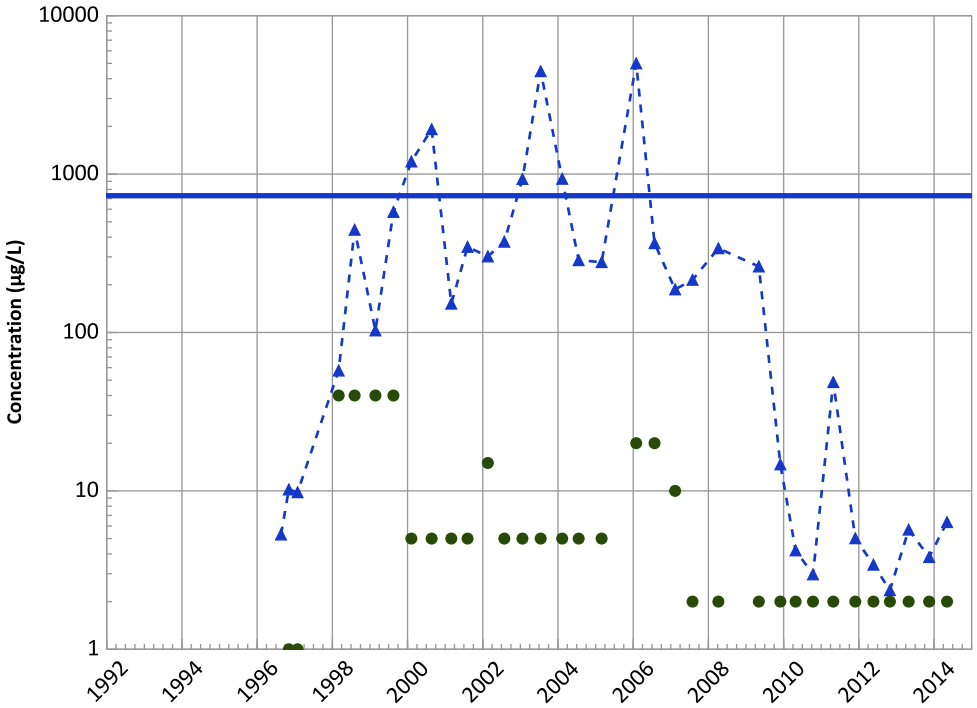
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

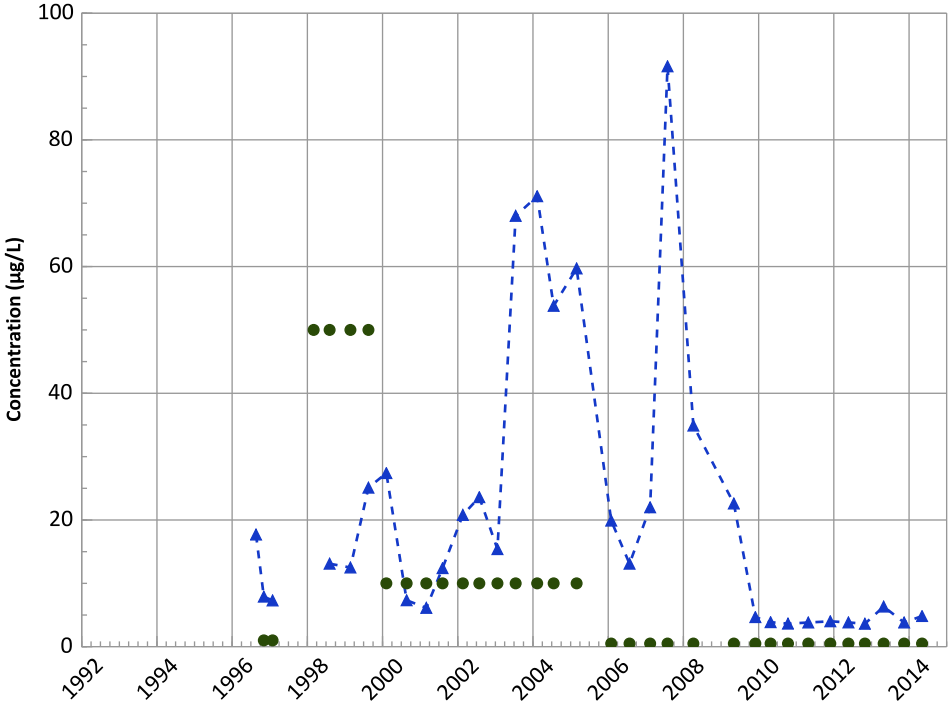


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Molybdenum Trend



Concentration Trend

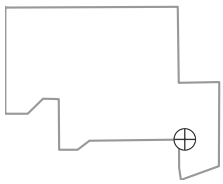
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

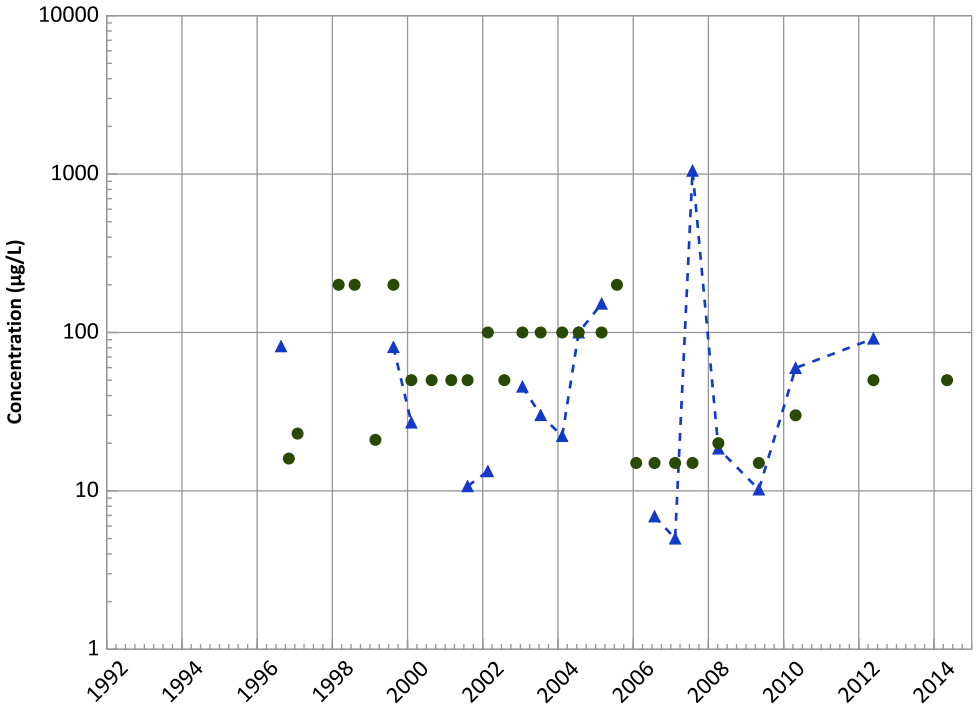
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

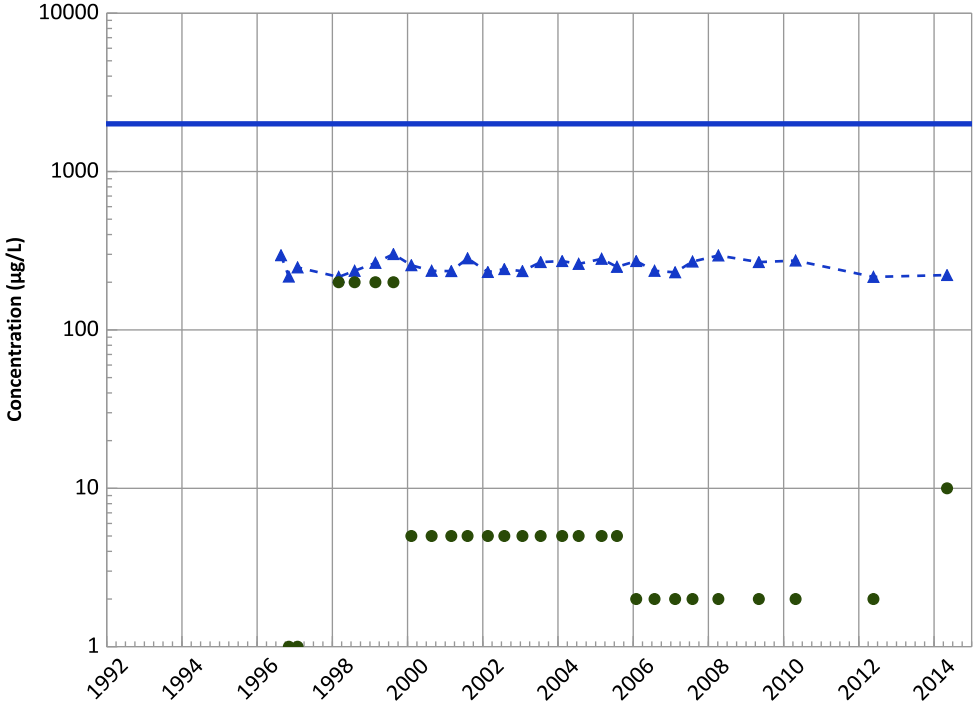


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

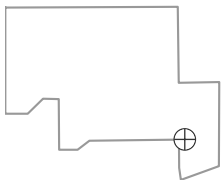
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

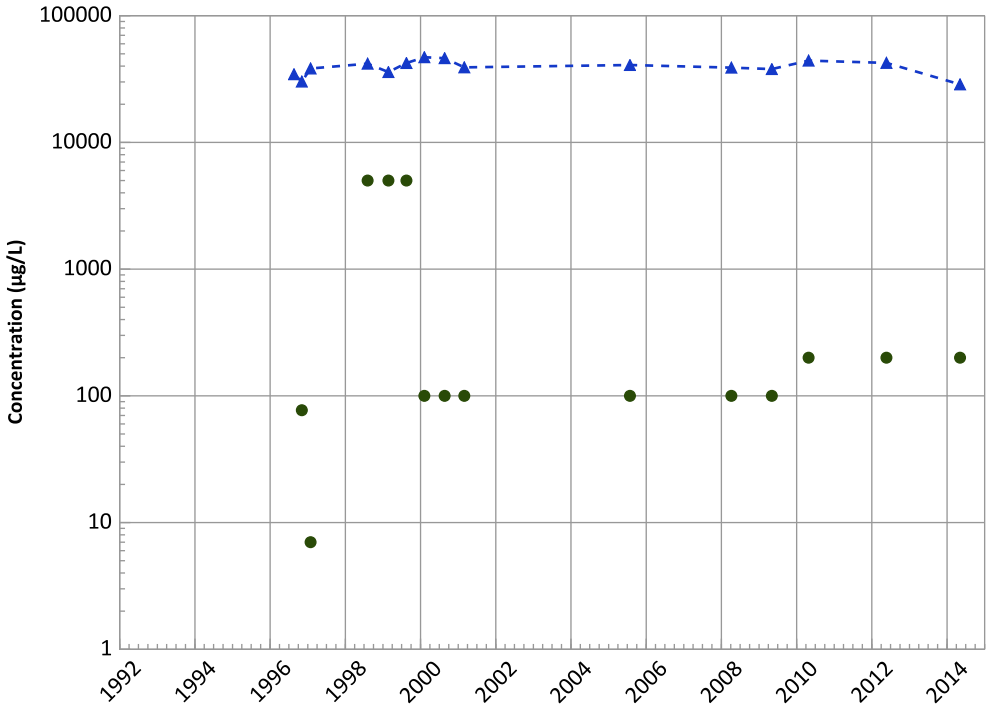
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

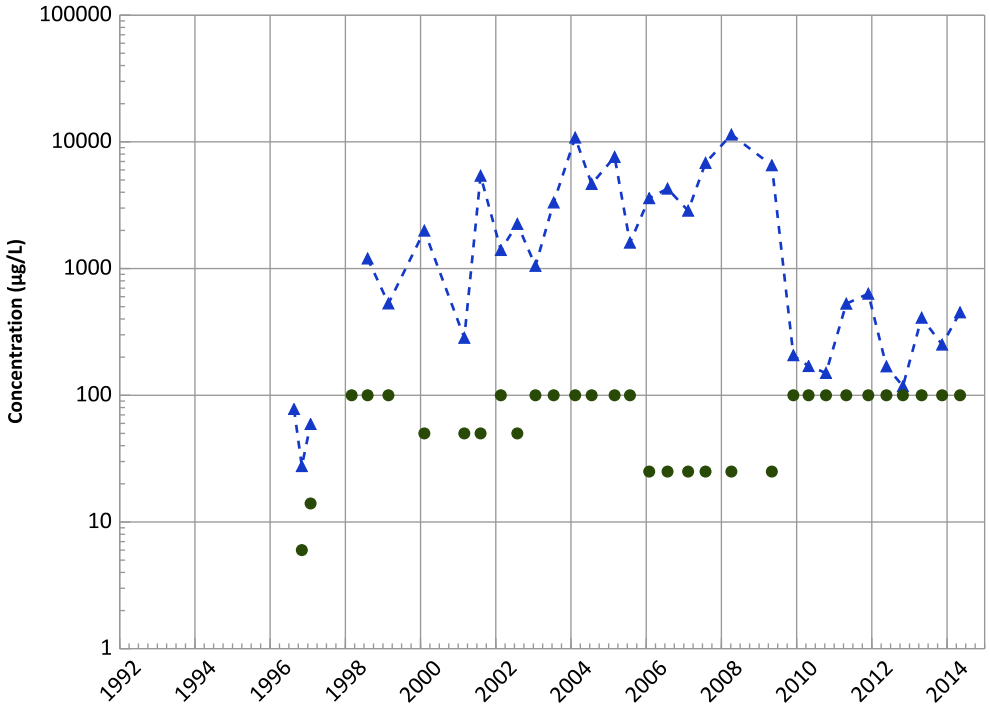


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

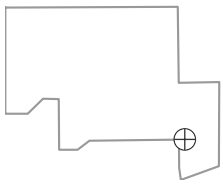
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

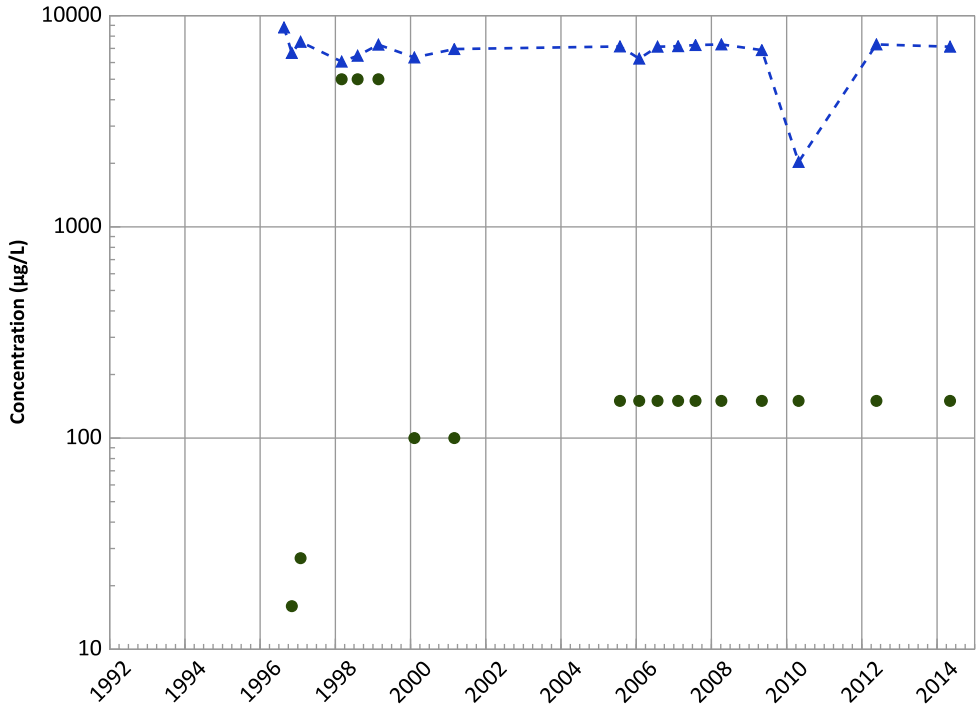
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

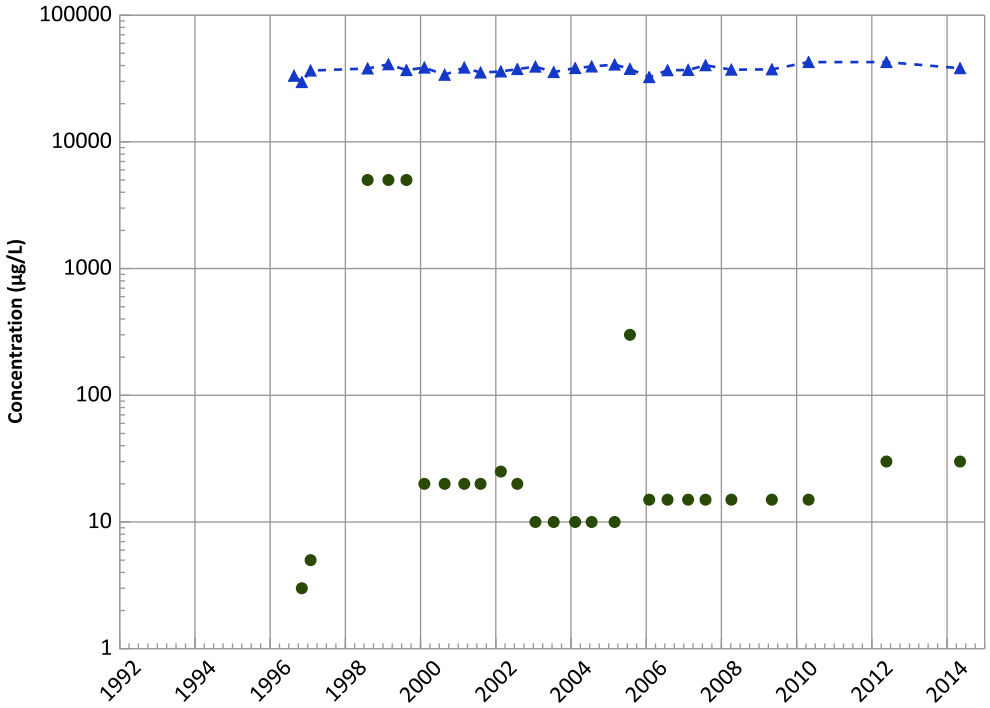


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Magnesium Trend



Concentration Trend

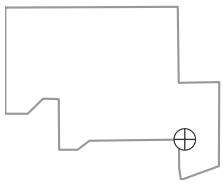
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

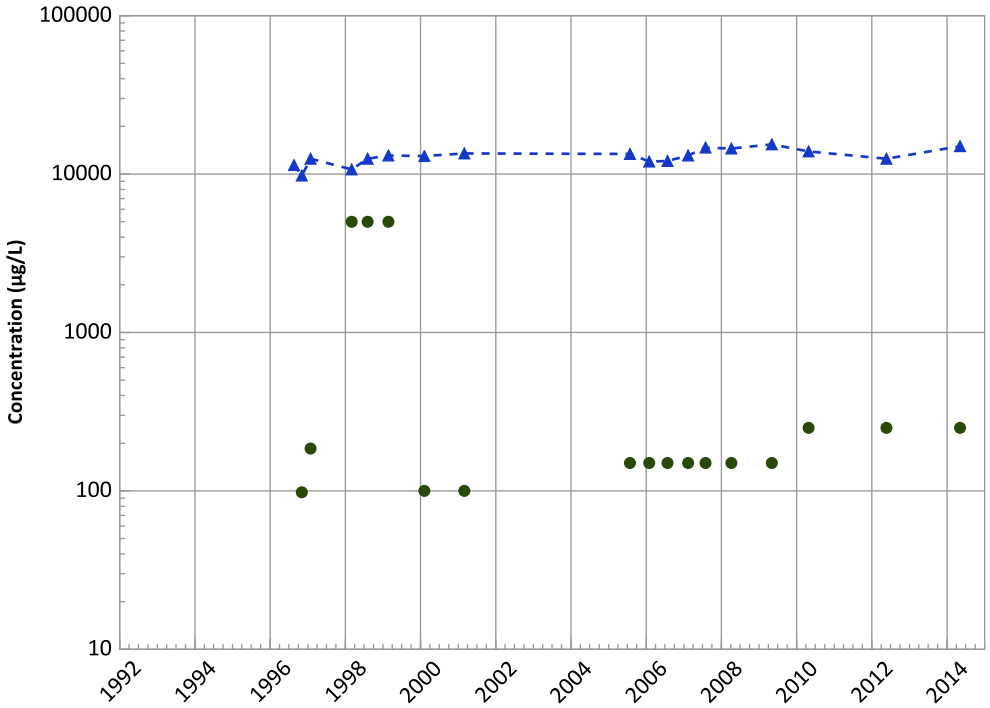
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1030 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

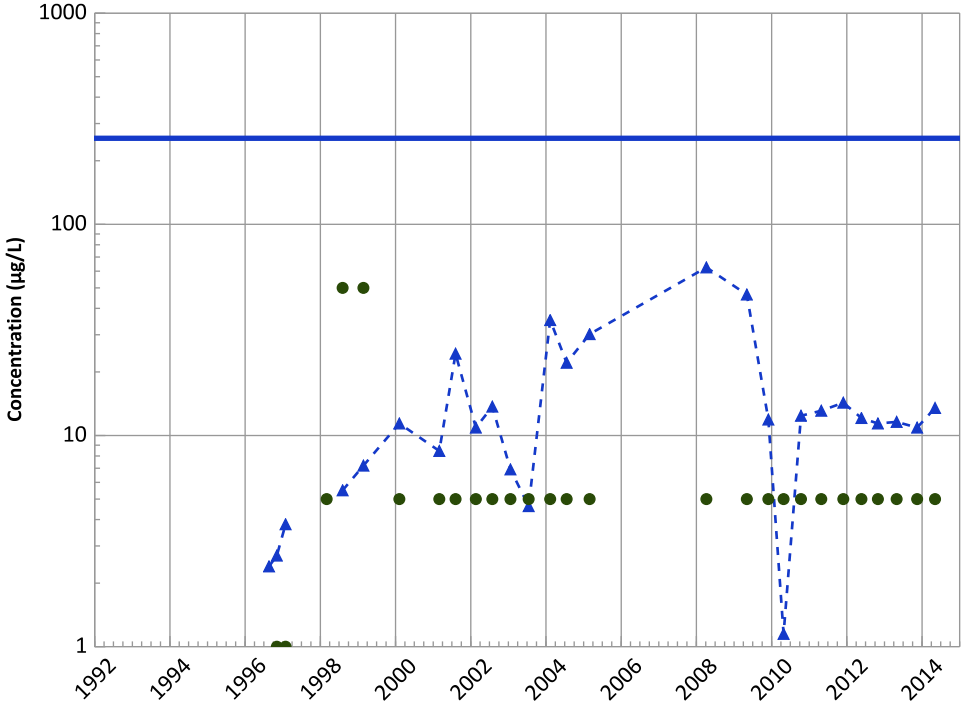


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Vanadium Trend



Concentration Trend

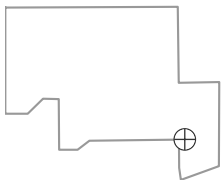
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

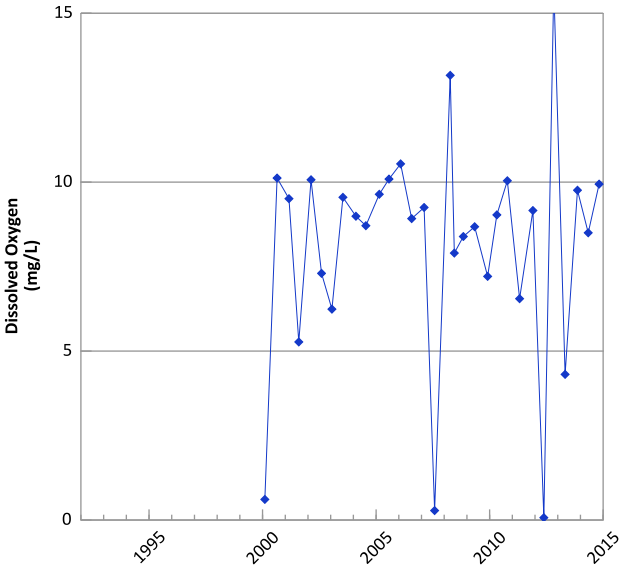
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

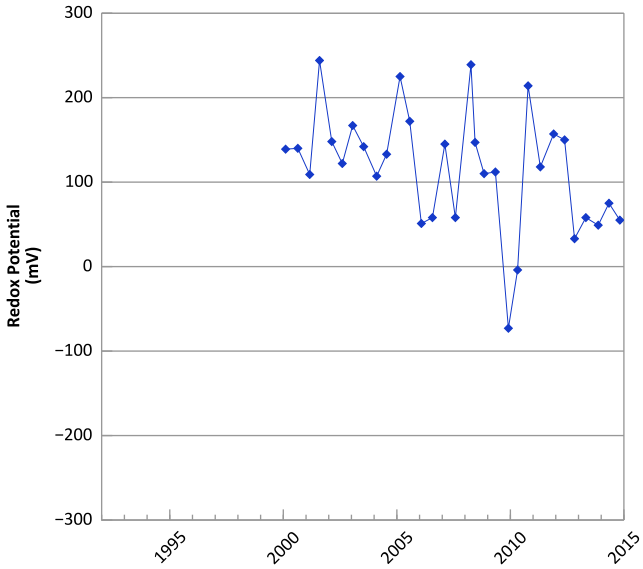
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

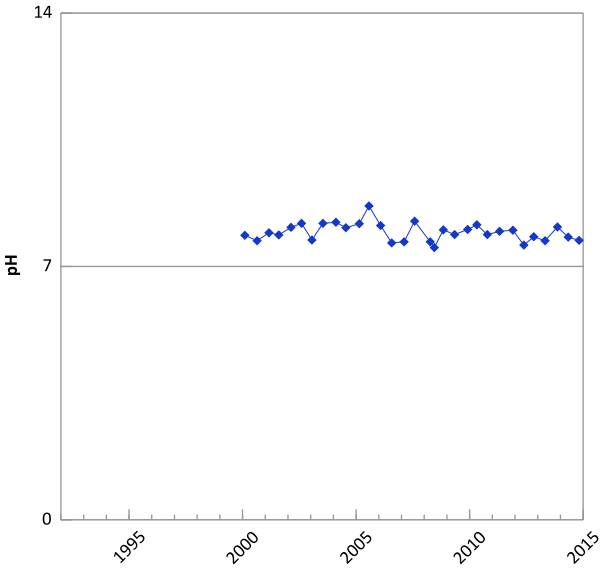
Well Location

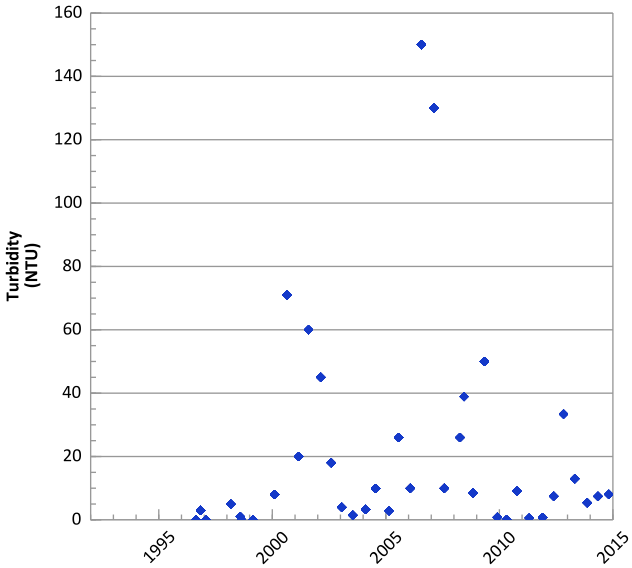


PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



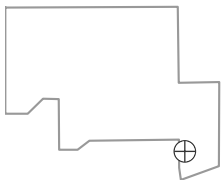






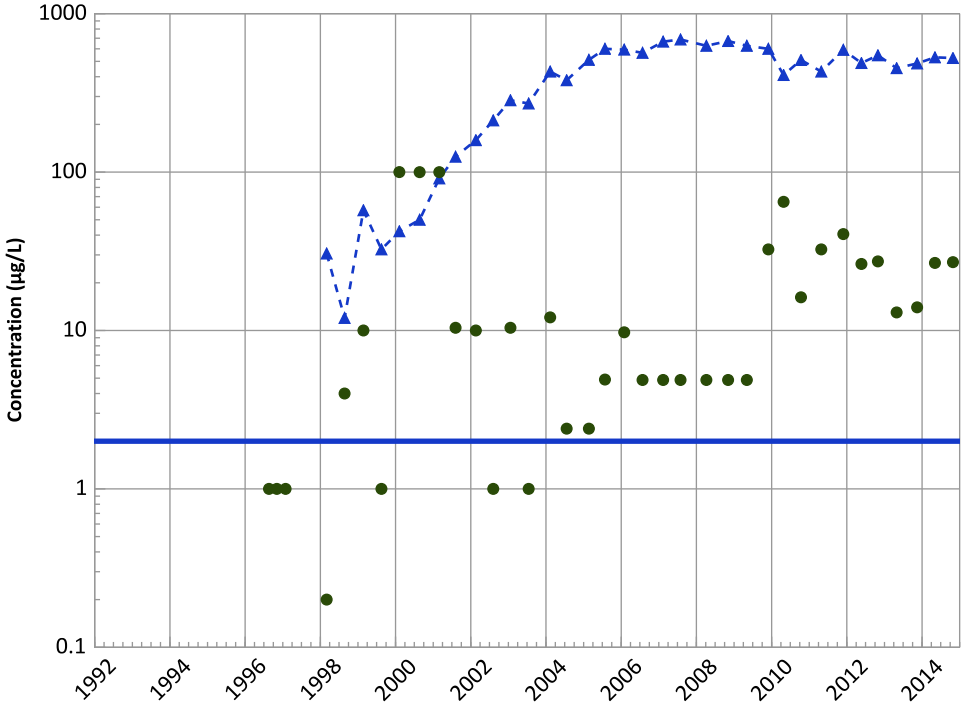
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

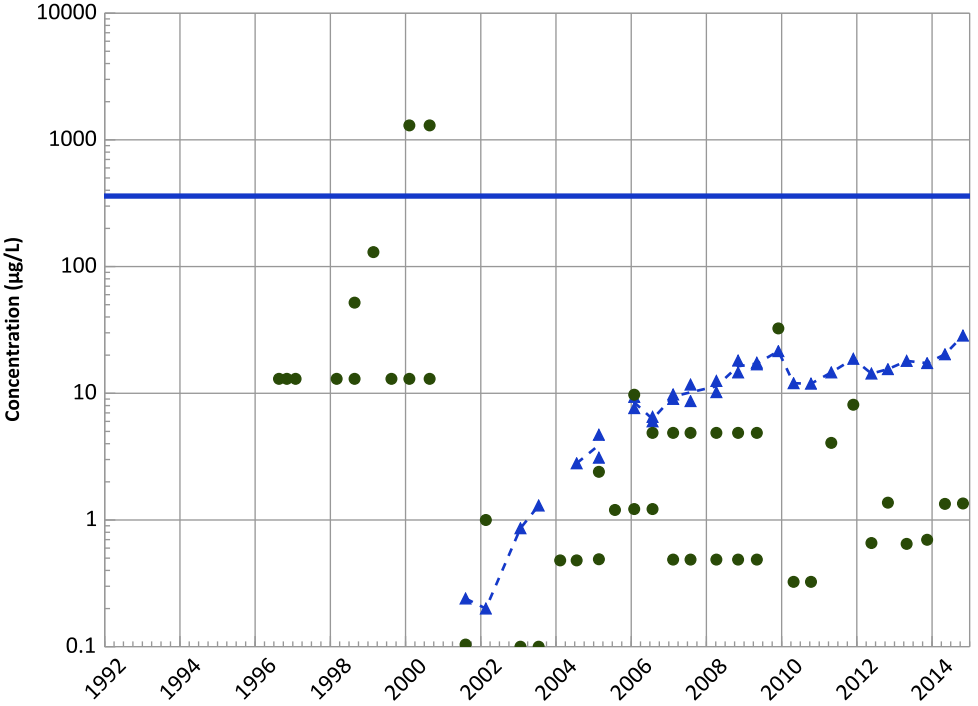


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

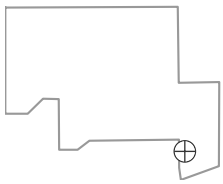
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

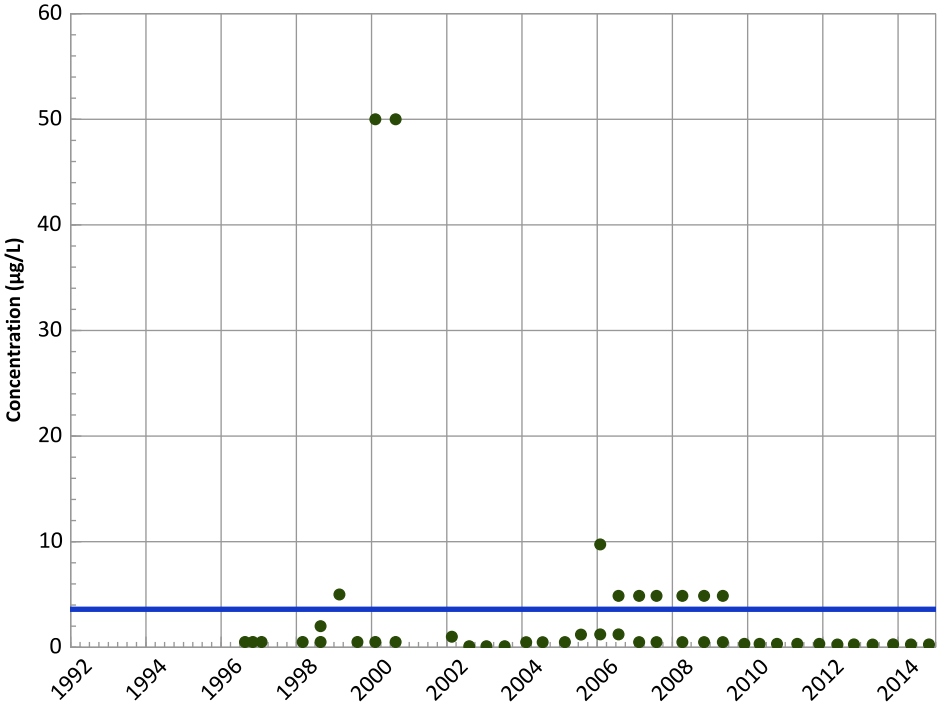
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

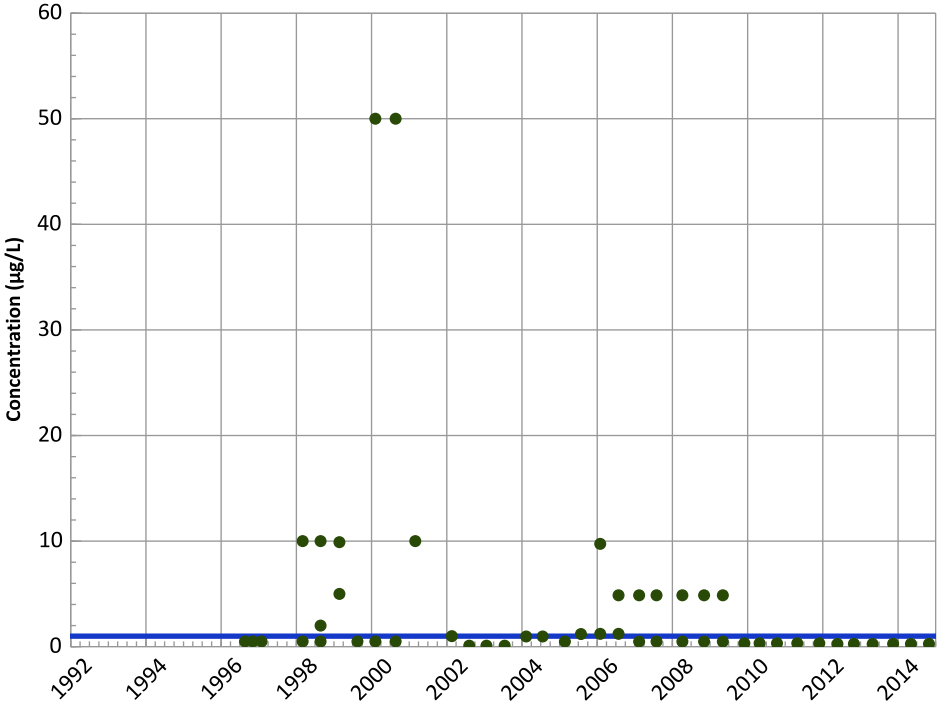


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

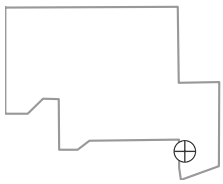
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

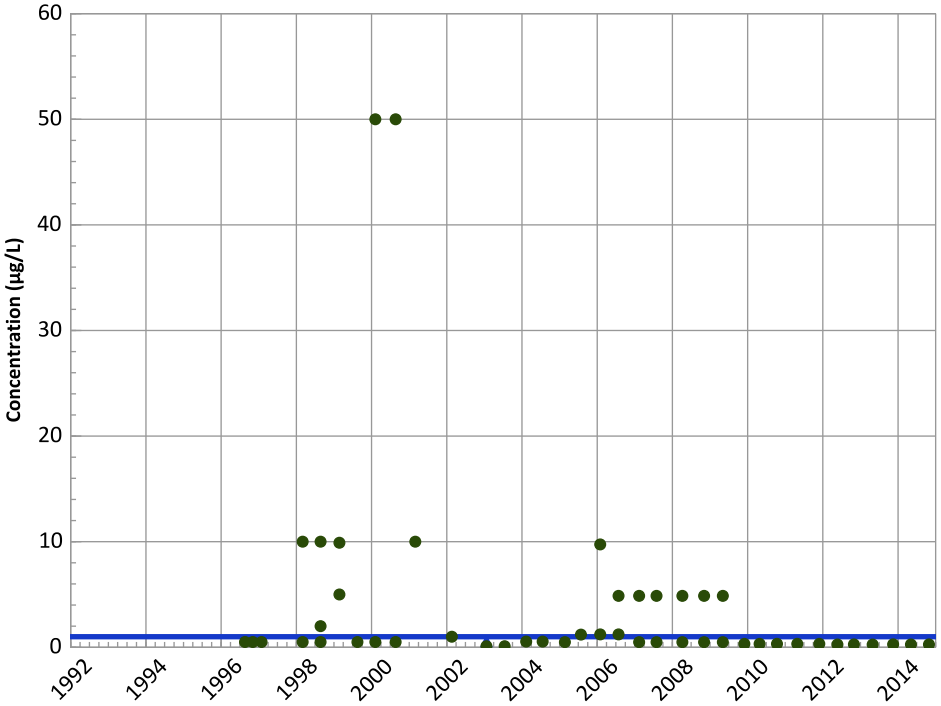
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

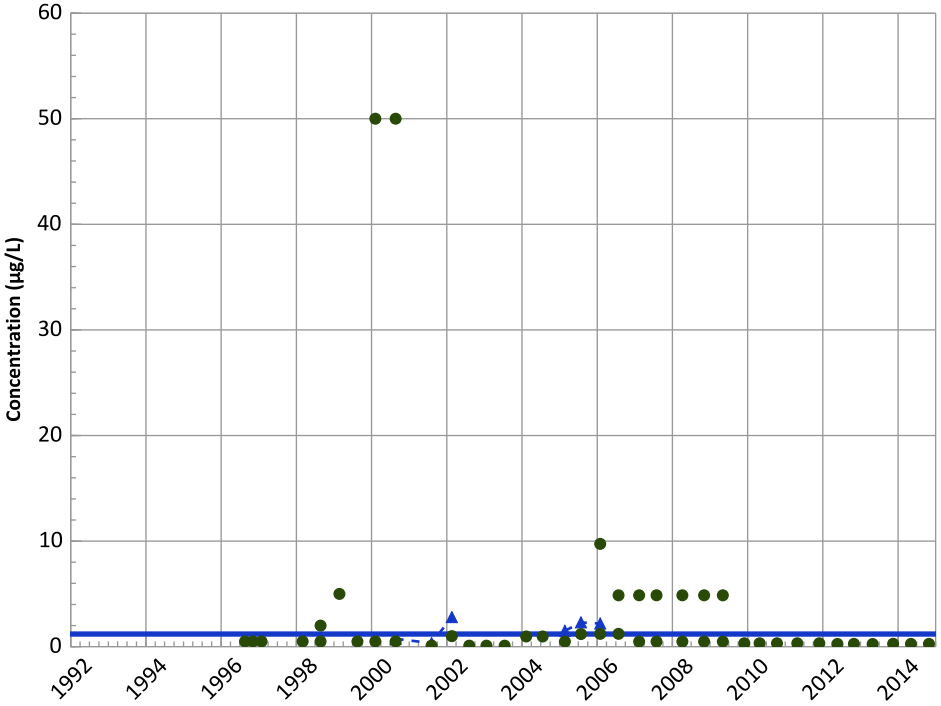


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

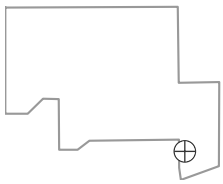
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

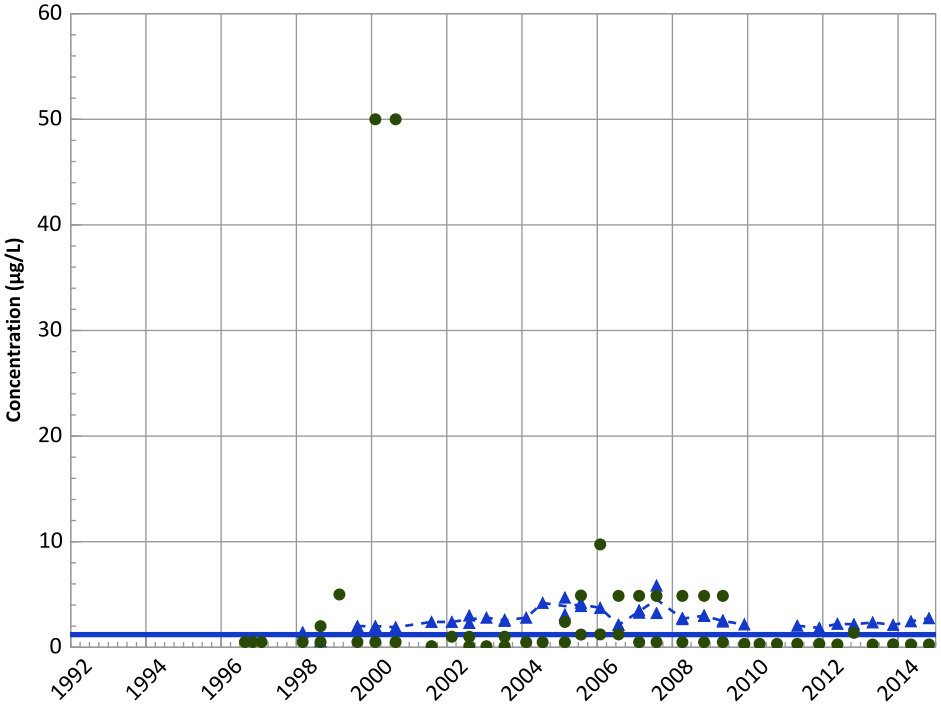
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

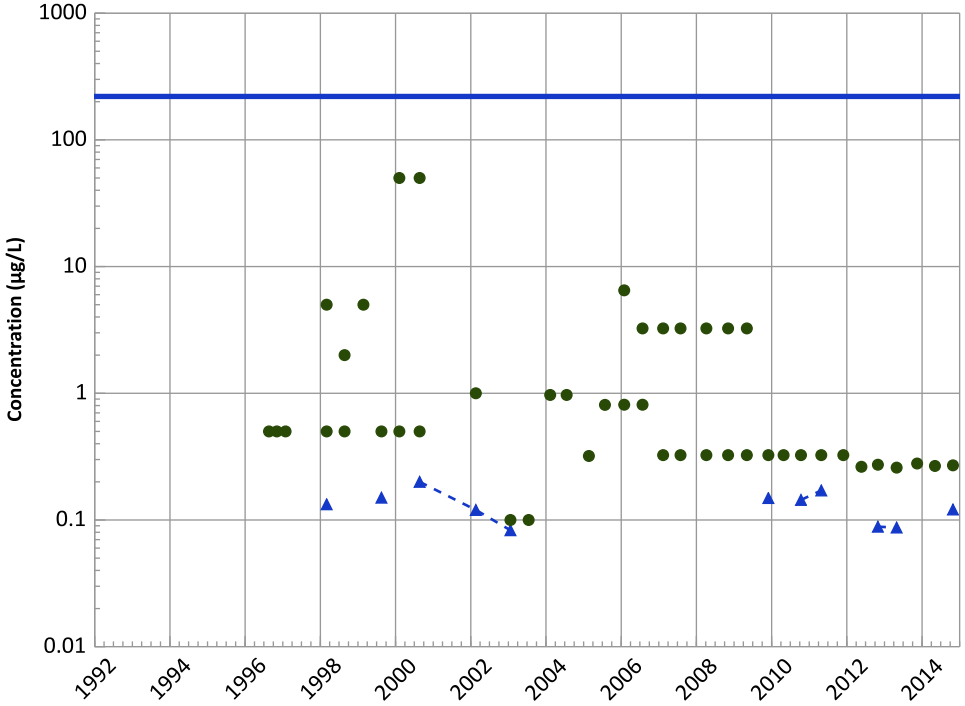


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Probably Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

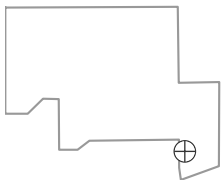
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

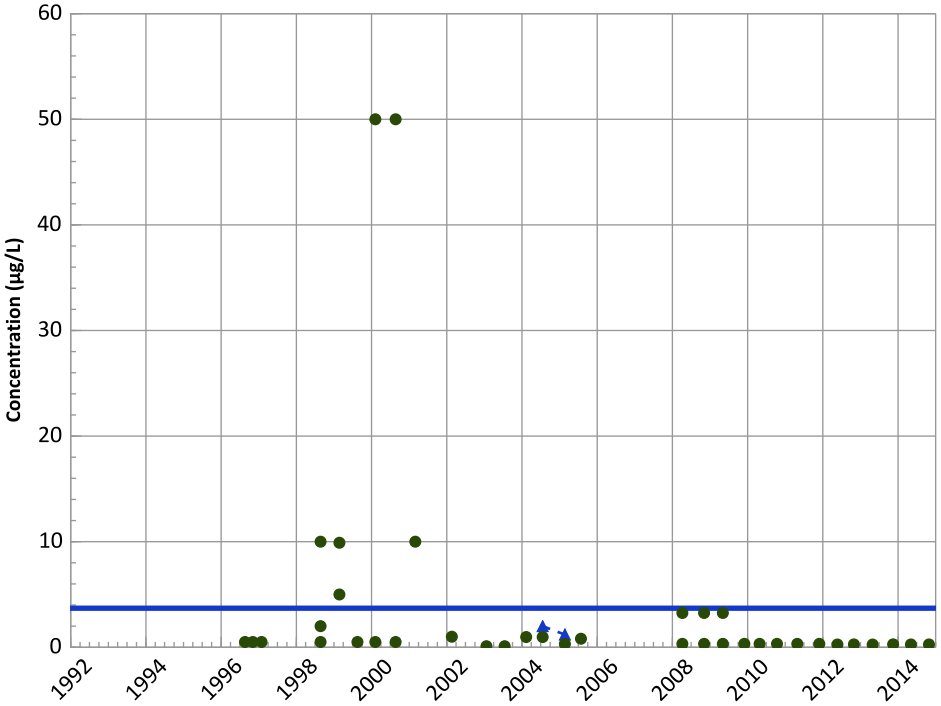
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

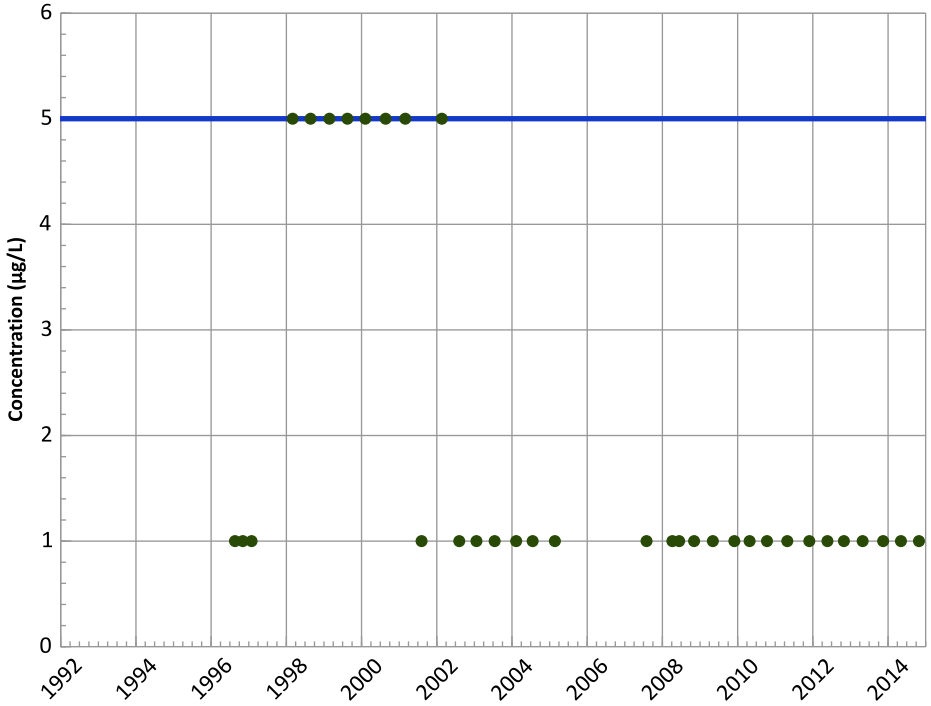


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

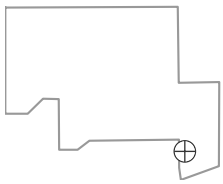
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

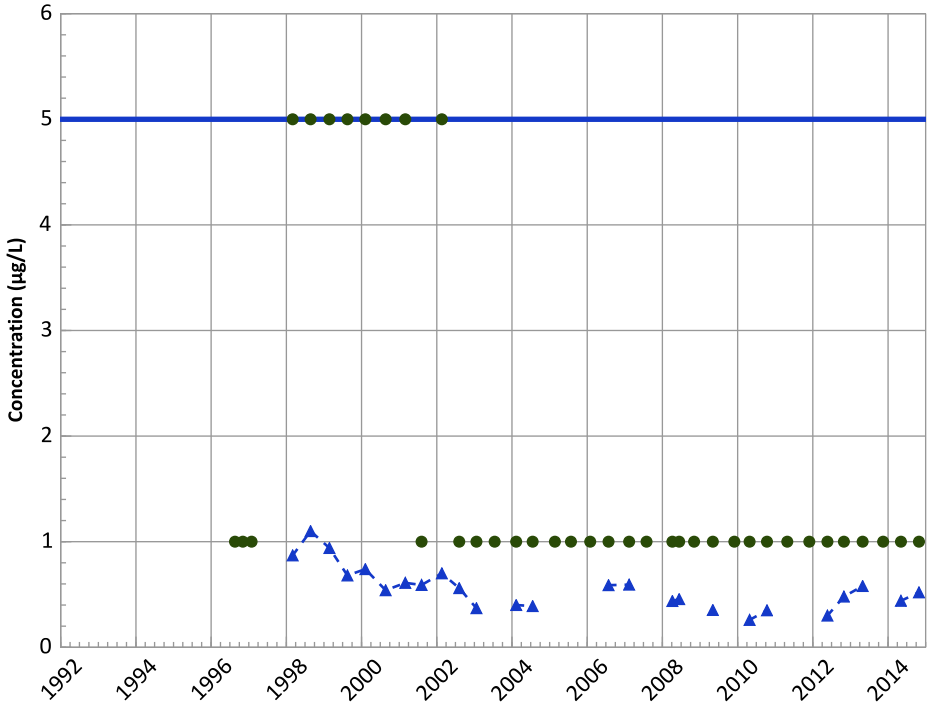
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

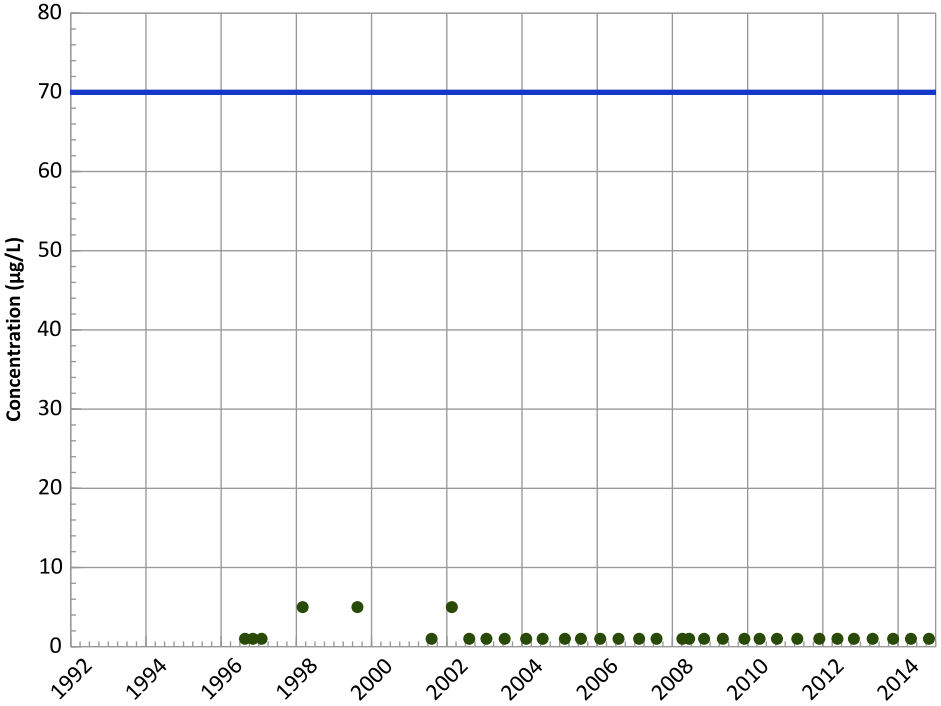


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

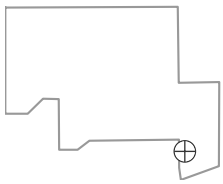
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

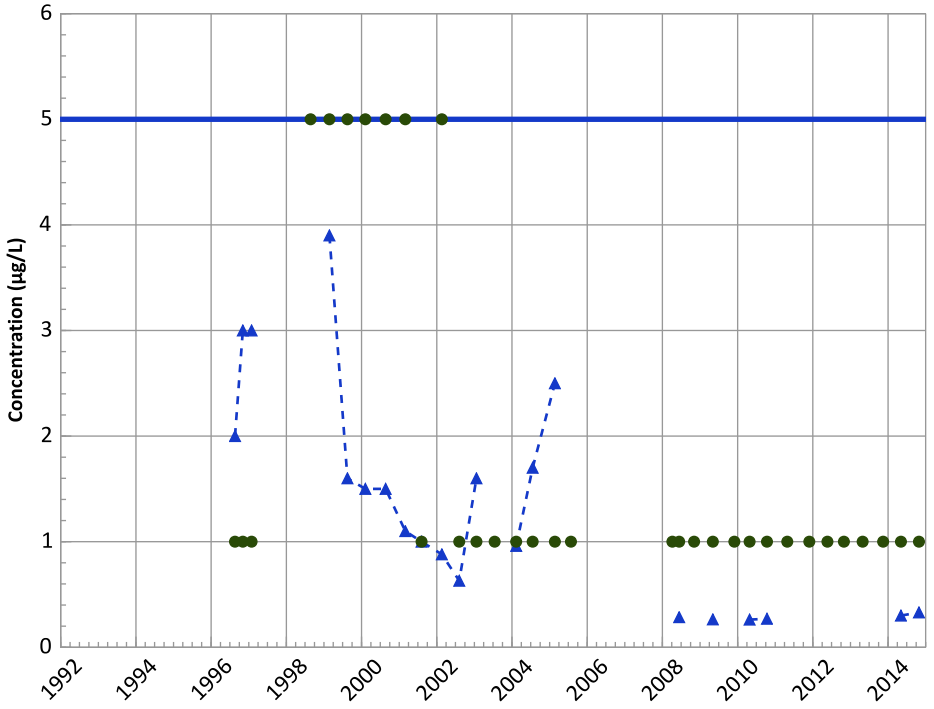
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

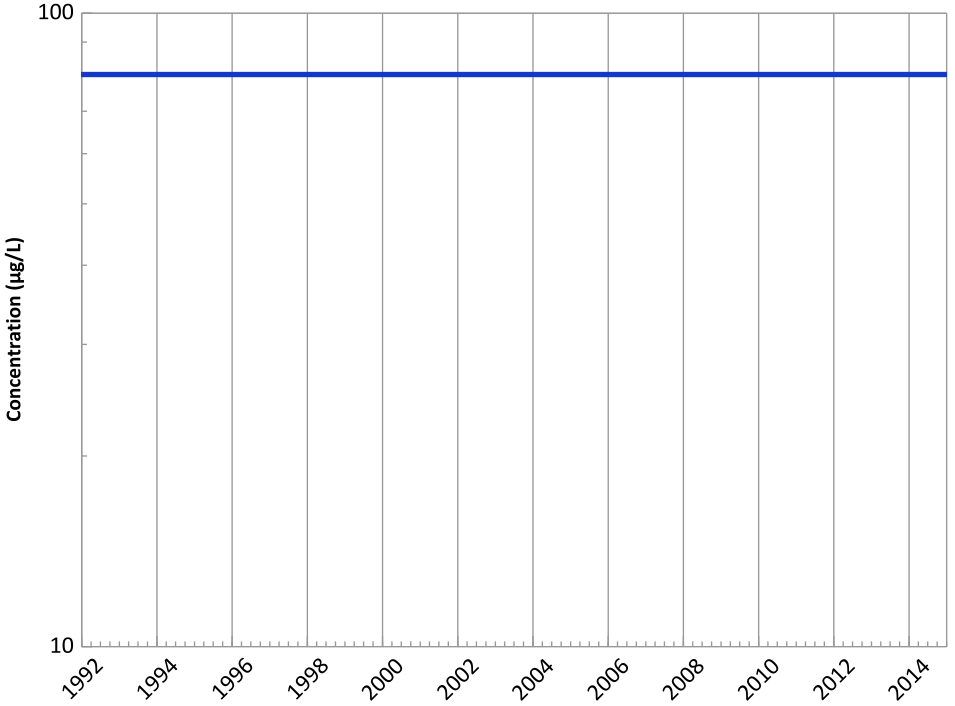


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Chloroform Trend



Concentration Trend

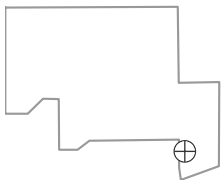
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

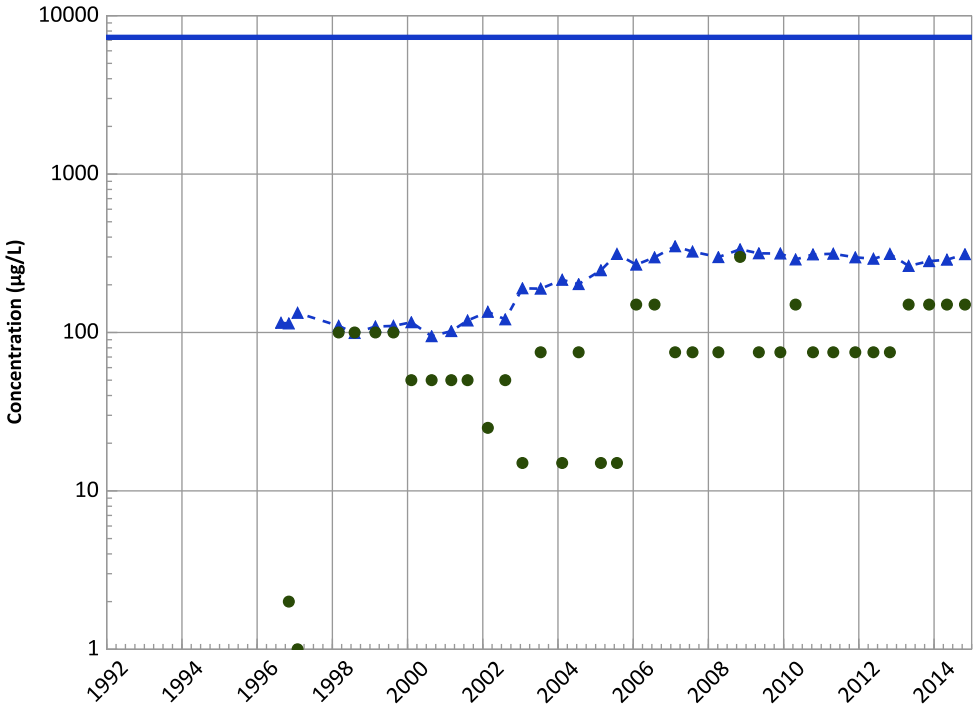
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

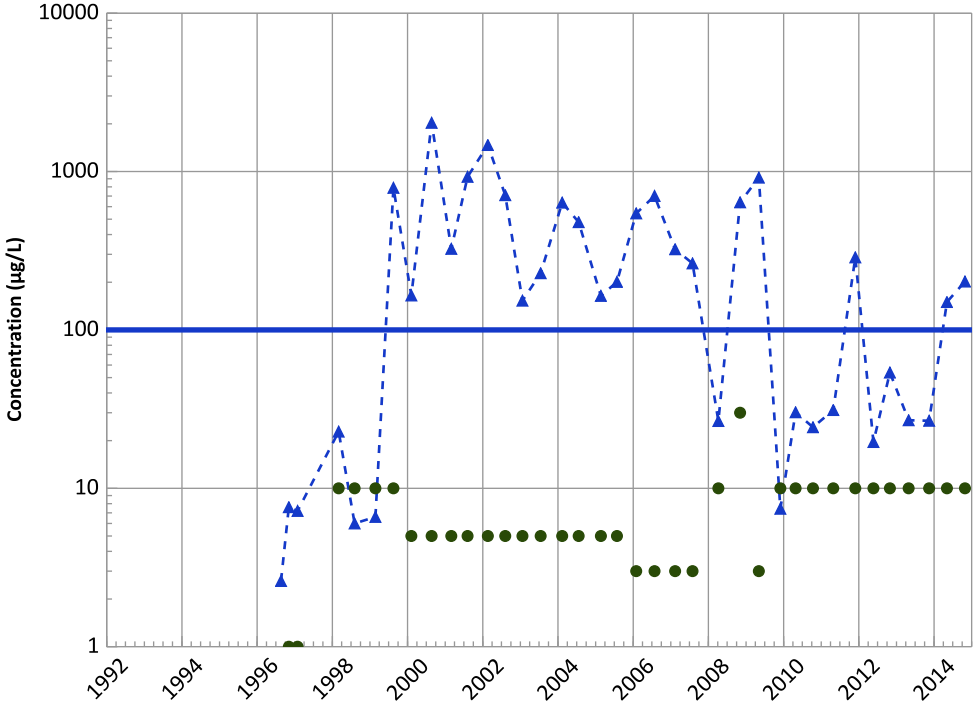


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Chromium, Total Trend



Concentration Trend

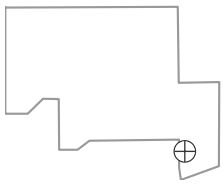
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

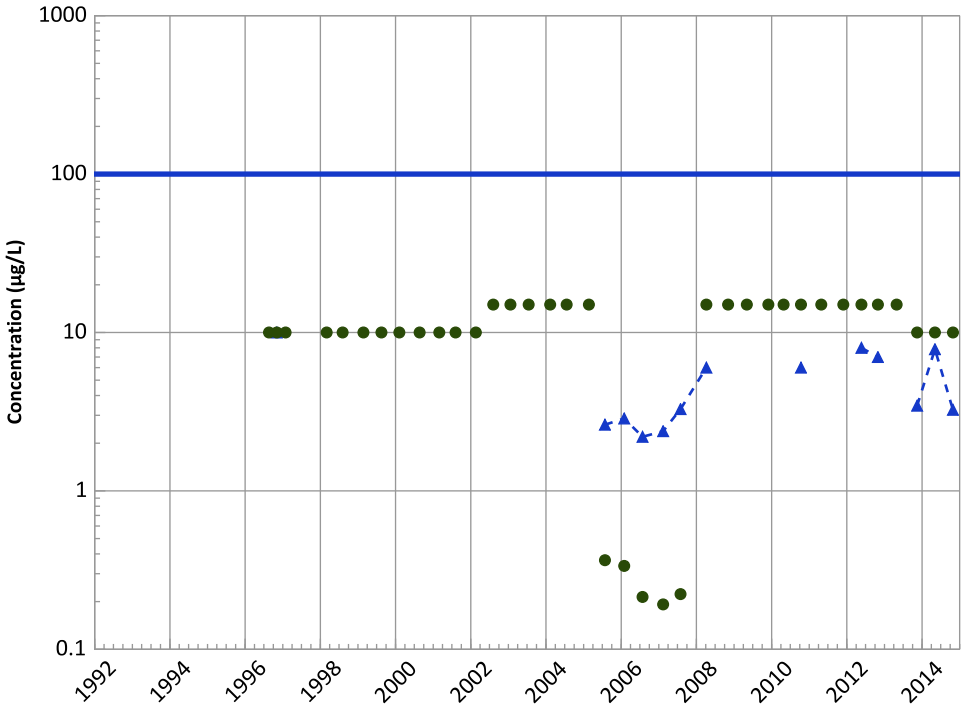
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

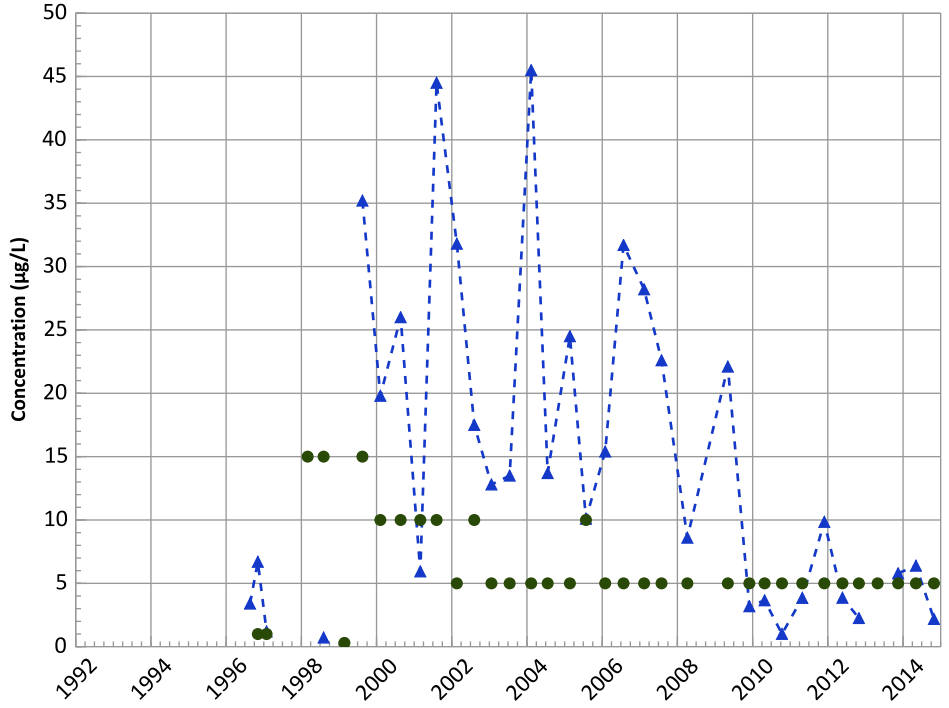


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Manganese Trend



Concentration Trend

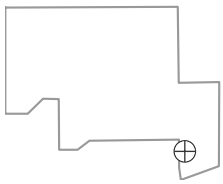
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

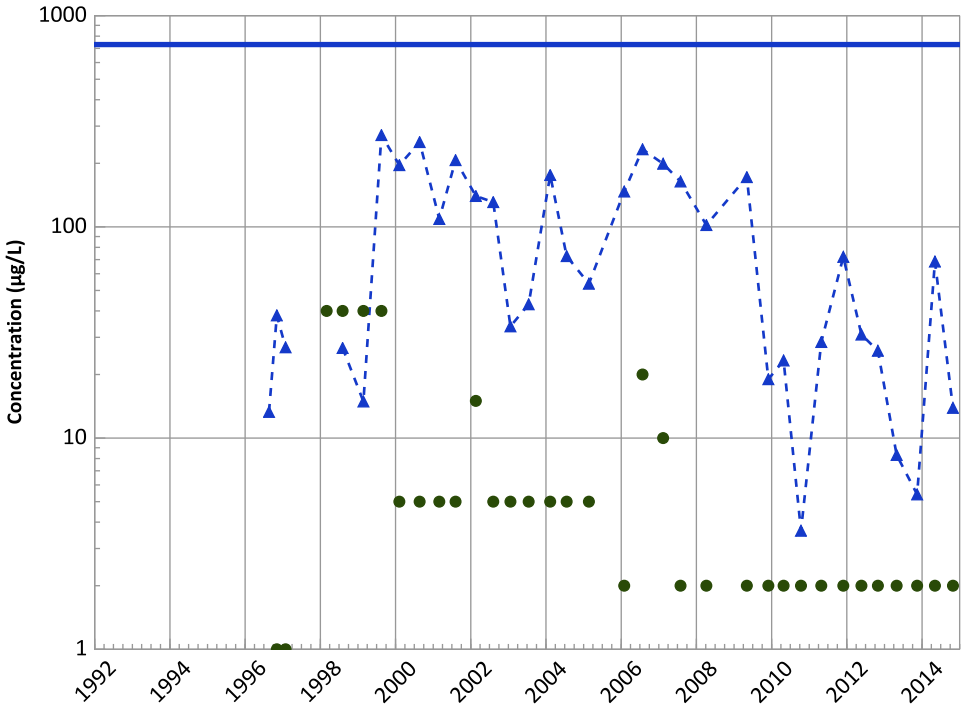
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

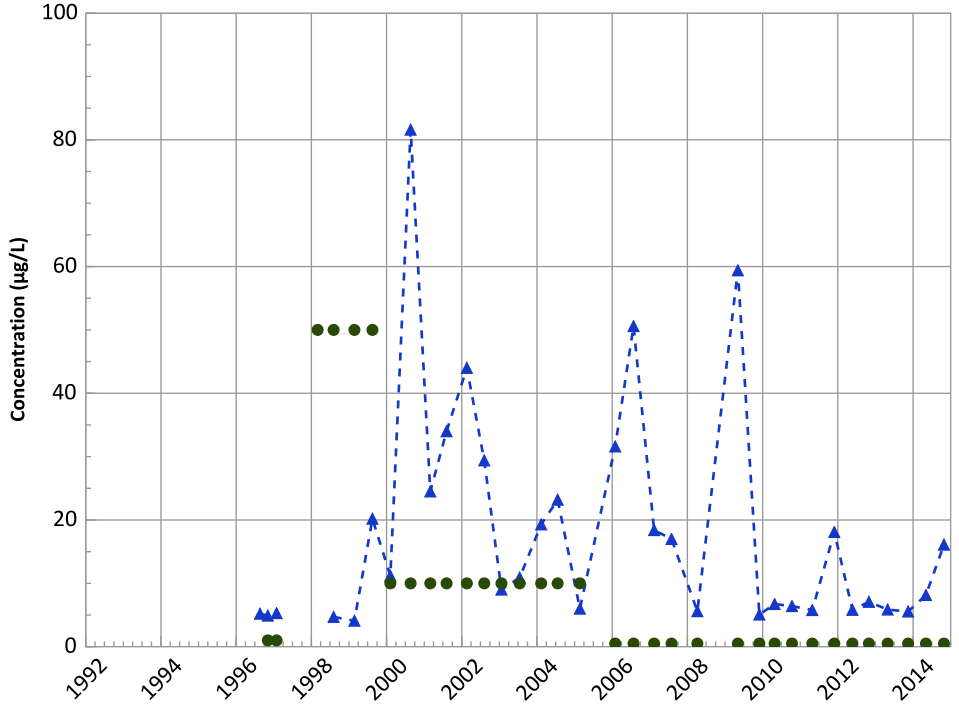


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Molybdenum Trend



Concentration Trend

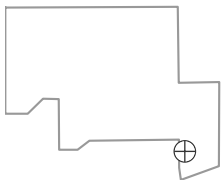
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

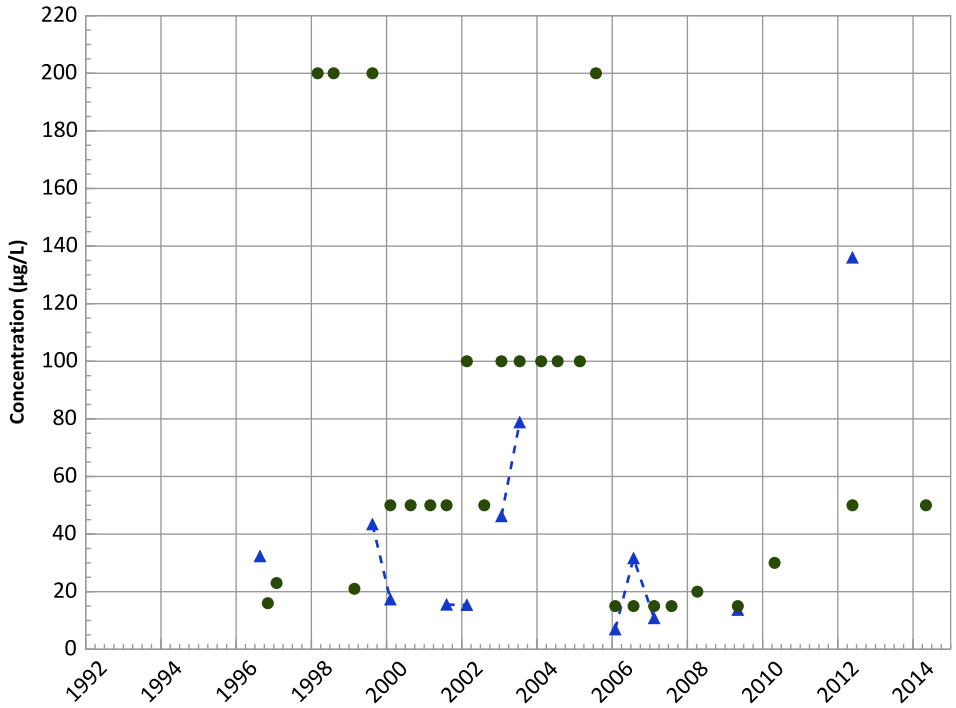
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

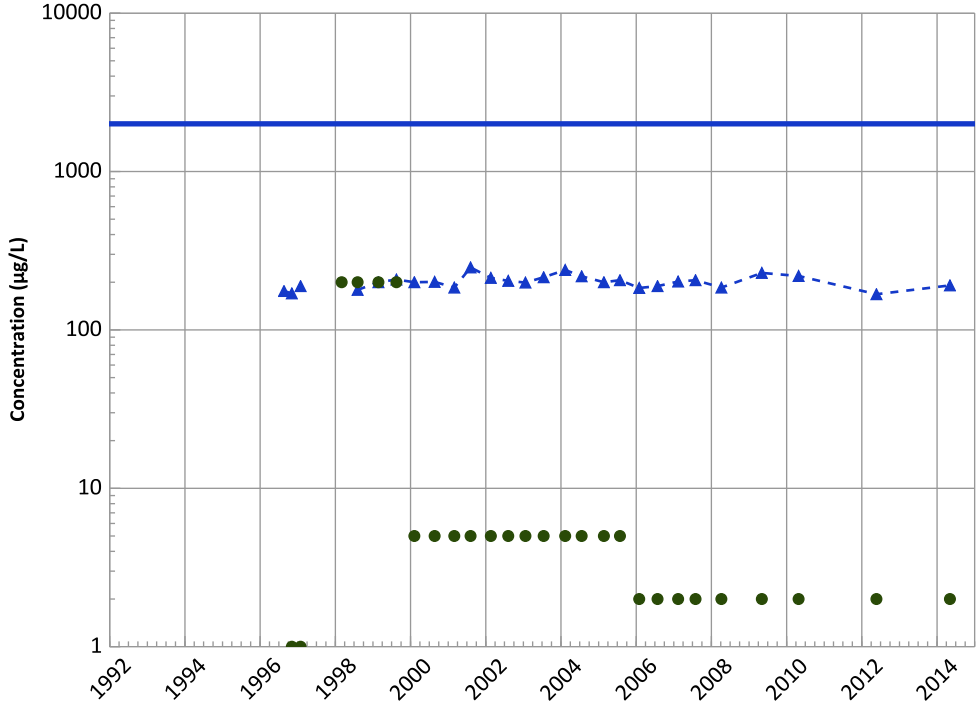


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

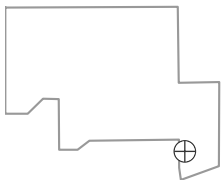
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

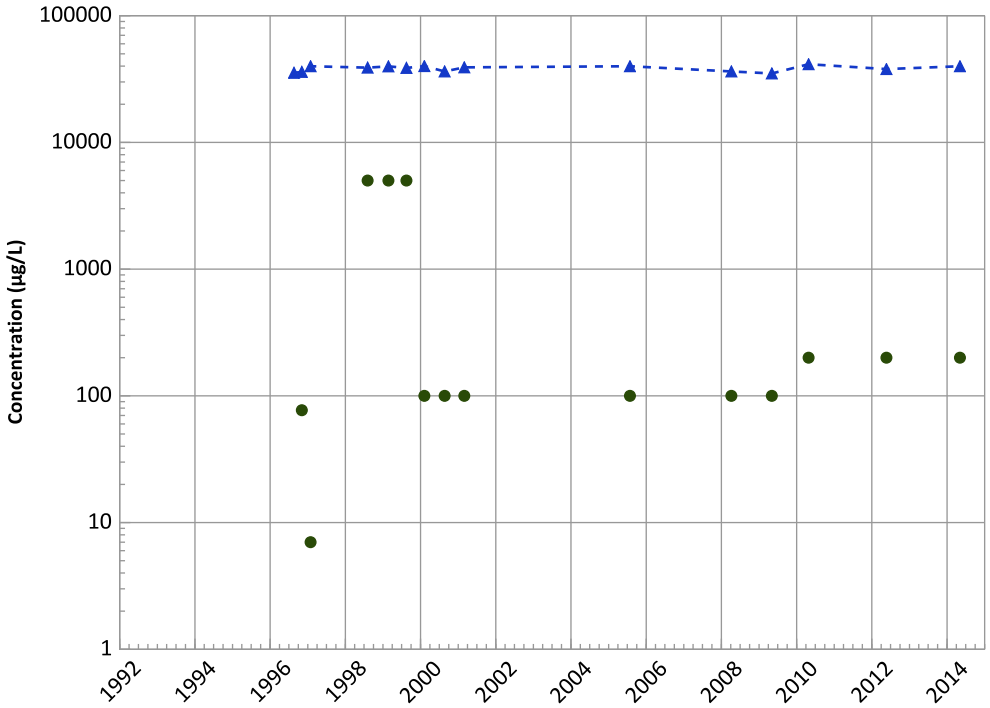
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

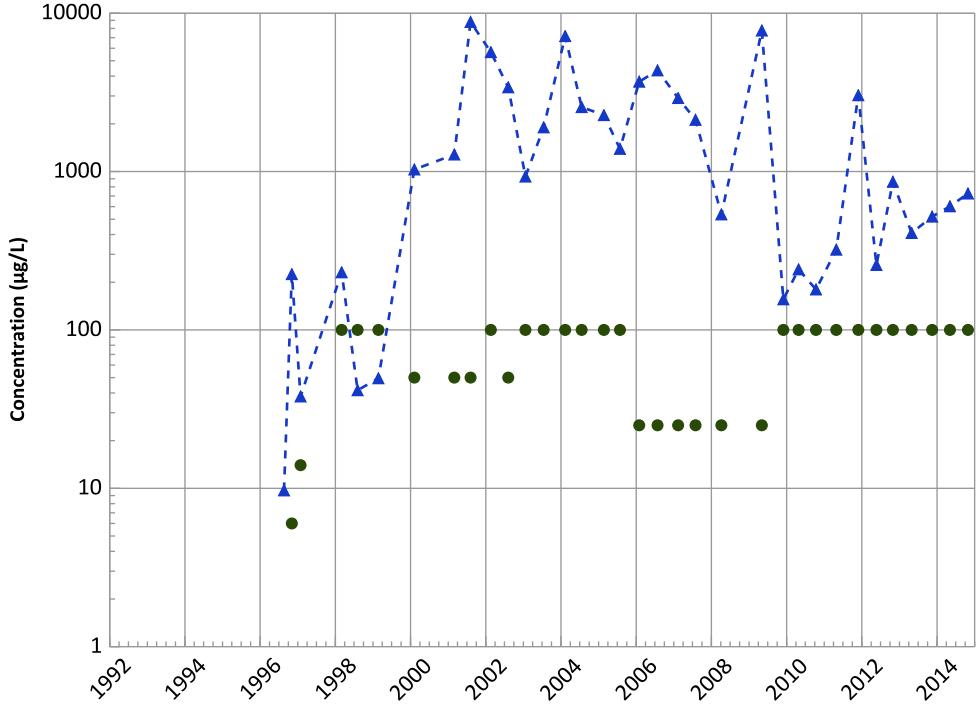


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

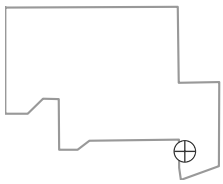
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

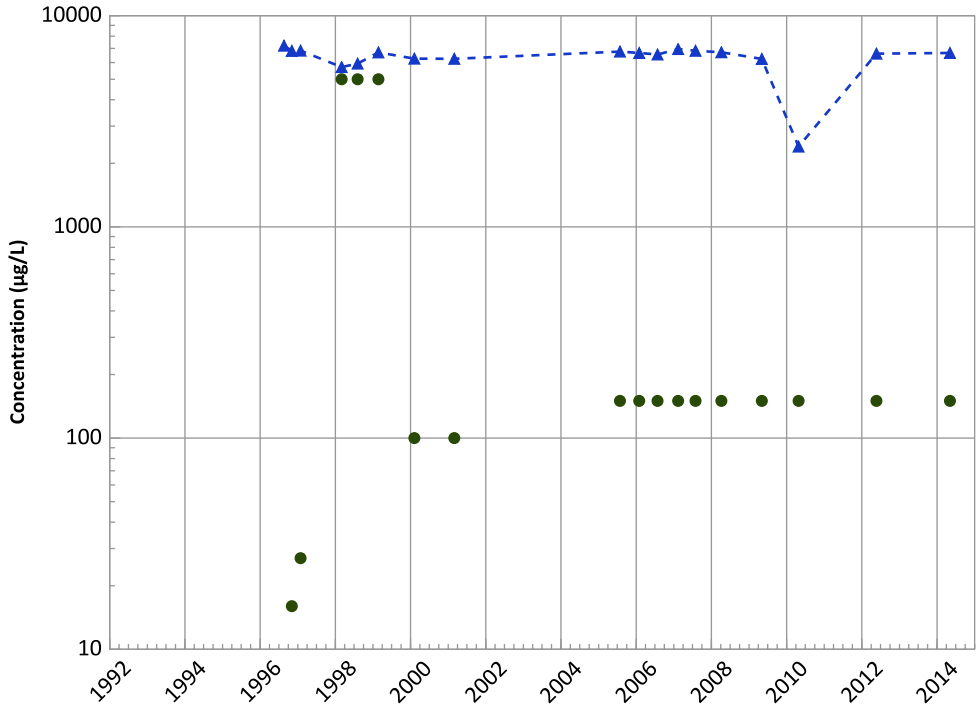
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

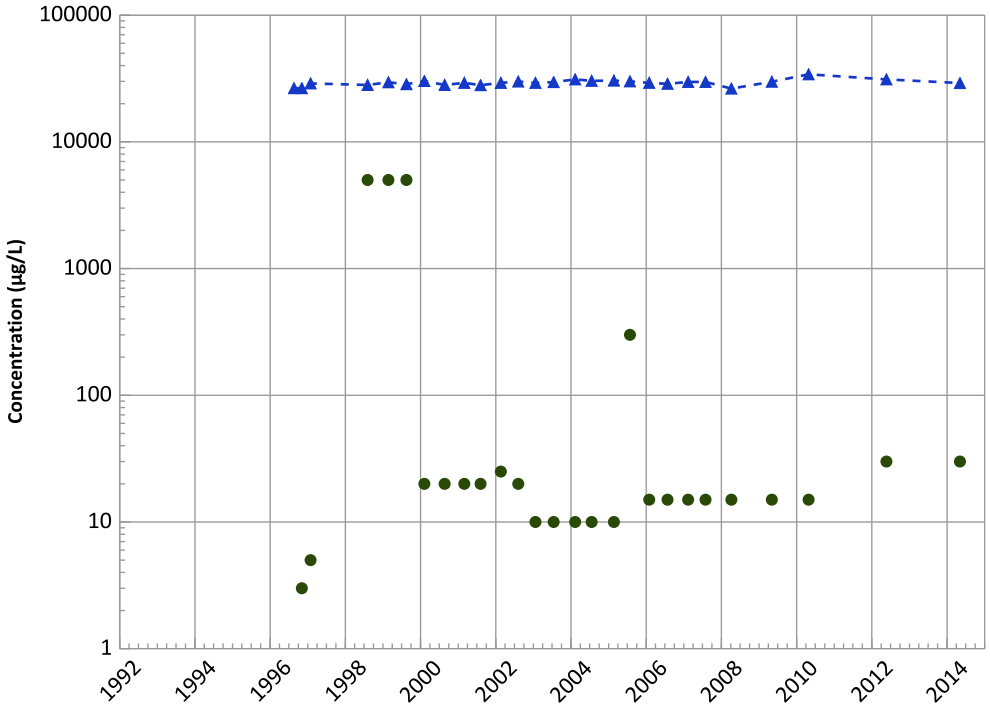


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Magnesium Trend



Concentration Trend

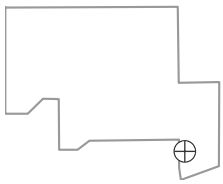
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

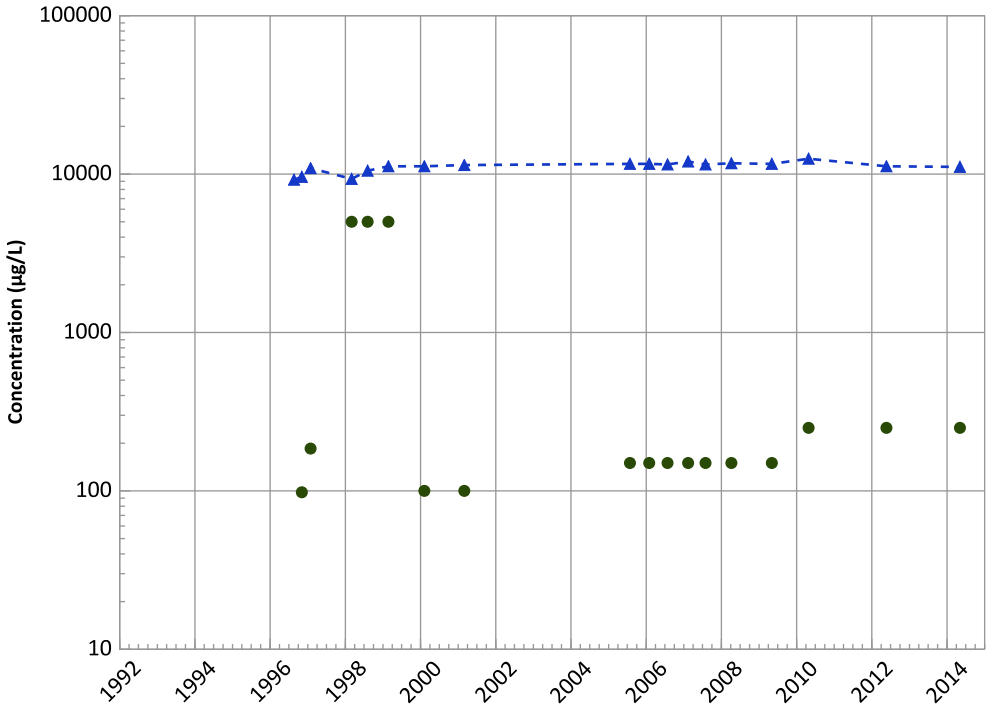
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1031 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

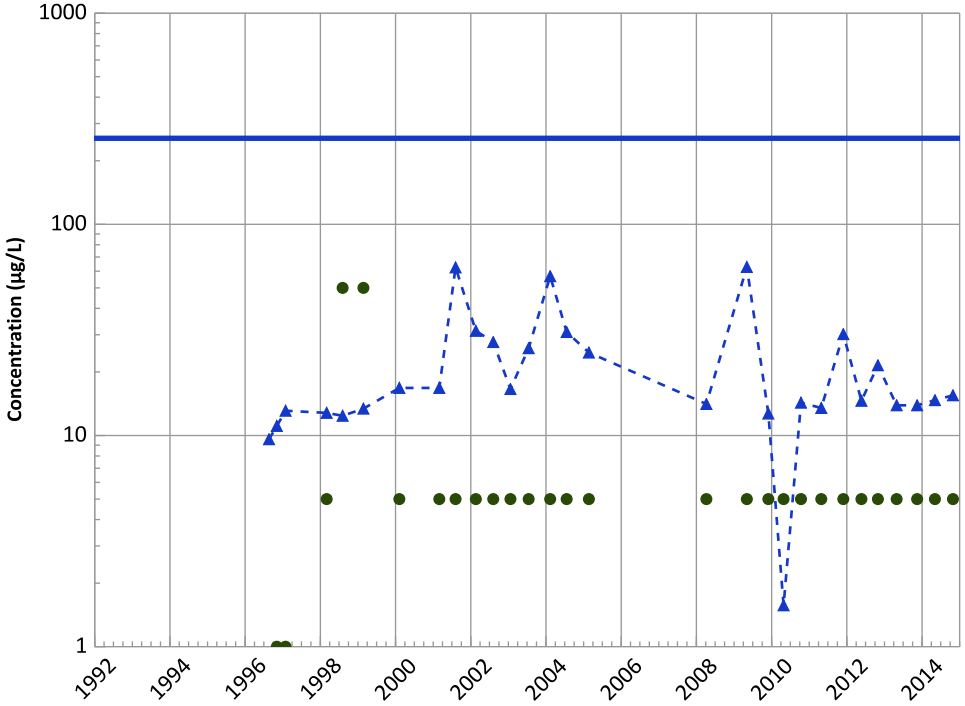


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Vanadium Trend



Concentration Trend

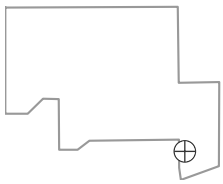
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

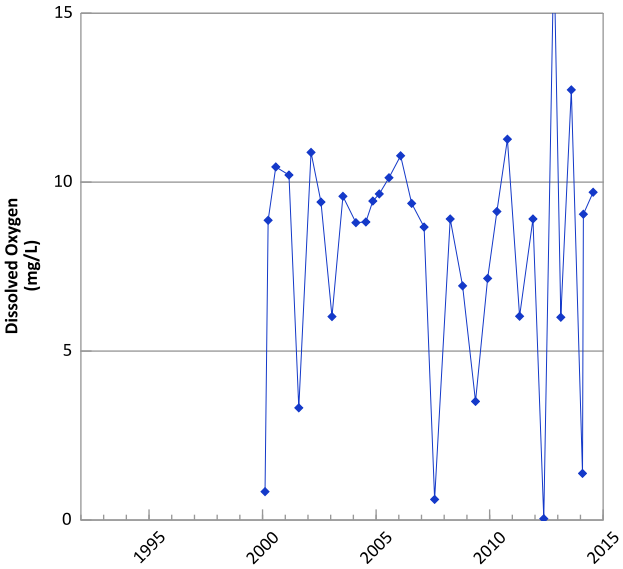
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/20/1996 to 10/28/2014
Analysis Date: 03/19/2015

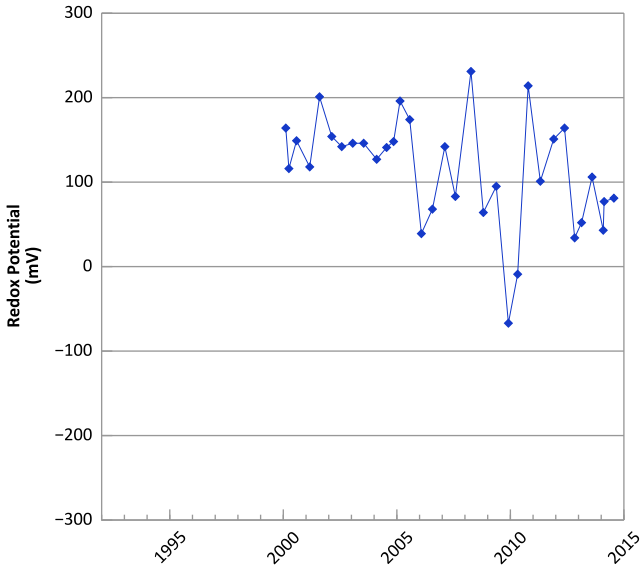
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

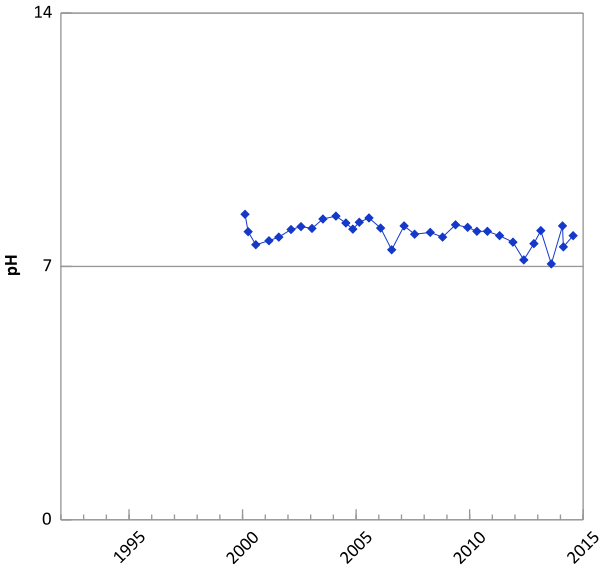
Well Location

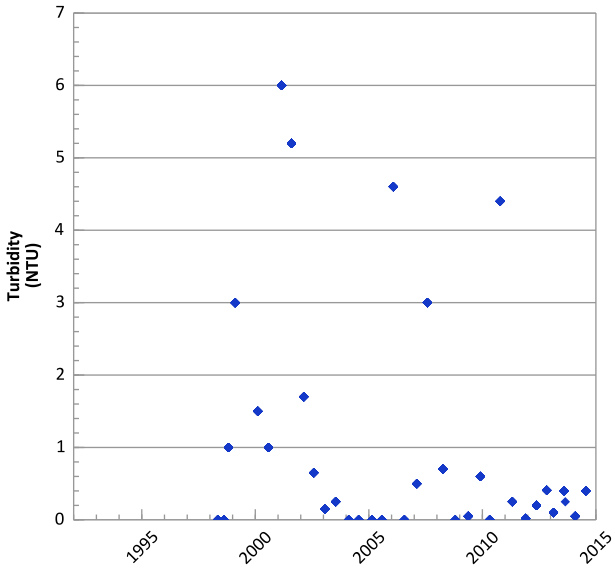


PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



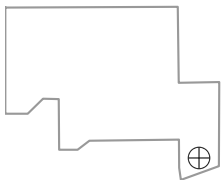






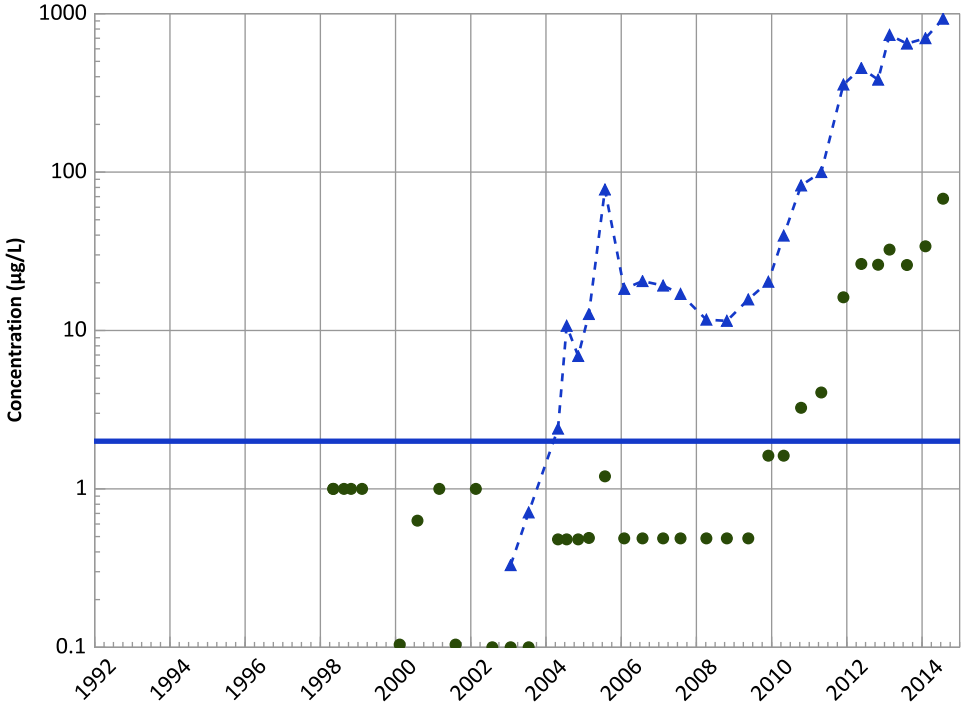
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

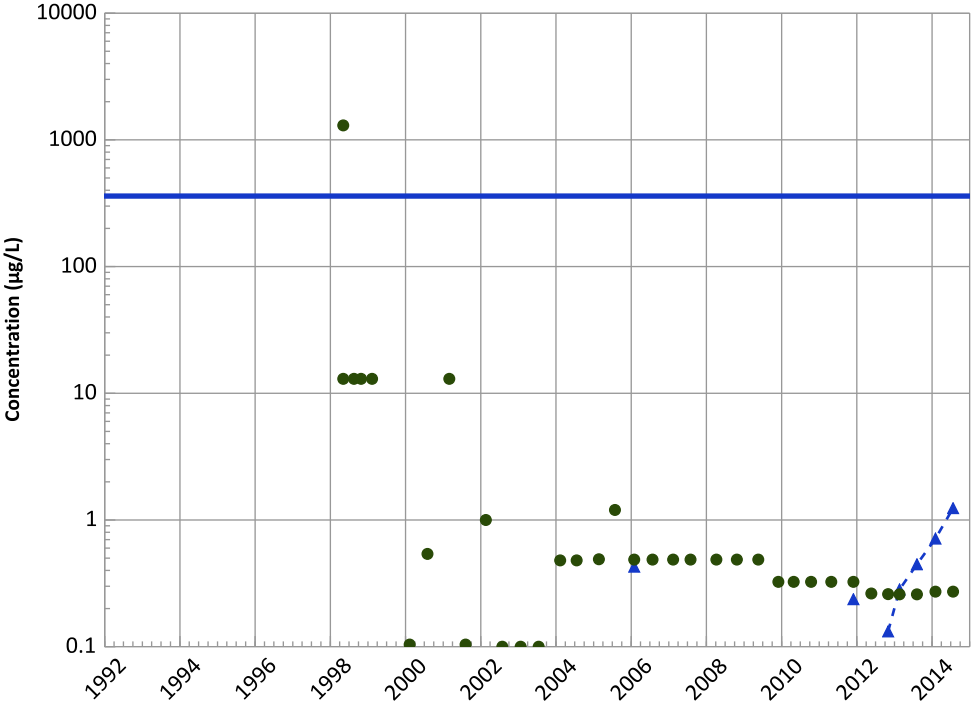


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

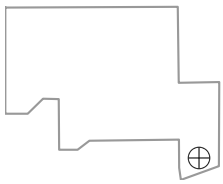
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

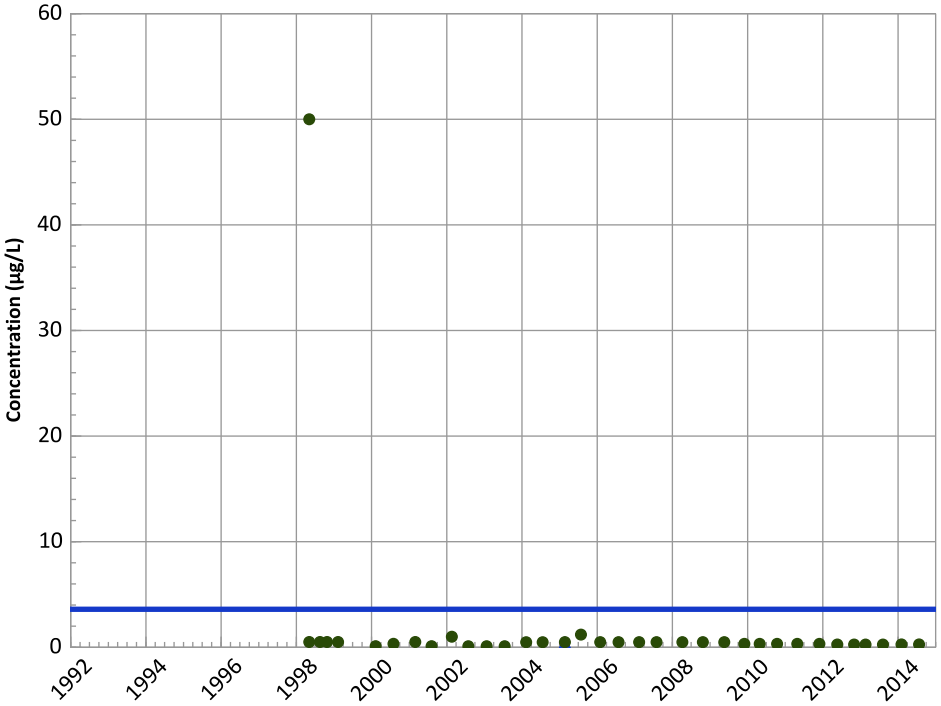
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

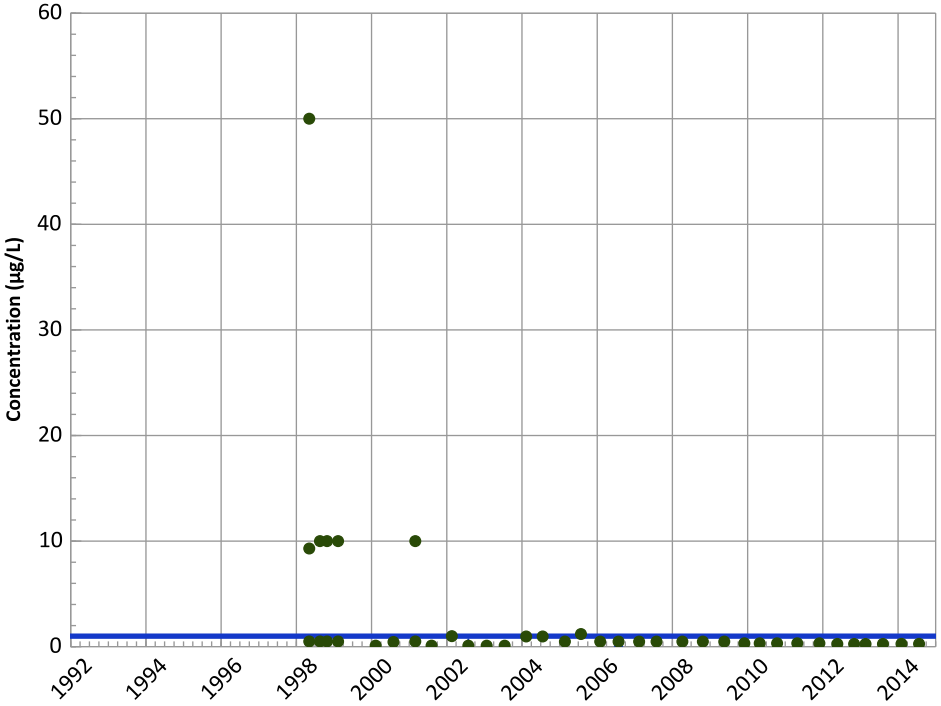


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

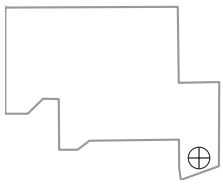
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

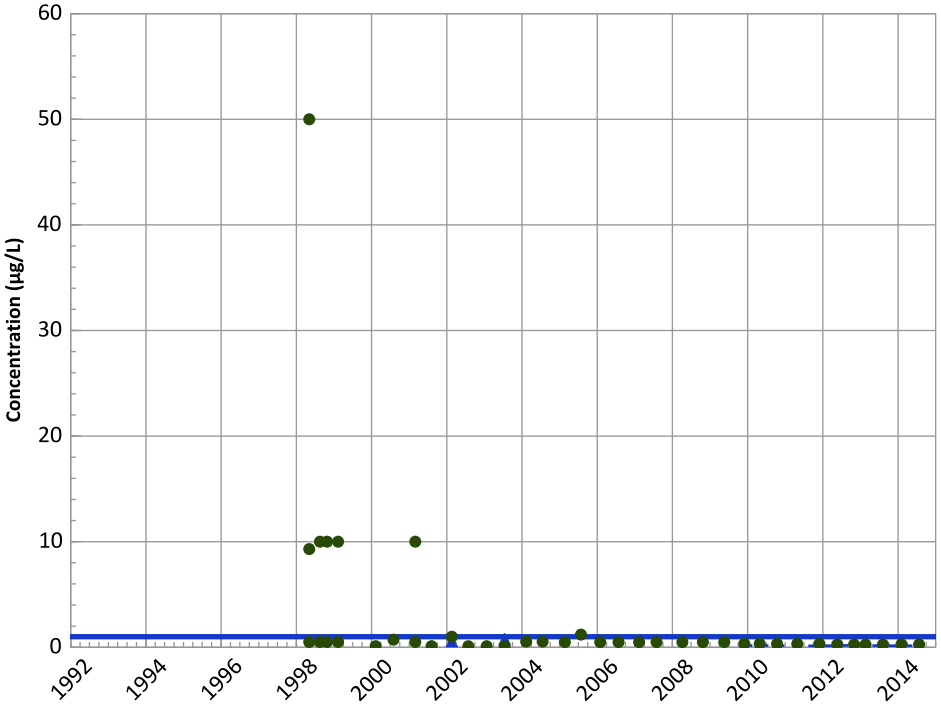
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

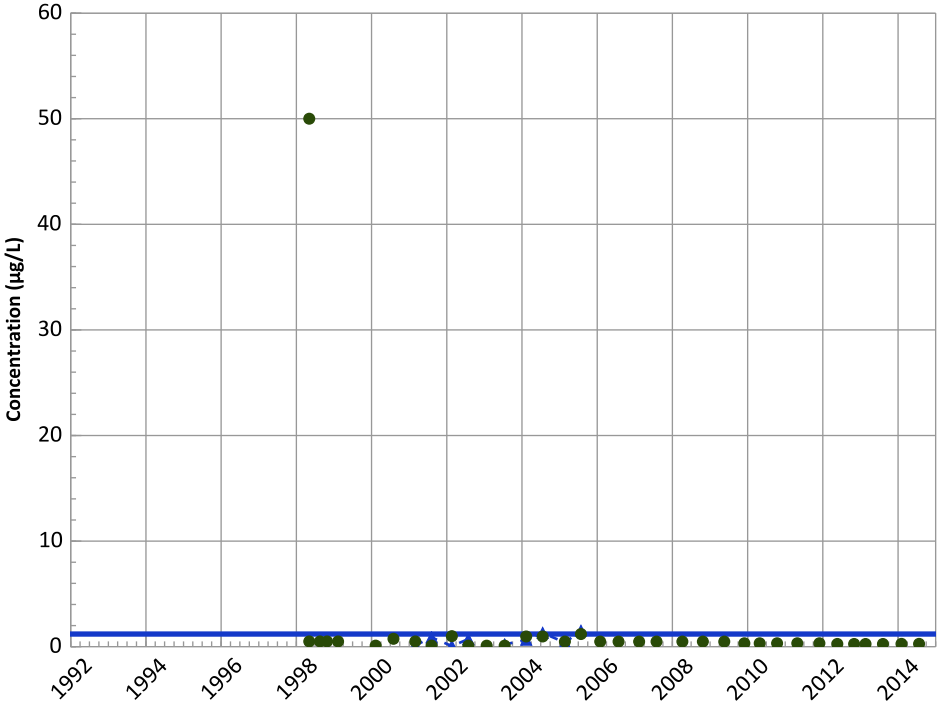


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

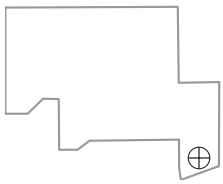
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

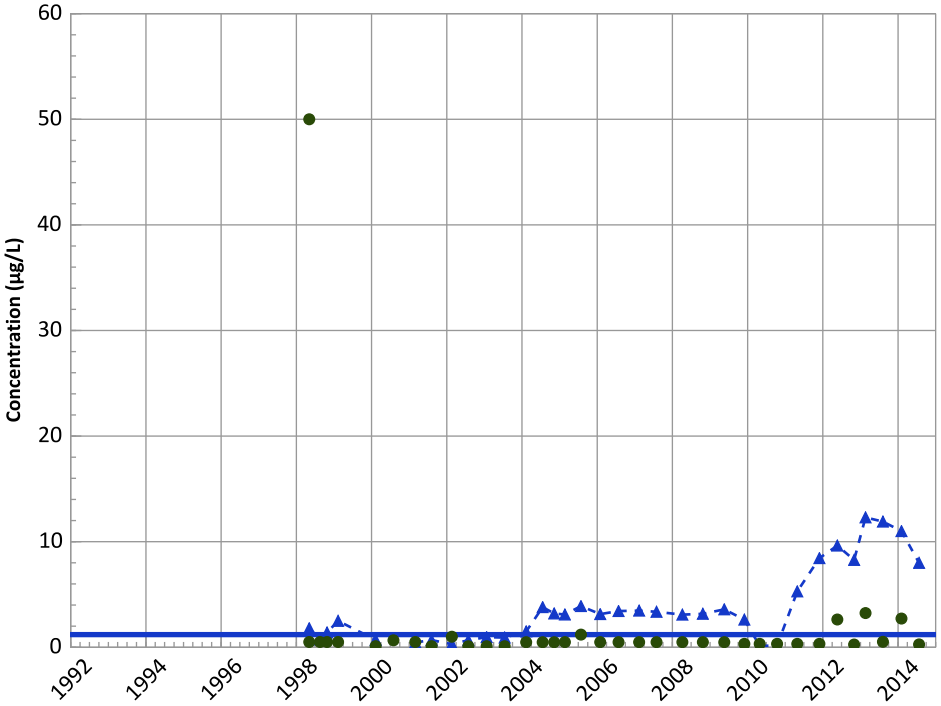
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

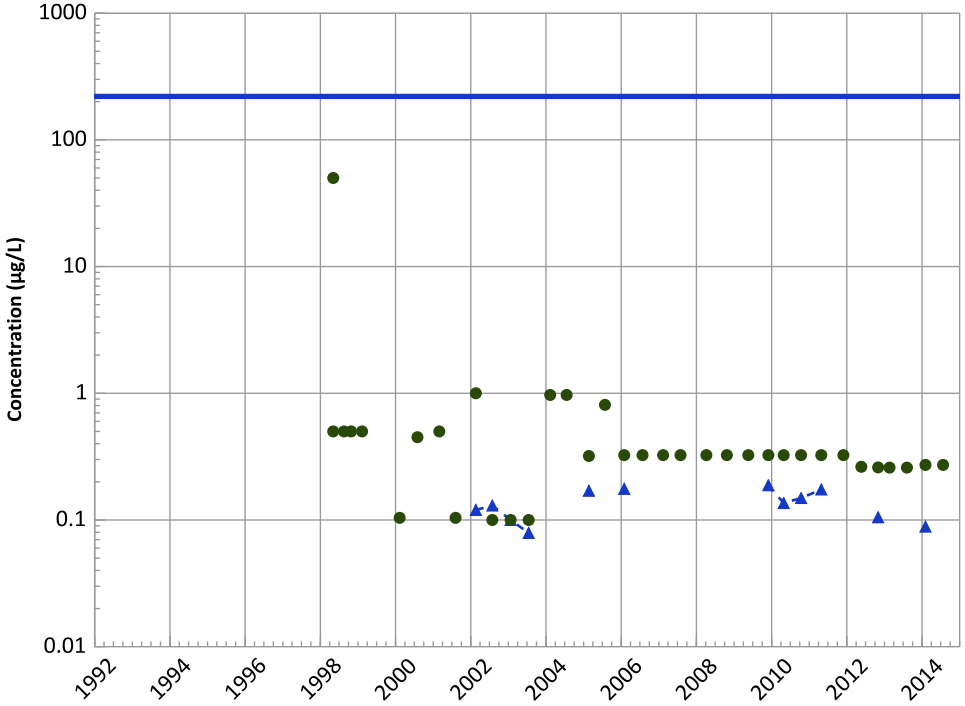


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

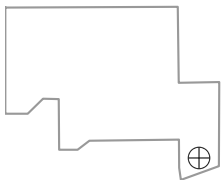
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

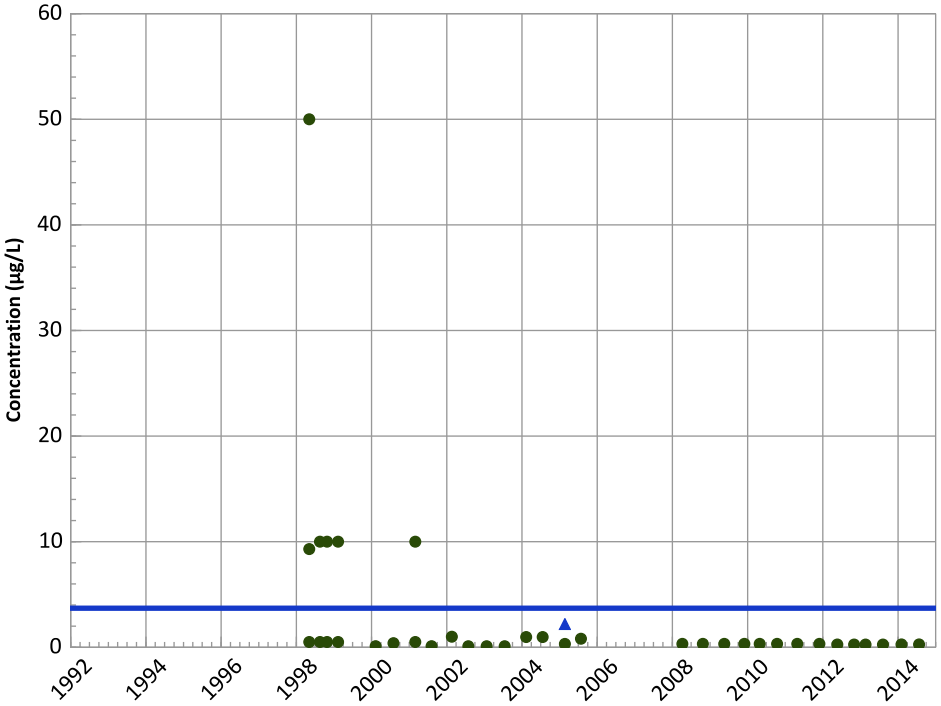
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

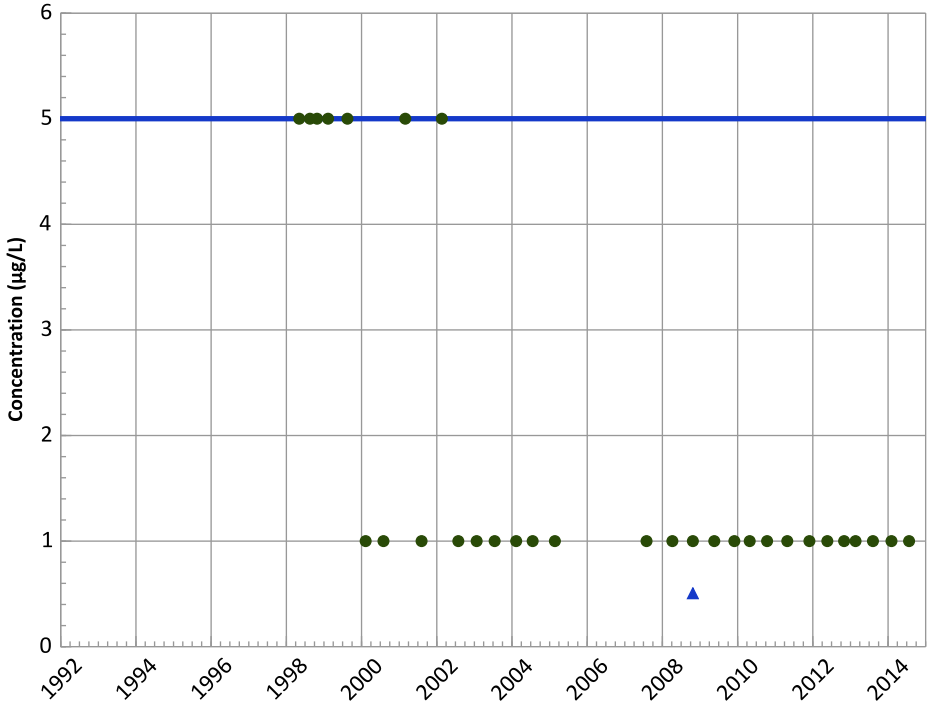


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

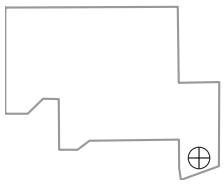
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

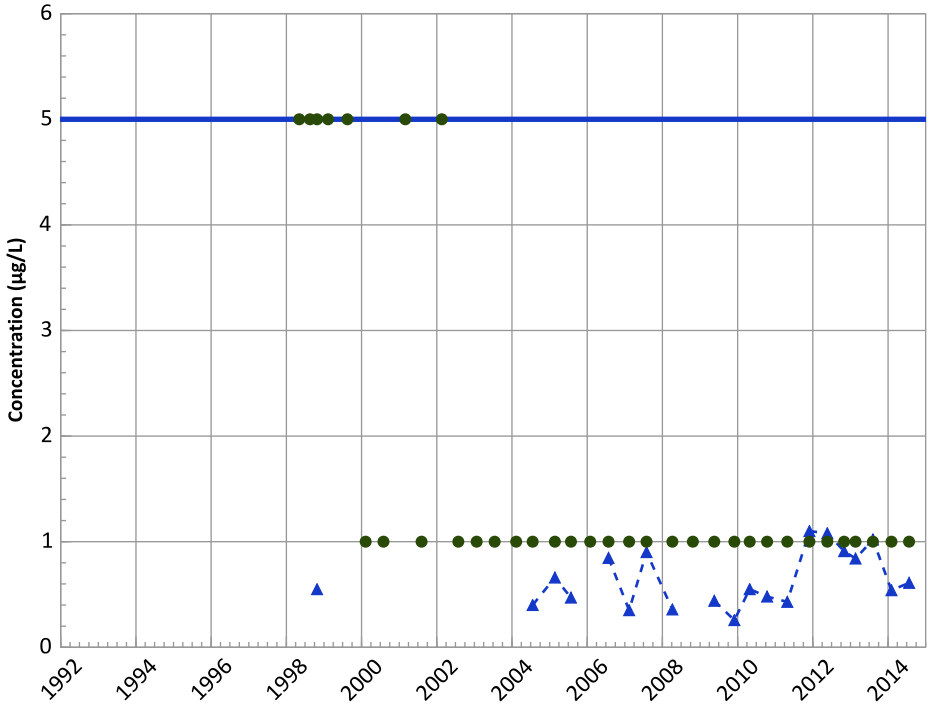
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

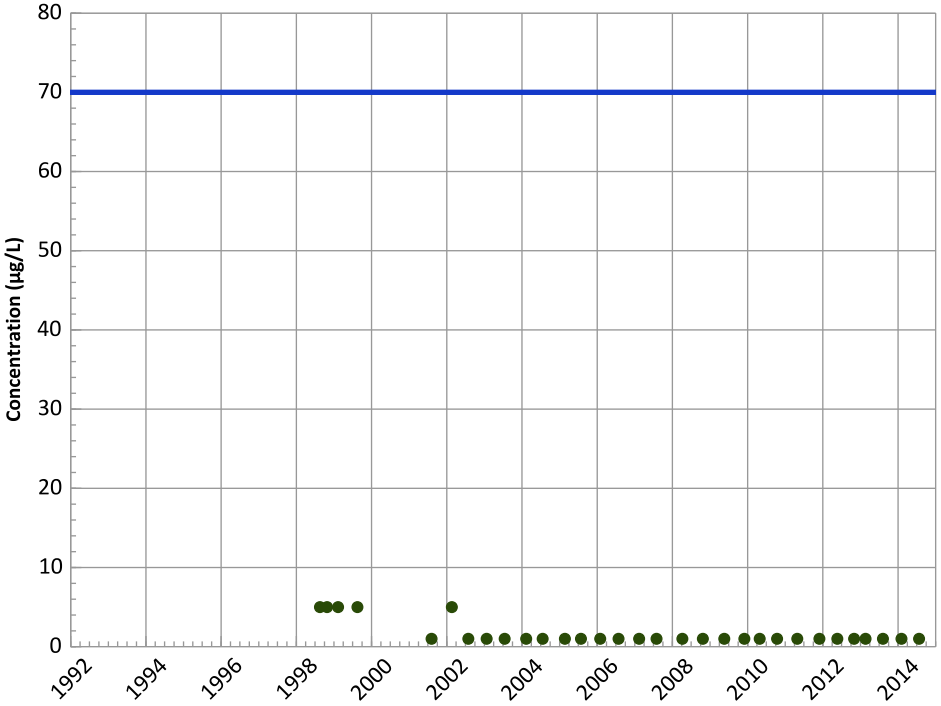


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Probably Increasing

cis-1,2-Dichloroethene Trend



Concentration Trend

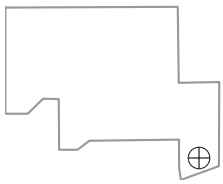
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

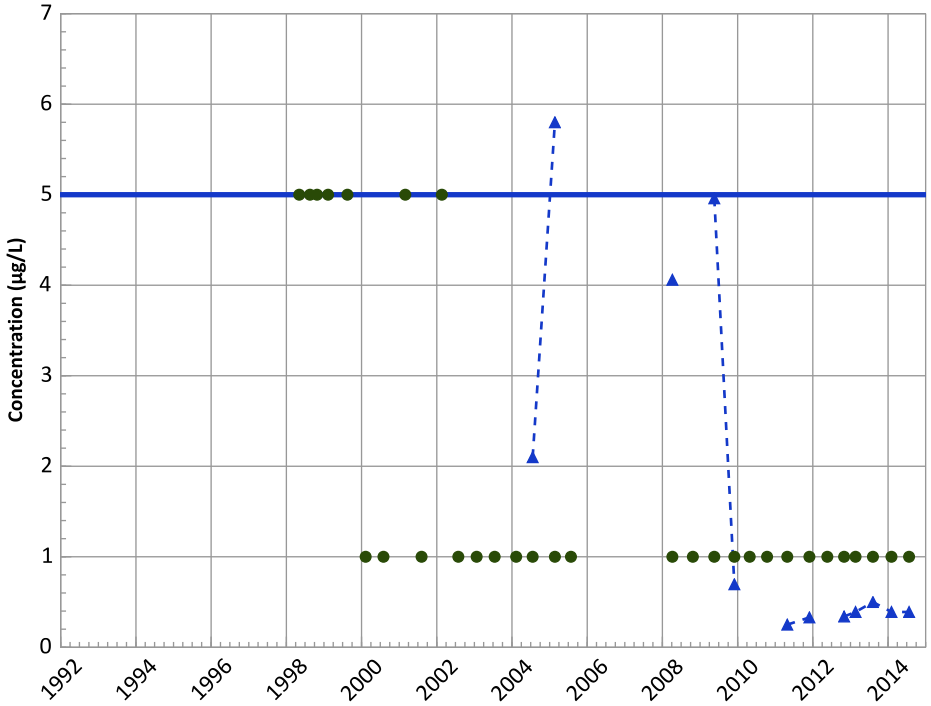
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

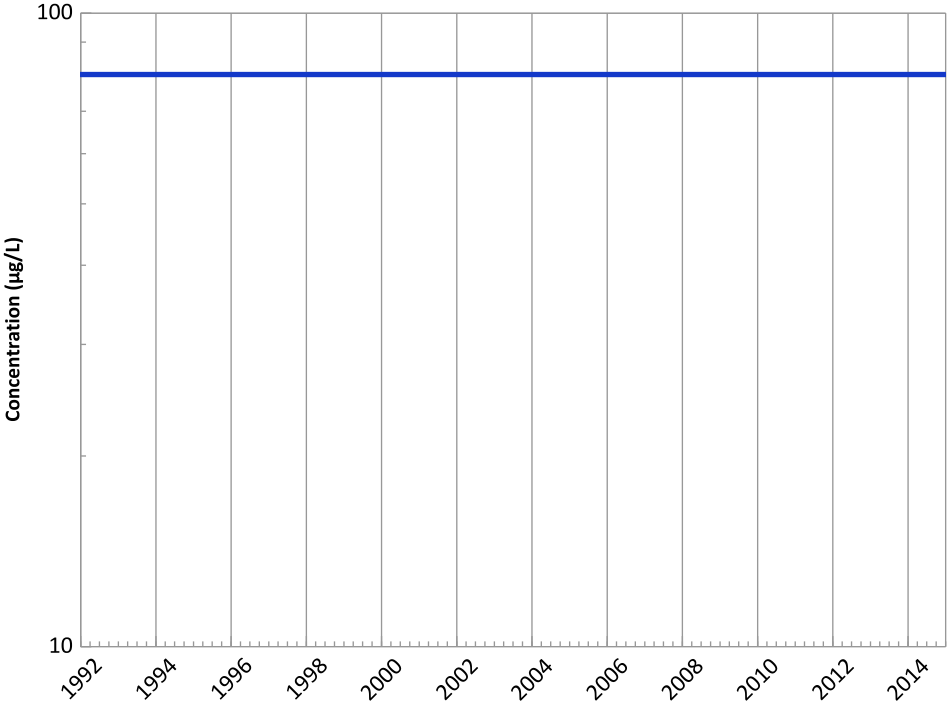


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Chloroform Trend



Concentration Trend

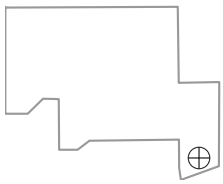
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

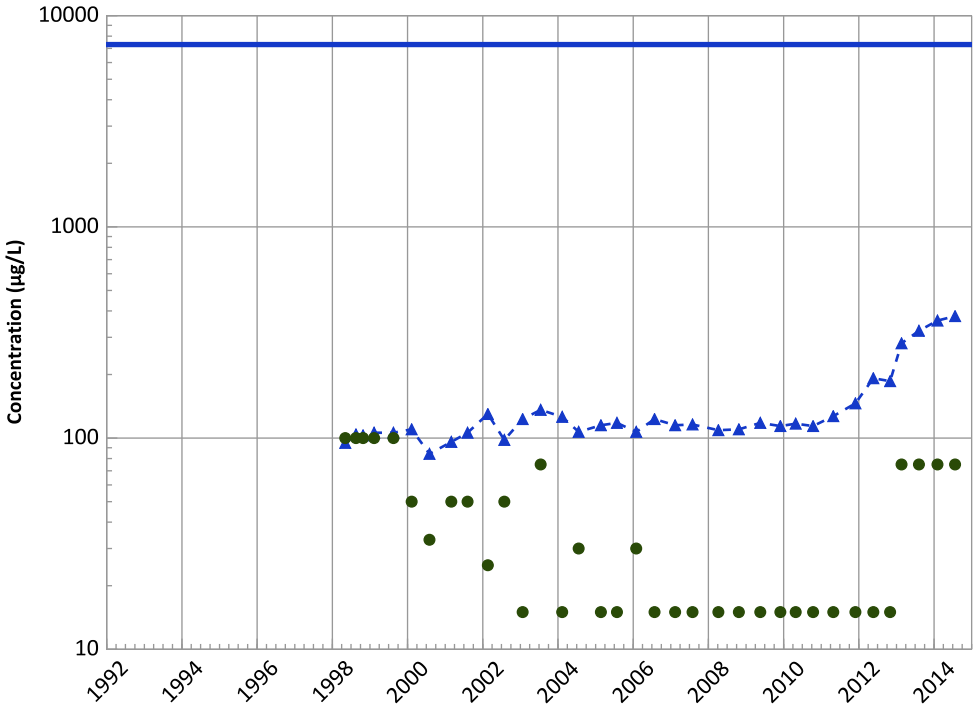
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

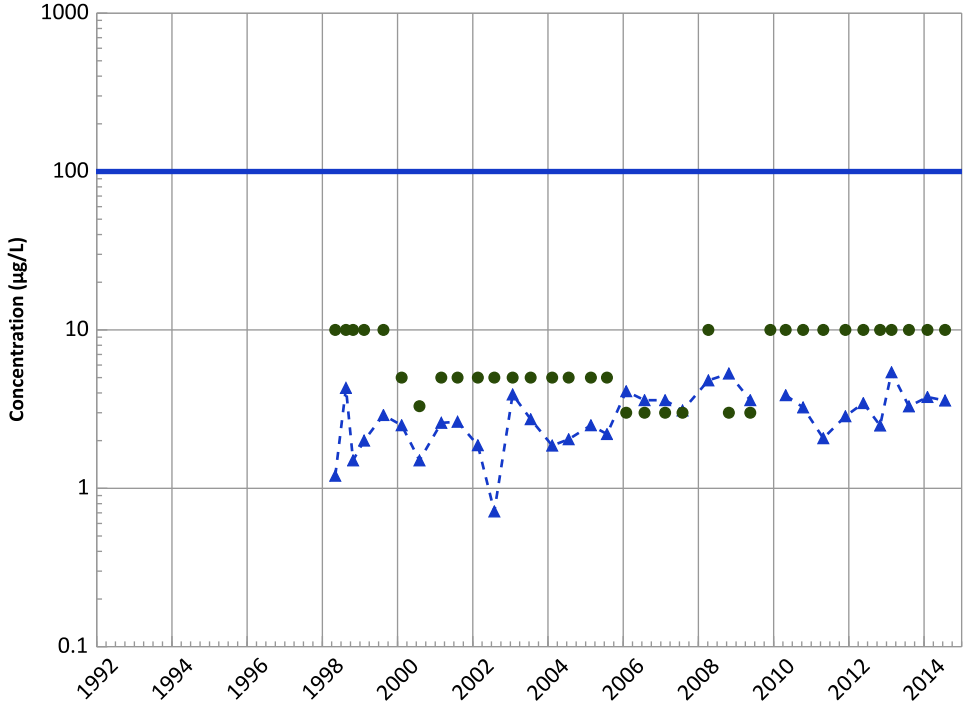


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

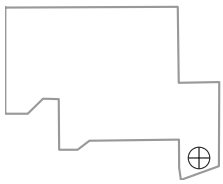
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

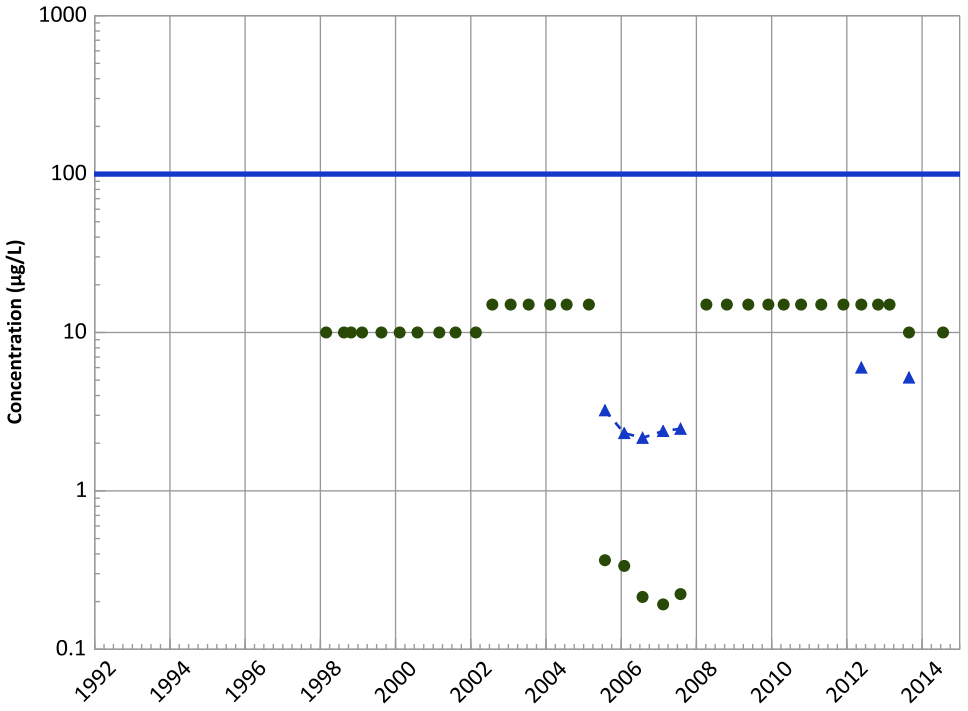
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

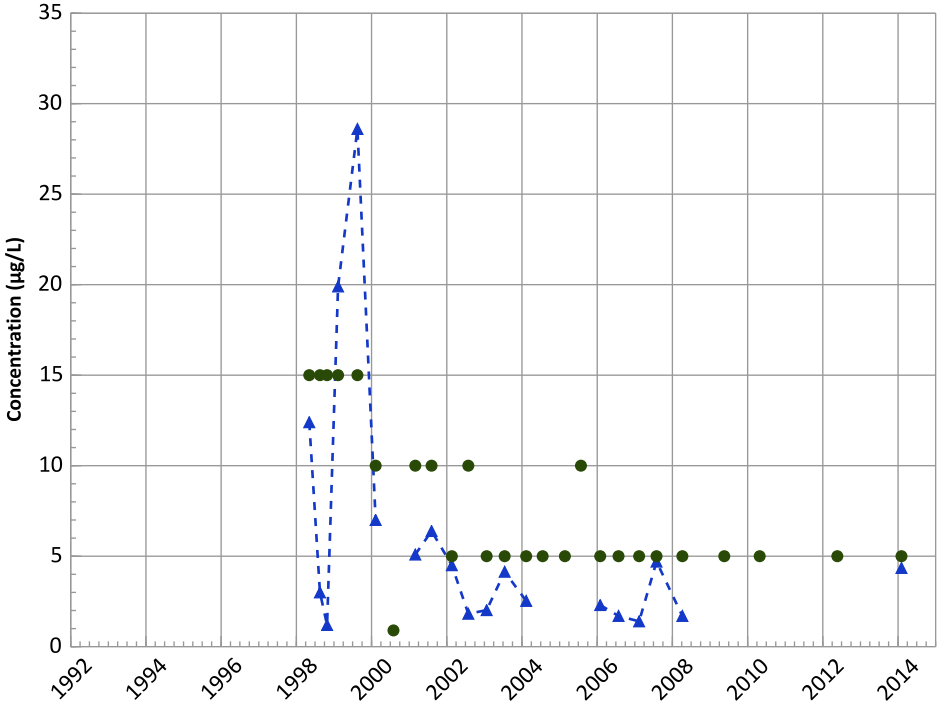


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Manganese Trend



Concentration Trend

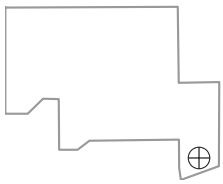
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

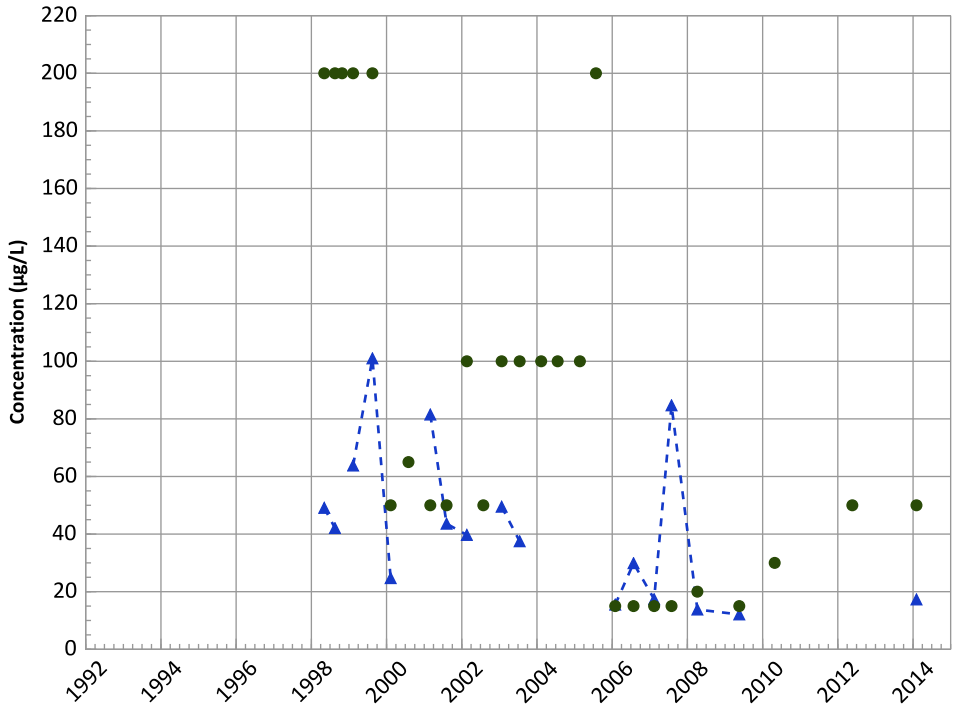
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

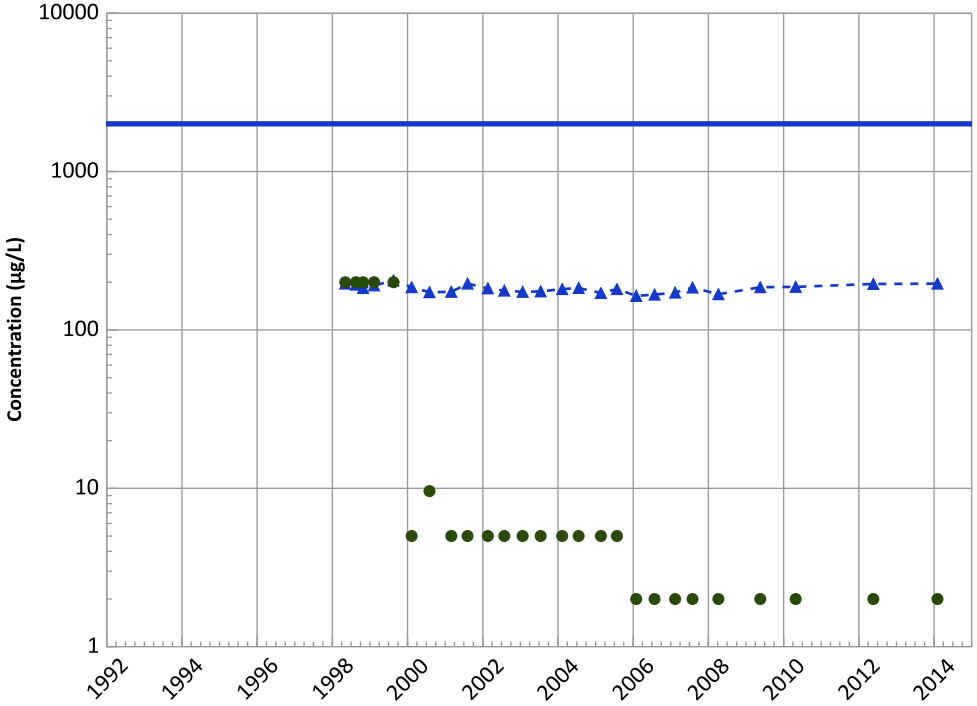


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

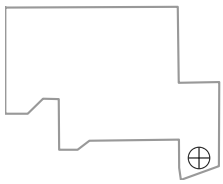
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

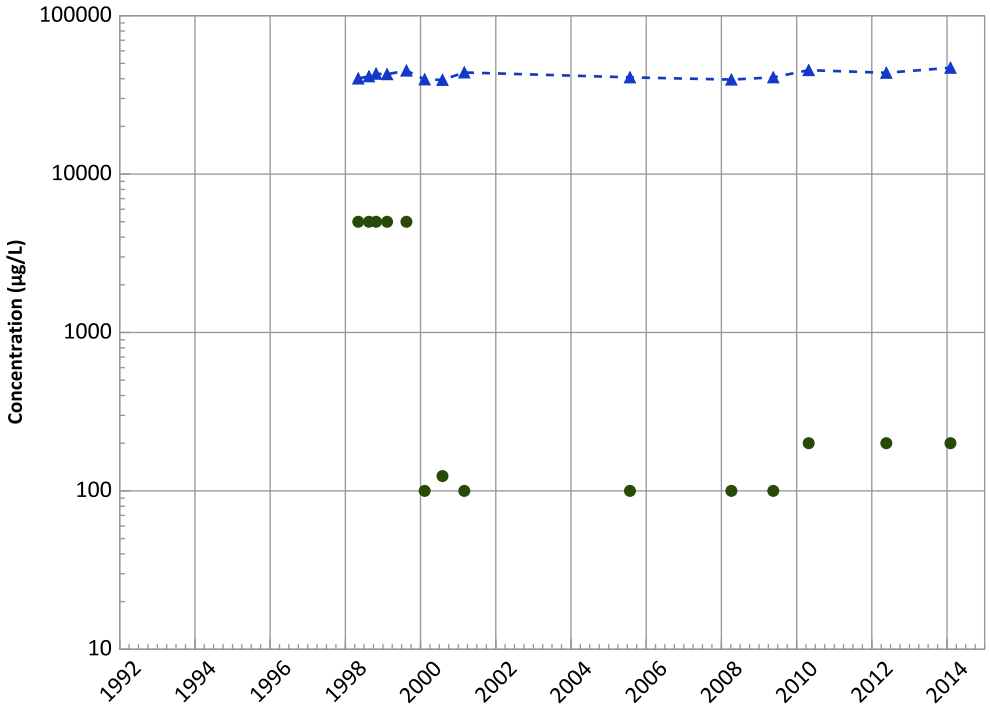
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

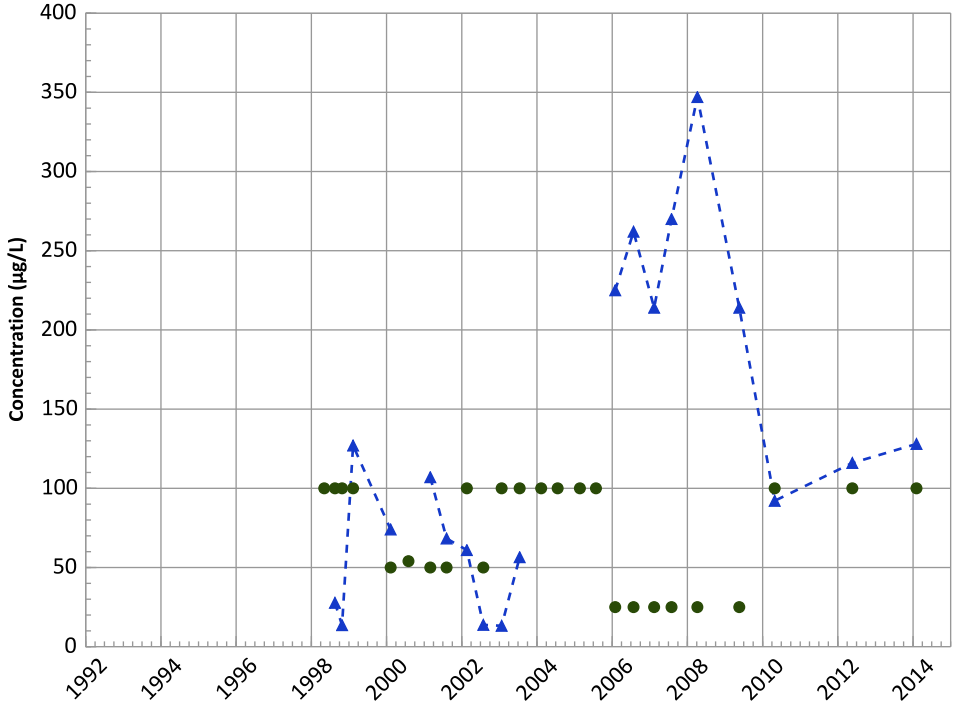


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Iron Trend



Concentration Trend

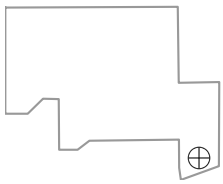
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

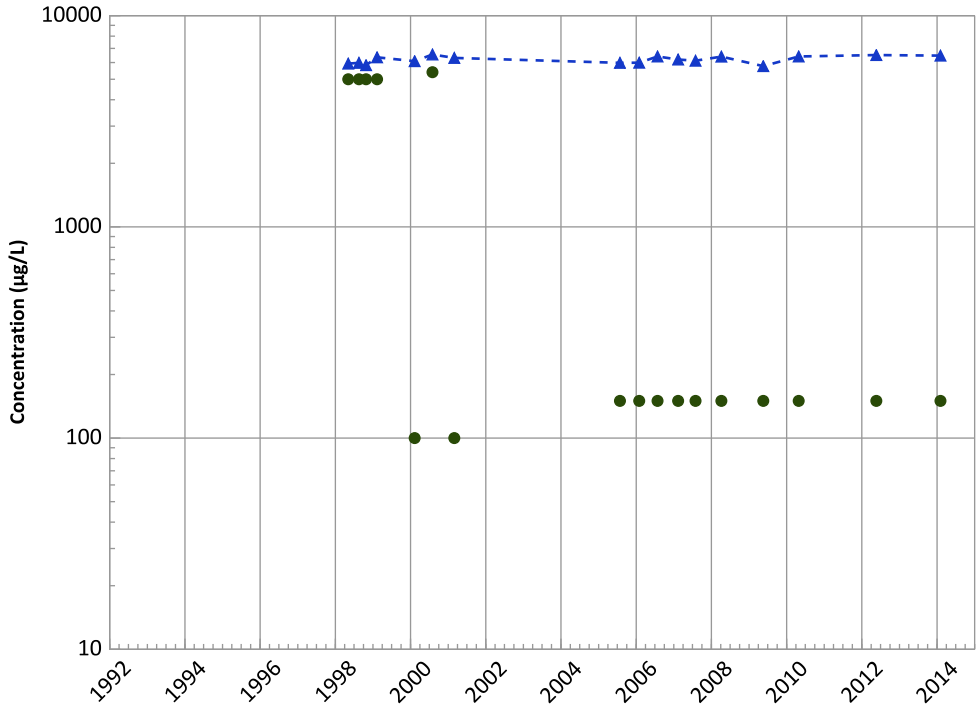
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

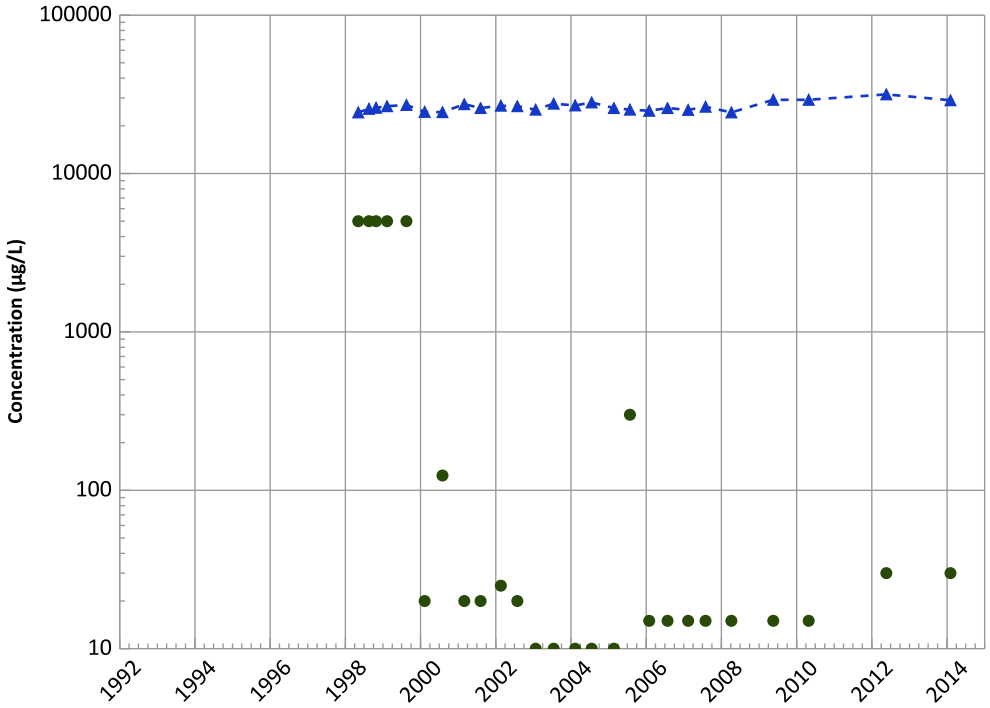


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

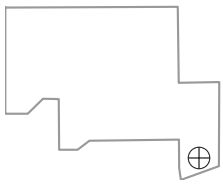
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

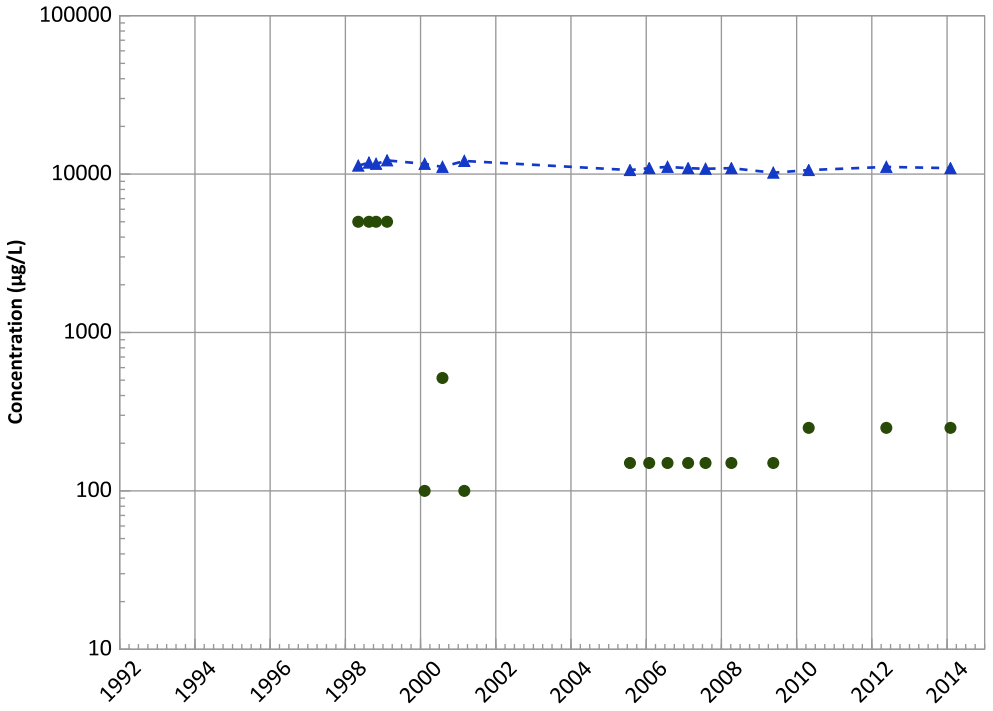
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1034 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

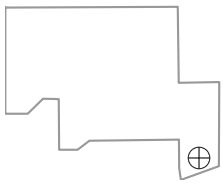
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

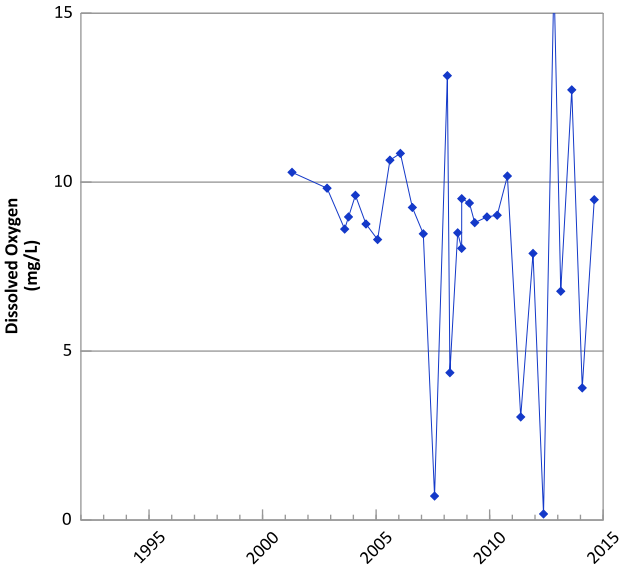
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/26/1998 to 07/24/2014
Analysis Date: 03/19/2015

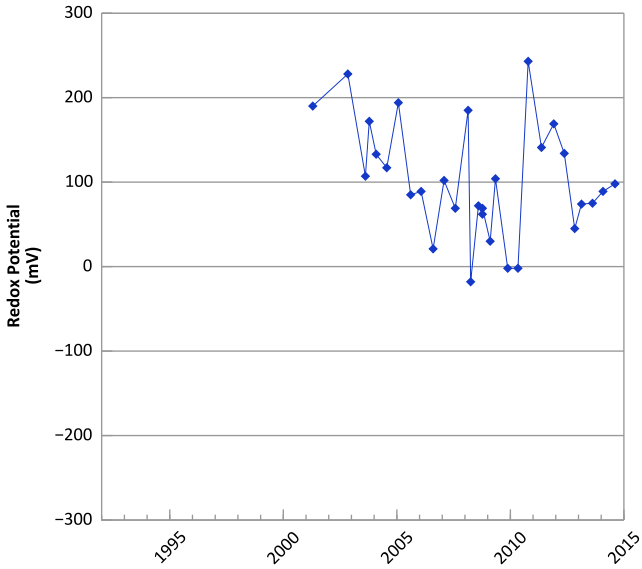
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

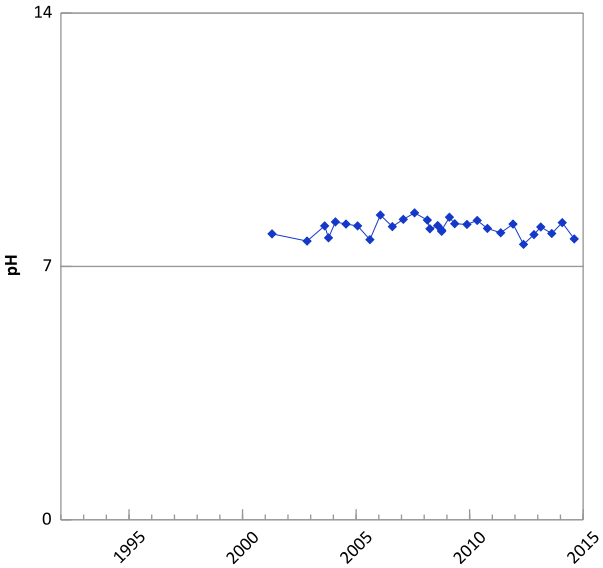
Well Location

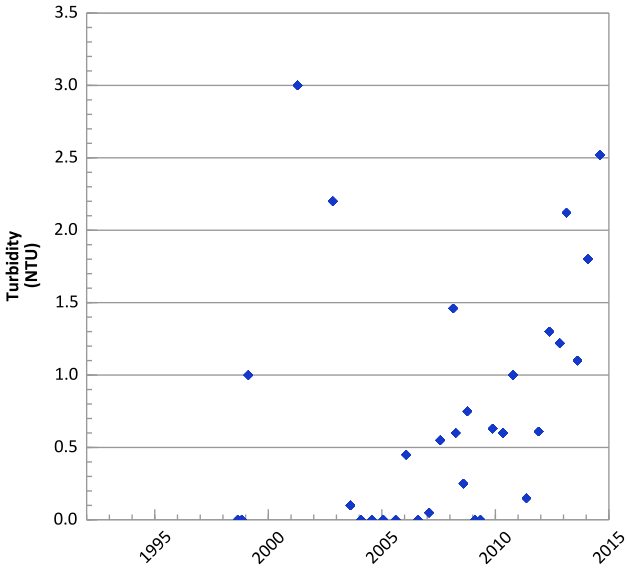


PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



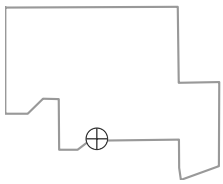






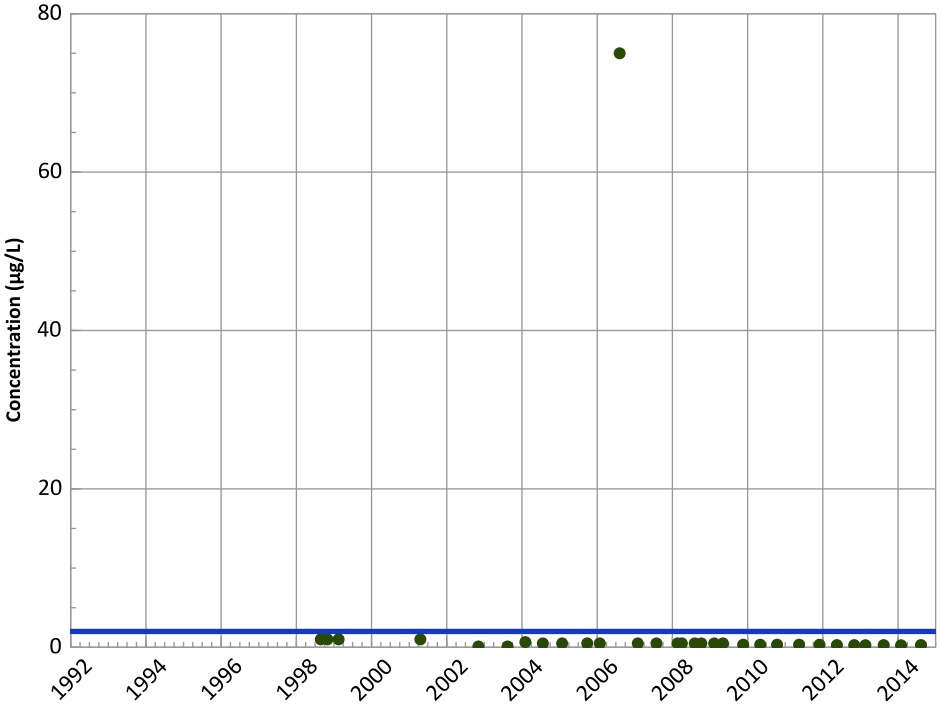
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

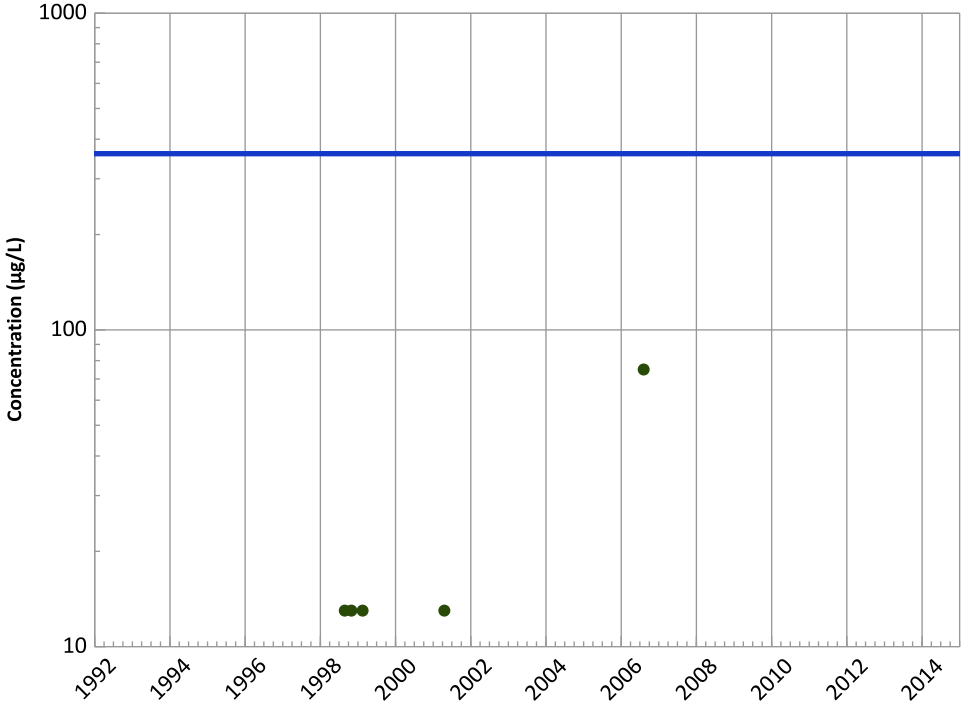


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

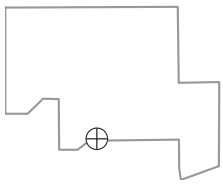
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

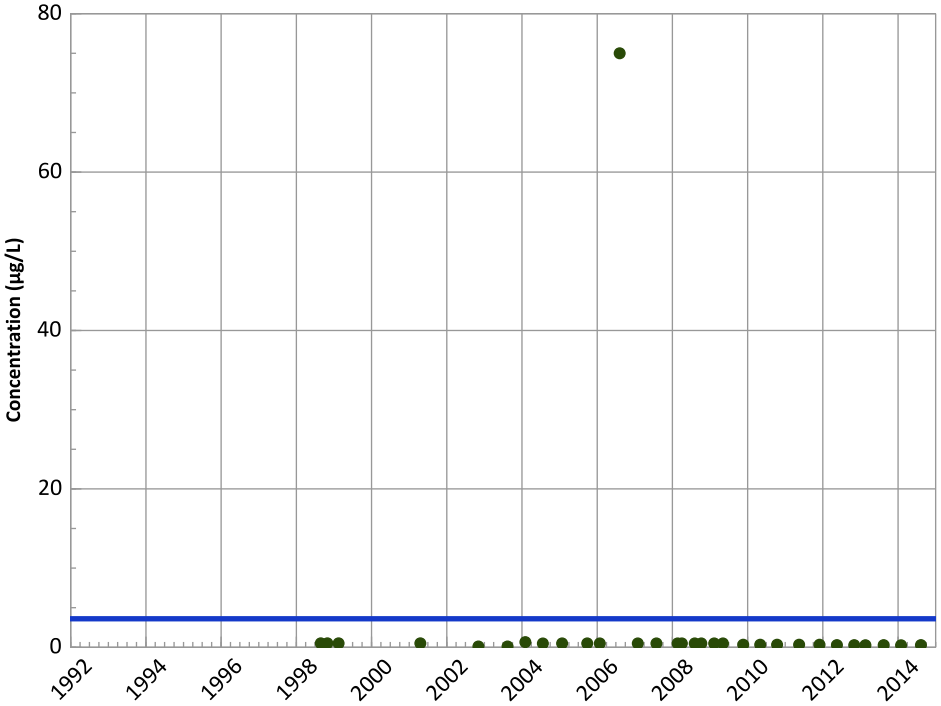
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

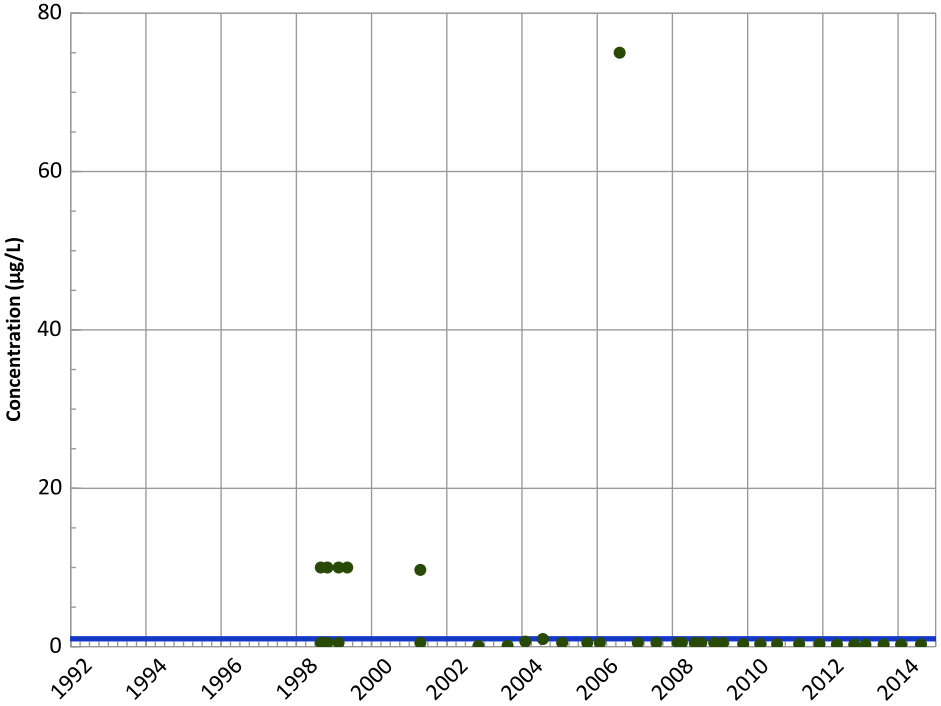


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

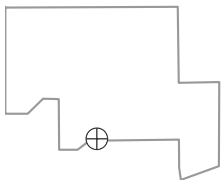
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

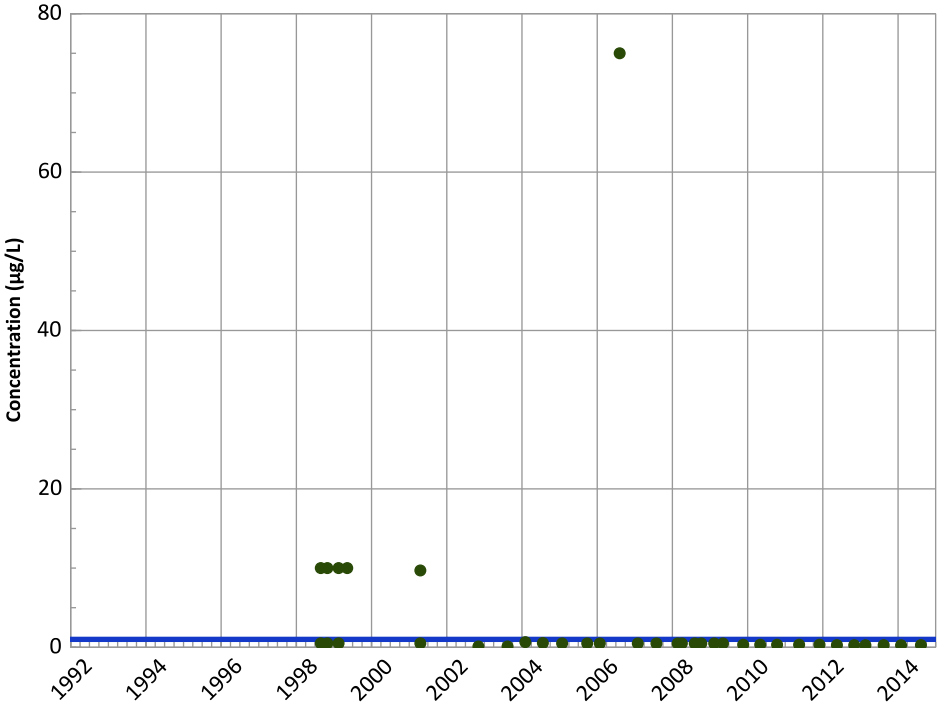
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

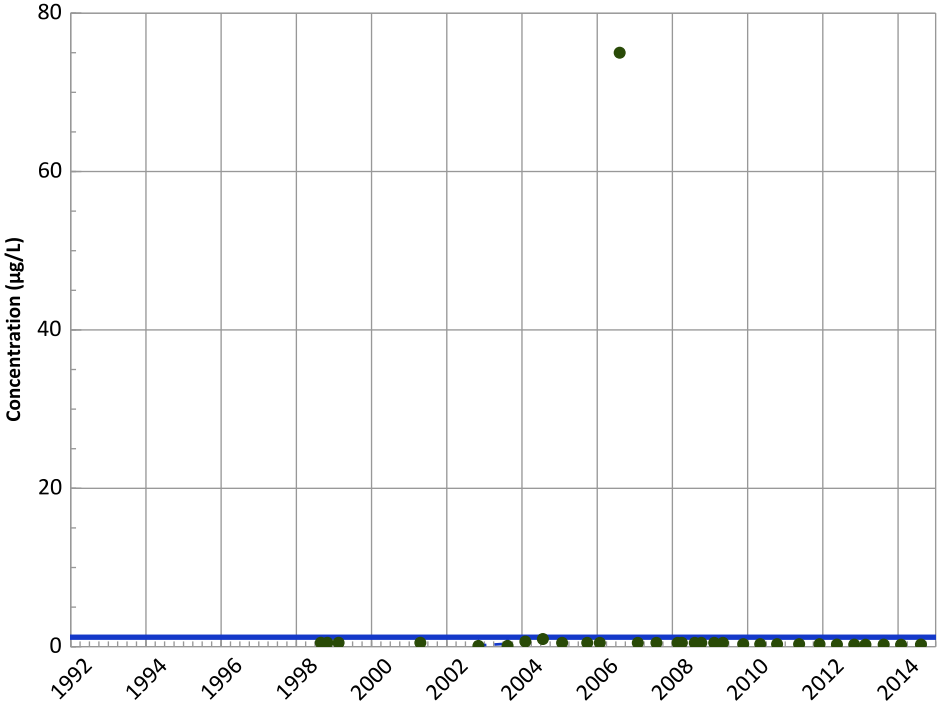


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

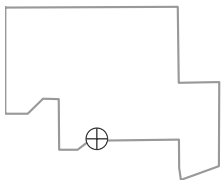
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

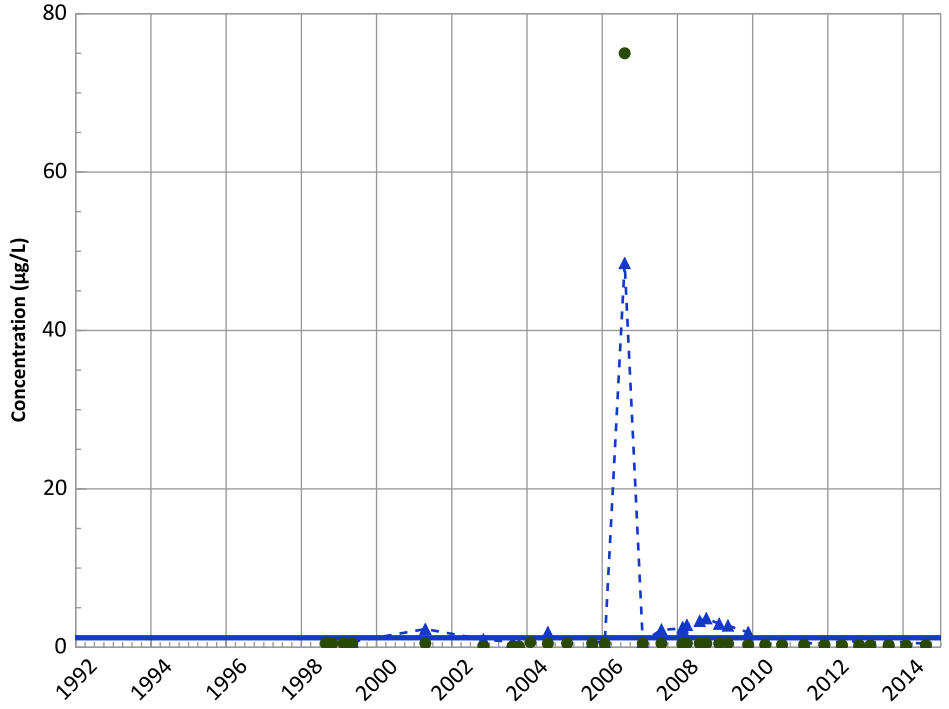
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

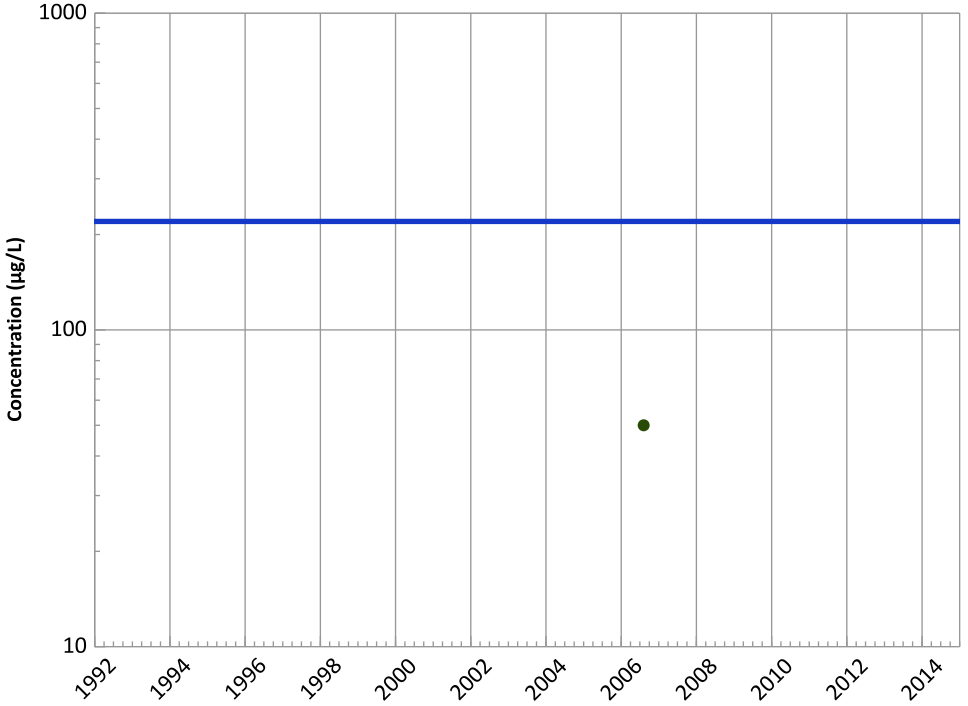


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

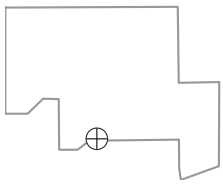
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

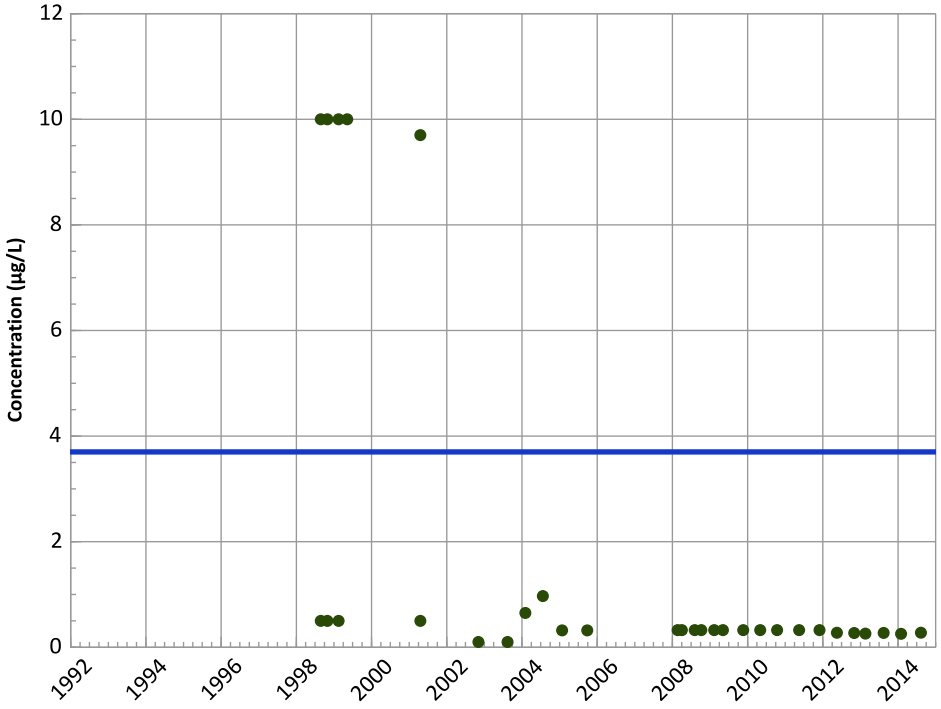
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

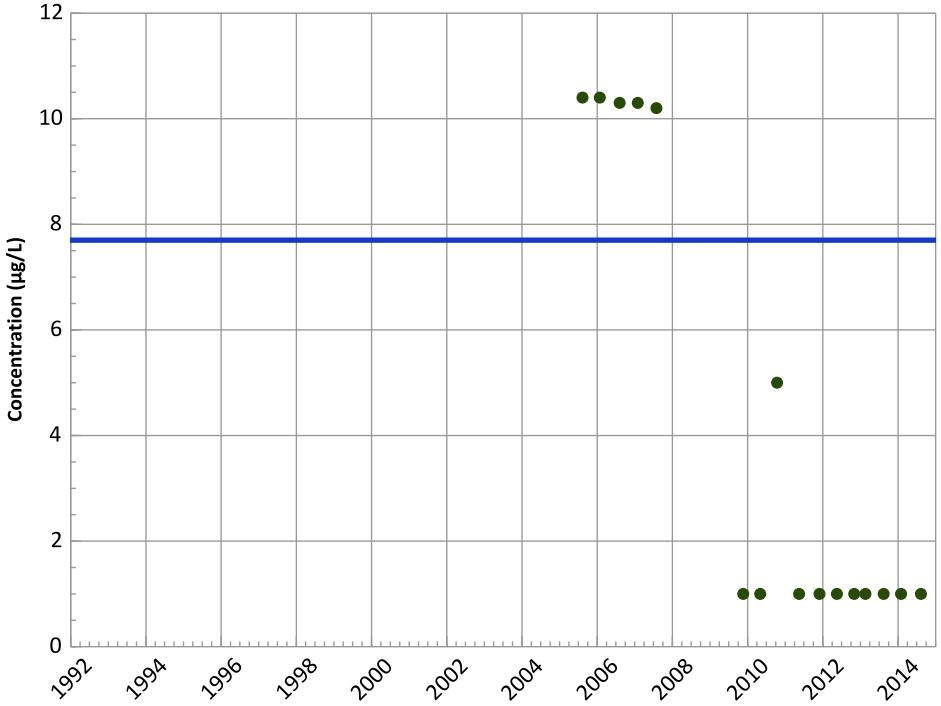


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

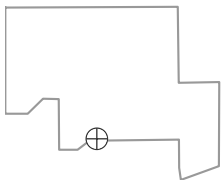
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

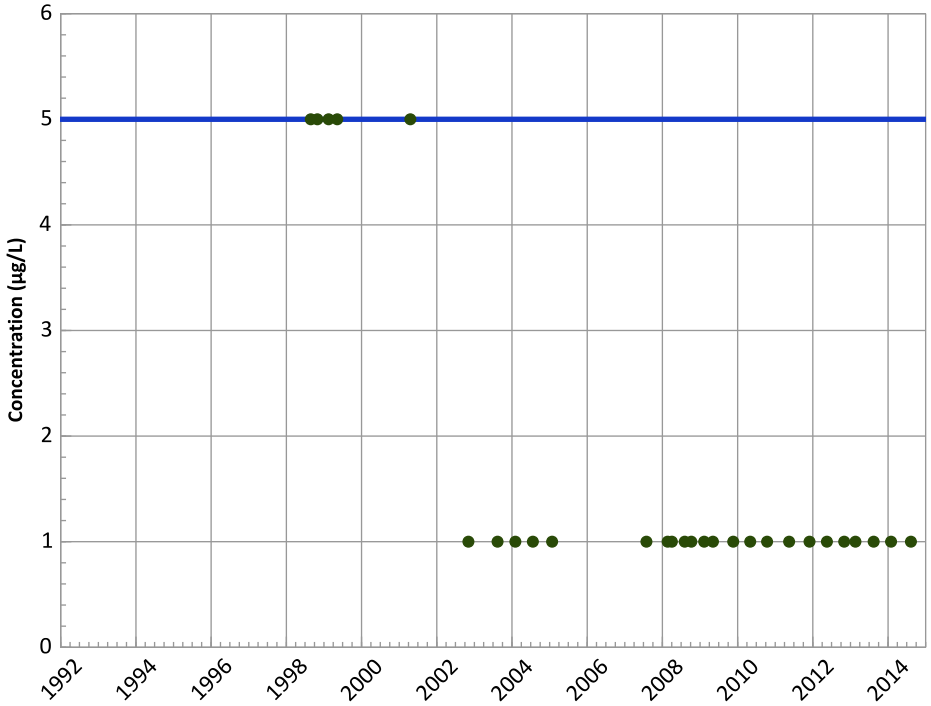
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

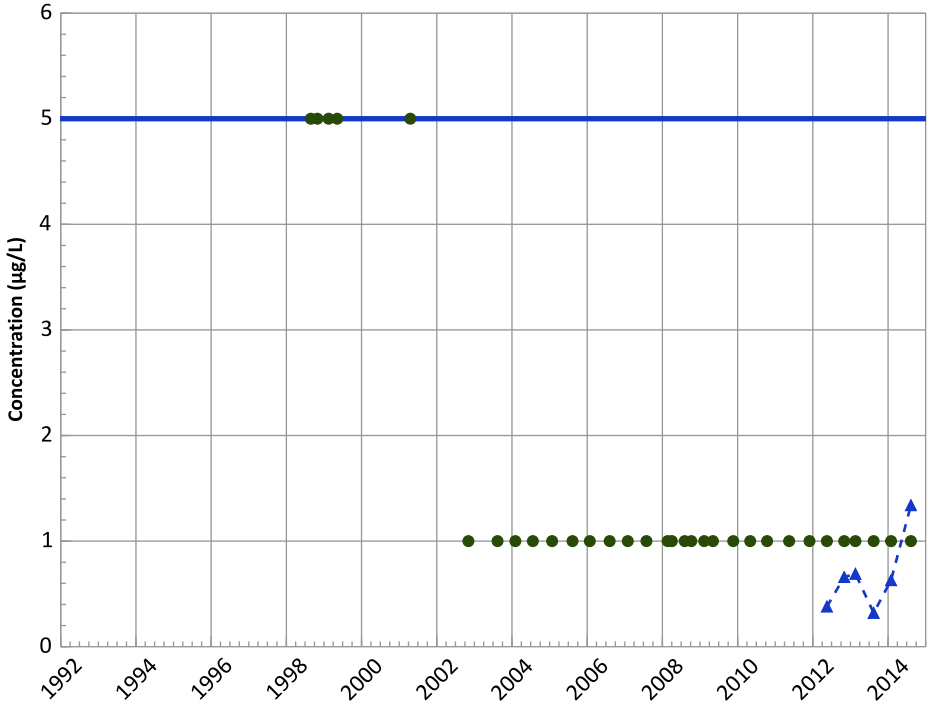


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

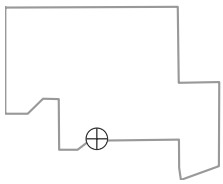
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

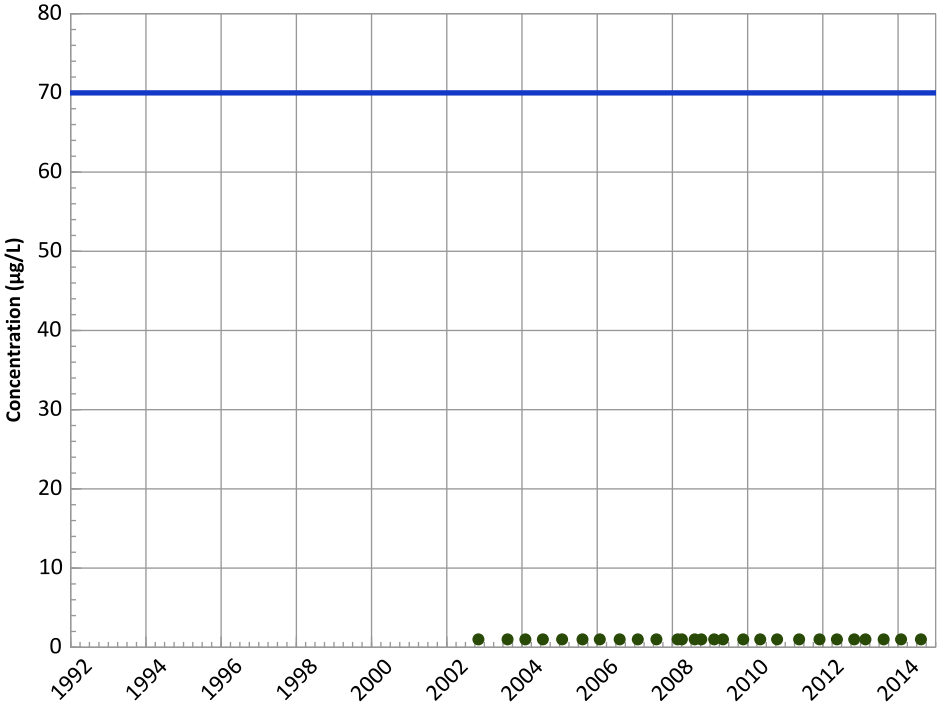
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

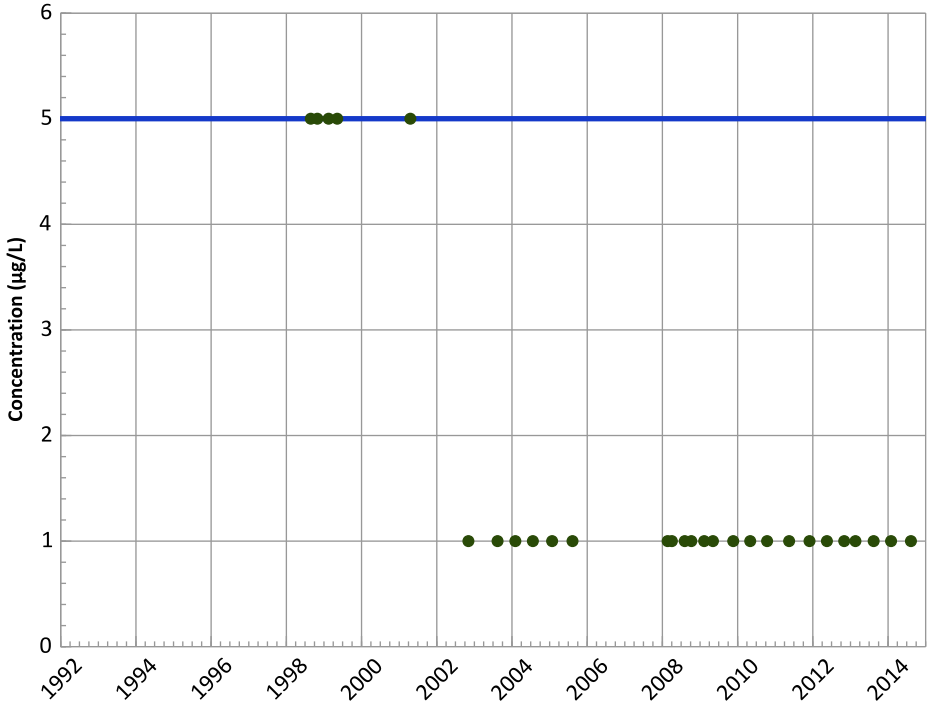


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

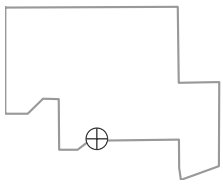
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

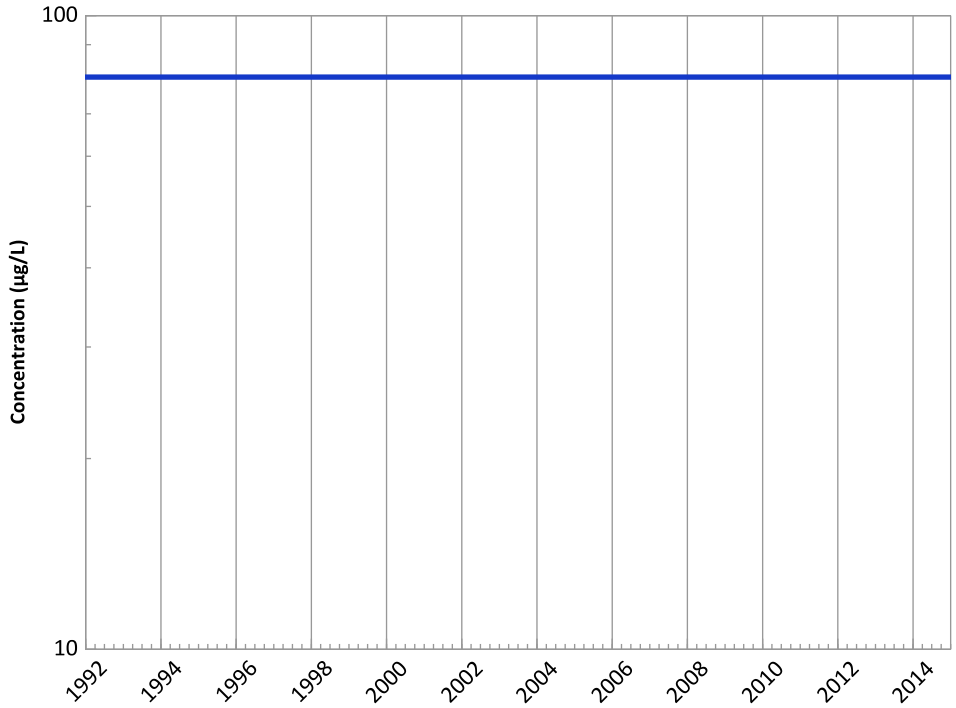
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

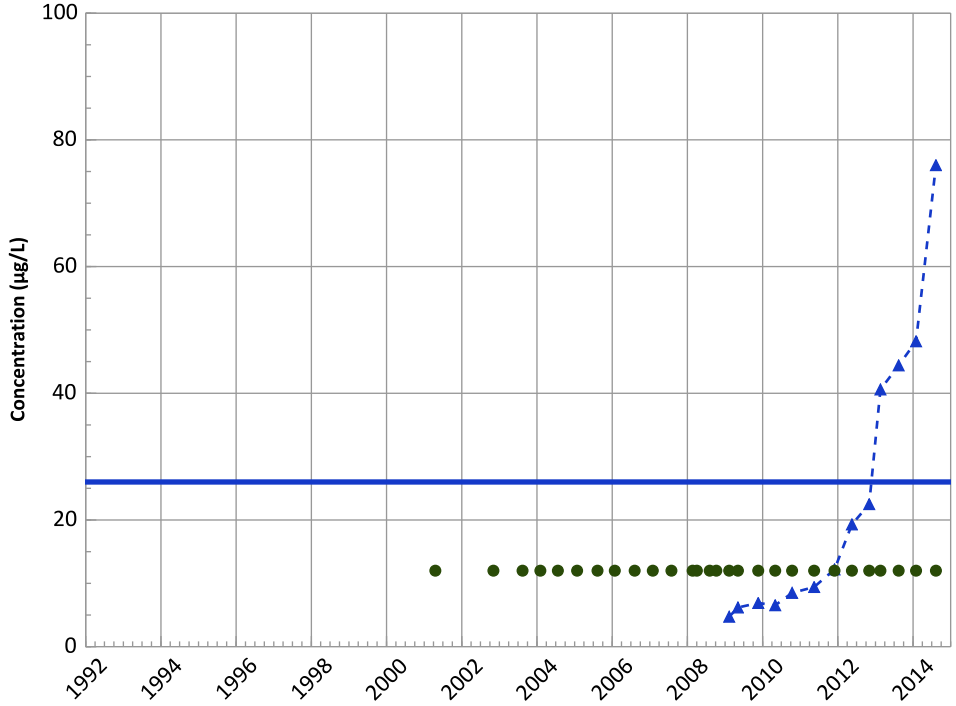


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

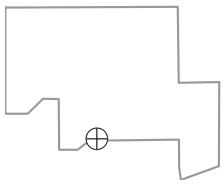
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

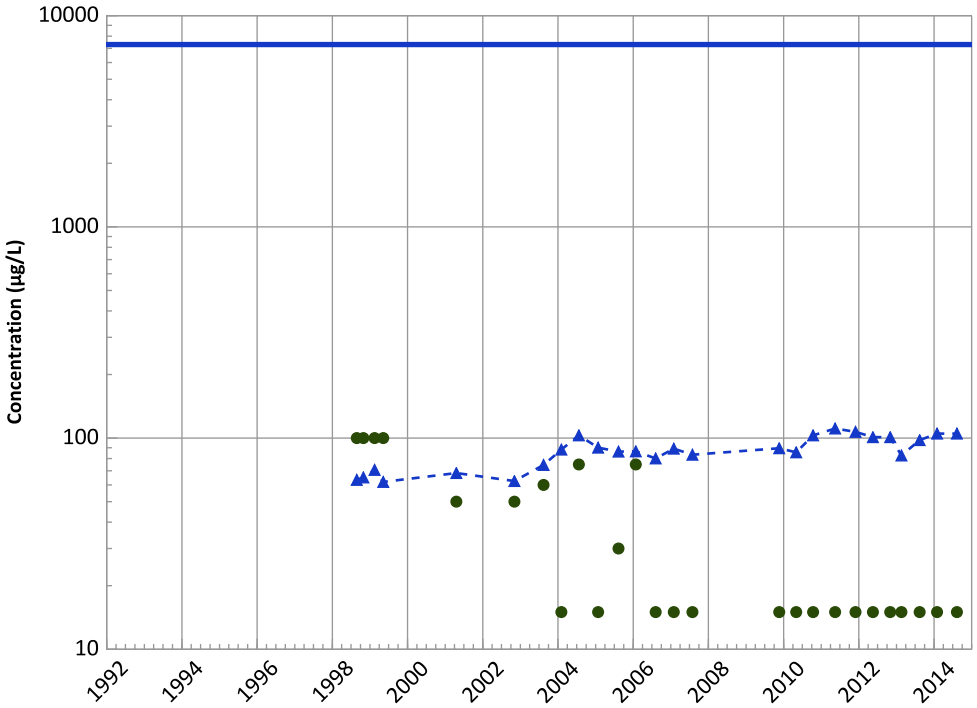
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

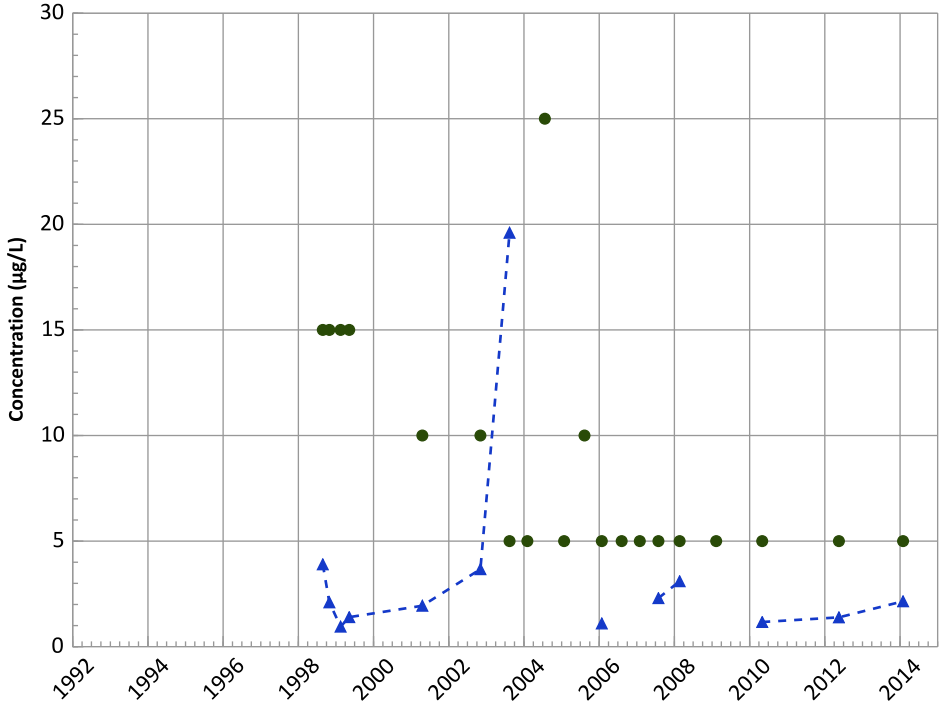


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Manganese Trend



Concentration Trend

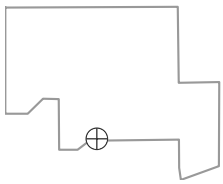
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

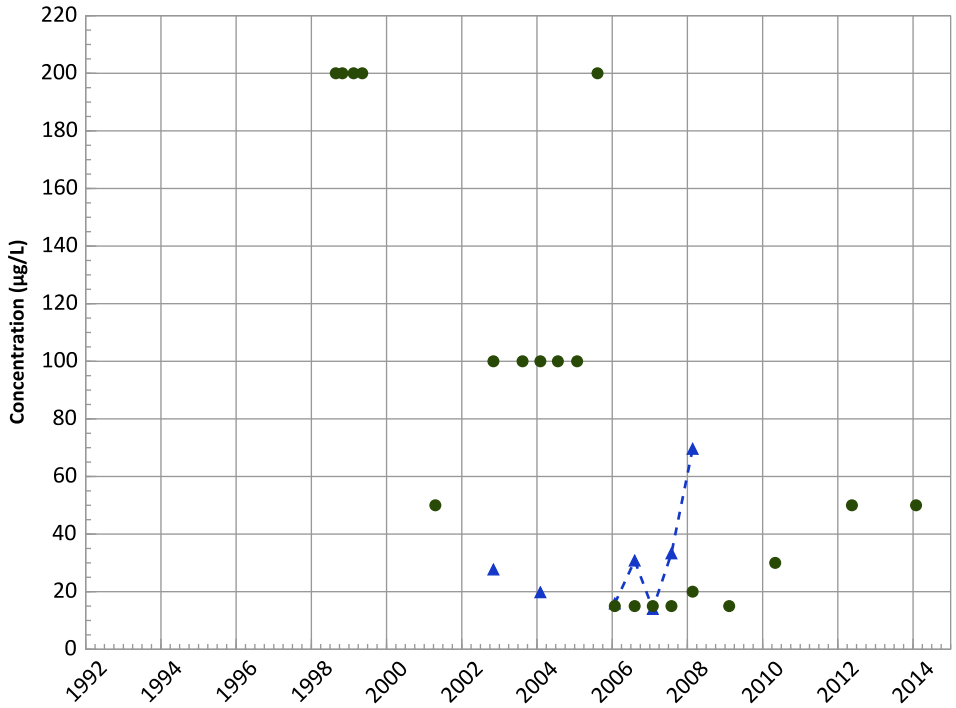
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

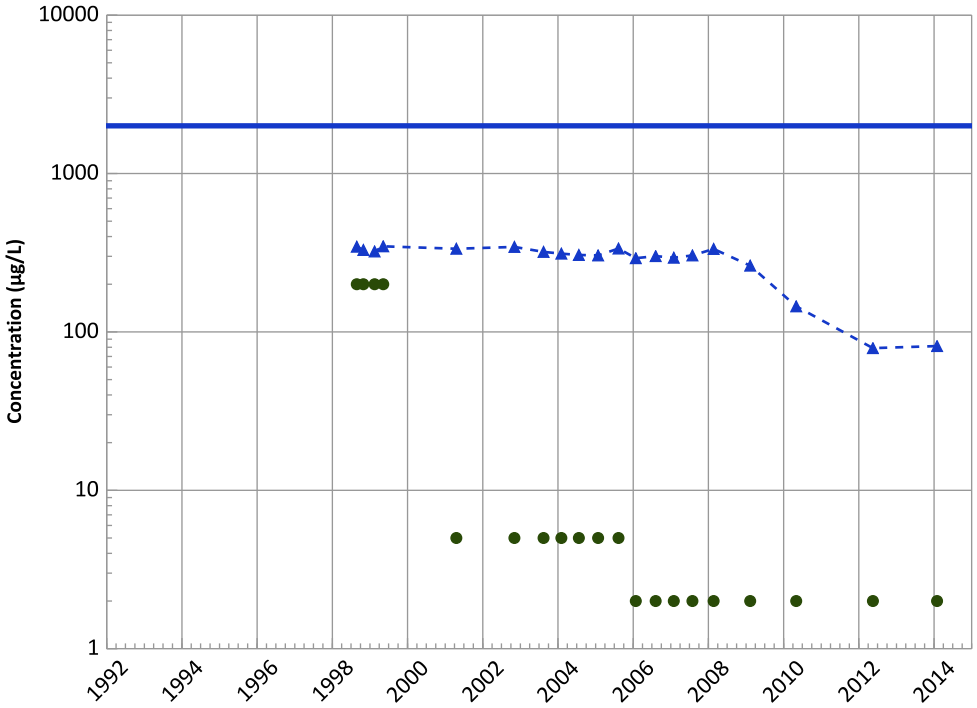


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

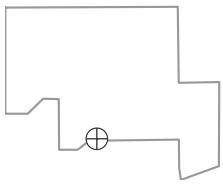
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

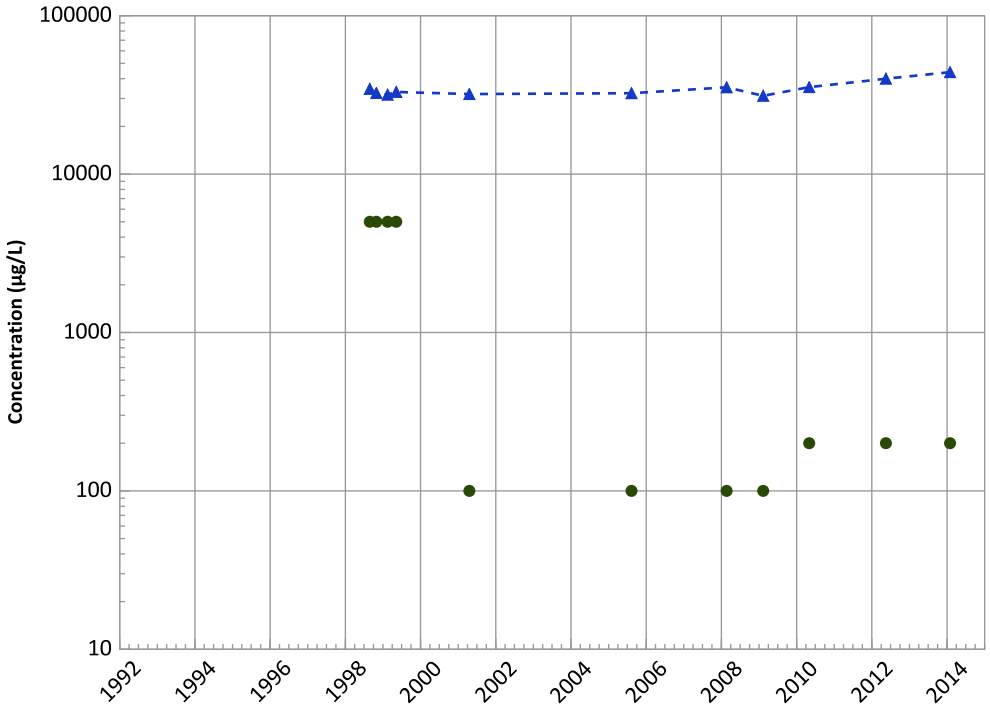
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

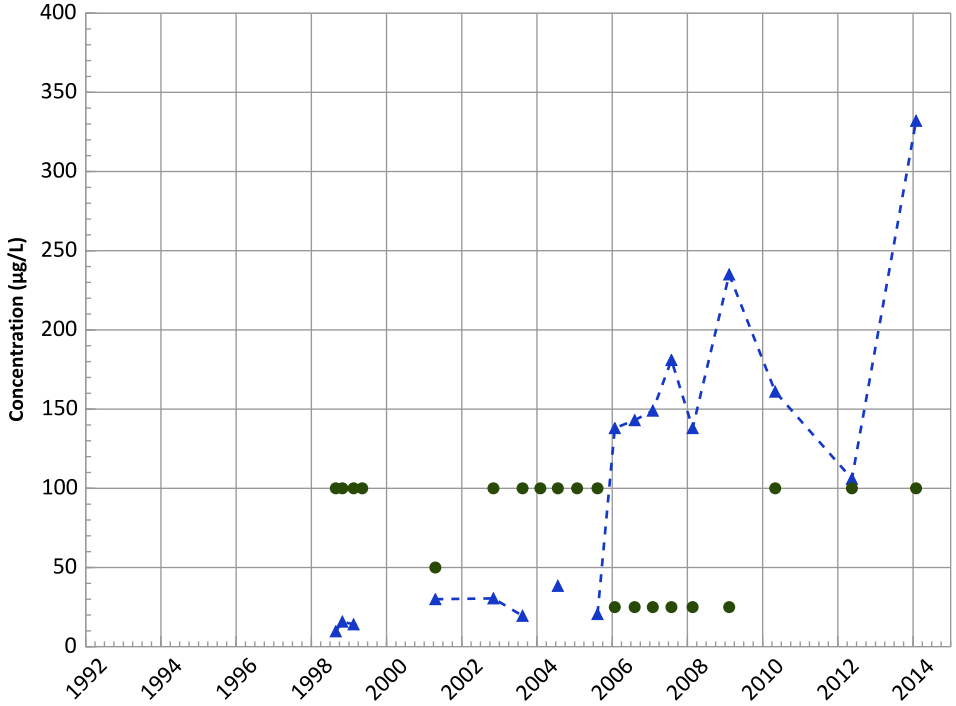


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

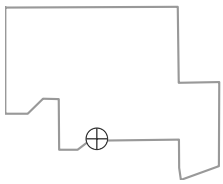
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

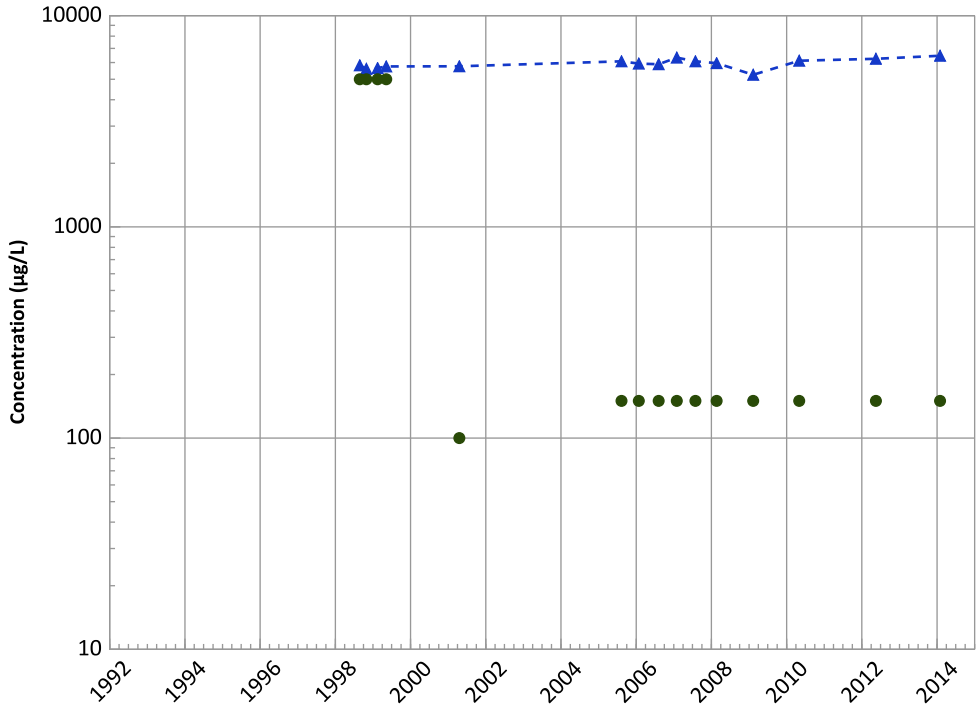
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

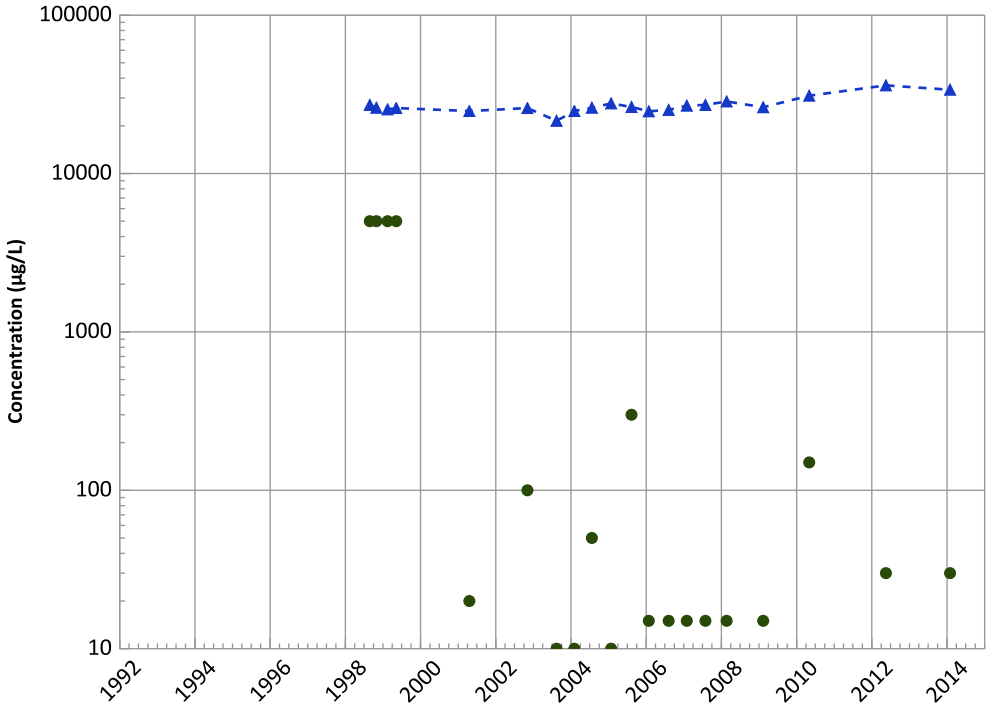


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

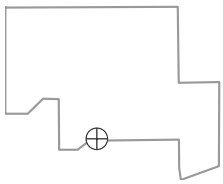
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

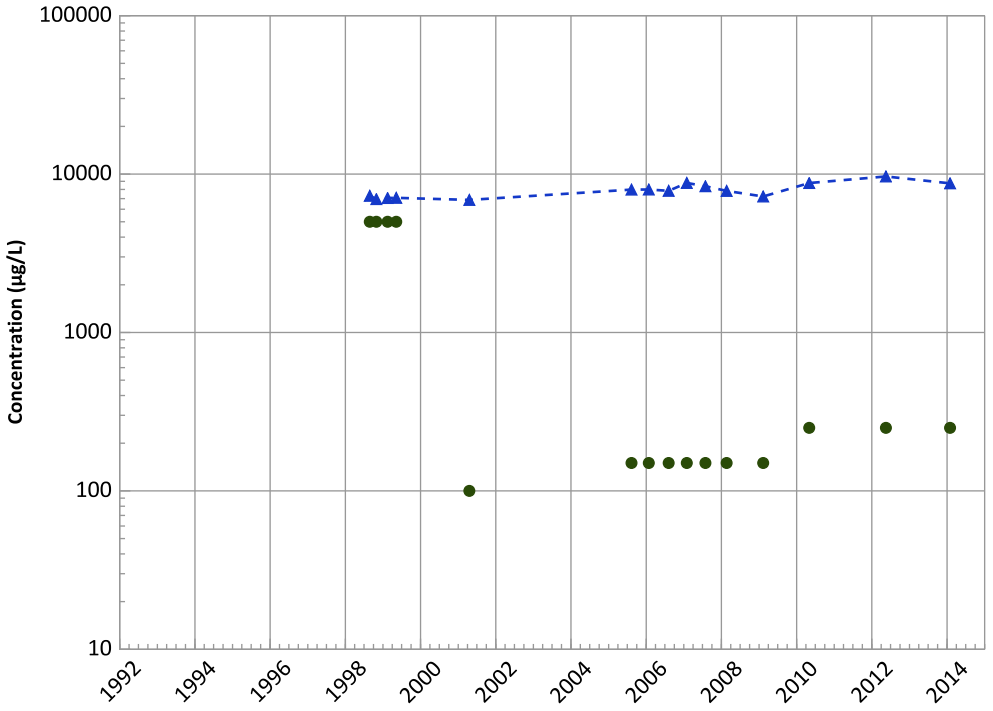
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1035 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

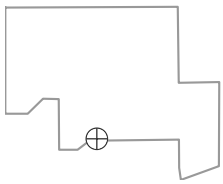
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

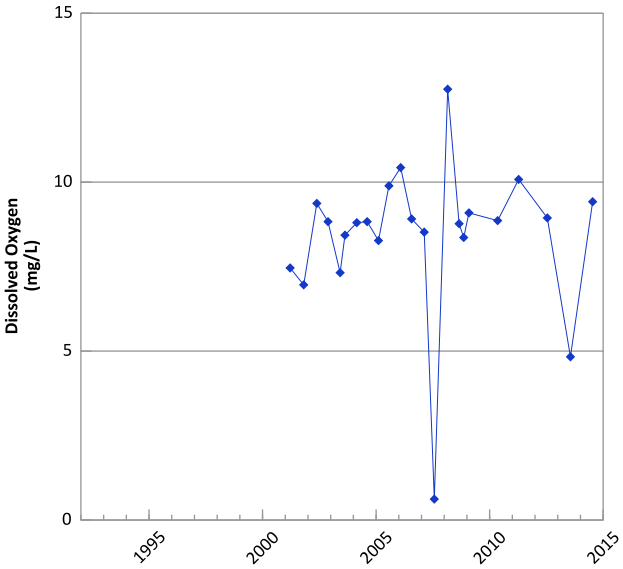
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 08/11/2014
Analysis Date: 03/19/2015

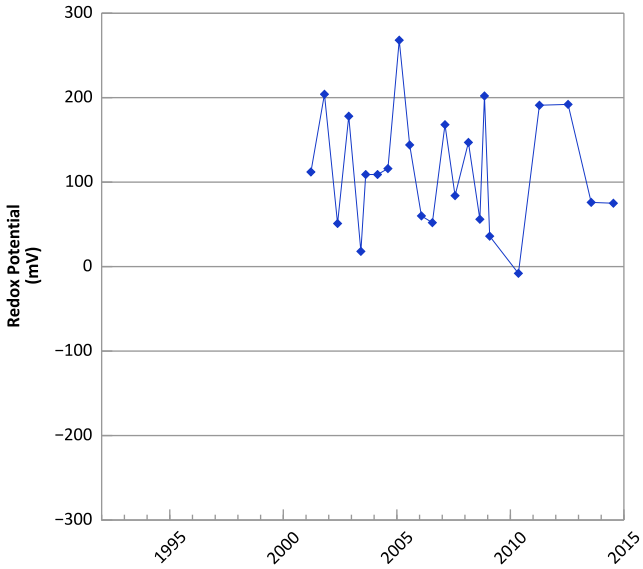
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

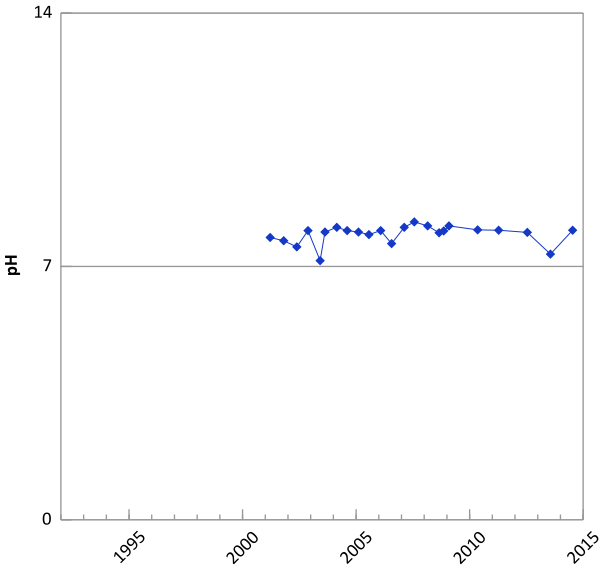
Well Location

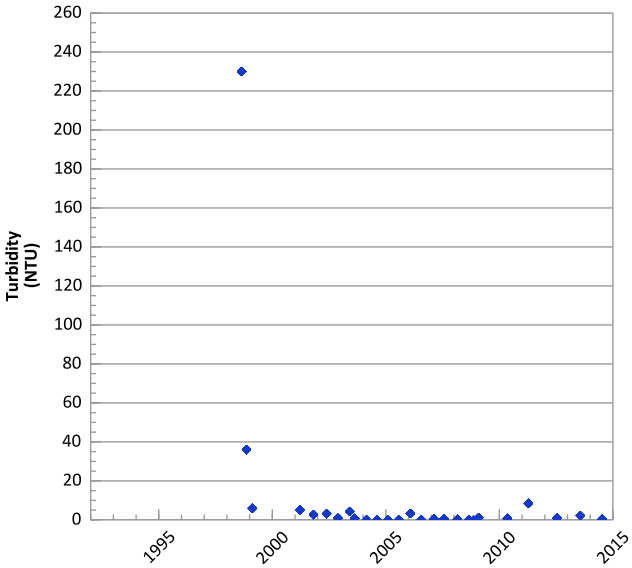


PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



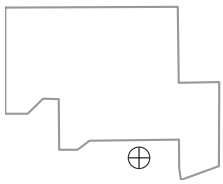






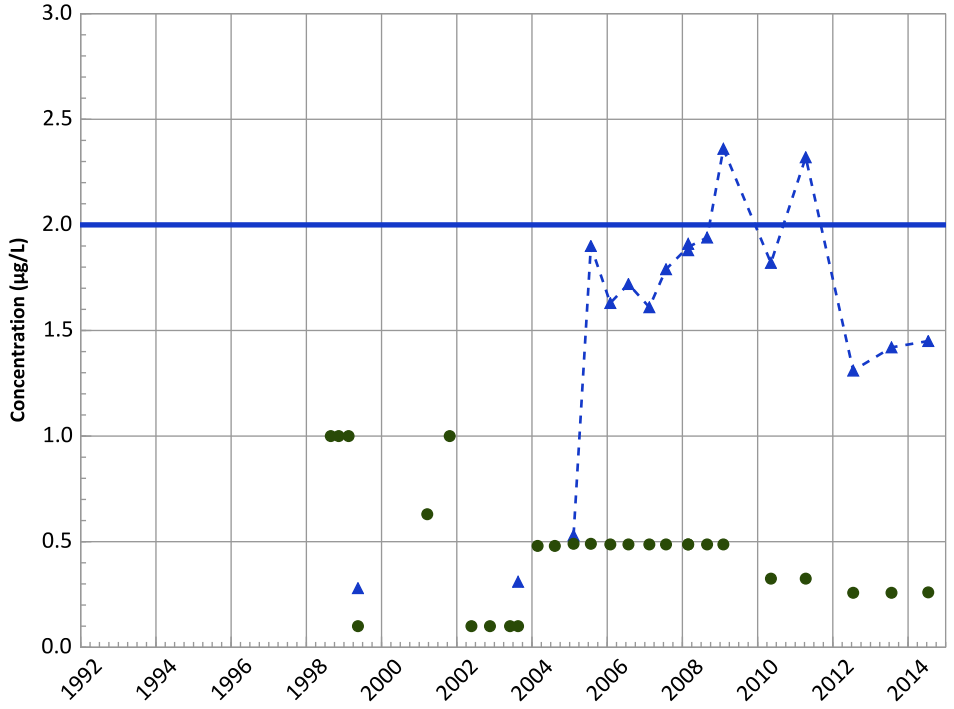
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

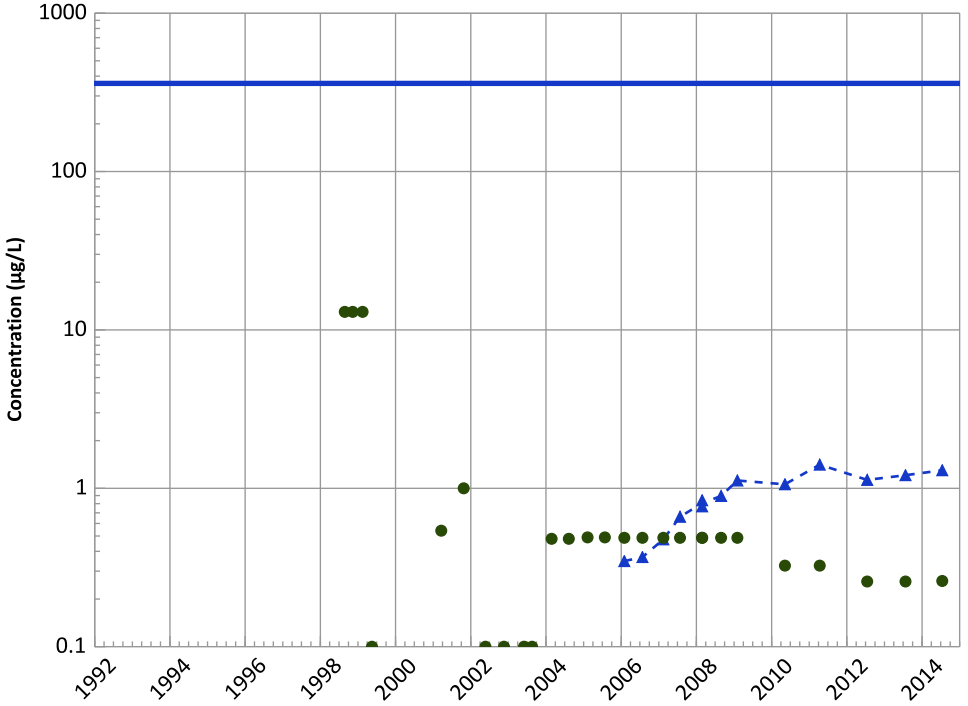


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

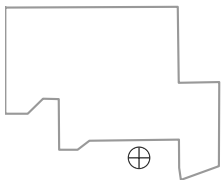
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

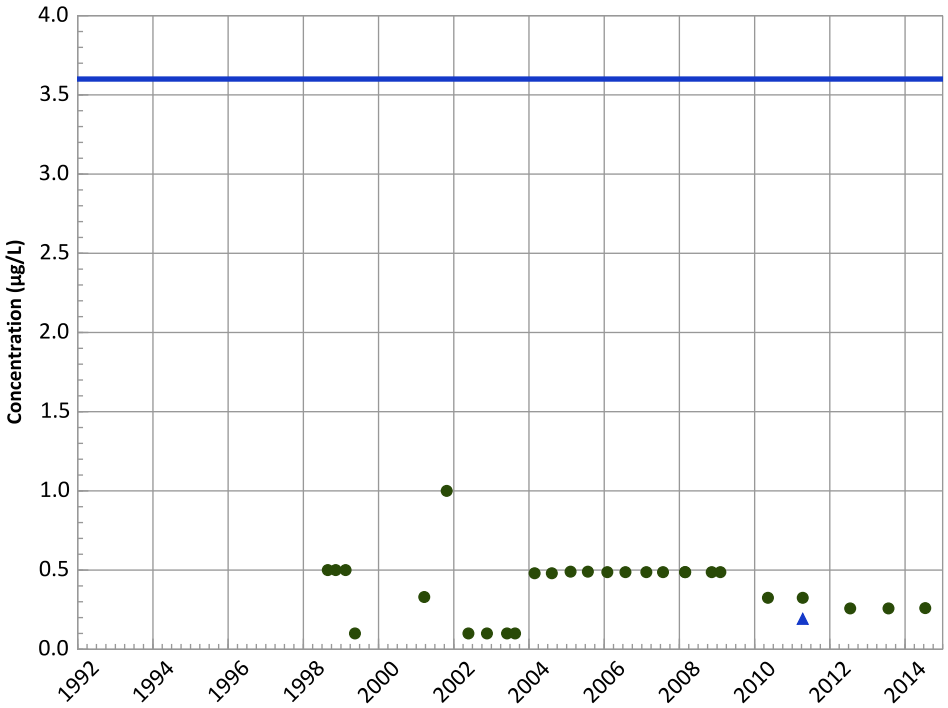
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

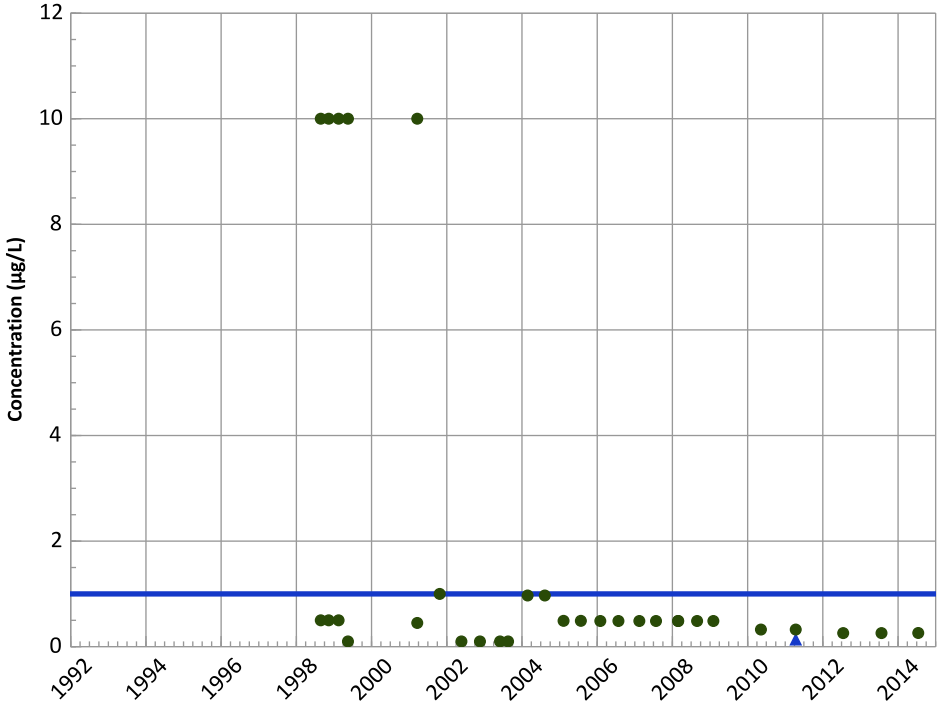


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

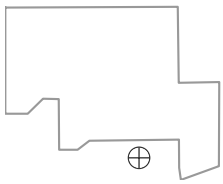
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

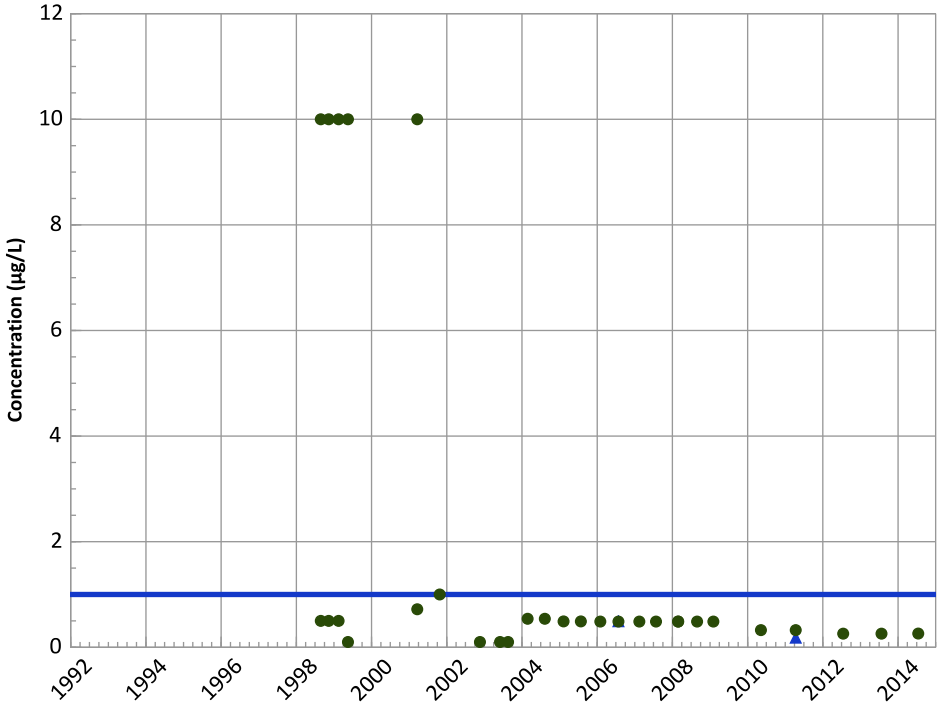
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

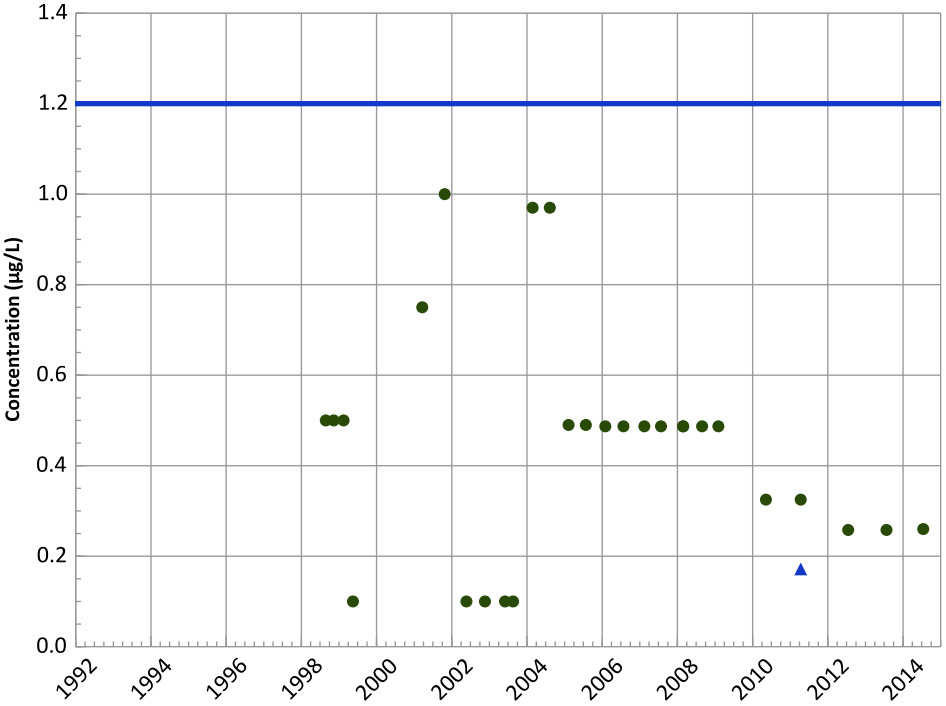


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

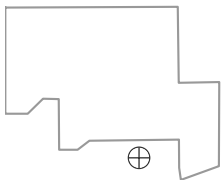
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

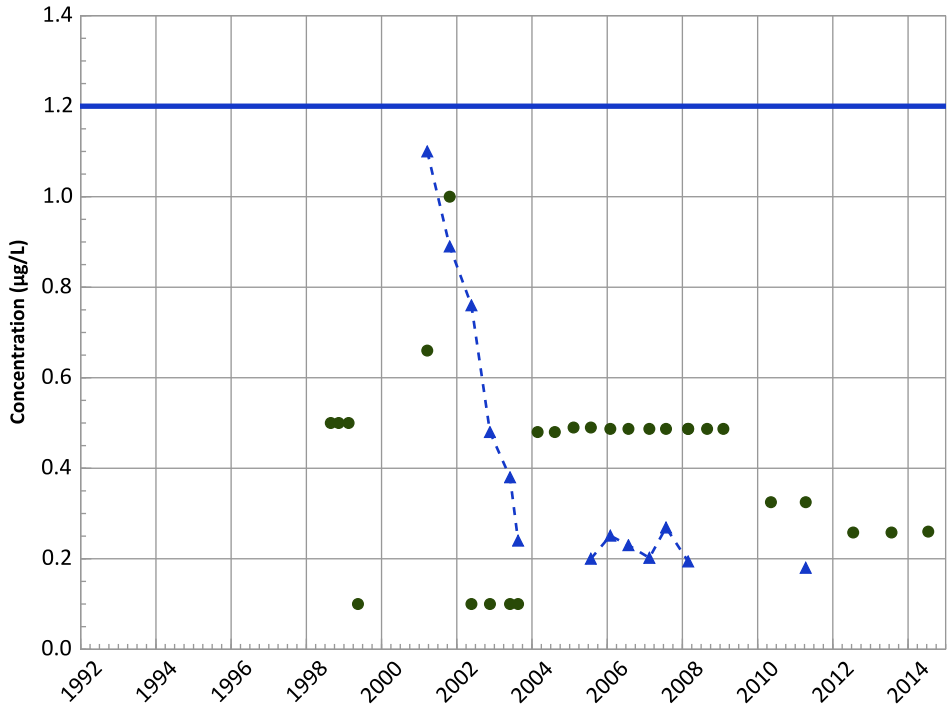
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

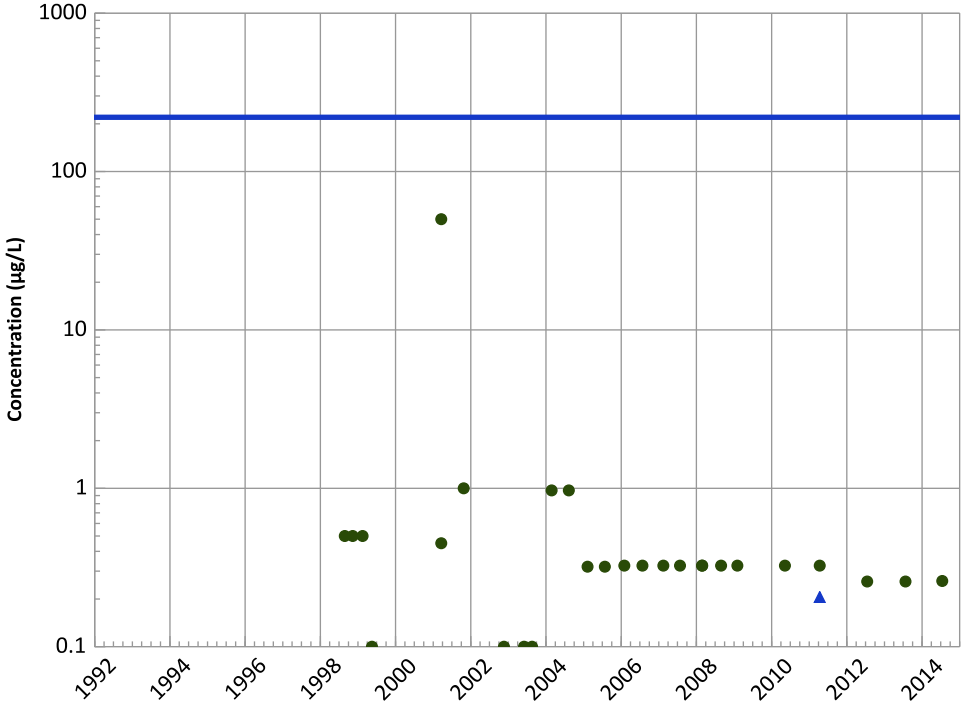


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

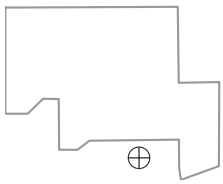
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

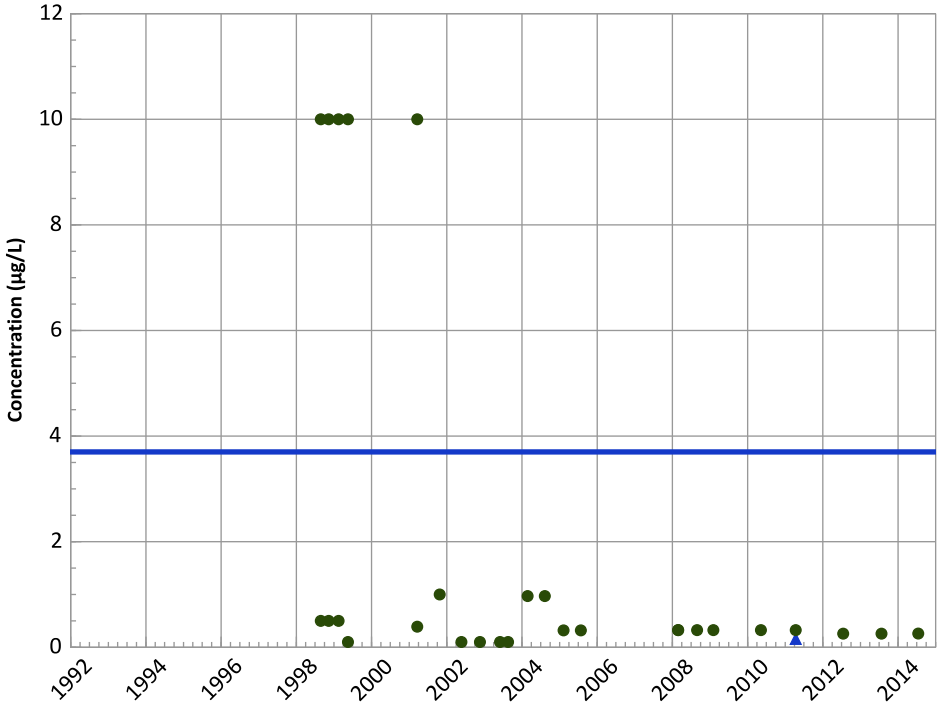
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

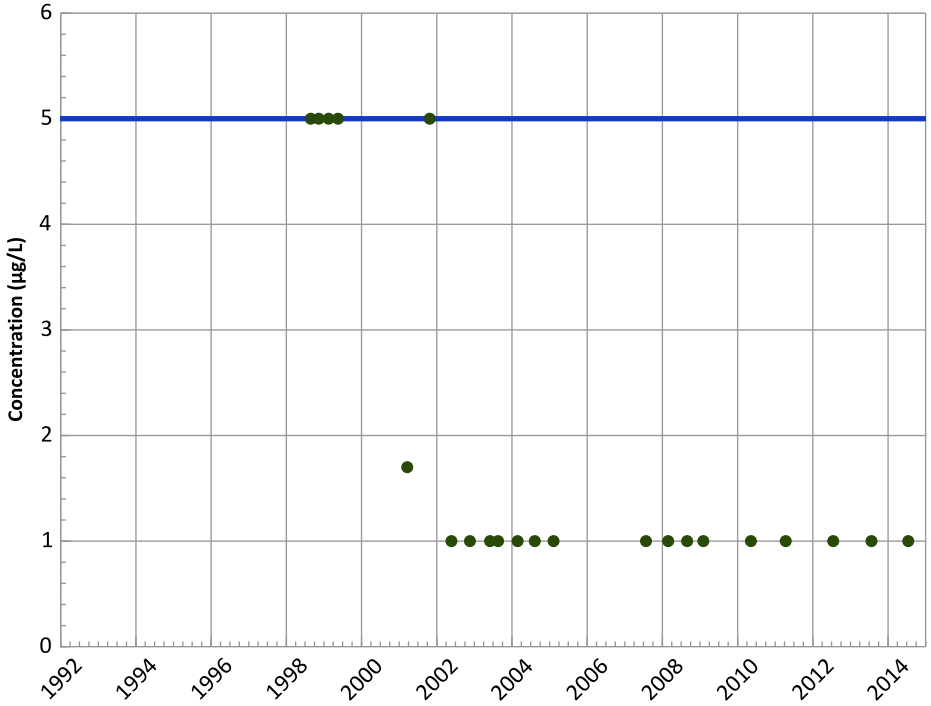


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

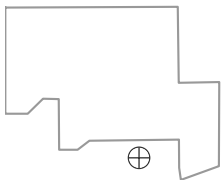
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

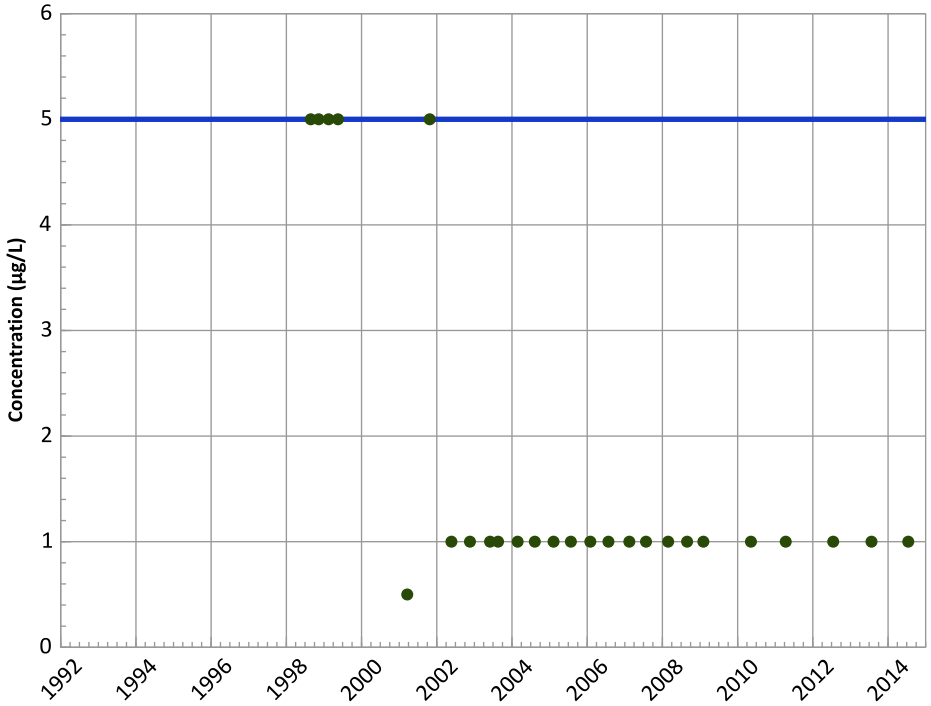
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

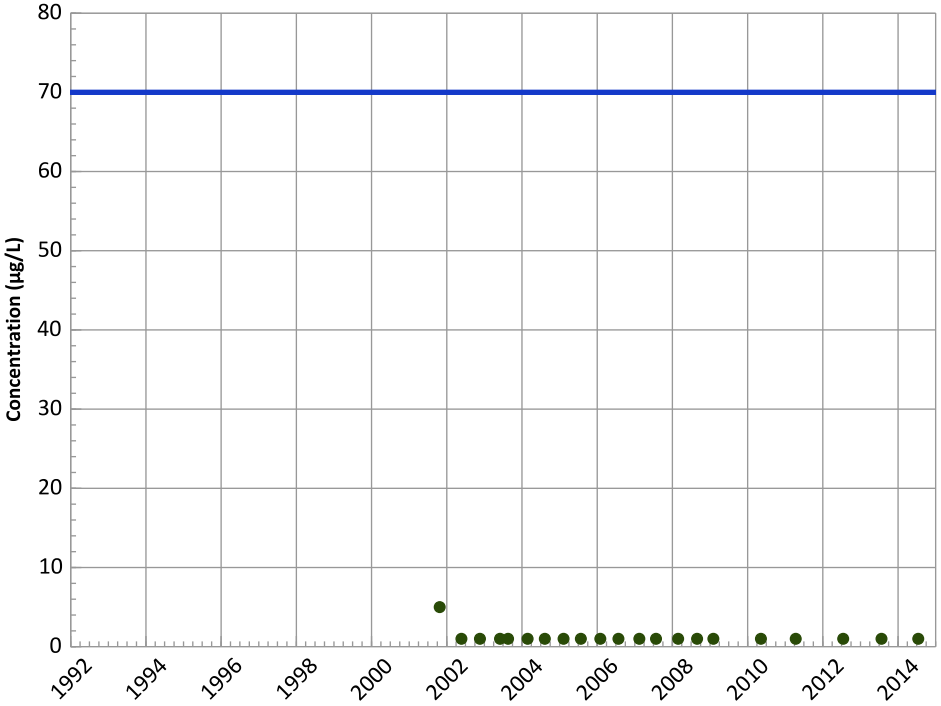


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

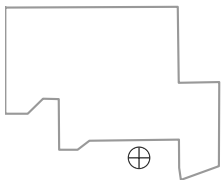
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

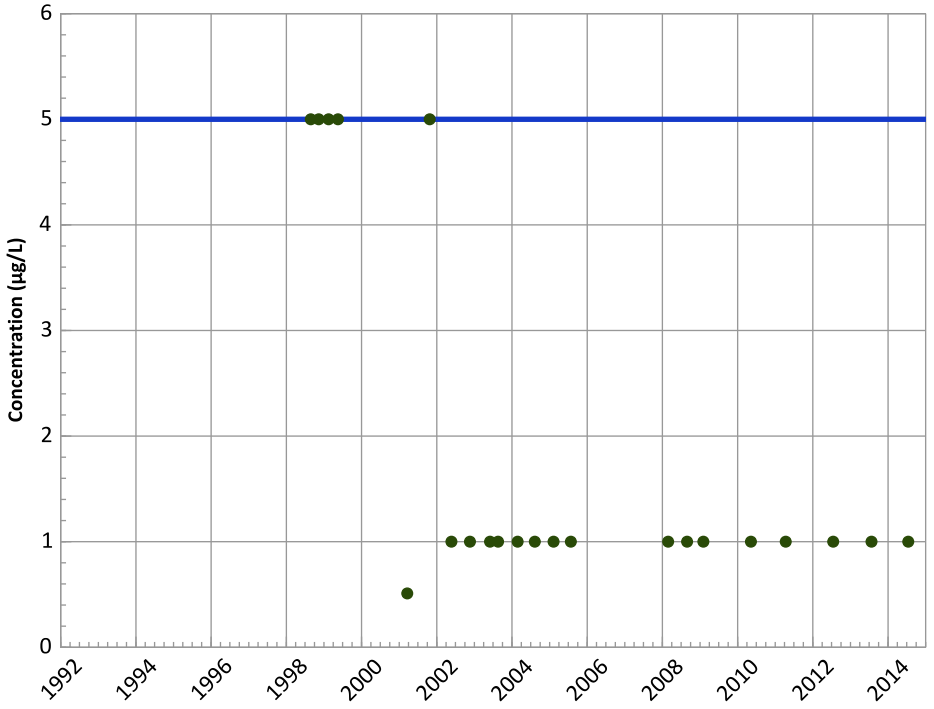
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

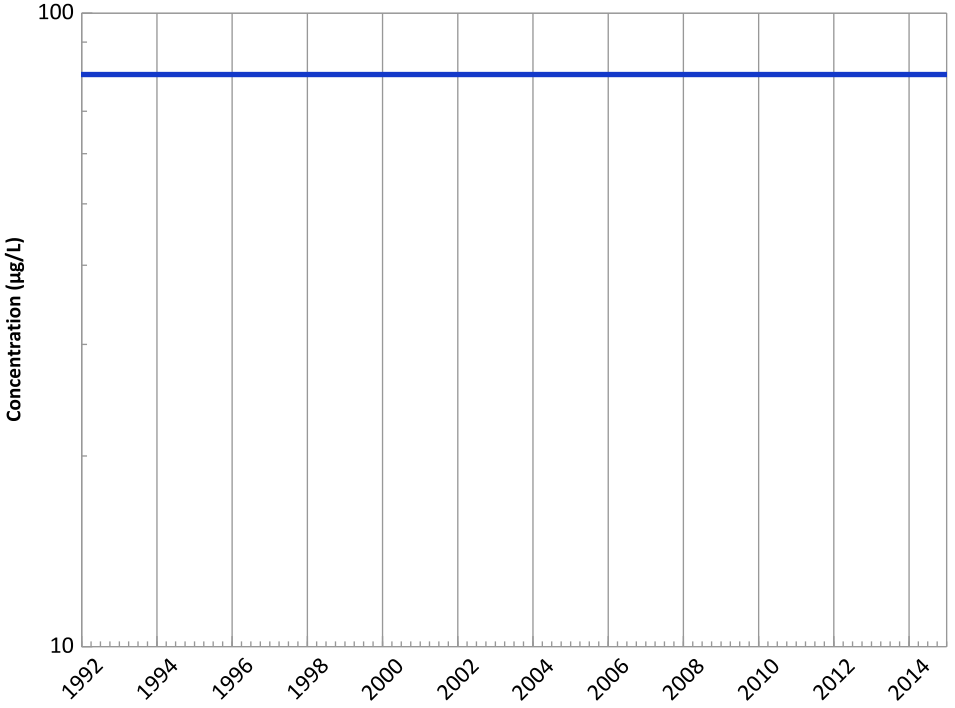


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

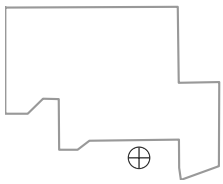
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

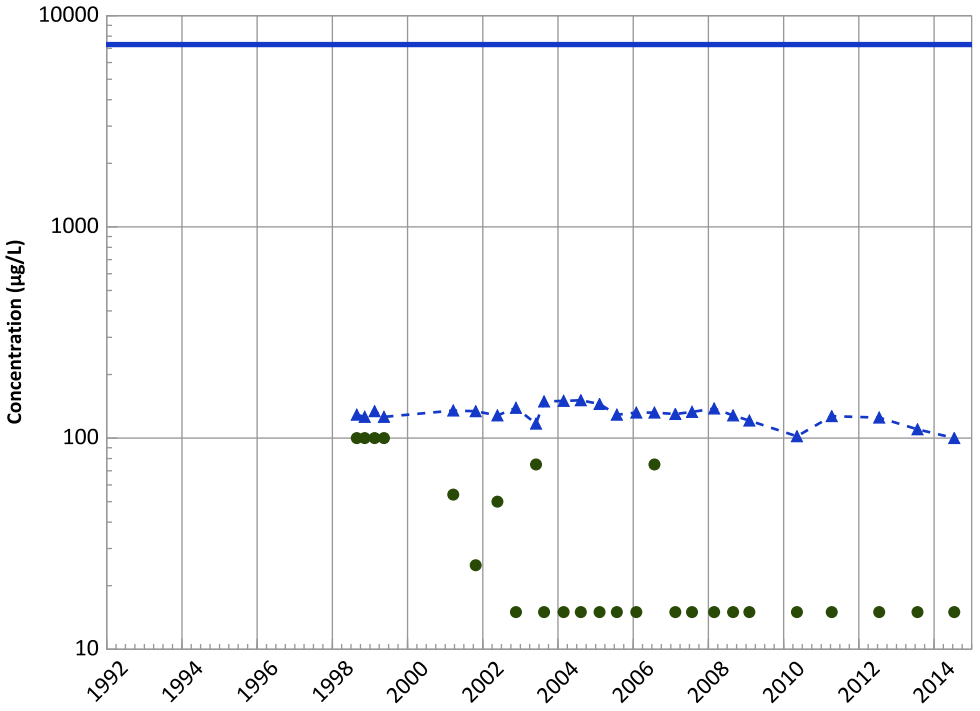
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

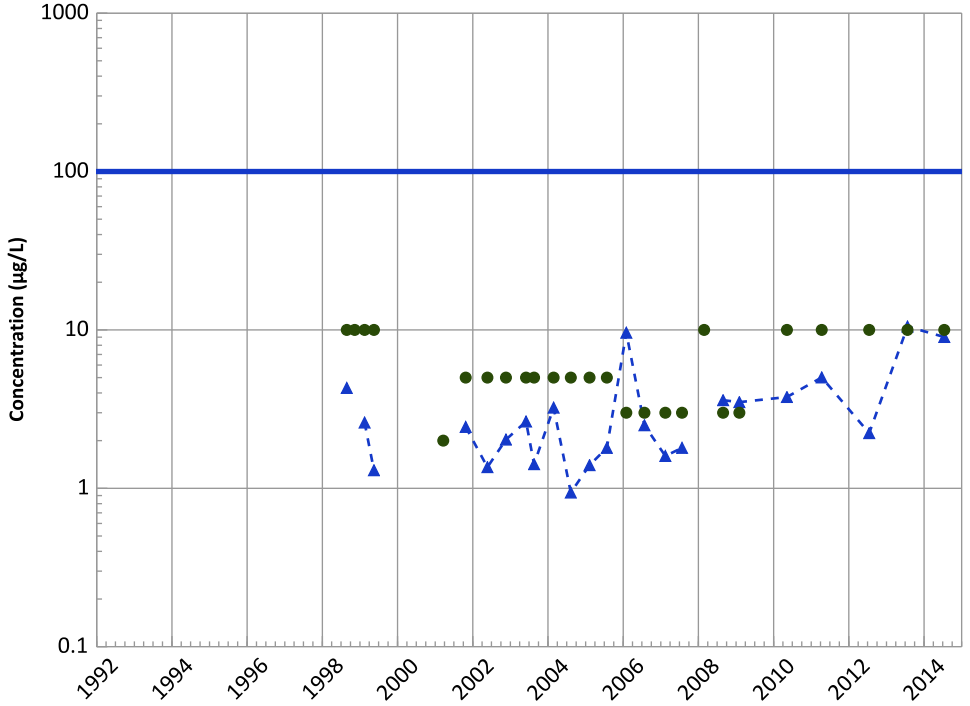


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

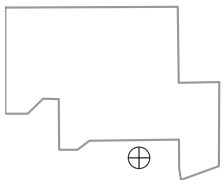
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

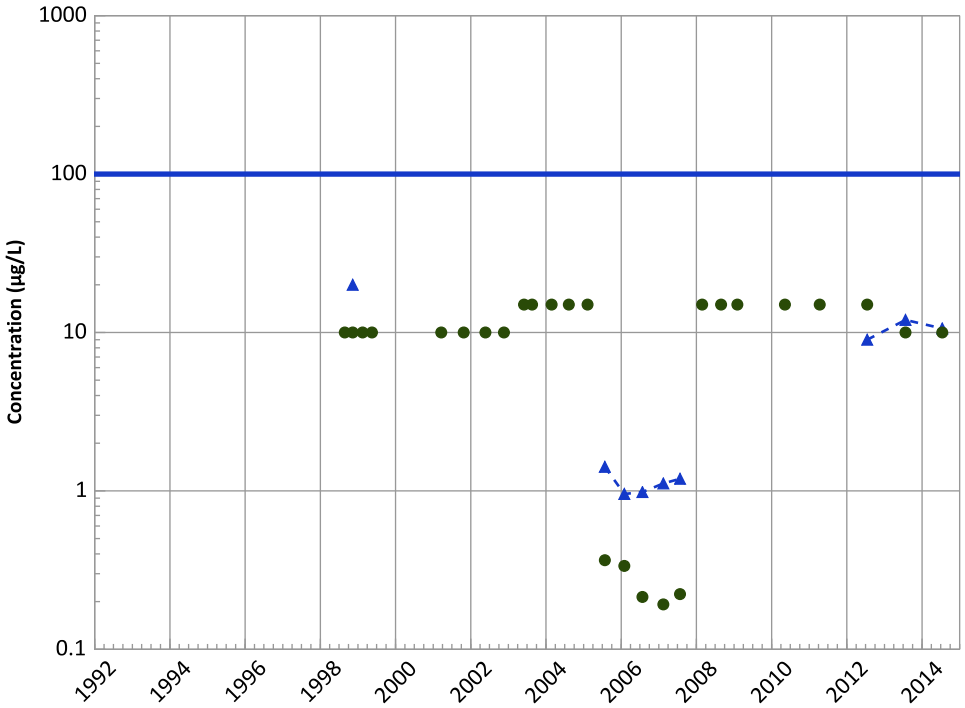
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

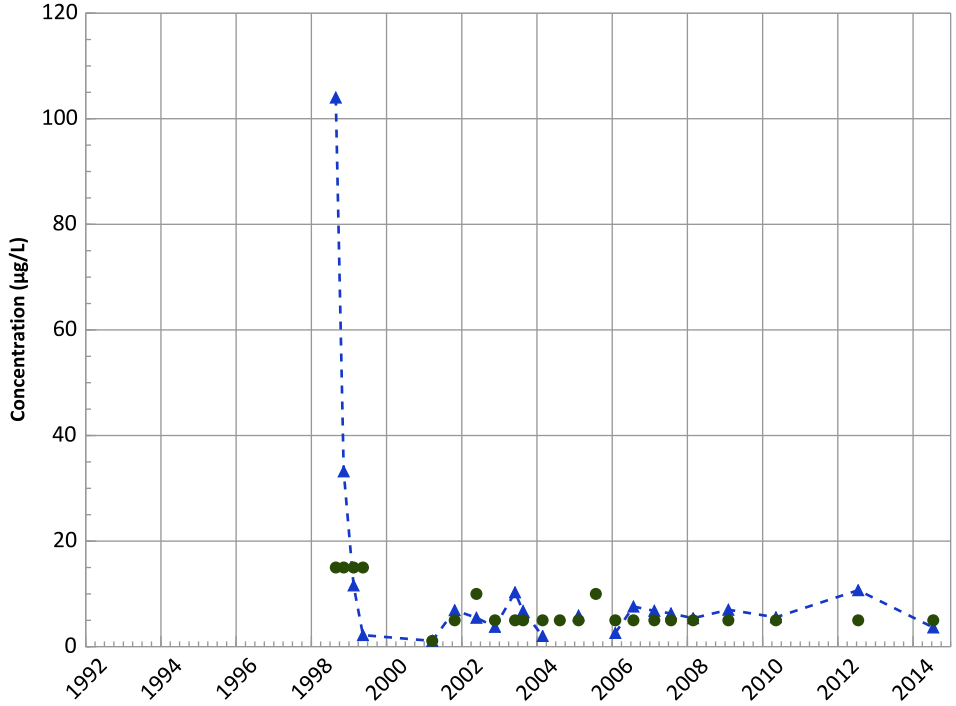


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Manganese Trend



Concentration Trend

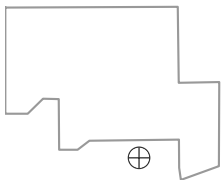
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

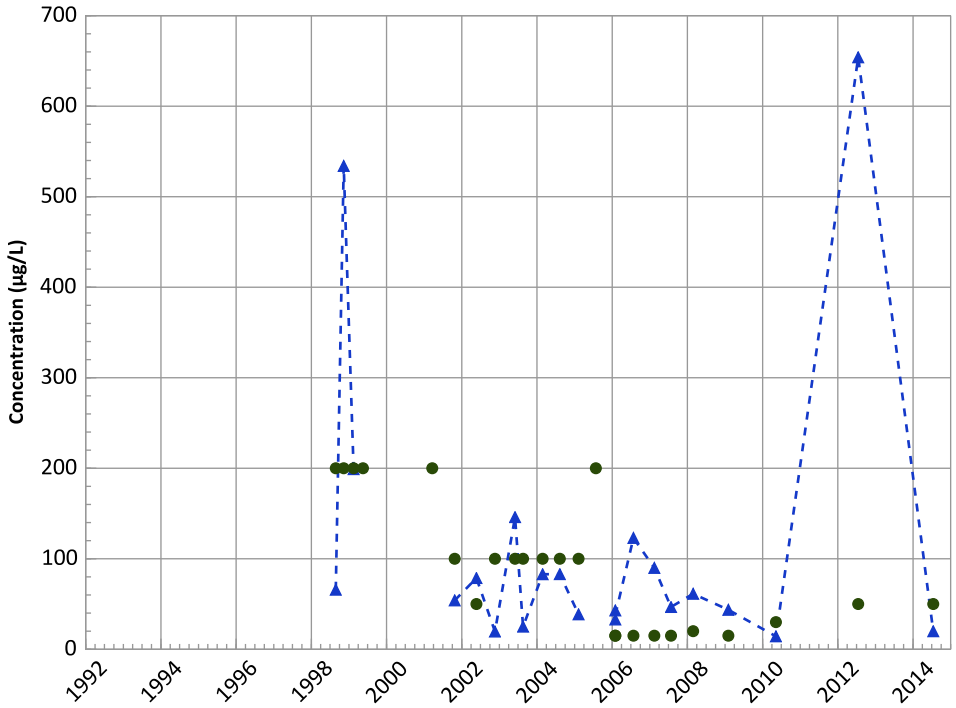
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

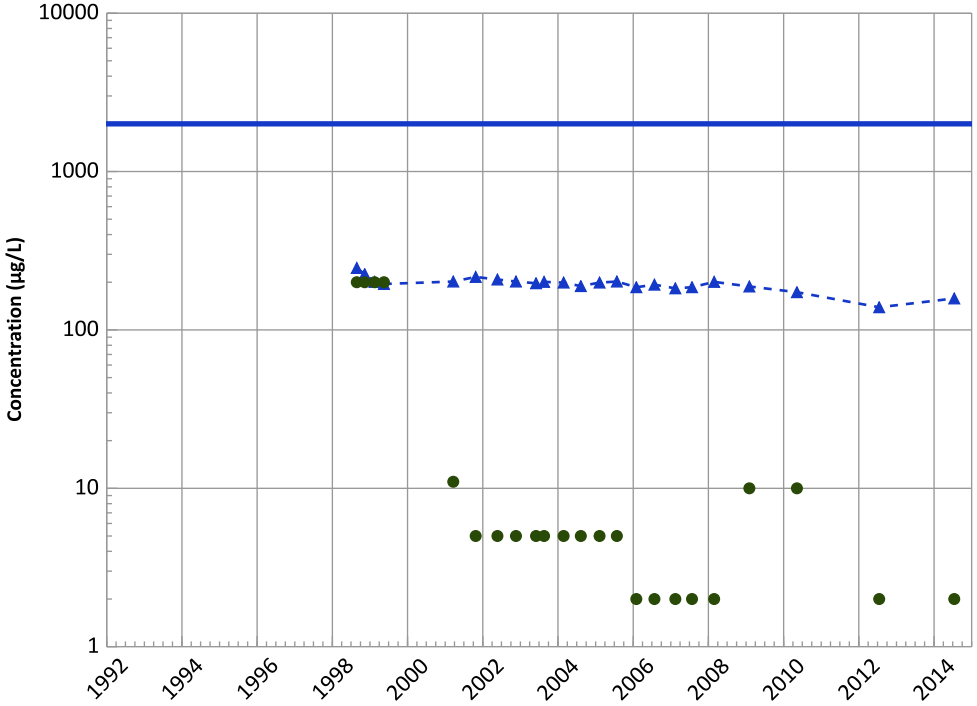


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

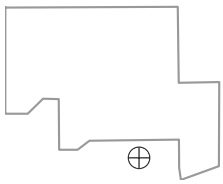
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

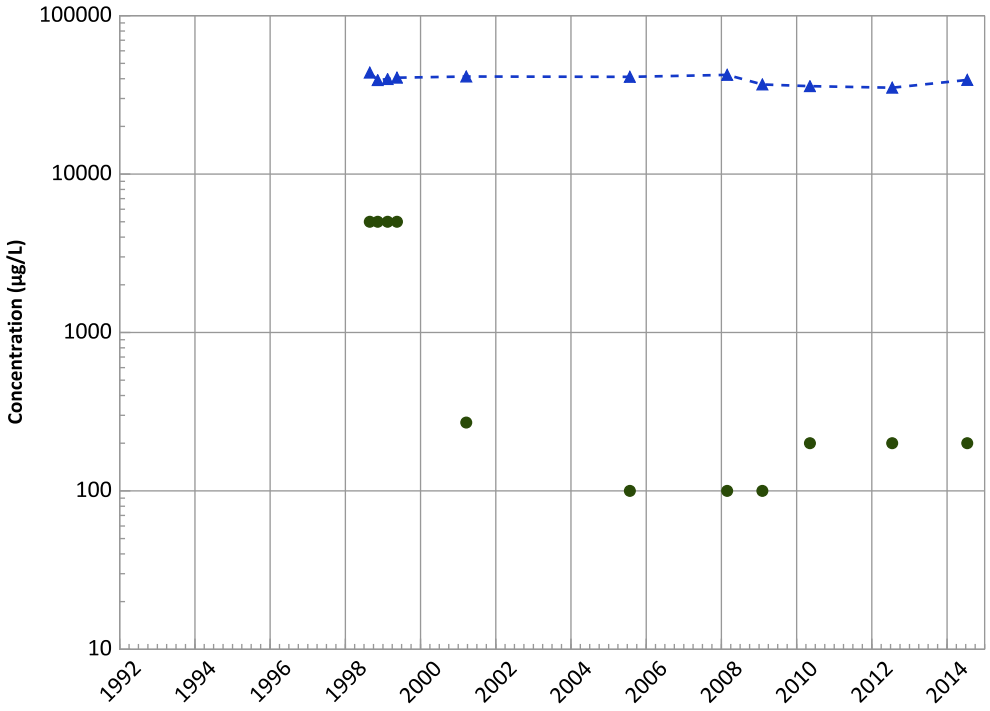
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

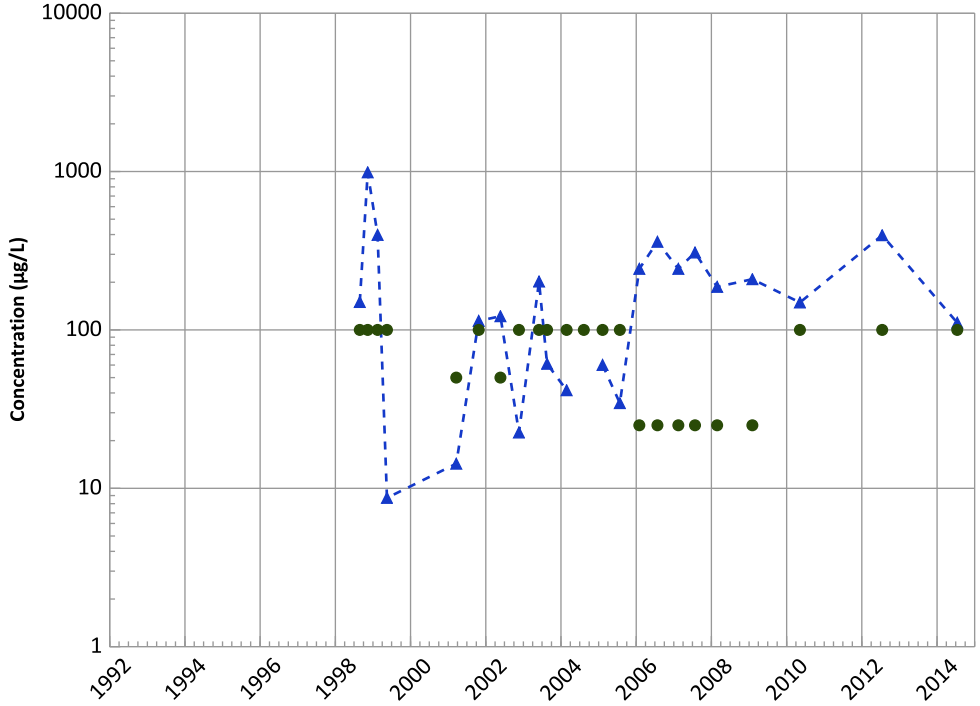


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

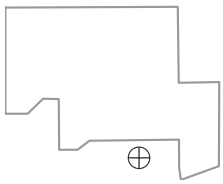
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

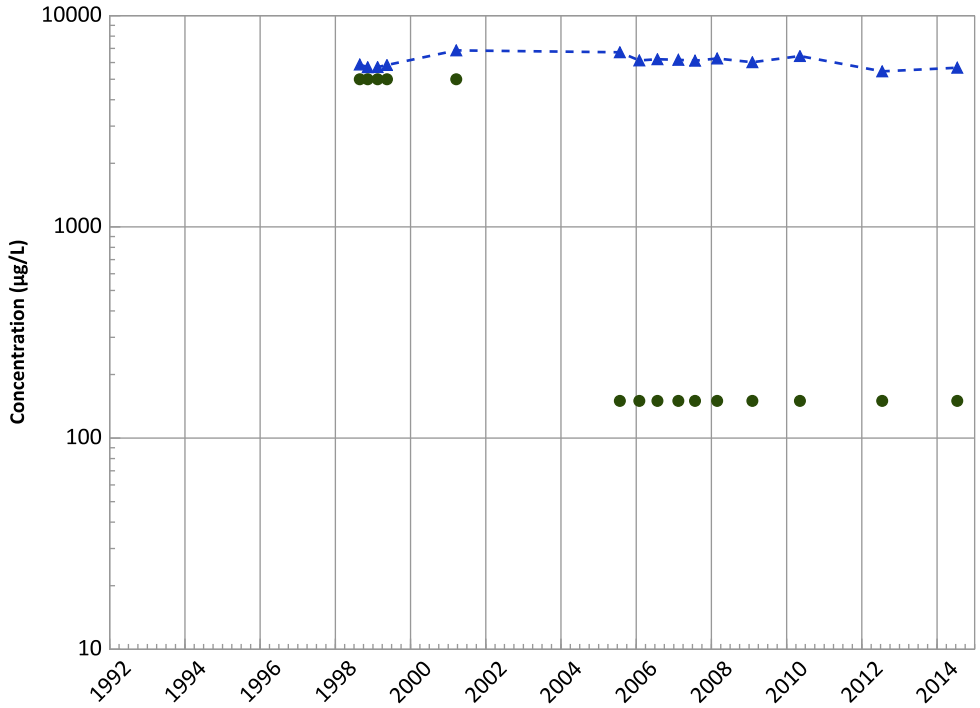
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

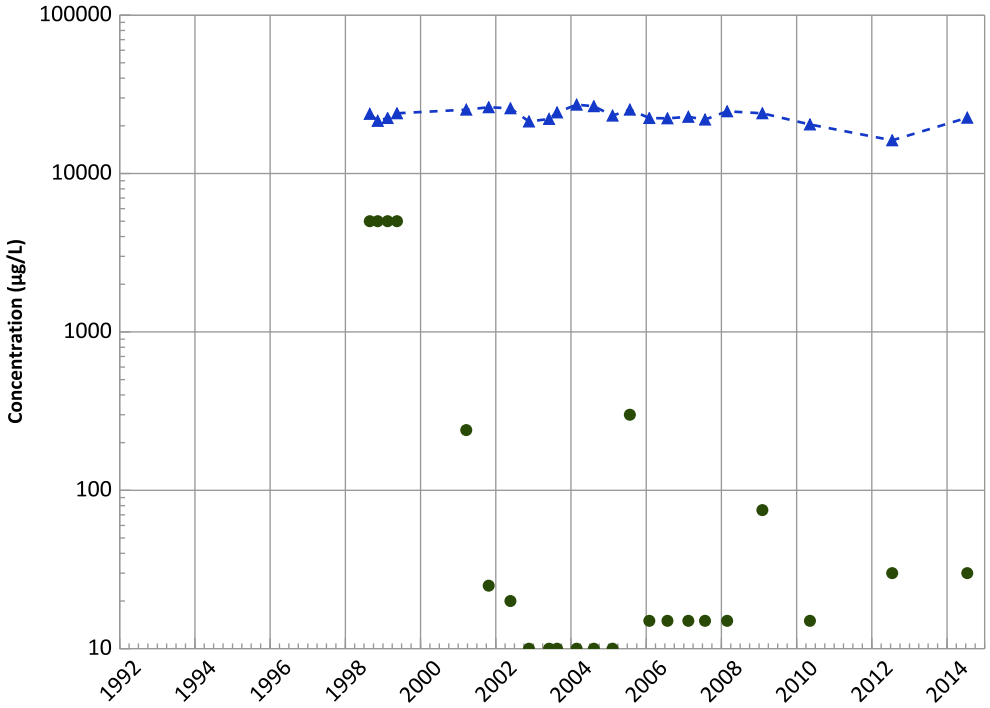


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

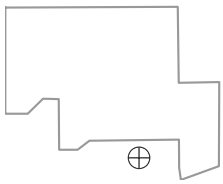
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

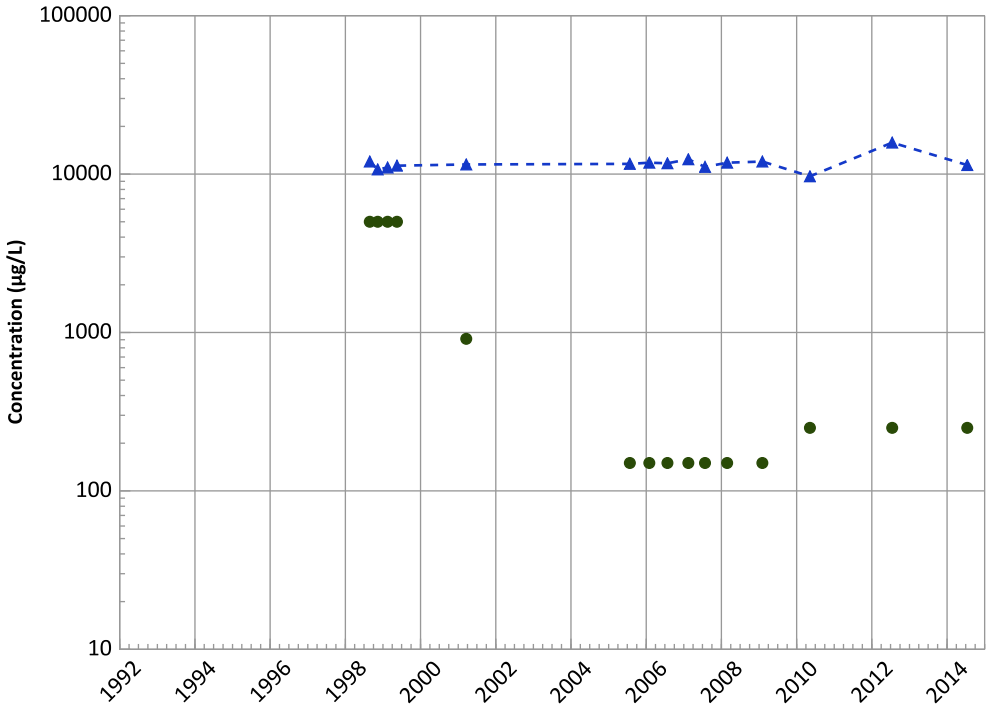
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1036 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

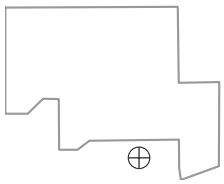
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

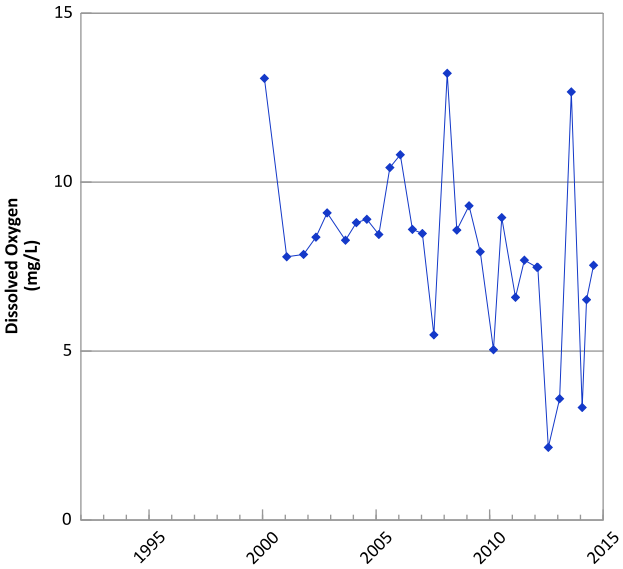
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/1998 to 07/16/2014
Analysis Date: 03/19/2015

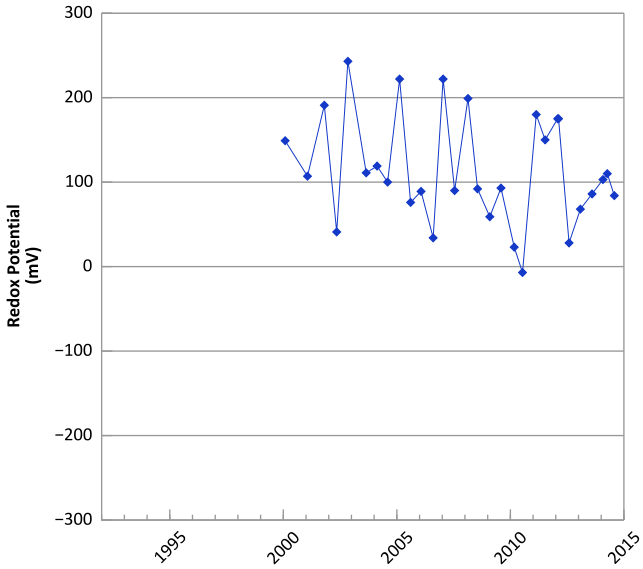
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

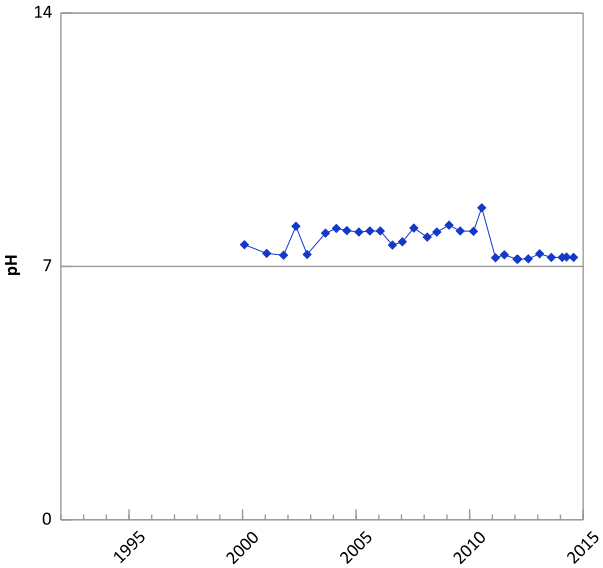
Well Location

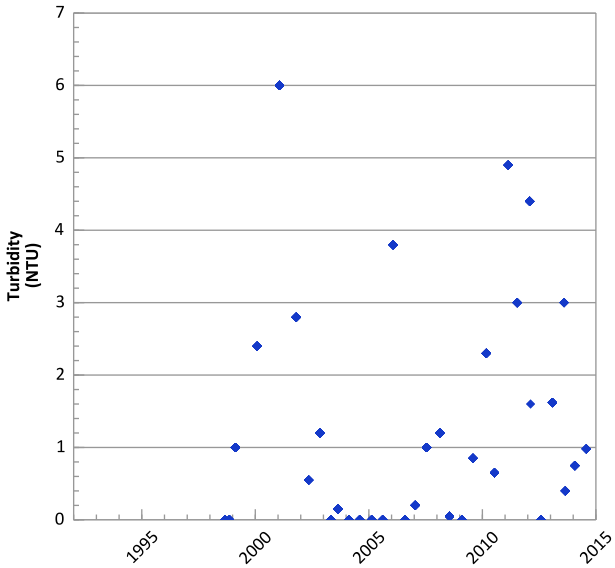


PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



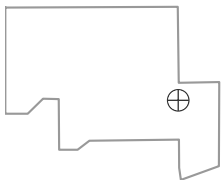






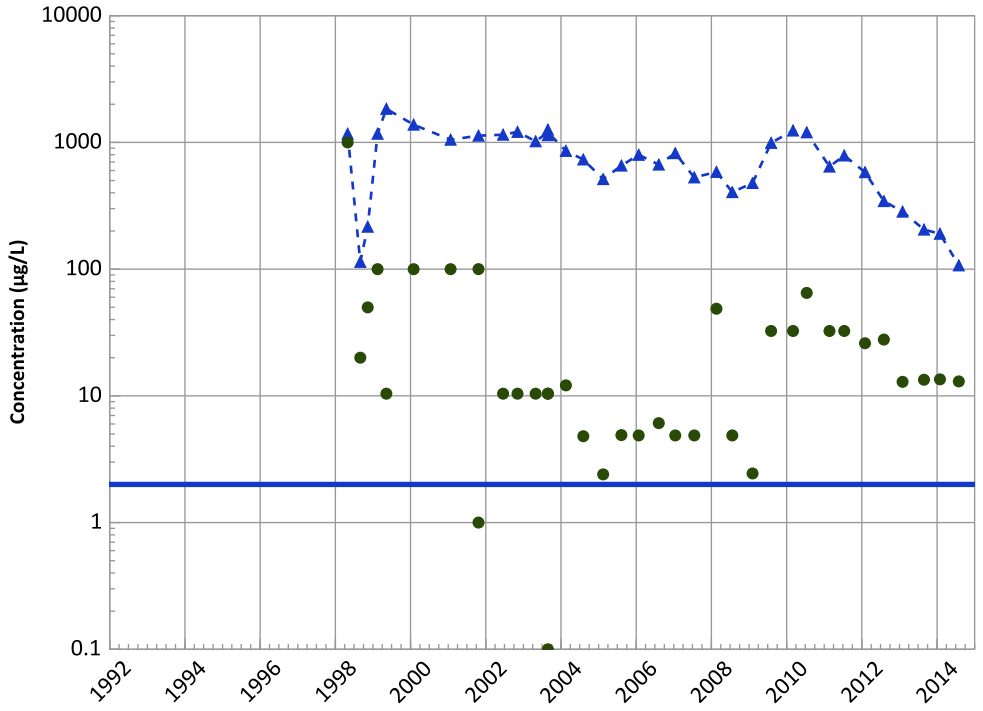
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

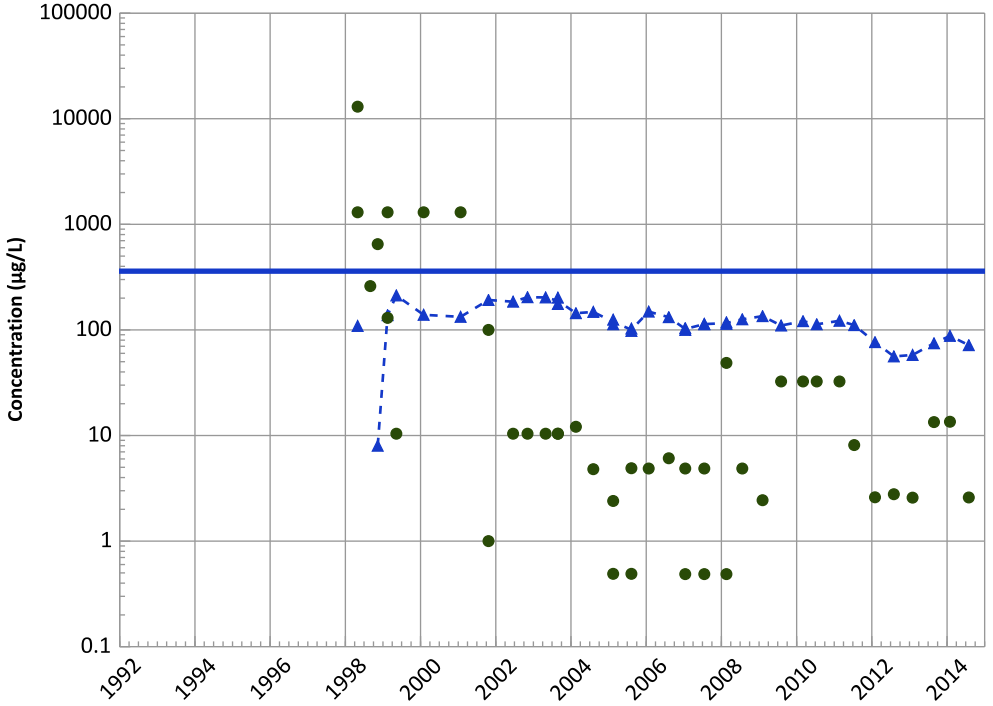


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

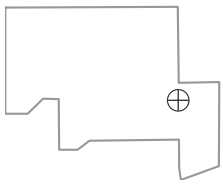
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

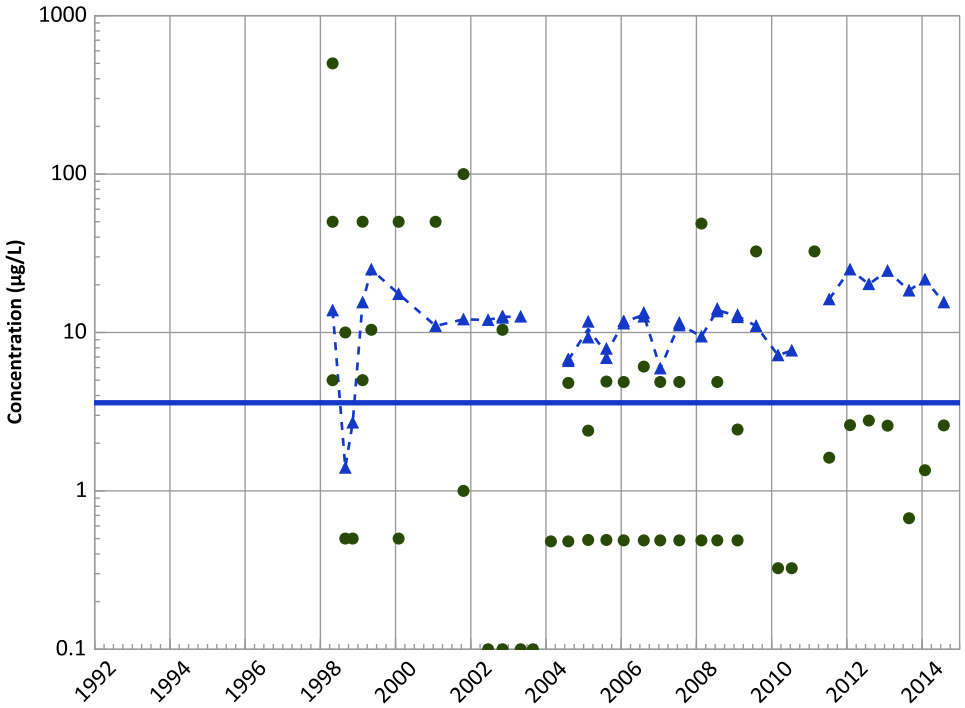
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

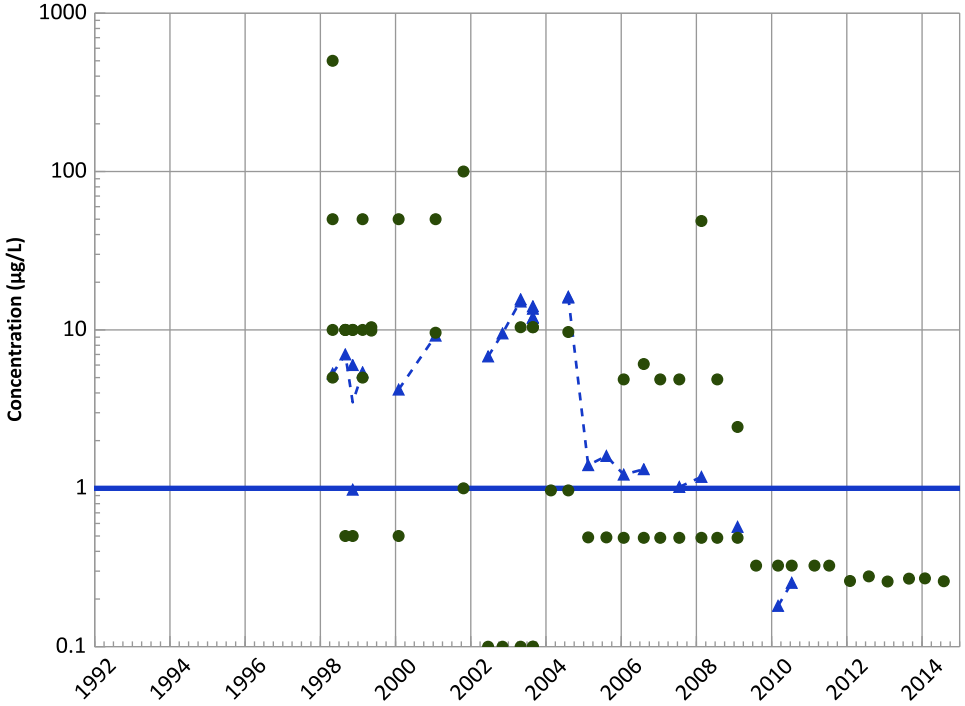


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

2,4-Dinitrotoluene Trend



Concentration Trend

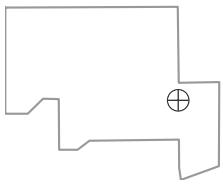
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

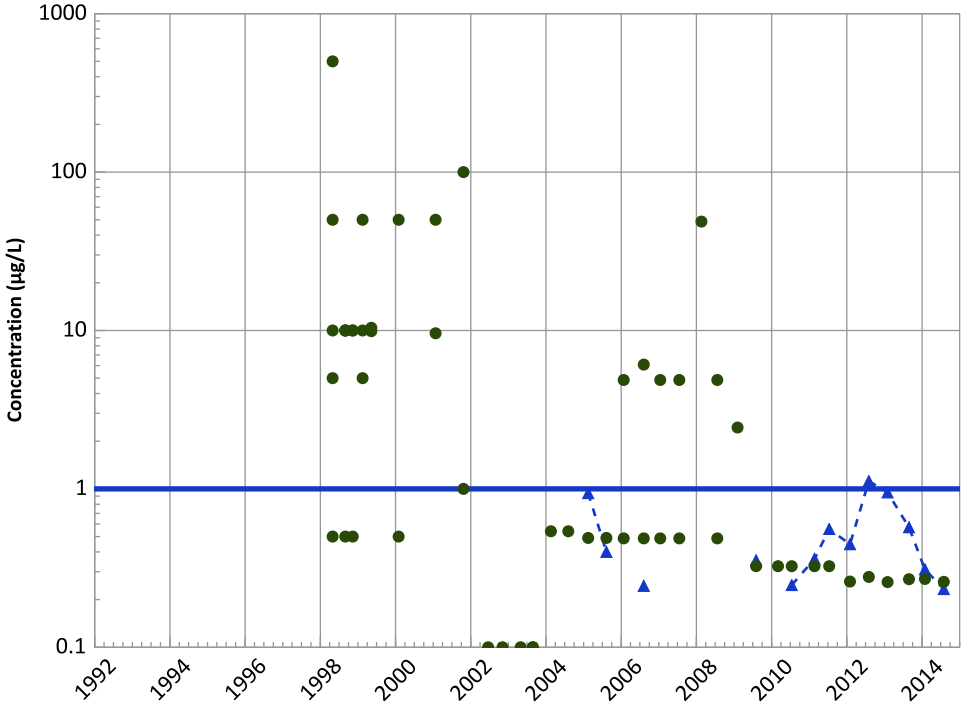
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

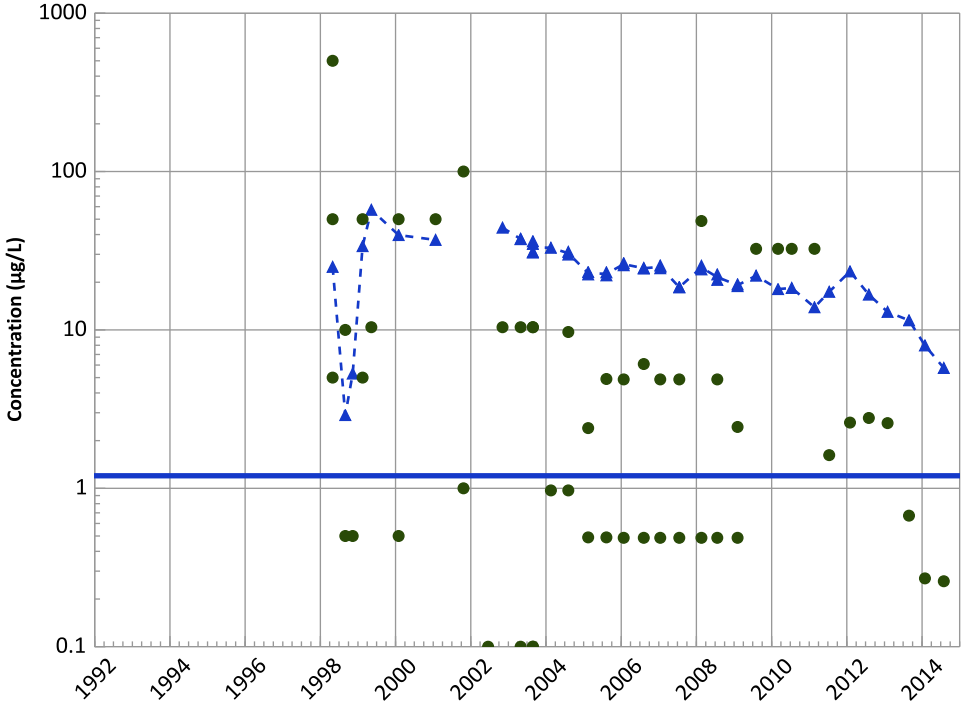


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

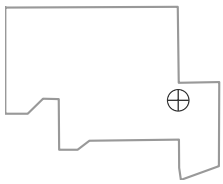
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

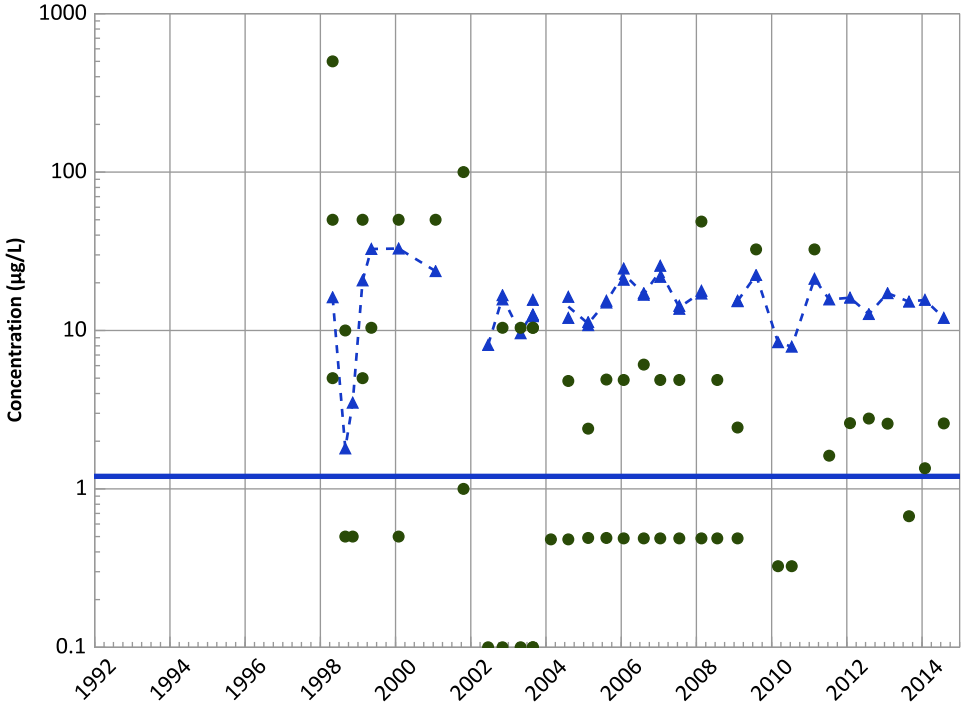
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

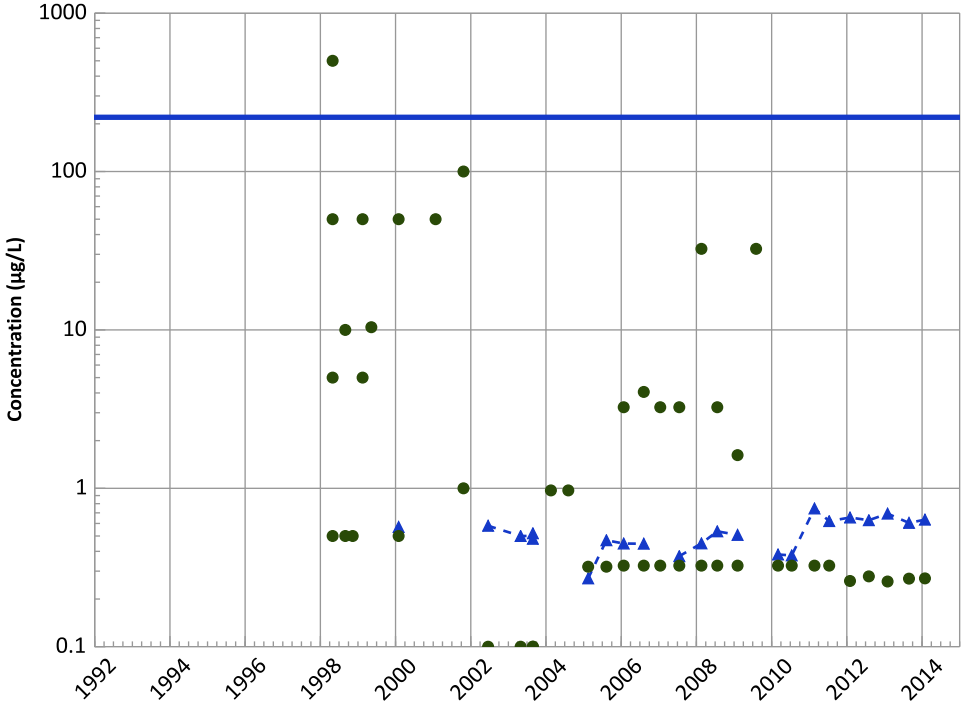


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

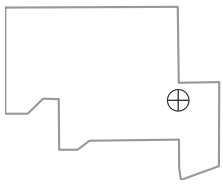
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

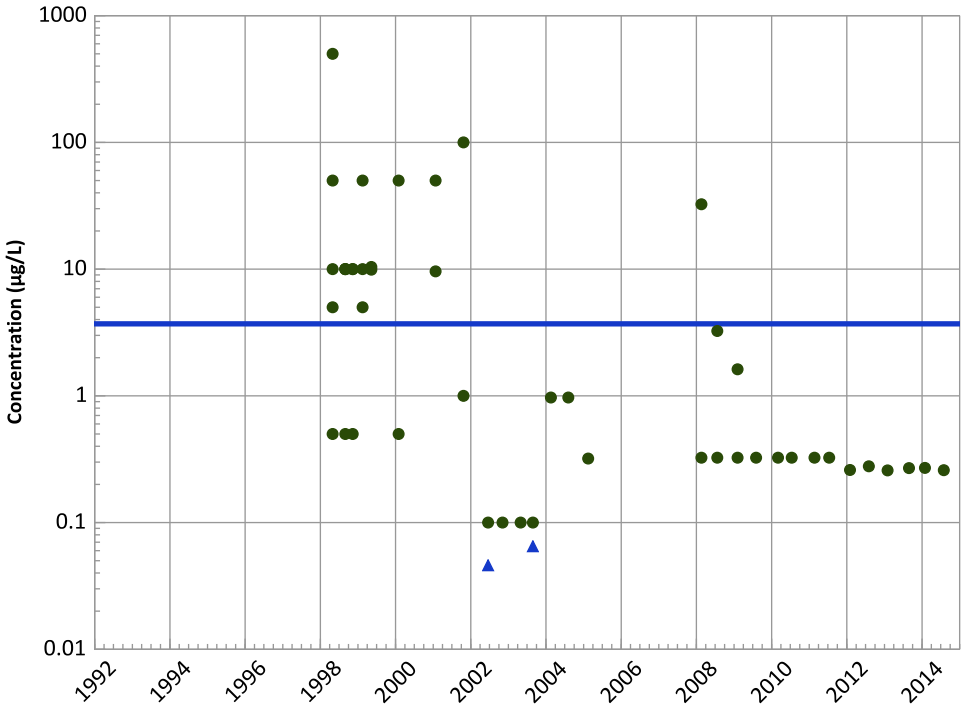
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

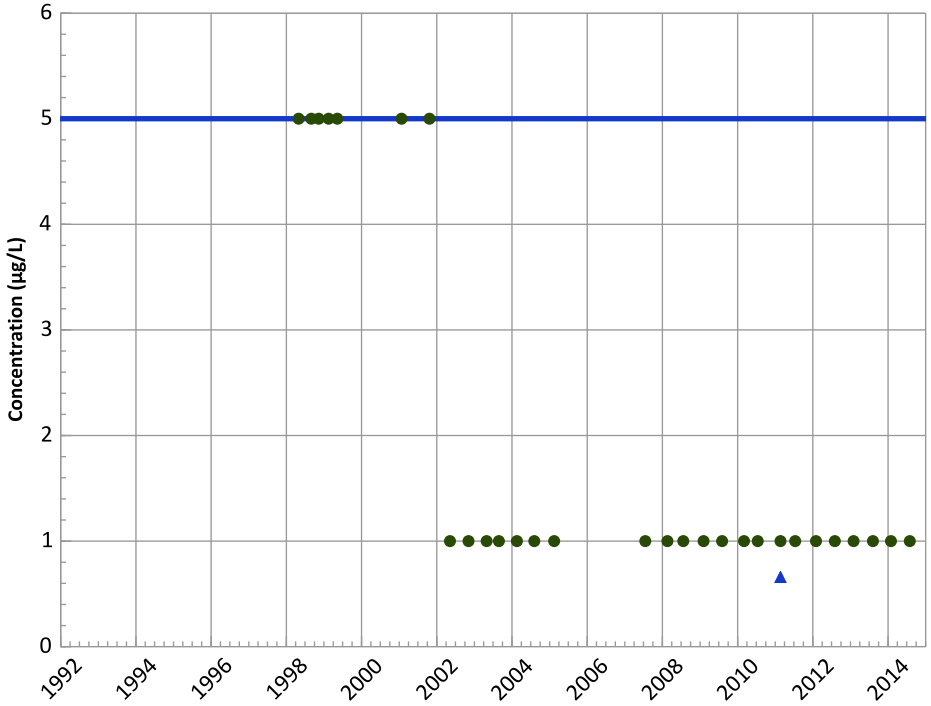


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

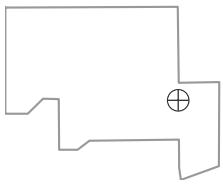
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

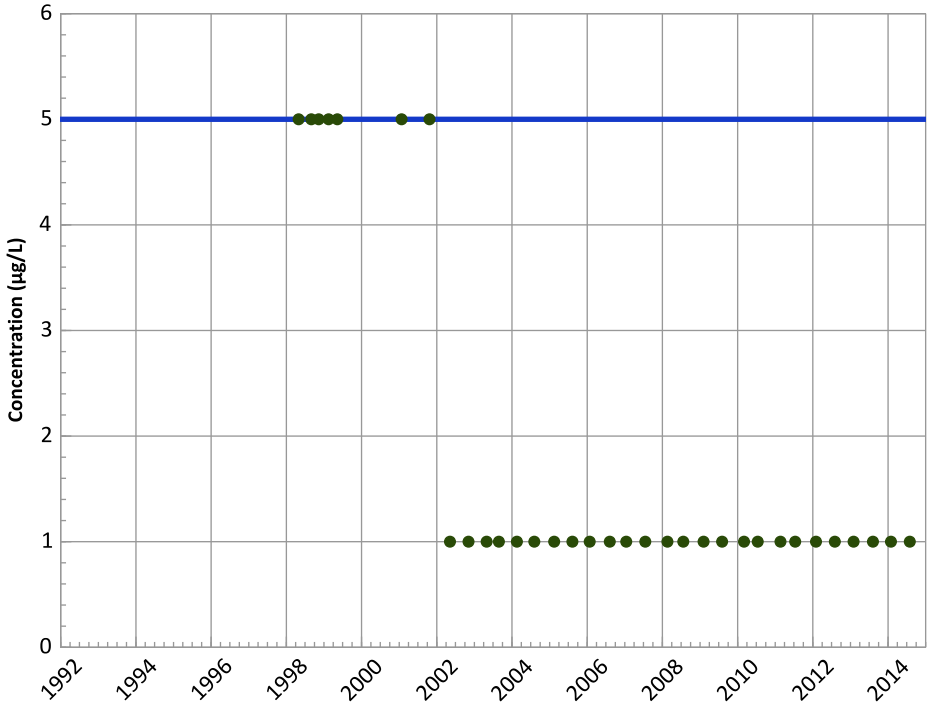
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

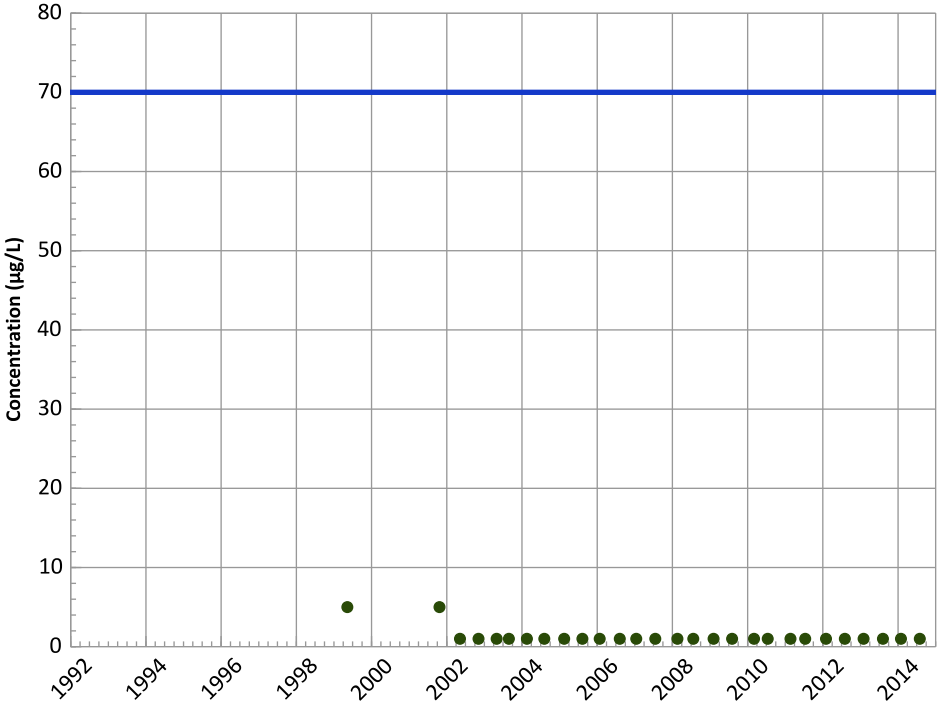


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

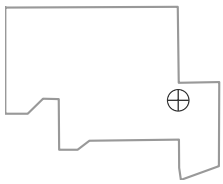
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

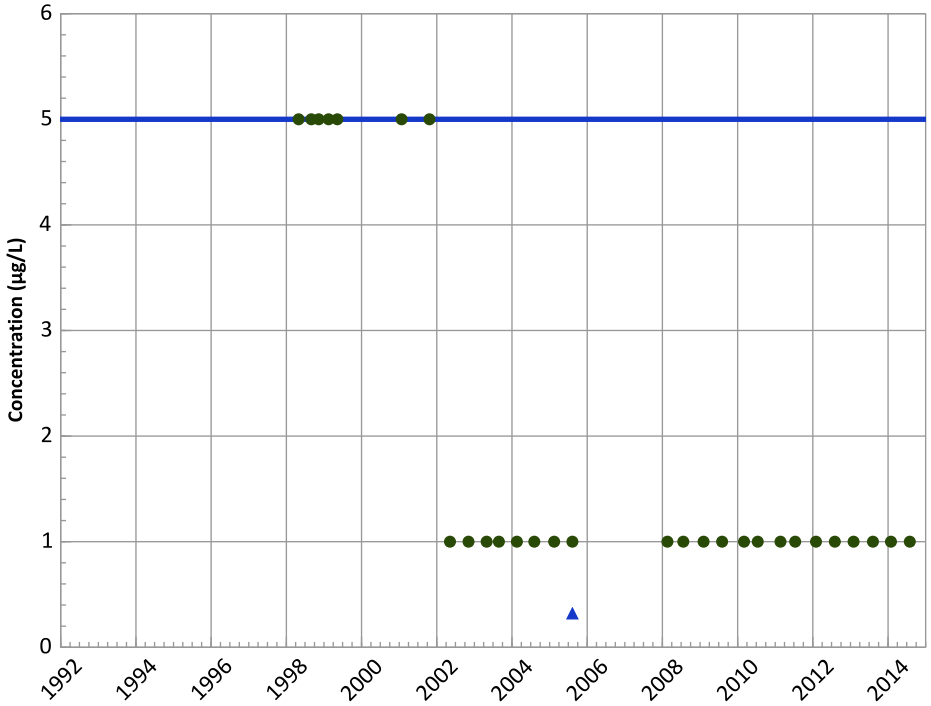
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

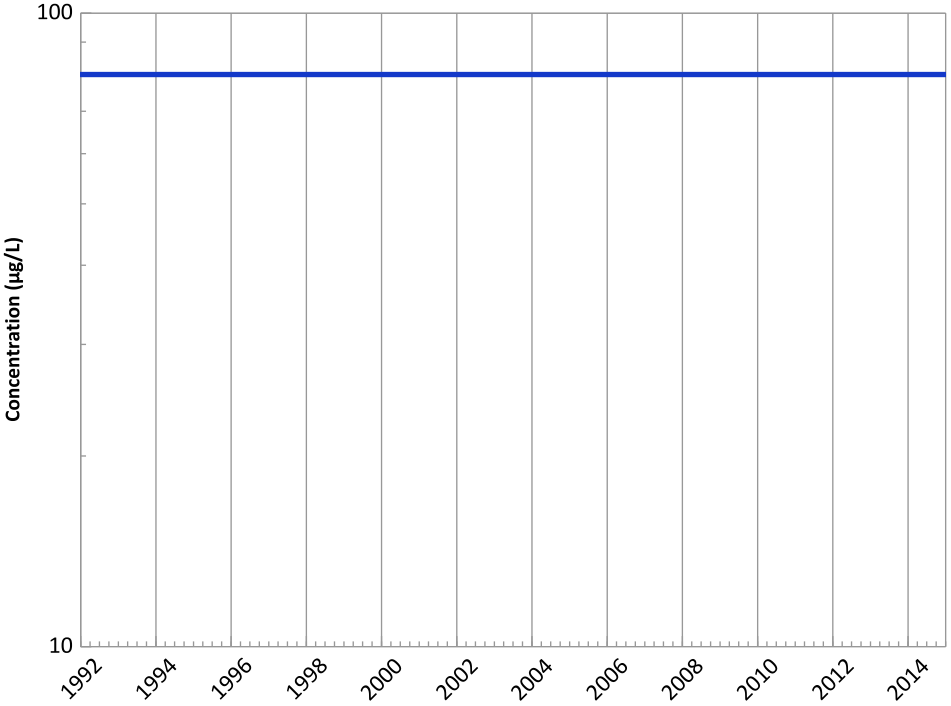


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Chloroform Trend



Concentration Trend

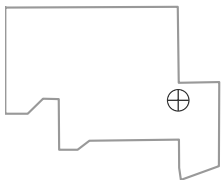
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

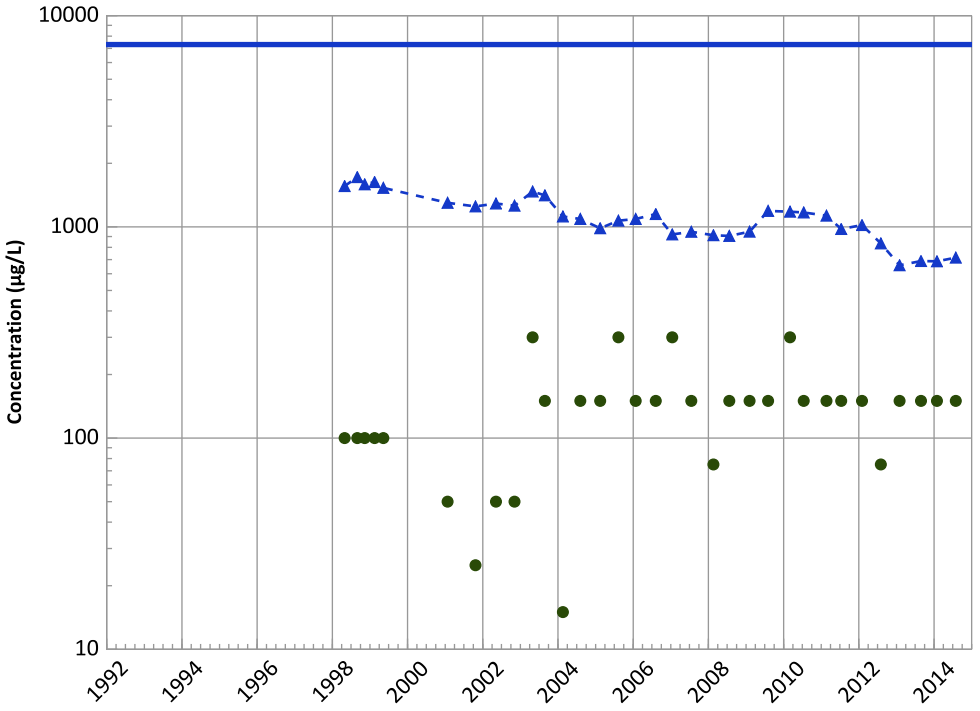
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

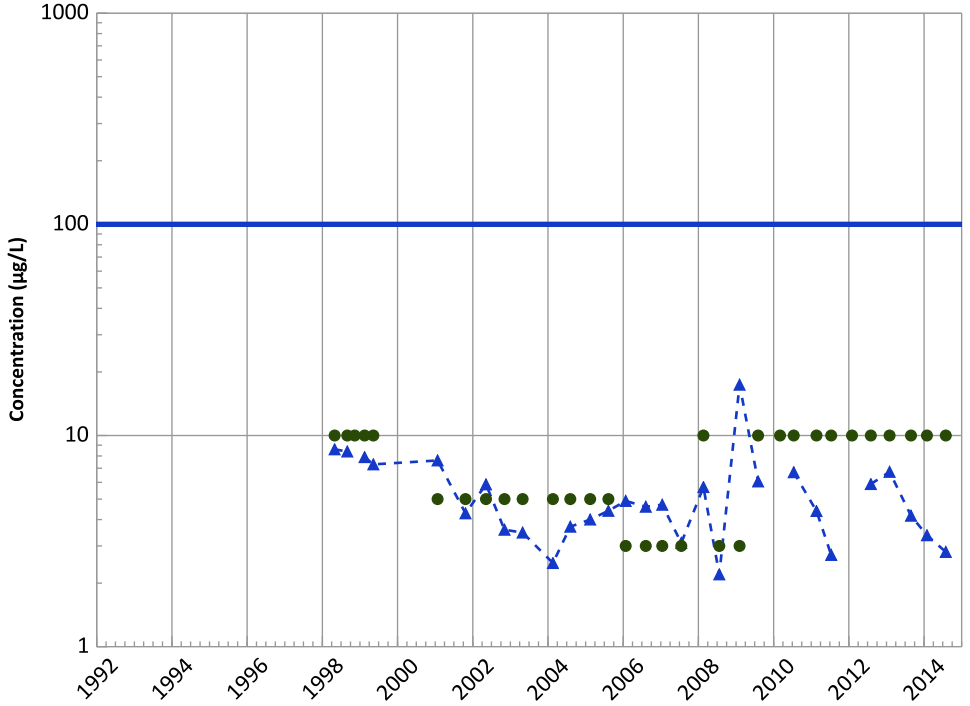


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

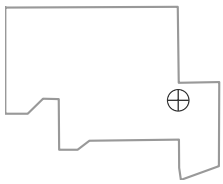
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

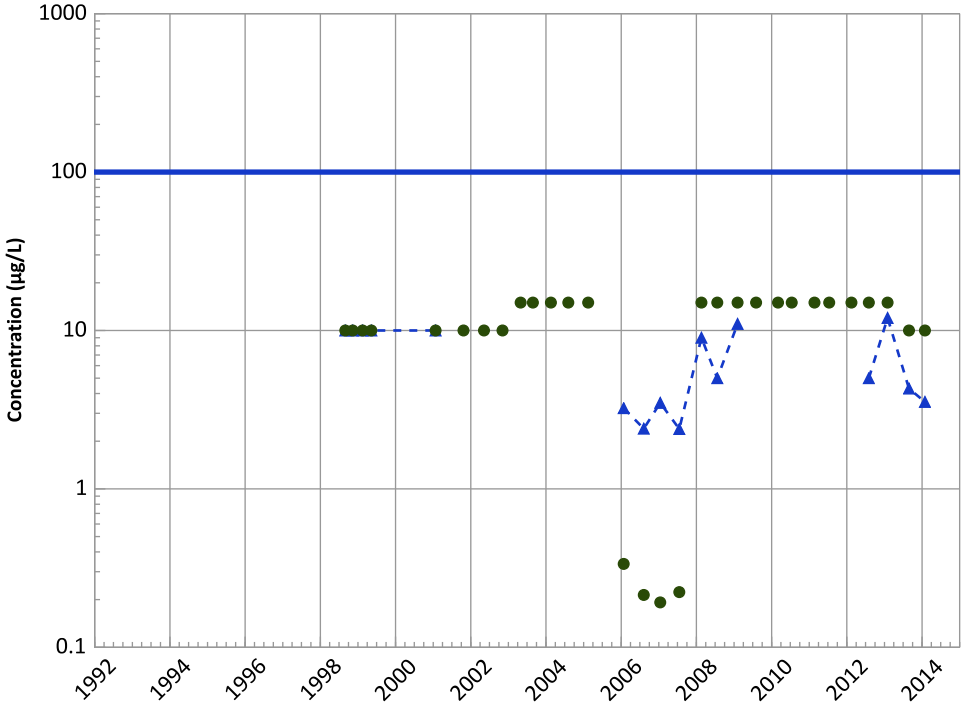
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

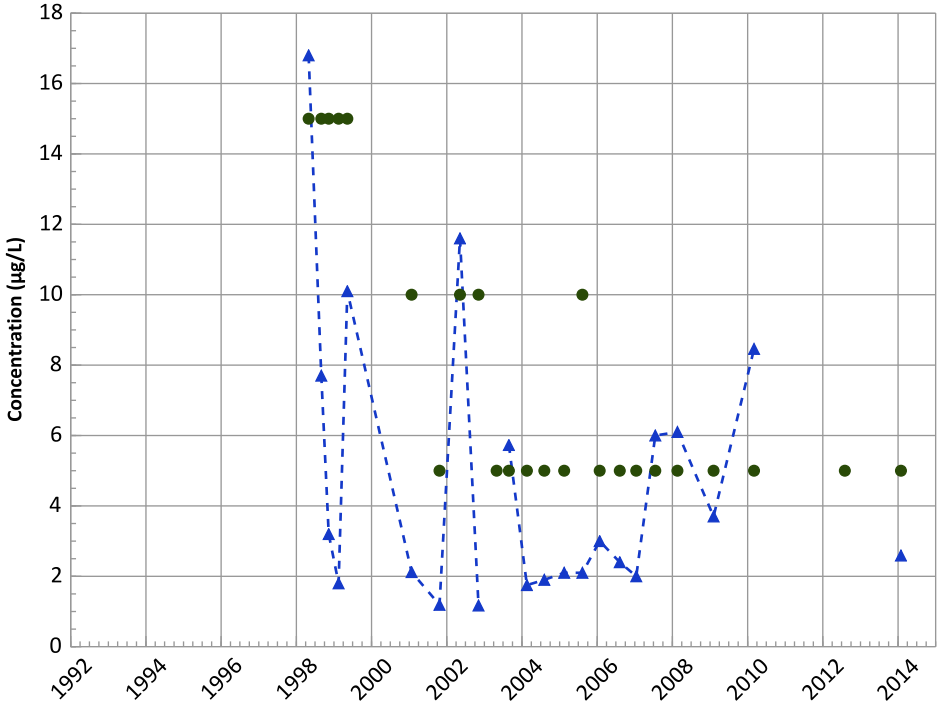


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Decreasing

Manganese Trend



Concentration Trend

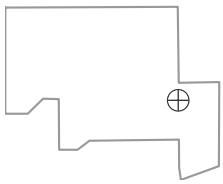
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

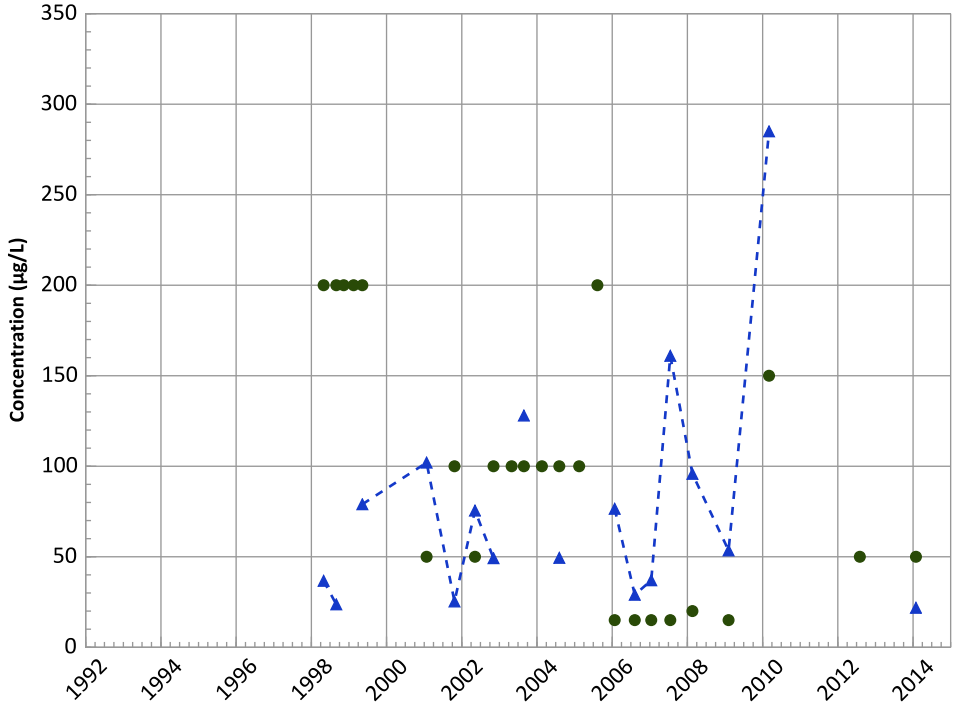
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

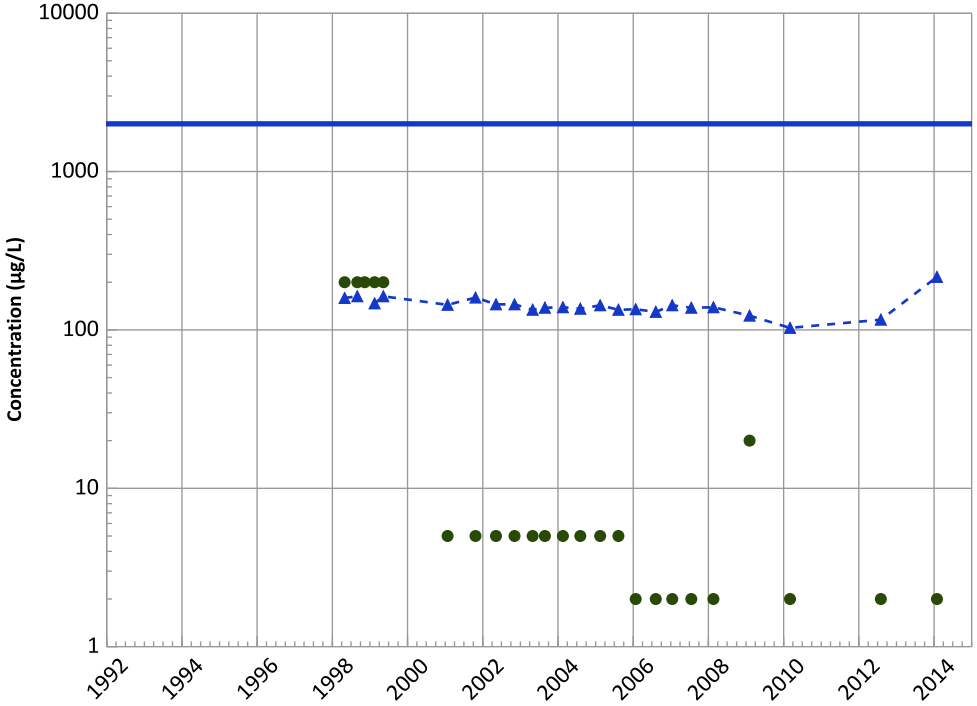


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

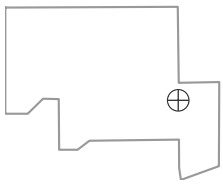
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

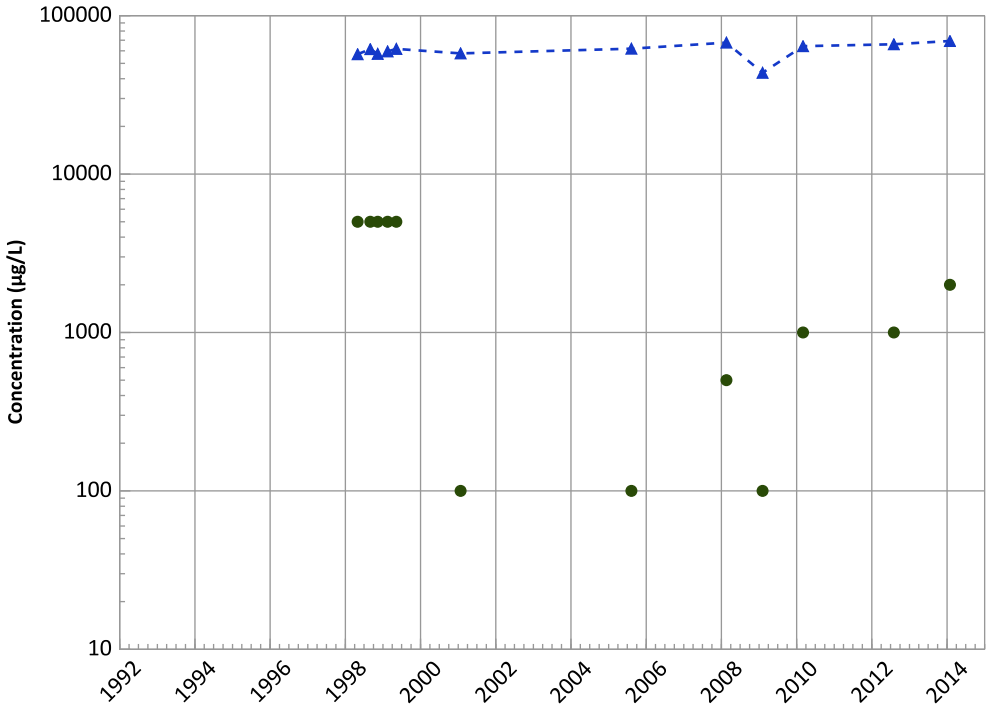
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

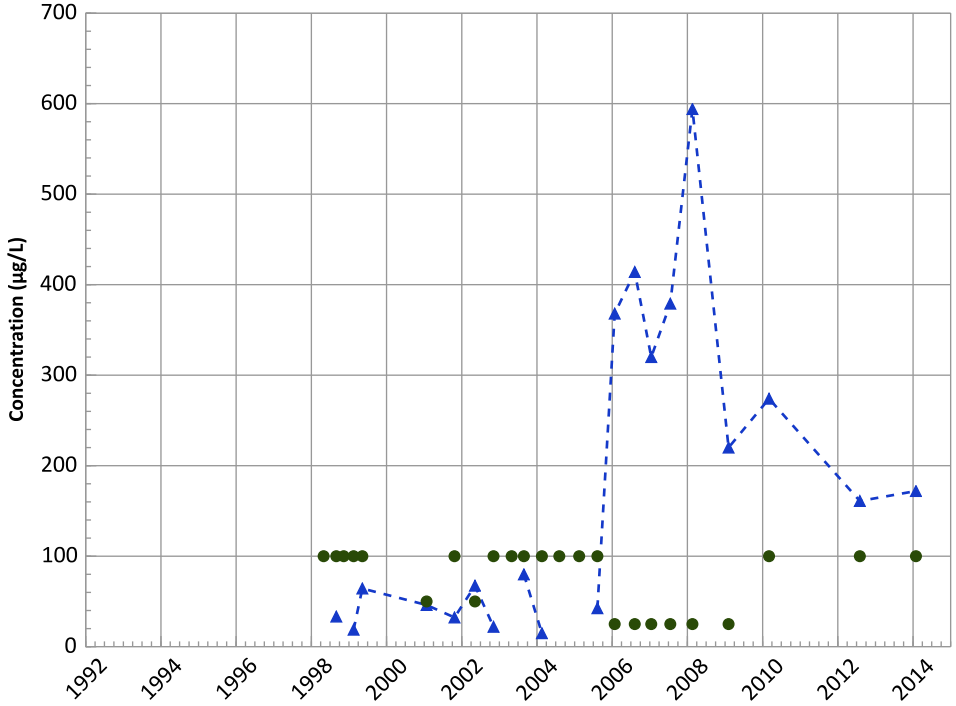


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

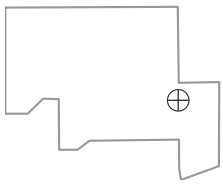
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

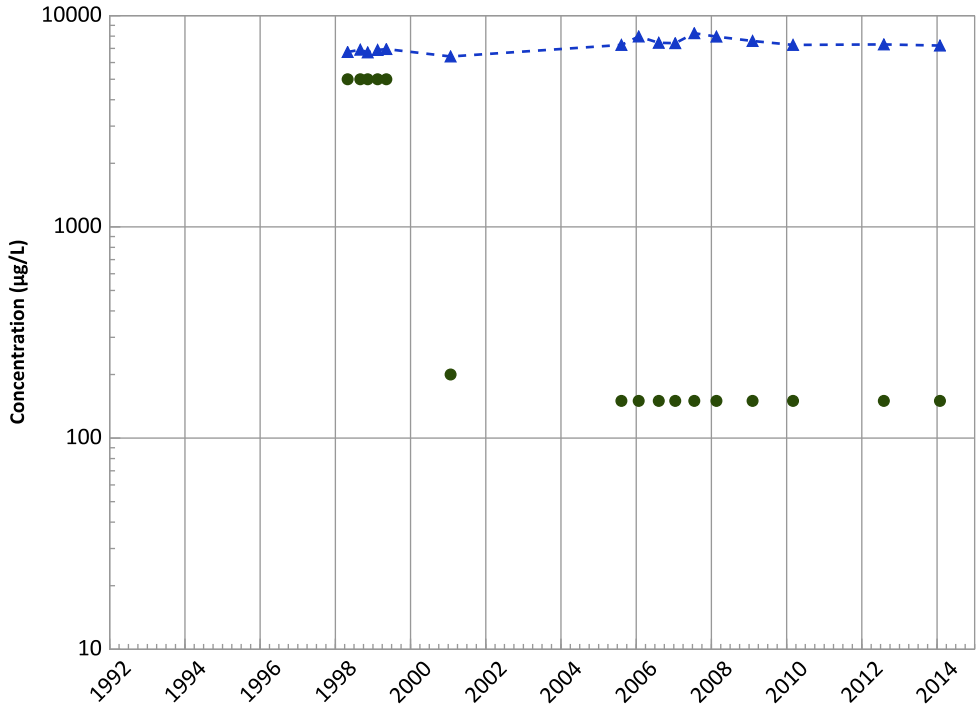
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

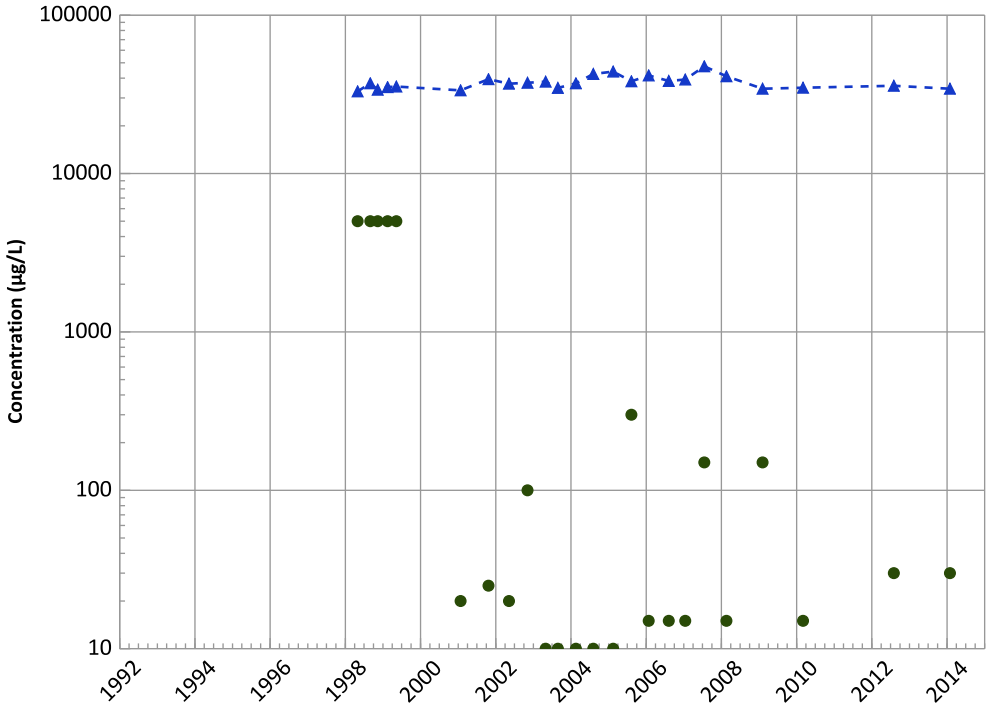


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

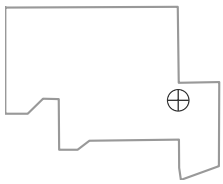
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

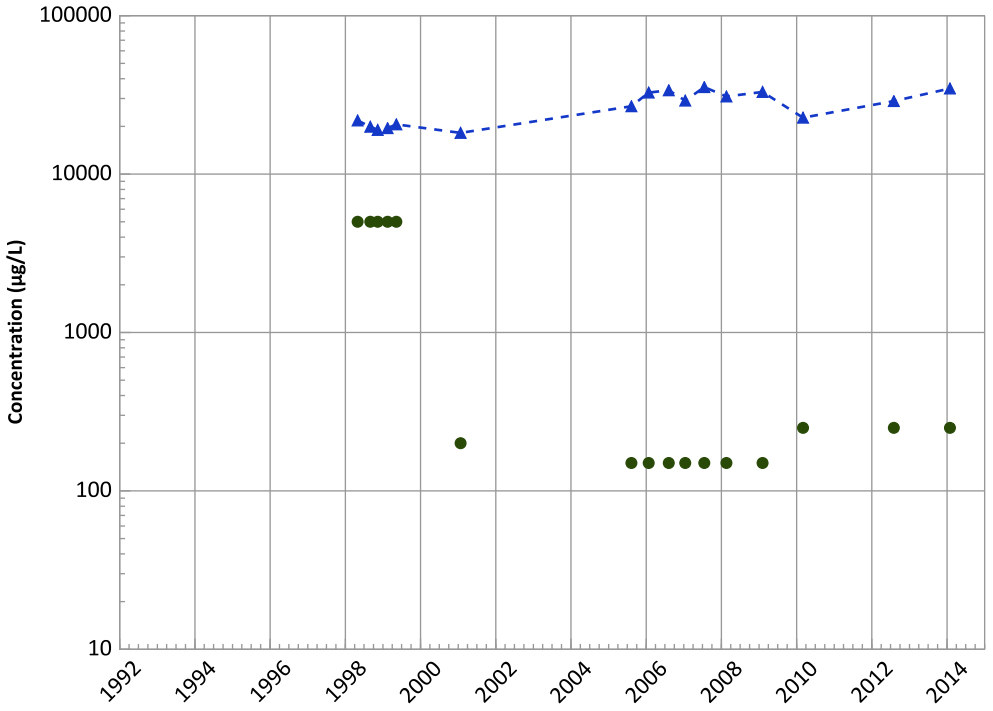
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1038 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

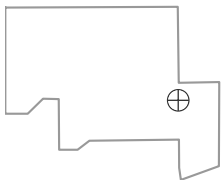
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

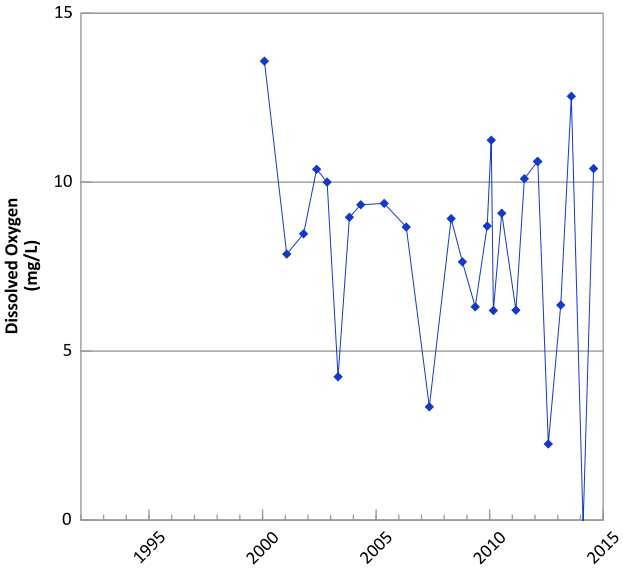
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

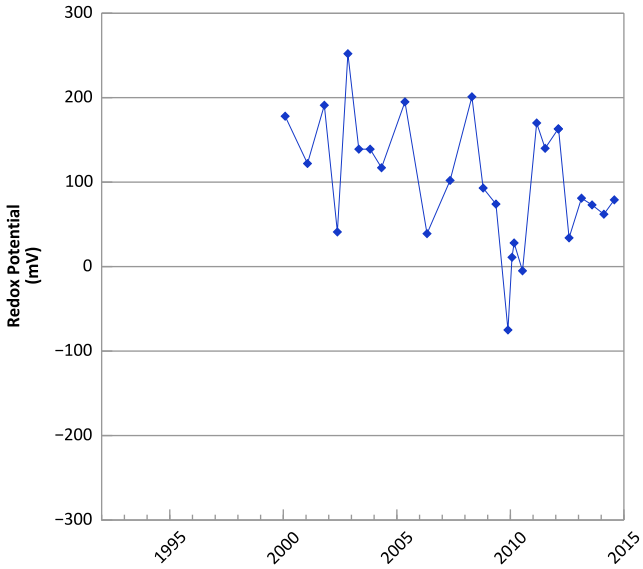
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

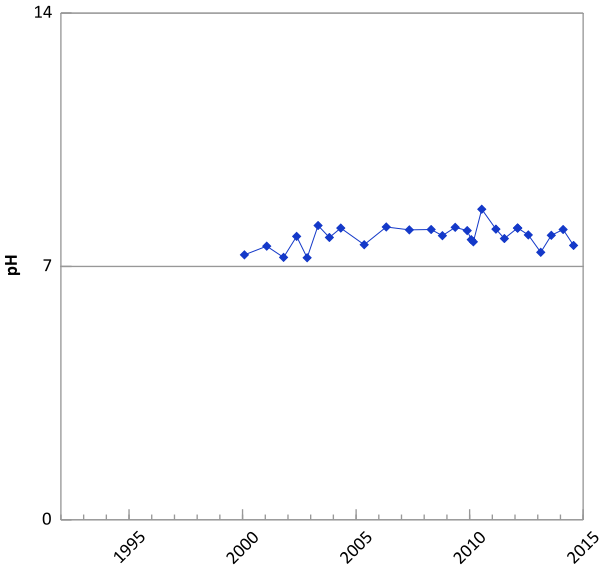
Well Location

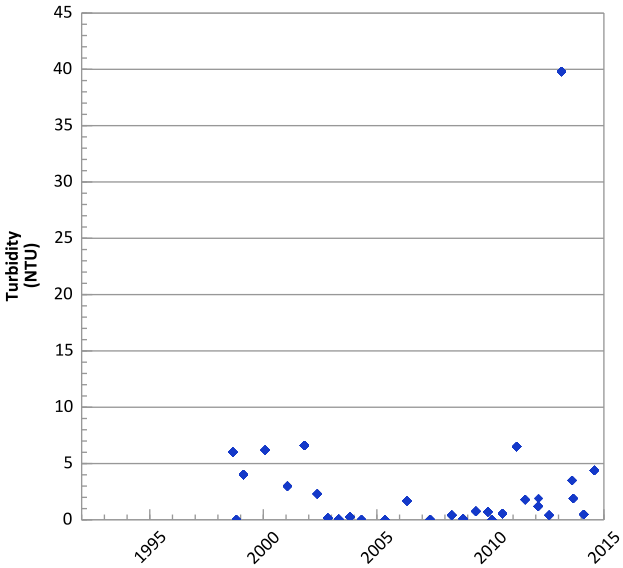


PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



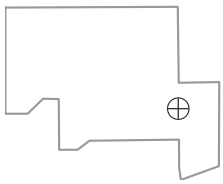






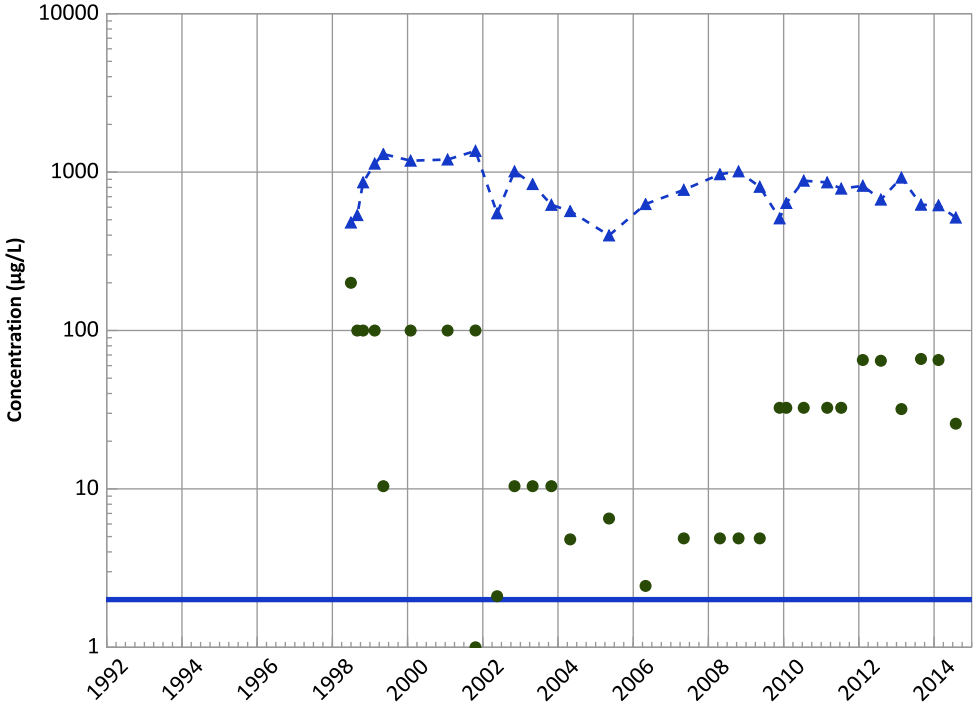
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

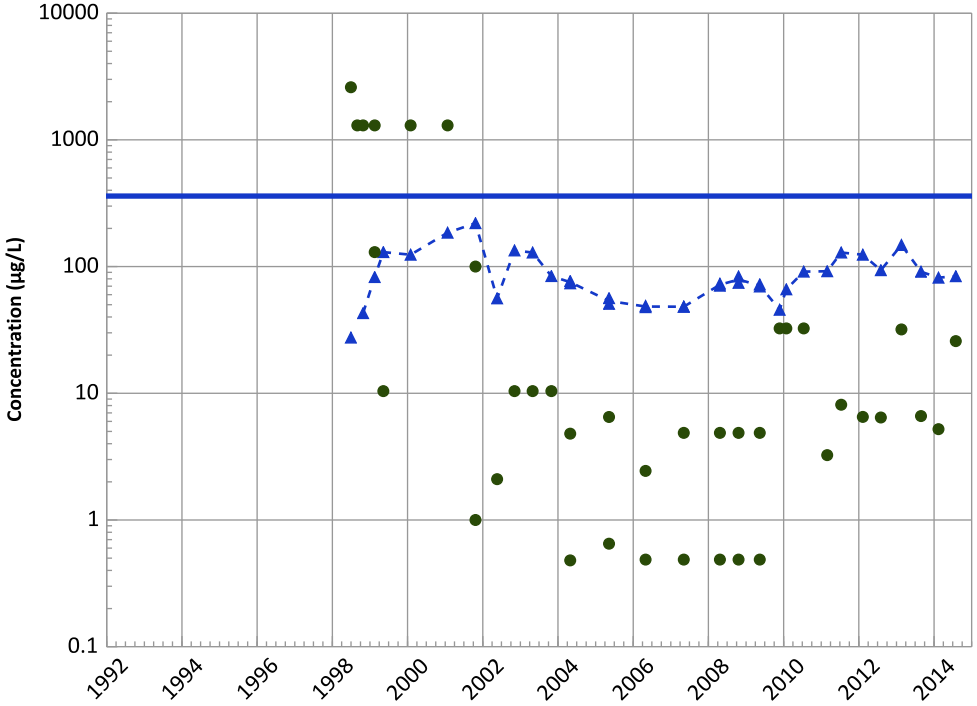


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

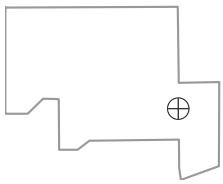
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

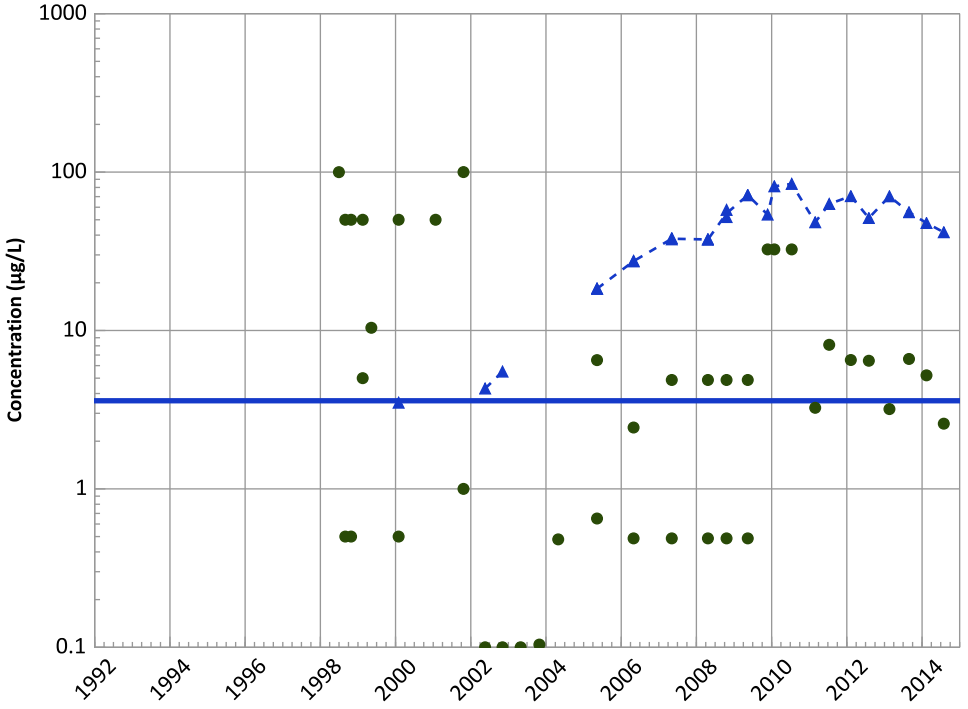
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

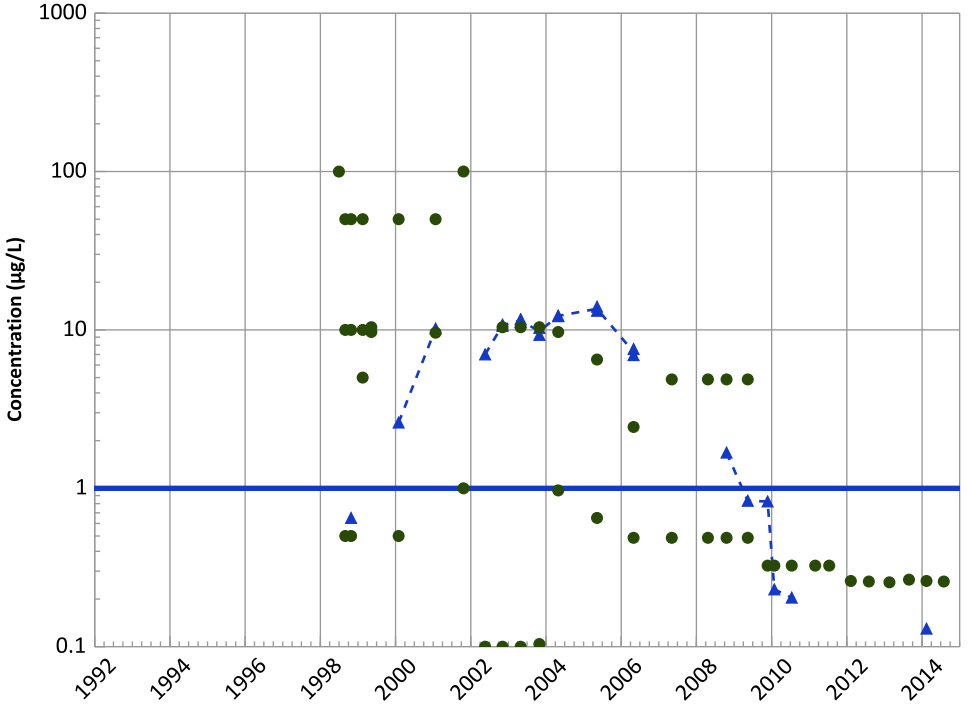


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

2,4-Dinitrotoluene Trend



Concentration Trend

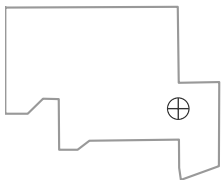
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

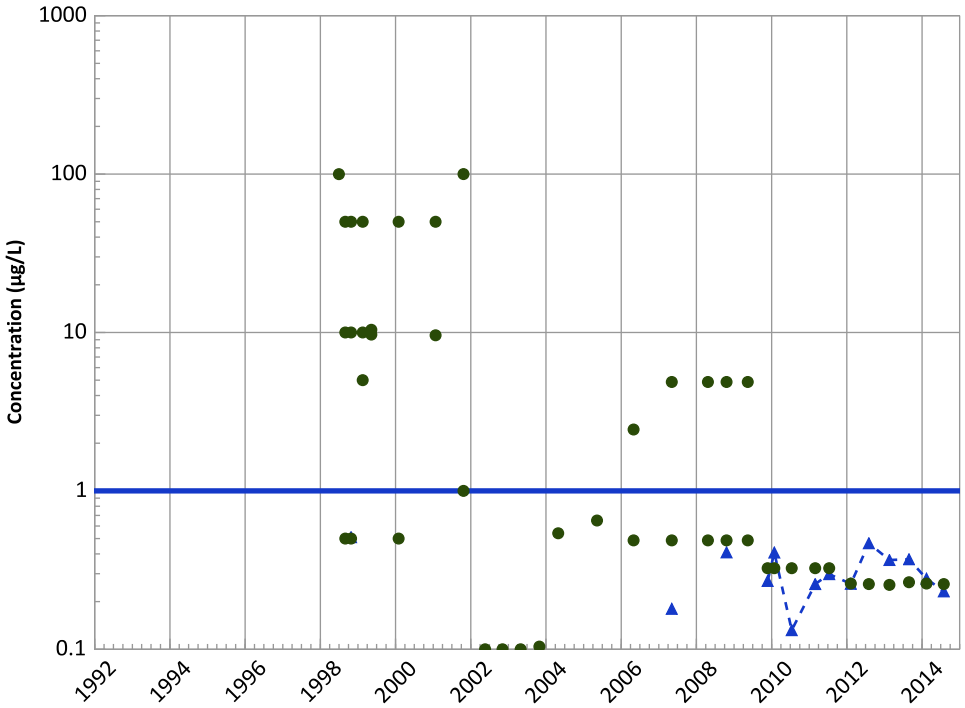
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

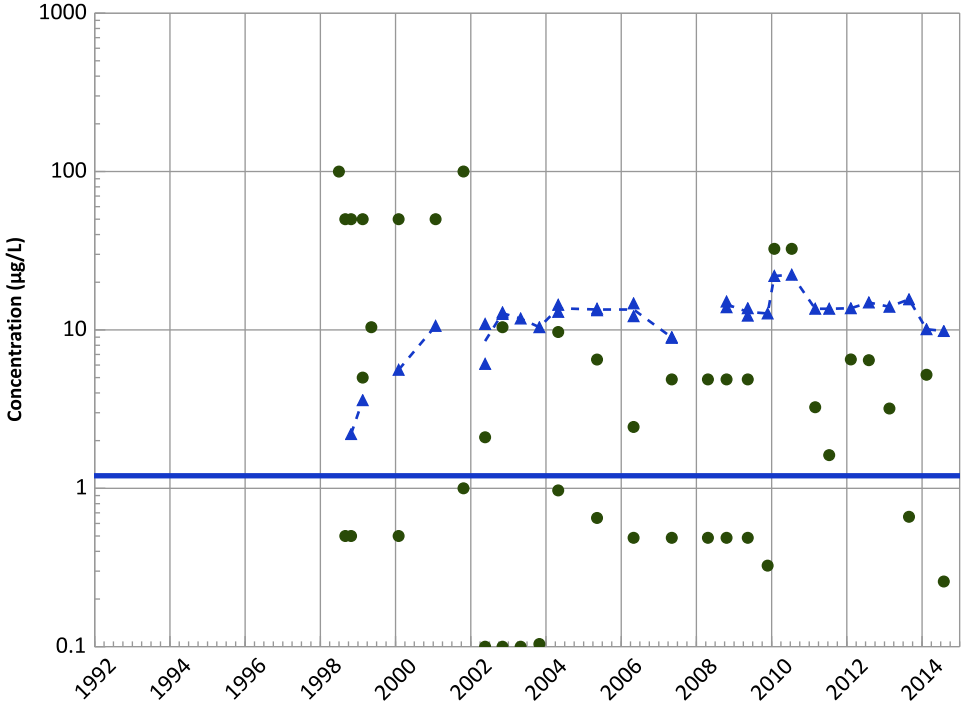


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

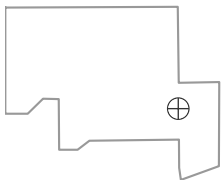
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

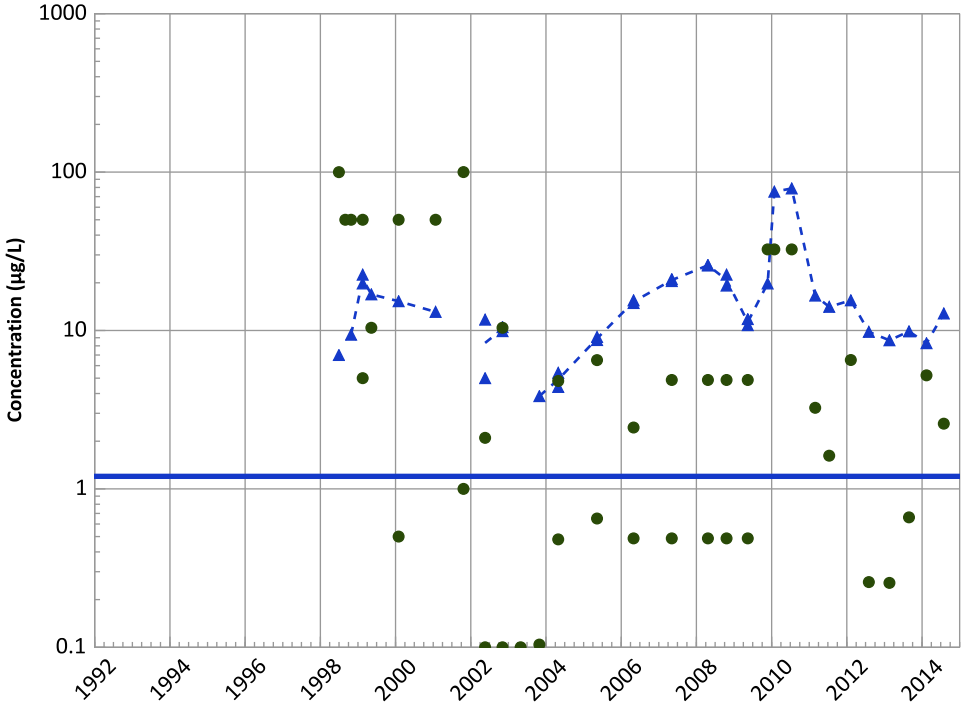
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

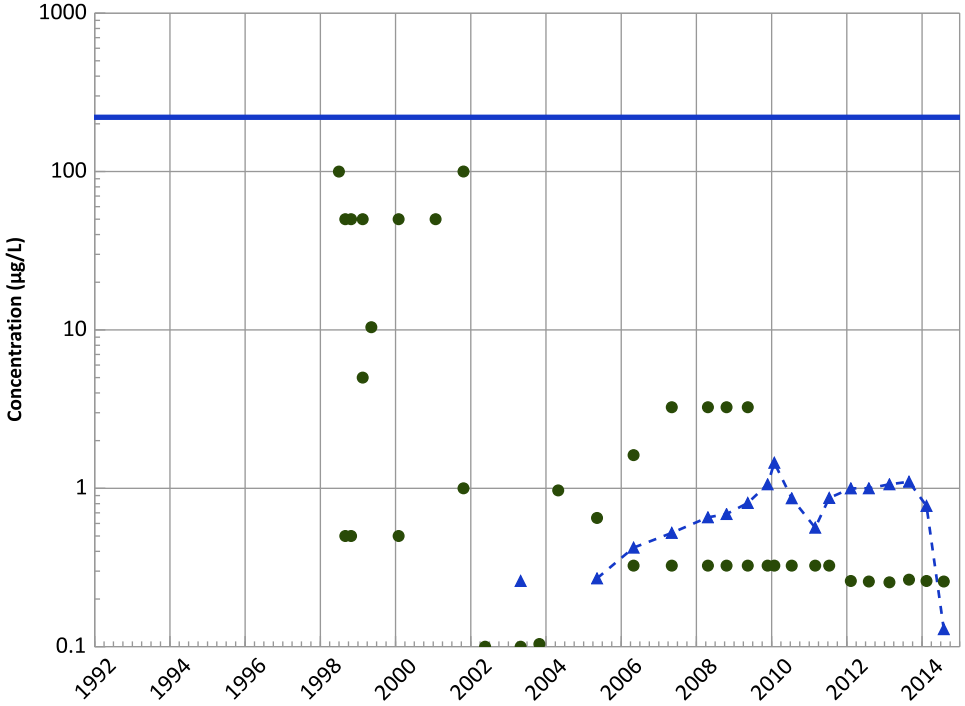


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

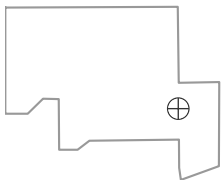
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

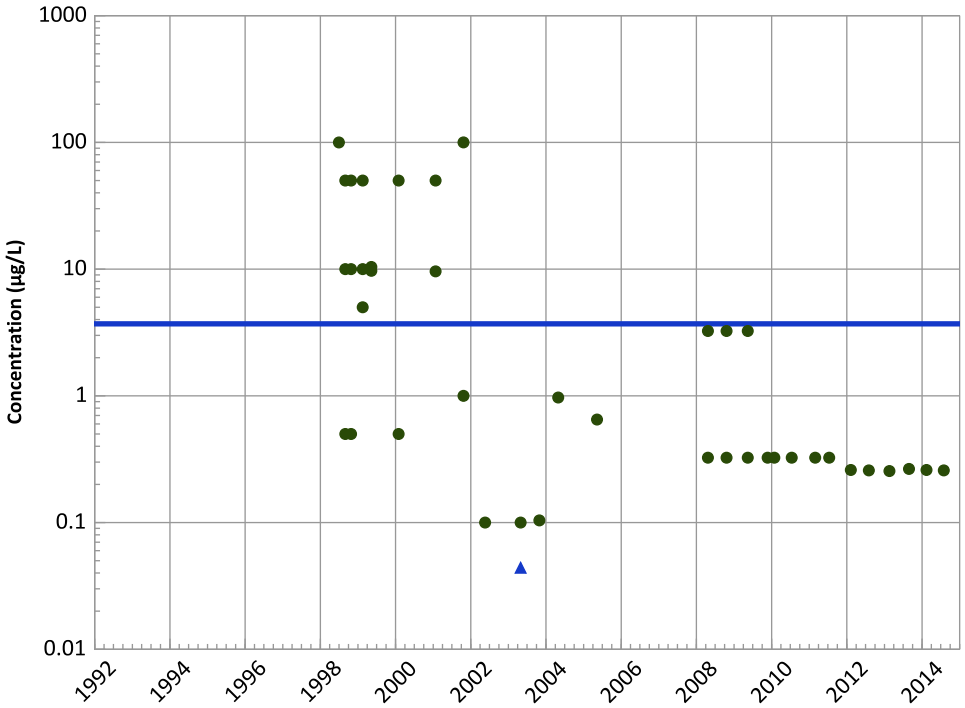
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

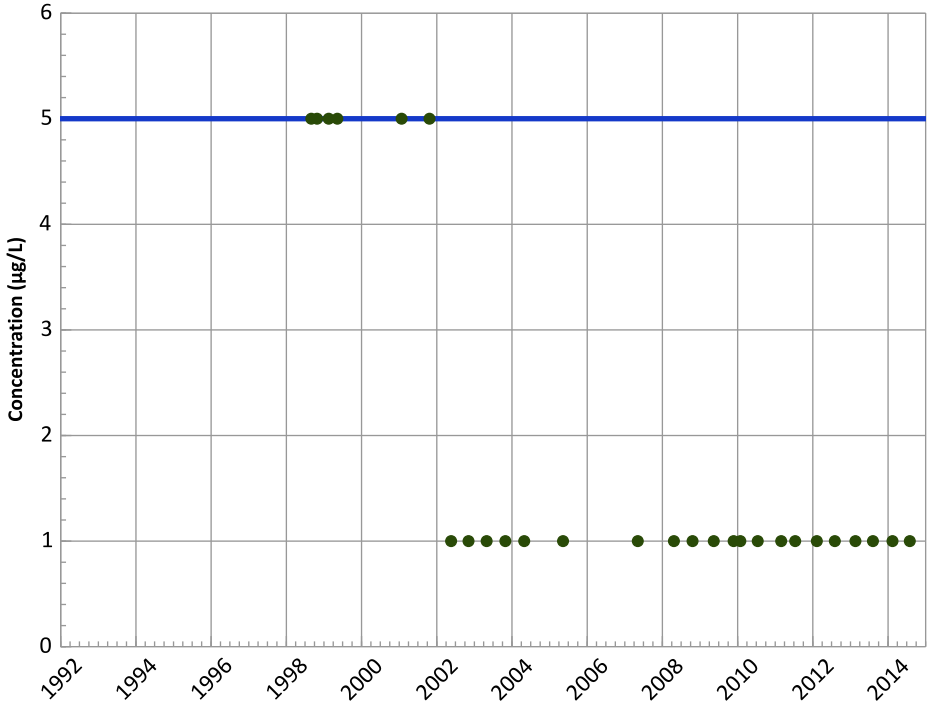


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

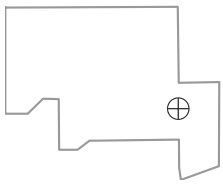
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

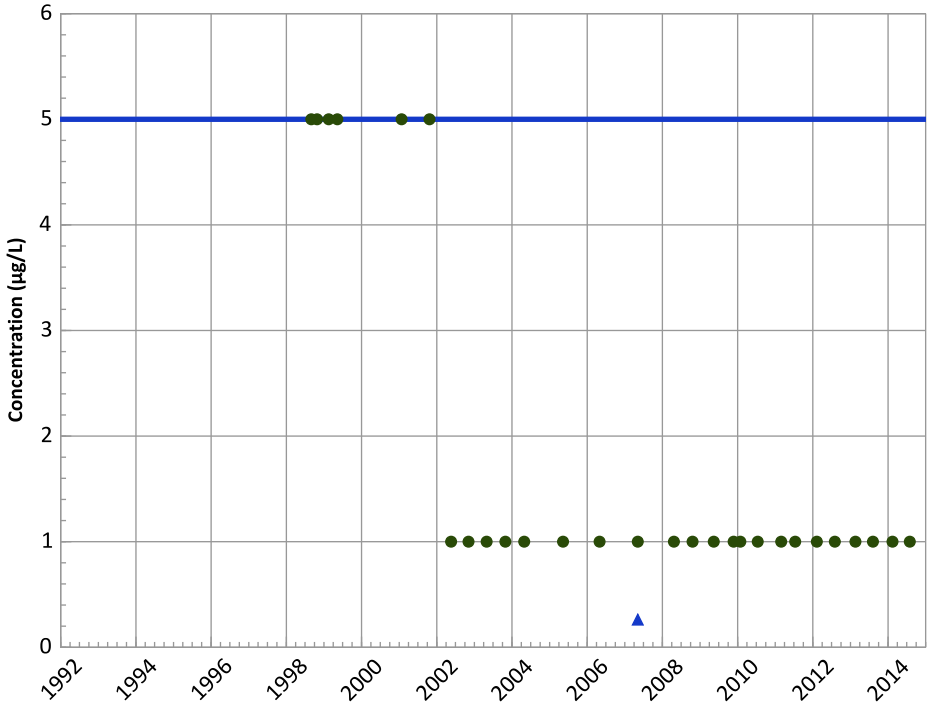
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

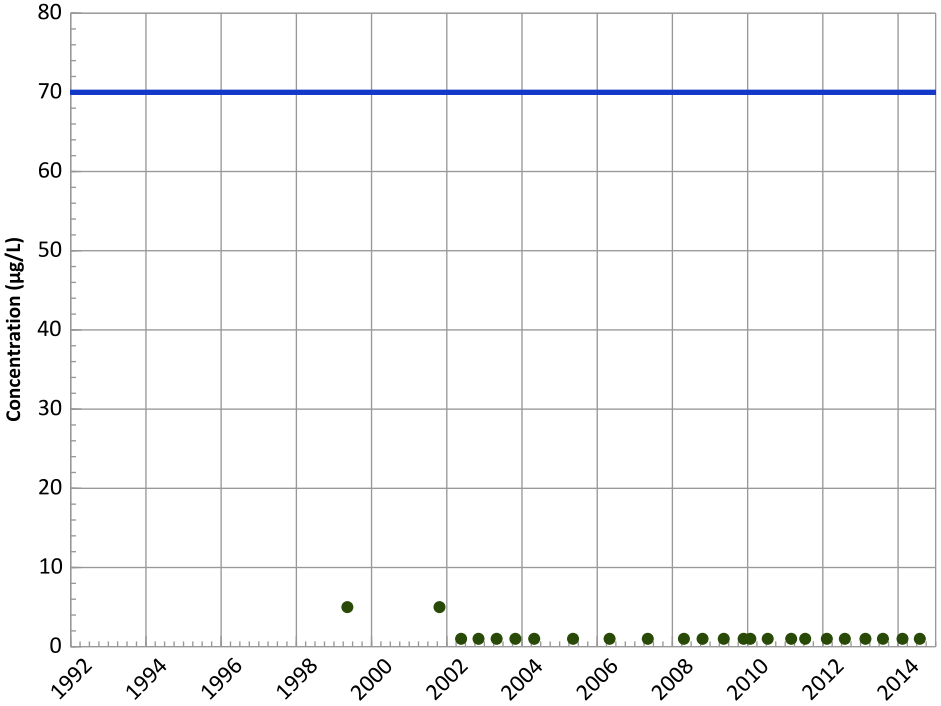


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

cis-1,2-Dichloroethene Trend



Concentration Trend

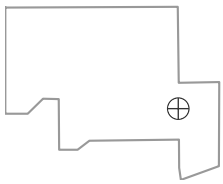
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

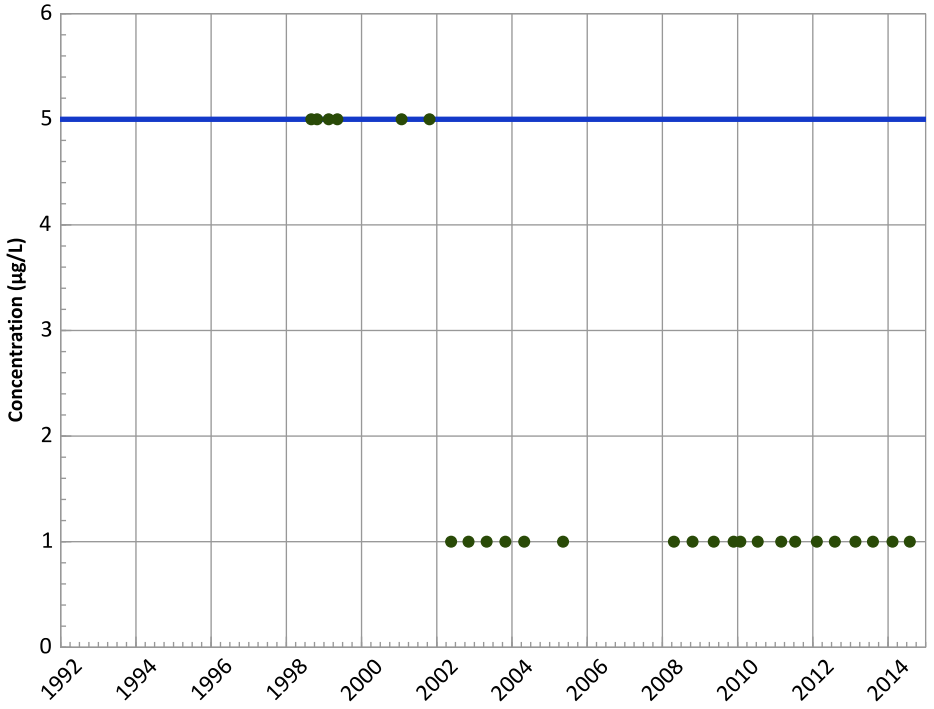
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

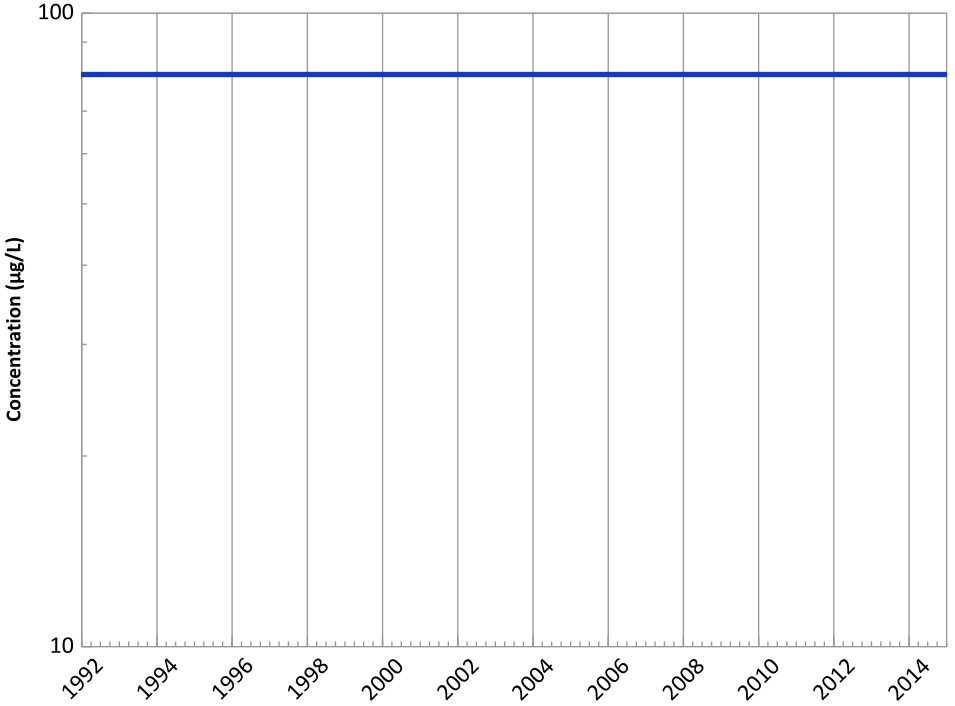


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

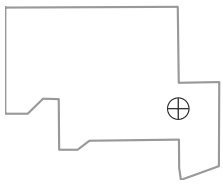
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

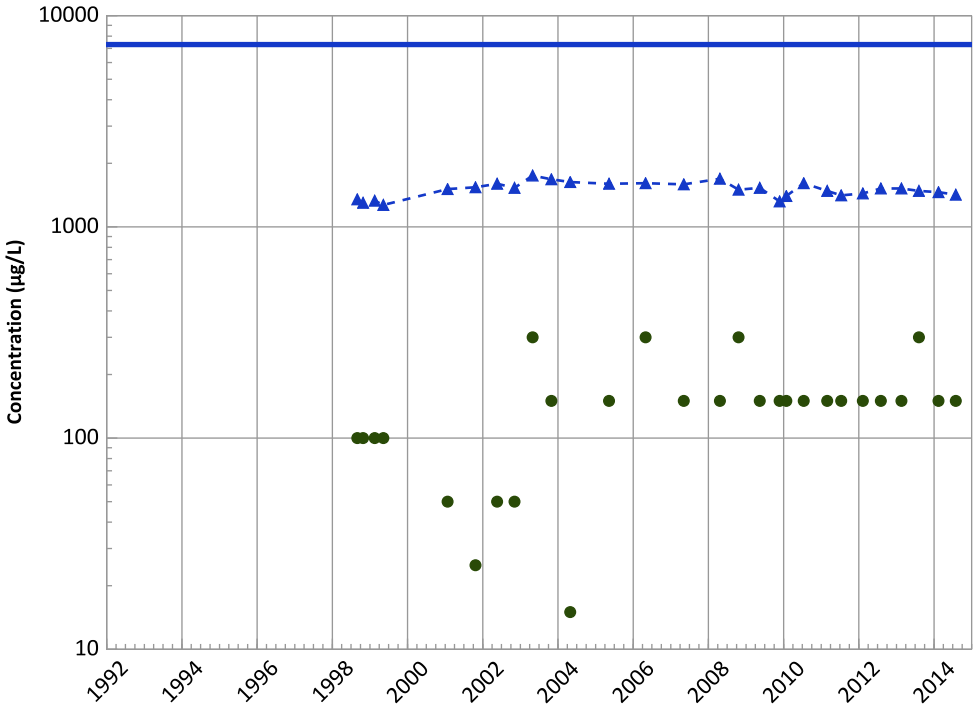
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

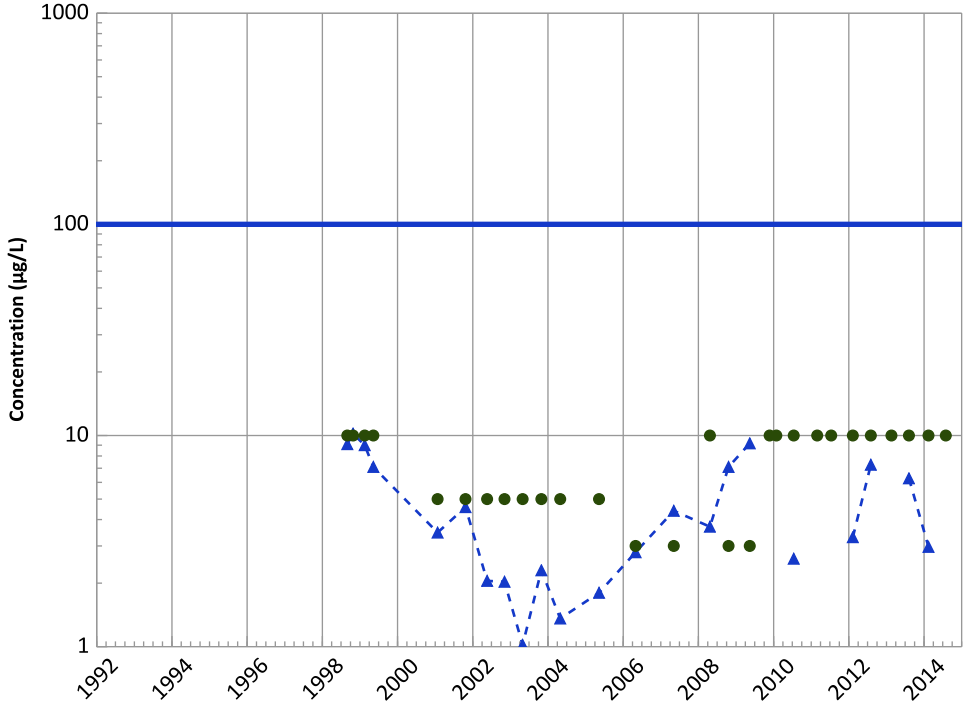


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Chromium, Total Trend



Concentration Trend

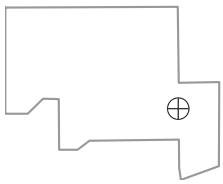
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

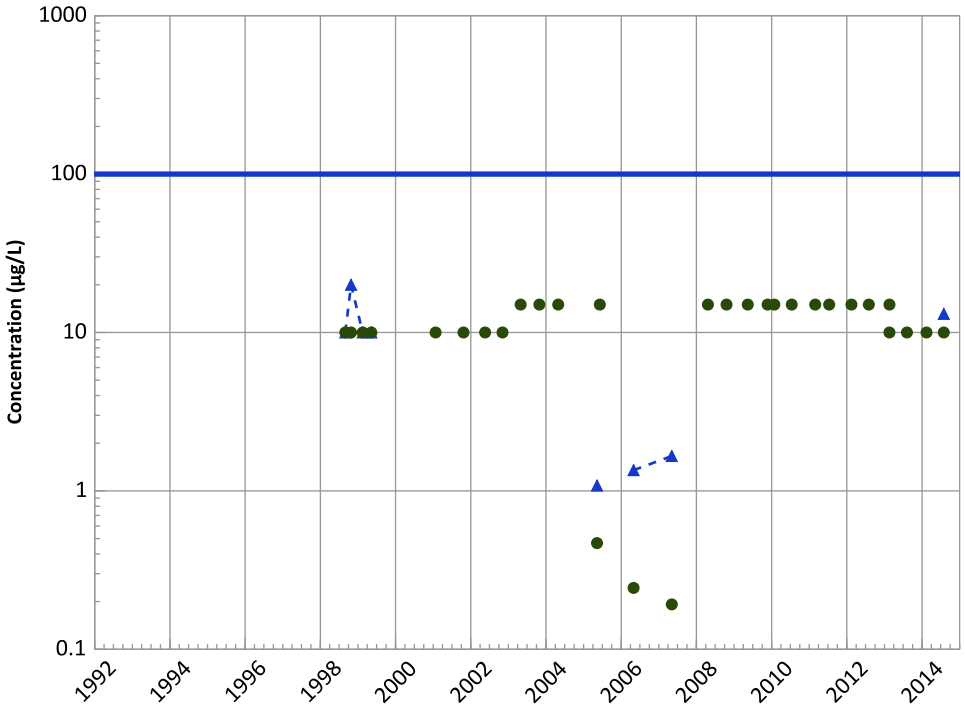
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

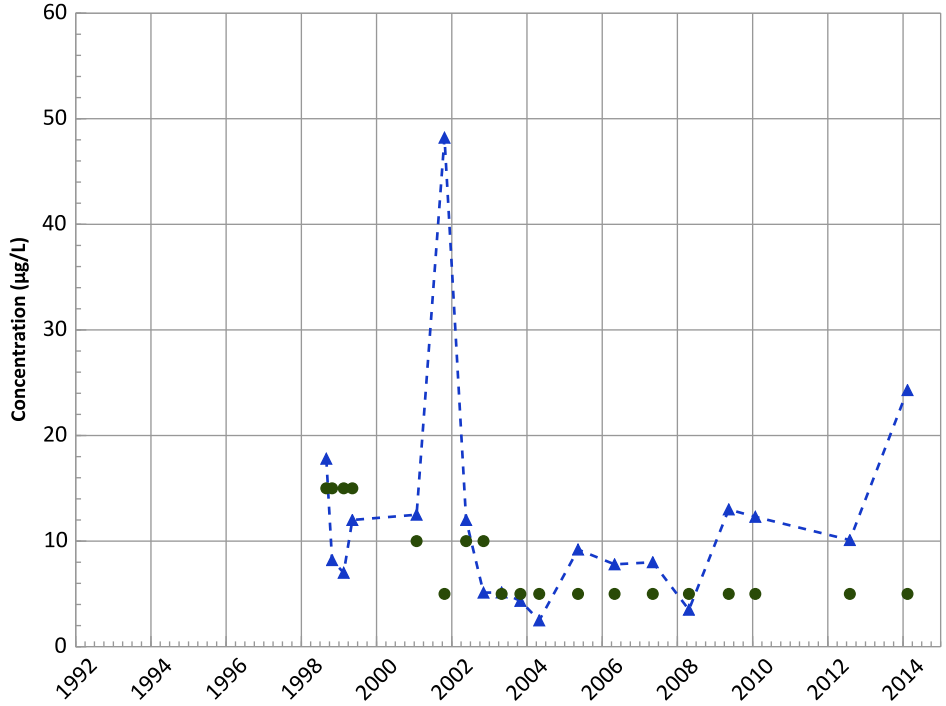


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Manganese Trend



Concentration Trend

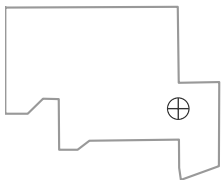
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

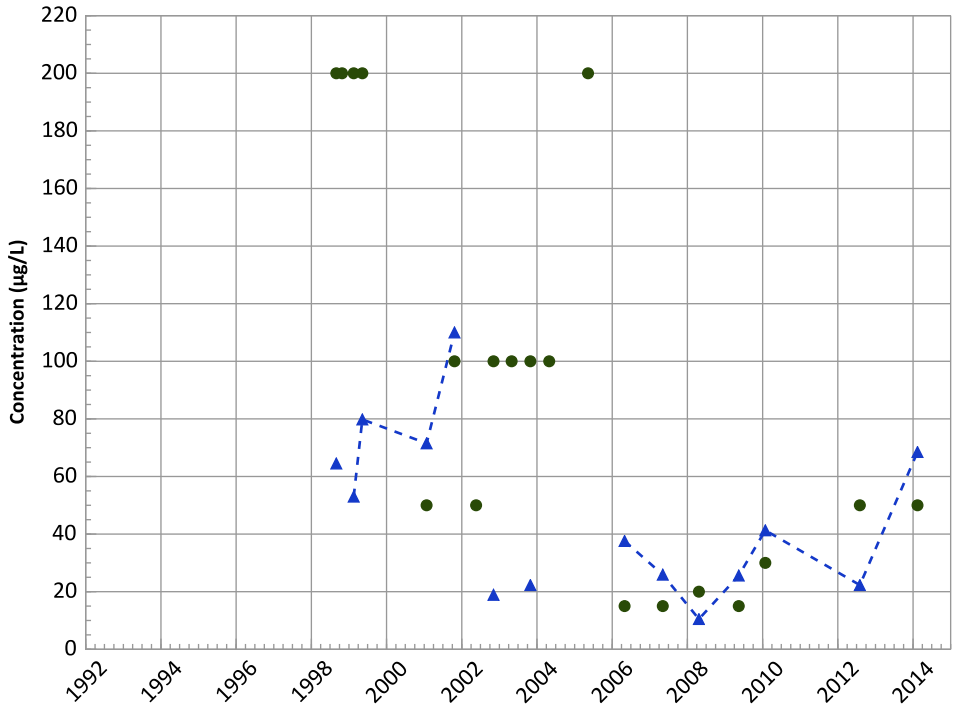
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

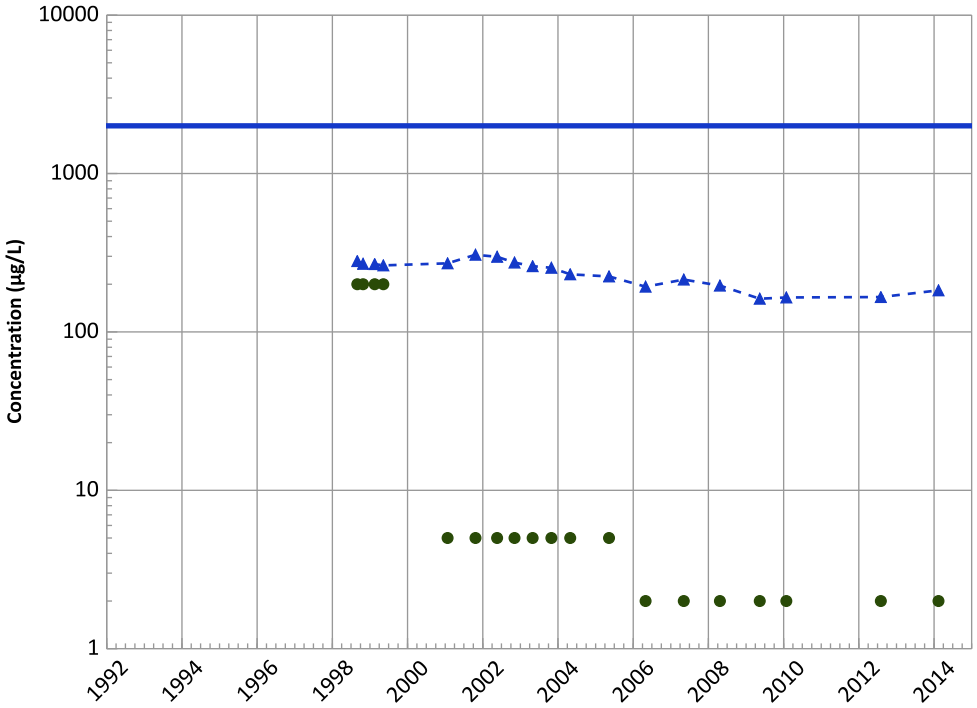


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Barium Trend



Concentration Trend

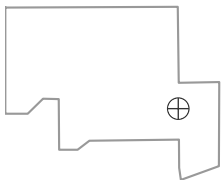
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

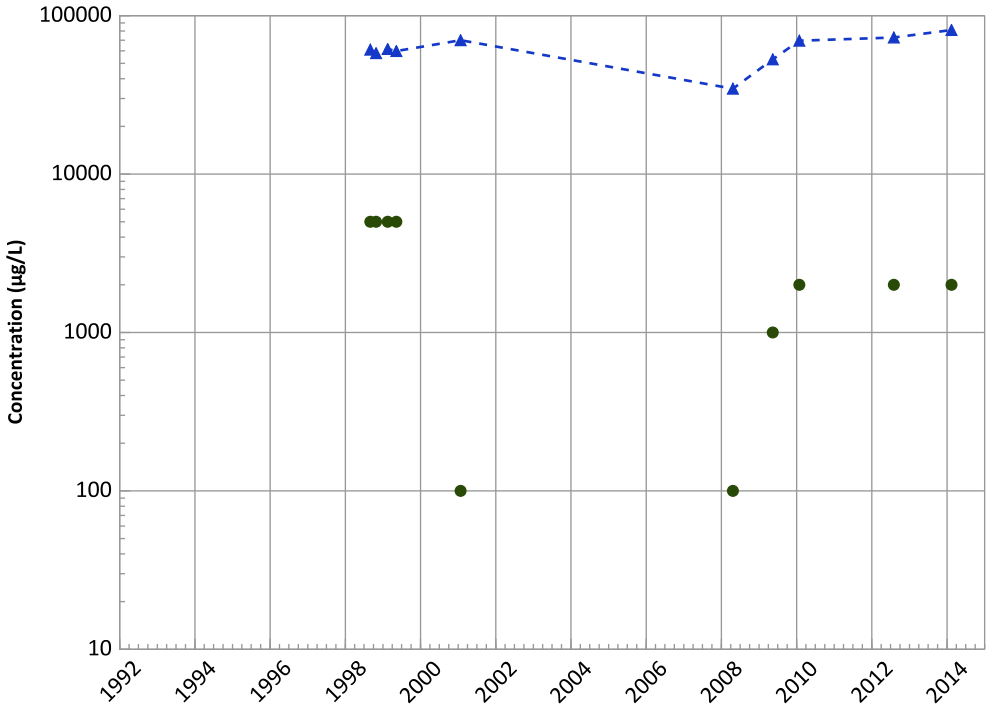
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

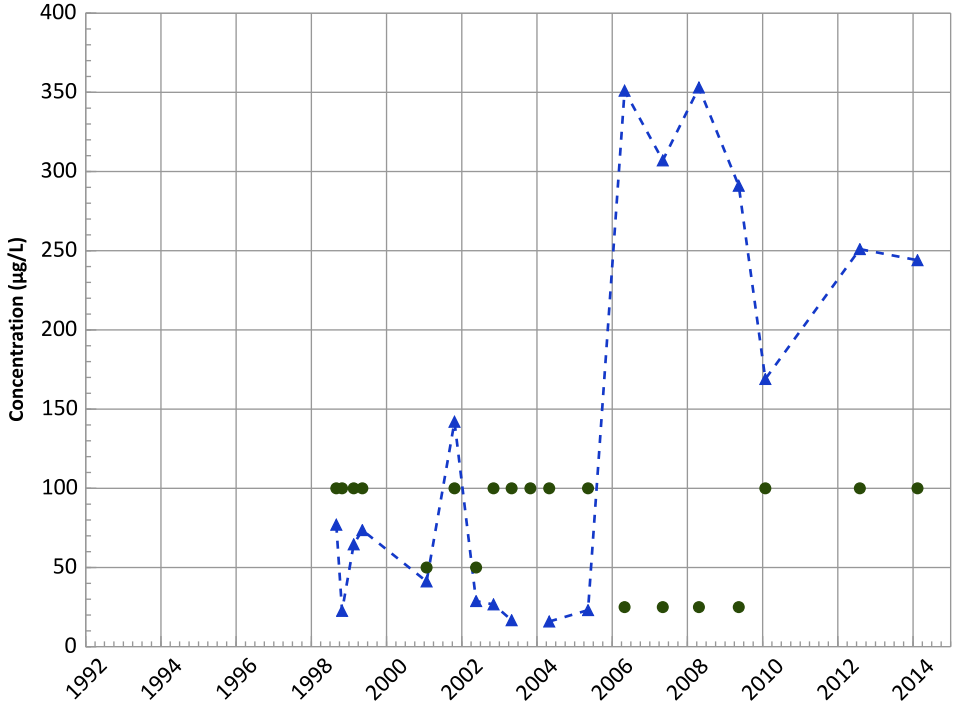


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

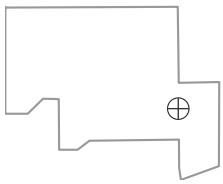
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

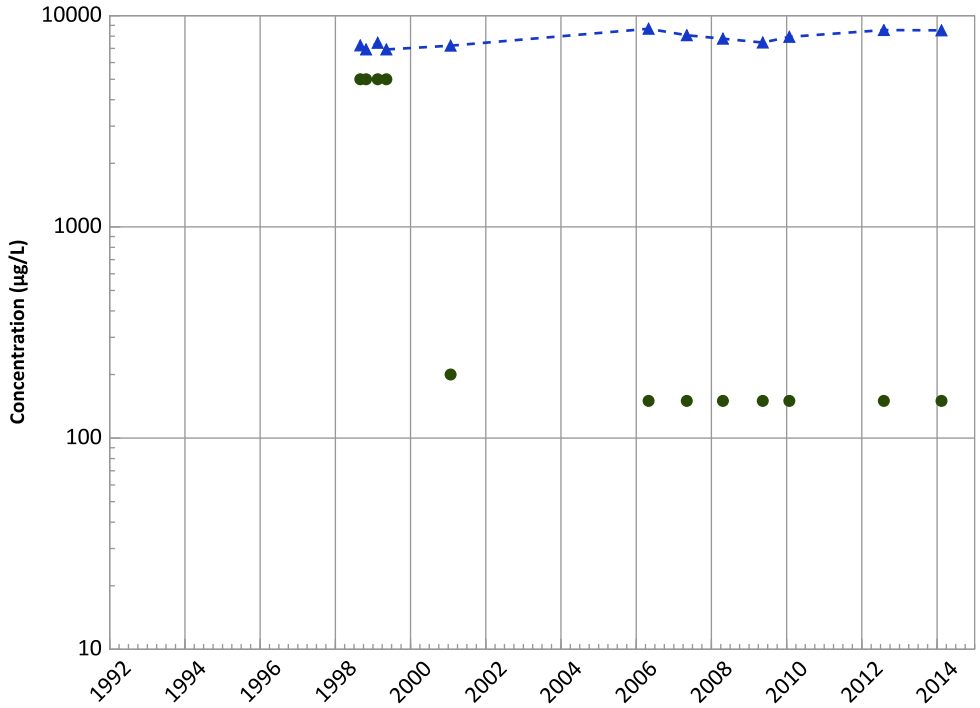
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

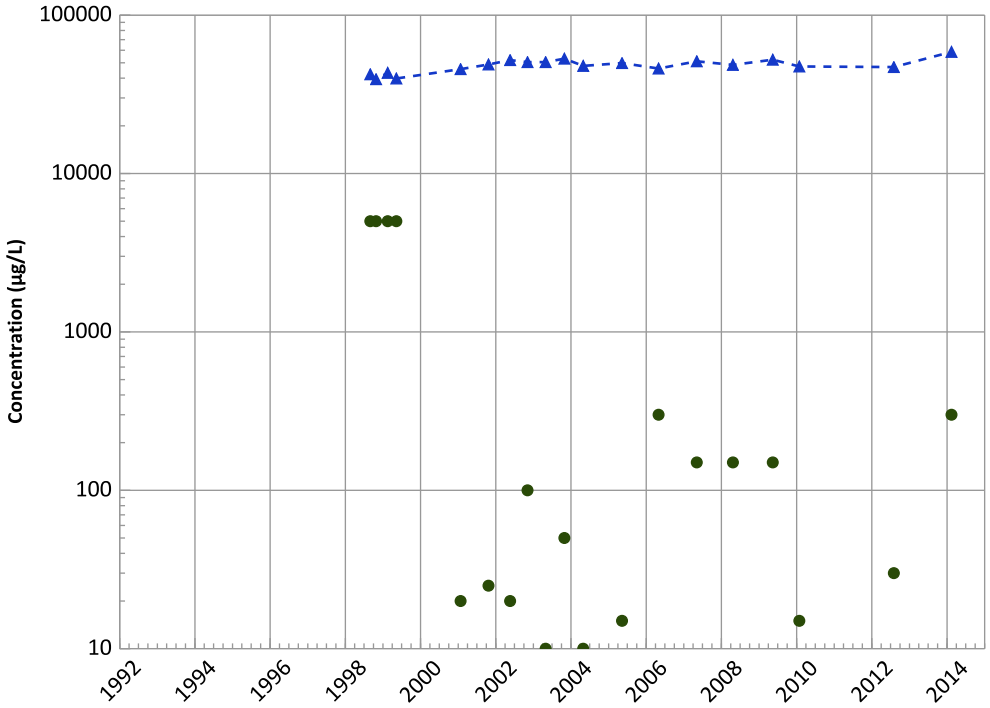


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

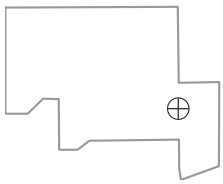
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

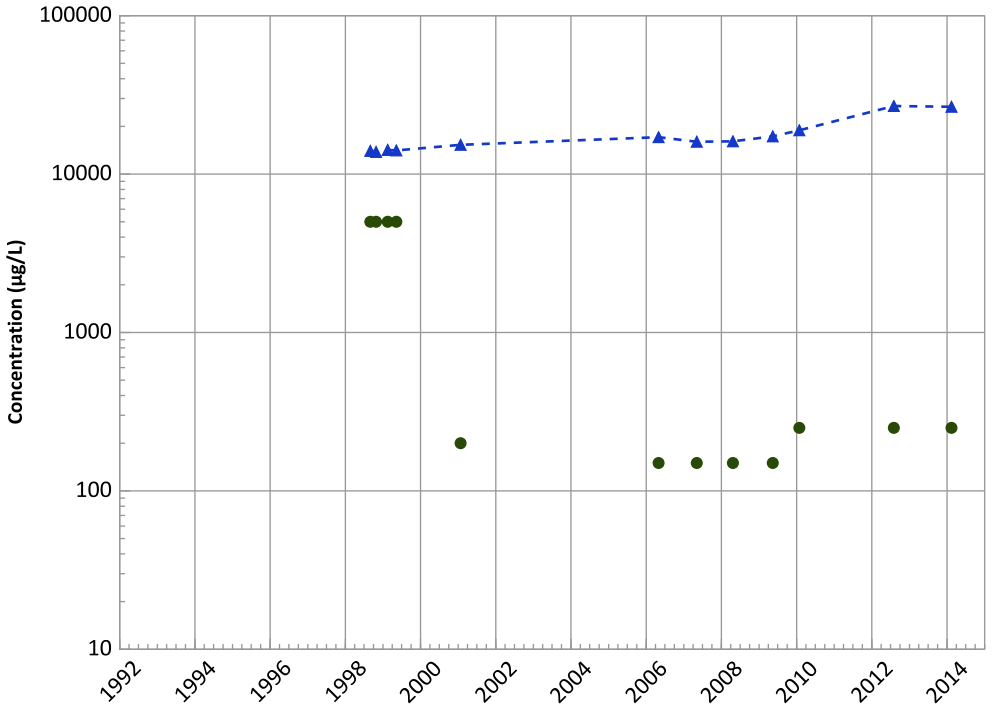
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1039A in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

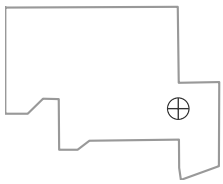
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

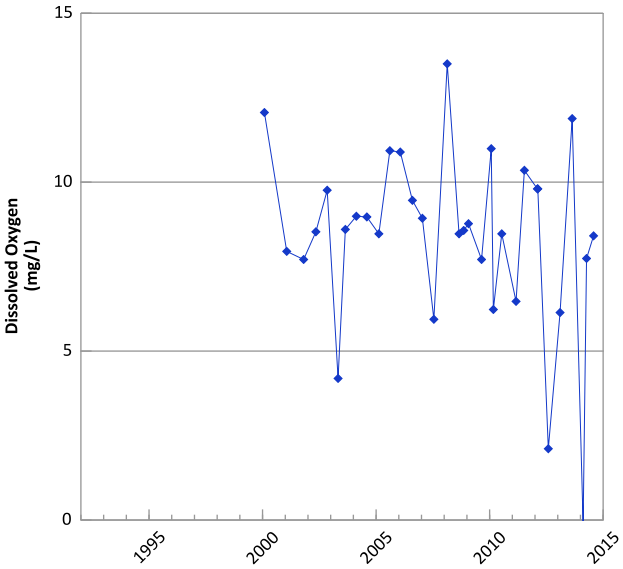
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

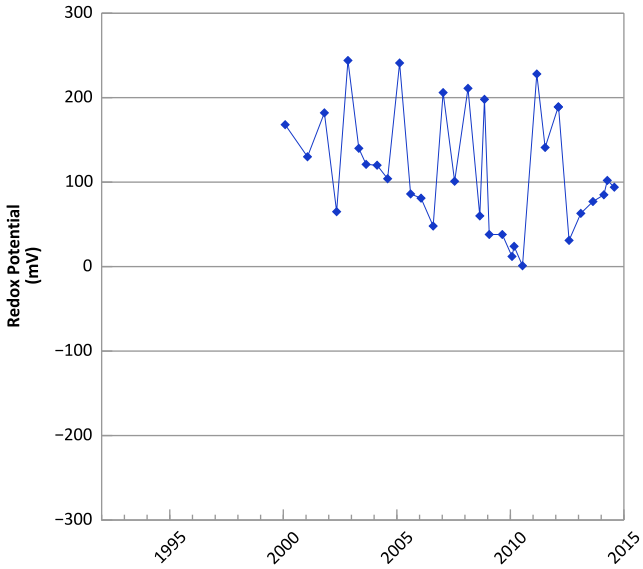
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

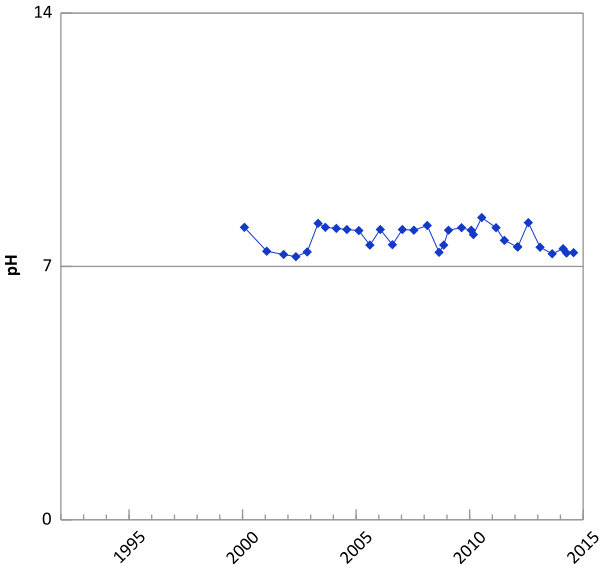
Well Location

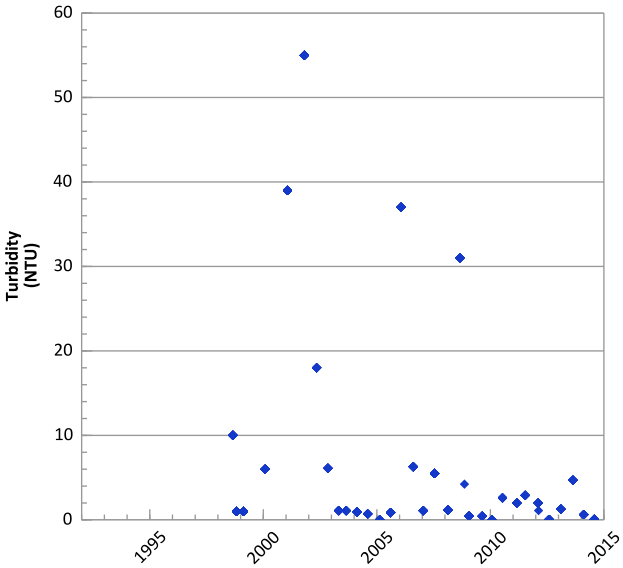


PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



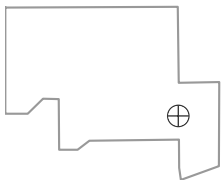






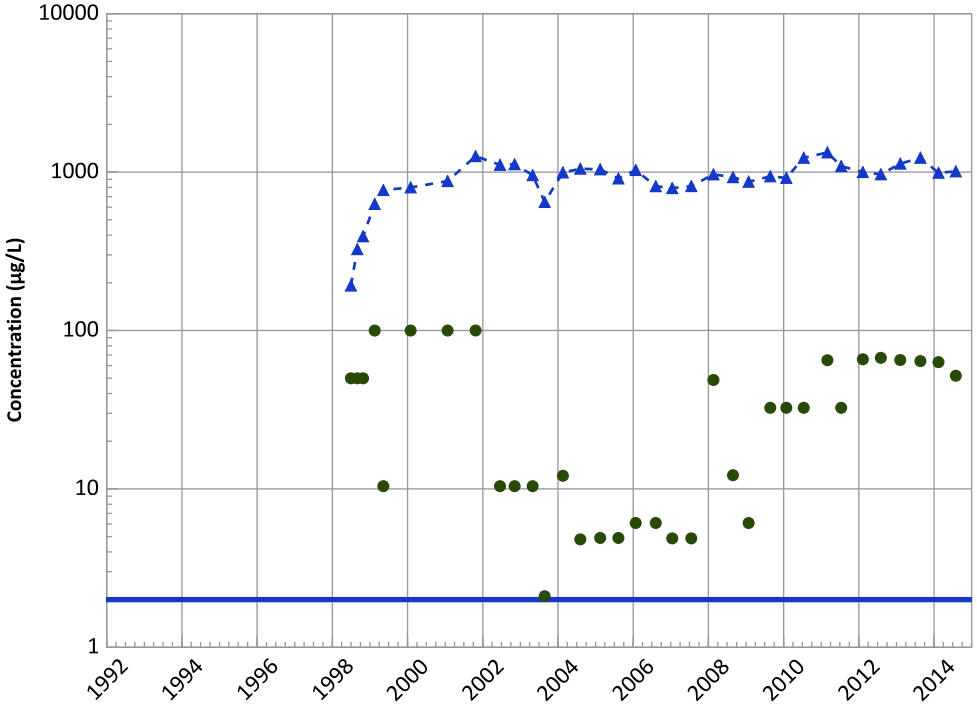
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

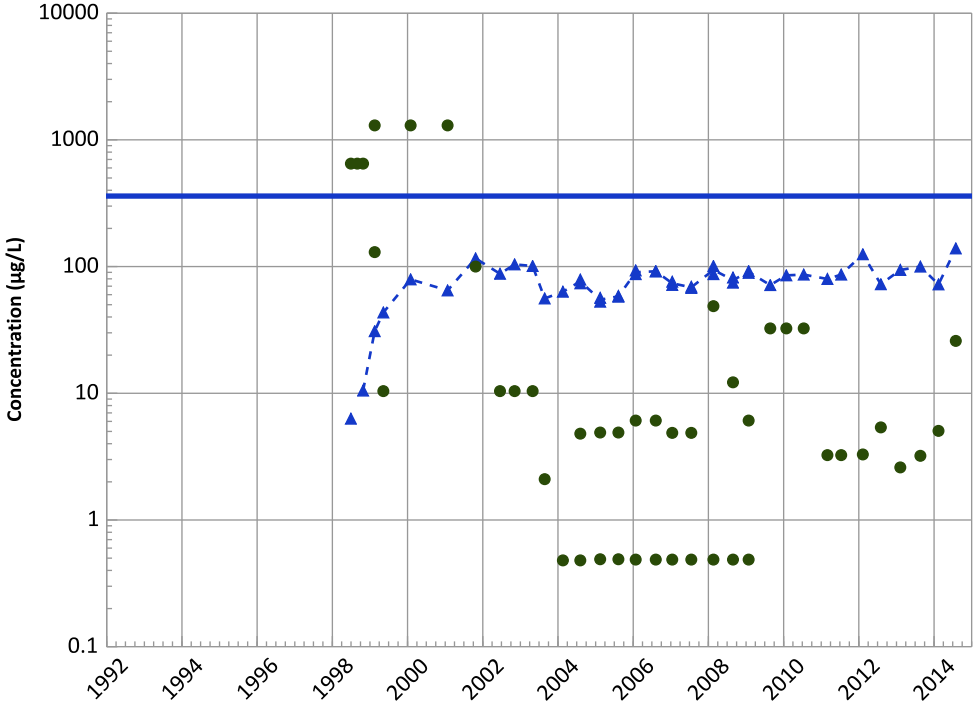


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

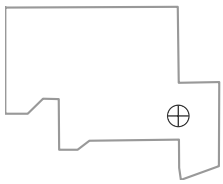
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

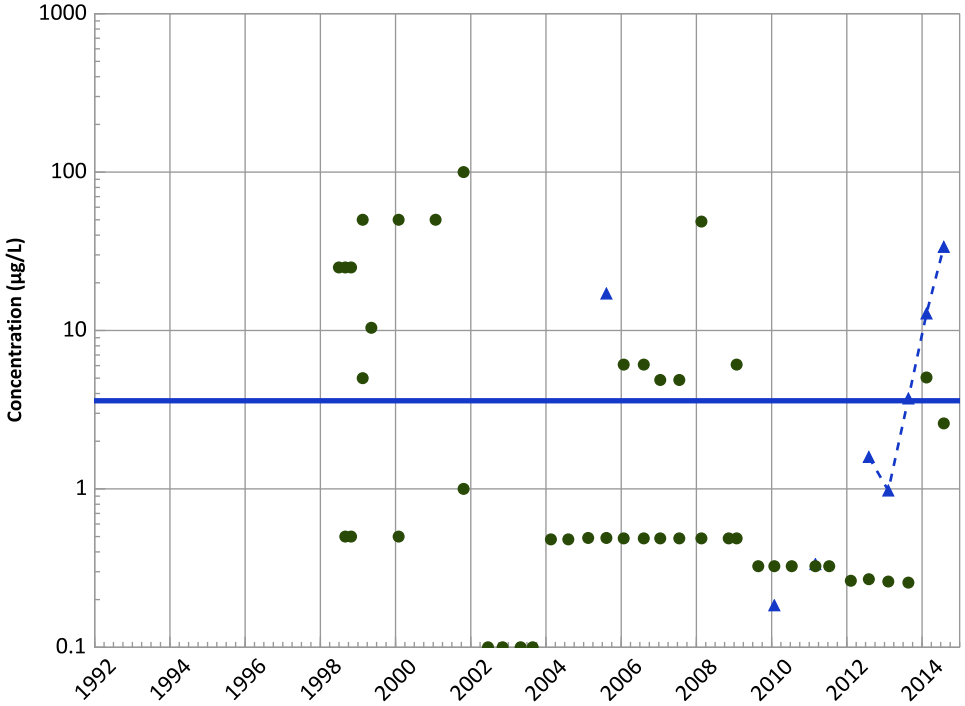
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

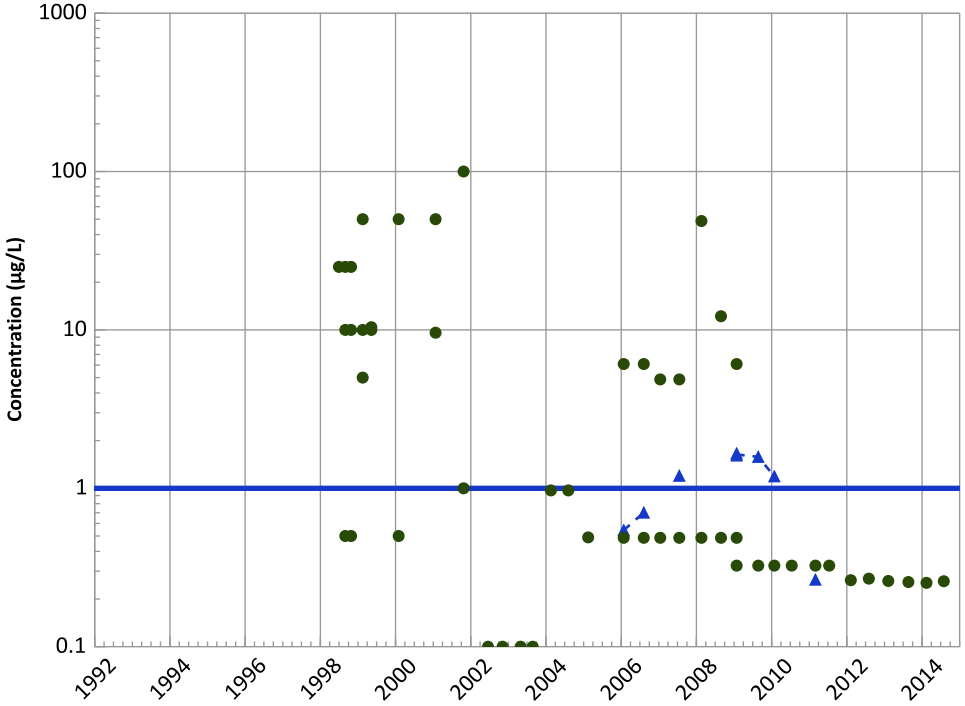


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

2,4-Dinitrotoluene Trend



Concentration Trend

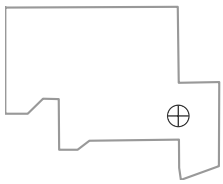
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

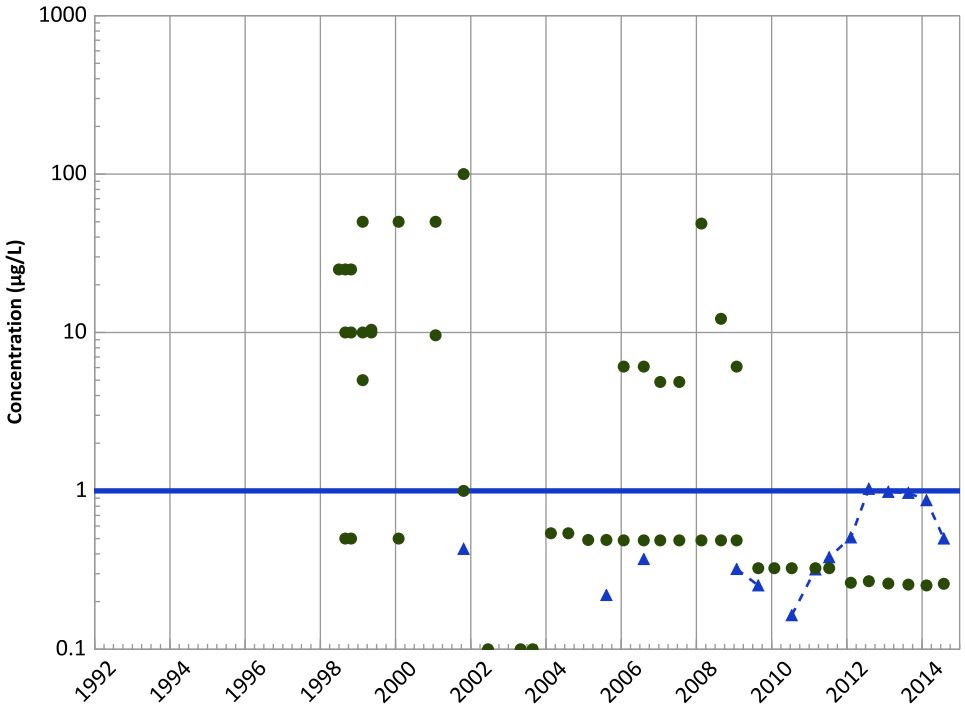
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

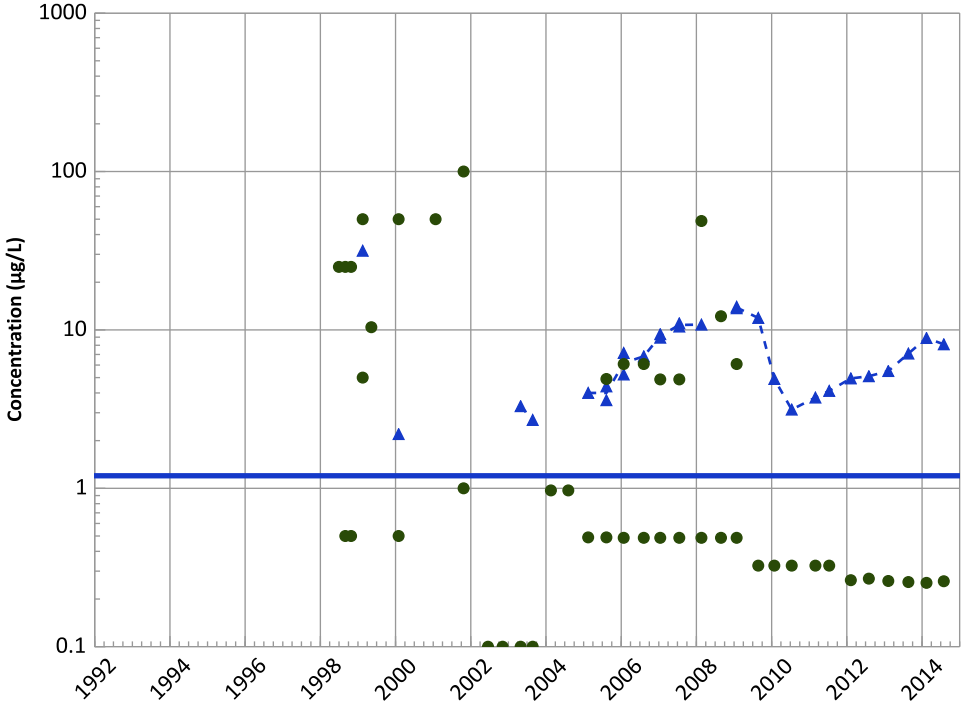


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

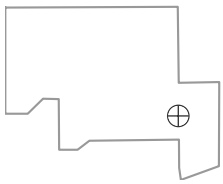
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

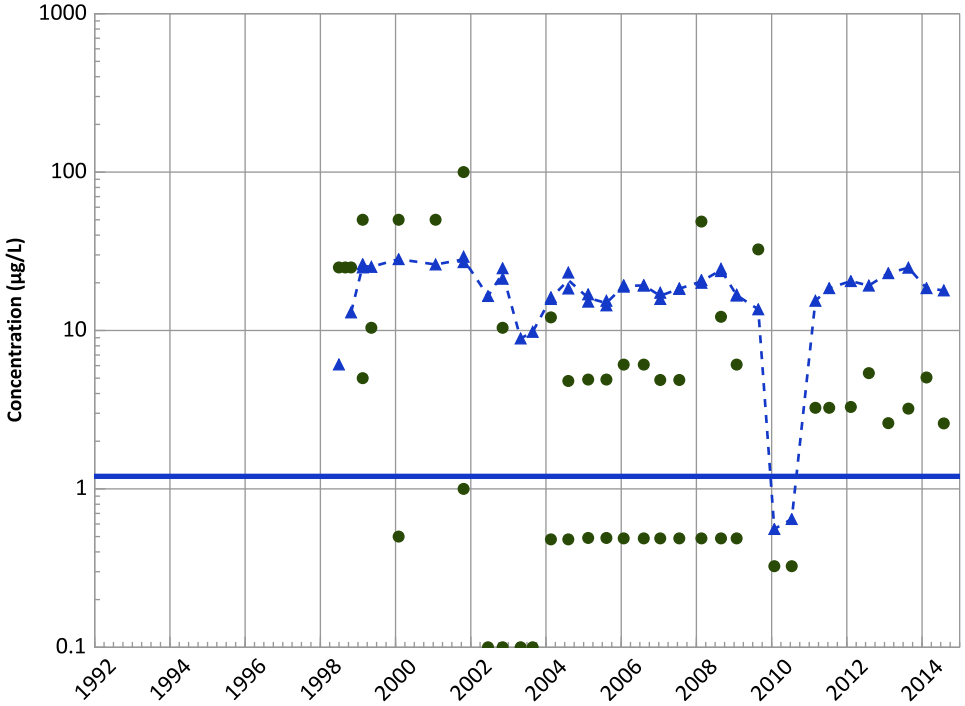
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

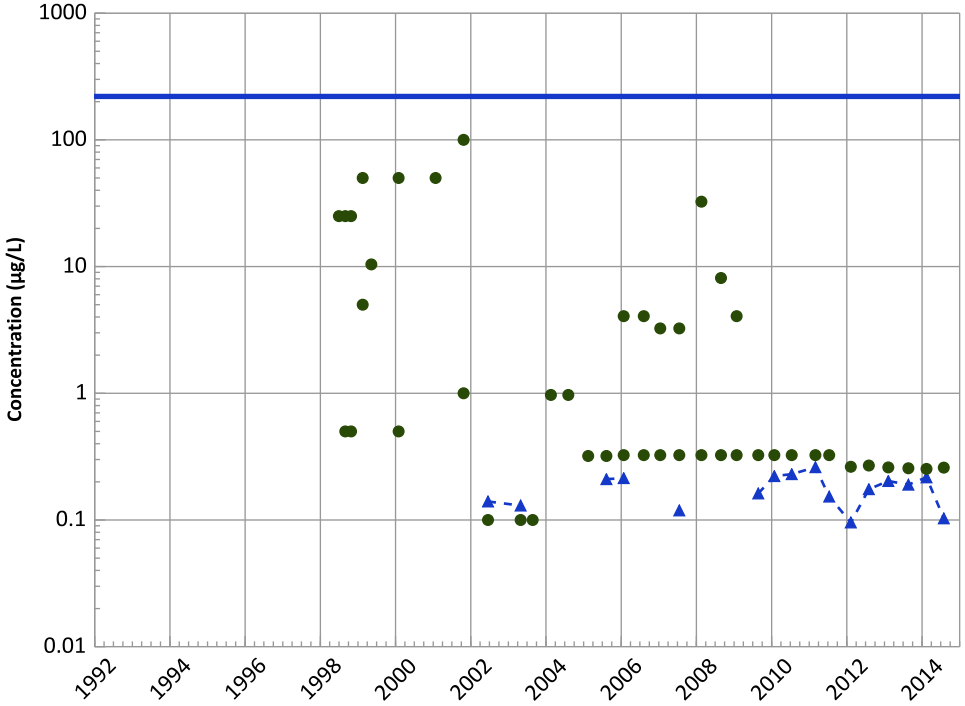


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Stable

1,3,5-Trinitrobenzene Trend



Concentration Trend

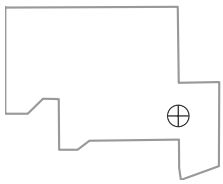
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

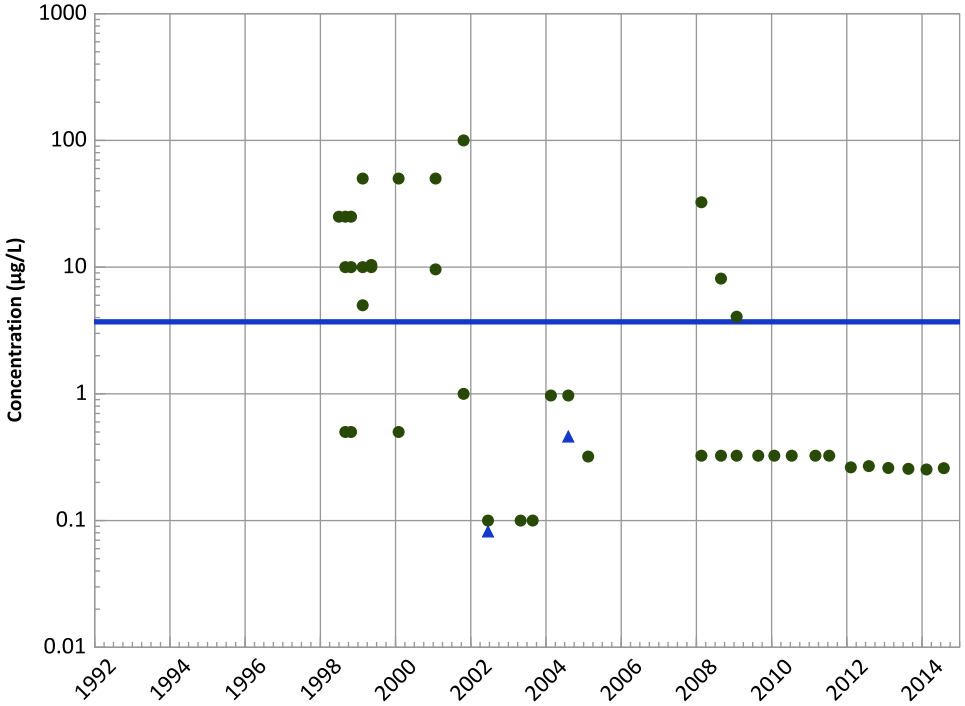
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

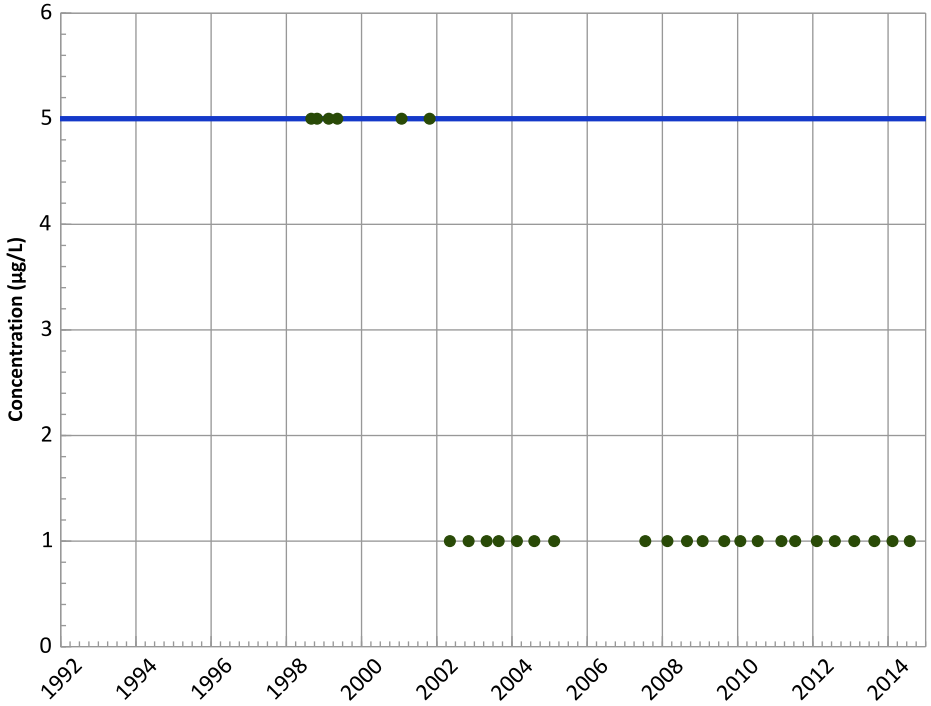


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

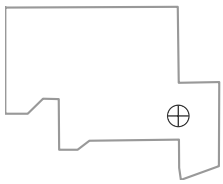
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

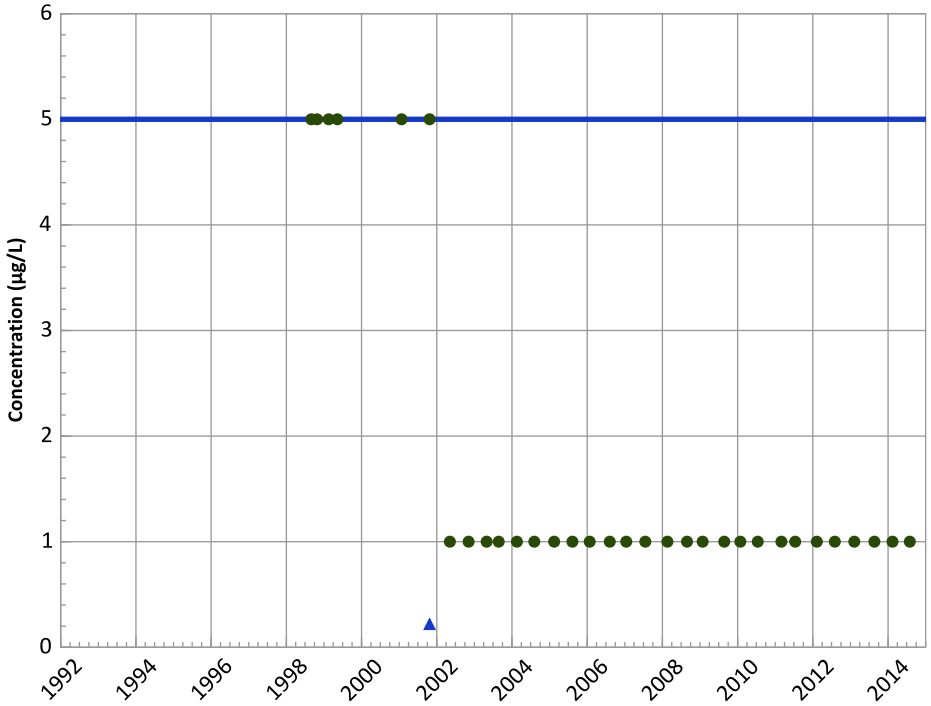
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

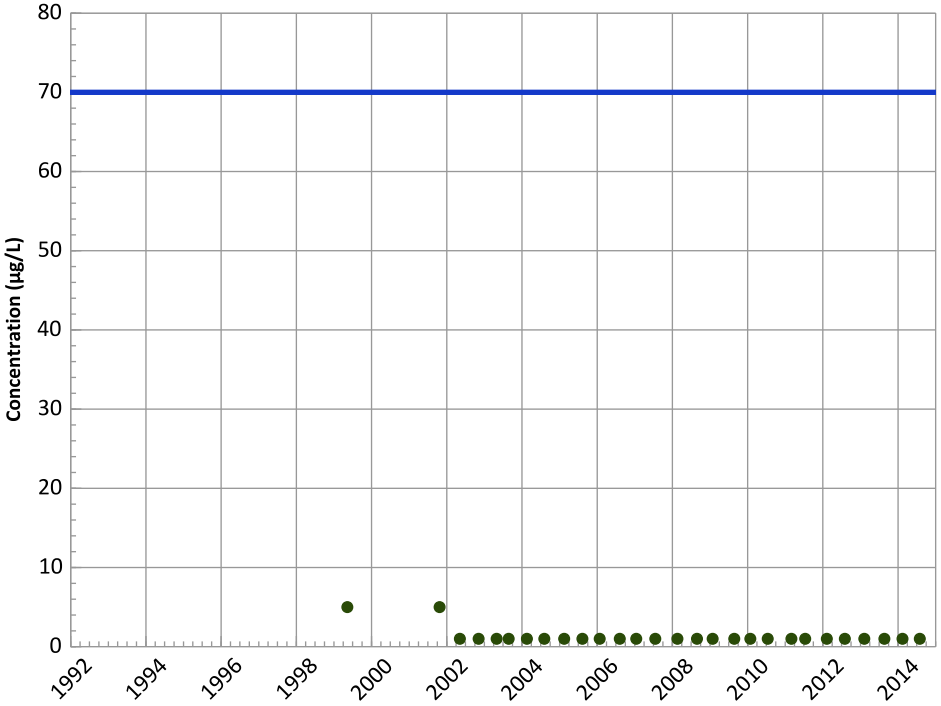


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

cis-1,2-Dichloroethene Trend



Concentration Trend

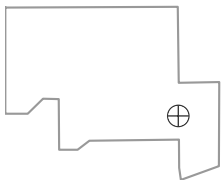
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

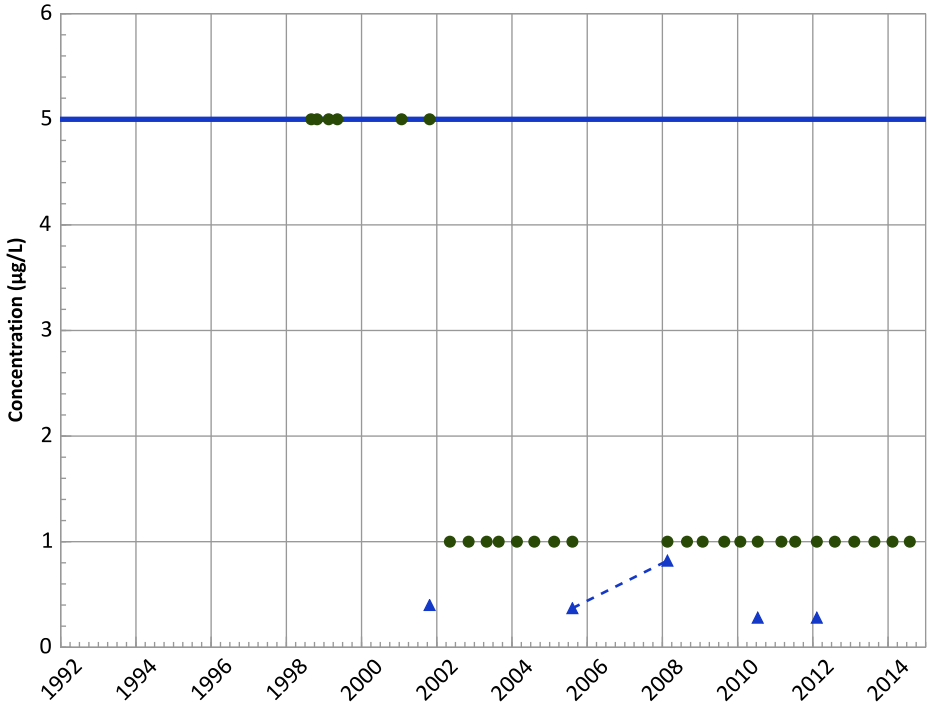
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

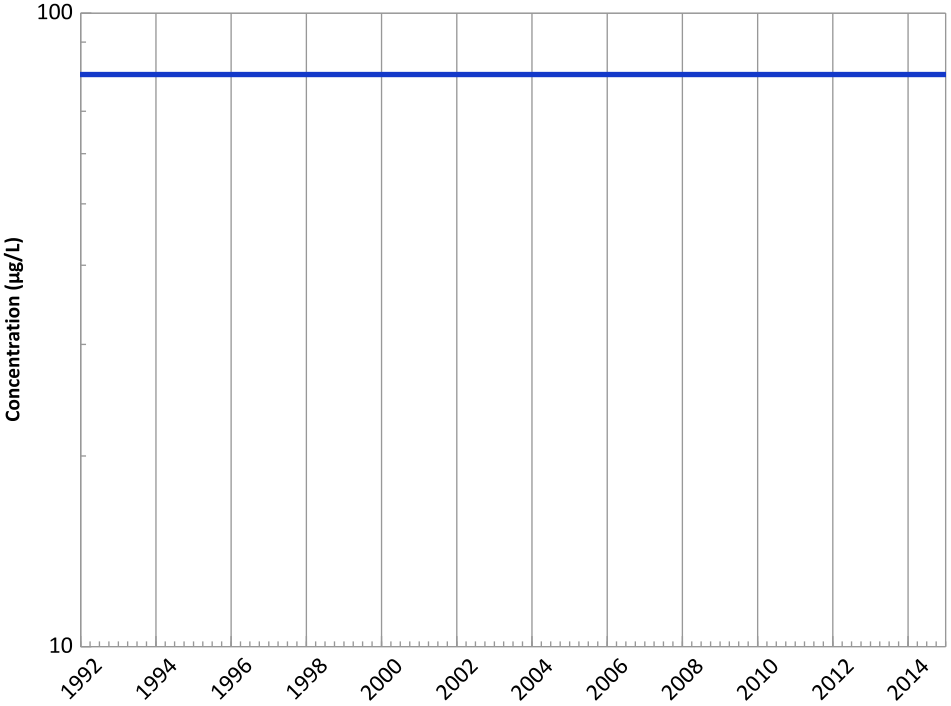


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Chloroform Trend



Concentration Trend

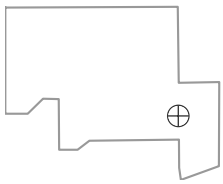
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

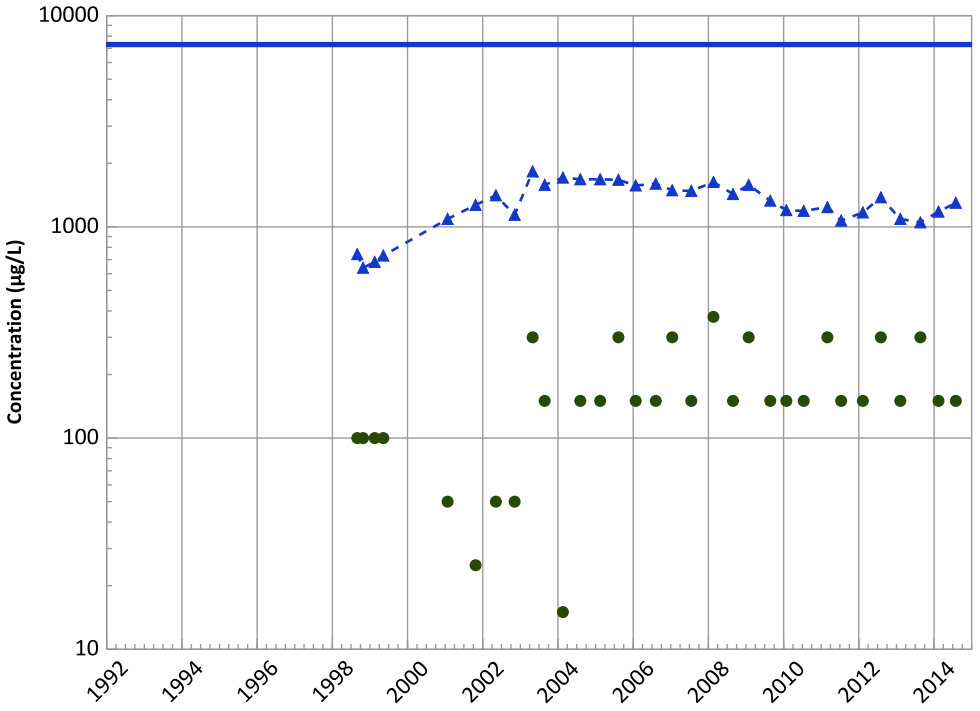
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

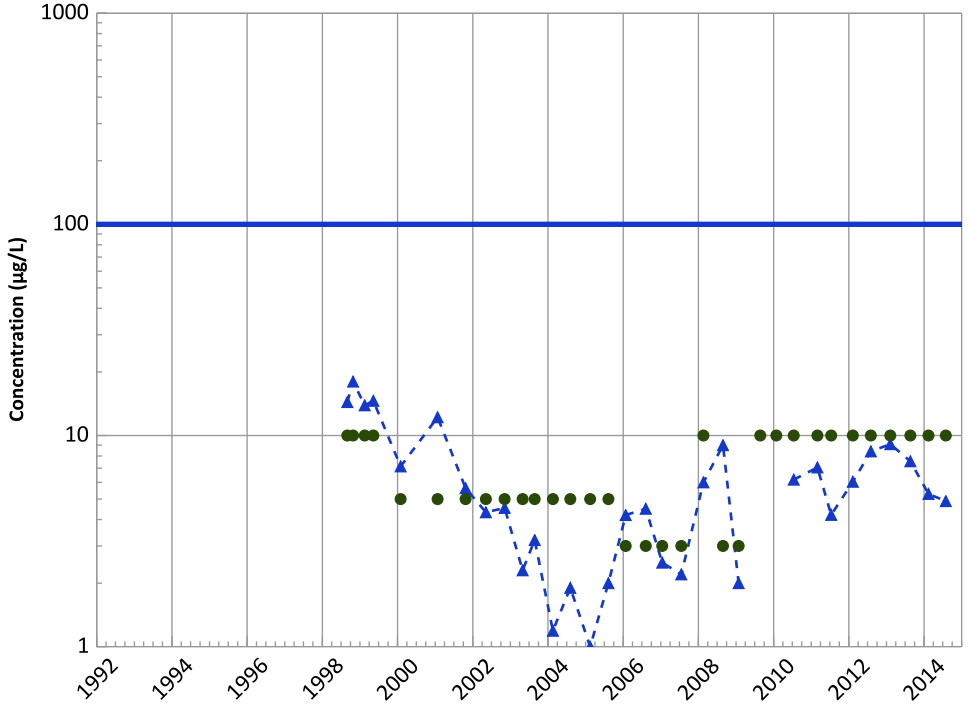


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Chromium, Total Trend



Concentration Trend

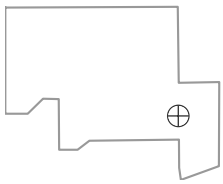
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

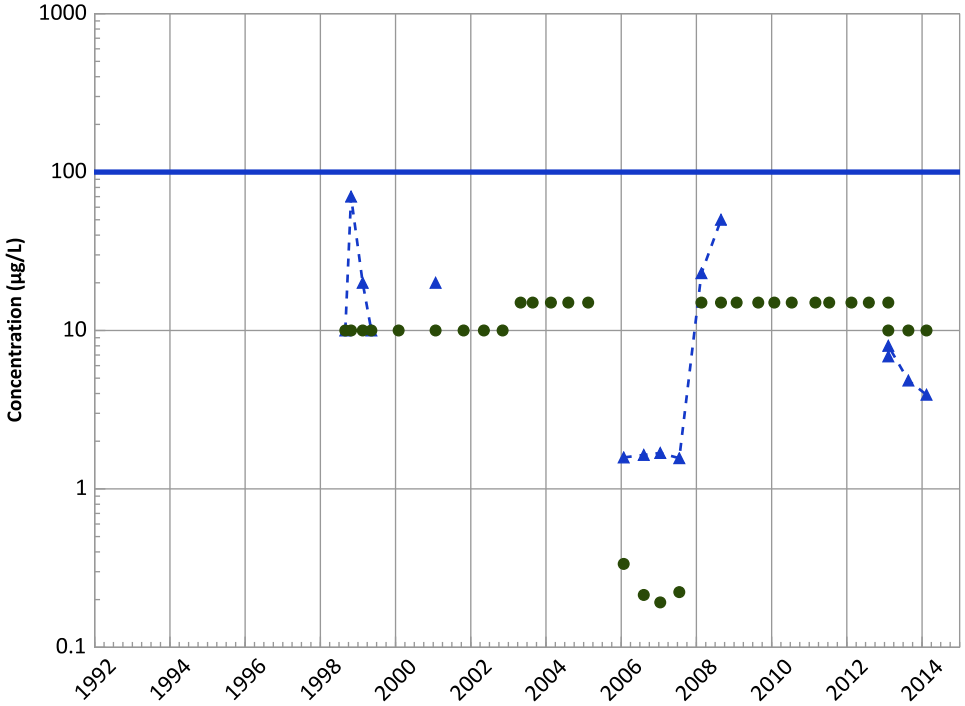
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

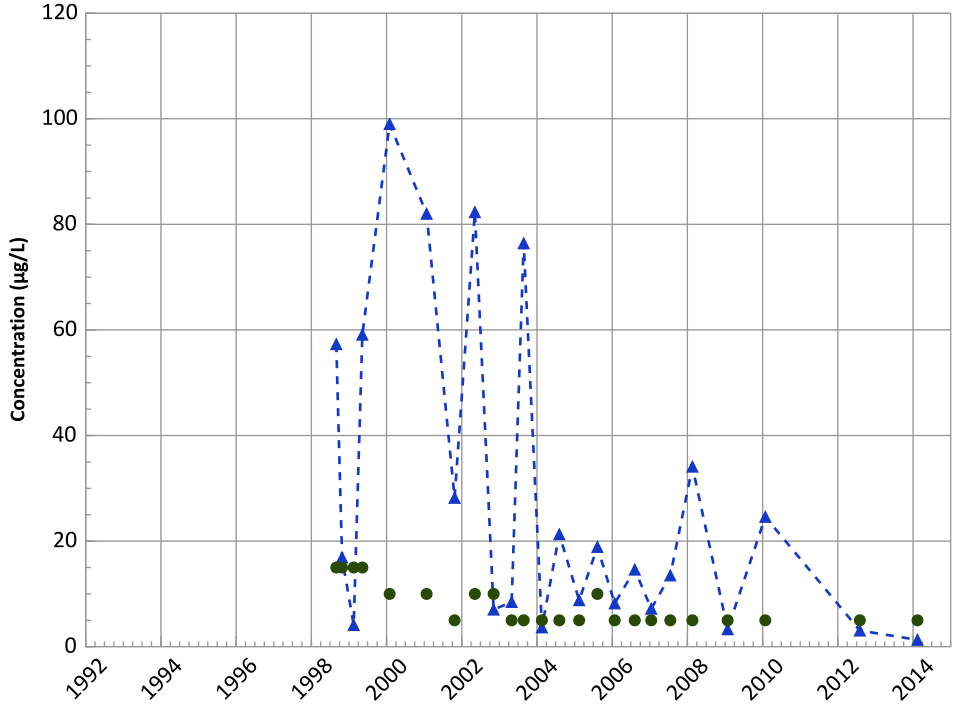


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Decreasing

Manganese Trend



Concentration Trend

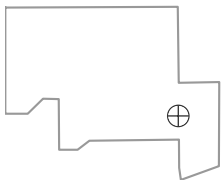
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

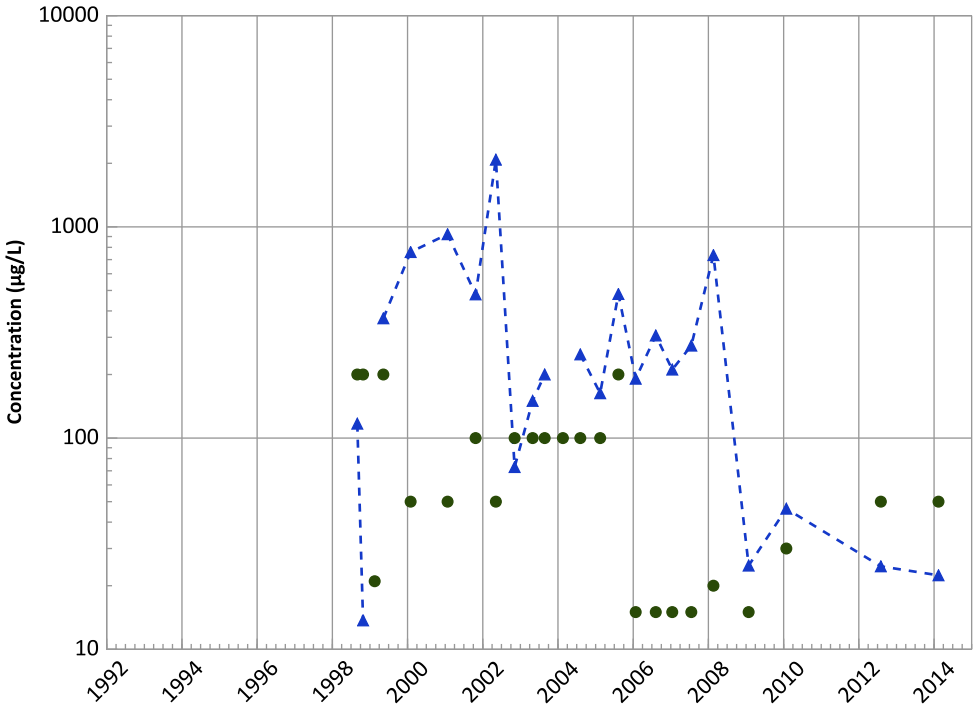
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

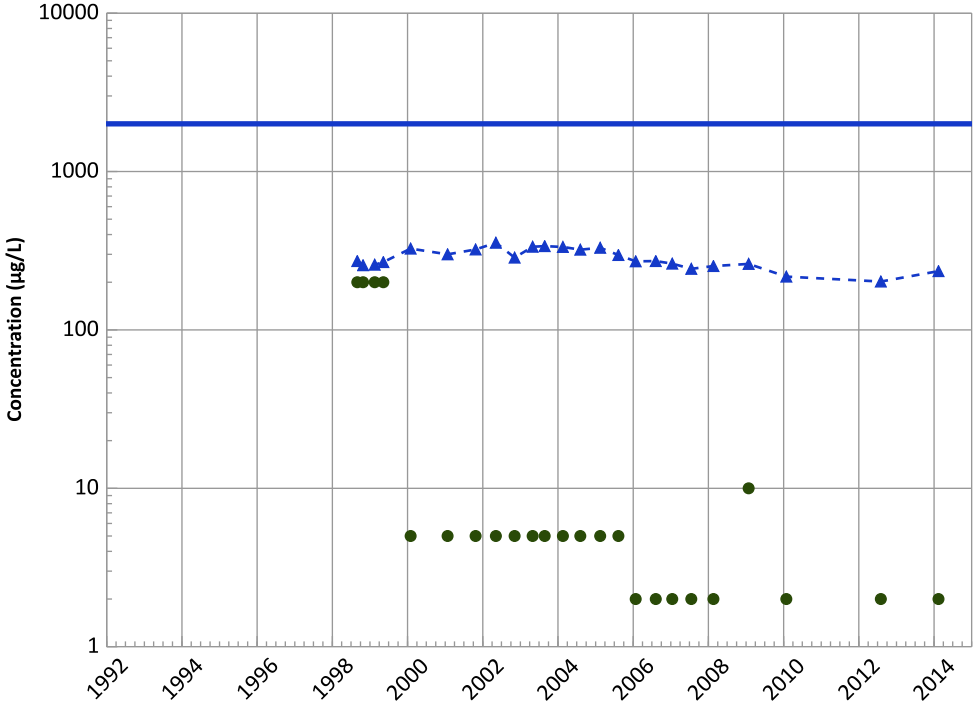


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

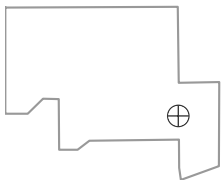
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

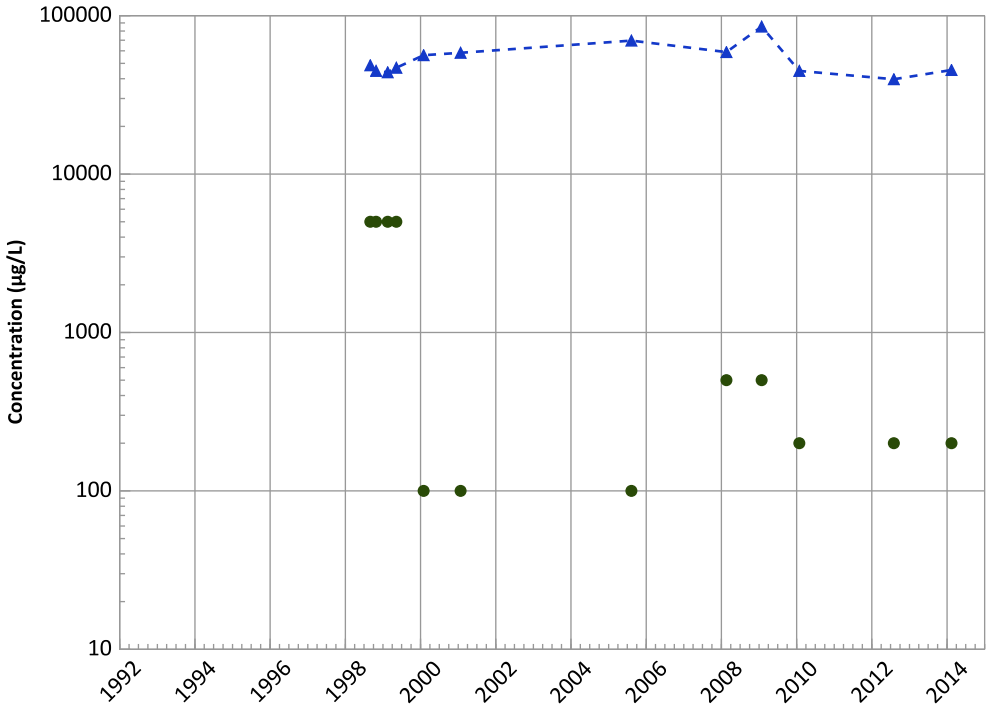
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

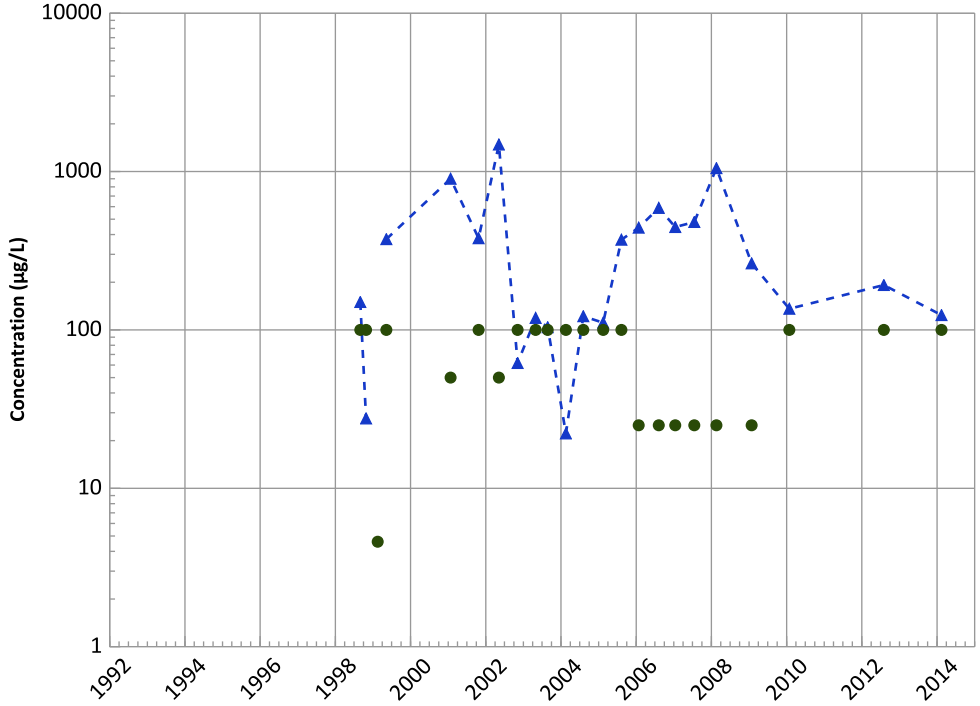


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

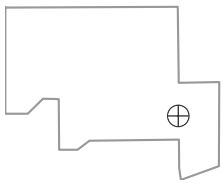
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

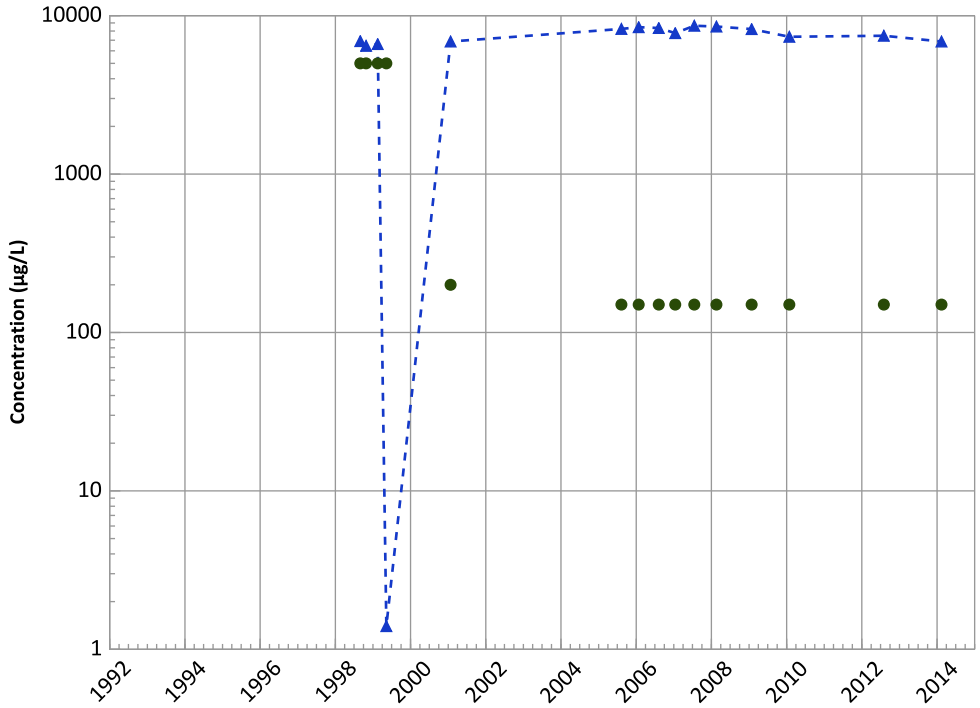
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

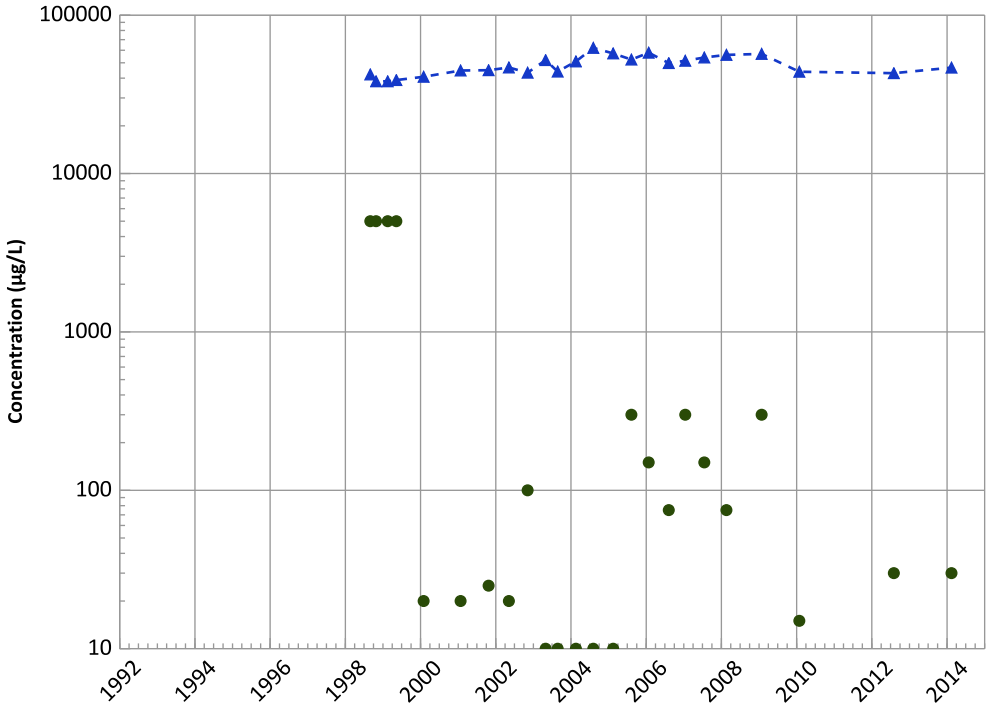


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Magnesium Trend



Concentration Trend

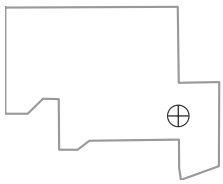
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

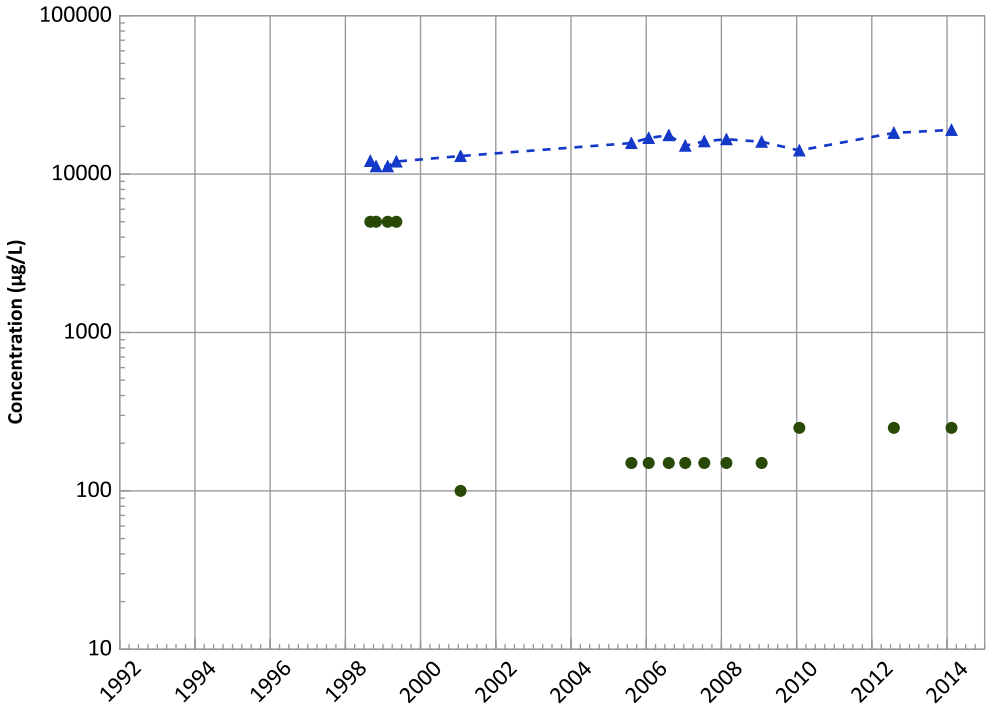
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1040 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

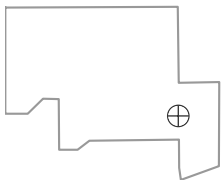
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

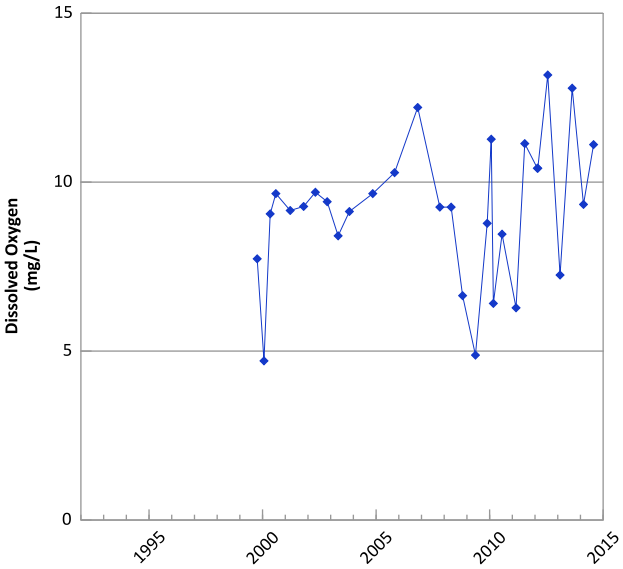
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/30/1998 to 07/31/2014
Analysis Date: 03/19/2015

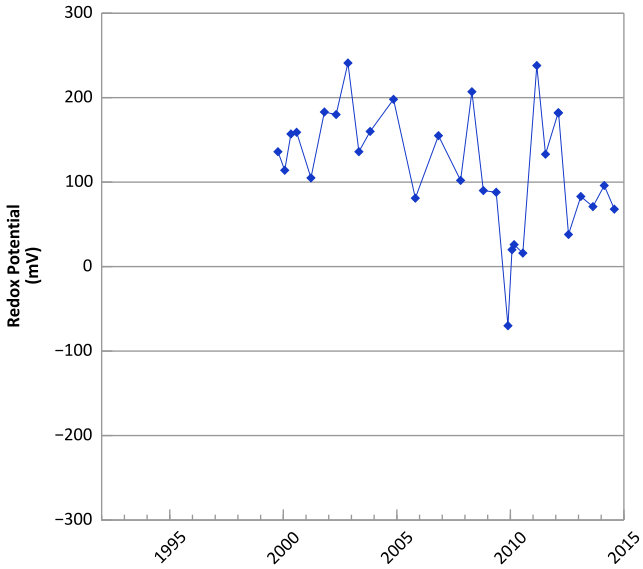
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

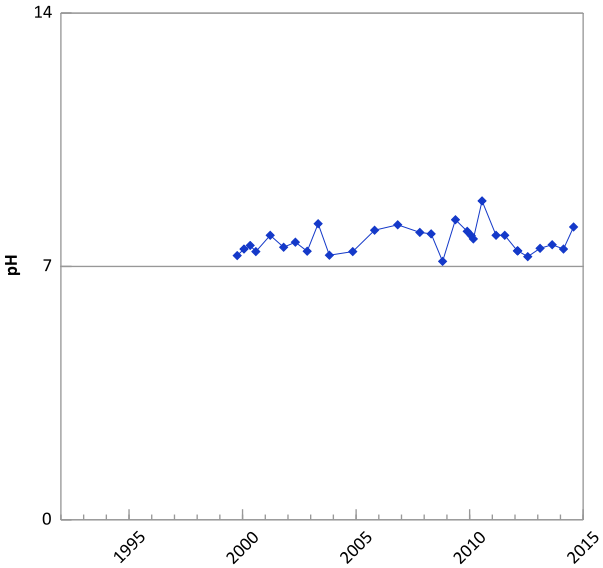
Well Location

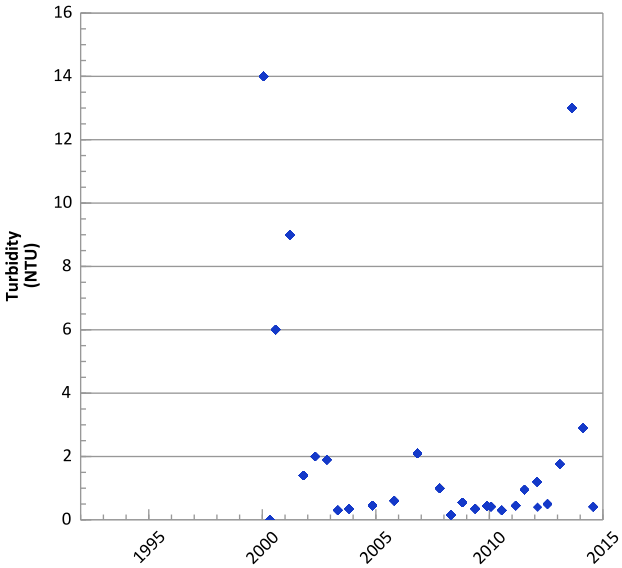


PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



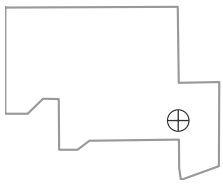






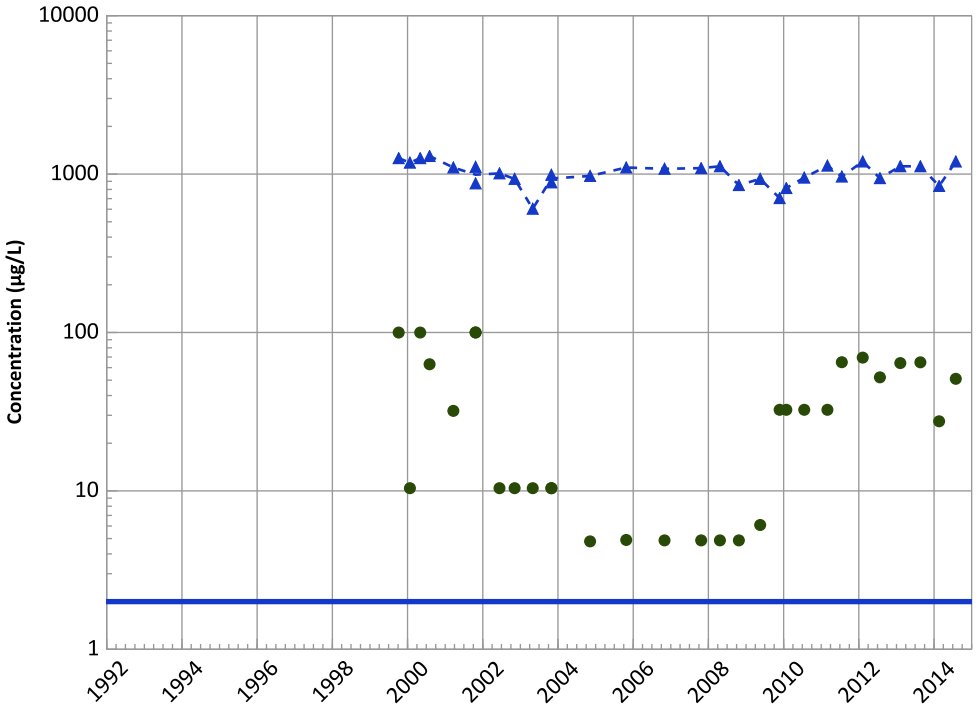
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

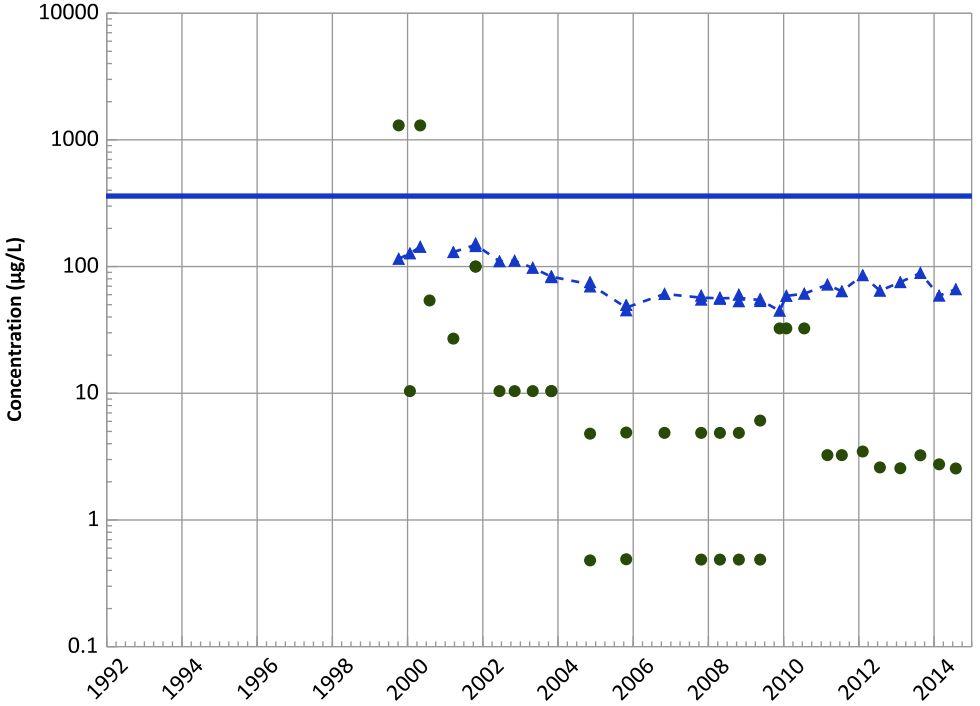


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Stable

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

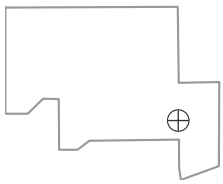
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

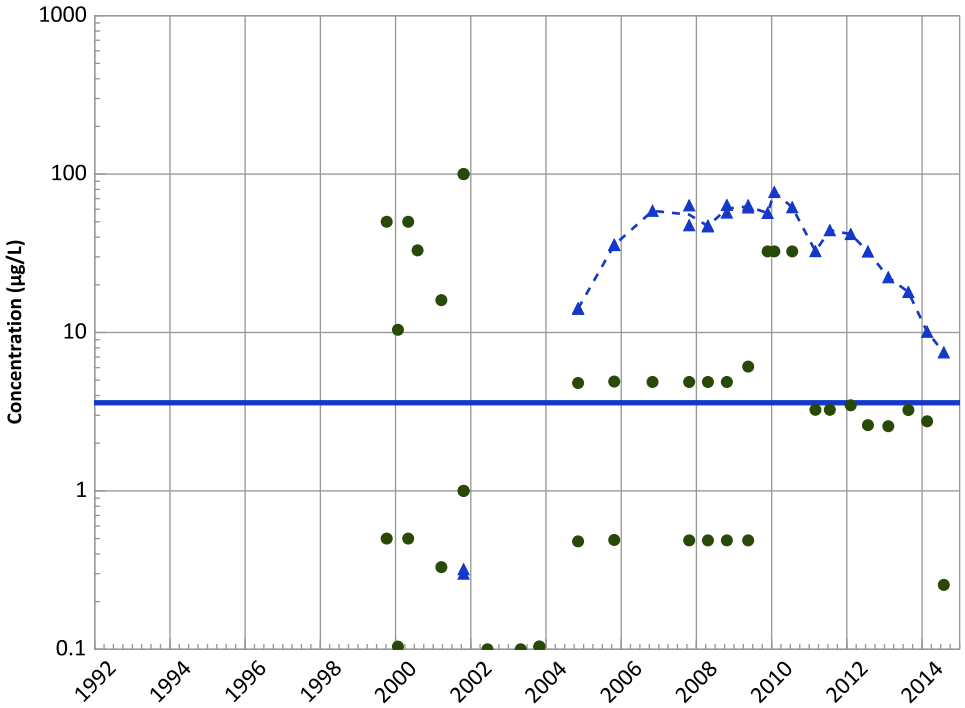
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

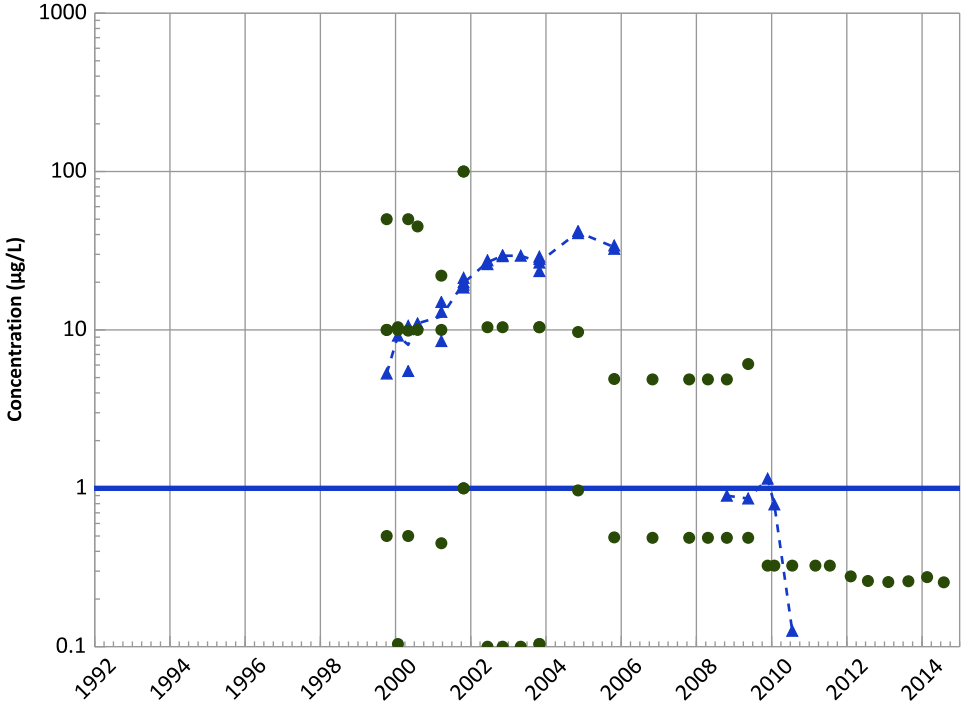


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

2,4-Dinitrotoluene Trend



Concentration Trend

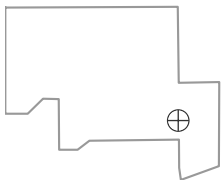
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

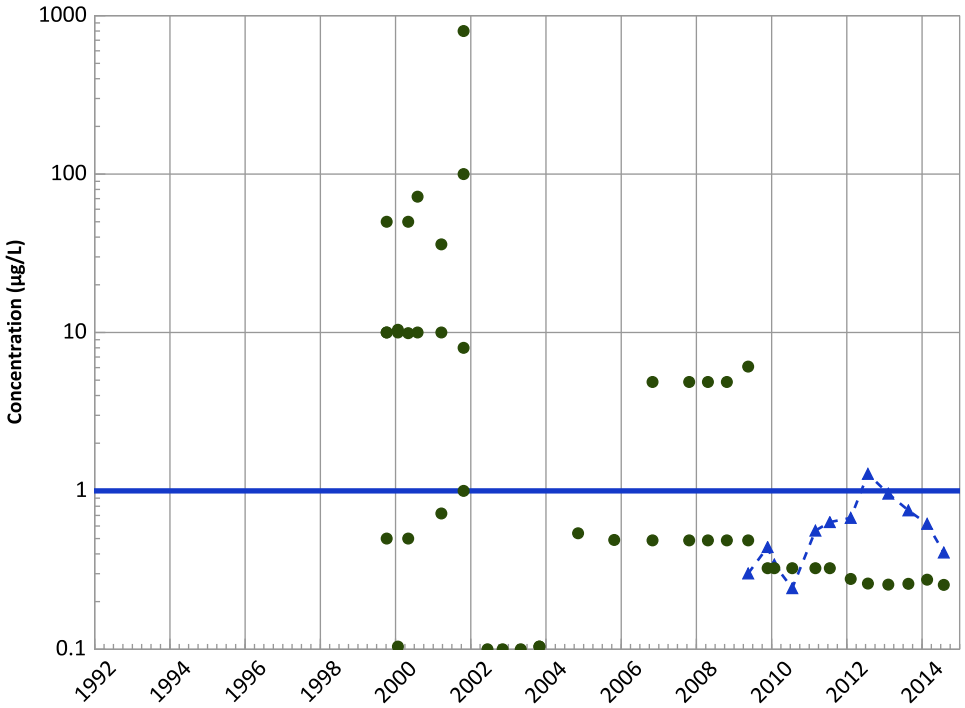
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

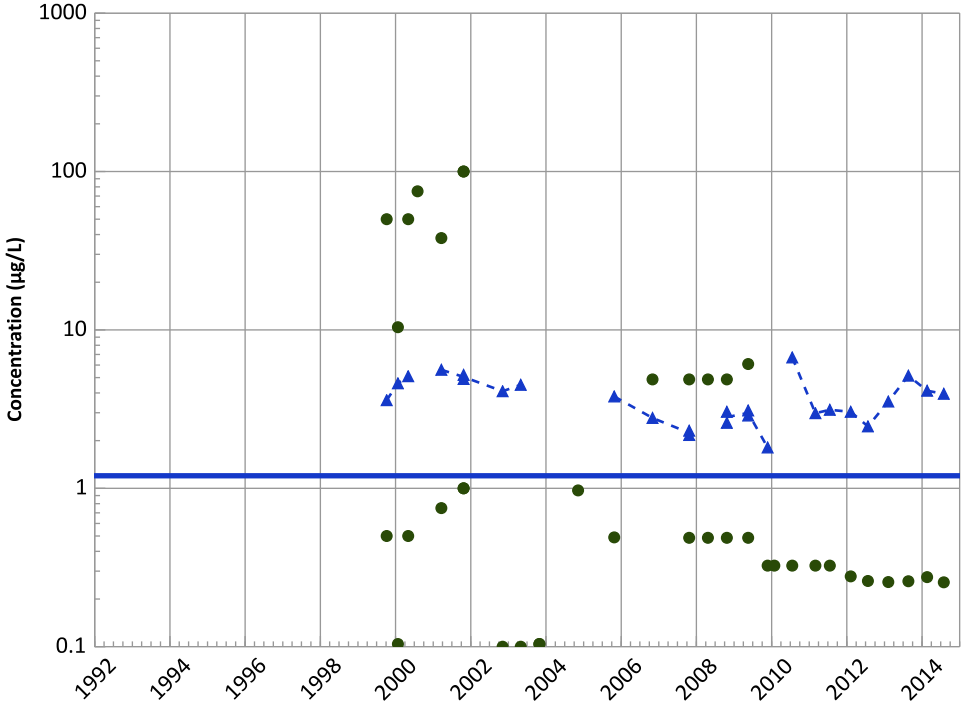


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

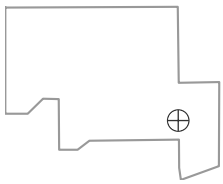
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

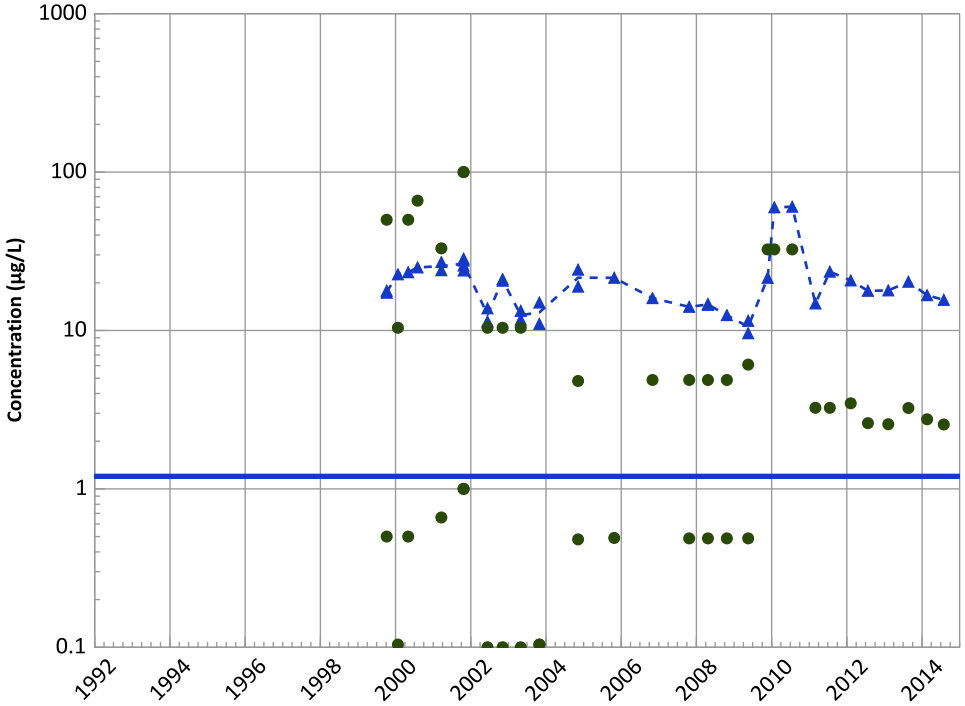
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

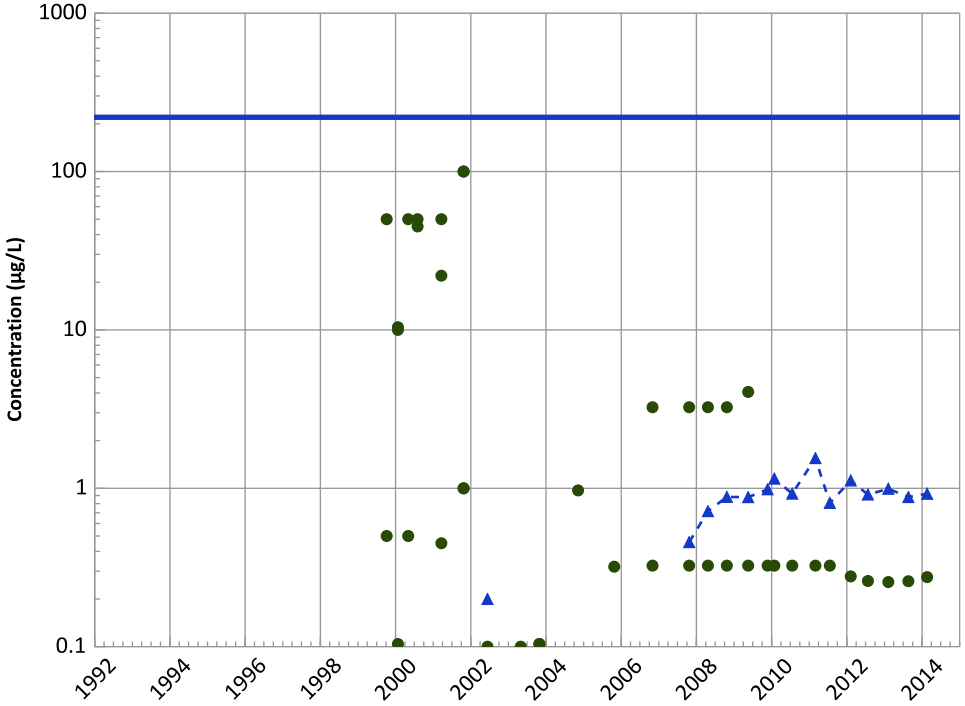


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

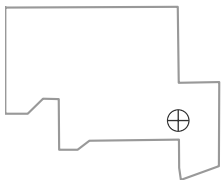
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

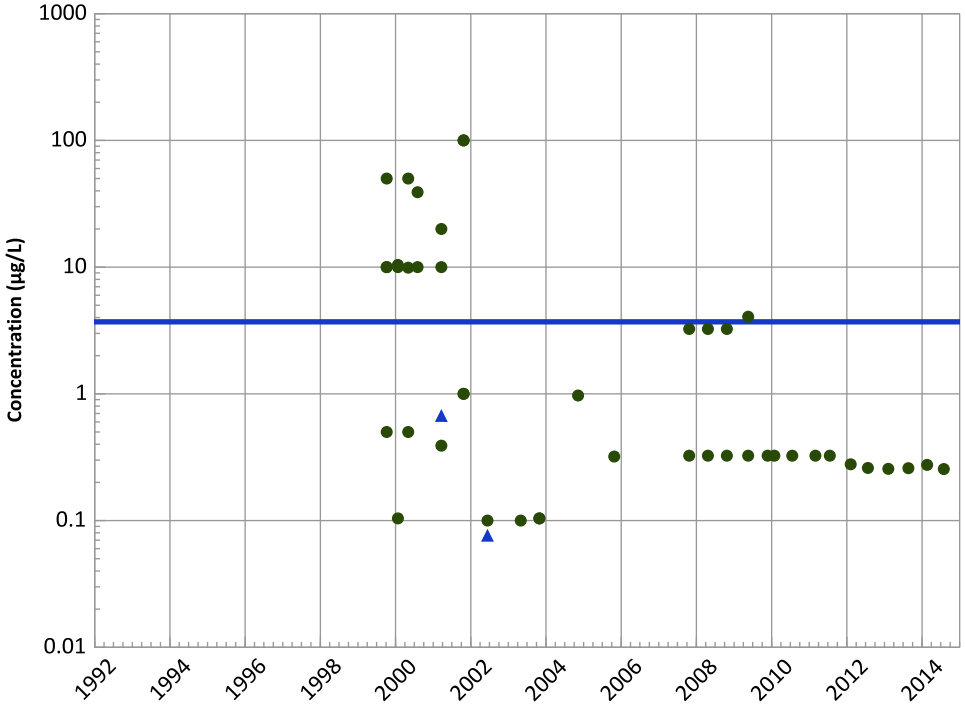
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

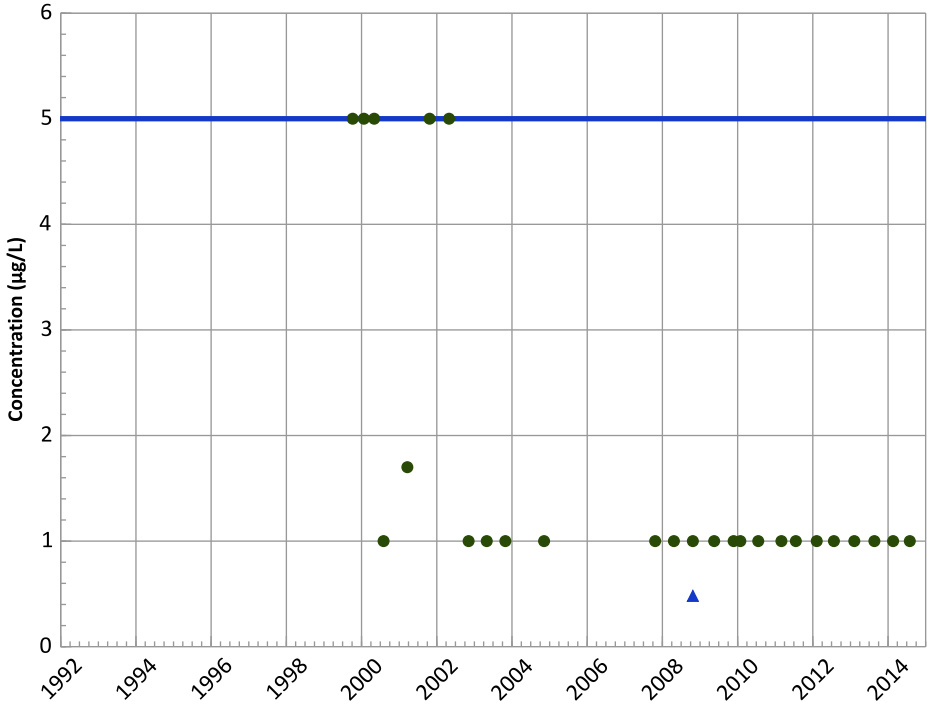


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

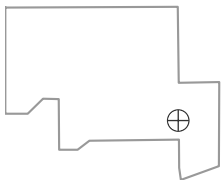
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

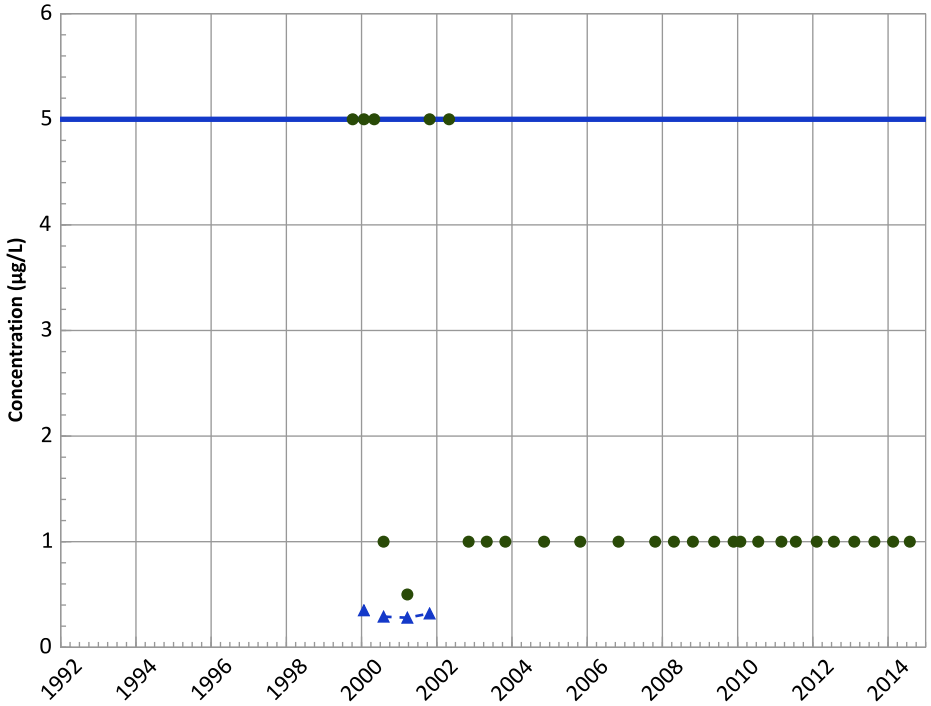
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

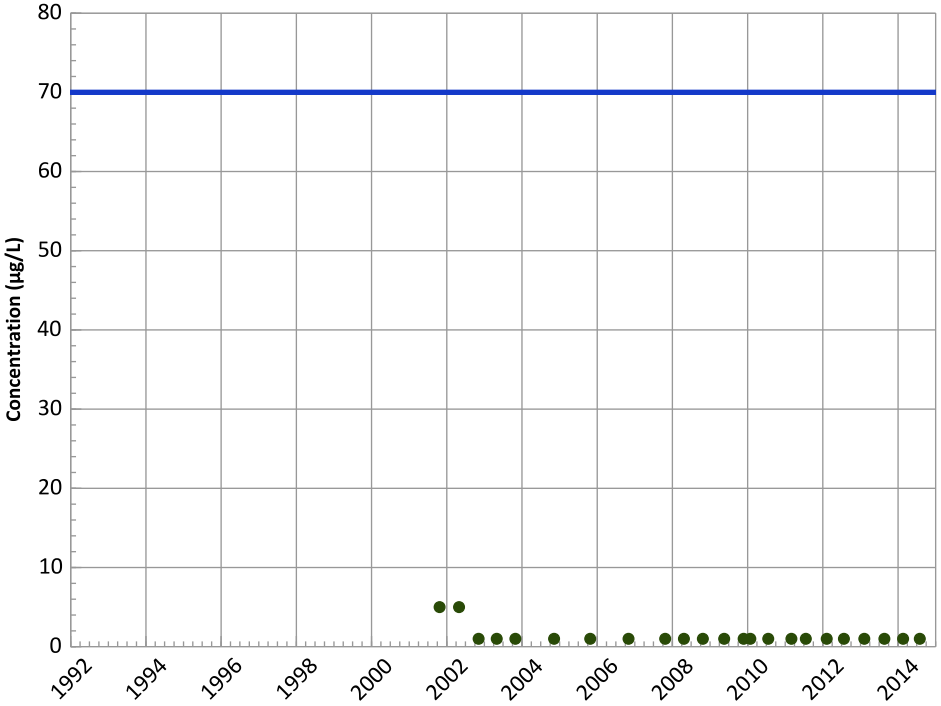


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Stable

cis-1,2-Dichloroethene Trend



Concentration Trend

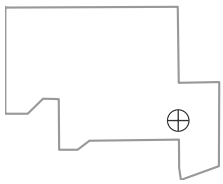
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

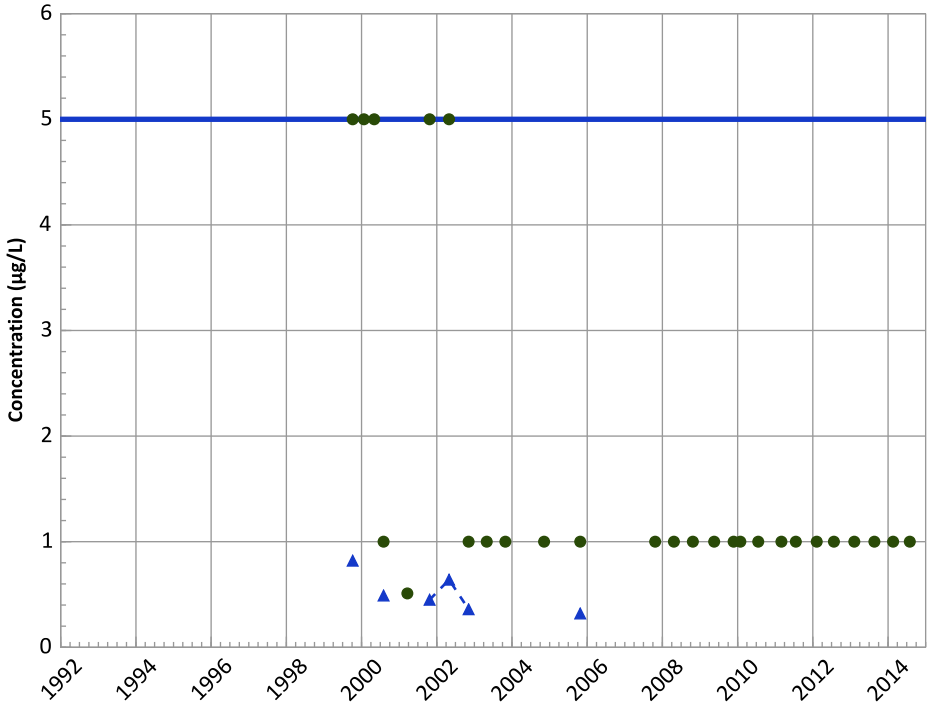
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

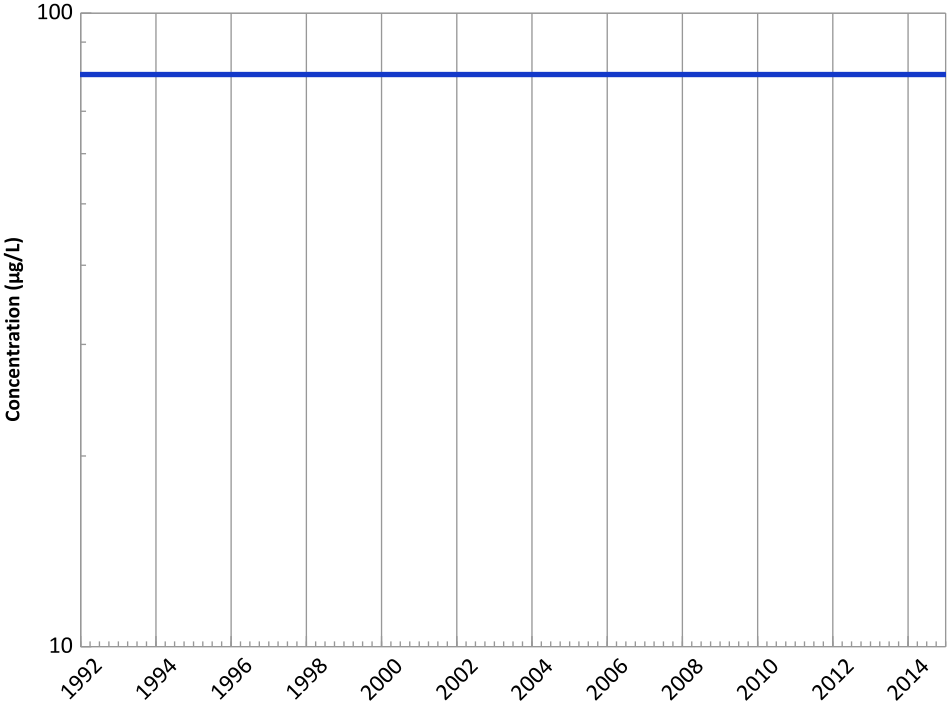


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

Chloroform Trend



Concentration Trend

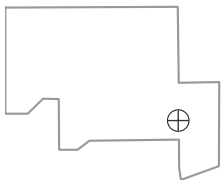
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

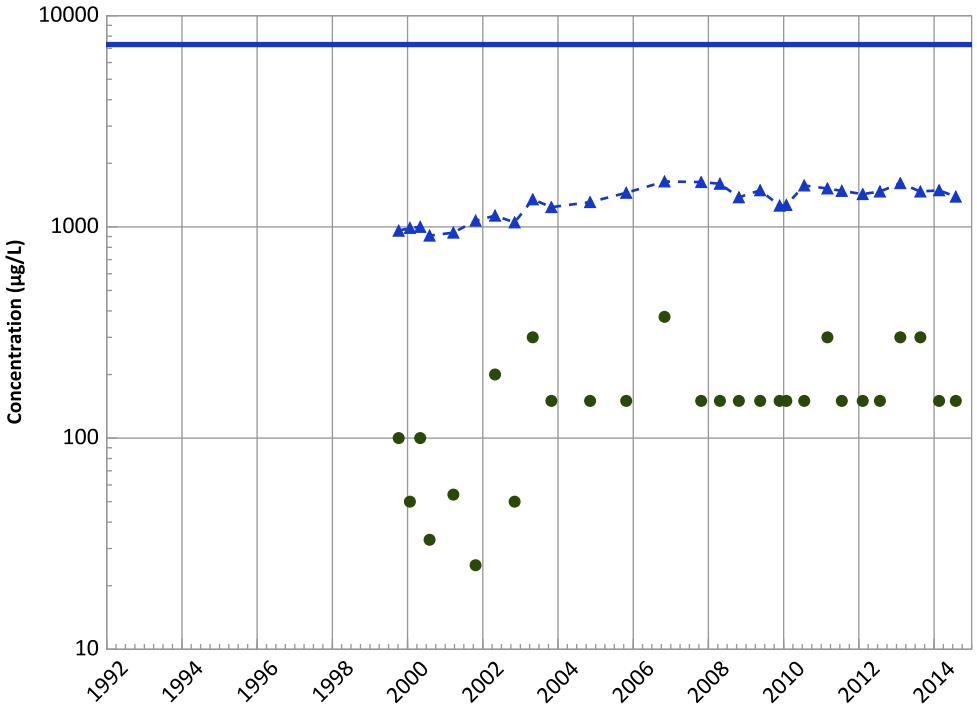
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

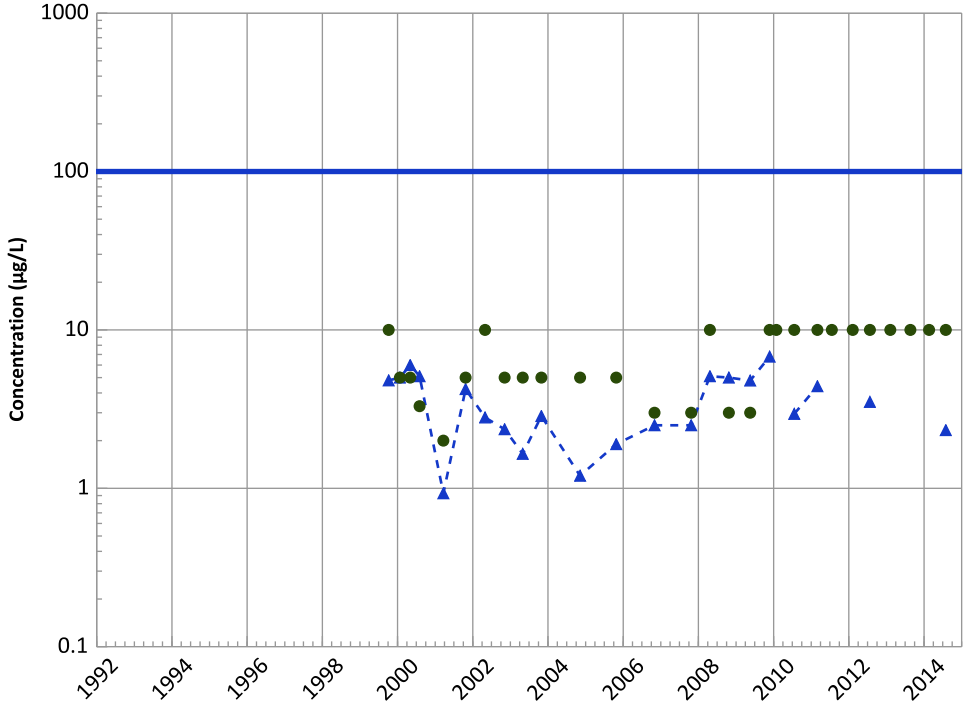


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Chromium, Total Trend



Concentration Trend

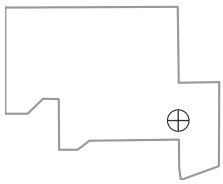
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

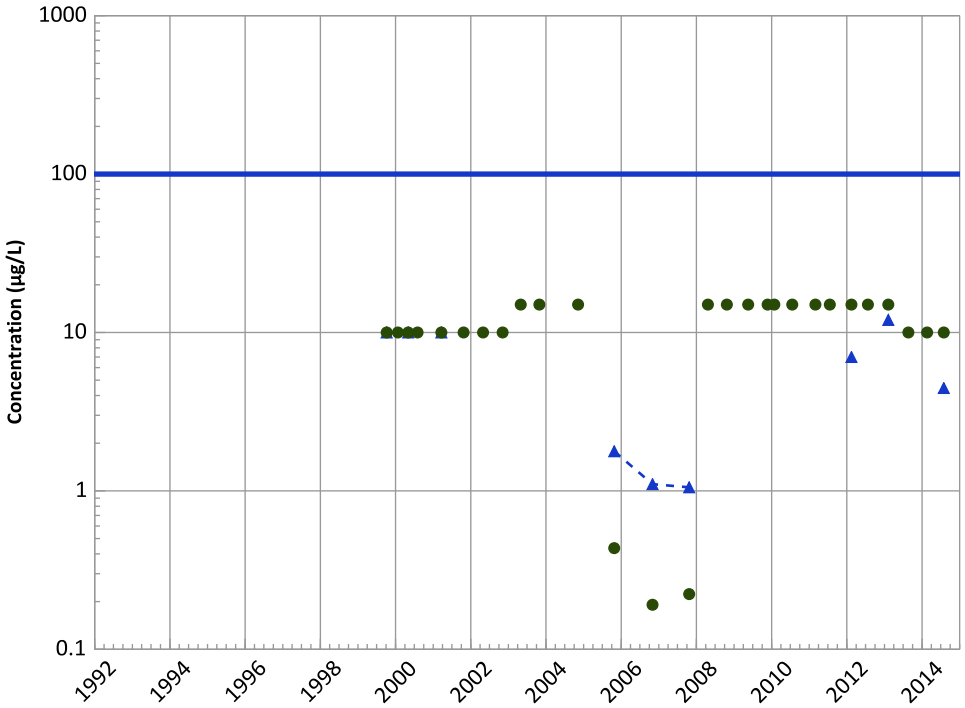
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

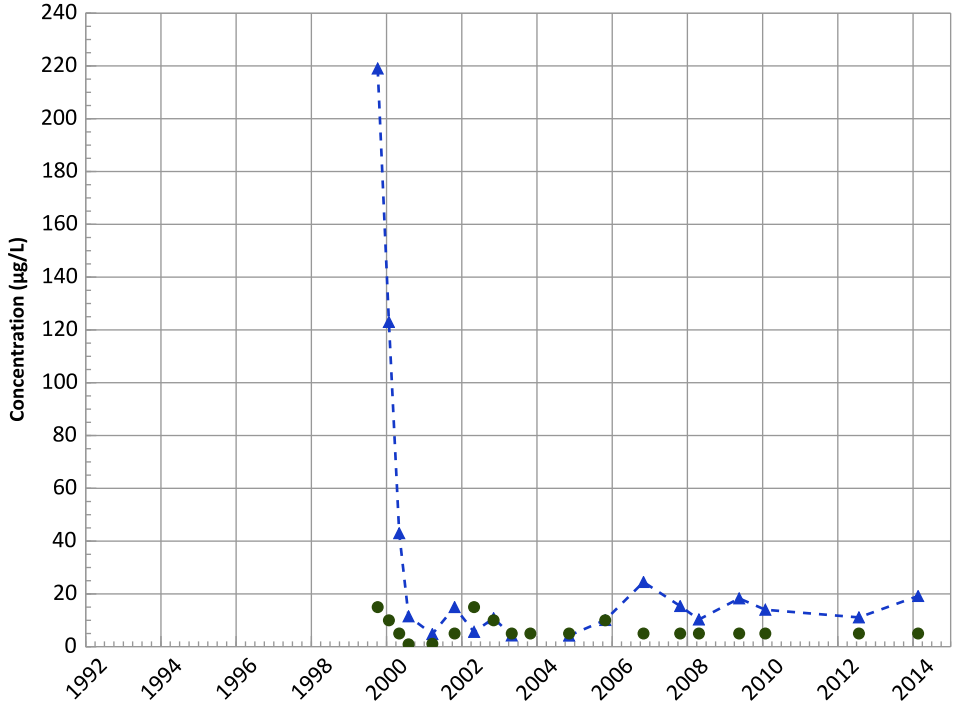


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Manganese Trend



Concentration Trend

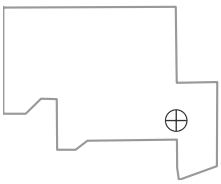
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

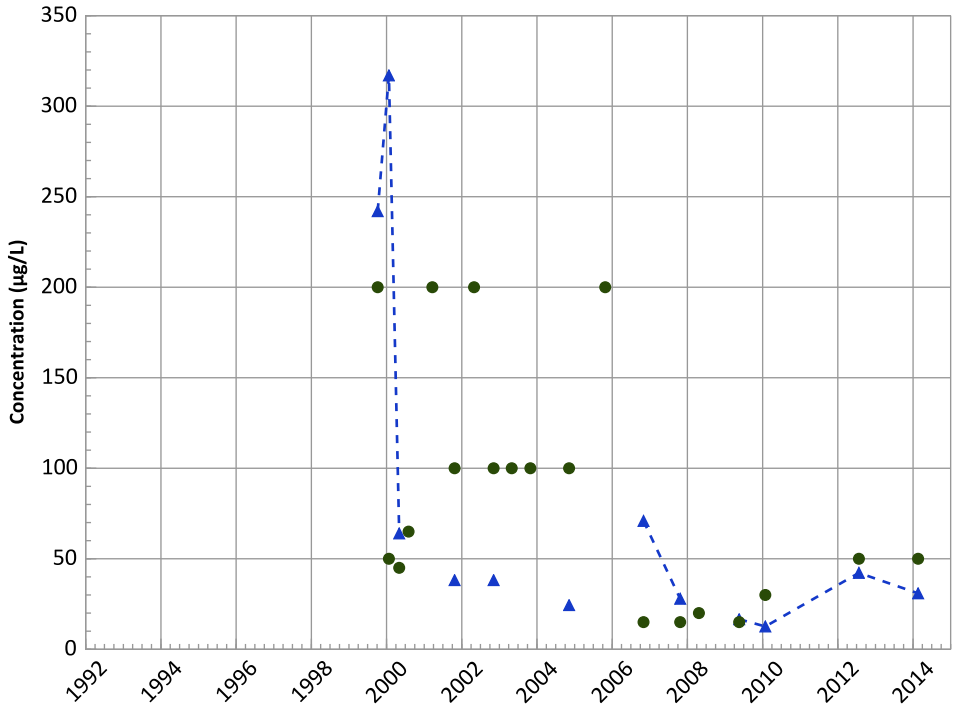
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

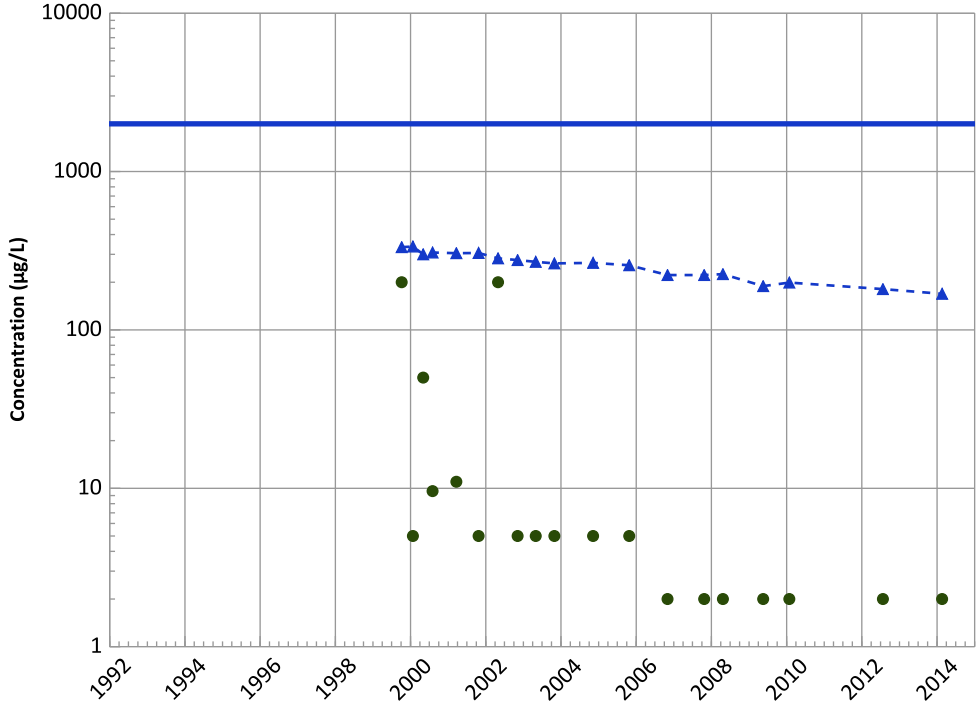


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

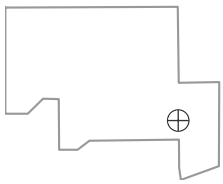
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

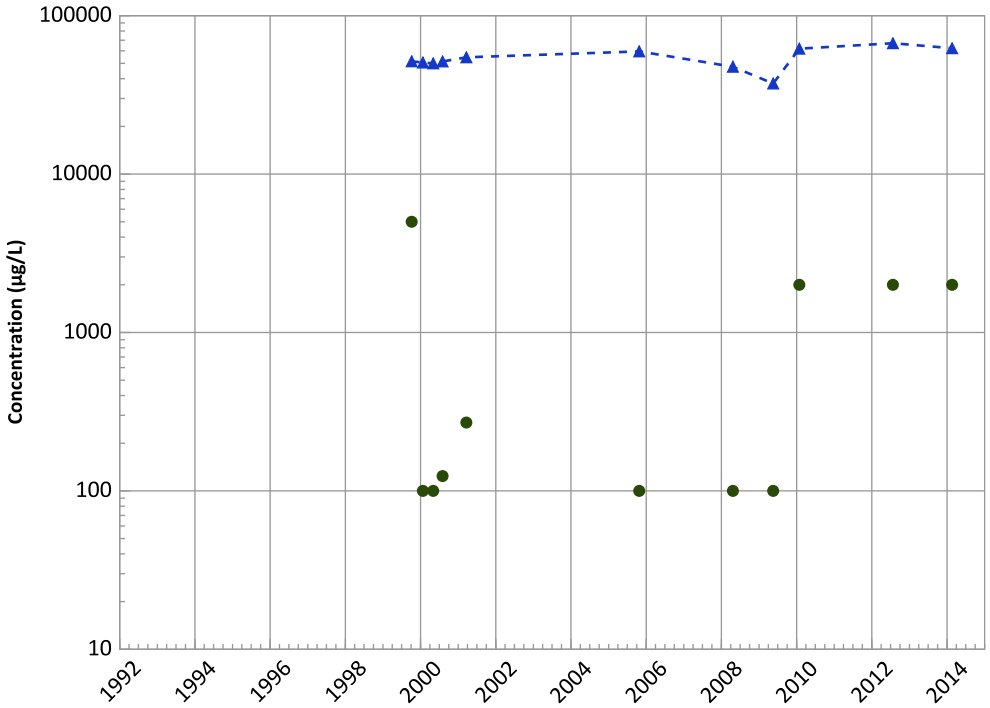
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

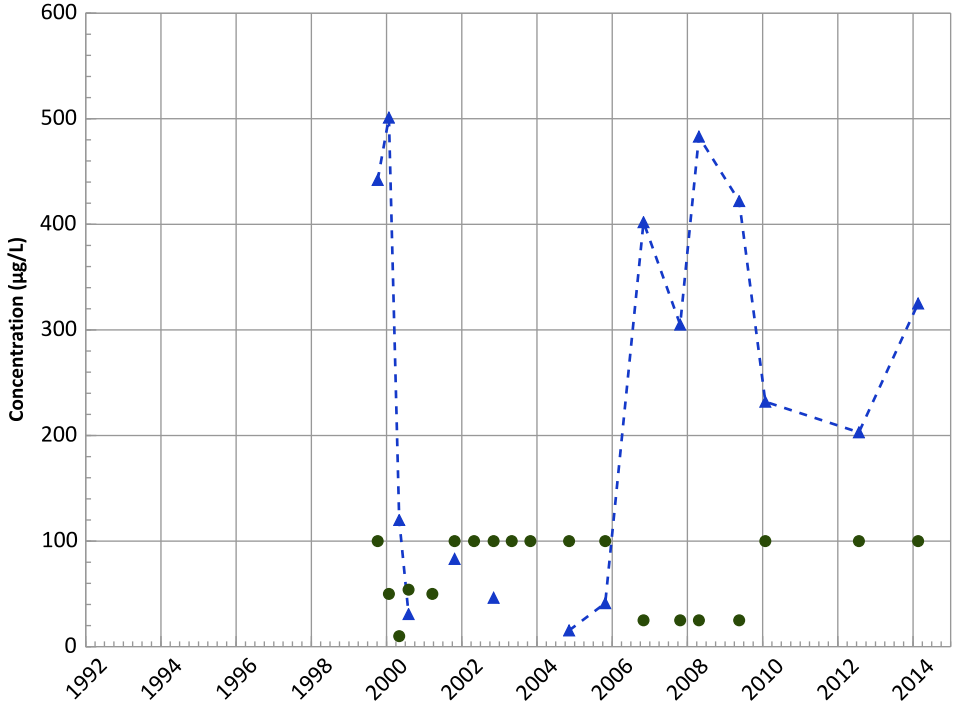


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

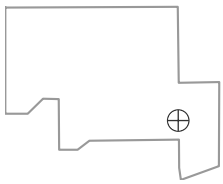
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

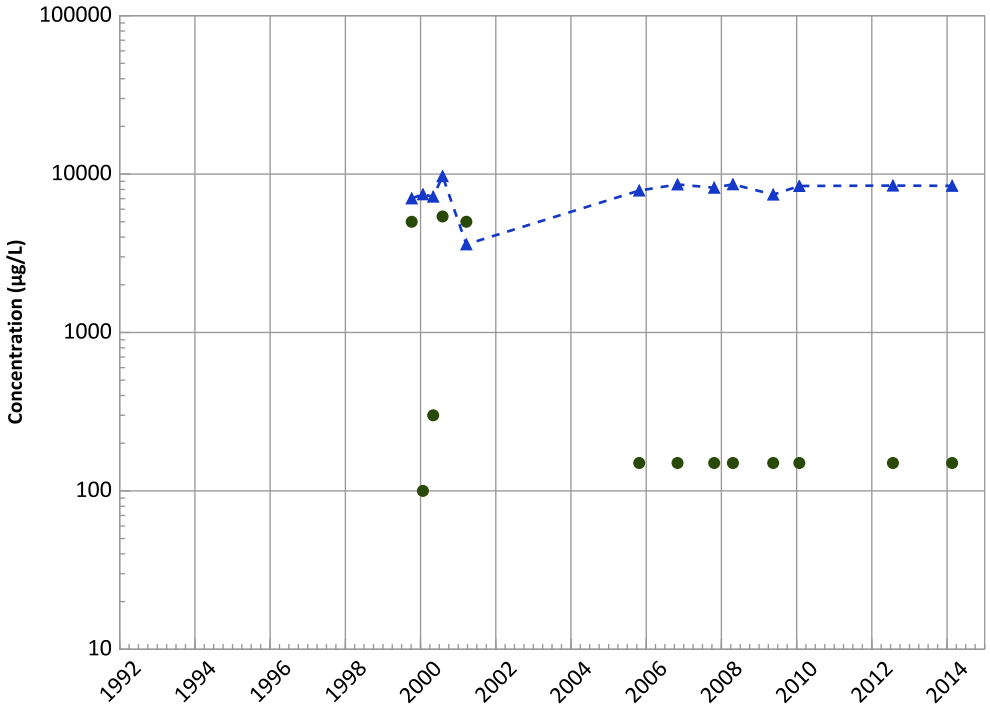
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

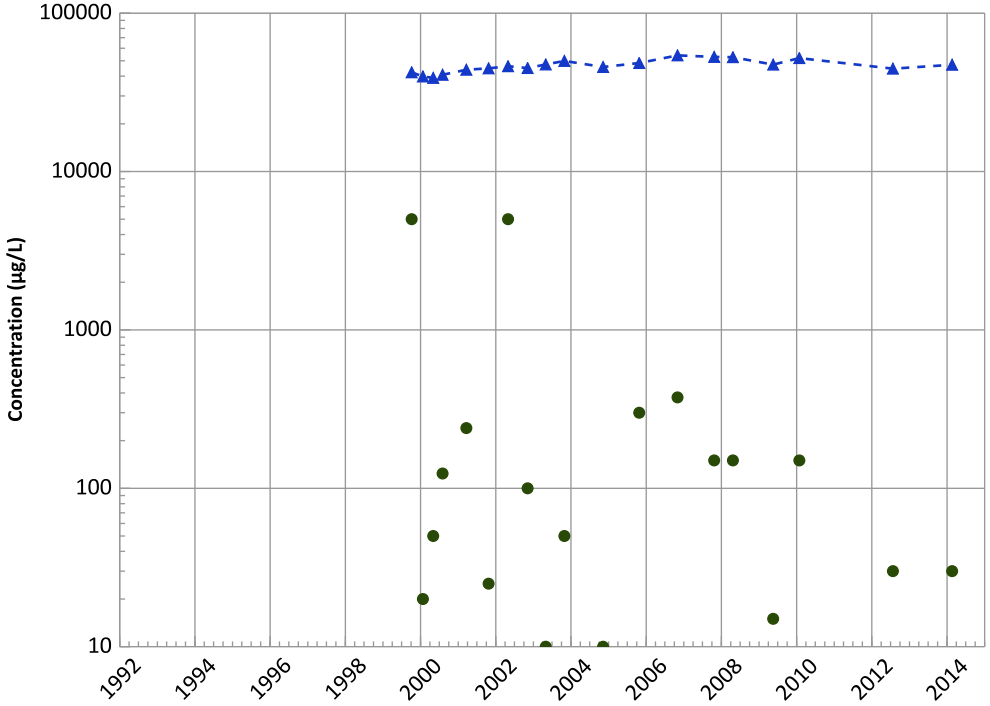


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Magnesium Trend



Concentration Trend

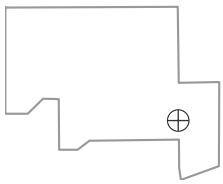
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

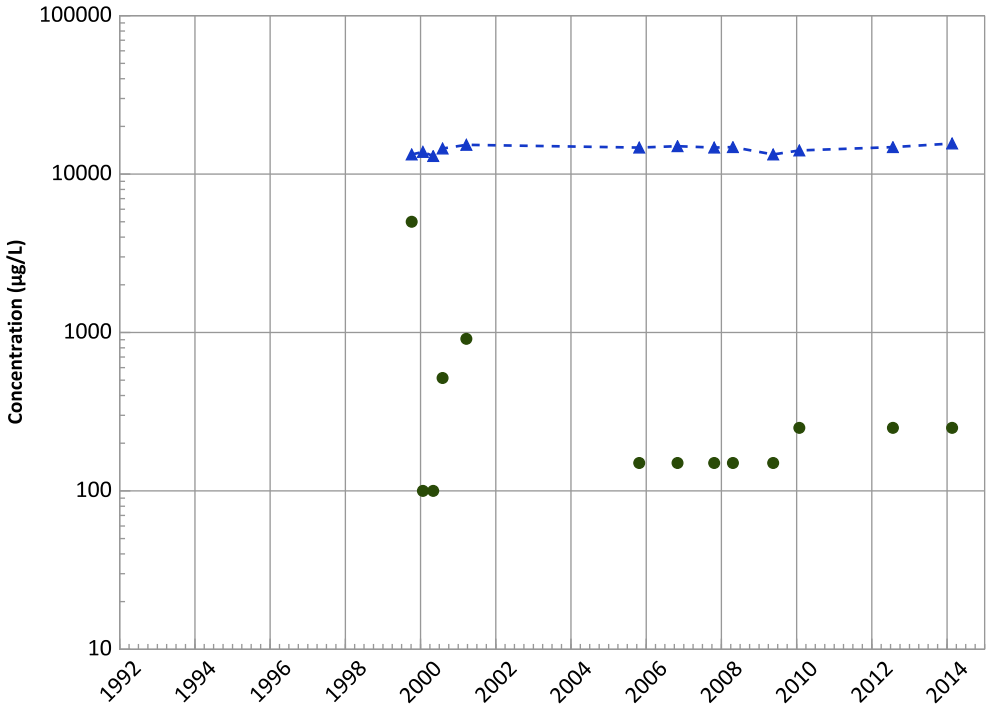
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1041 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

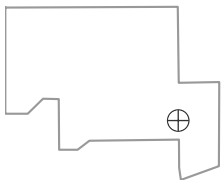
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

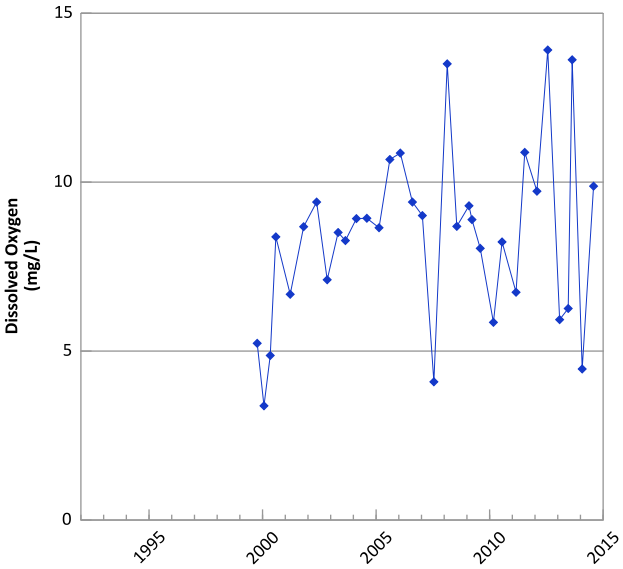
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

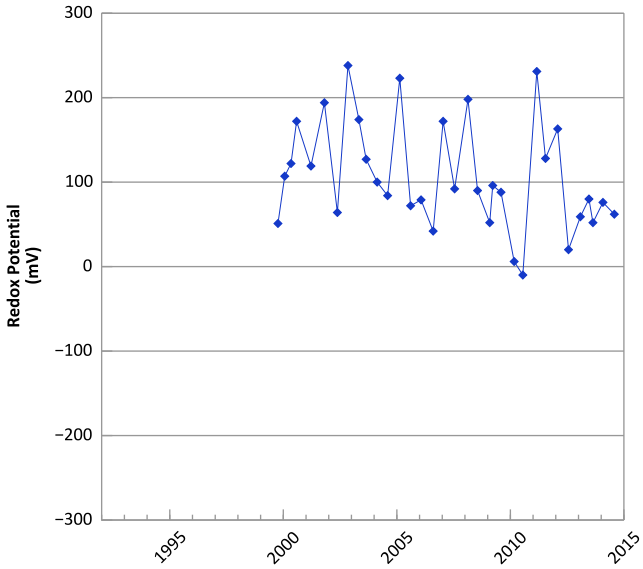
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

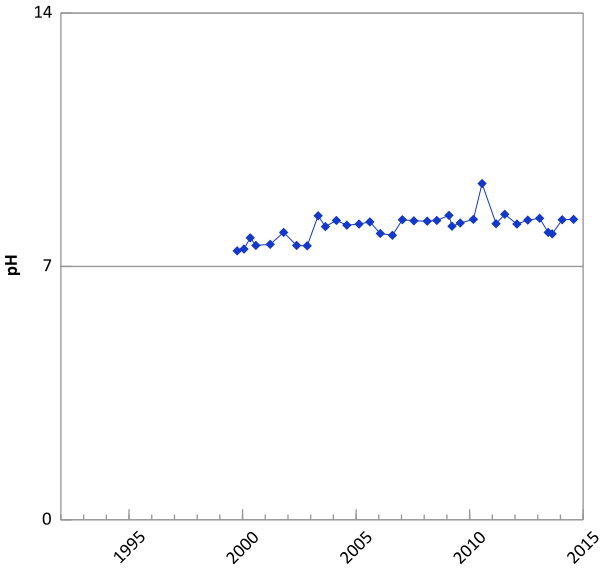
Well Location

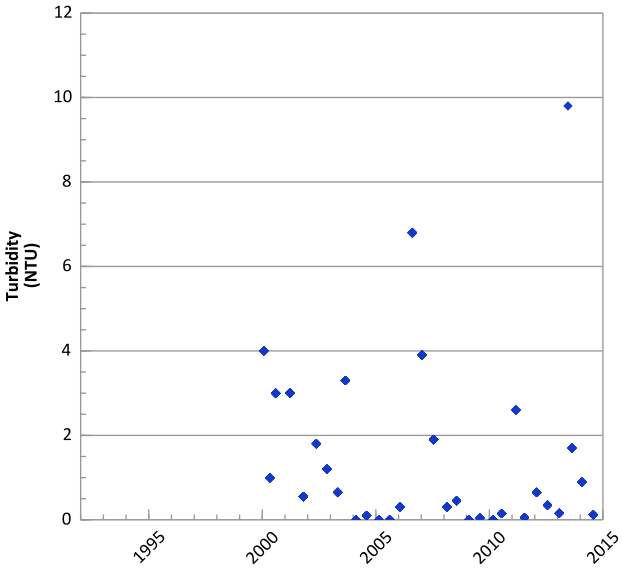


PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



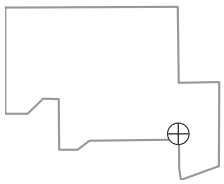






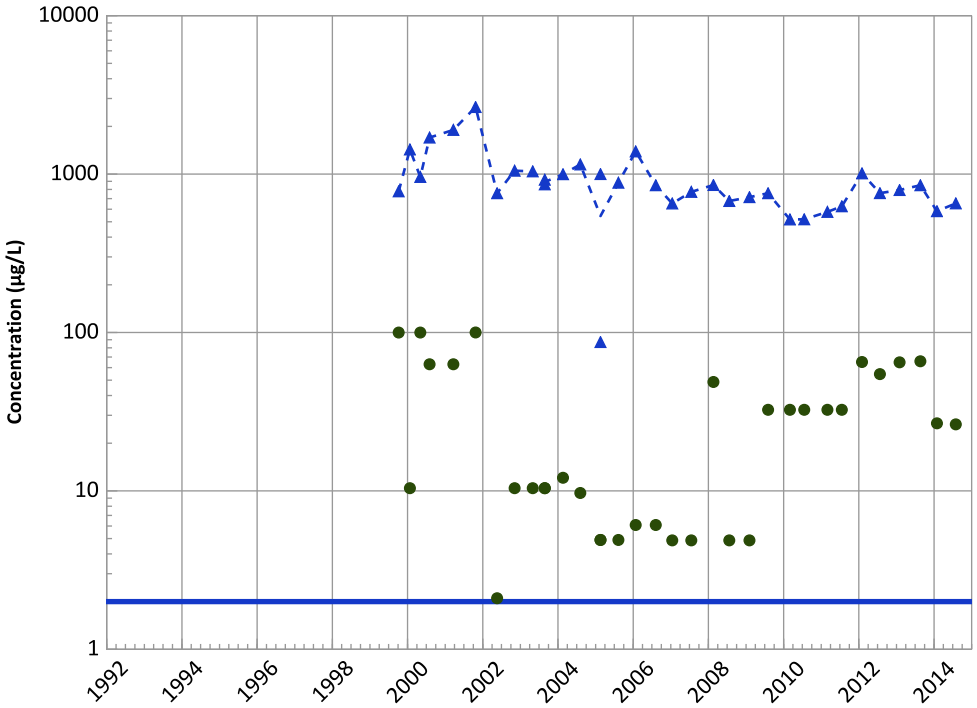
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

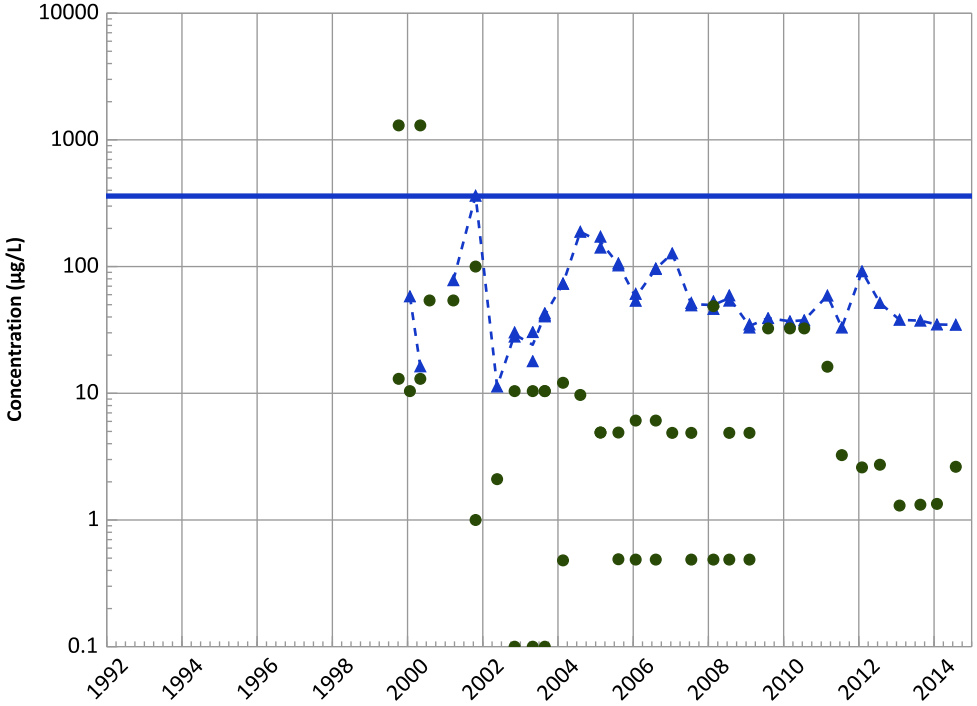


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

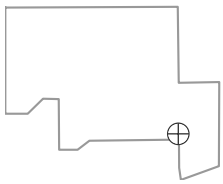
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

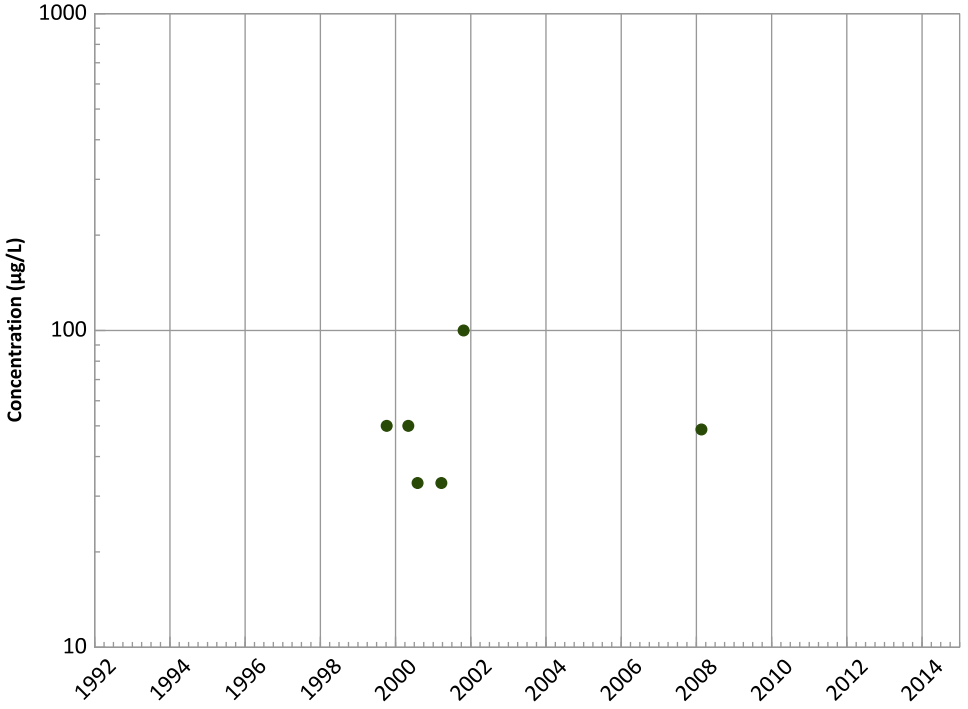
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

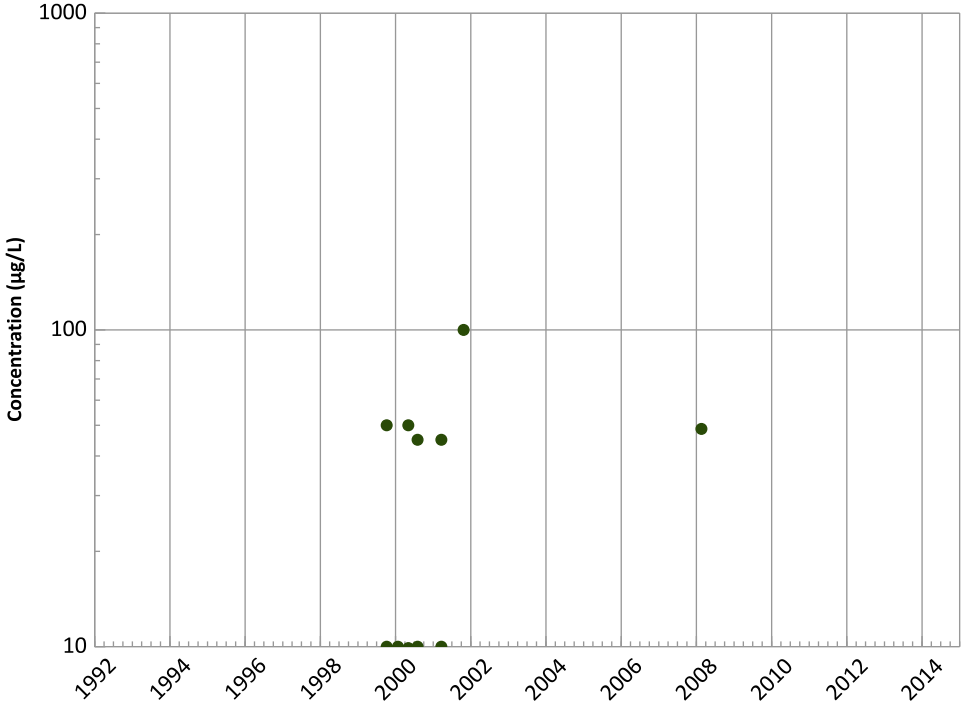


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

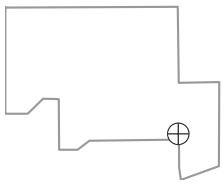
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

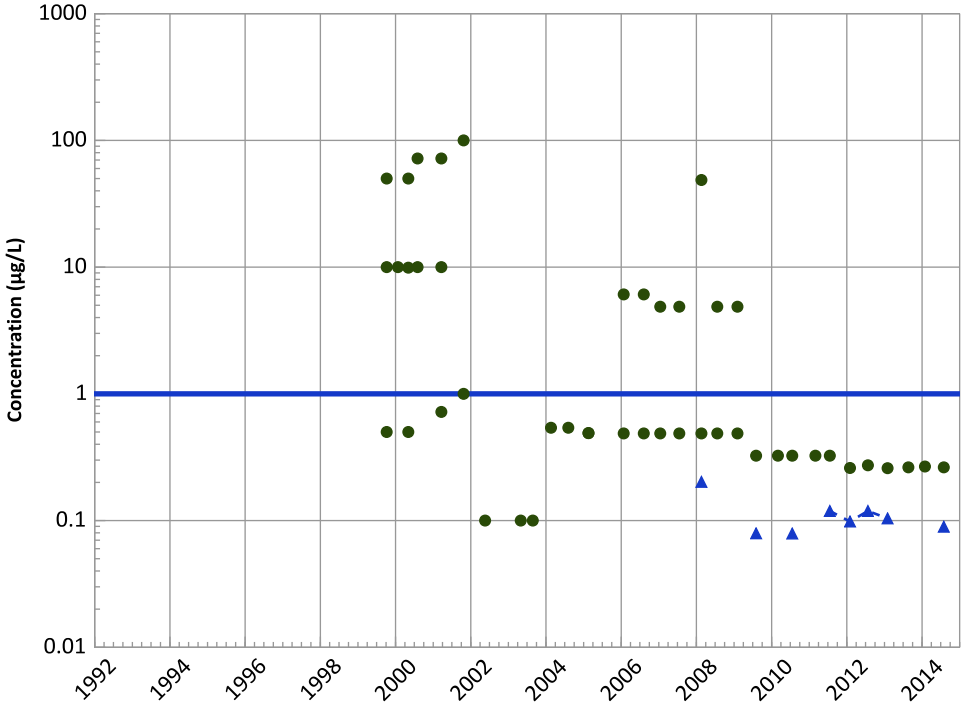
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

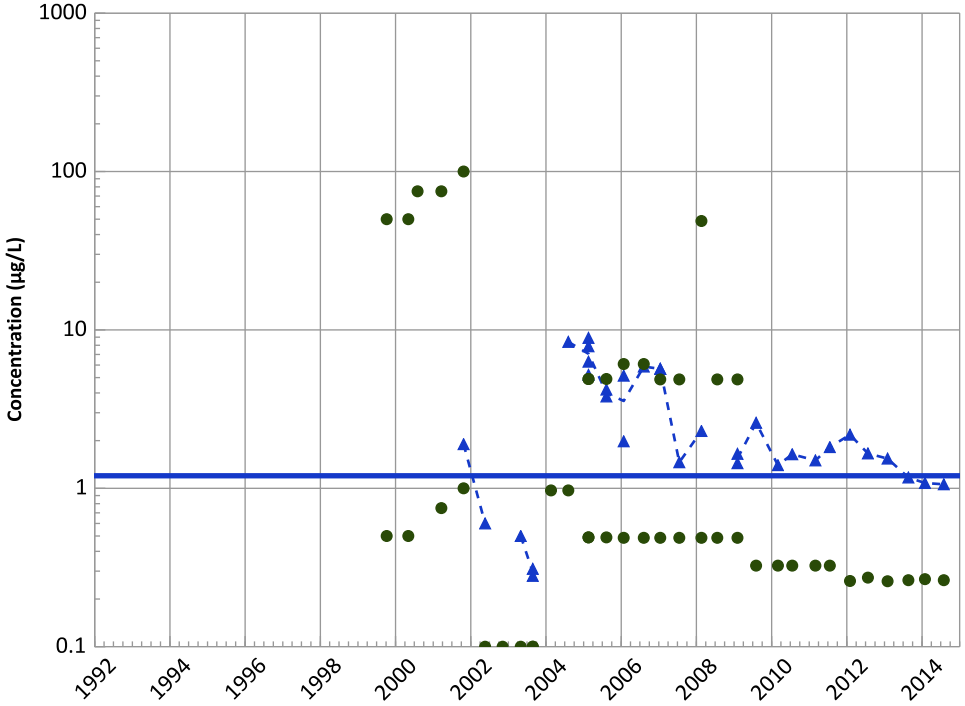


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

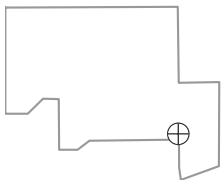
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

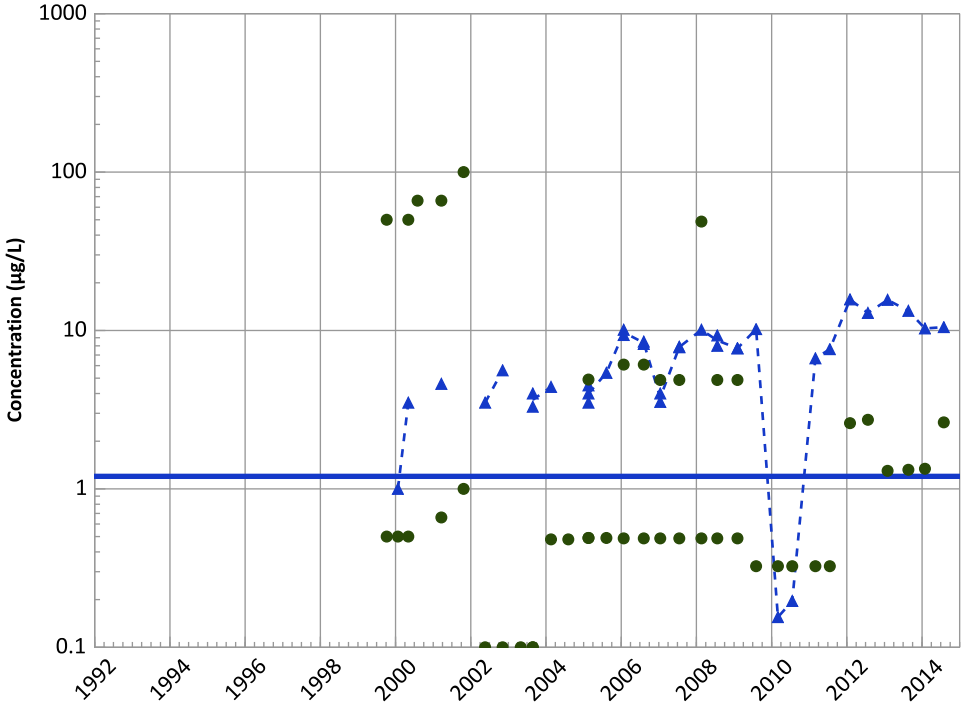
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

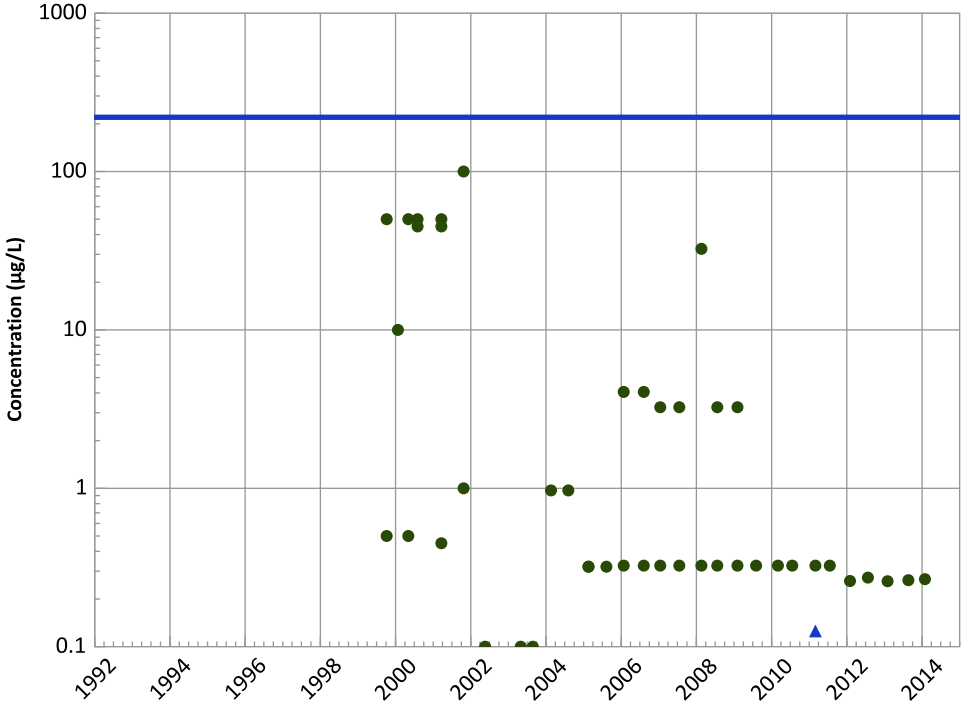


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Probably Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

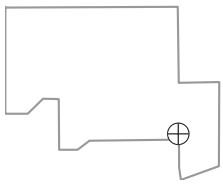
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

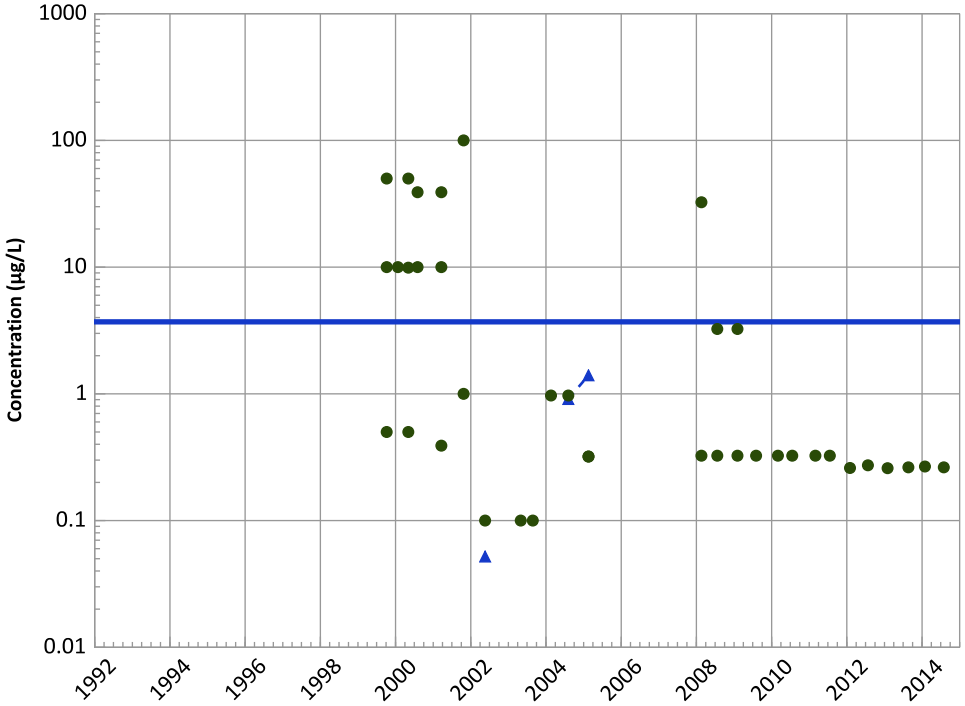
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

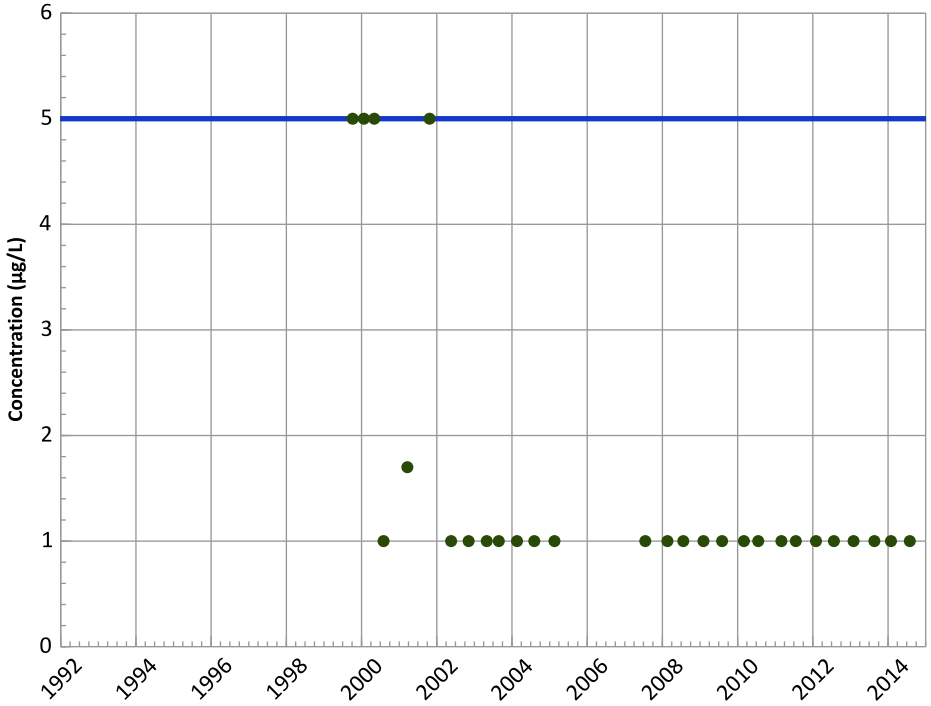


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

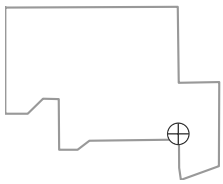
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

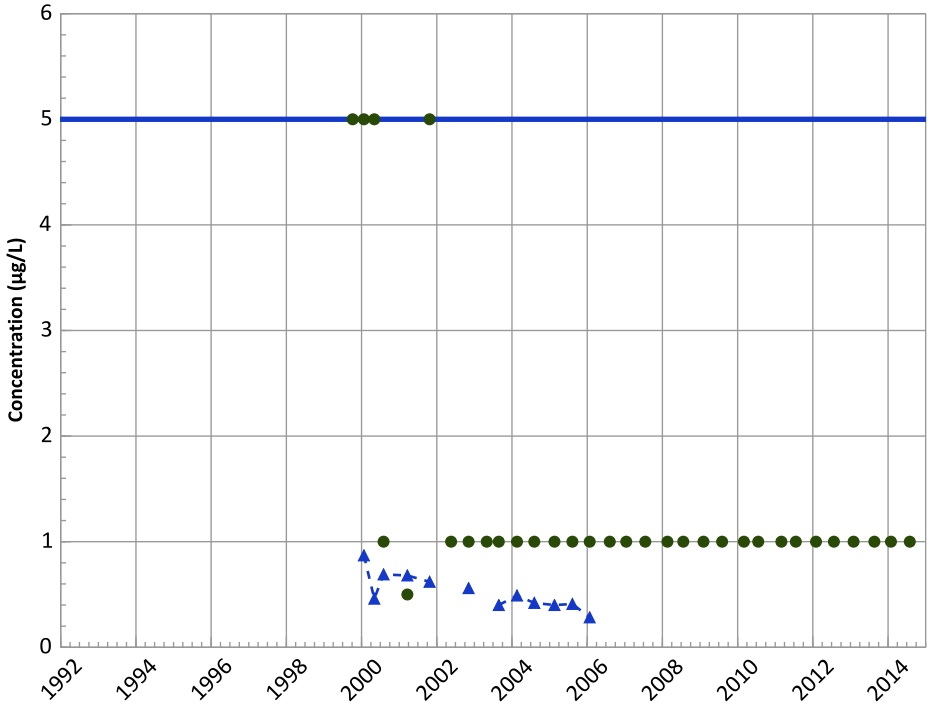
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

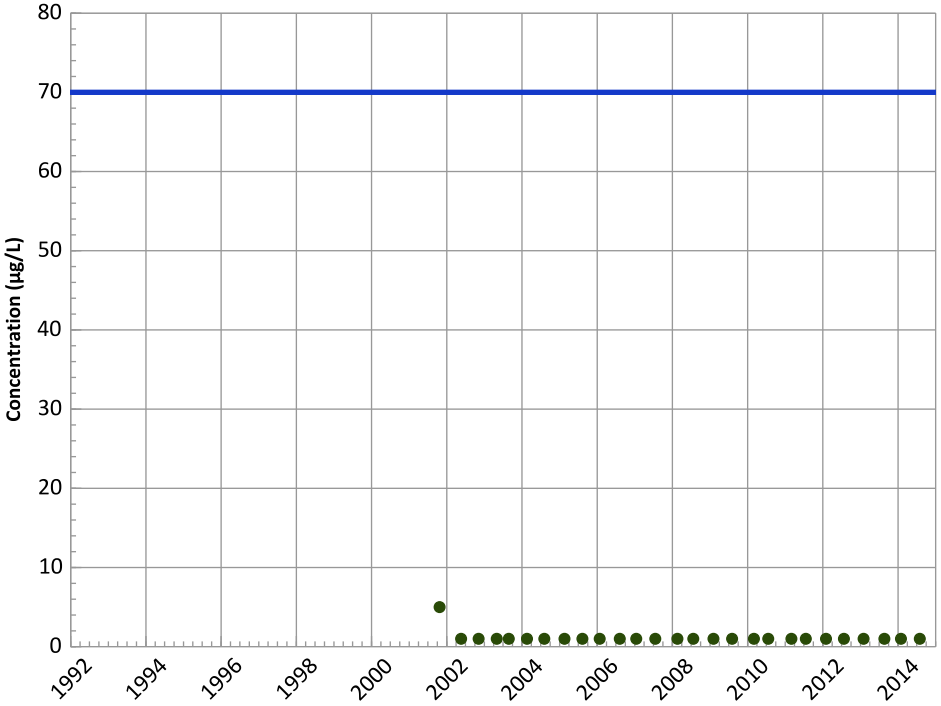


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

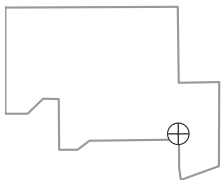
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

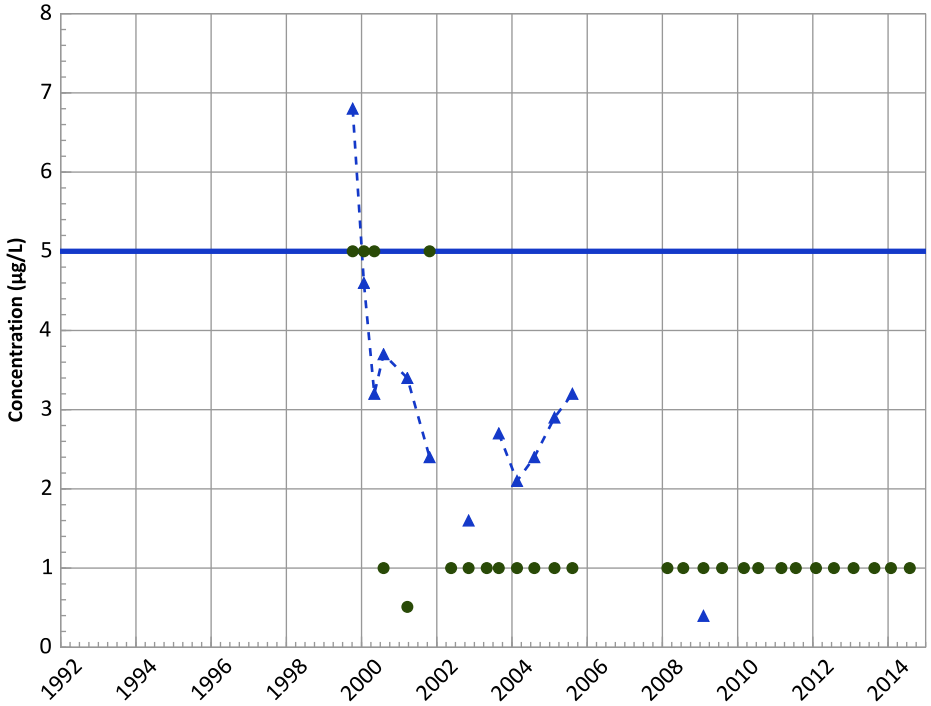
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

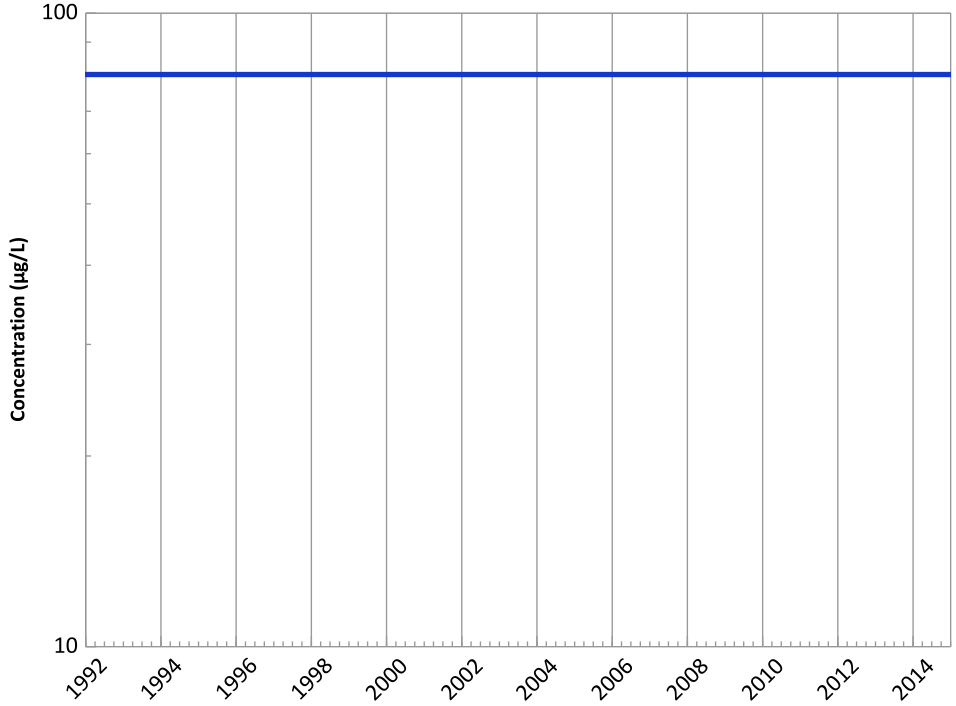


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

Chloroform Trend



Concentration Trend

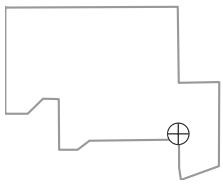
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

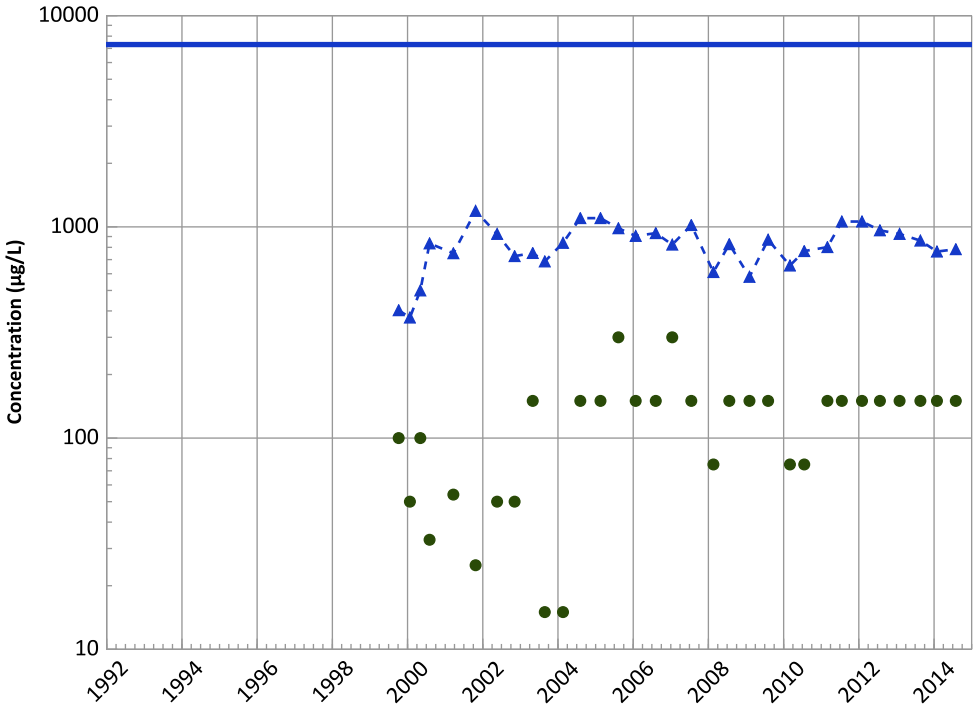
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

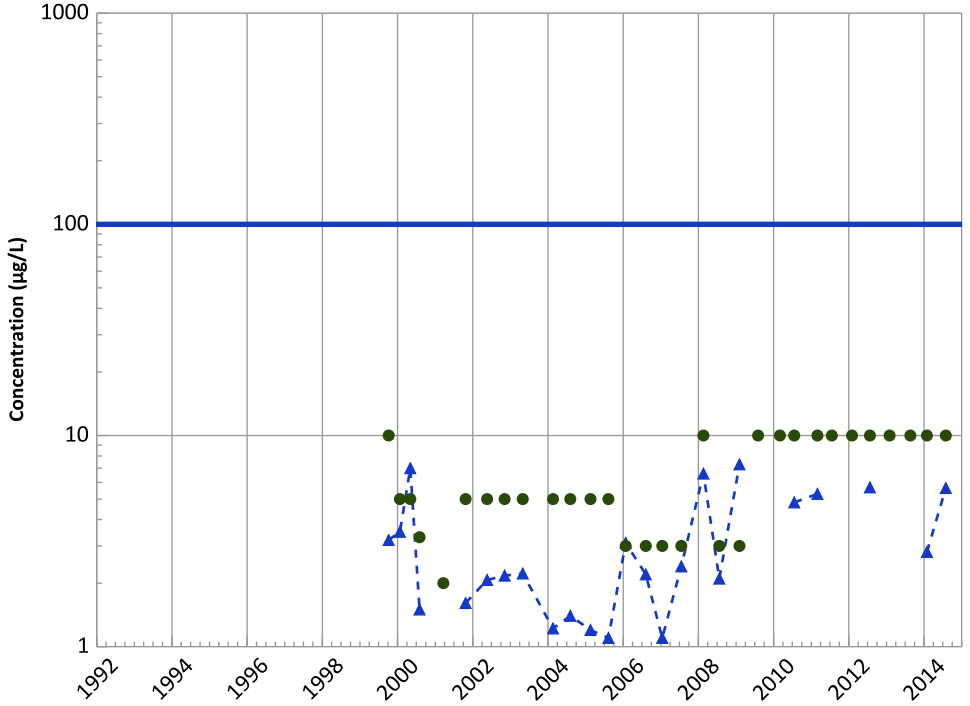


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Chromium, Total Trend



Concentration Trend

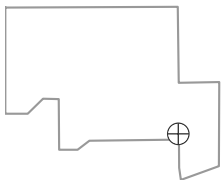
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

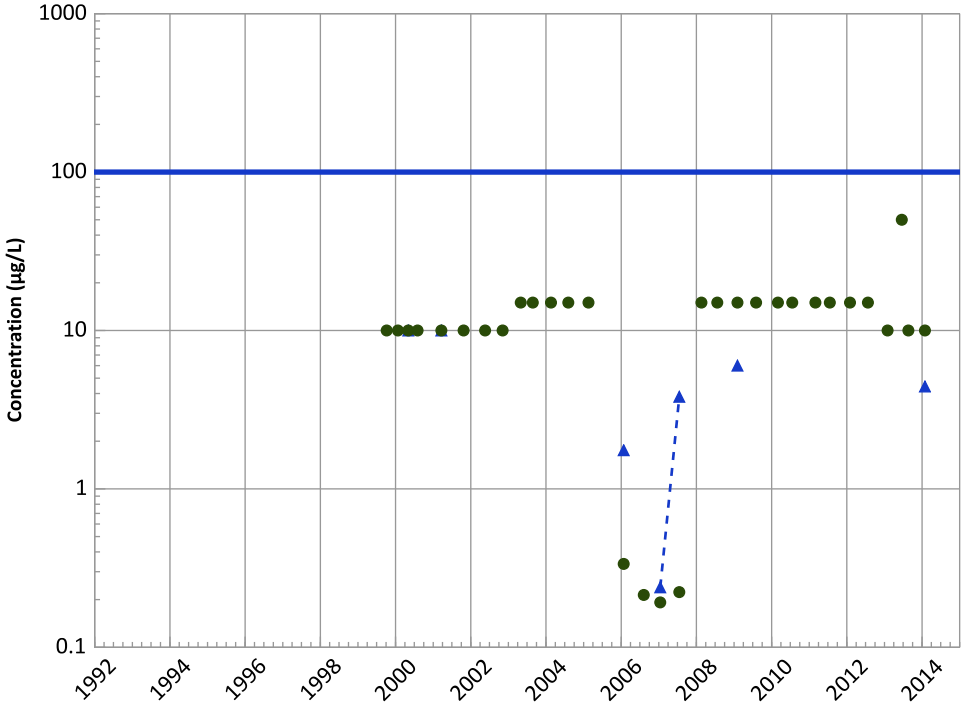
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

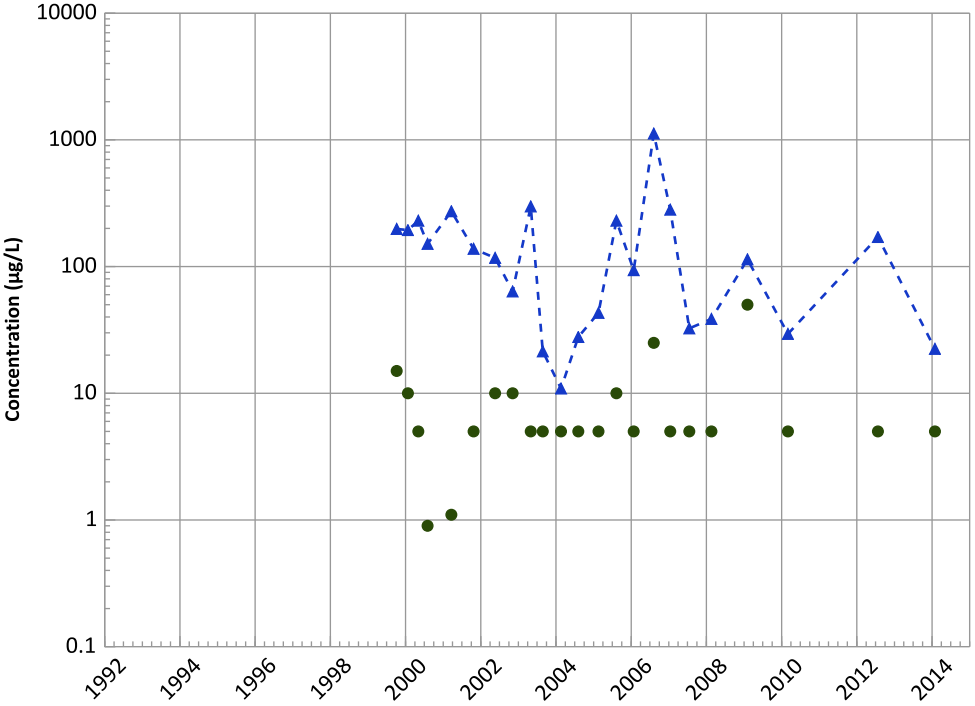


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Manganese Trend



Concentration Trend

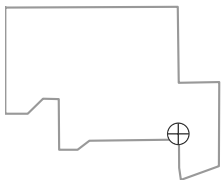
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

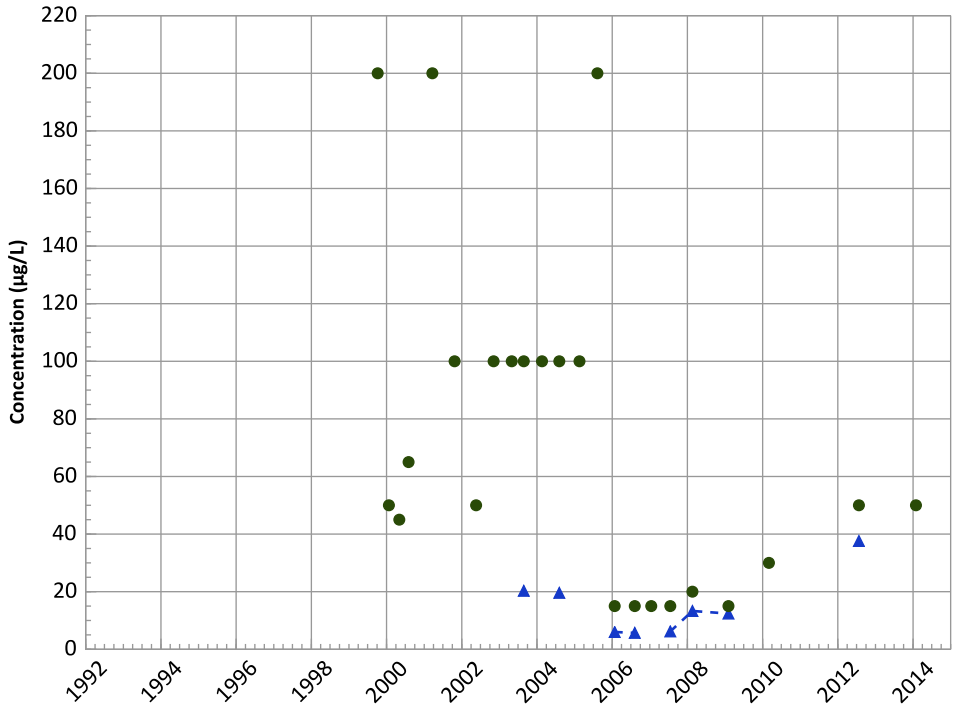
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

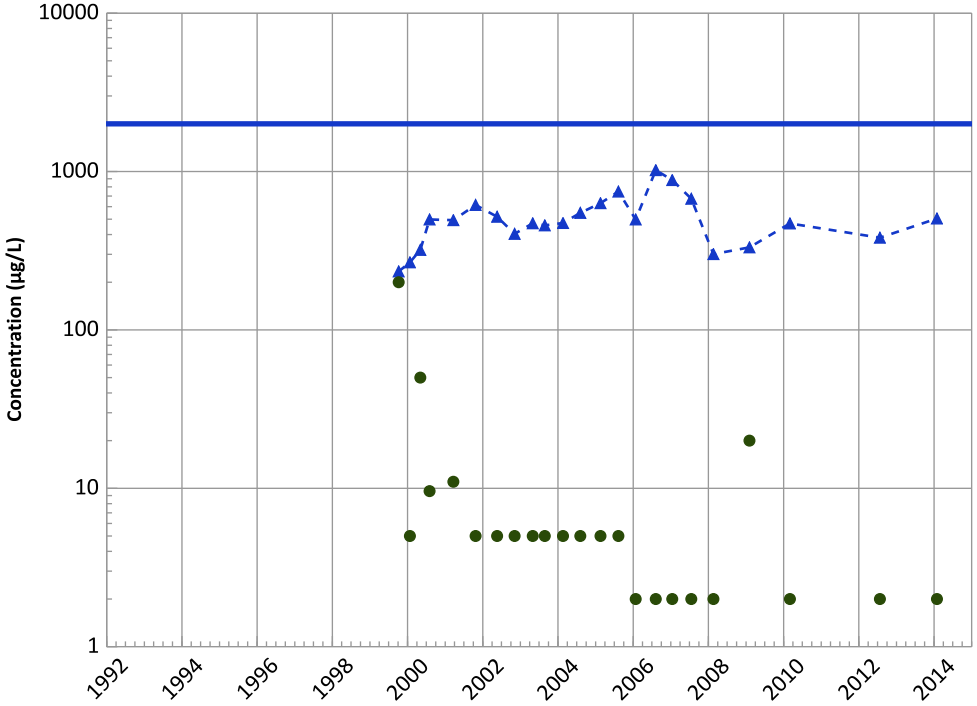


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

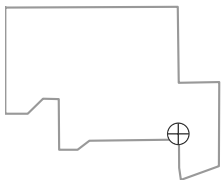
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

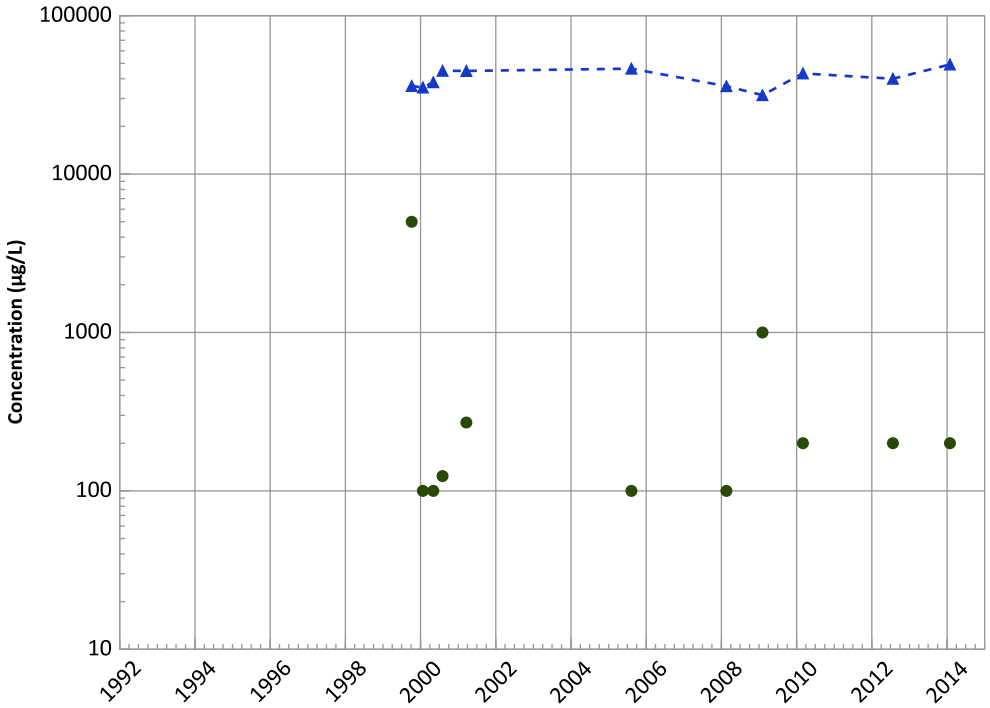
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

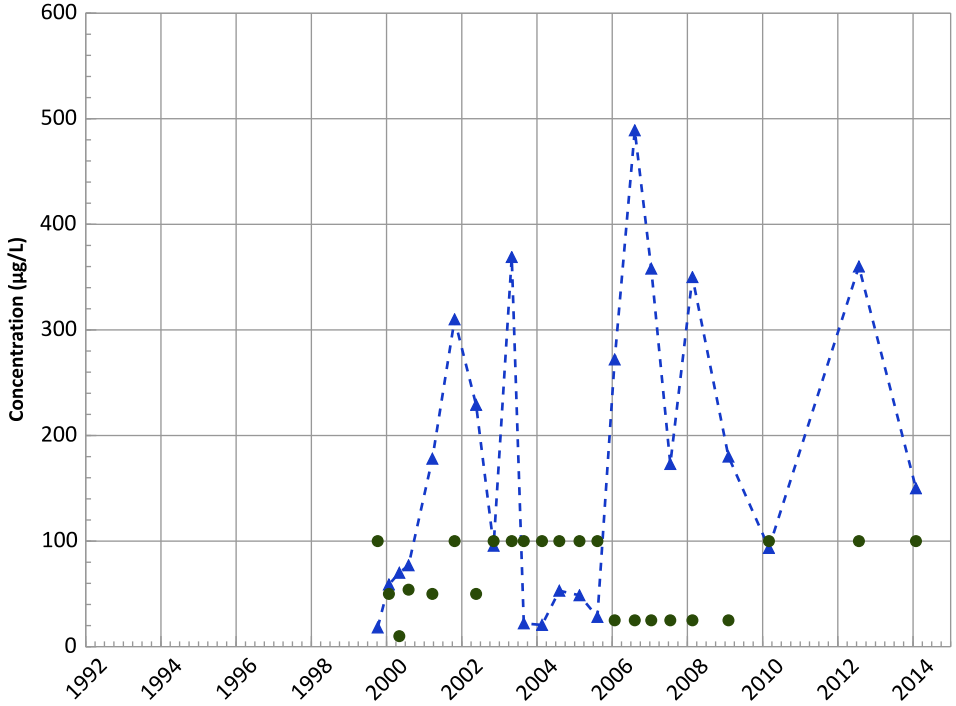


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

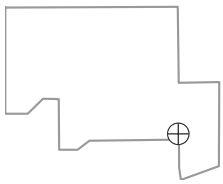
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

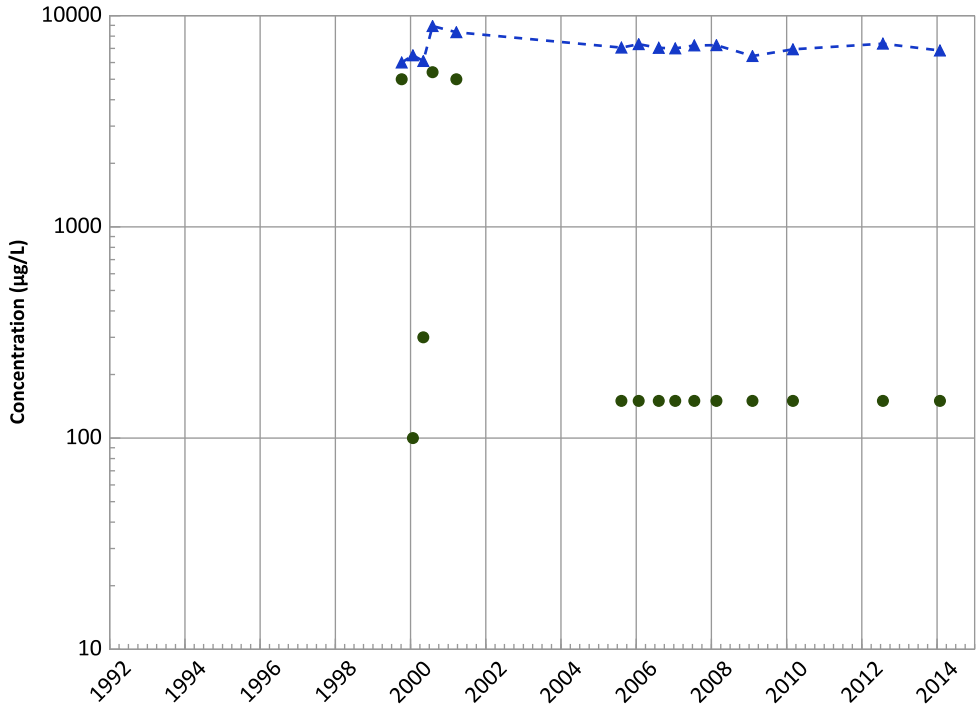
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

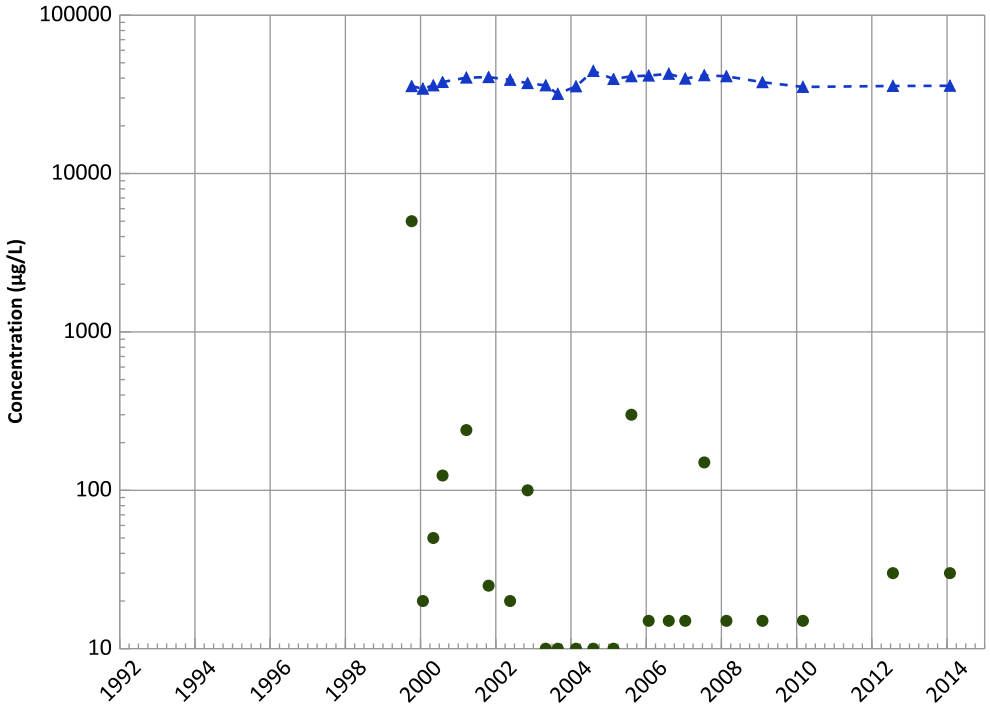


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

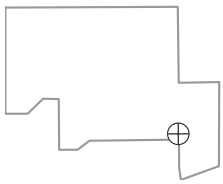
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

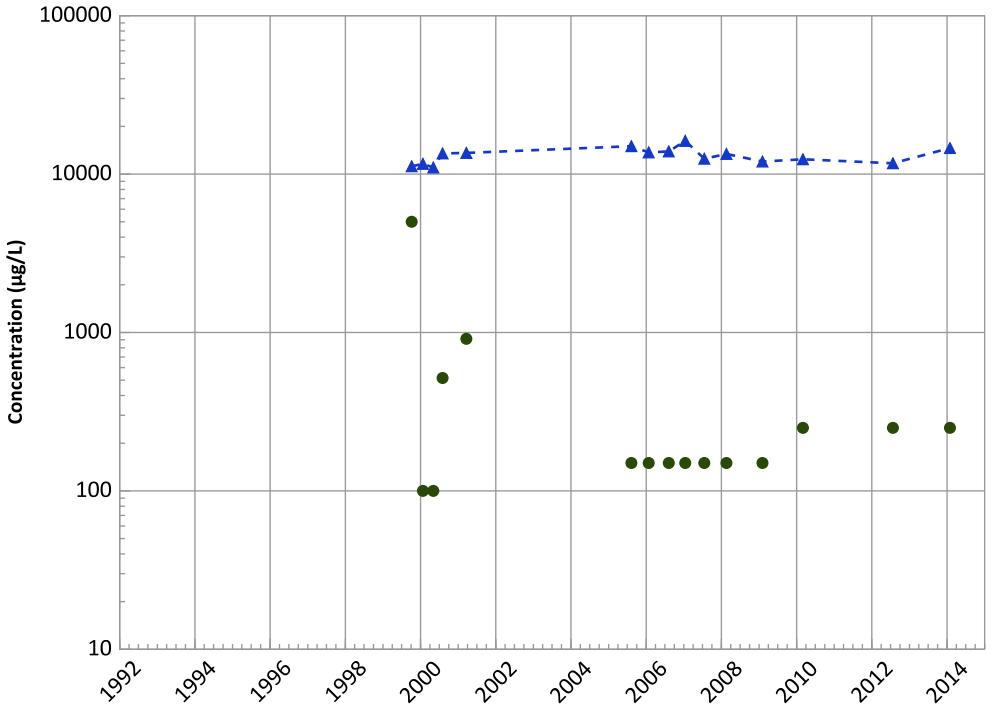
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1042 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

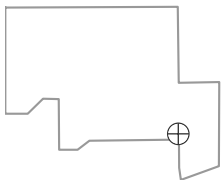
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

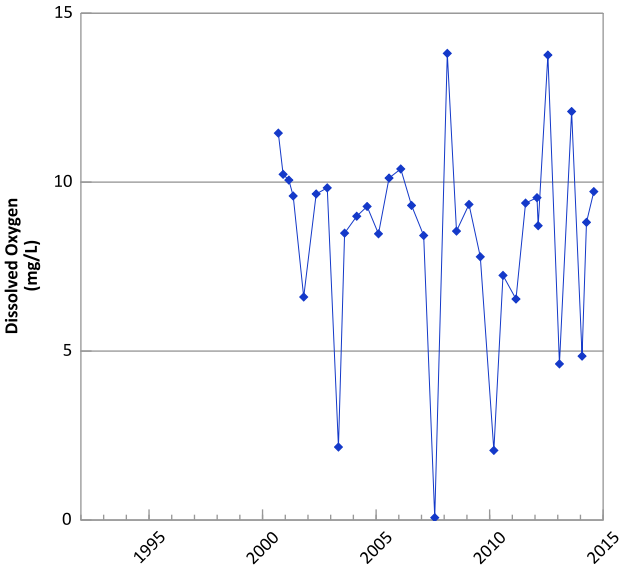
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/07/1999 to 07/31/2014
Analysis Date: 03/19/2015

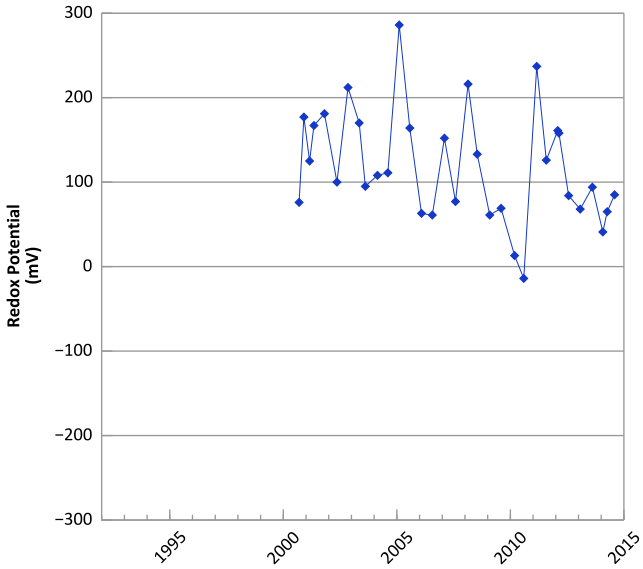
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

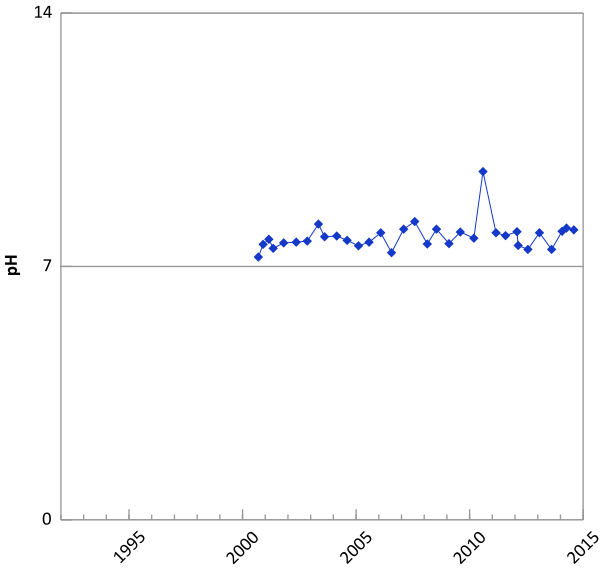
Well Location

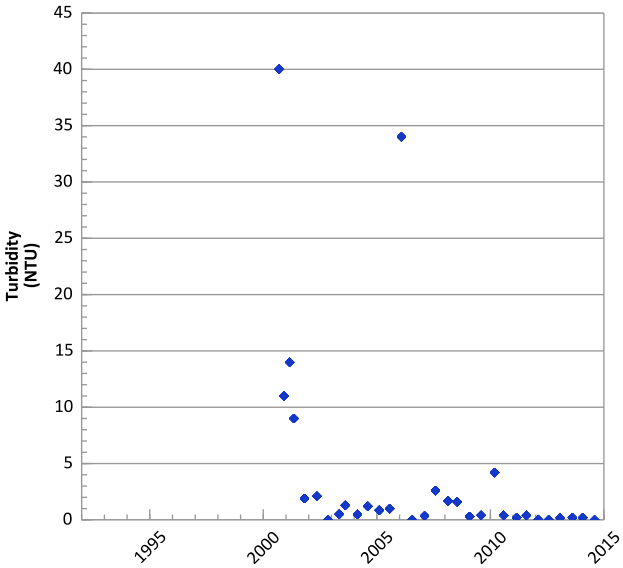


PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



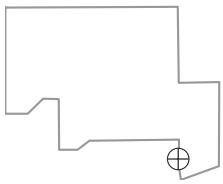






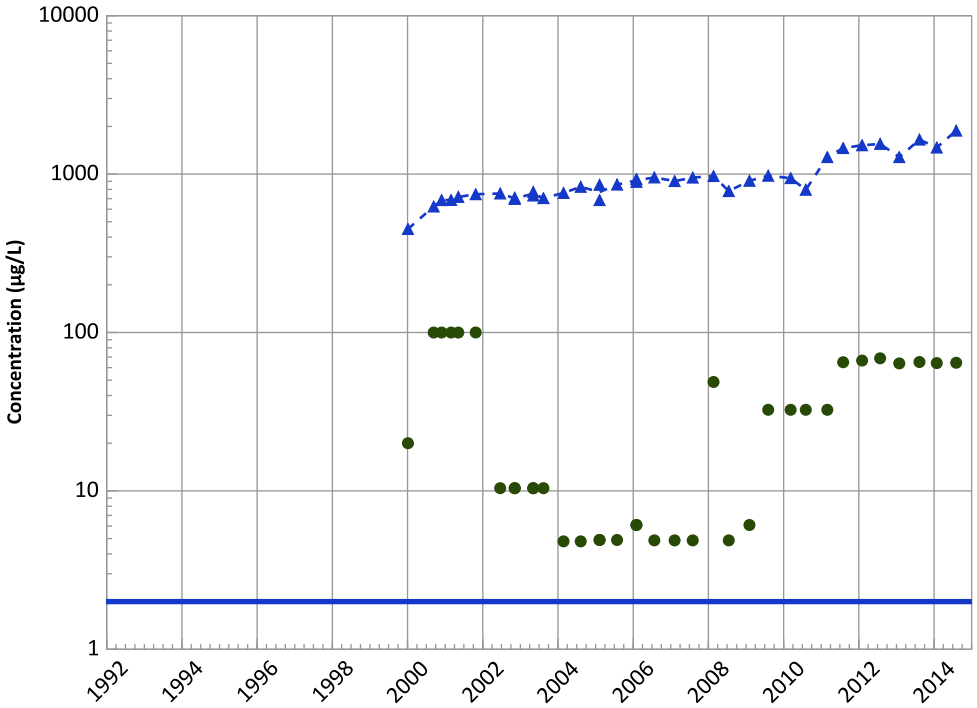
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

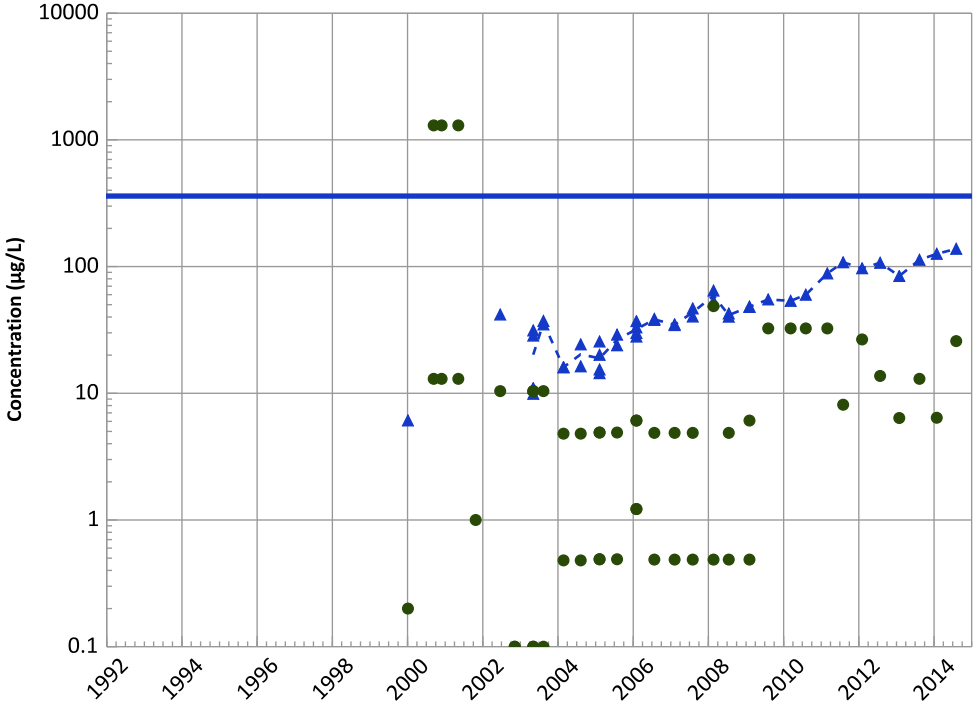


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

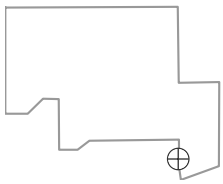
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

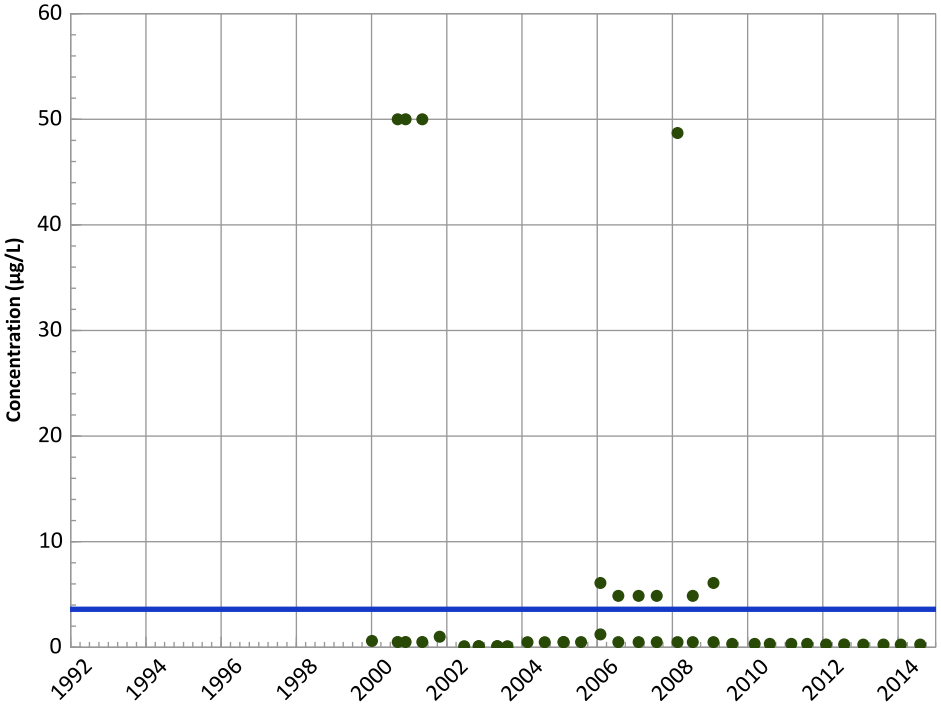
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

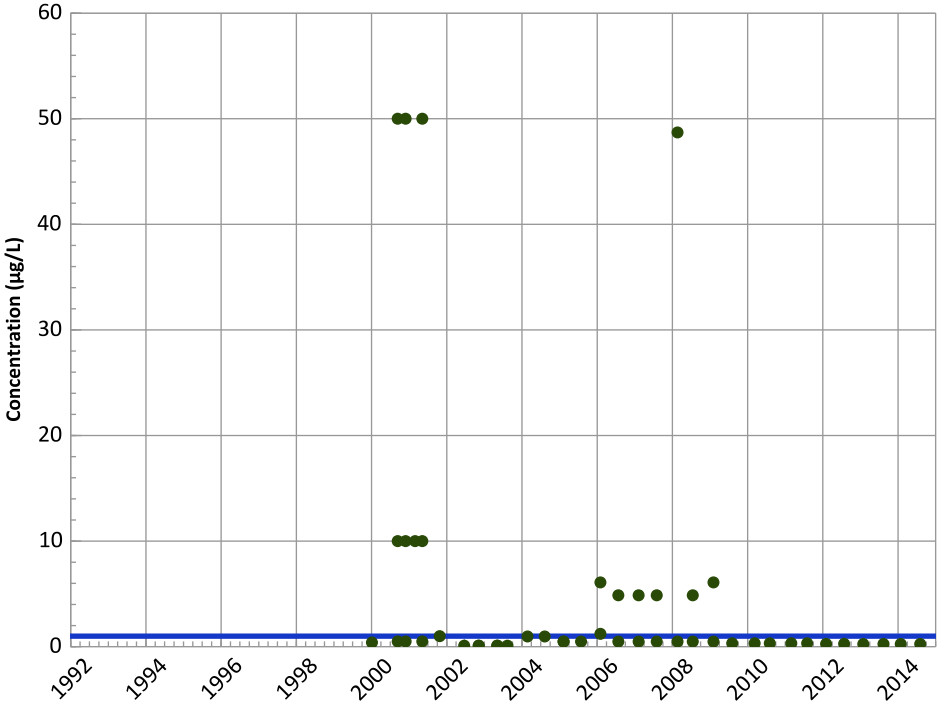


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

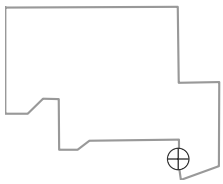
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

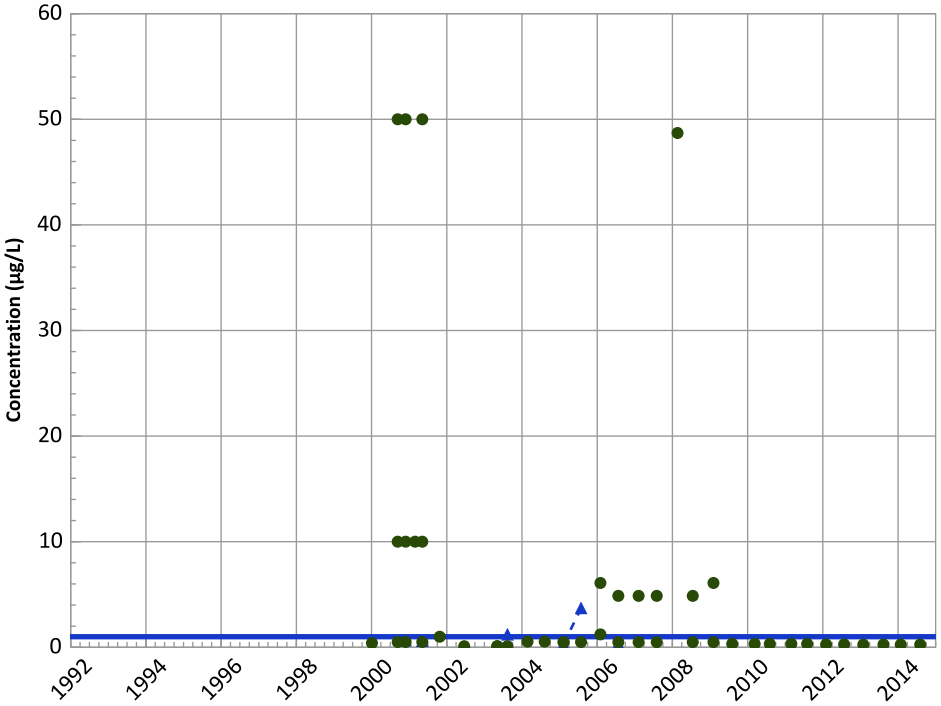
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

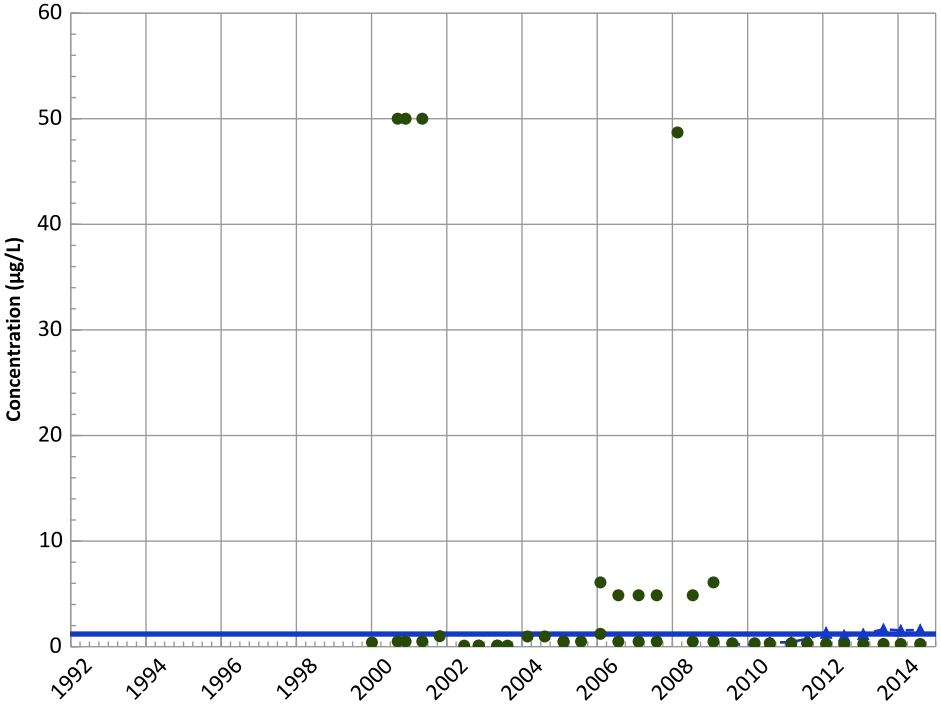


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

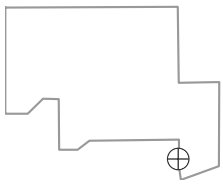
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

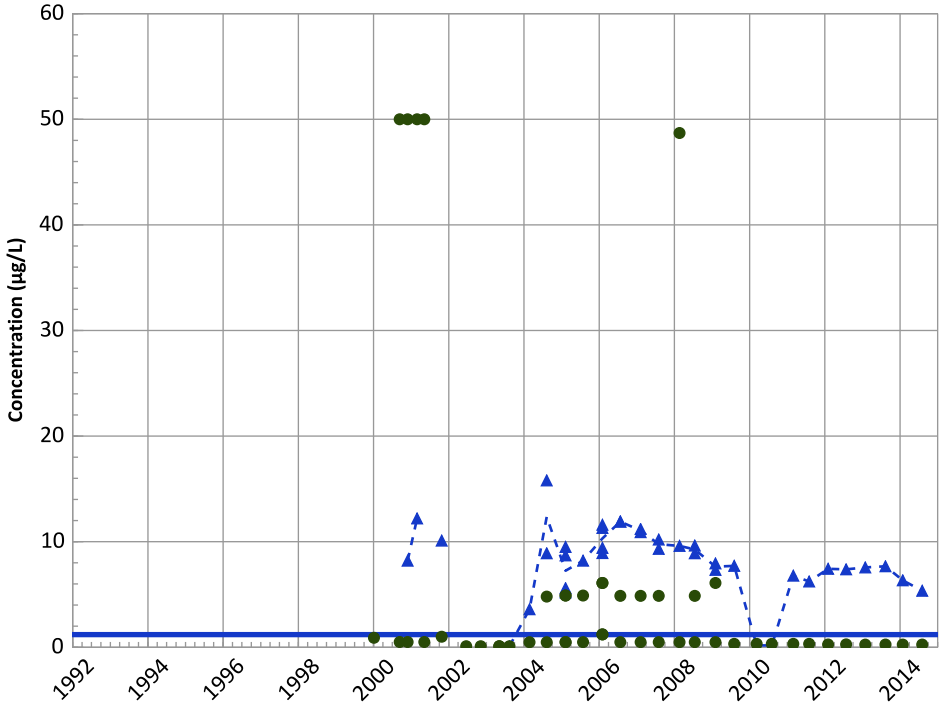
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

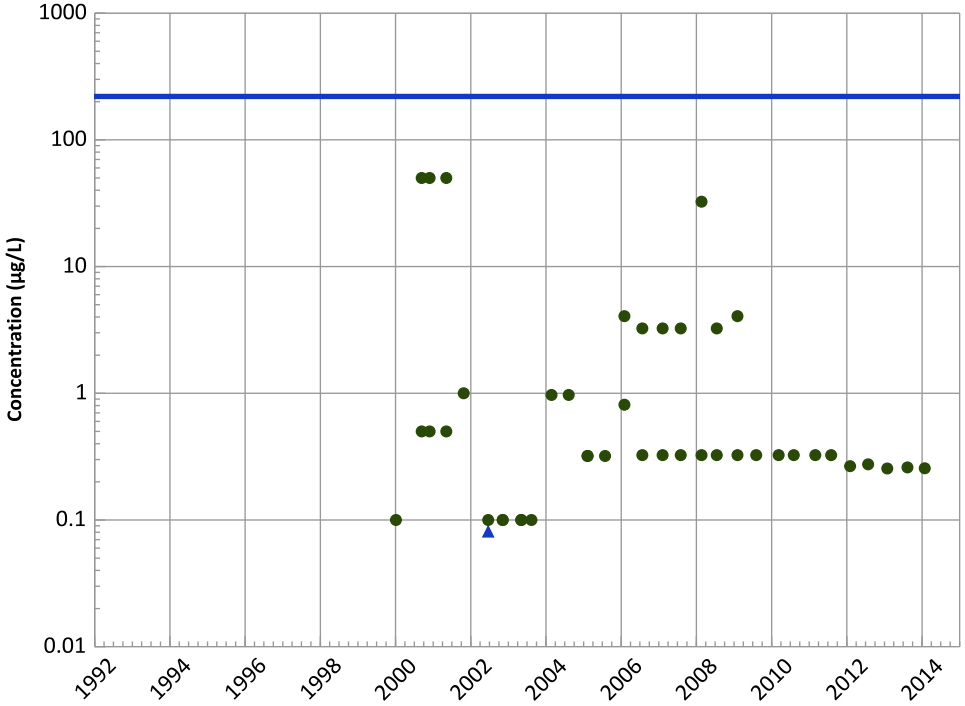


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Stable

1,3,5-Trinitrobenzene Trend



Concentration Trend

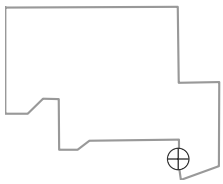
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

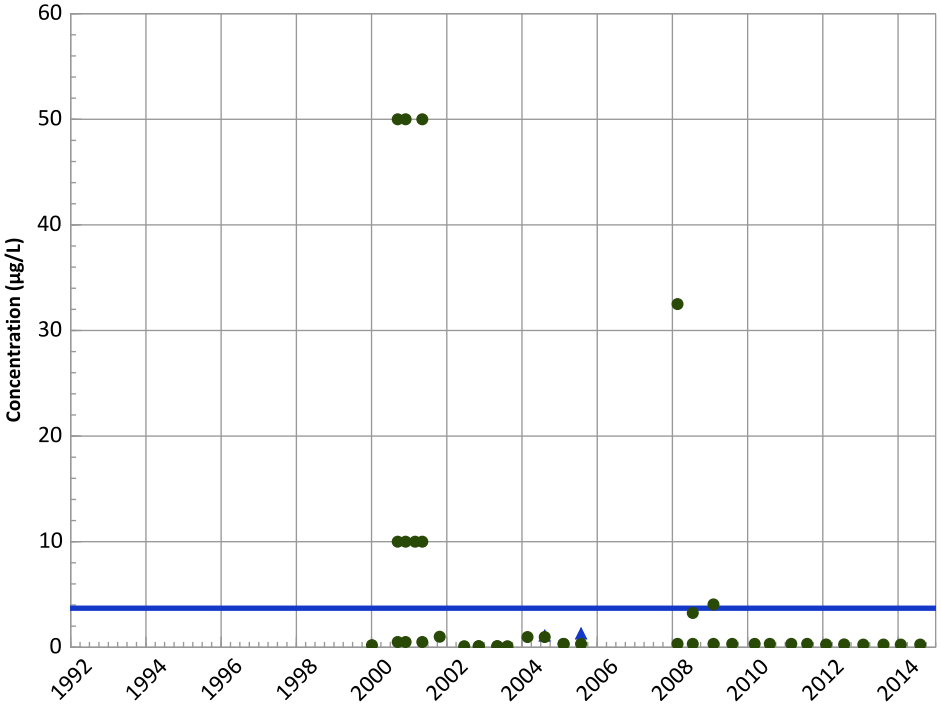
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

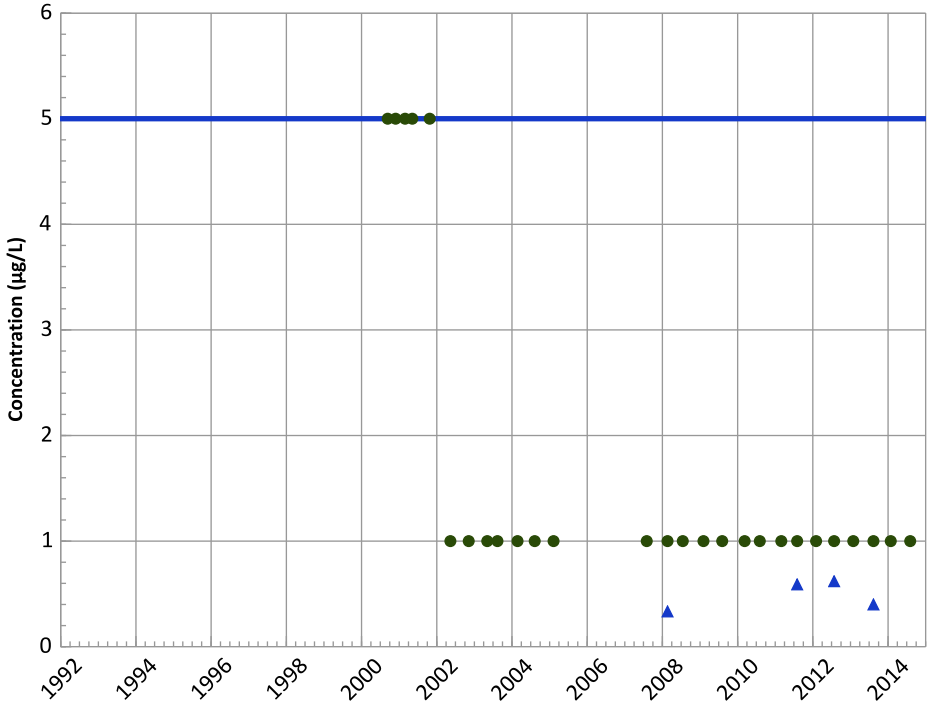


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

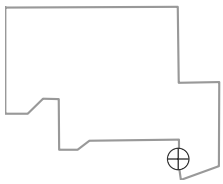
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

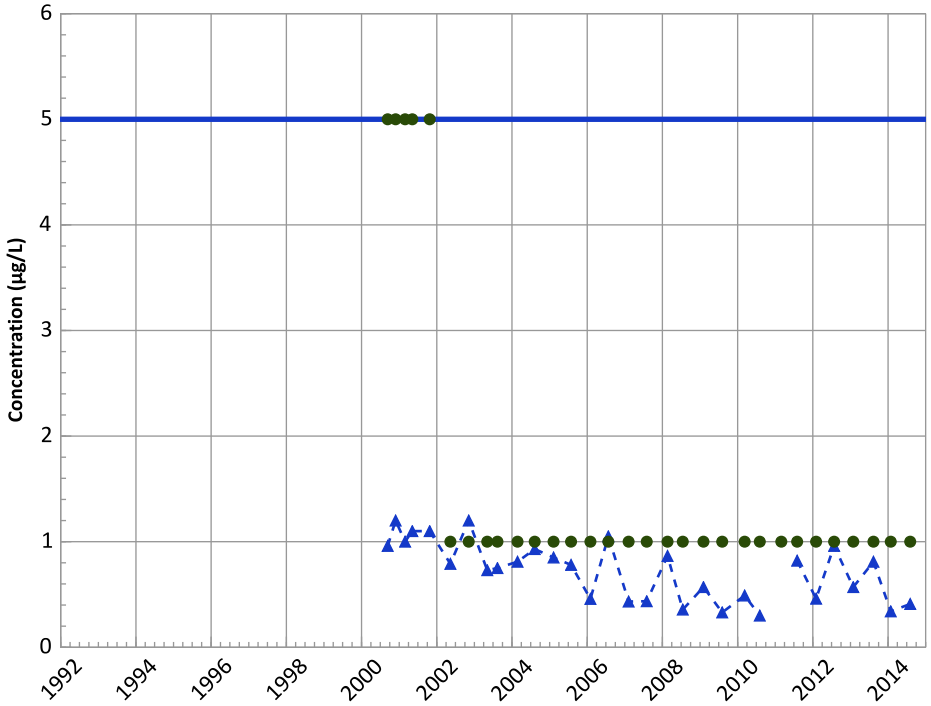
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

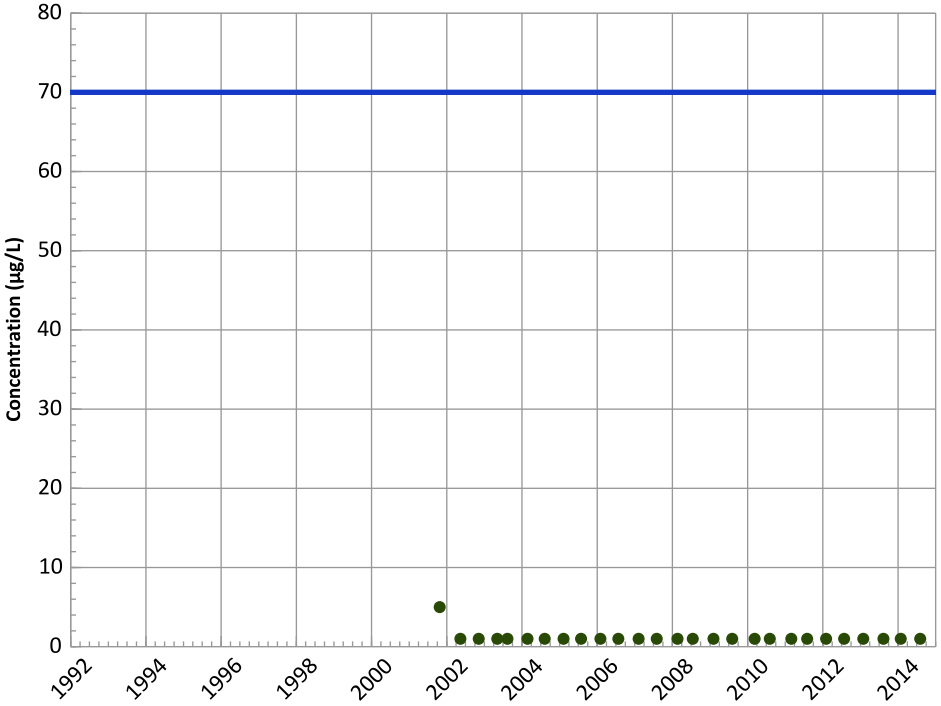


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

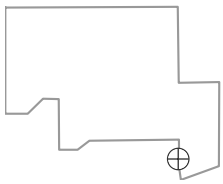
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

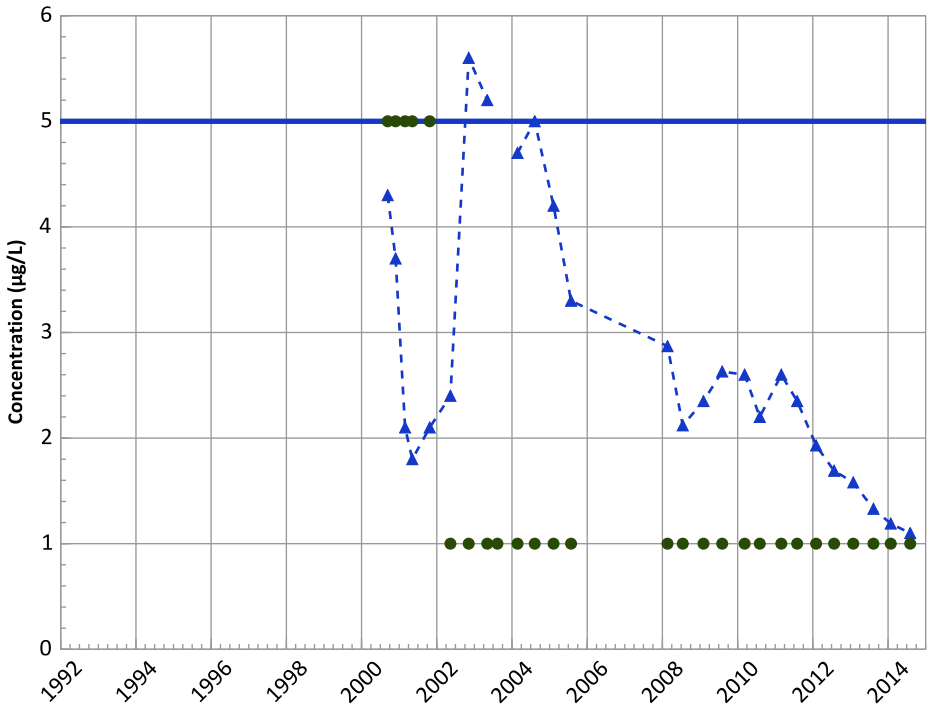
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

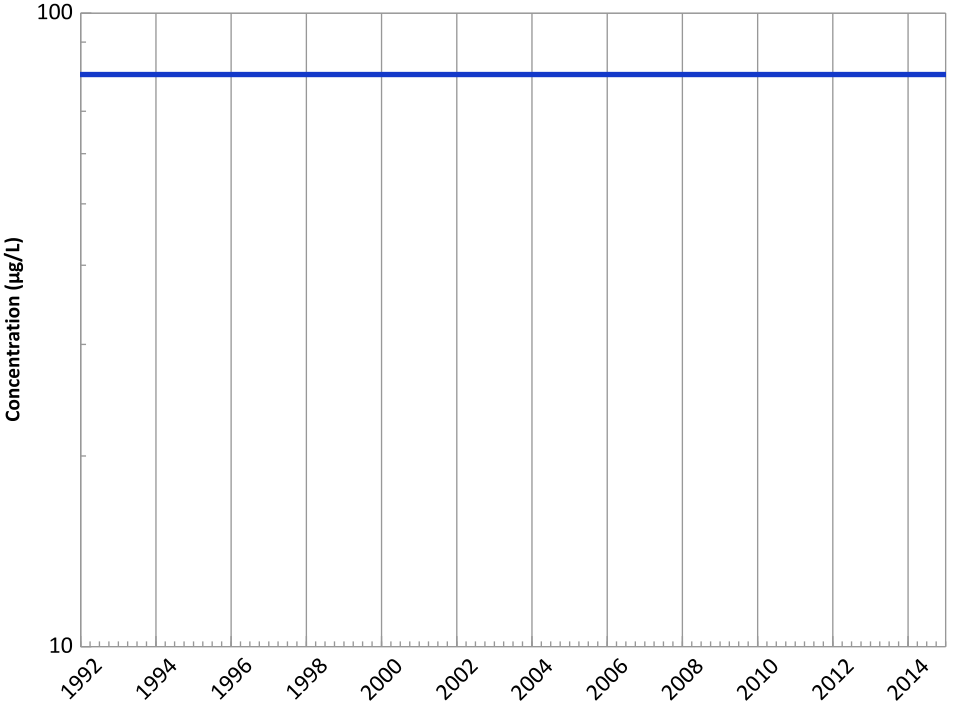


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chloroform Trend



Concentration Trend

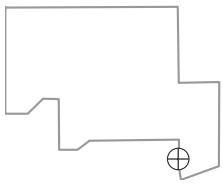
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

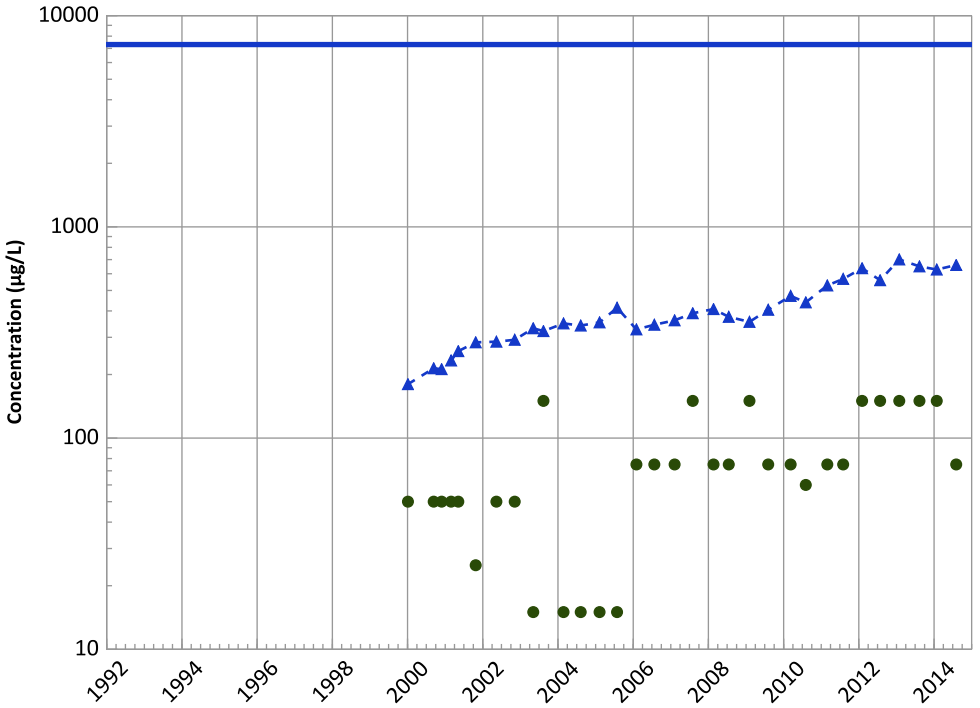
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

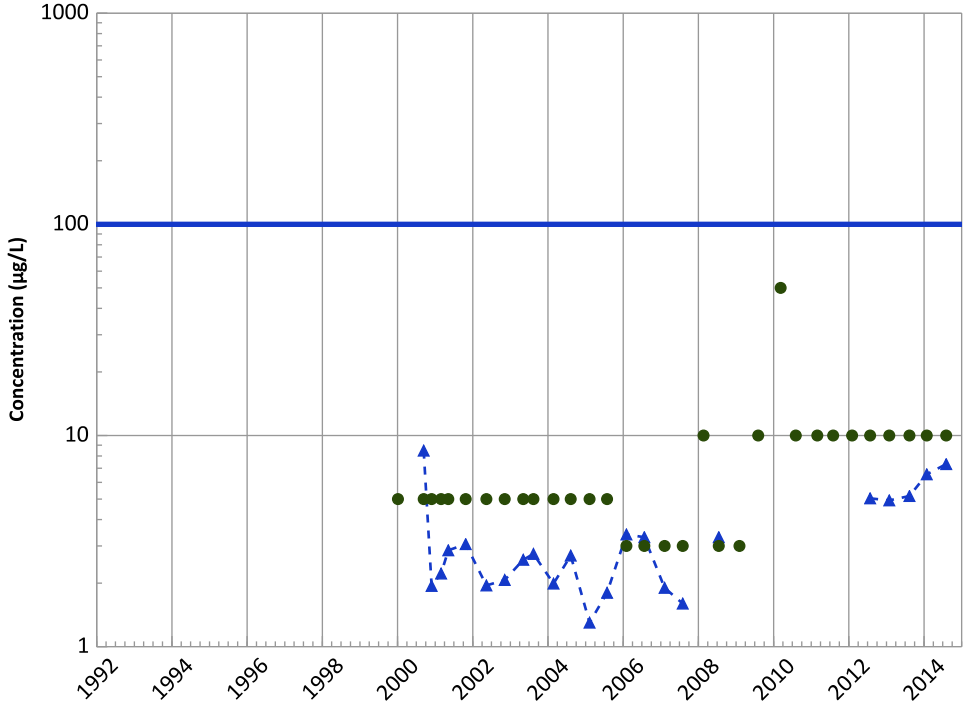


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

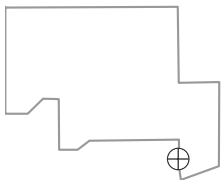
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

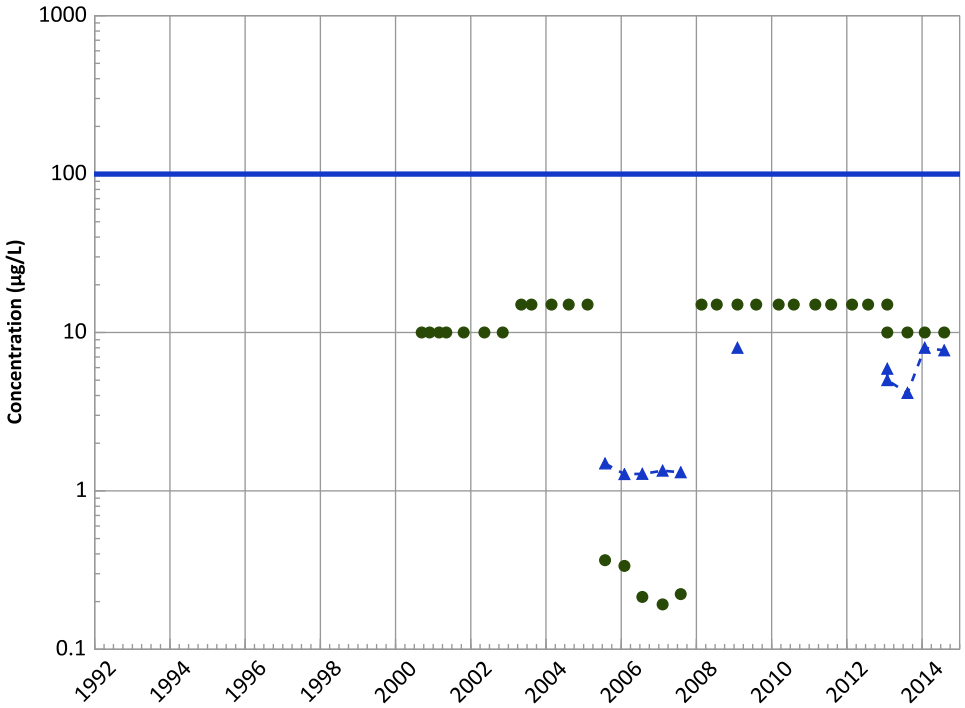
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

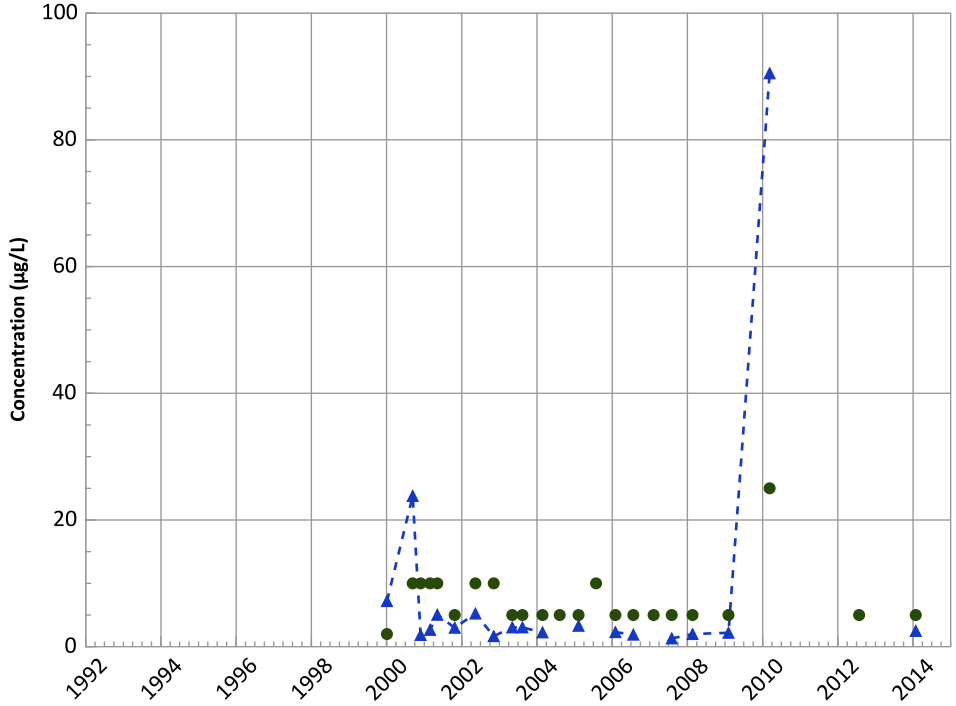


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Manganese Trend



Concentration Trend

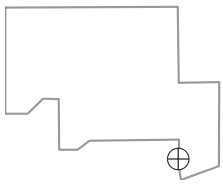
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

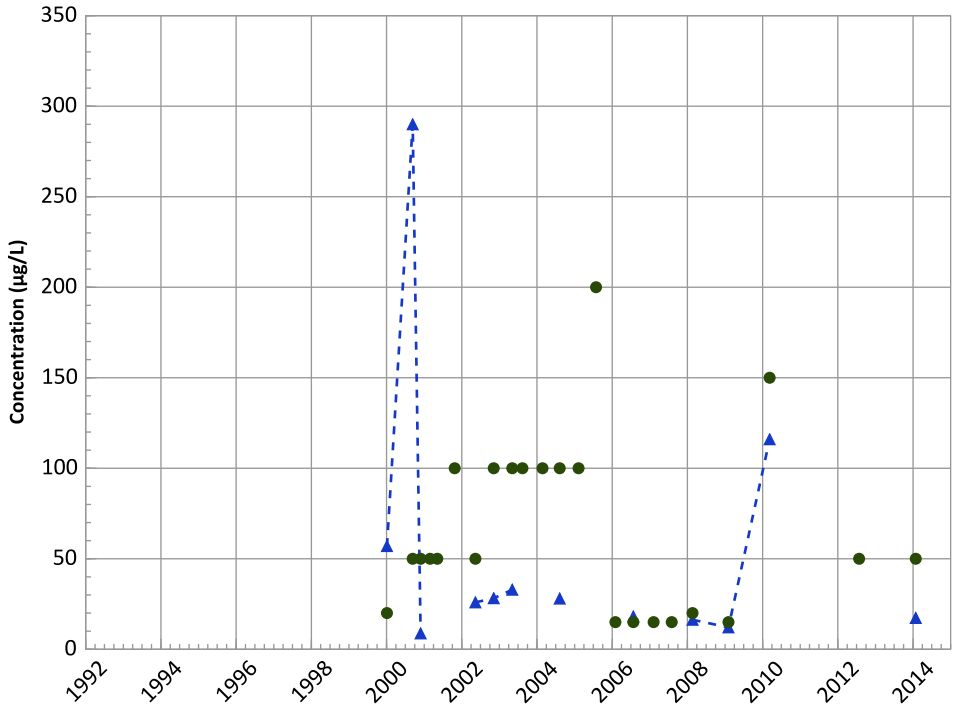
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

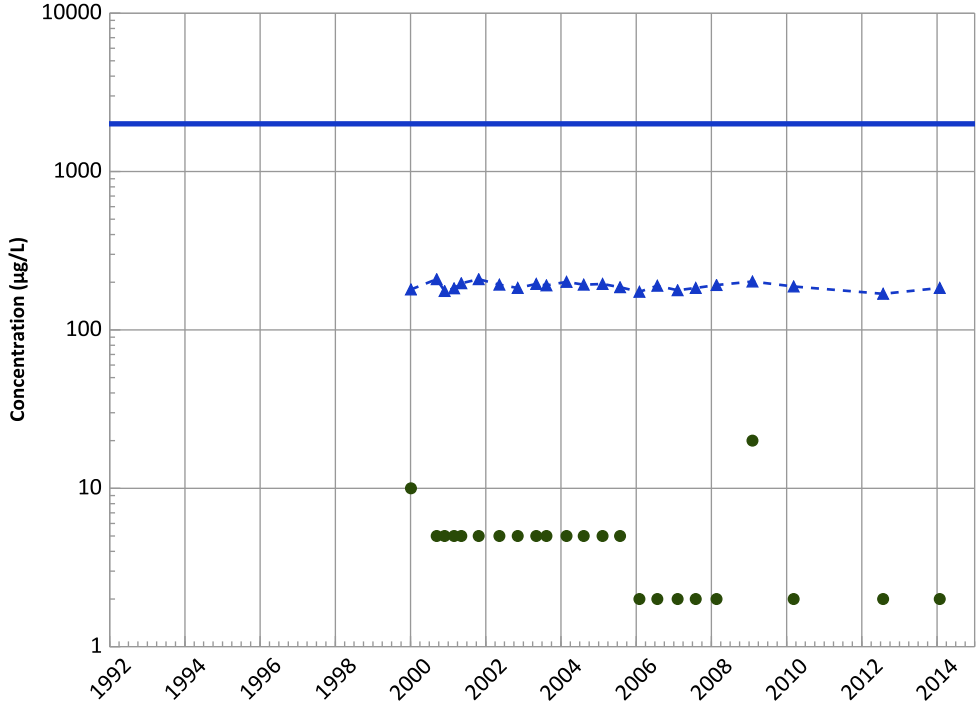


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

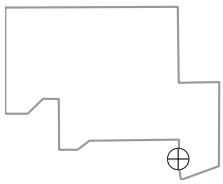
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

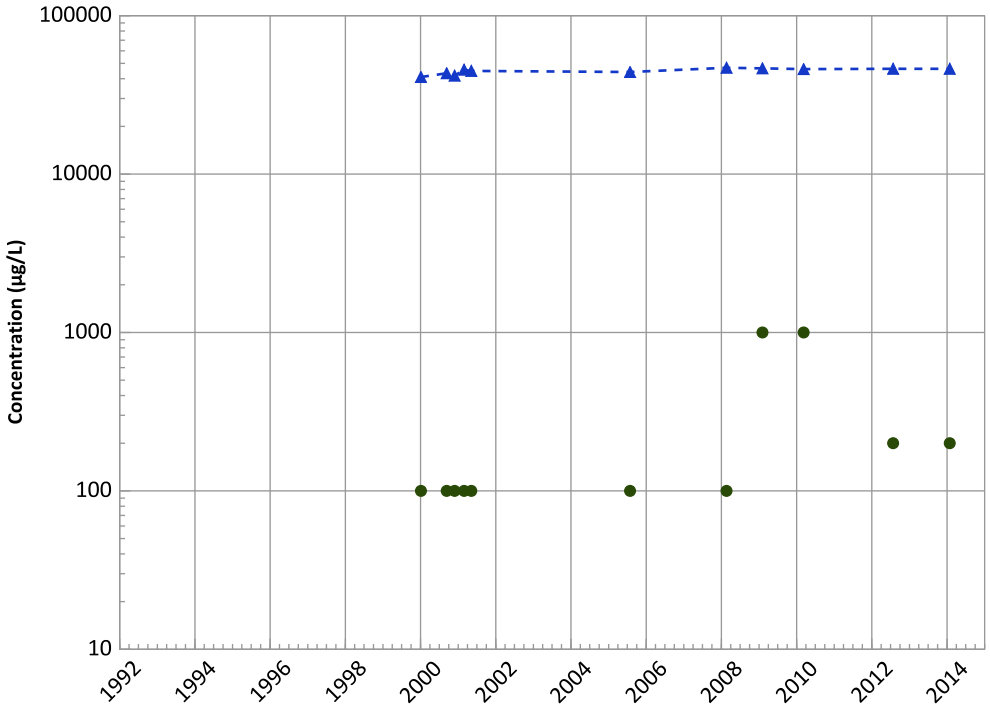
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

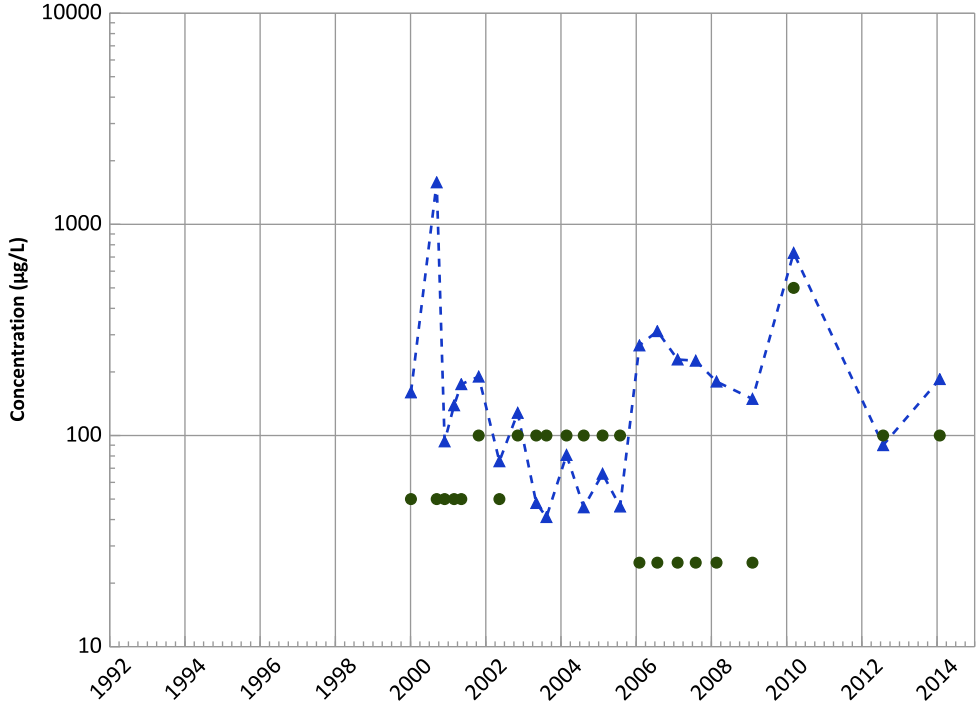


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

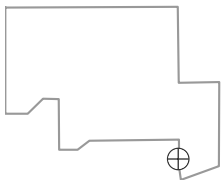
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

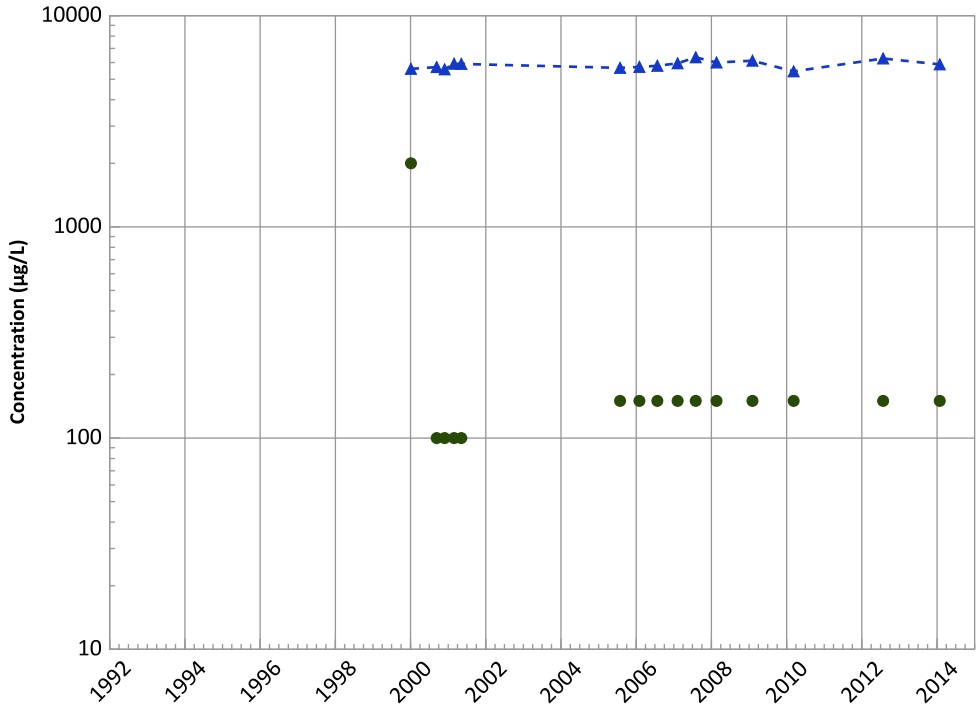
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

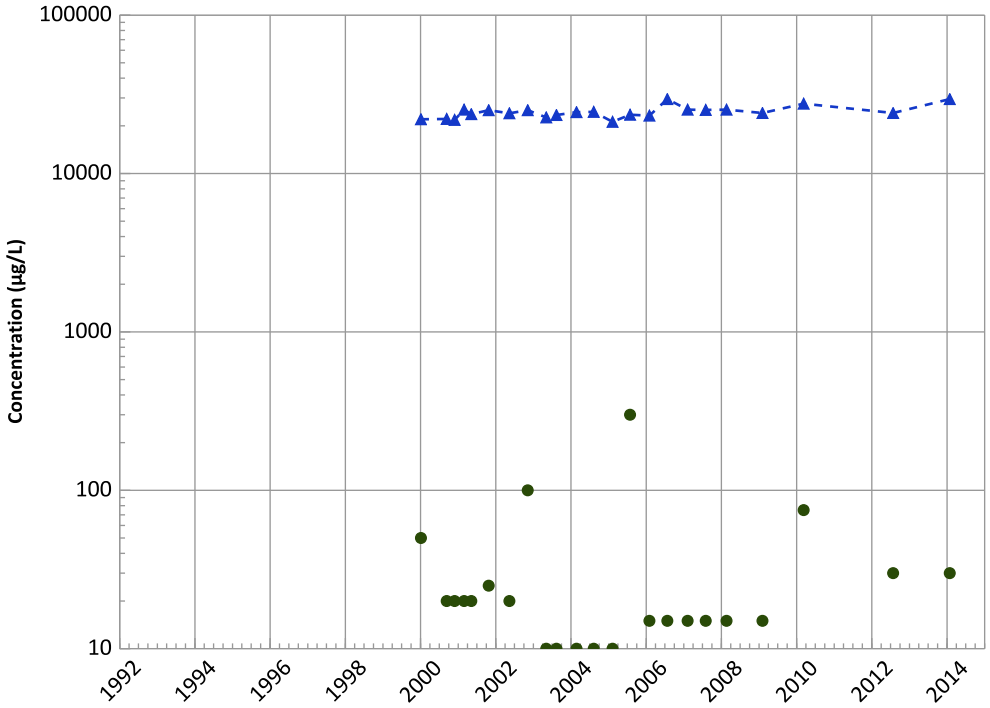


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Magnesium Trend



Concentration Trend

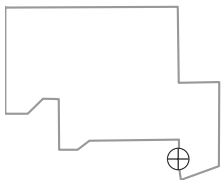
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

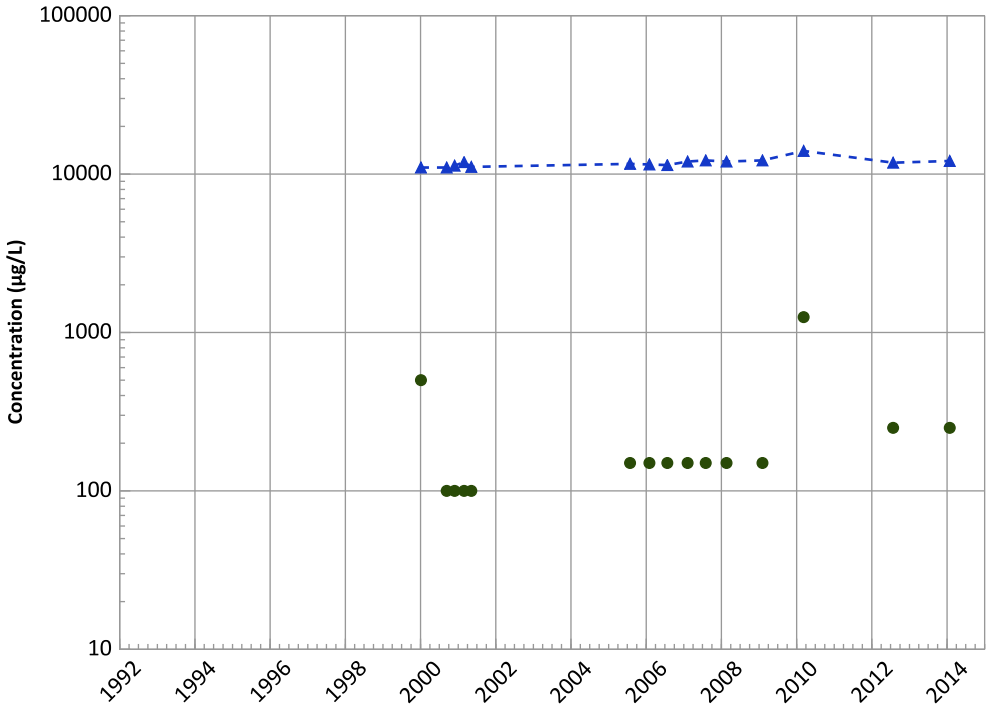
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1046 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

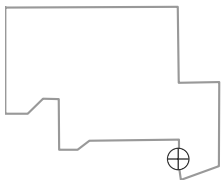
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

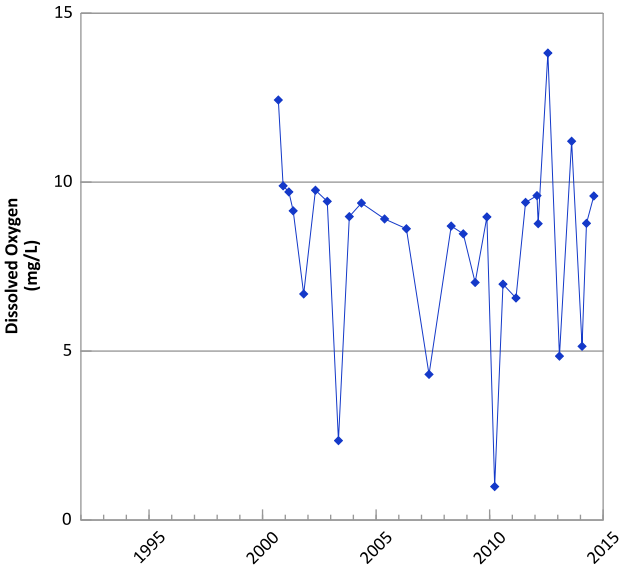
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/05/2000 to 08/04/2014
Analysis Date: 03/19/2015

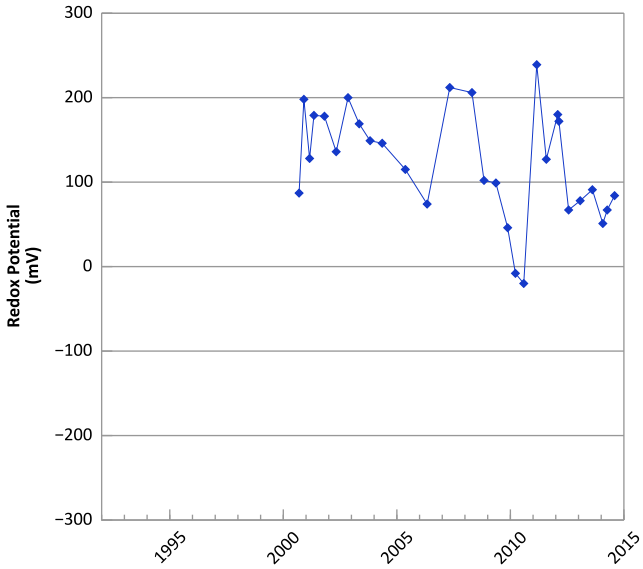
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

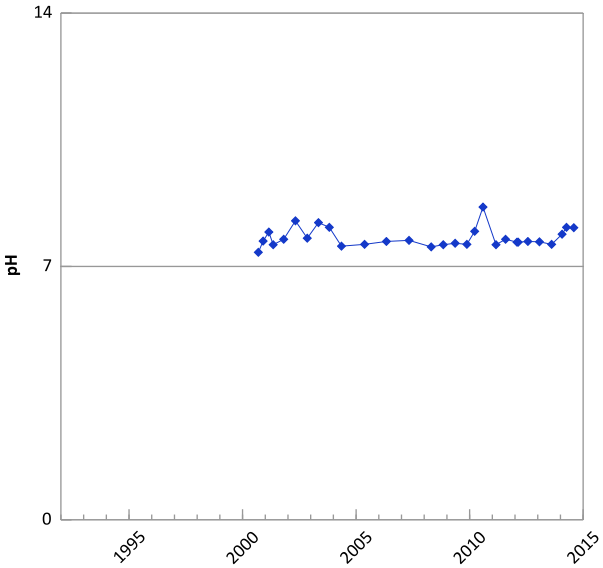
Well Location

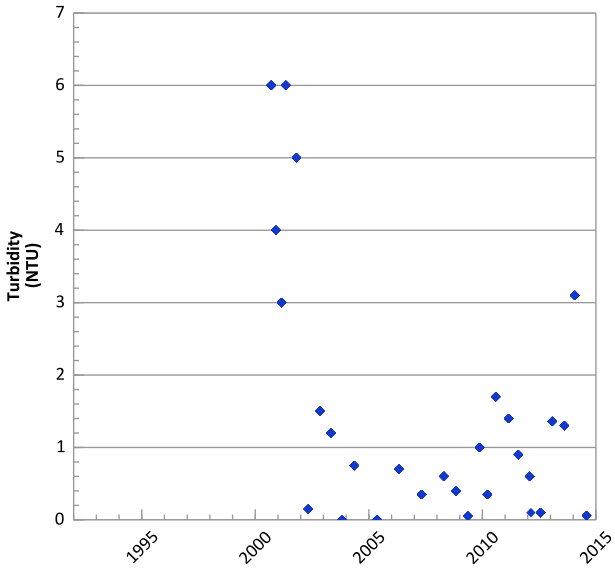


PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



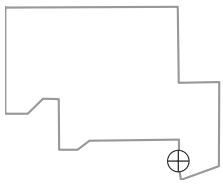






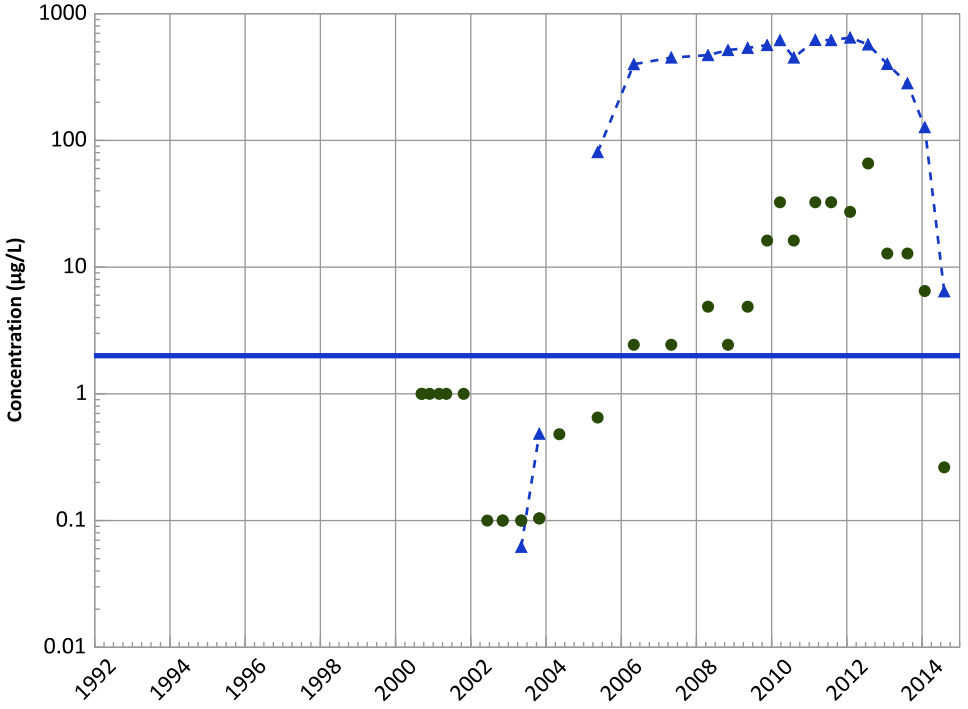
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

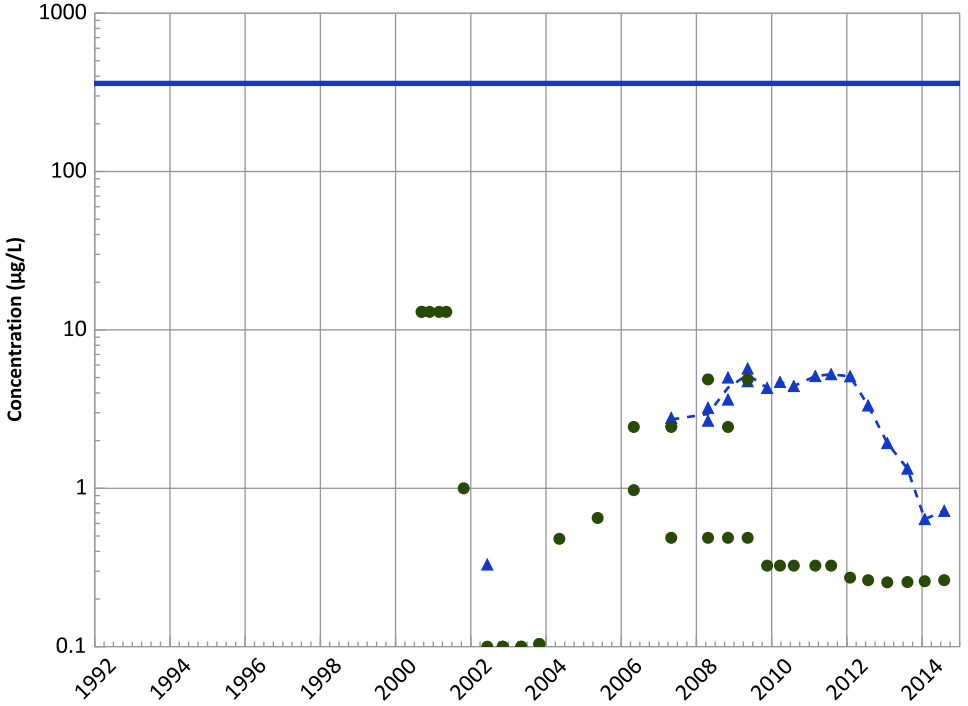


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

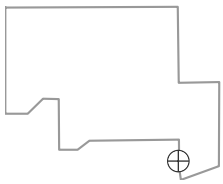
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

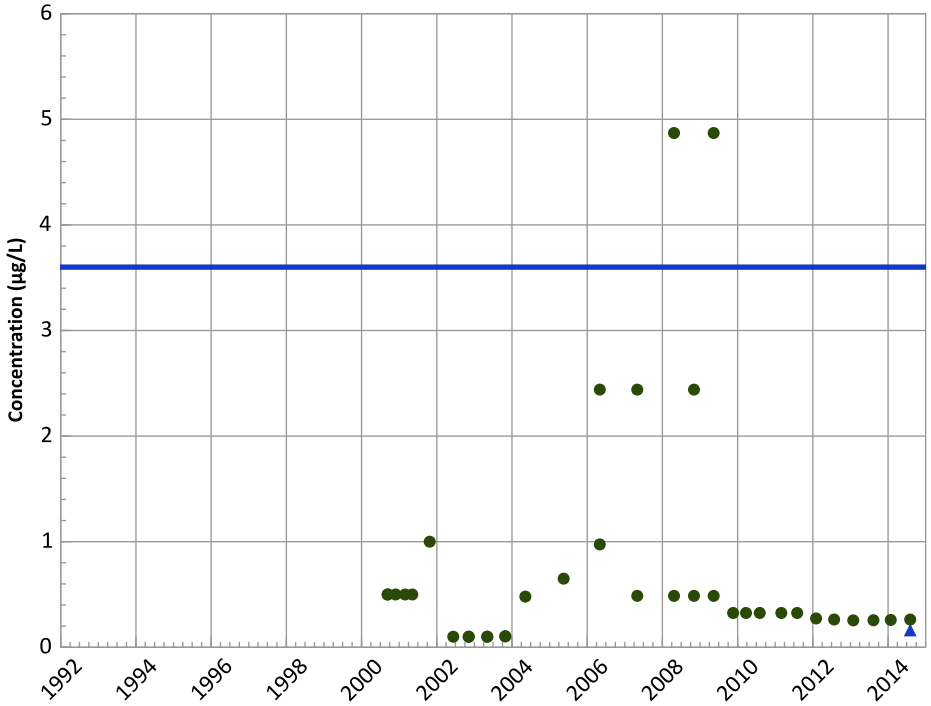
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

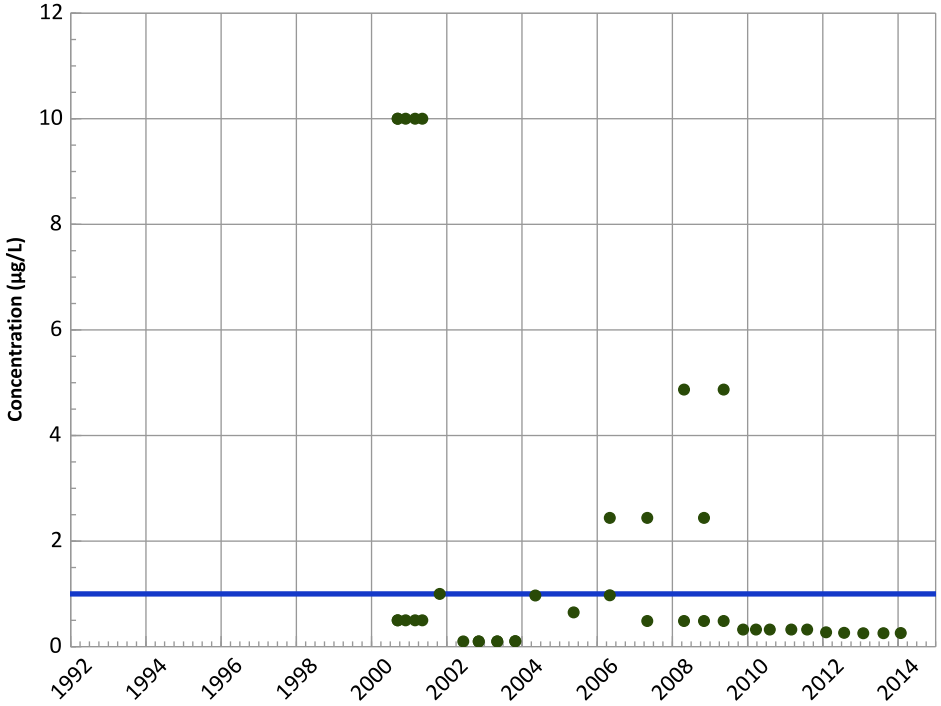


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

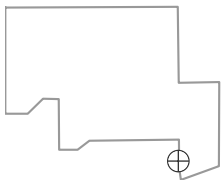
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

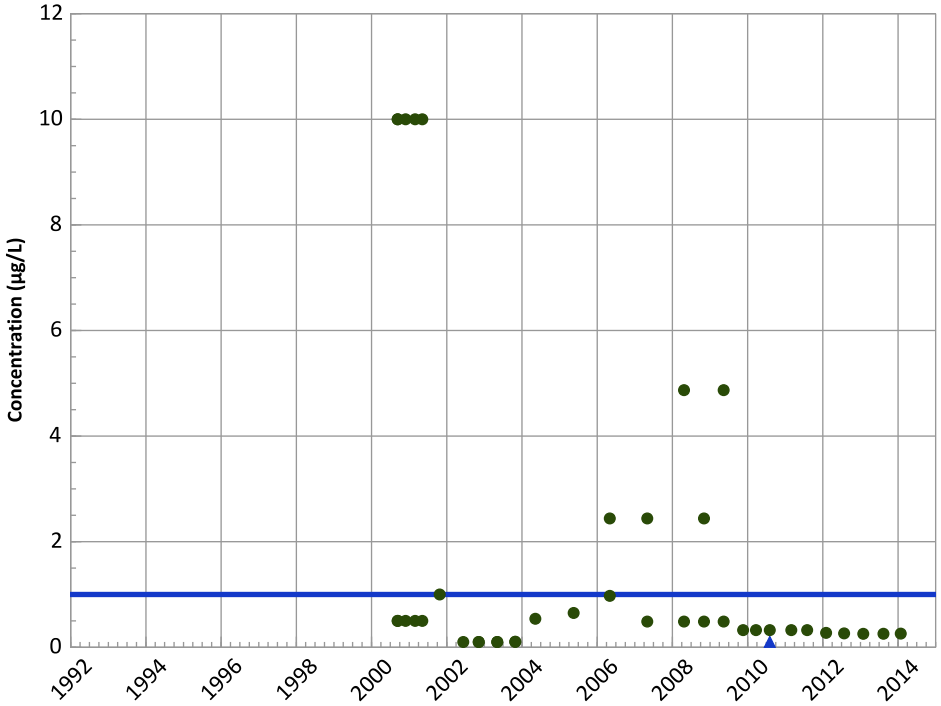
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

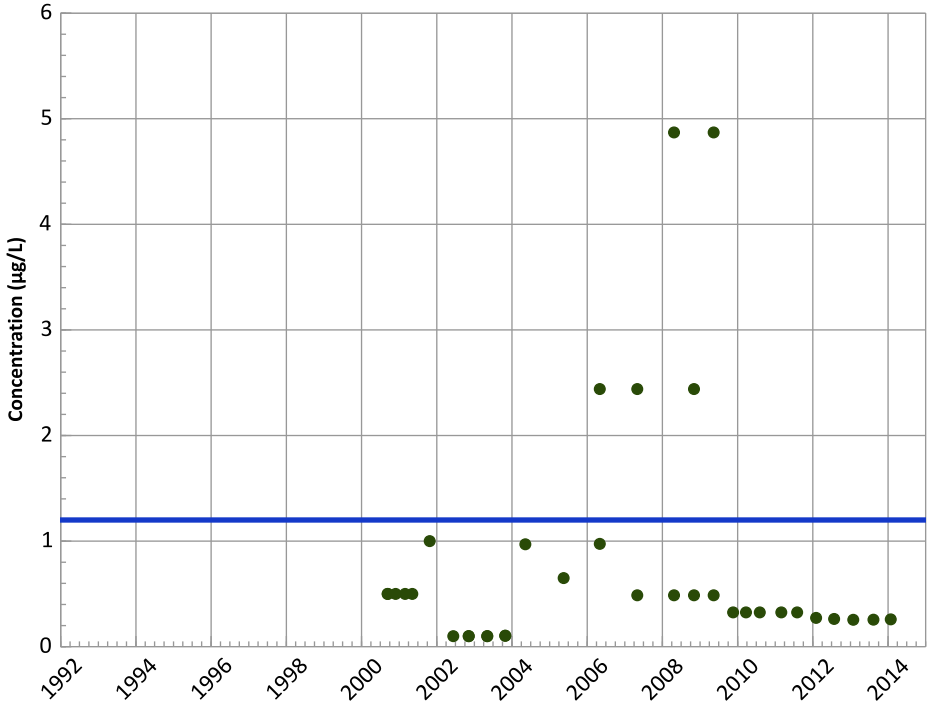


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

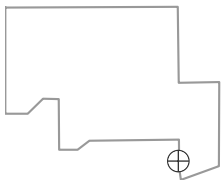
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

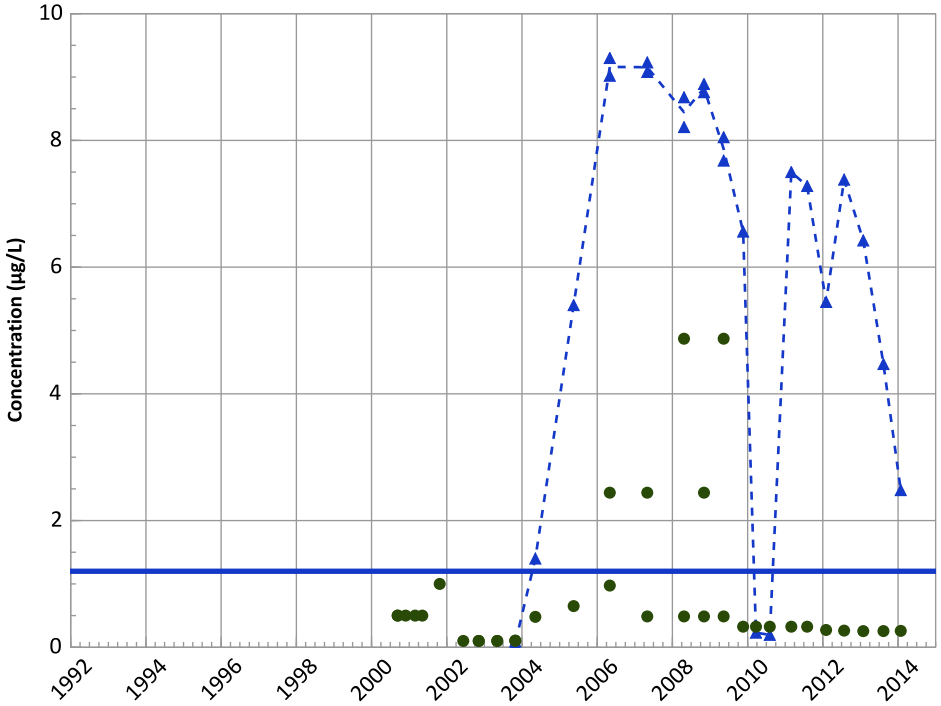
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

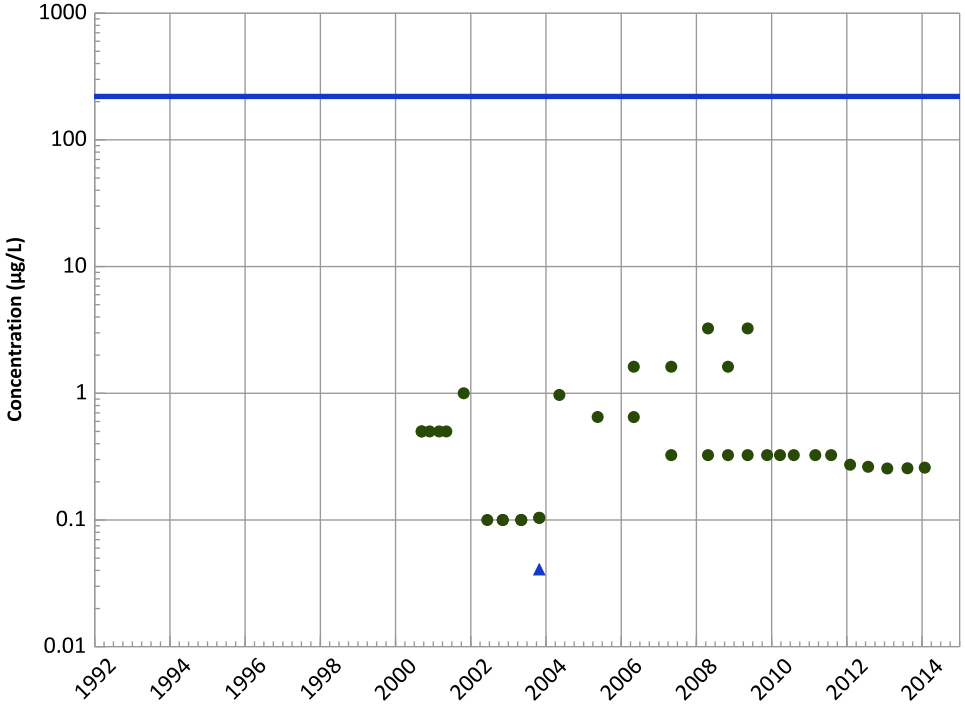


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

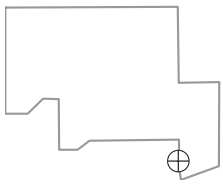
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

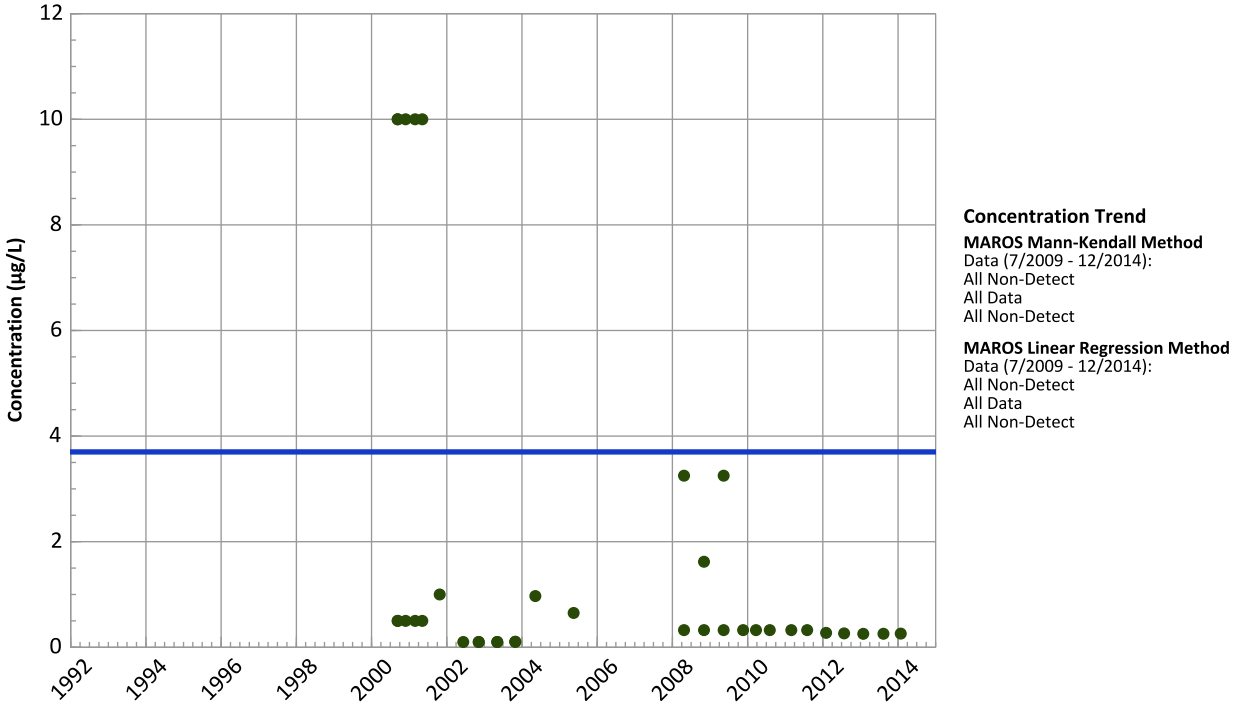
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

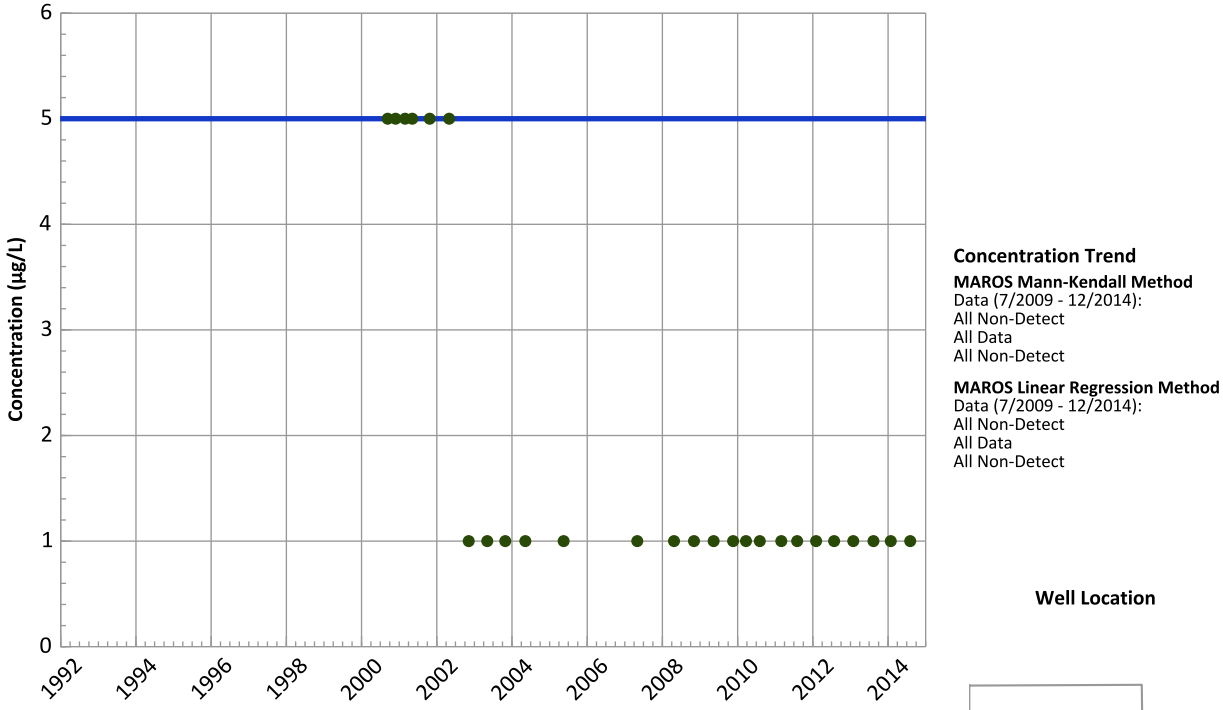


PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



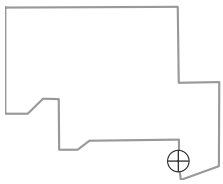
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

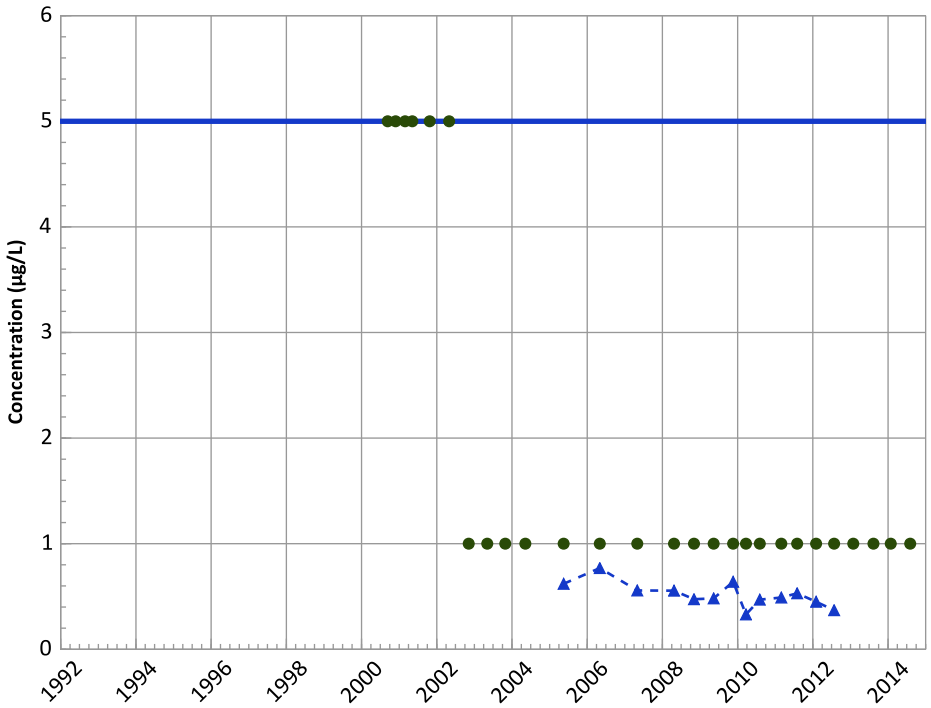
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

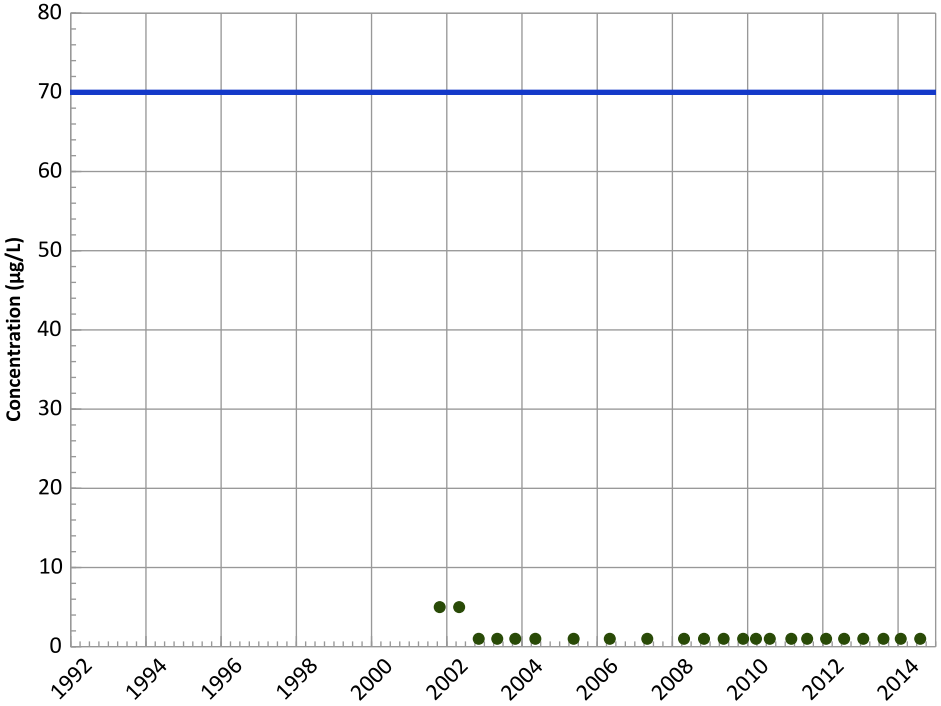


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

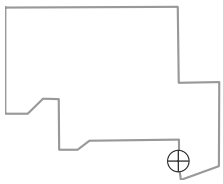
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

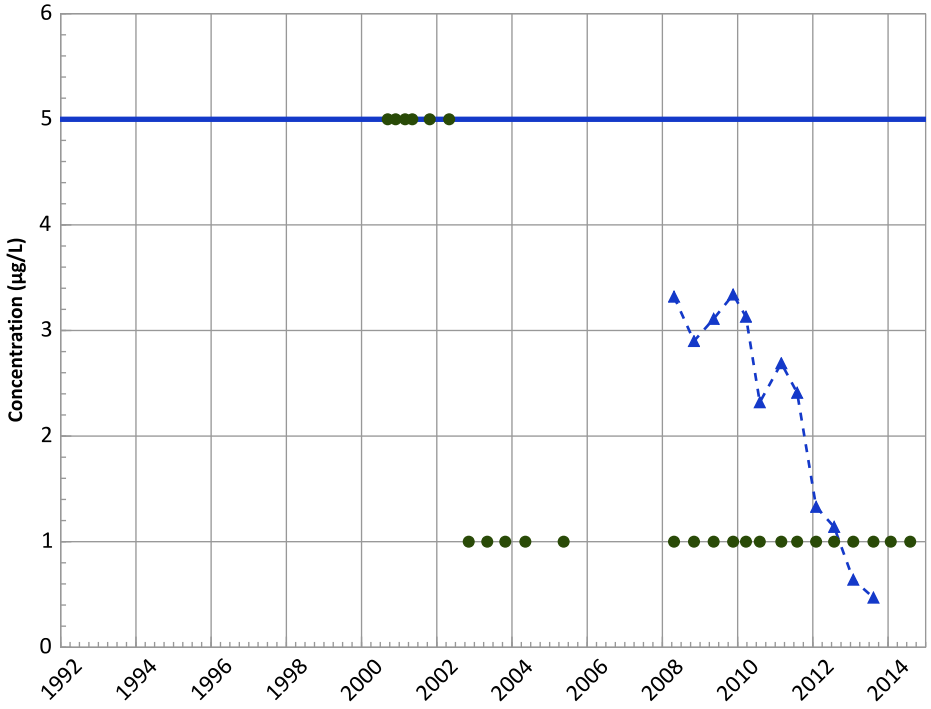
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

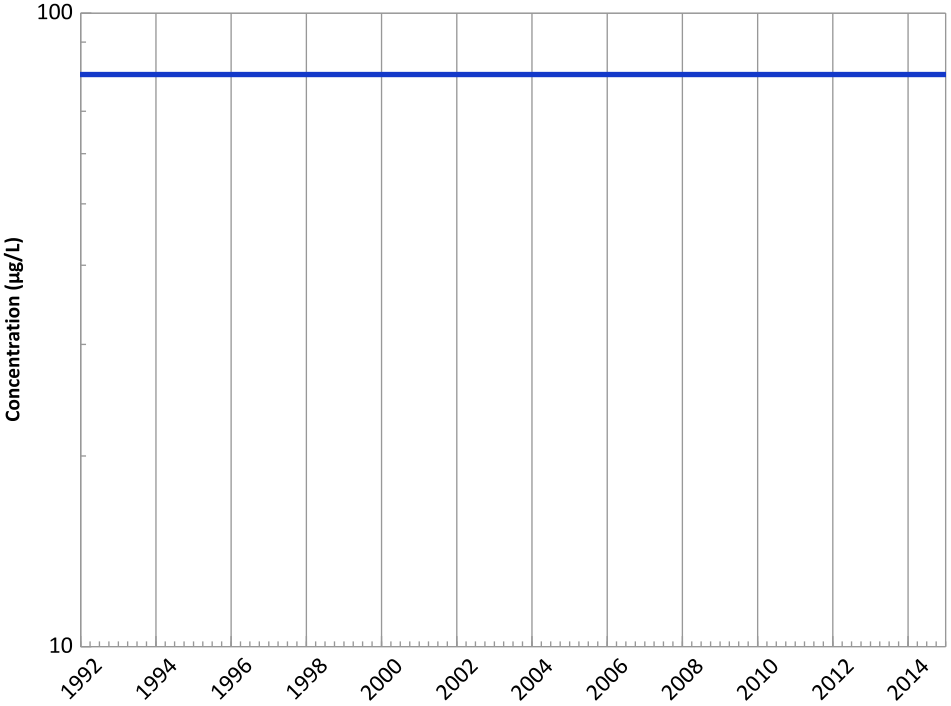


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chloroform Trend



Concentration Trend

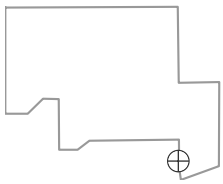
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

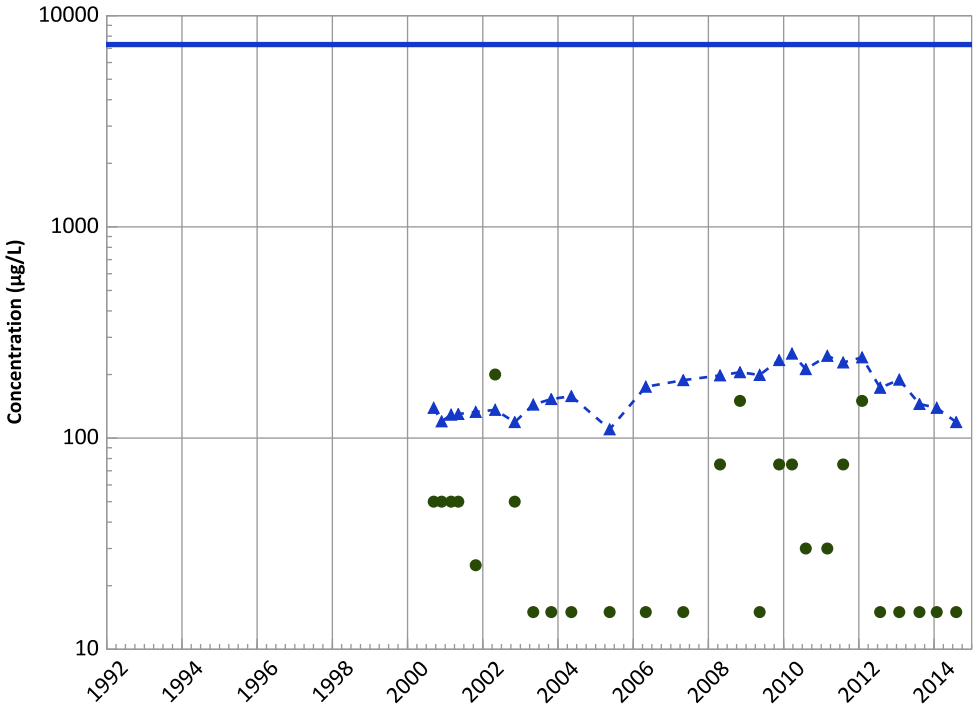
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

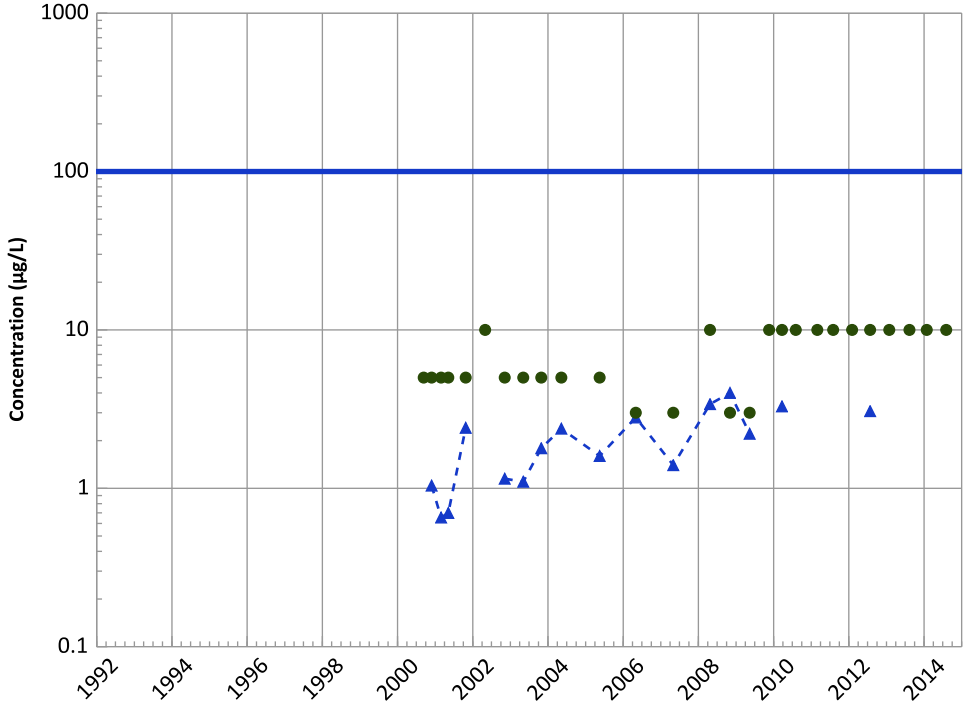


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

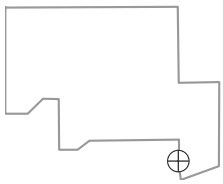
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

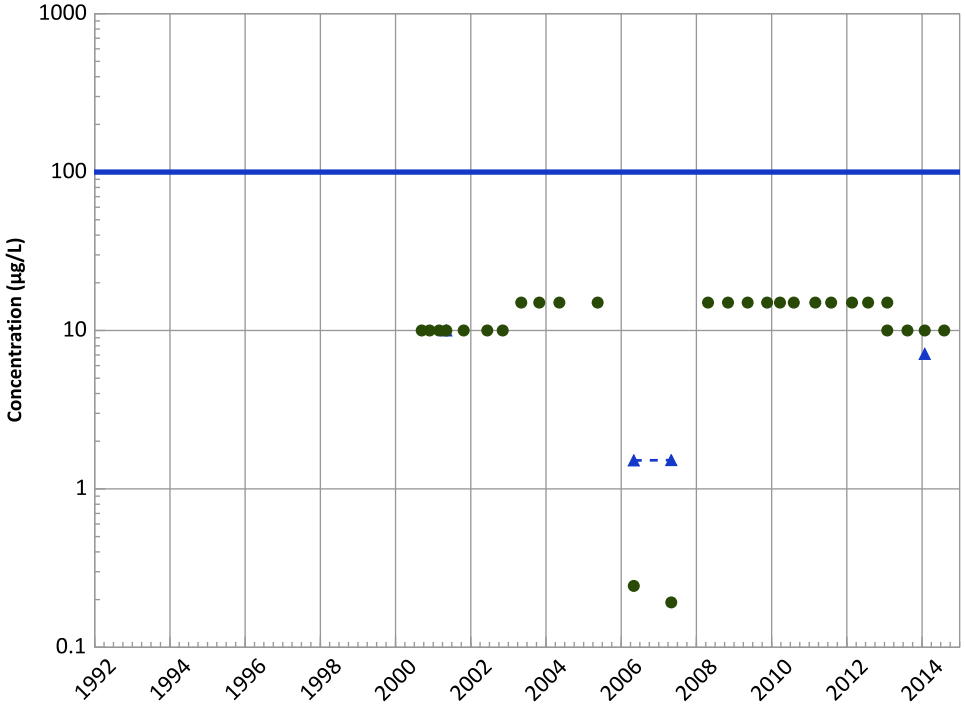
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

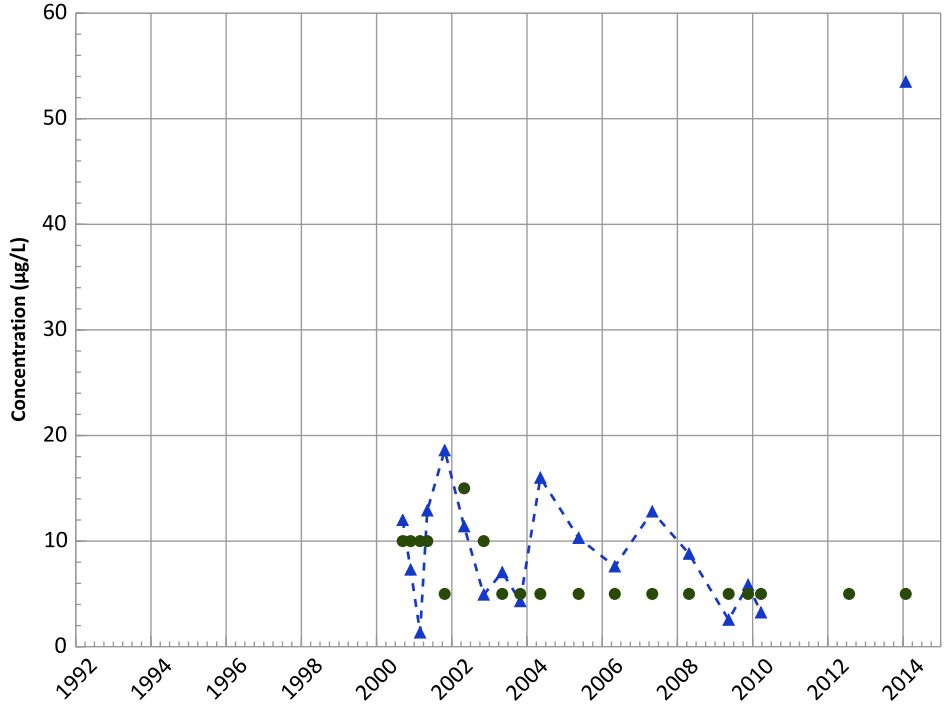


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Manganese Trend



Concentration Trend

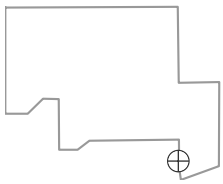
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

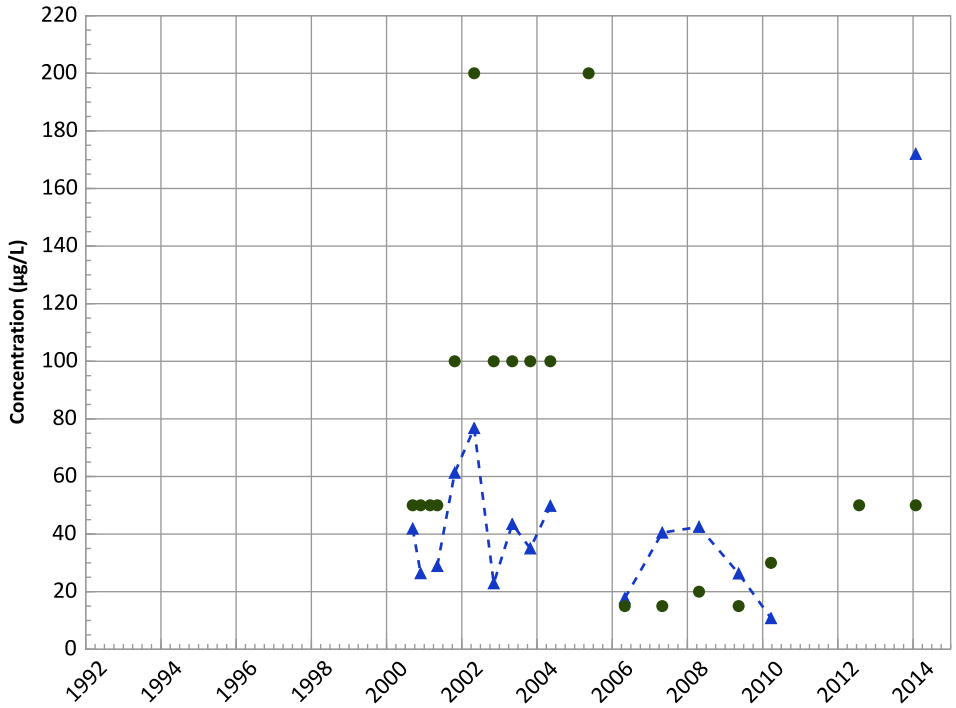
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

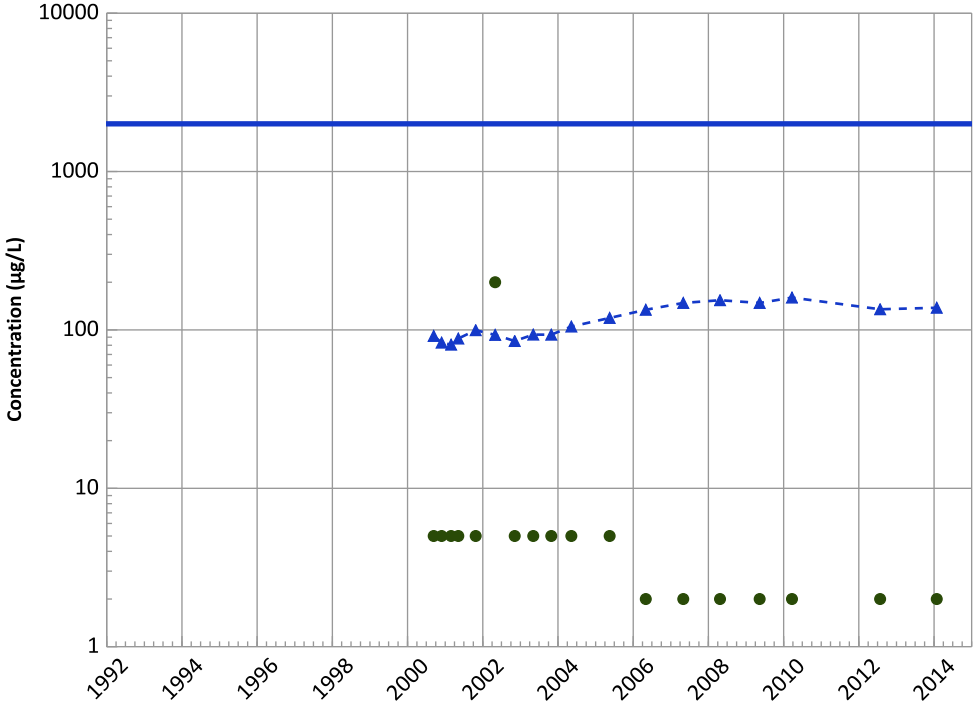


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

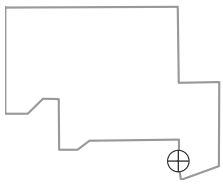
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

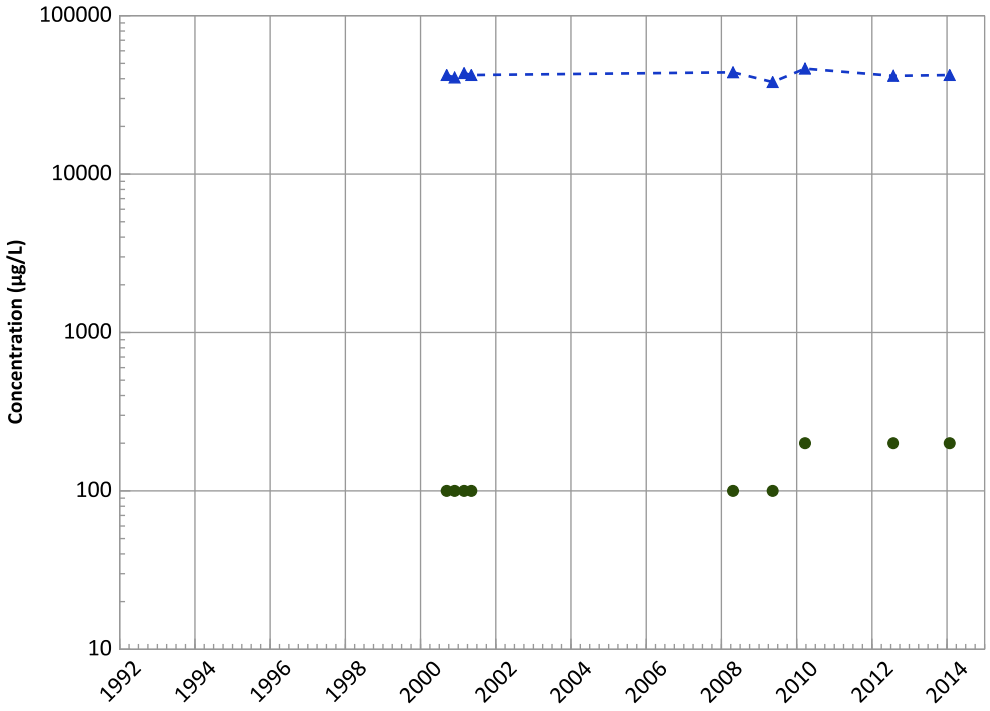
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

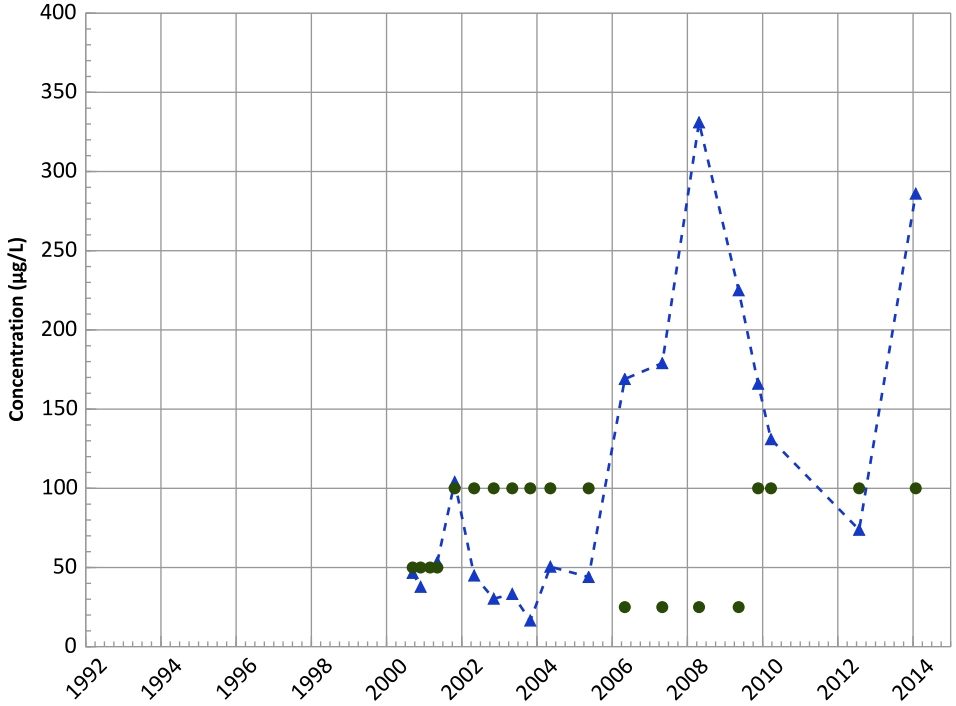


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

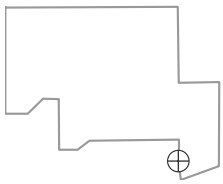
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

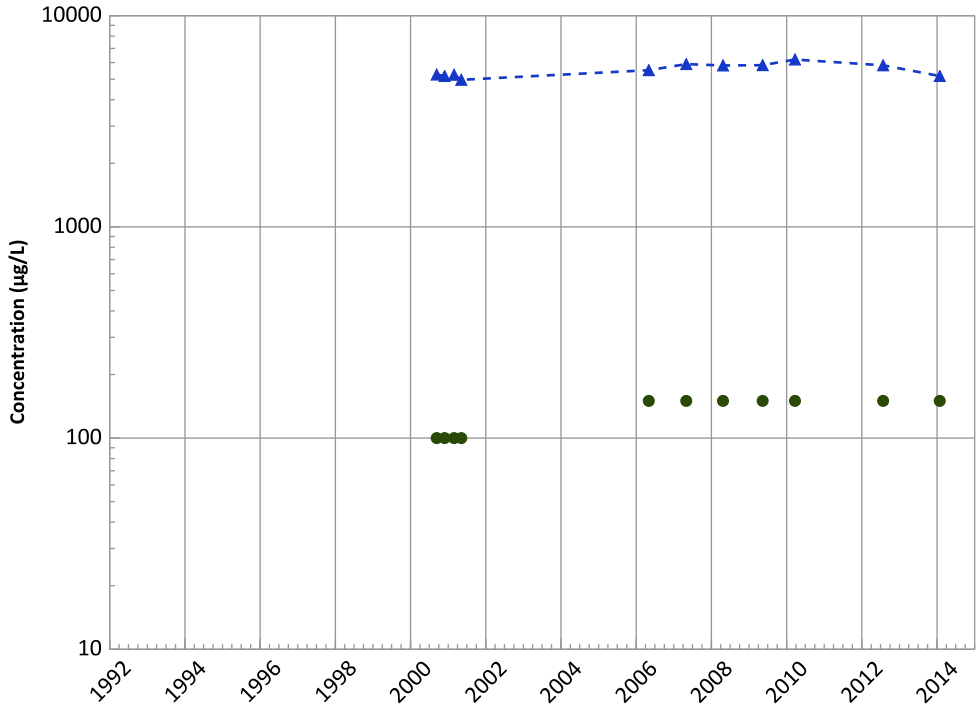
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

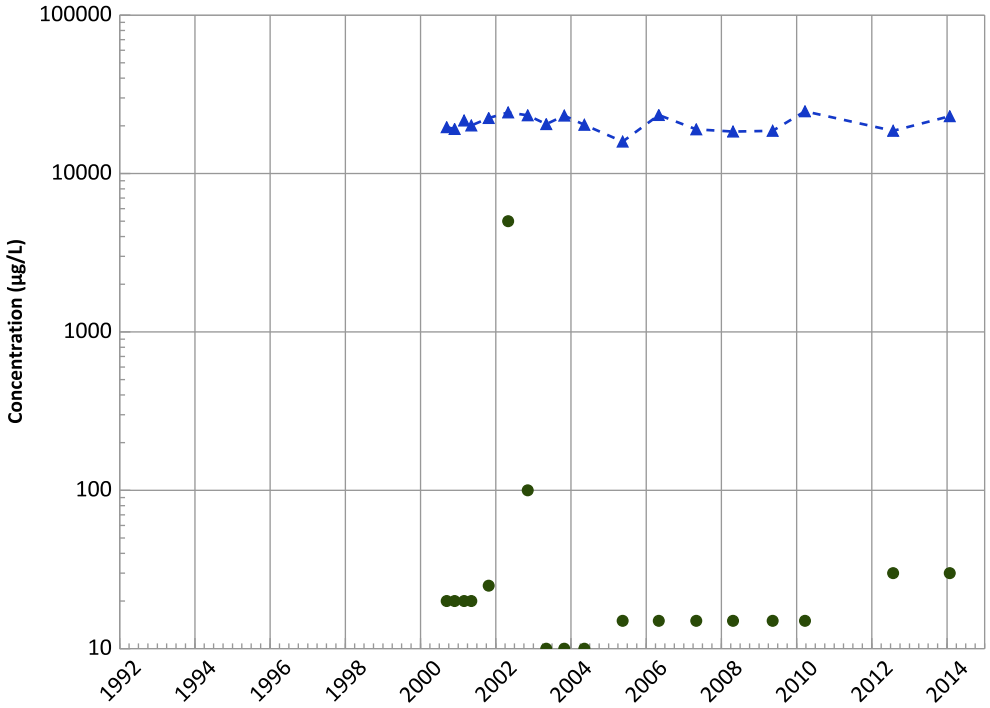


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

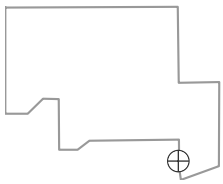
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

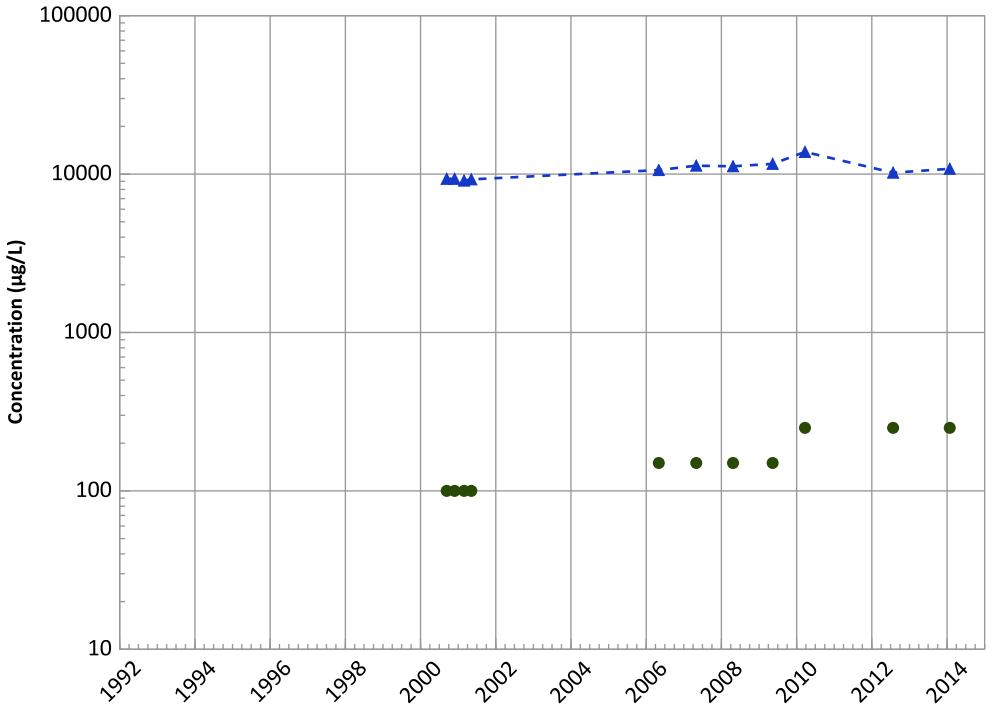
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1047A in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

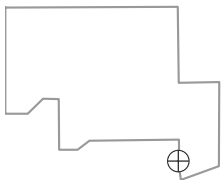
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

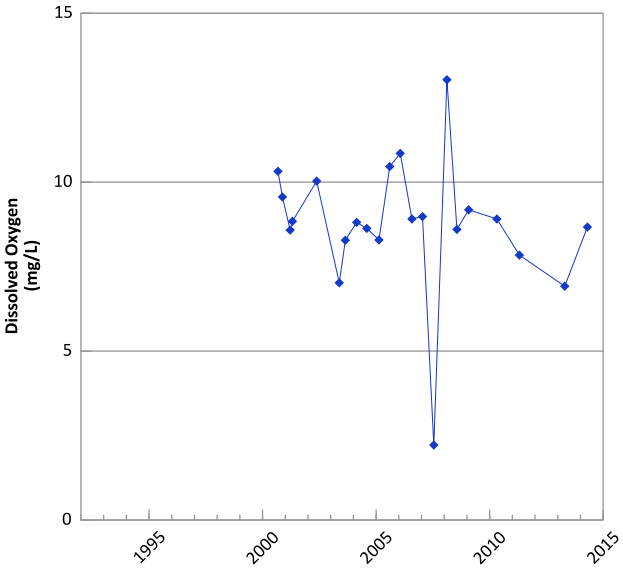
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/11/2000 to 08/04/2014
Analysis Date: 03/19/2015

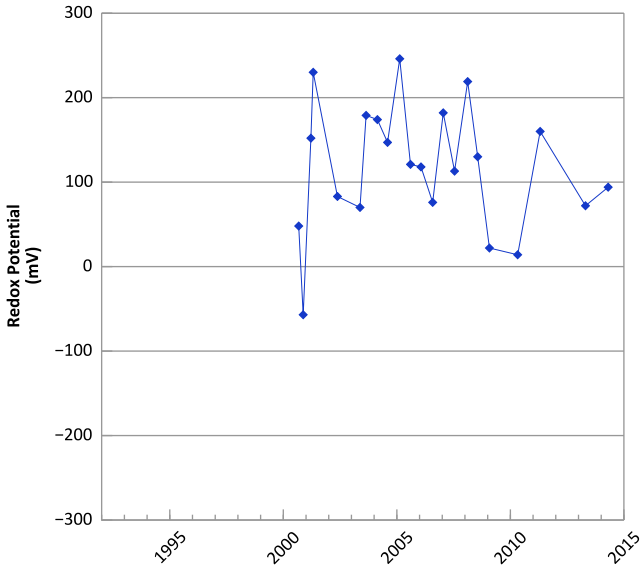
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

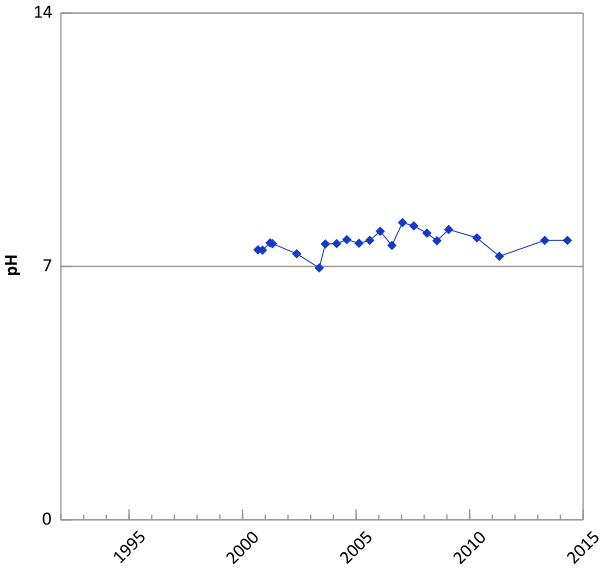
Well Location

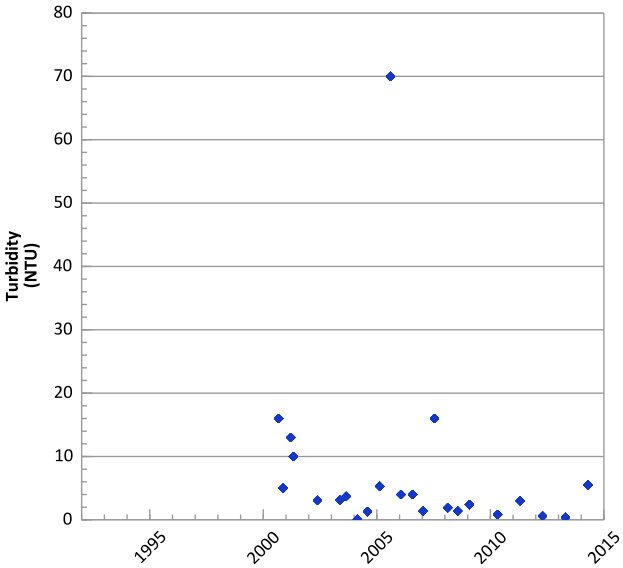


PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



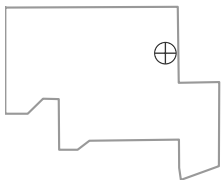






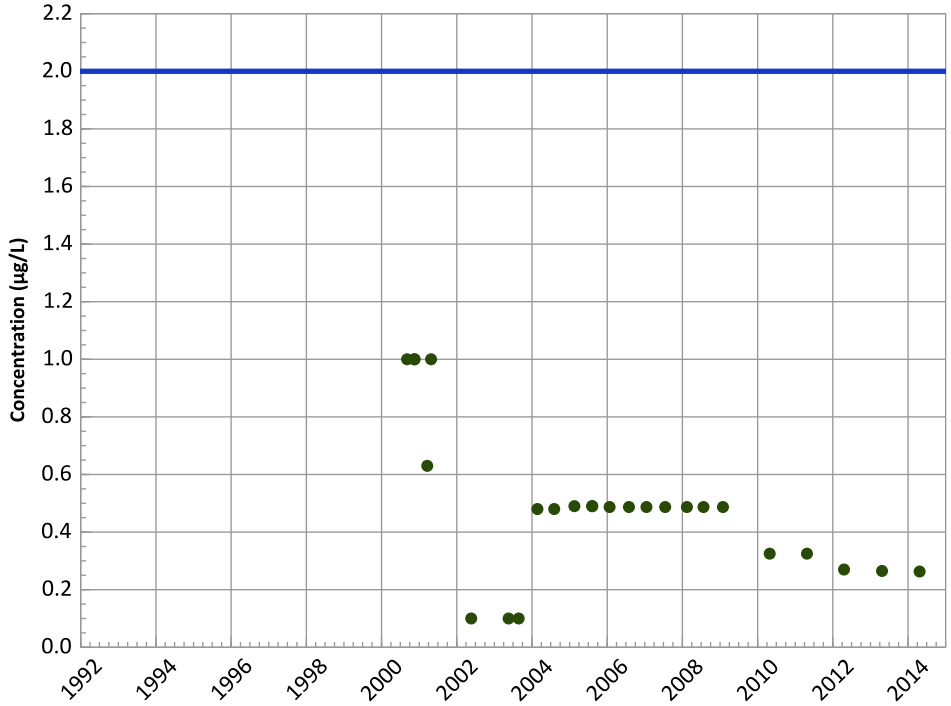
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

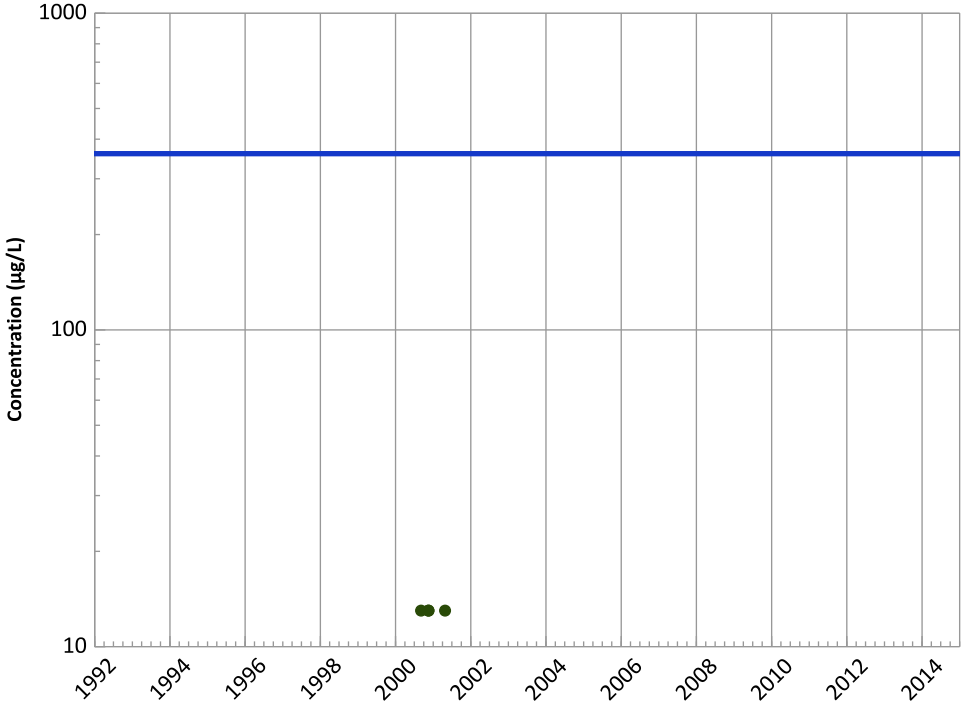


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

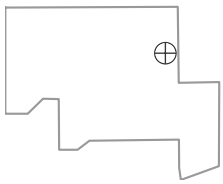
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

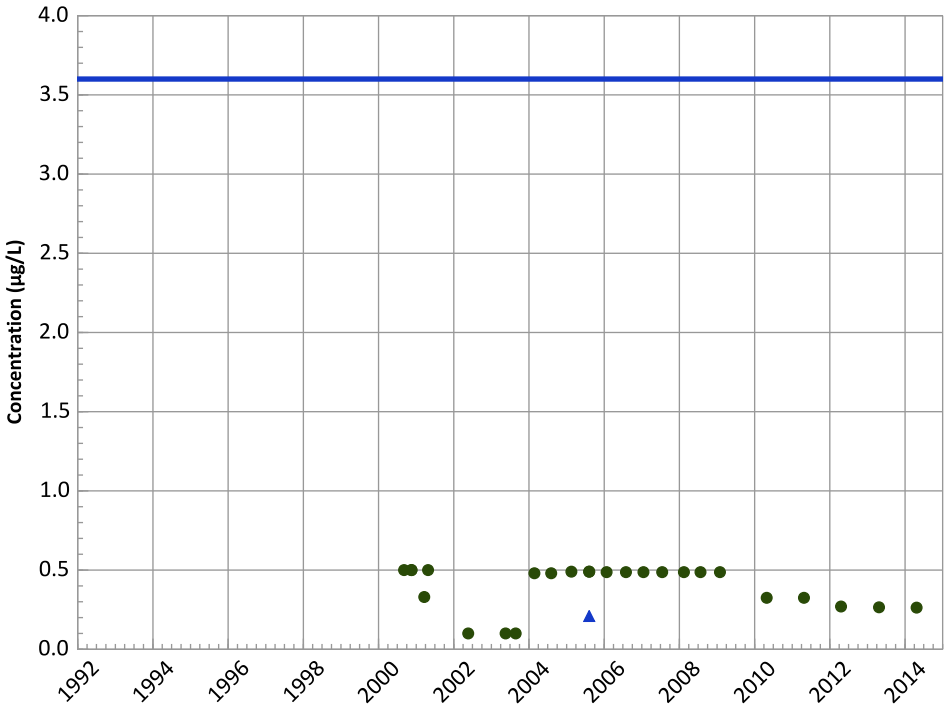
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

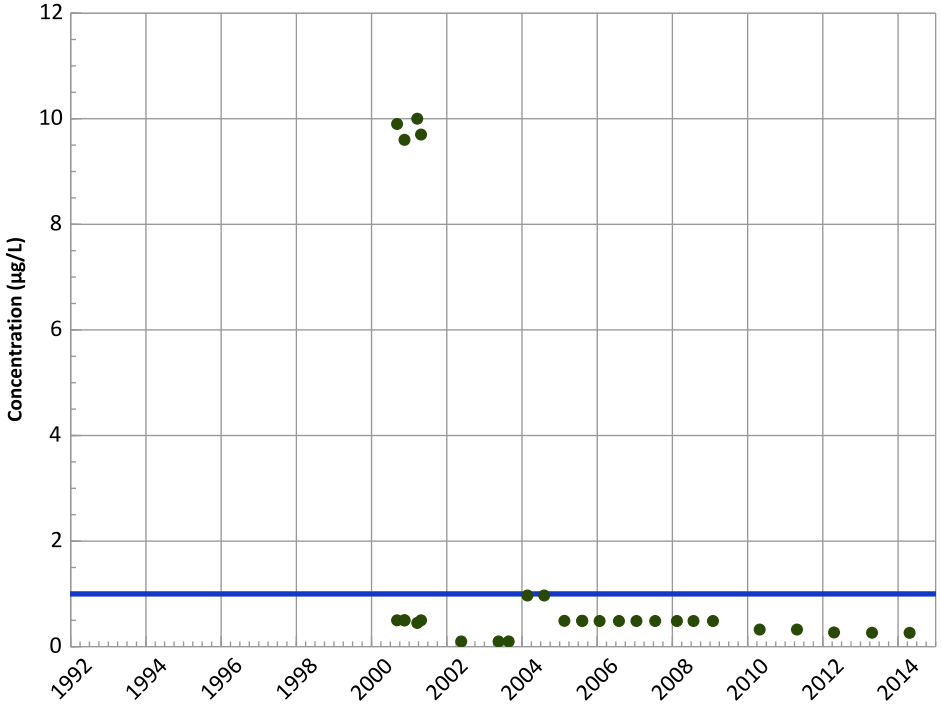


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

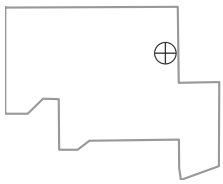
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

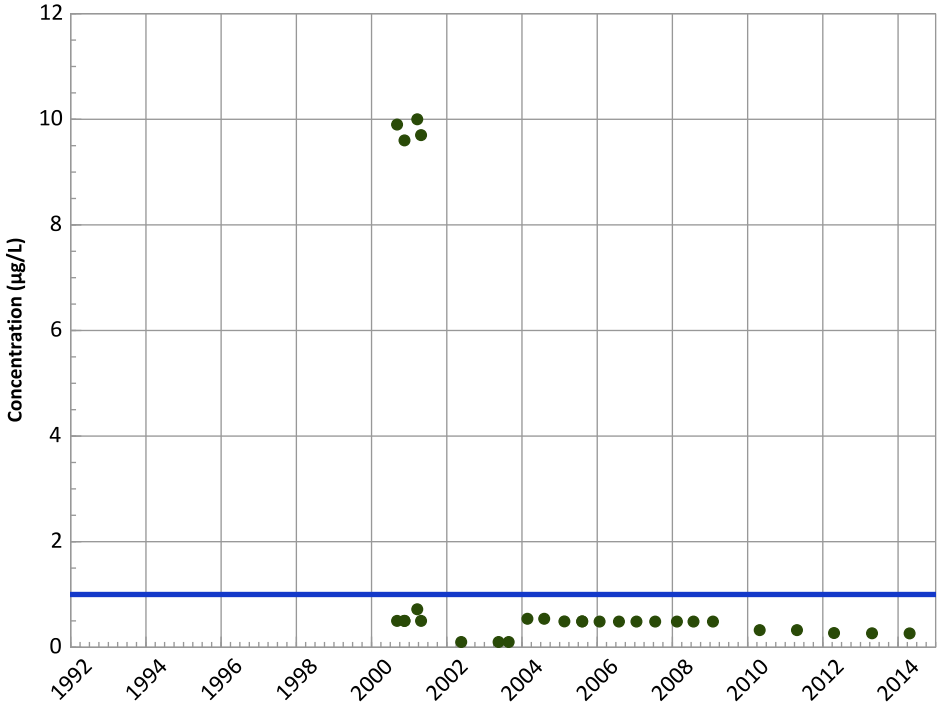
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

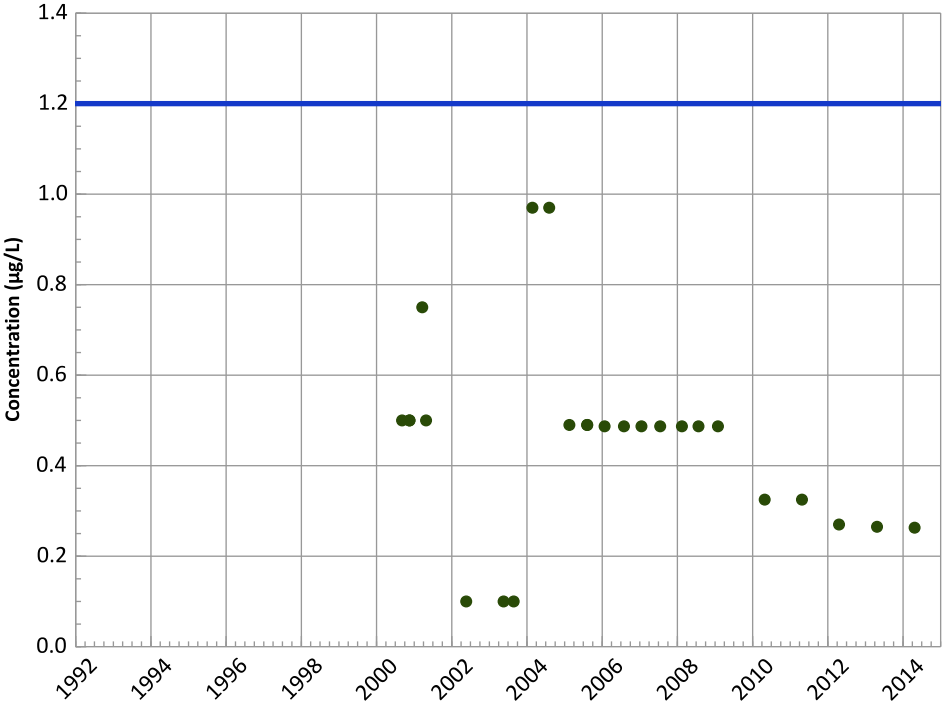


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

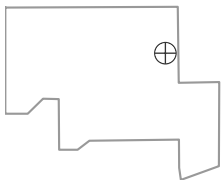
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

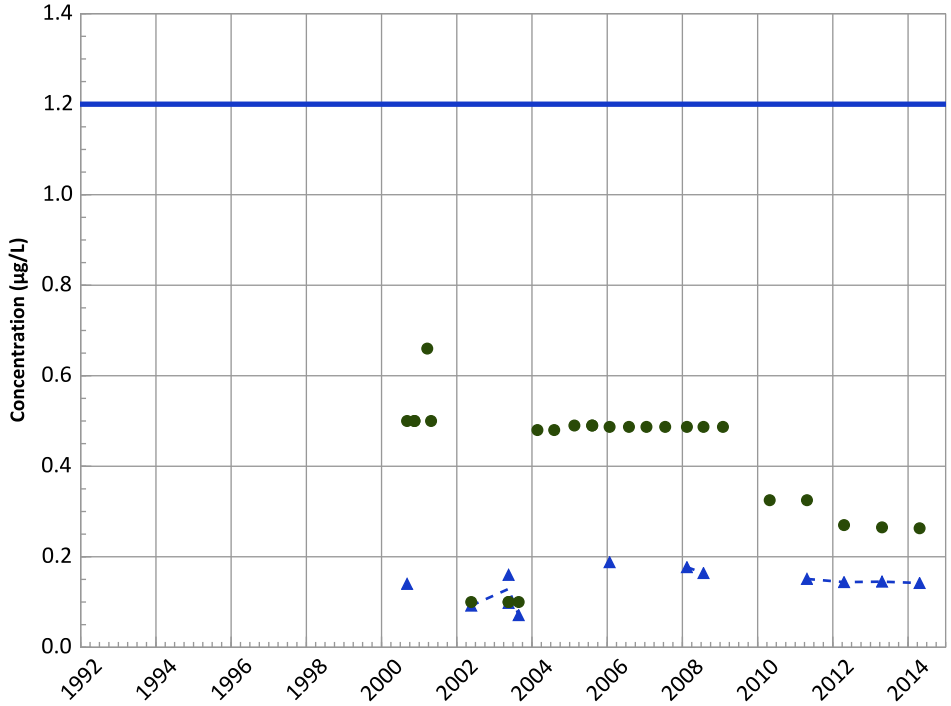
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

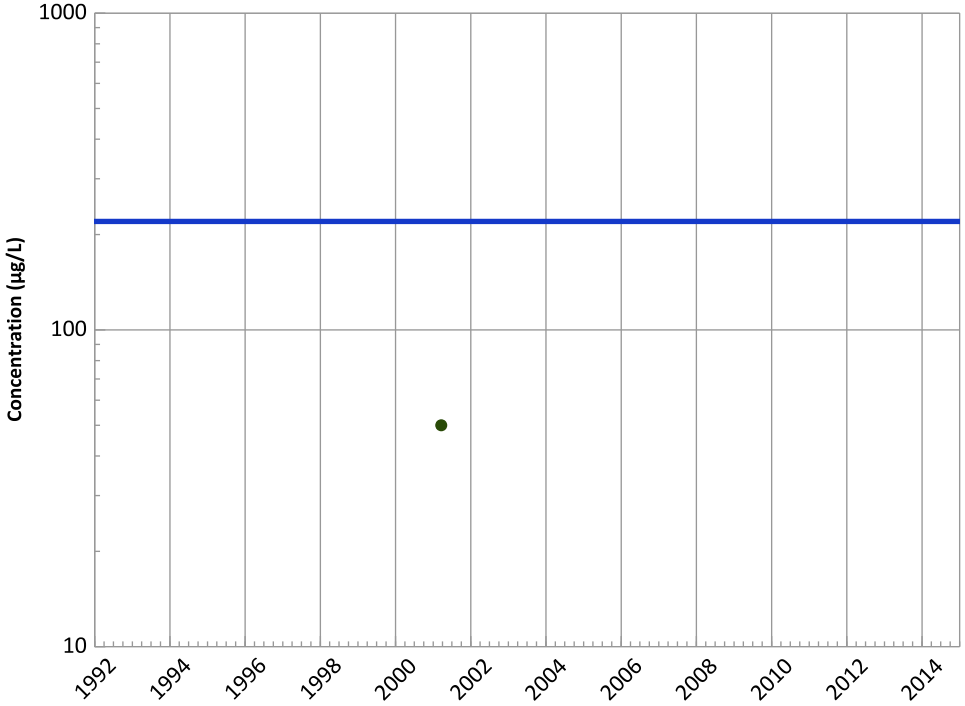


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

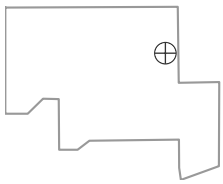
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

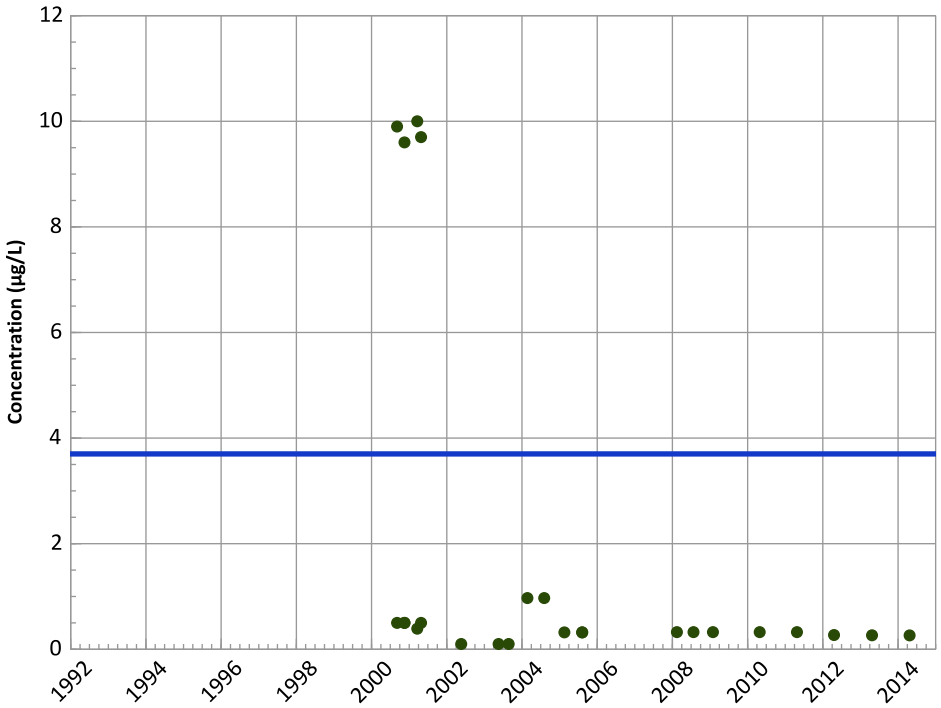
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

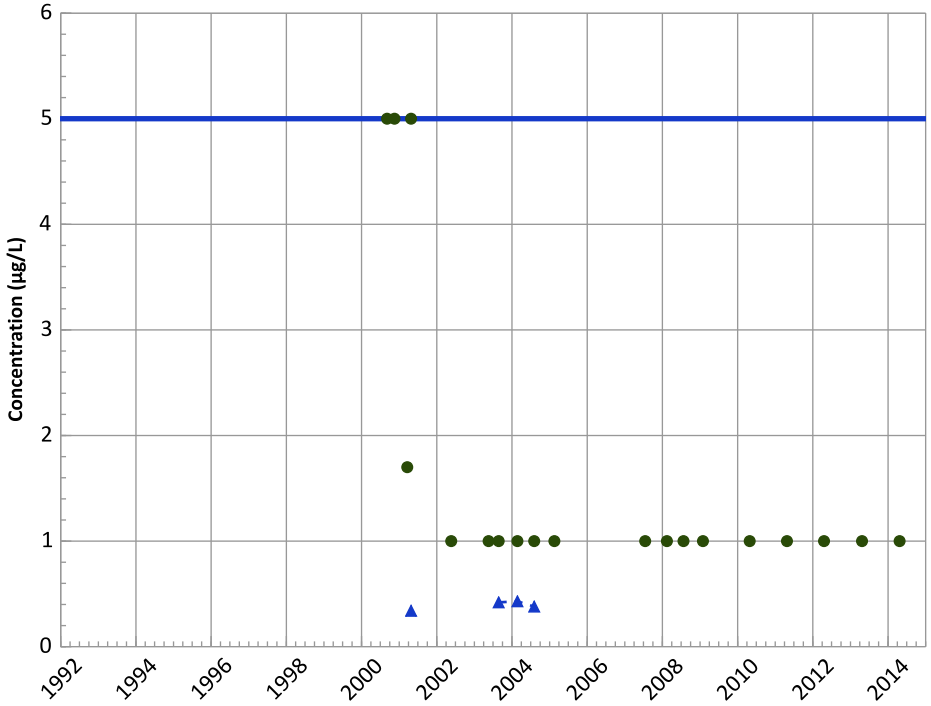


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

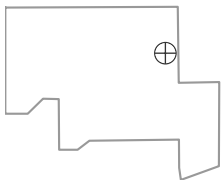
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

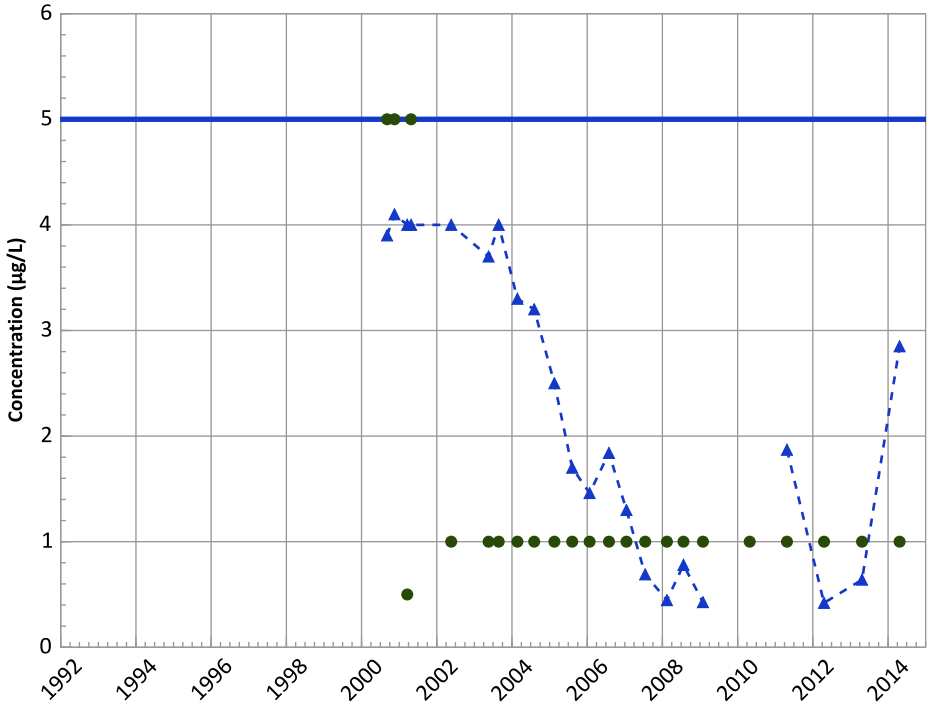
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

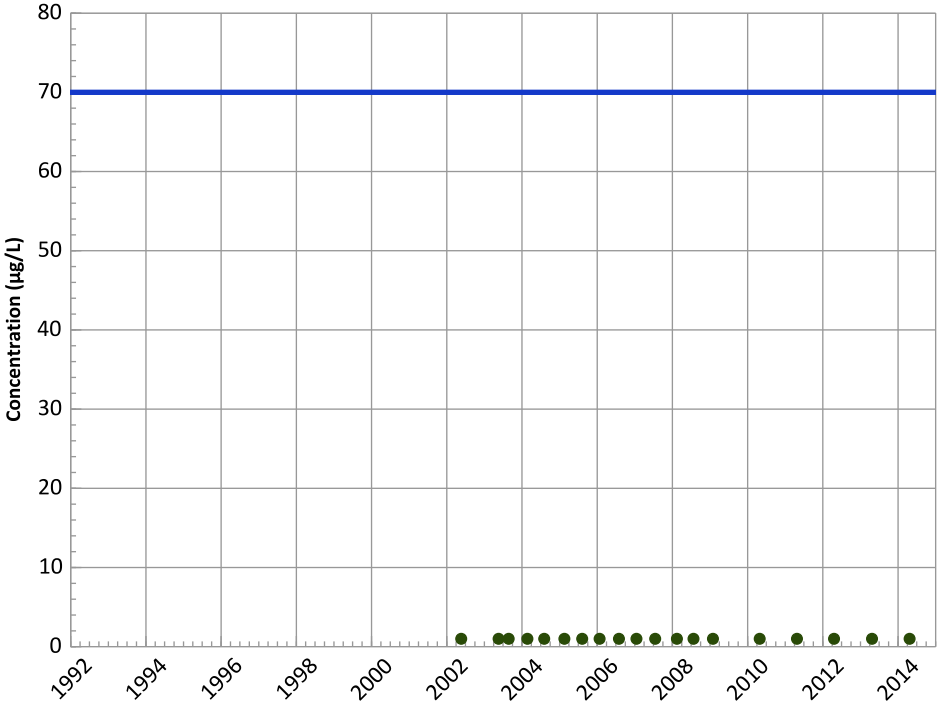


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

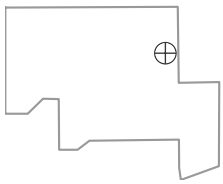
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

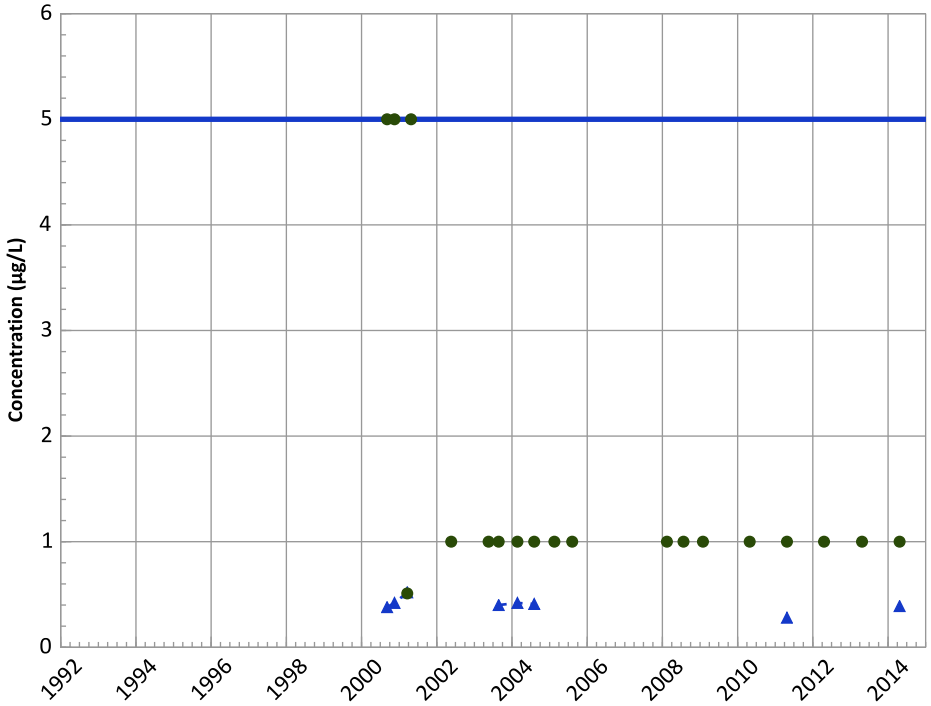
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

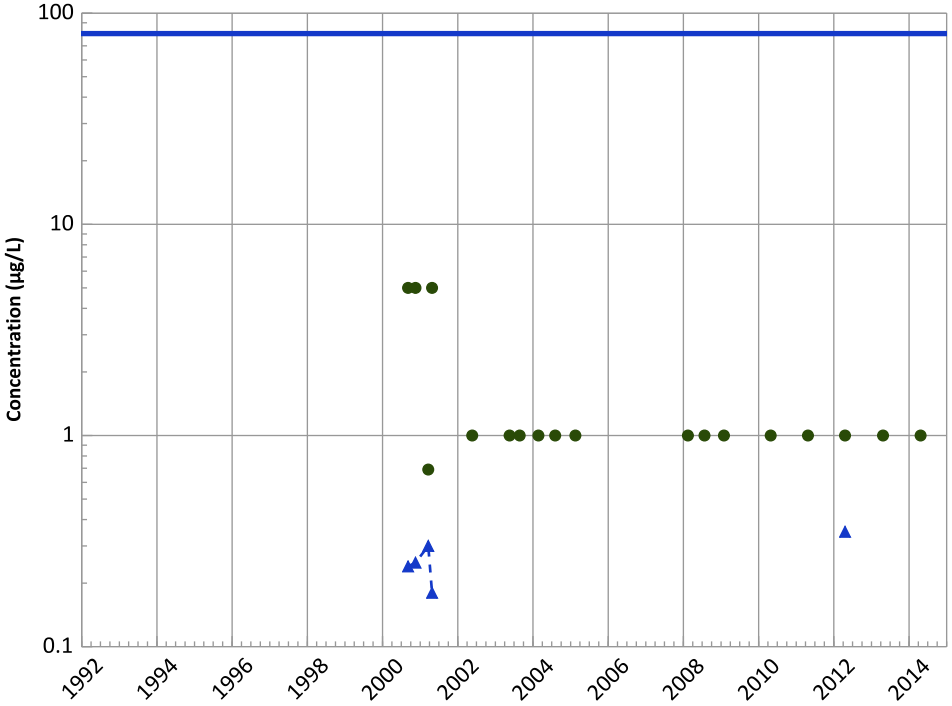


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Chloroform Trend



Concentration Trend

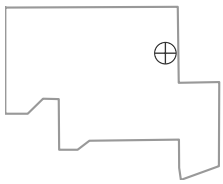
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

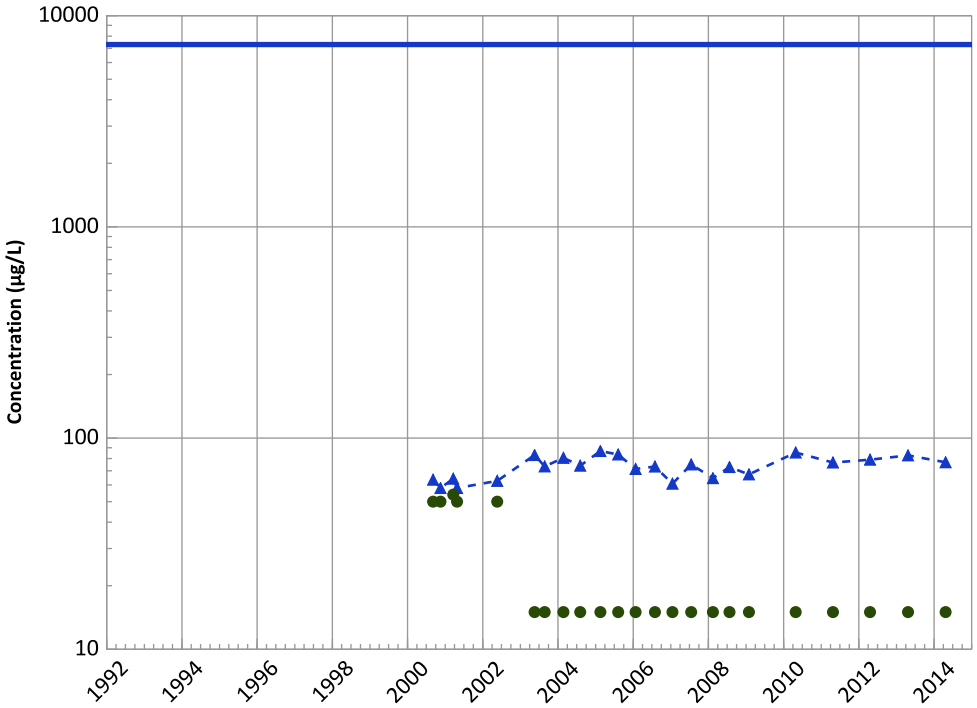
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

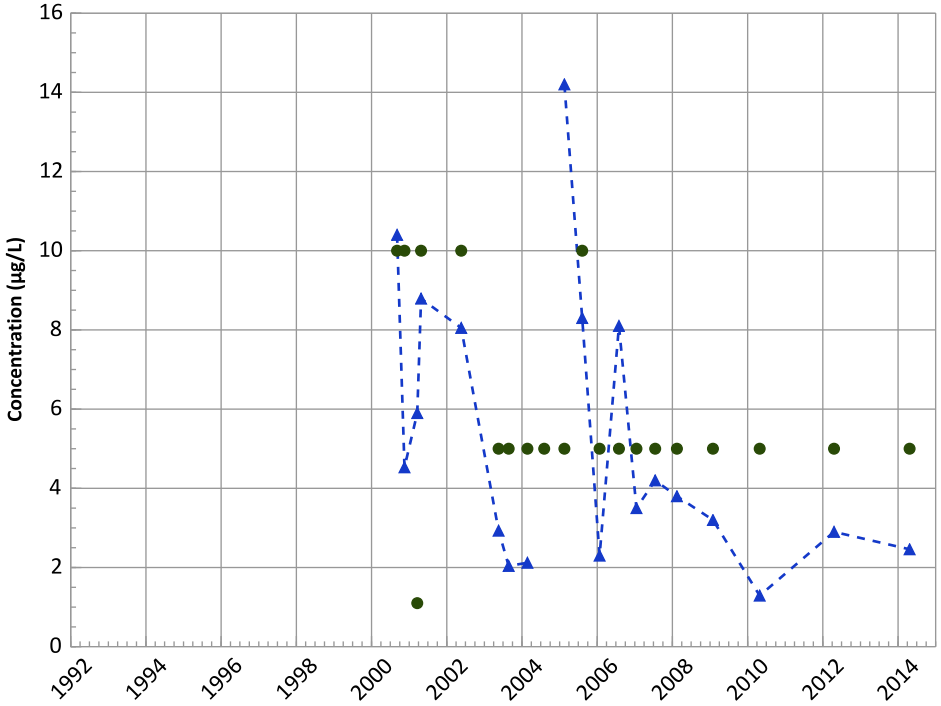


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Manganese Trend



Concentration Trend

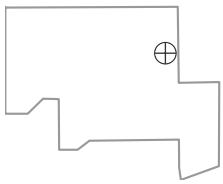
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

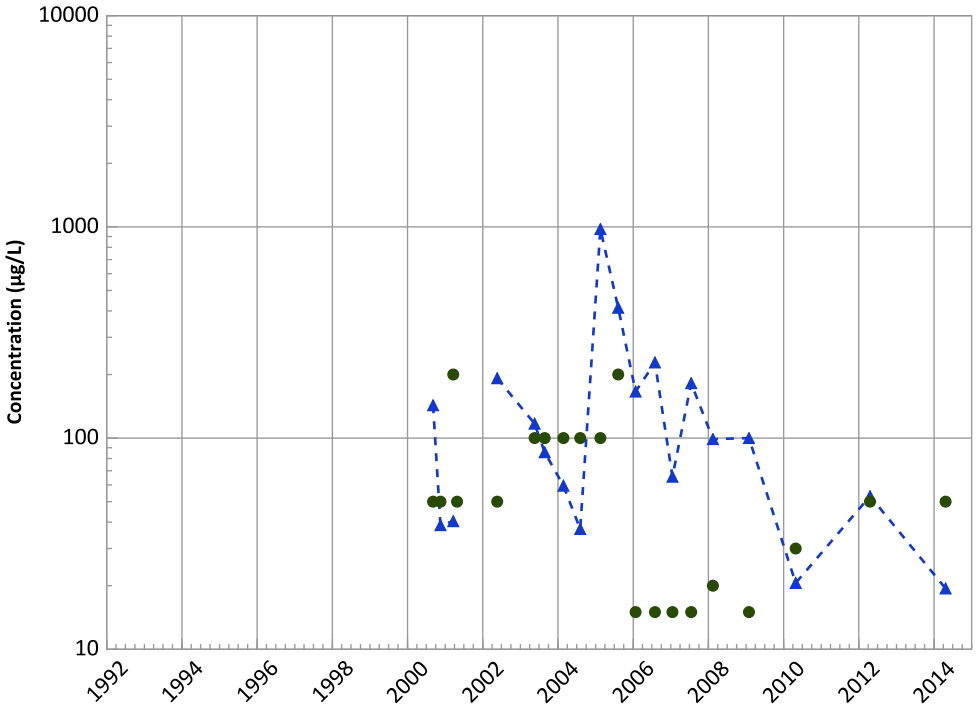
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

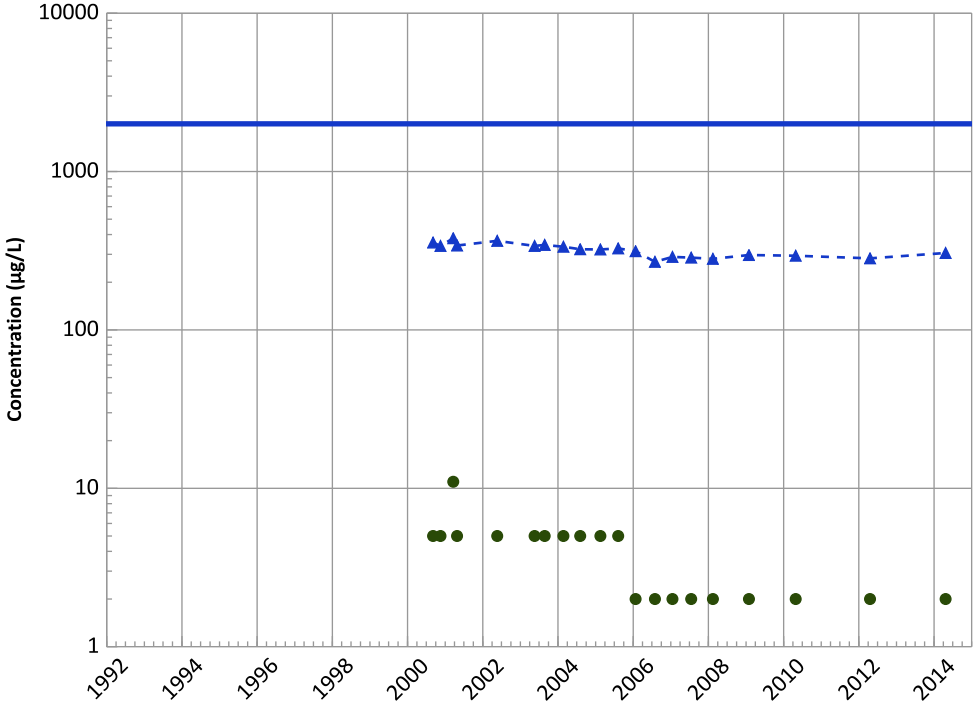


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

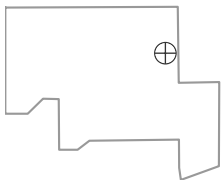
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

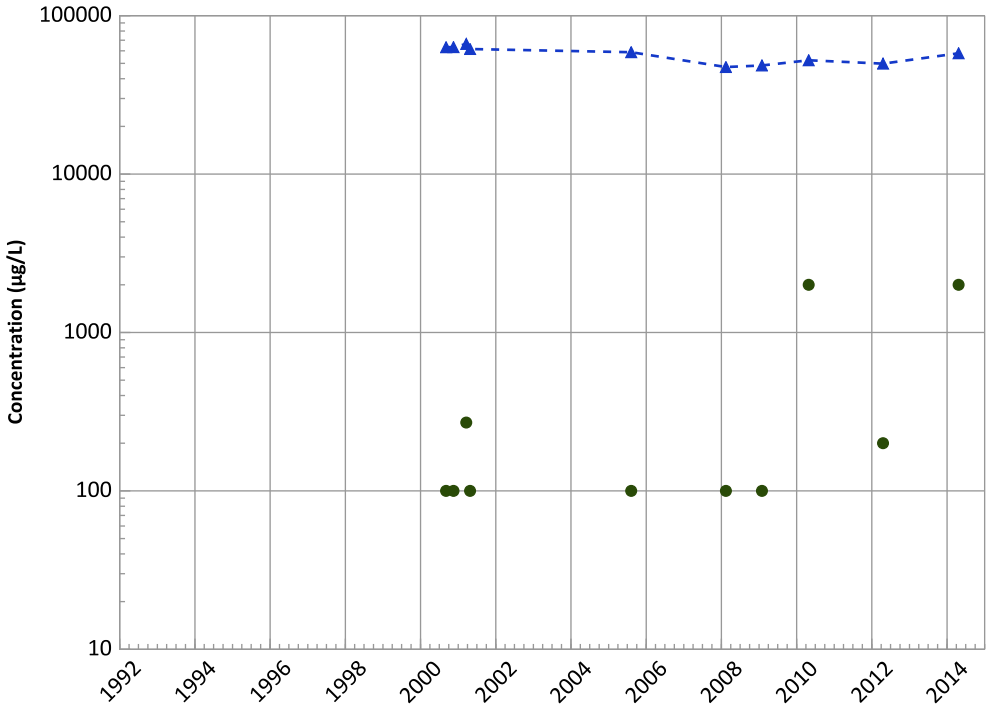
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

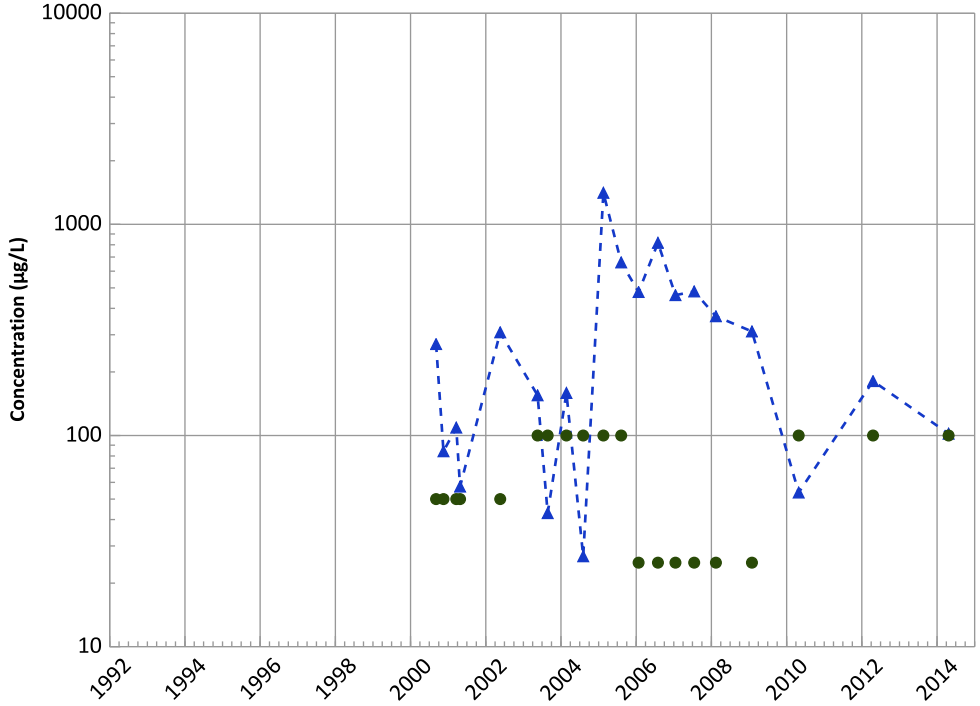


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

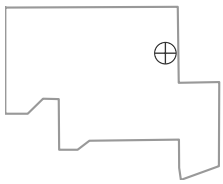
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

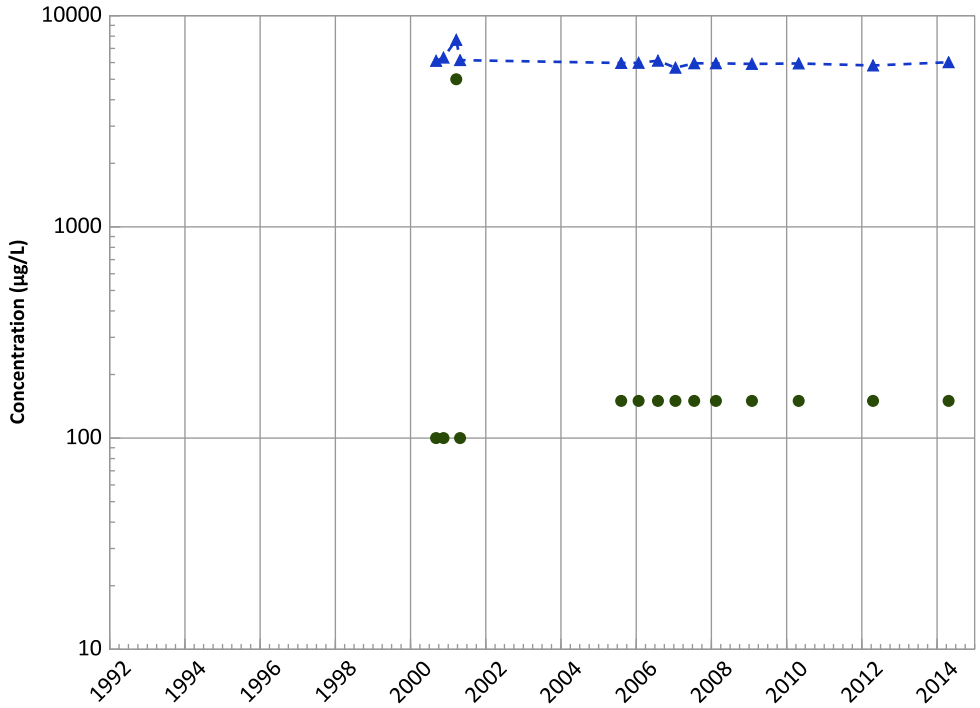
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

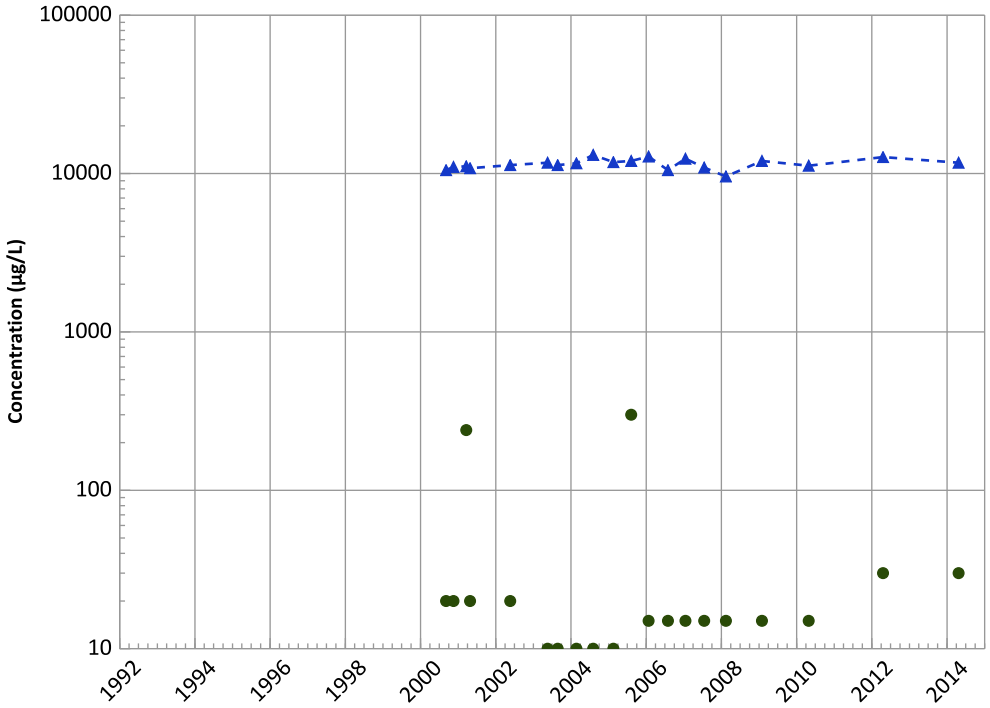


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

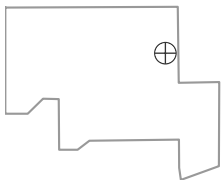
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

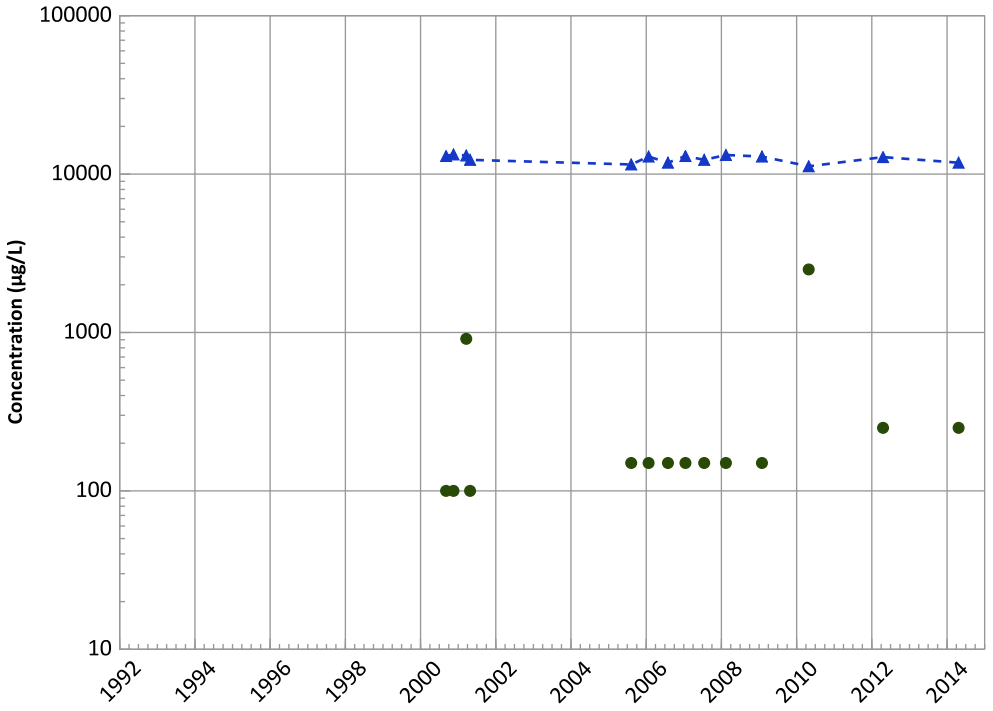
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1048A in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

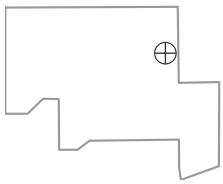
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

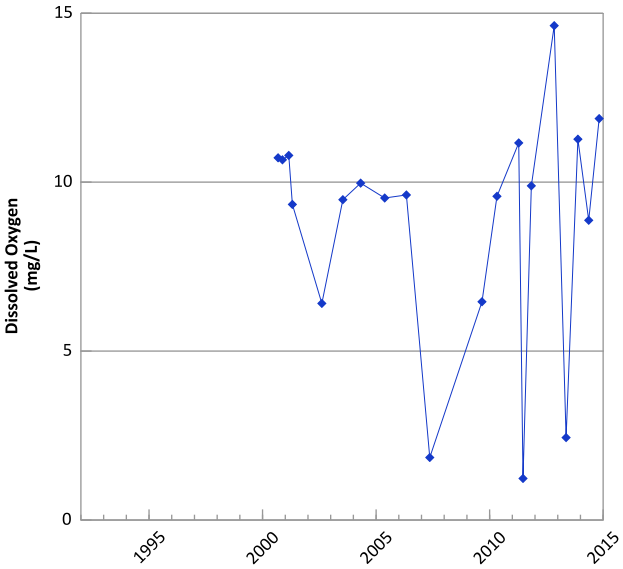
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 04/23/2014
Analysis Date: 03/19/2015

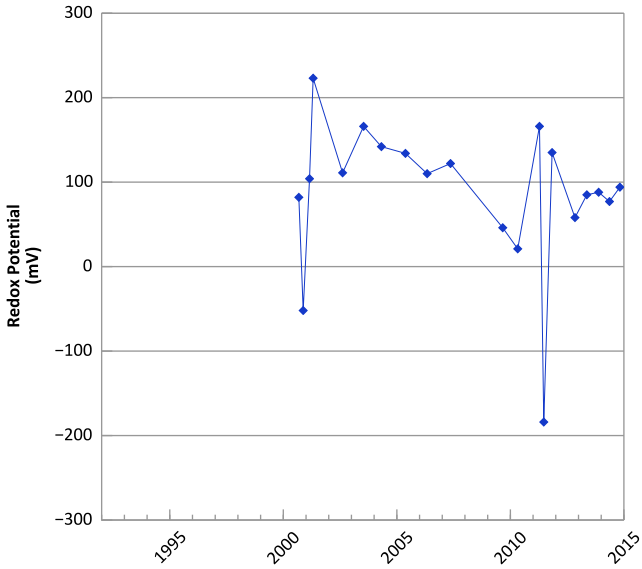
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

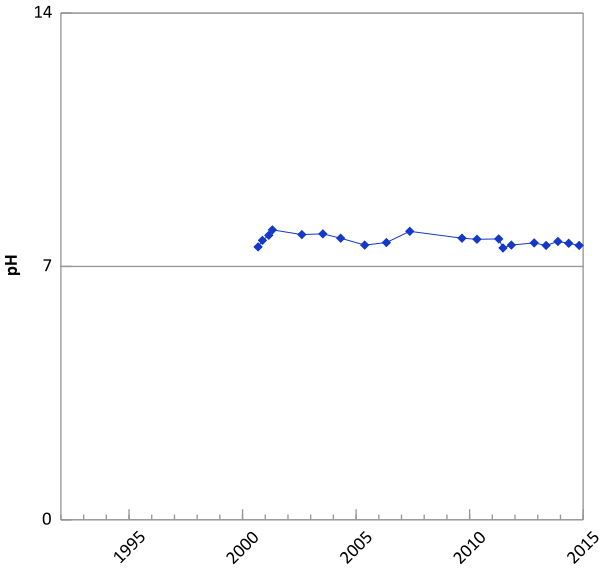
Well Location

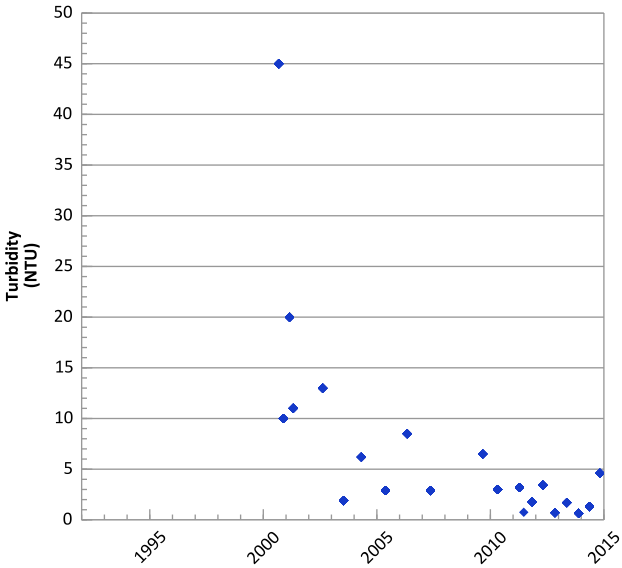


PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



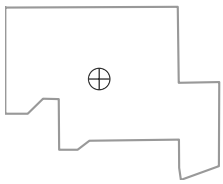






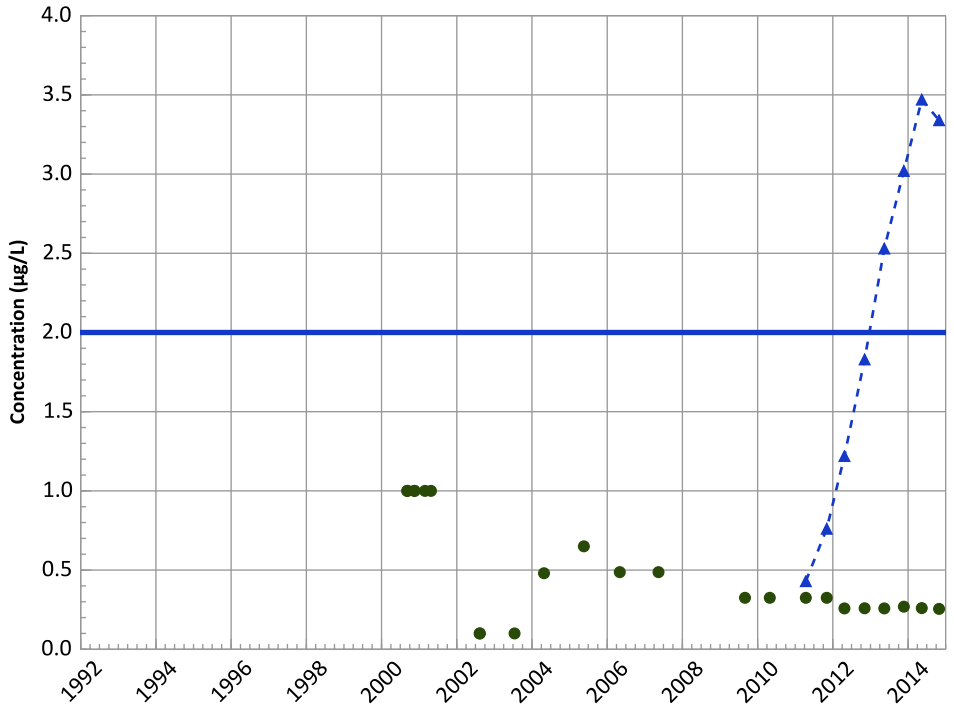
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

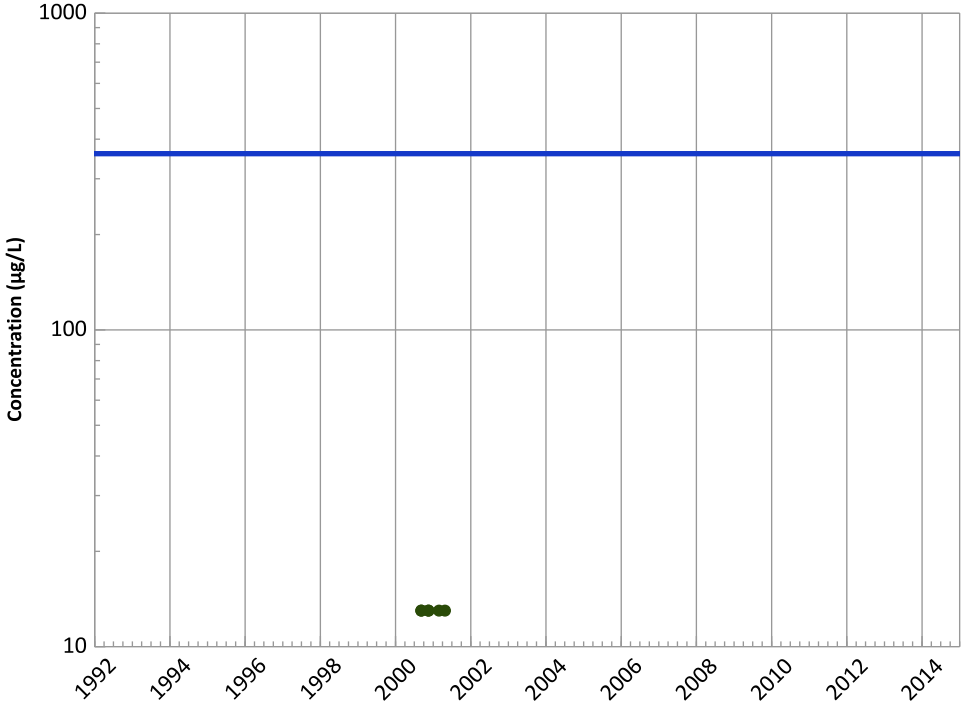


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

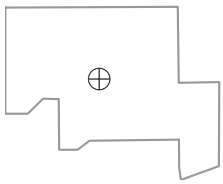
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

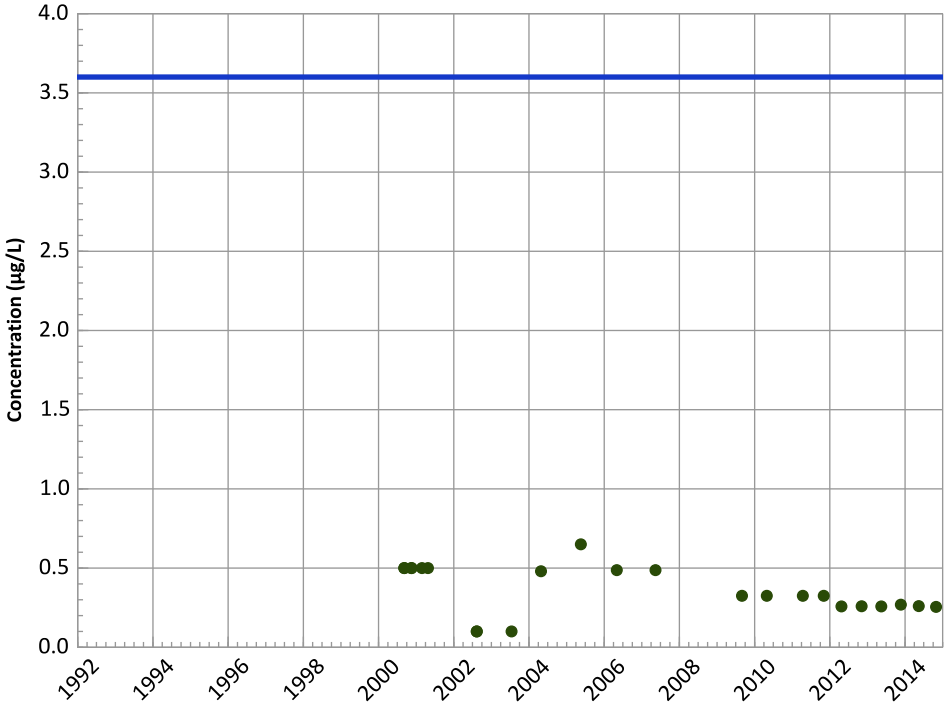
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

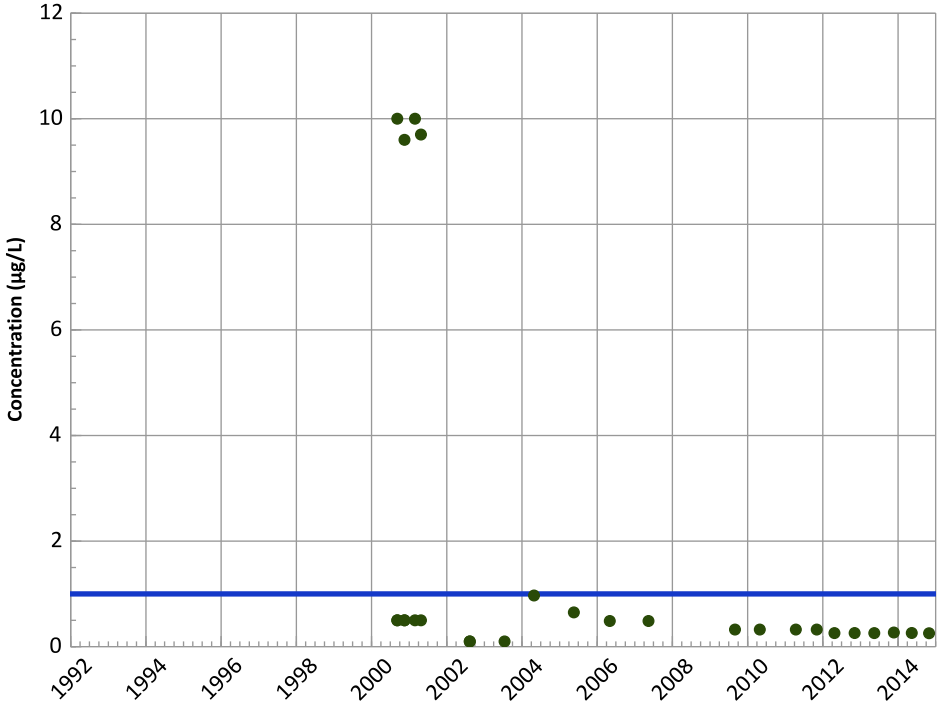


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

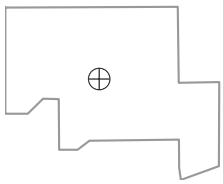
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

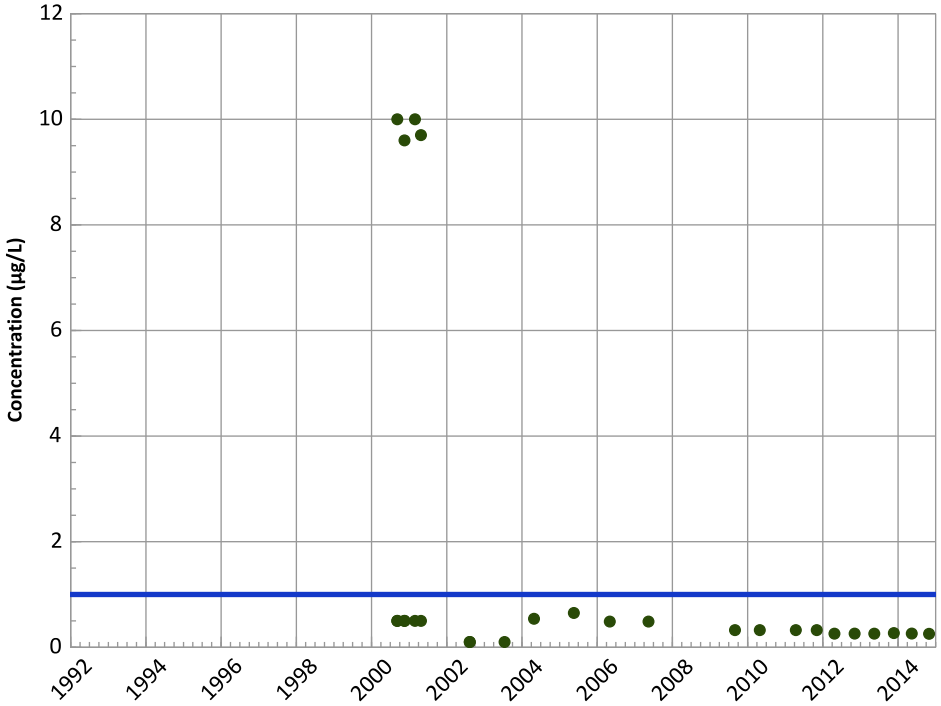
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

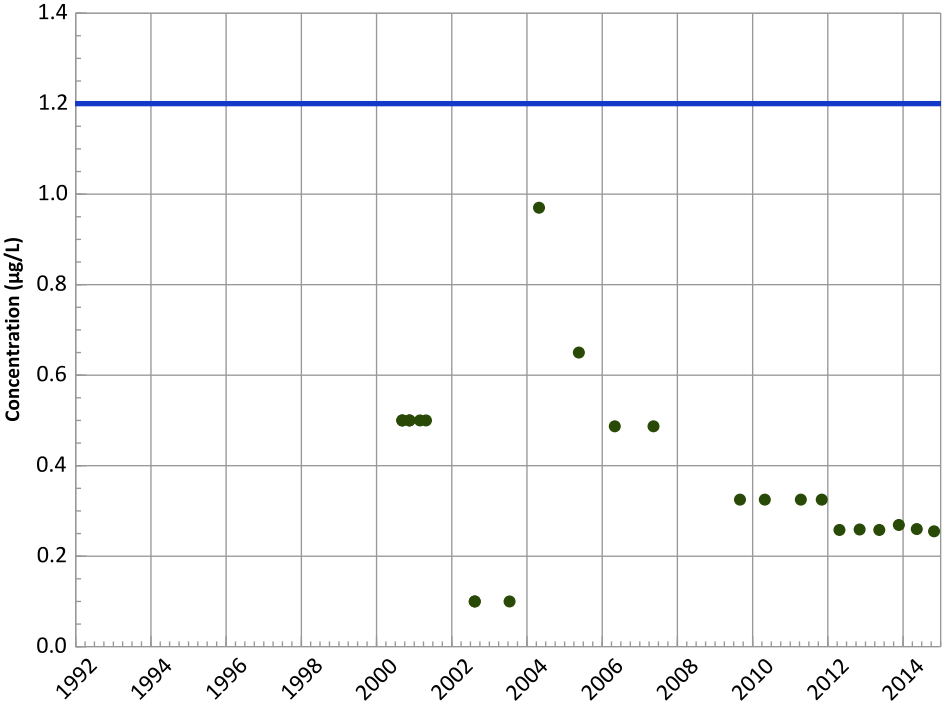


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

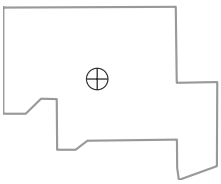
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

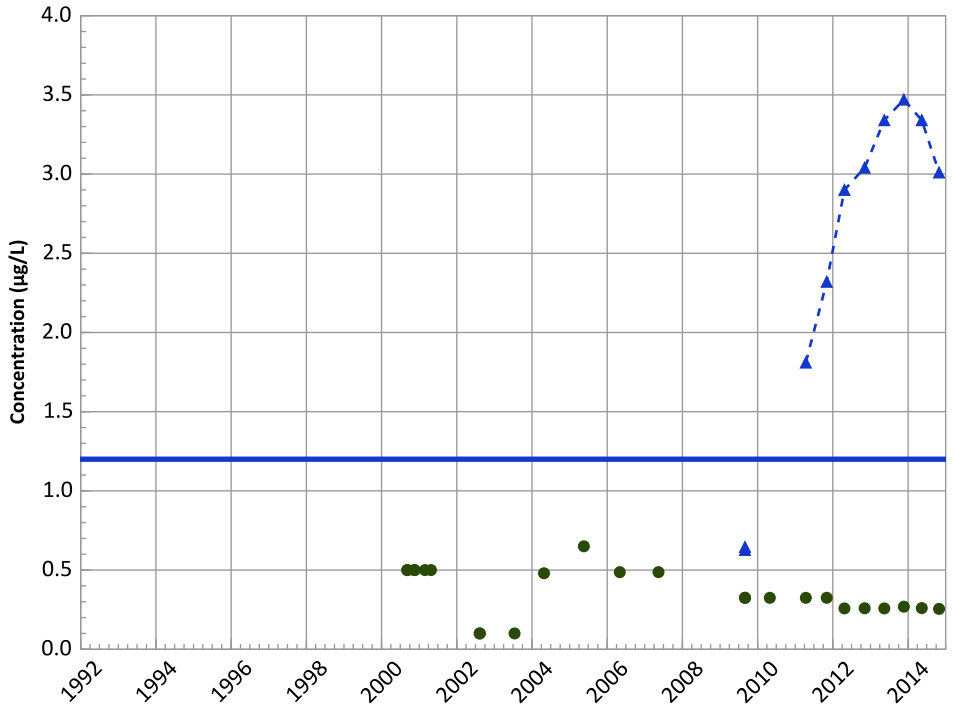
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

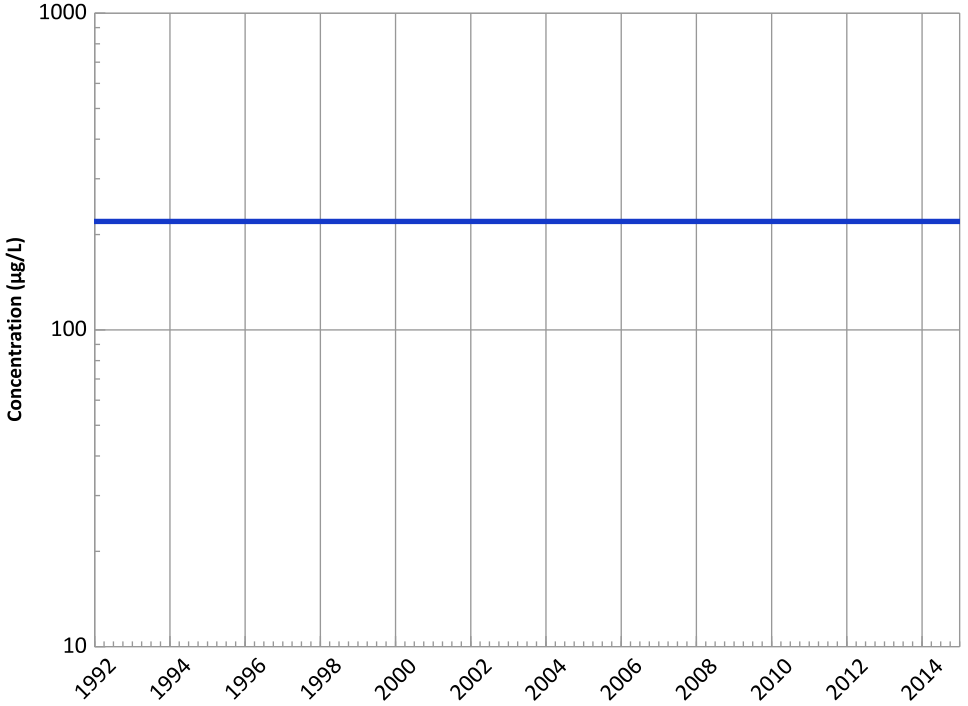


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

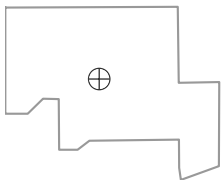
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

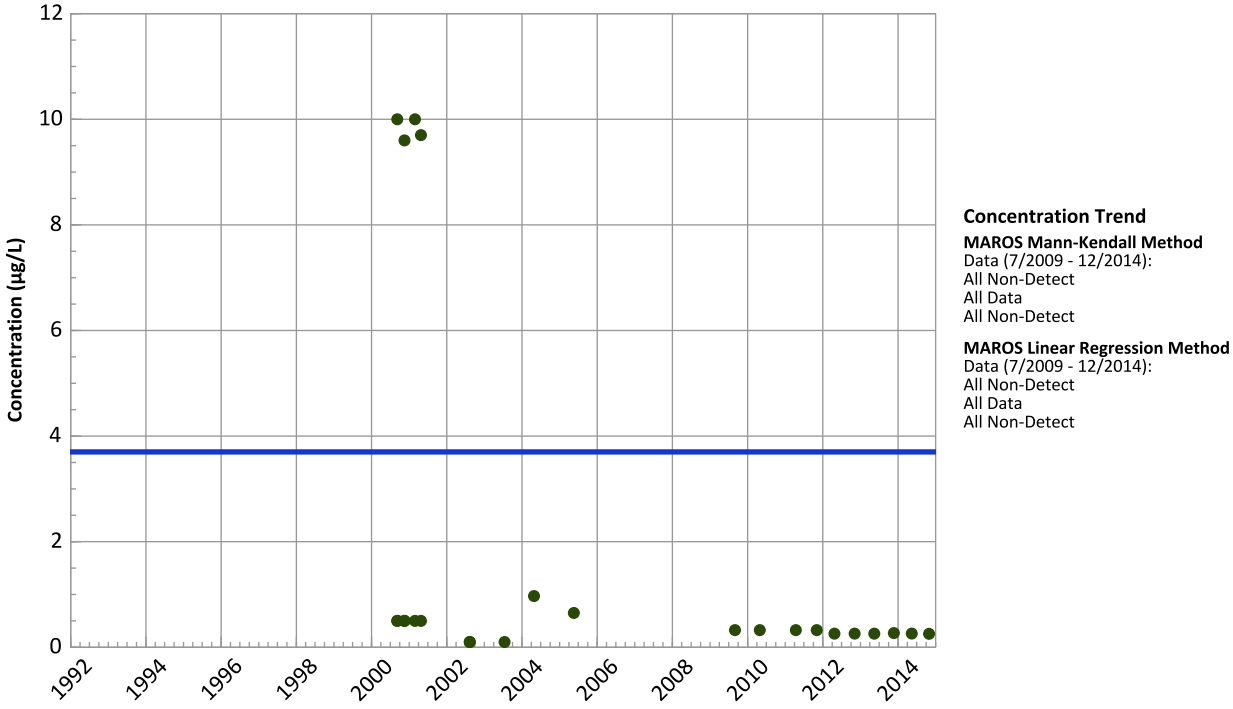
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

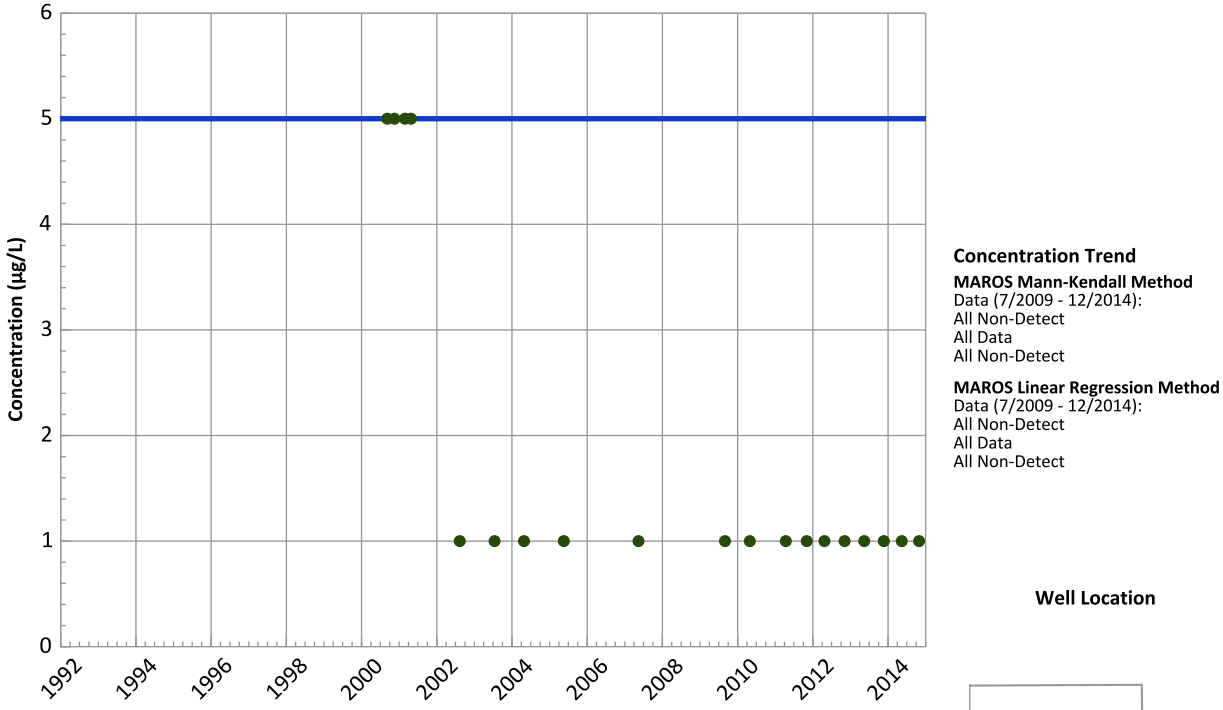


PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



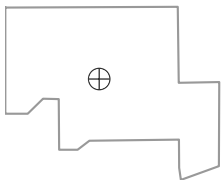
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

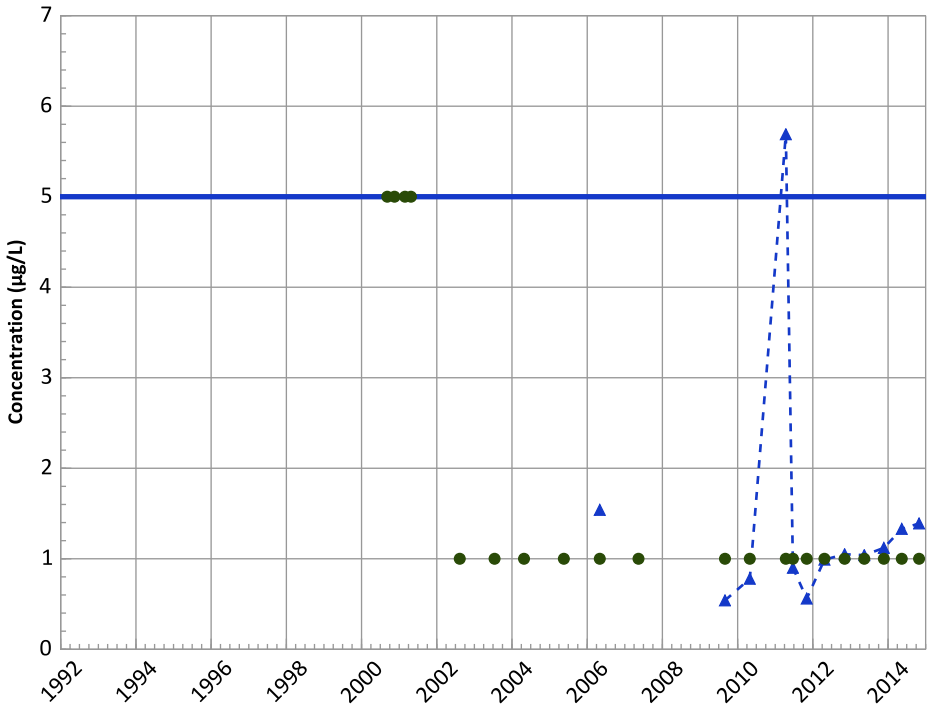
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

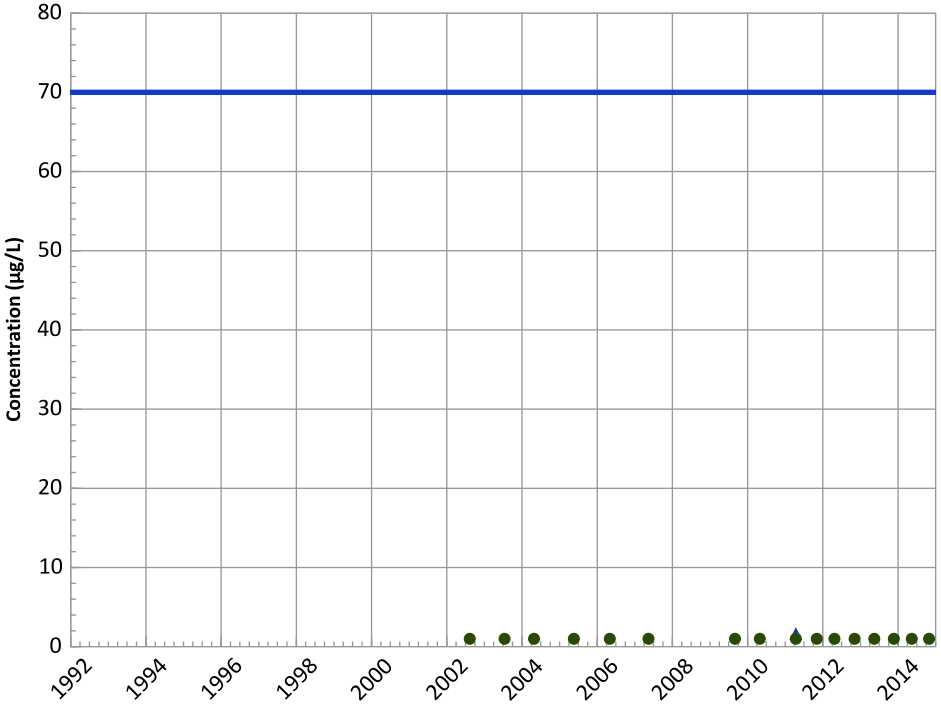


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

cis-1,2-Dichloroethene Trend



Concentration Trend

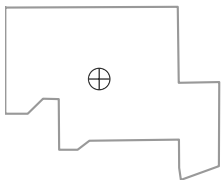
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

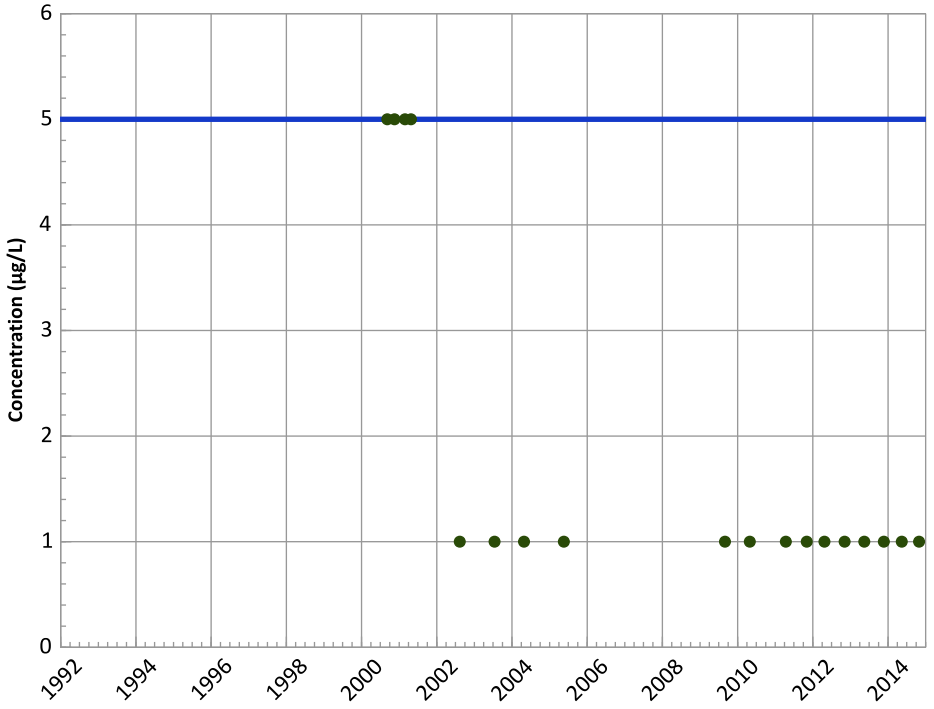
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

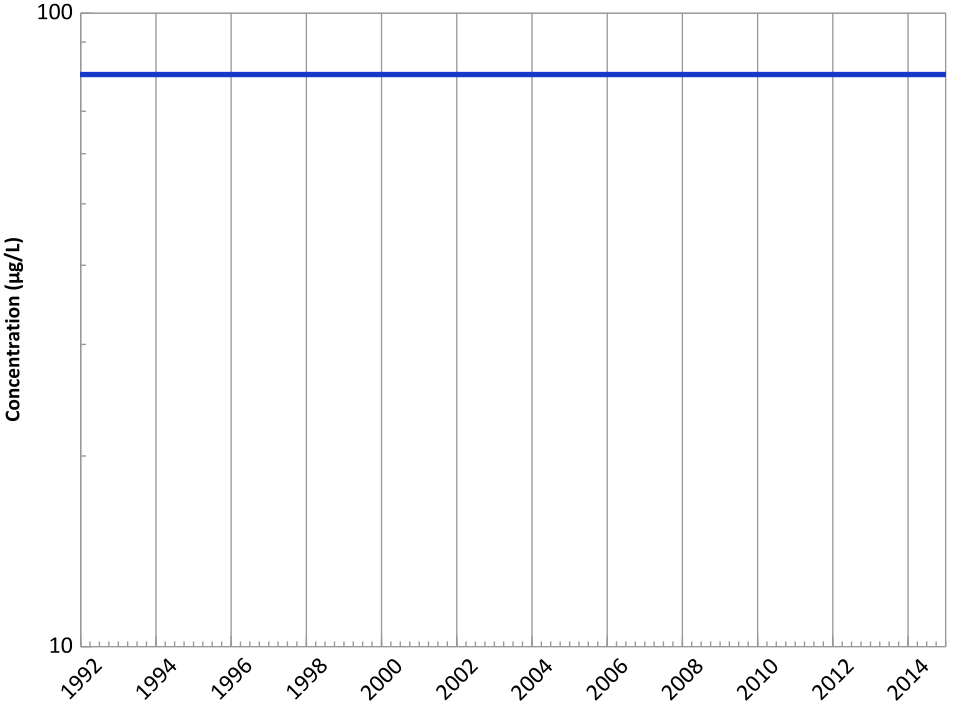


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

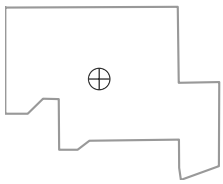
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

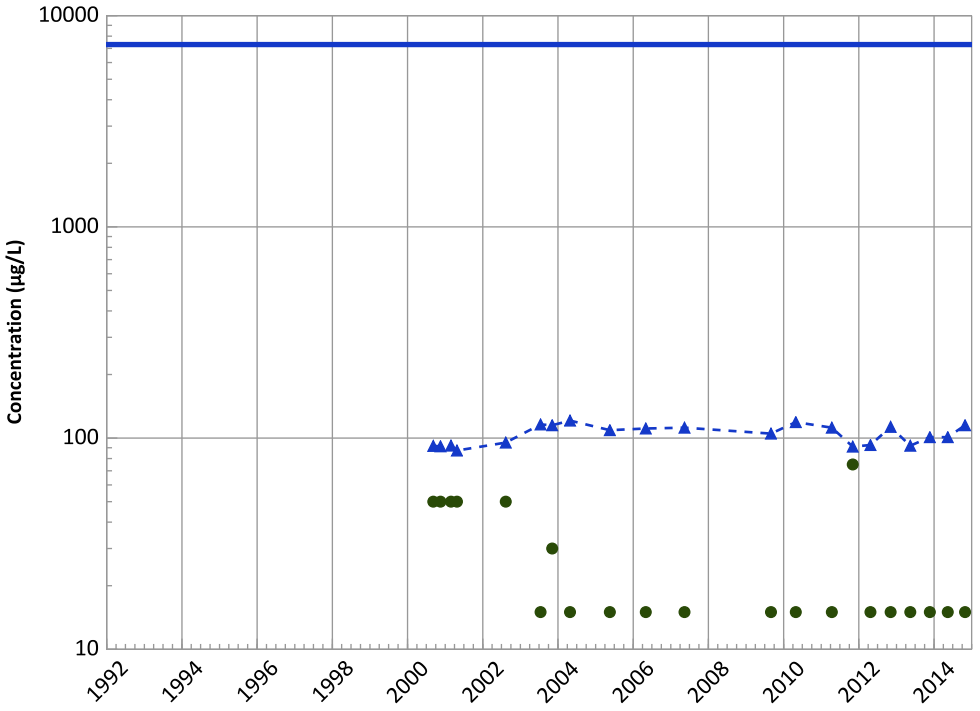
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

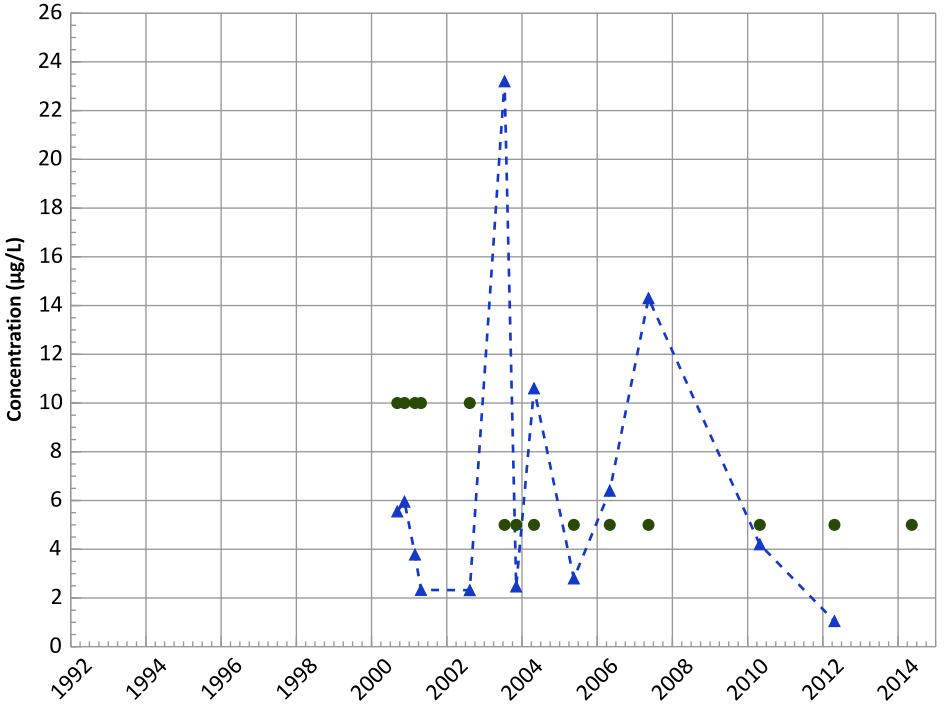


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Manganese Trend



Concentration Trend

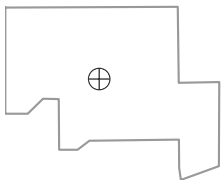
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

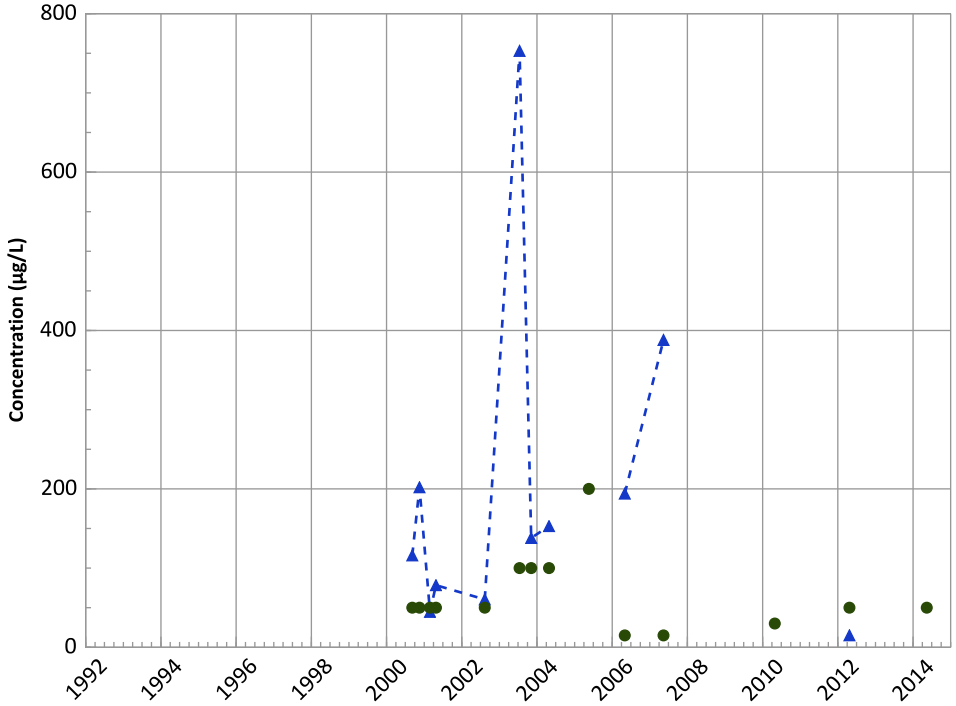
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

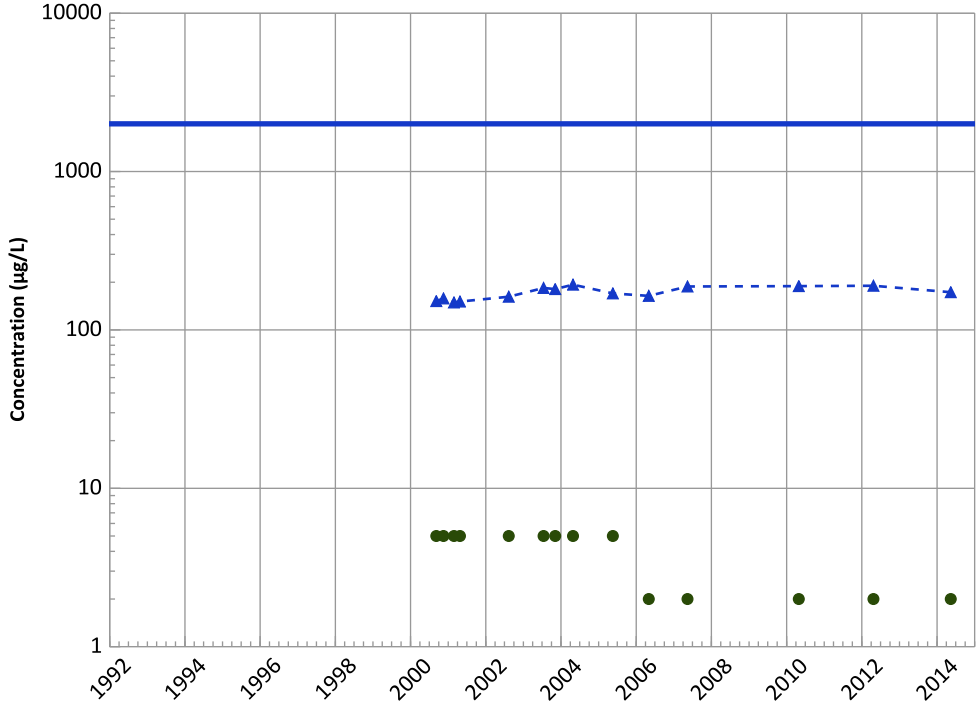


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

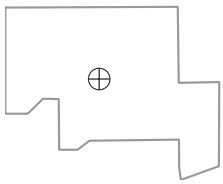
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

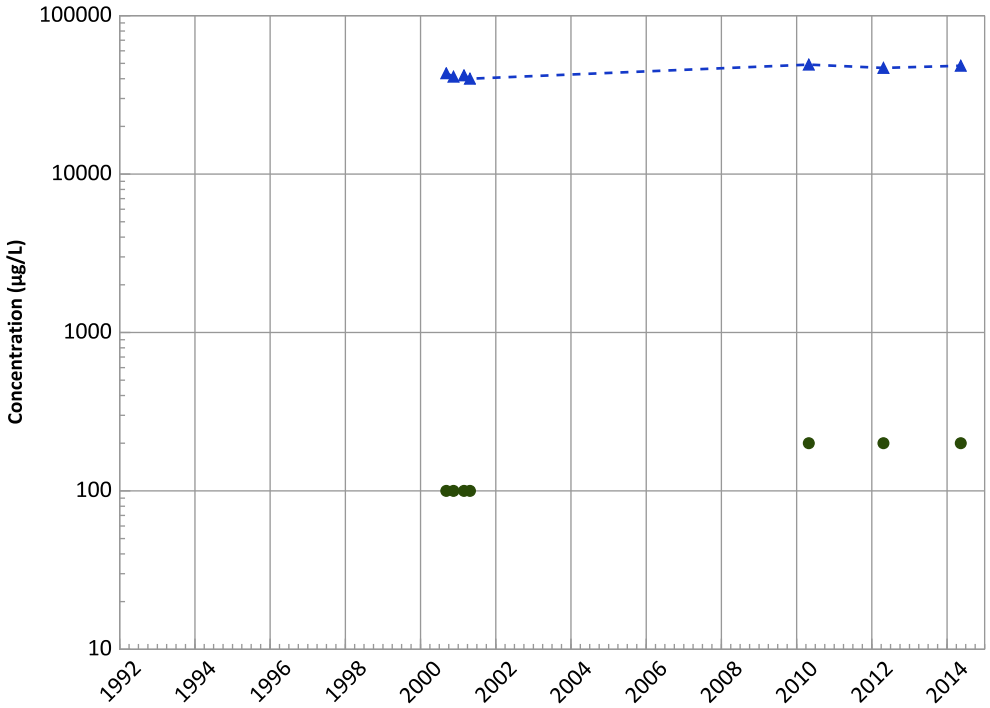
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

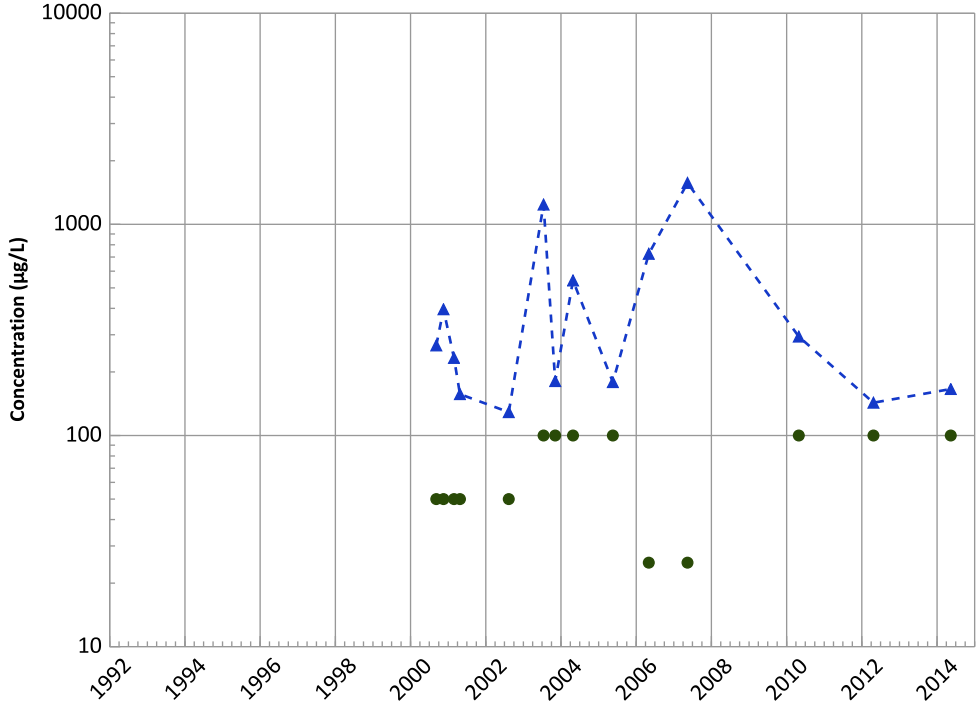


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

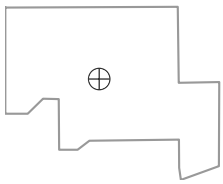
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

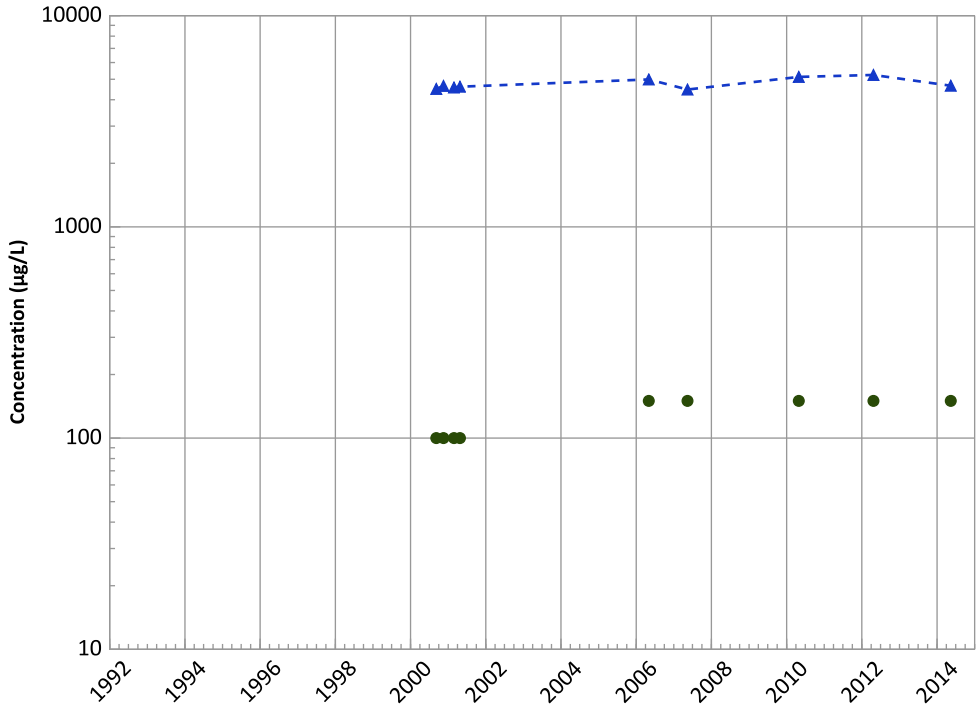
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

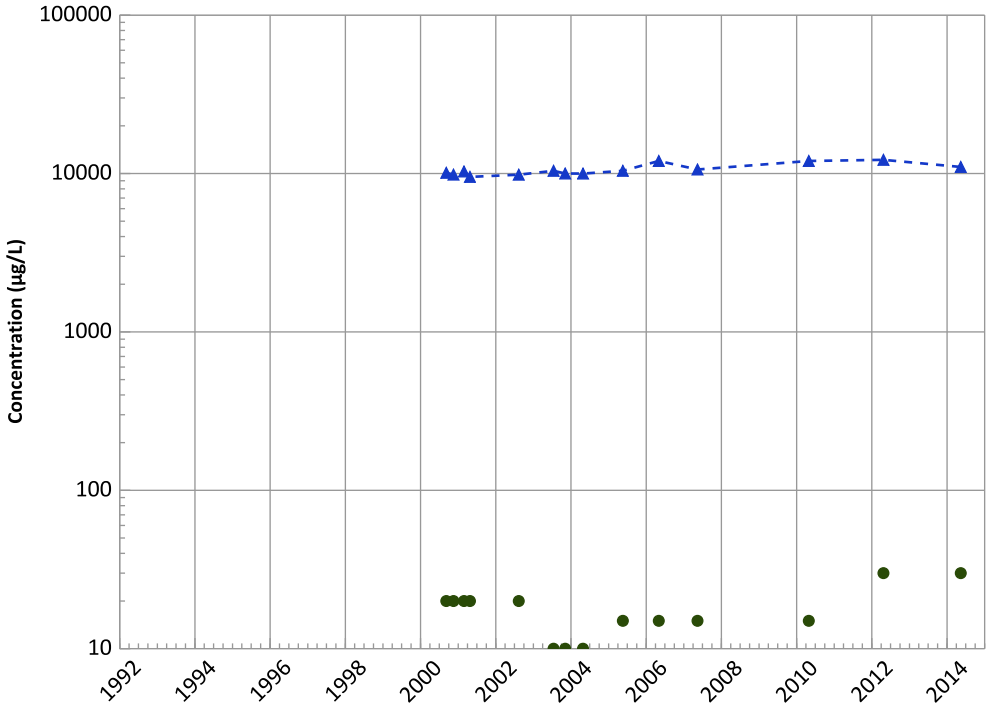


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Magnesium Trend



Concentration Trend

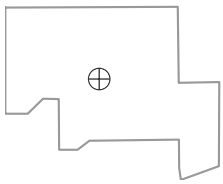
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

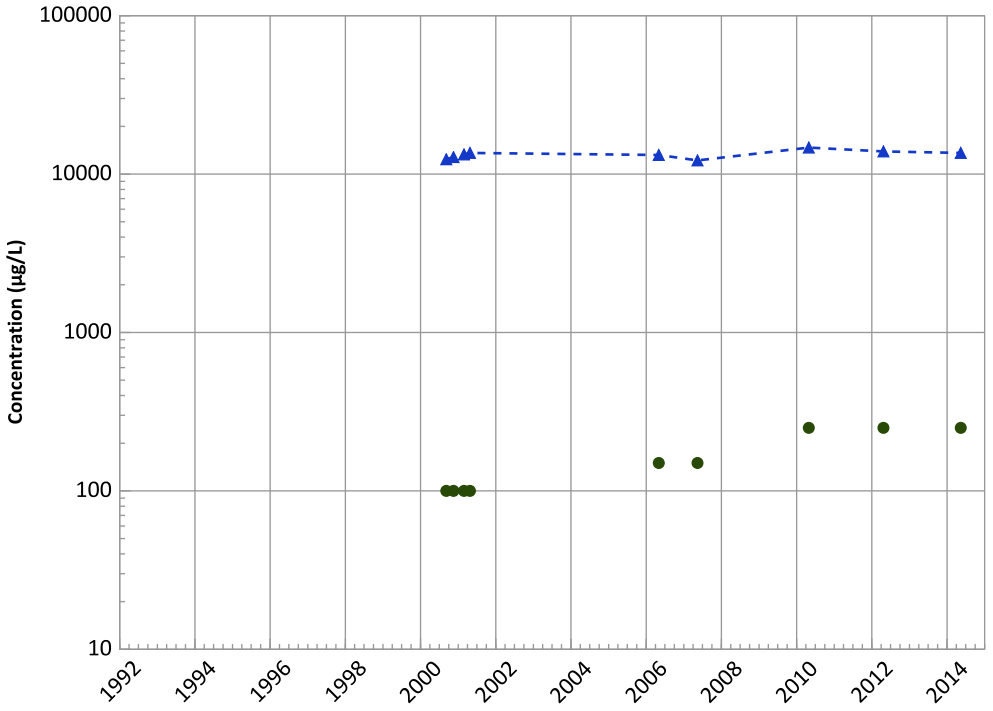
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1049 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

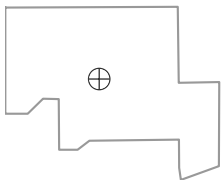
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

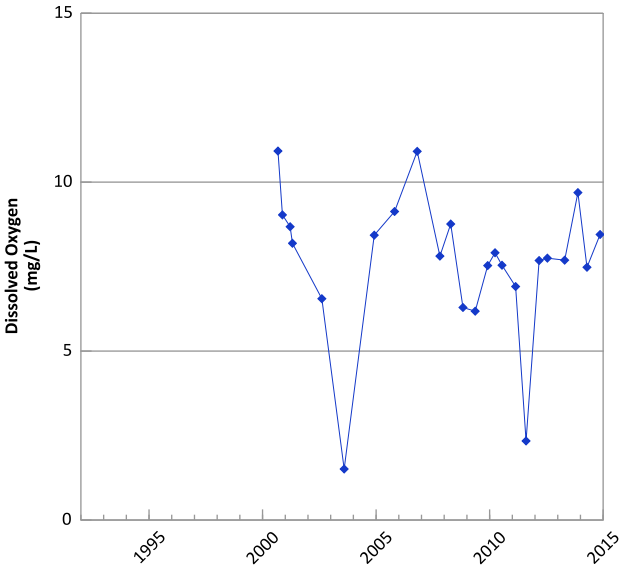
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/07/2000 to 10/29/2014
Analysis Date: 03/19/2015

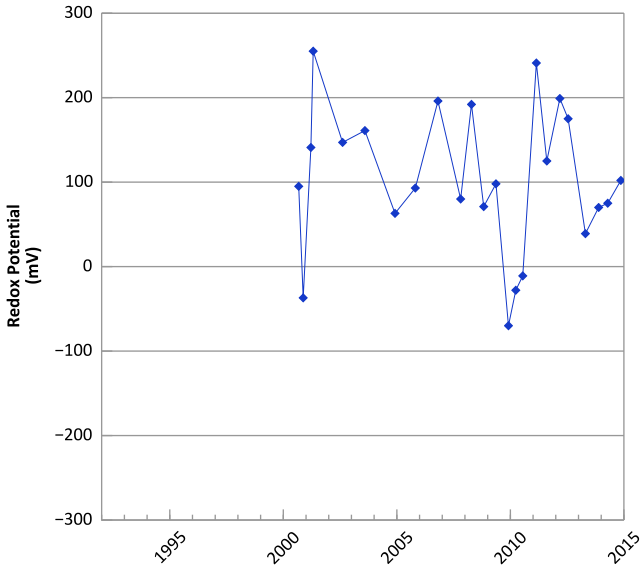
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

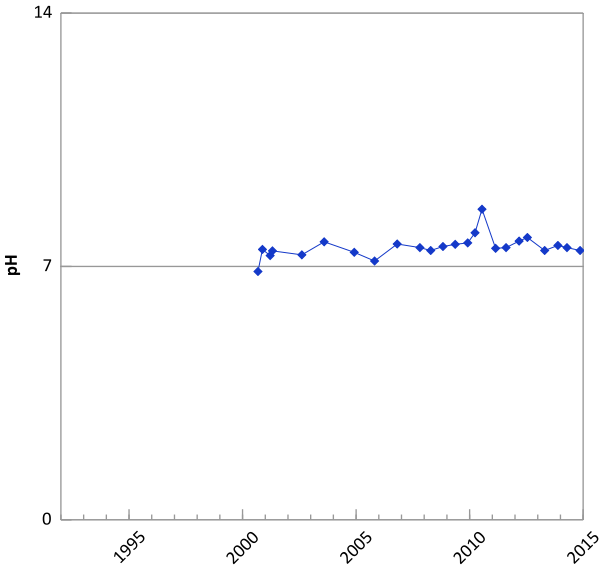
Well Location

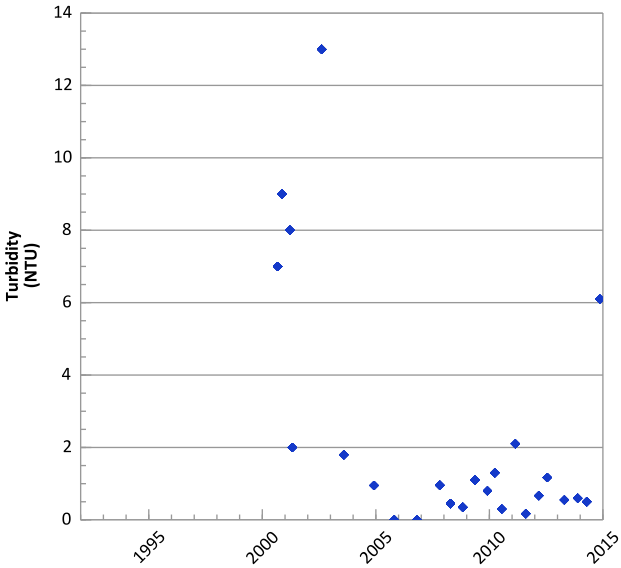


PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



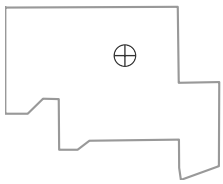






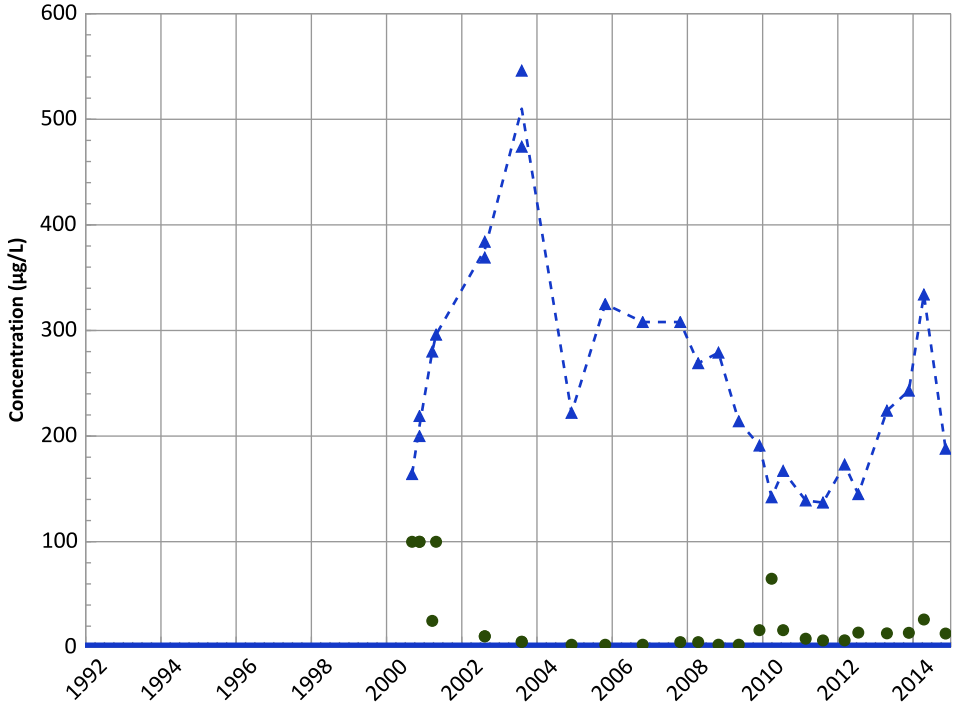
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

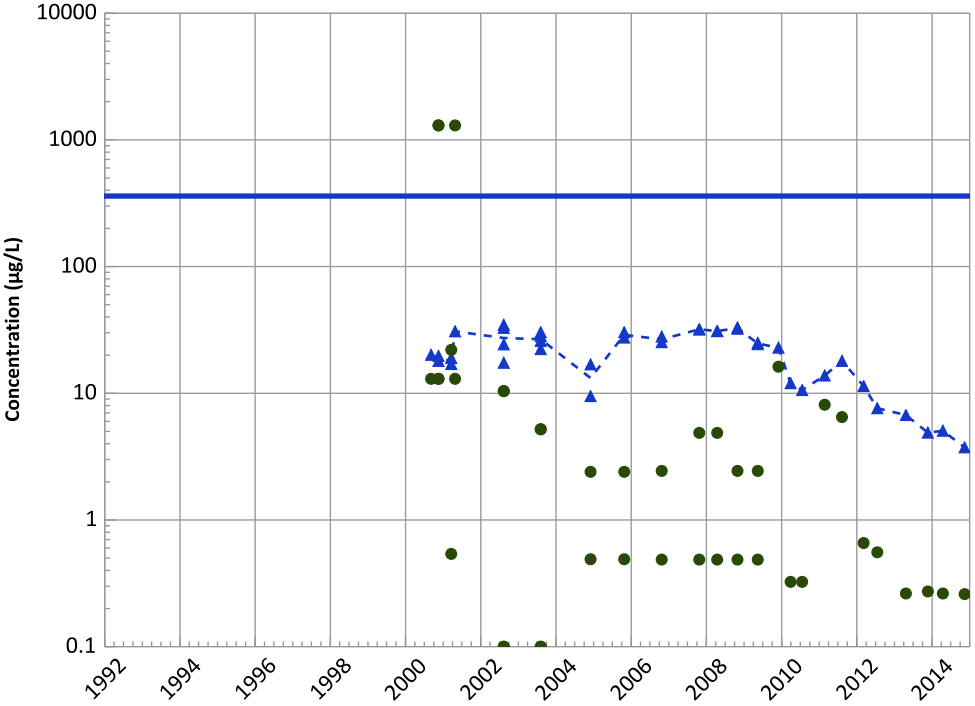


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

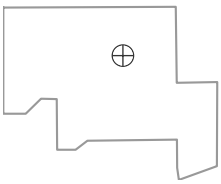
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

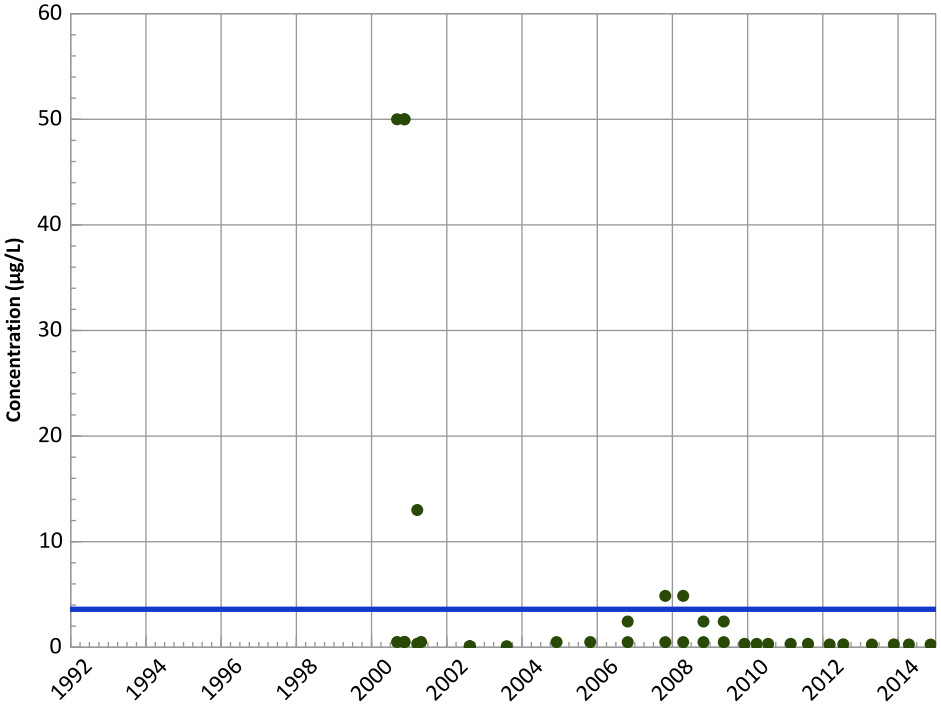
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

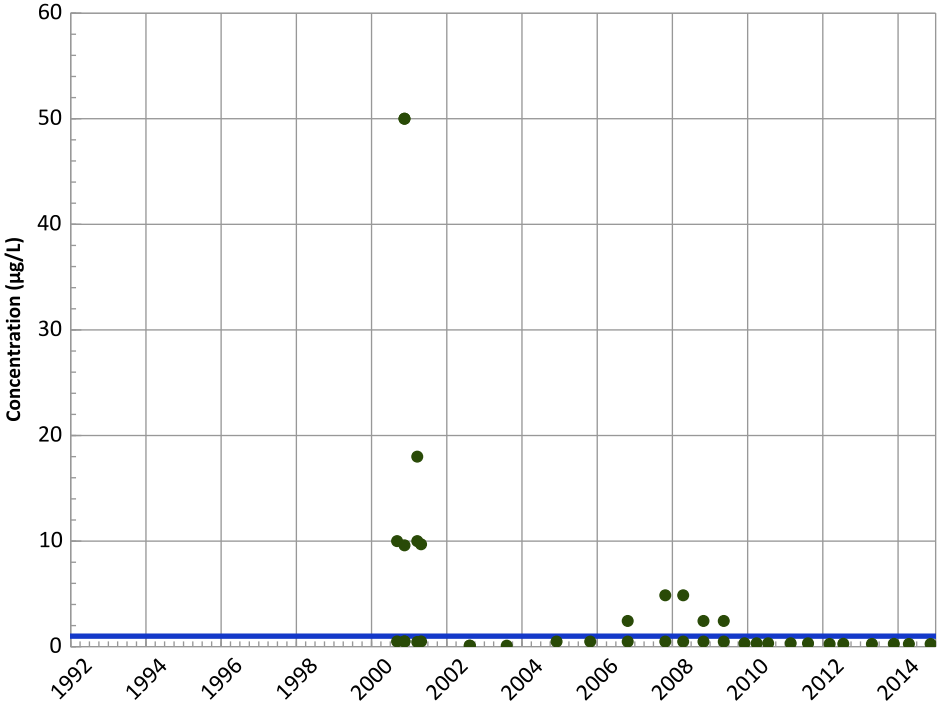


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

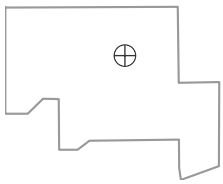
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

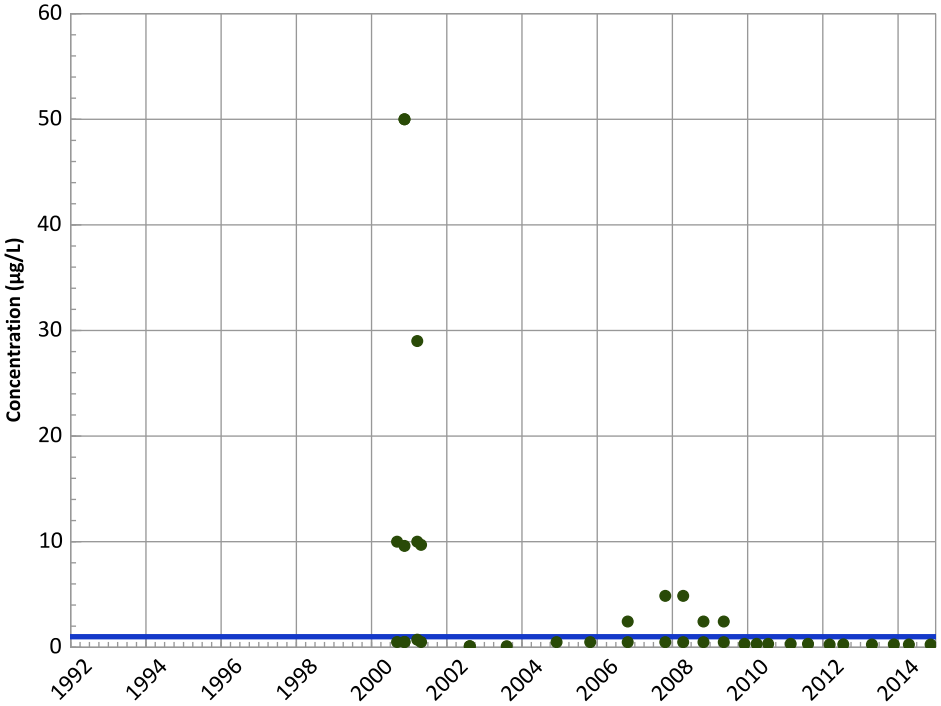
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

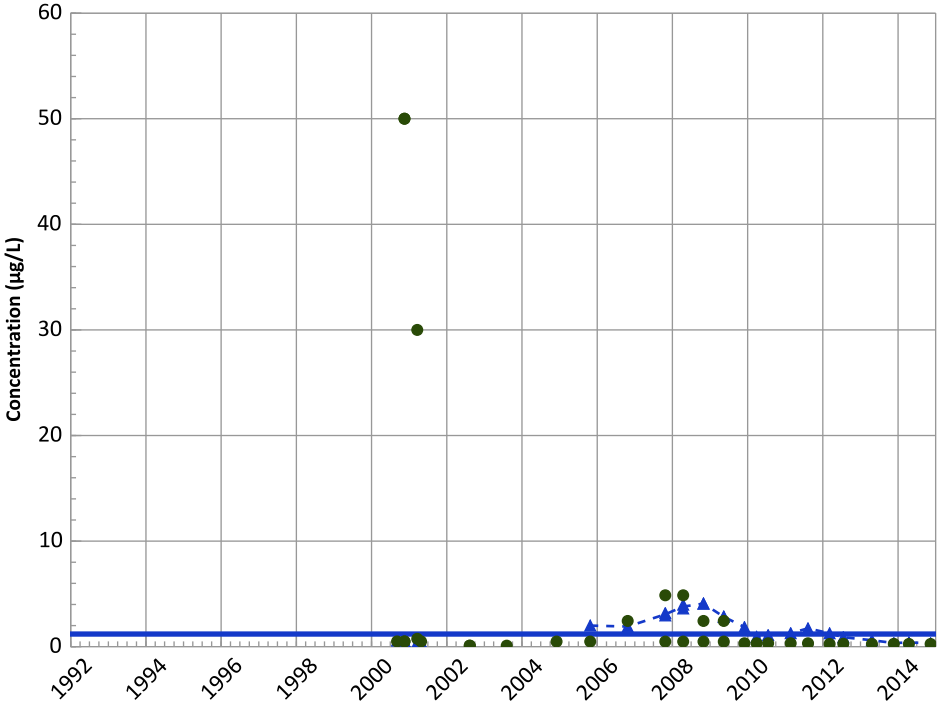


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

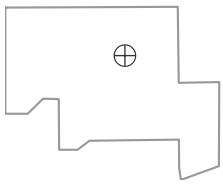
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

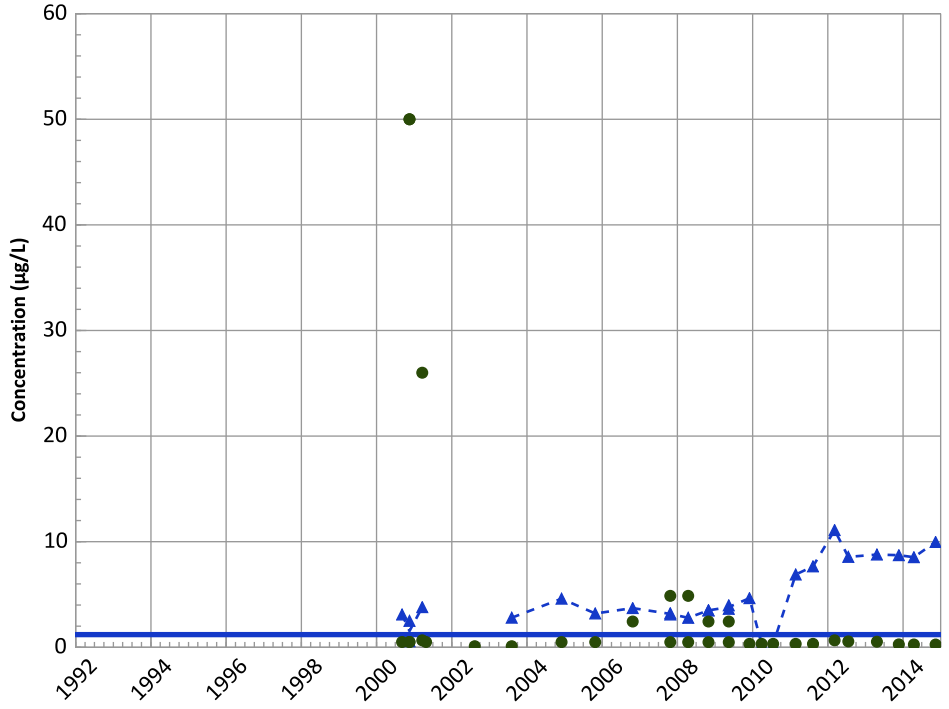
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

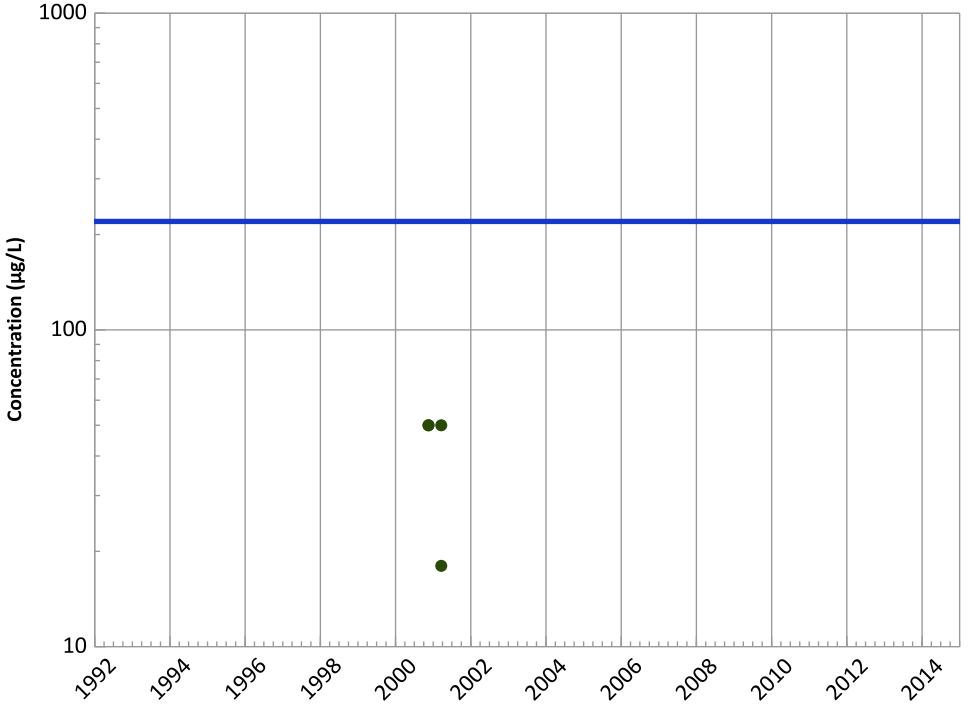


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Probably Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

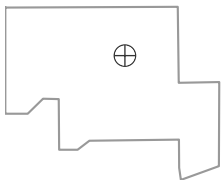
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

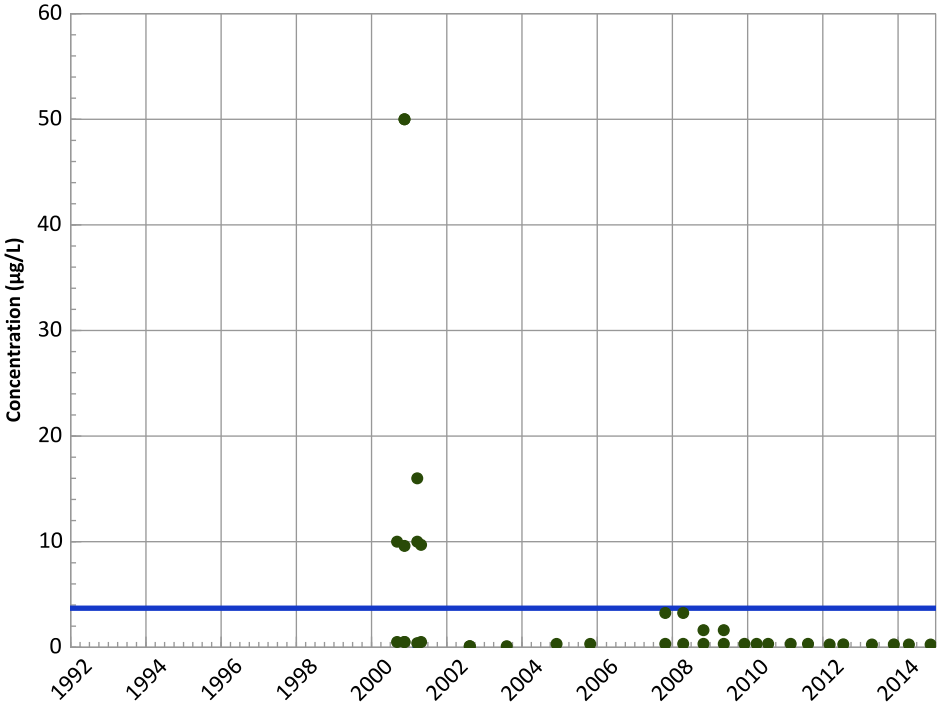
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

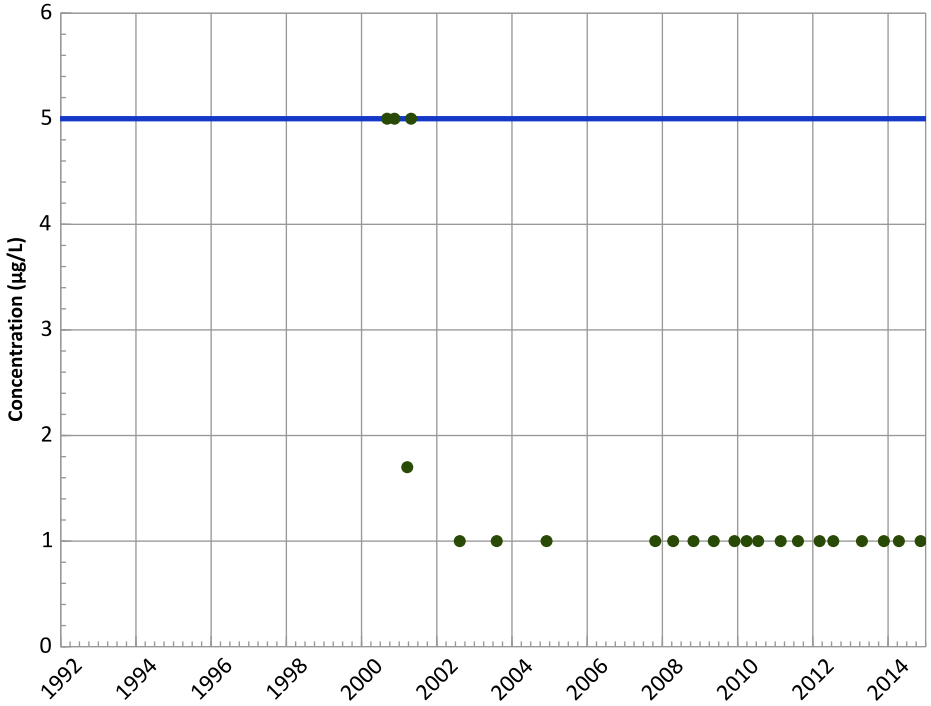


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

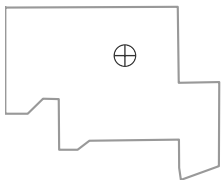
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

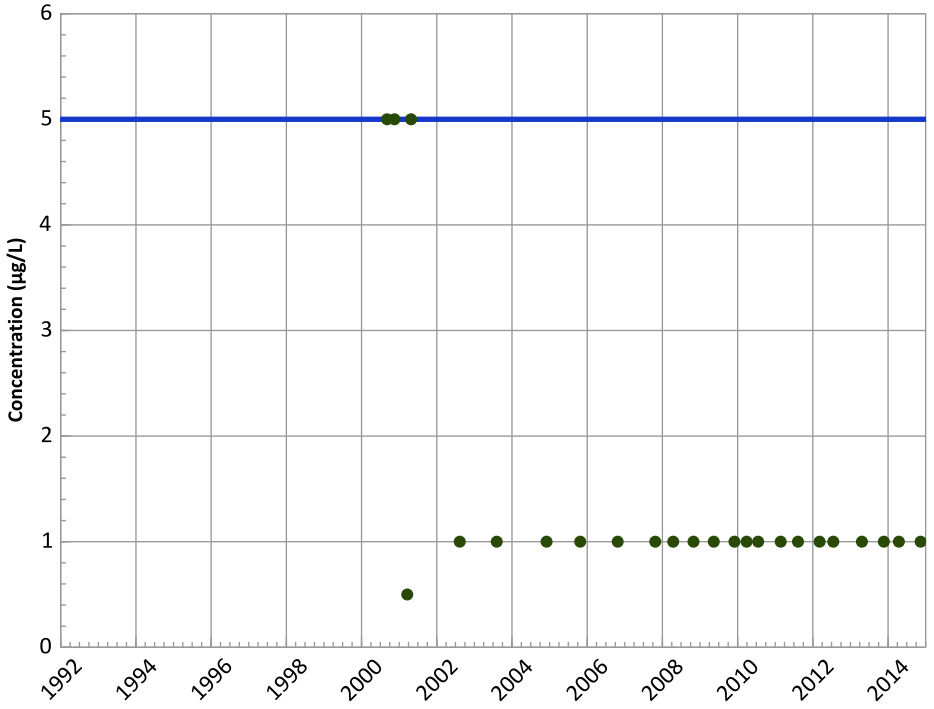
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

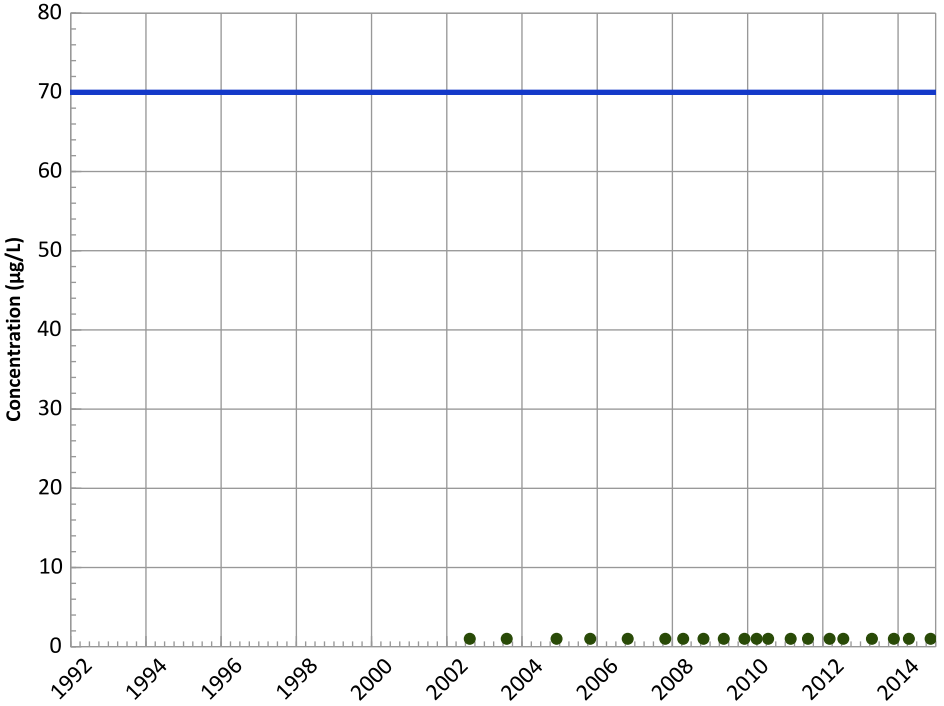


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

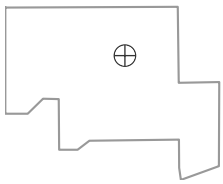
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

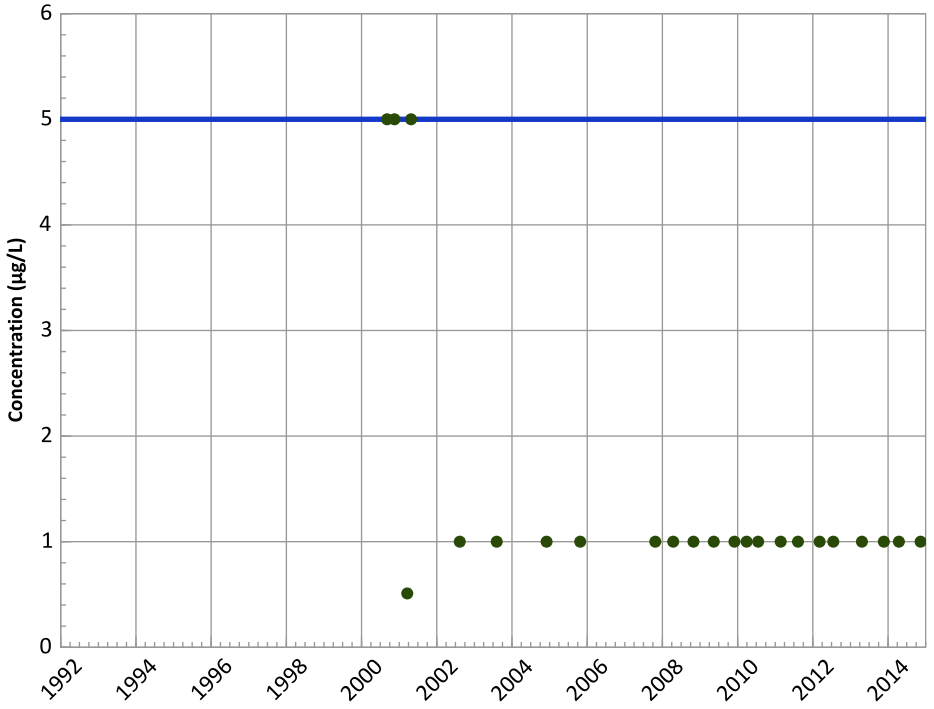
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

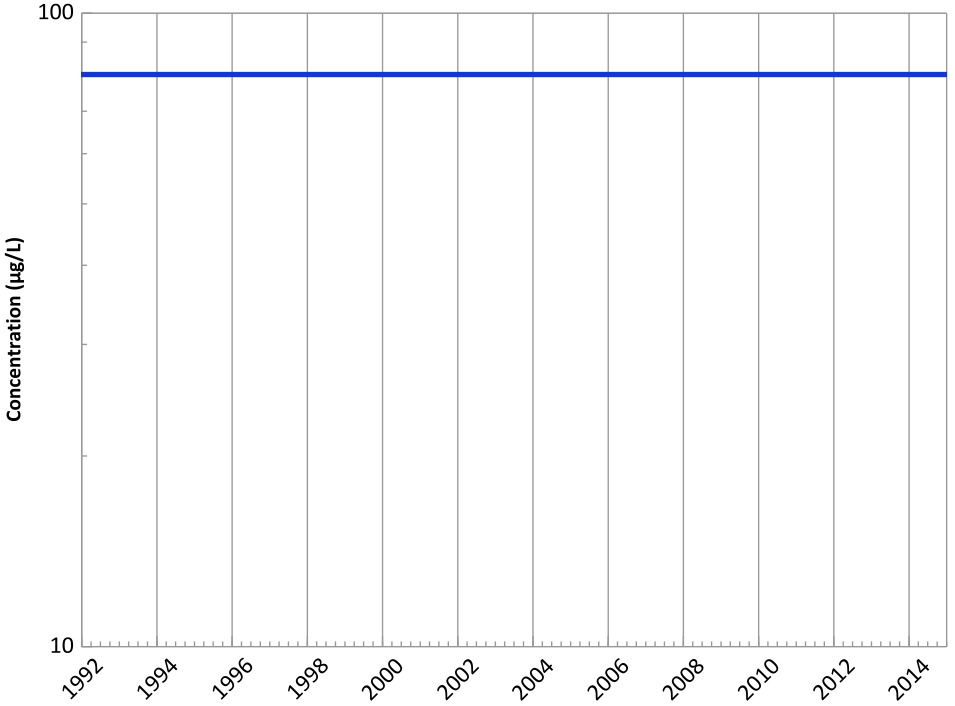


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

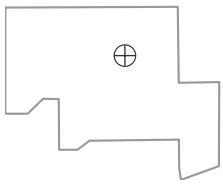
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

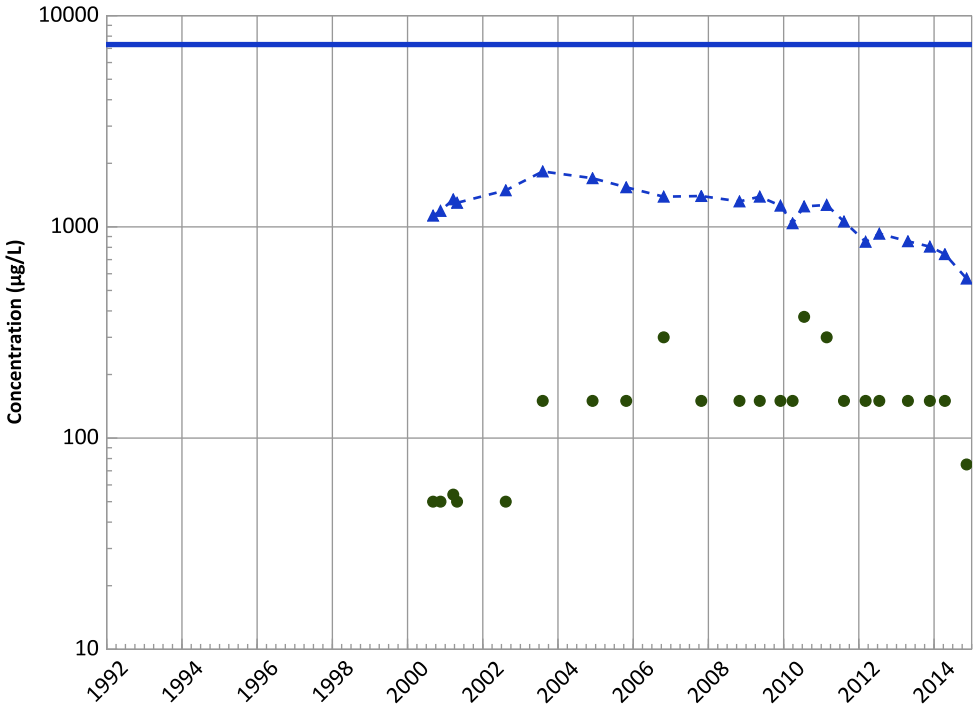
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

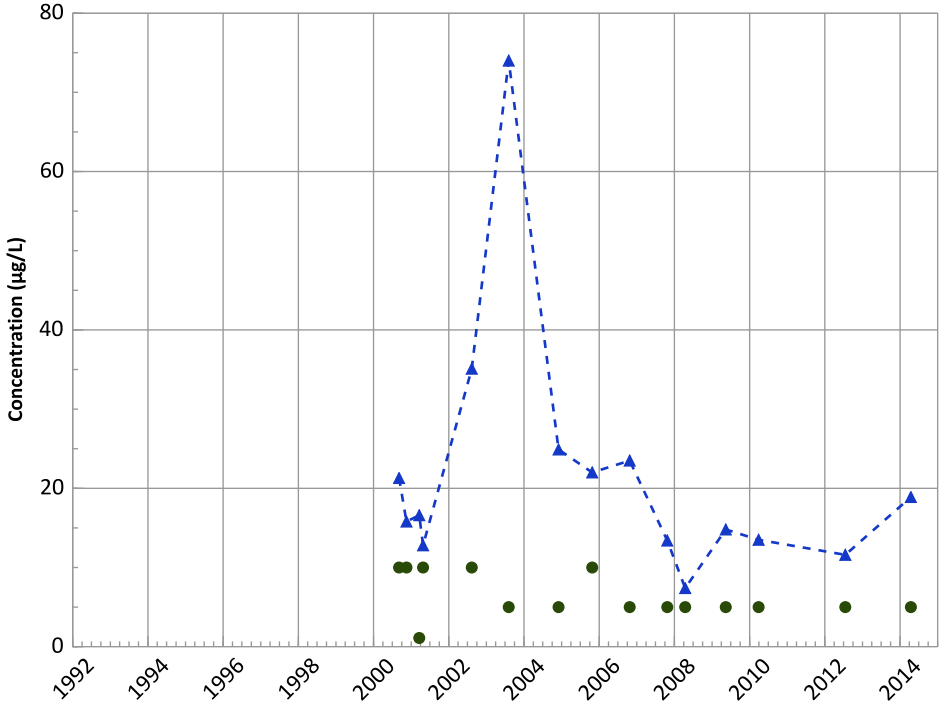


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Manganese Trend



Concentration Trend

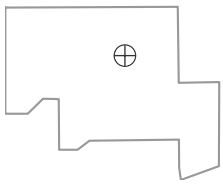
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

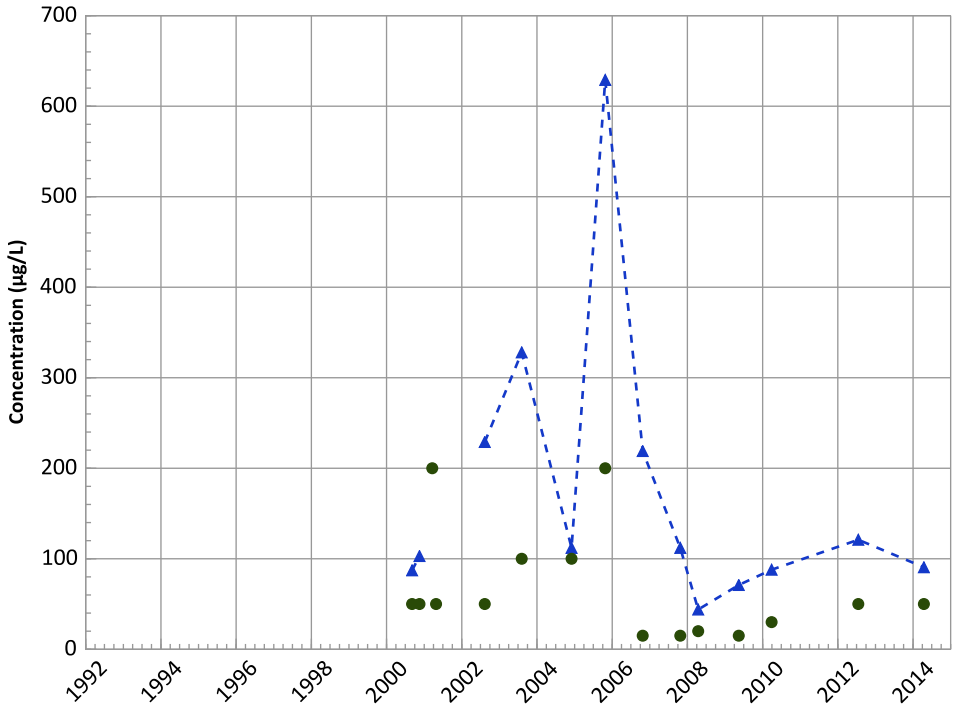
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

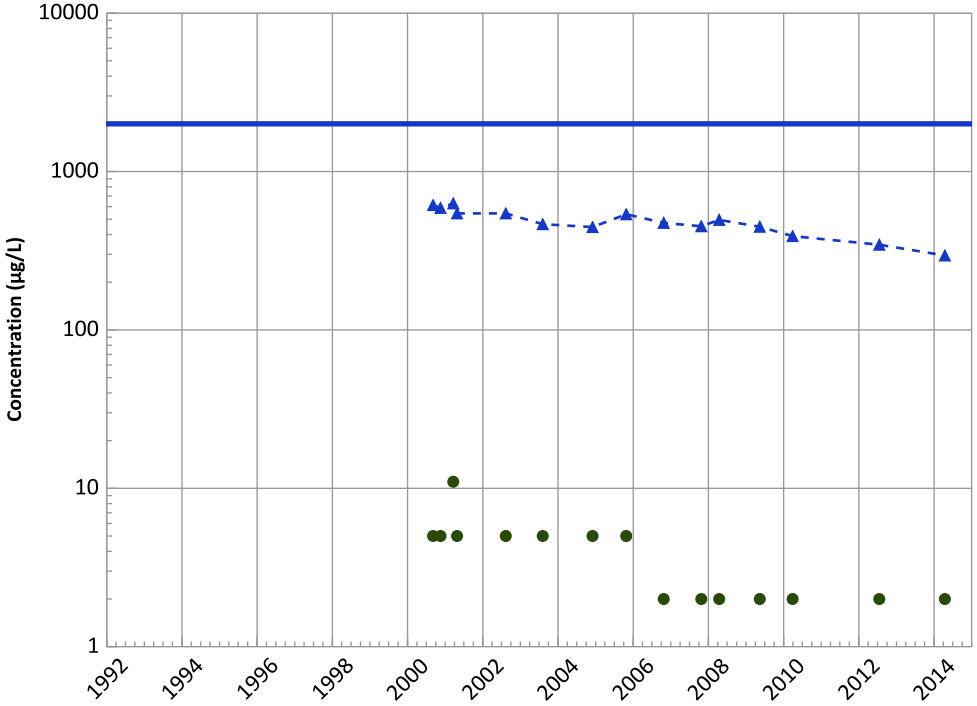


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

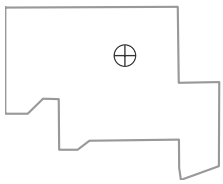
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

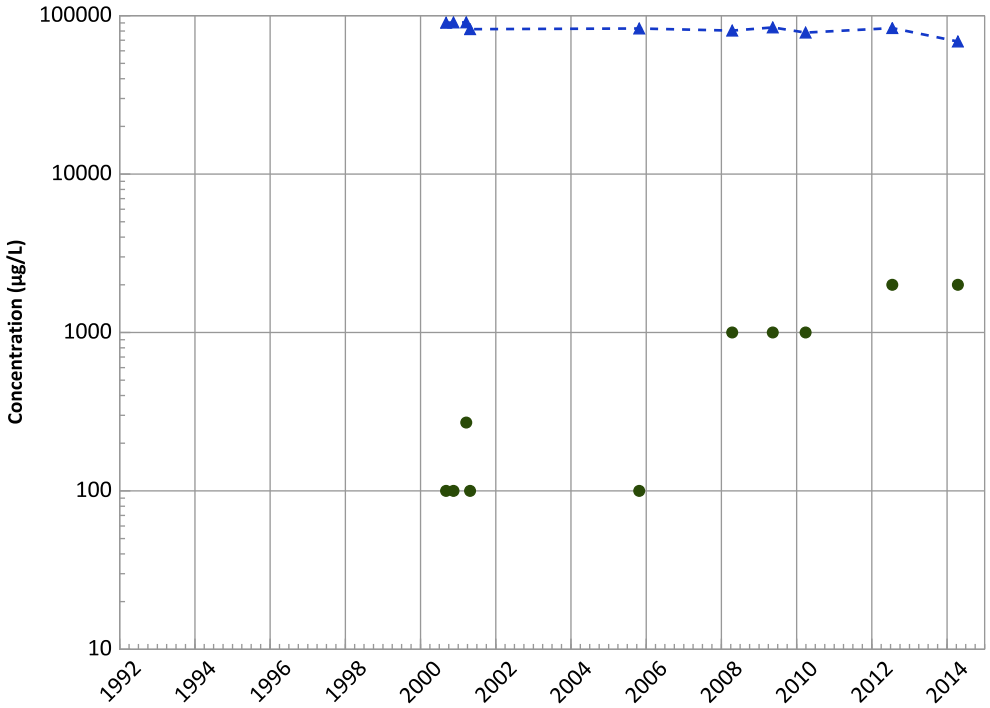
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

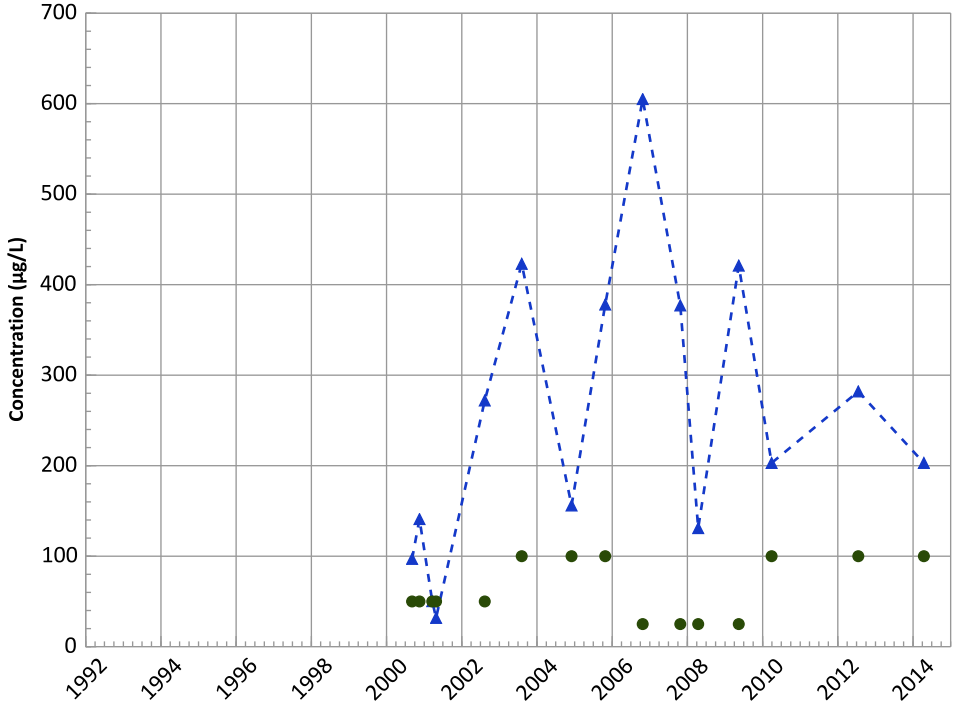


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

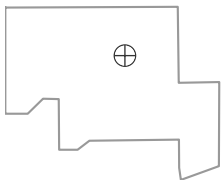
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

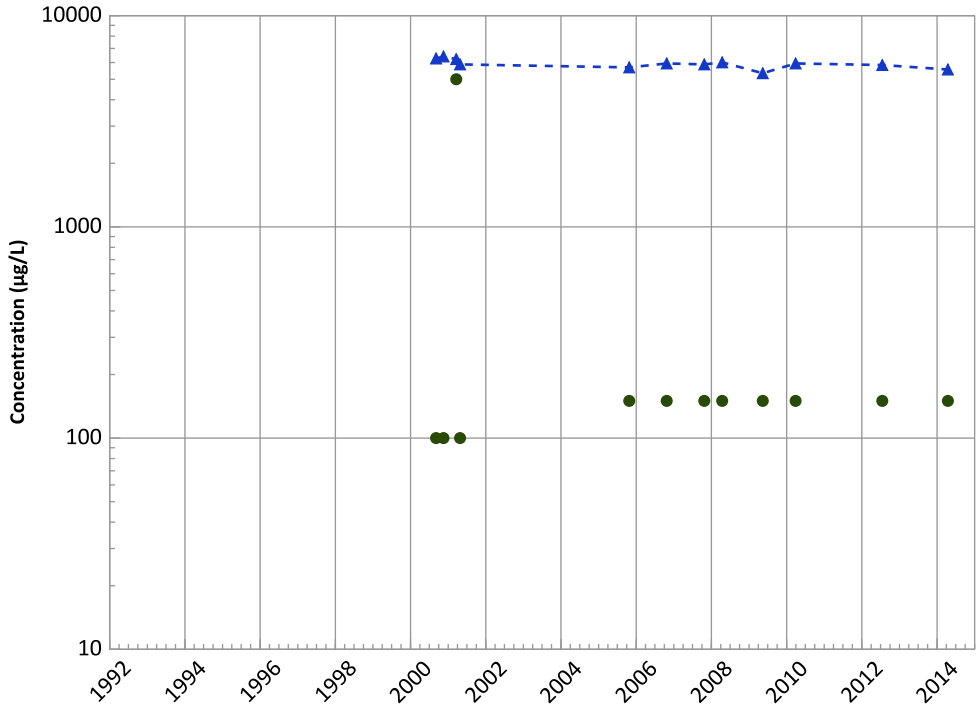
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

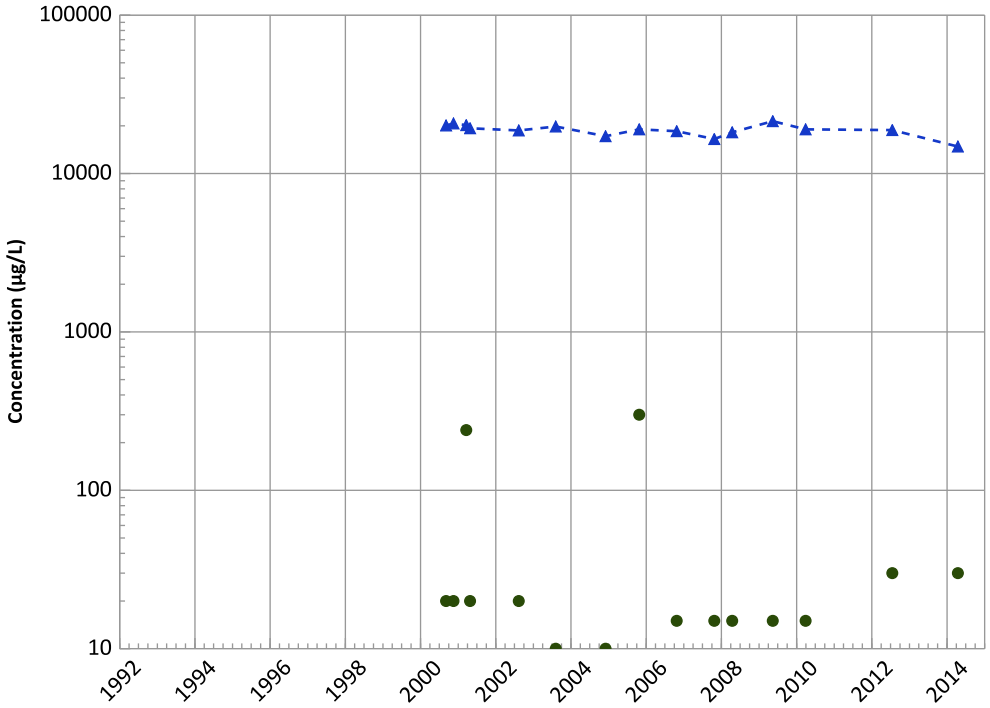


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

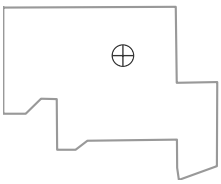
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

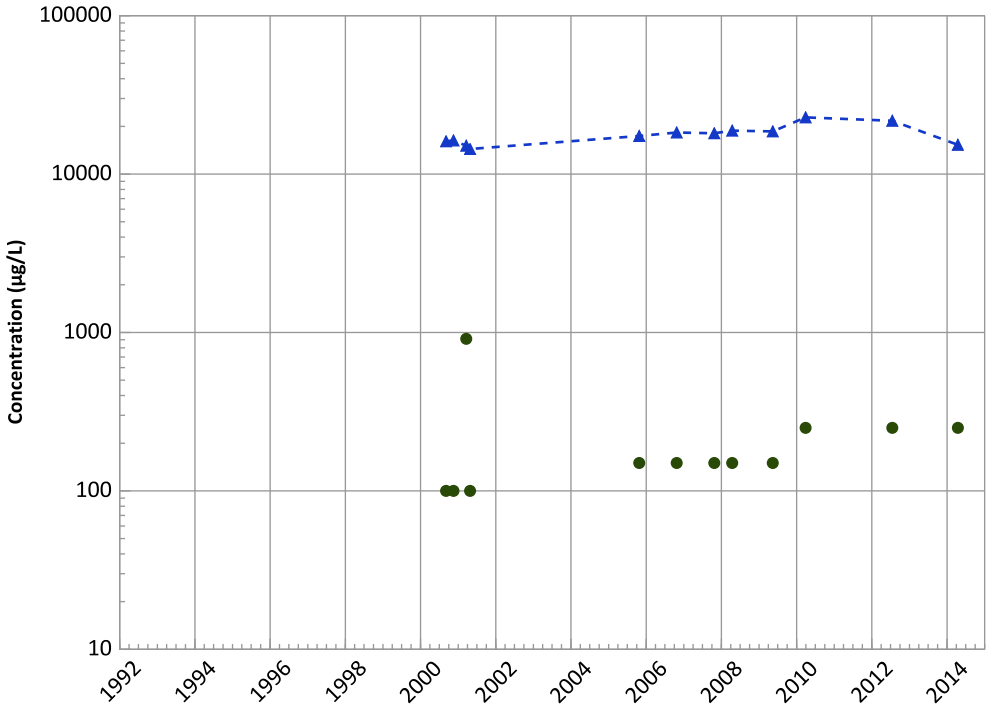
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1050 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

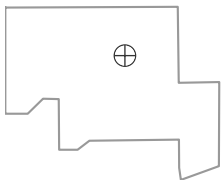
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

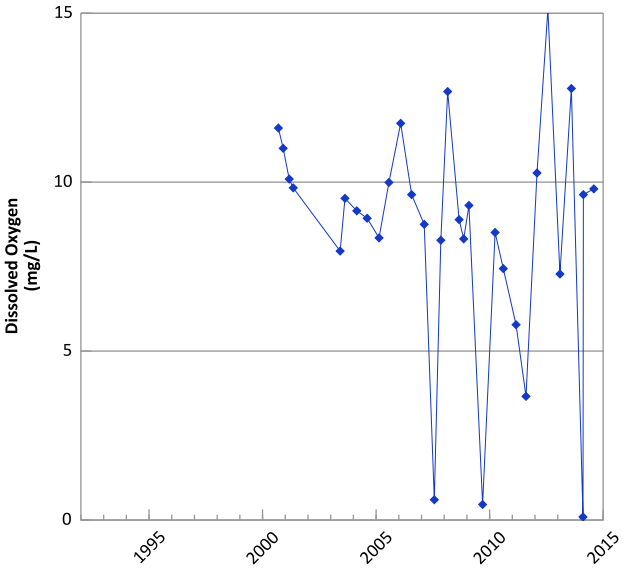
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/05/2000 to 11/13/2014
Analysis Date: 03/19/2015

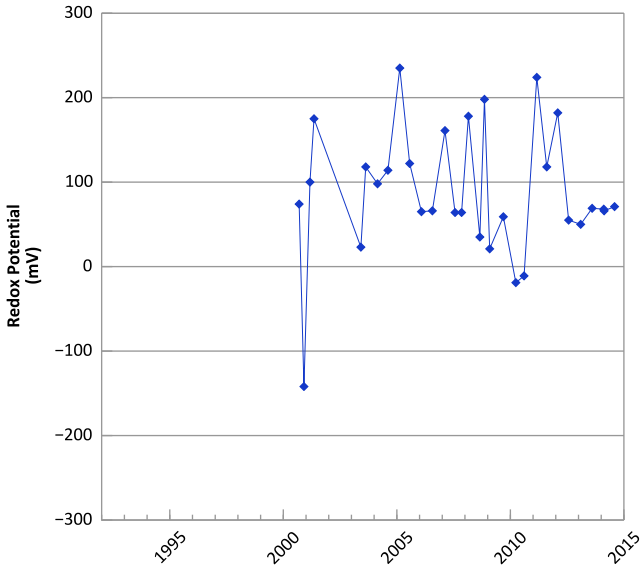
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

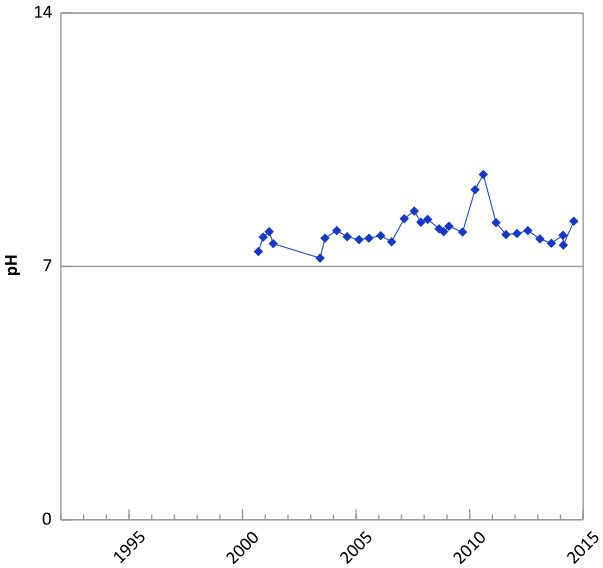
Well Location

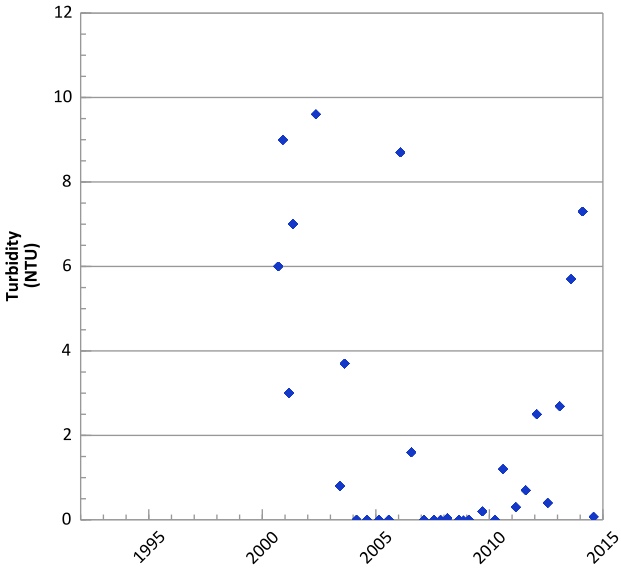


PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



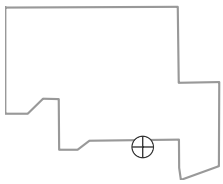






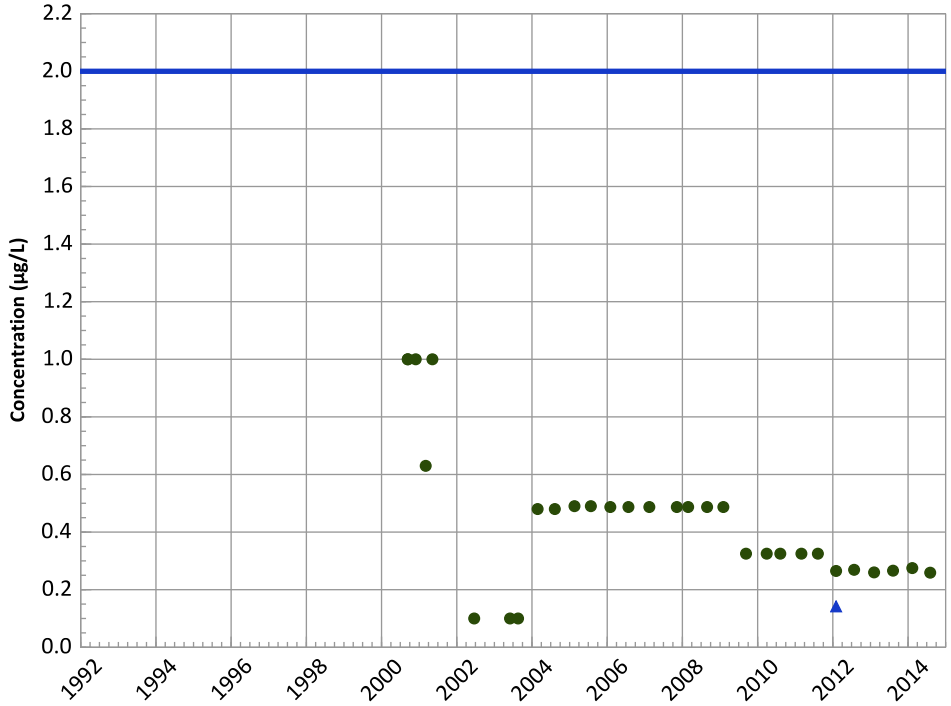
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

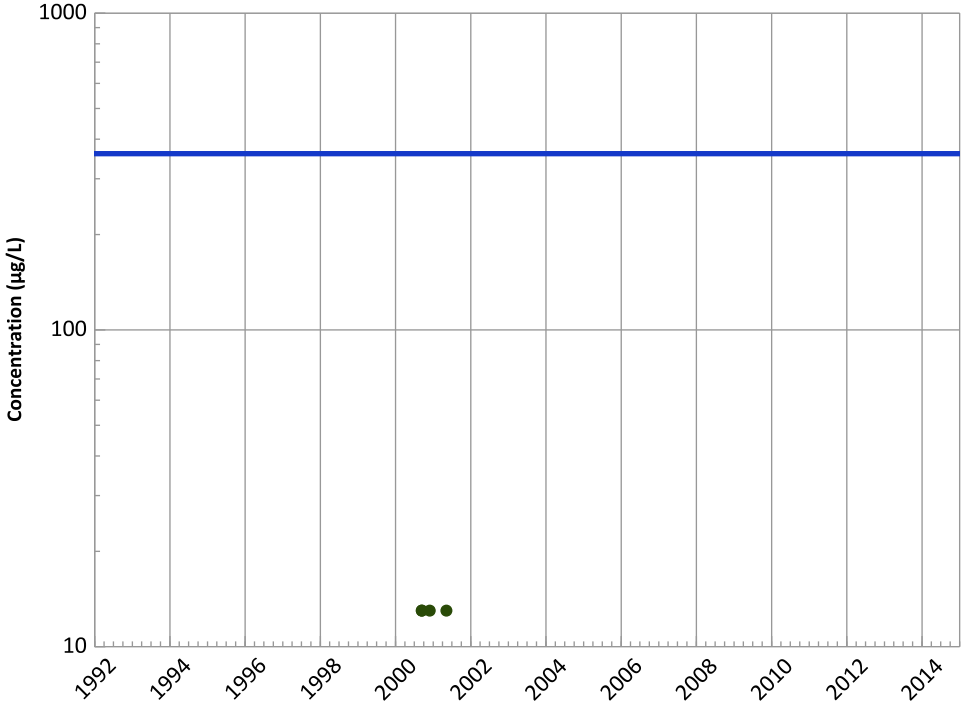


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

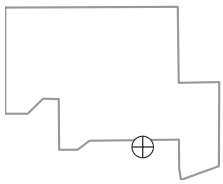
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

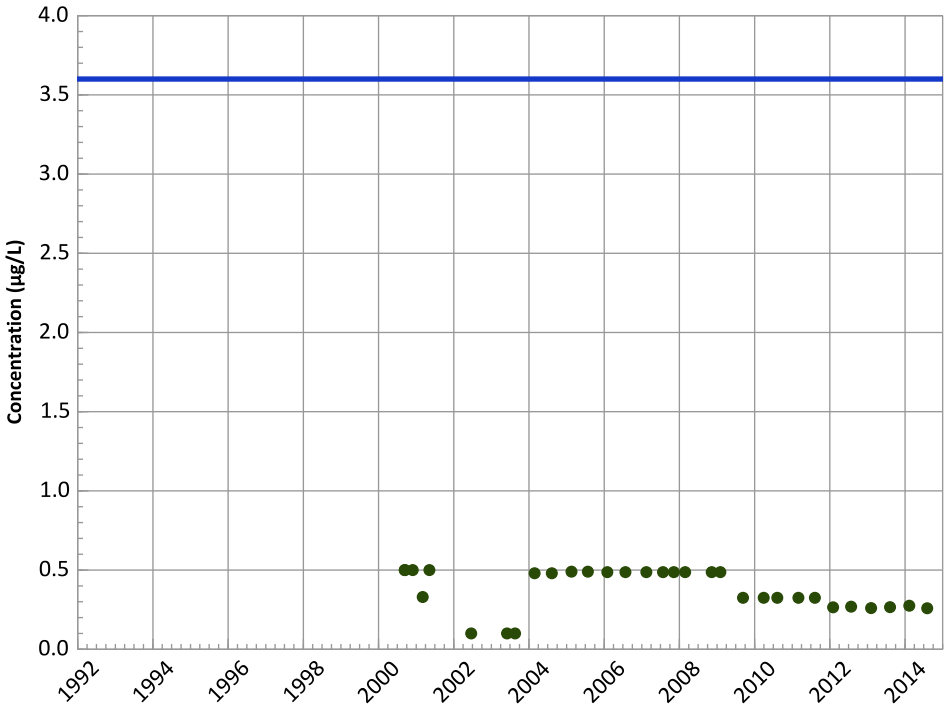
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

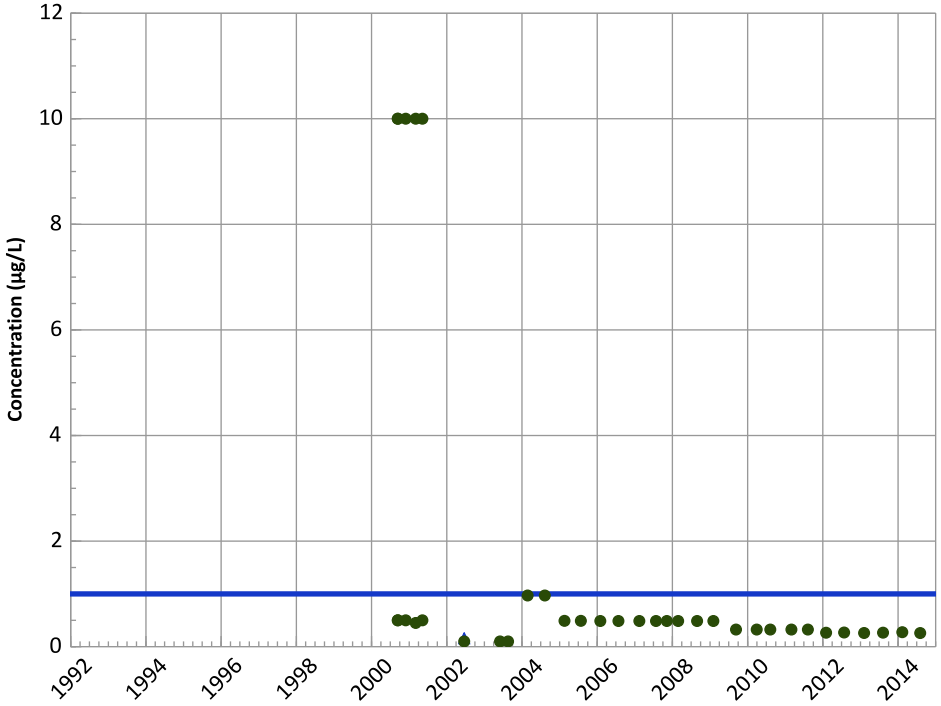


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

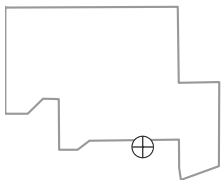
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

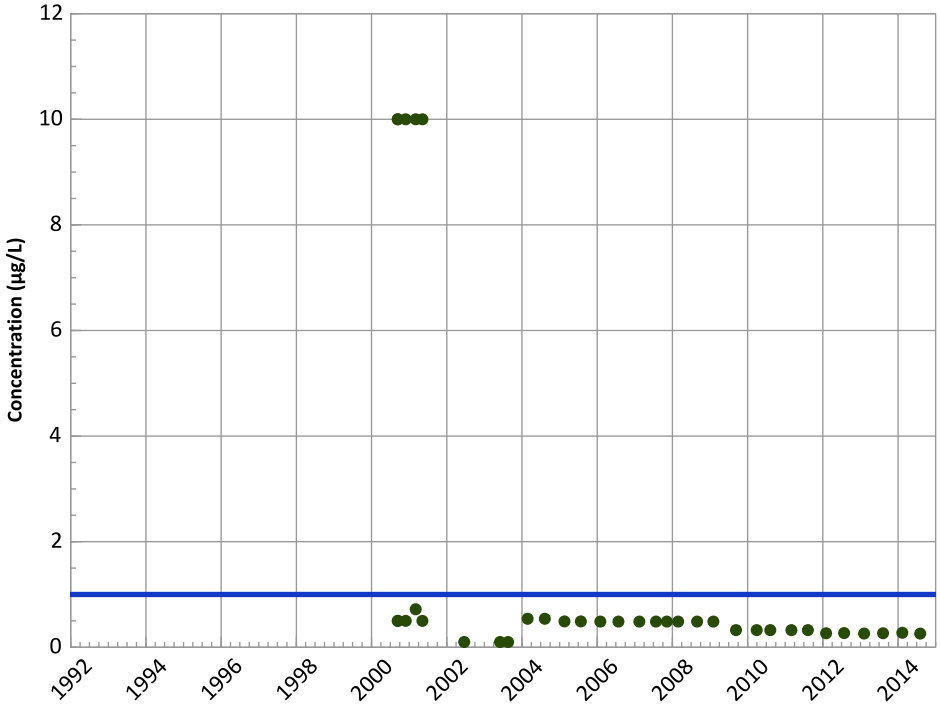
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

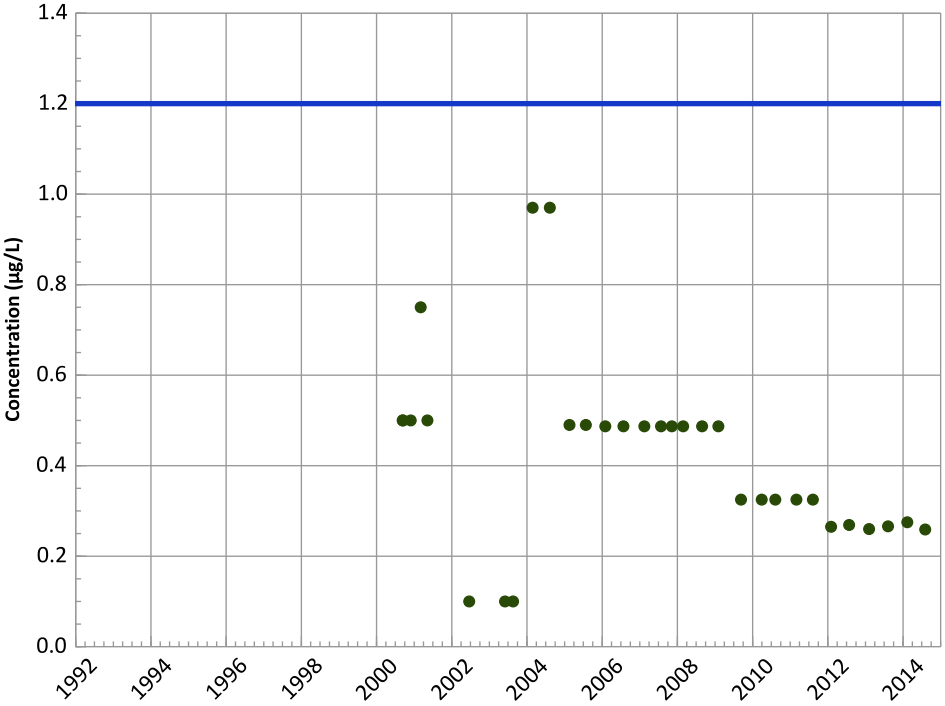


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

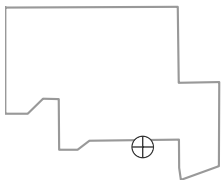
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

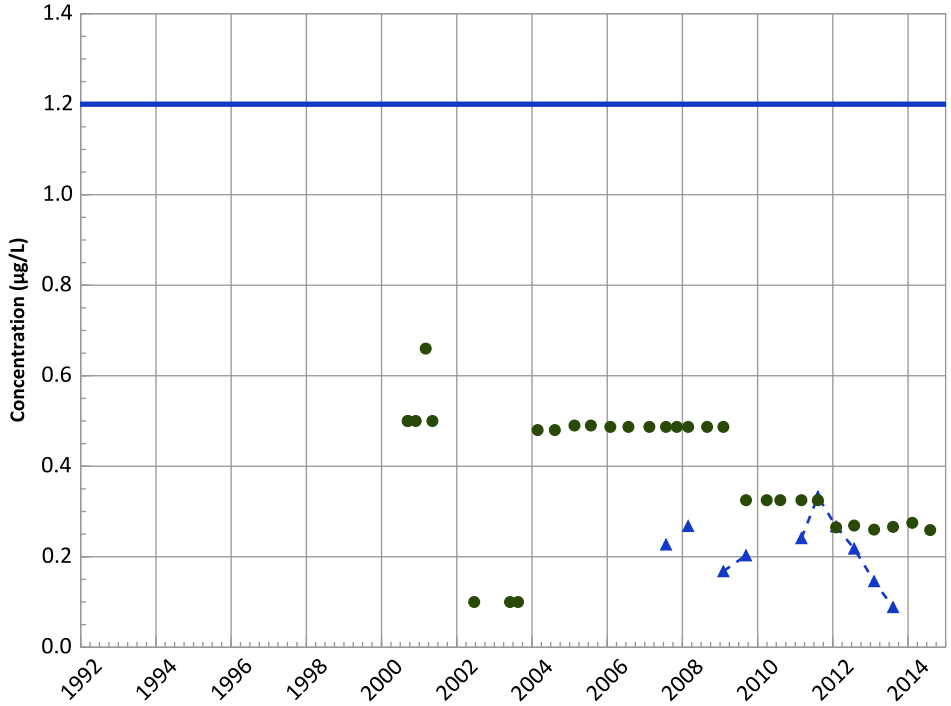
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

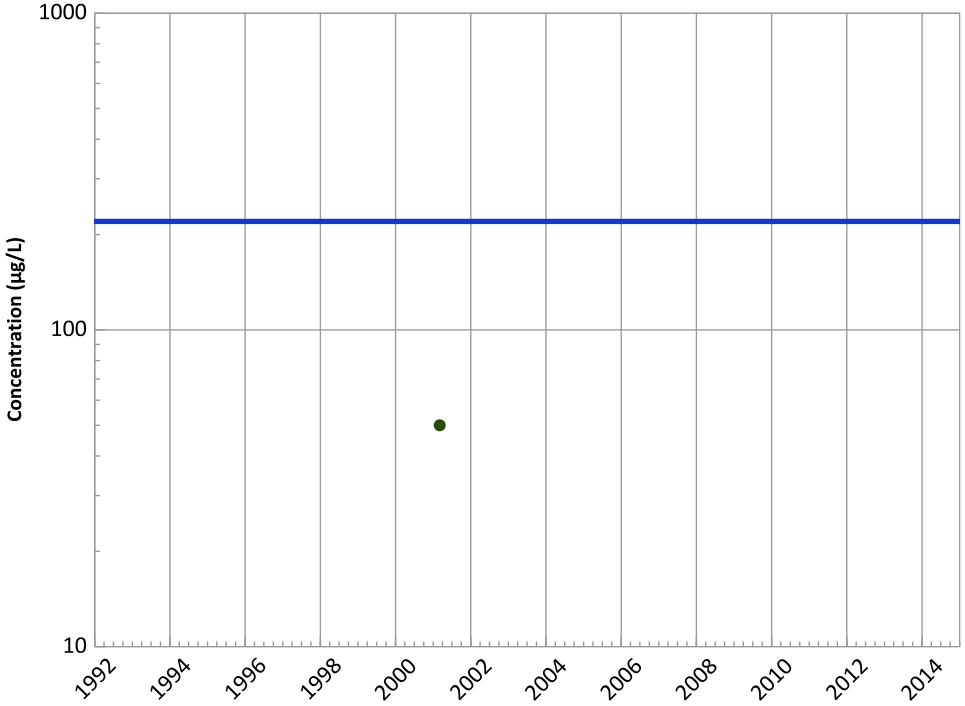


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Stable

1,3,5-Trinitrobenzene Trend



Concentration Trend

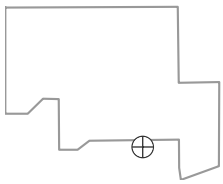
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

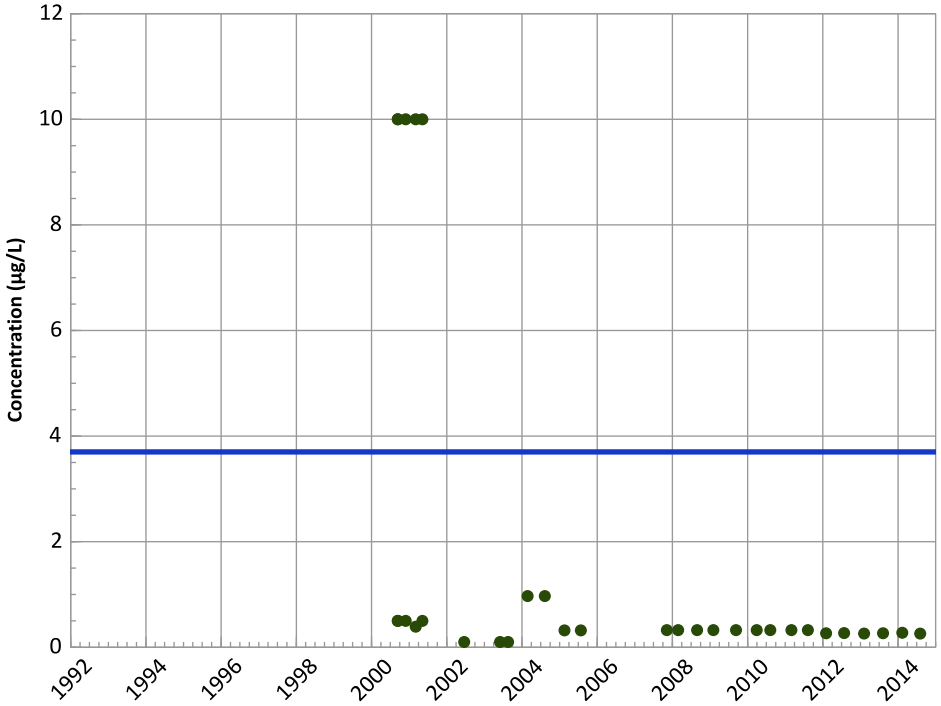
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

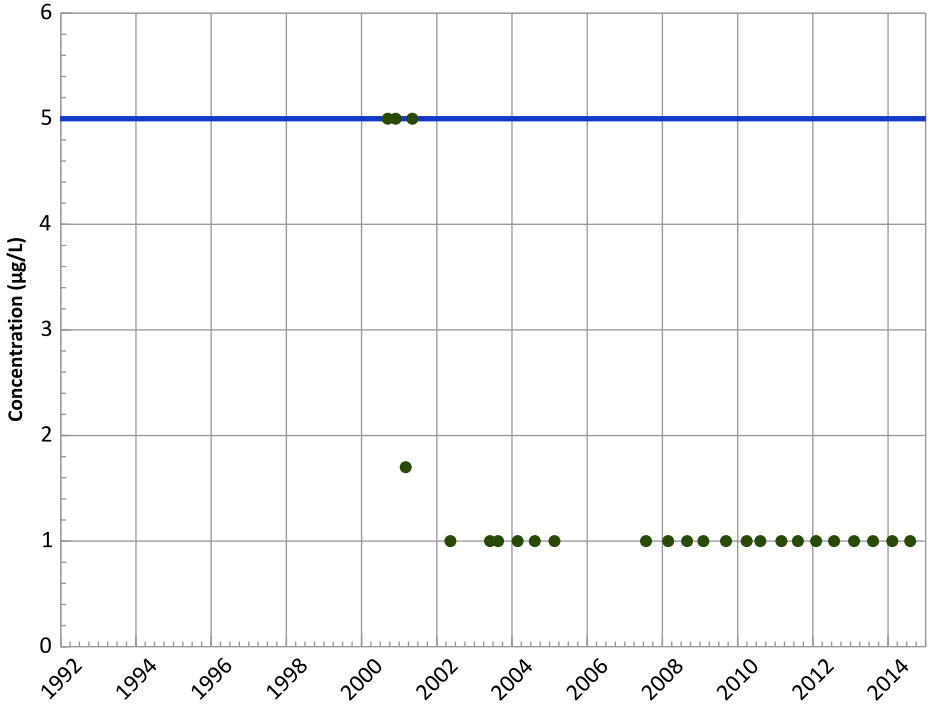


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

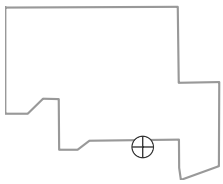
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

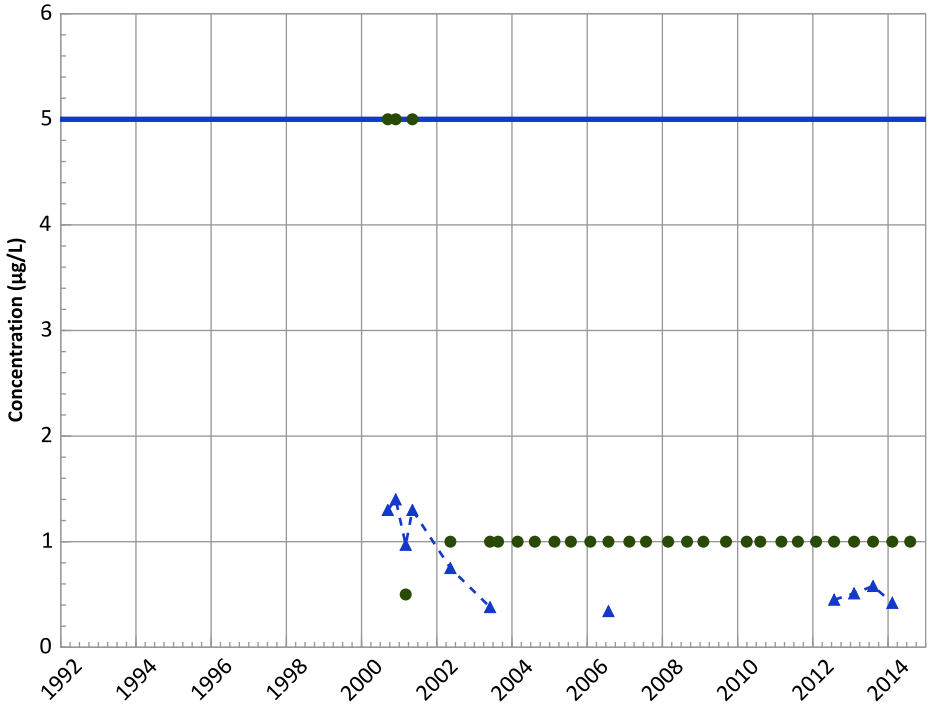
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

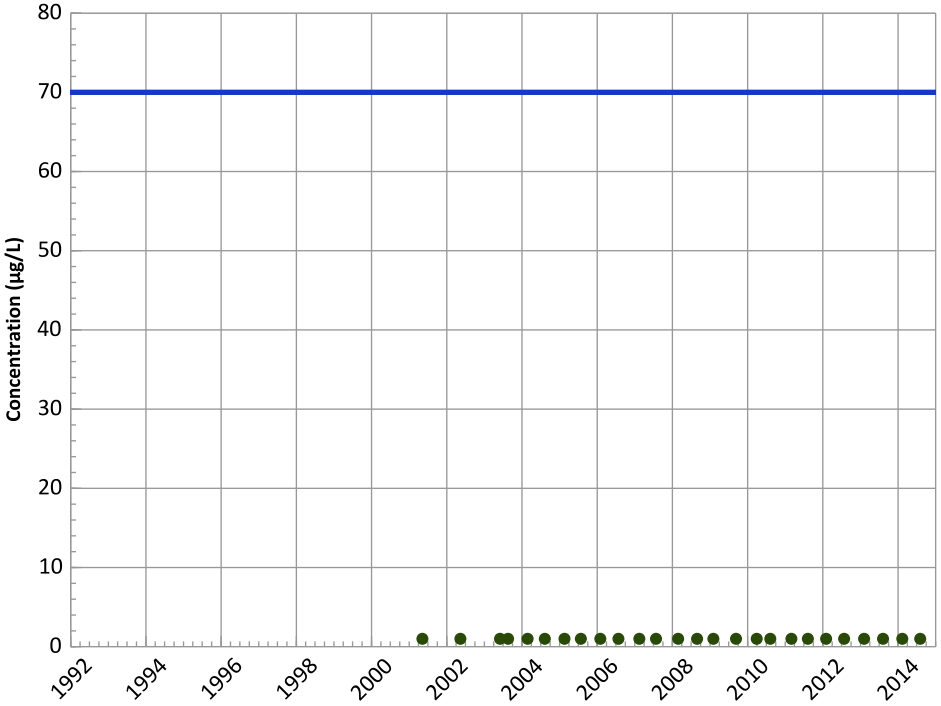


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

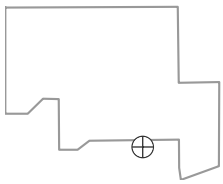
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

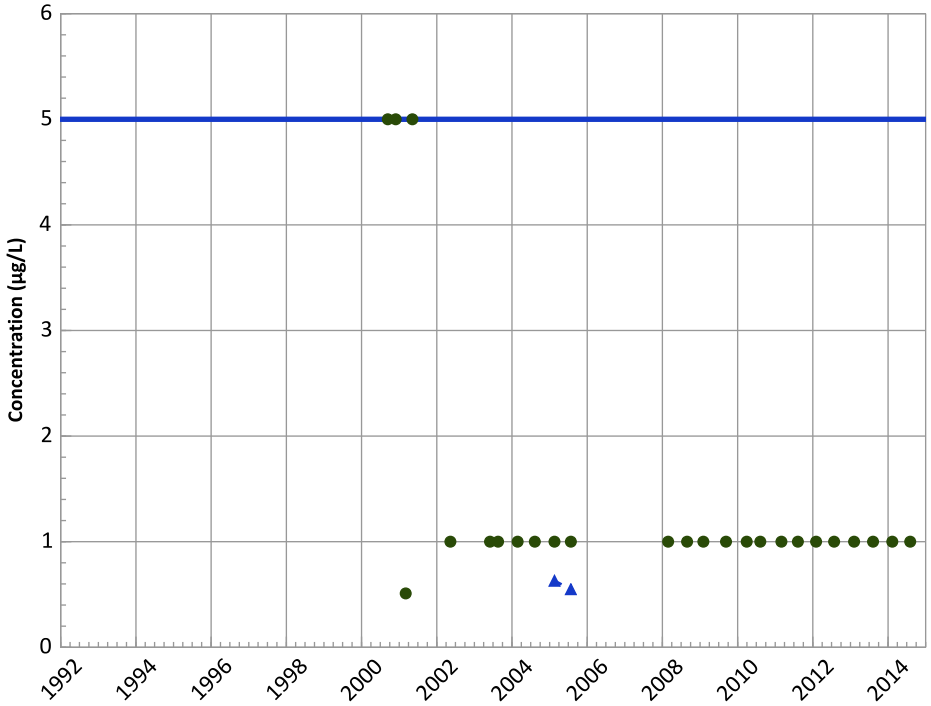
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

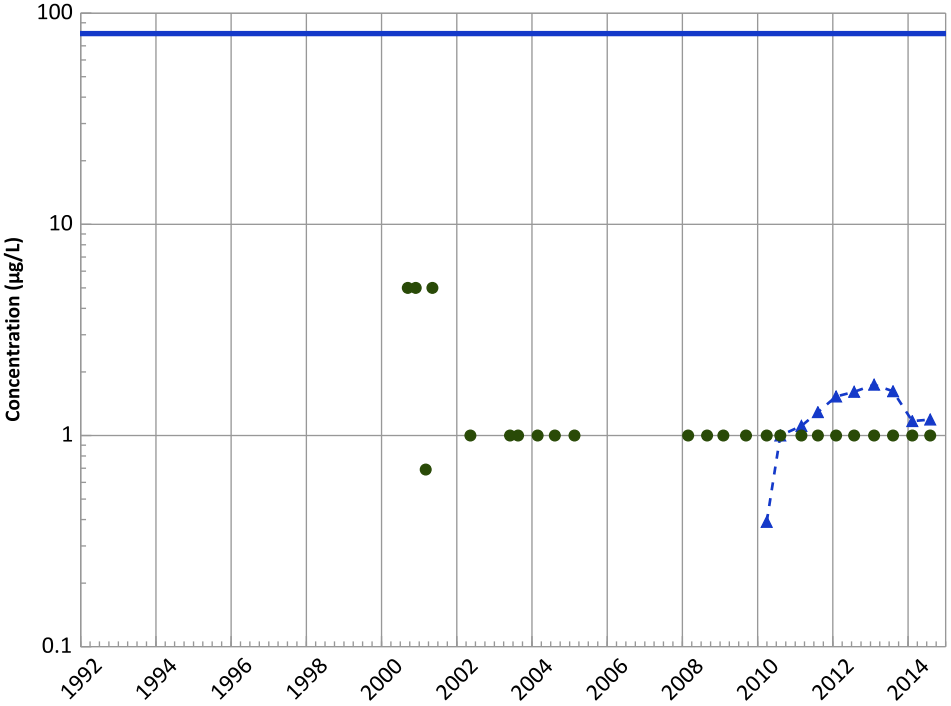


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Chloroform Trend



Concentration Trend

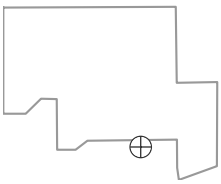
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

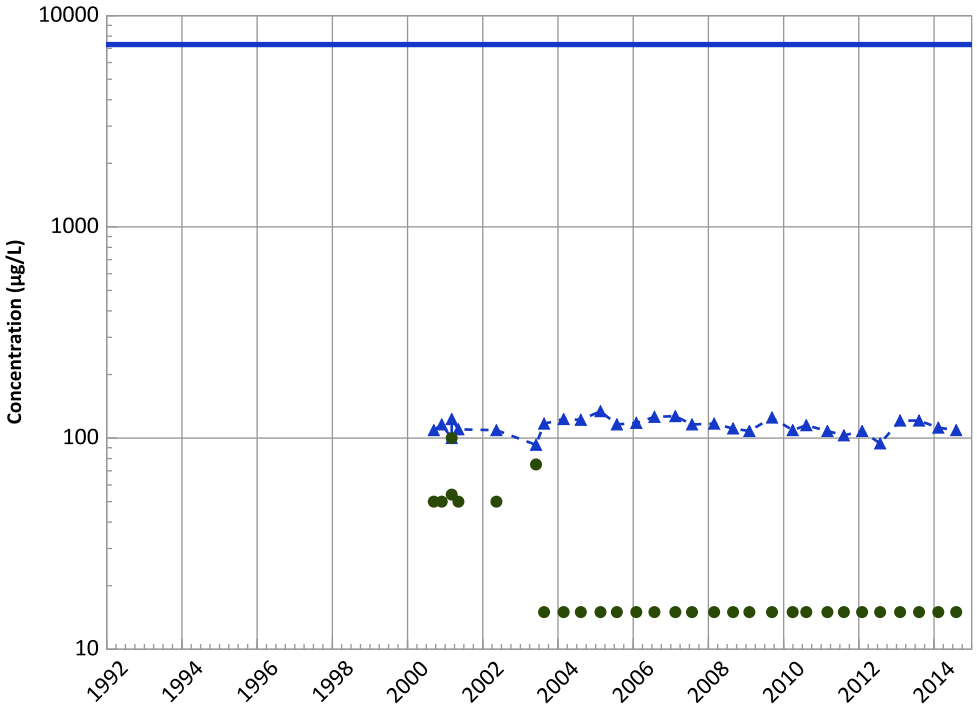
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

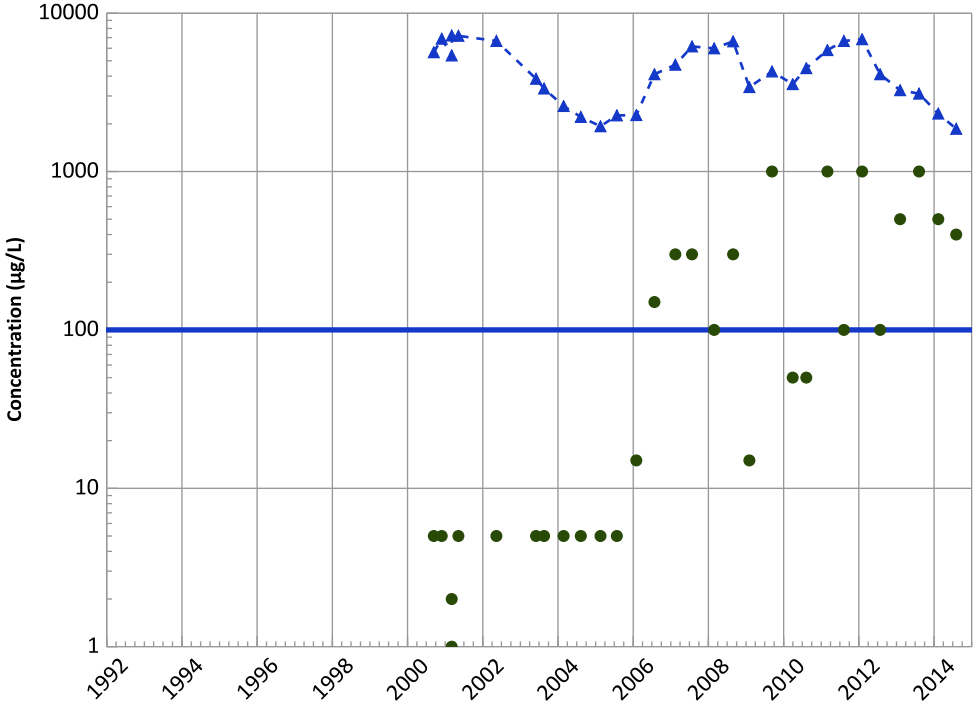


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

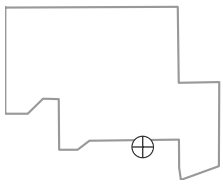
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

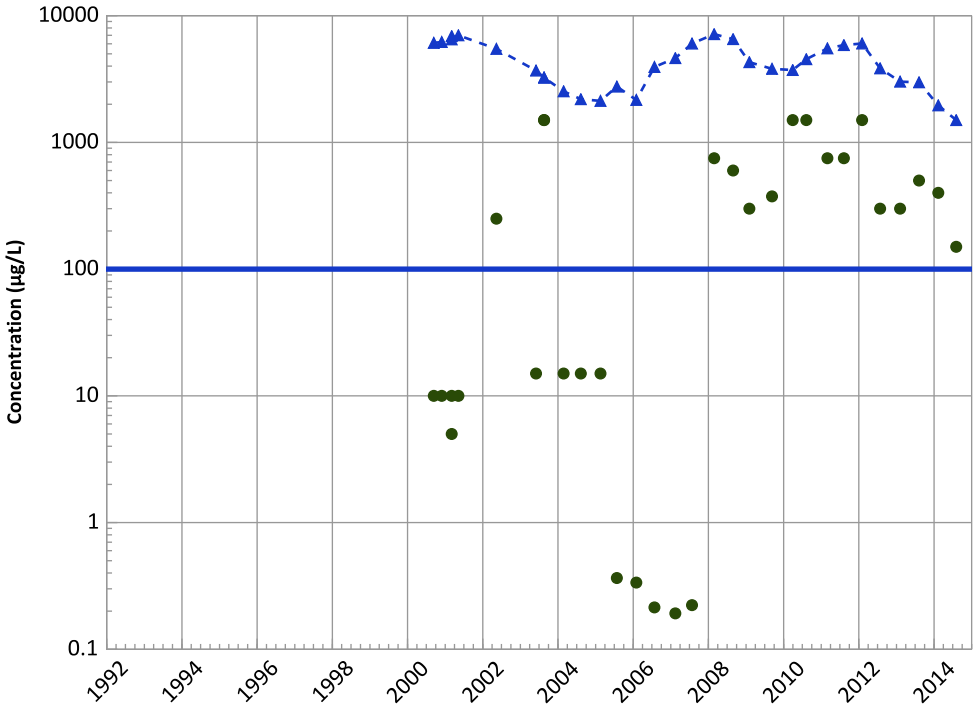
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

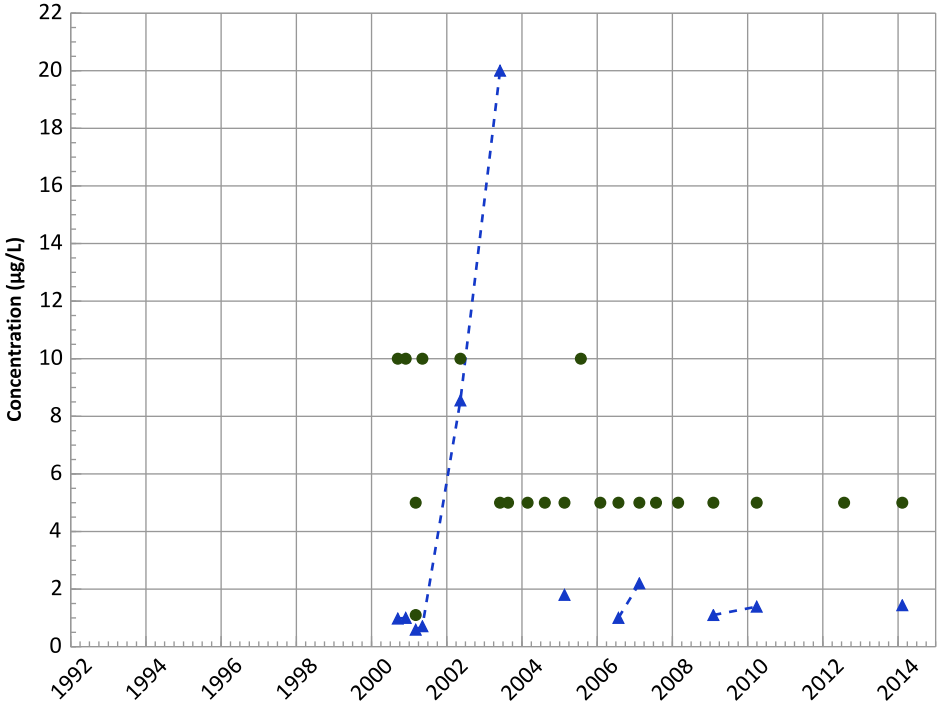


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Decreasing

Manganese Trend



Concentration Trend

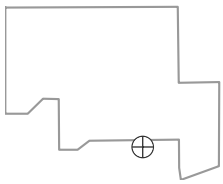
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

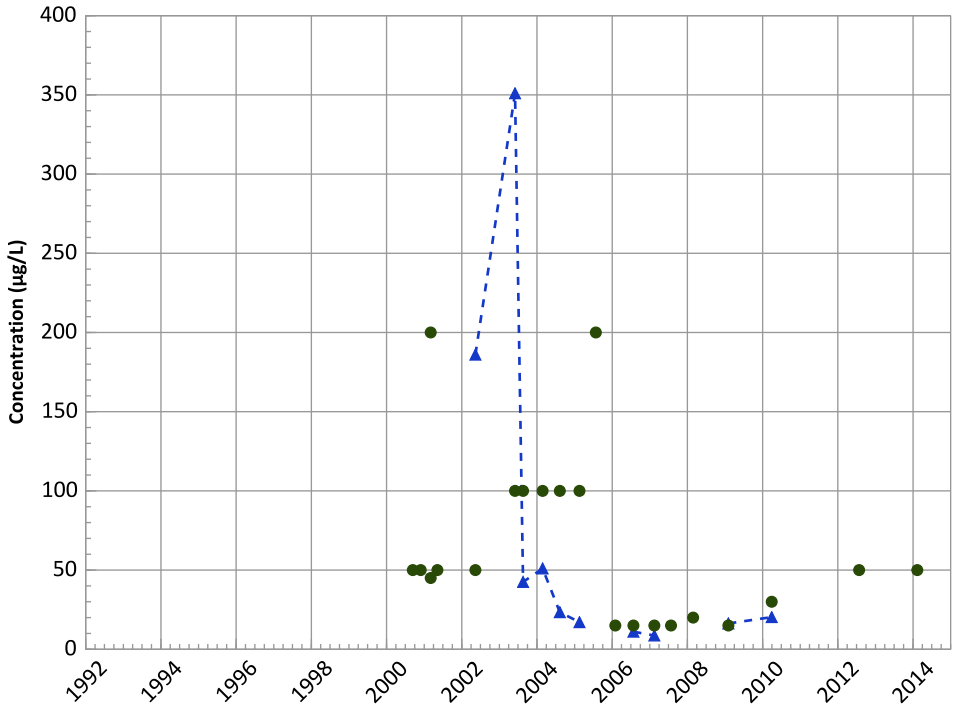
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

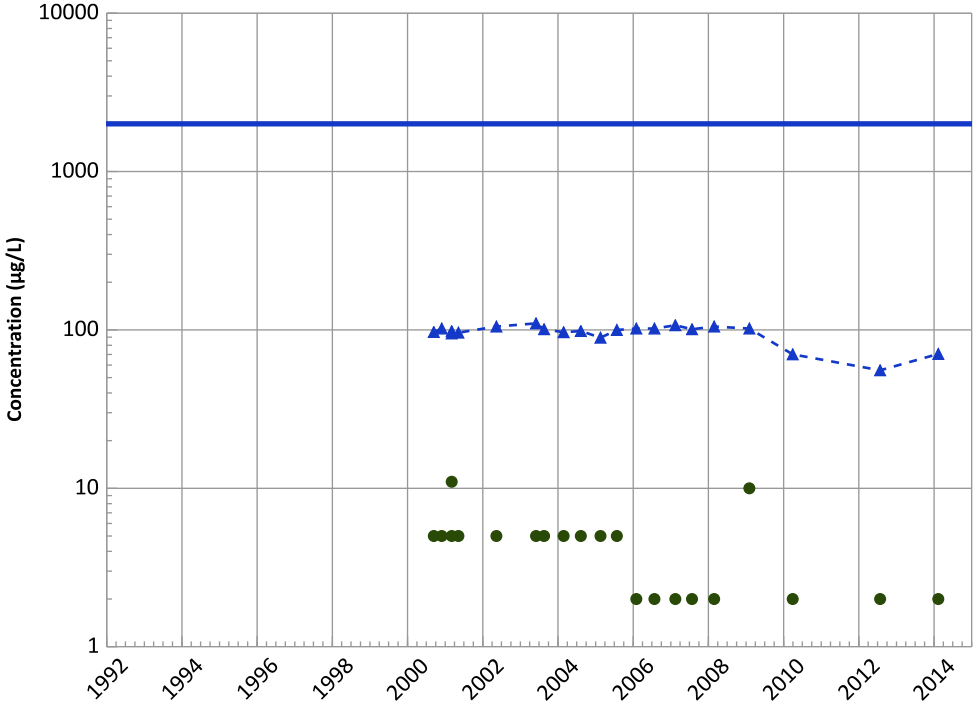


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

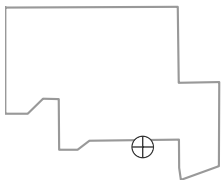
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

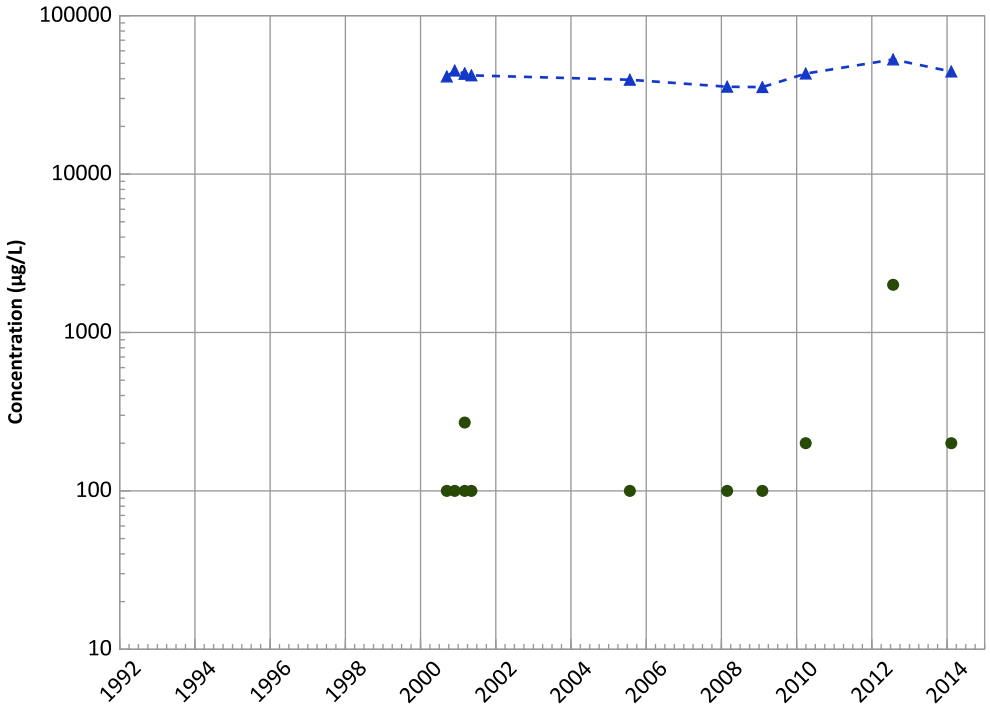
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

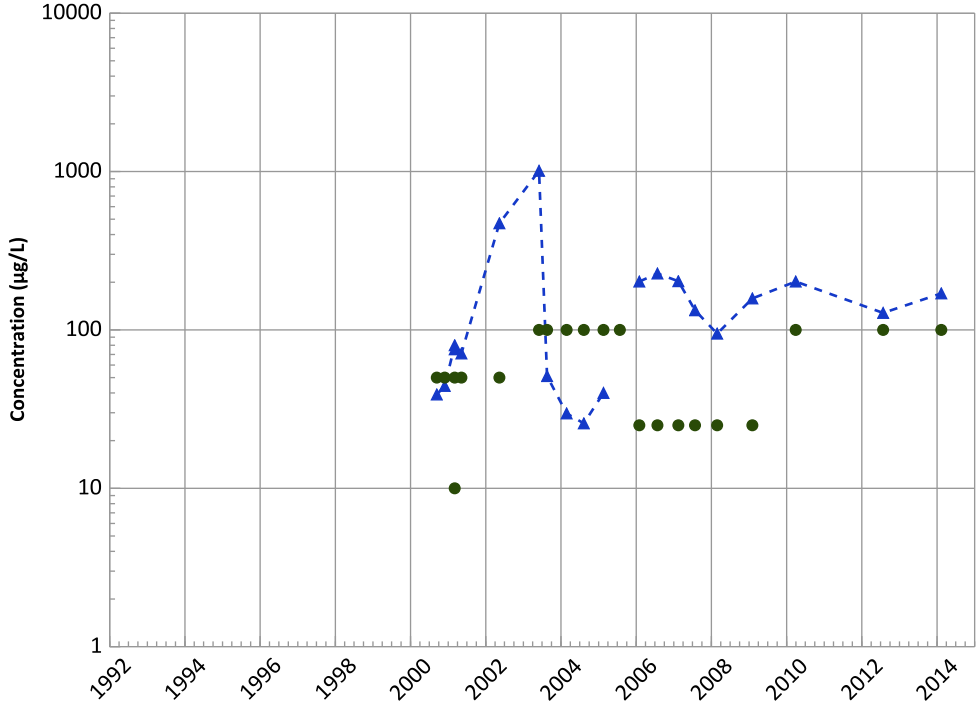


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

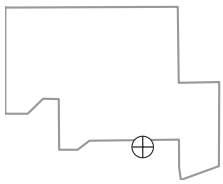
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

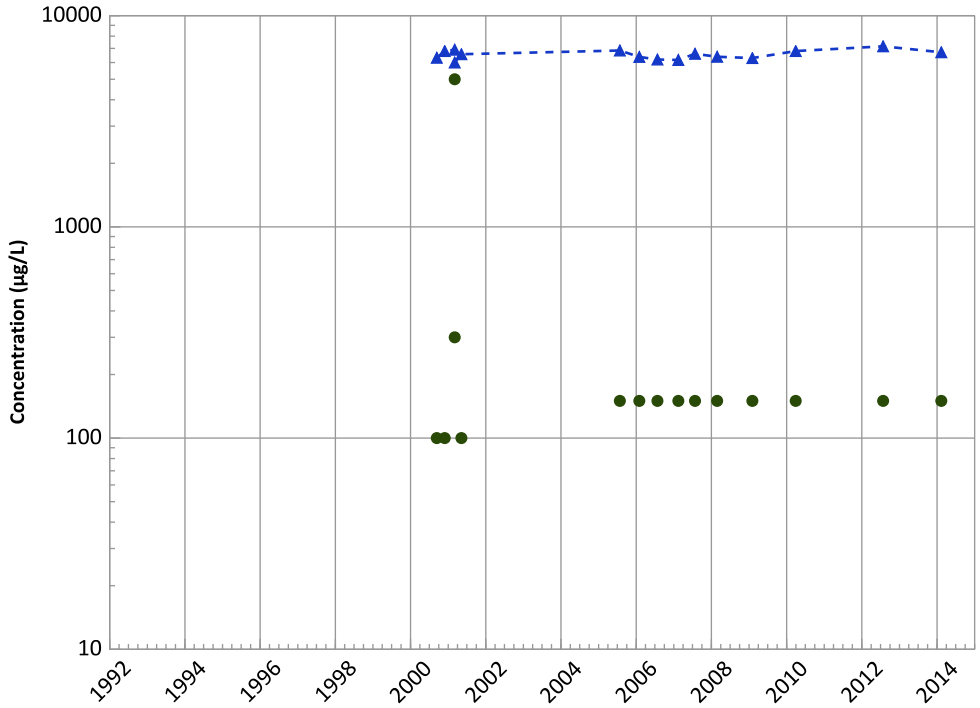
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

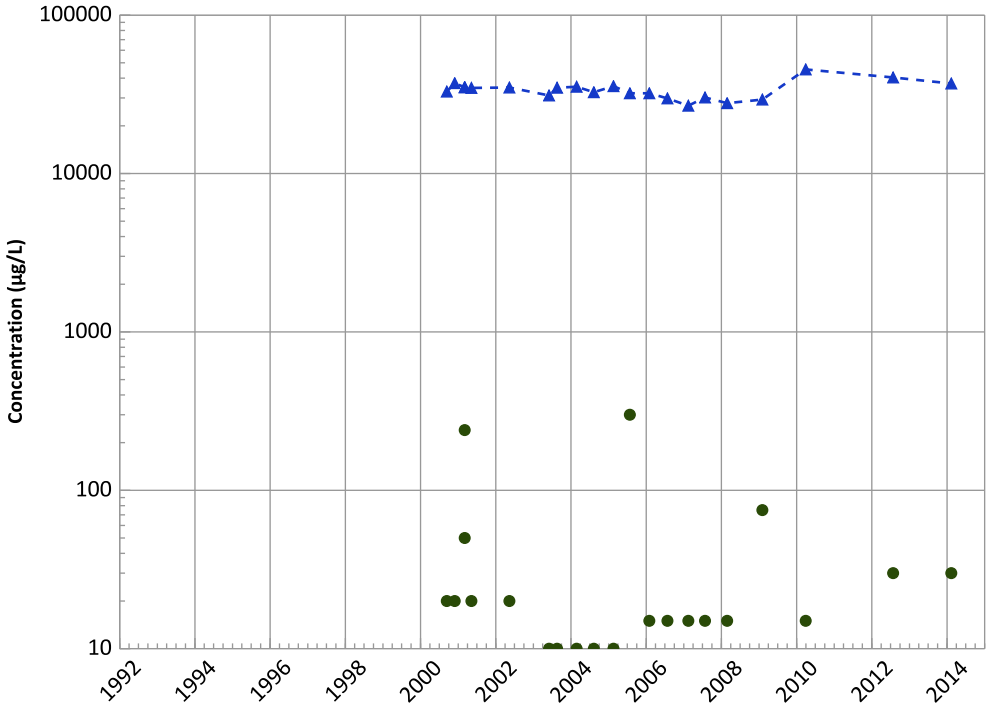


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

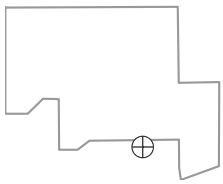
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

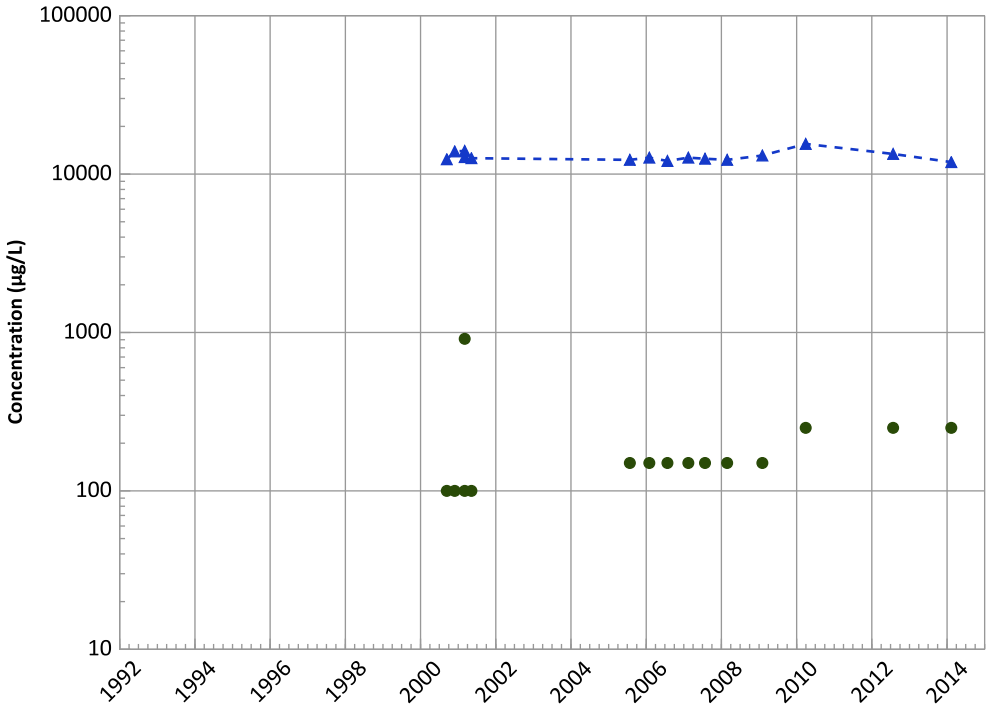
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1052 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

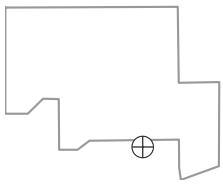
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

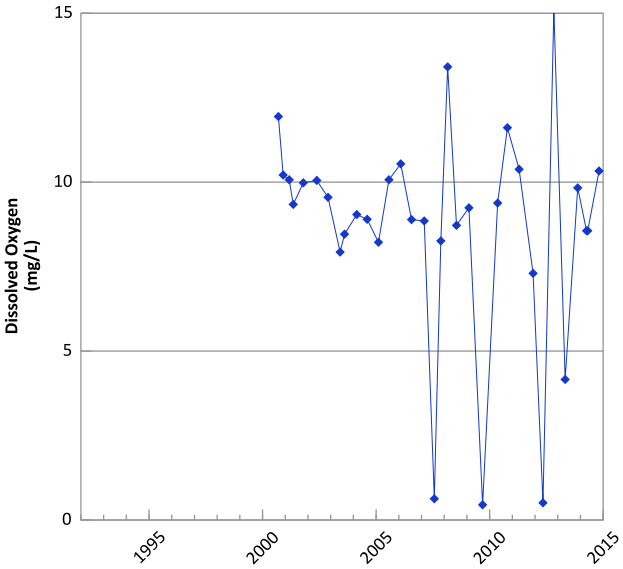
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 08/04/2014
Analysis Date: 03/19/2015

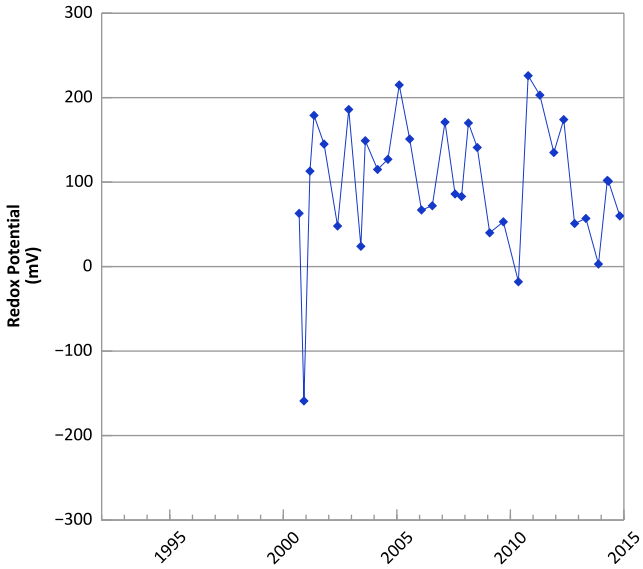
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

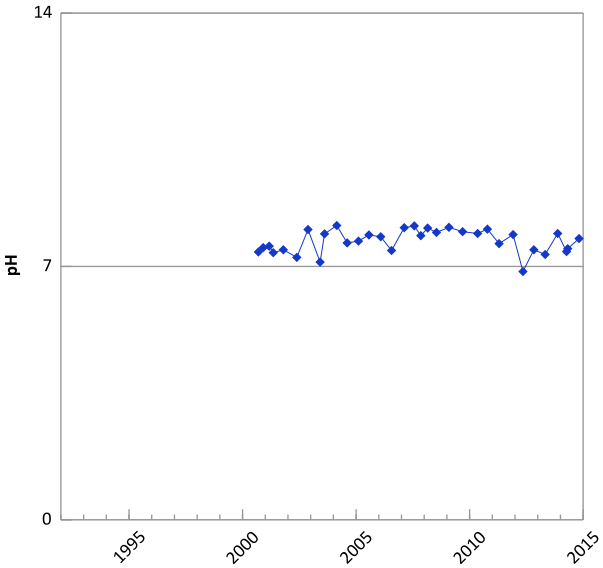
Well Location

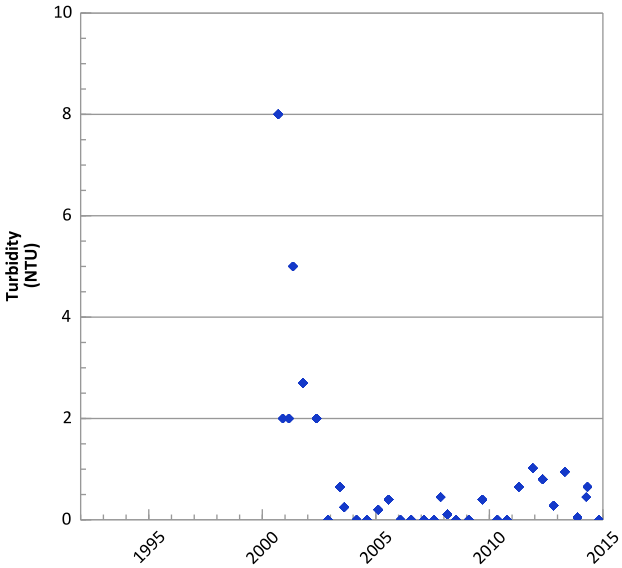


PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



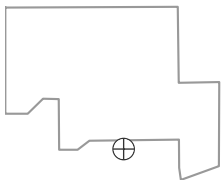






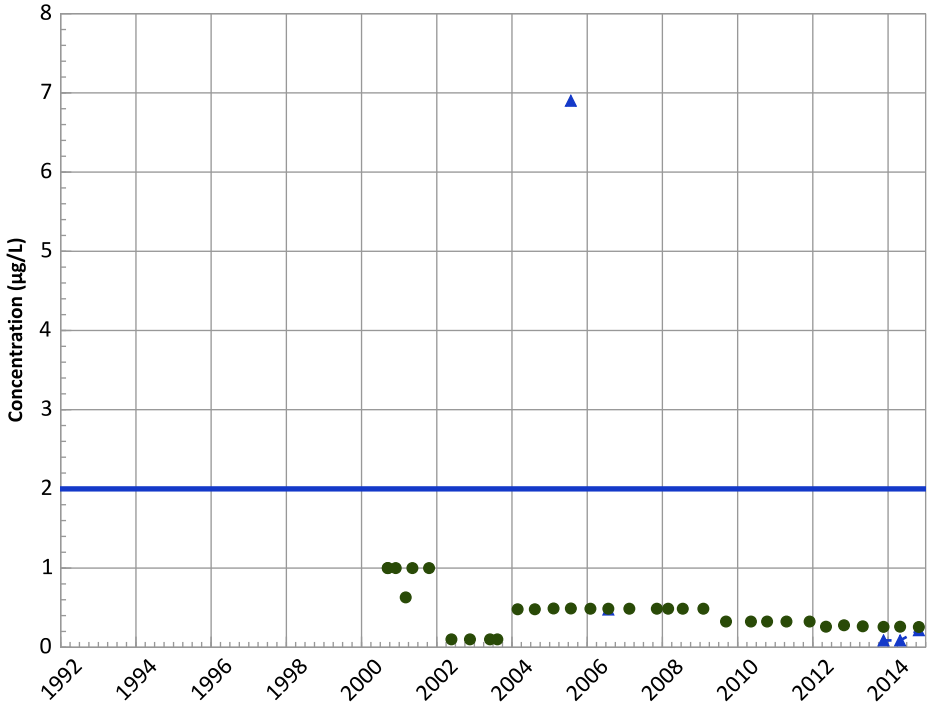
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

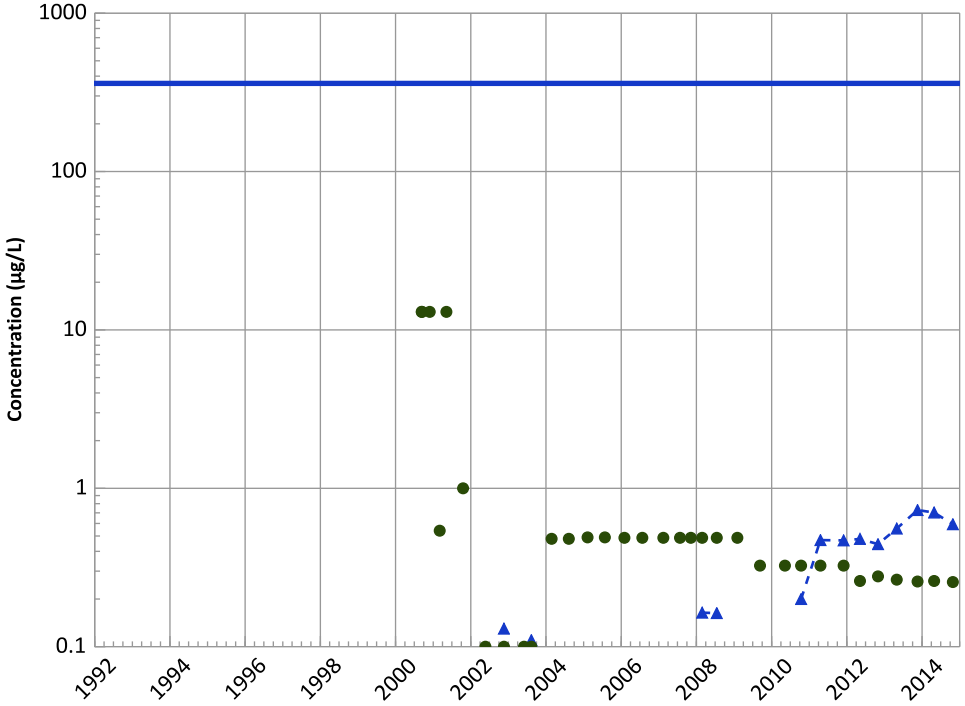


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

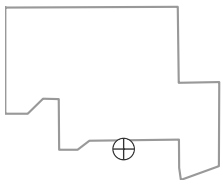
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

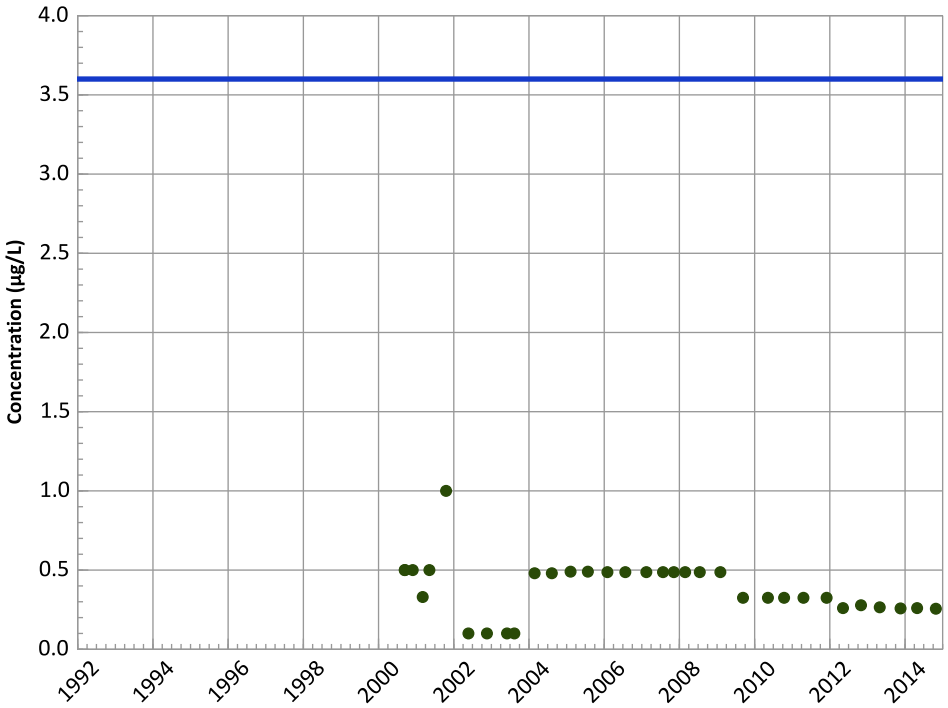
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

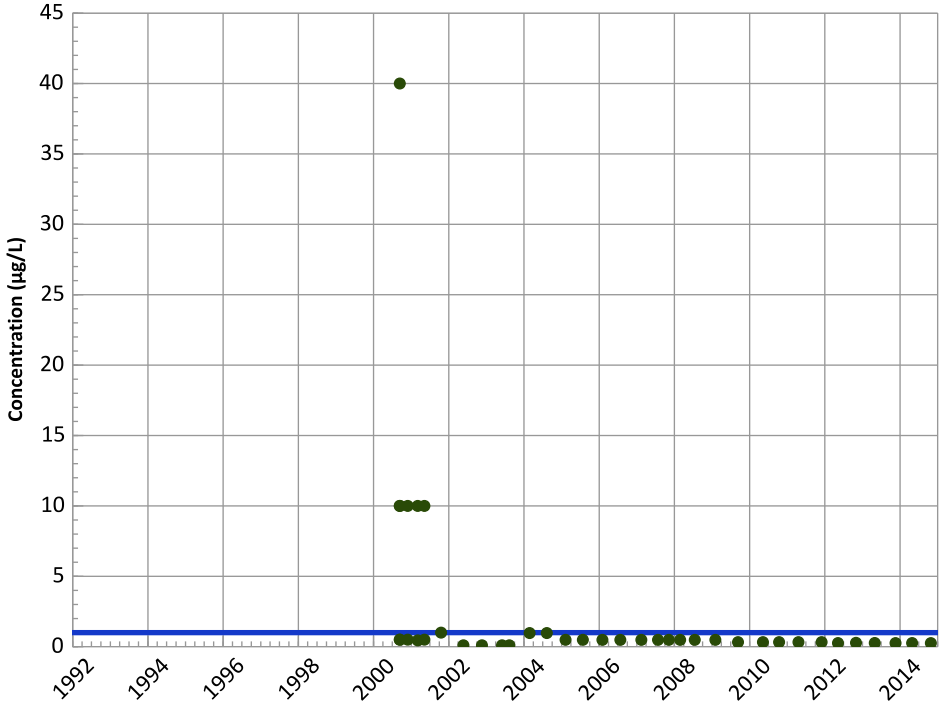


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

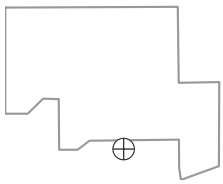
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

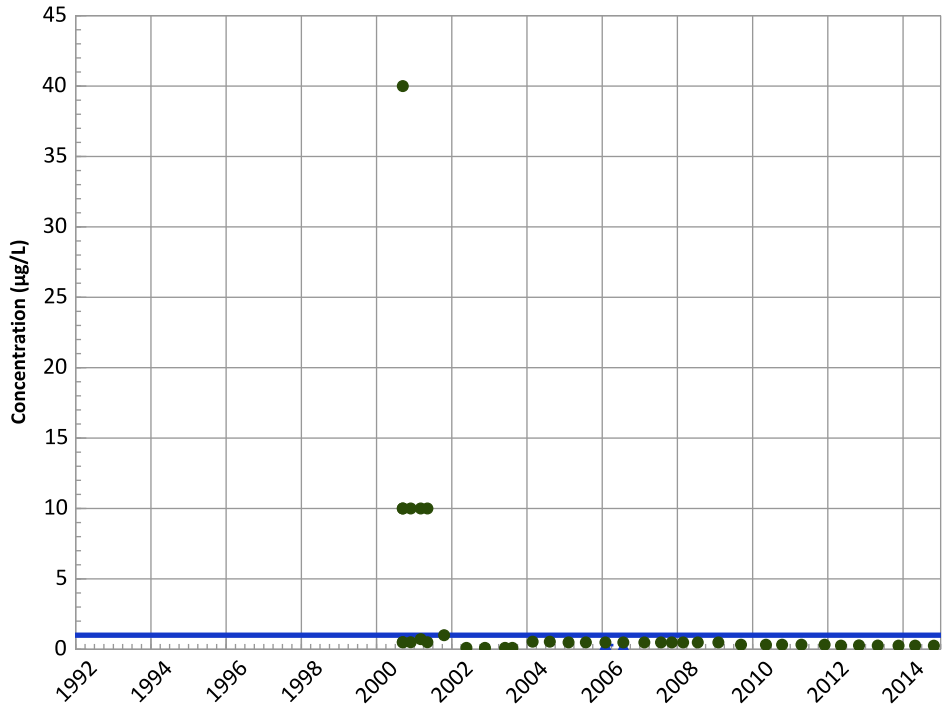
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

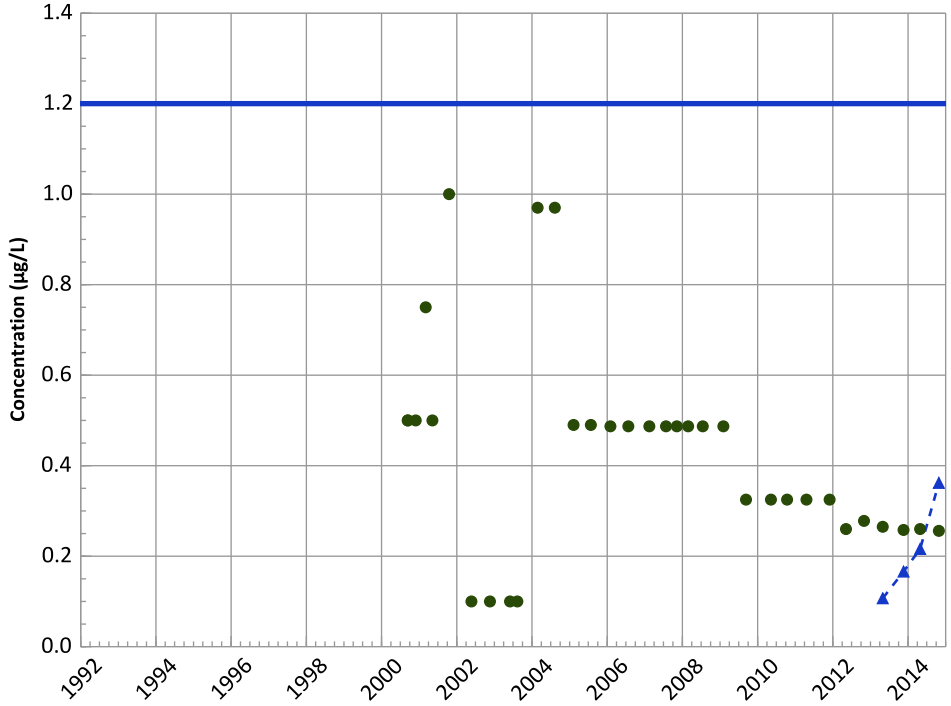


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

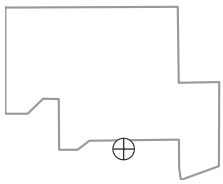
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

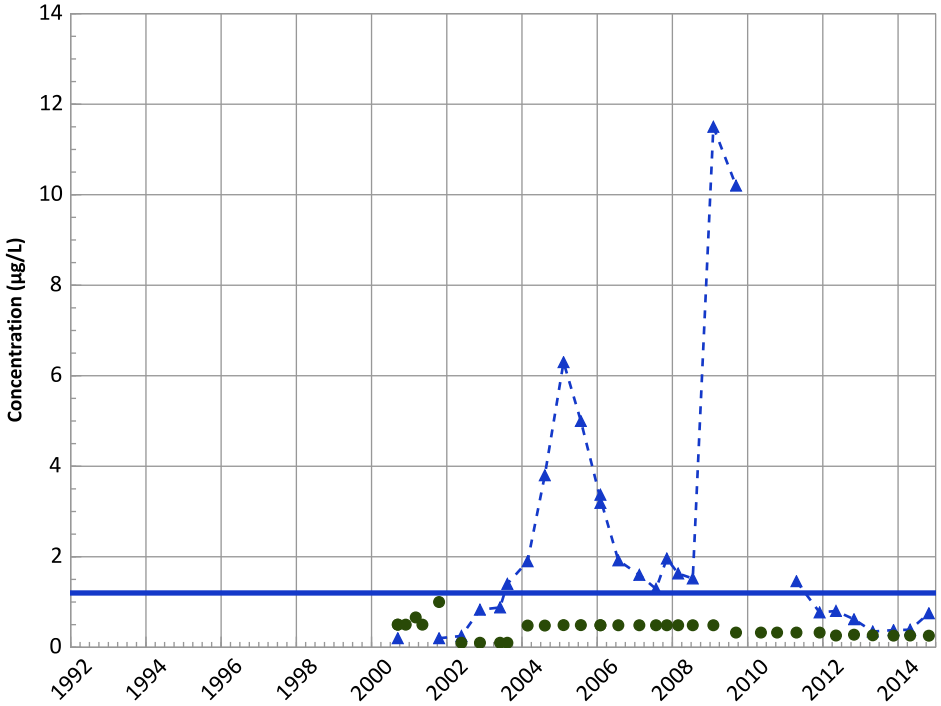
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

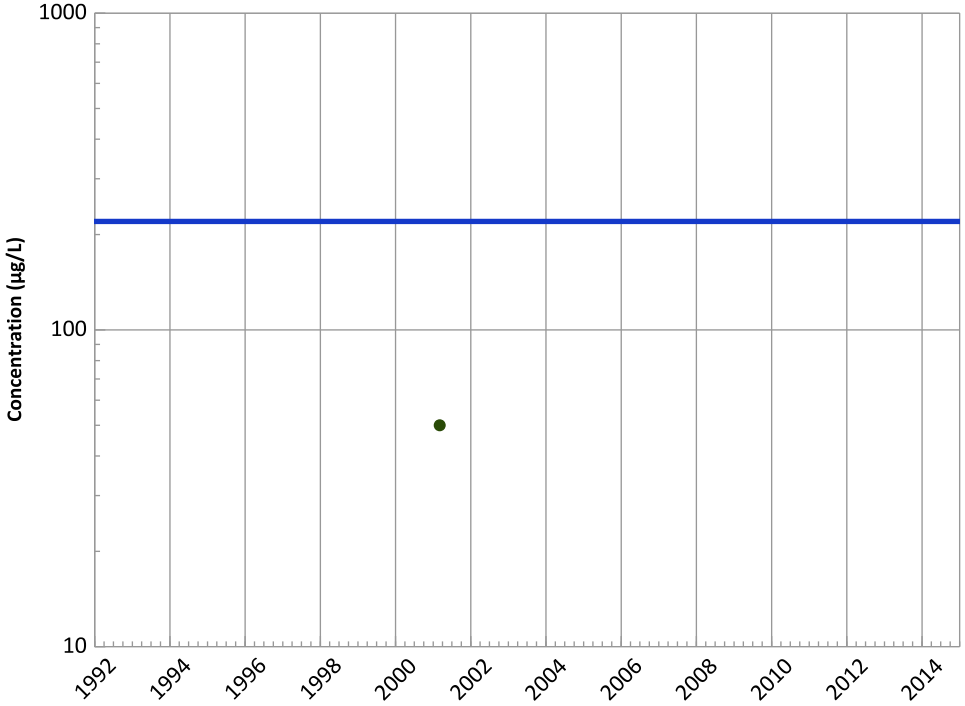


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

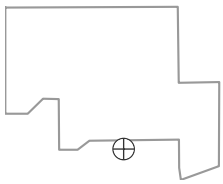
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

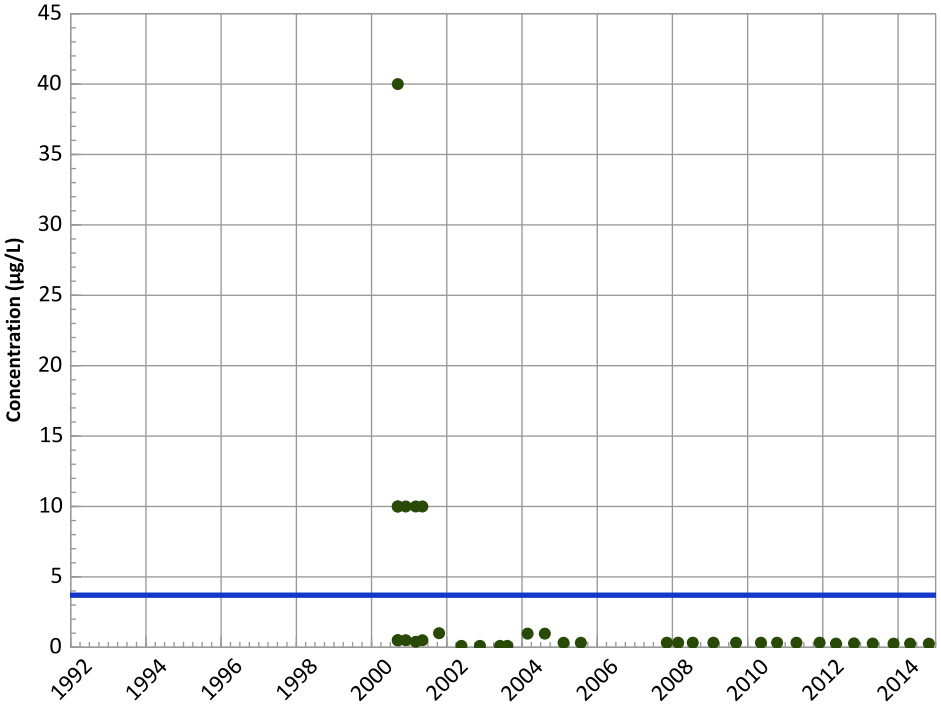
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

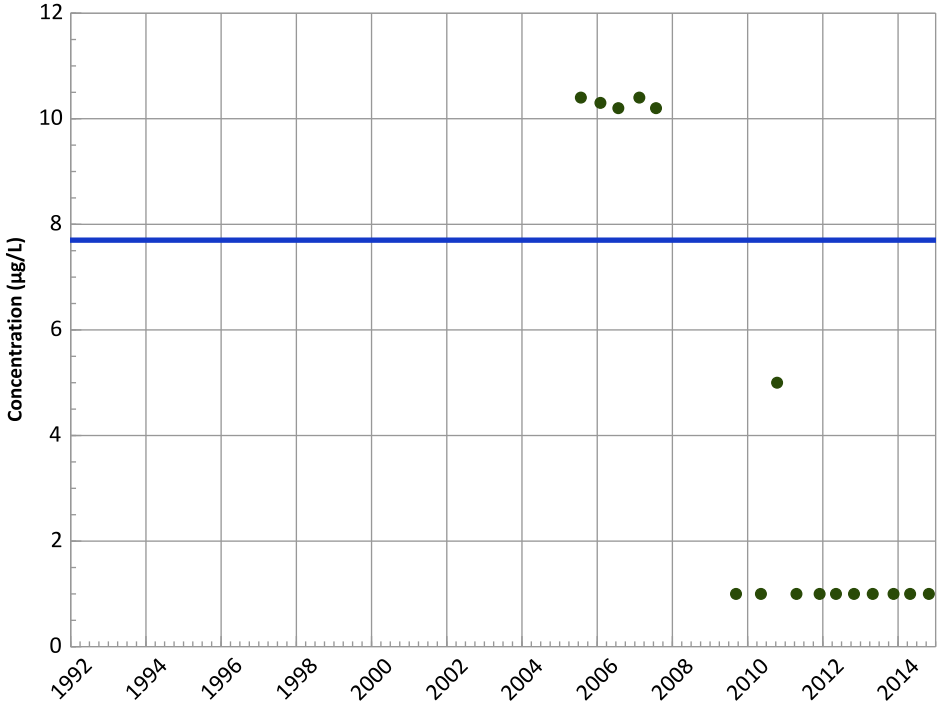


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

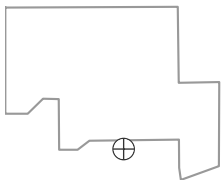
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

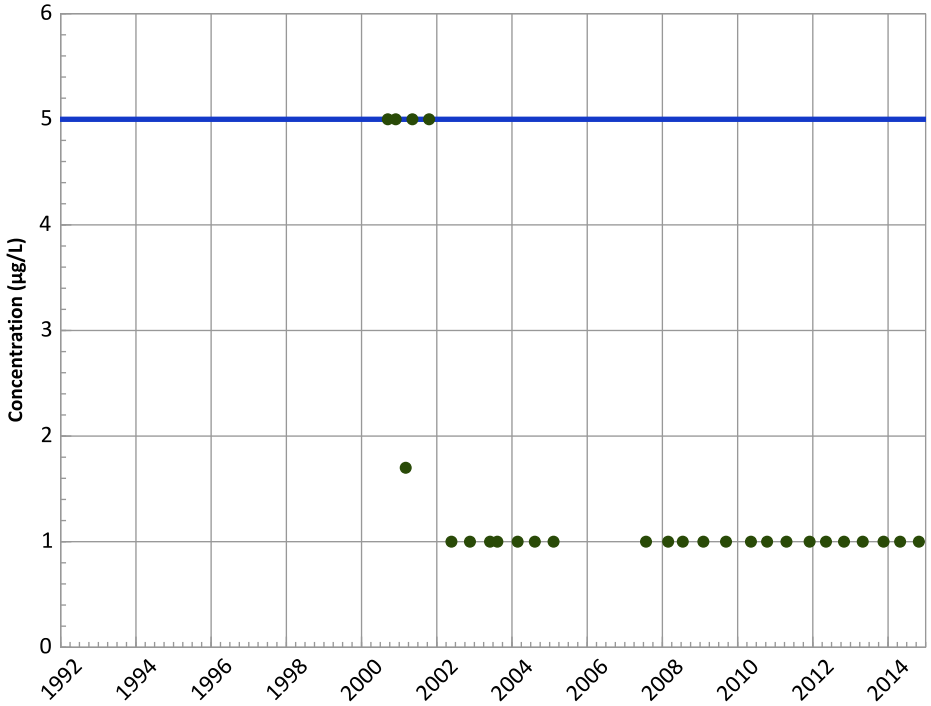
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

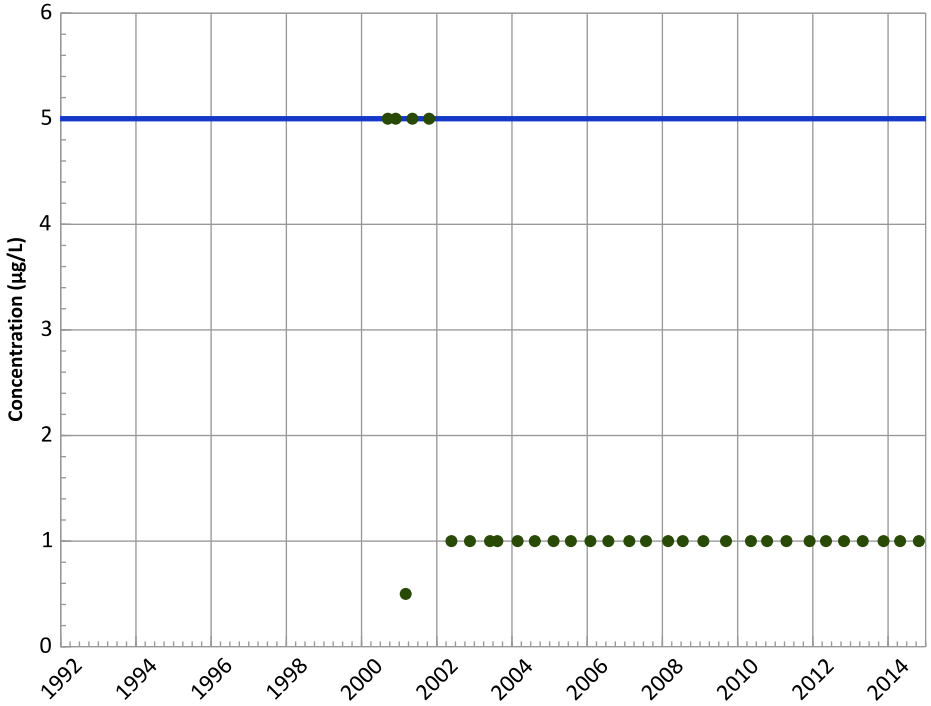


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

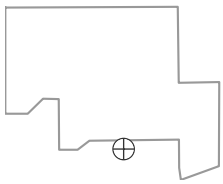
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

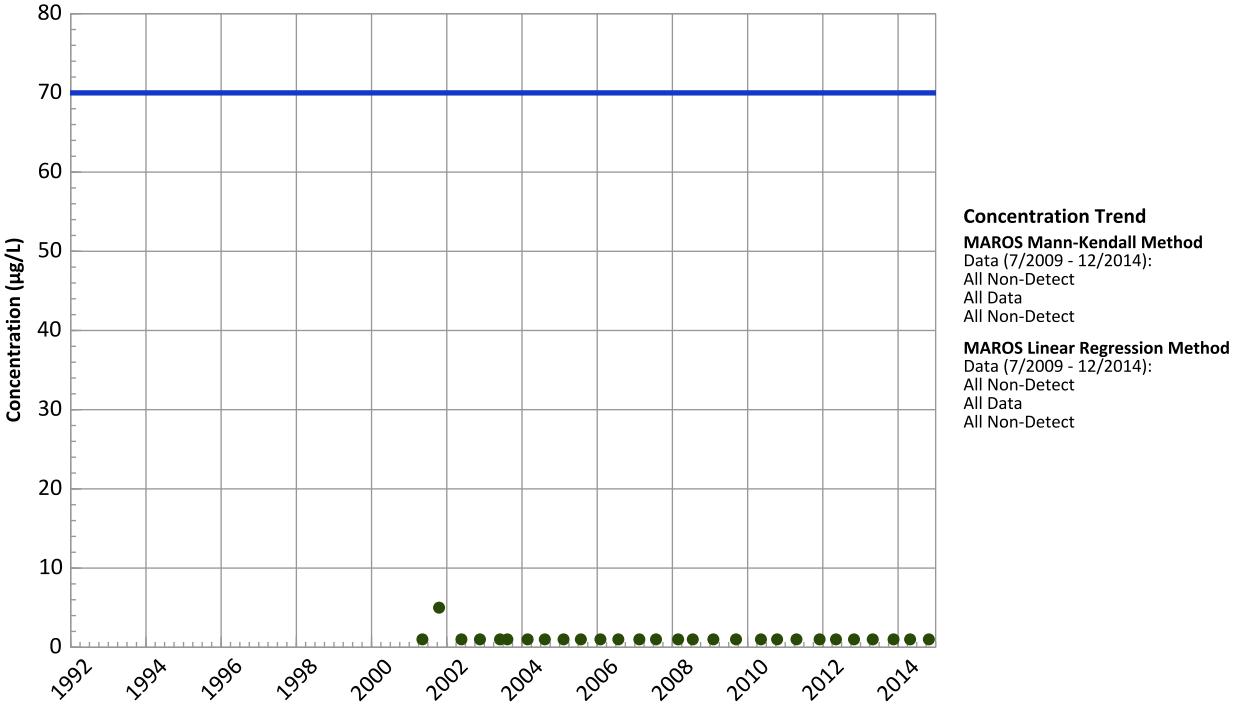
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

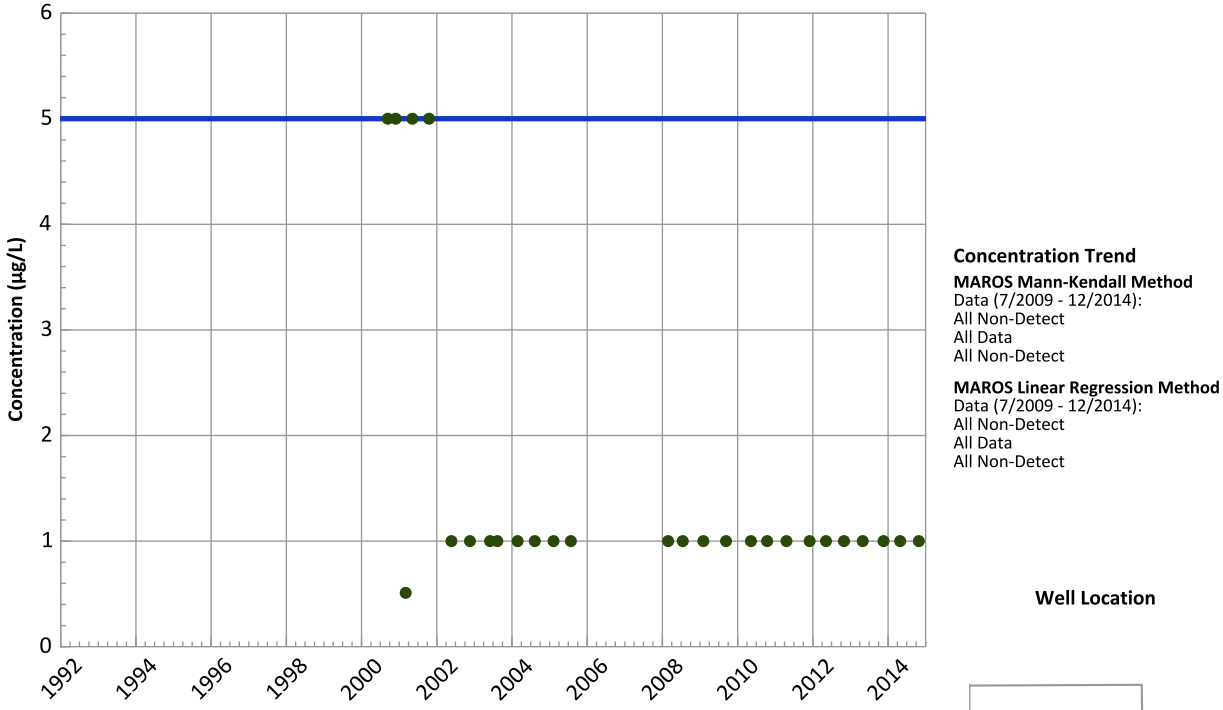


PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend



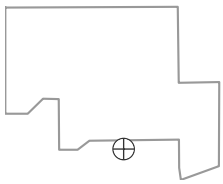
1,2-Dichloroethane Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

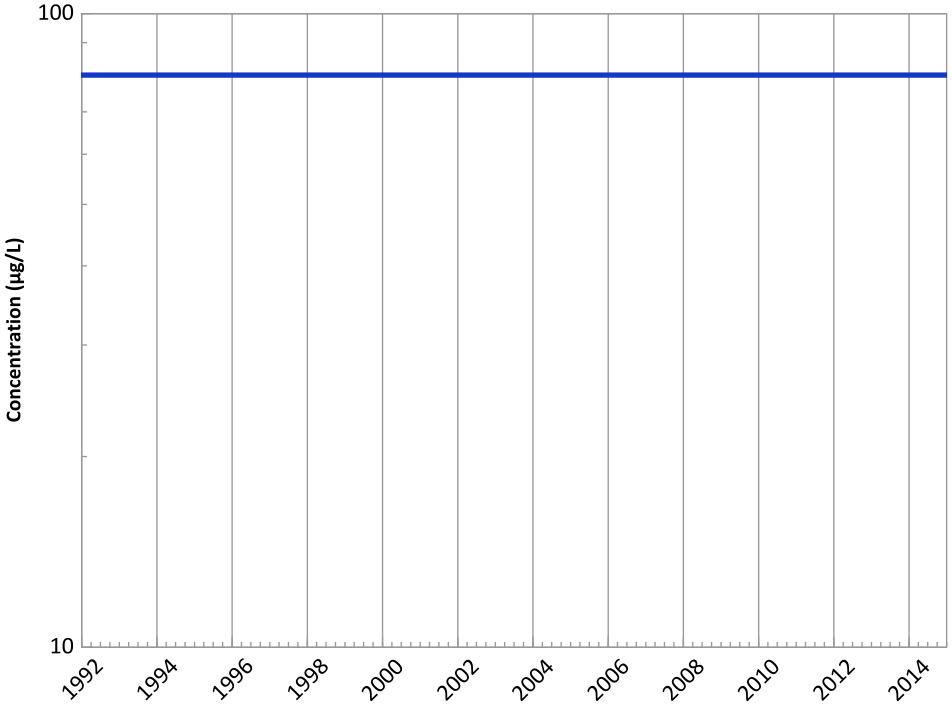
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

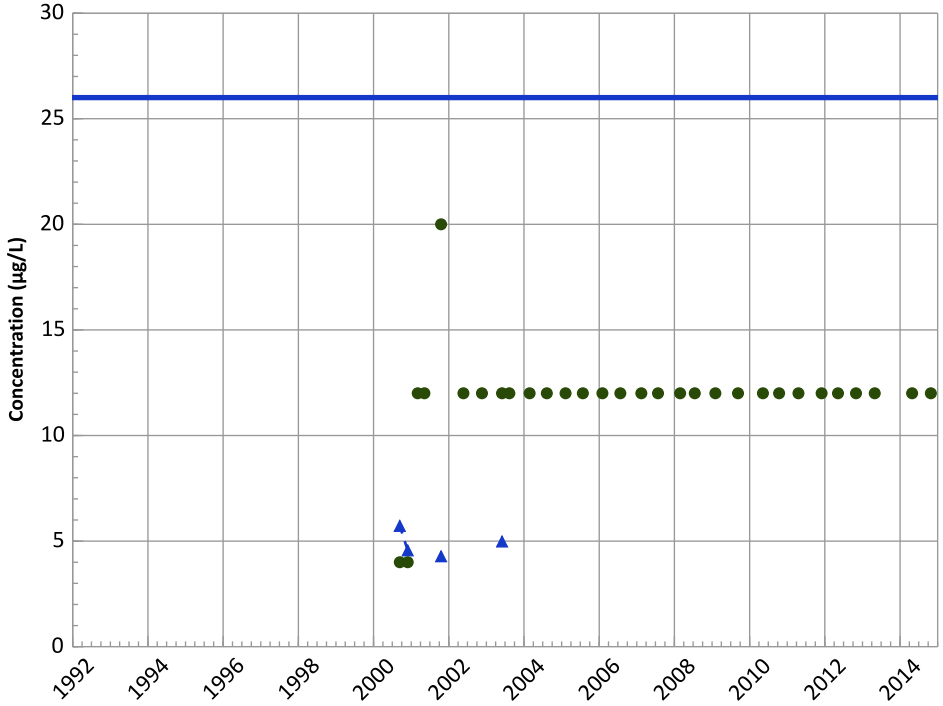


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

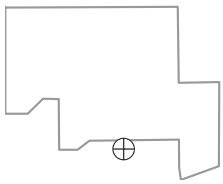
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

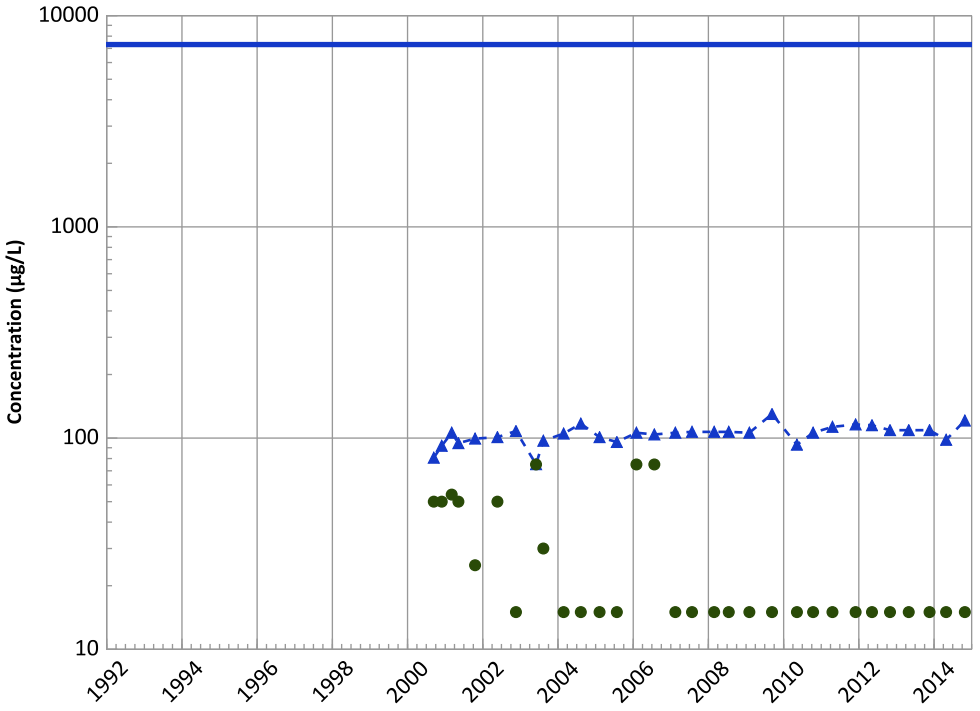
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

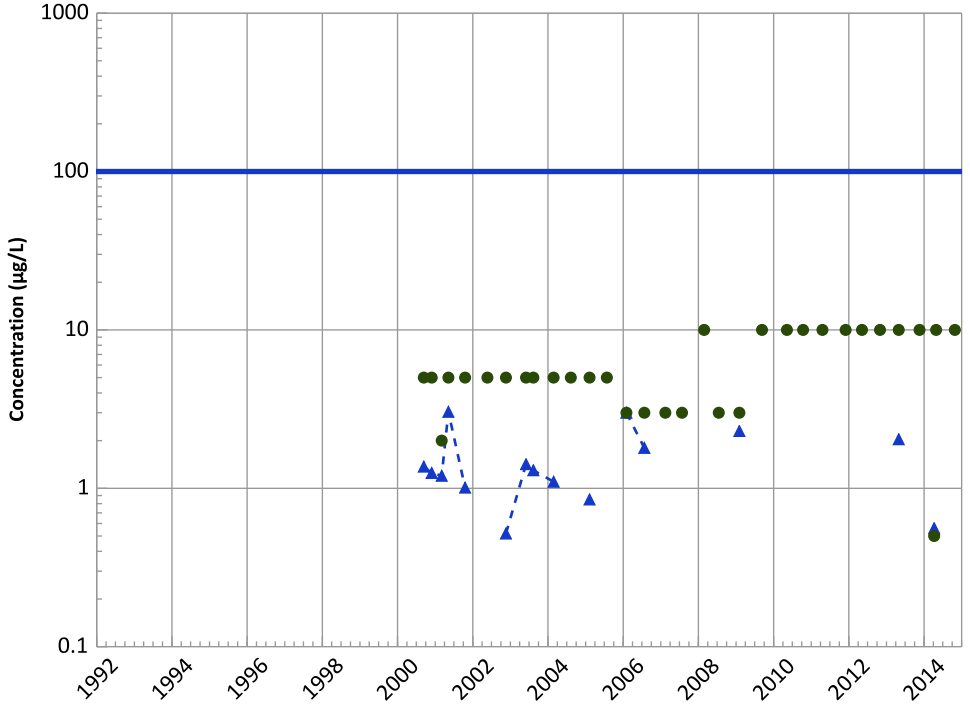


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Chromium, Total Trend



Concentration Trend

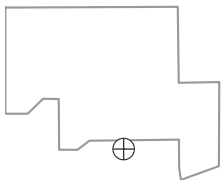
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

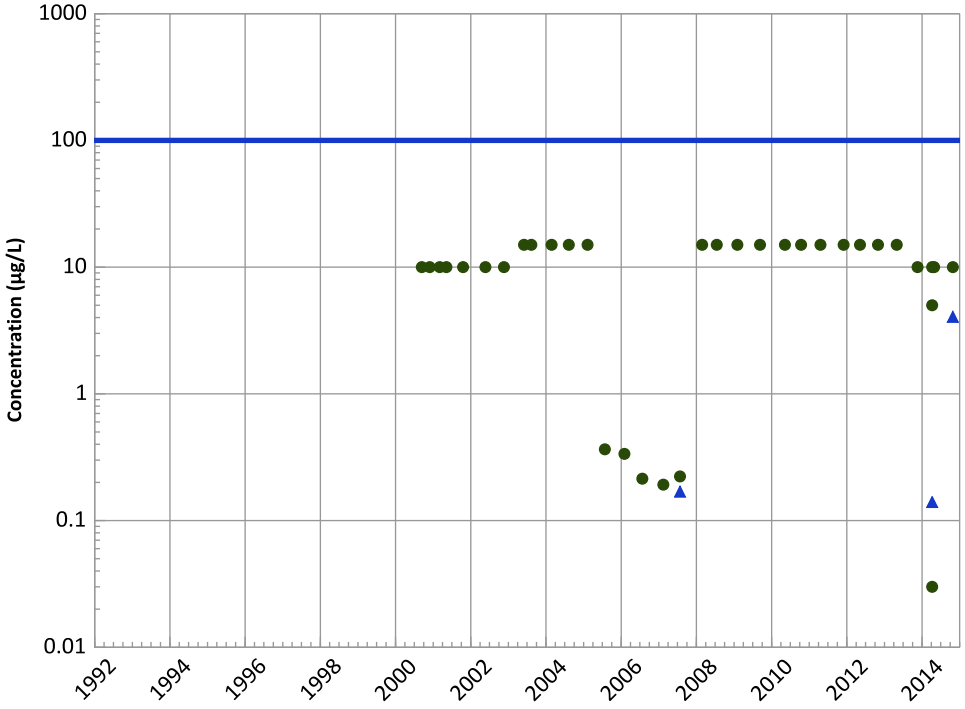
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

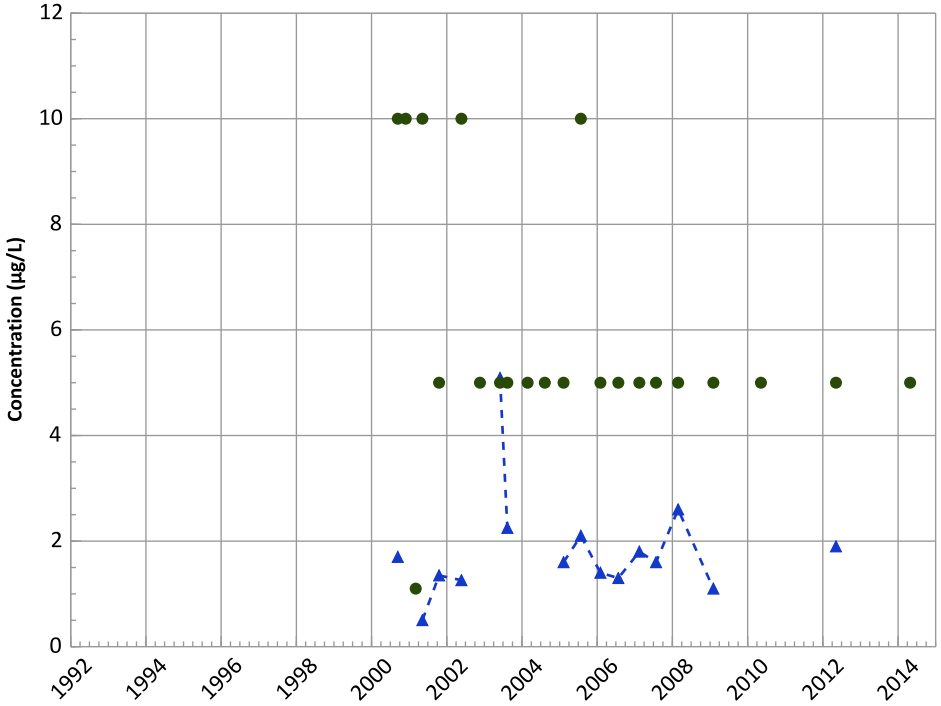


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

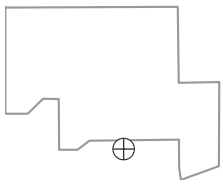
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

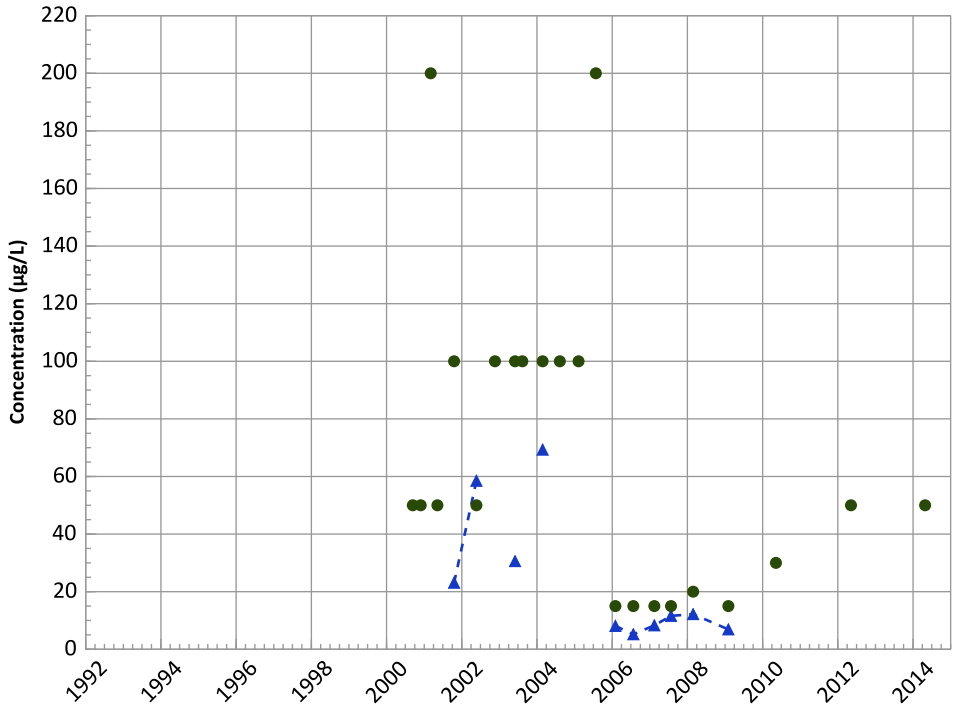
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

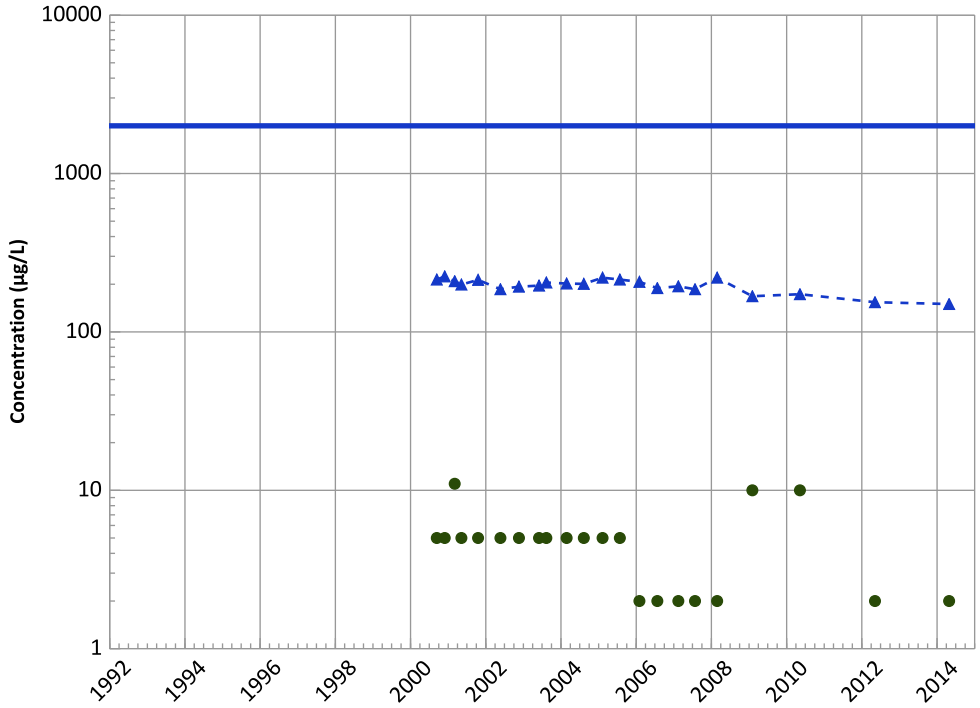


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

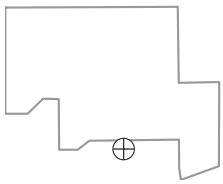
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

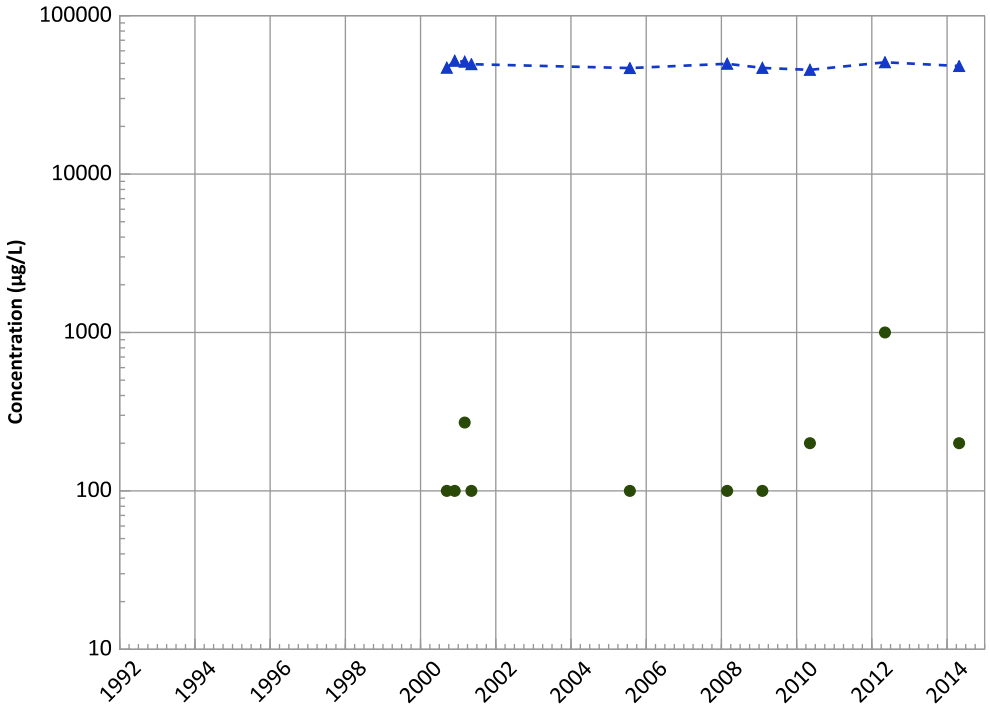
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

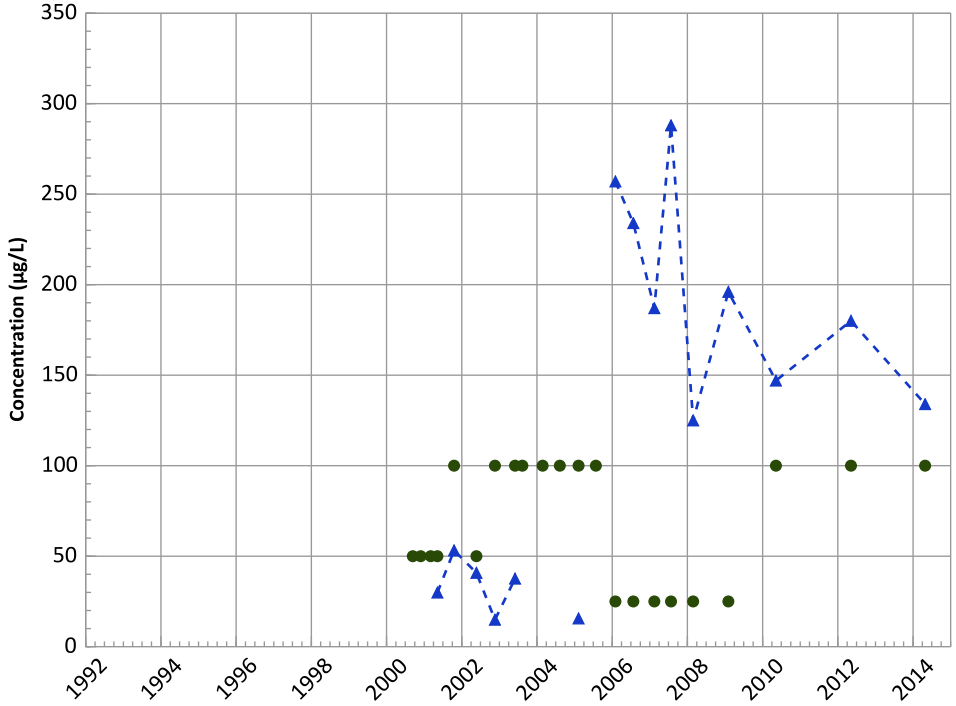


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

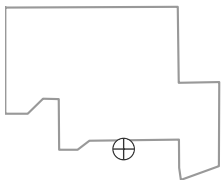
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

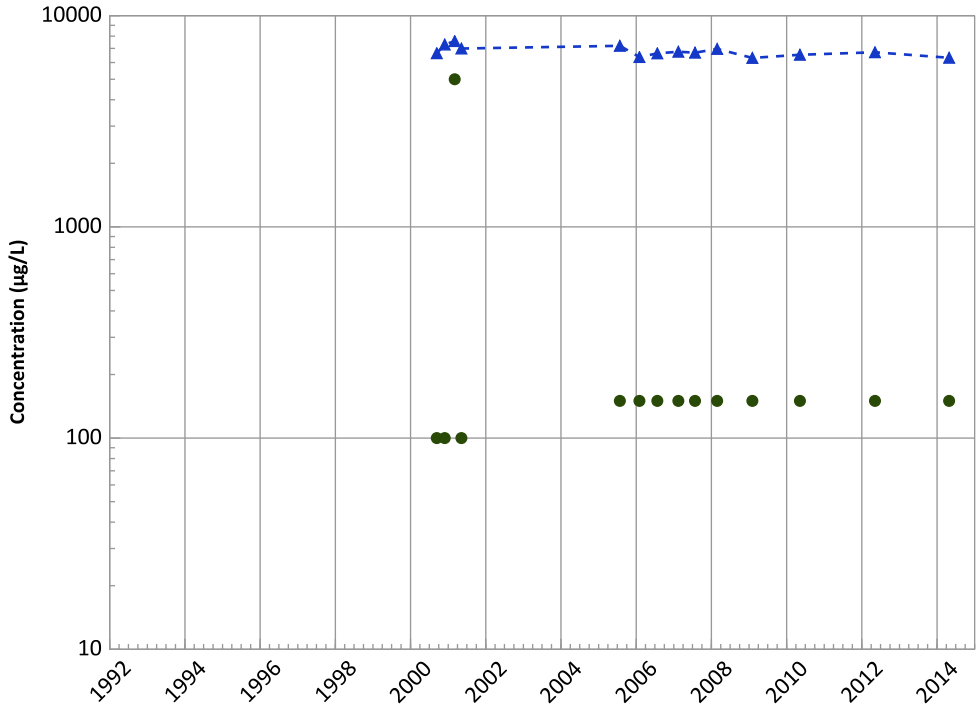
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

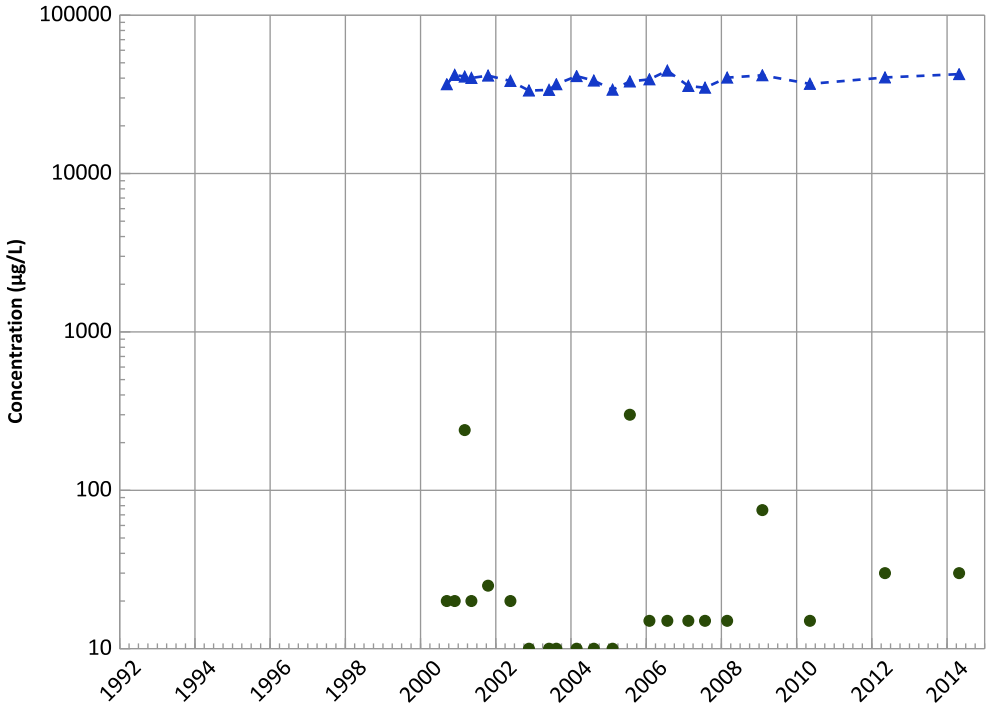


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

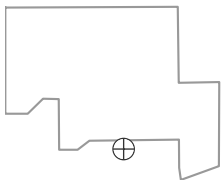
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

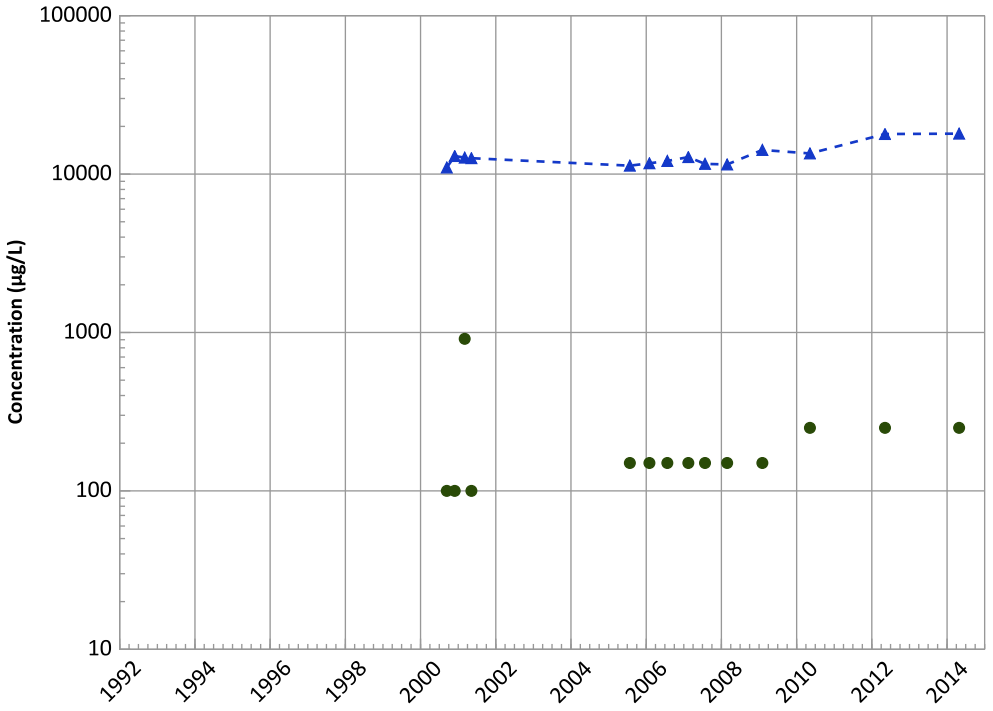
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1053 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

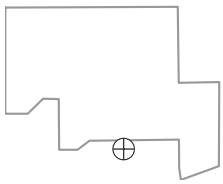
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

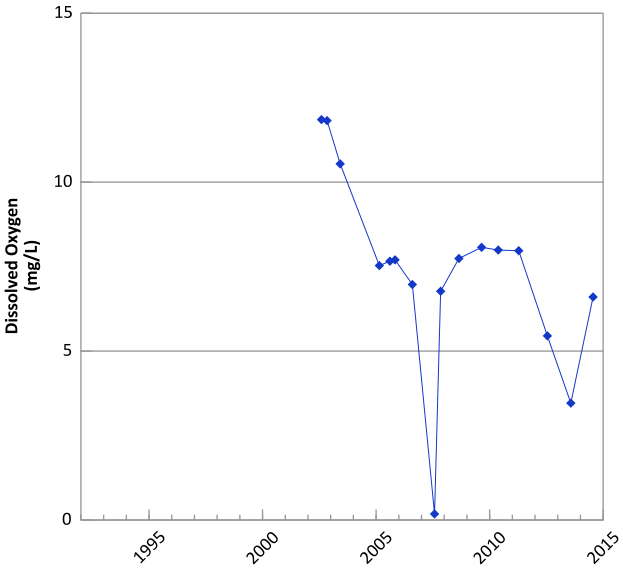
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/12/2000 to 10/27/2014
Analysis Date: 03/19/2015

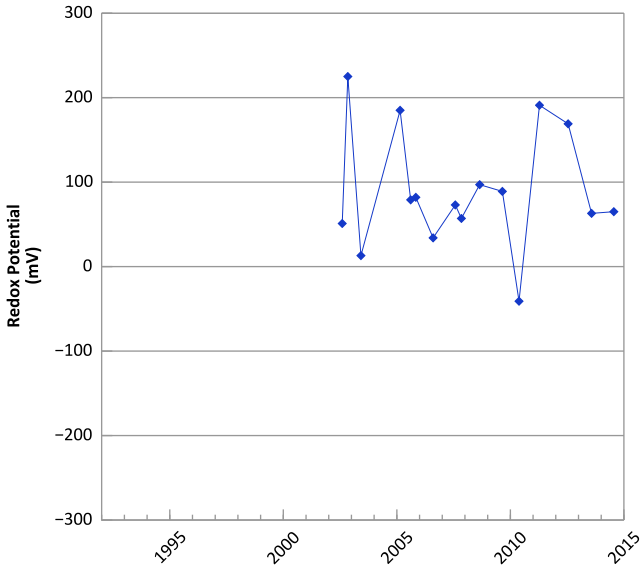
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

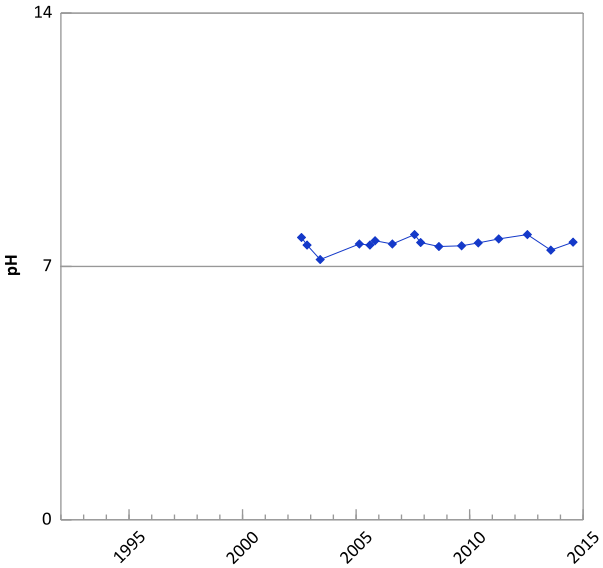
Well Location

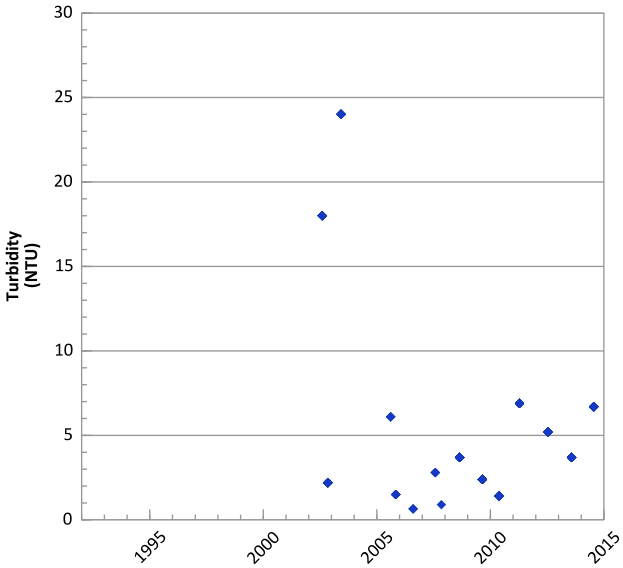


PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



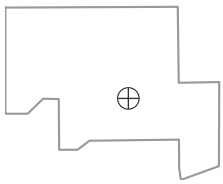






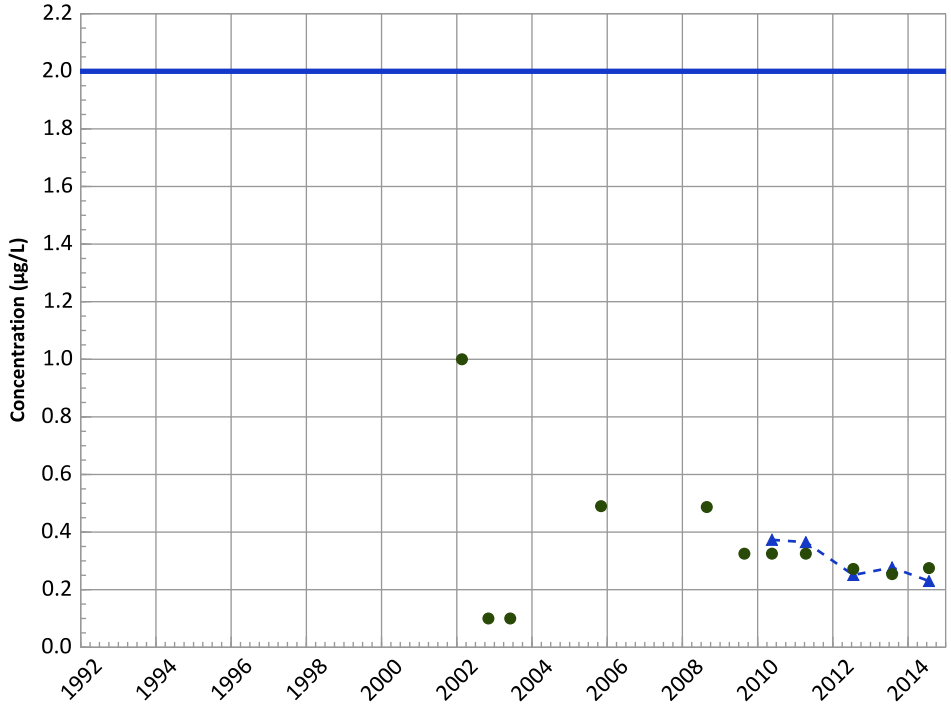
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

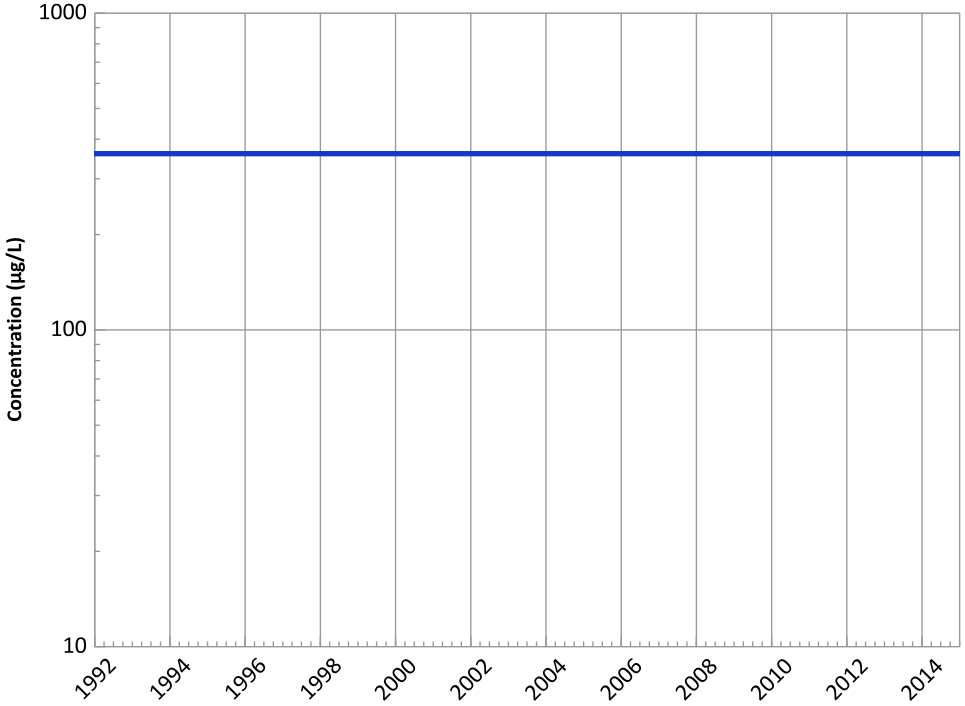


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

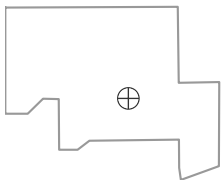
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

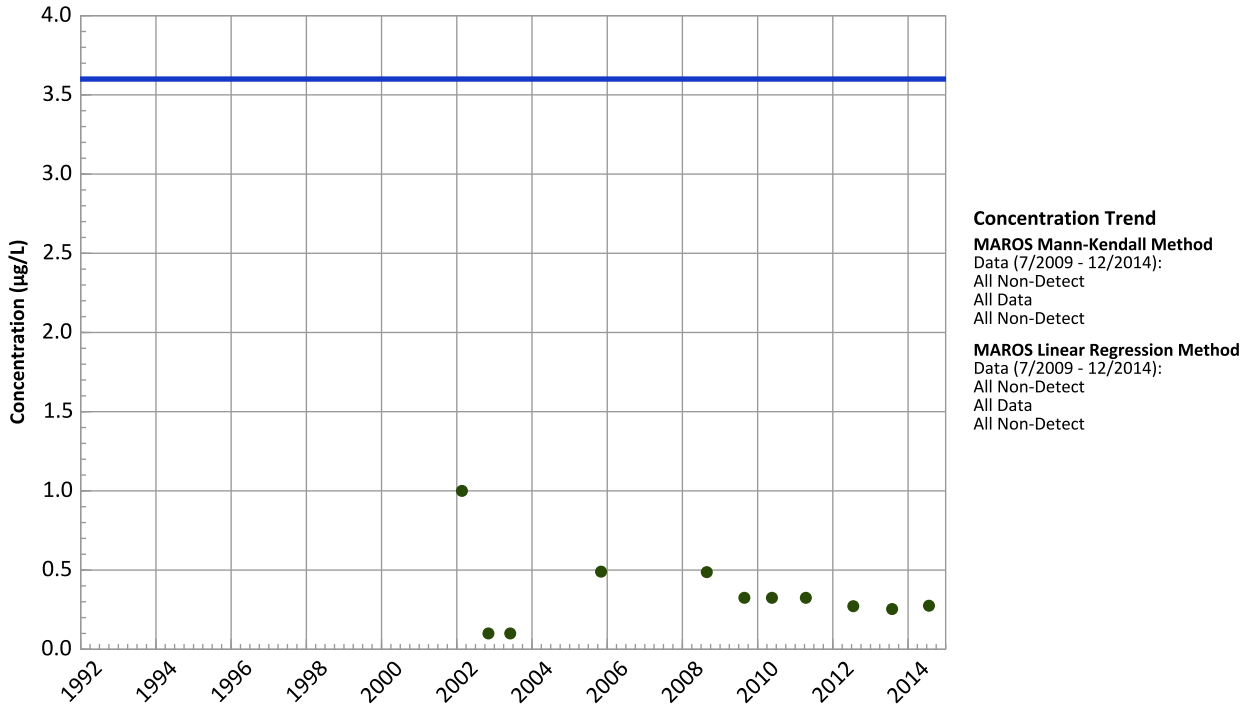
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

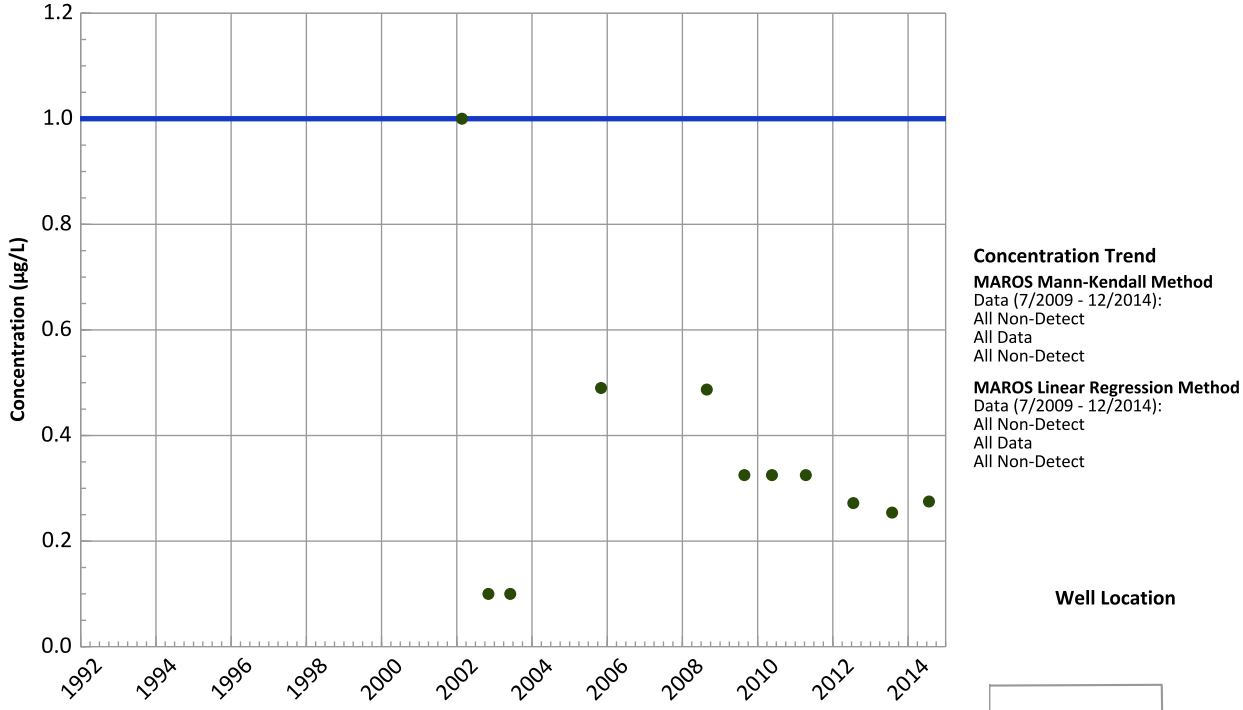


PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



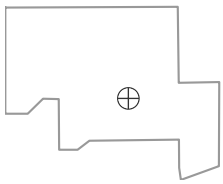
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

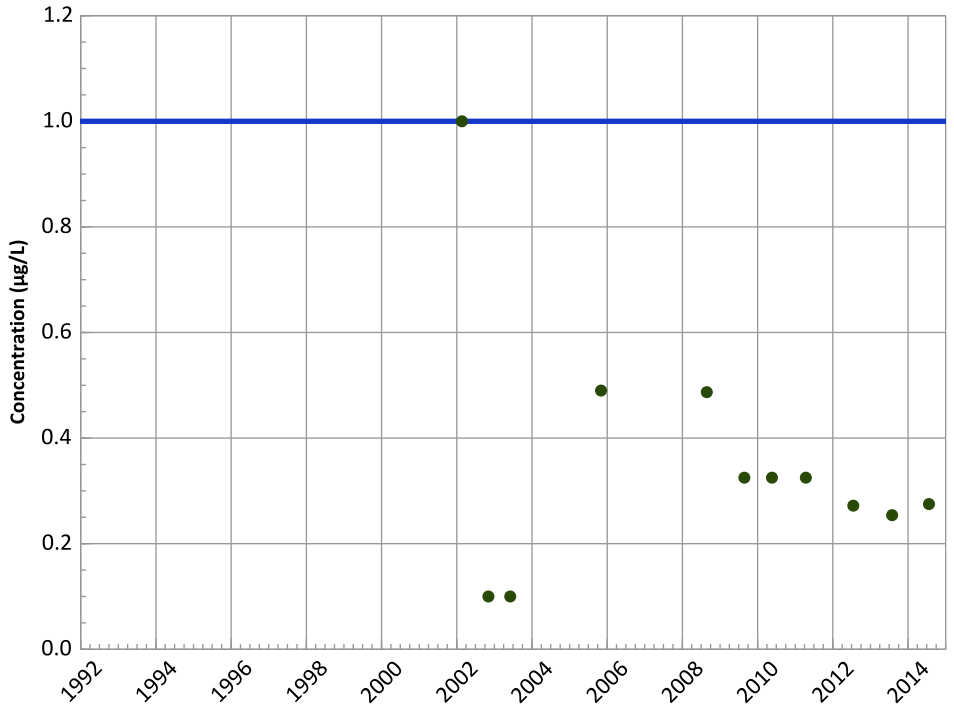
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

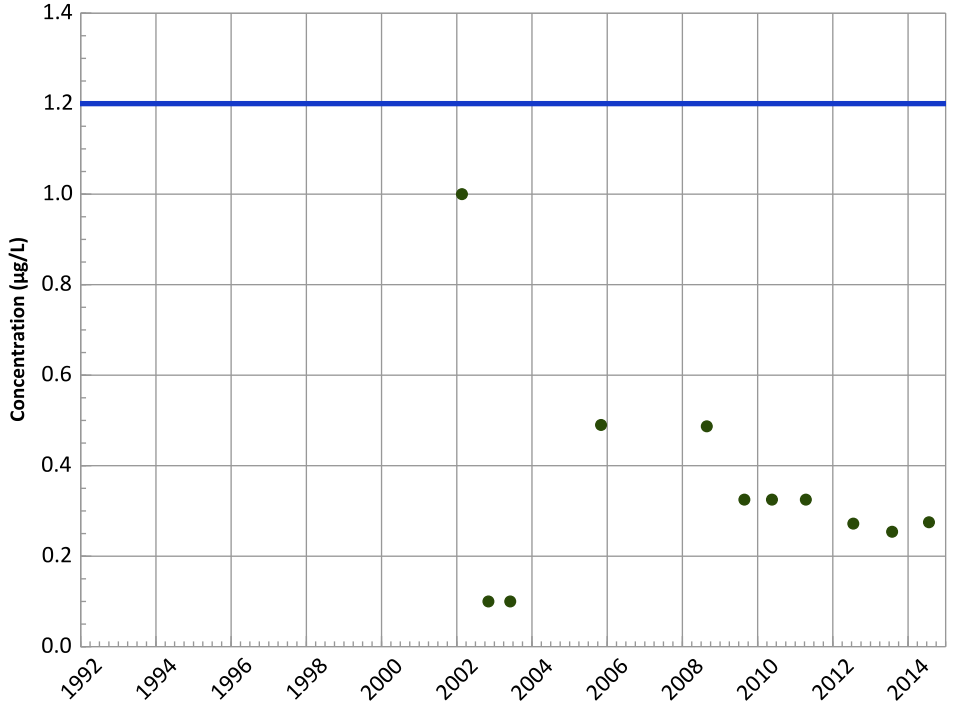


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

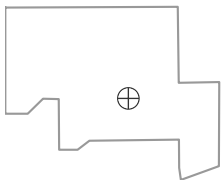
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

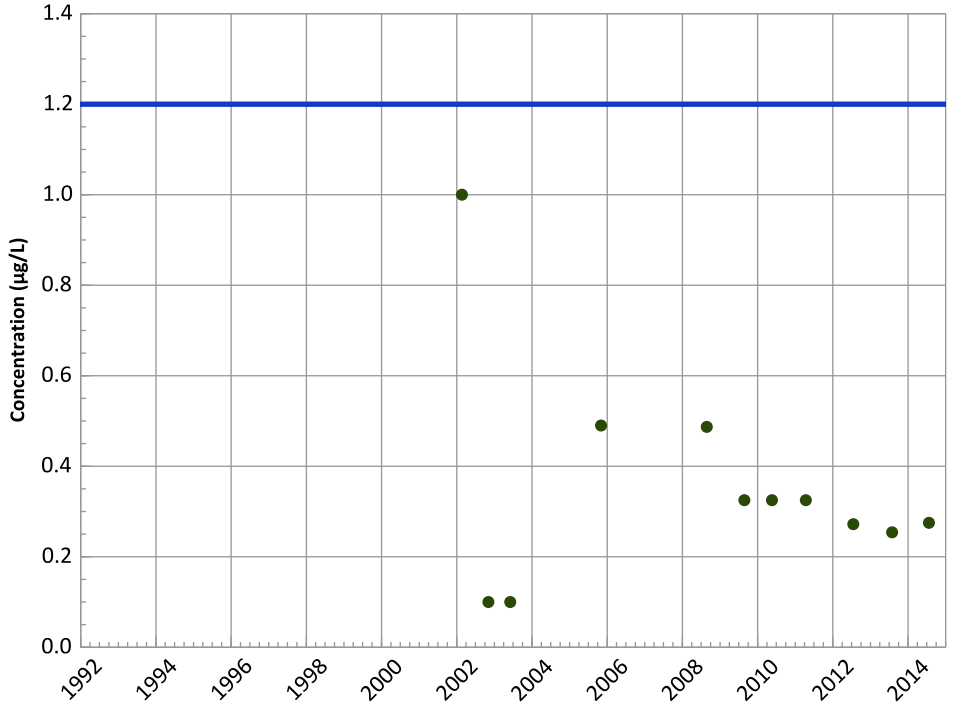
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

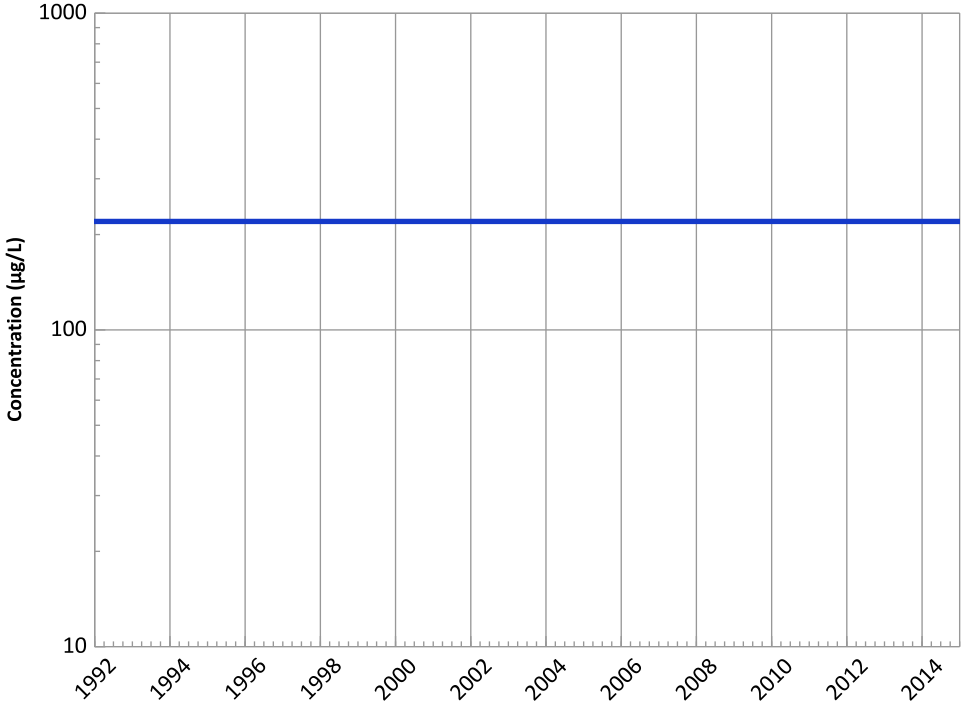


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

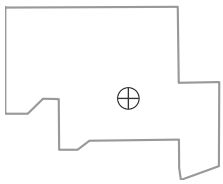
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

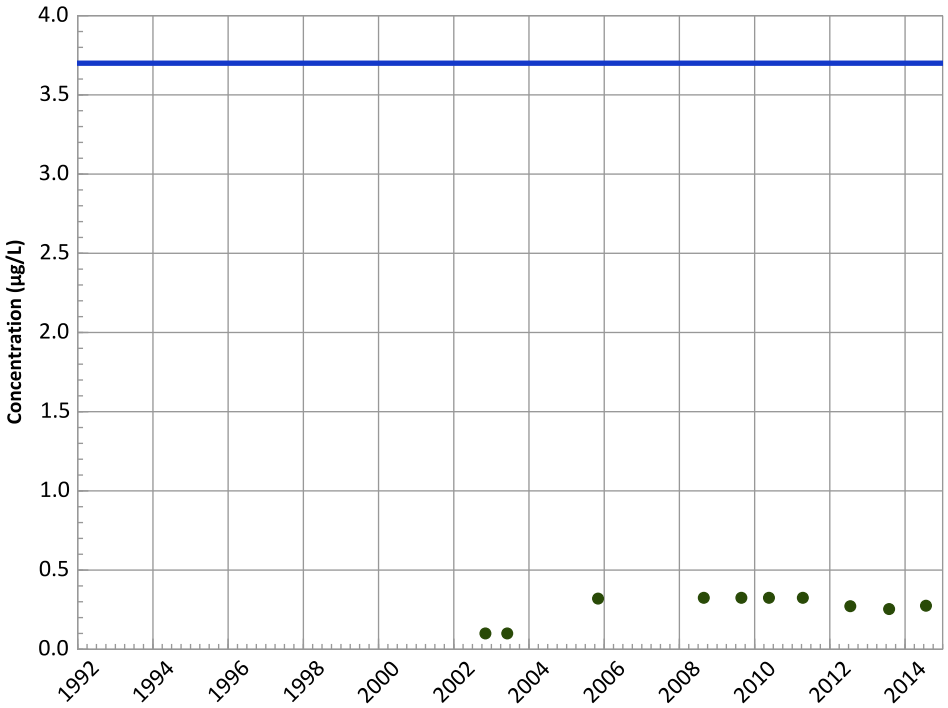
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

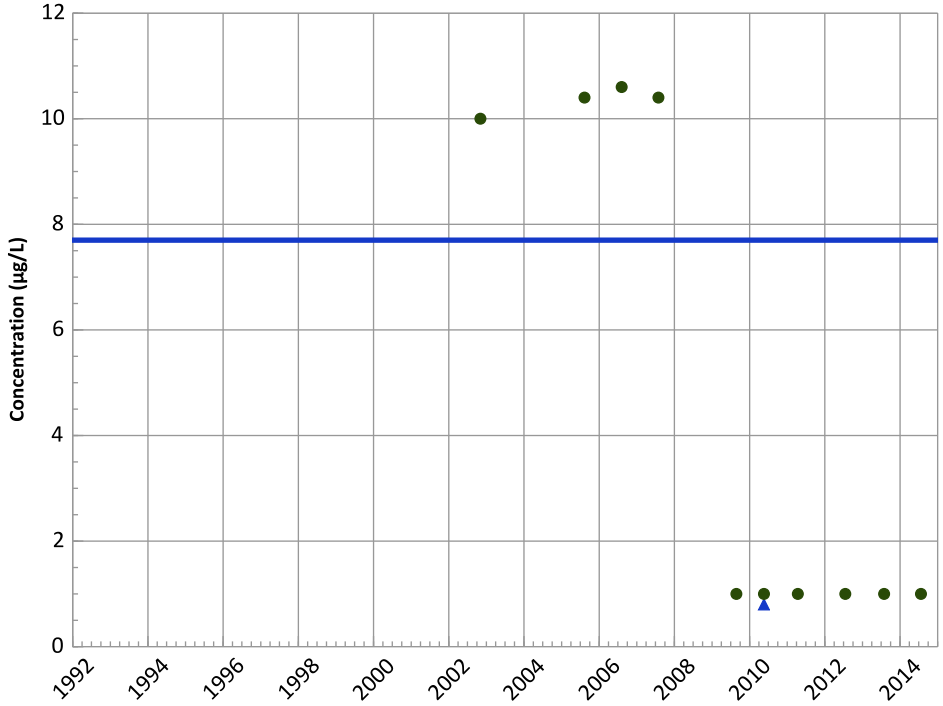


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

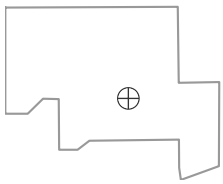
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

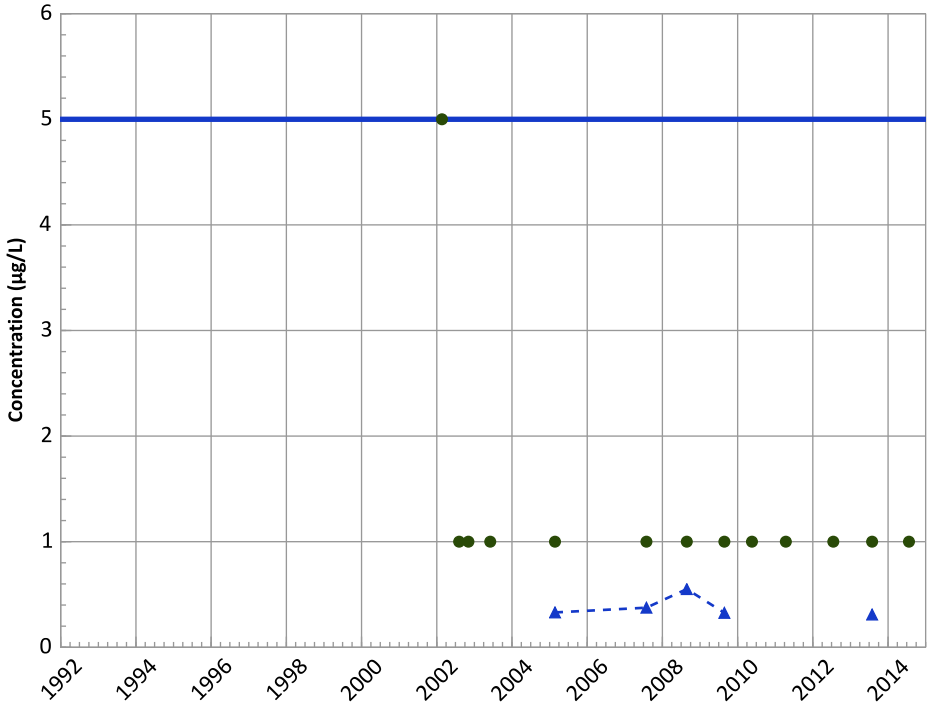
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

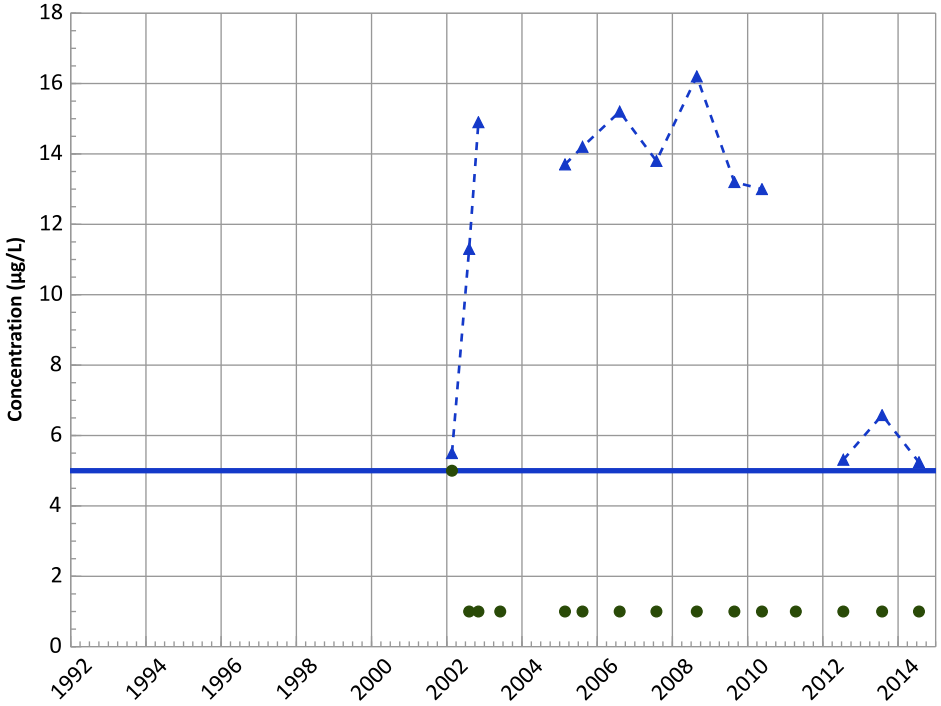


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Trichloroethene Trend



Concentration Trend

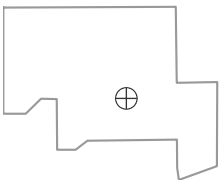
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

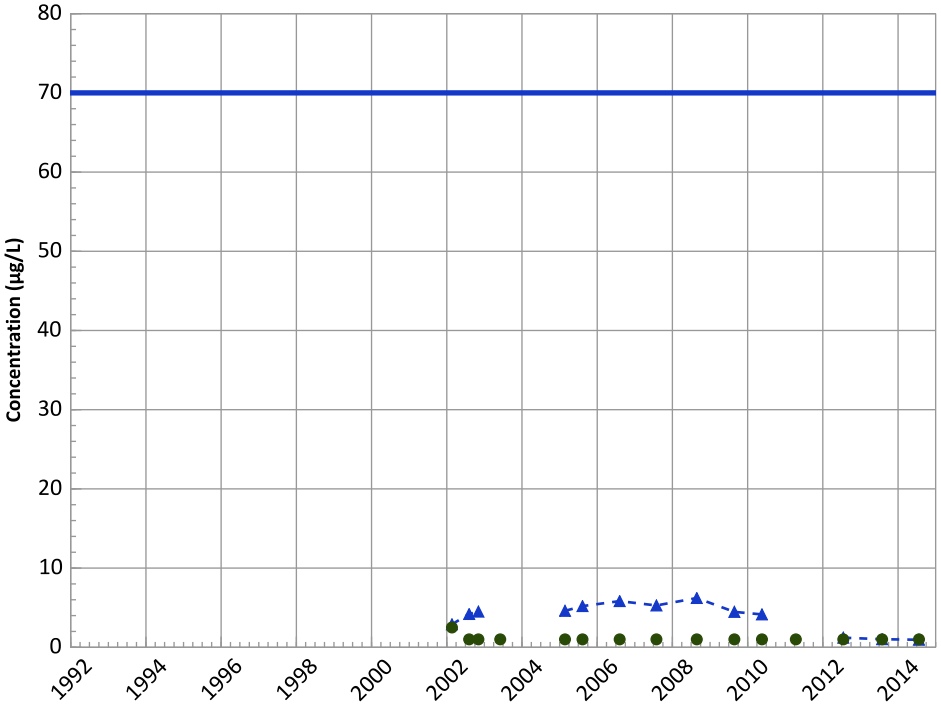
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

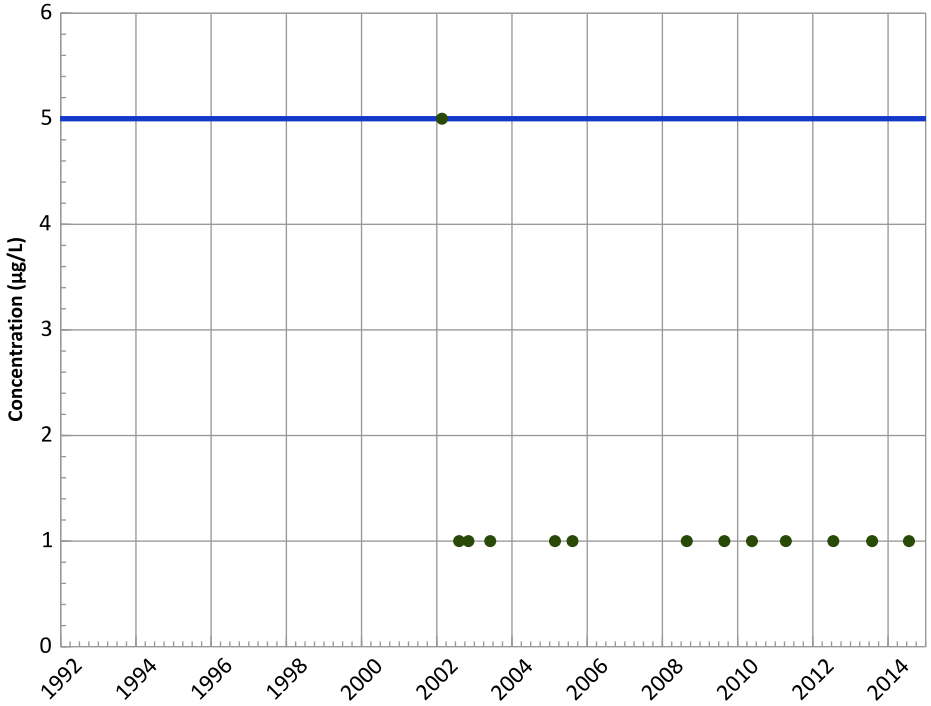


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

1,2-Dichloroethane Trend



Concentration Trend

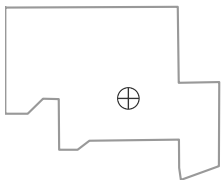
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

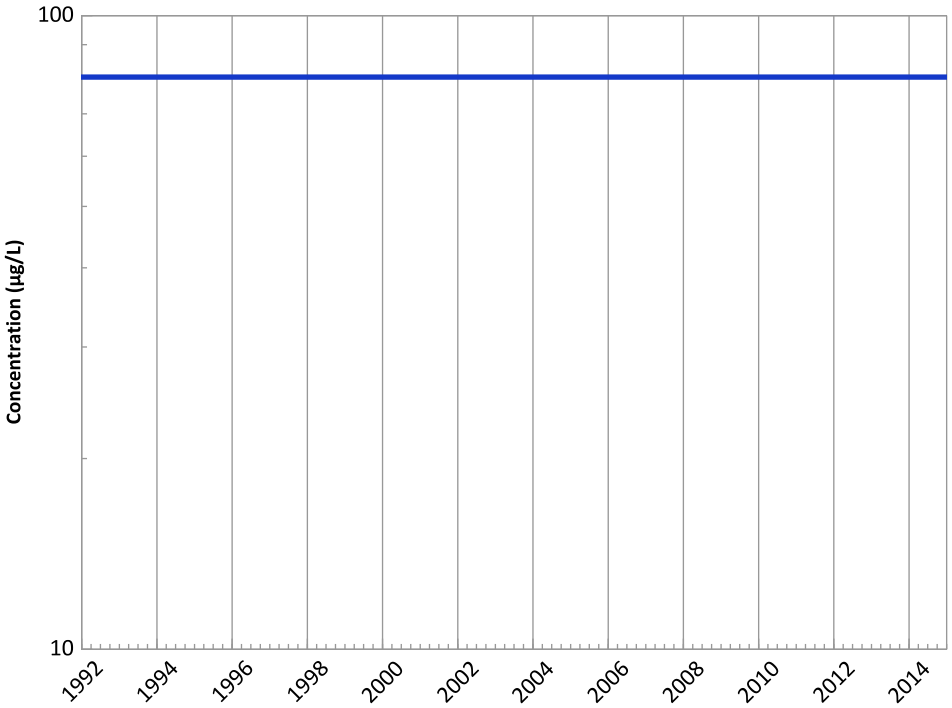
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

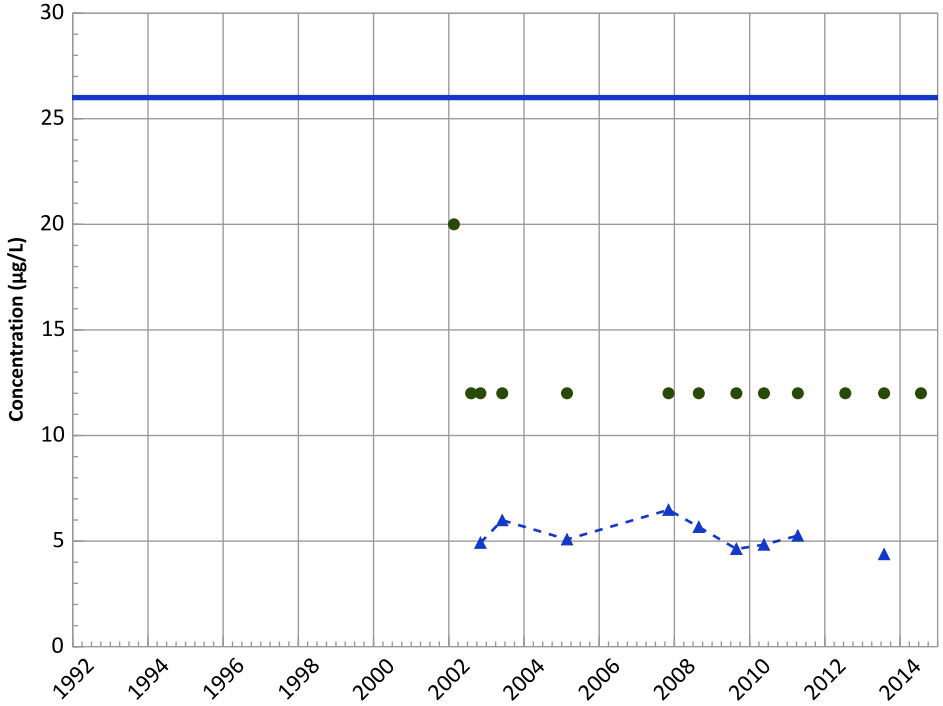


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

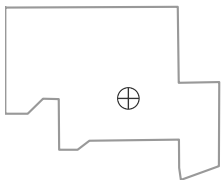
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

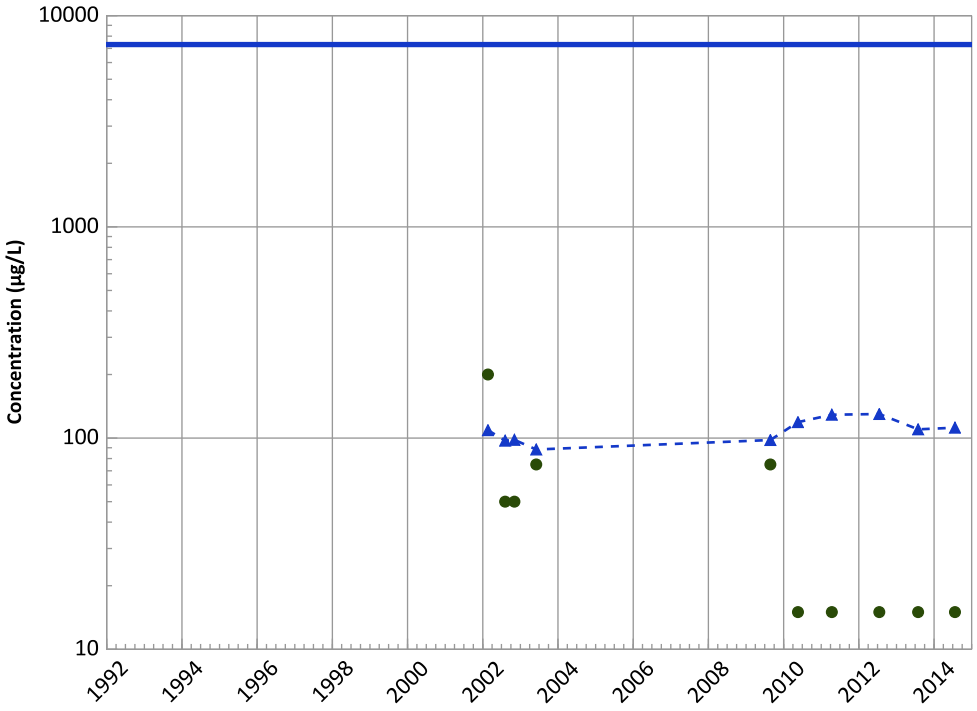
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

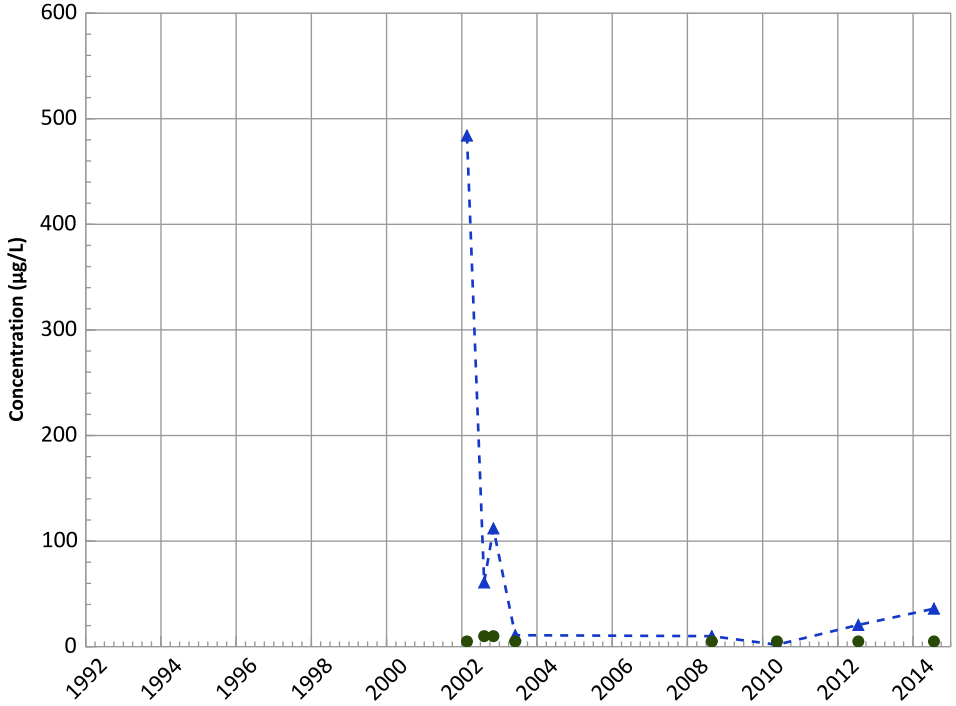


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Manganese Trend



Concentration Trend

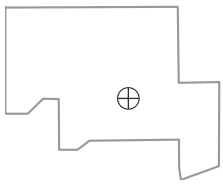
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

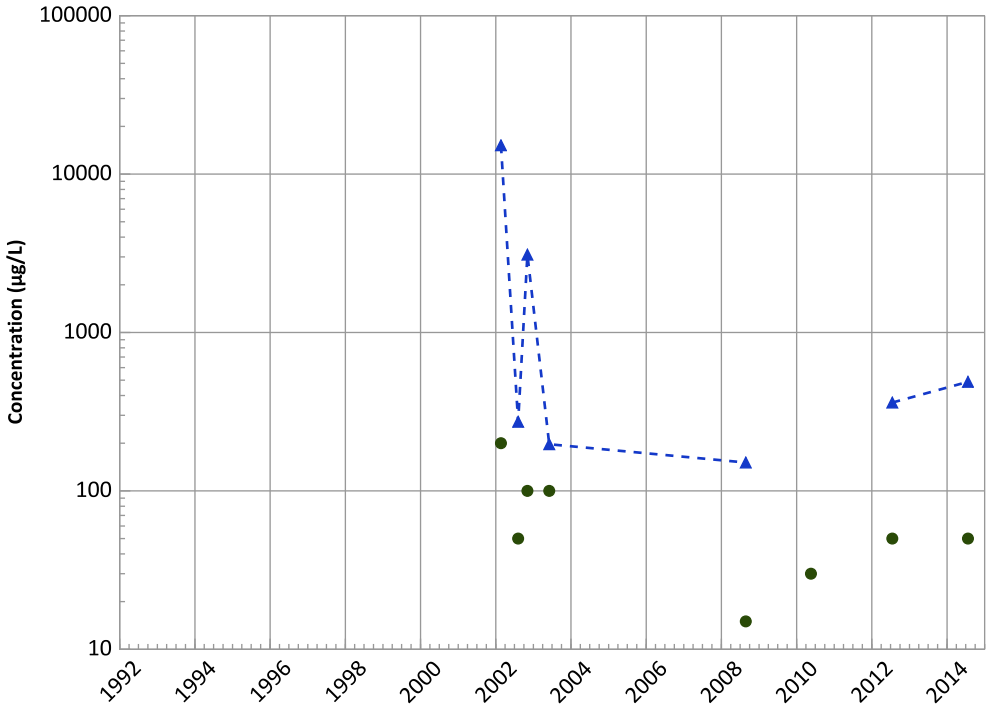
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

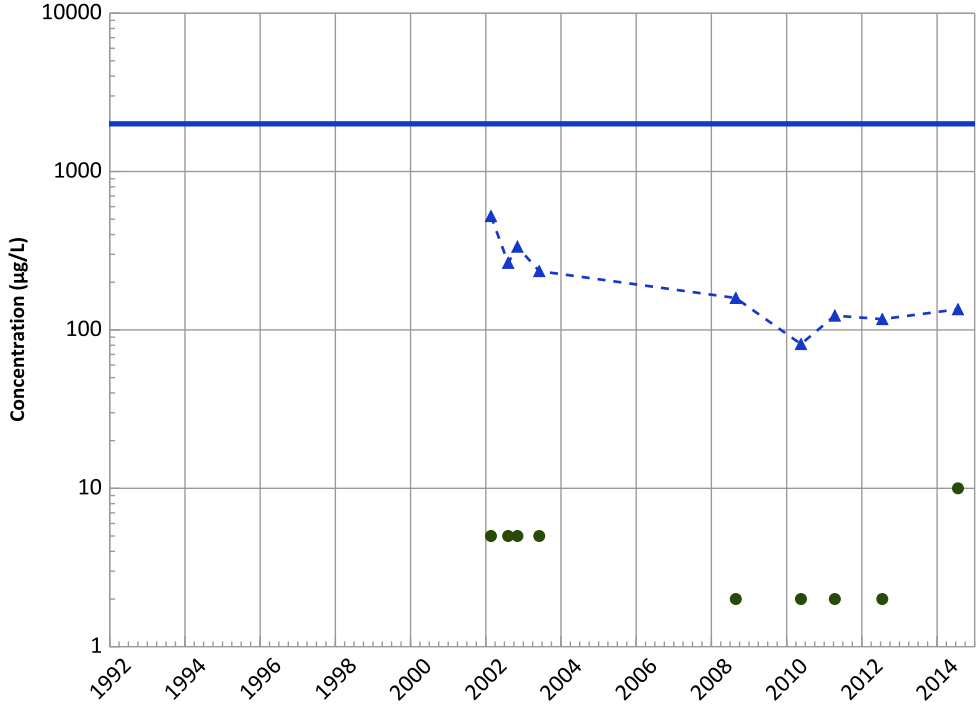


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

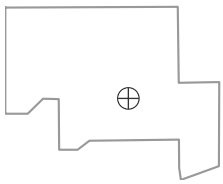
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

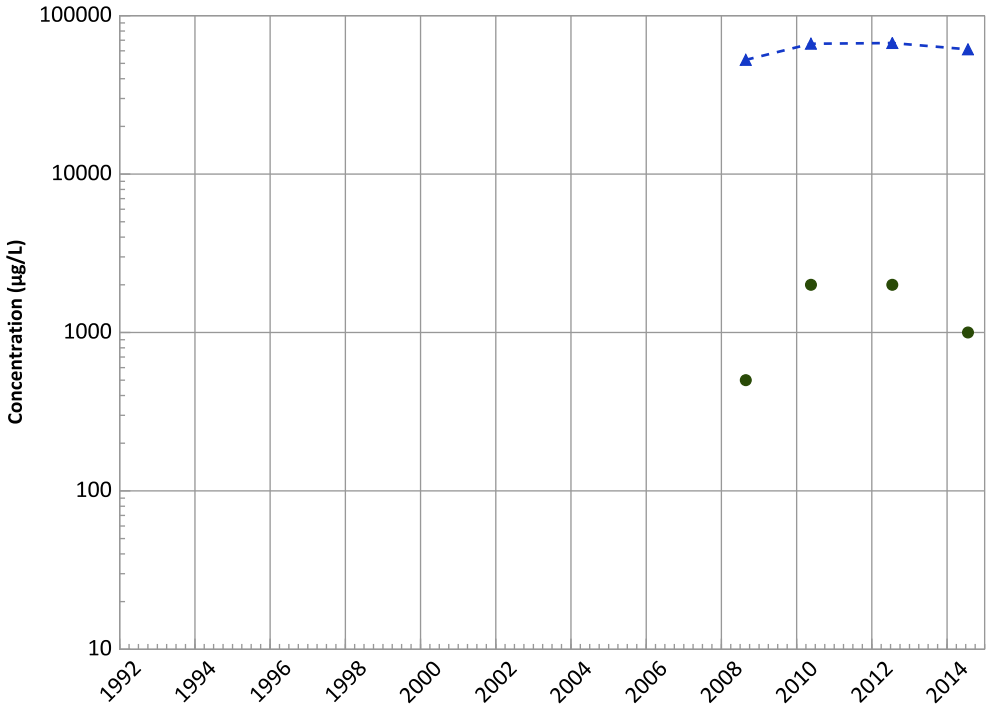
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

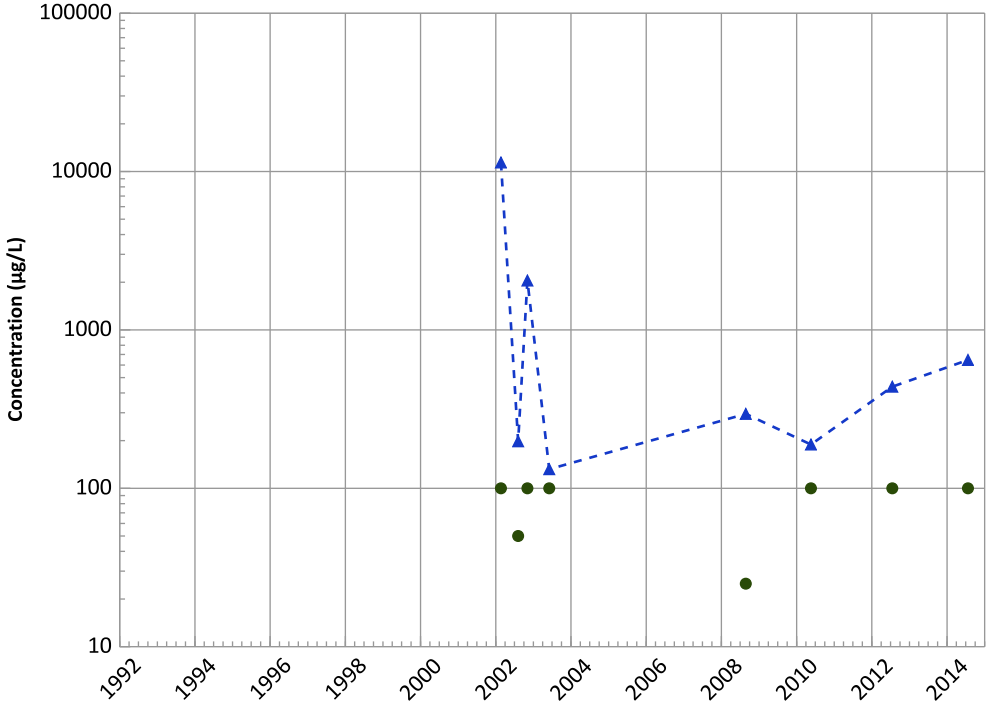


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

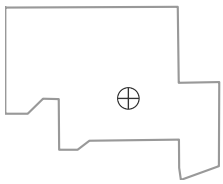
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

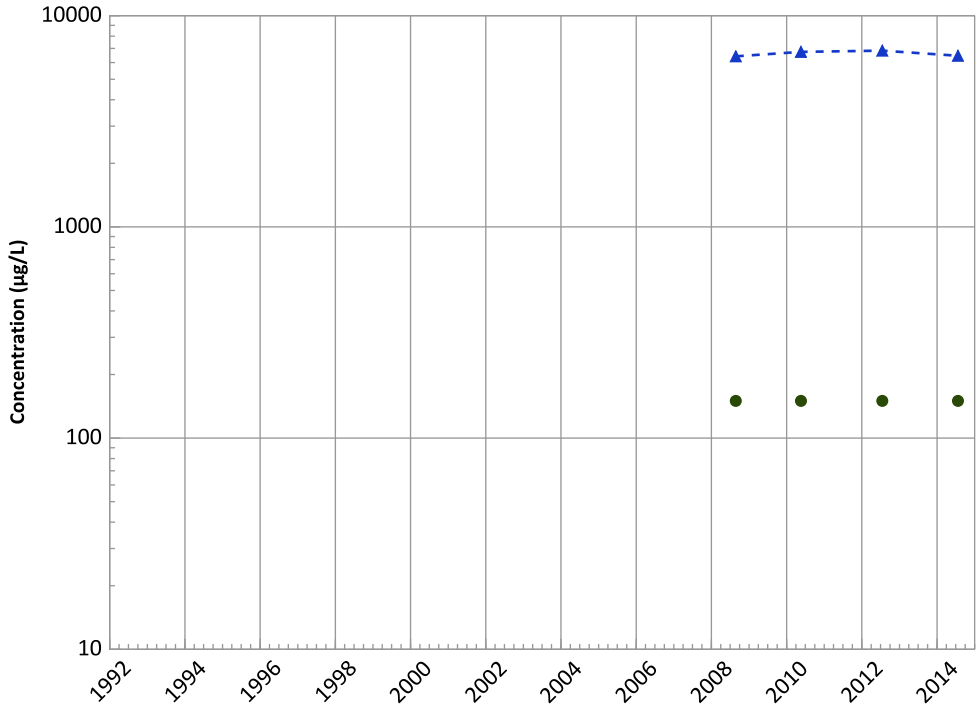
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

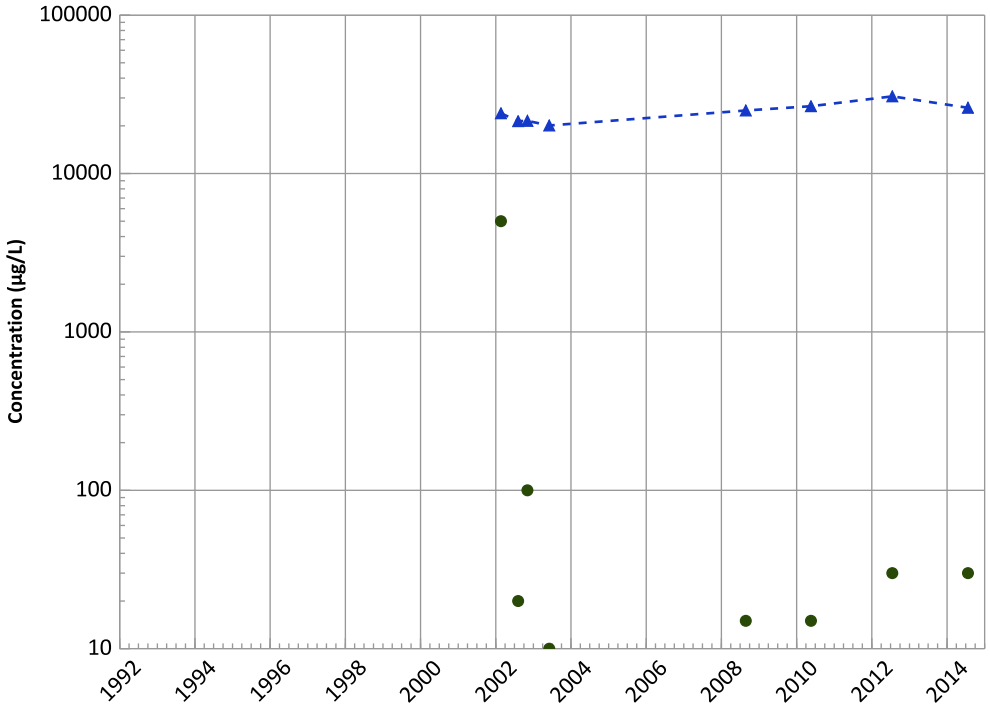


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

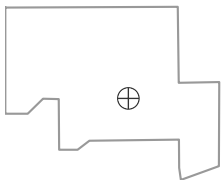
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

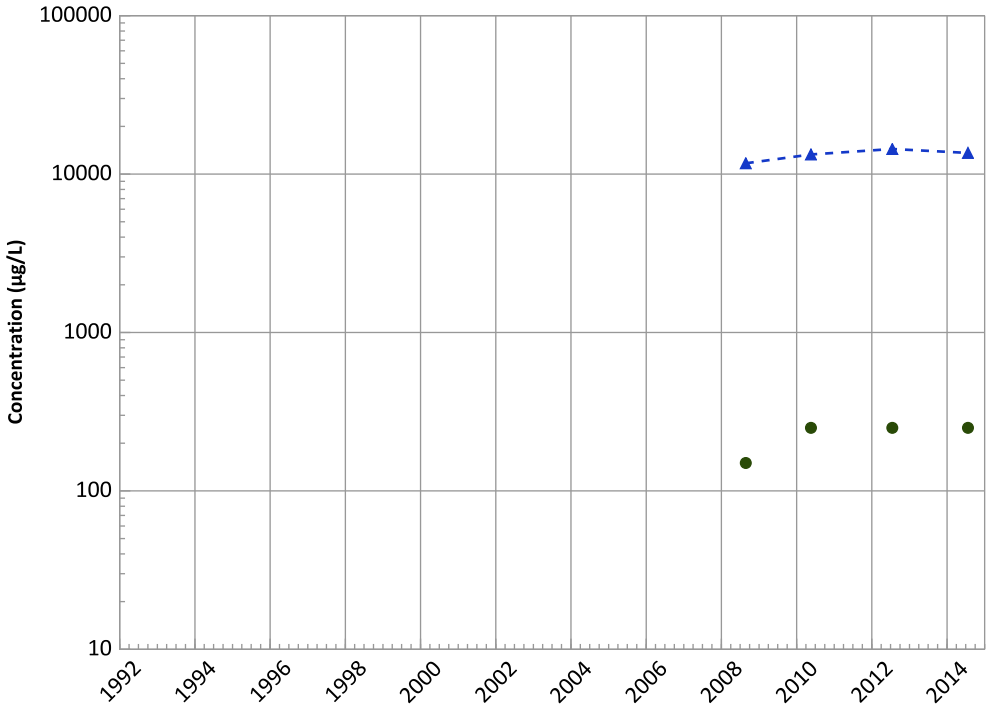
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1077A in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

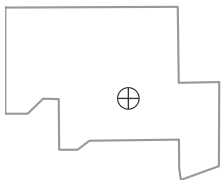
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

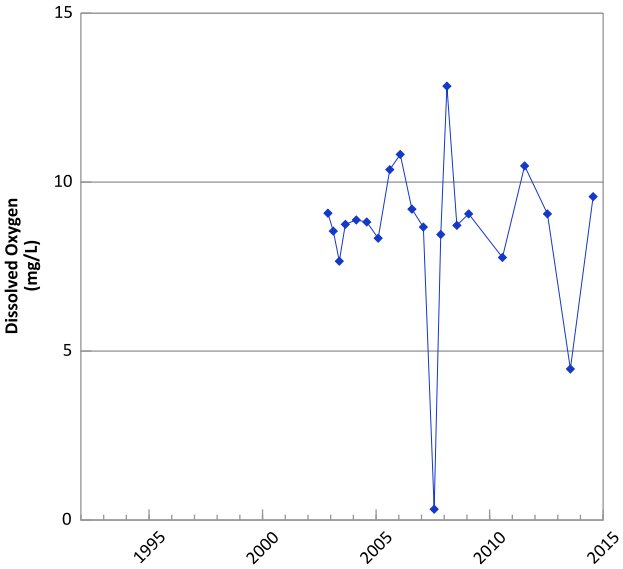
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/20/2002 to 07/23/2014
Analysis Date: 03/19/2015

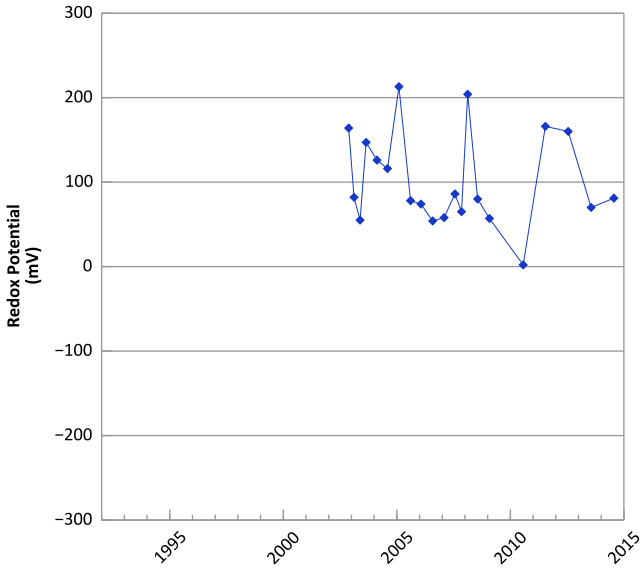
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

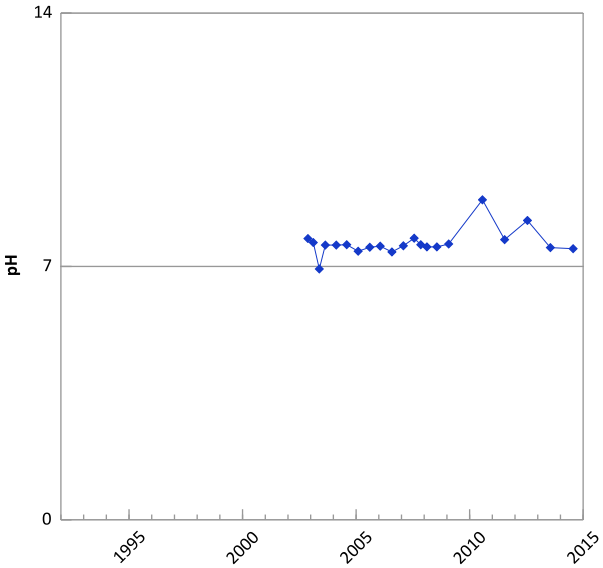
Well Location

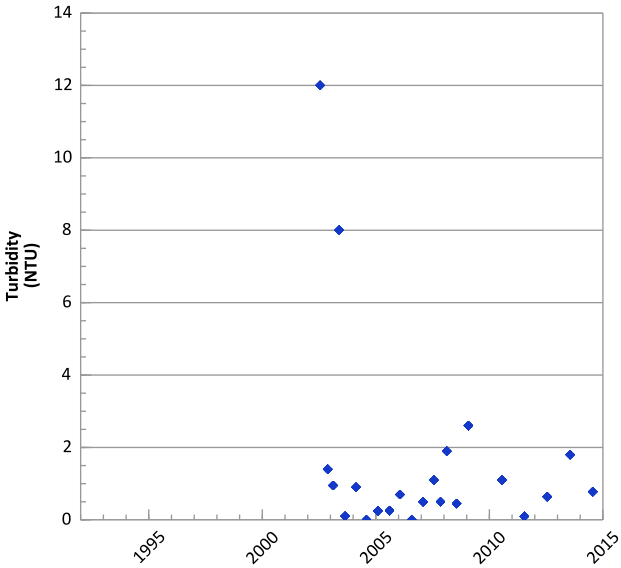


PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



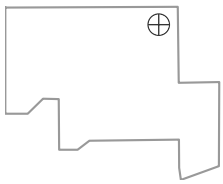






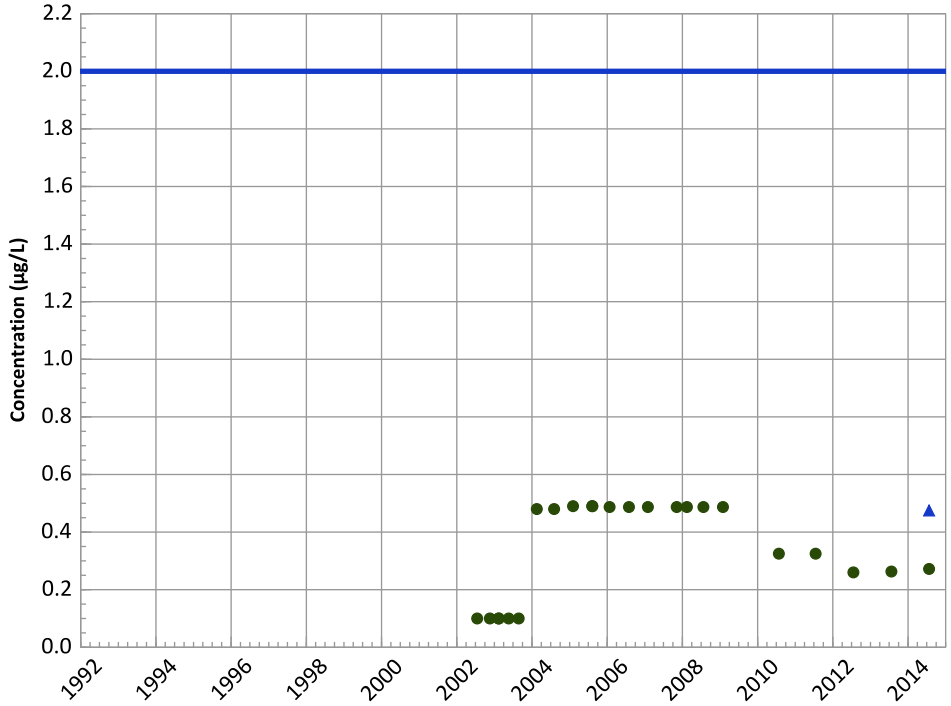
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

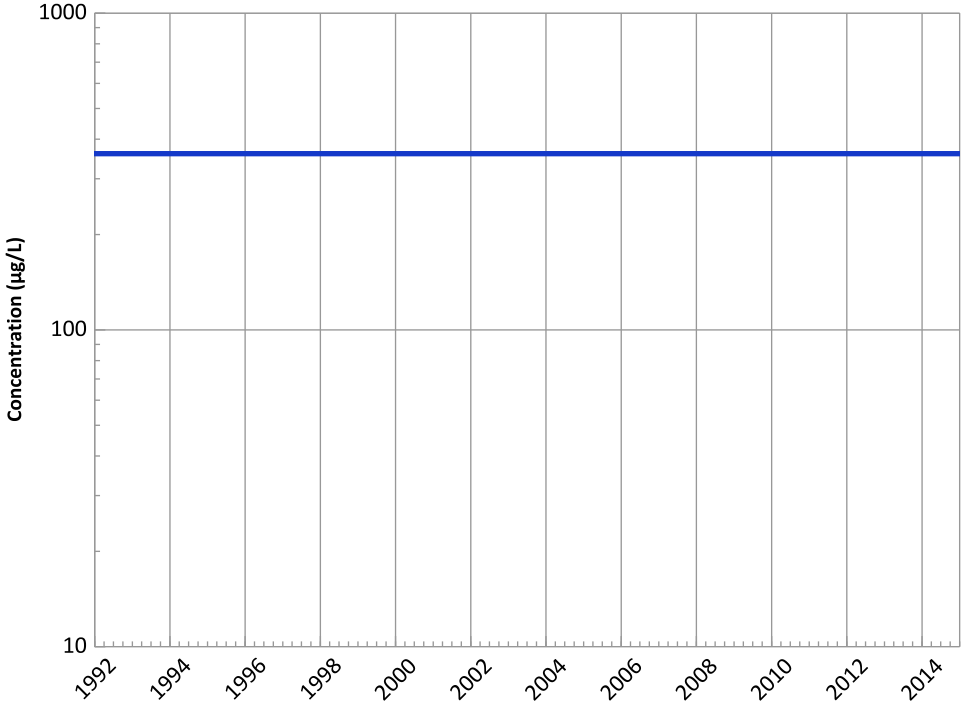


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

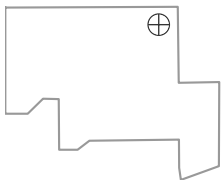
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

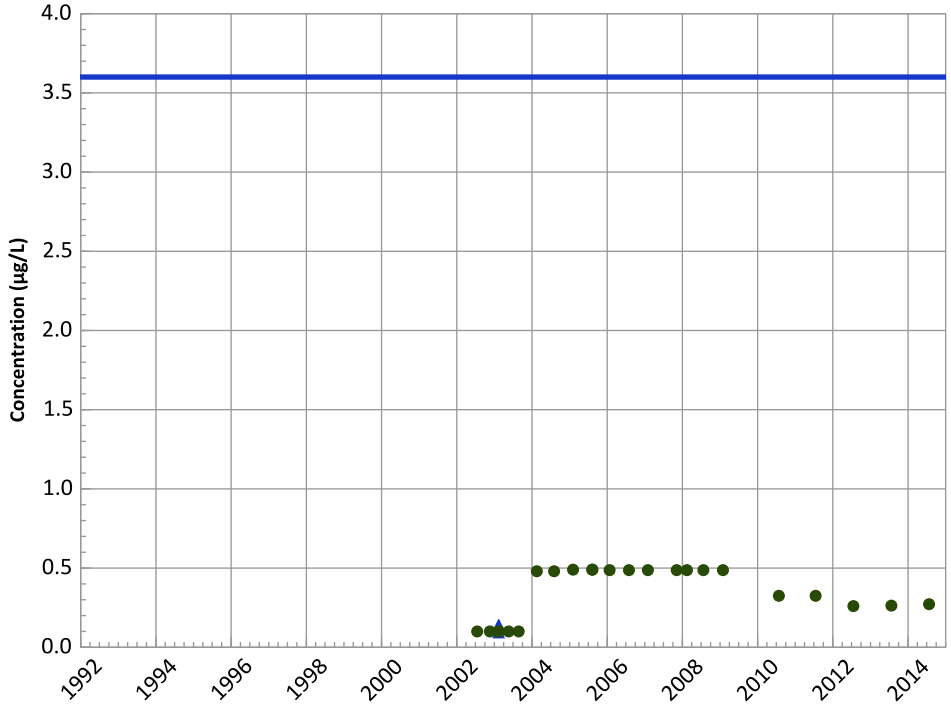
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

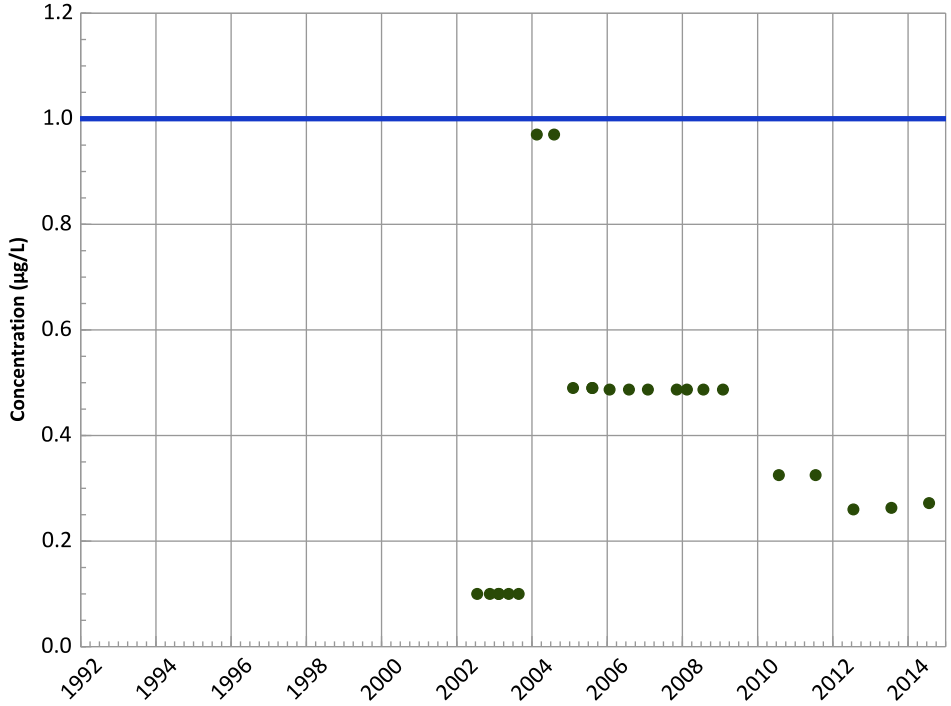


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

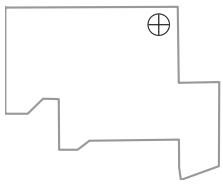
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

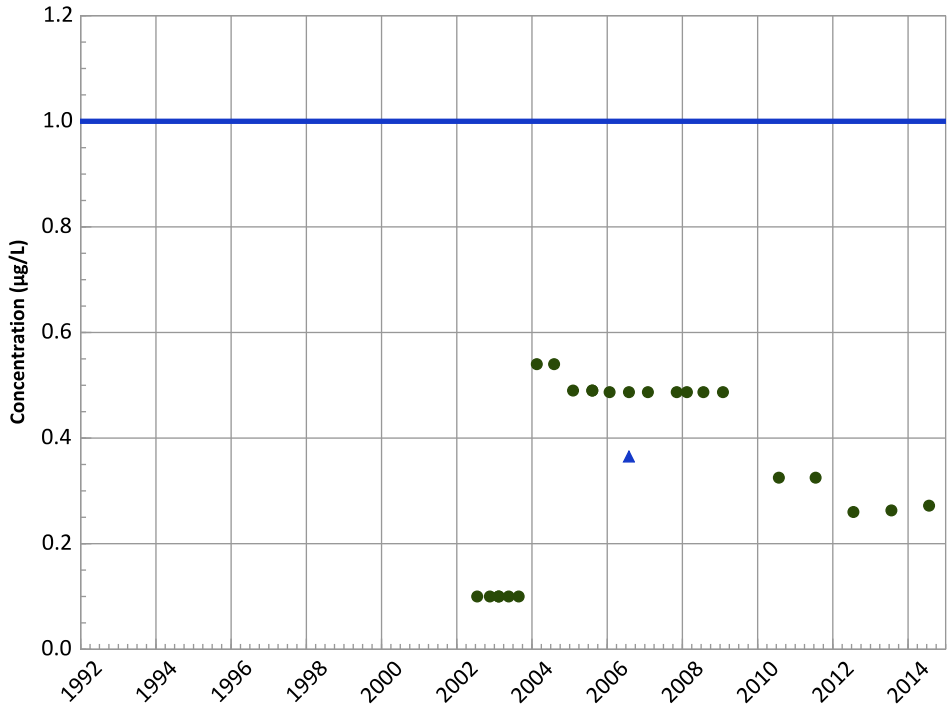
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

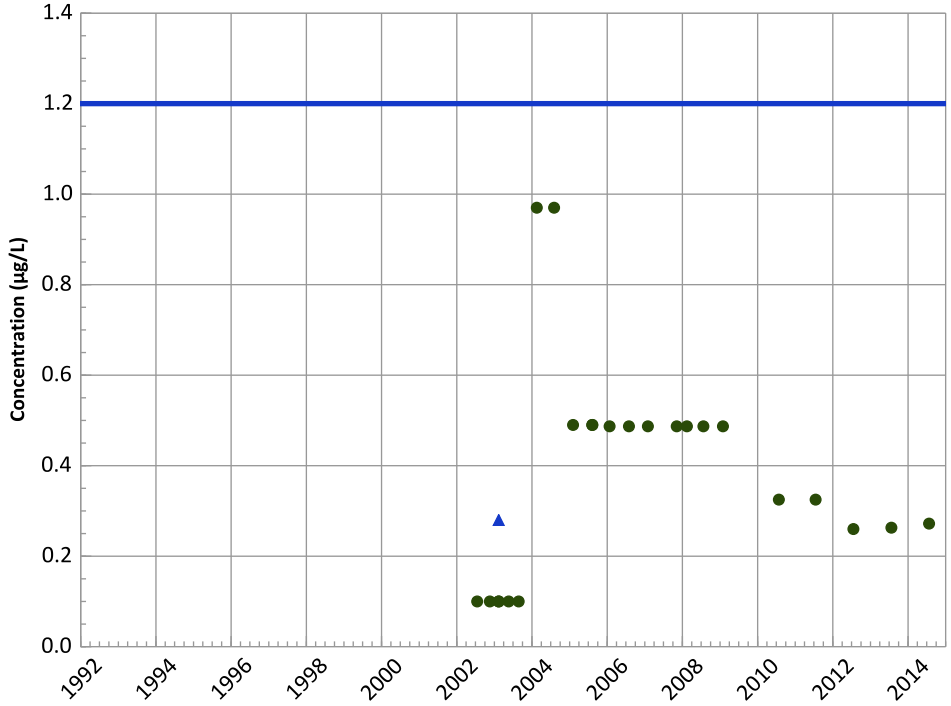


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

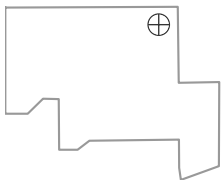
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

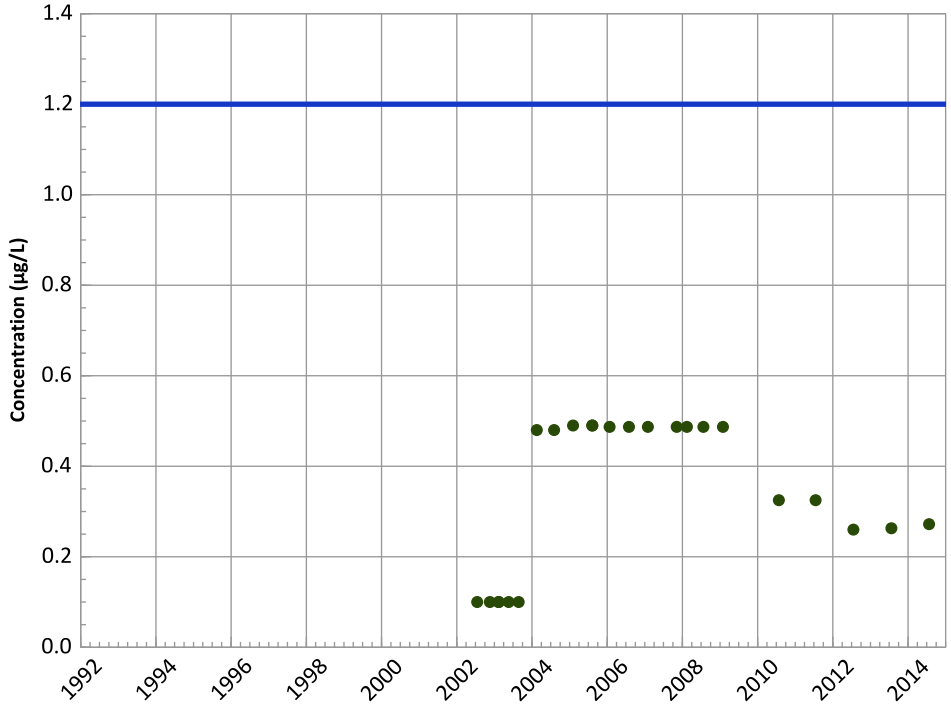
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

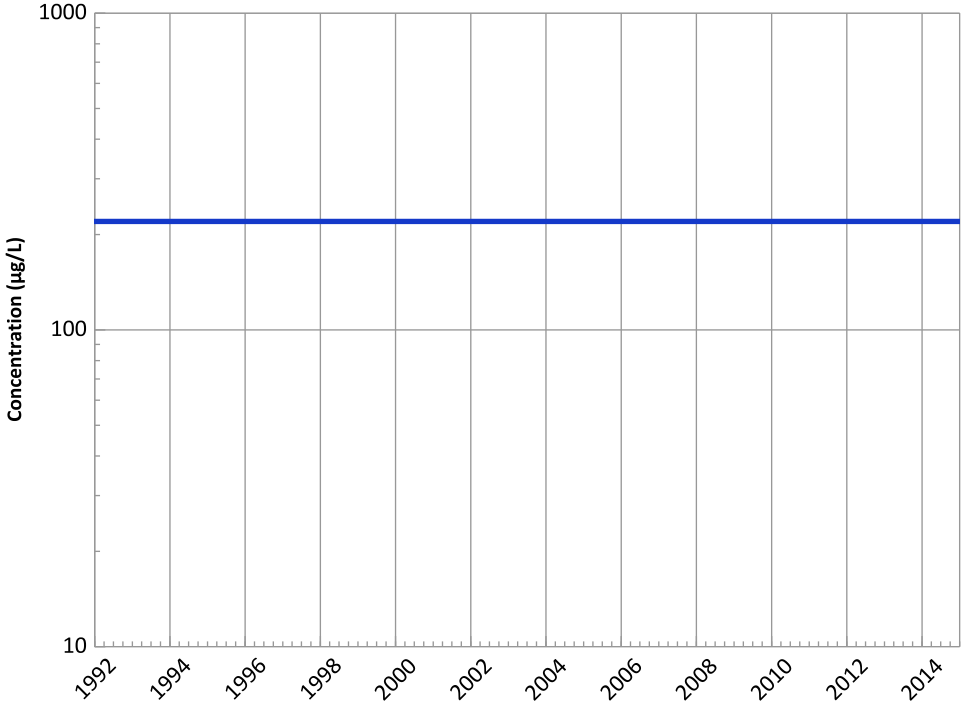


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

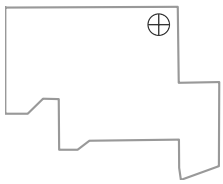
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

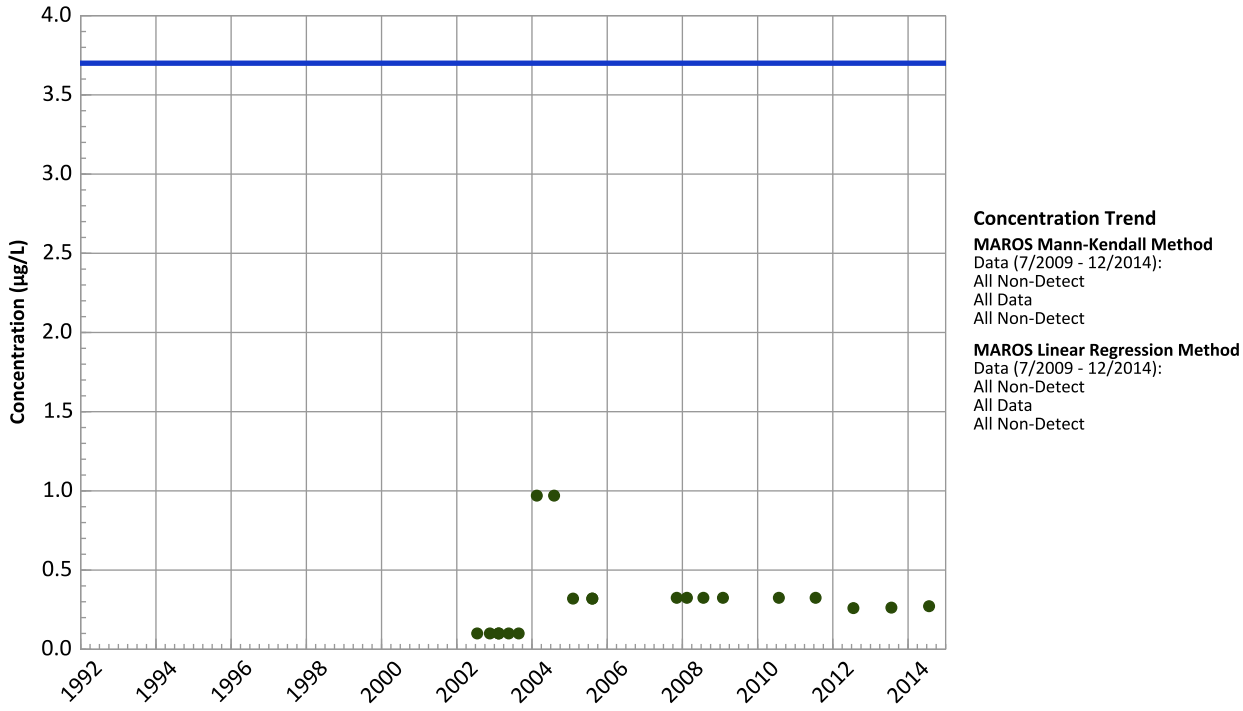
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

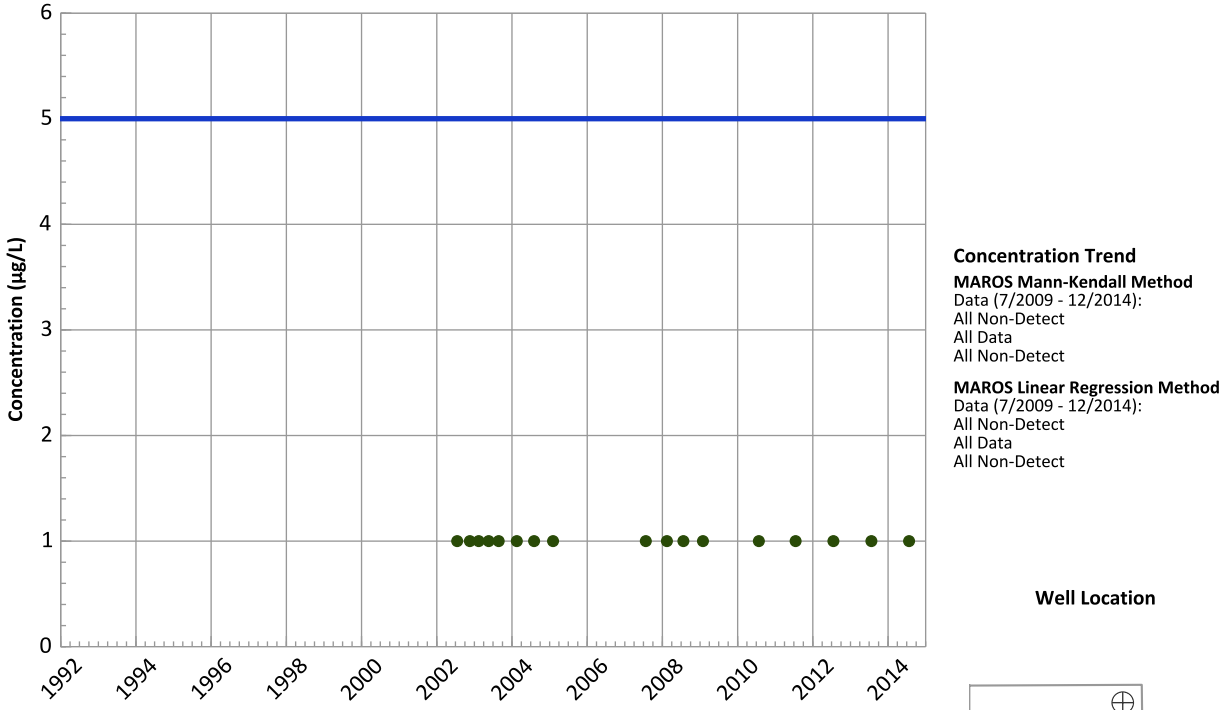


PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



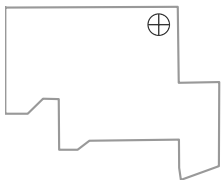
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

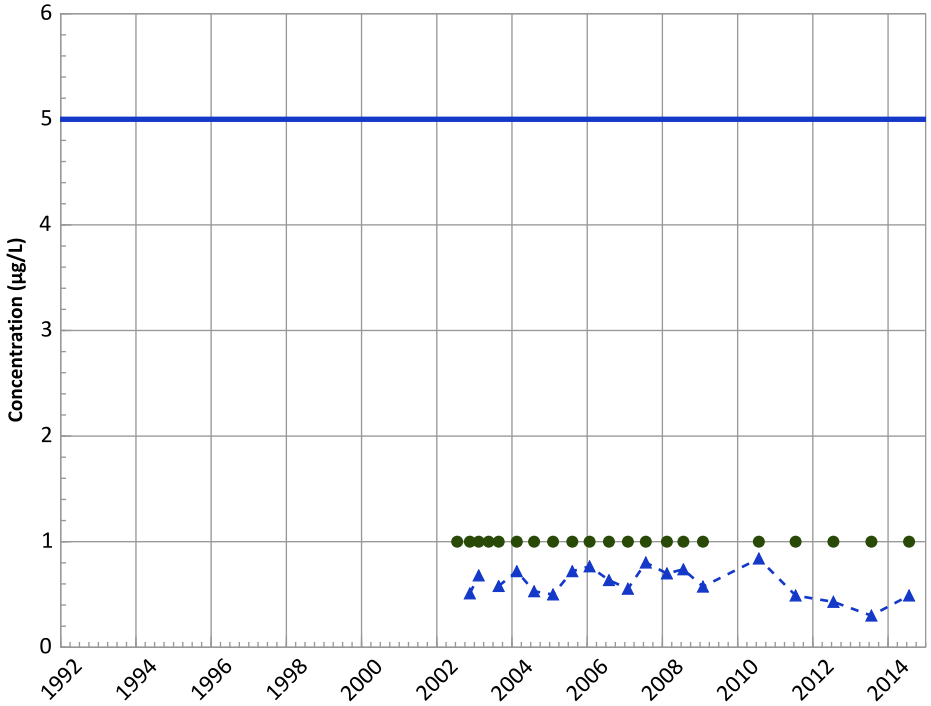
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

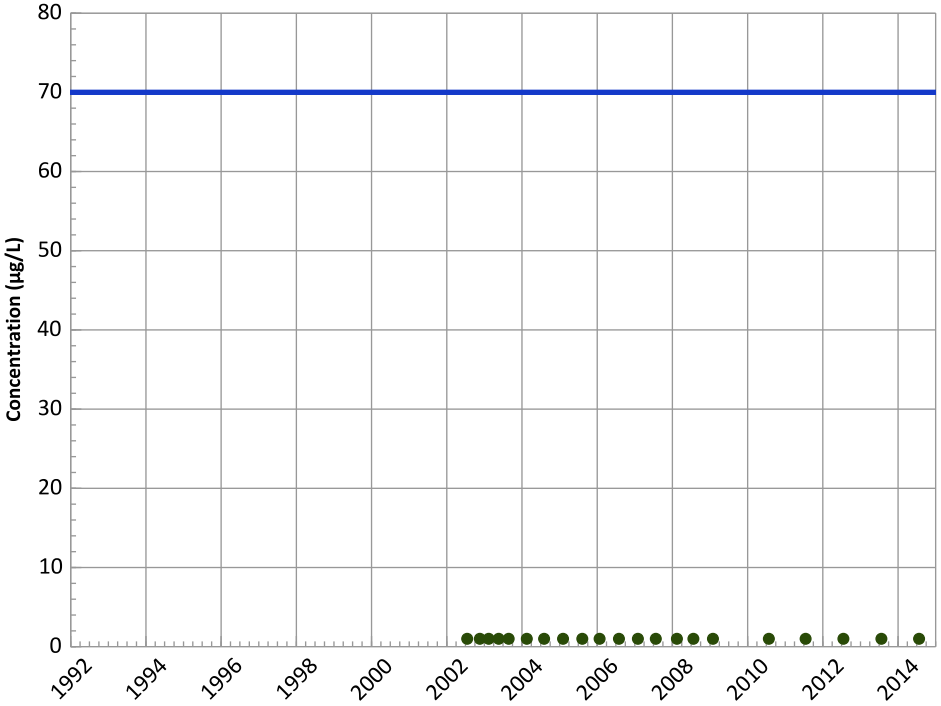


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

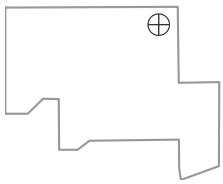
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

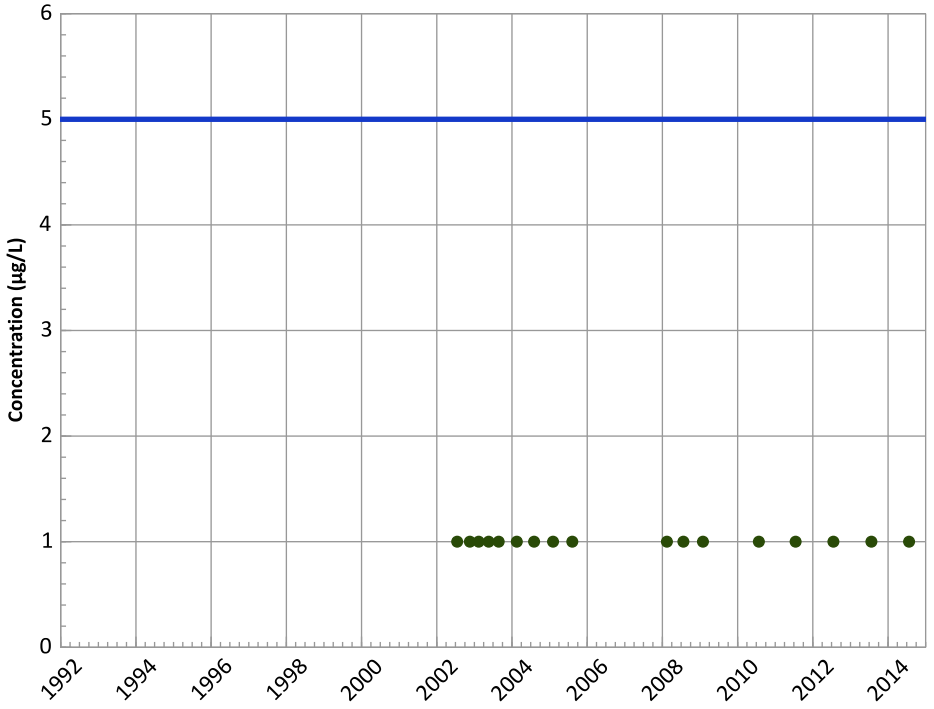
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

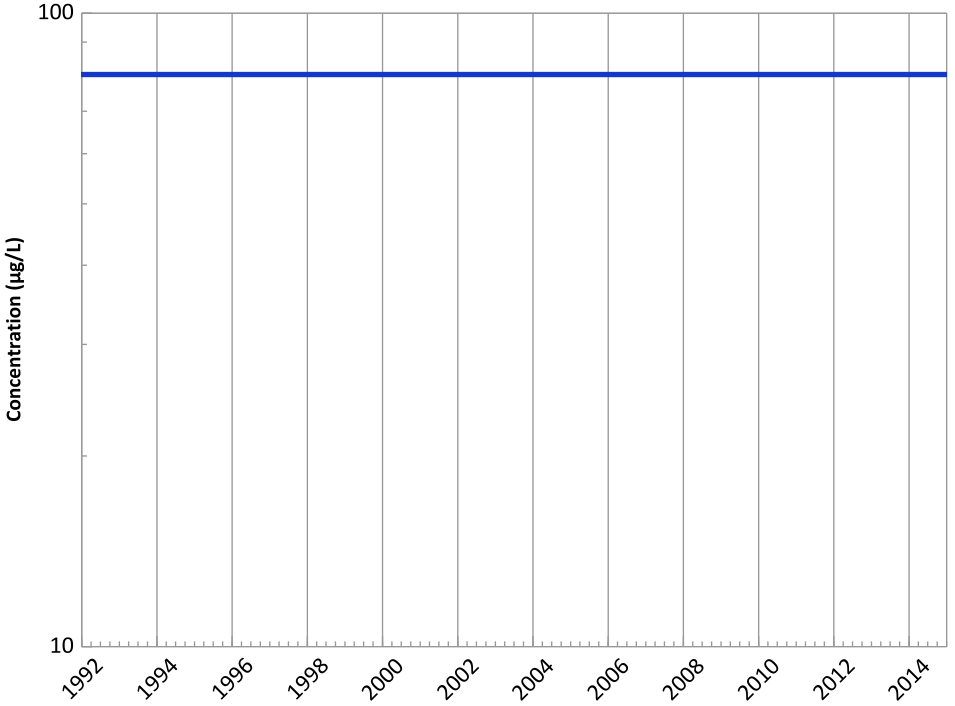


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

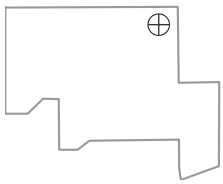
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

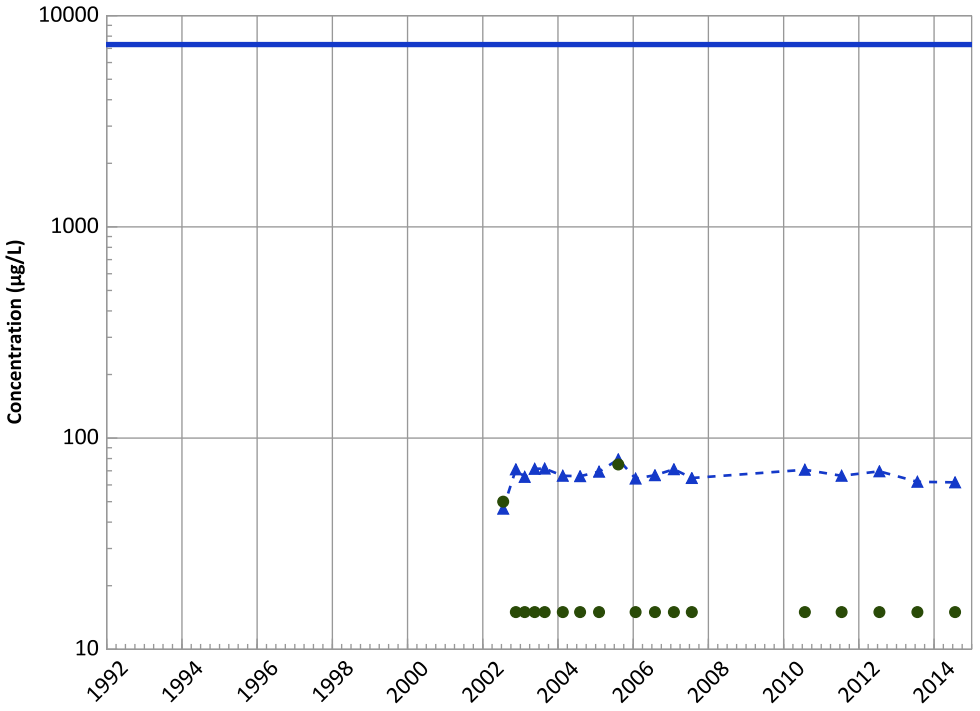
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

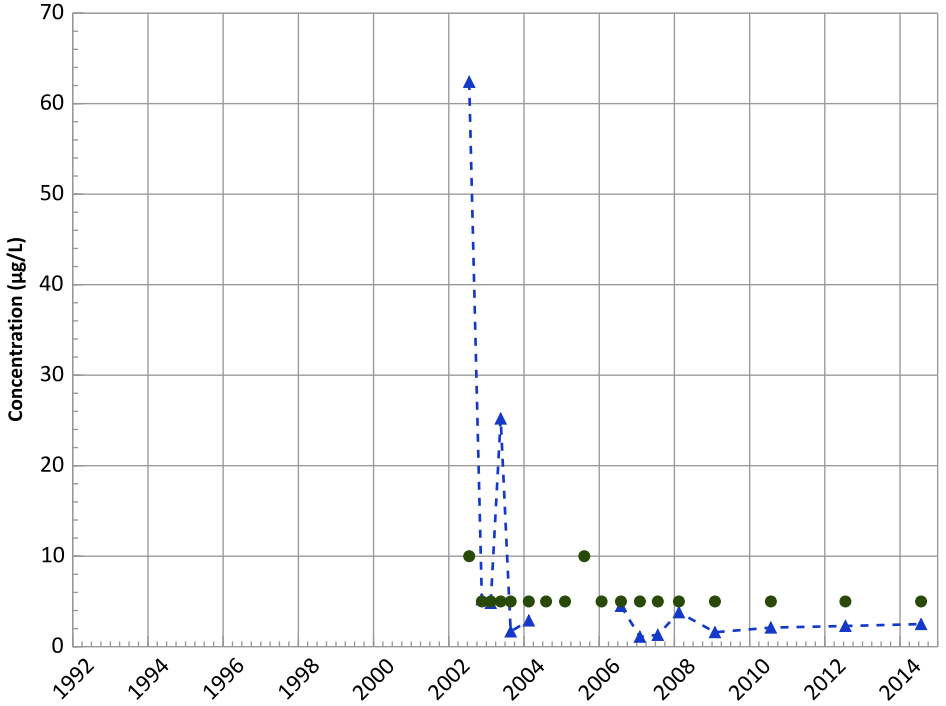


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Manganese Trend



Concentration Trend

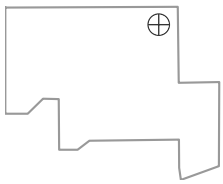
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

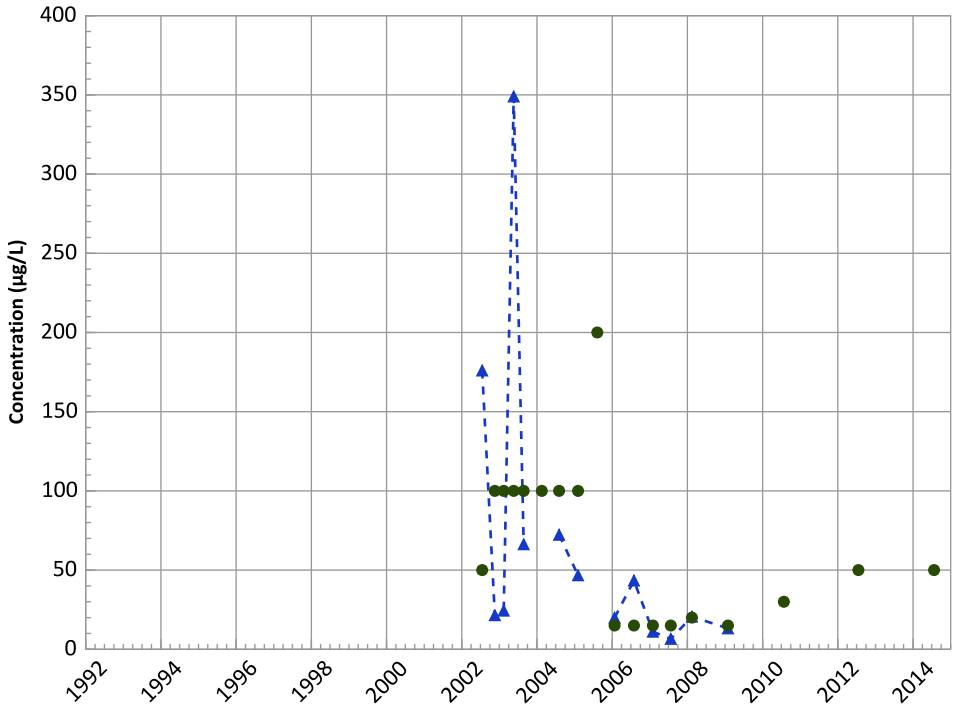
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

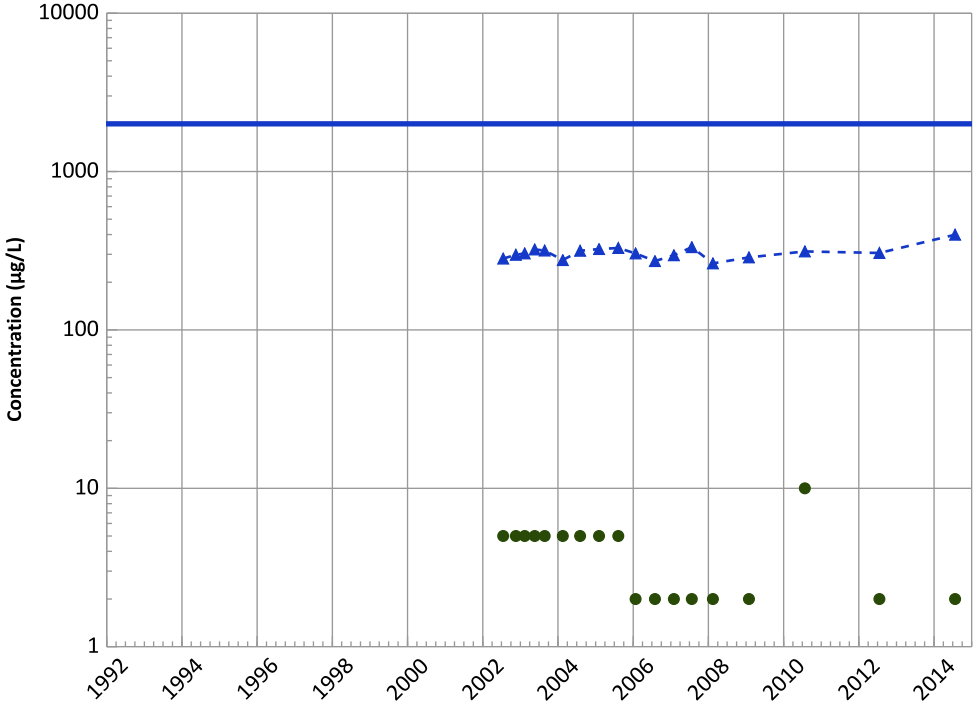


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

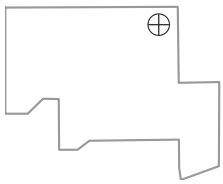
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

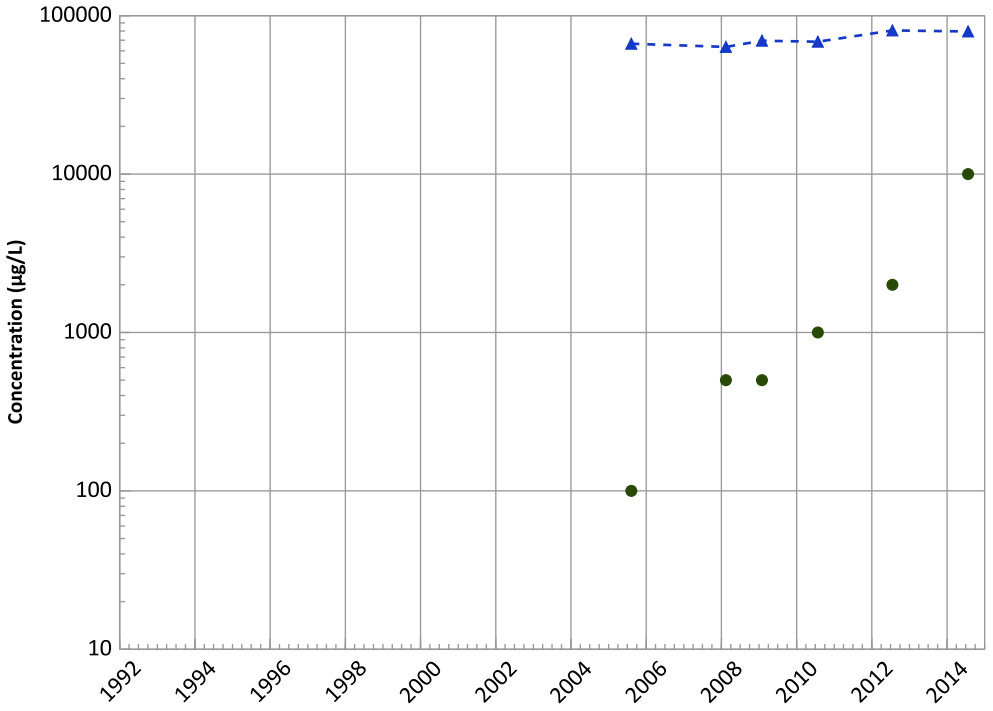
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

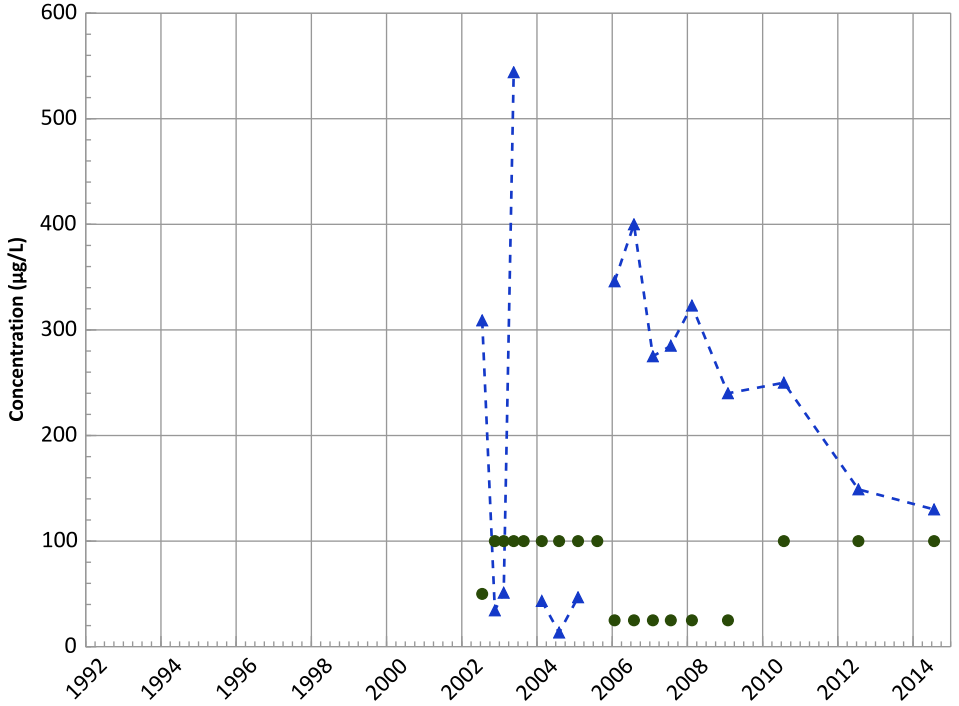


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

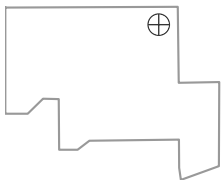
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

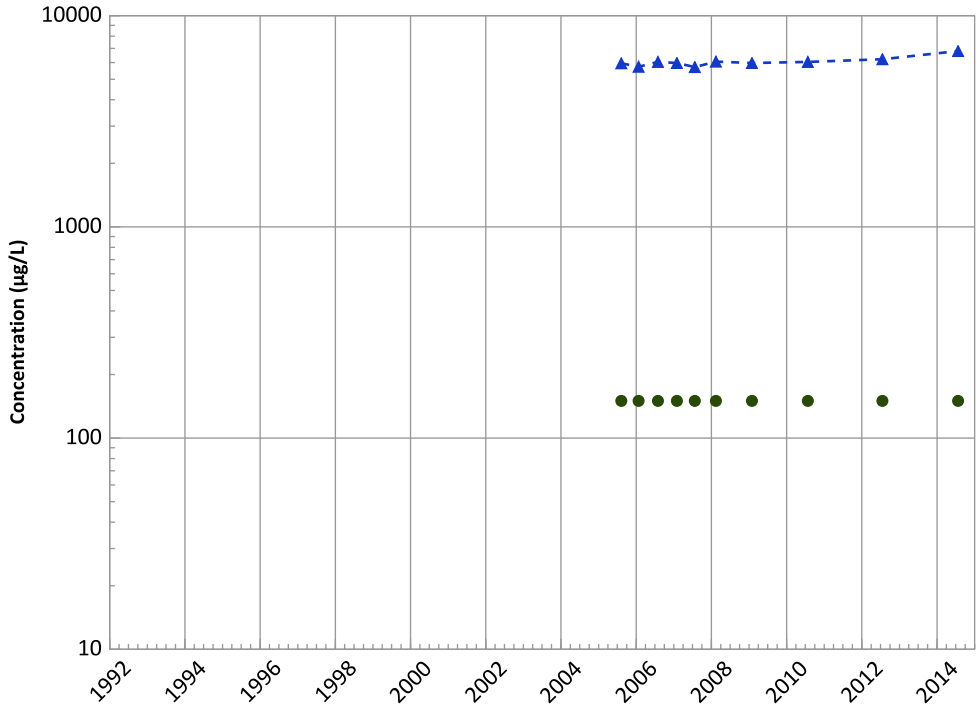
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

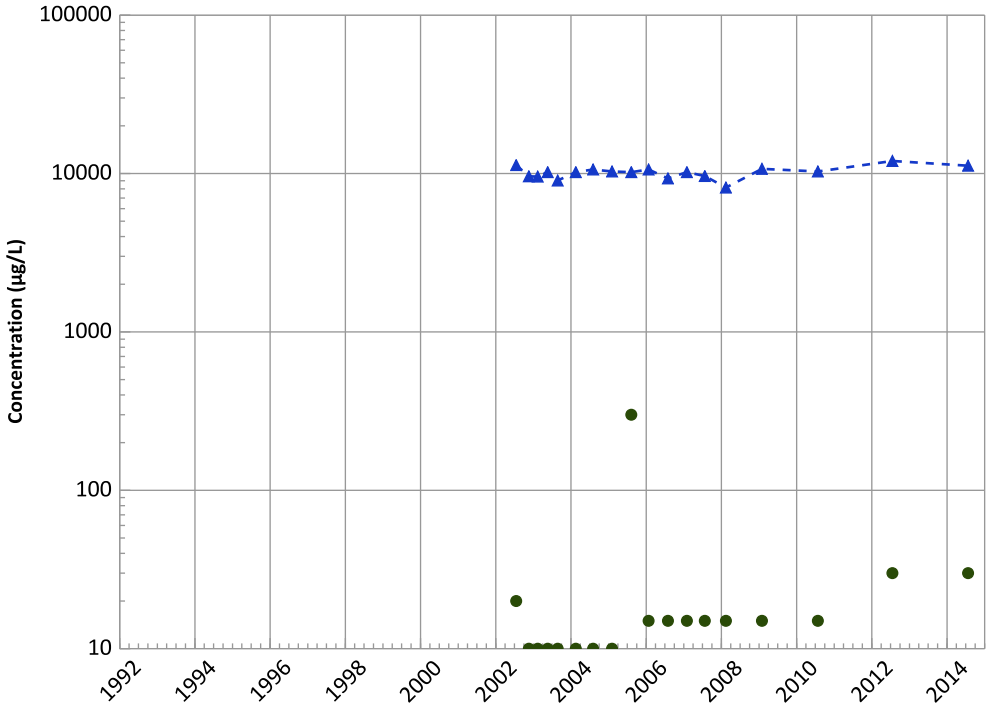


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

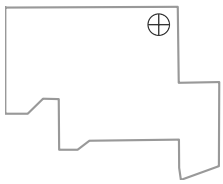
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

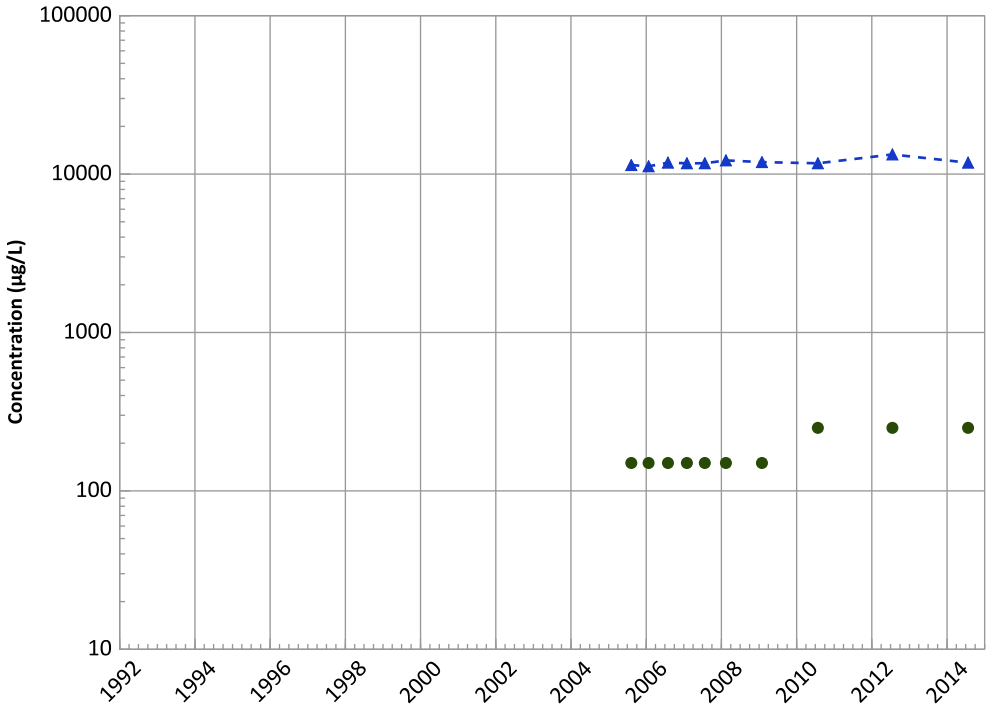
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1081 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

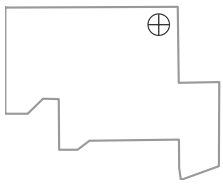
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

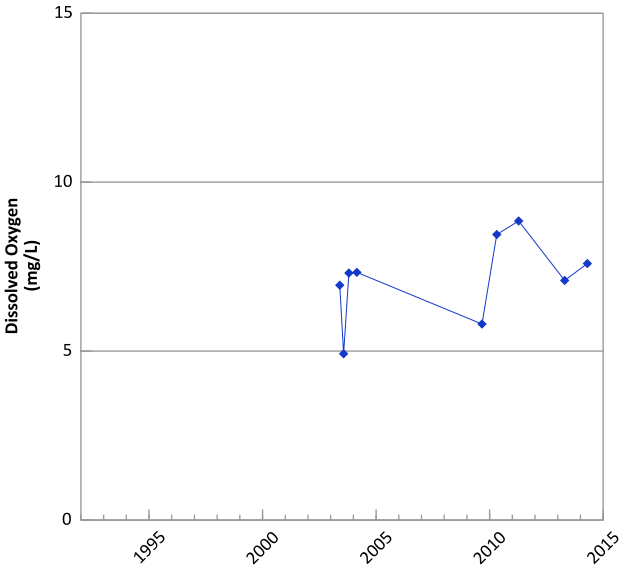
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/18/2002 to 07/24/2014
Analysis Date: 03/19/2015

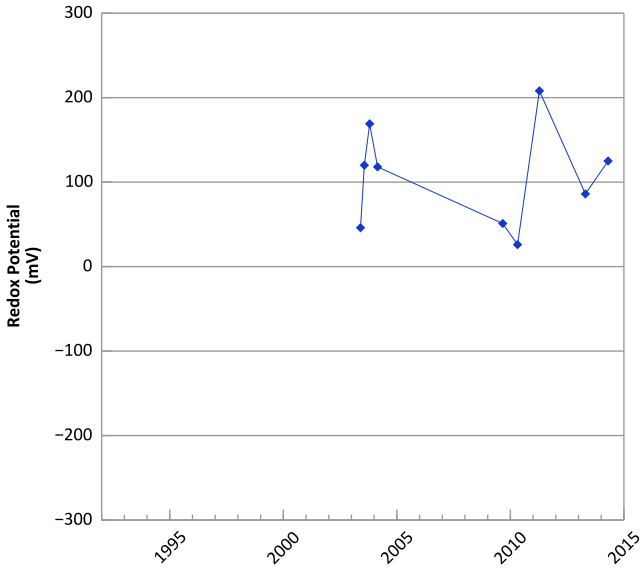
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

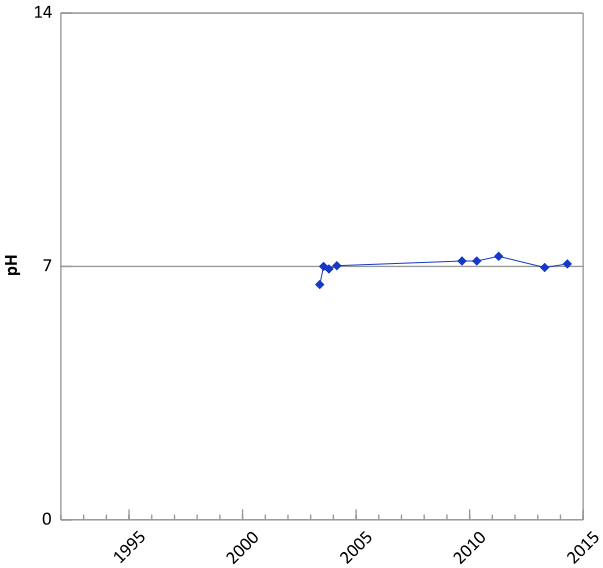
Well Location

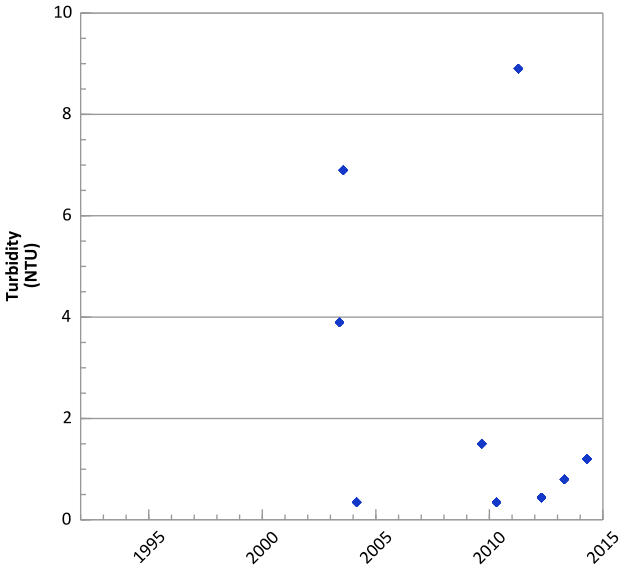


PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



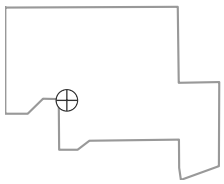






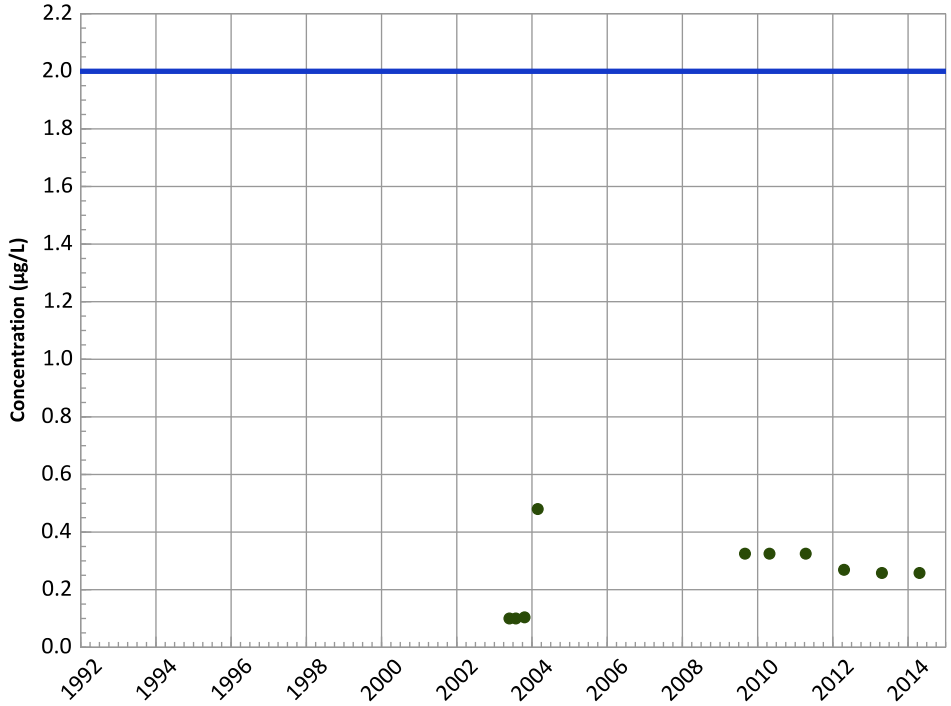
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

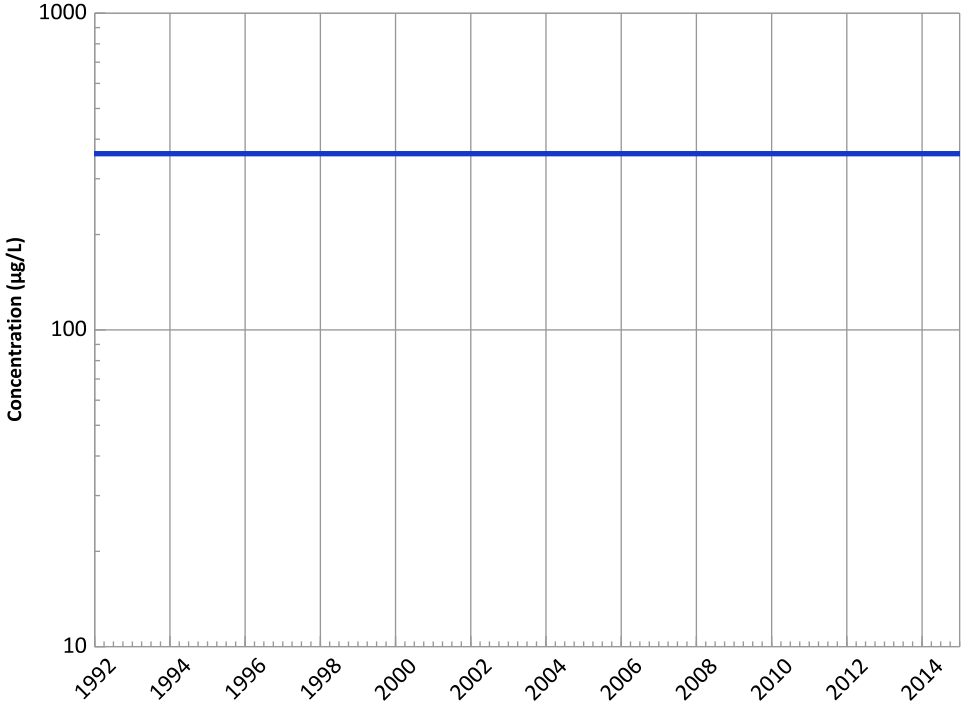


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

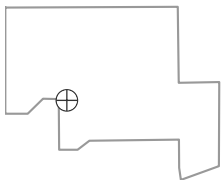
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

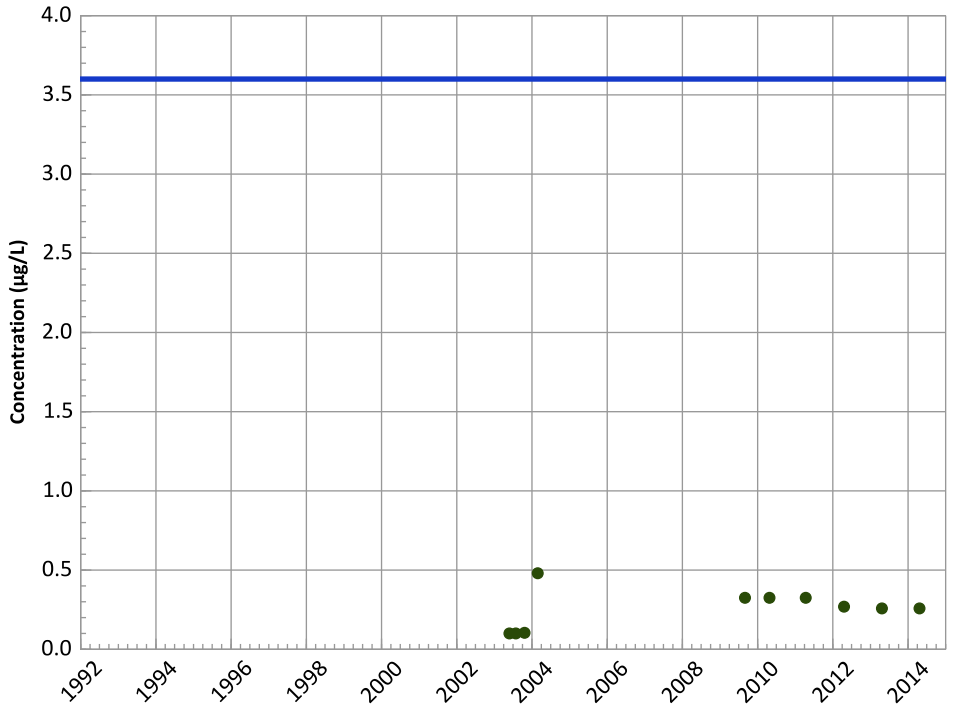
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

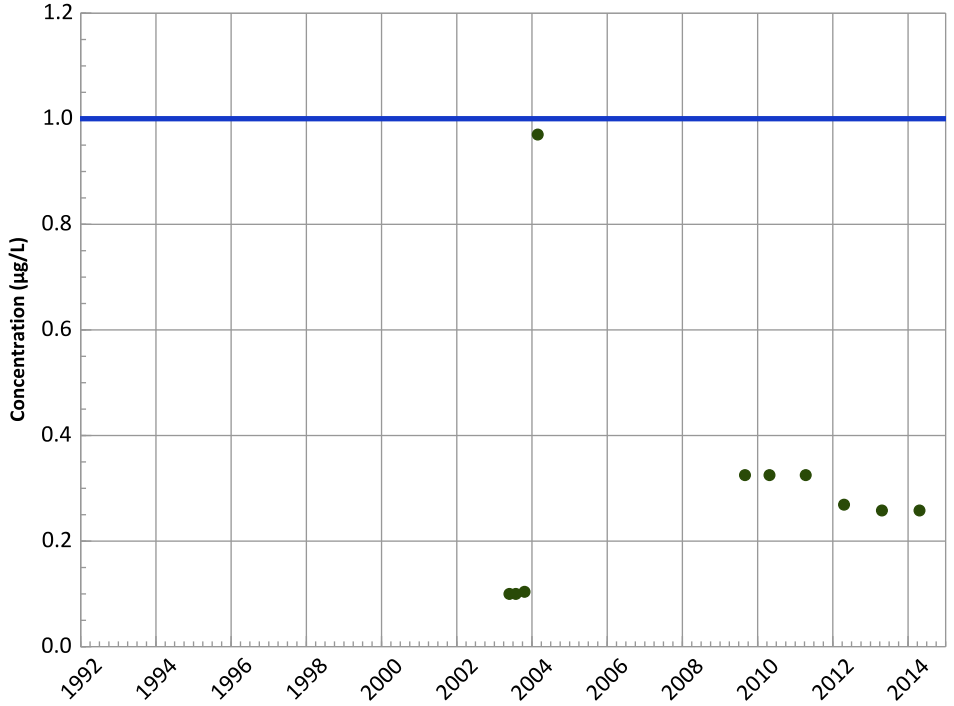


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

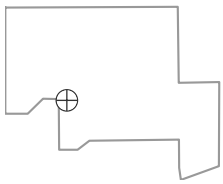
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

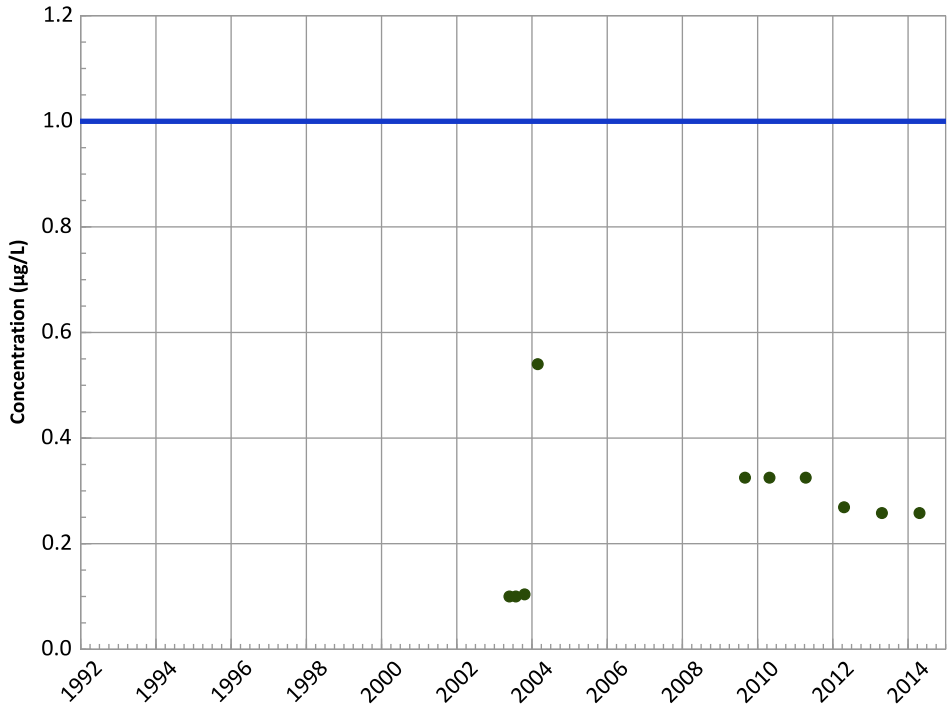
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

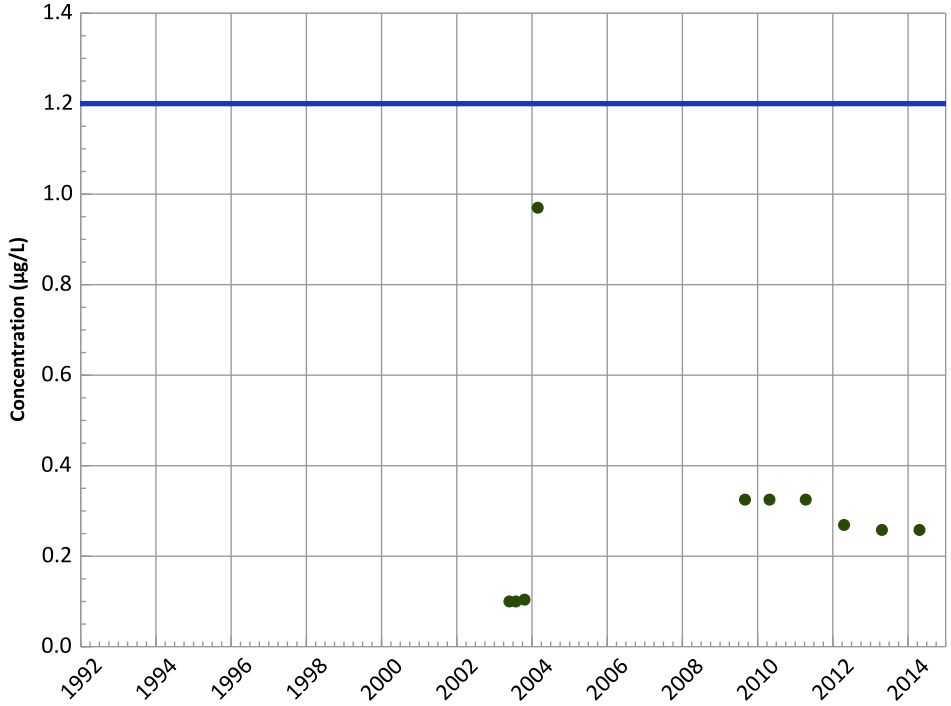


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

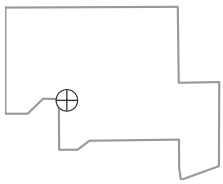
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

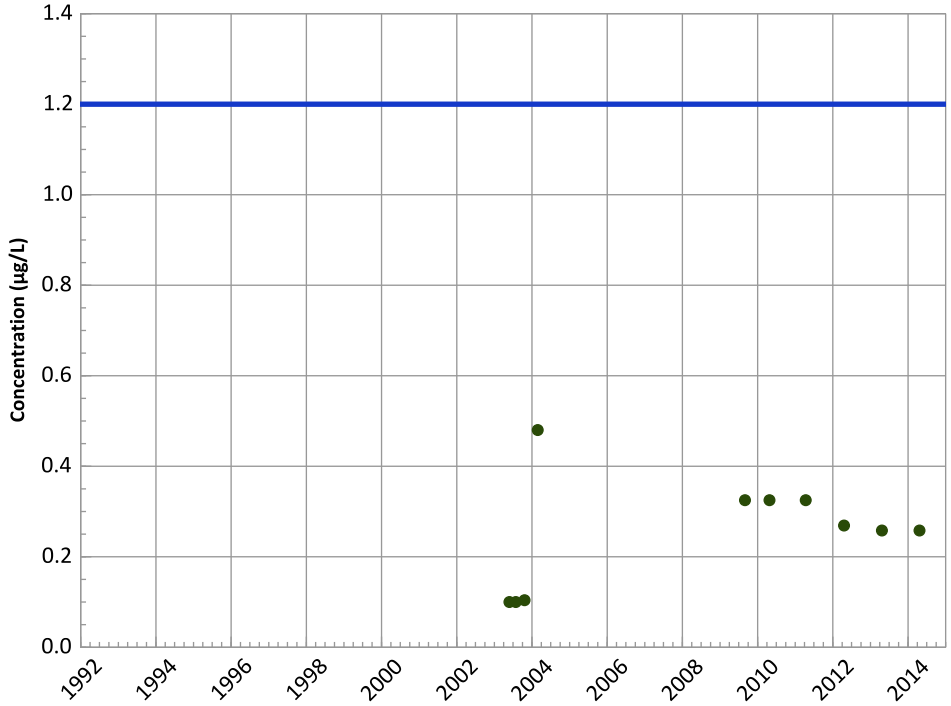
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

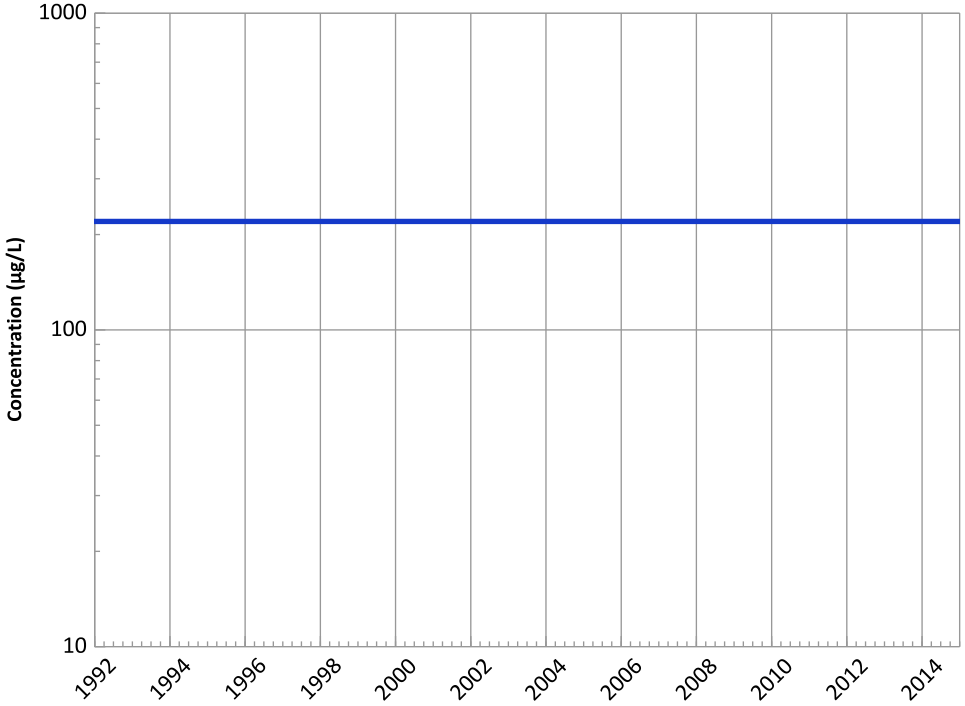


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

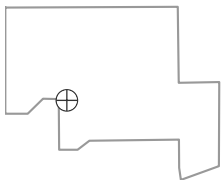
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

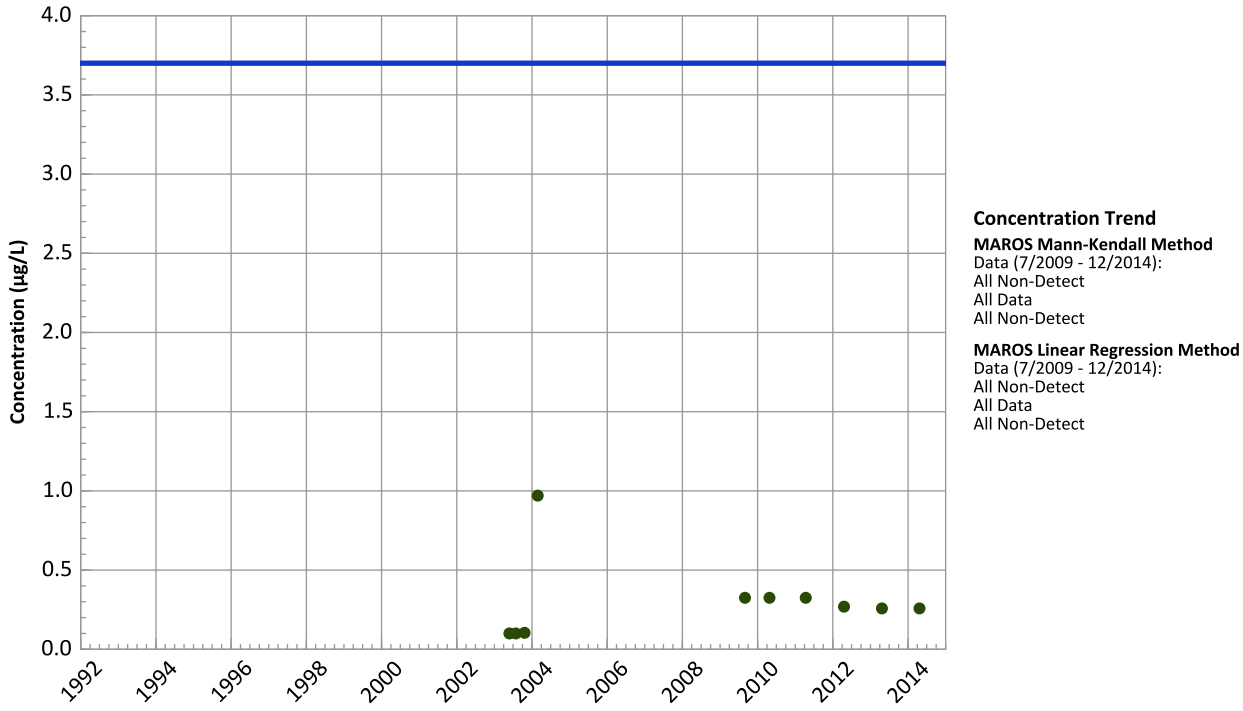
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

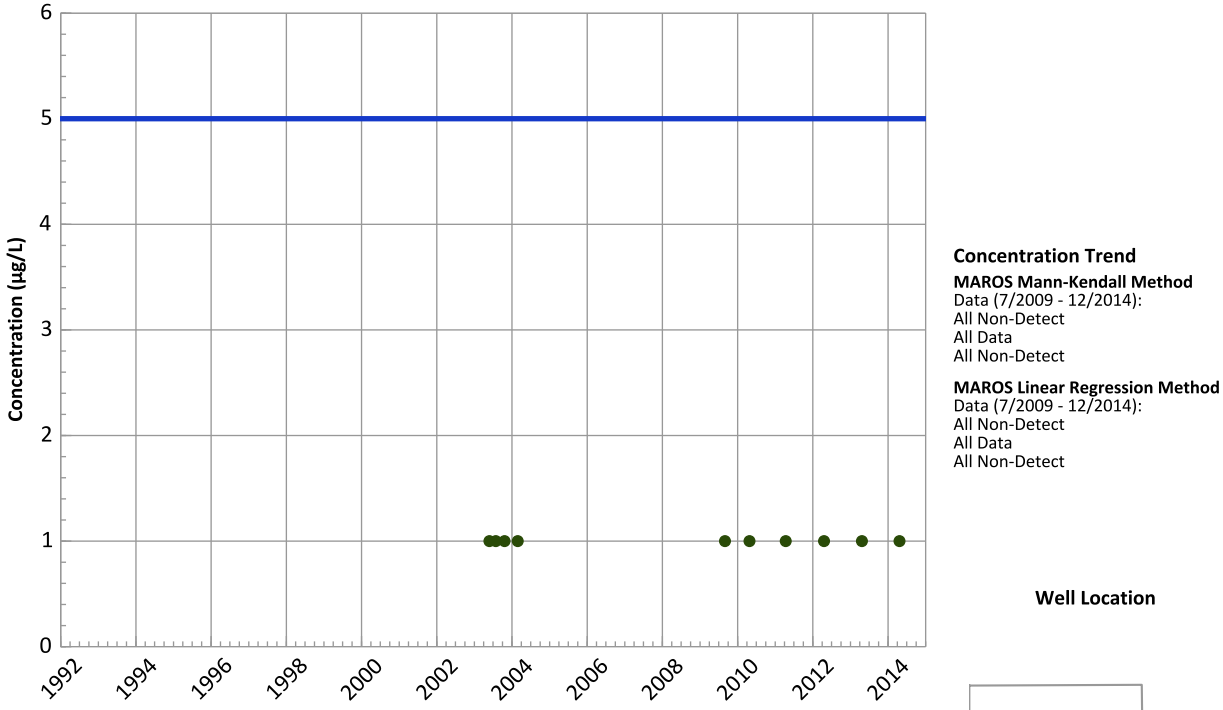


PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



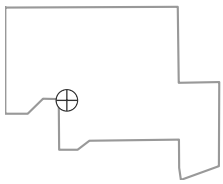
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

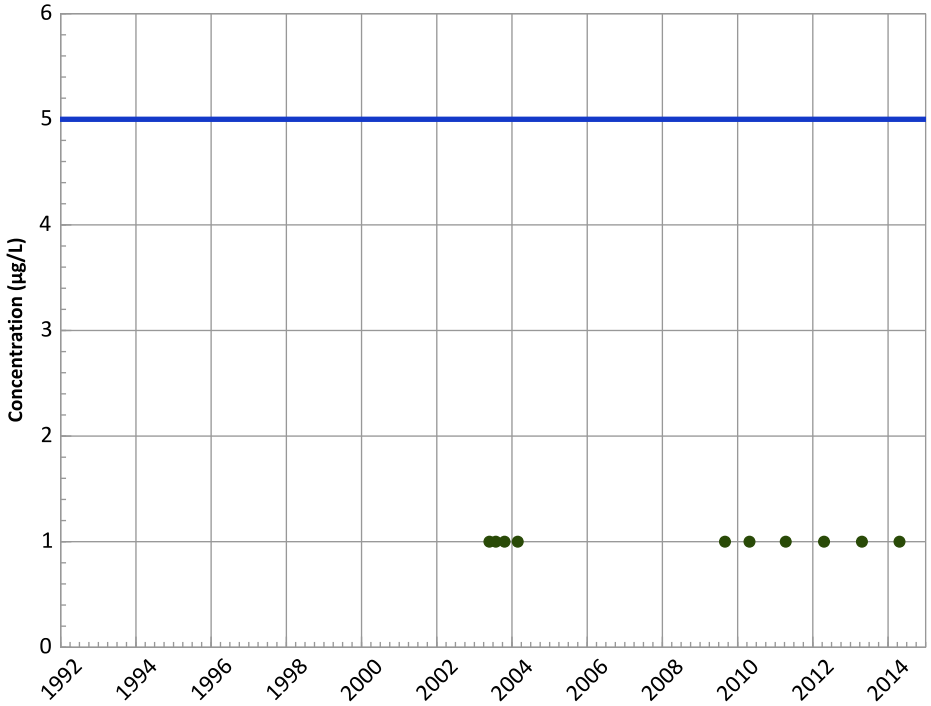
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

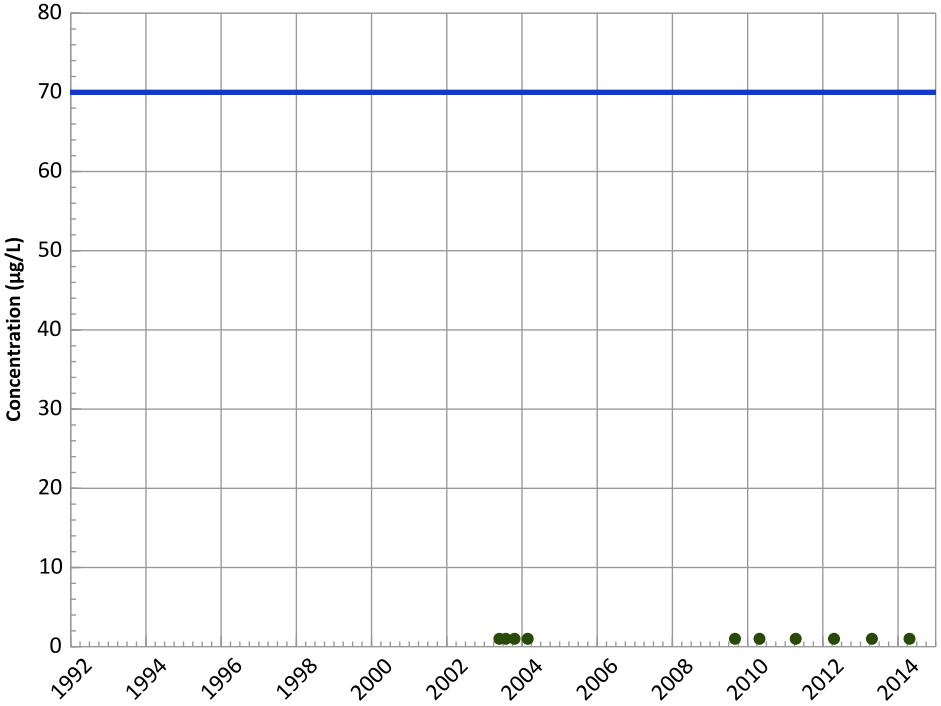


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

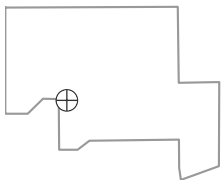
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

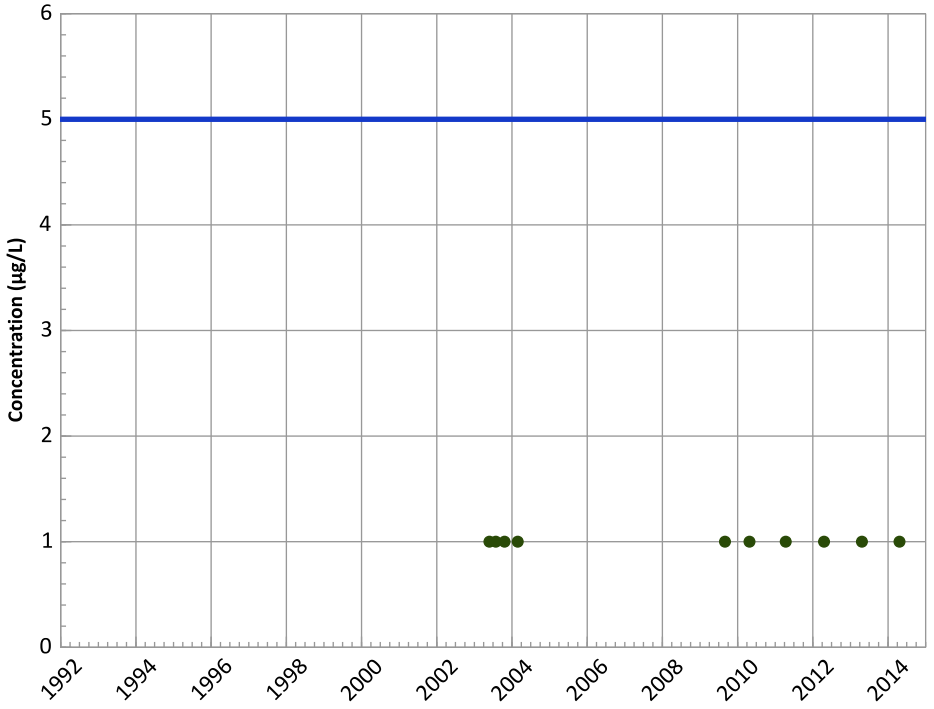
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

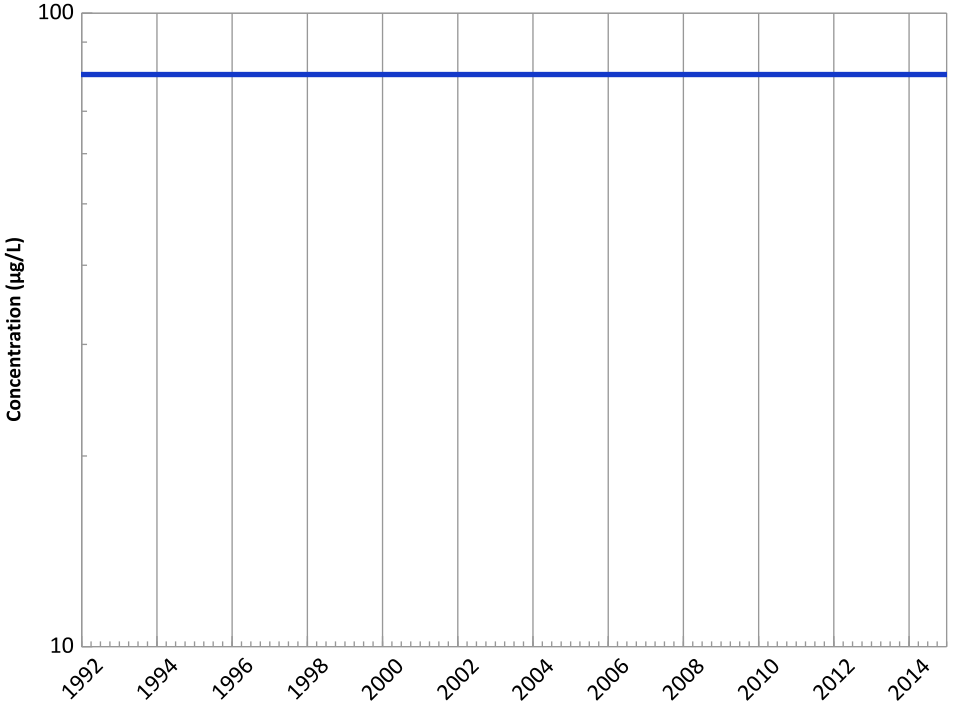


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

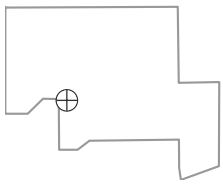
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

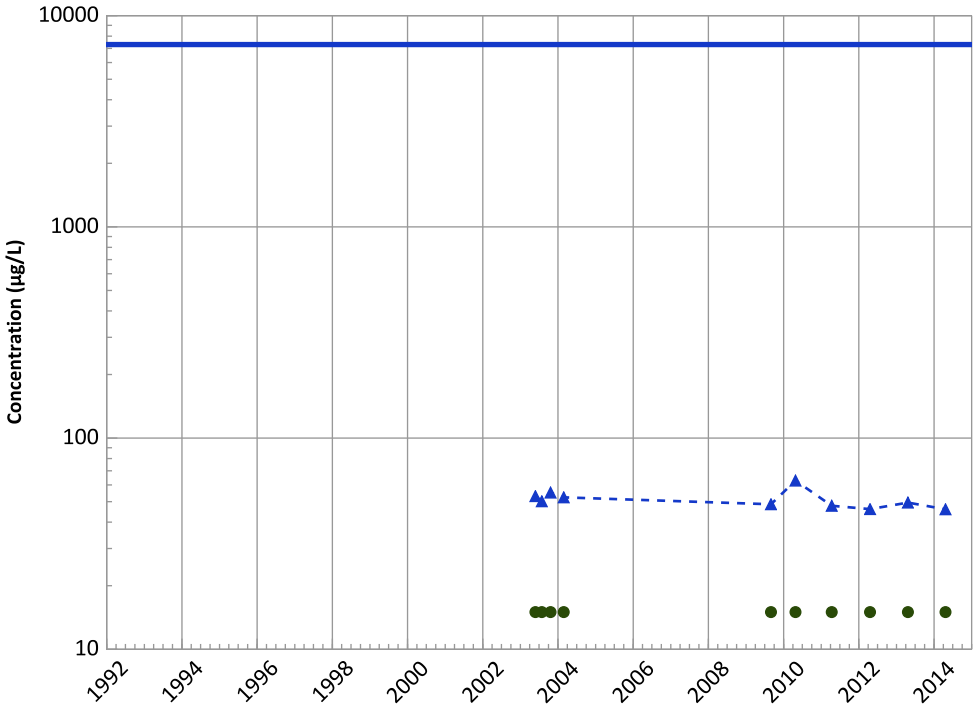
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

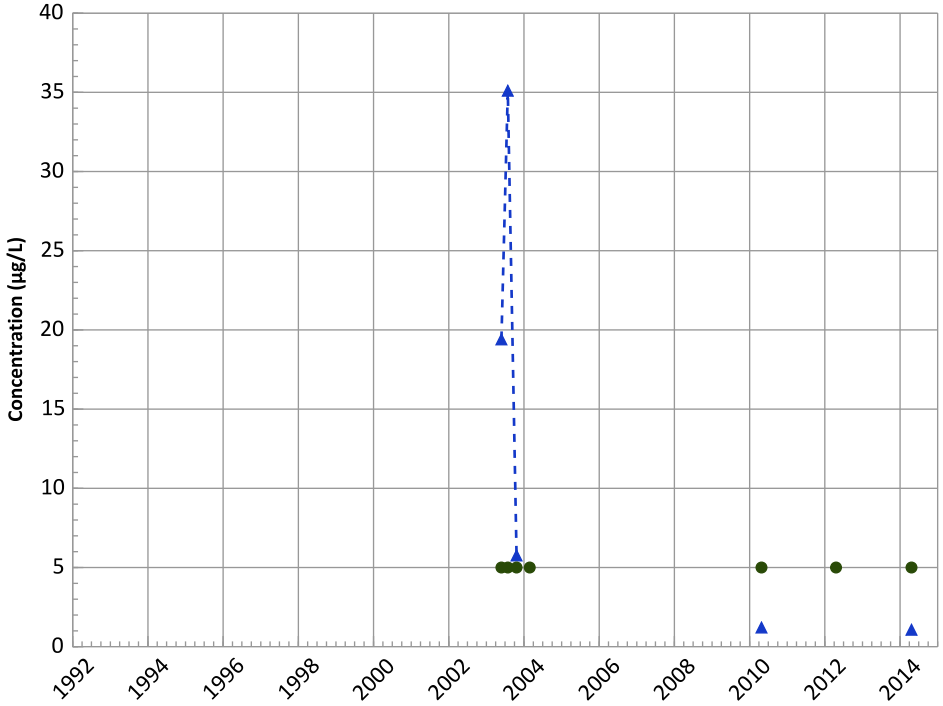


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Manganese Trend



Concentration Trend

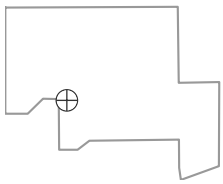
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

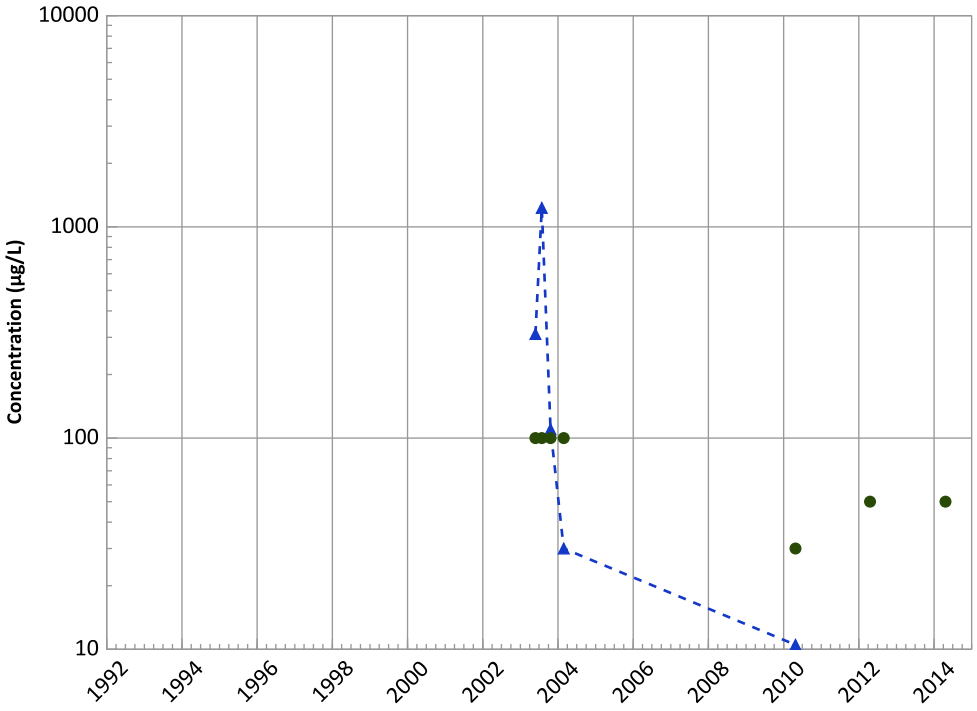
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

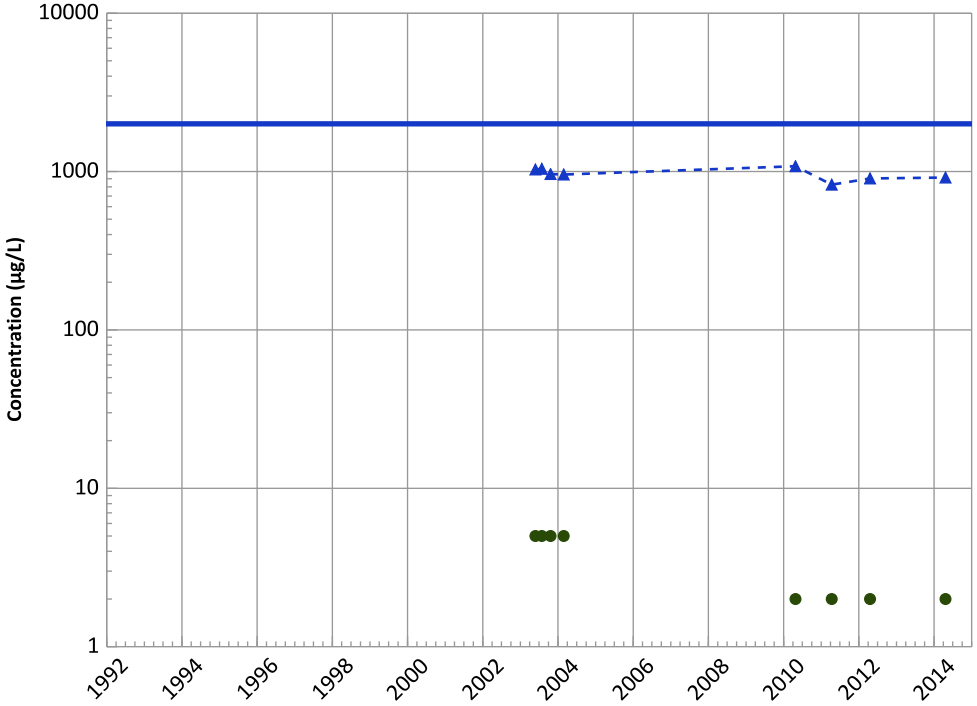


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Barium Trend



Concentration Trend

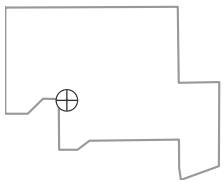
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

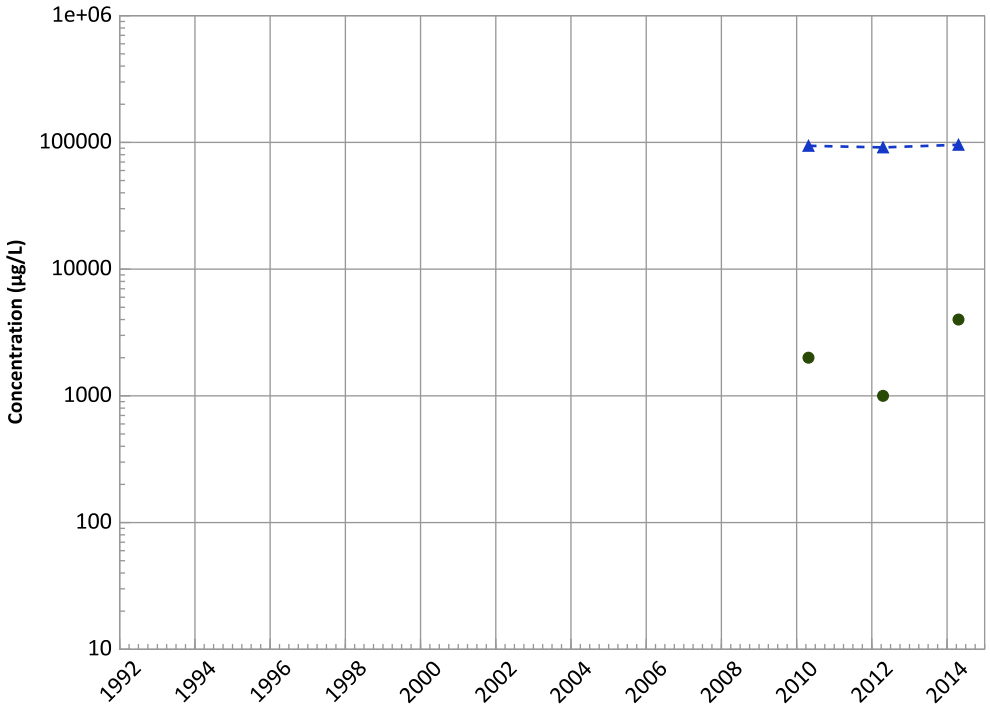
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

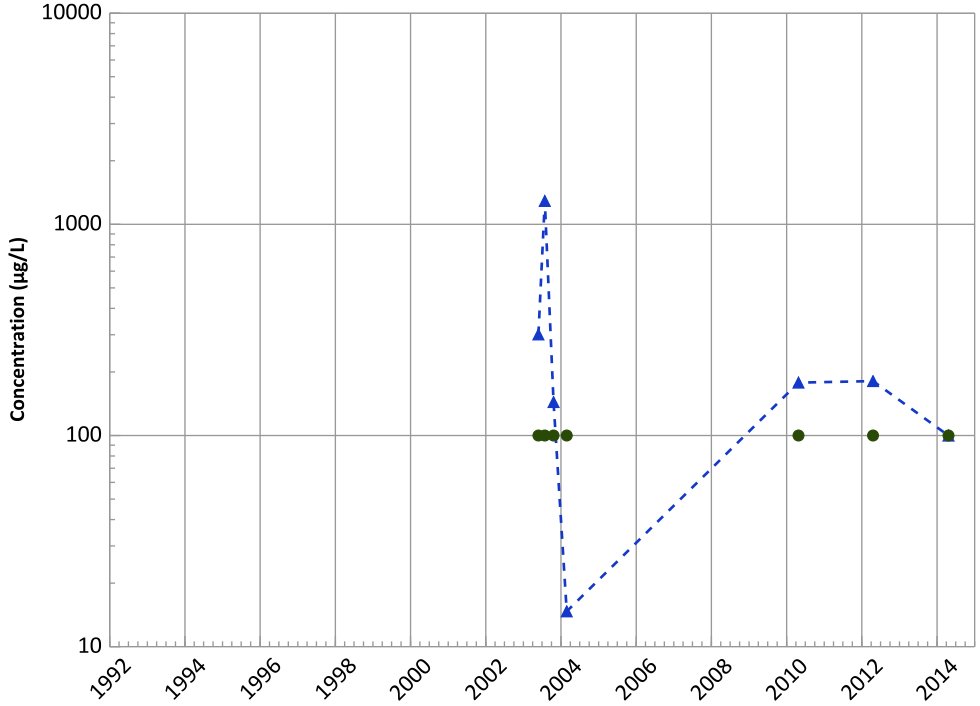


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

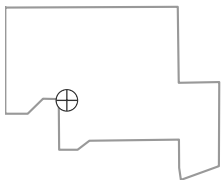
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

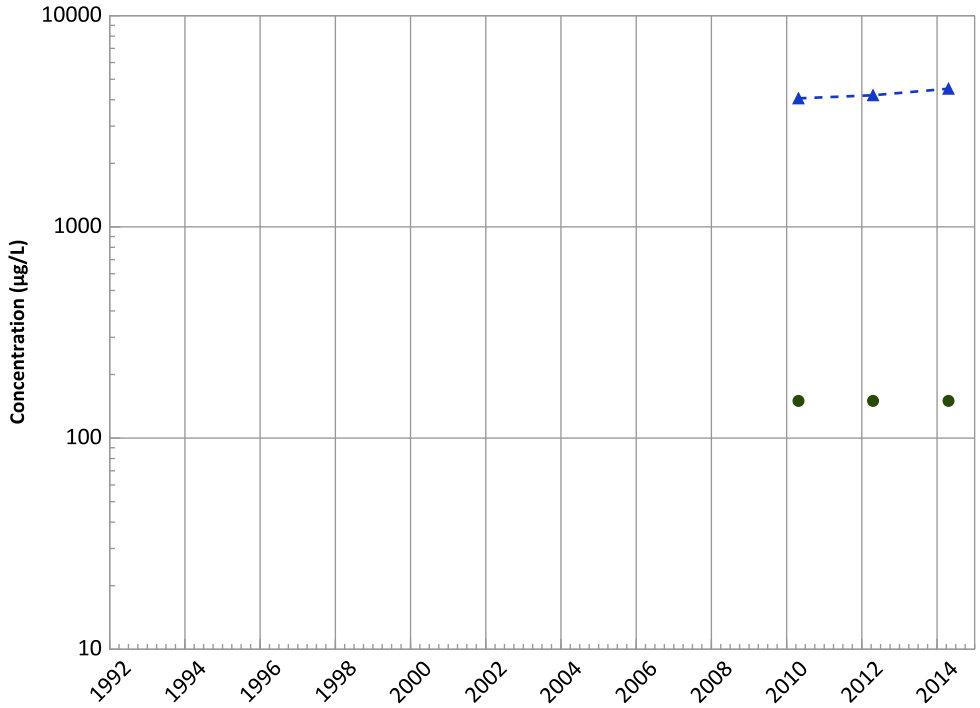
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

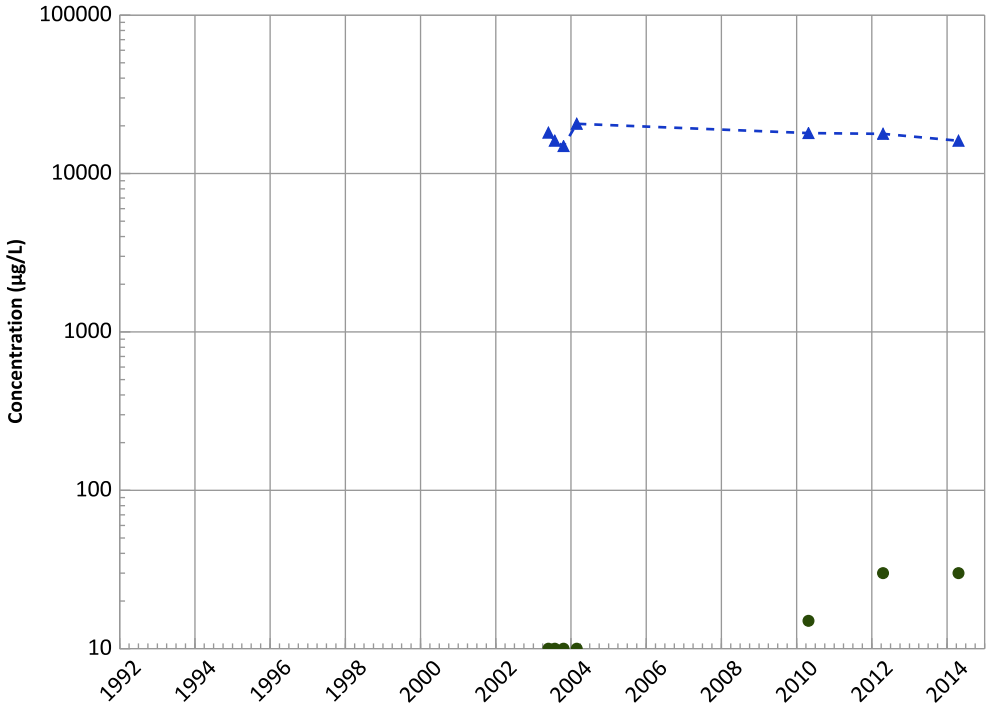


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

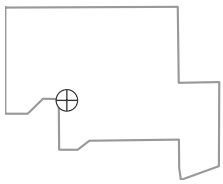
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

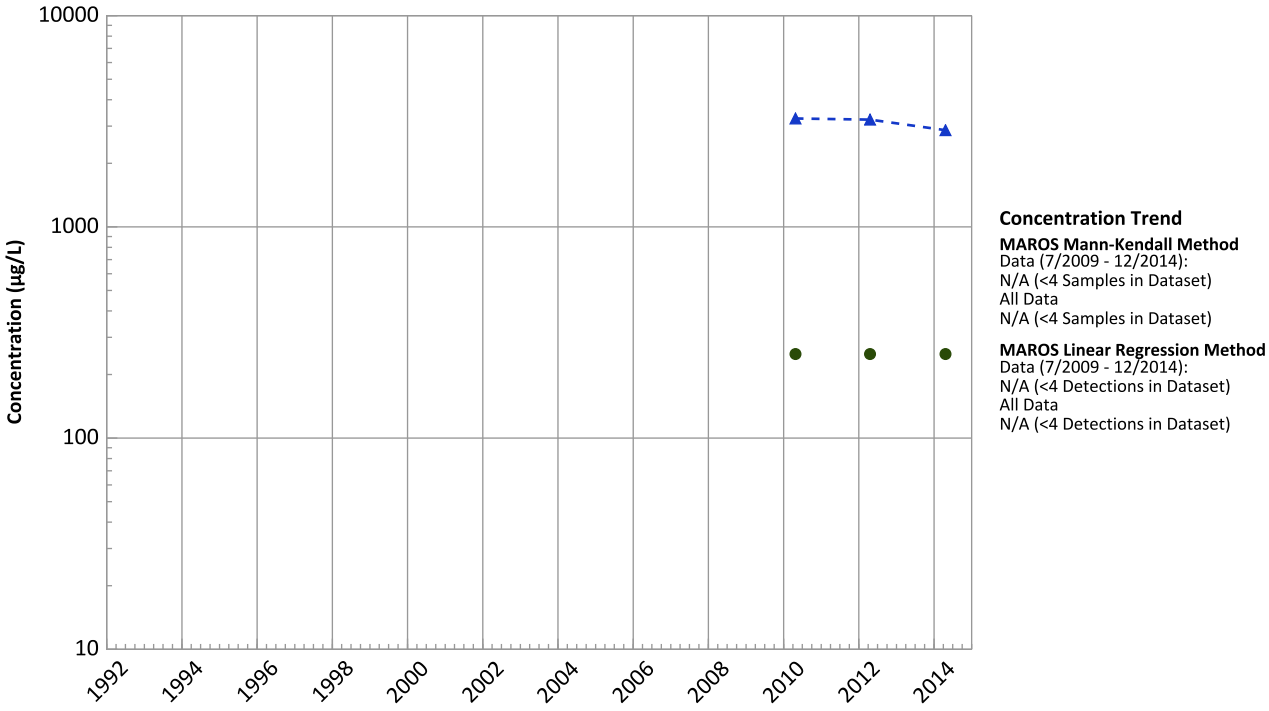
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1085 in Perched Aquifer
USDOE/NNSA Pantex Plant

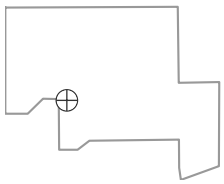
Sodium Trend



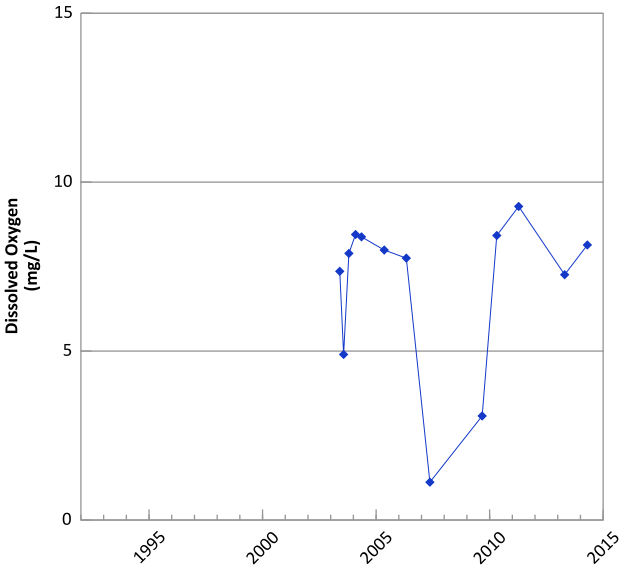
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

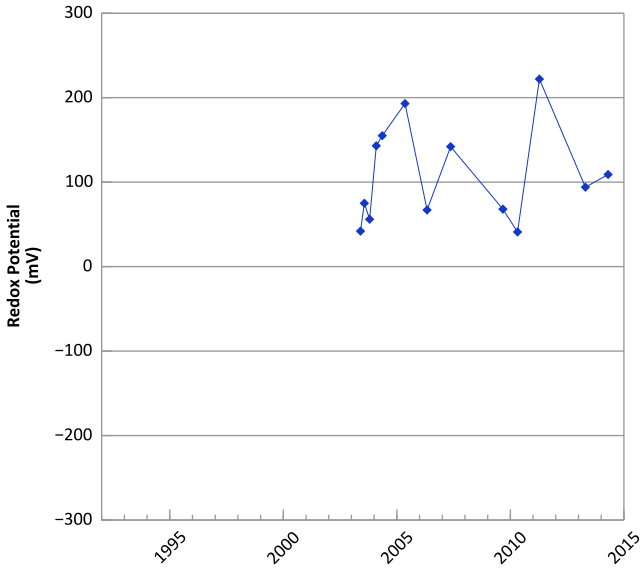
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

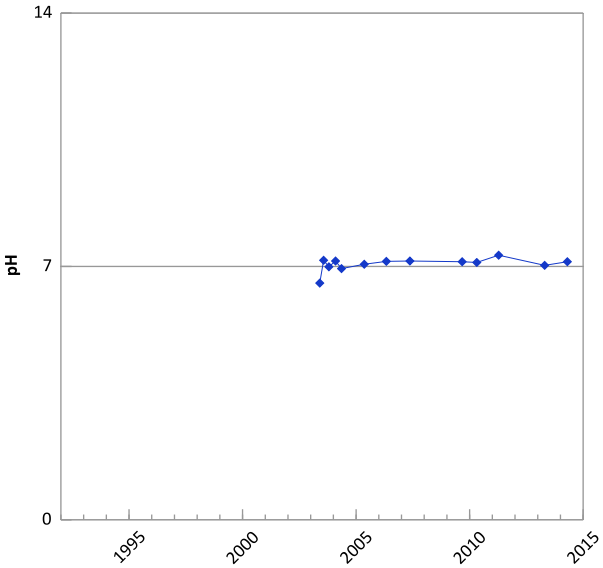
Well Location

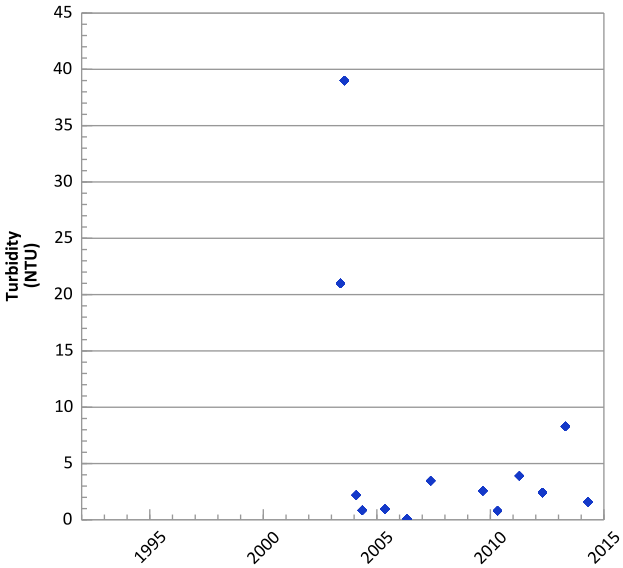


PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



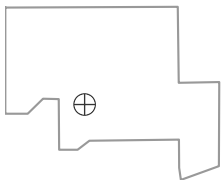






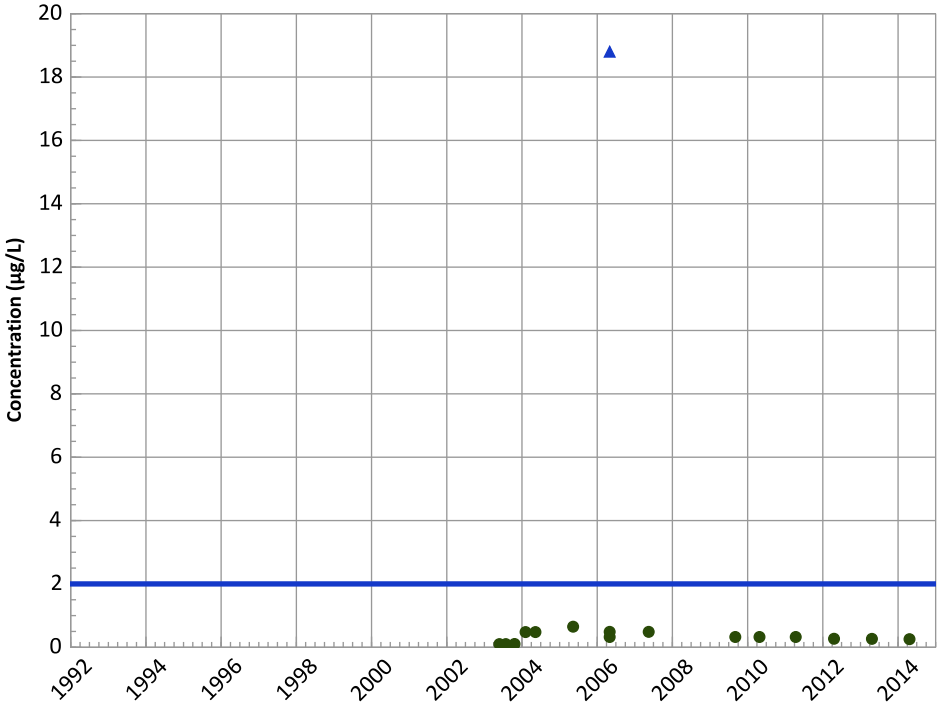
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

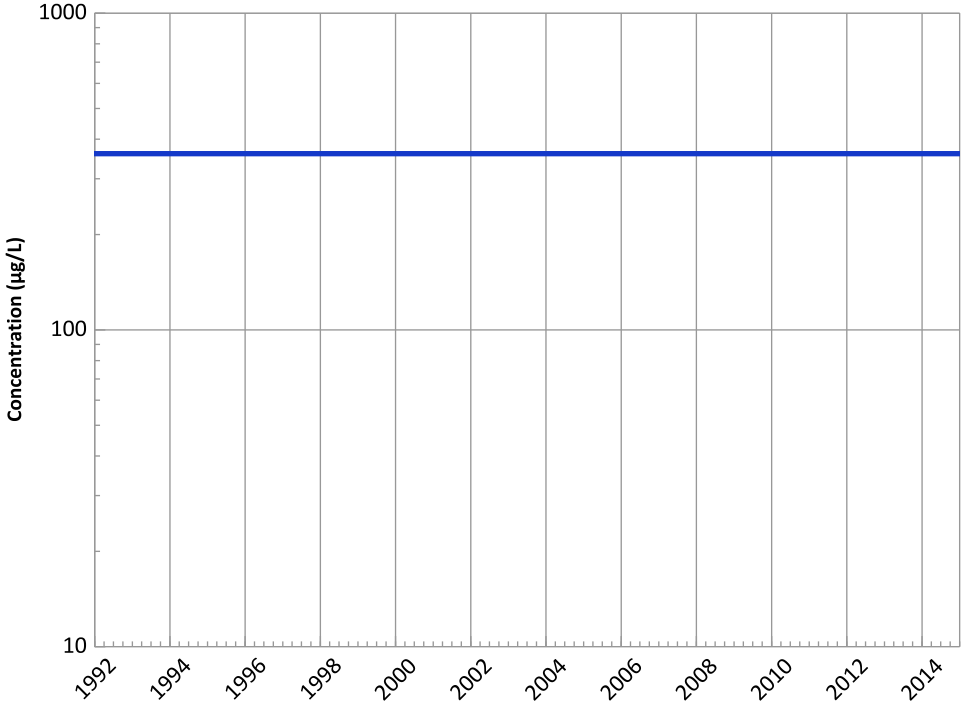


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

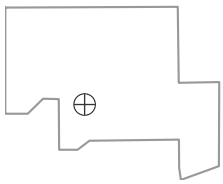
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

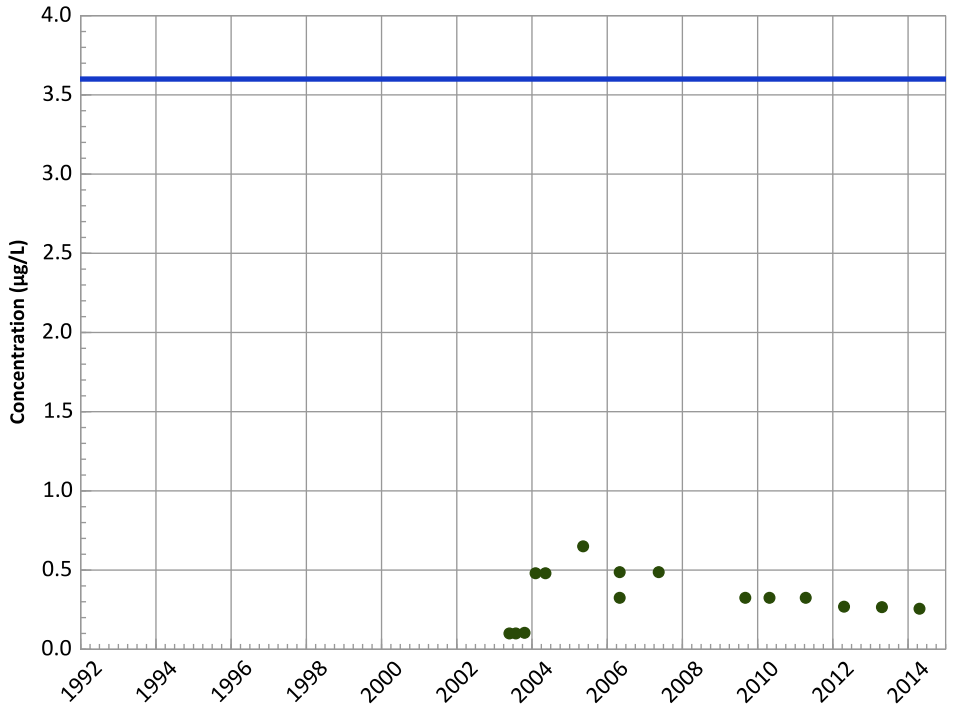
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

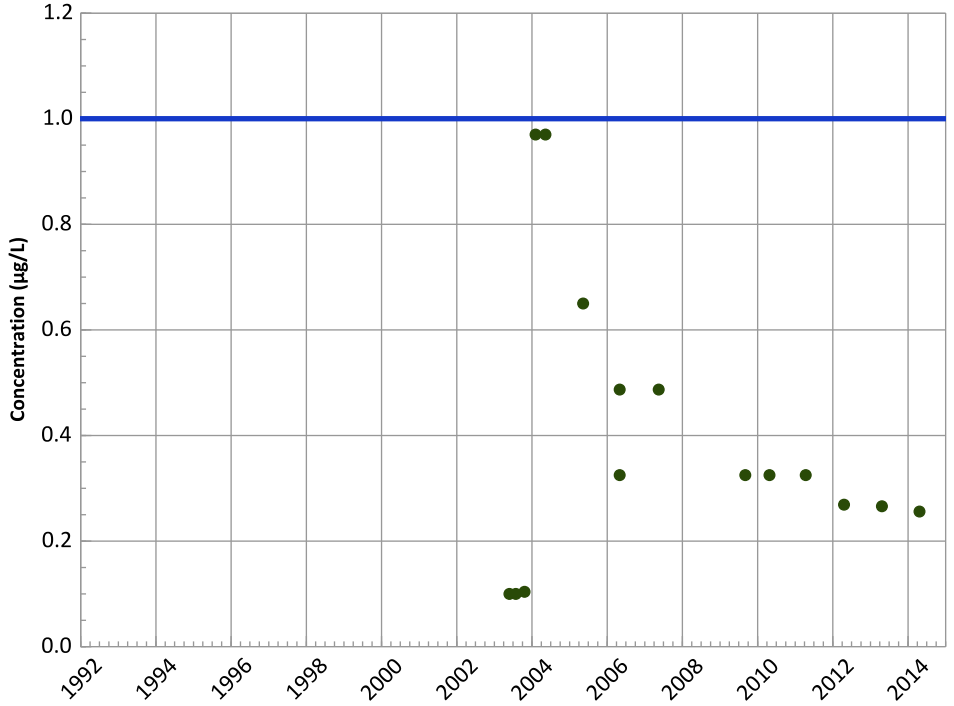


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

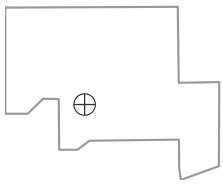
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

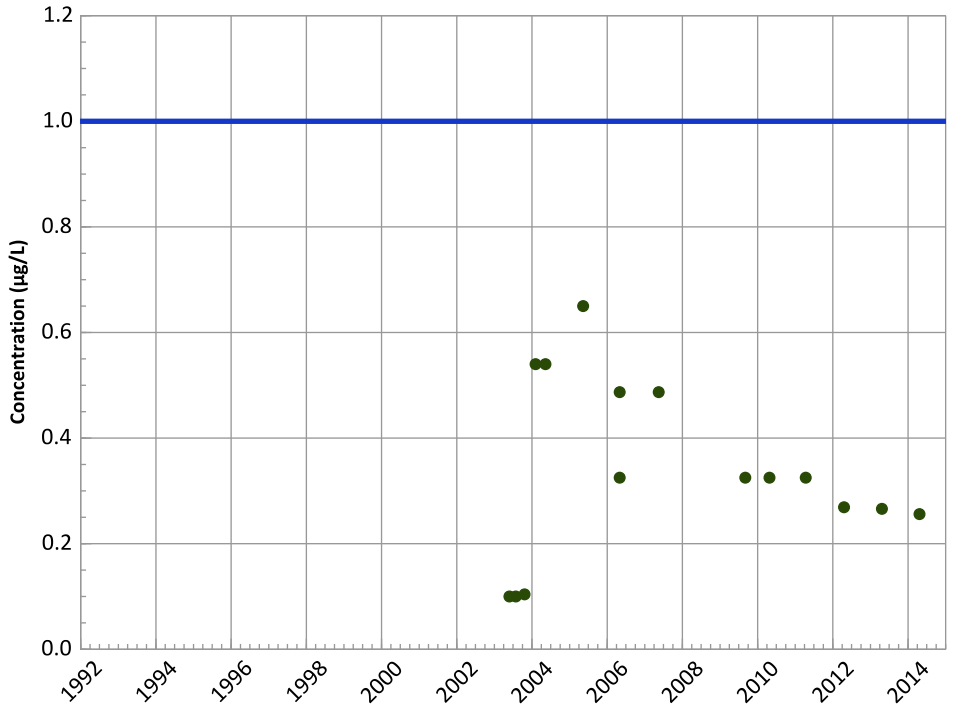
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

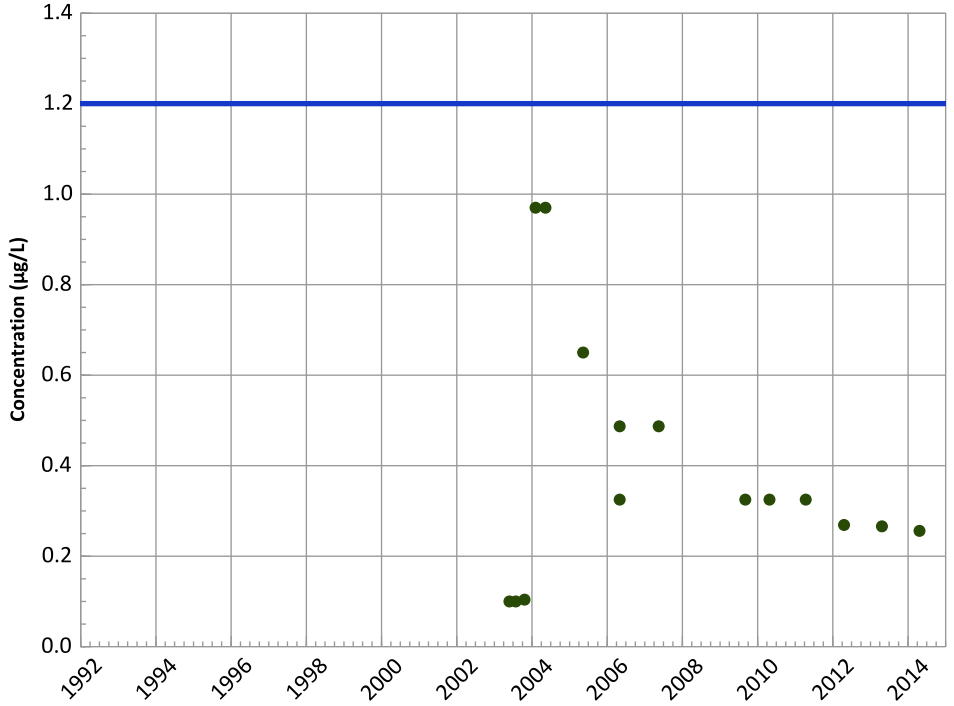


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

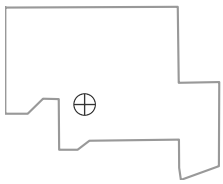
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

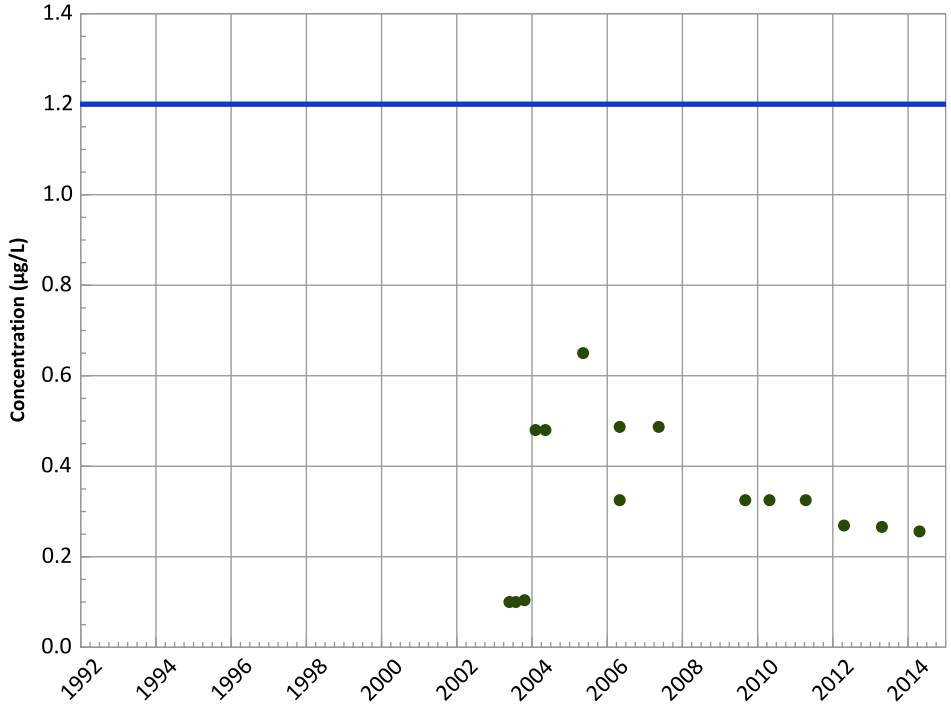
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

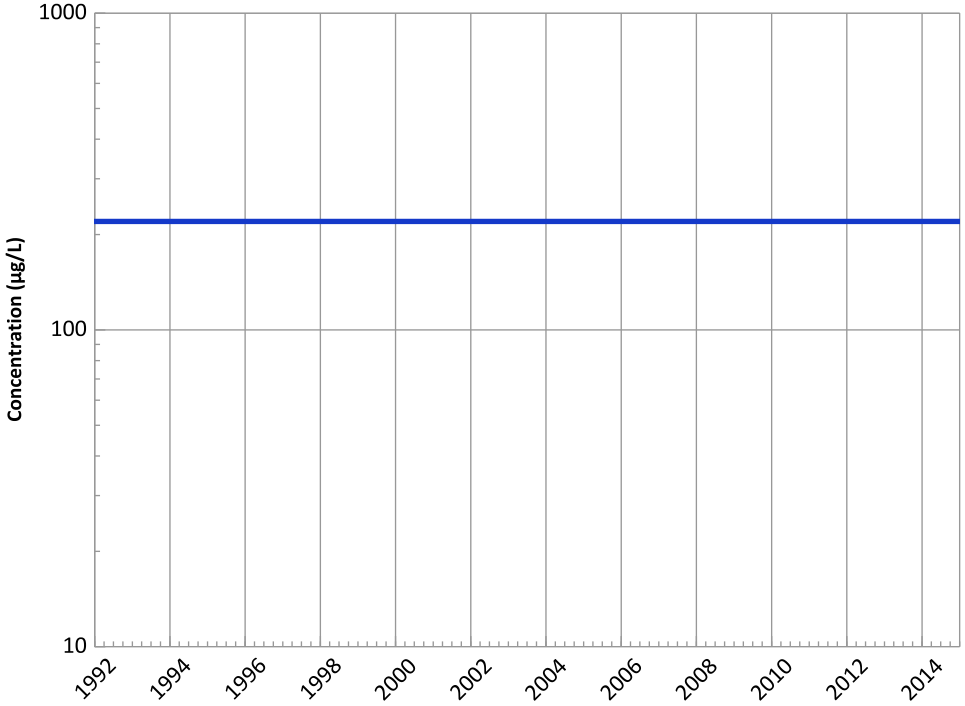


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

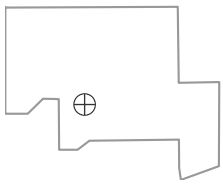
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

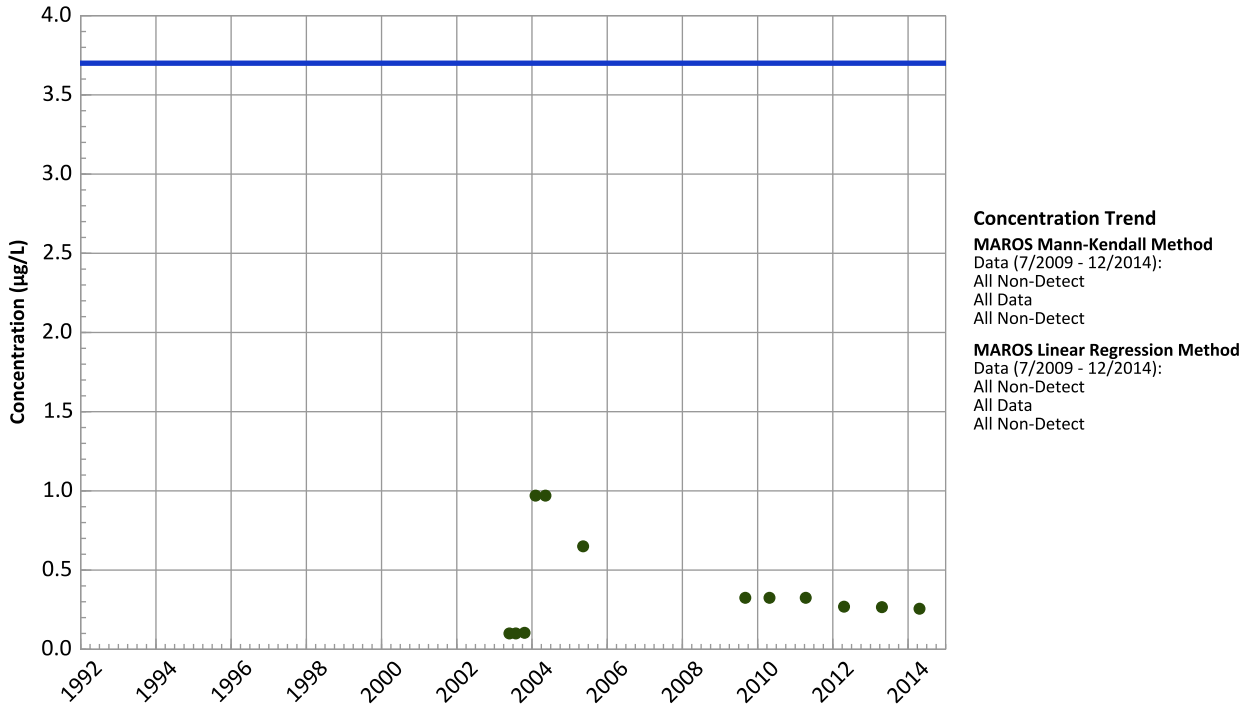
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

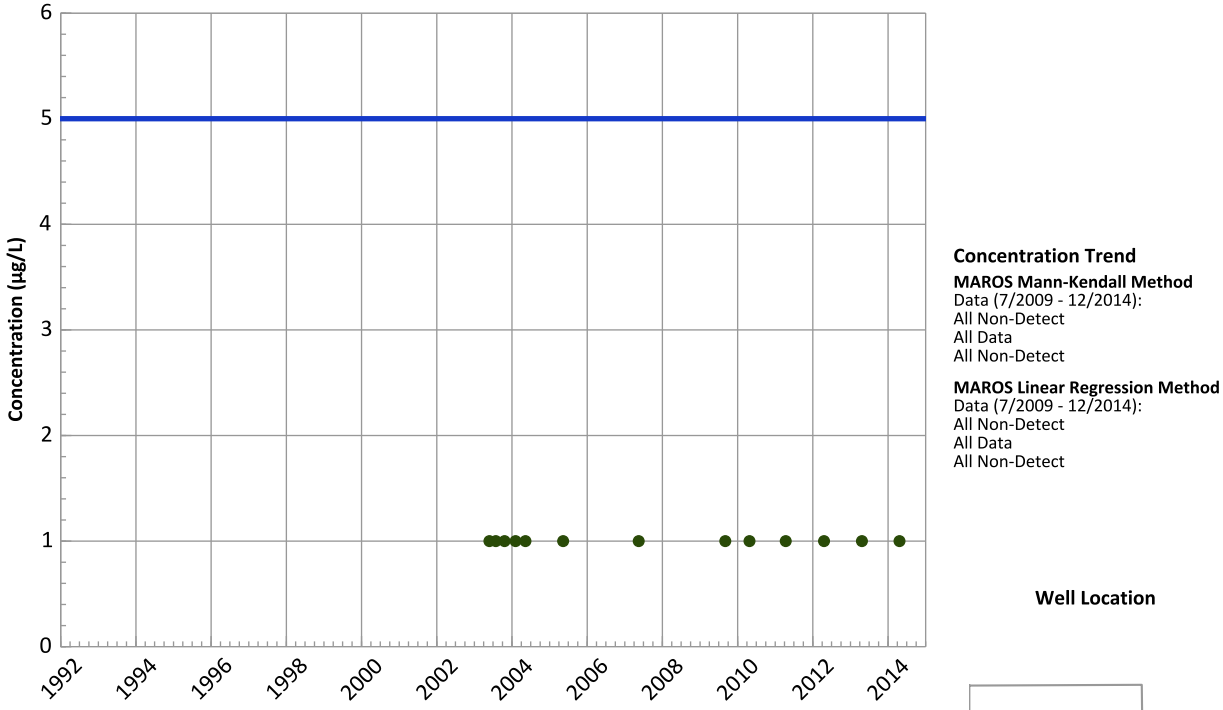


PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



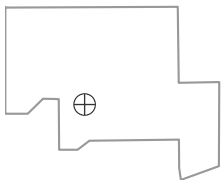
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

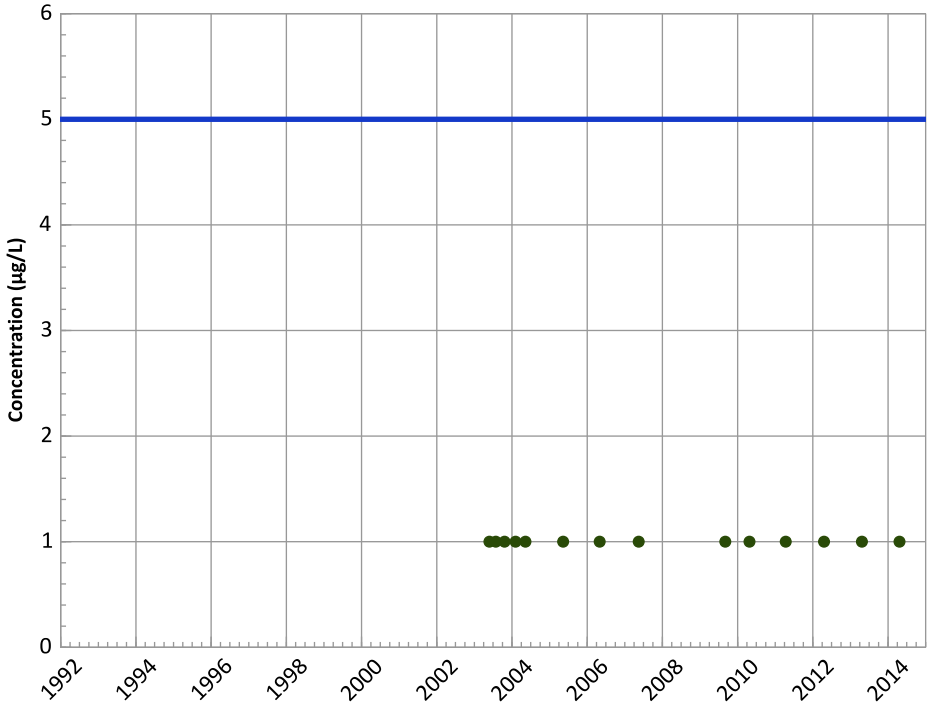
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

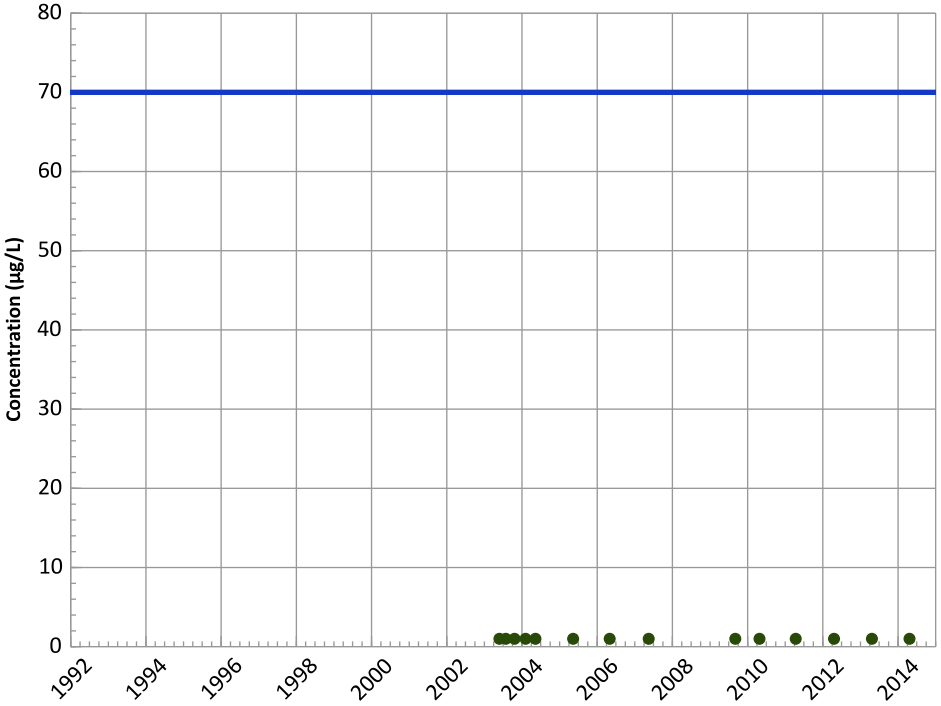


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

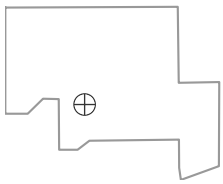
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

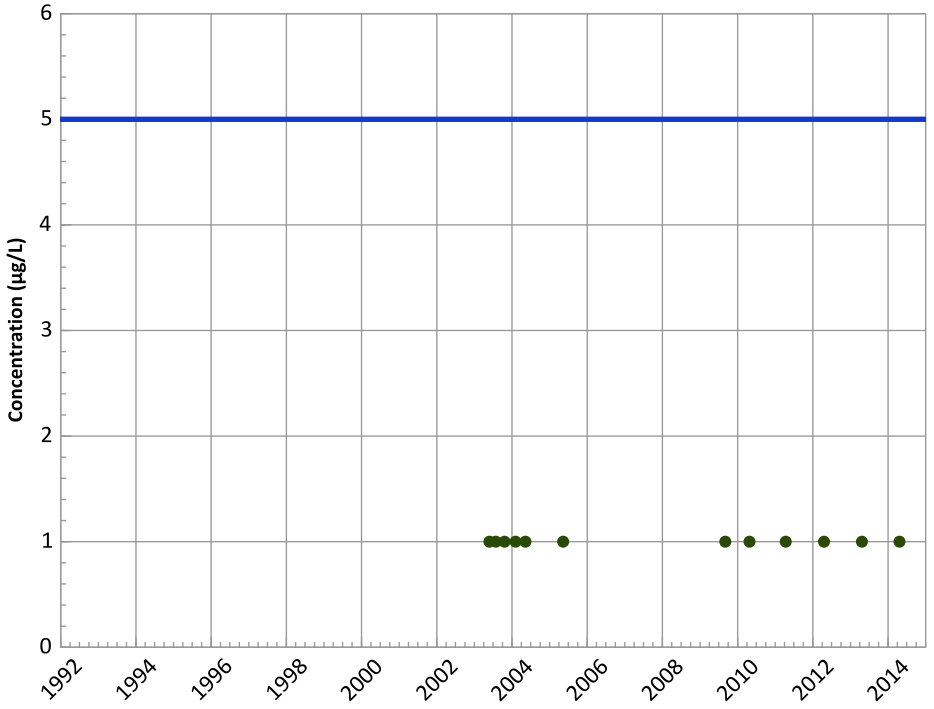
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

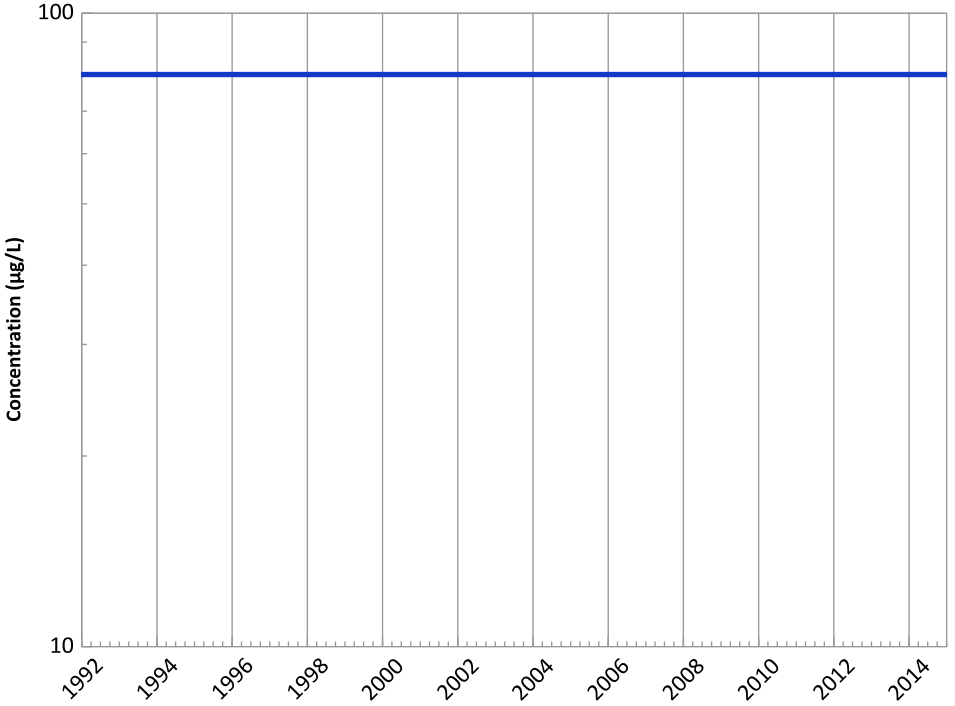


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

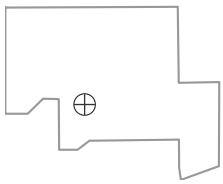
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

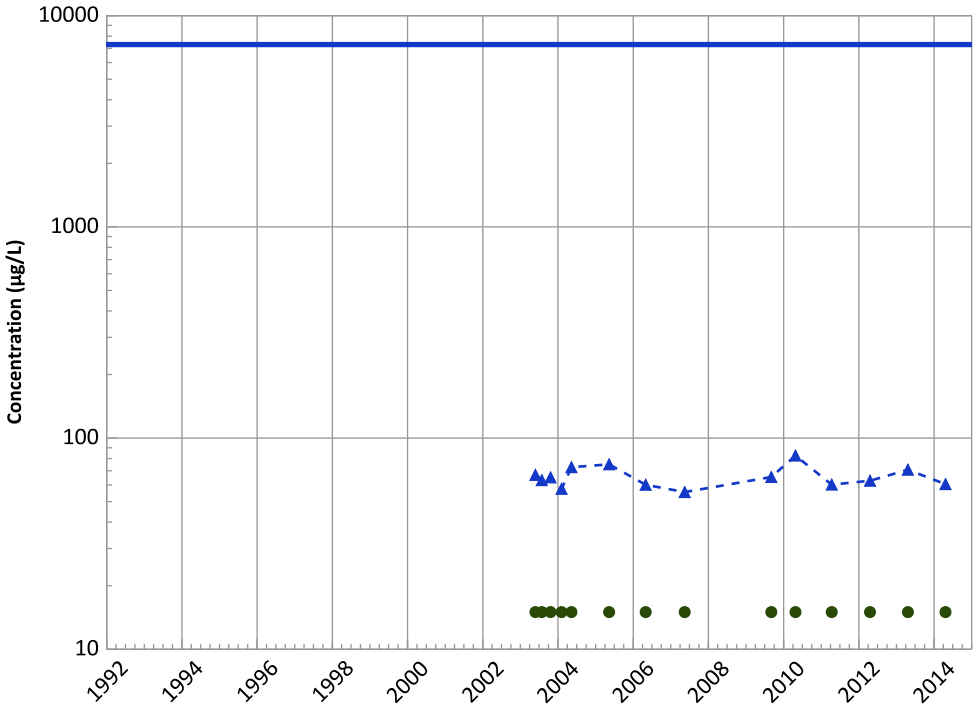
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

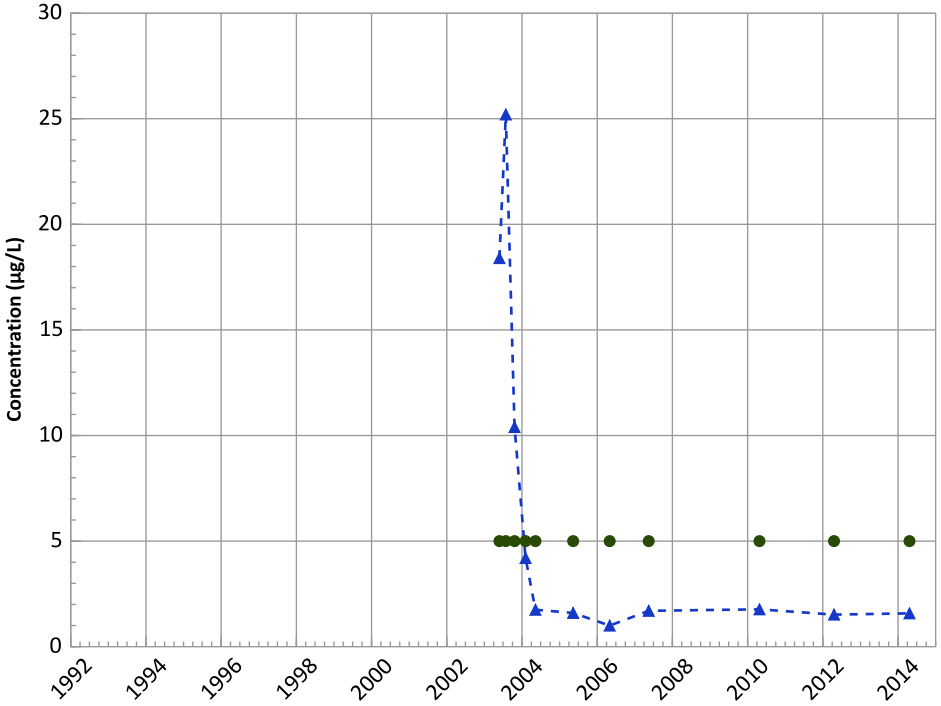


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Manganese Trend



Concentration Trend

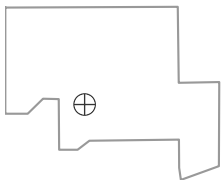
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

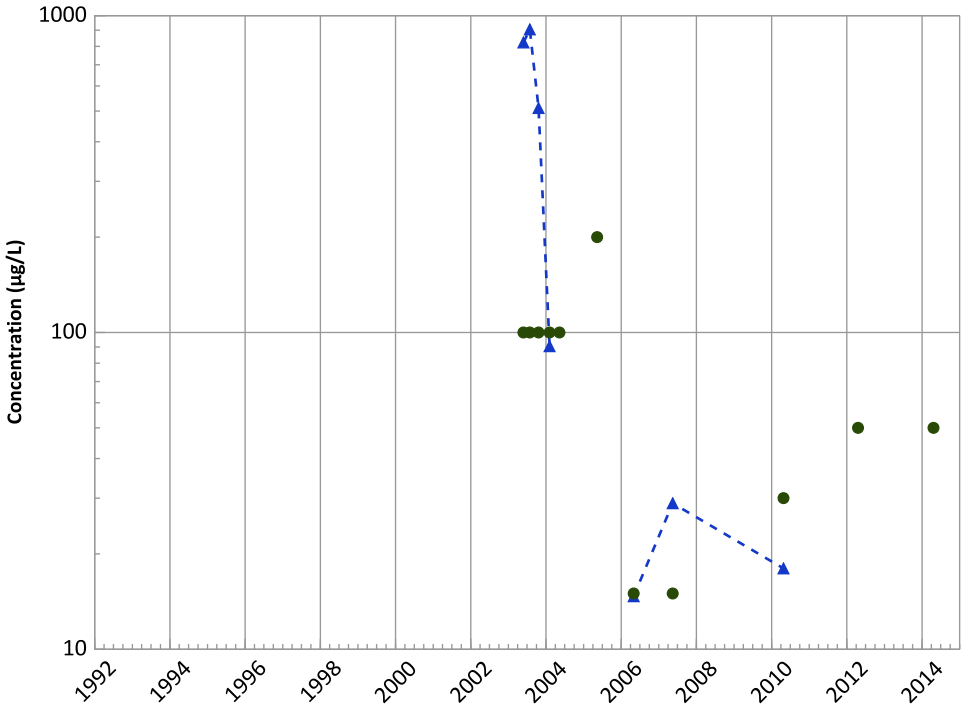
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

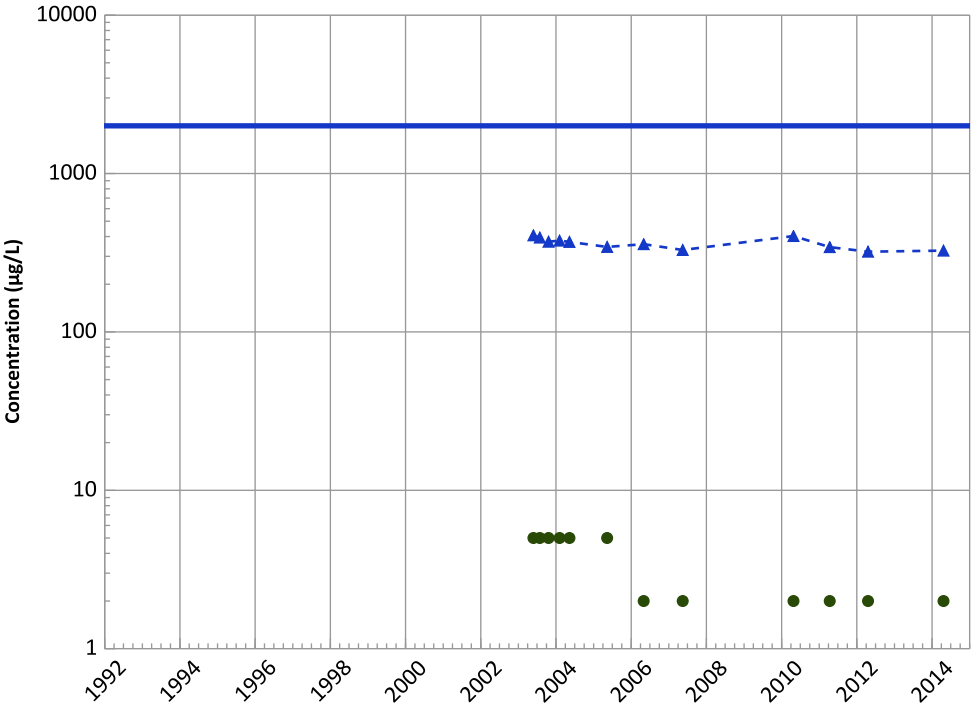


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

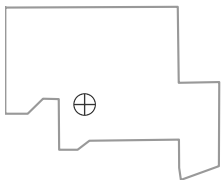
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

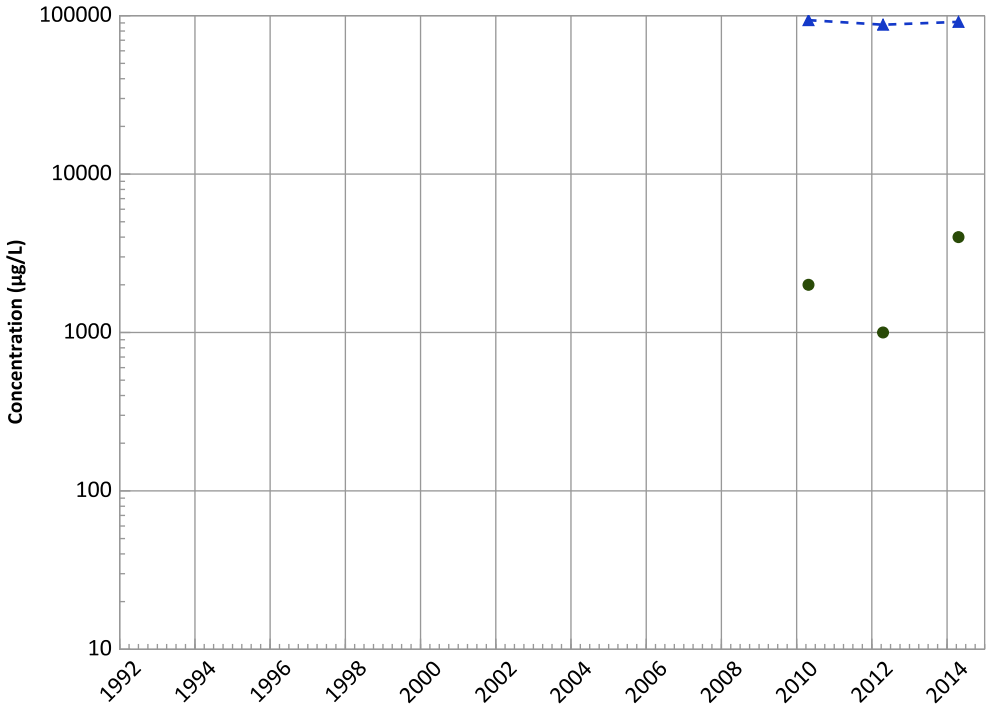
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

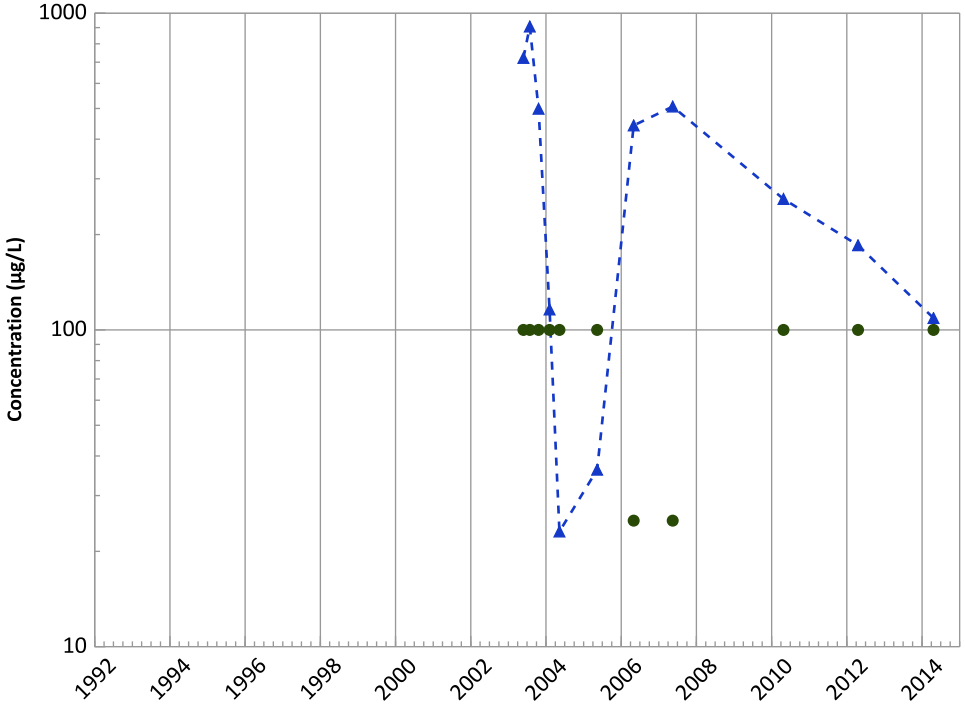


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

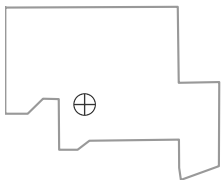
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

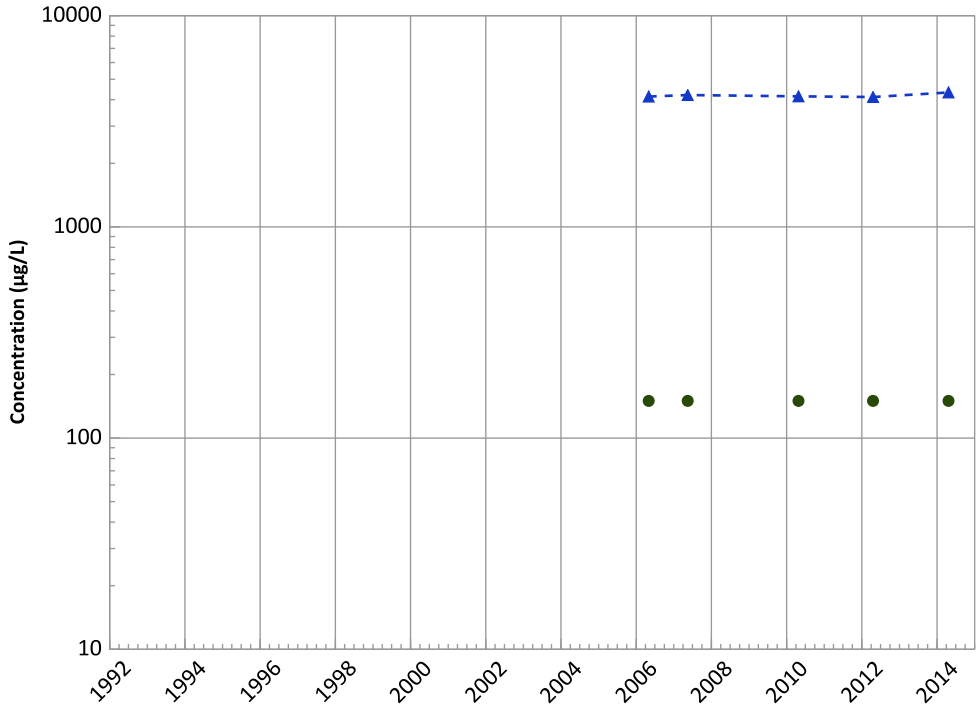
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

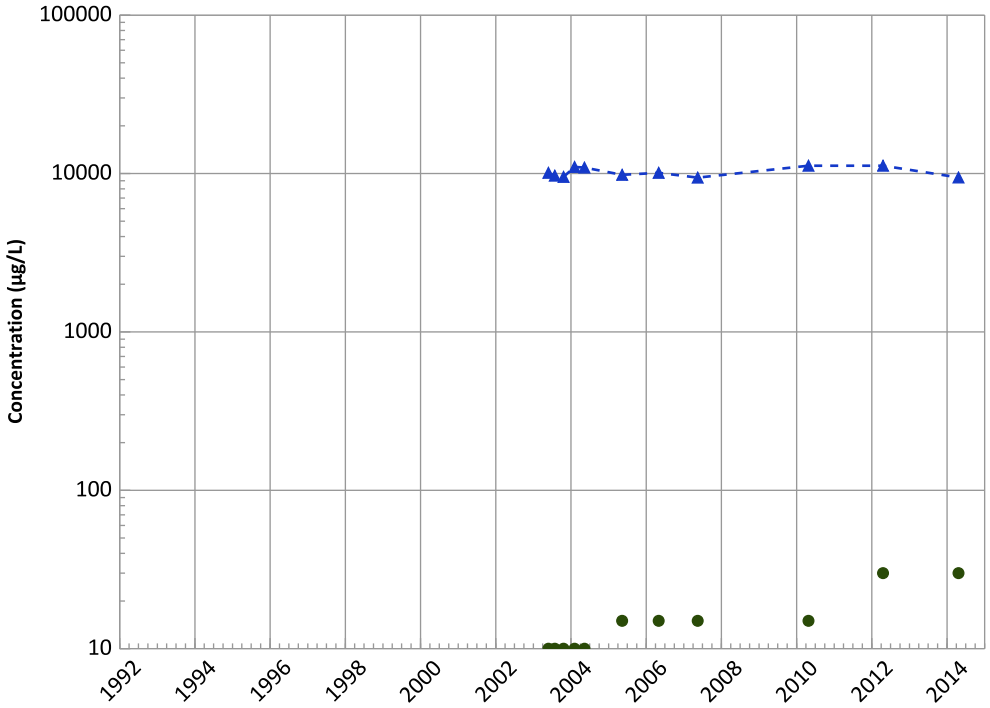


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

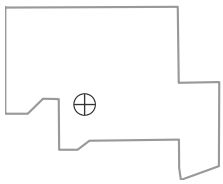
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

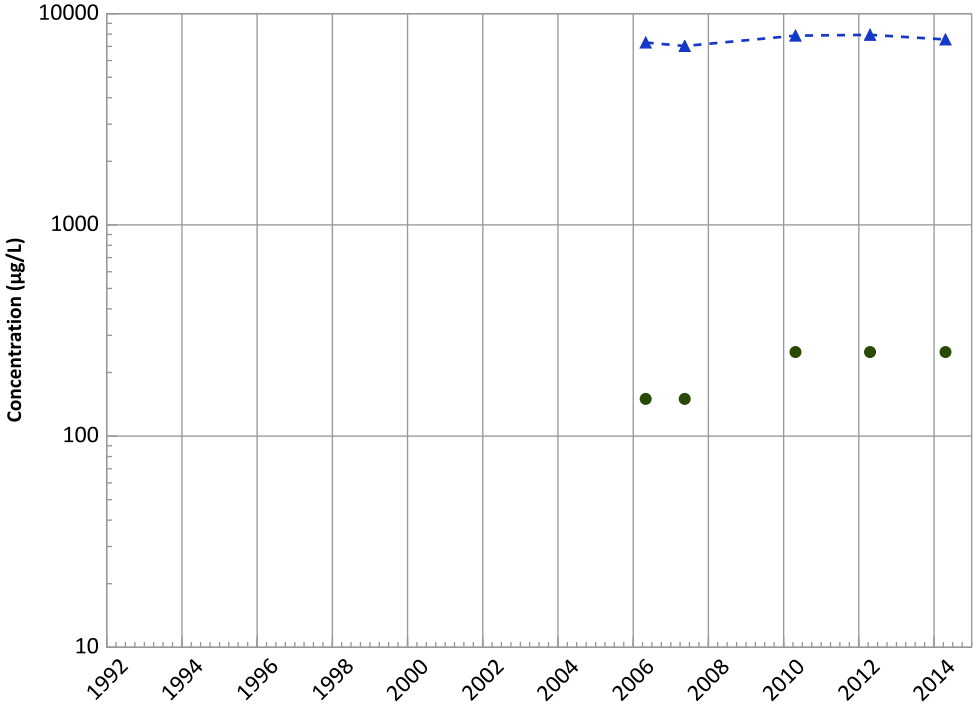
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1086 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

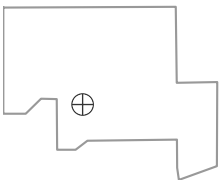
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

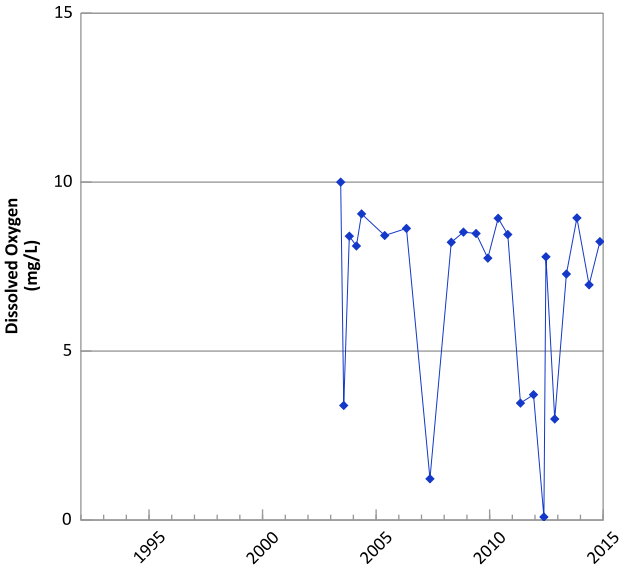
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/27/2003 to 04/22/2014
Analysis Date: 03/19/2015

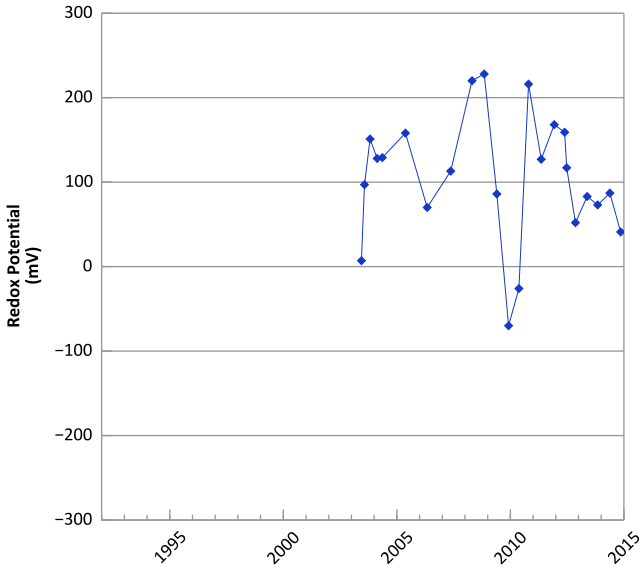
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

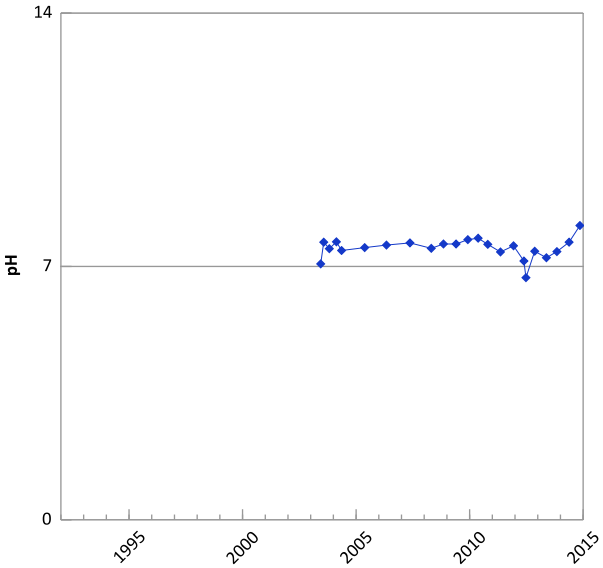
Well Location

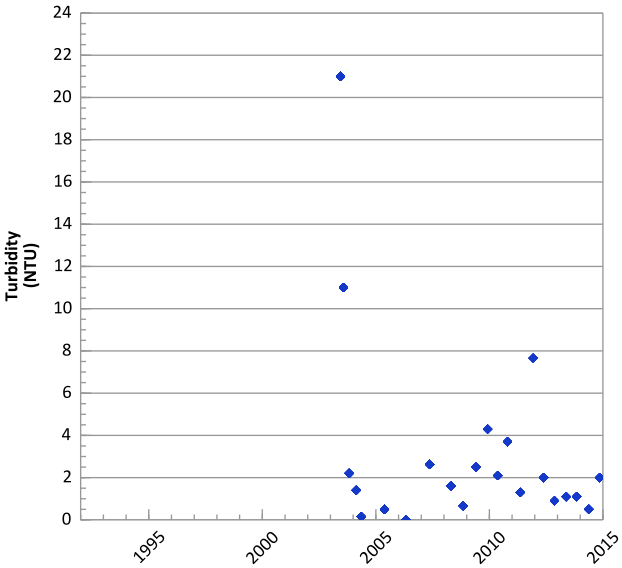


PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



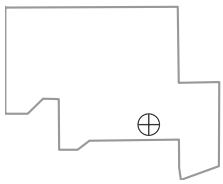






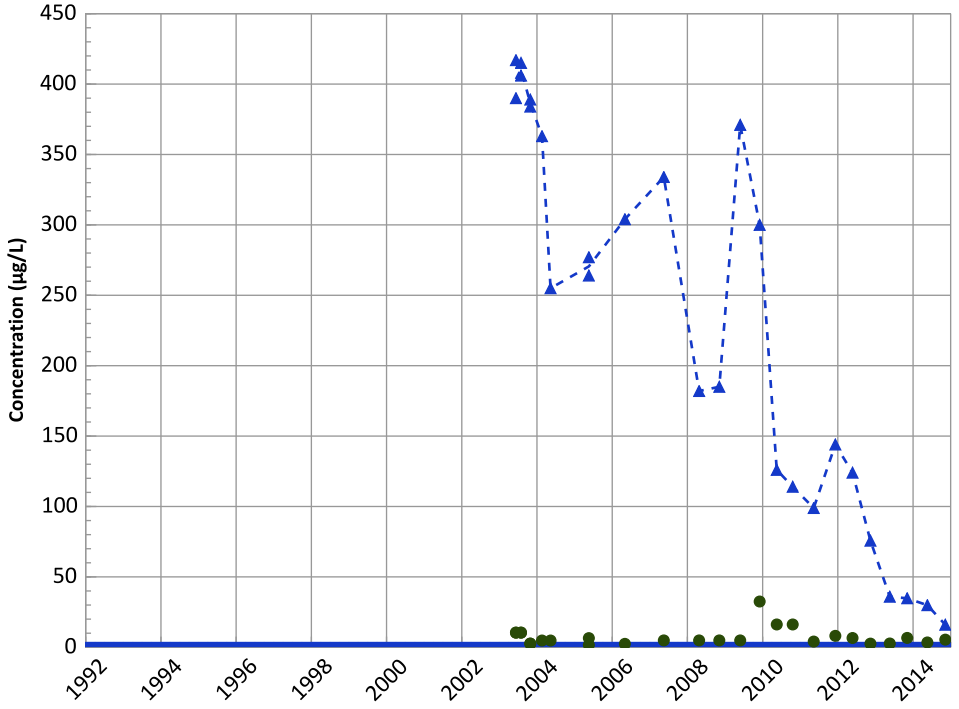
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

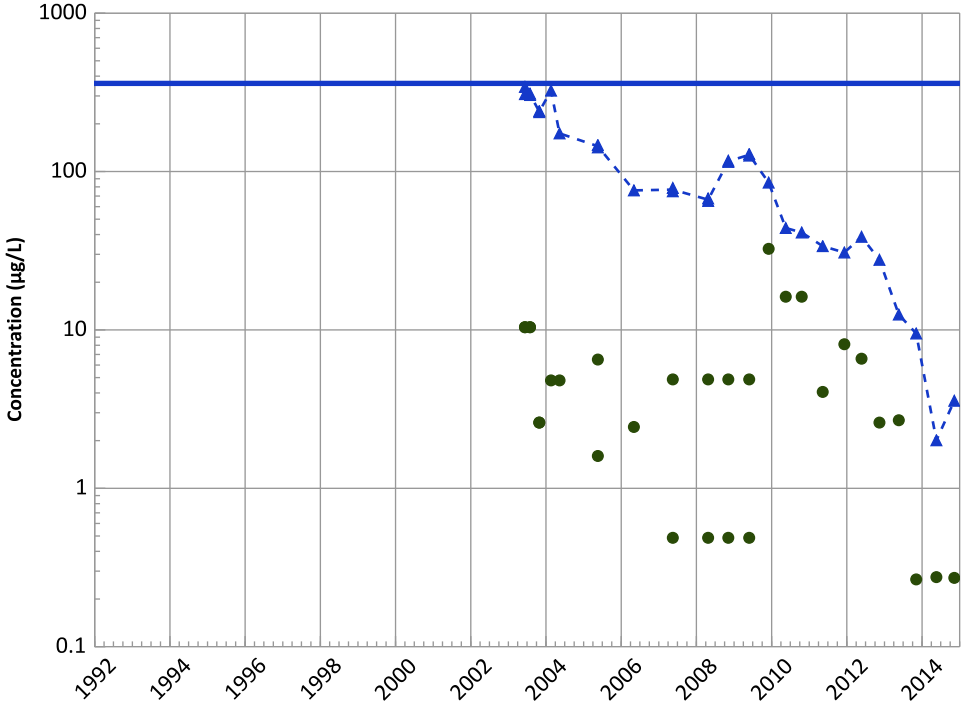


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

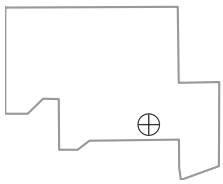
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

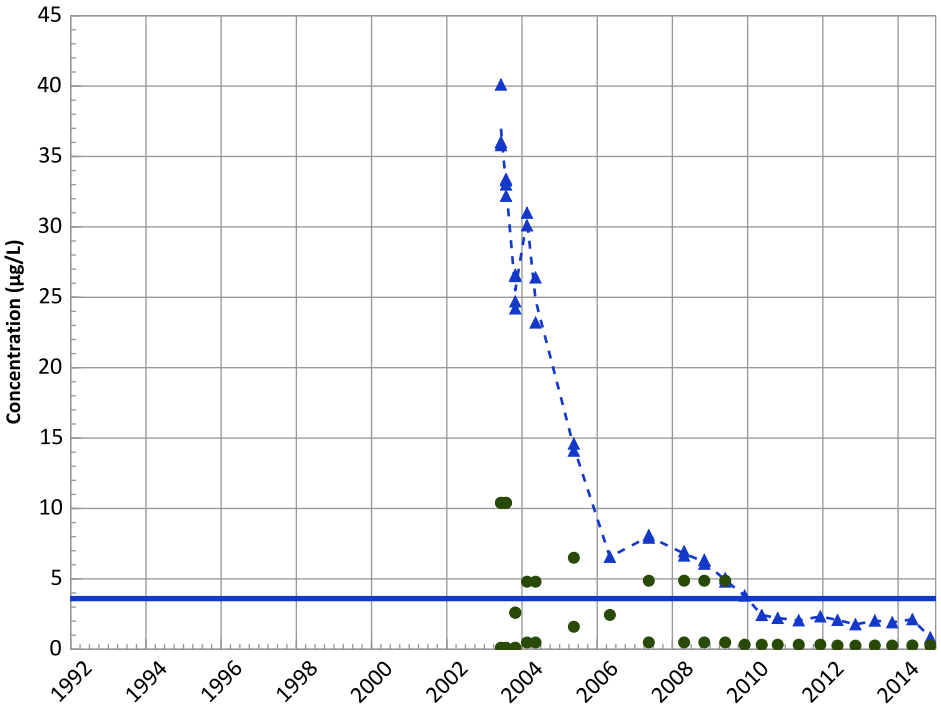
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

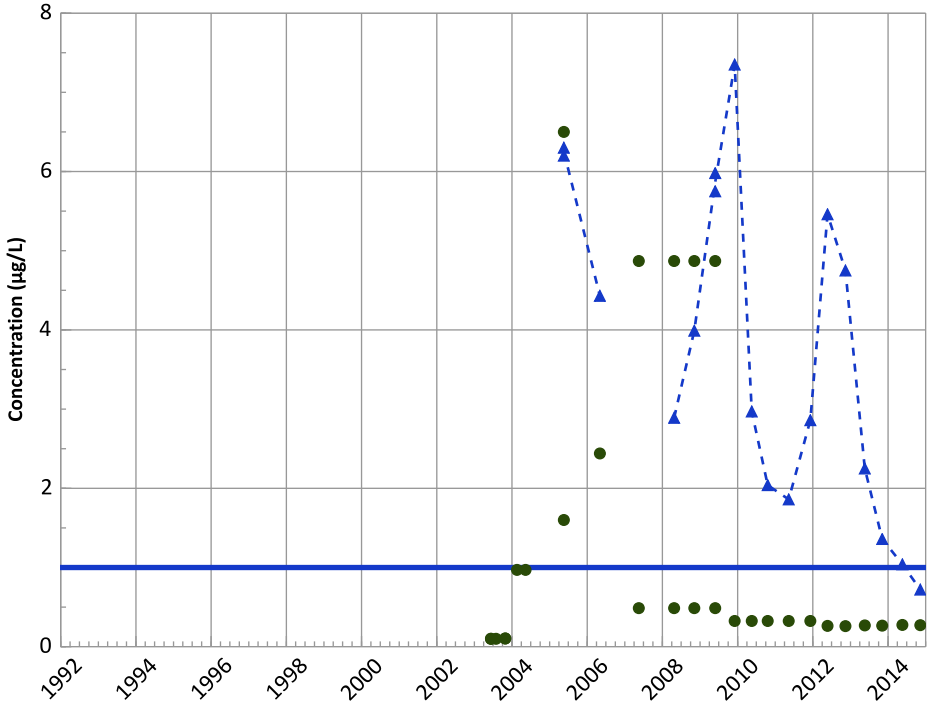


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

2,4-Dinitrotoluene Trend



Concentration Trend

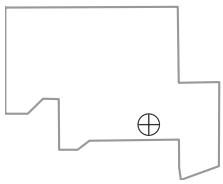
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

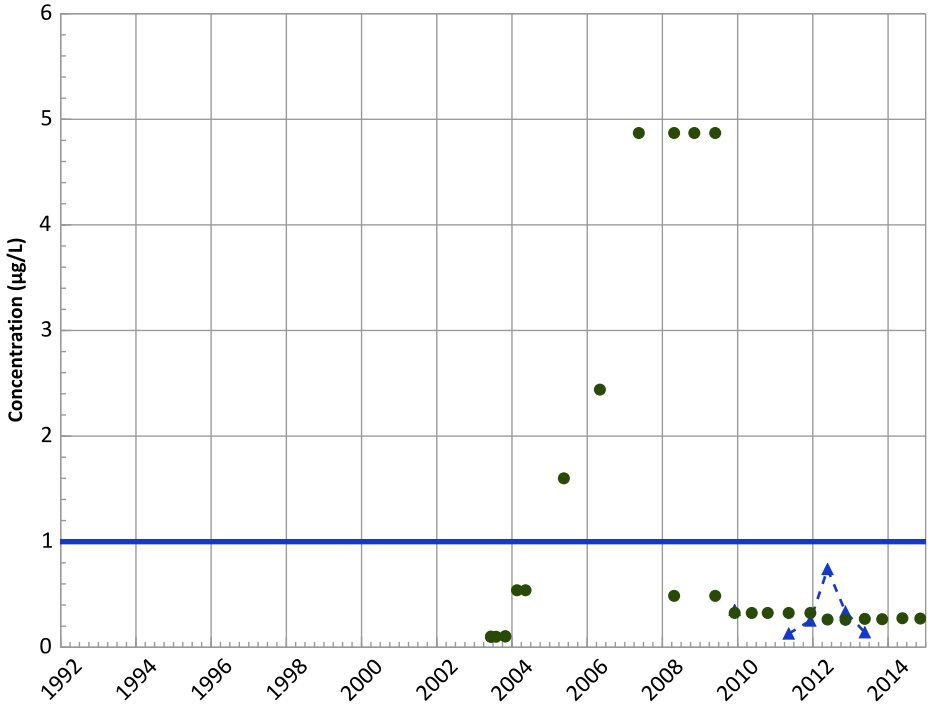
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

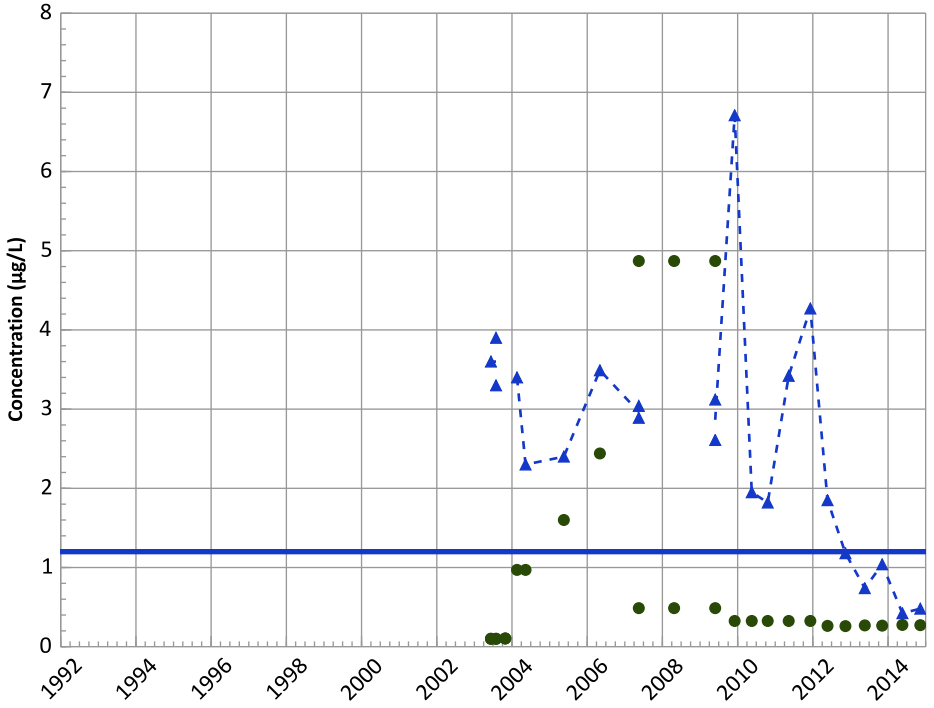


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

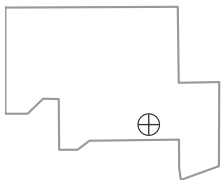
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

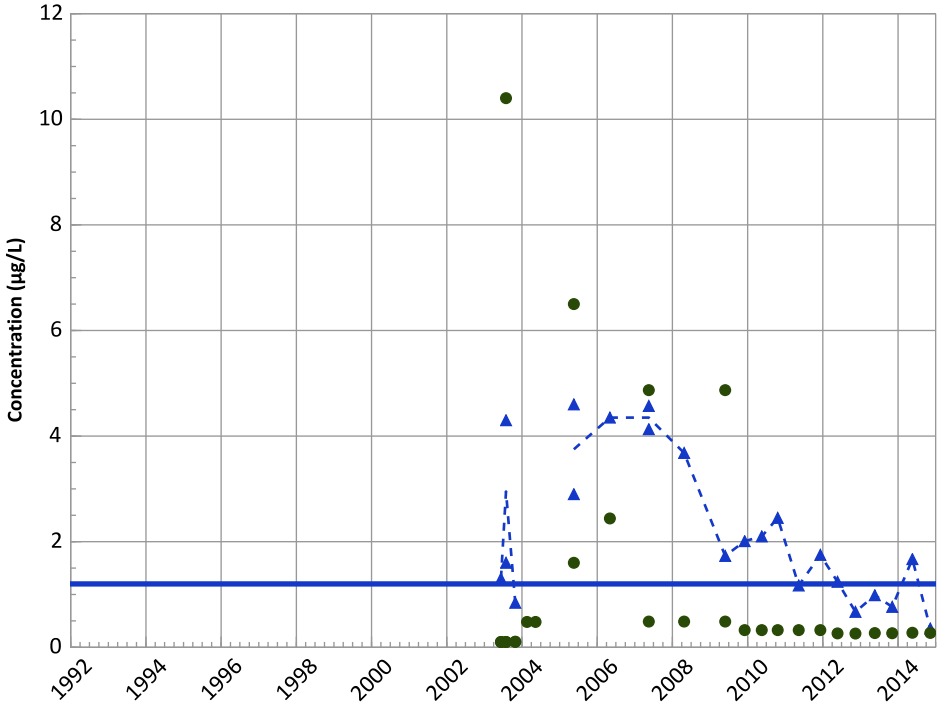
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

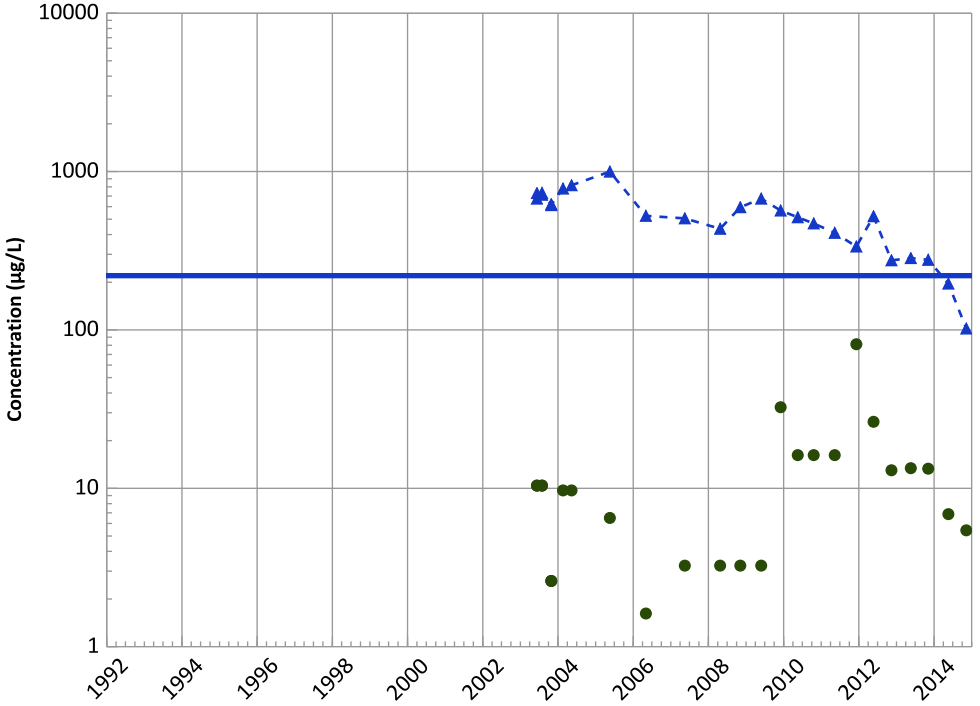


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

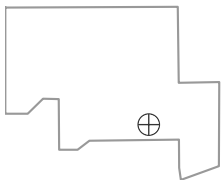
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

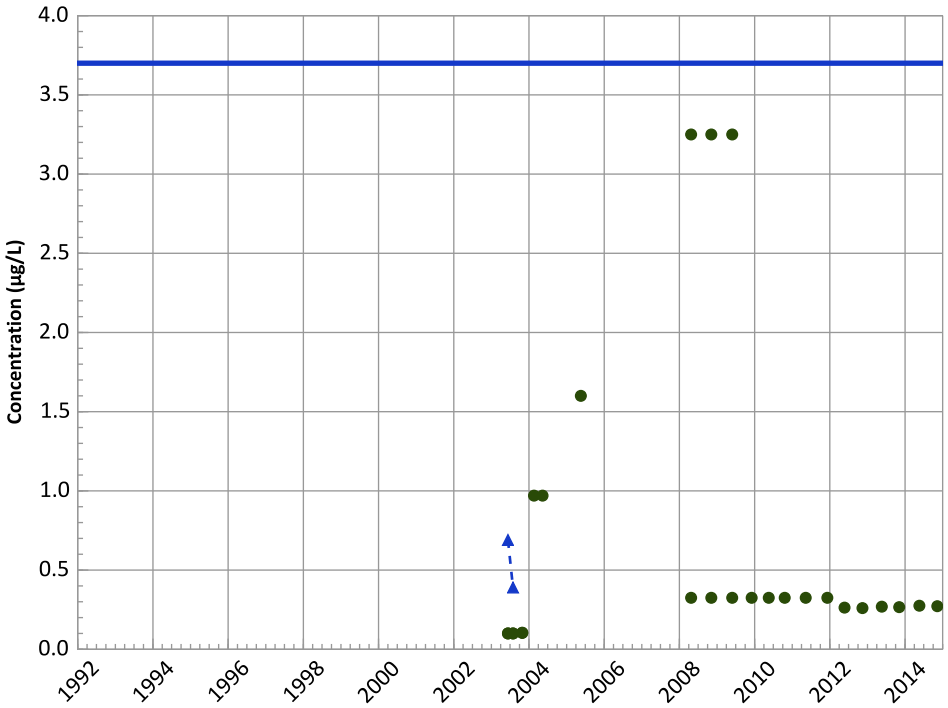
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

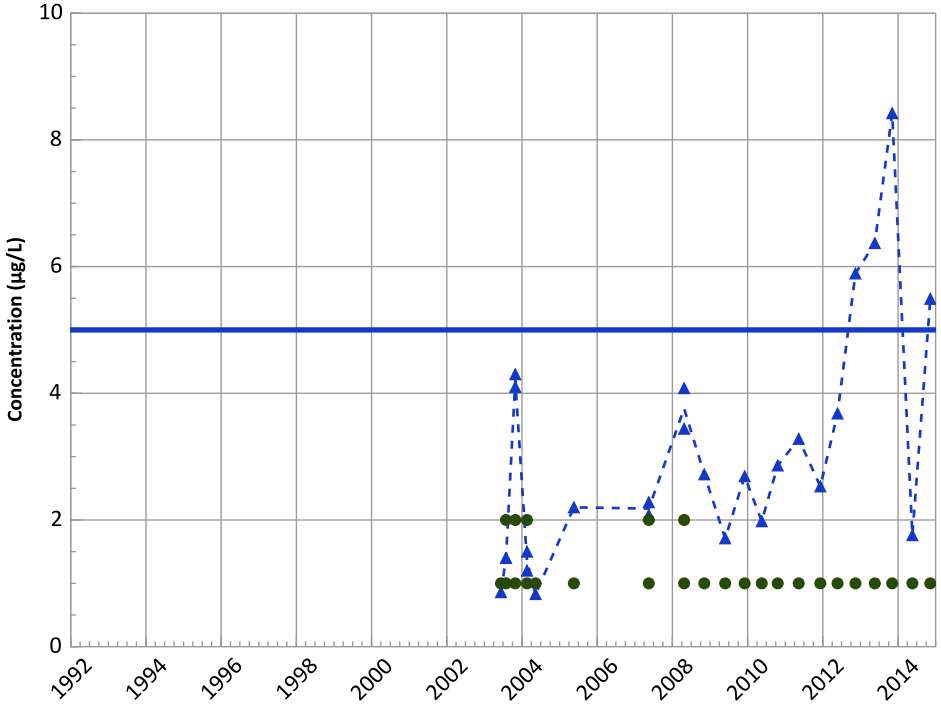


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

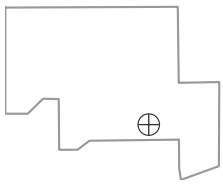
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

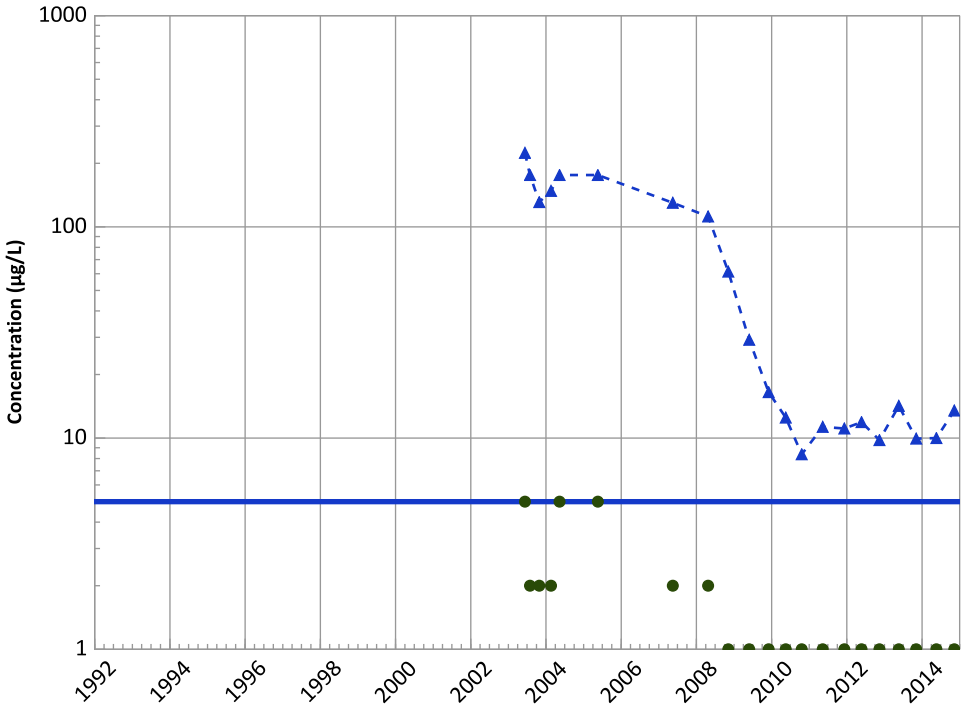
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

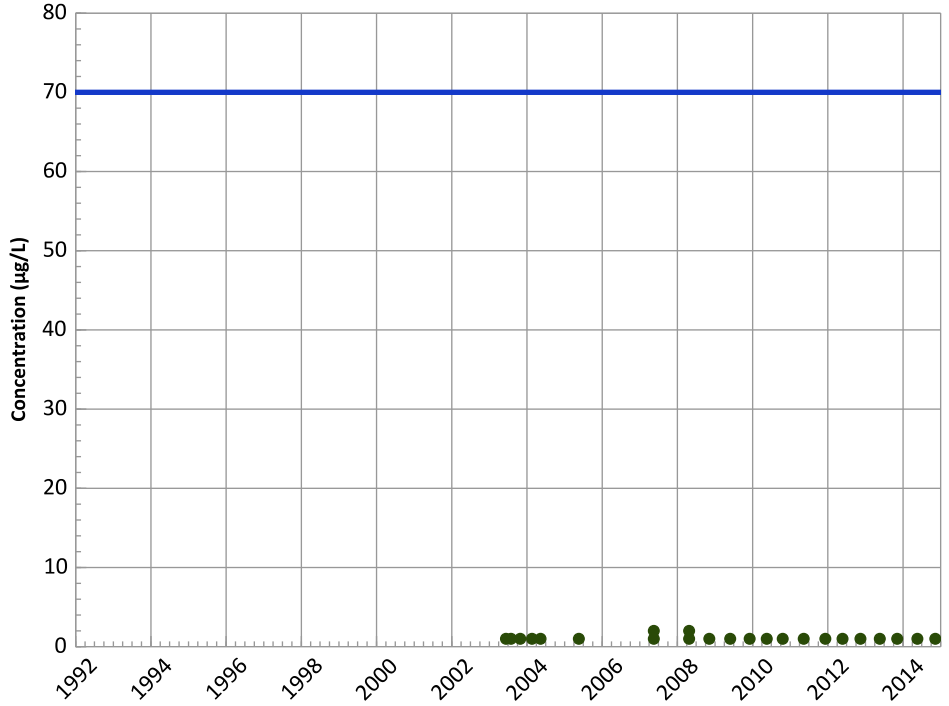


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

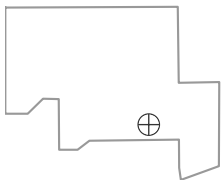
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

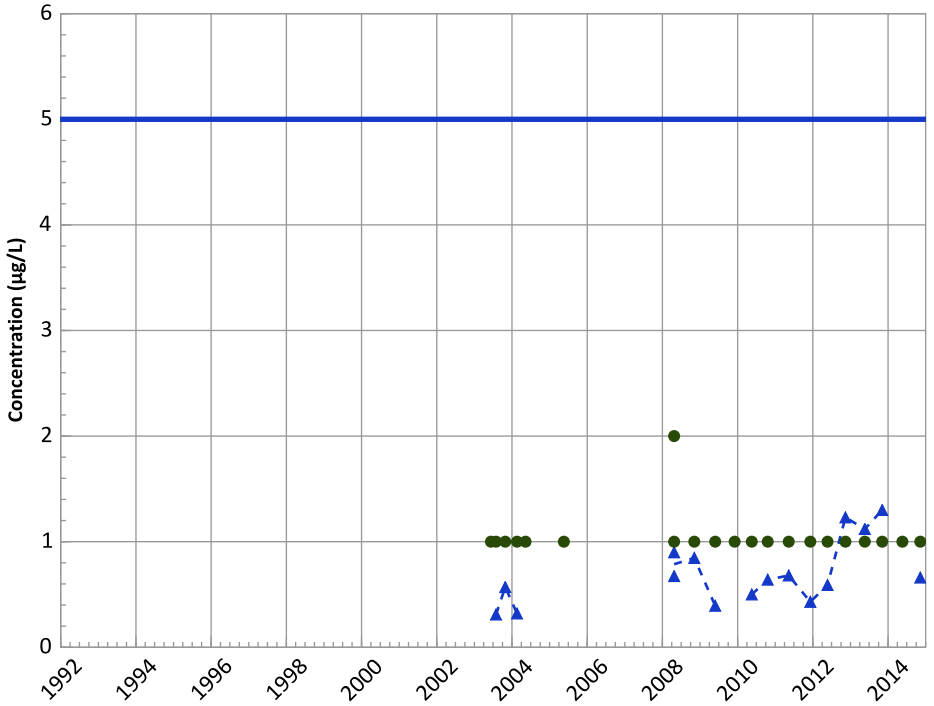
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

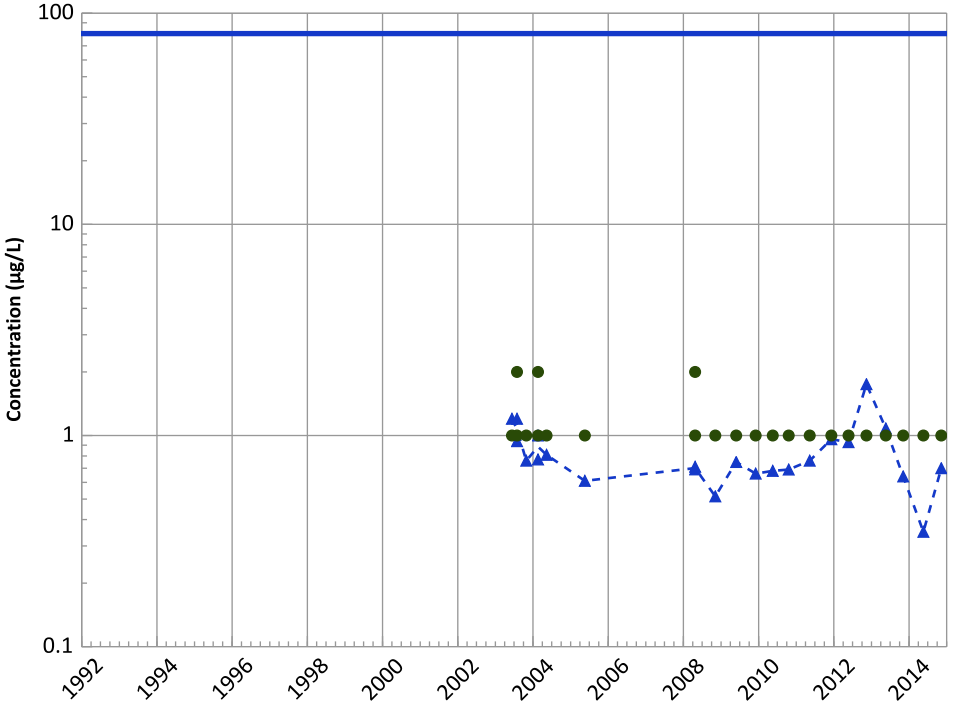


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

Chloroform Trend



Concentration Trend

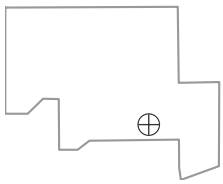
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

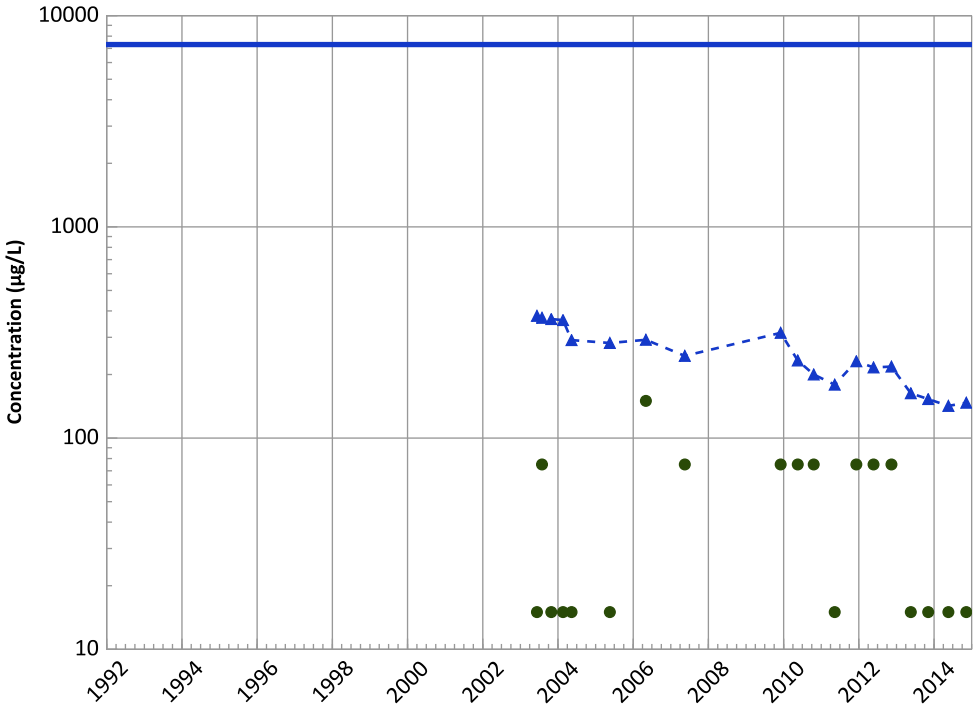
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

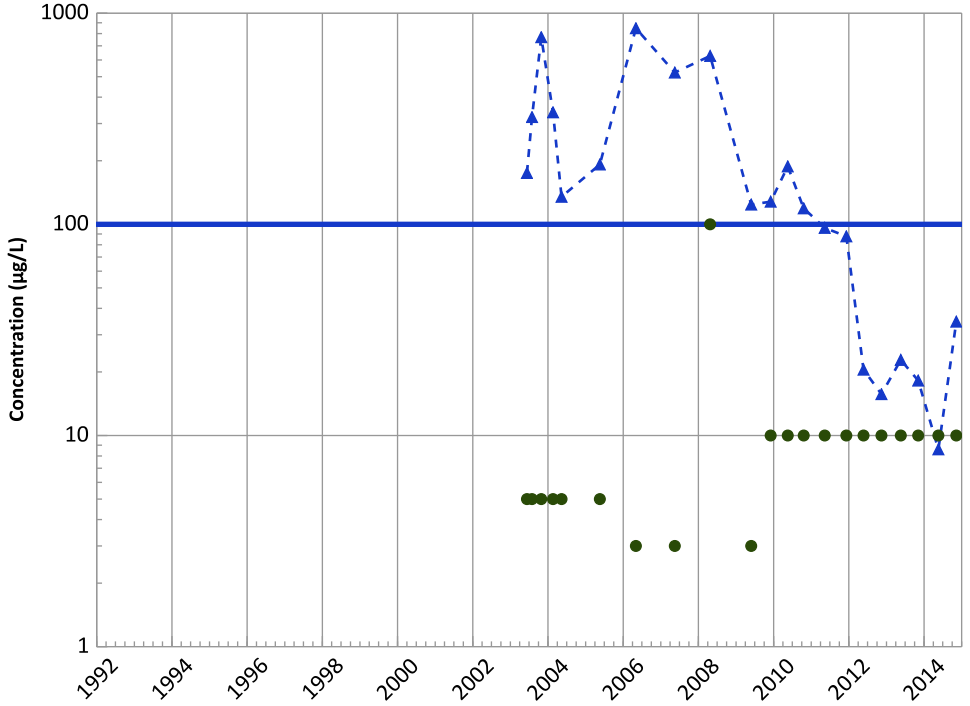


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

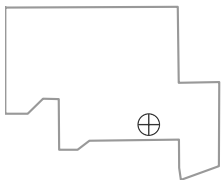
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

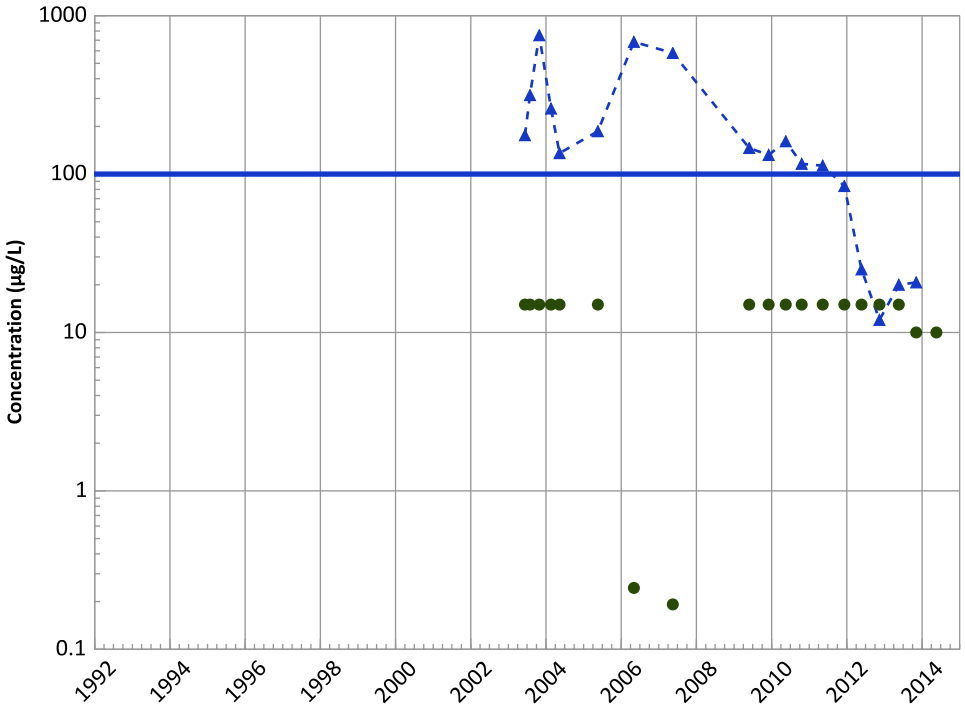
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

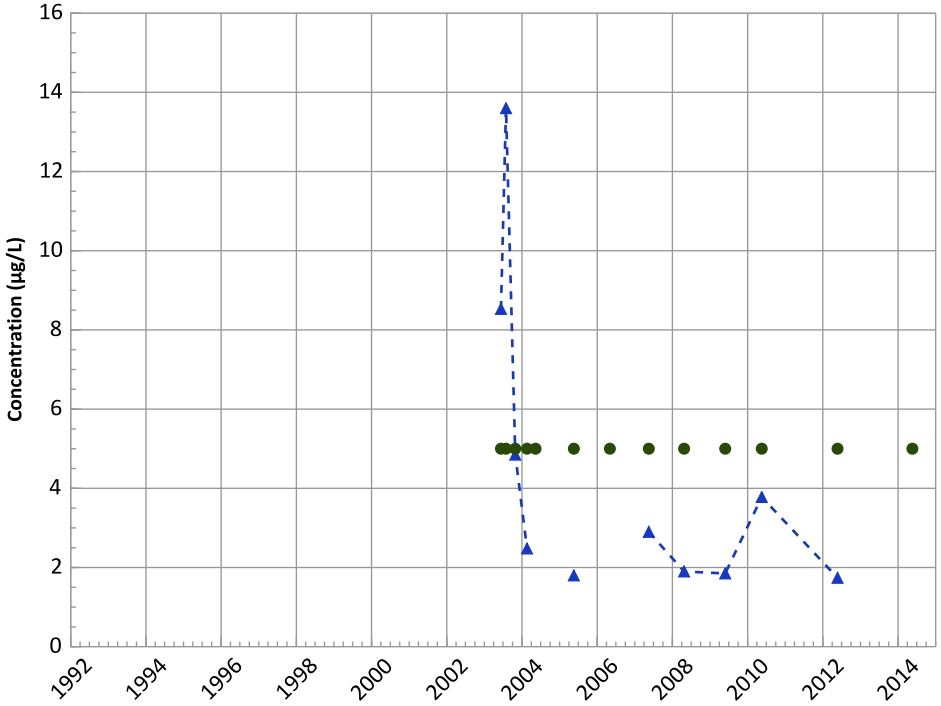


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Manganese Trend



Concentration Trend

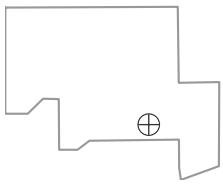
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

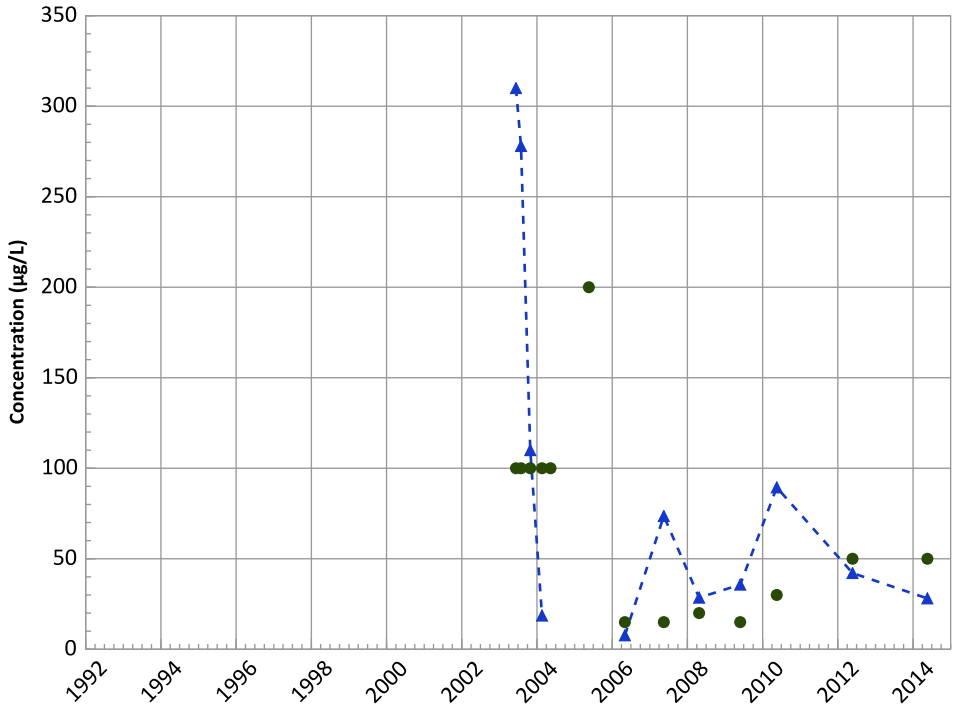
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

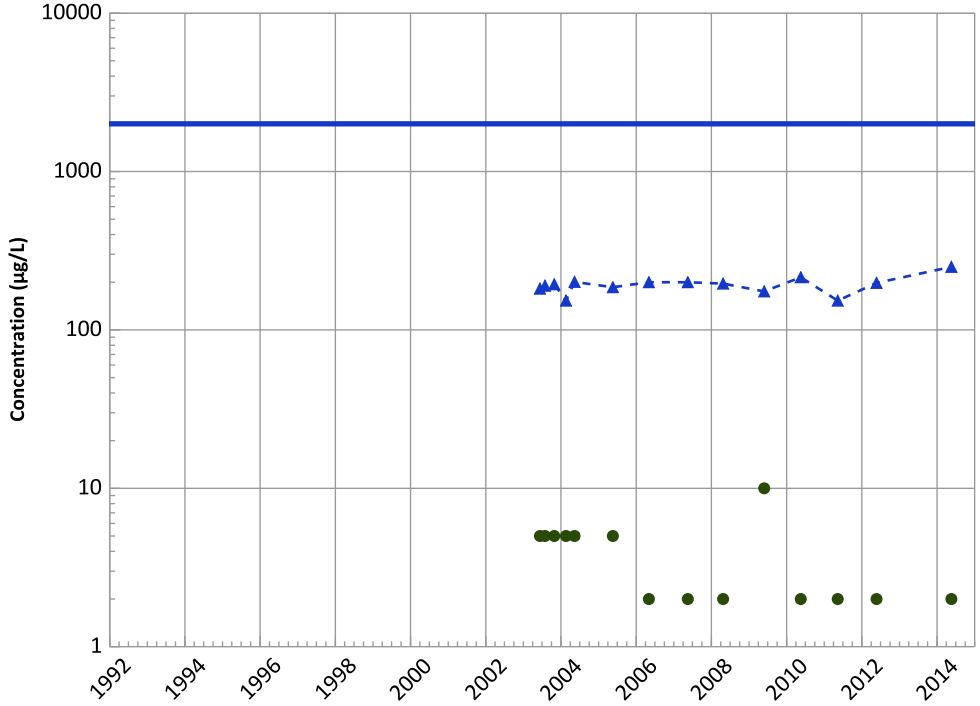


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

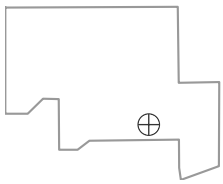
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

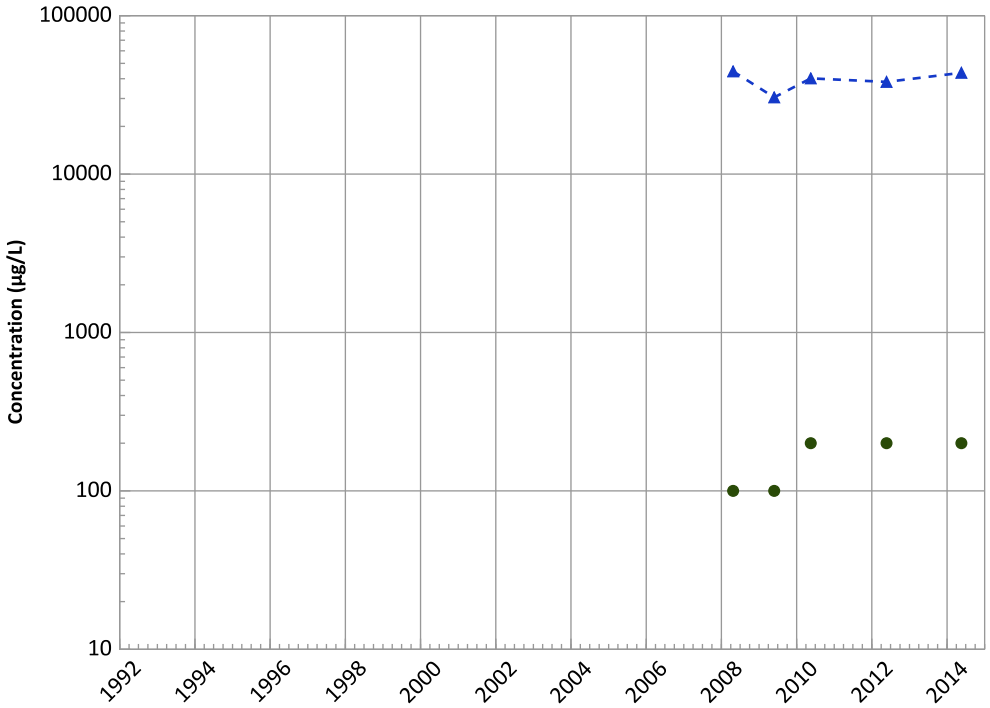
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

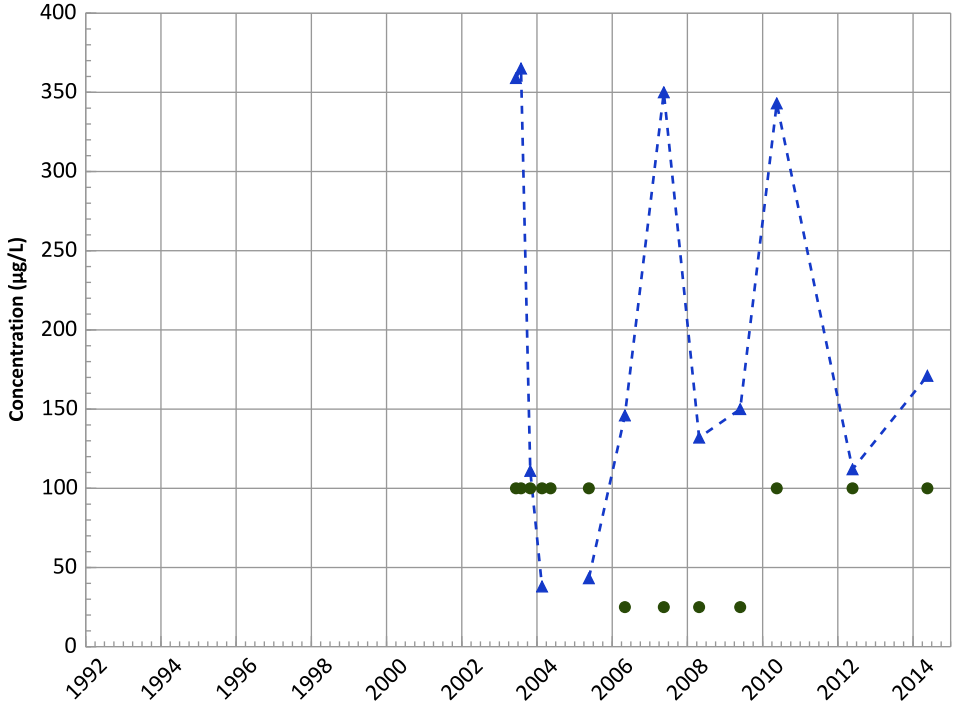


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

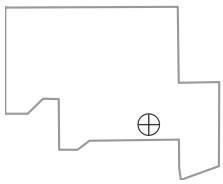
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

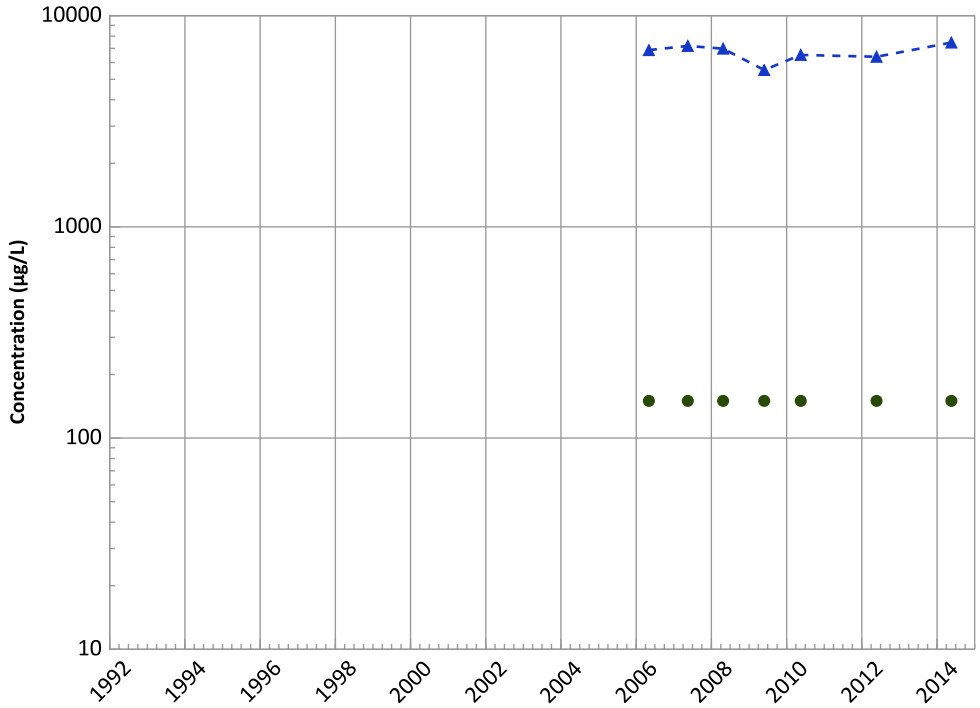
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

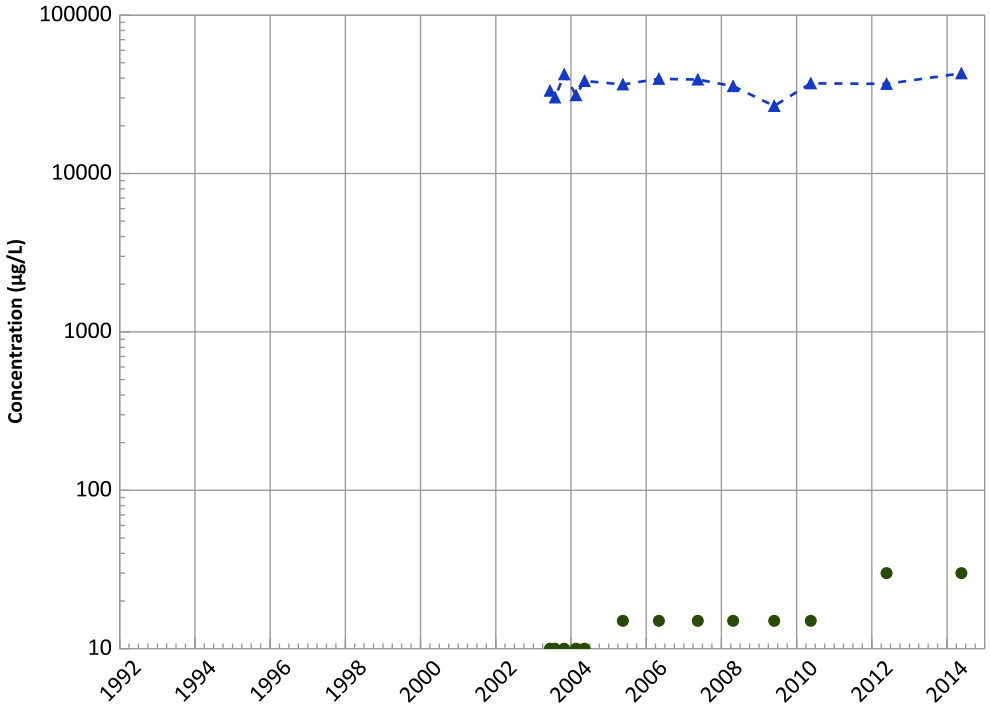


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

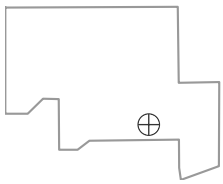
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

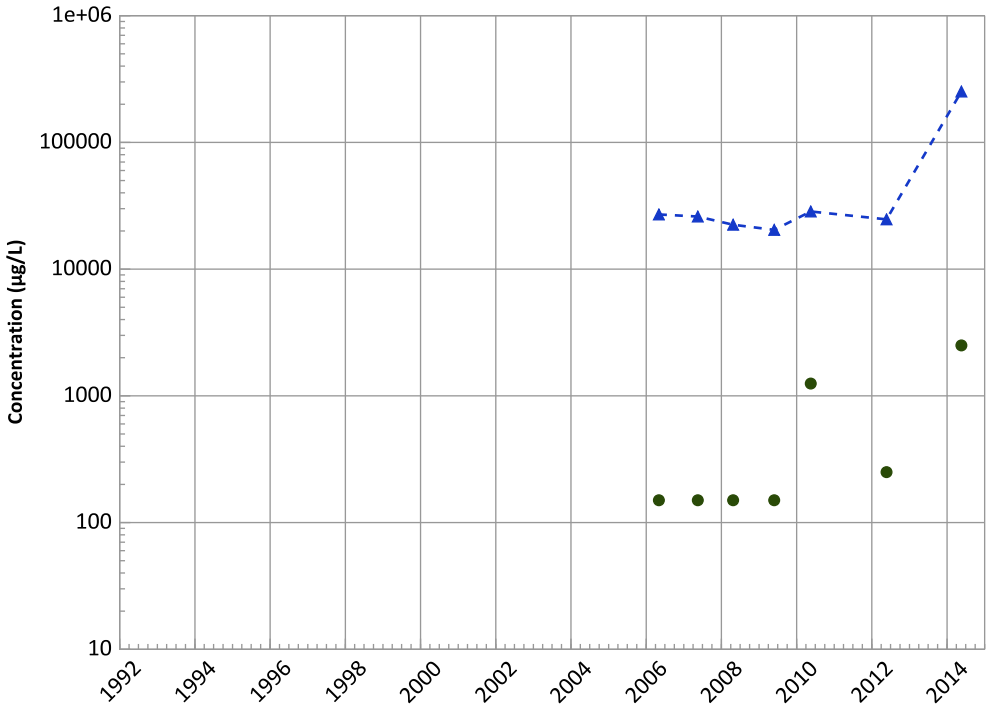
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1088 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

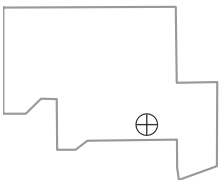
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

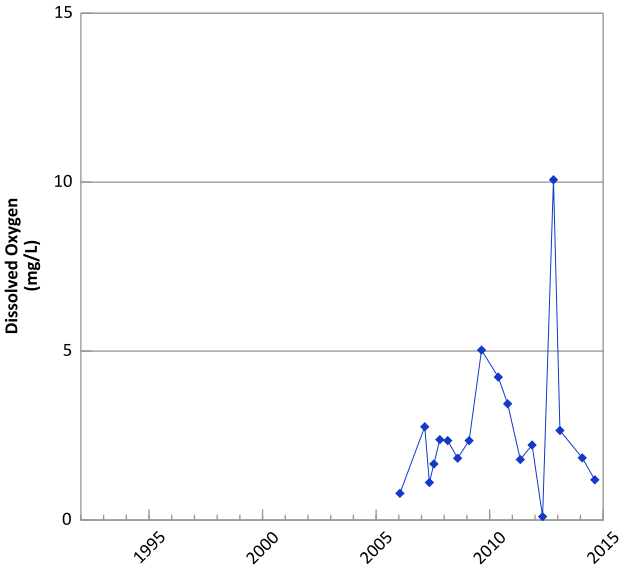
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/11/2003 to 11/10/2014
Analysis Date: 03/19/2015

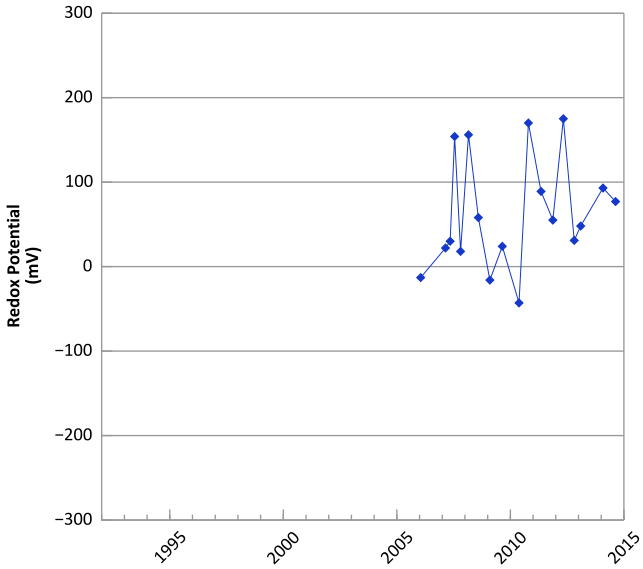
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

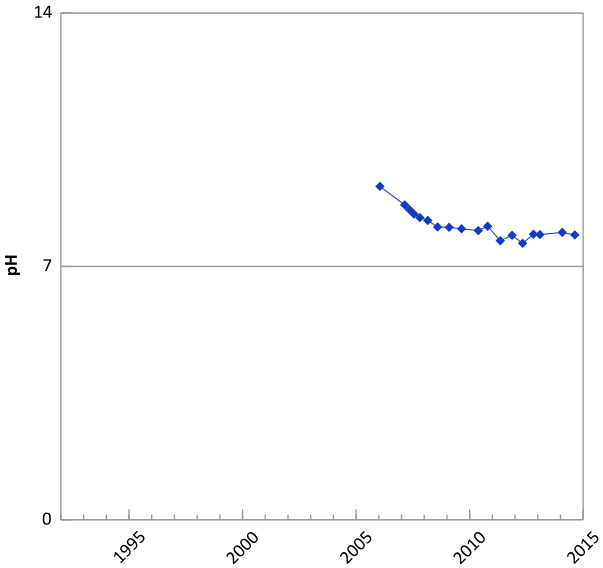
Well Location

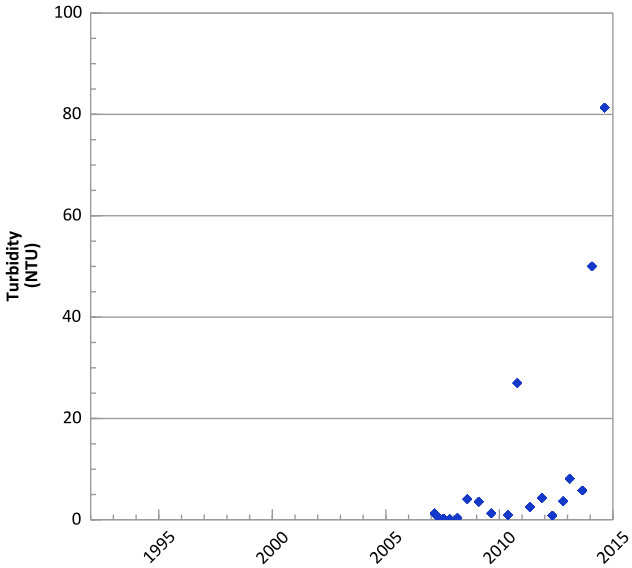


PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



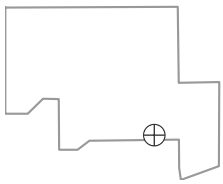






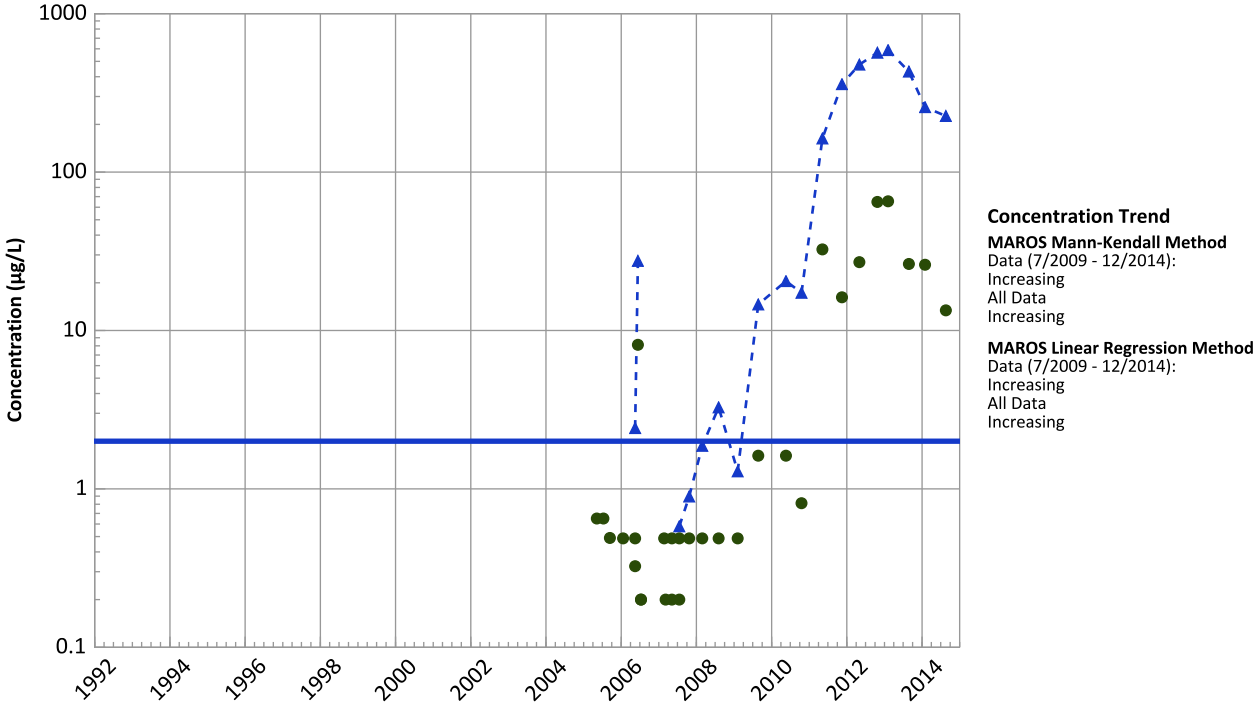
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

Well Location

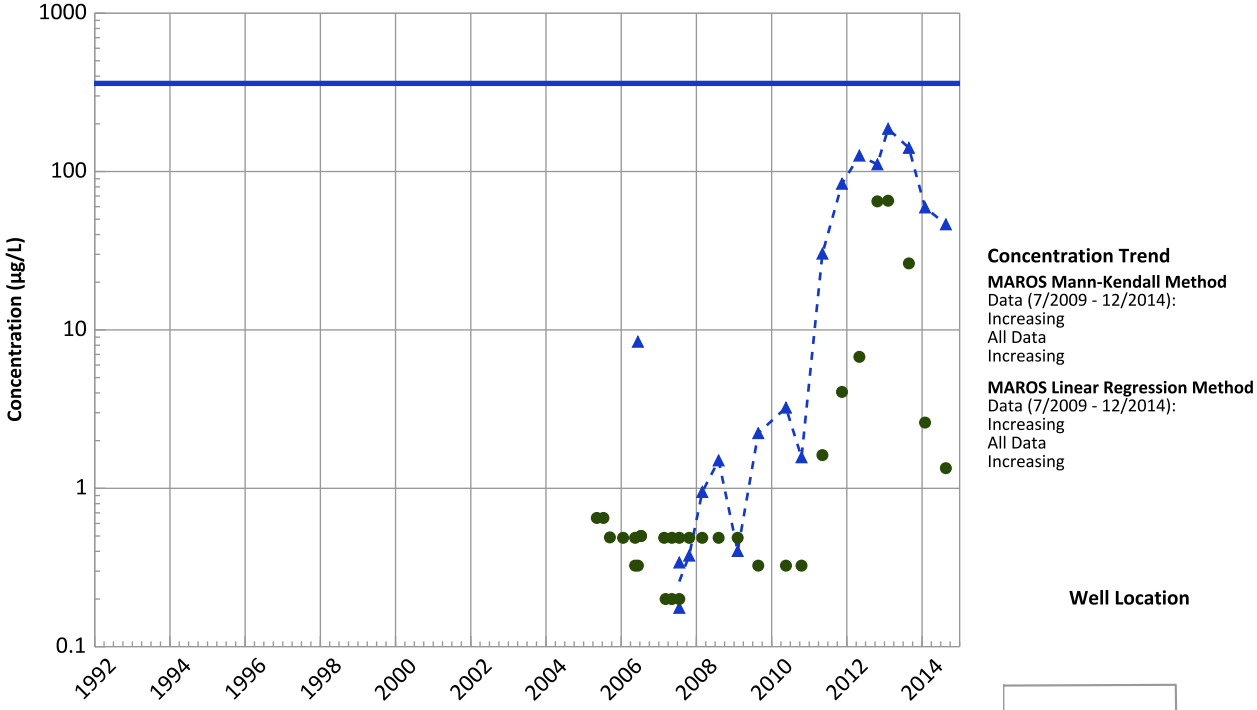


PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend



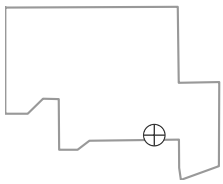
HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

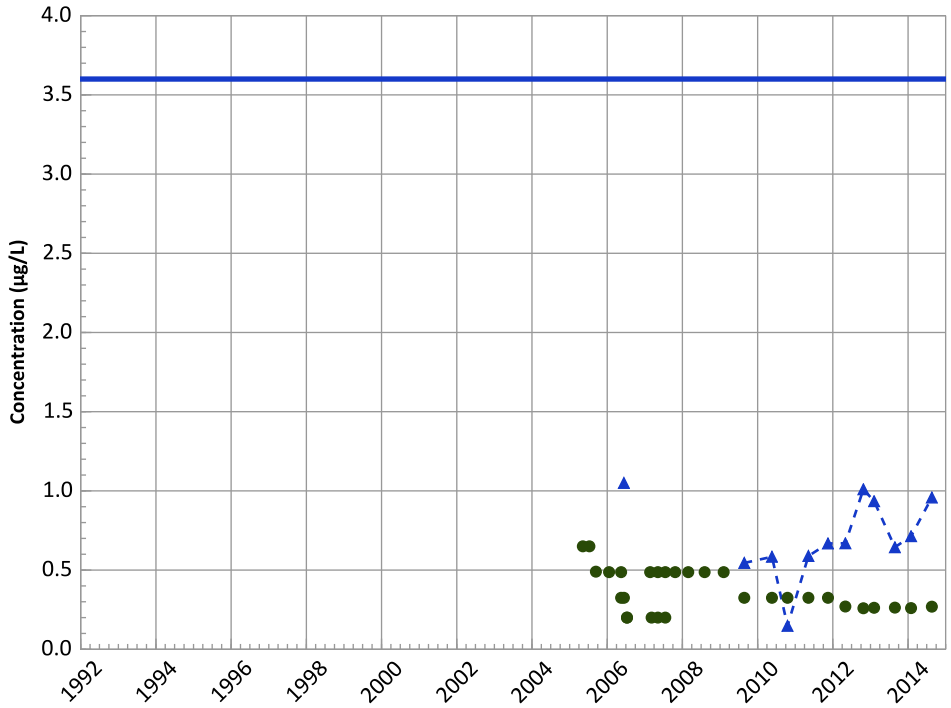
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

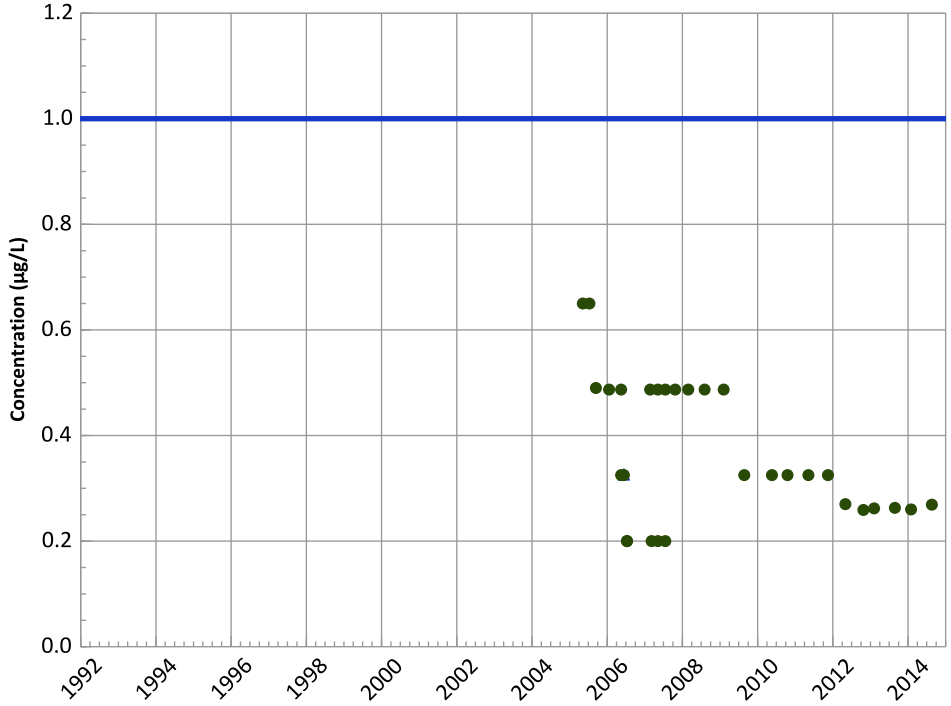


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

2,4-Dinitrotoluene Trend



Concentration Trend

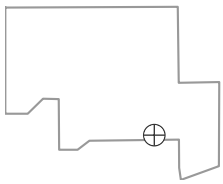
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

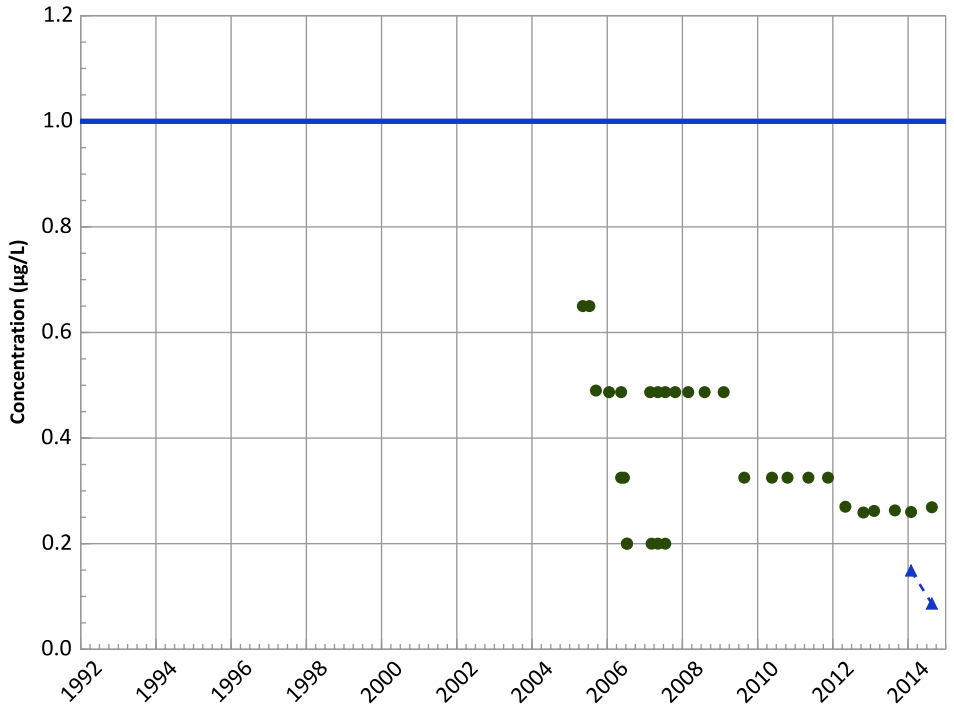
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

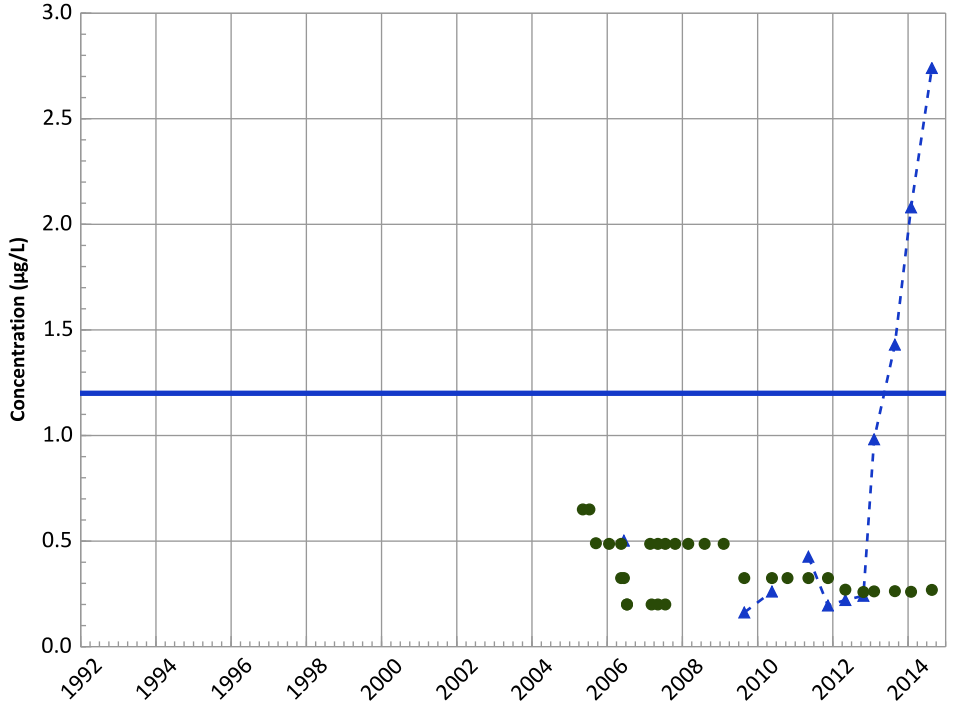


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

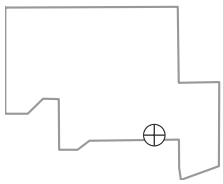
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

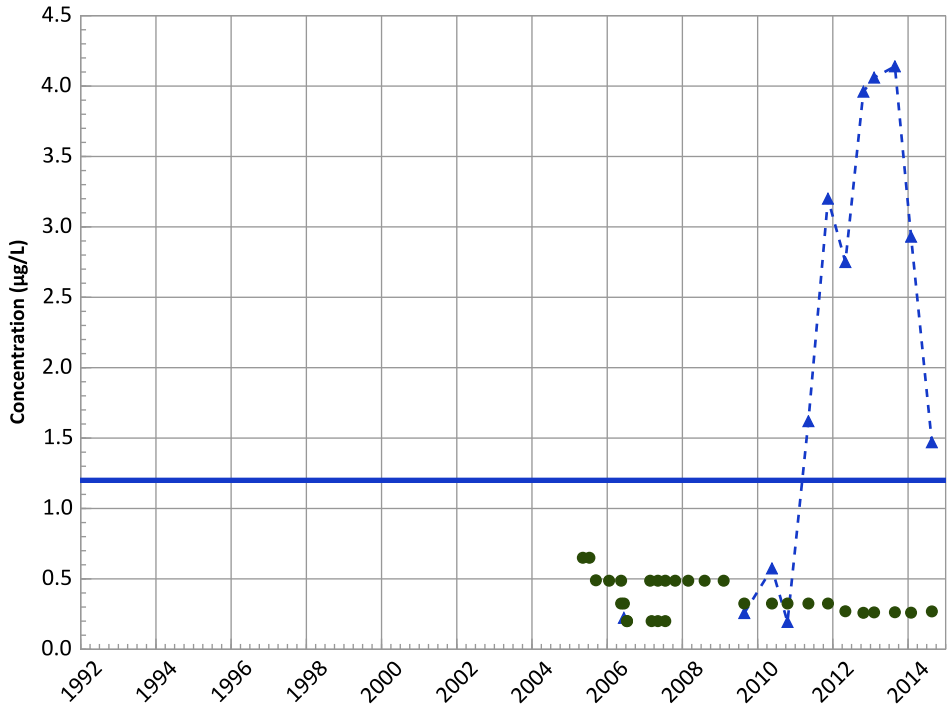
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

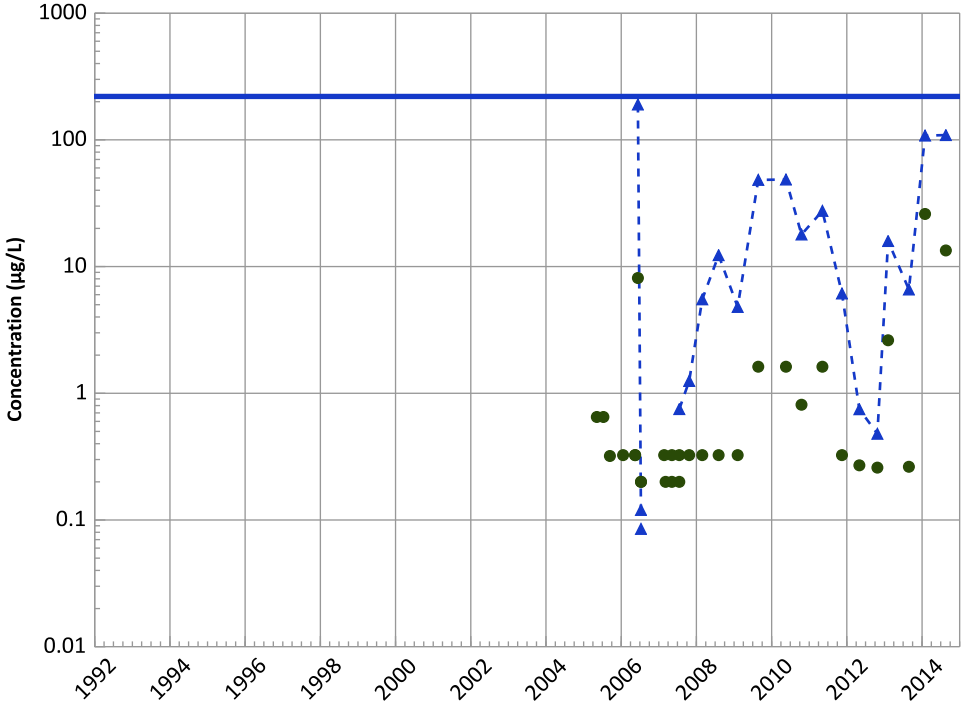


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

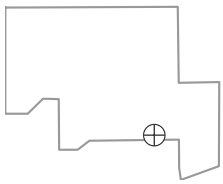
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

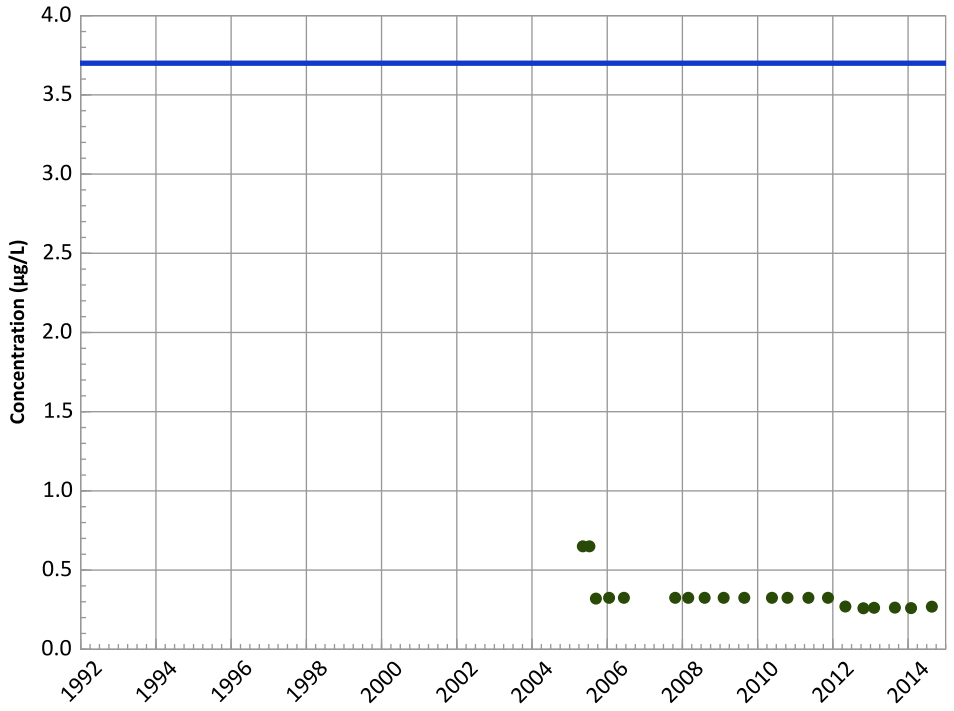
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

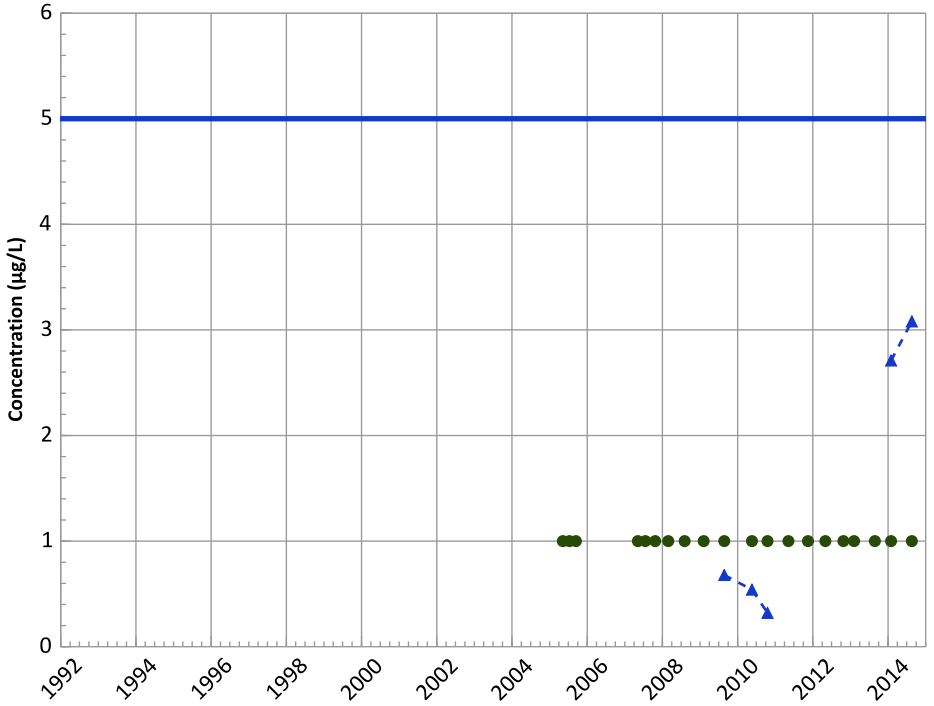


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

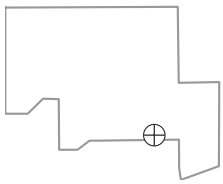
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

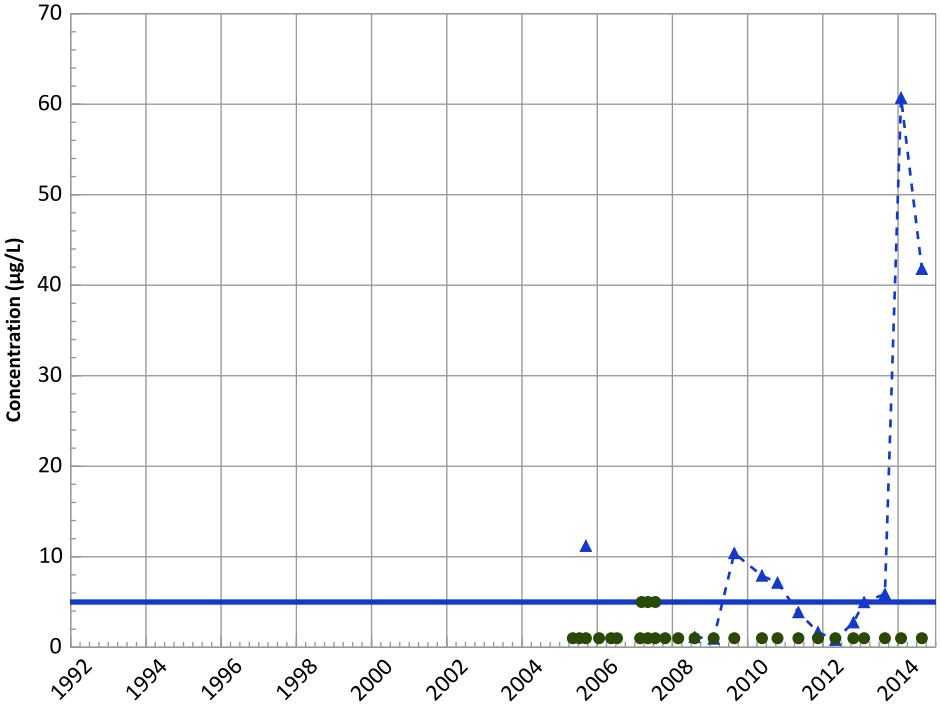
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

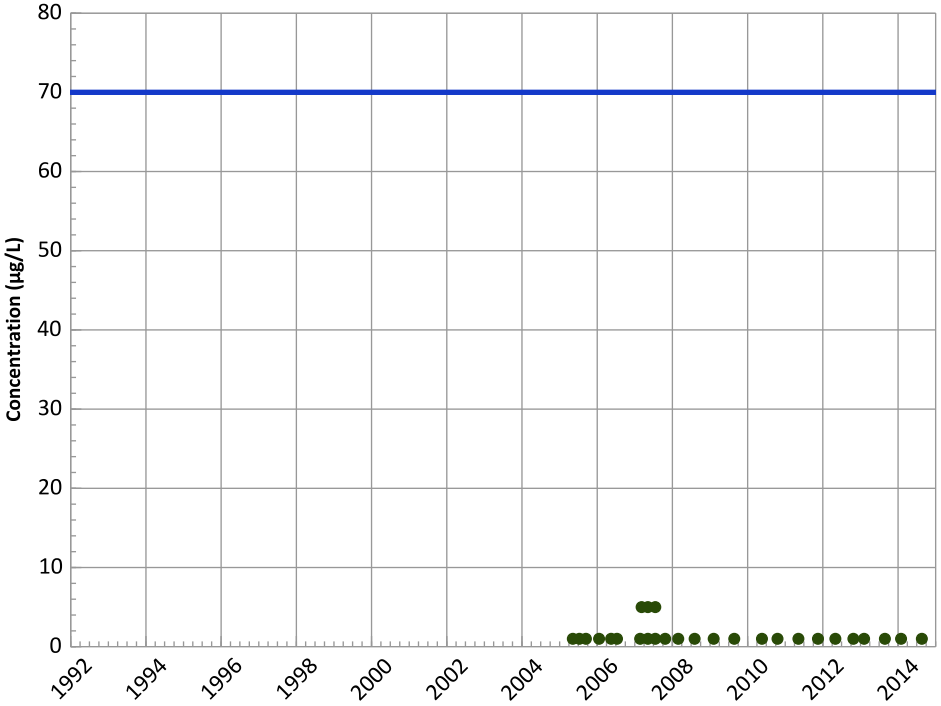


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

cis-1,2-Dichloroethene Trend



Concentration Trend

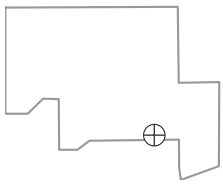
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

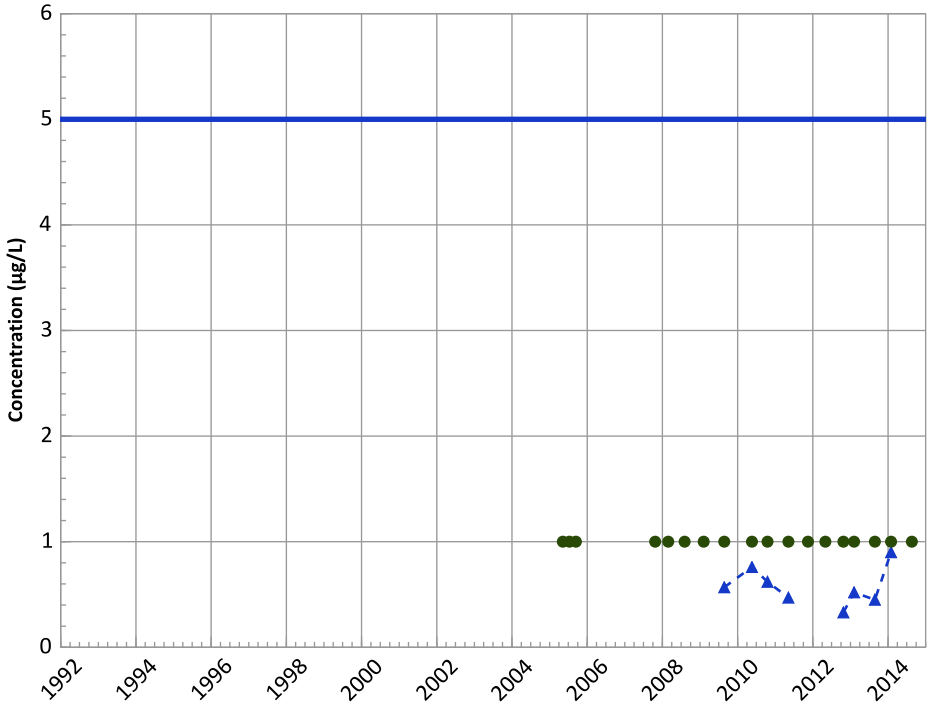
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

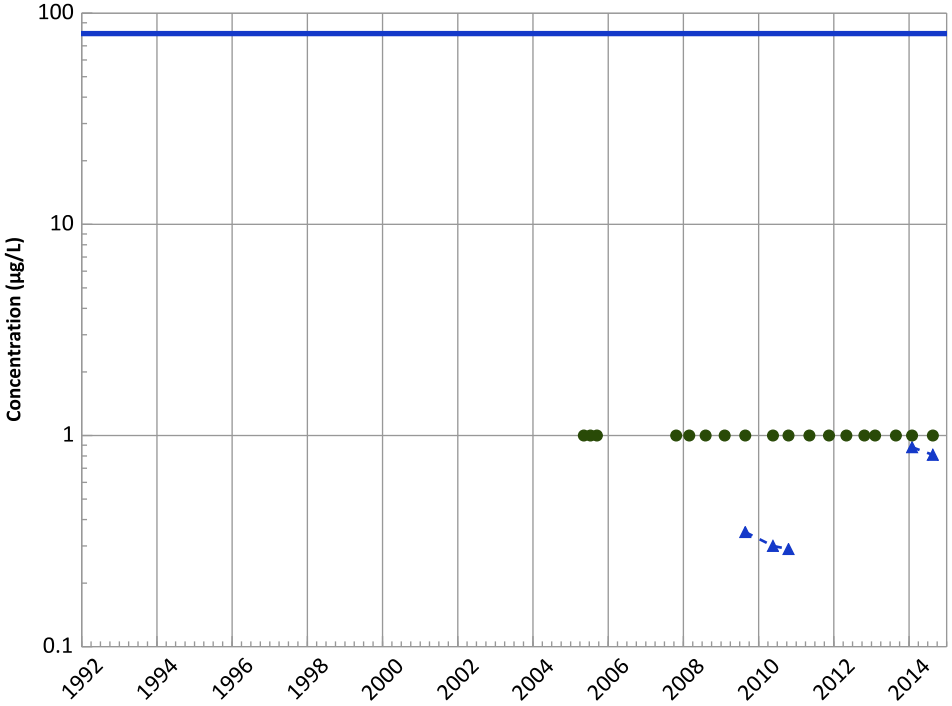


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Chloroform Trend



Concentration Trend

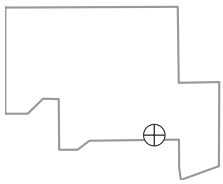
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

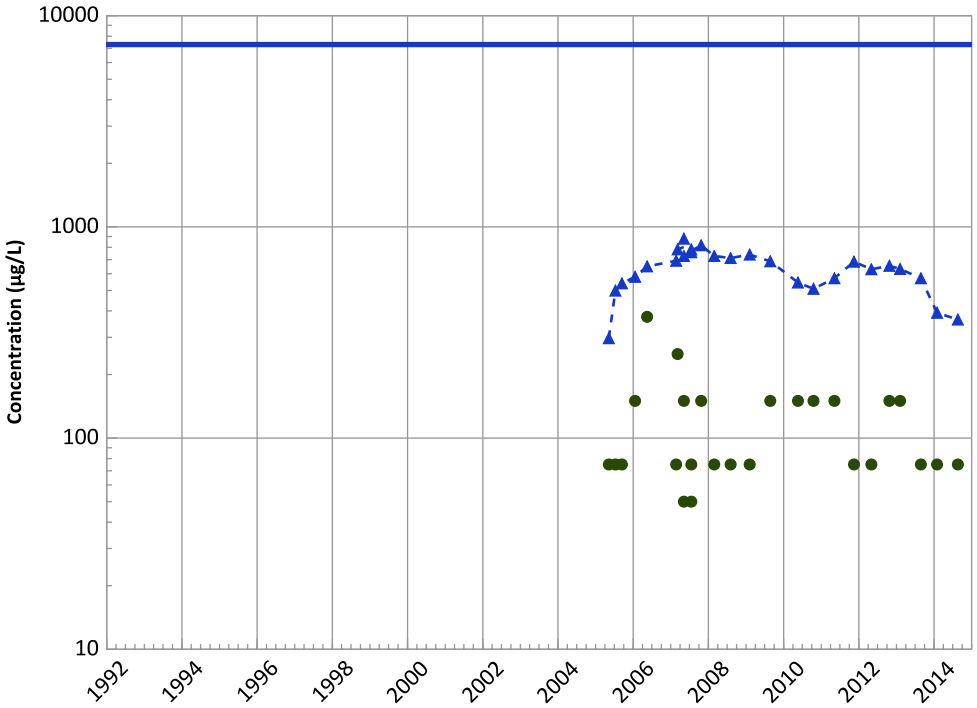
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

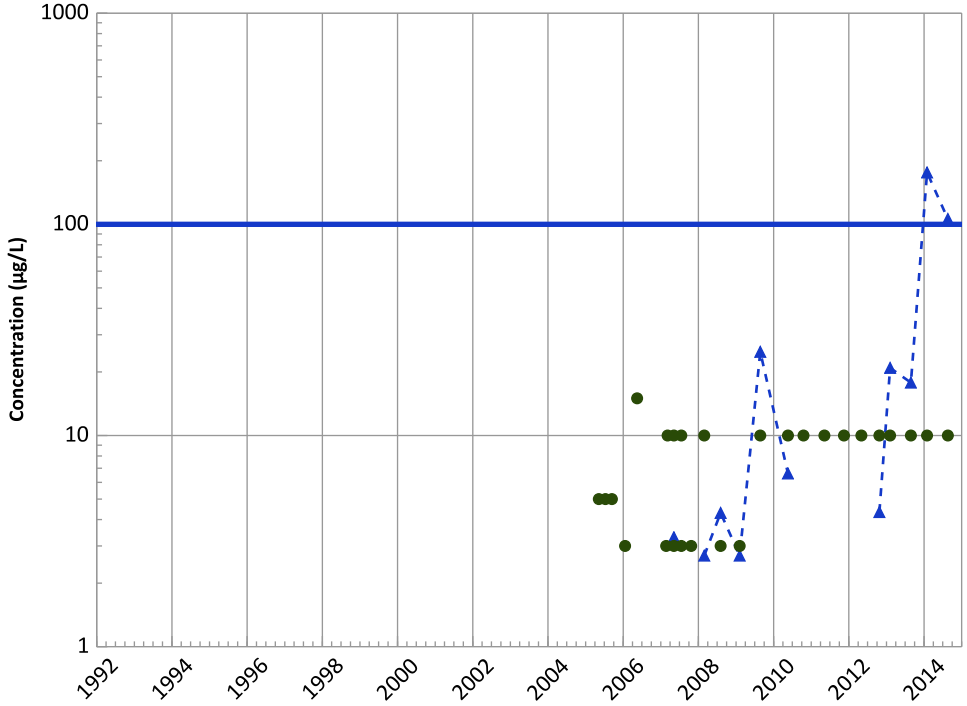


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

Chromium, Total Trend



Concentration Trend

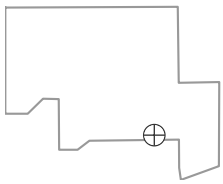
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

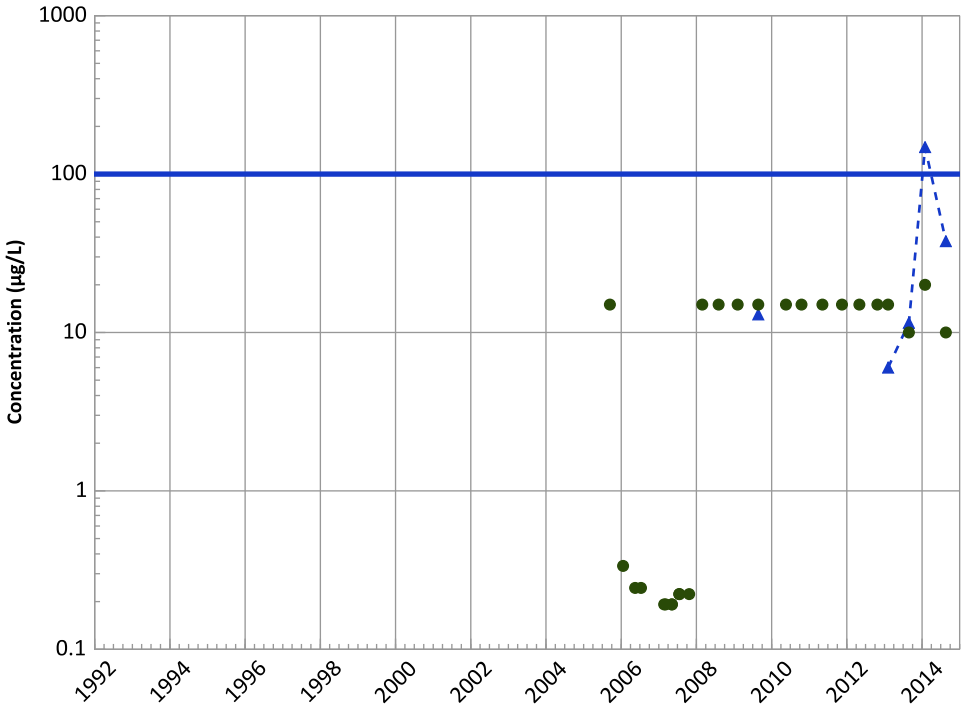
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

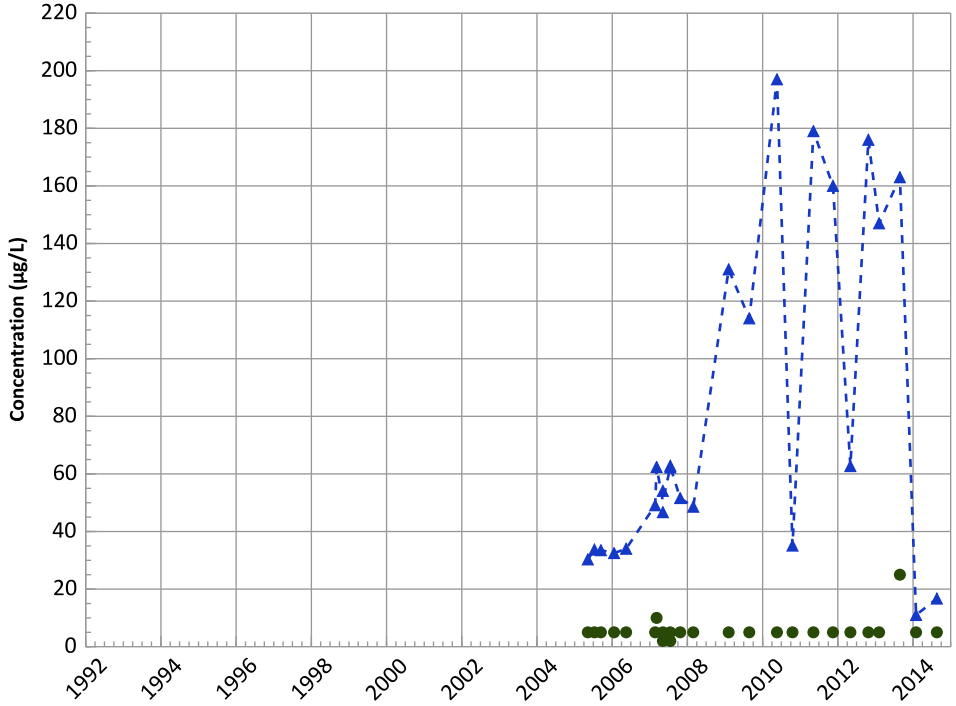


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Manganese Trend



Concentration Trend

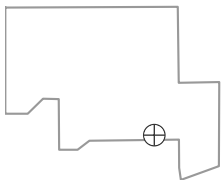
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

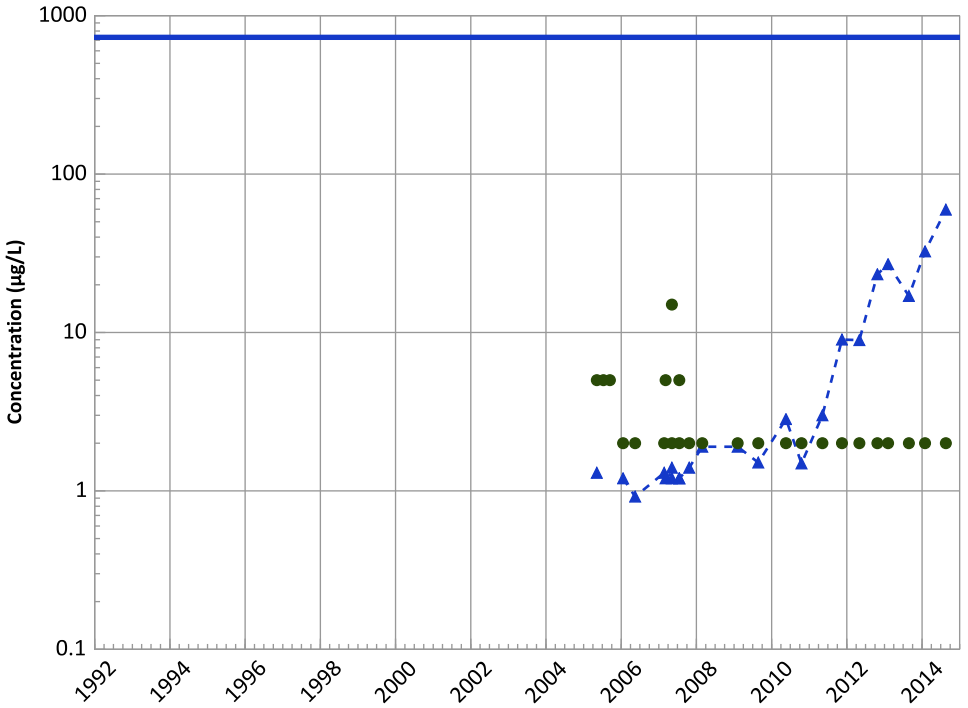
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

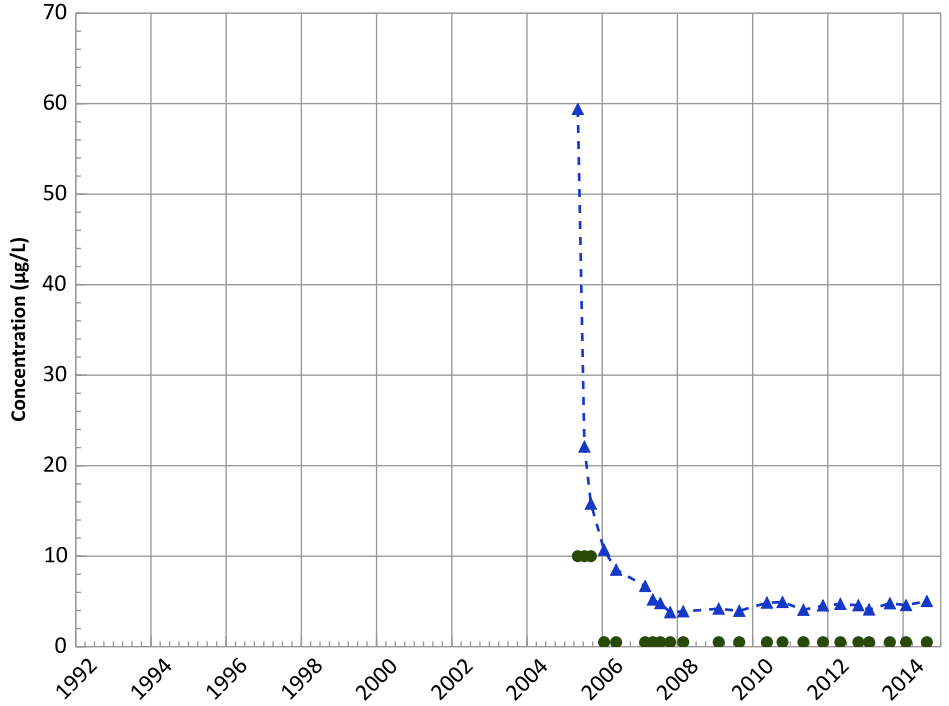


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Molybdenum Trend



Concentration Trend

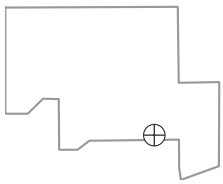
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

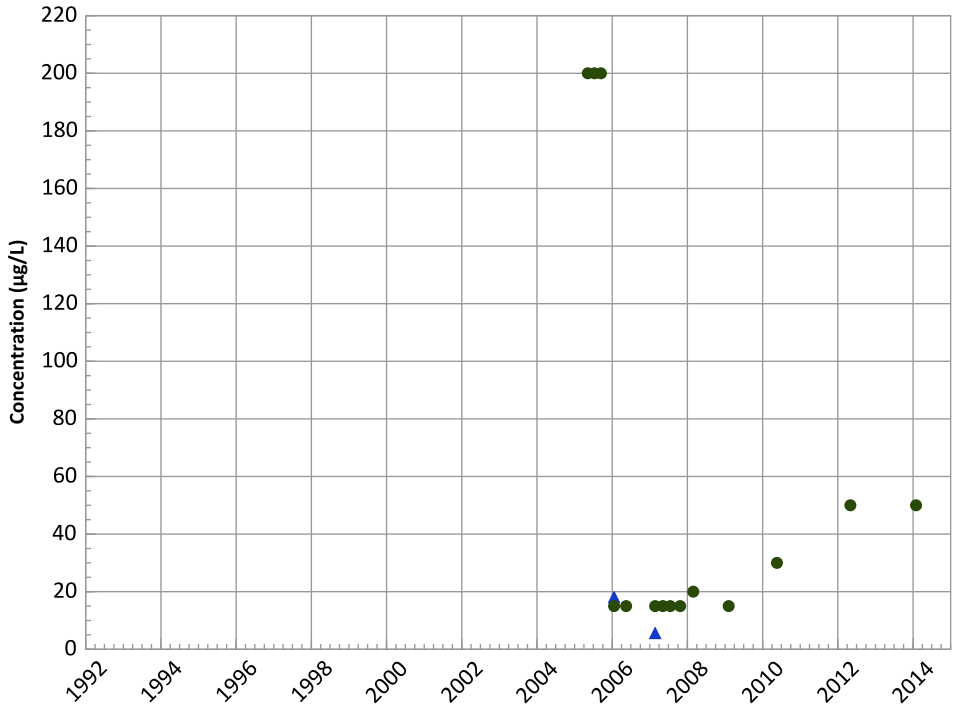
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

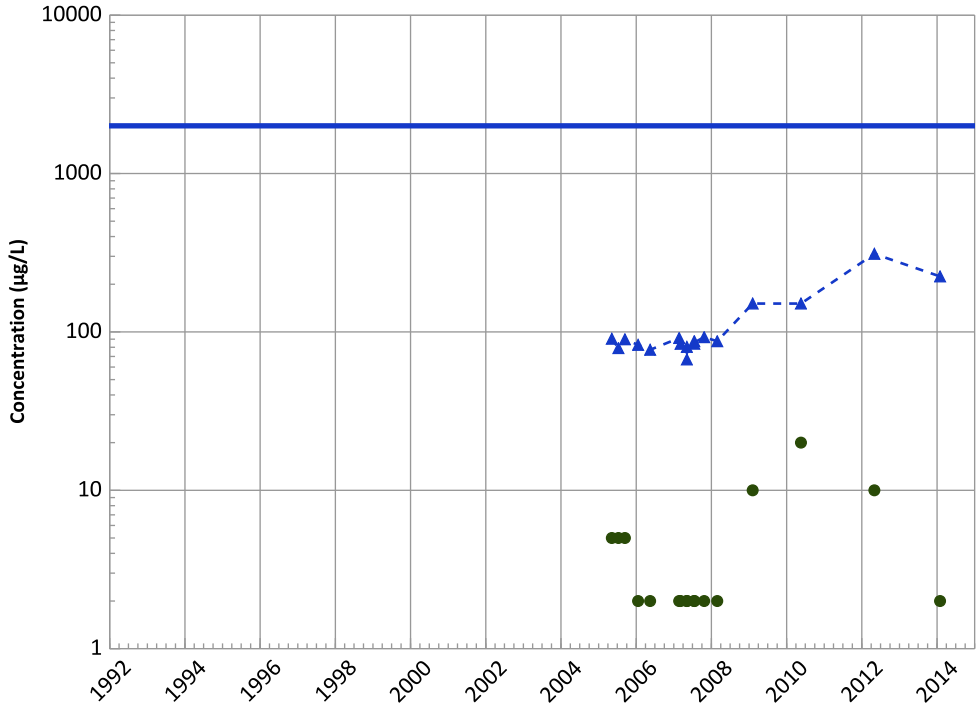


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

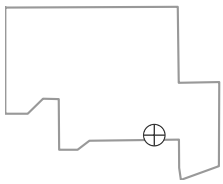
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

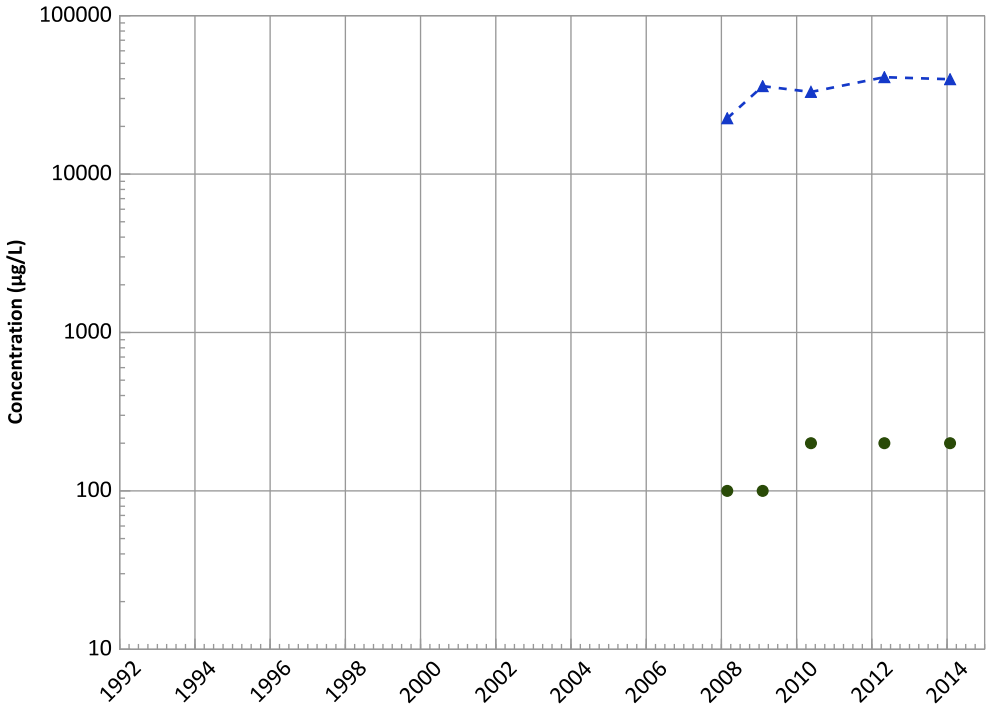
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

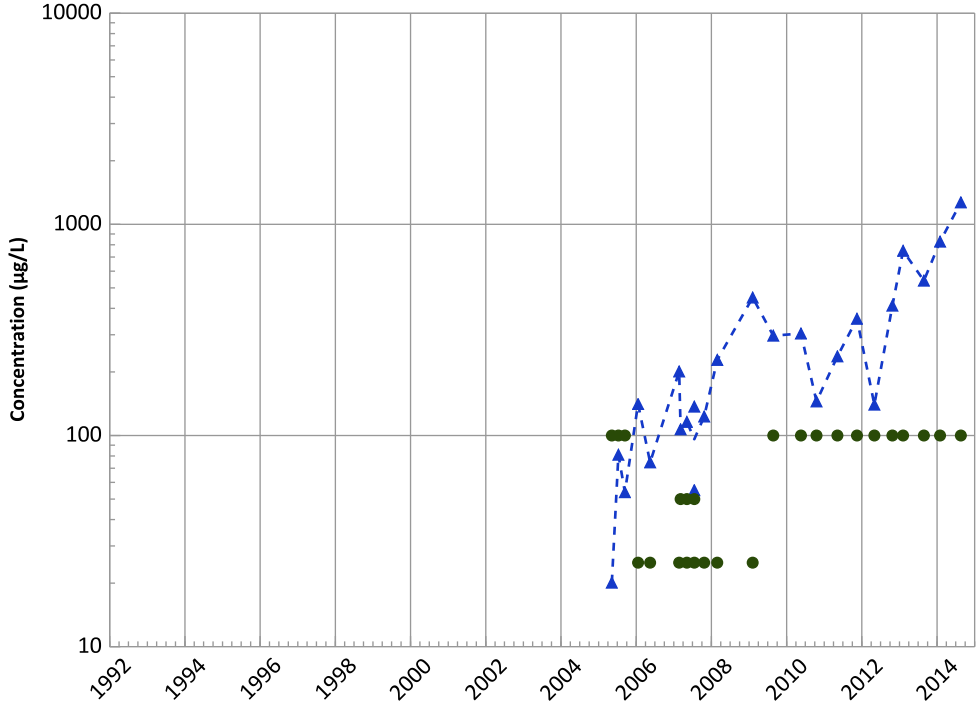


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Iron Trend



Concentration Trend

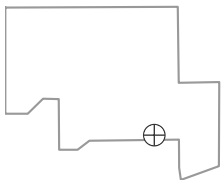
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

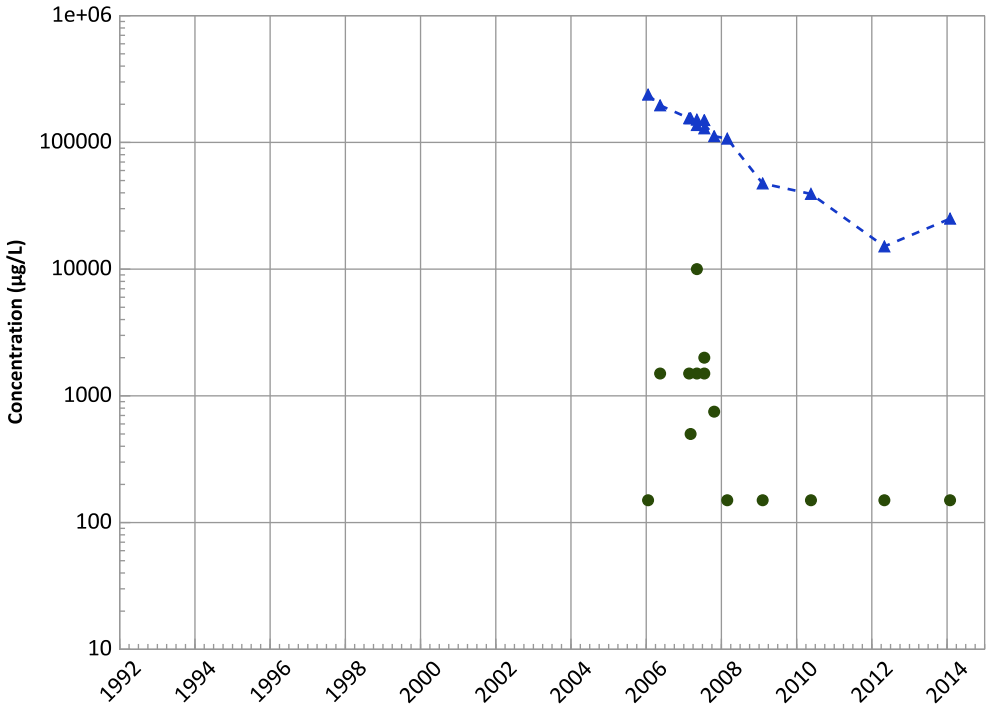
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

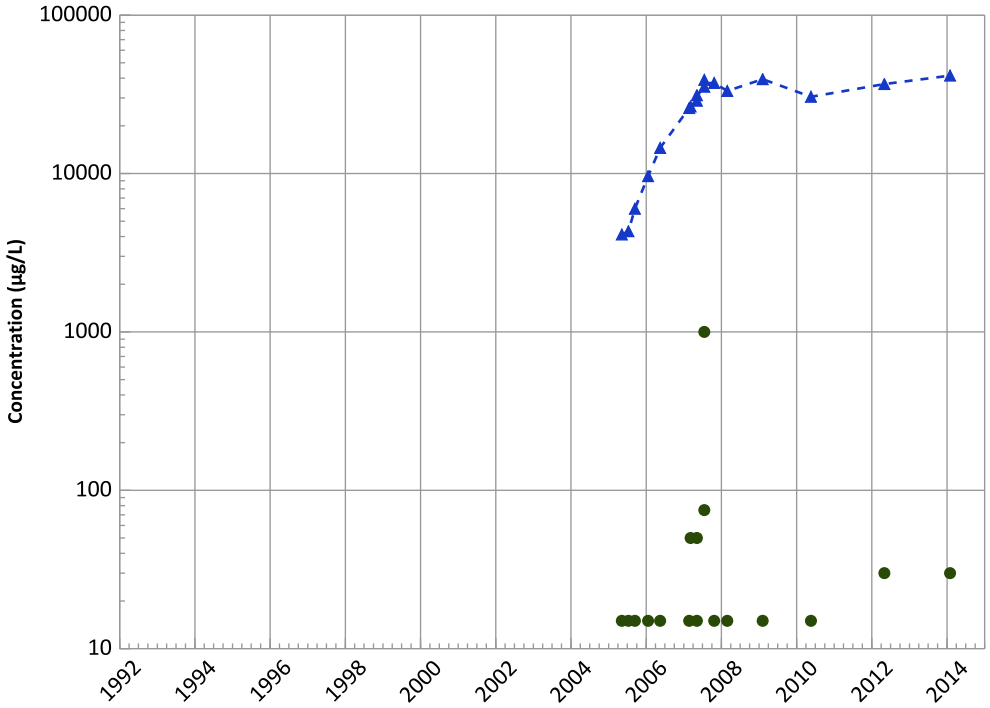


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

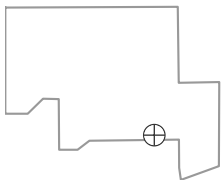
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

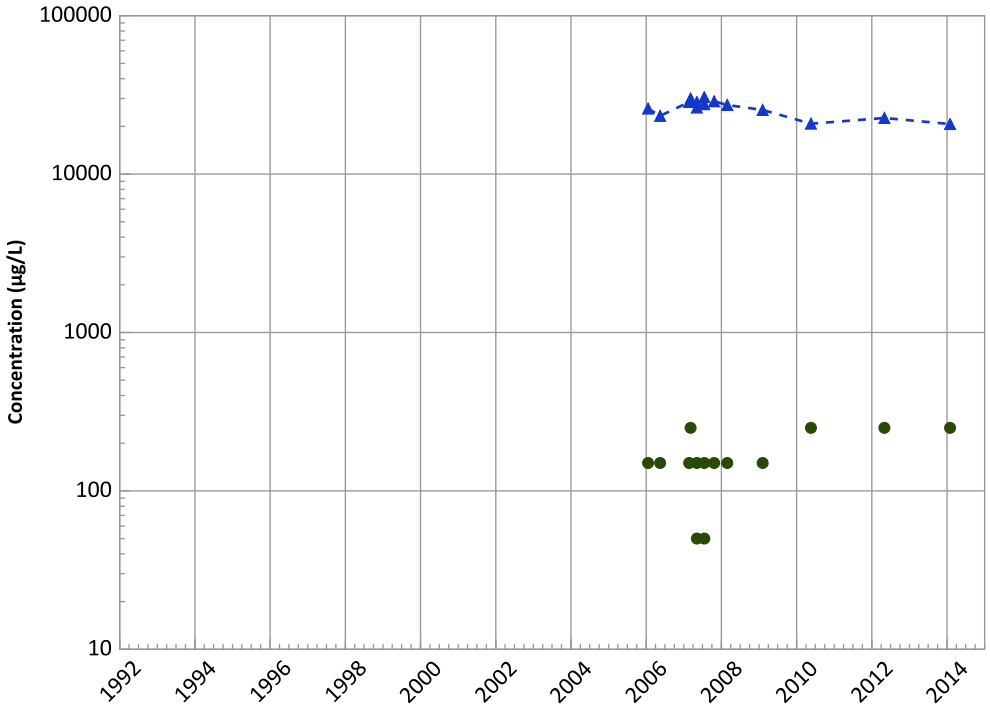
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1095A in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

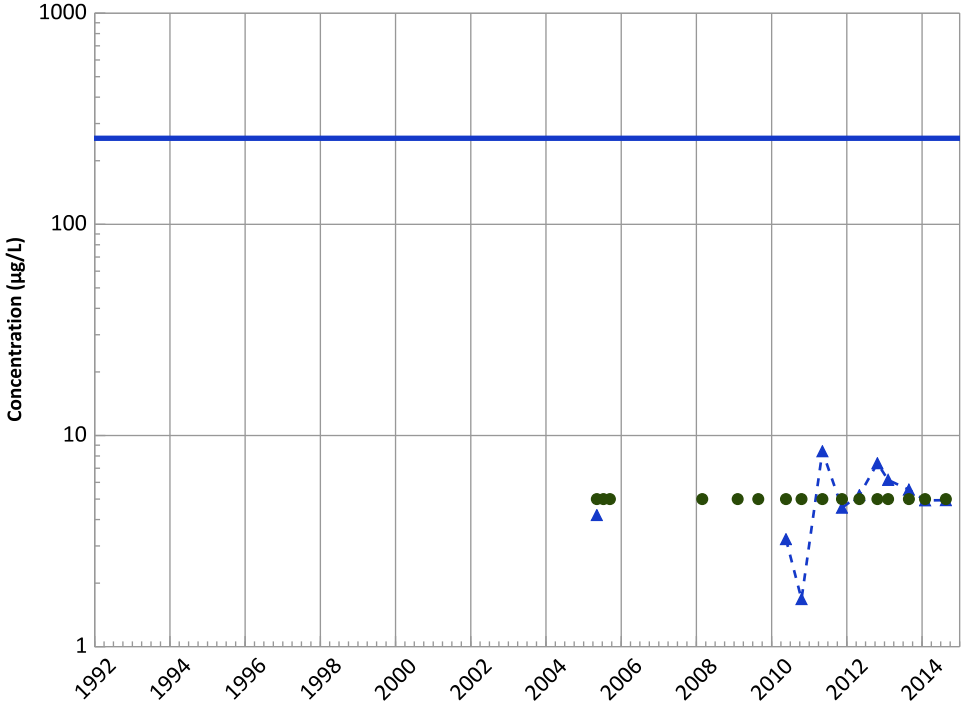


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Vanadium Trend



Concentration Trend

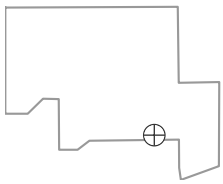
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

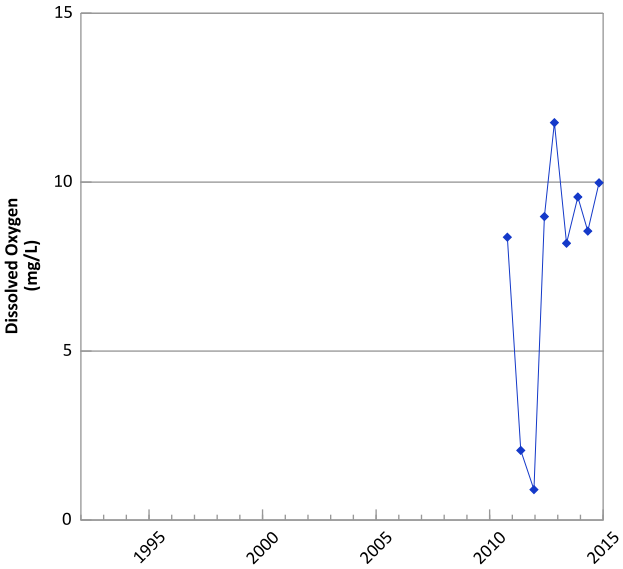
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/09/2005 to 08/20/2014
Analysis Date: 03/19/2015

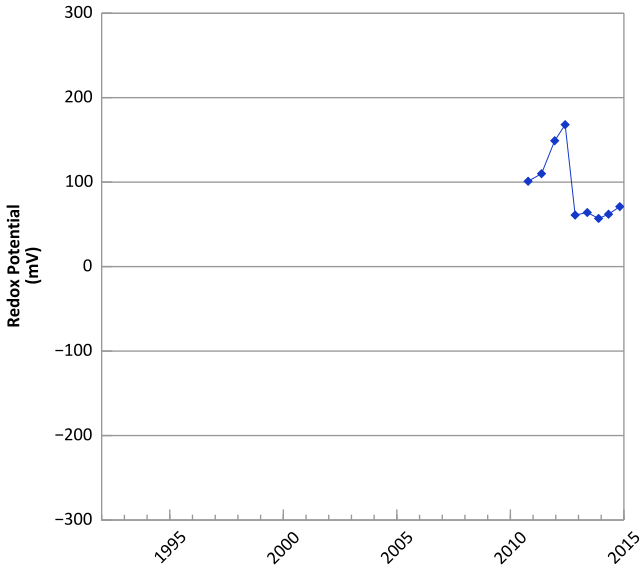
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

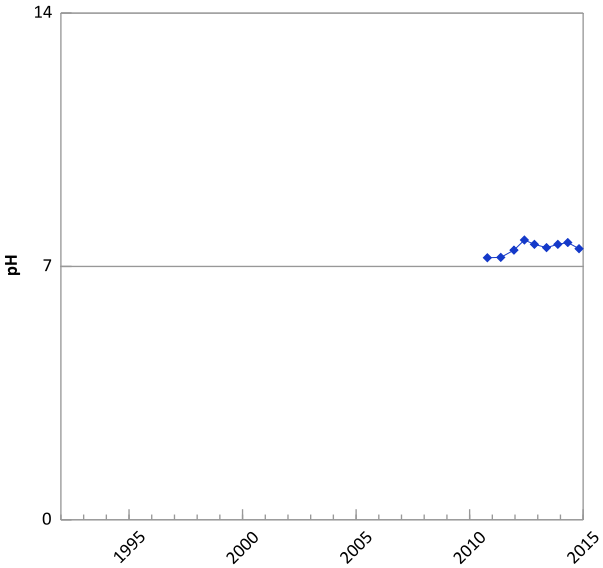
Well Location

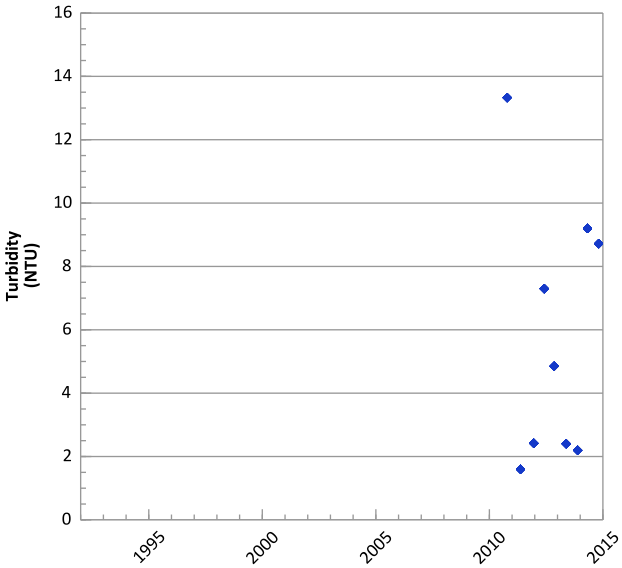


PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



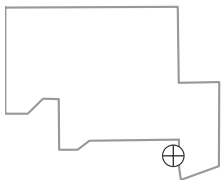






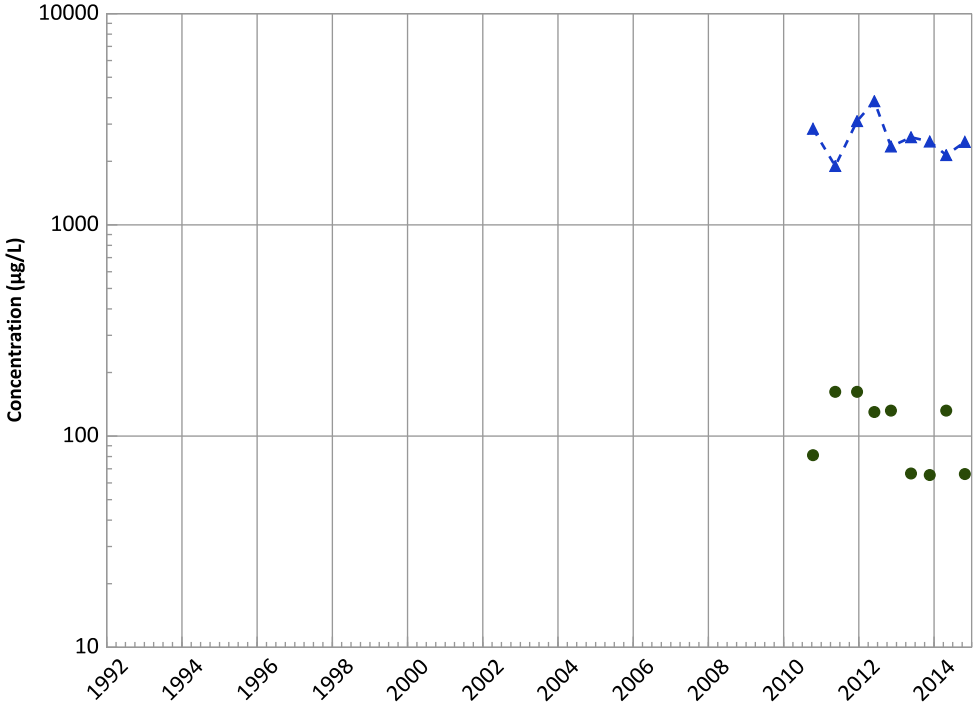
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

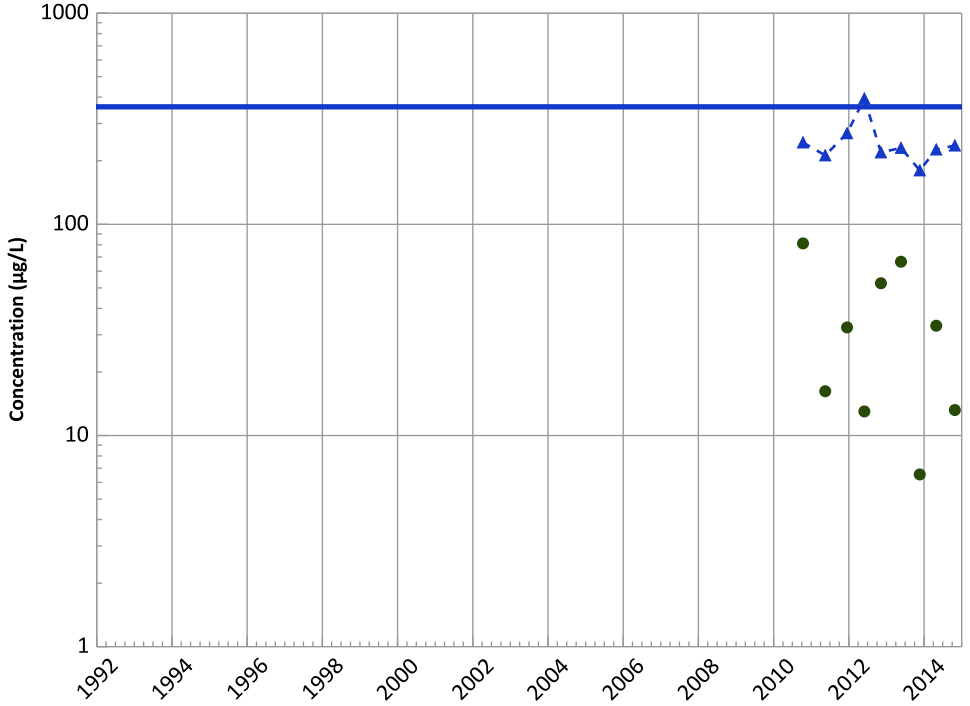


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

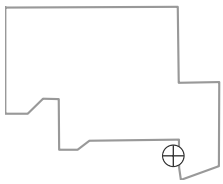
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

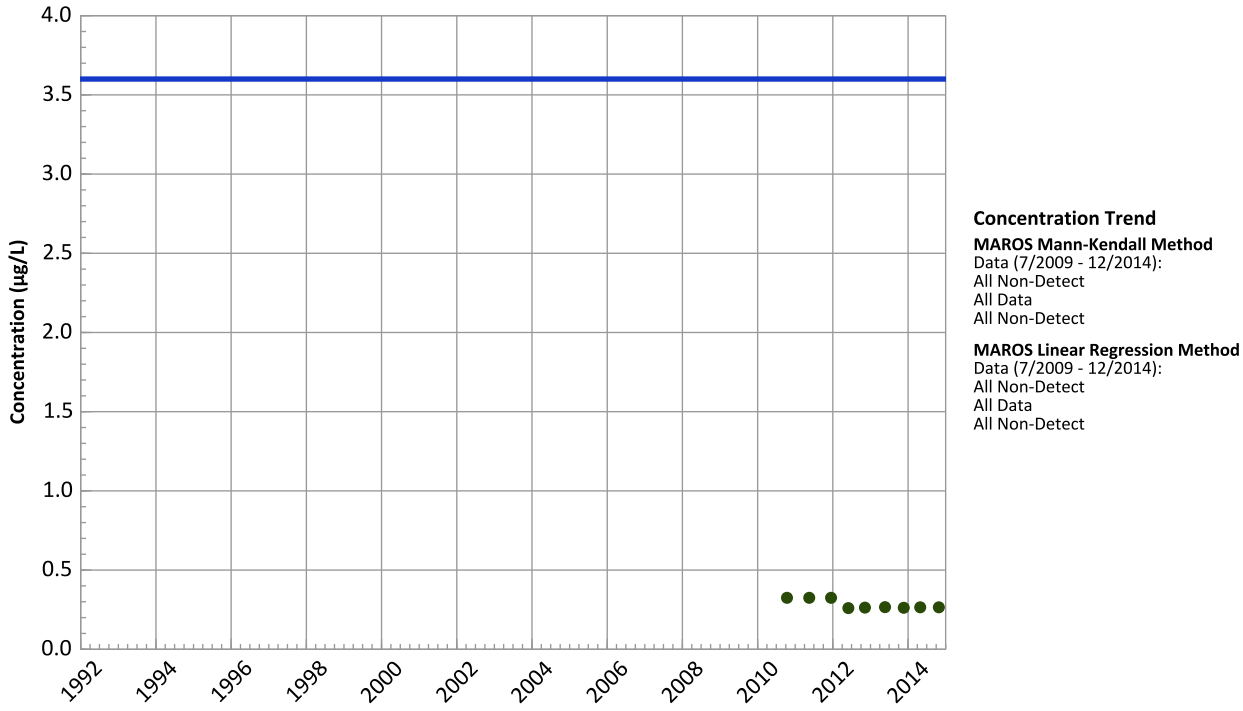
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

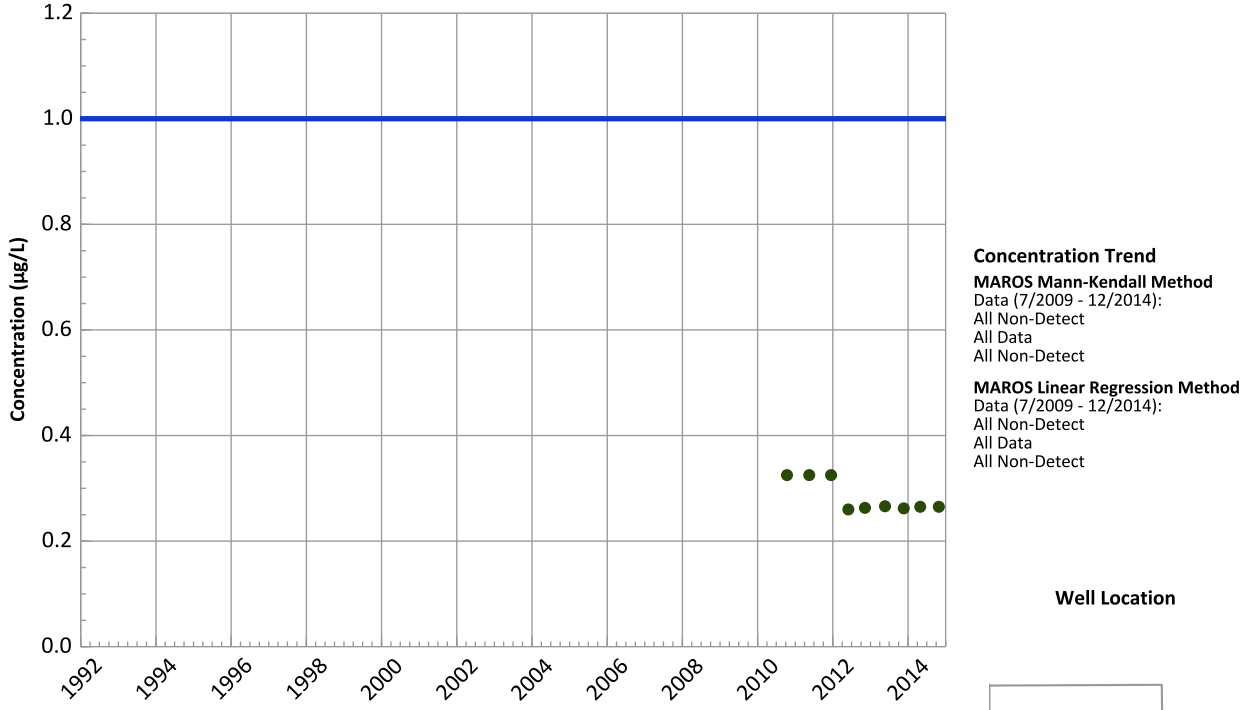


PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



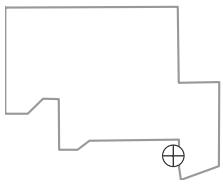
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

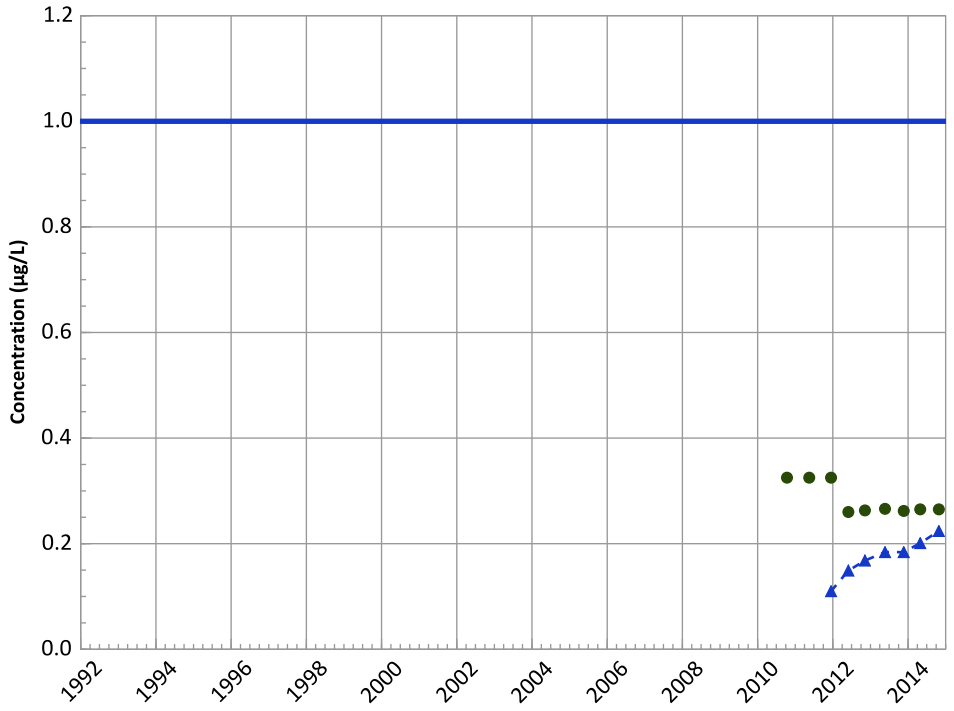
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

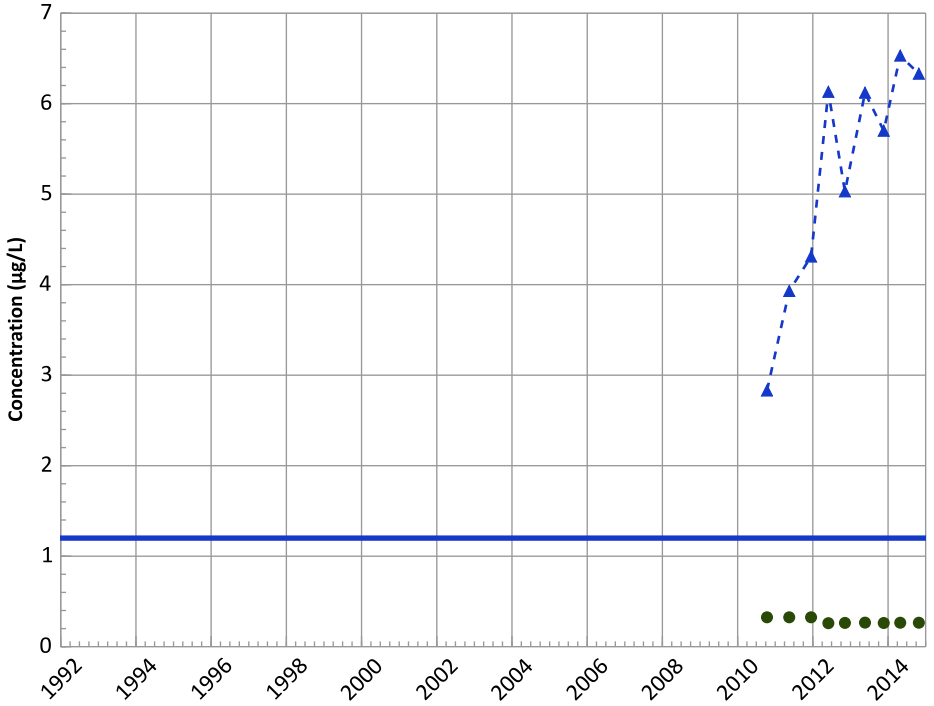


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

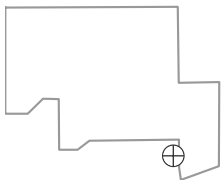
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

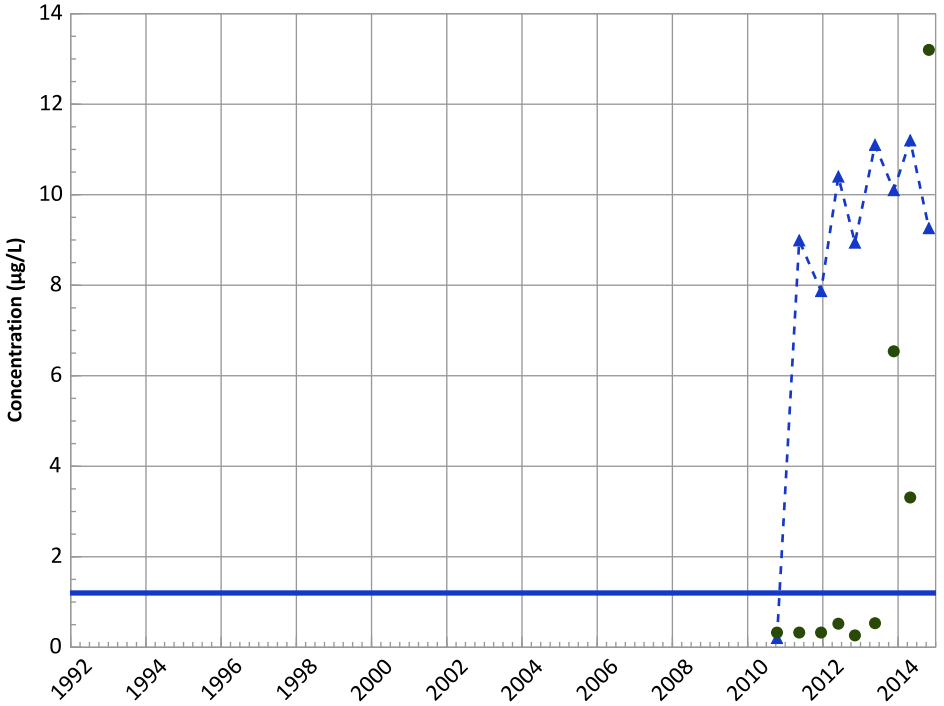
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

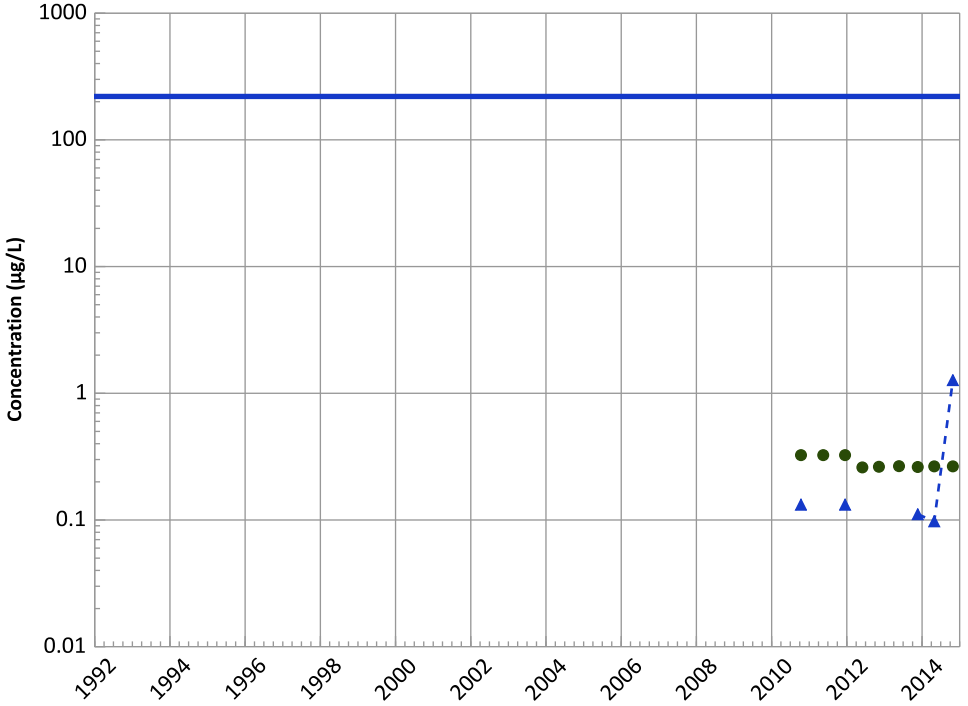


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

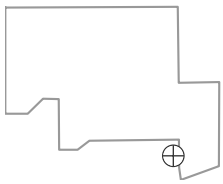
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

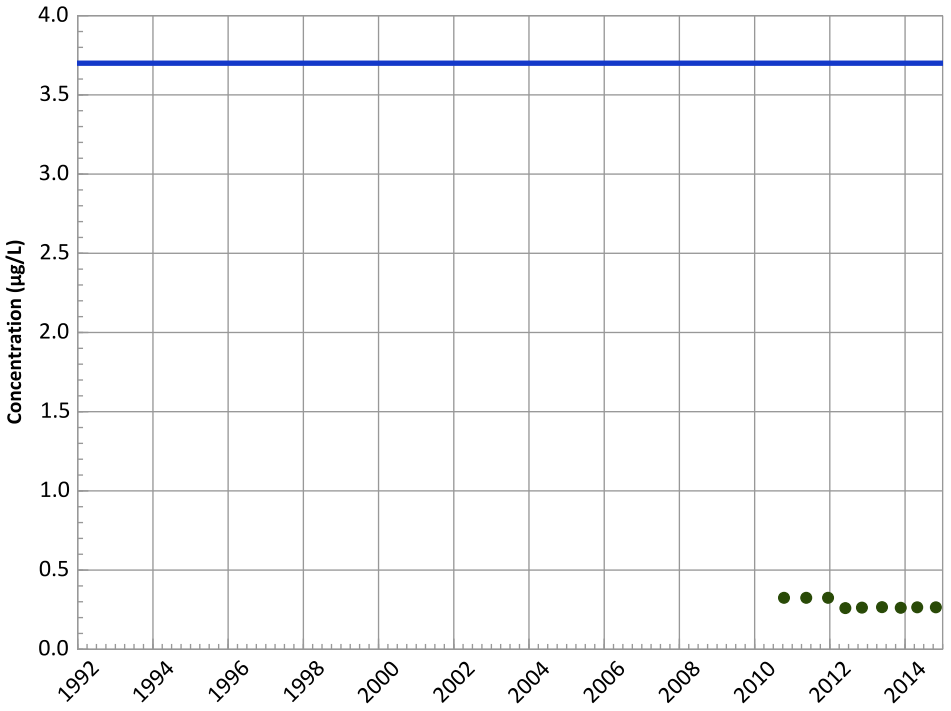
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

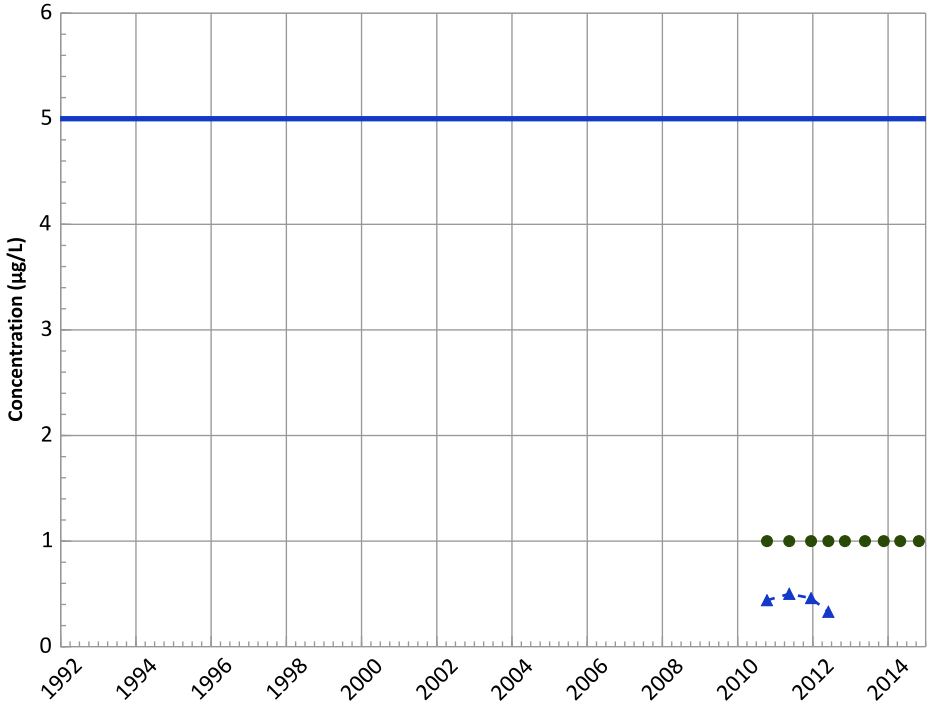


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

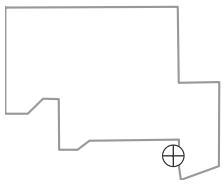
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

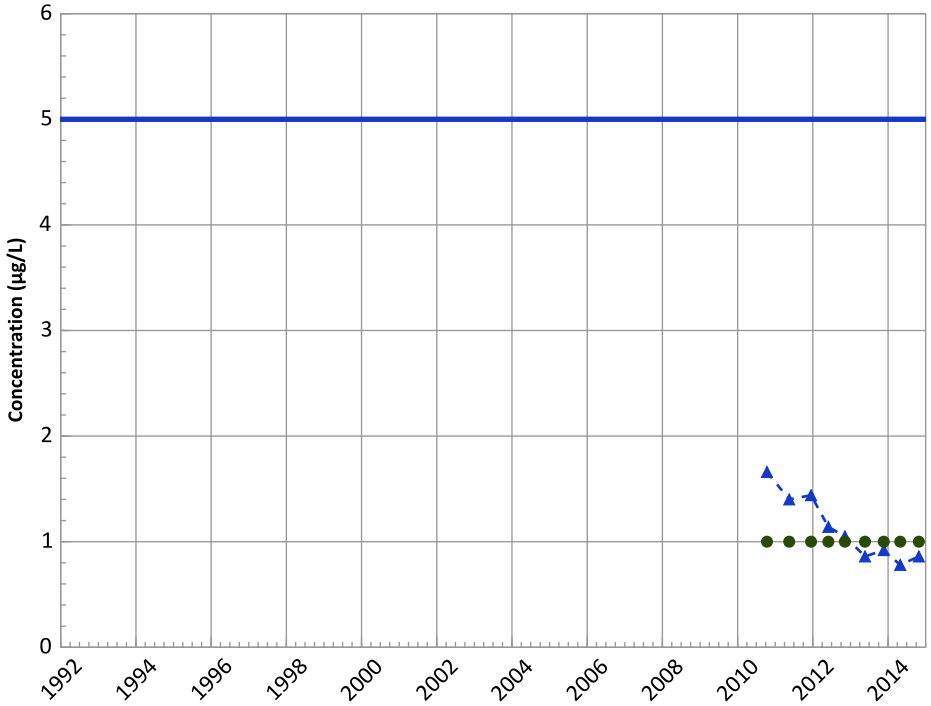
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

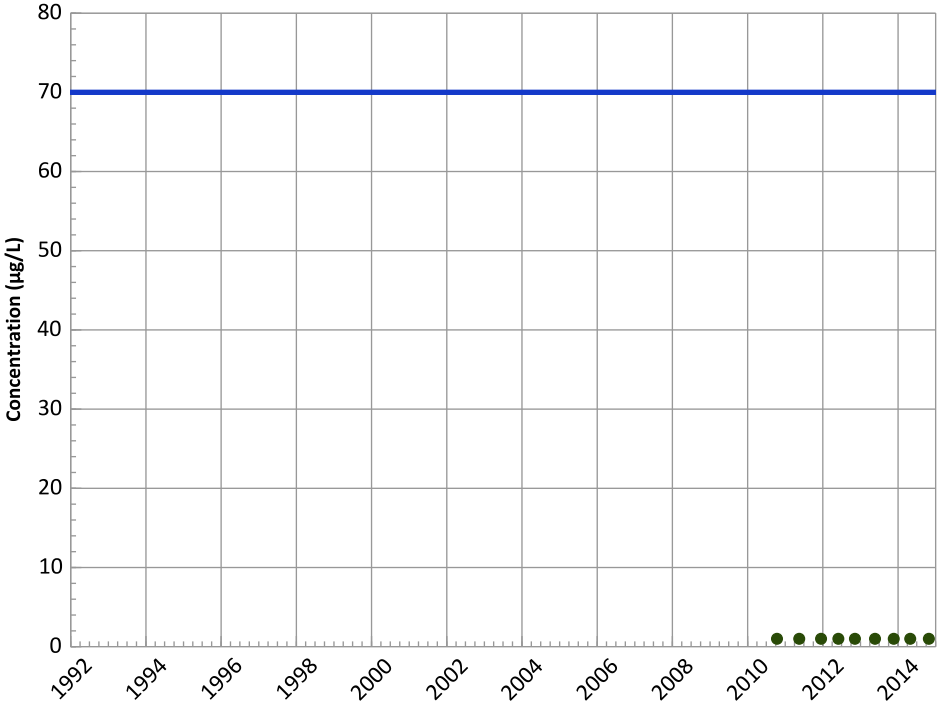


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

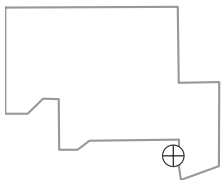
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

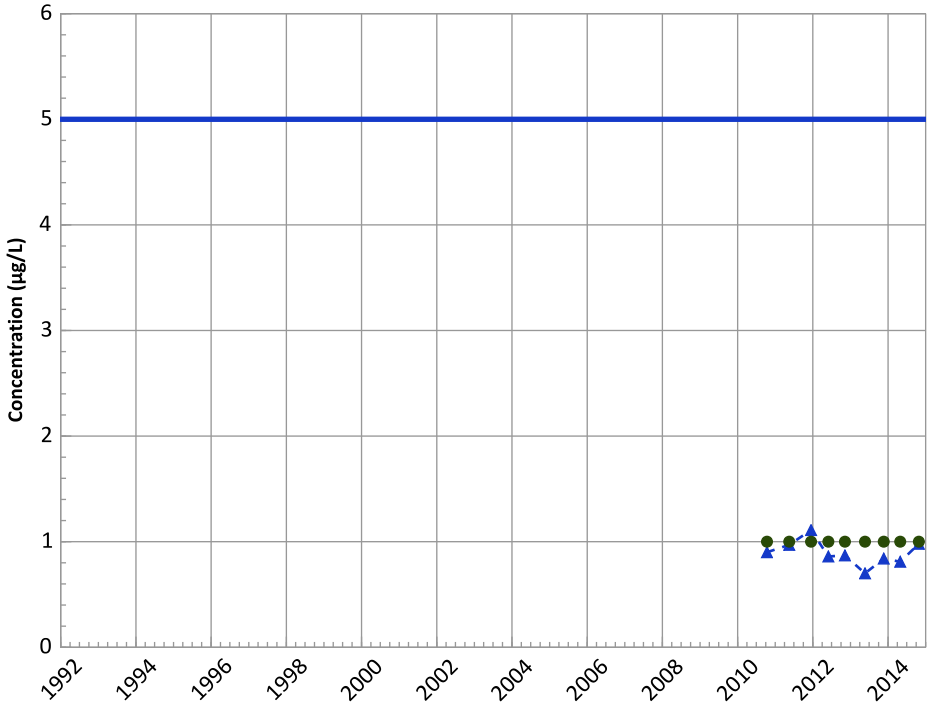
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

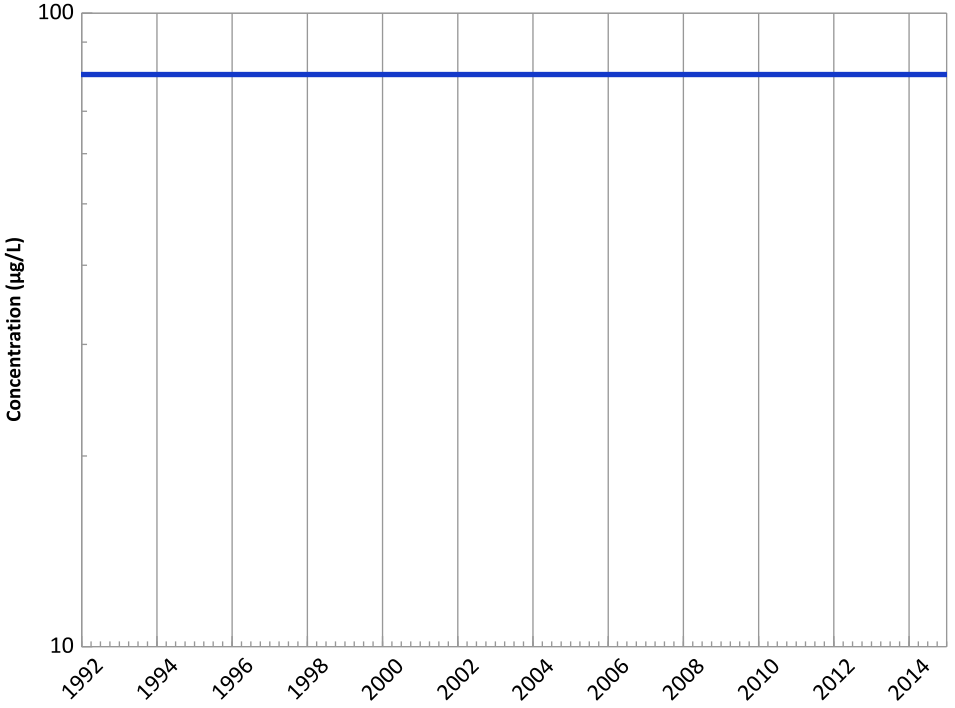


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Chloroform Trend



Concentration Trend

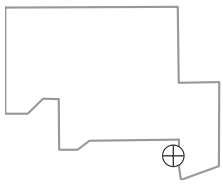
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

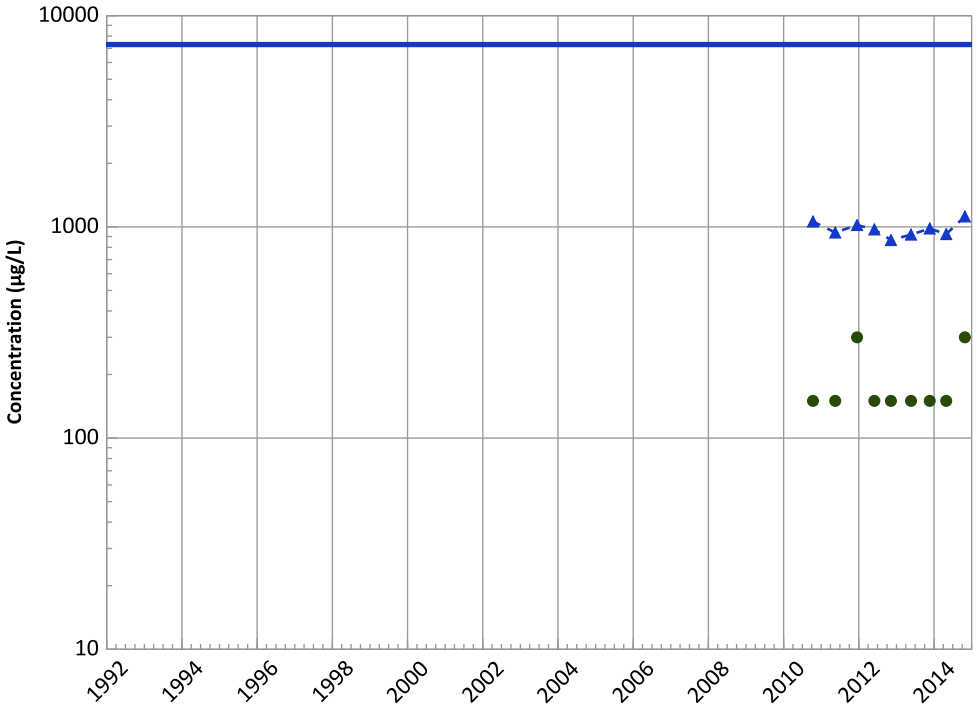
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

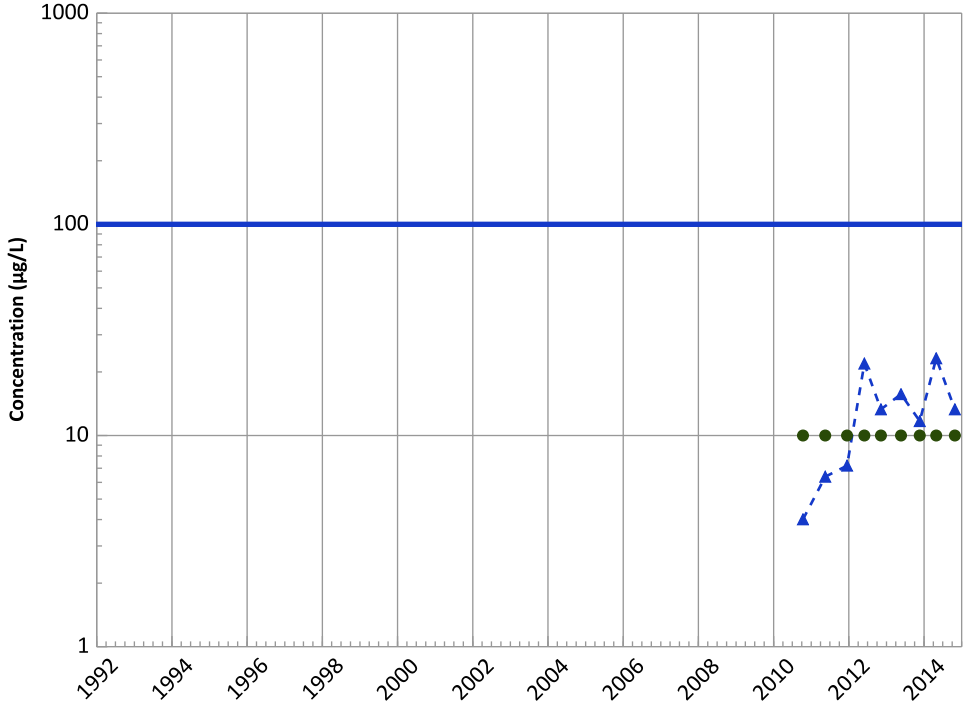


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

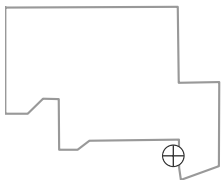
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

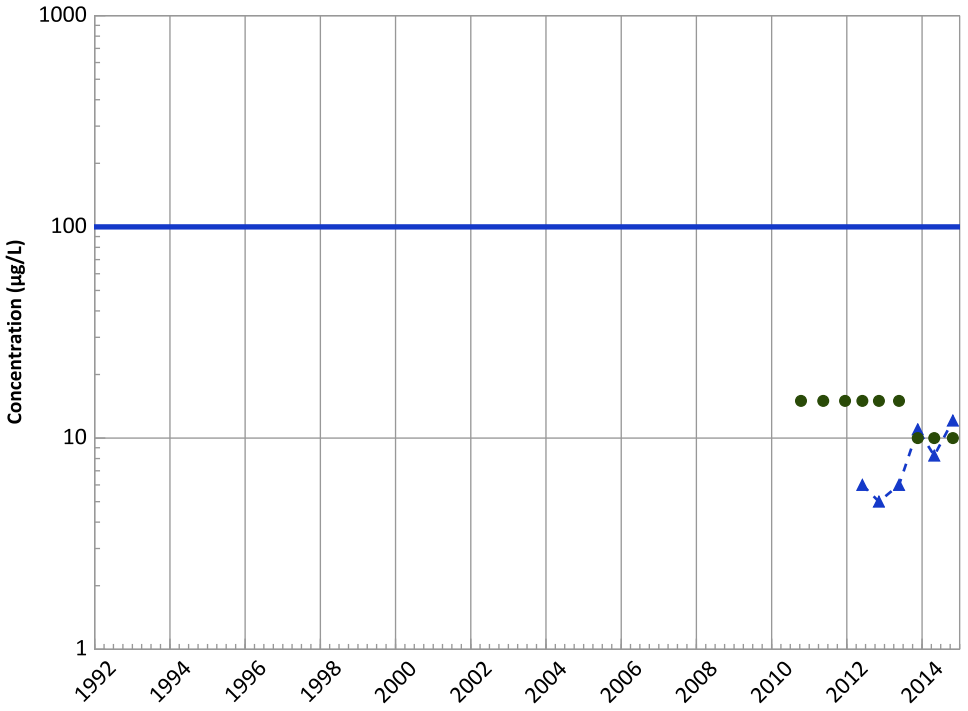
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

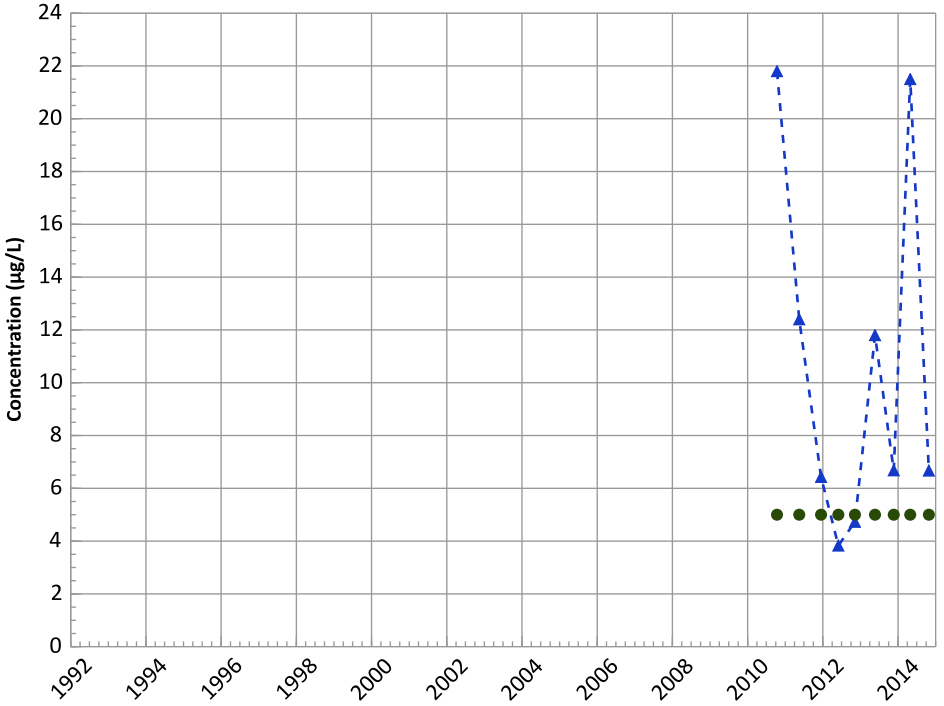


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Manganese Trend



Concentration Trend

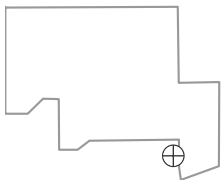
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

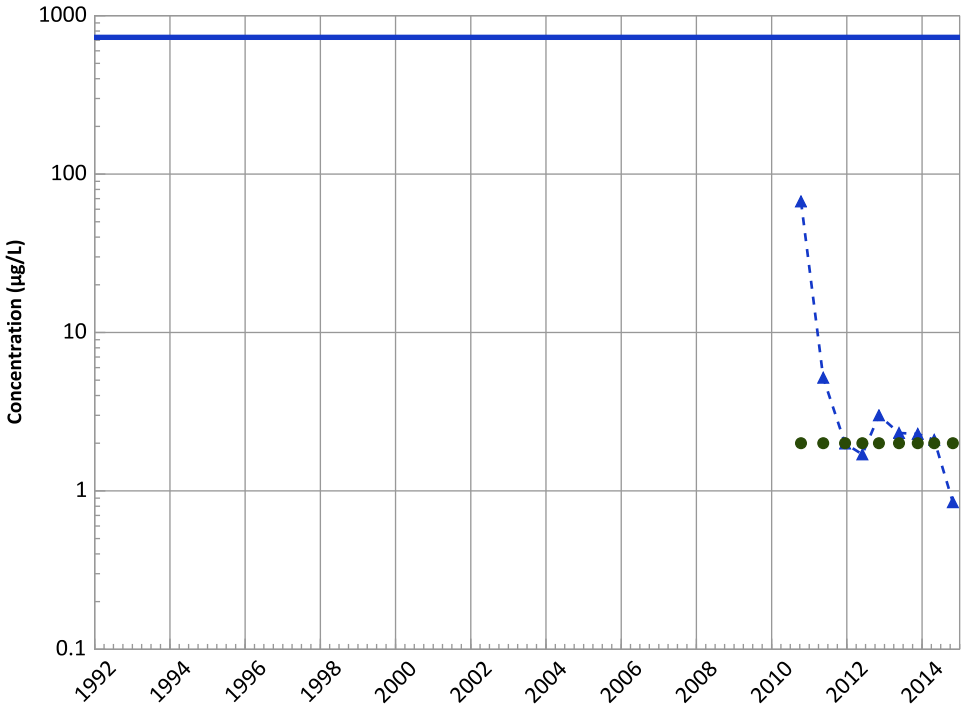
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

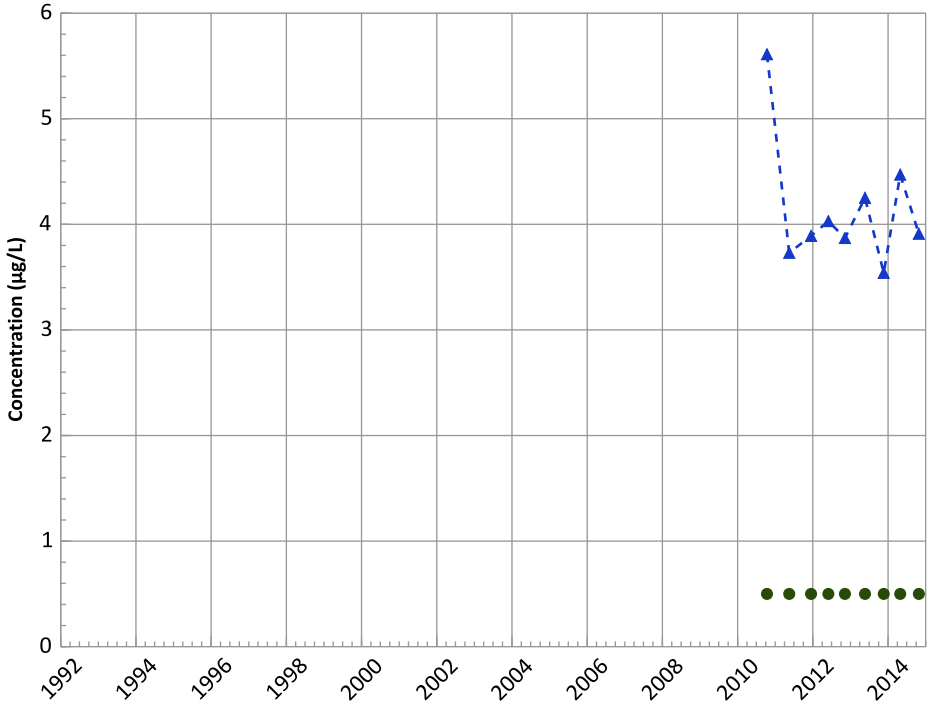


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Molybdenum Trend



Concentration Trend

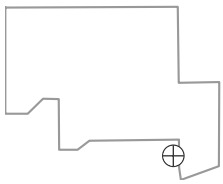
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

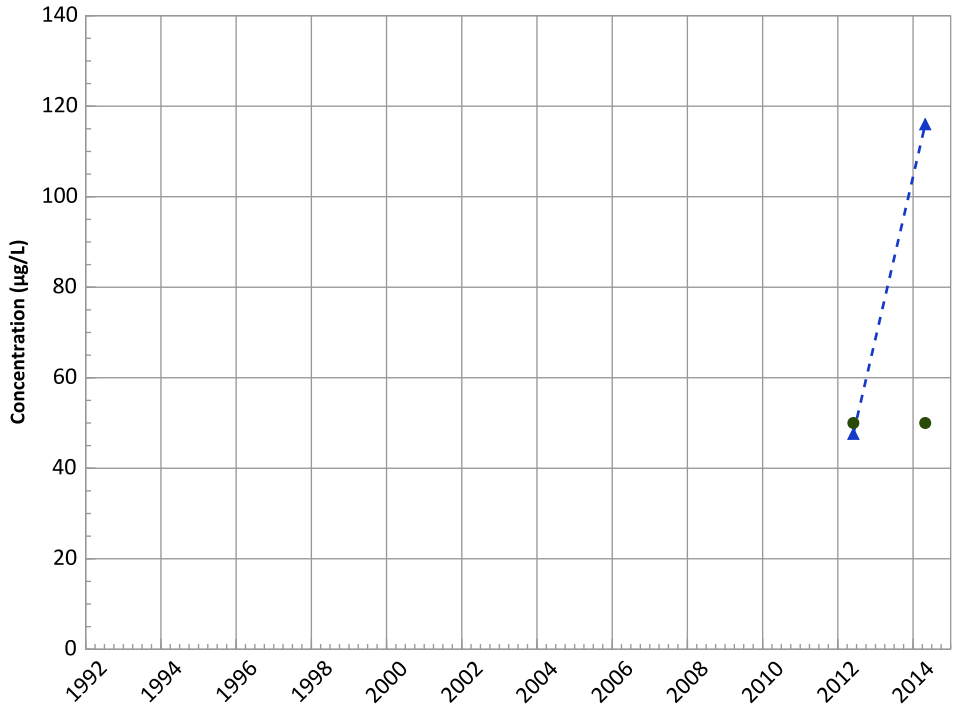
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

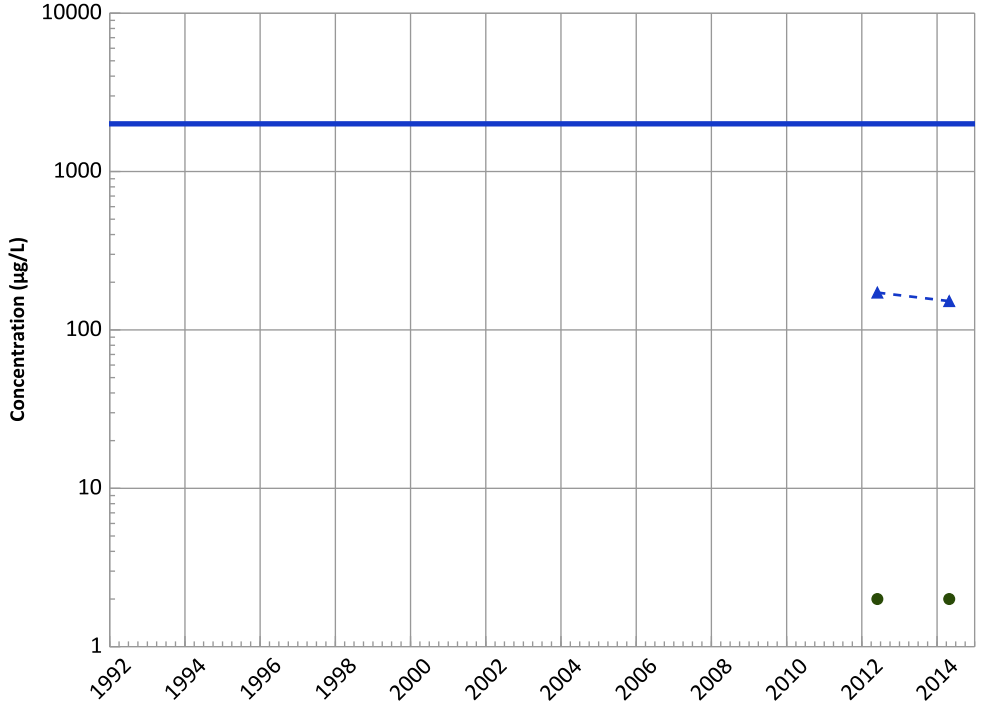


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

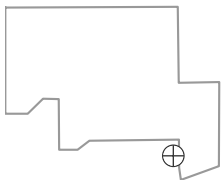
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

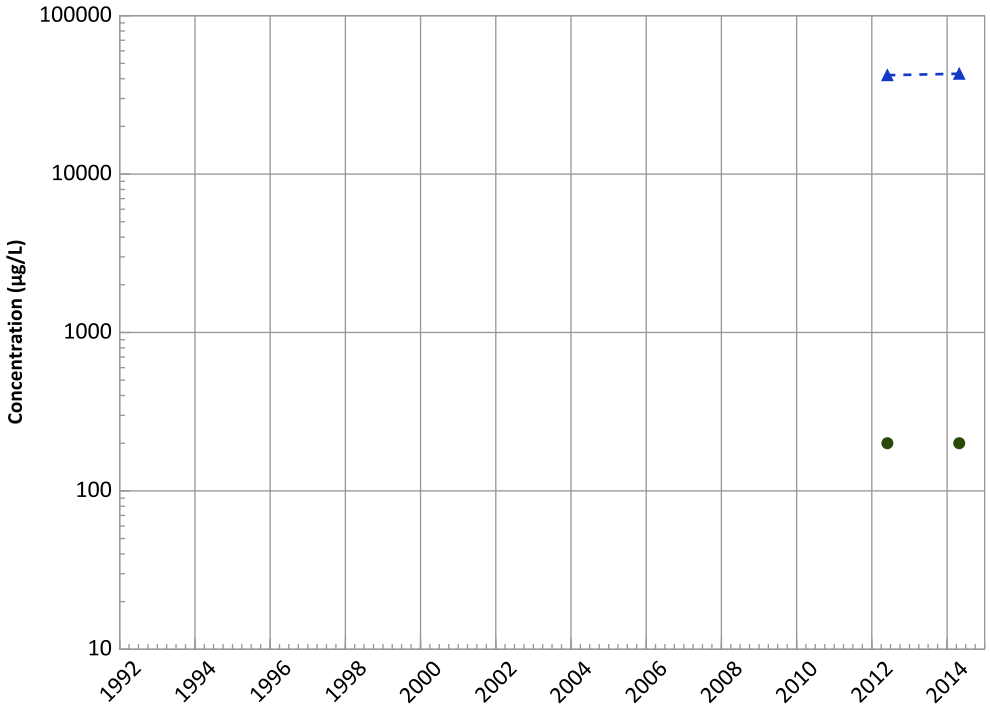
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

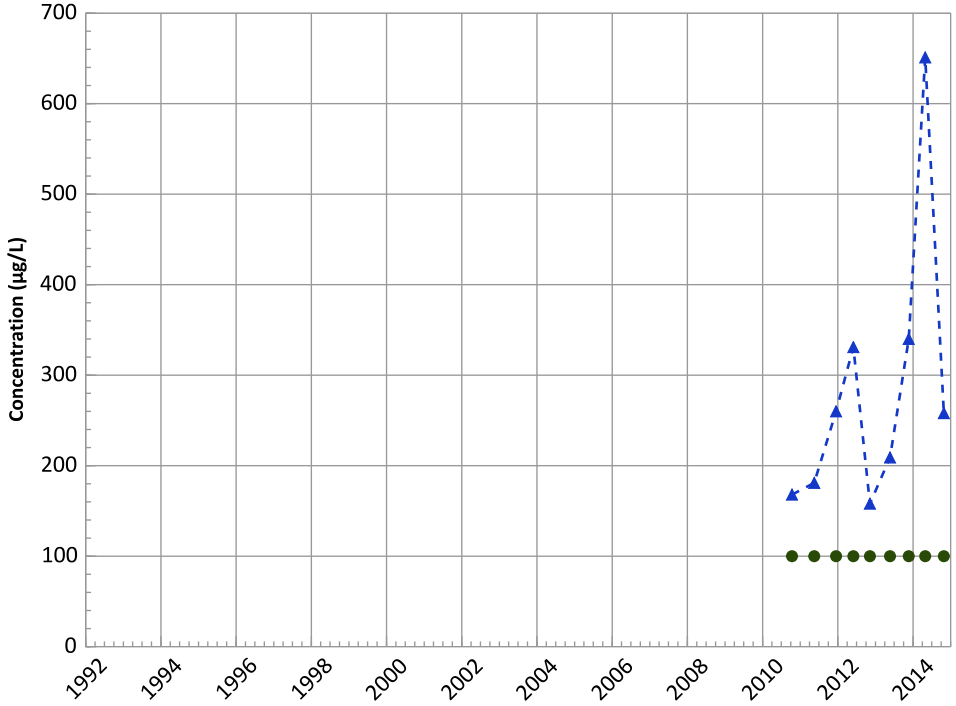


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

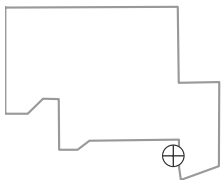
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

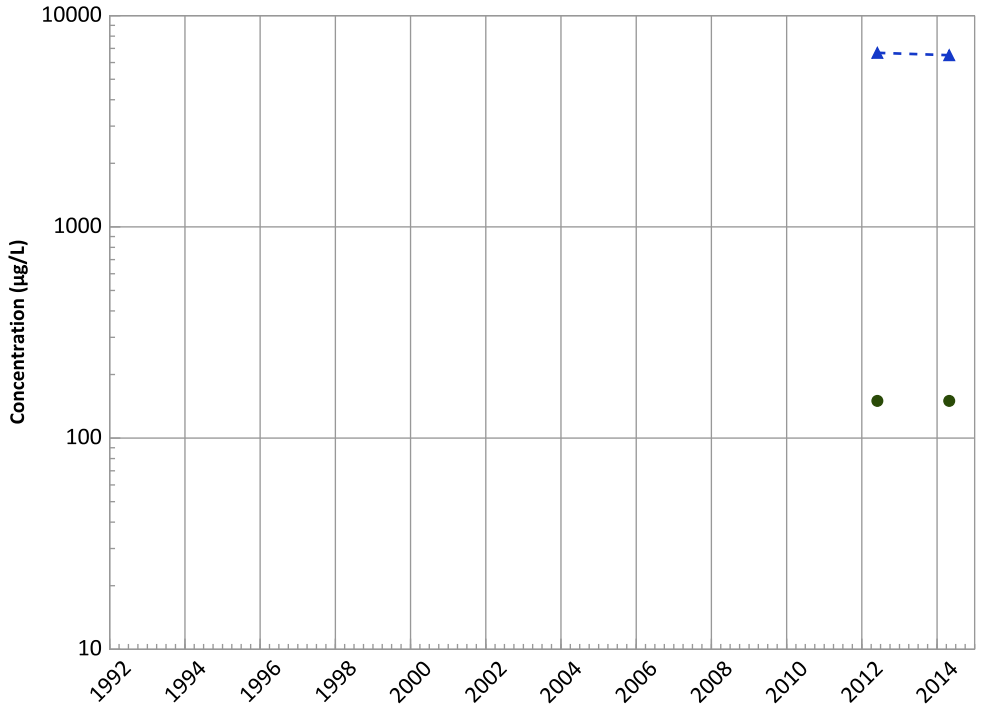
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

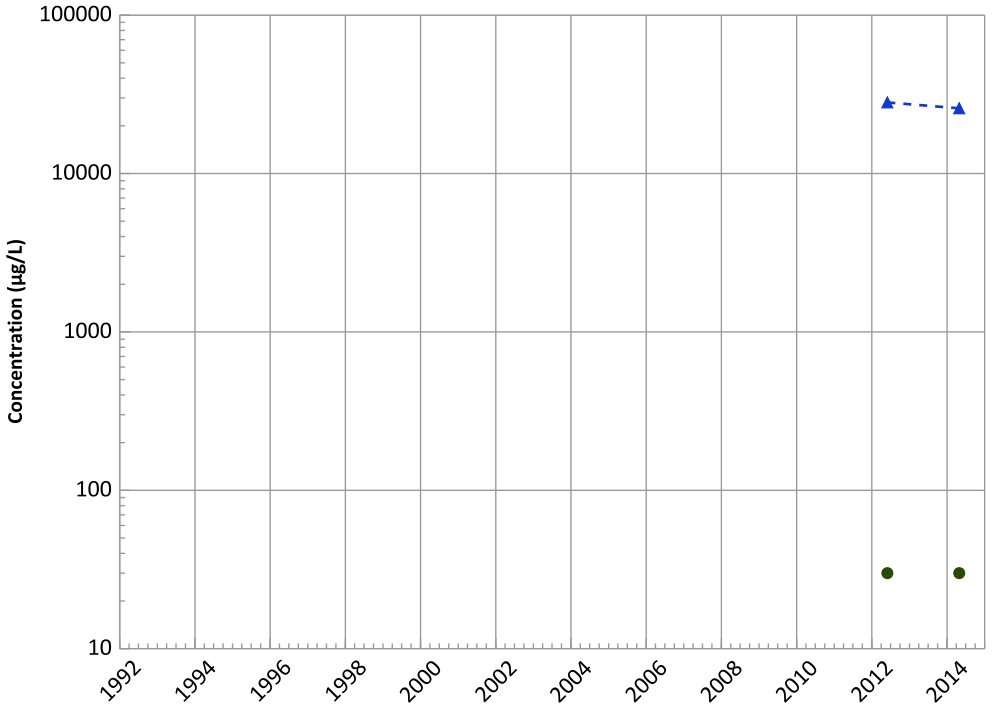


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

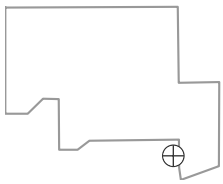
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

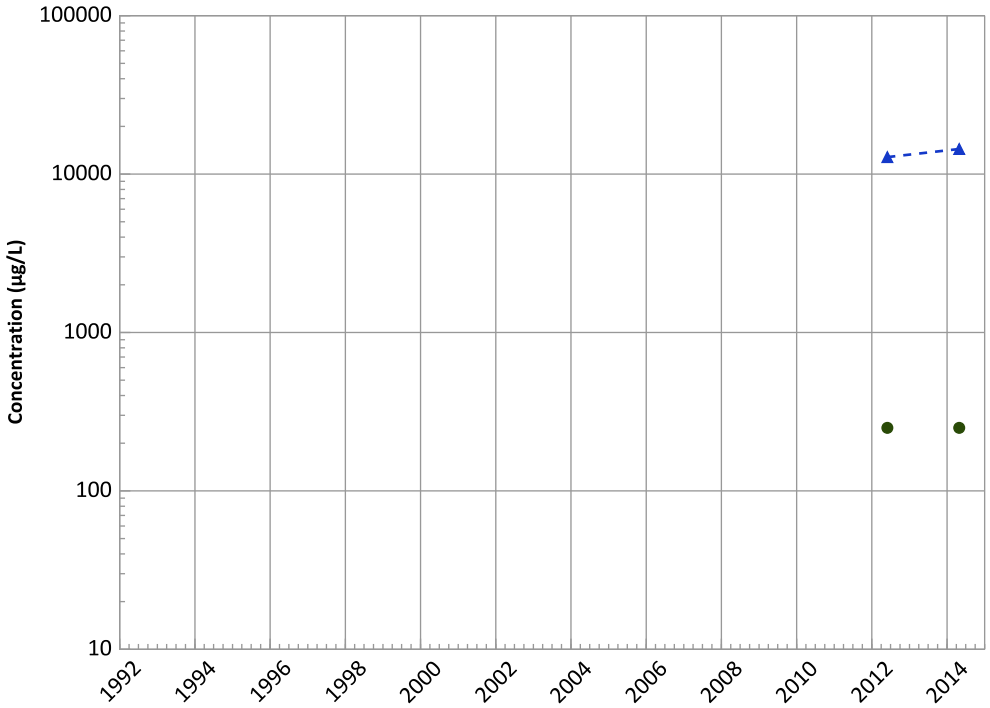
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1120 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

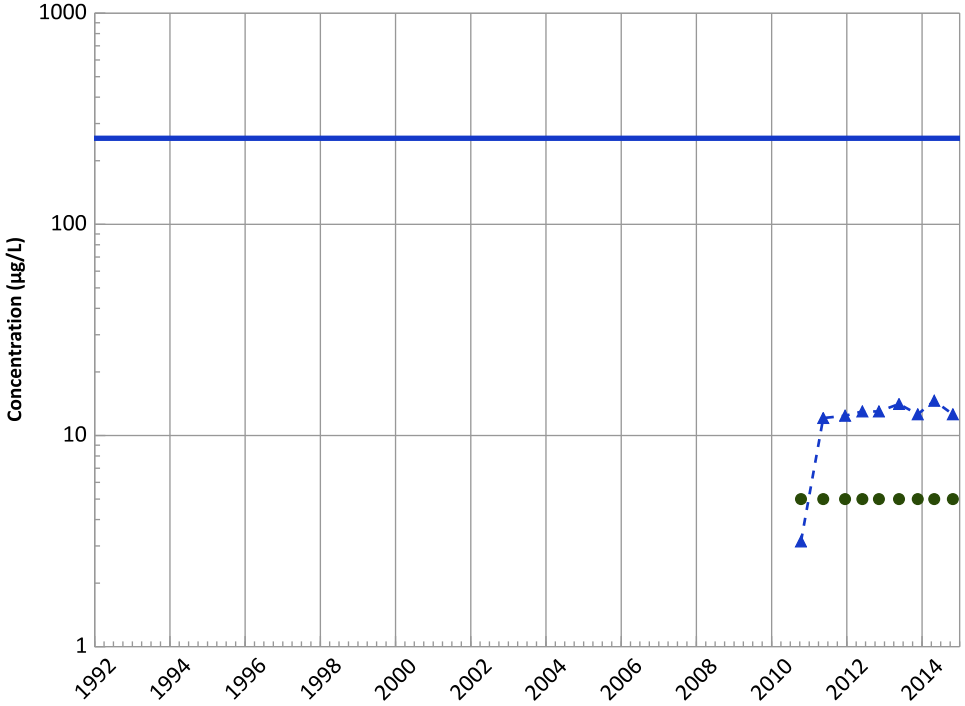


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Vanadium Trend



Concentration Trend

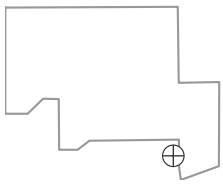
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

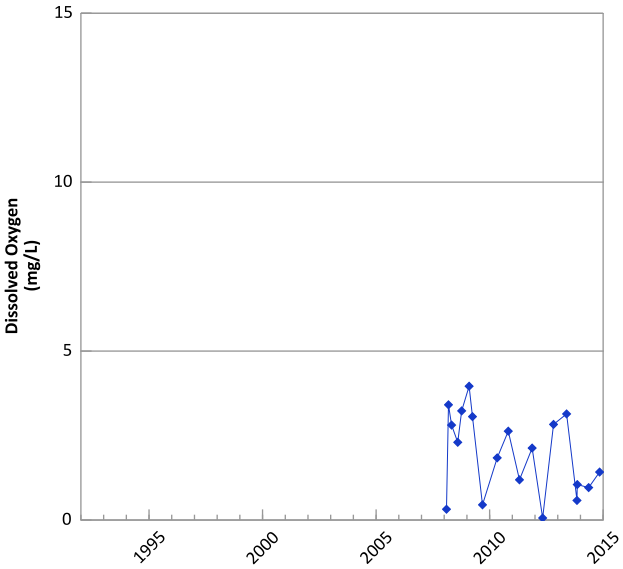
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/2010 to 10/27/2014
Analysis Date: 03/19/2015

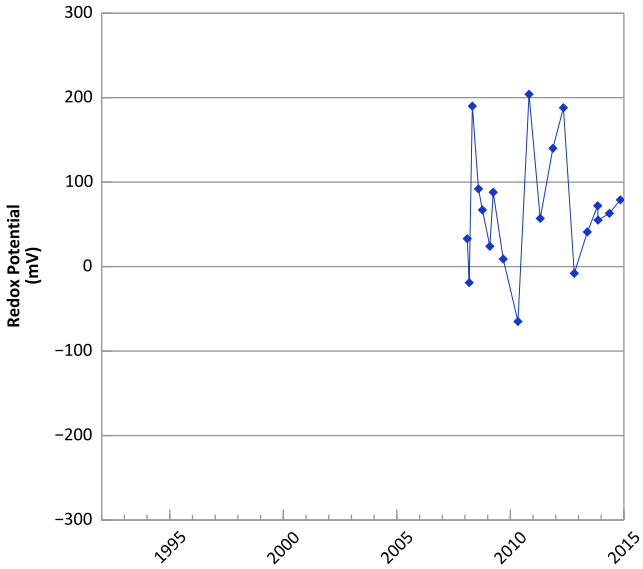
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

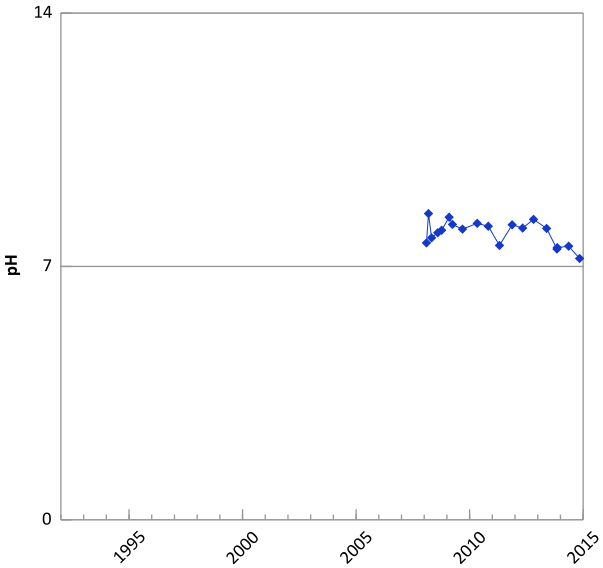
Well Location

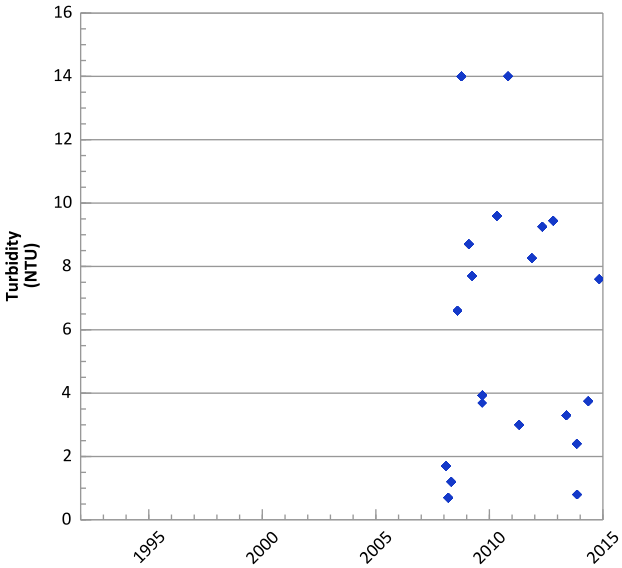


PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



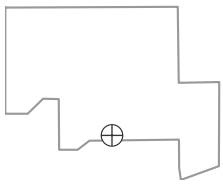






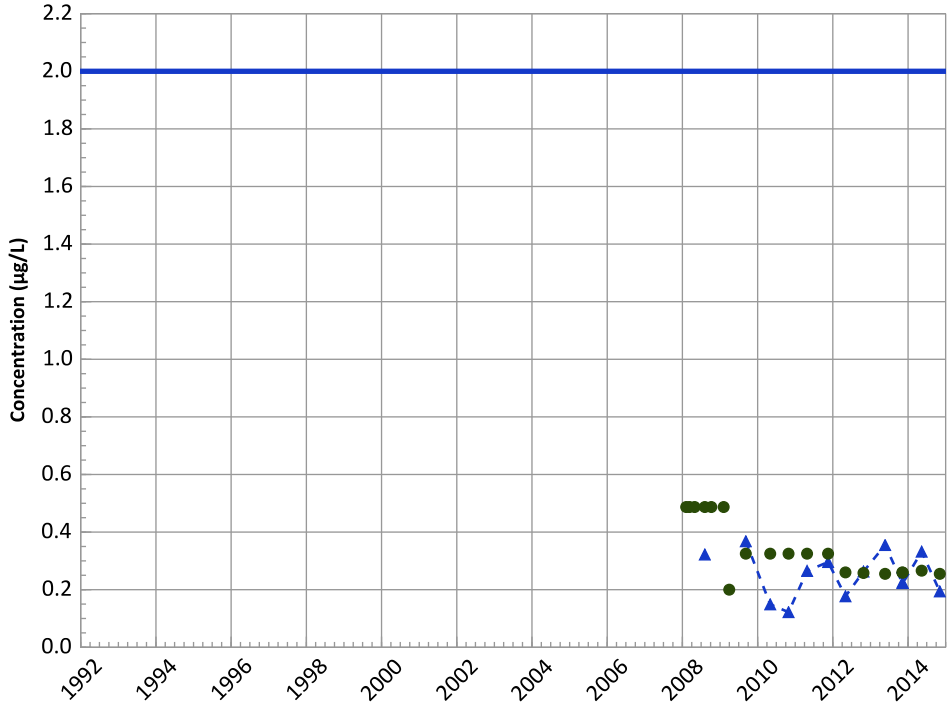
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

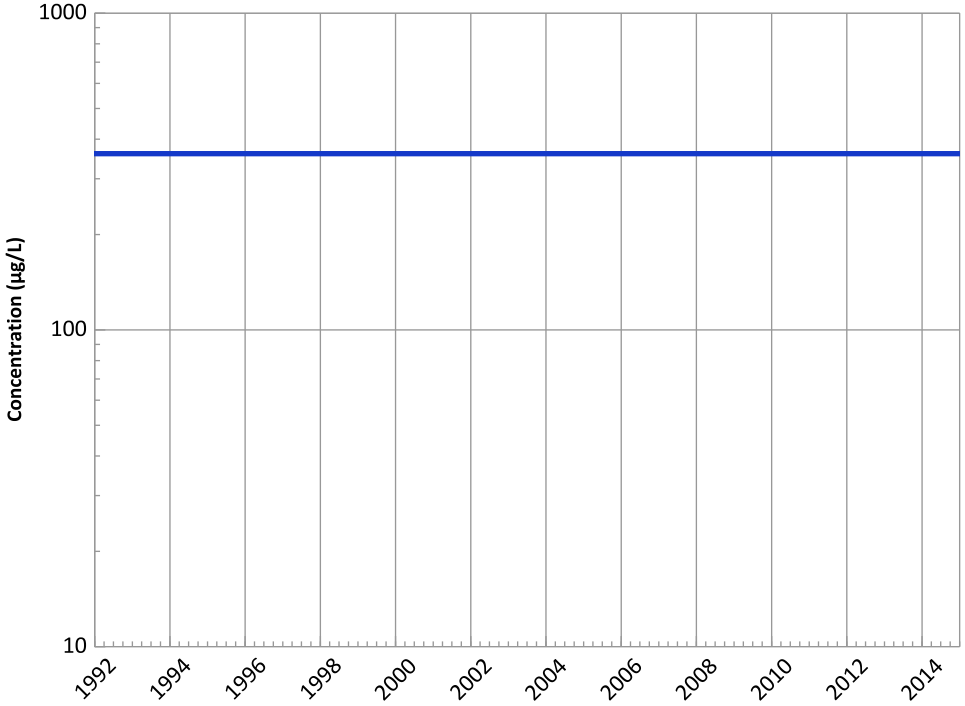


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

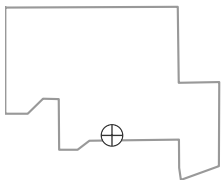
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

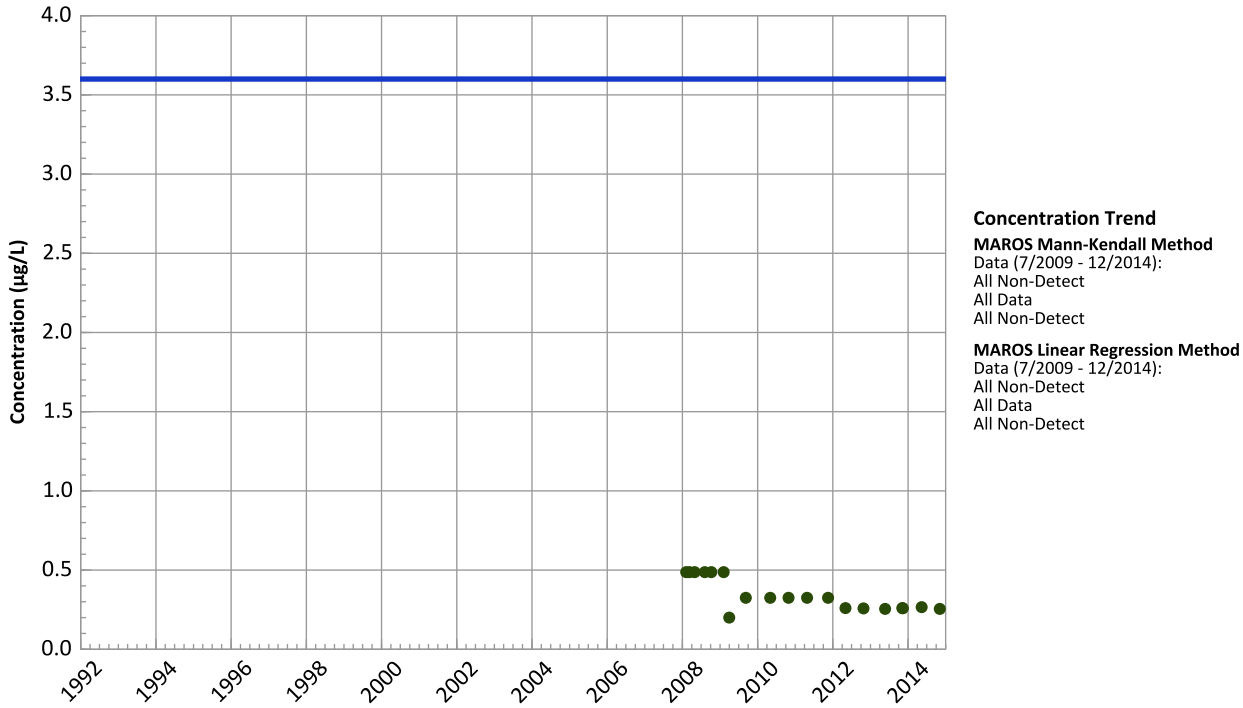
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

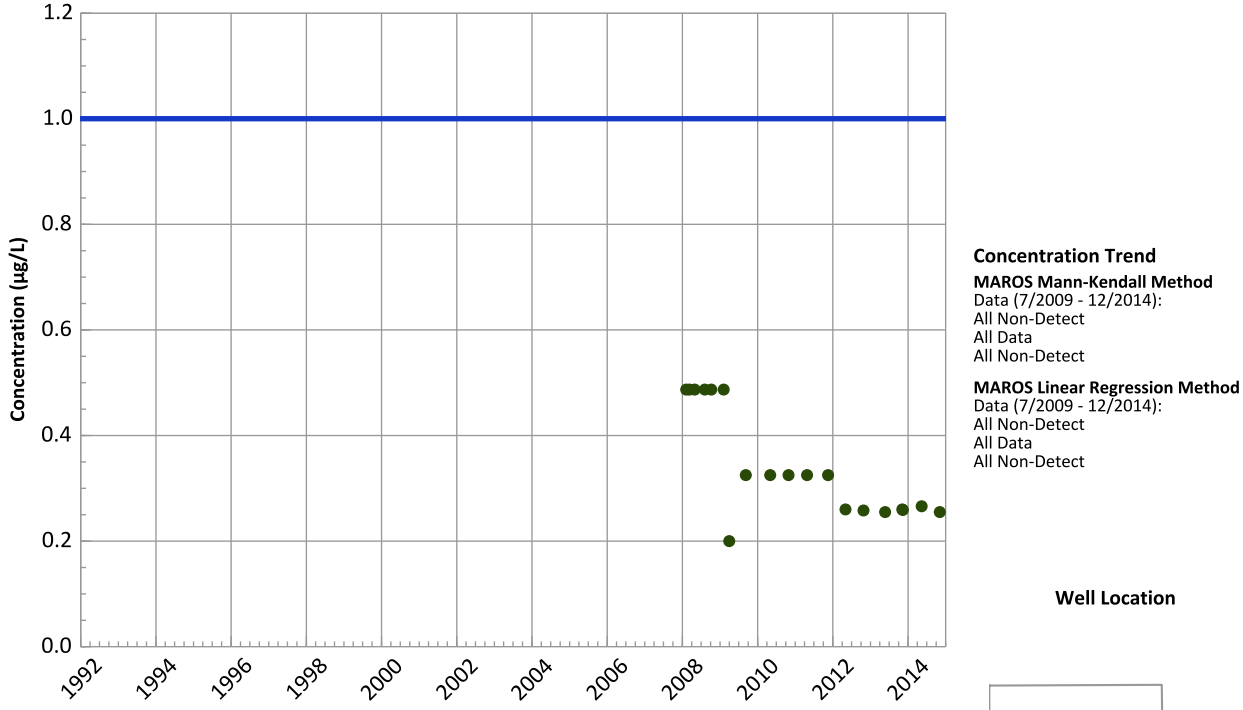


PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



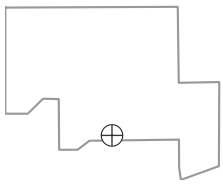
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

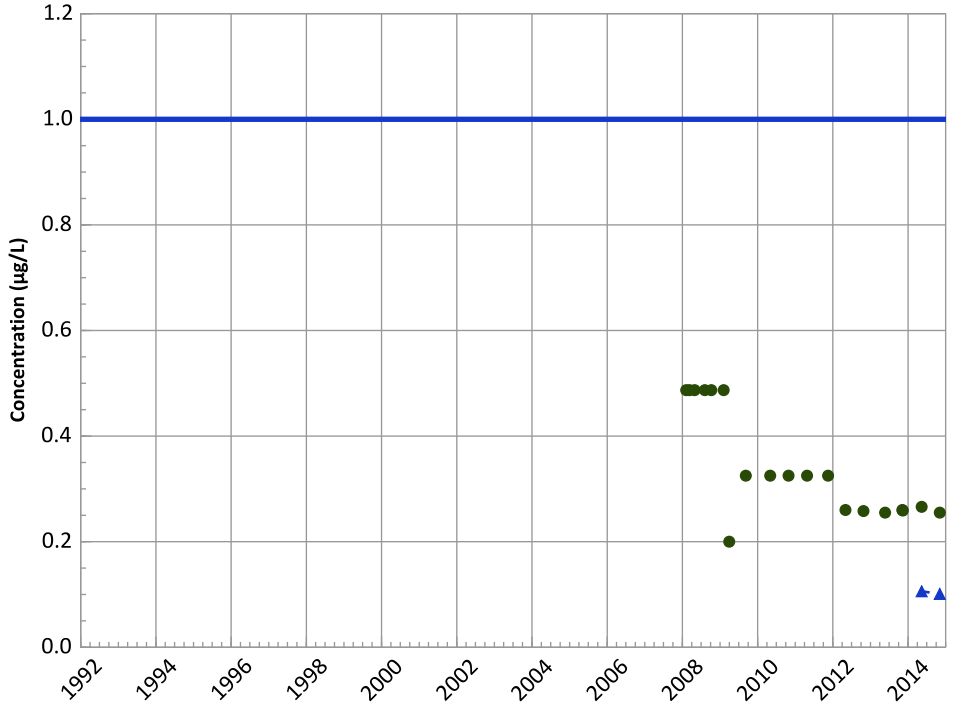
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

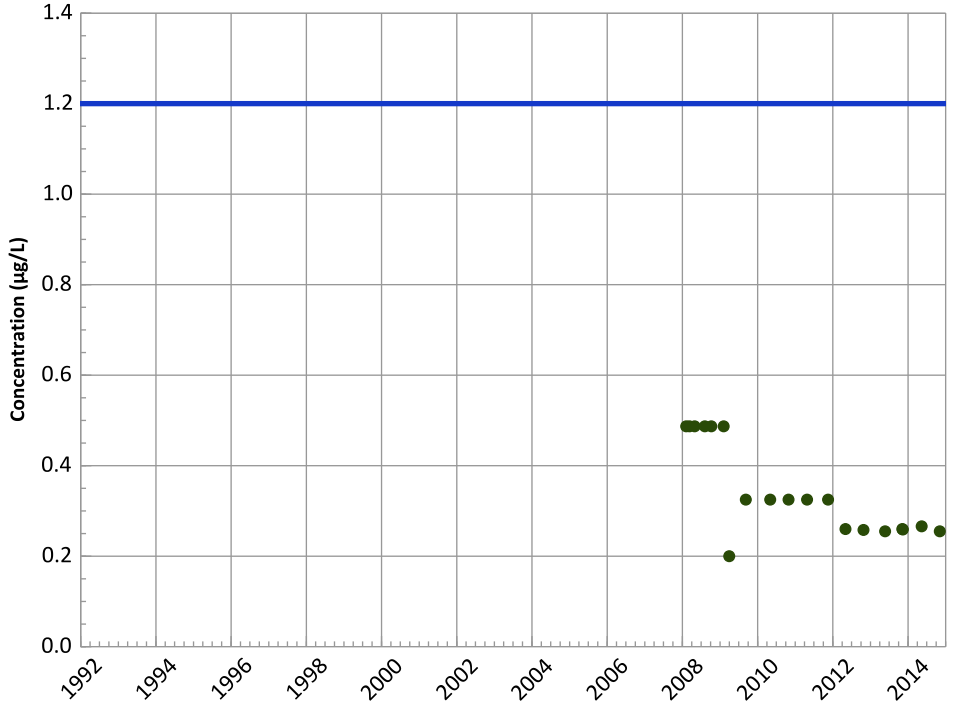


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

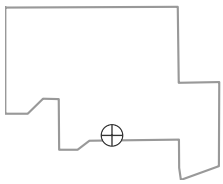
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

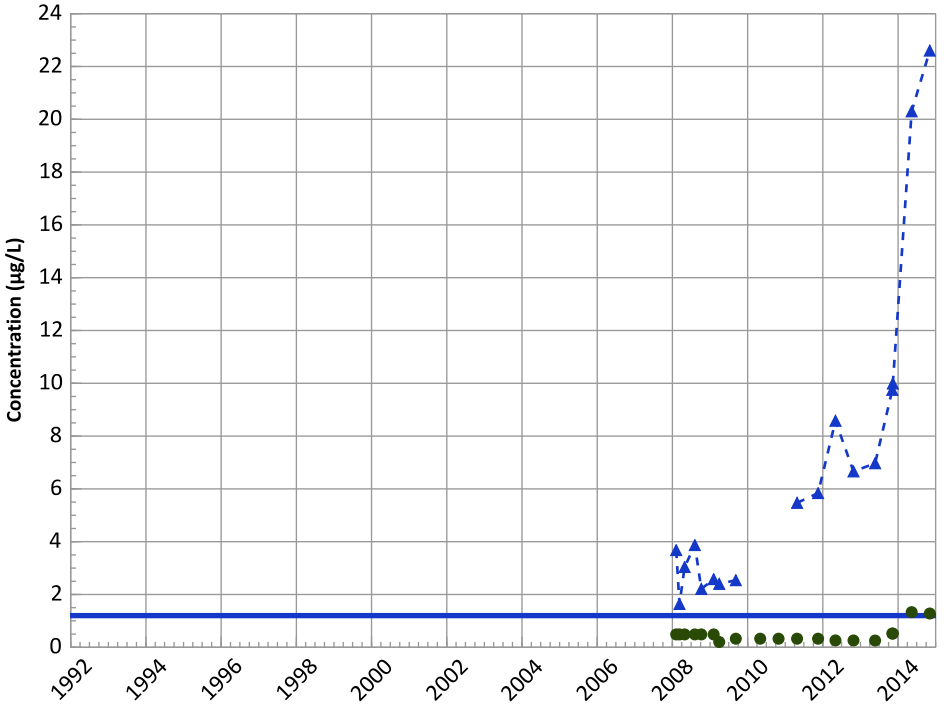
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

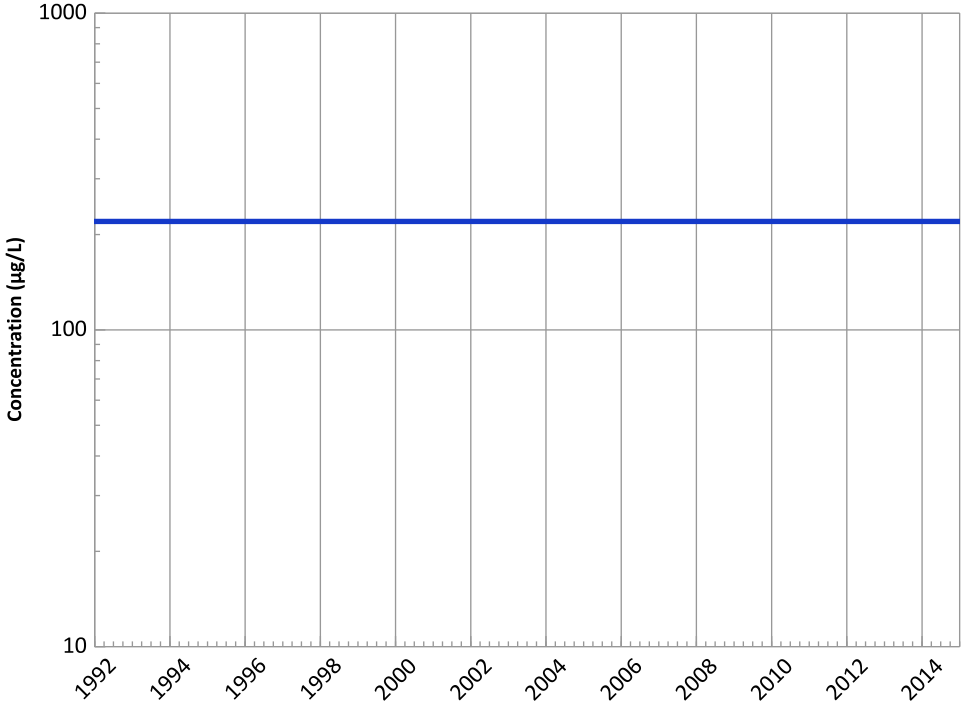


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

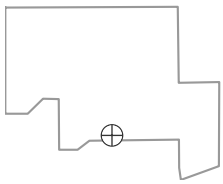
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

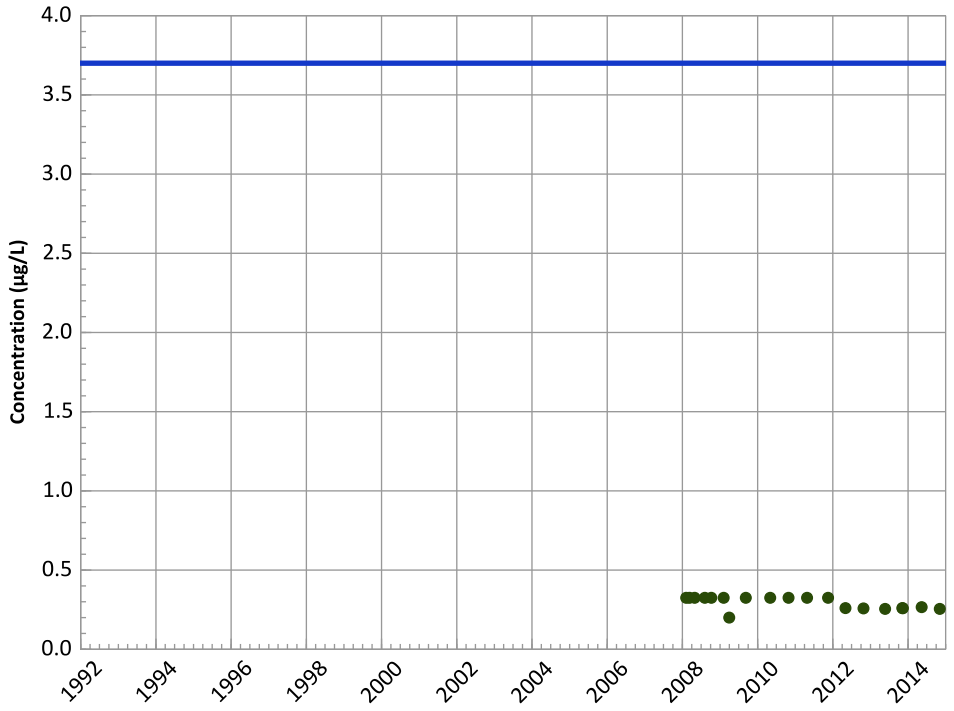
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

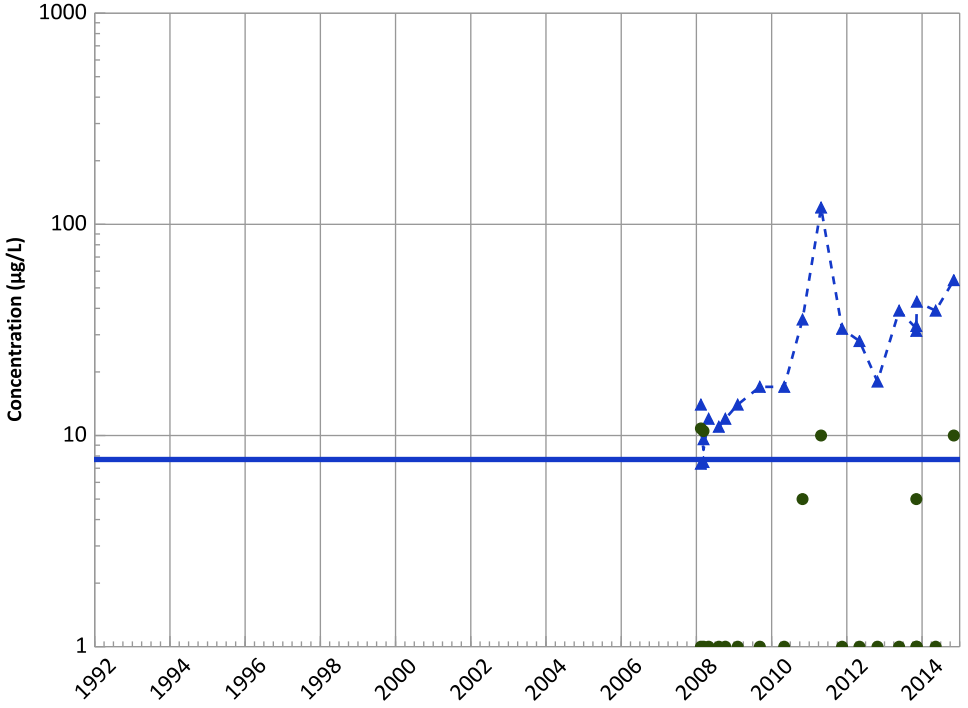


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

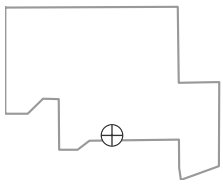
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

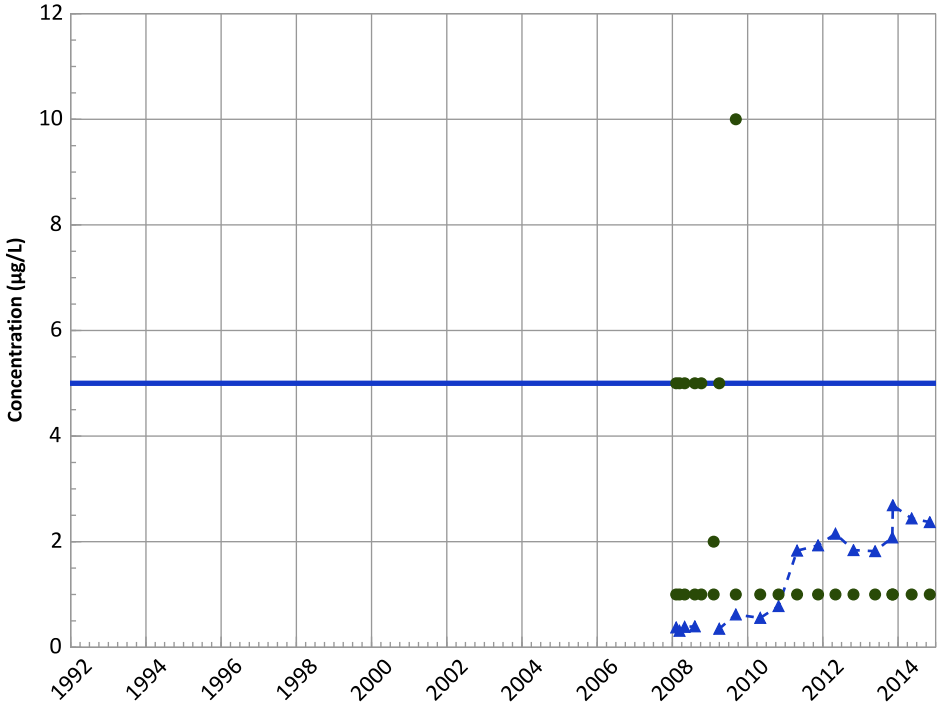
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

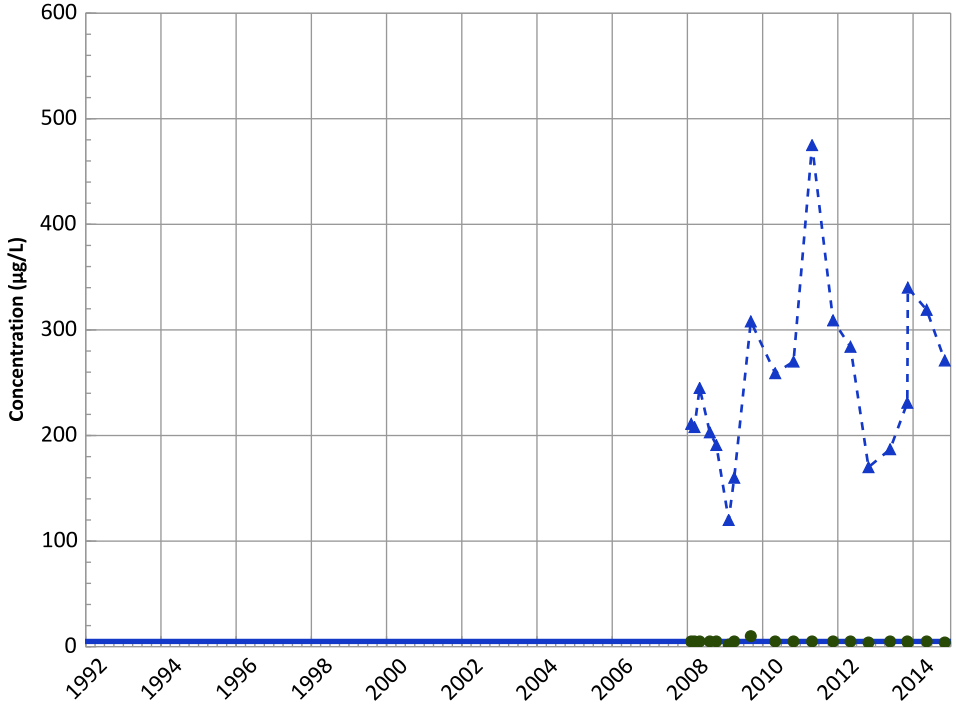


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Trichloroethene Trend



Concentration Trend

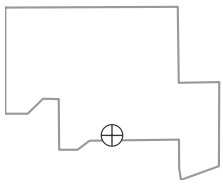
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

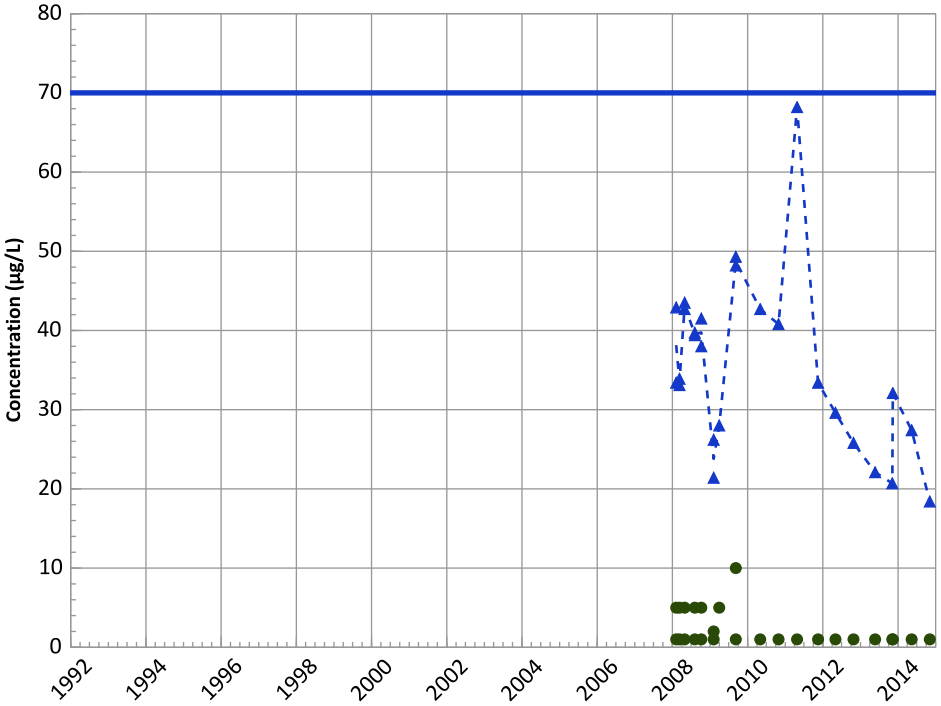
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

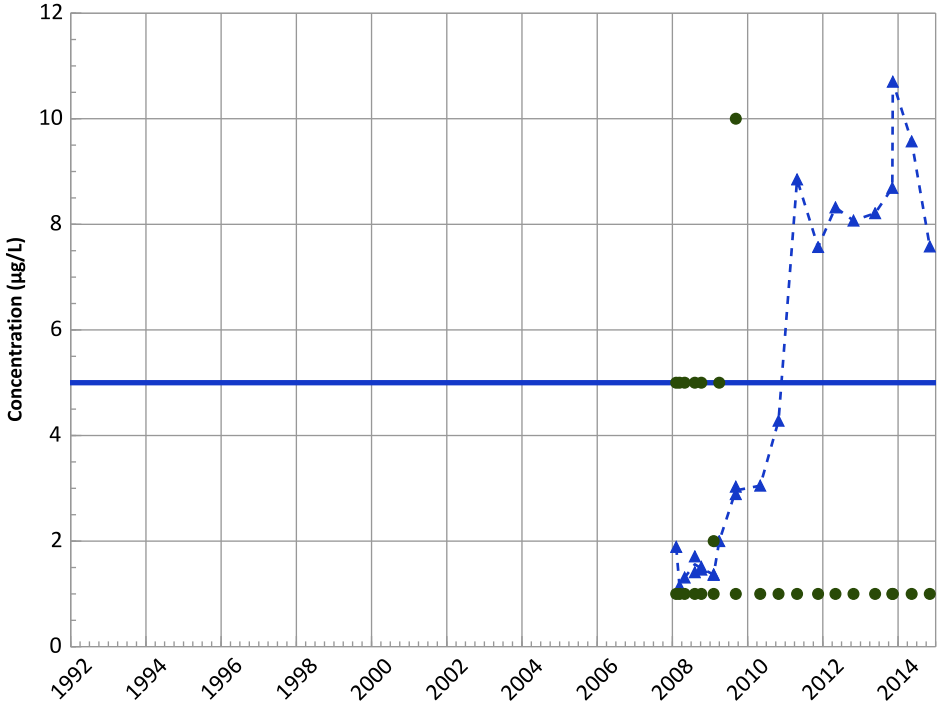


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

1,2-Dichloroethane Trend



Concentration Trend

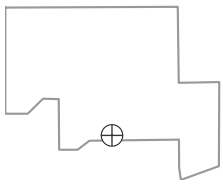
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

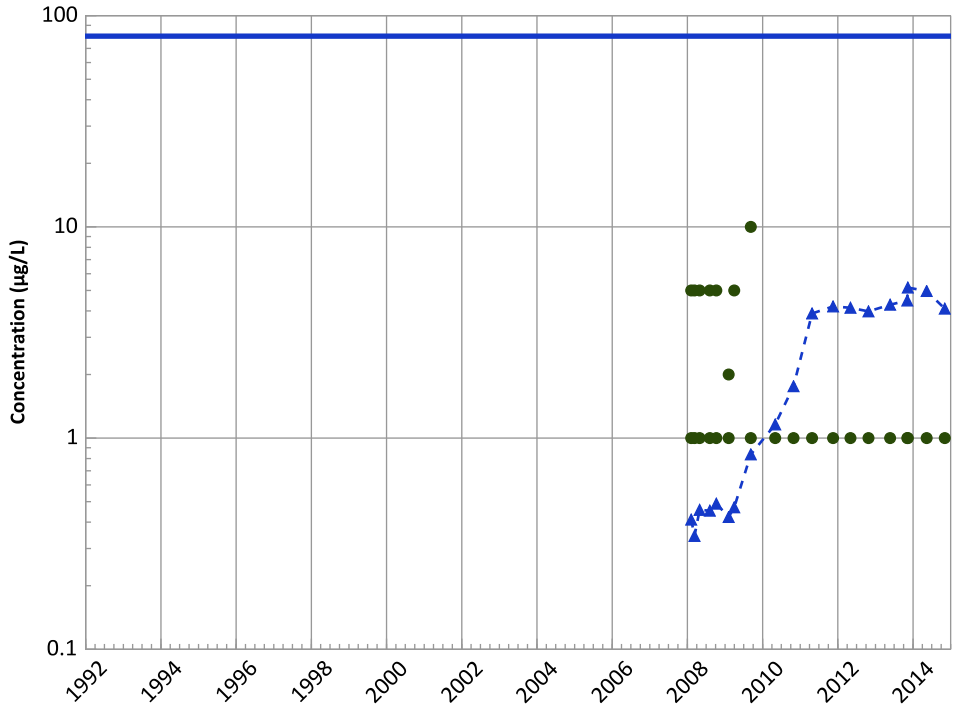
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

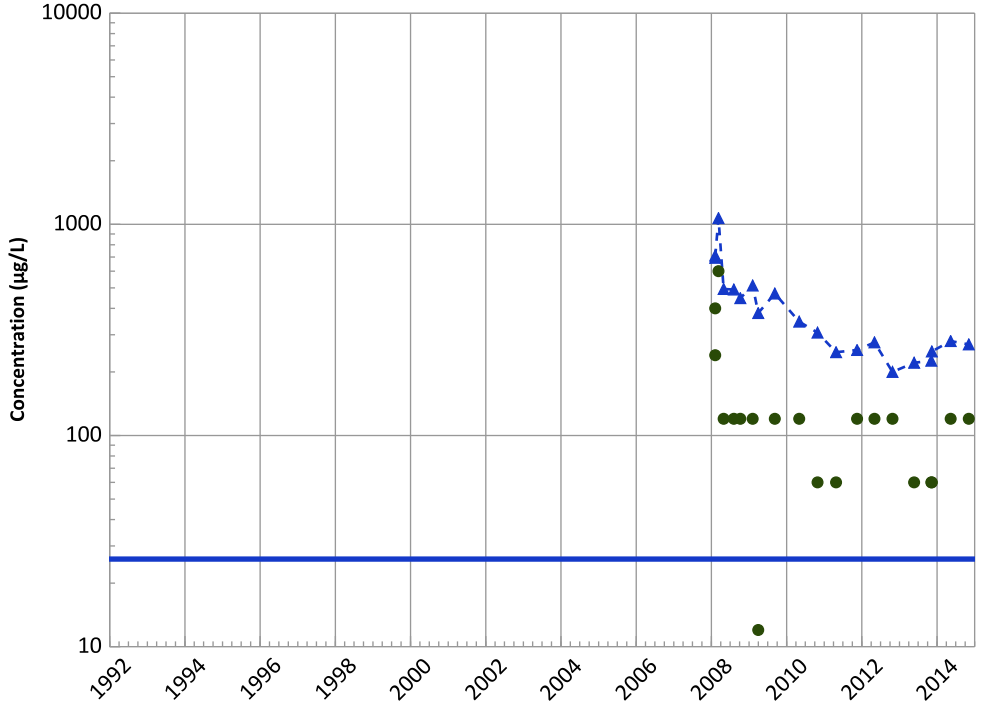


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Perchlorate Trend



Concentration Trend

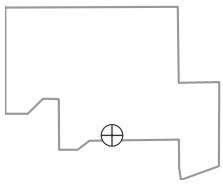
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

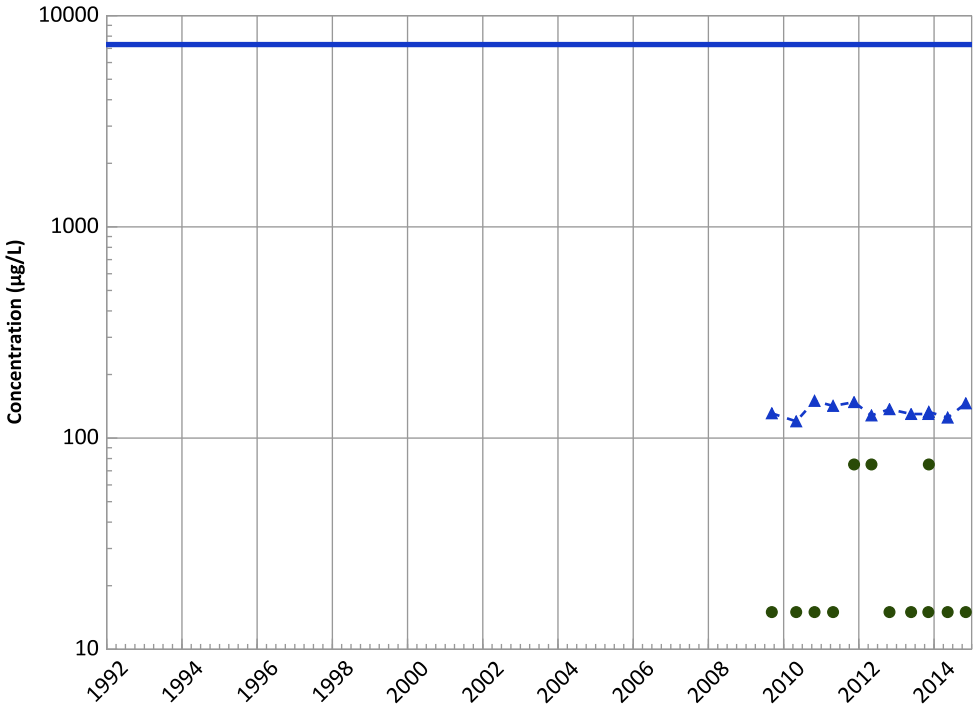
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

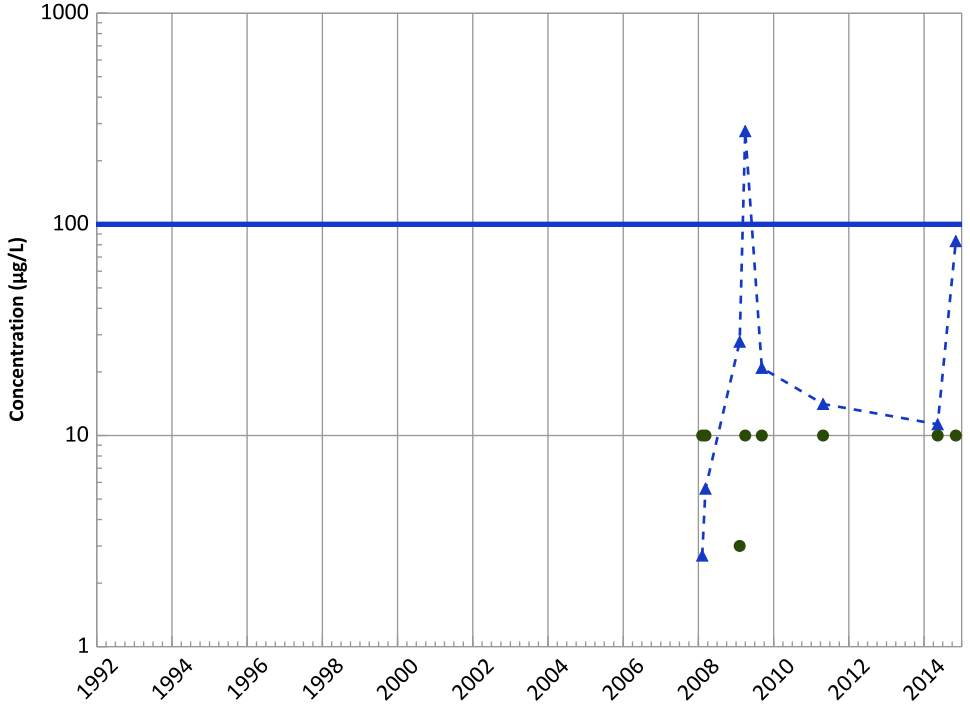


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

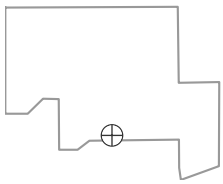
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

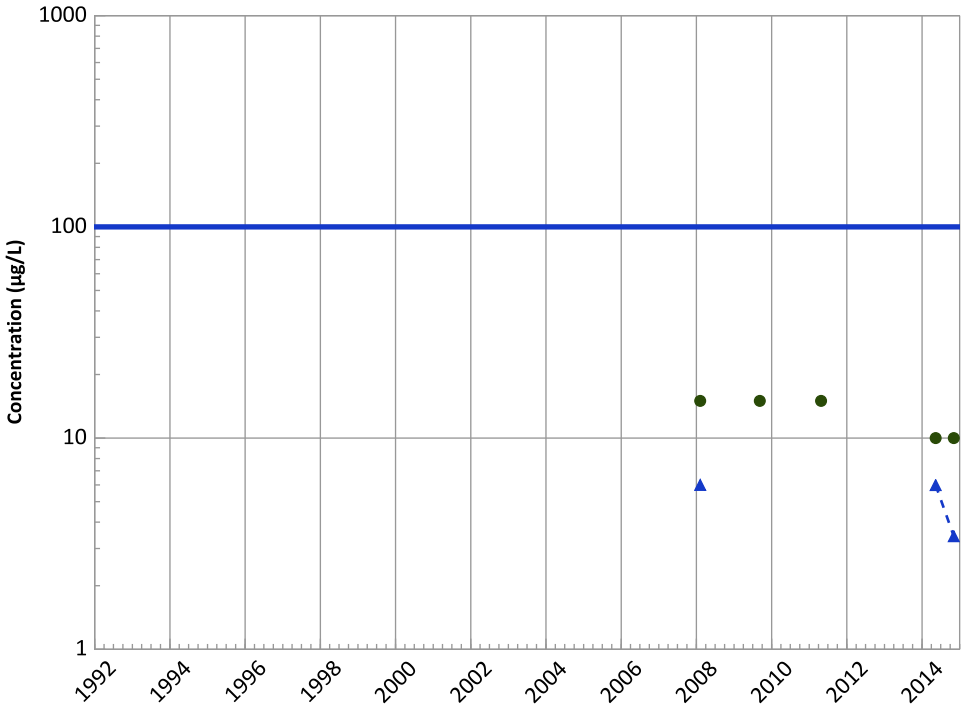
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

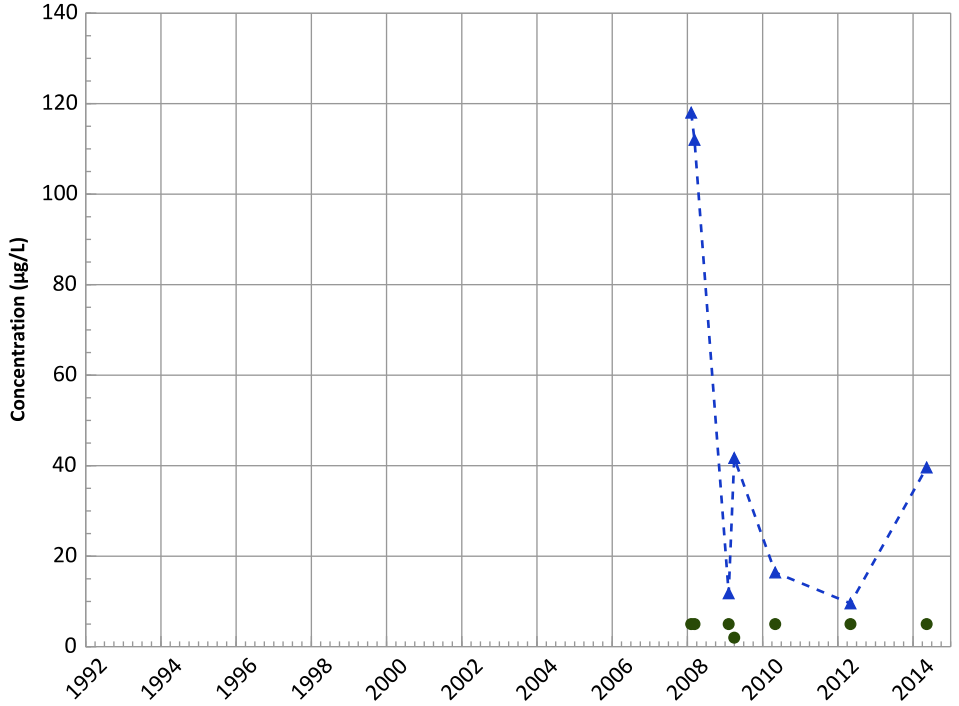


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

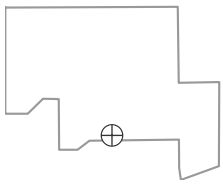
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

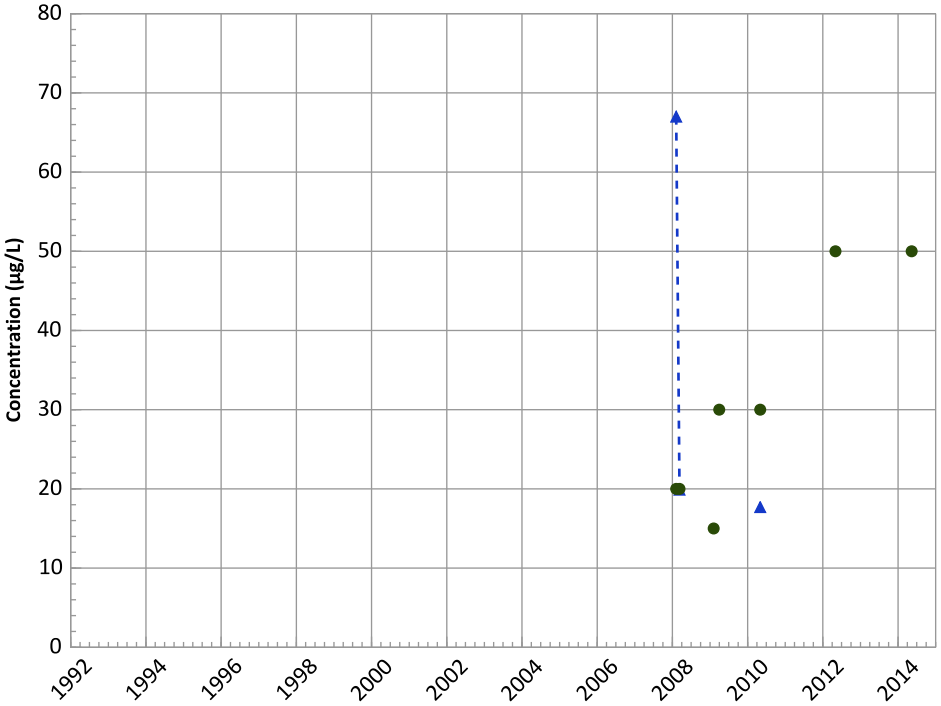
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

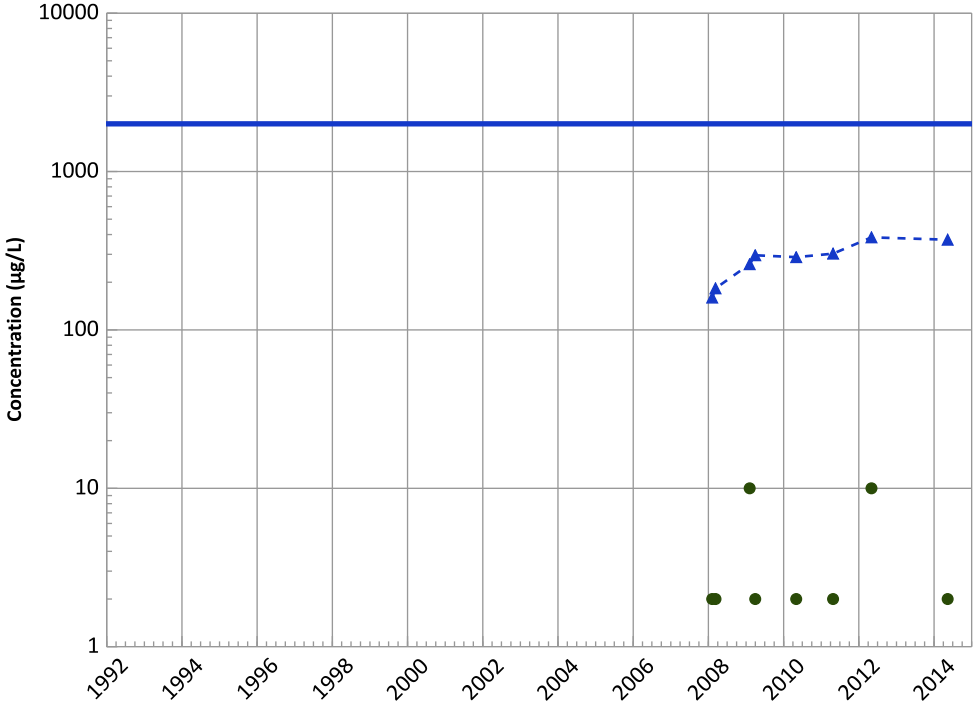


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

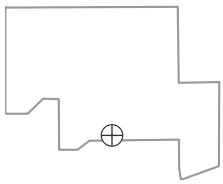
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

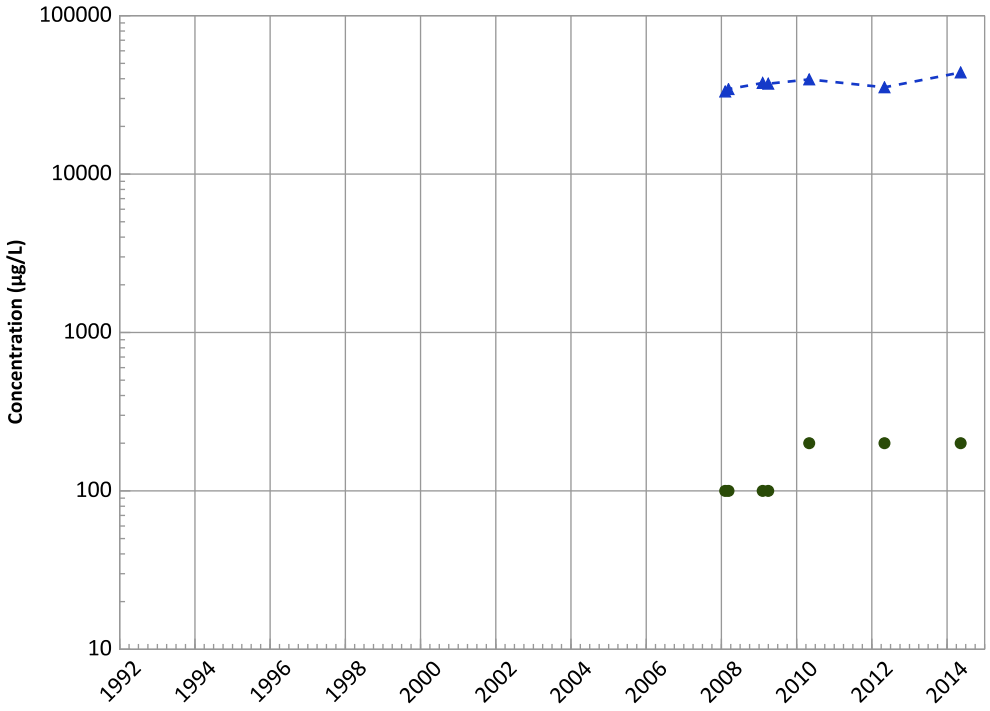
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

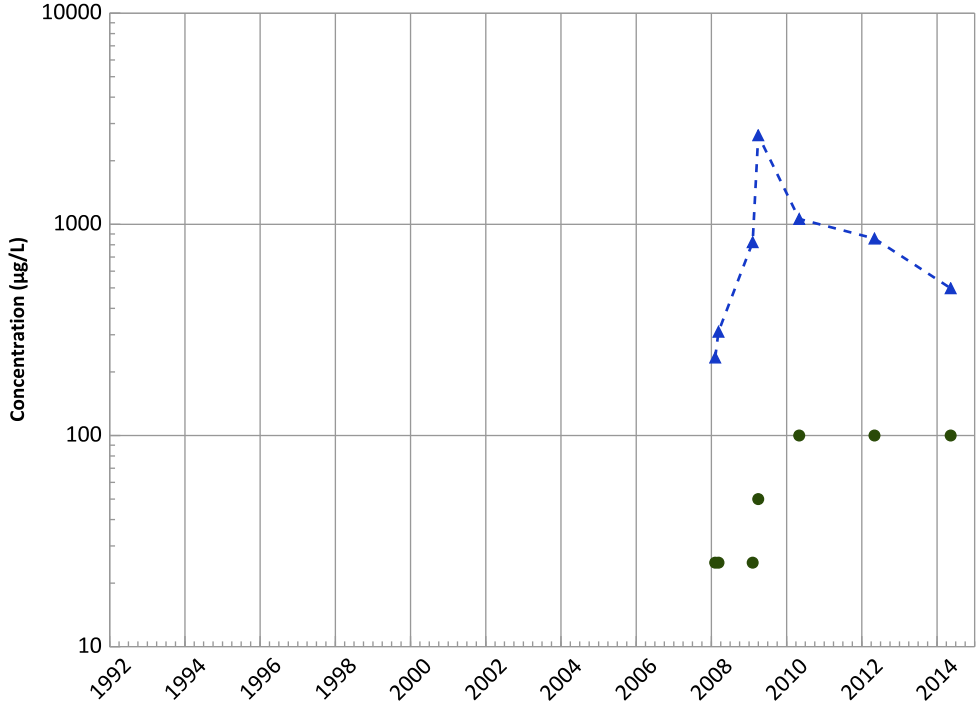


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

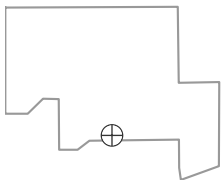
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

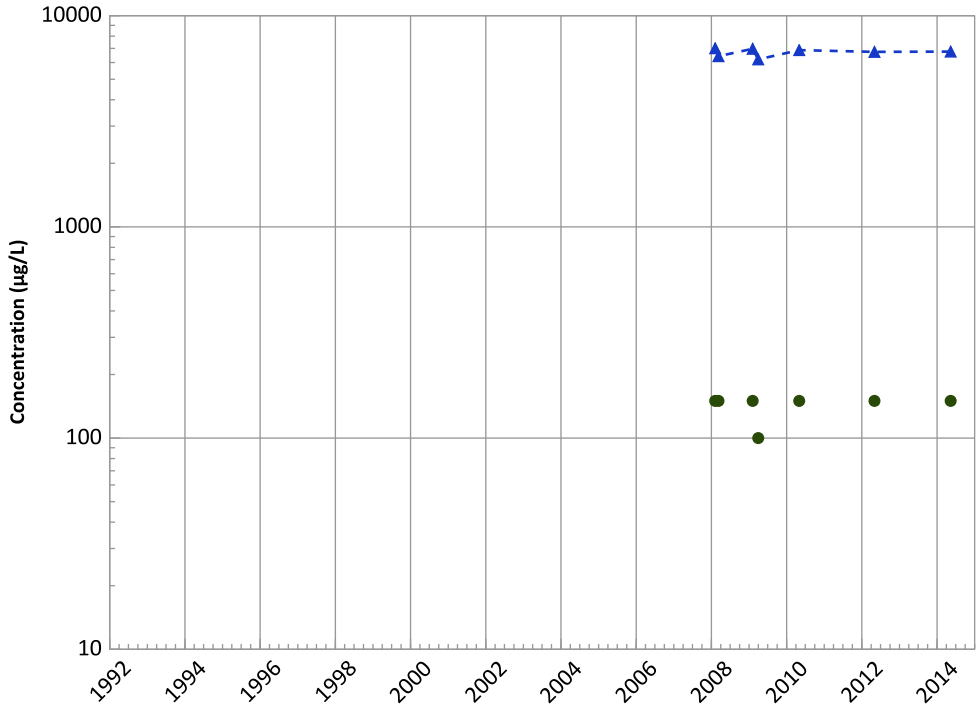
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

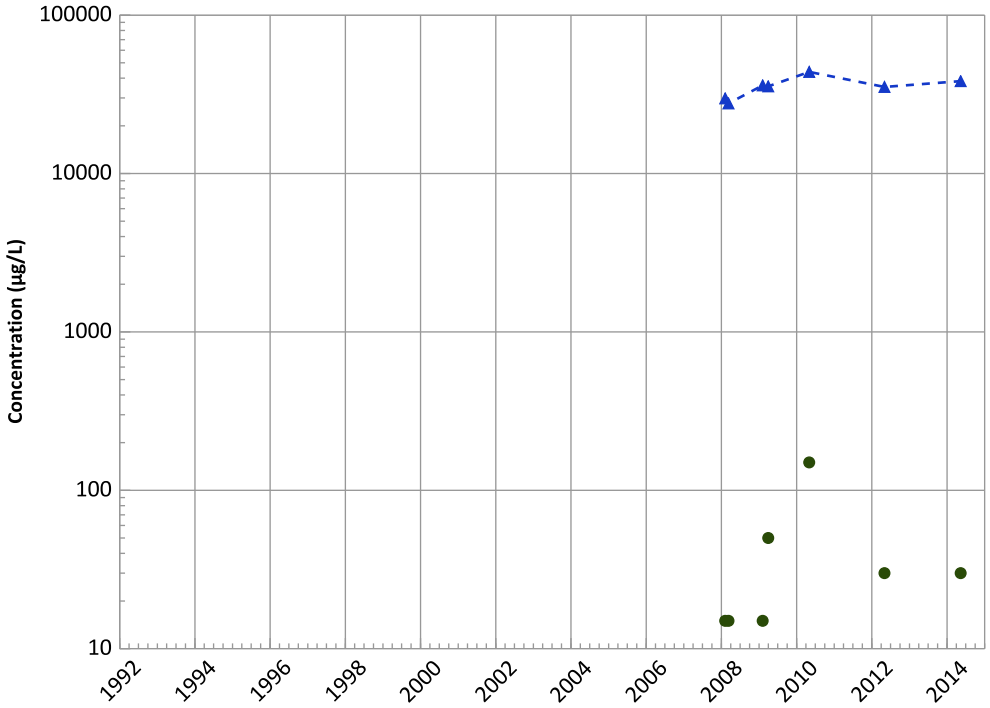


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

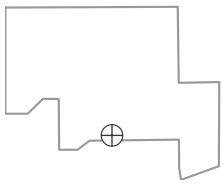
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

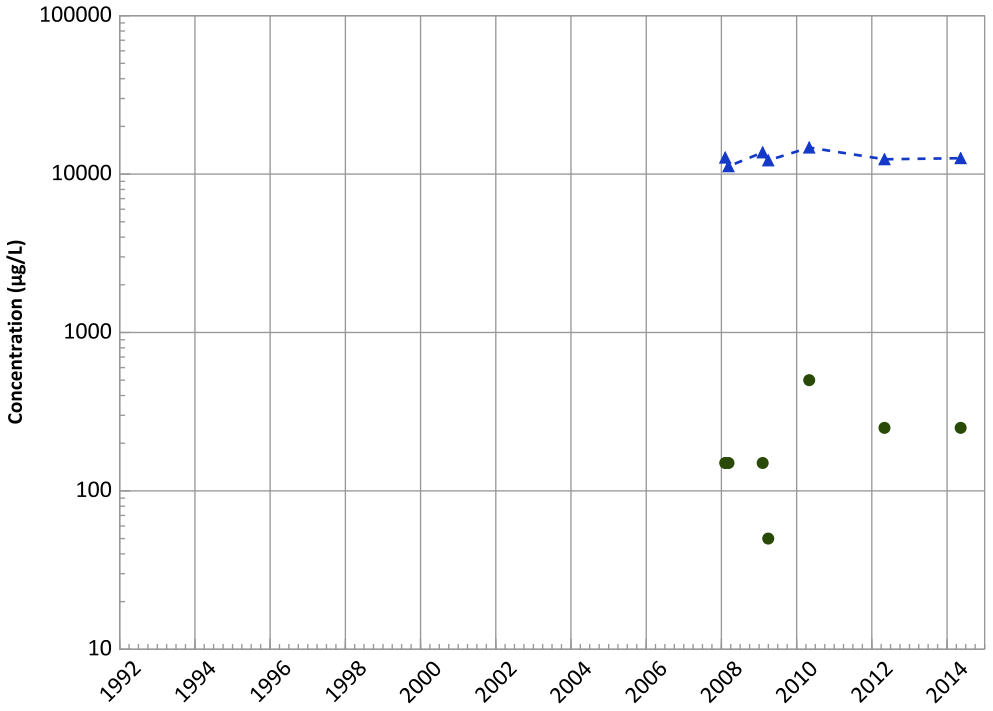
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1126 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

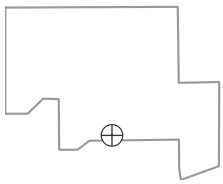
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

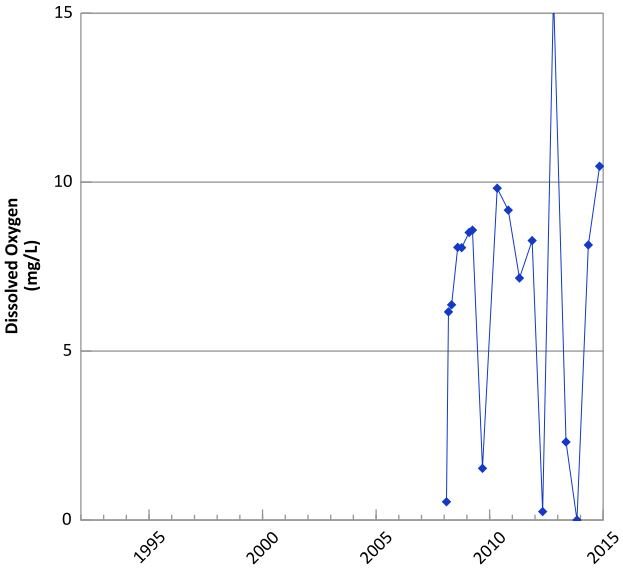
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

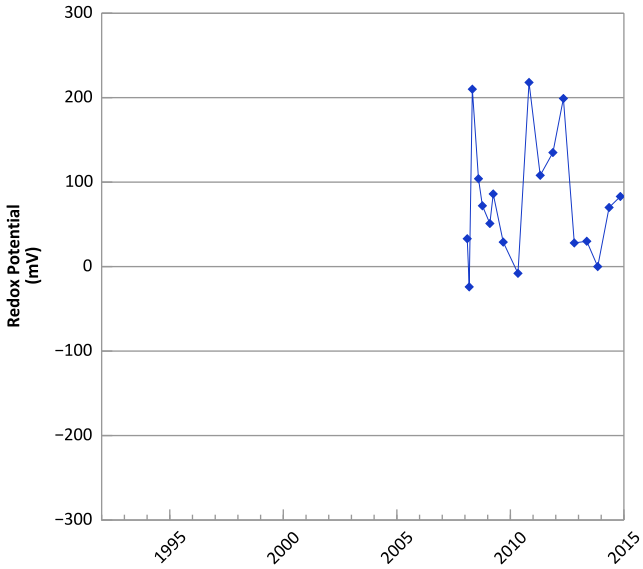
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

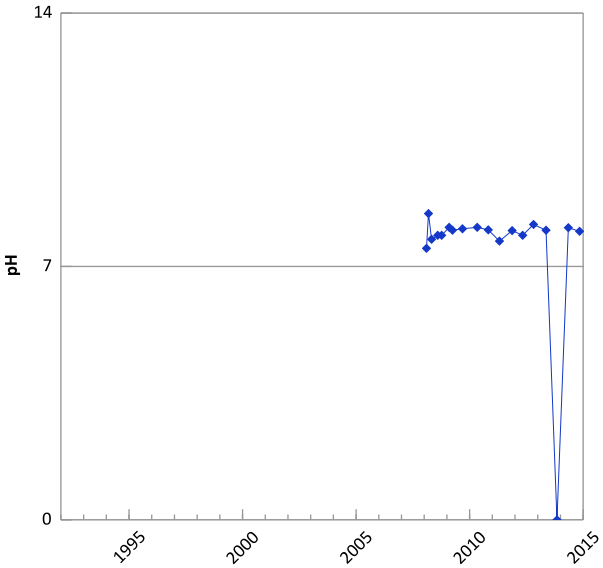
Well Location

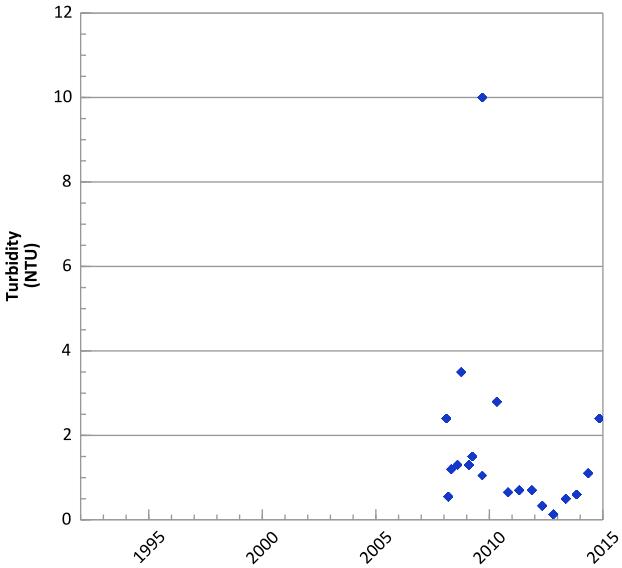


PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



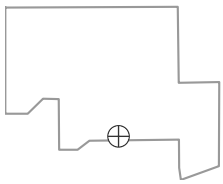






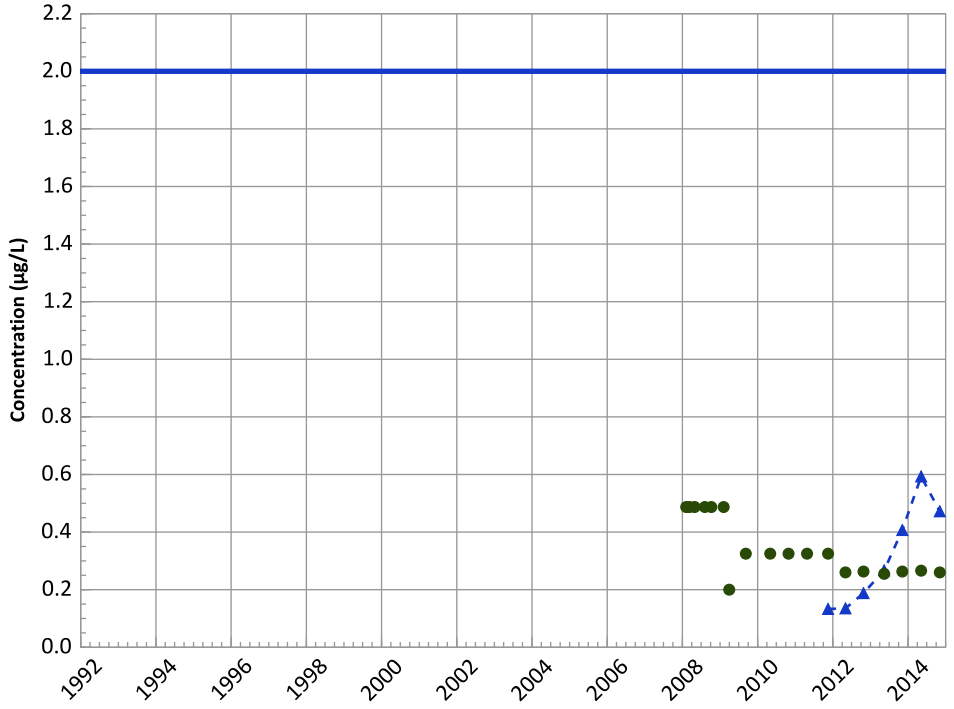
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

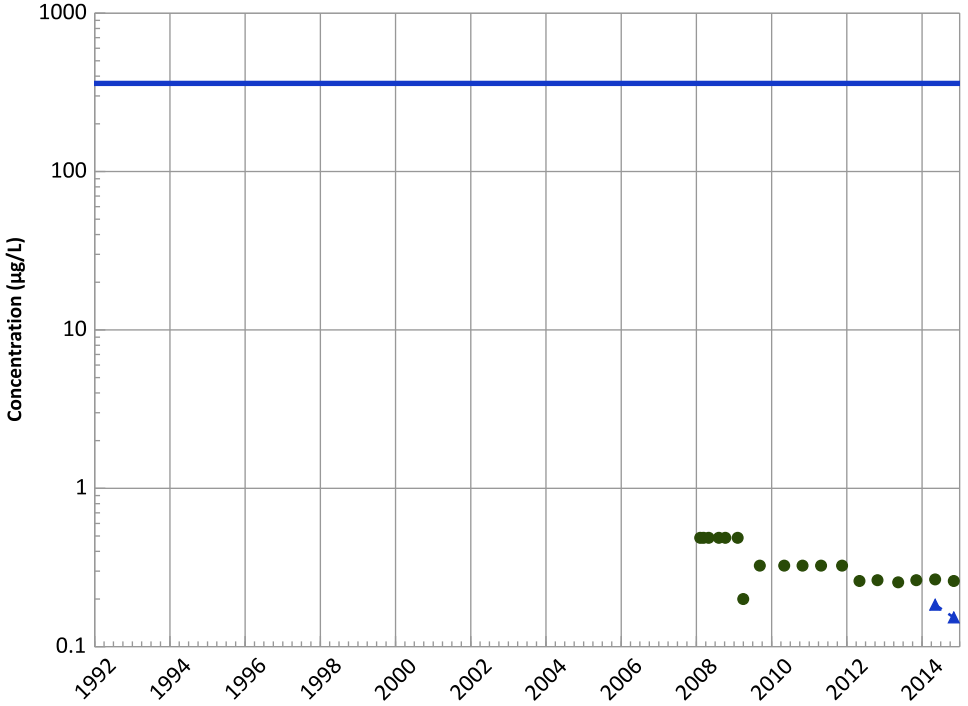


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

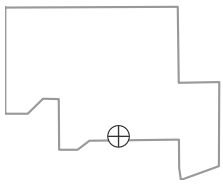
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

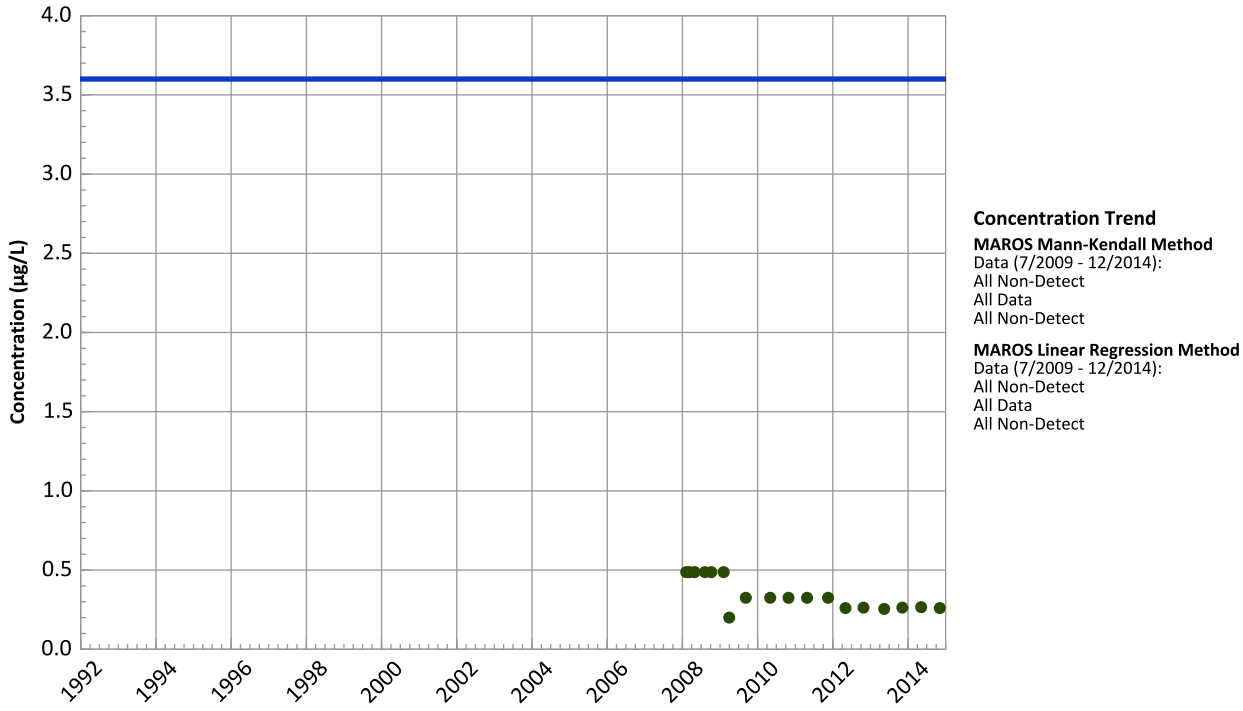
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

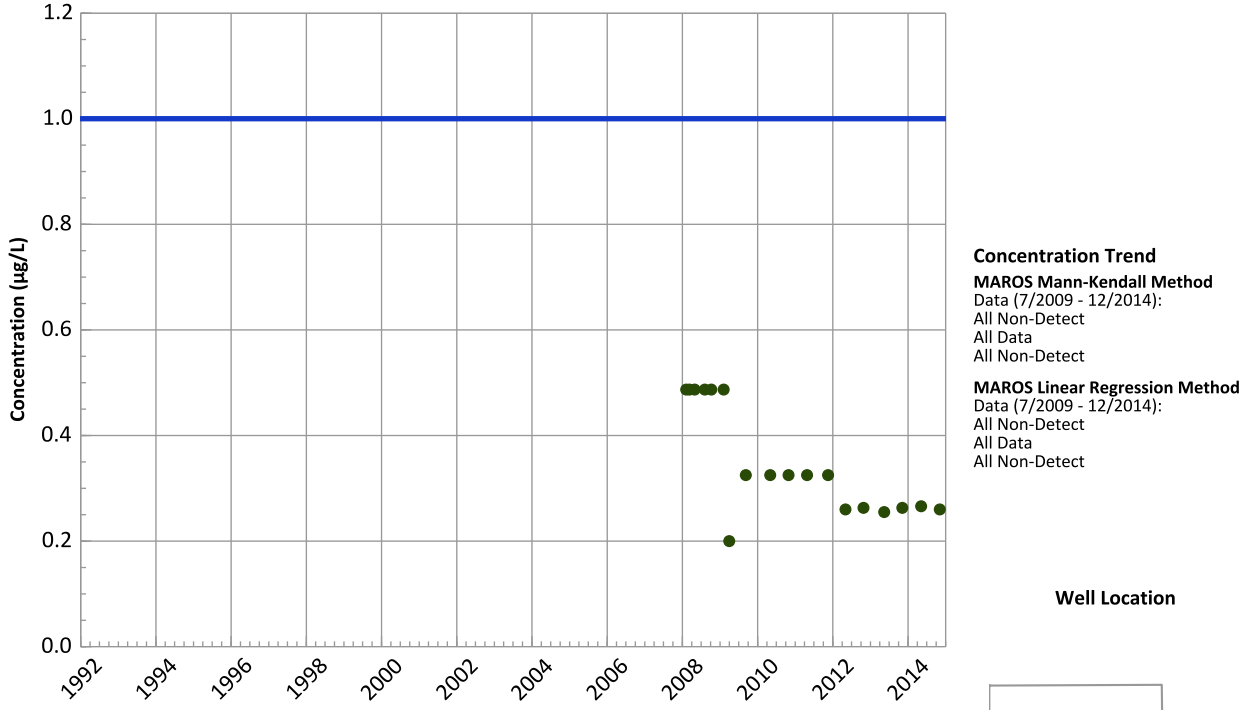


PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



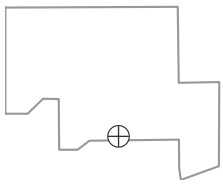
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

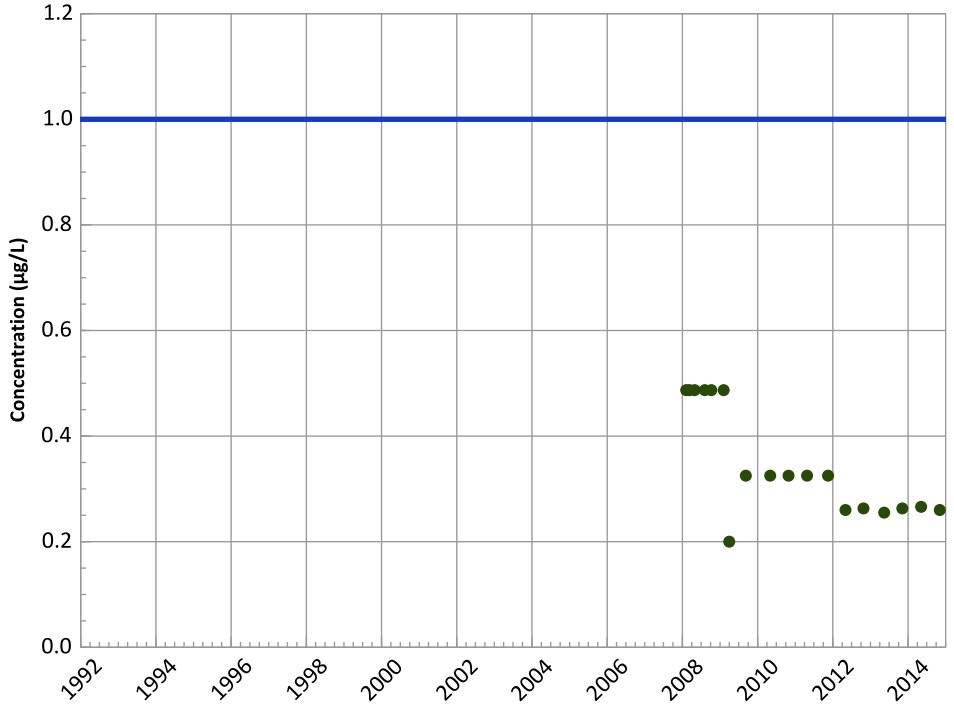
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

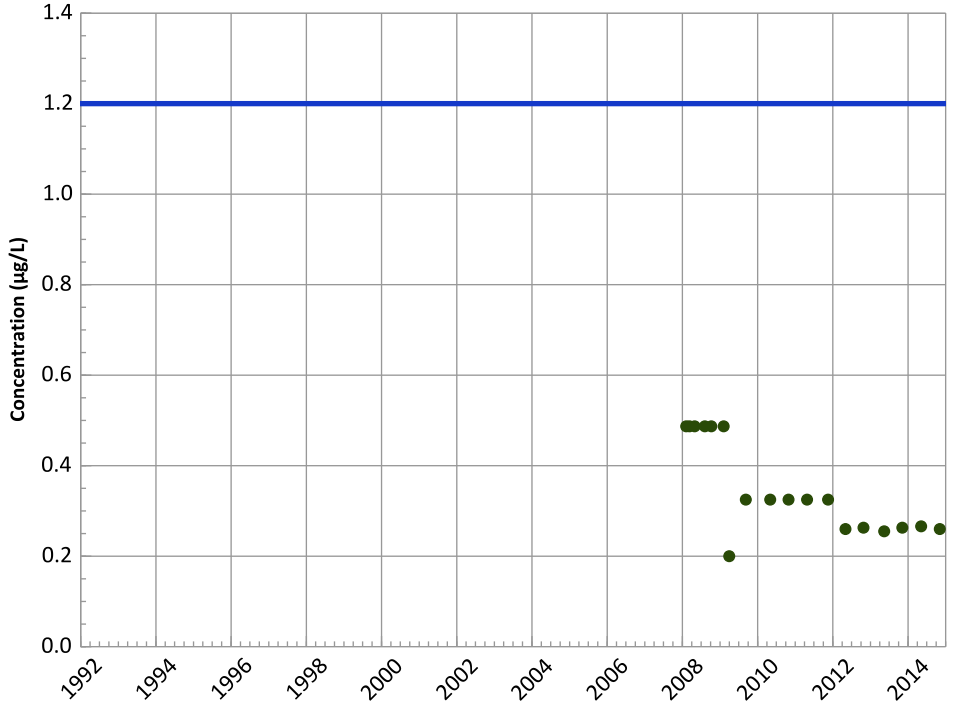


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

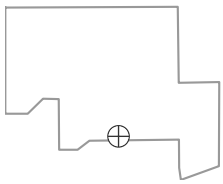
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

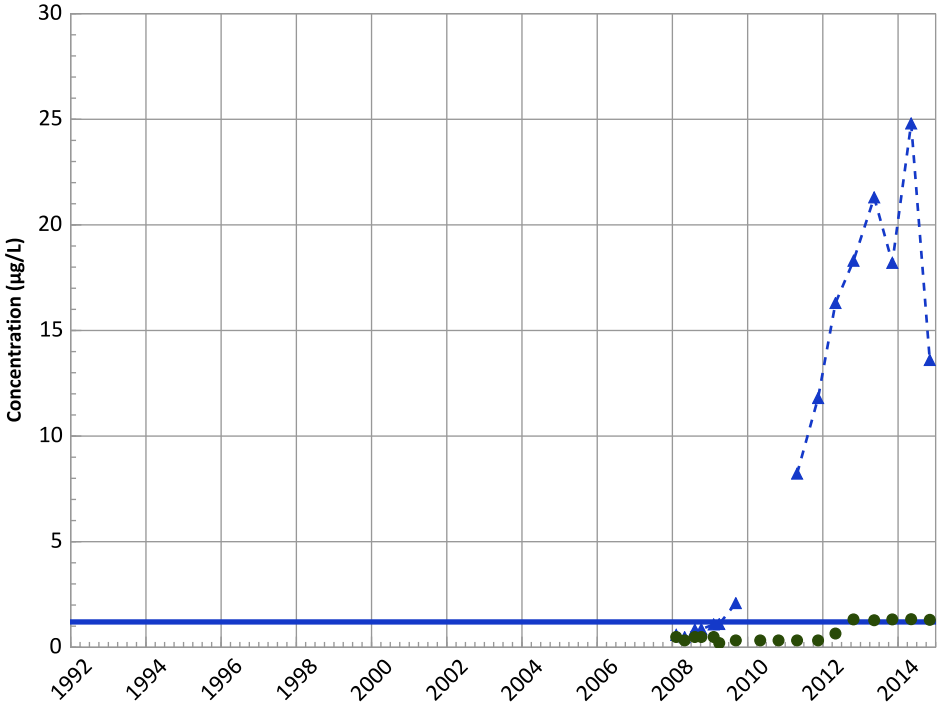
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

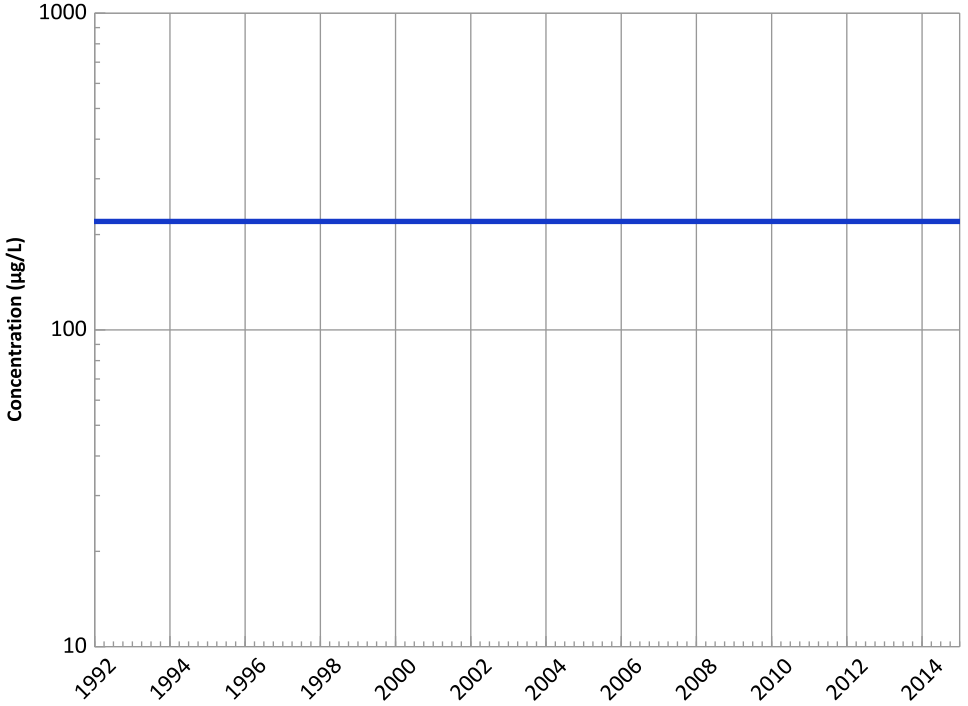


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

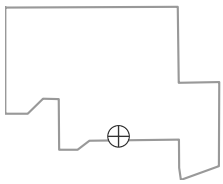
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

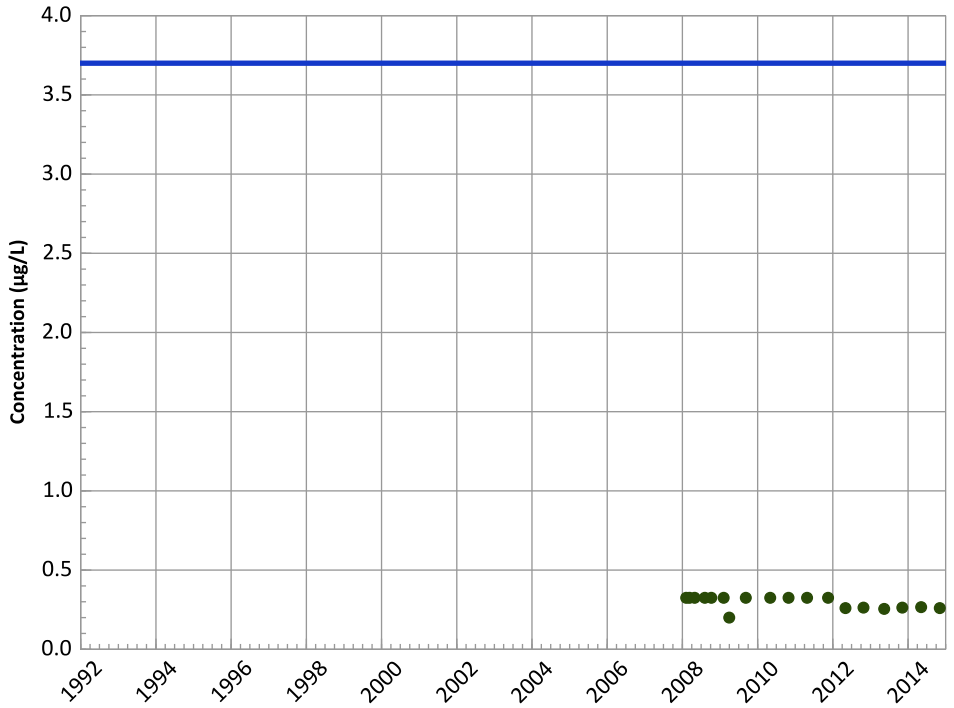
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

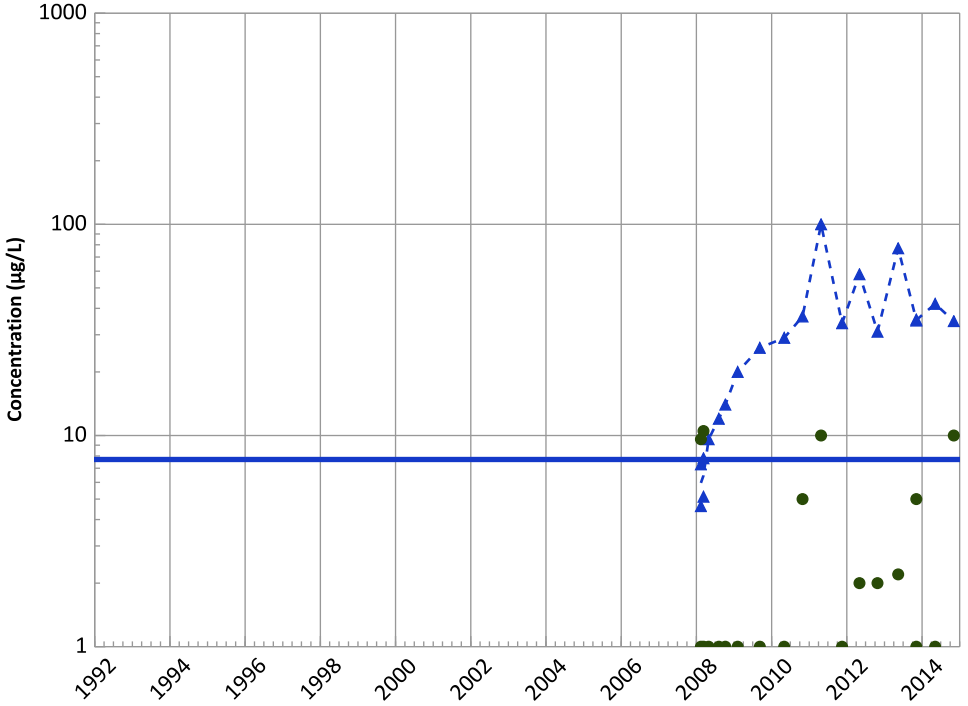


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

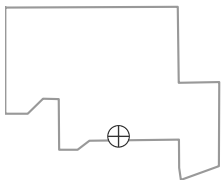
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

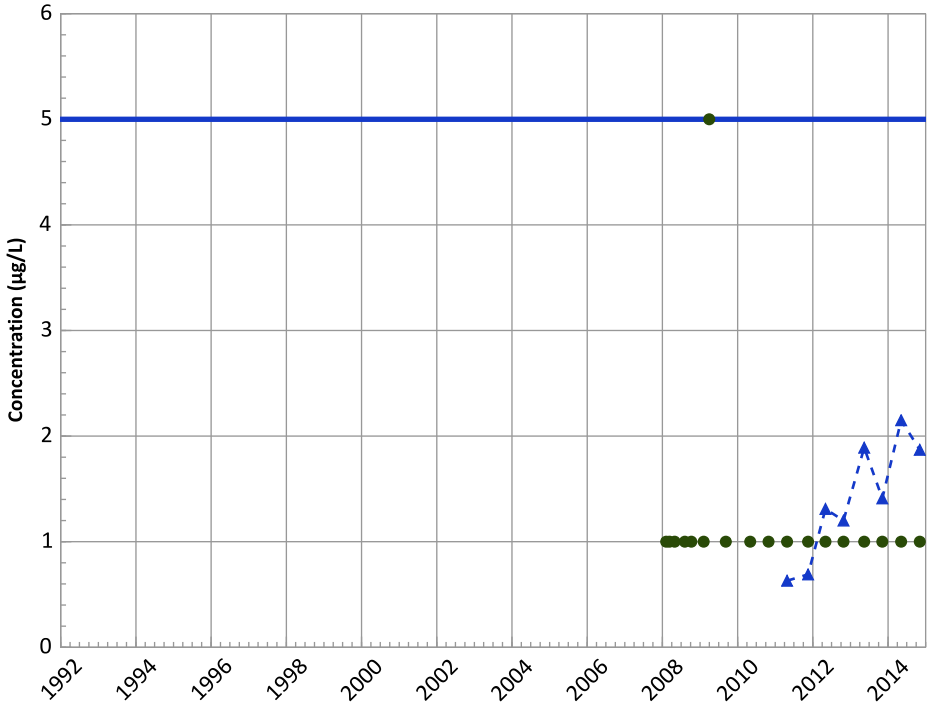
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

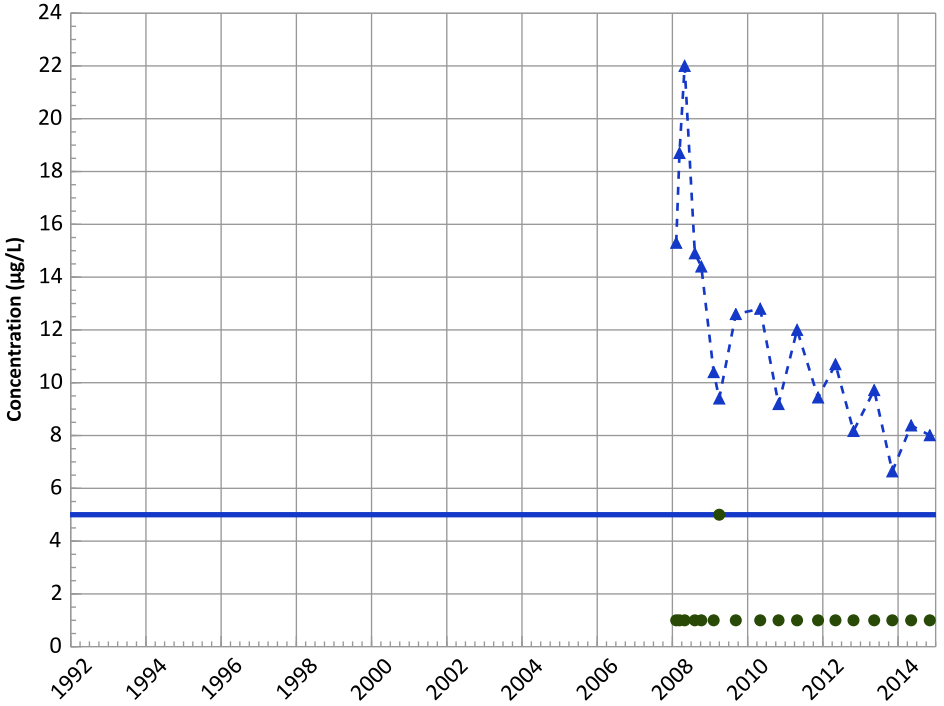


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Trichloroethene Trend



Concentration Trend

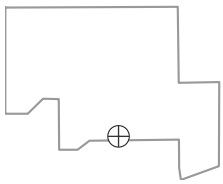
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

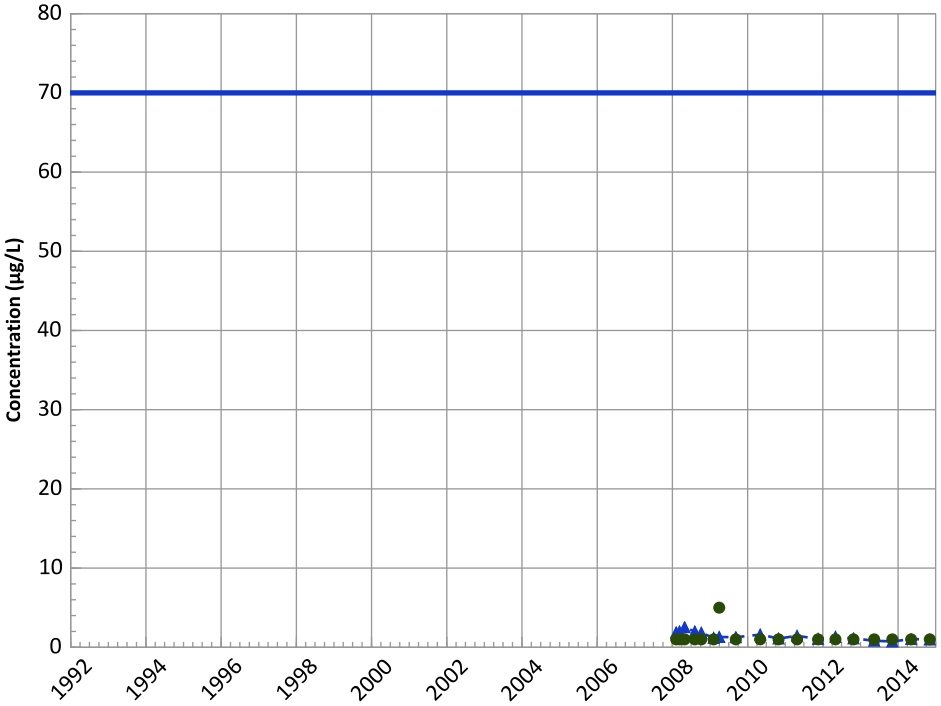
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

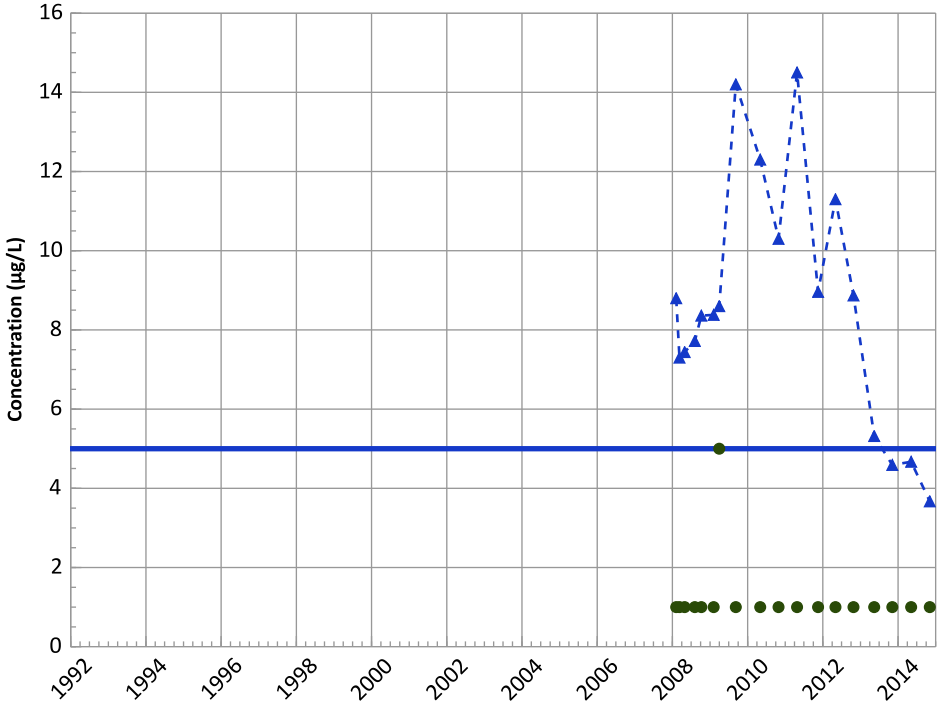


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

1,2-Dichloroethane Trend



Concentration Trend

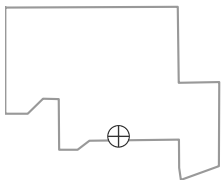
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

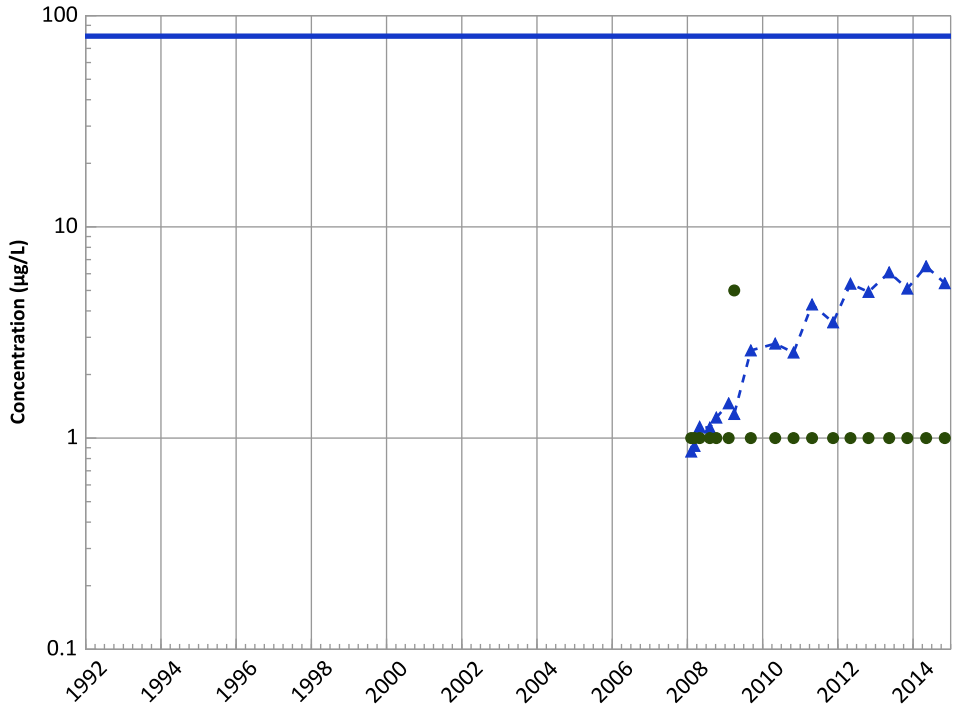
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

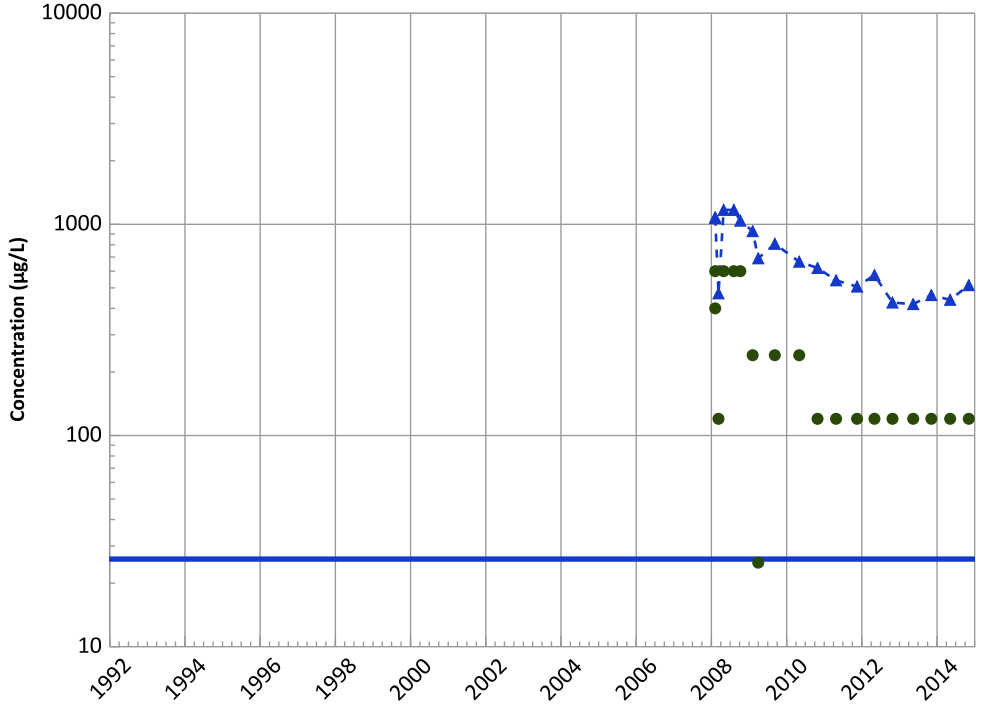


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Perchlorate Trend



Concentration Trend

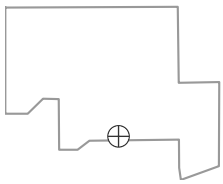
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

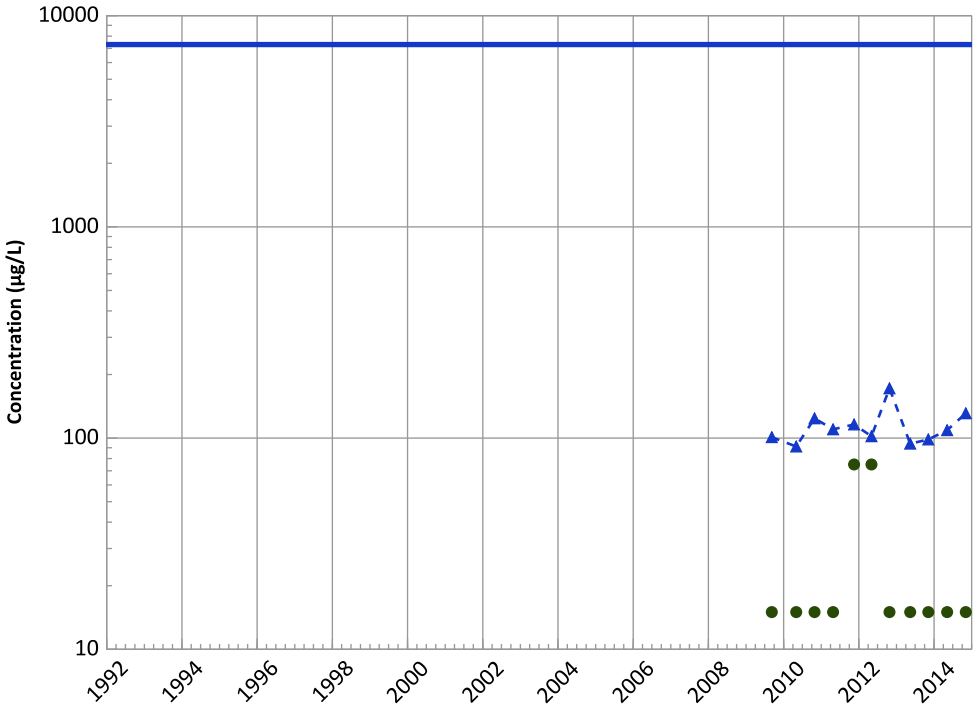
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

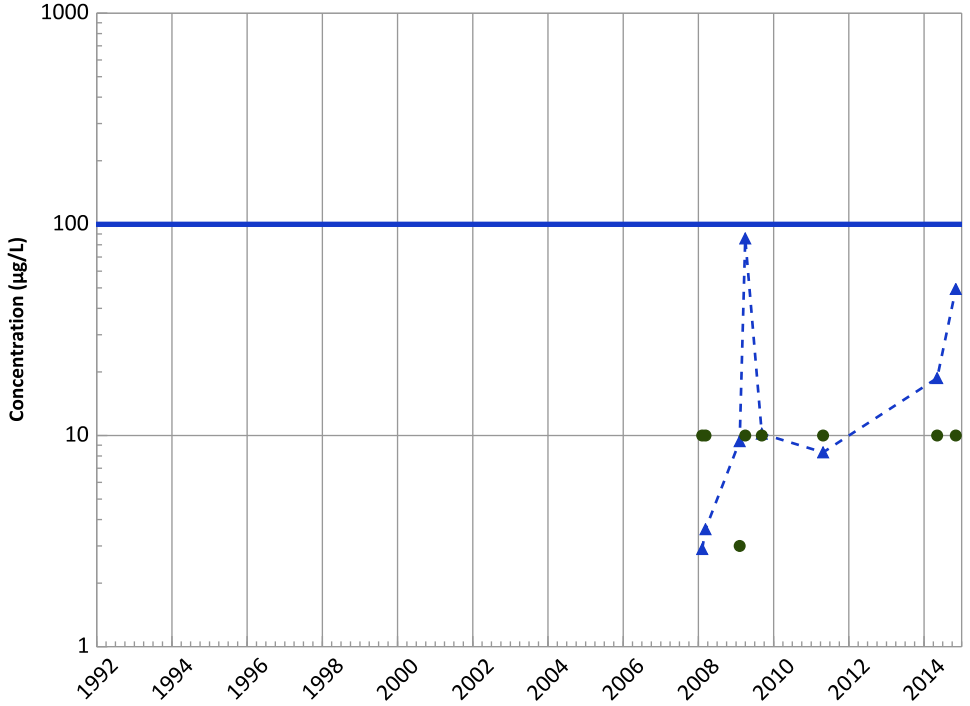


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chromium, Total Trend



Concentration Trend

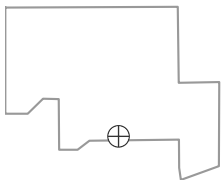
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

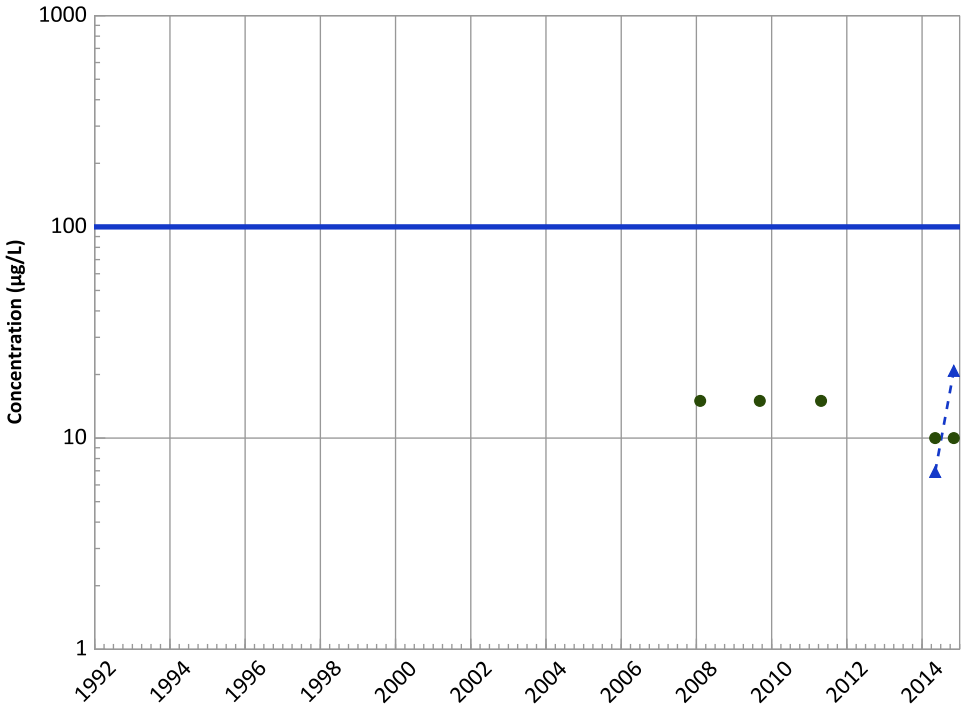
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

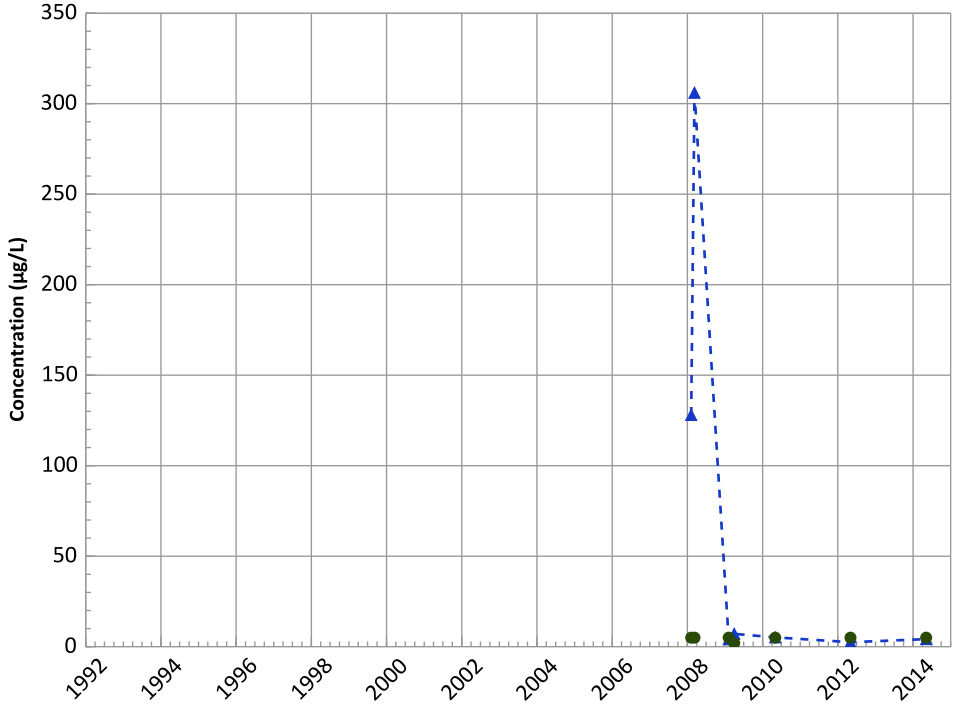


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

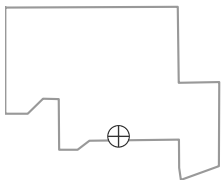
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

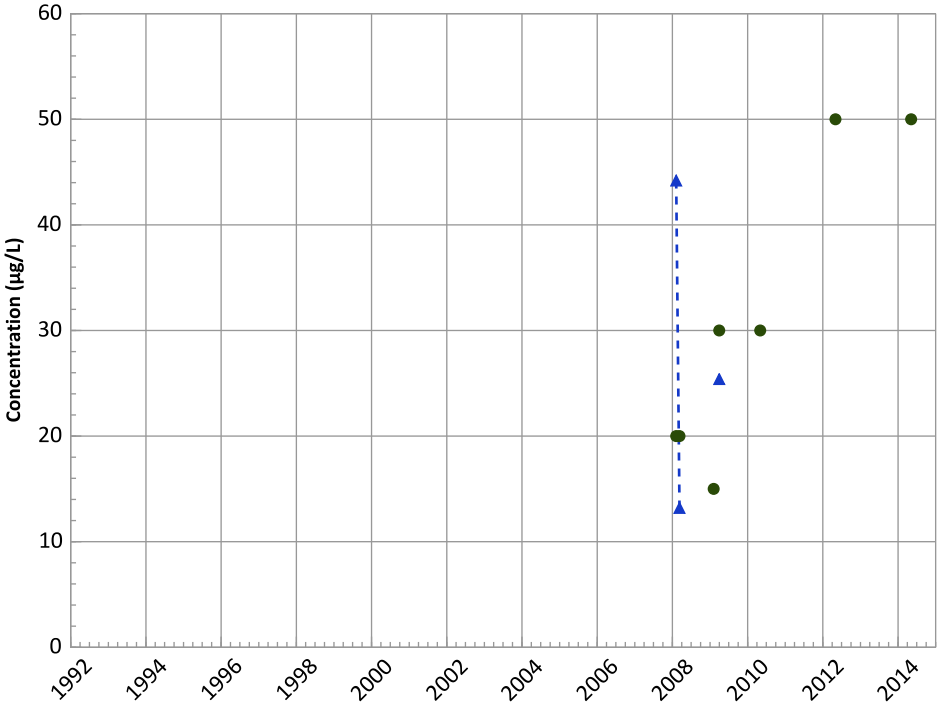
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

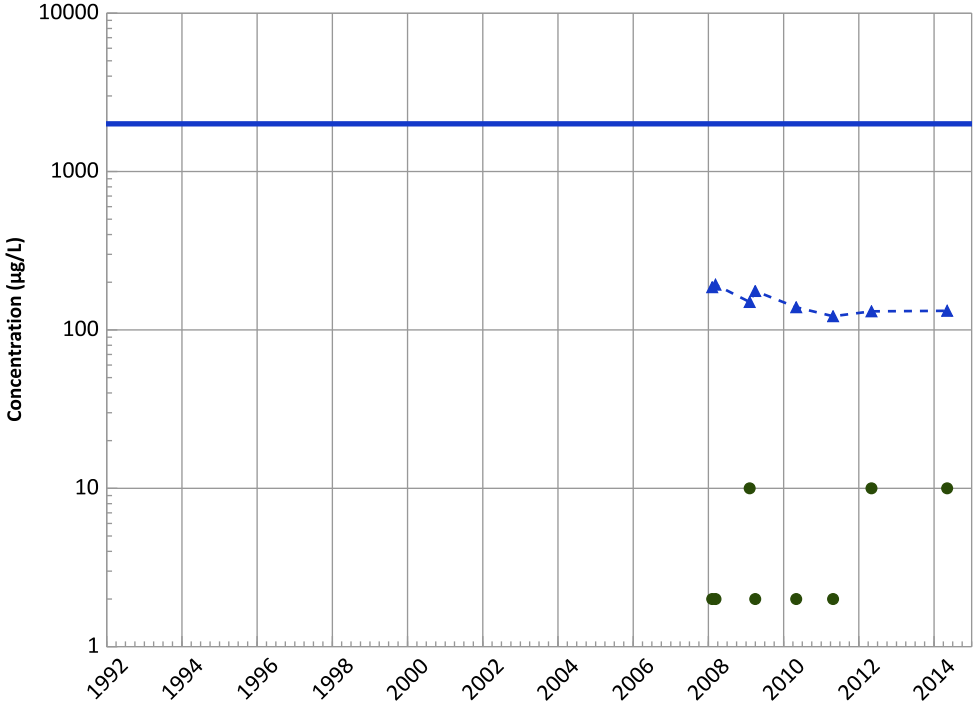


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

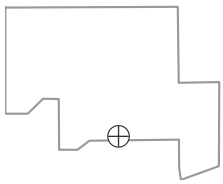
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

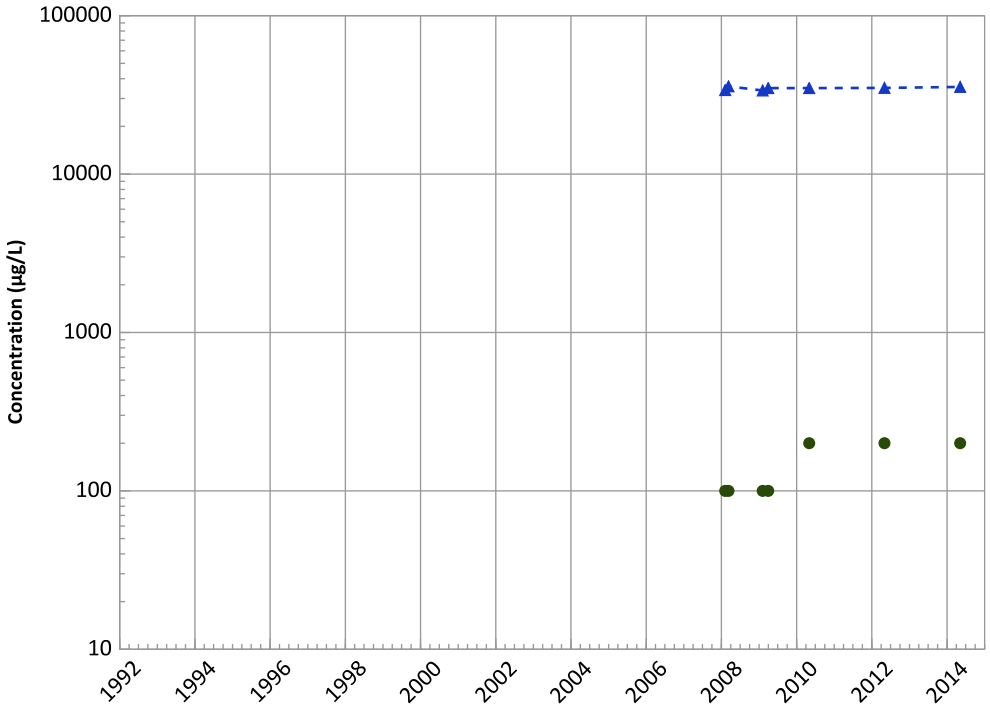
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

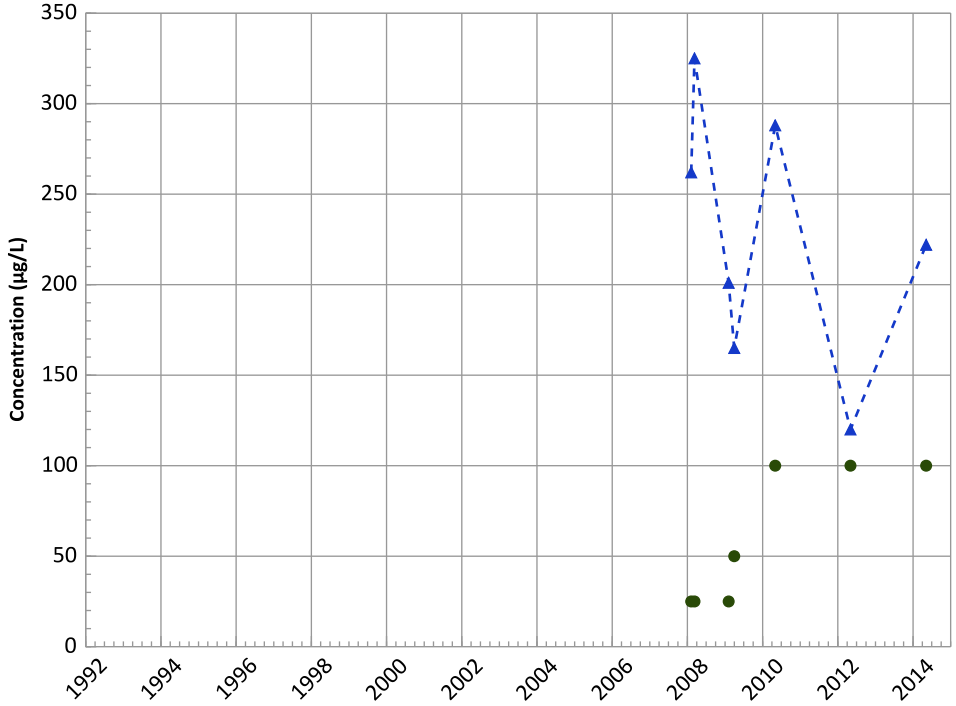


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

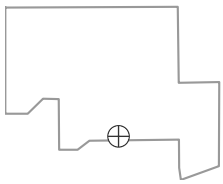
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

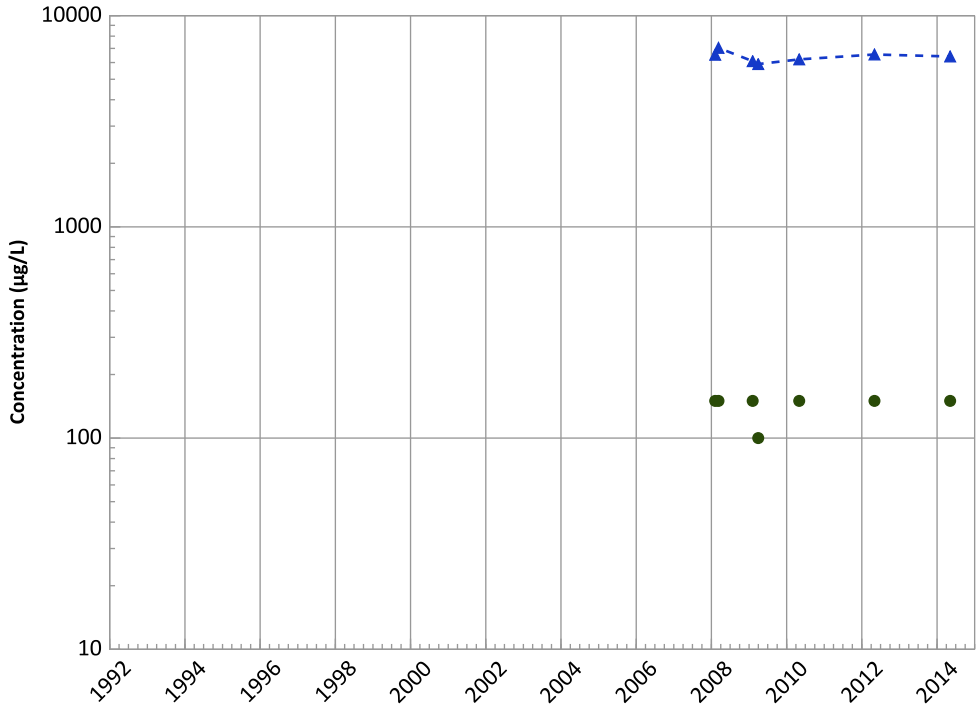
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

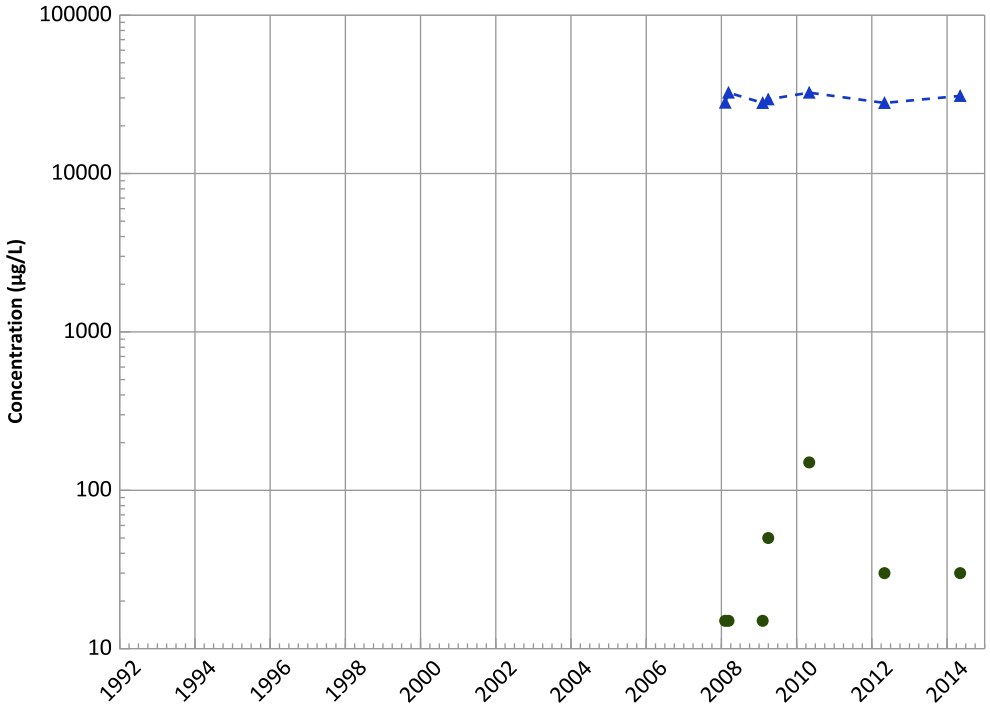


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

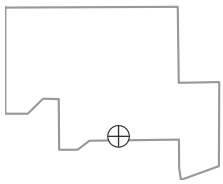
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

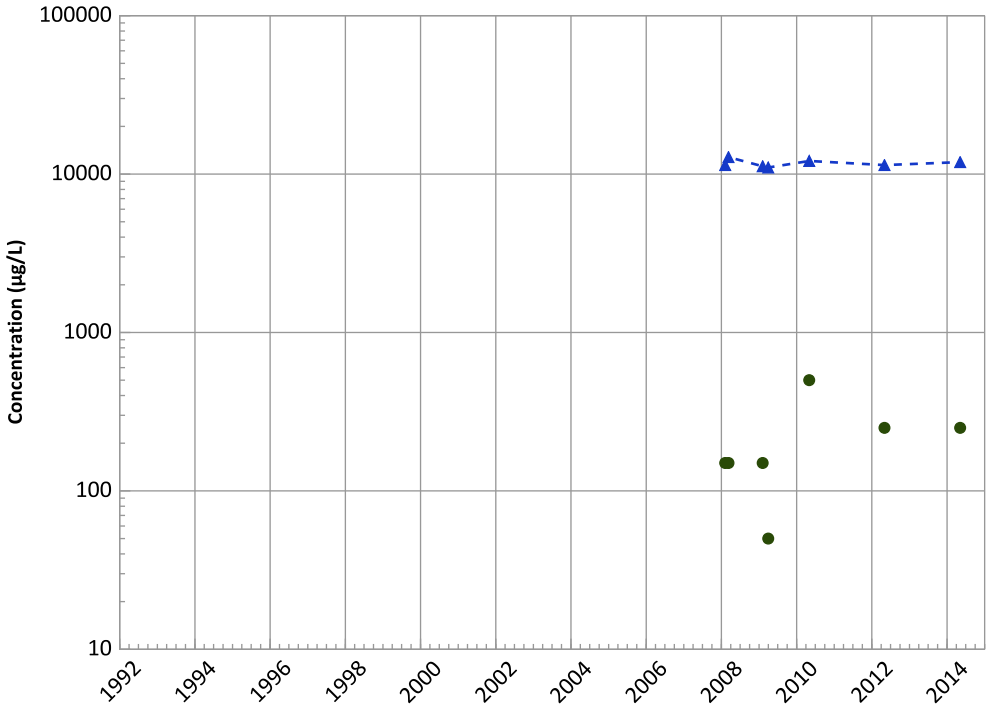
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1127 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

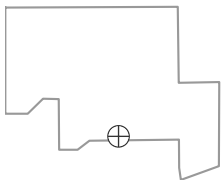
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

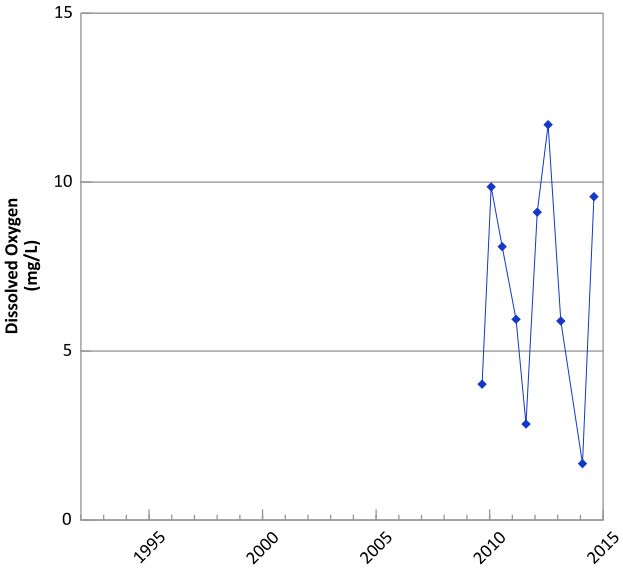
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 02/07/2008 to 11/05/2014
Analysis Date: 03/19/2015

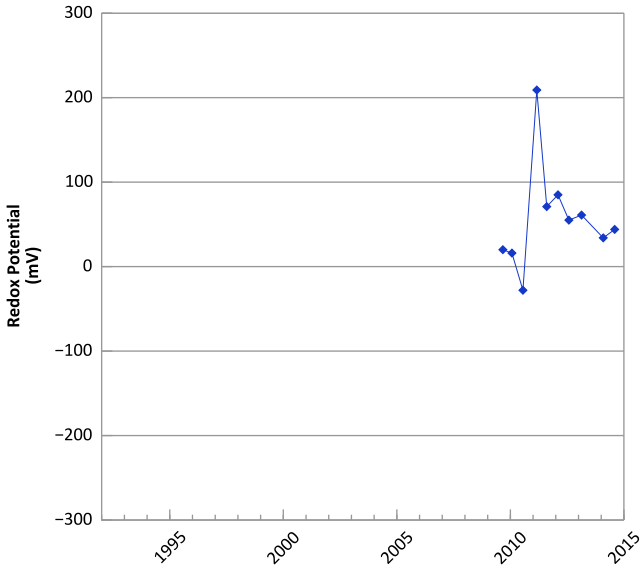
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

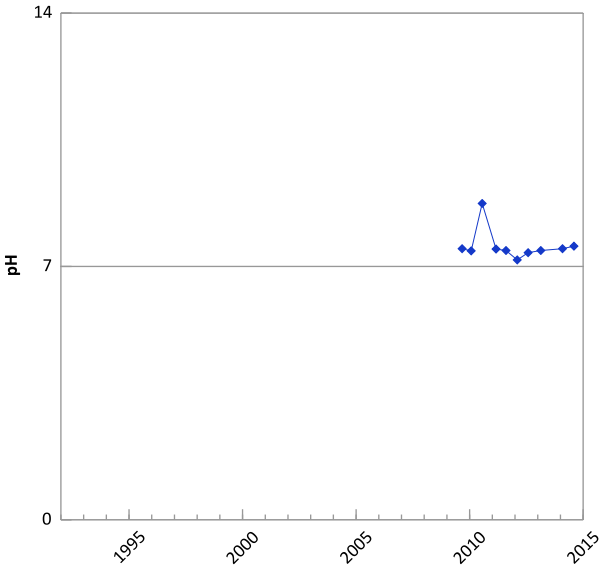
Well Location

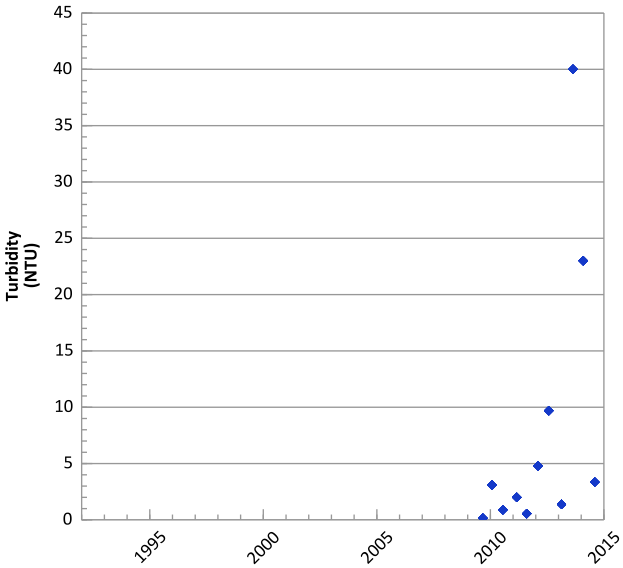


PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



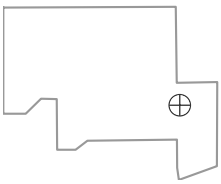






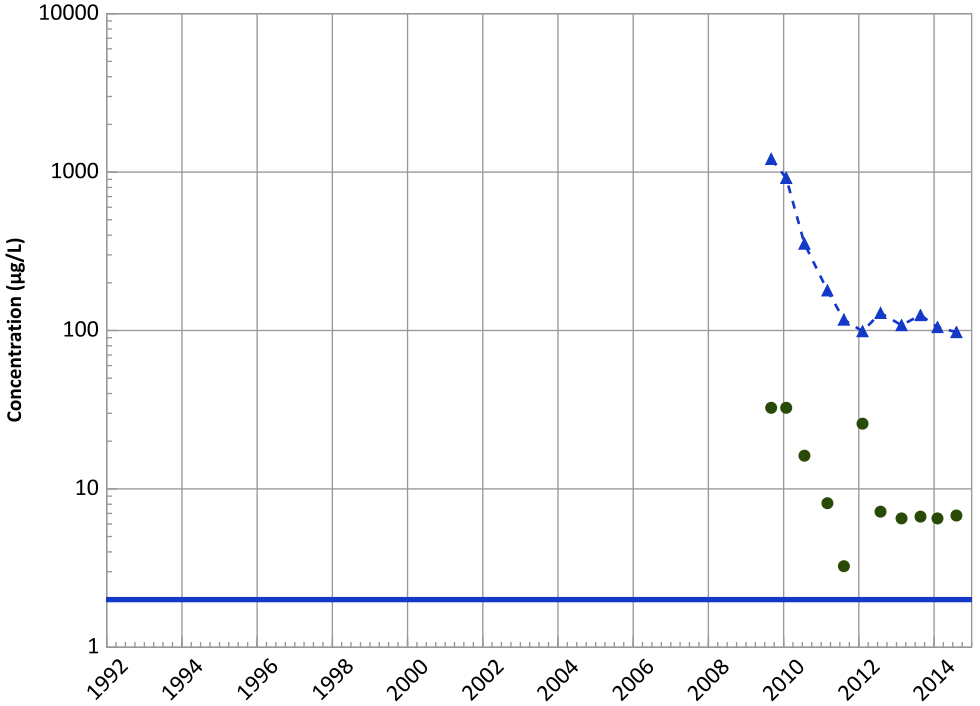
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

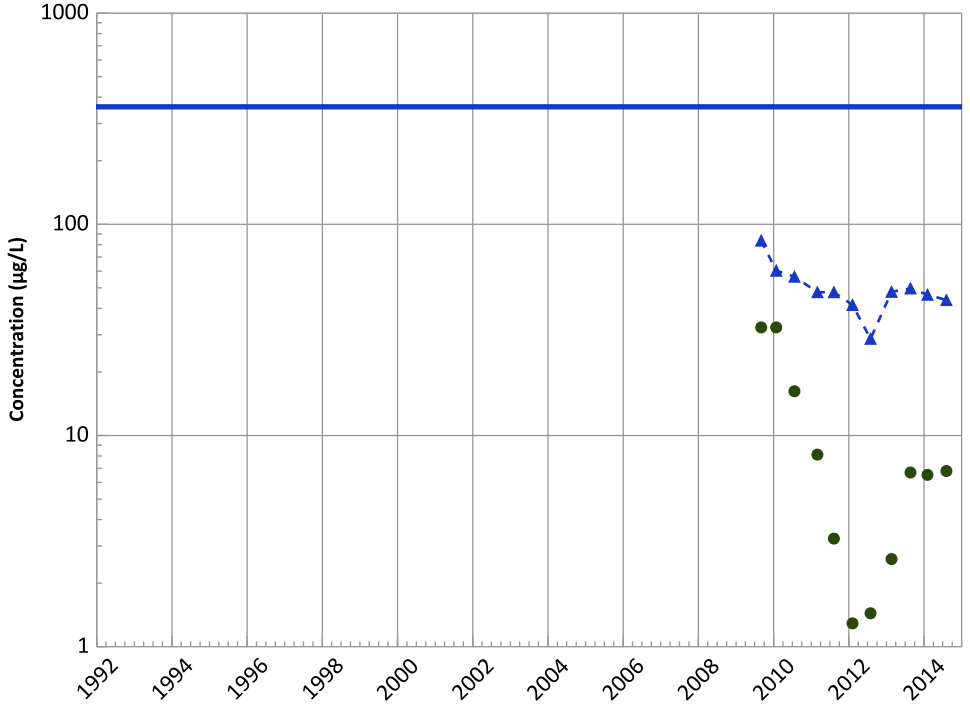


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

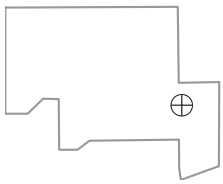
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

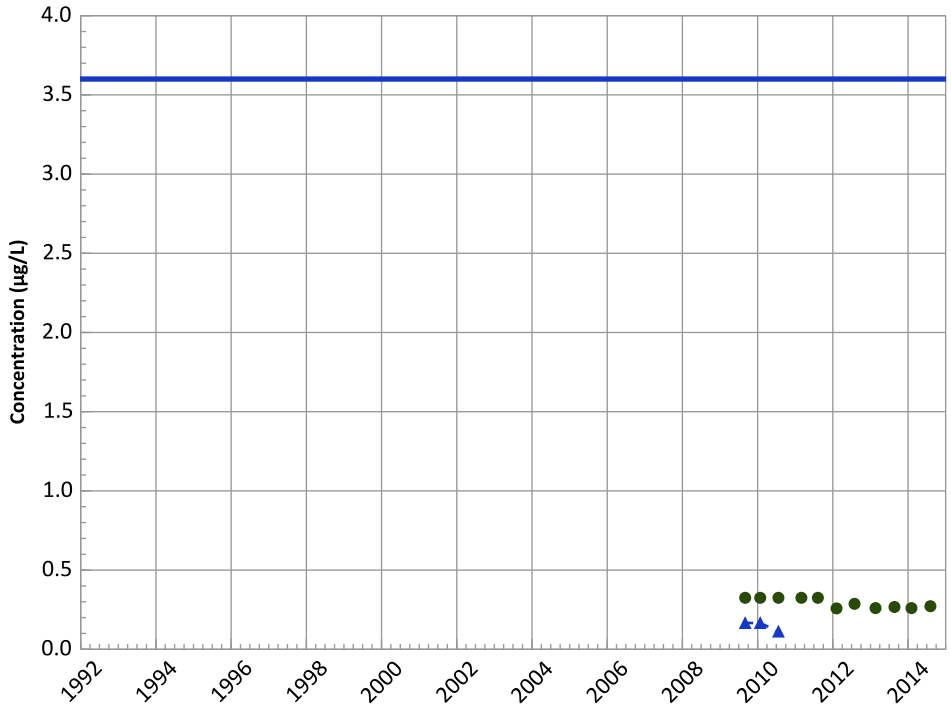
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

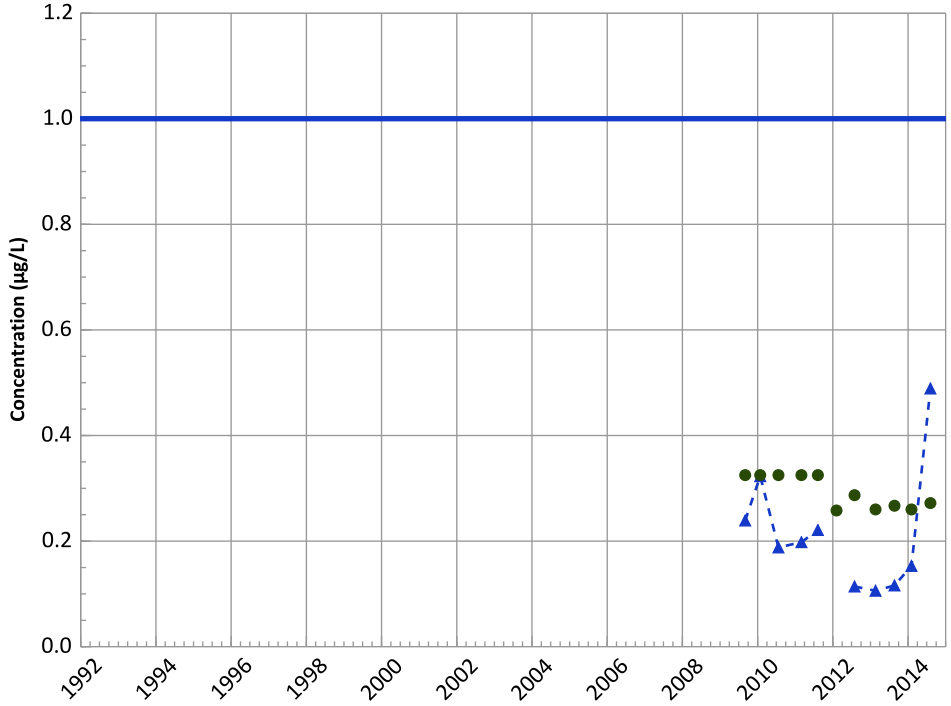


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

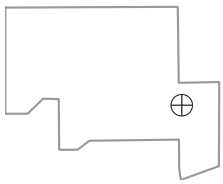
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

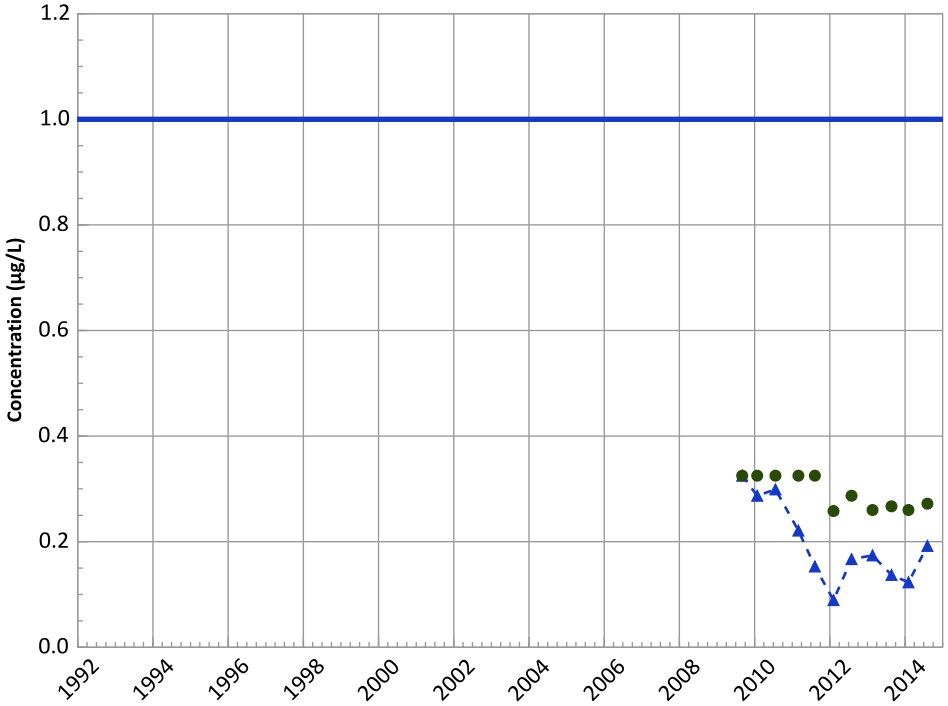
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

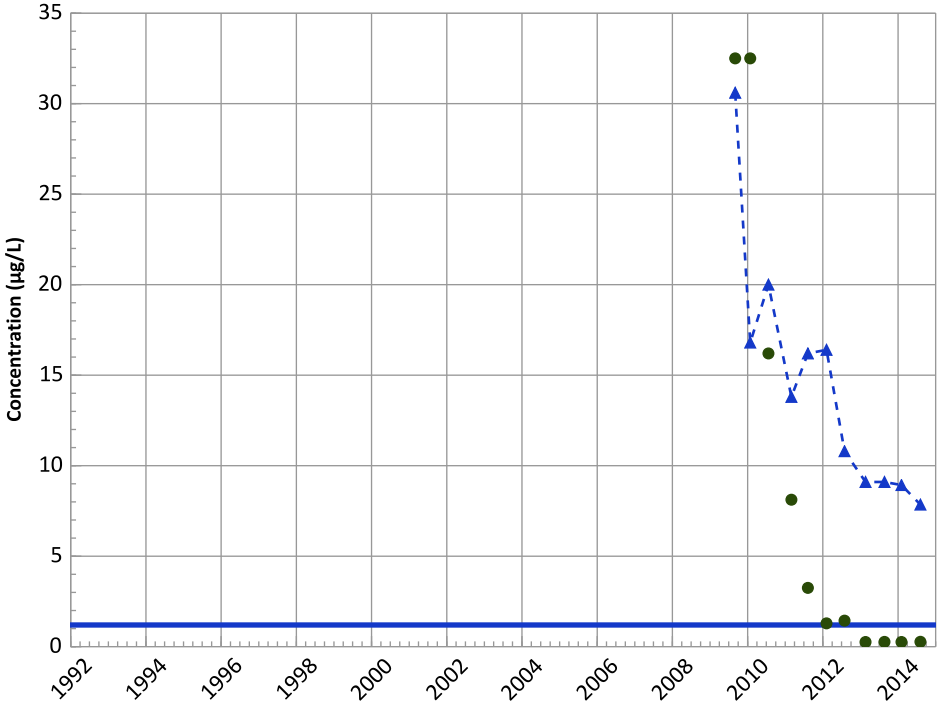


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

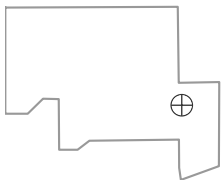
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

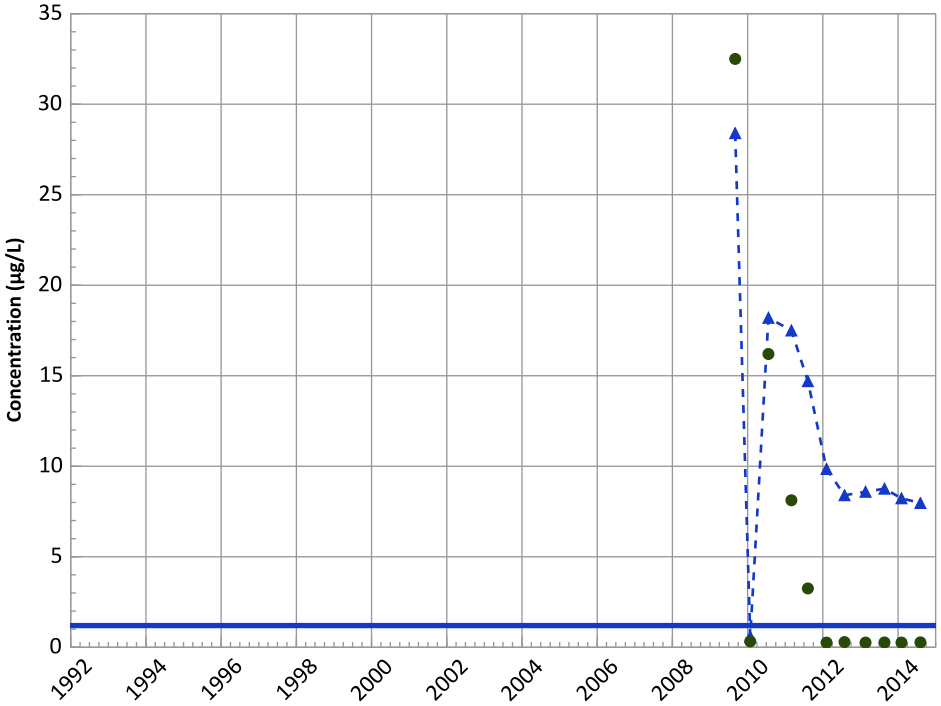
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

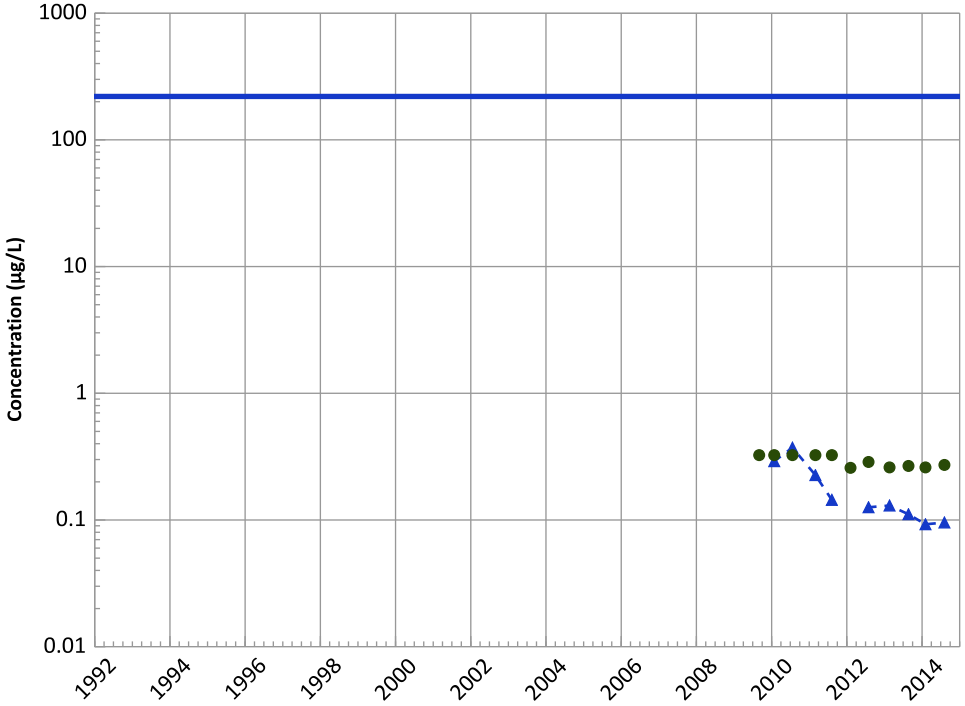


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

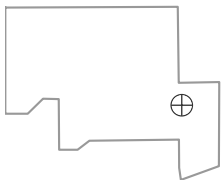
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

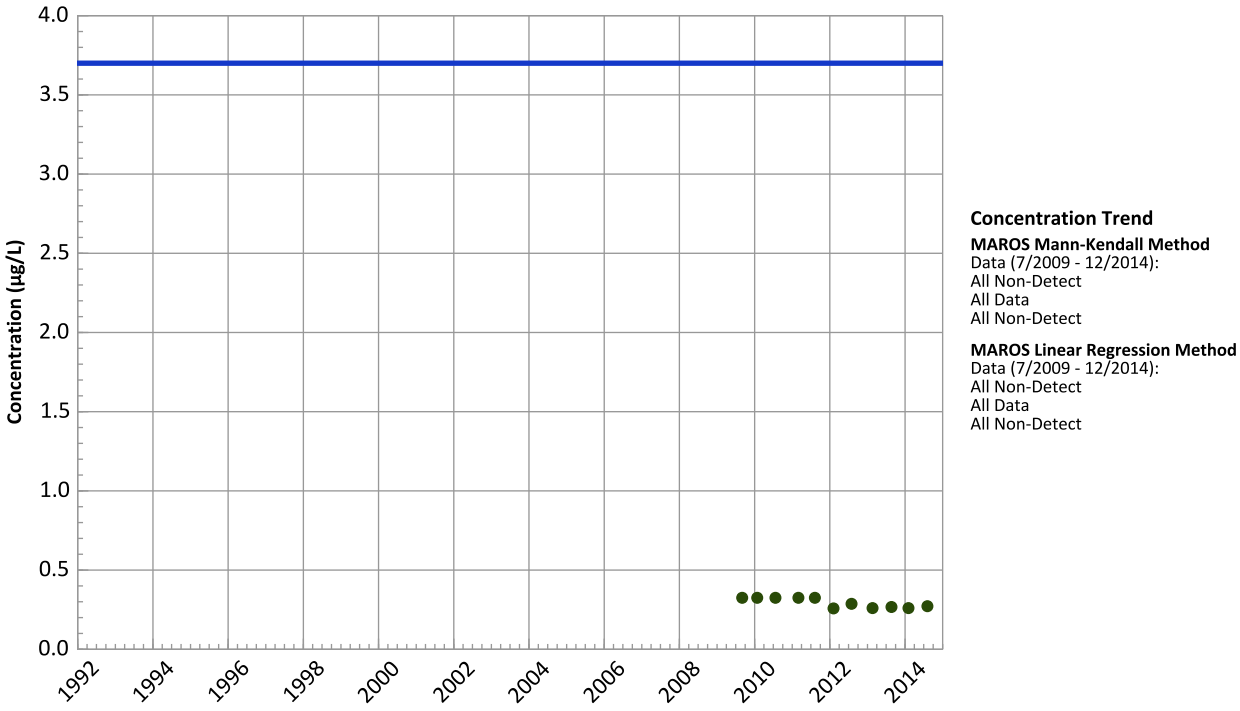
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

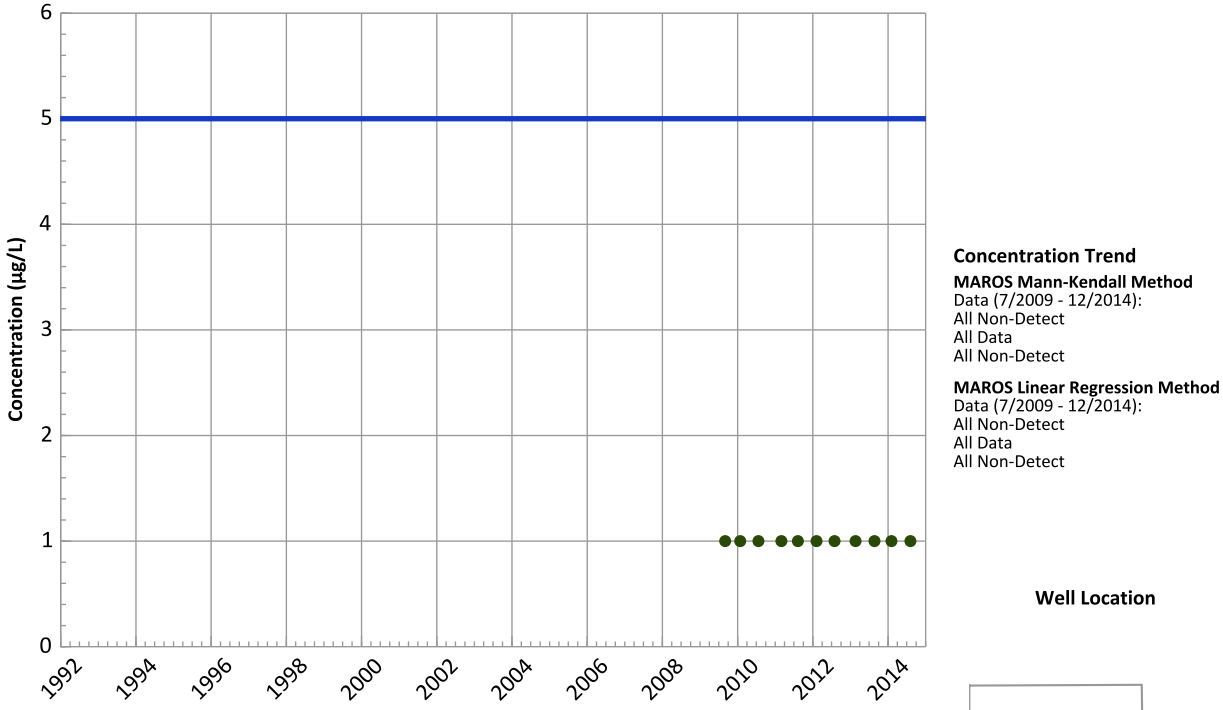


PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



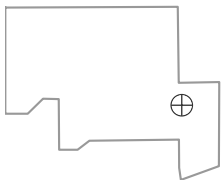
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

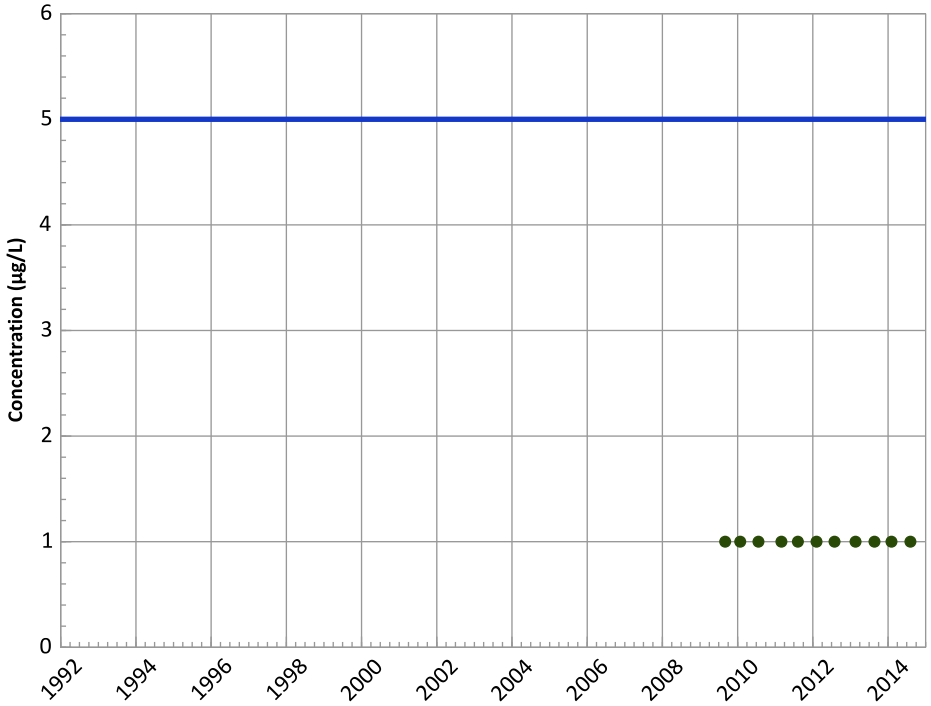
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

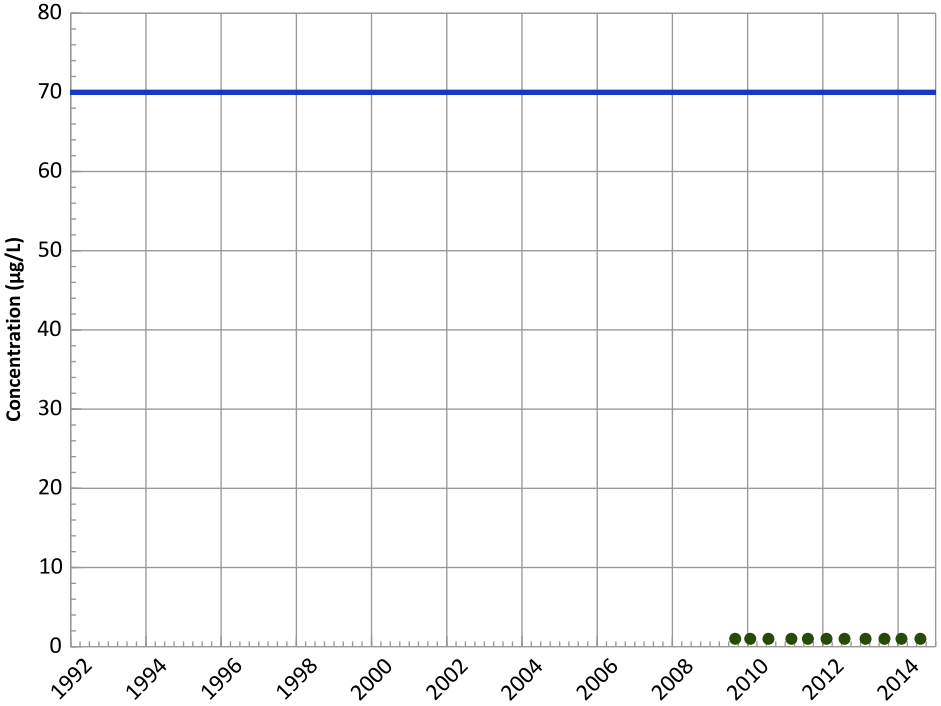


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

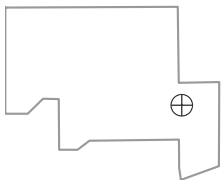
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

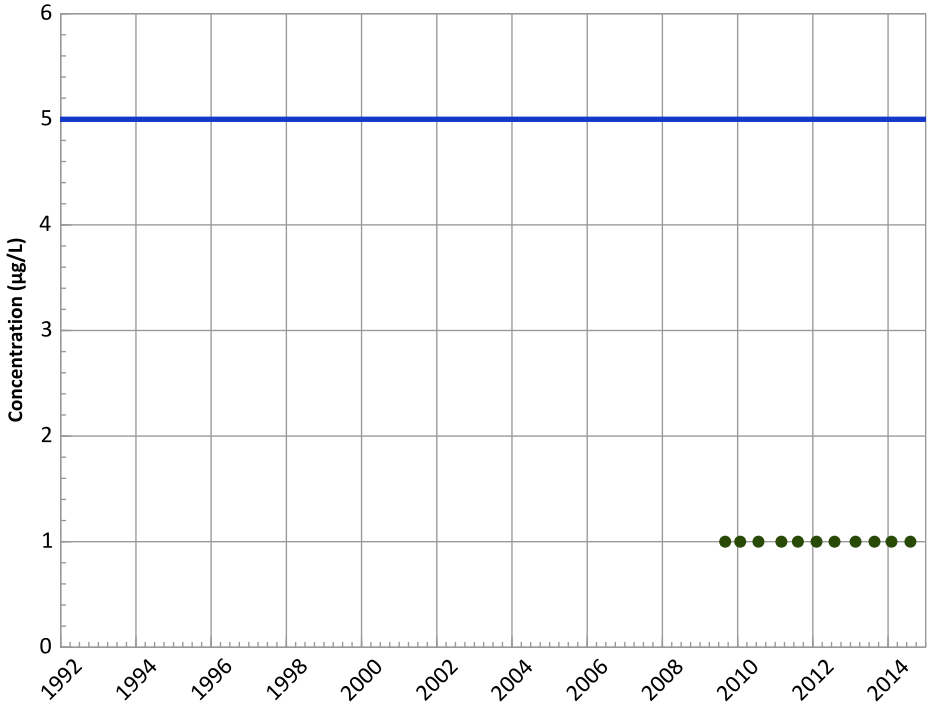
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

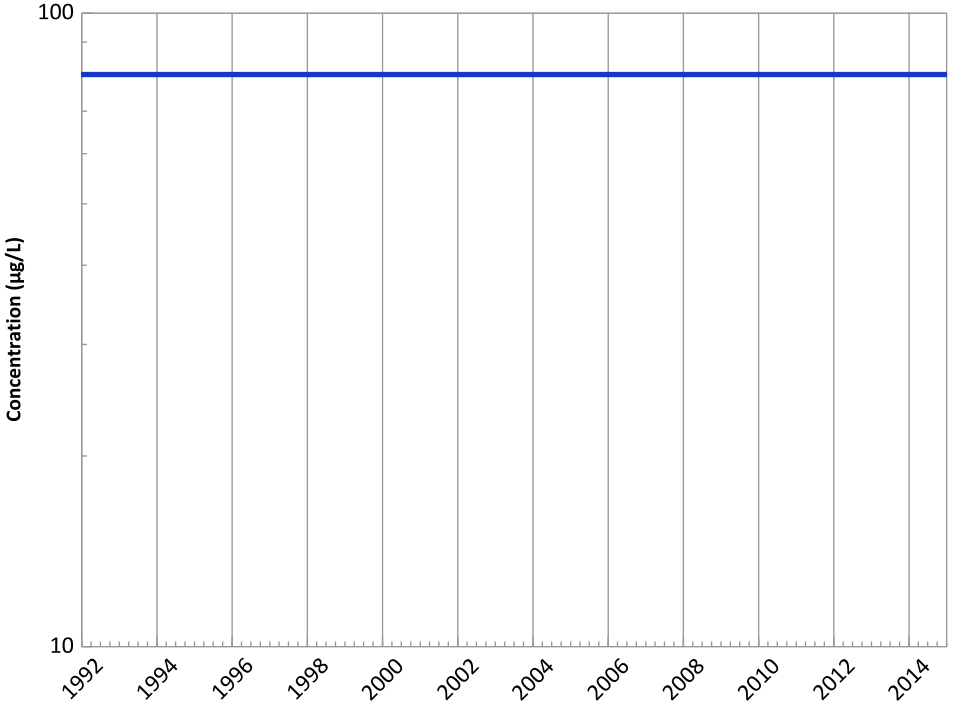


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

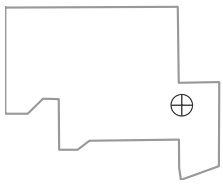
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

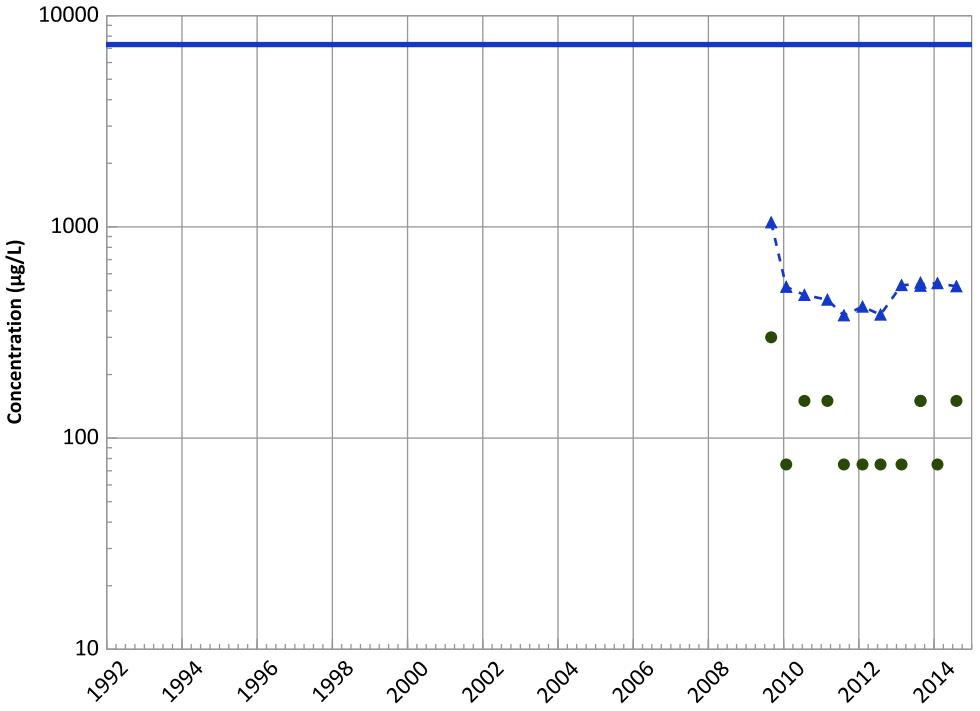
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

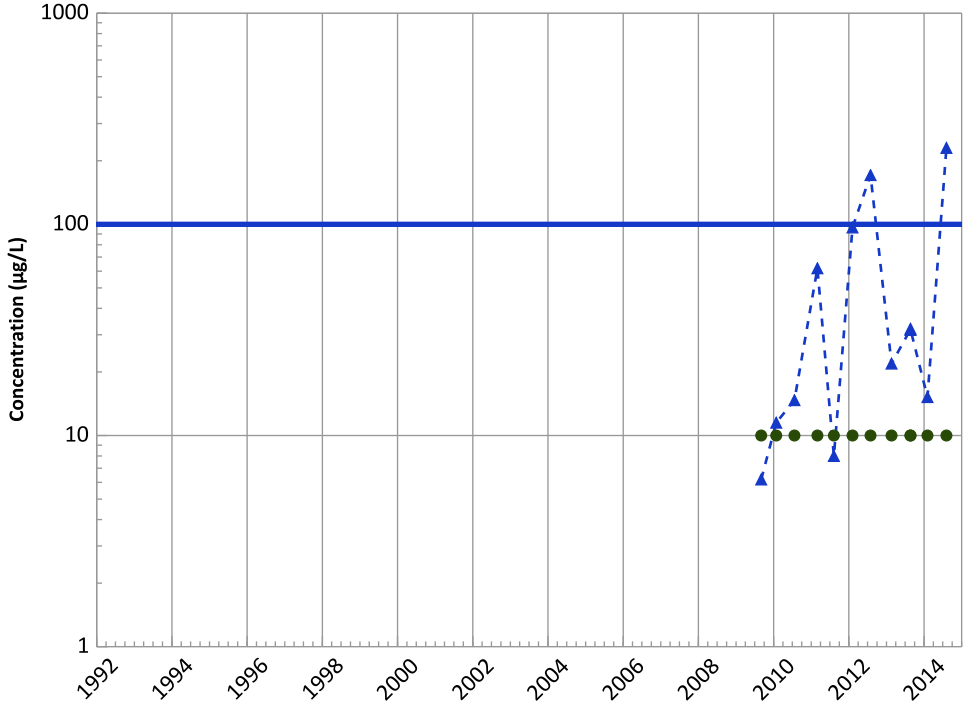


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Chromium, Total Trend



Concentration Trend

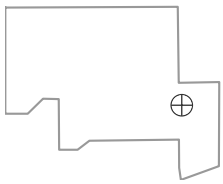
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

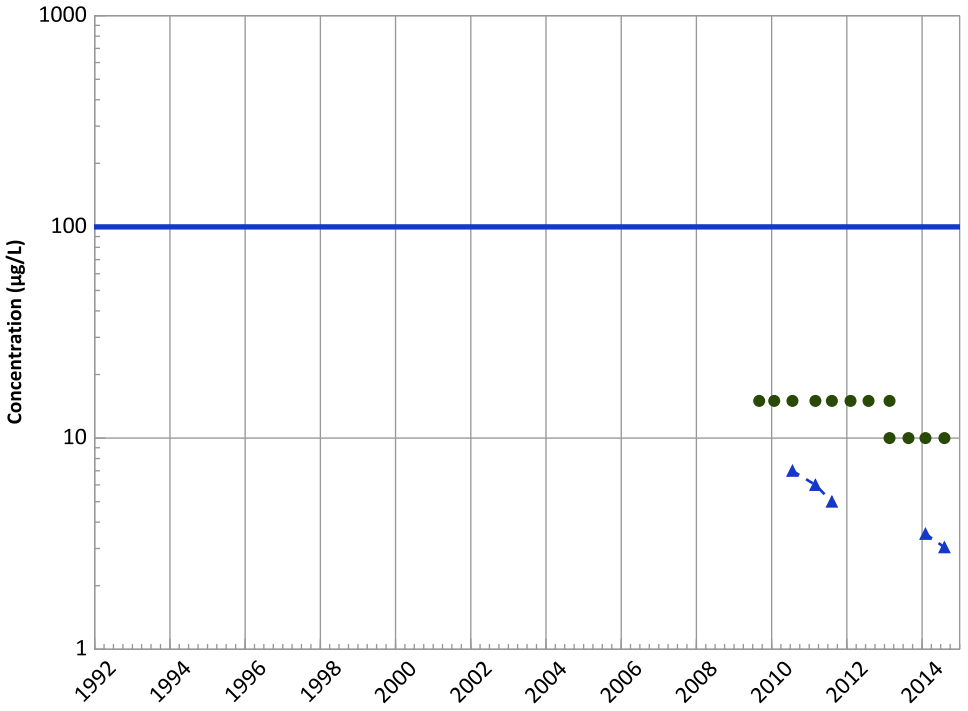
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

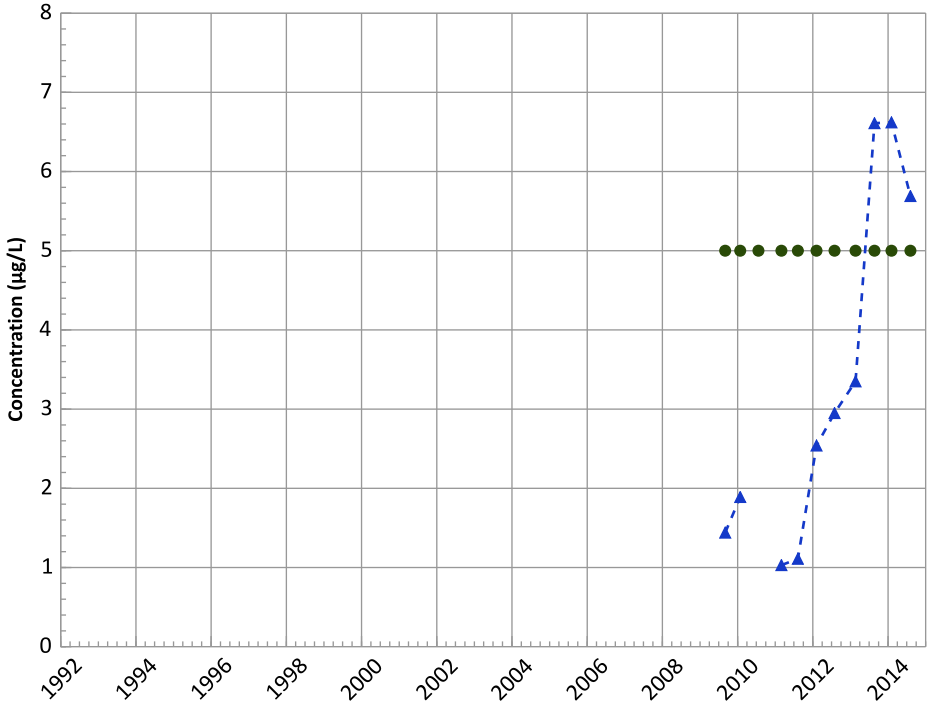


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Manganese Trend



Concentration Trend

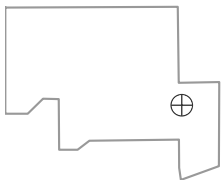
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

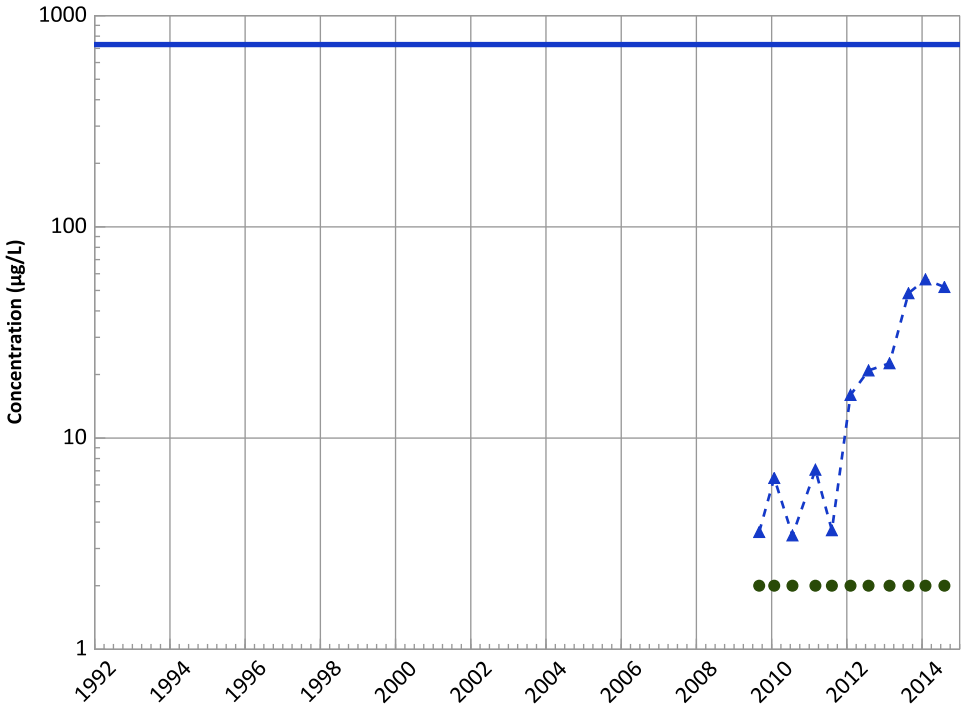
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

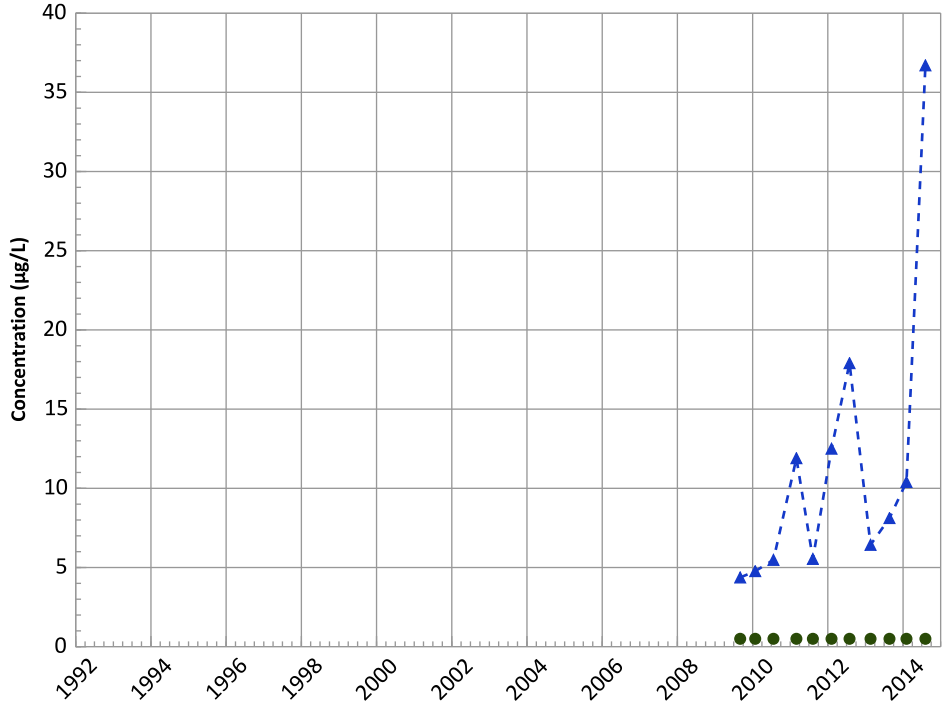


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Molybdenum Trend



Concentration Trend

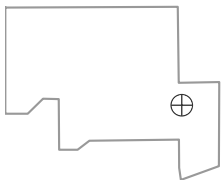
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

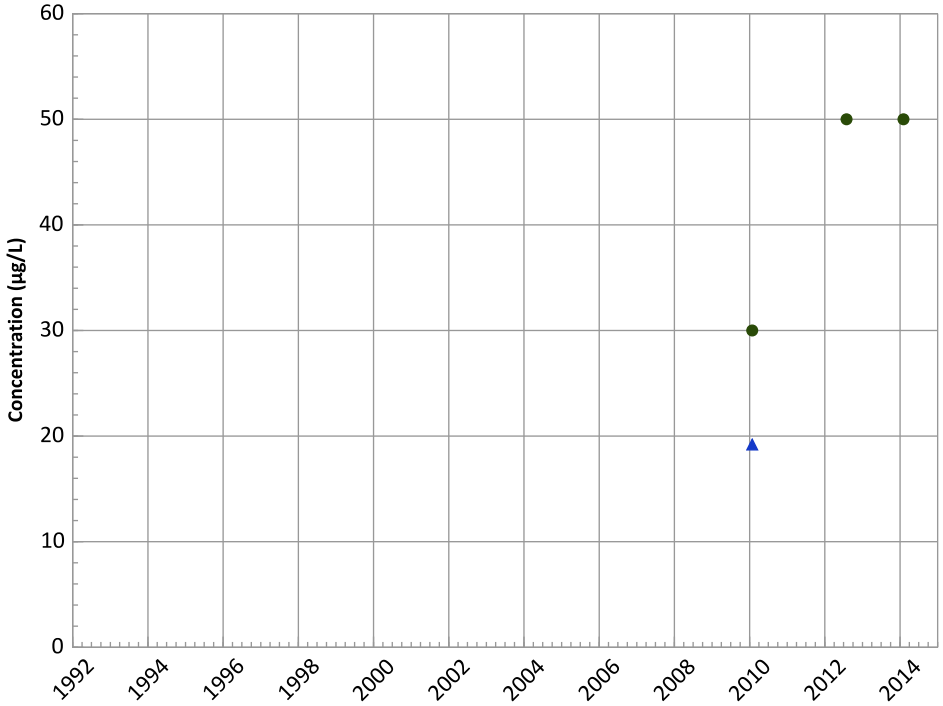
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

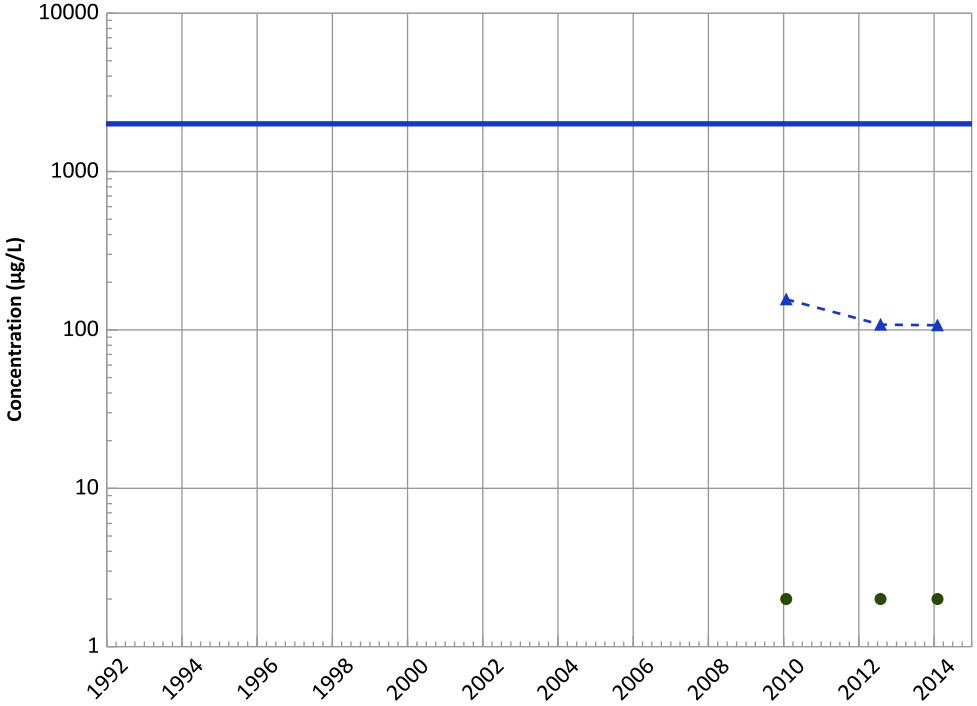


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

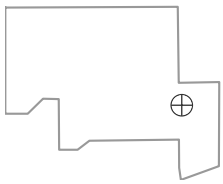
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

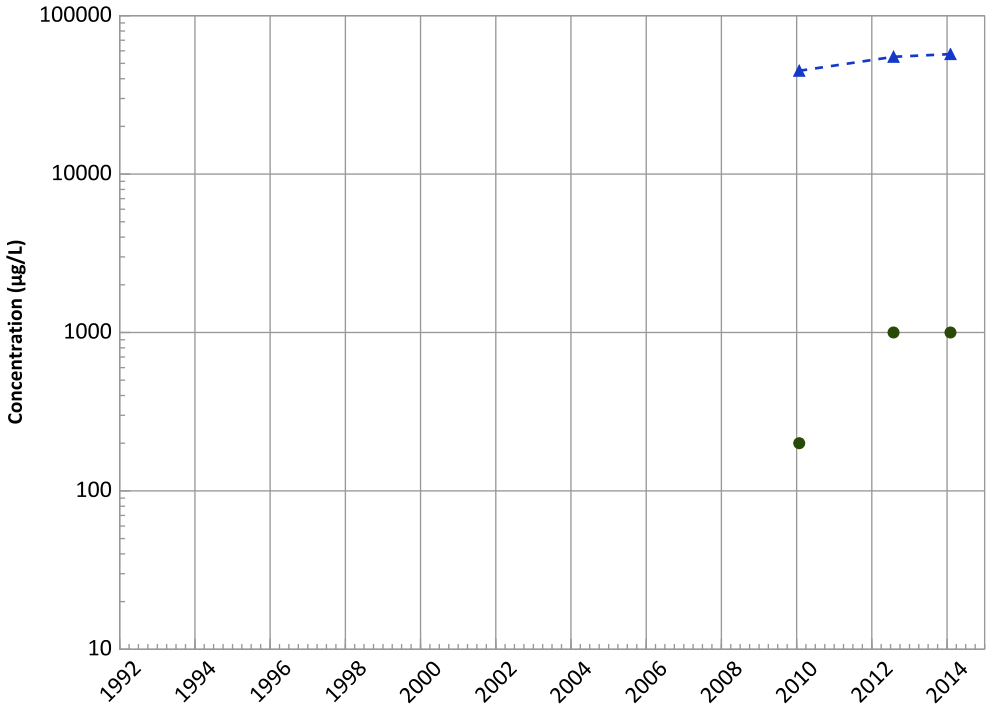
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

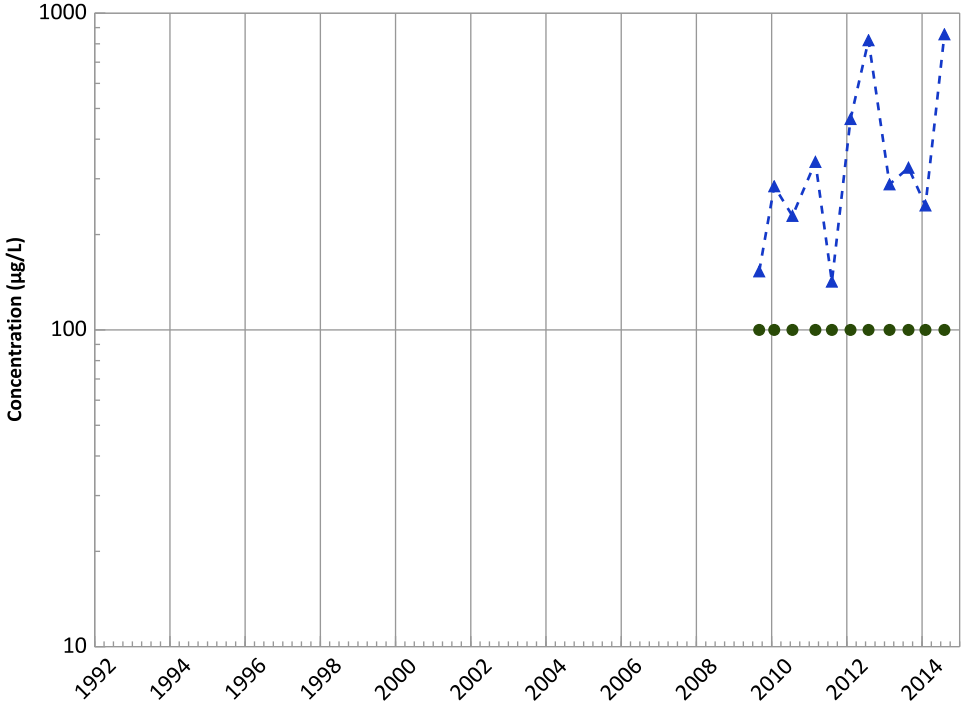


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

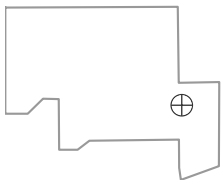
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

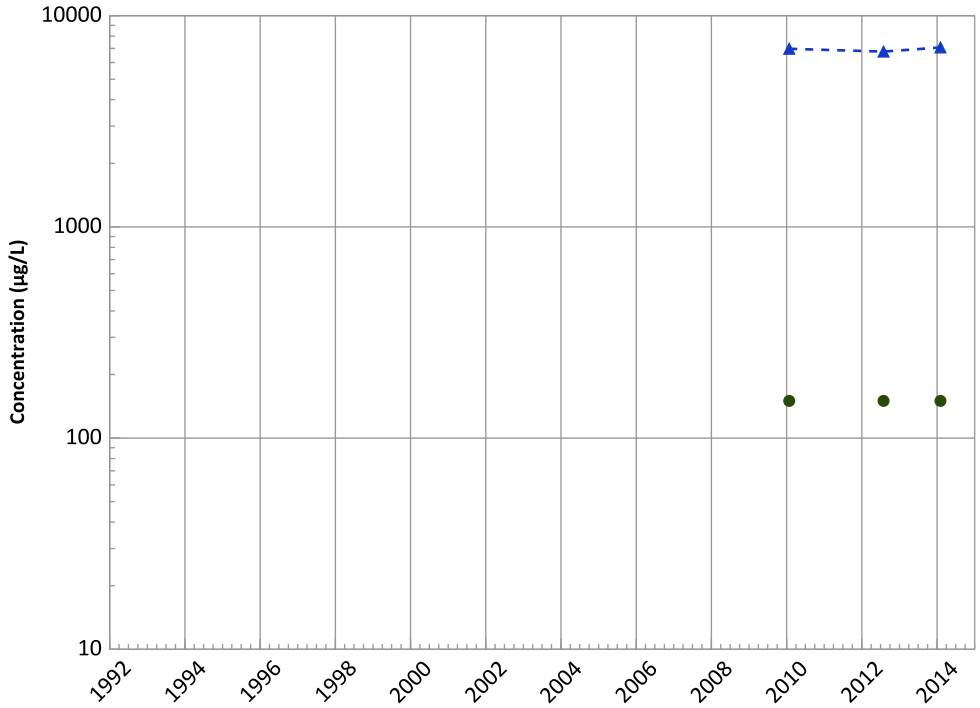
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

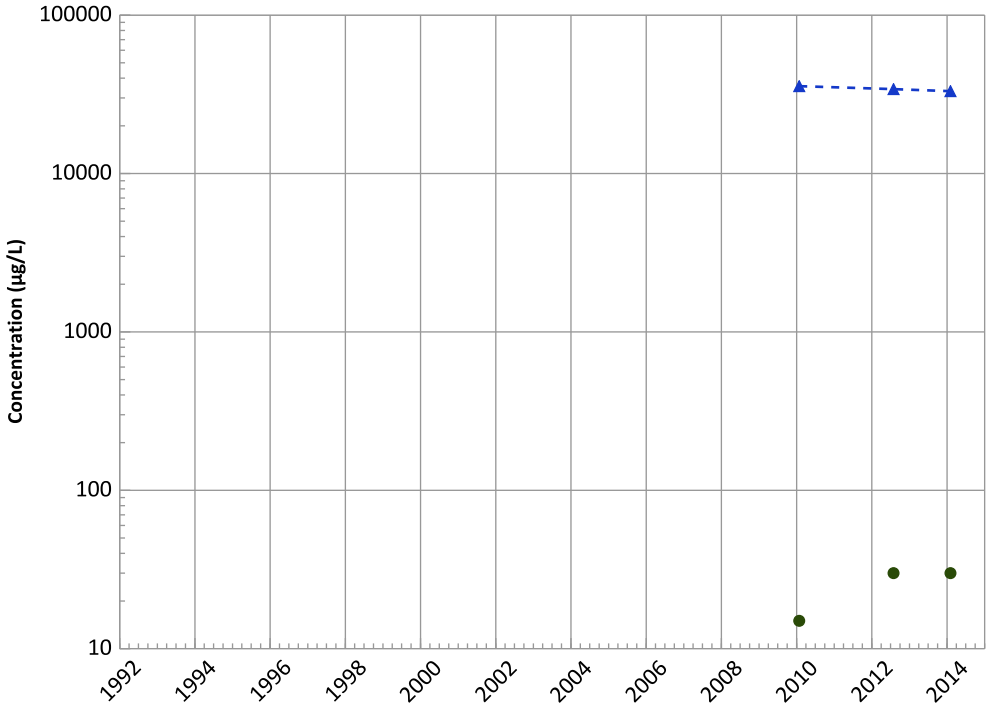


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

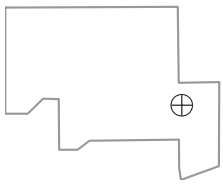
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

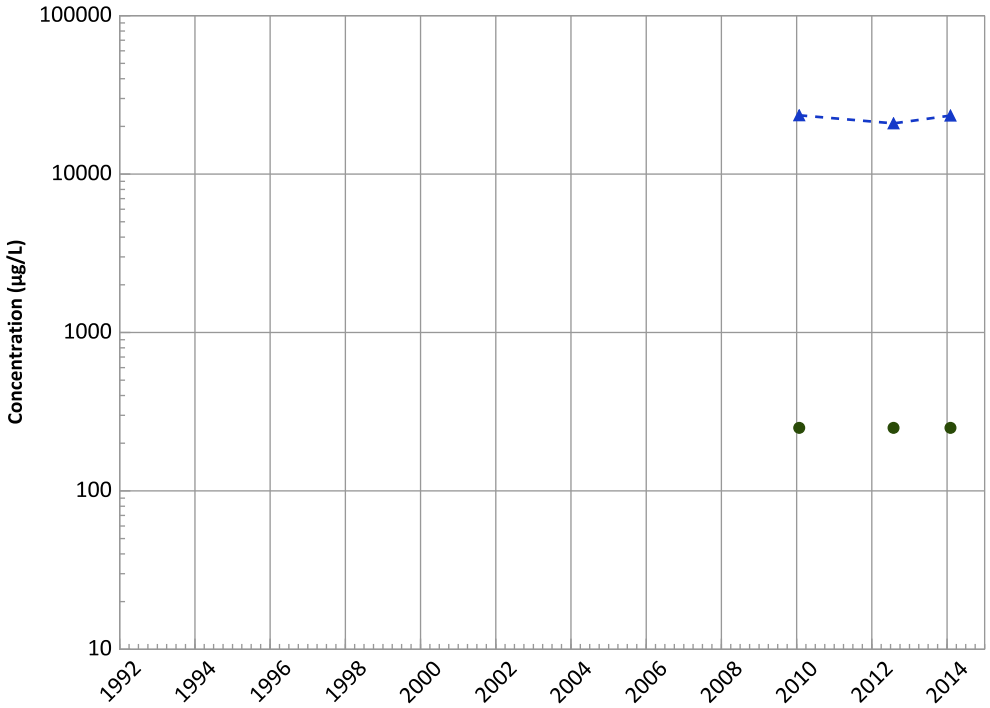
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1130 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

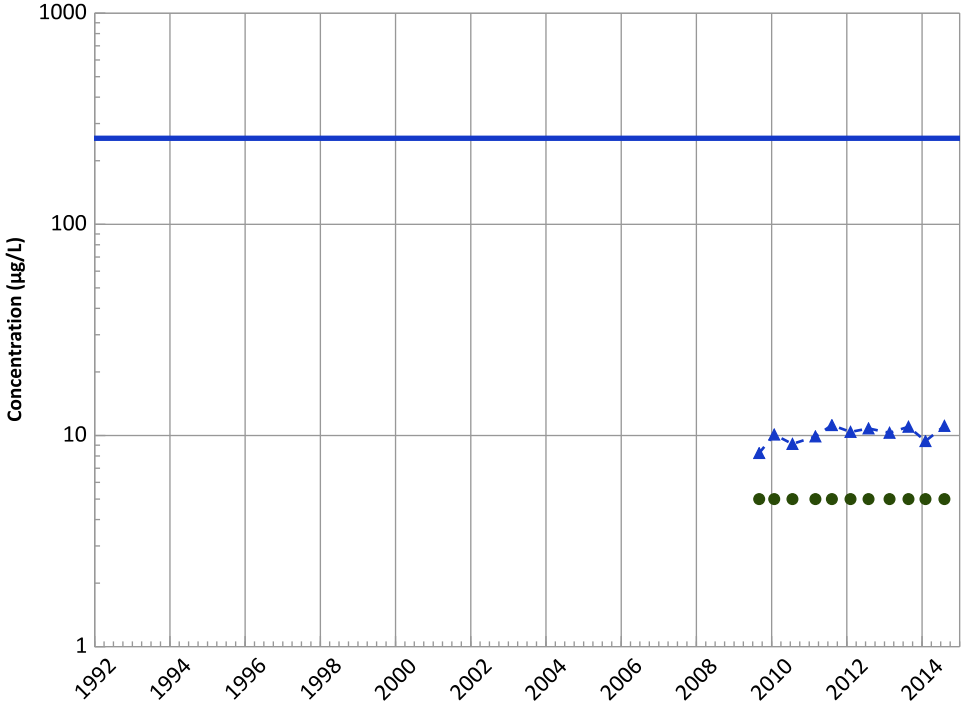


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Vanadium Trend



Concentration Trend

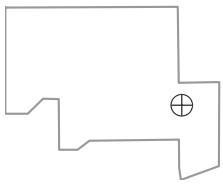
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

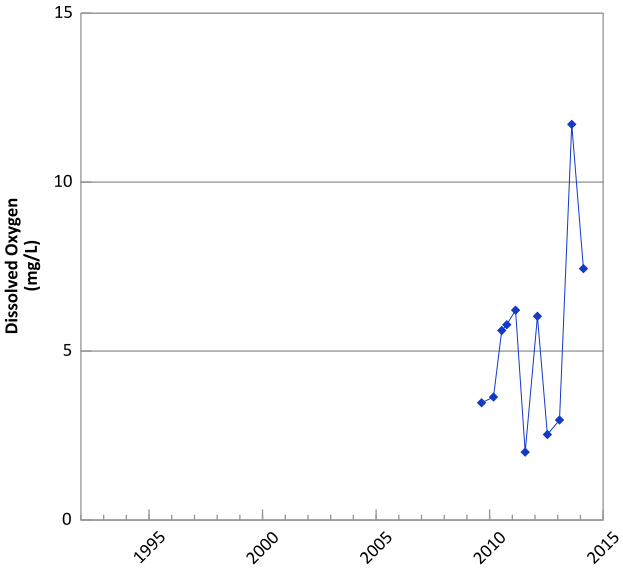
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

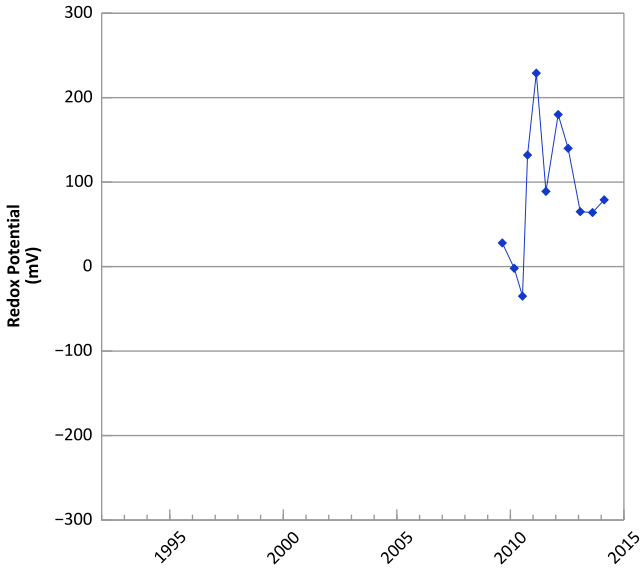
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

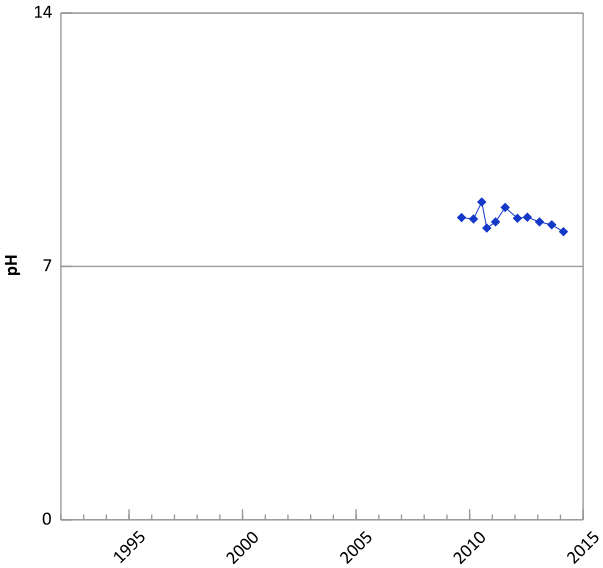
Well Location

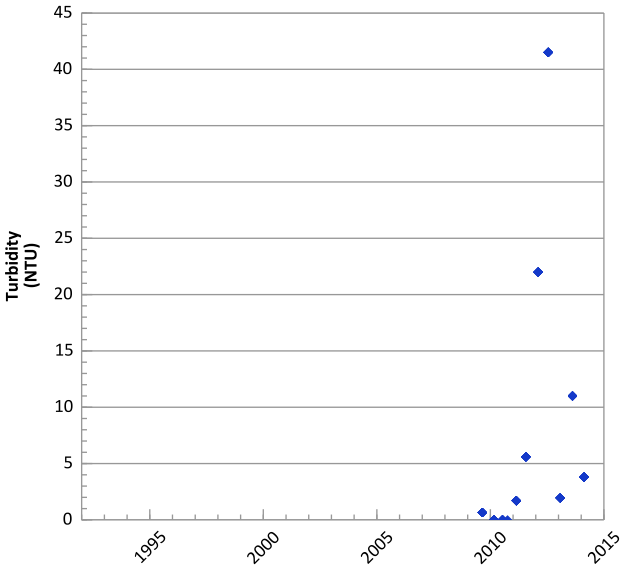


PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



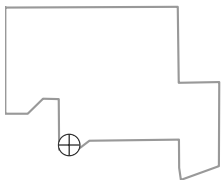






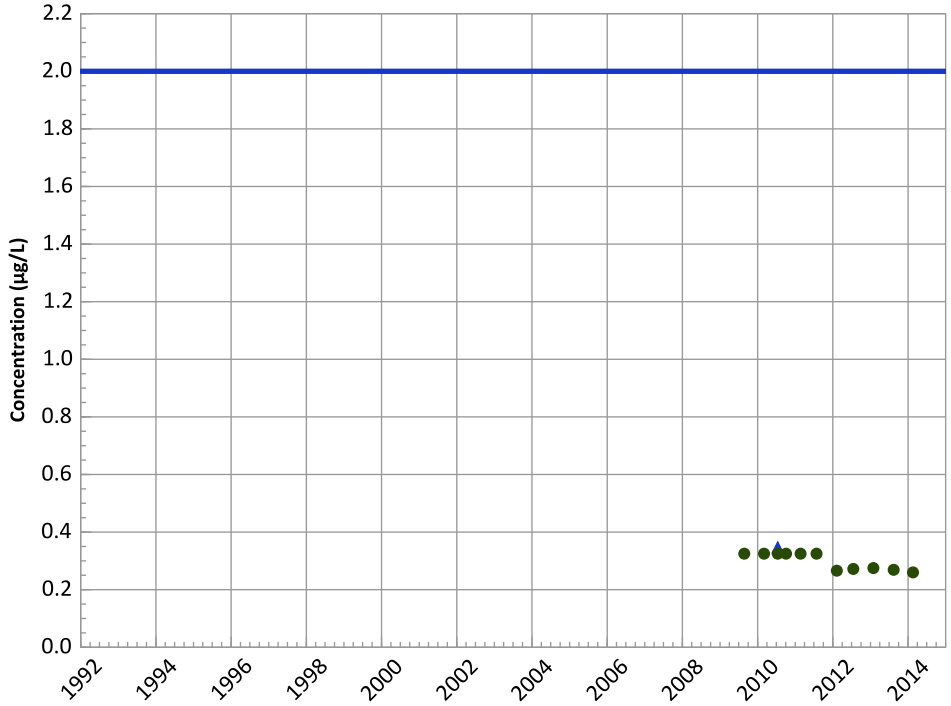
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

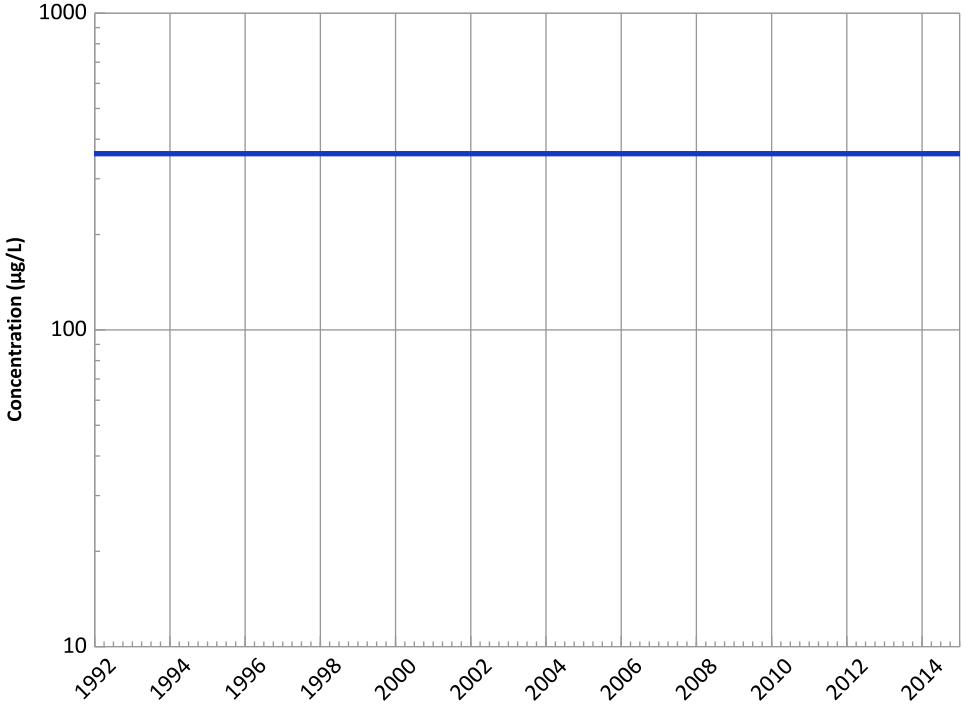


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

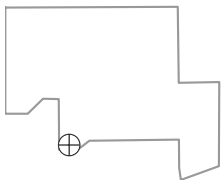
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

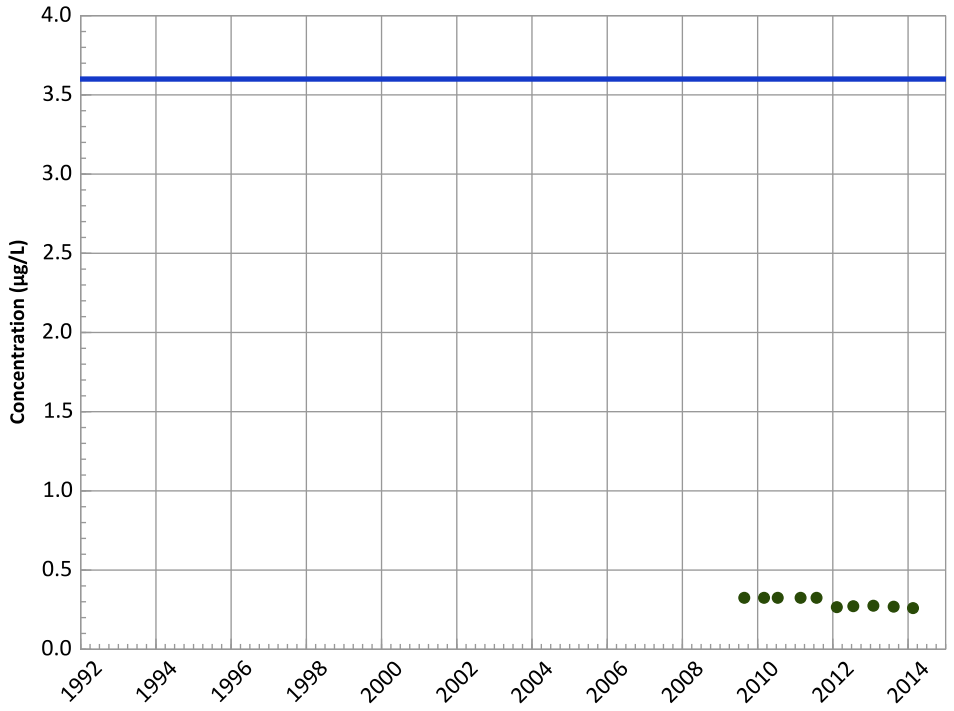
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

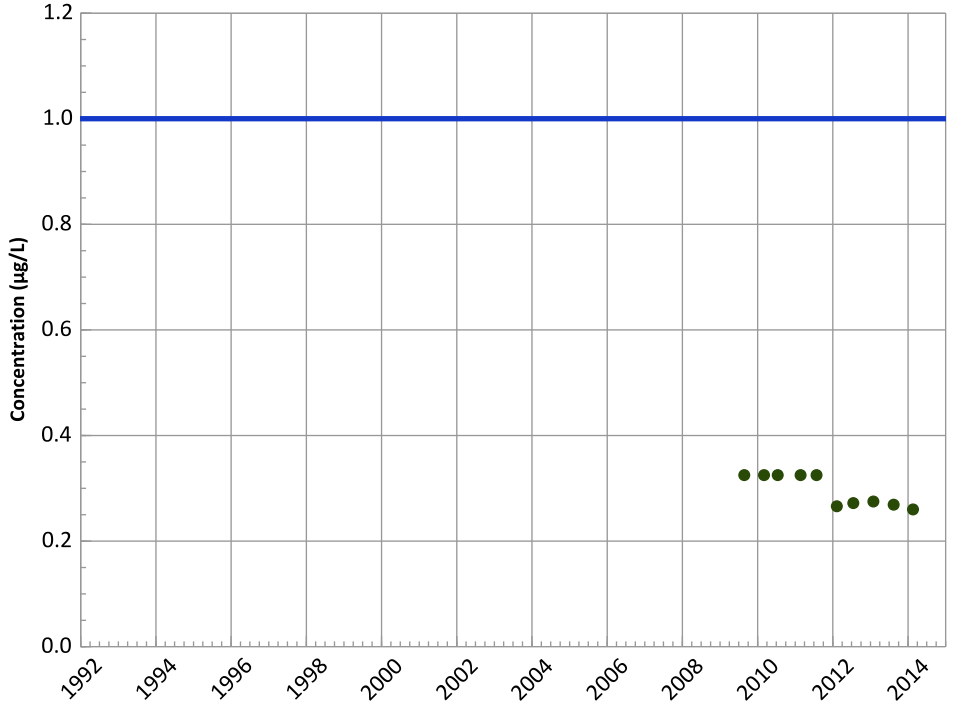


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

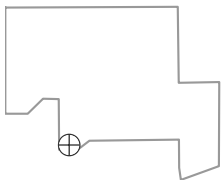
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

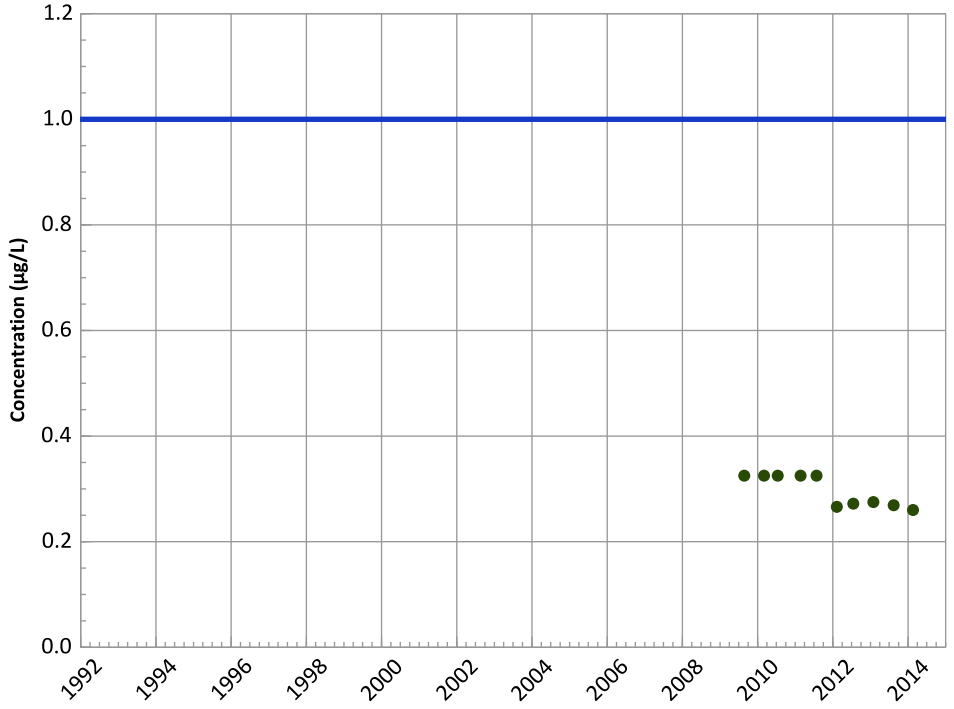
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

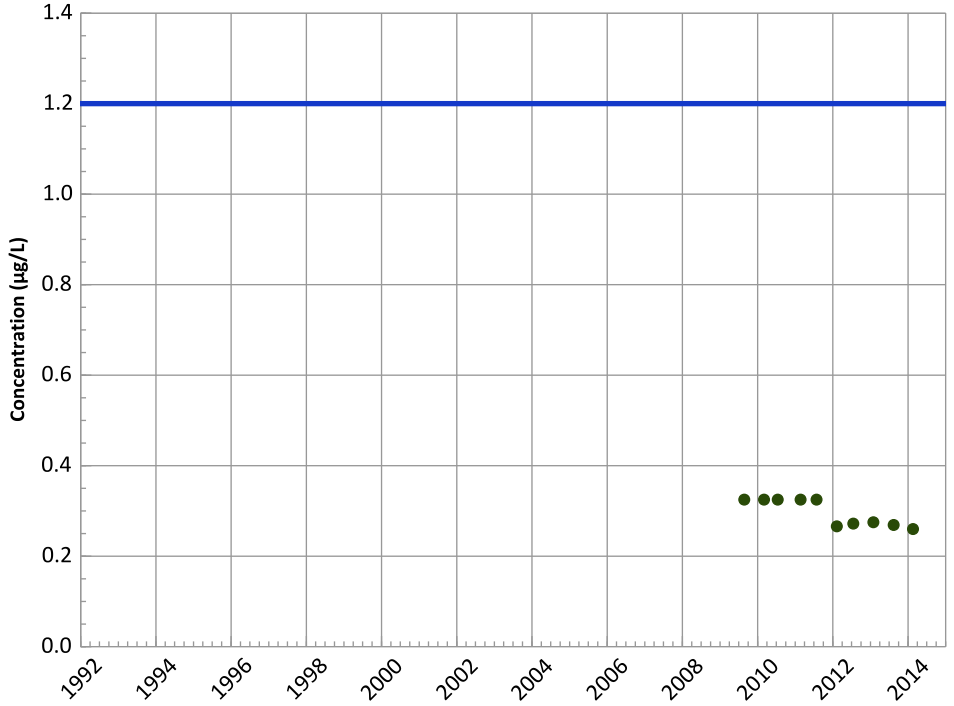


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

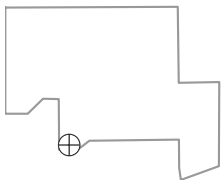
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

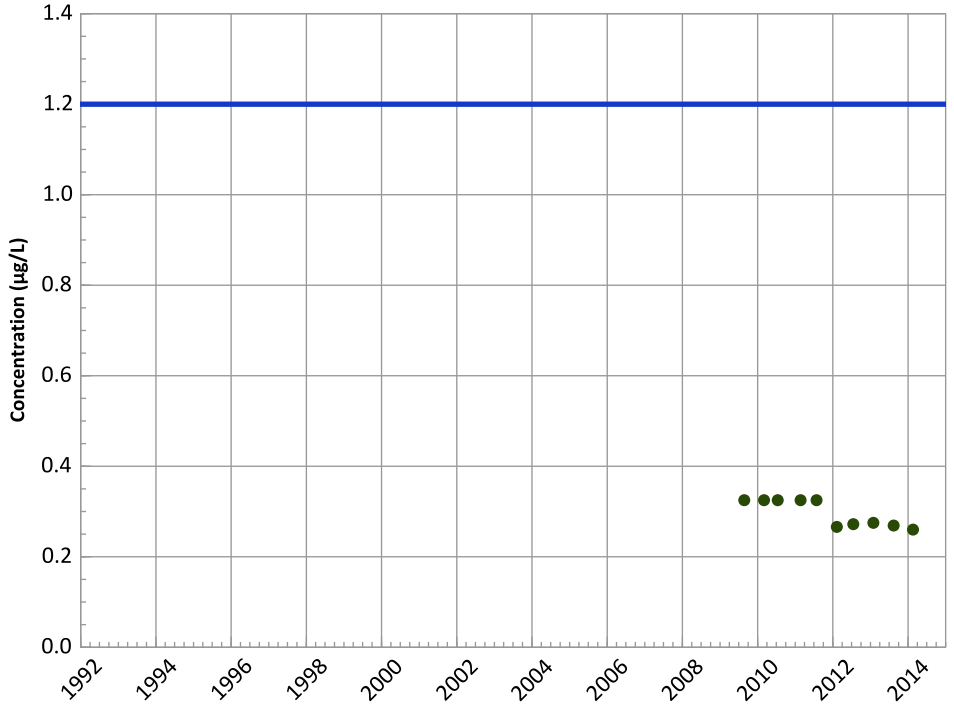
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

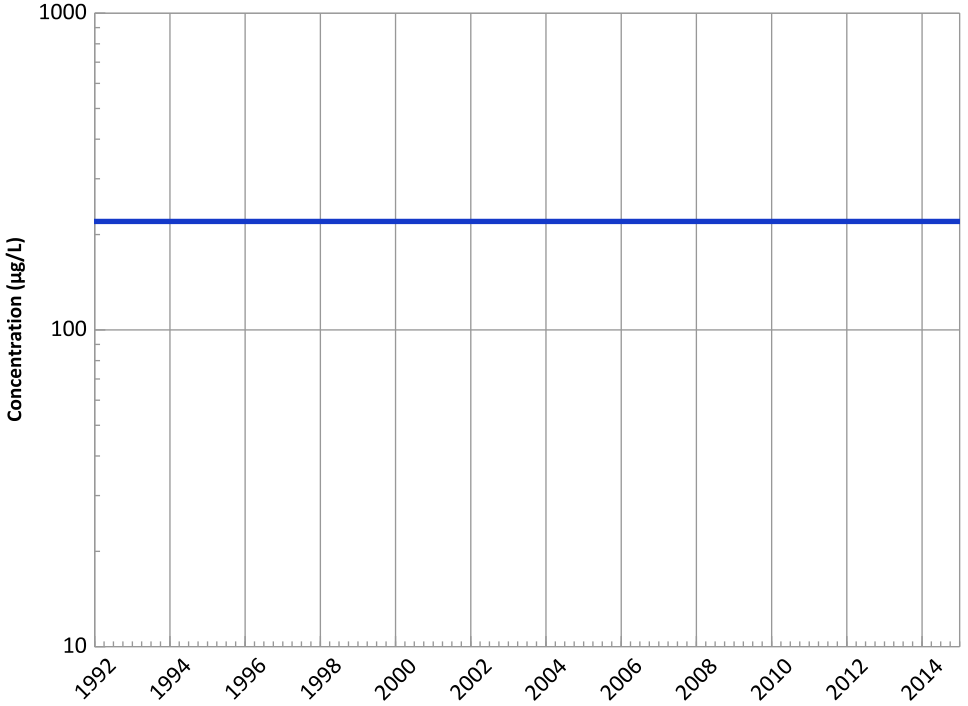


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

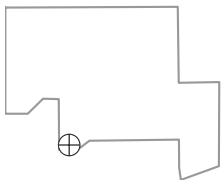
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

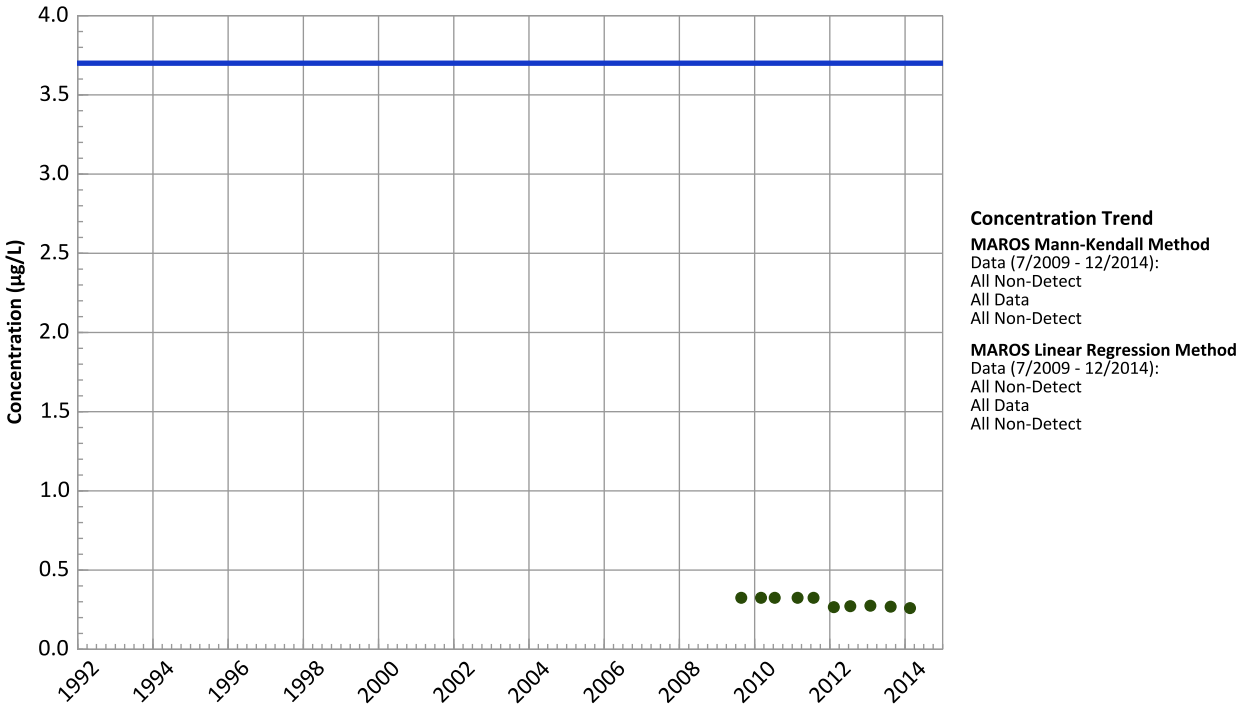
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

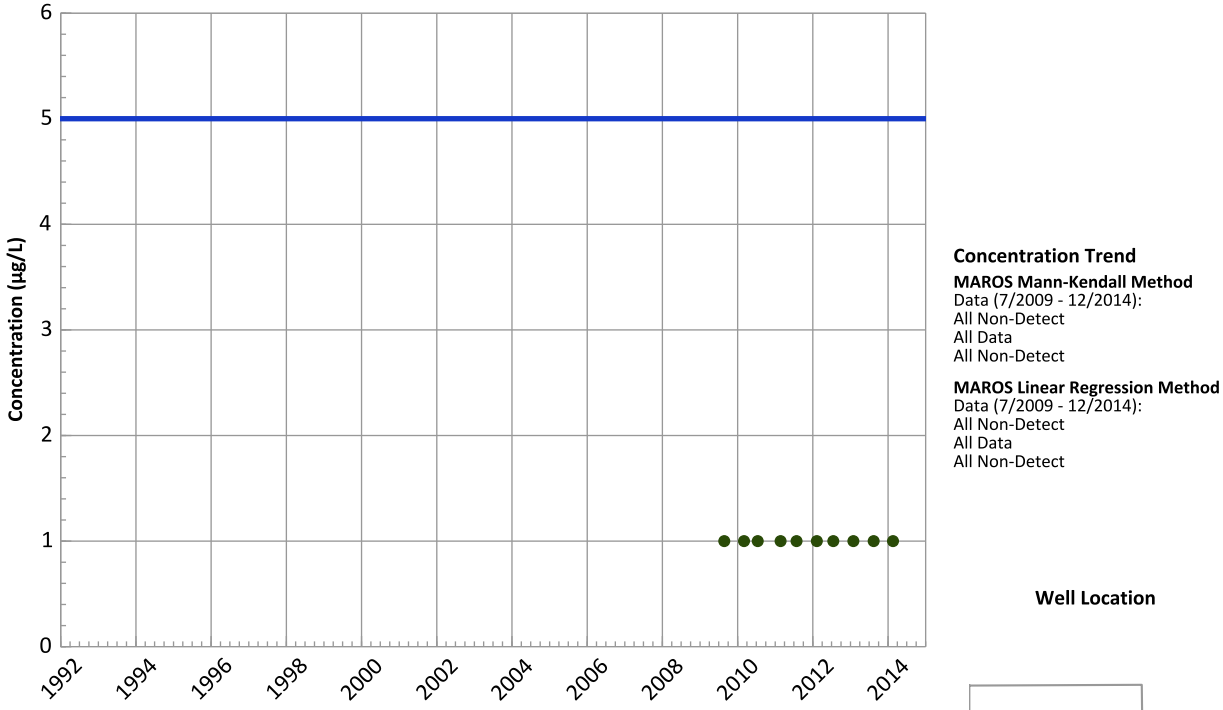


PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



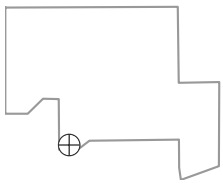
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

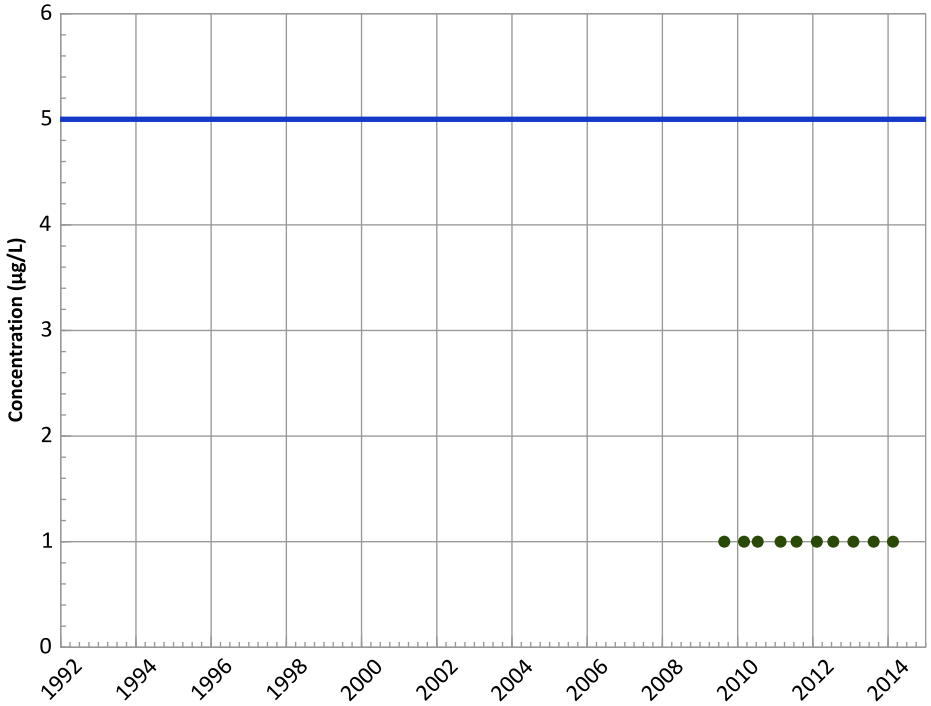
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

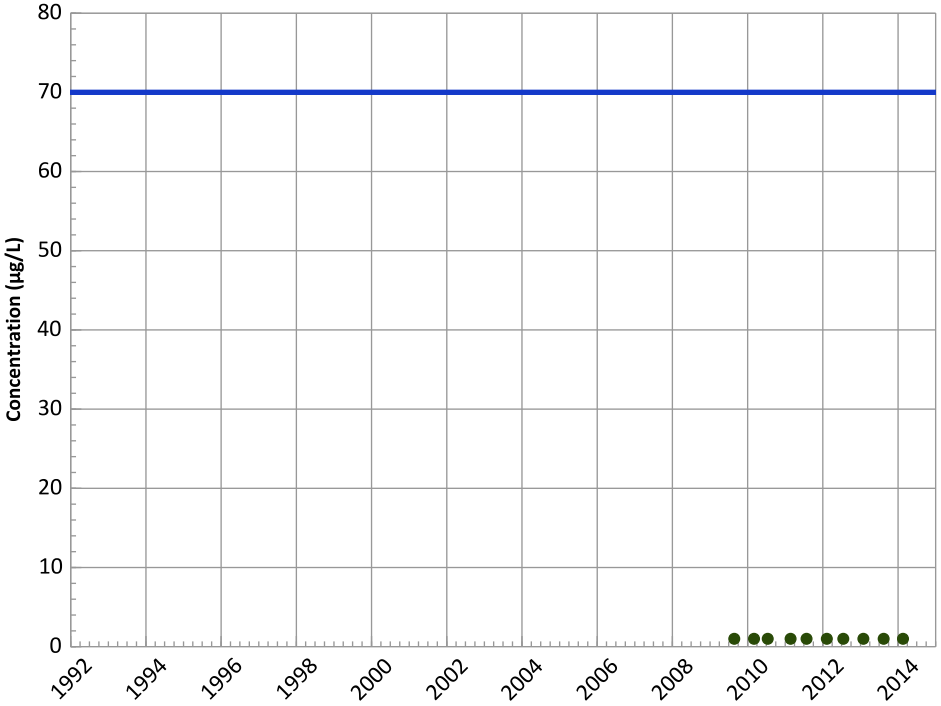


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

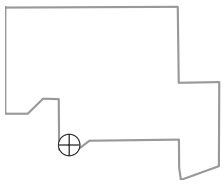
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

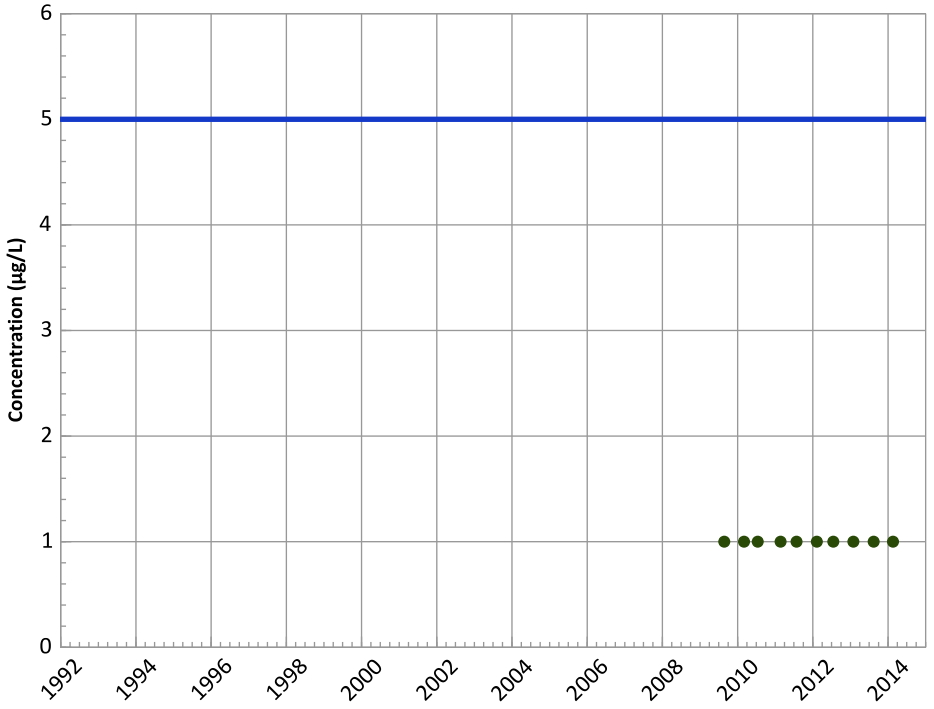
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

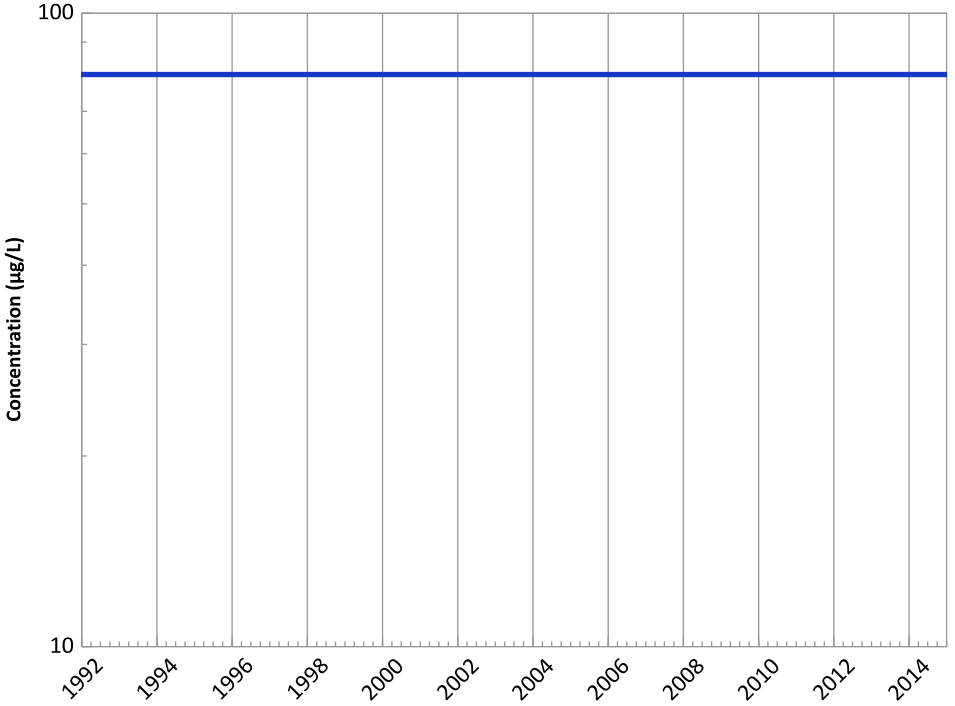


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

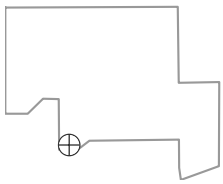
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

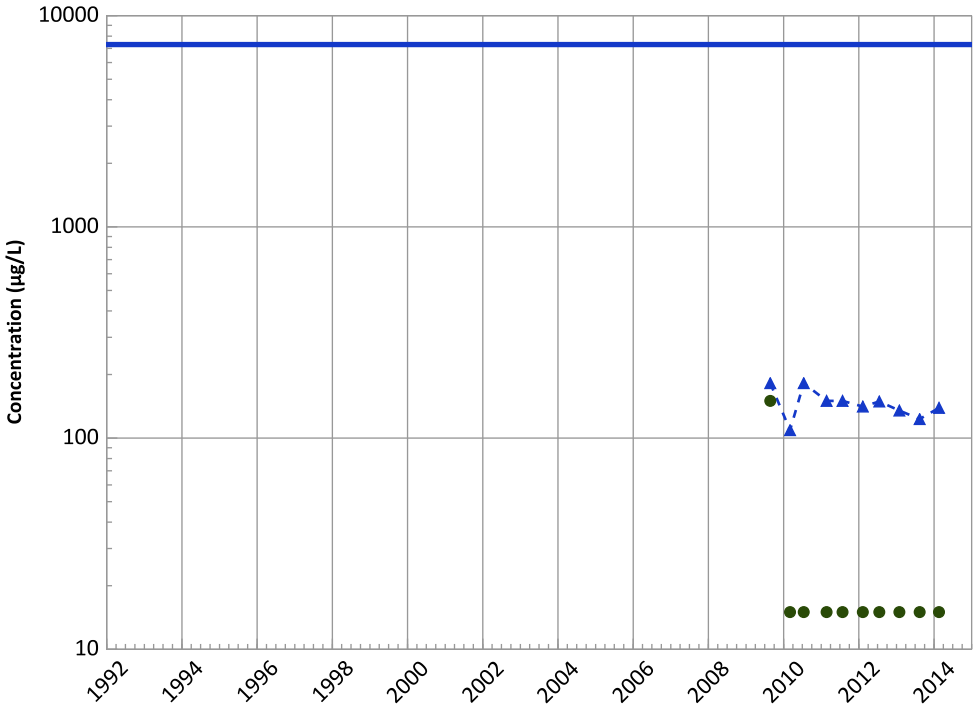
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

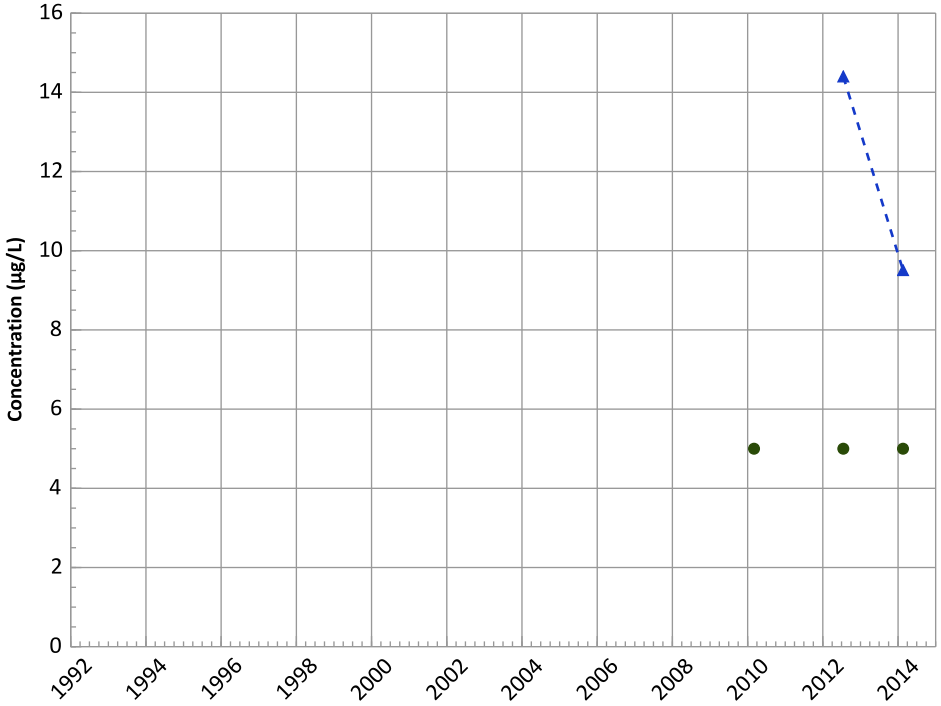


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Manganese Trend



Concentration Trend

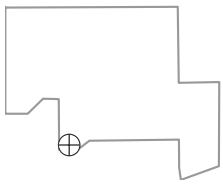
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

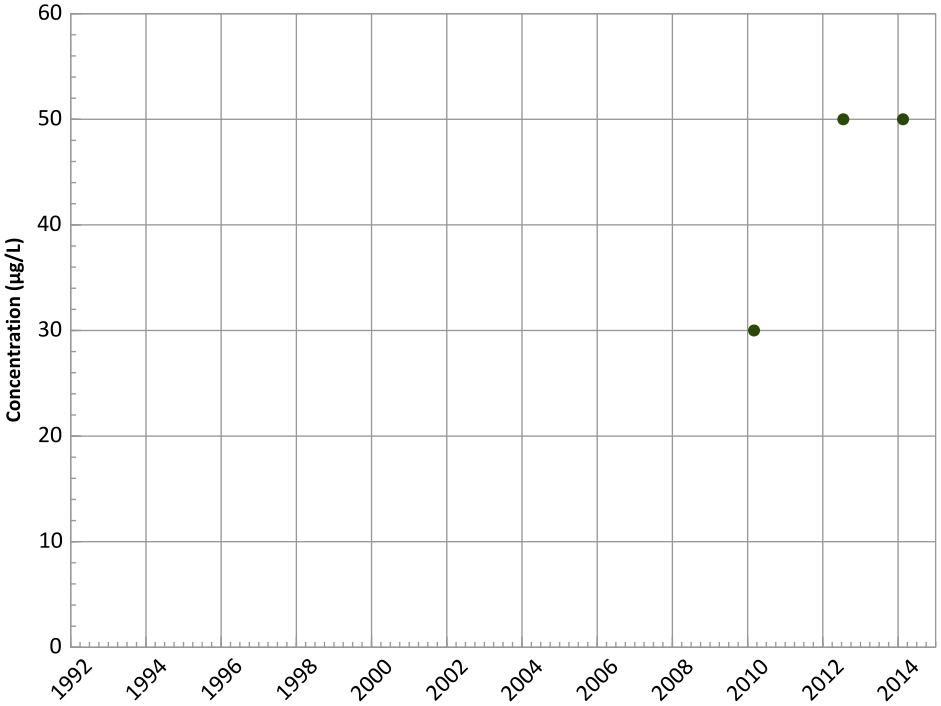
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

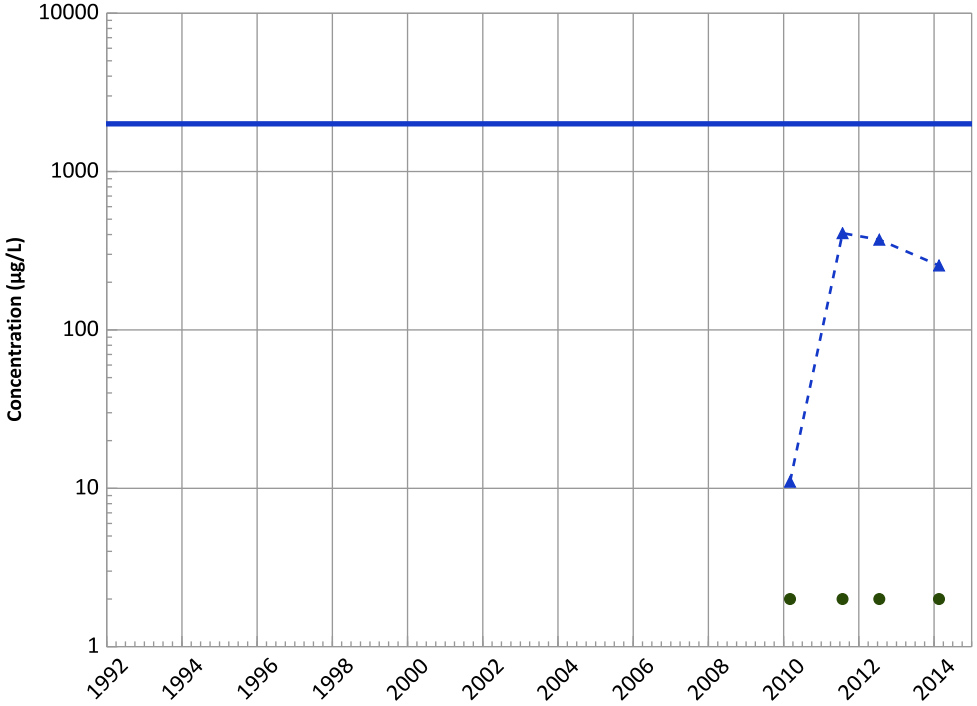


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Barium Trend



Concentration Trend

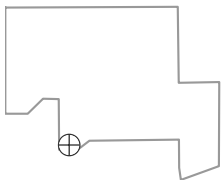
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

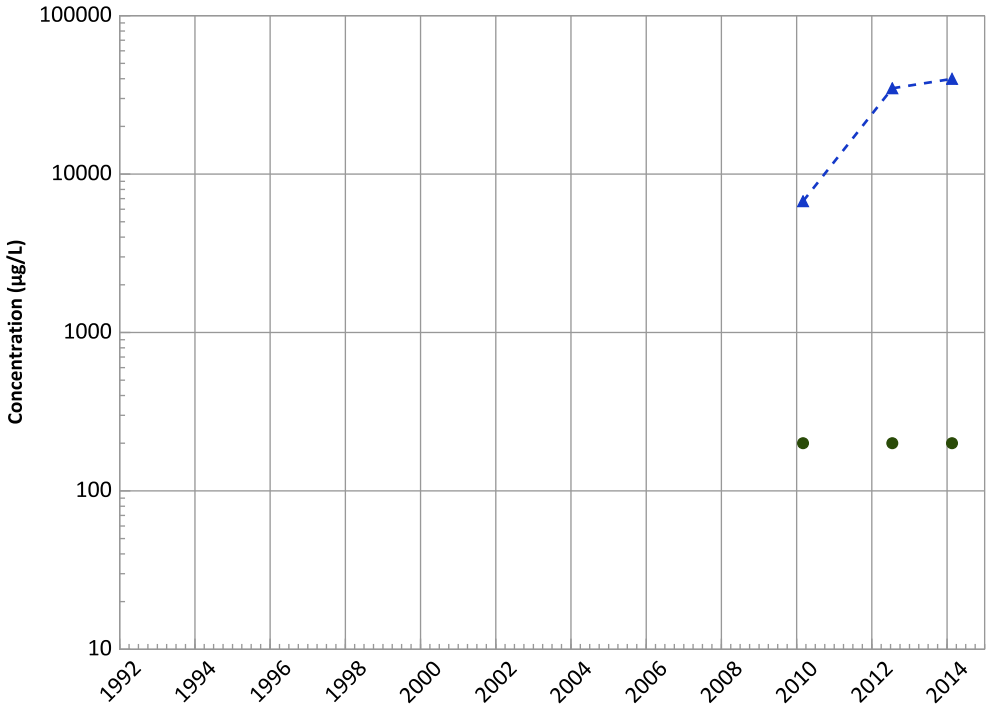
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

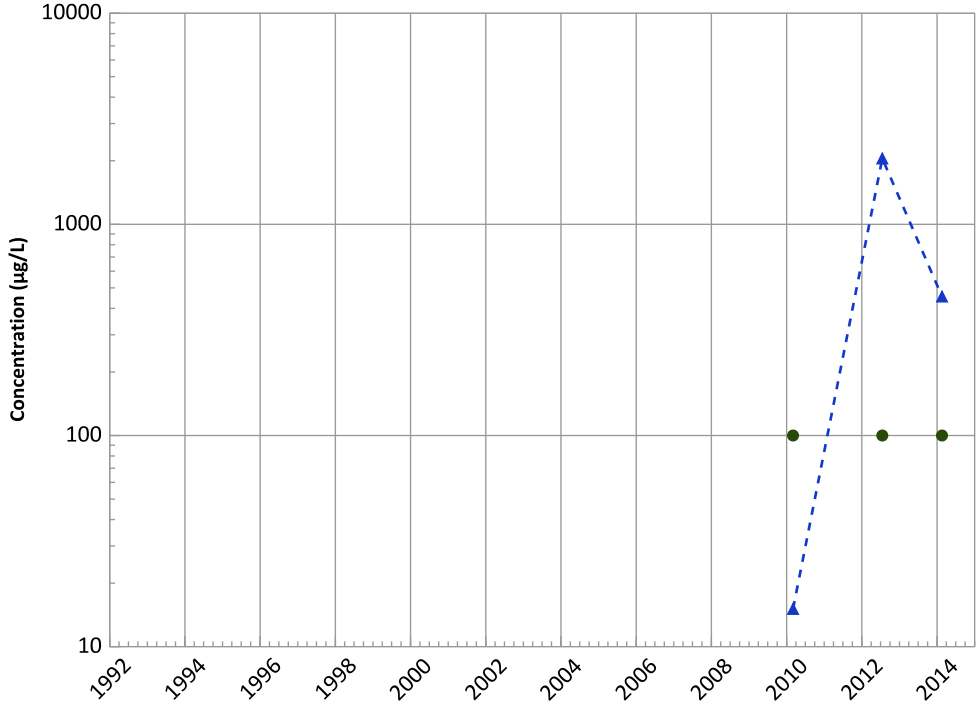


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

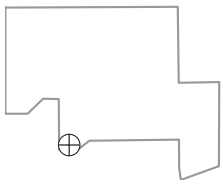
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

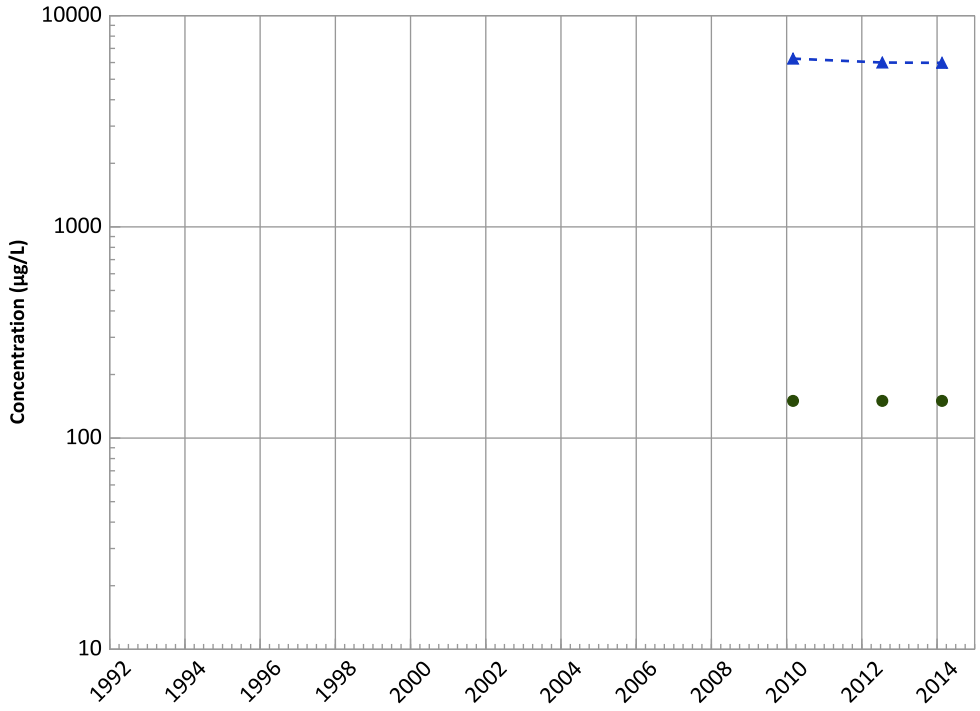
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

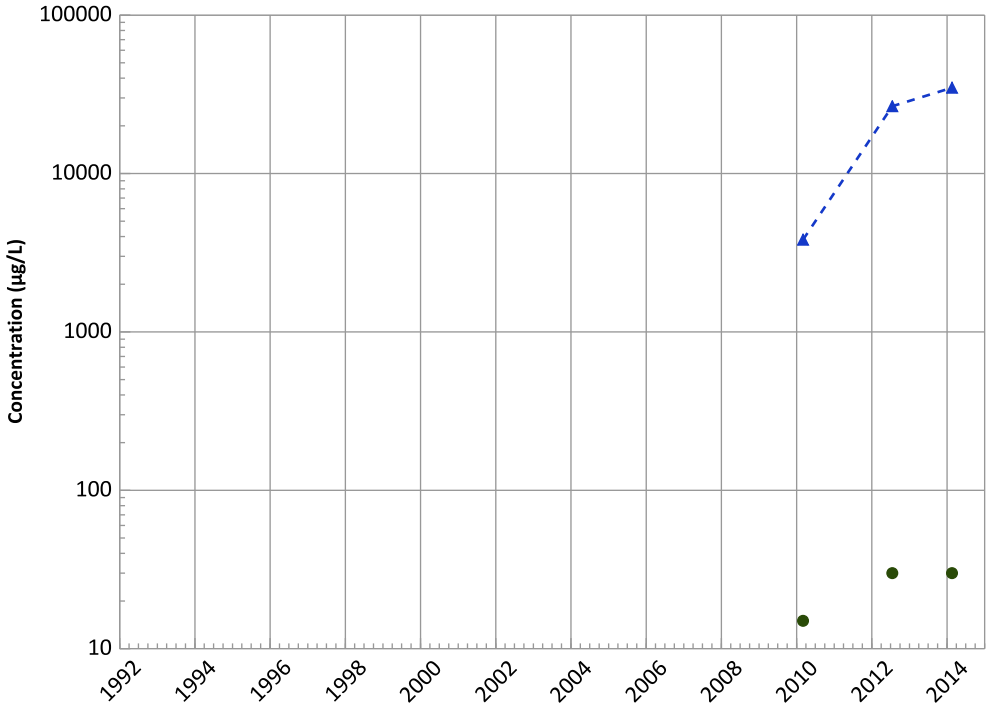


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

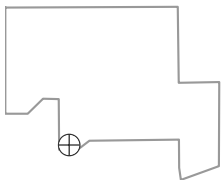
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

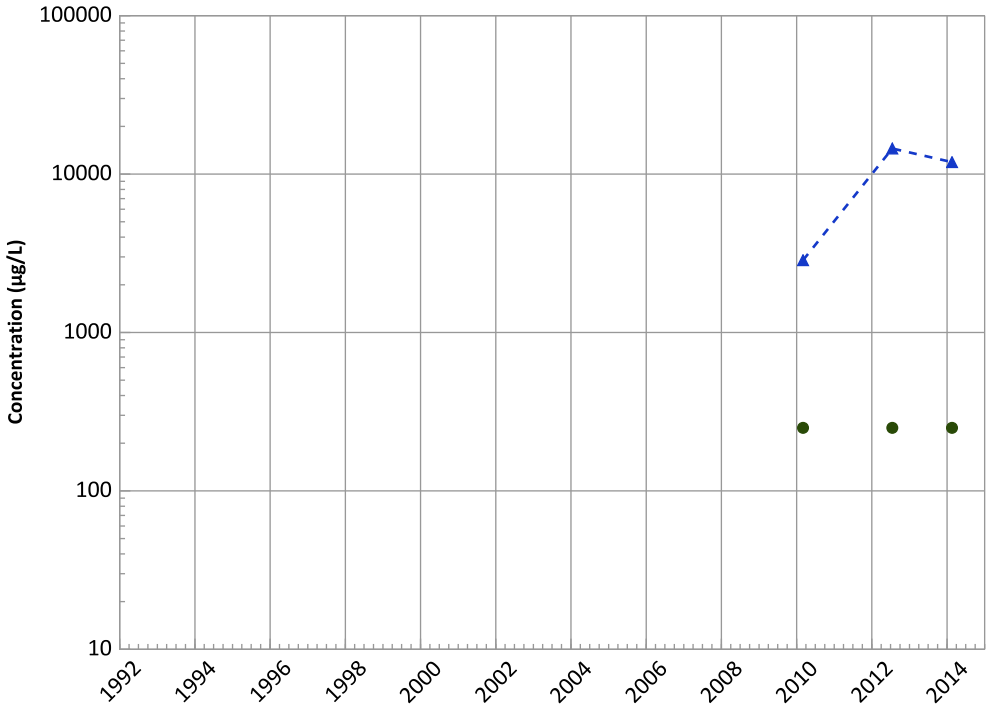
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1131 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

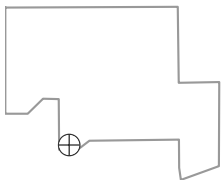
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

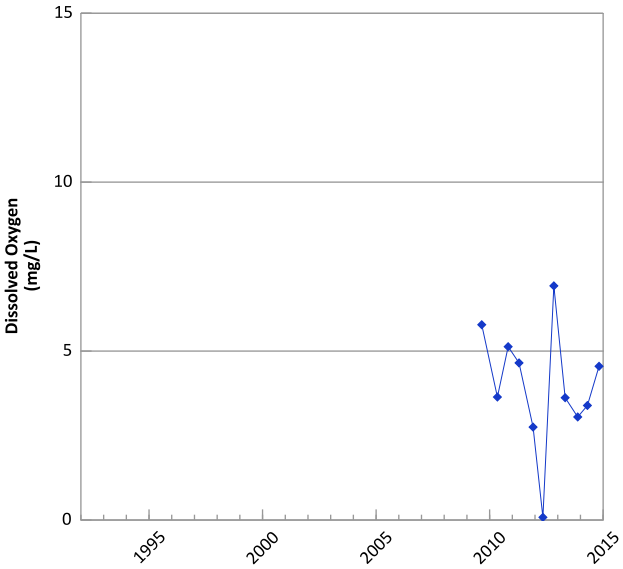
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/24/2009 to 02/18/2014
Analysis Date: 03/19/2015

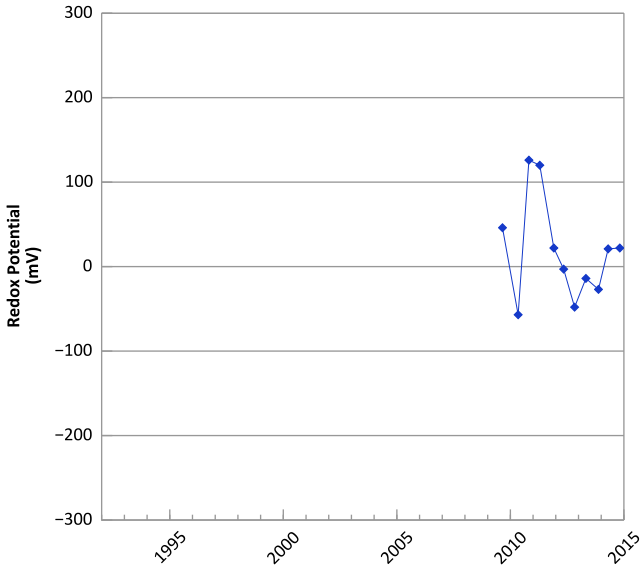
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

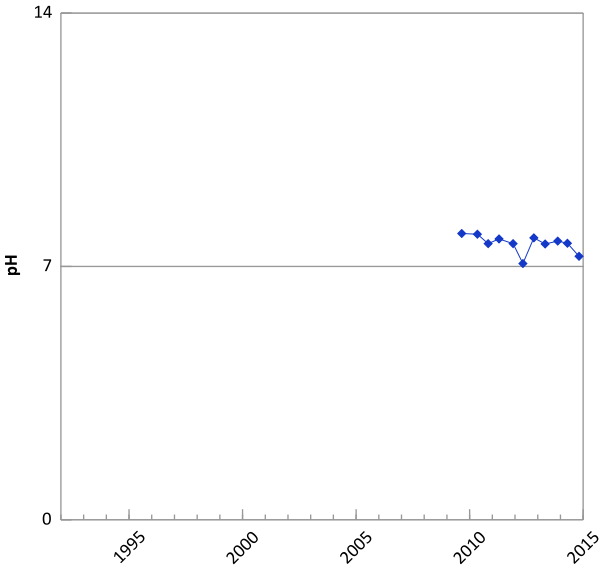
Well Location

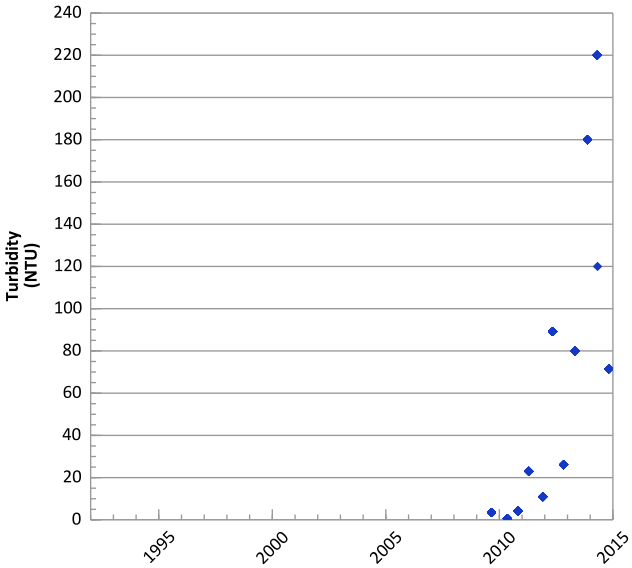


PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



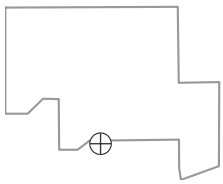






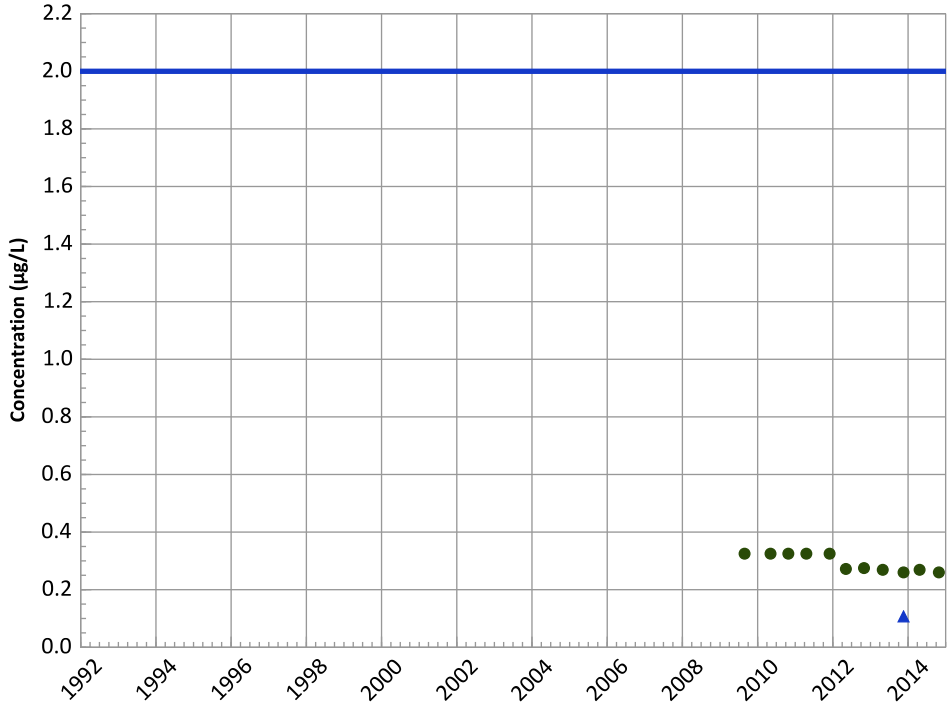
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

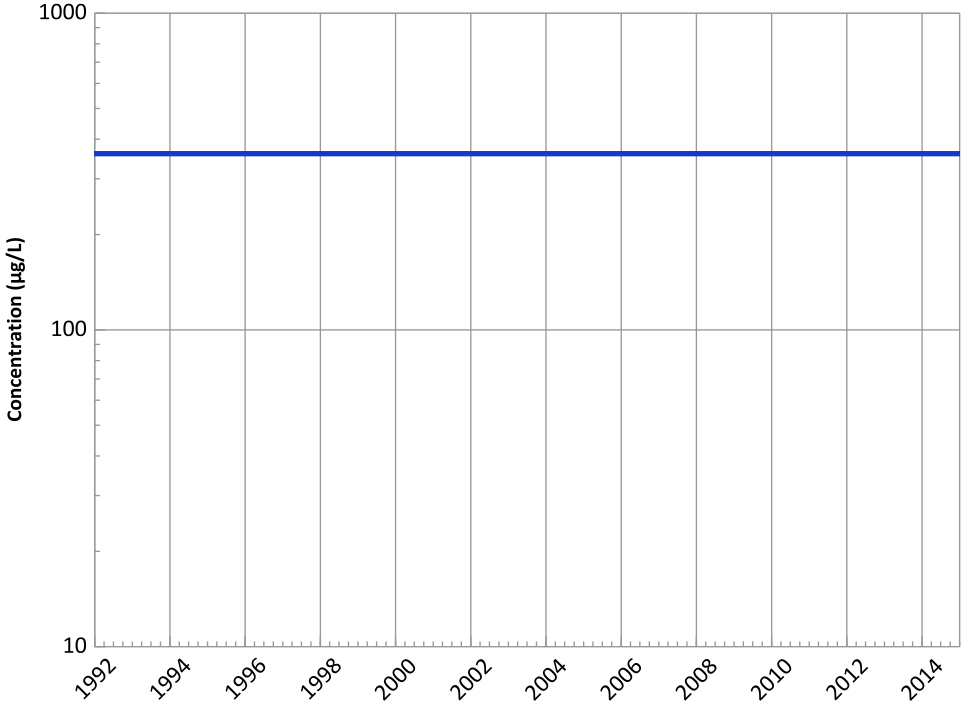


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

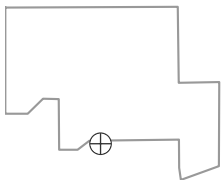
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

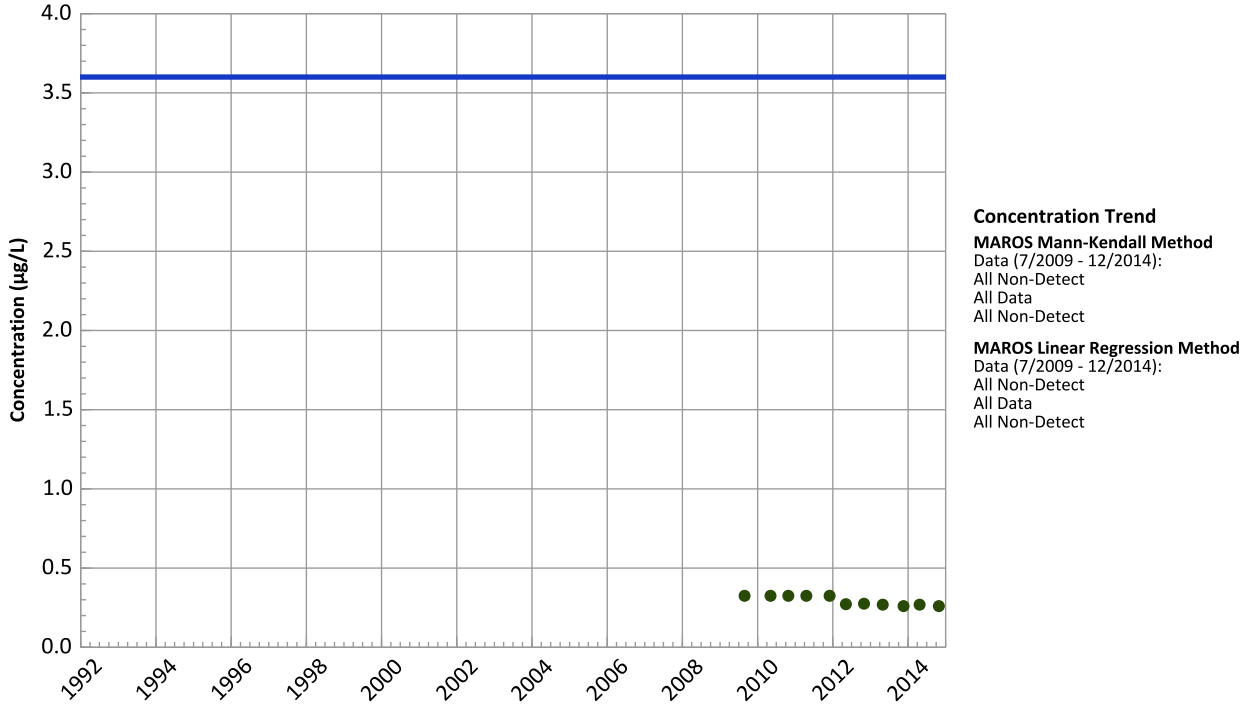
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

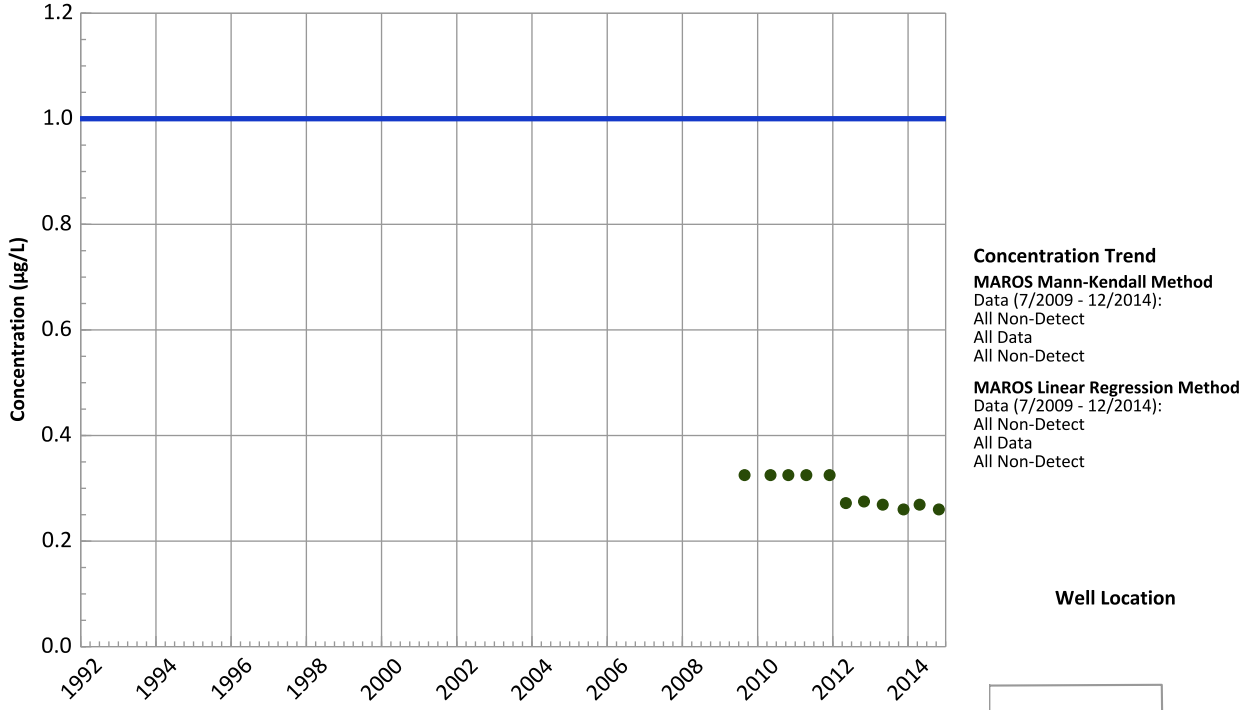


PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



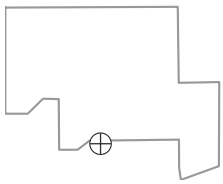
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

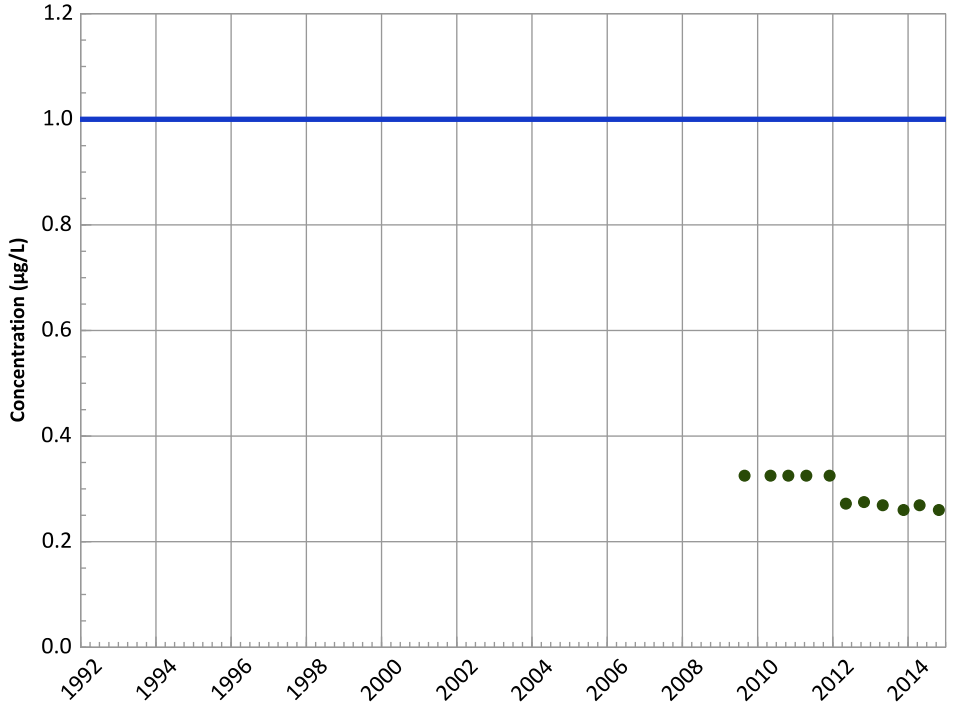
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

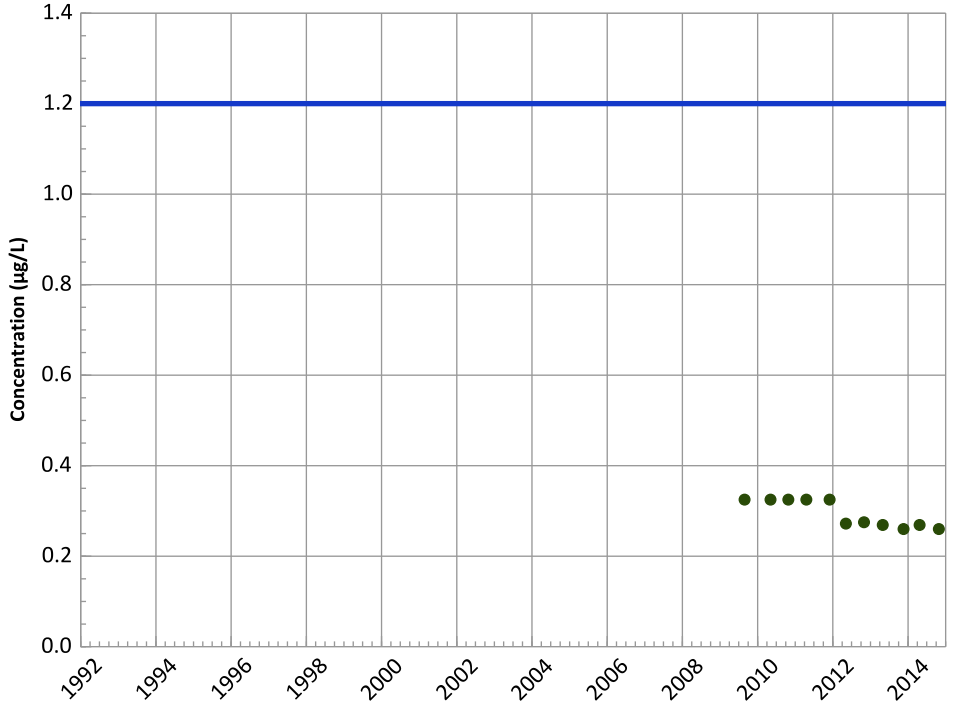


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

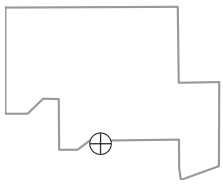
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

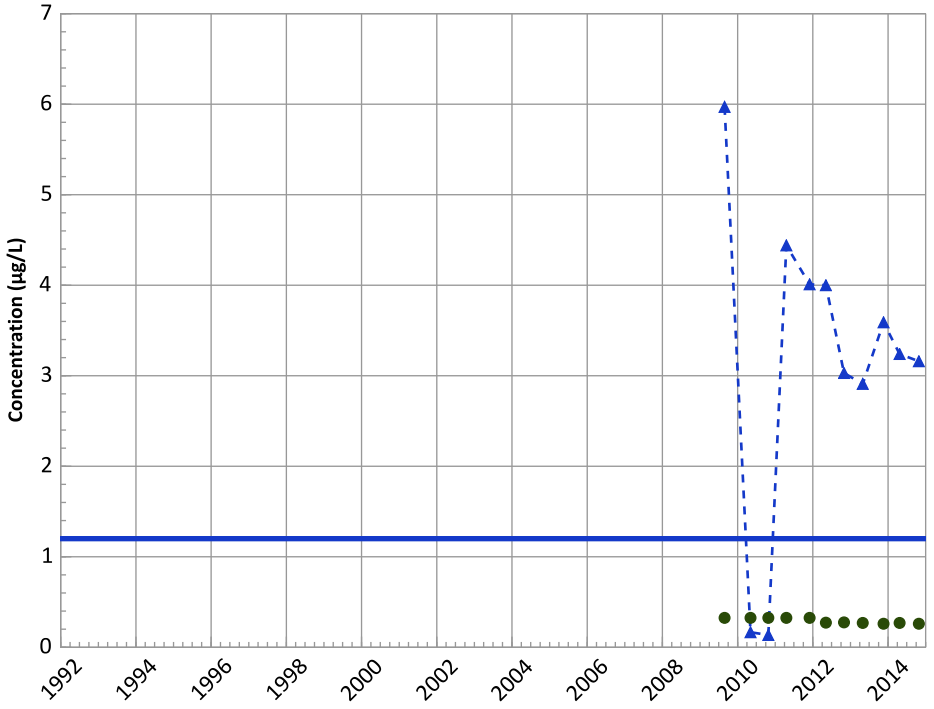
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

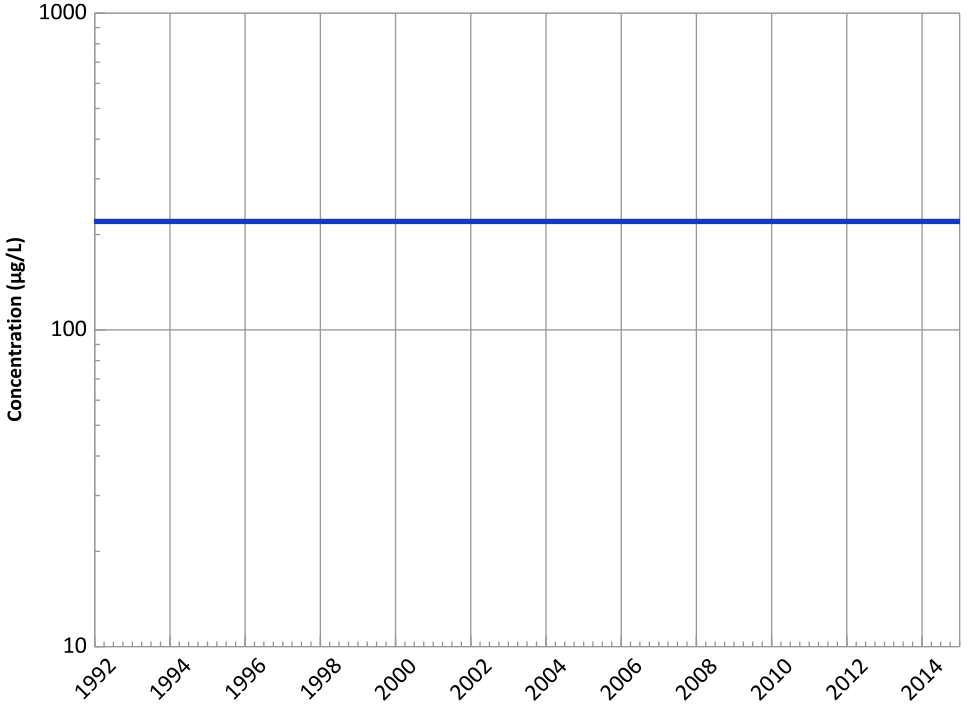


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

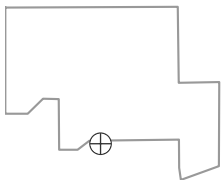
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

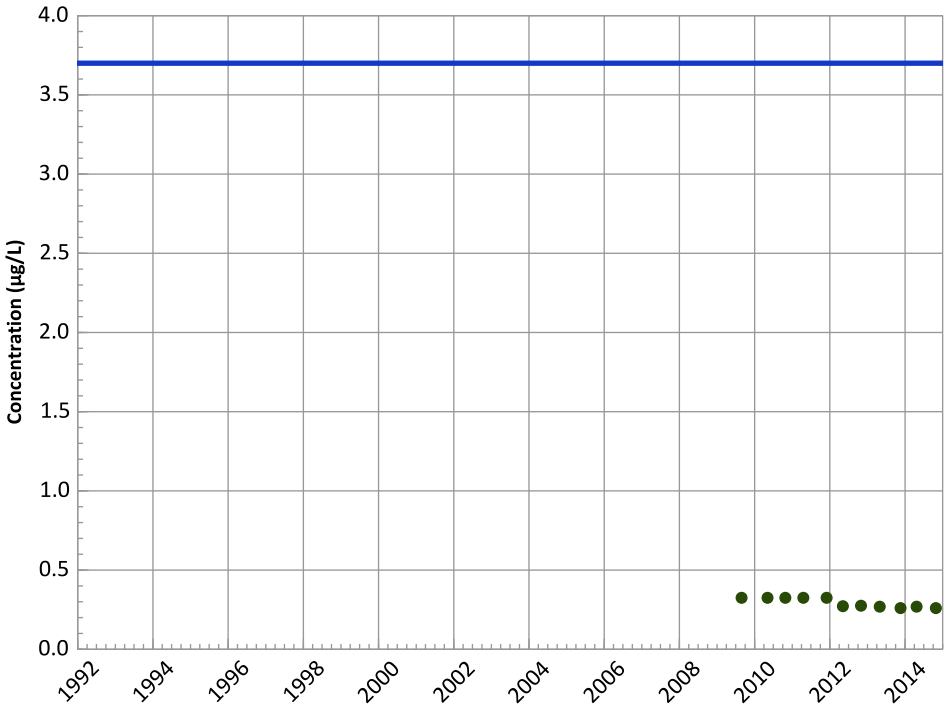
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

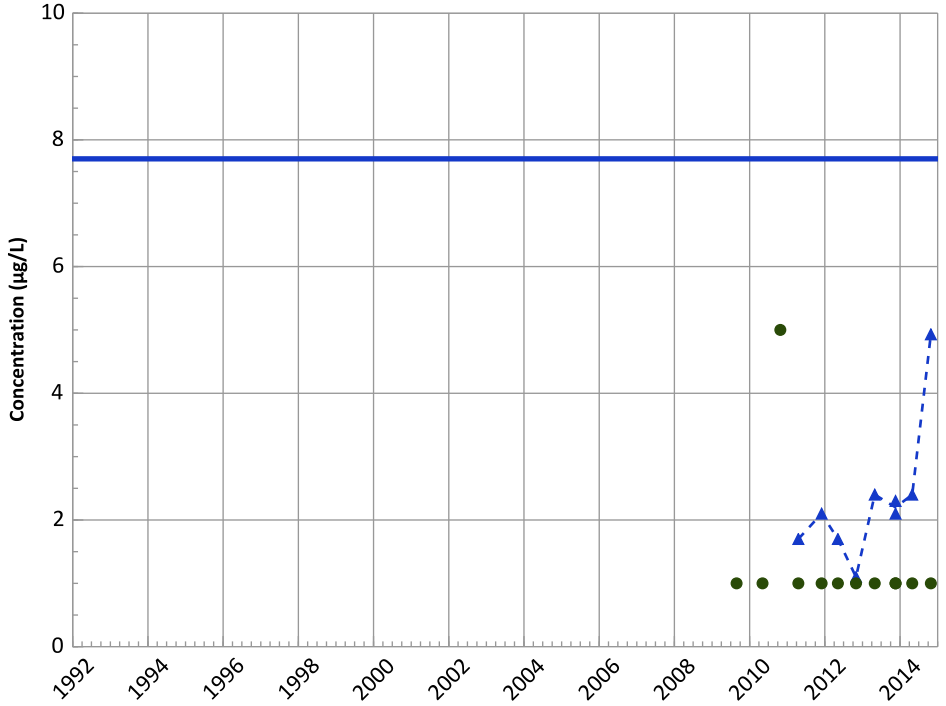


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

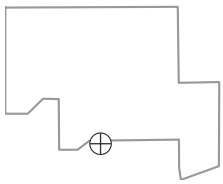
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

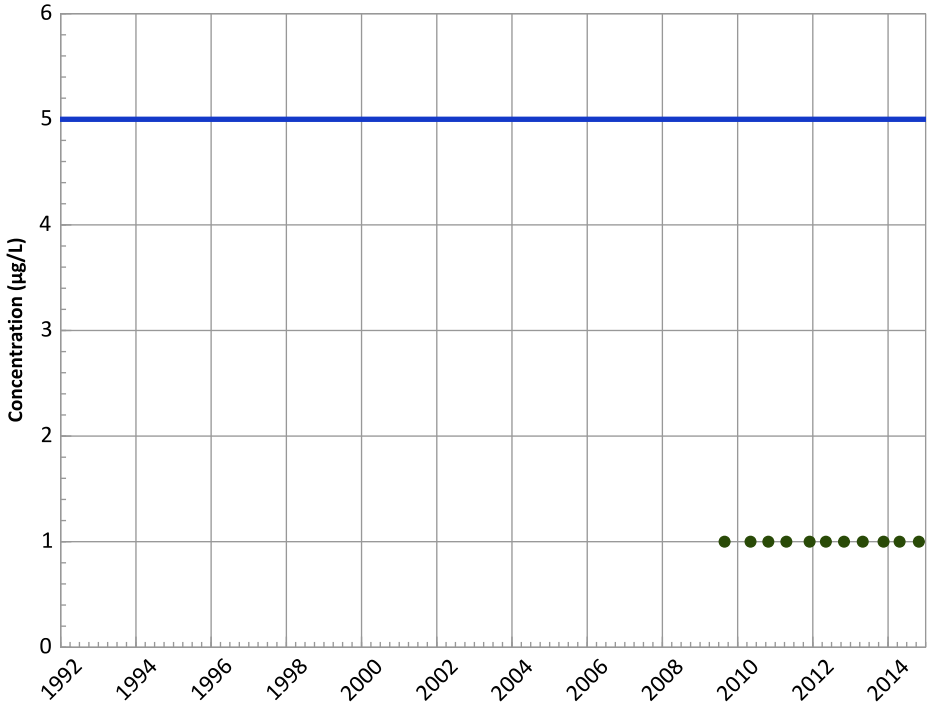
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

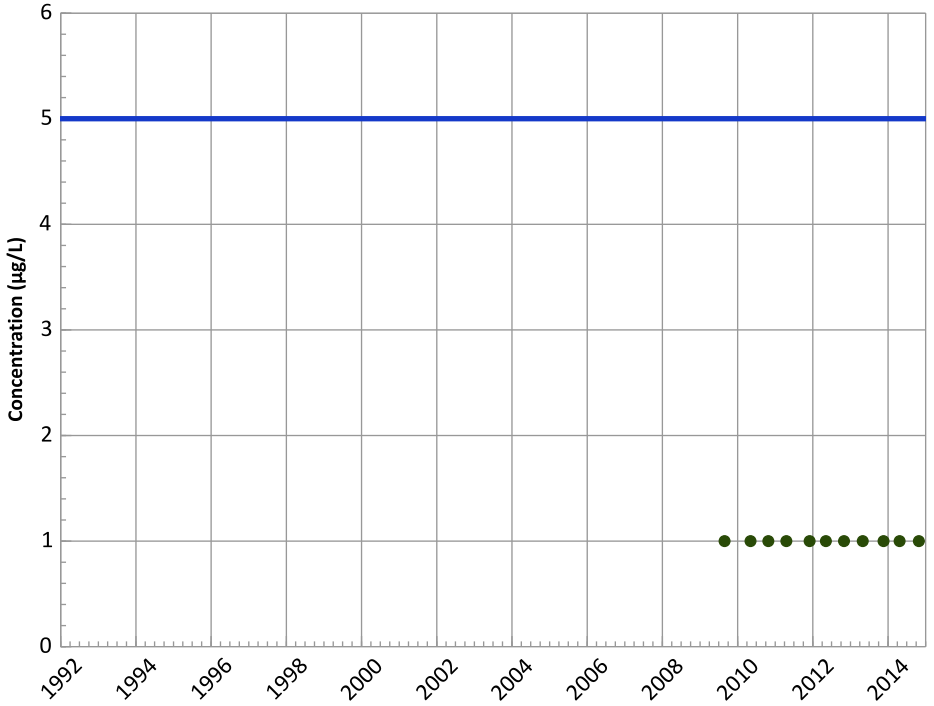


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

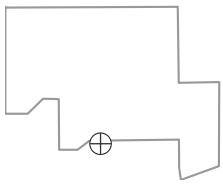
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

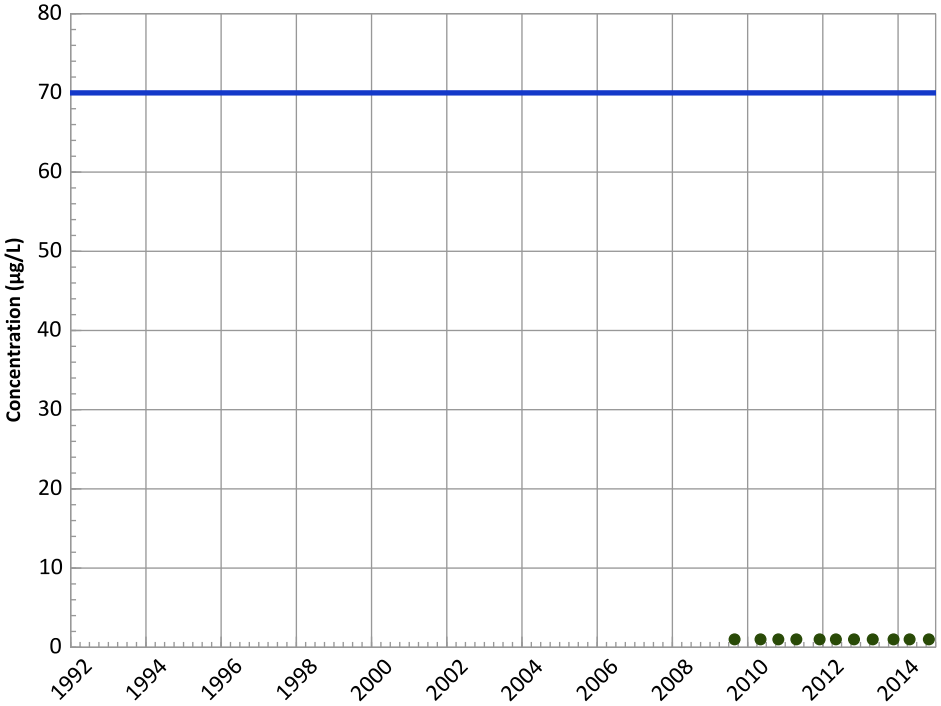
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

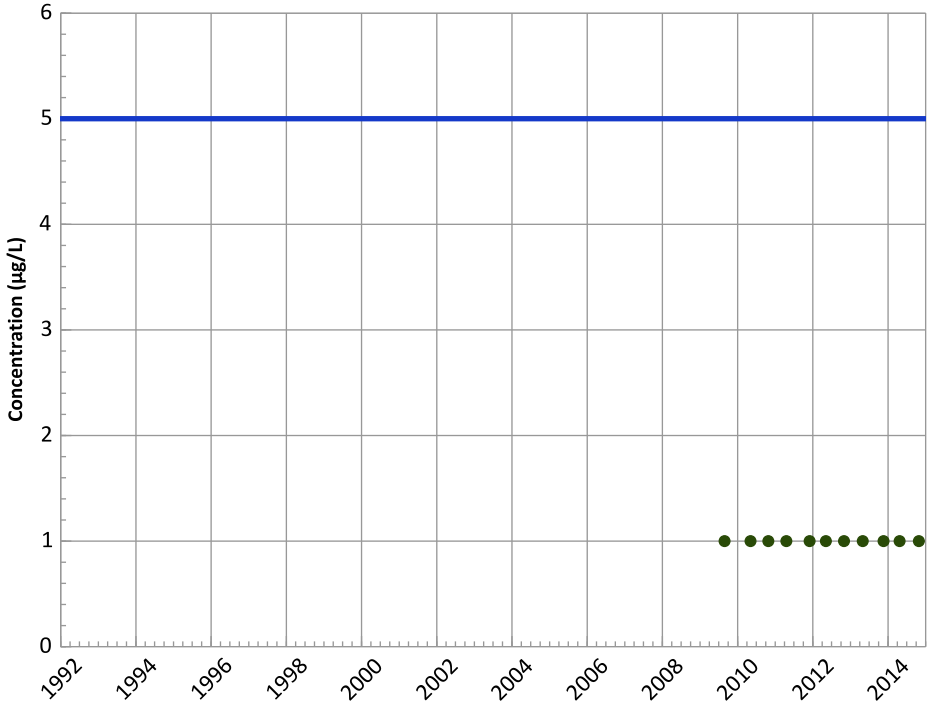


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

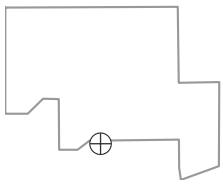
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

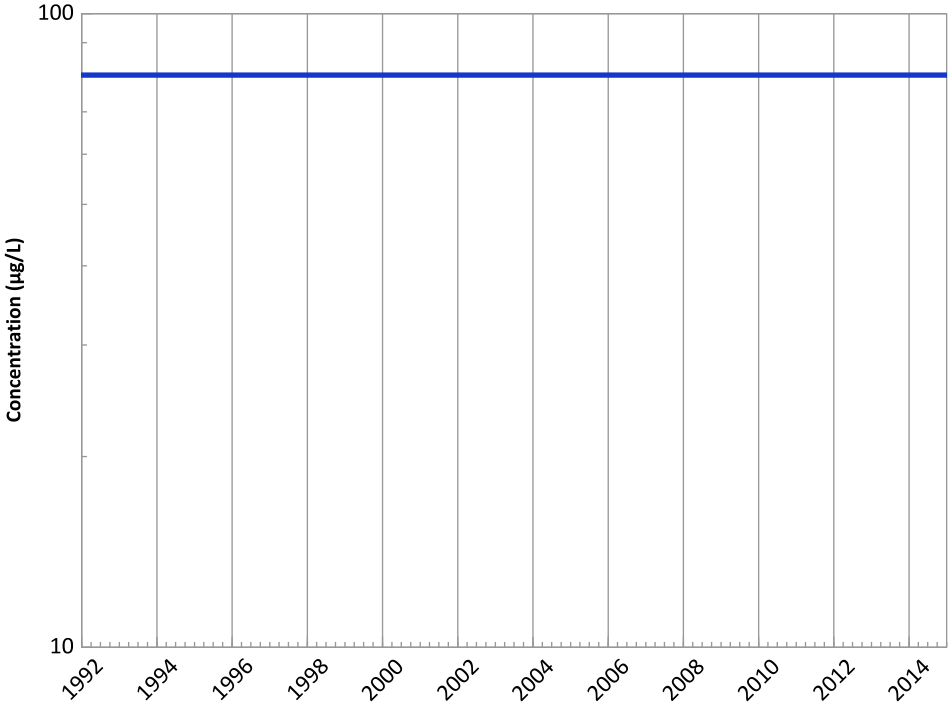
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

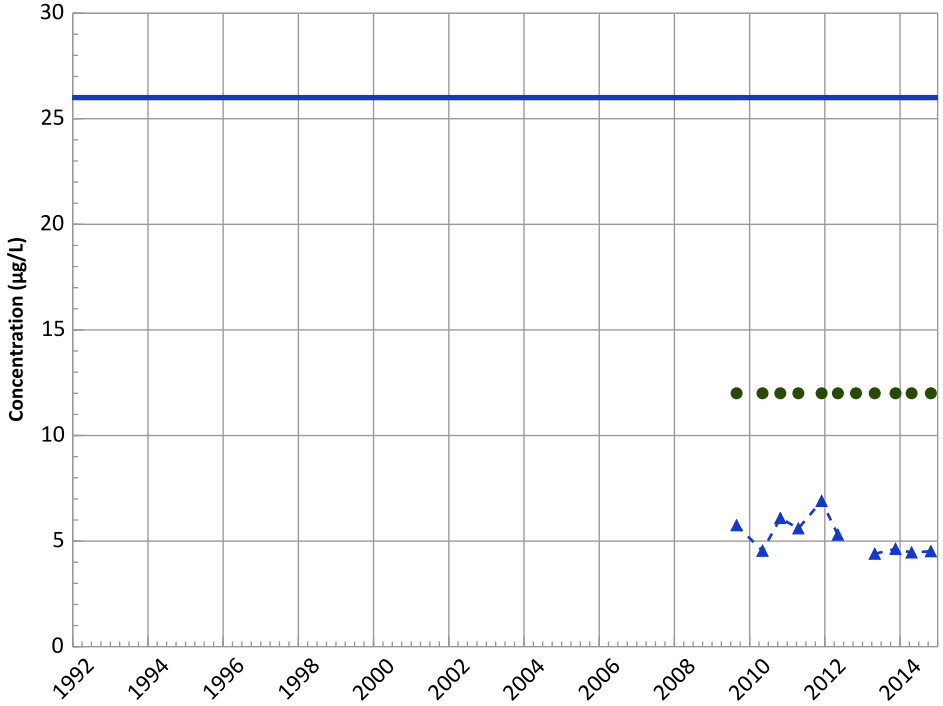


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

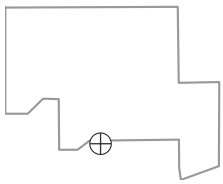
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

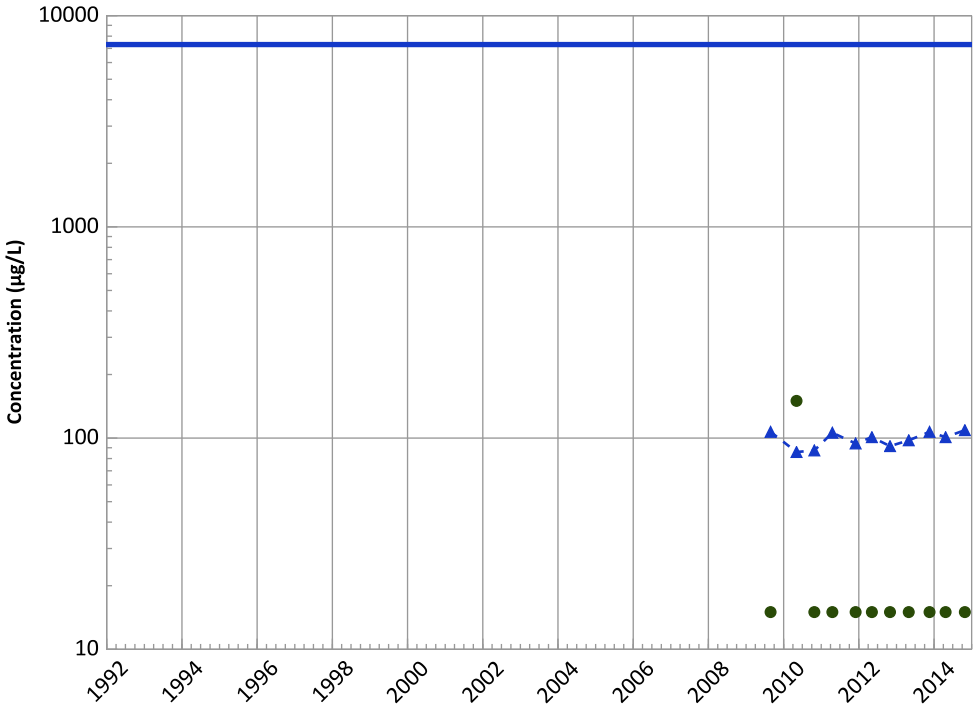
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━ Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

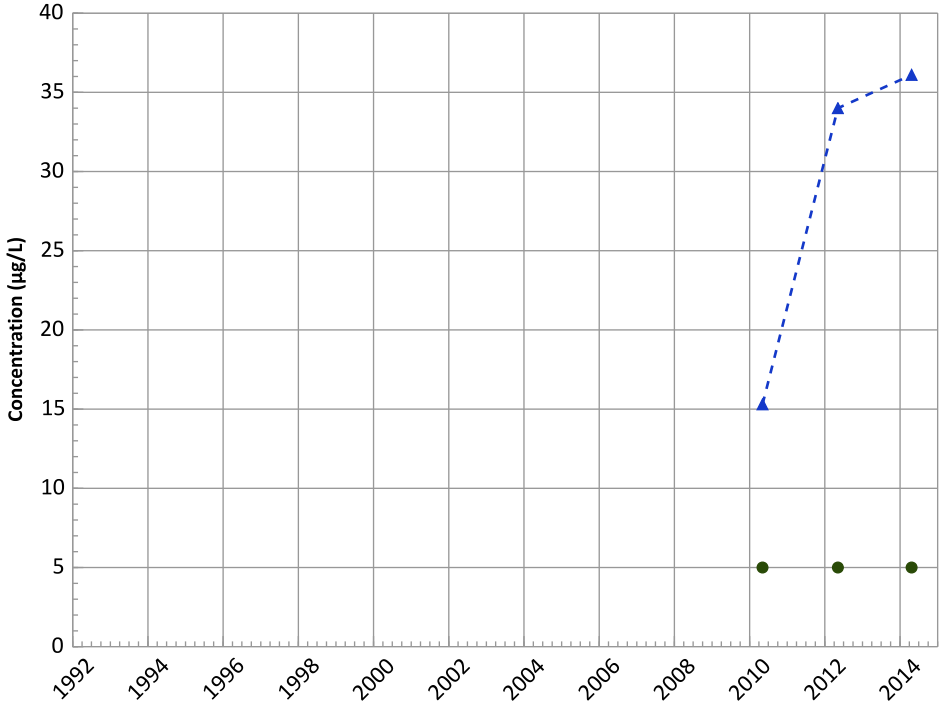


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Manganese Trend



Concentration Trend

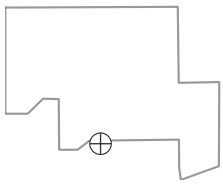
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

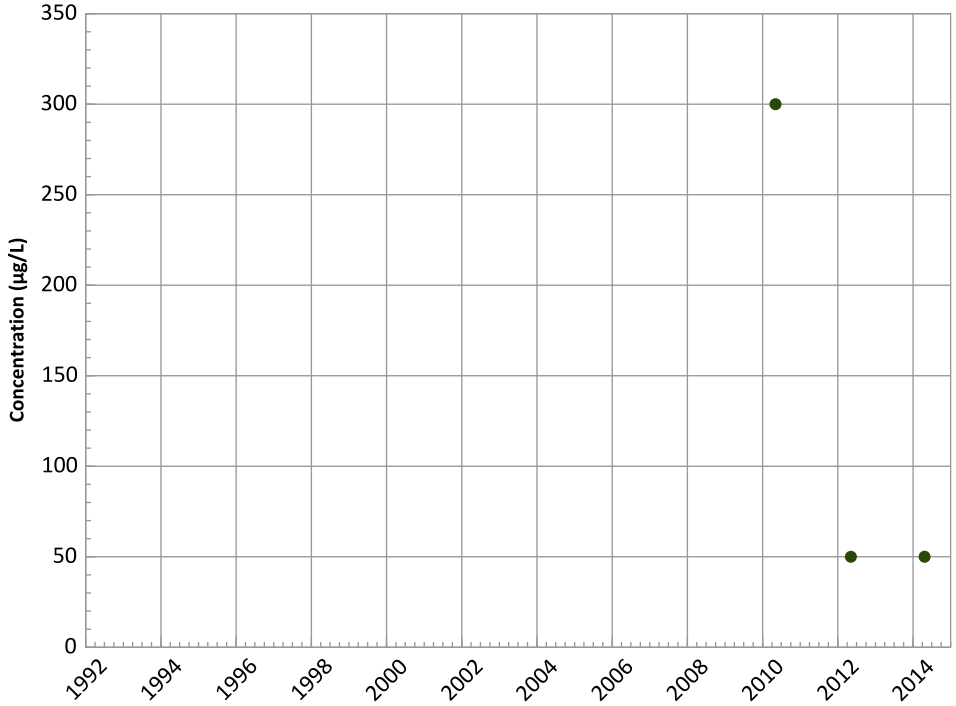
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

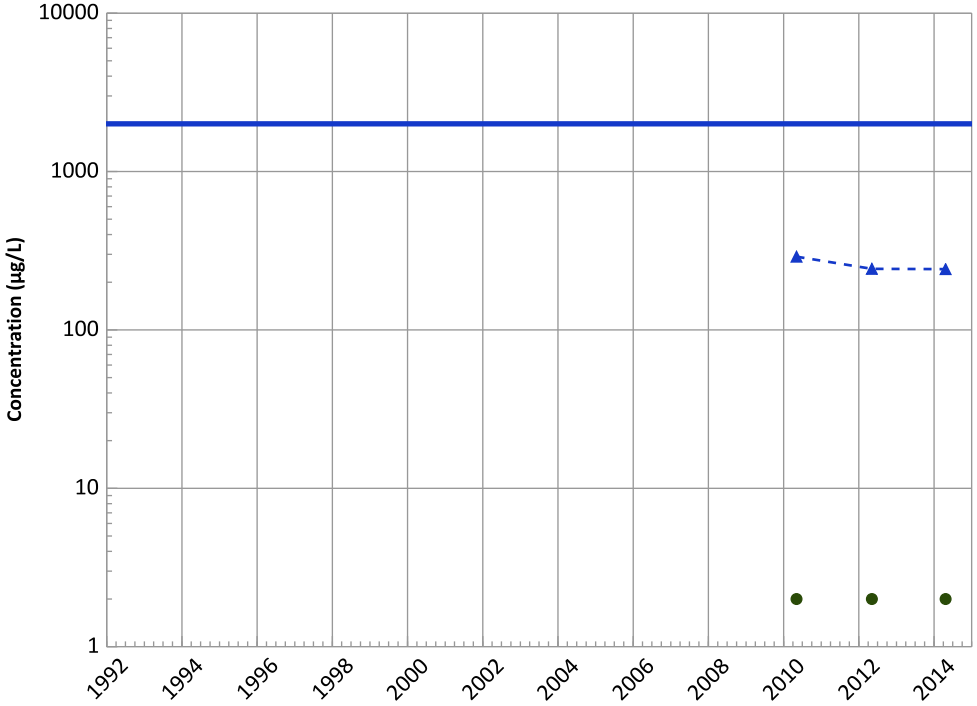


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Barium Trend



Concentration Trend

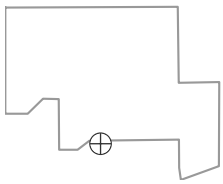
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

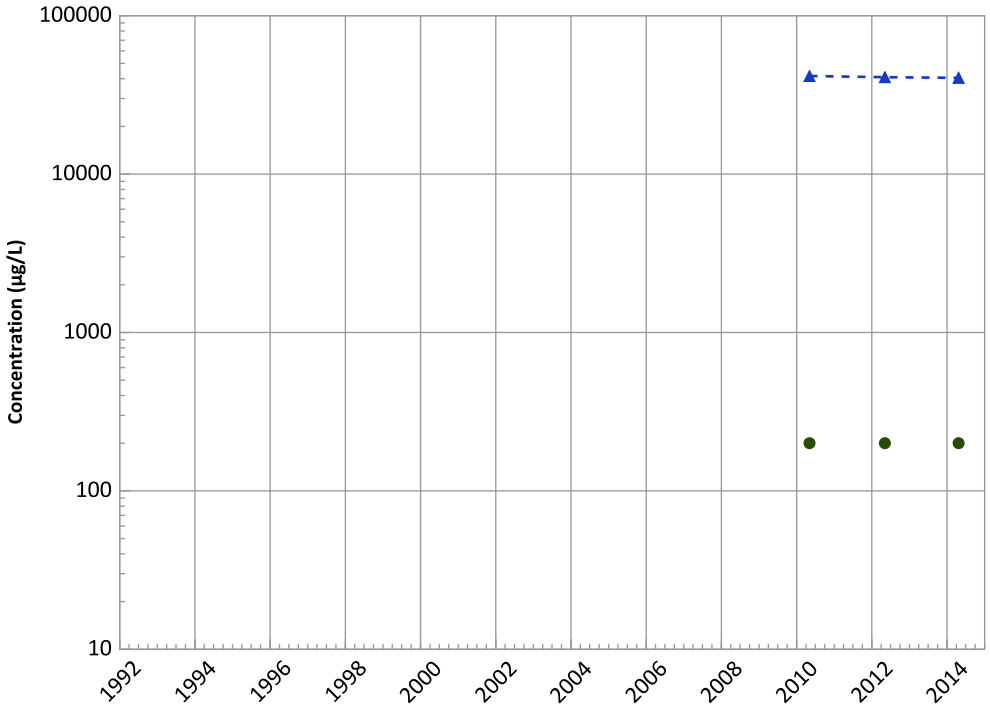
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

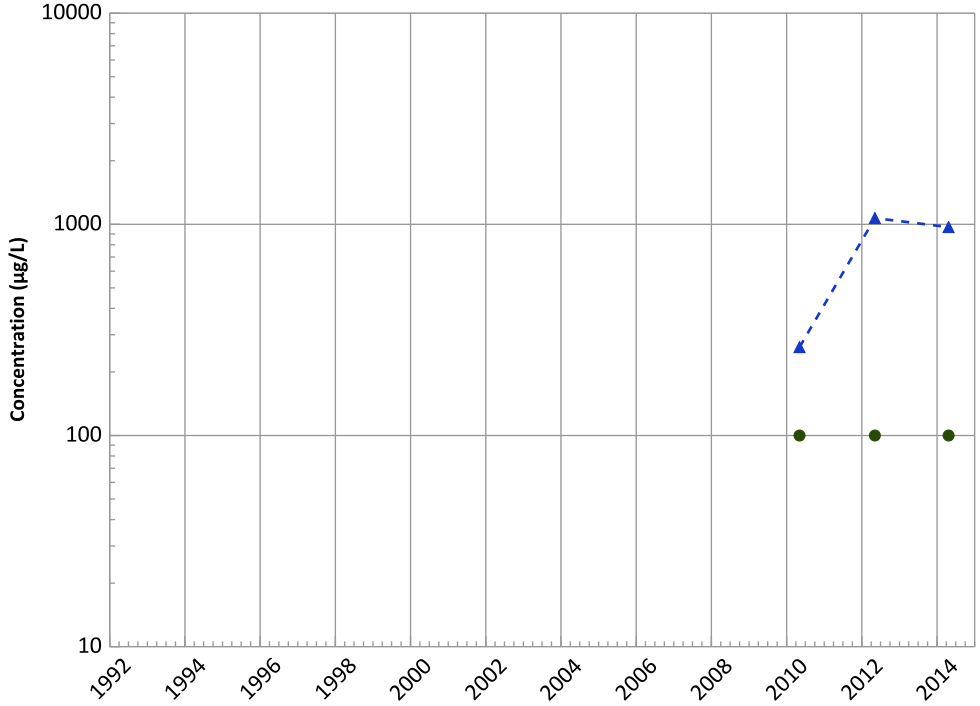


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

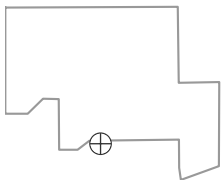
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

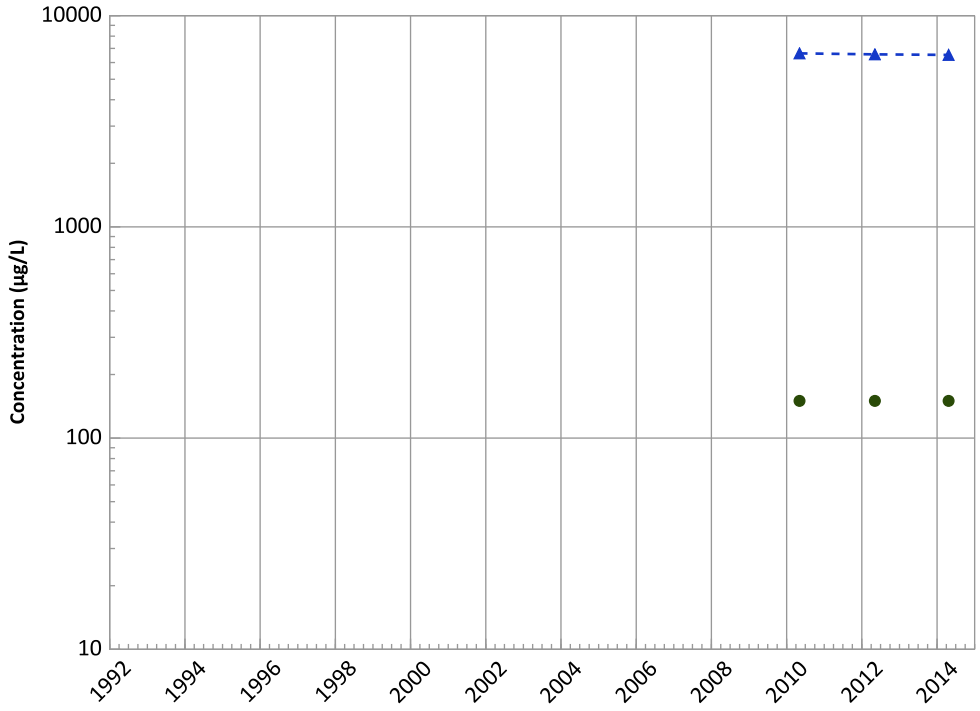
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

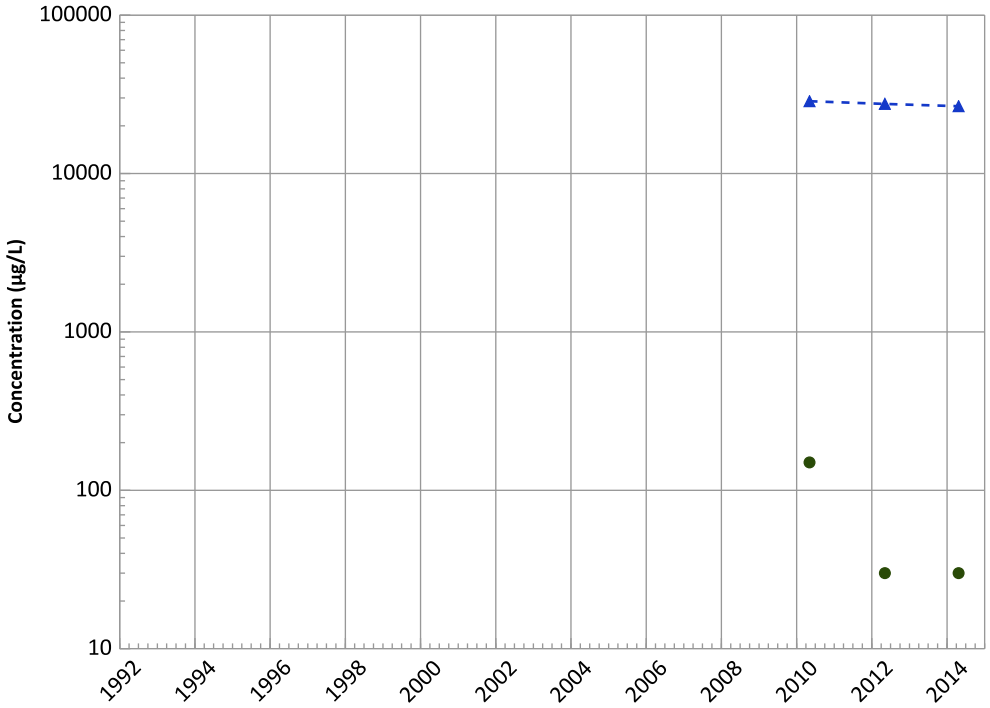


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

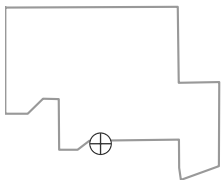
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

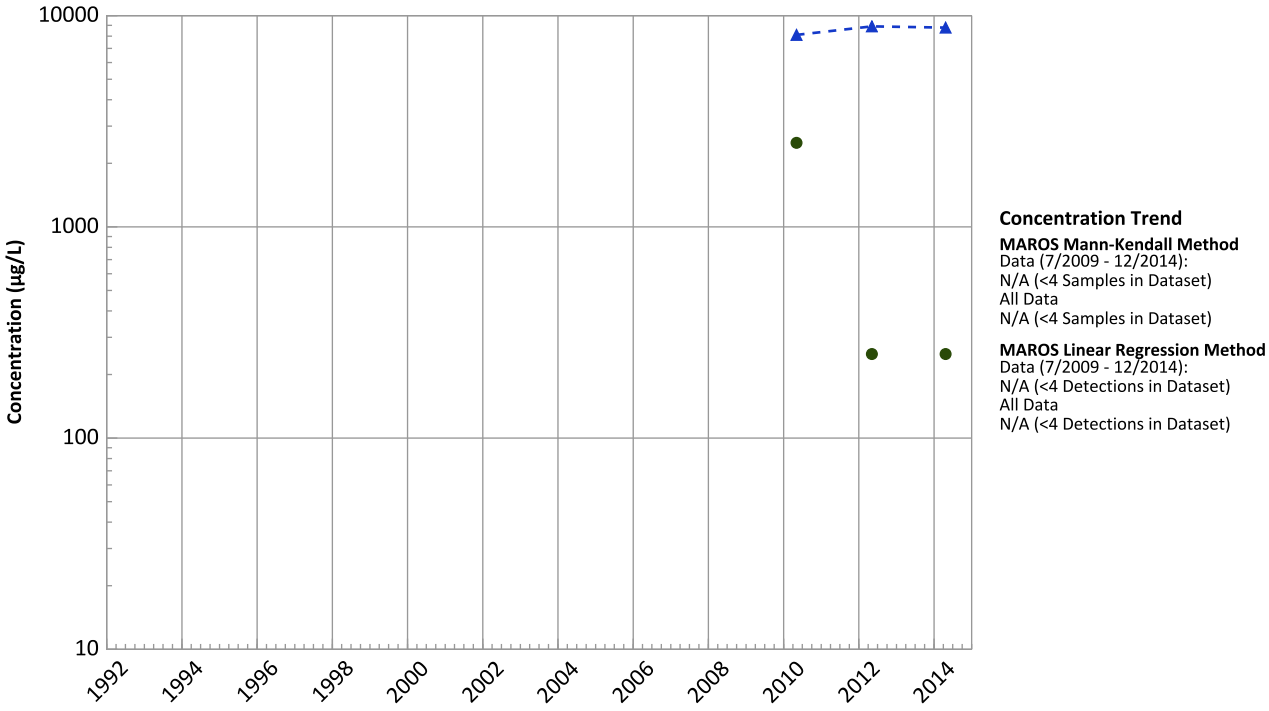
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1134 in Perched Aquifer
USDOE/NNSA Pantex Plant

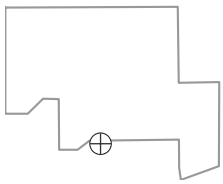
Sodium Trend



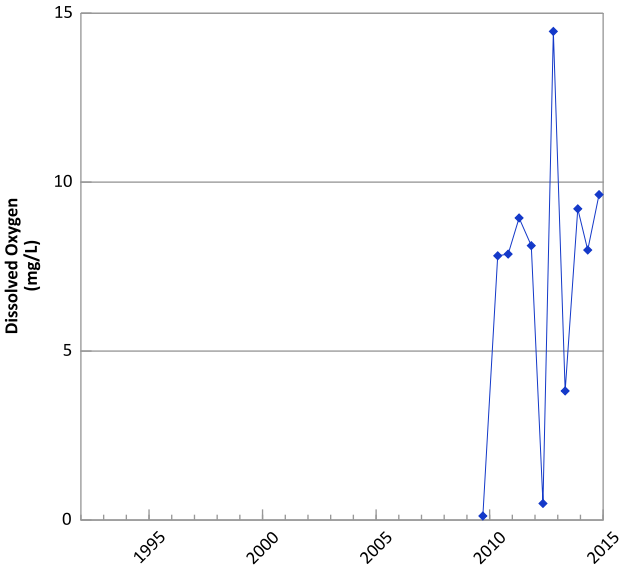
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/27/2009 to 10/27/2014
Analysis Date: 03/19/2015

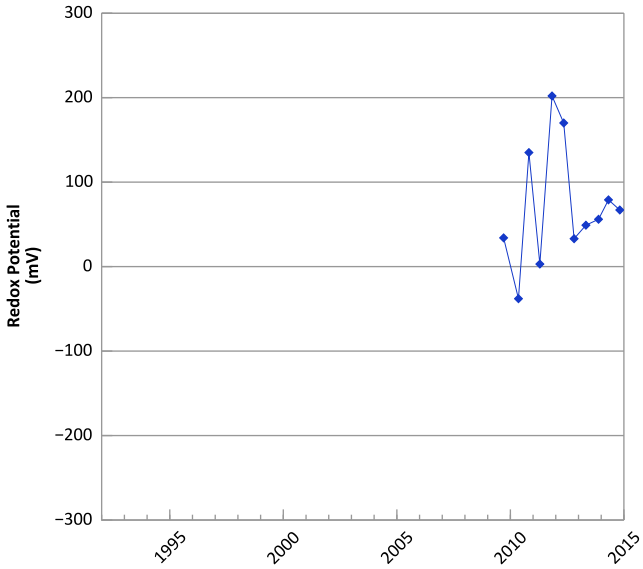
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

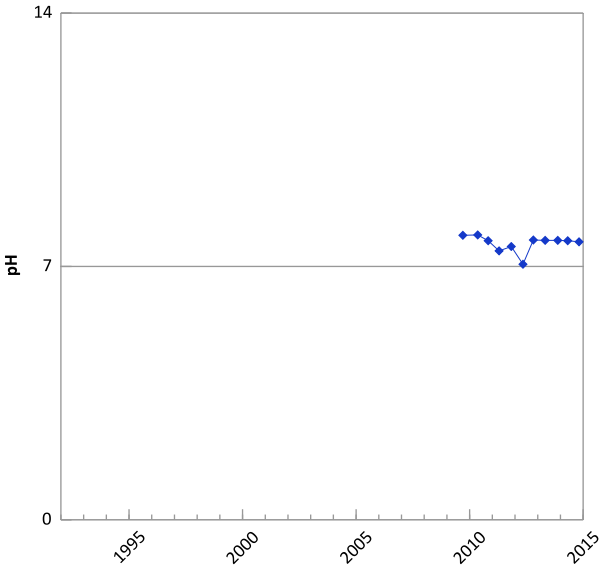
Well Location

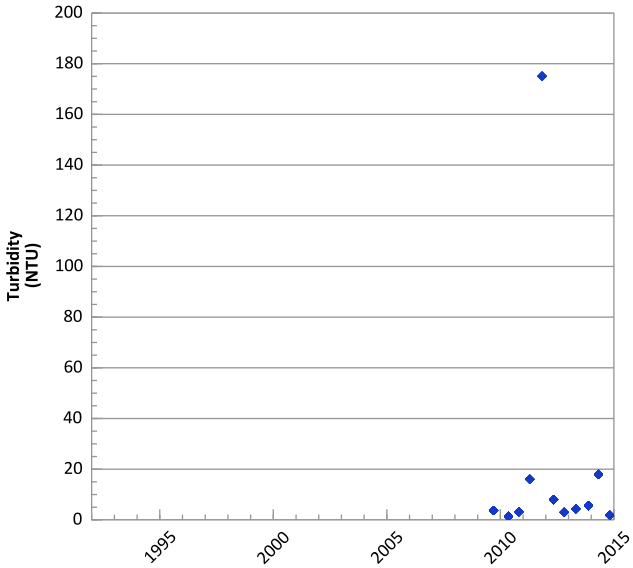


PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



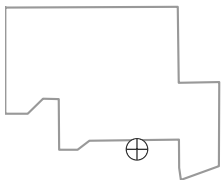






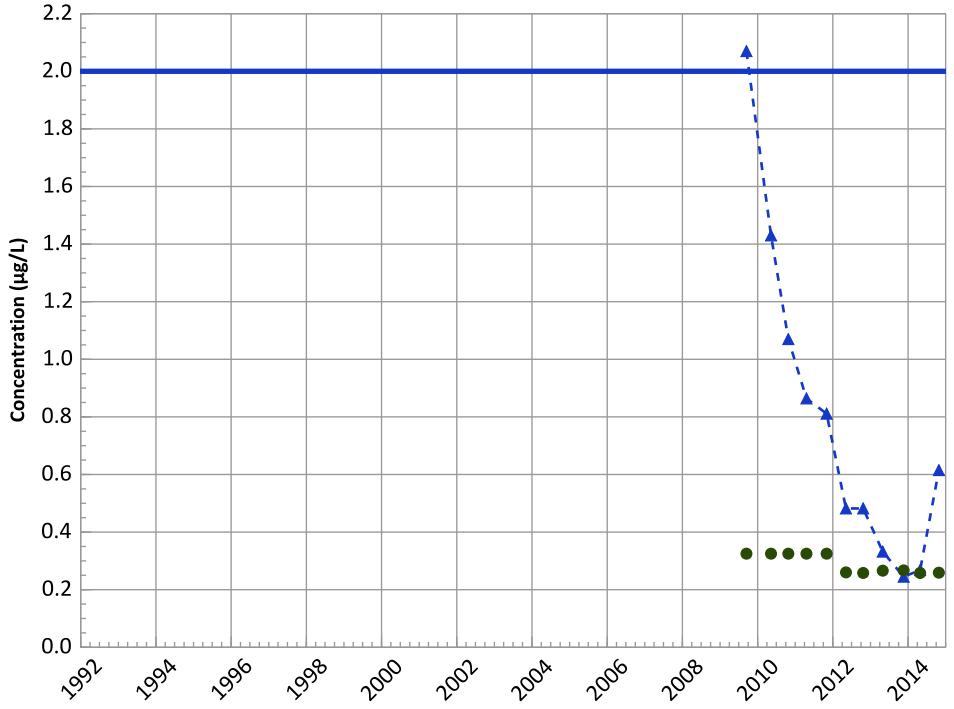
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

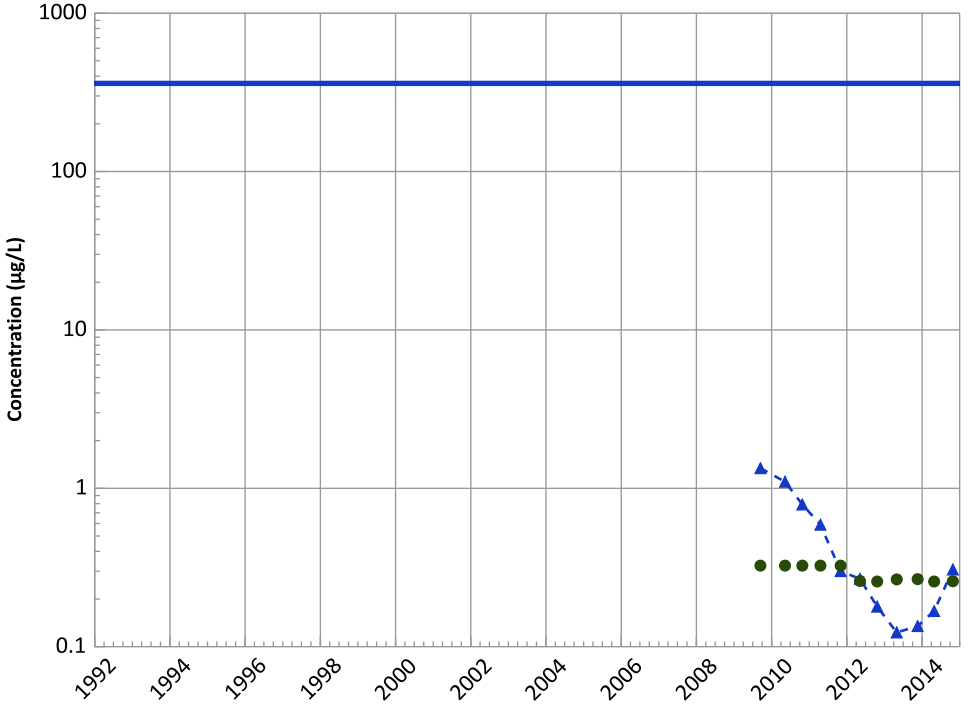


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

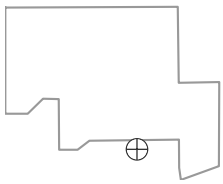
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

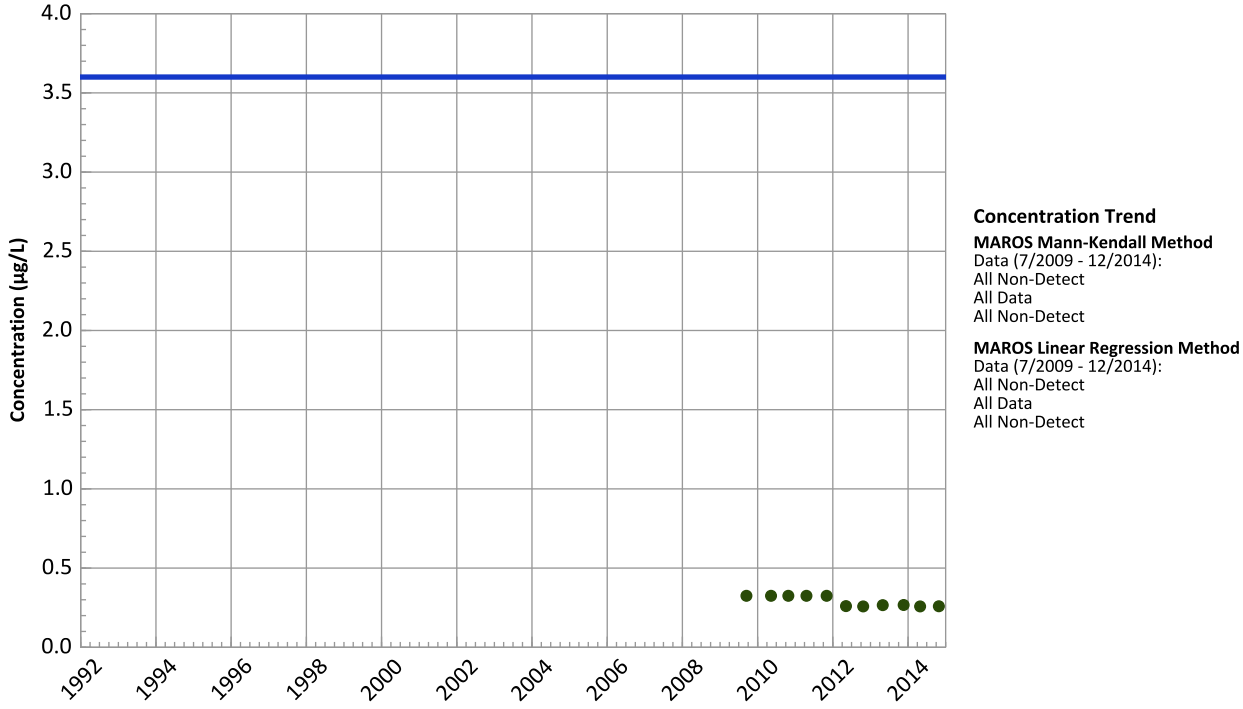
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

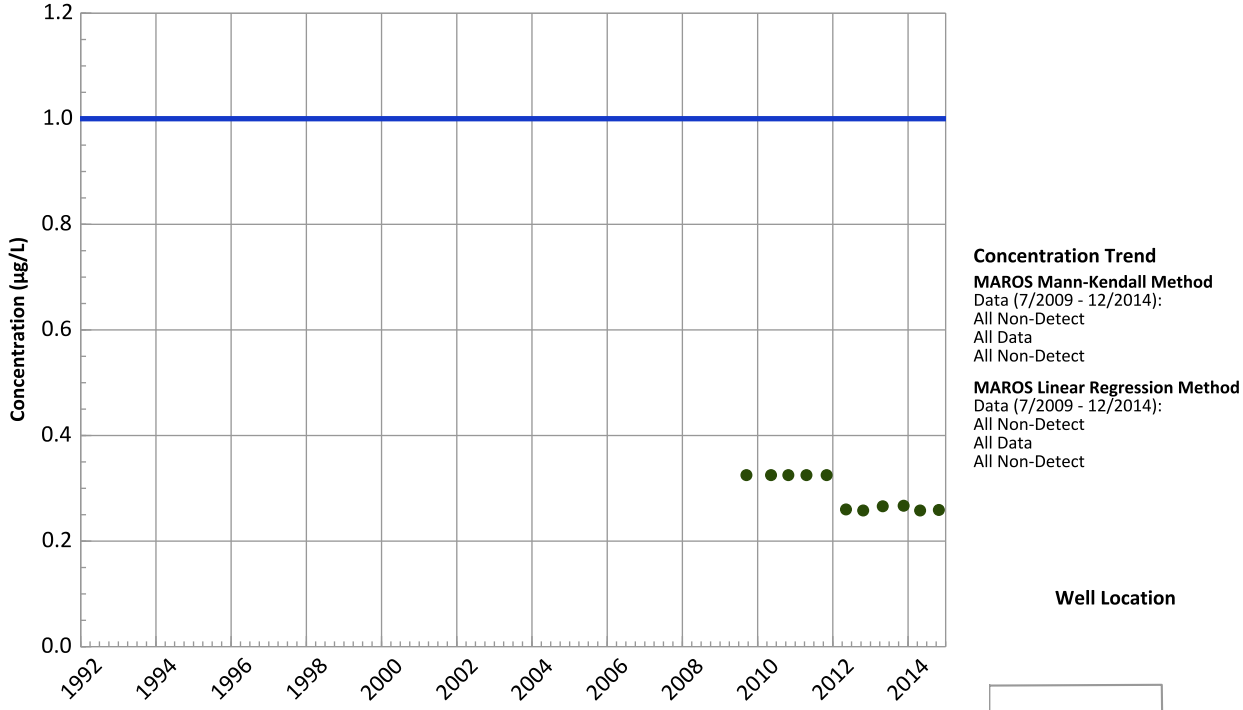


PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



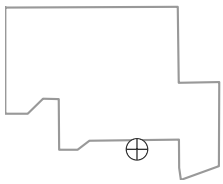
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

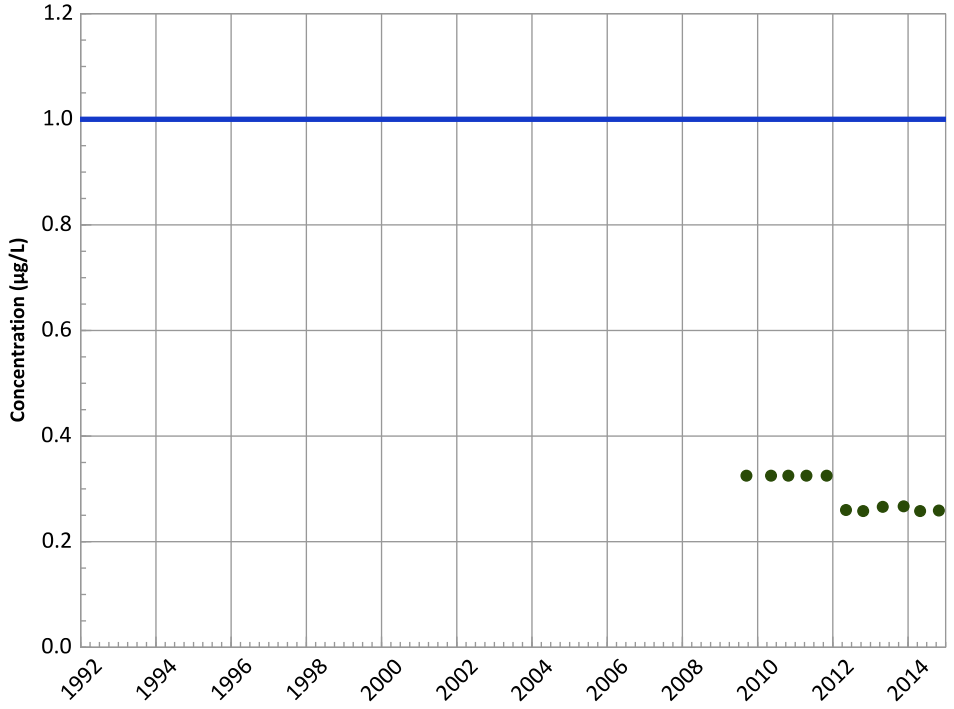
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

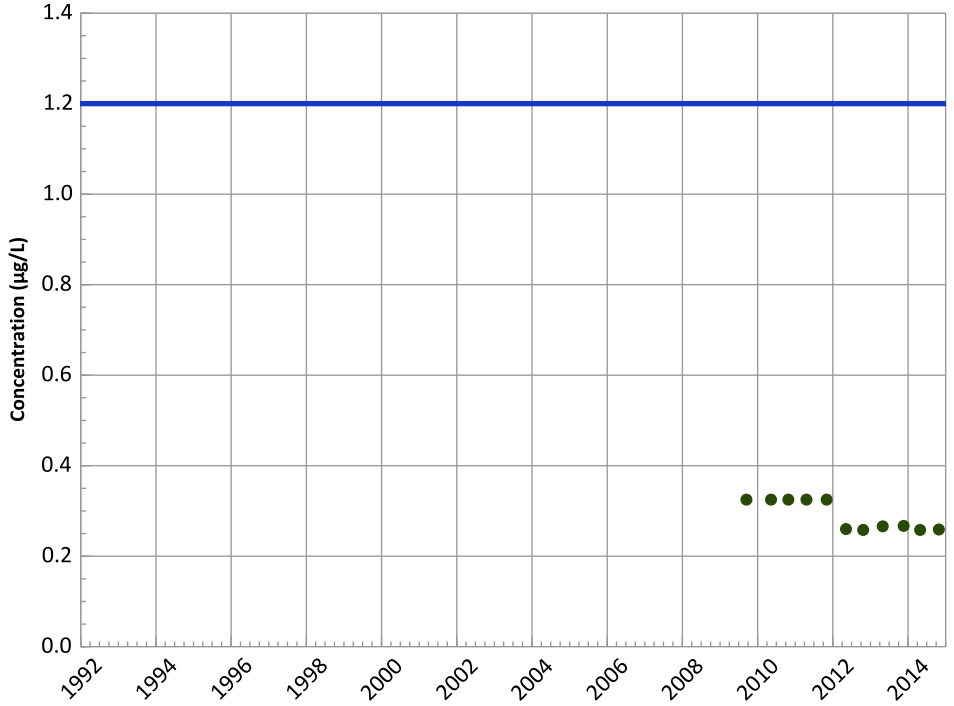


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

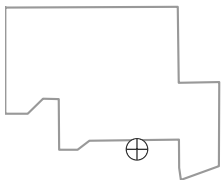
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

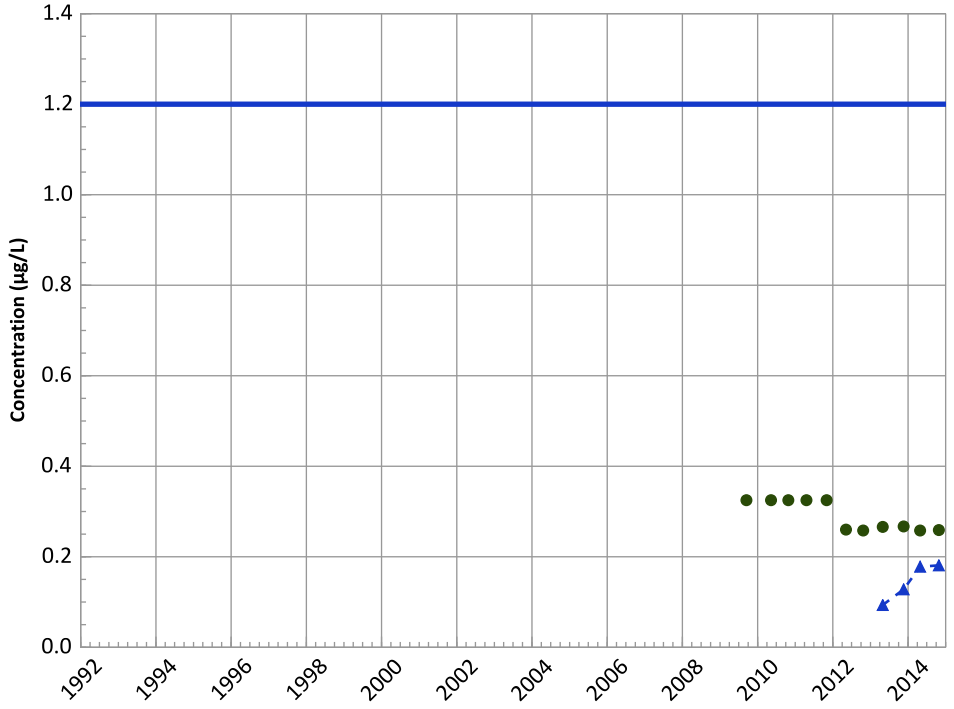
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

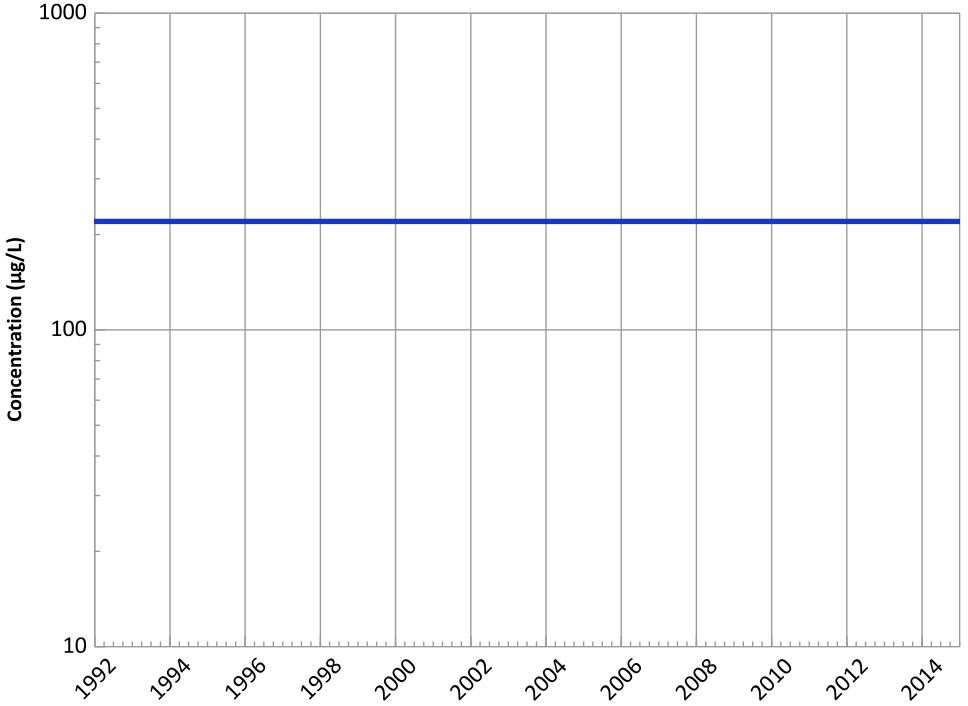


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

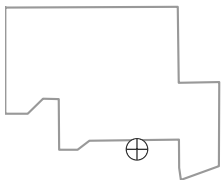
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

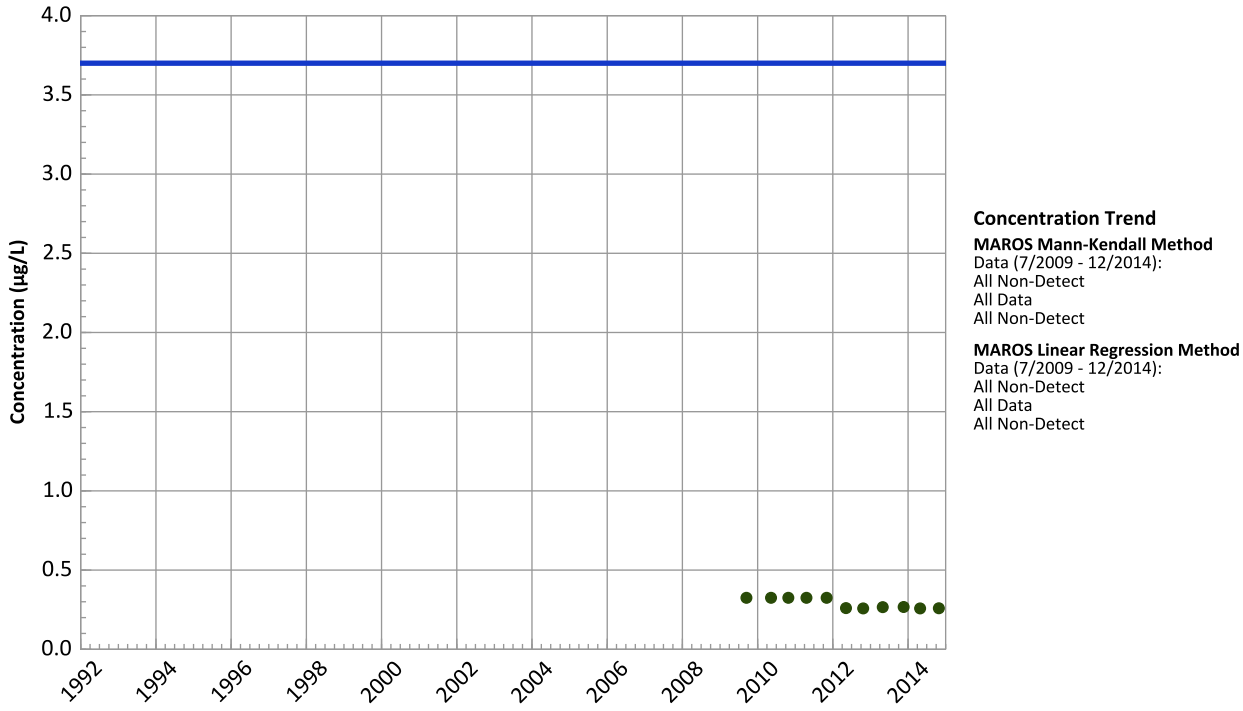
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

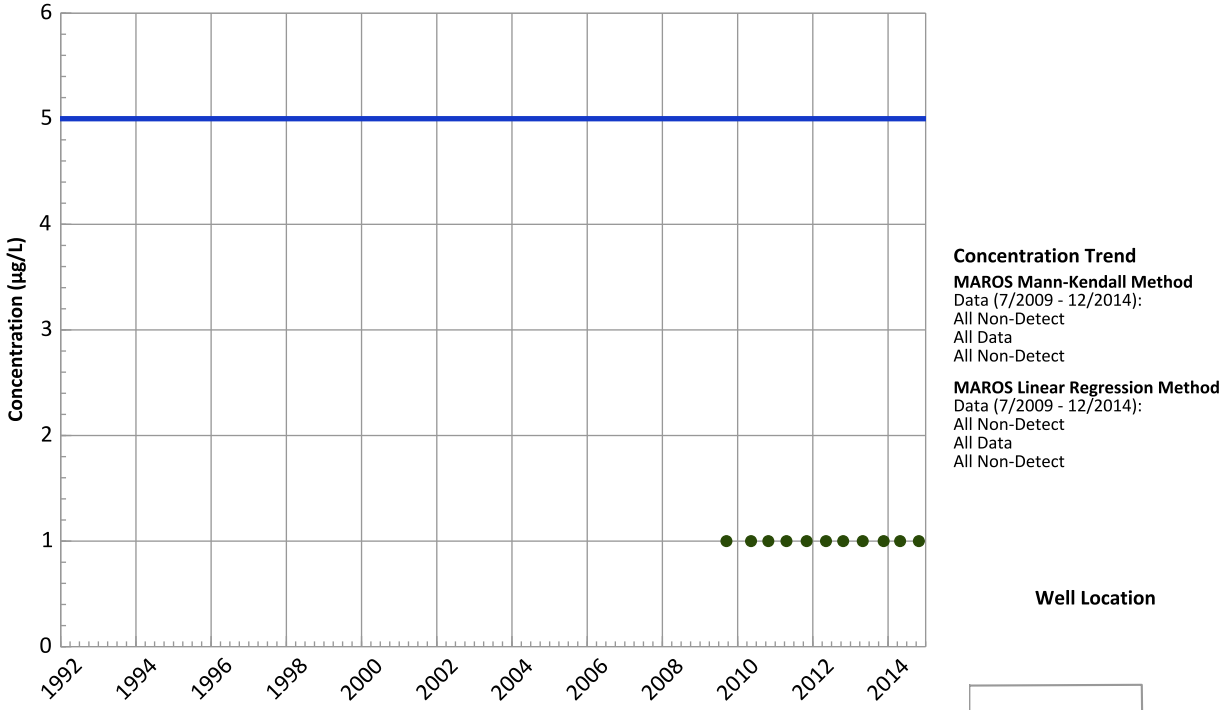


PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



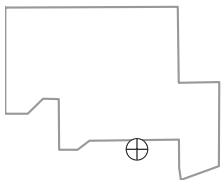
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

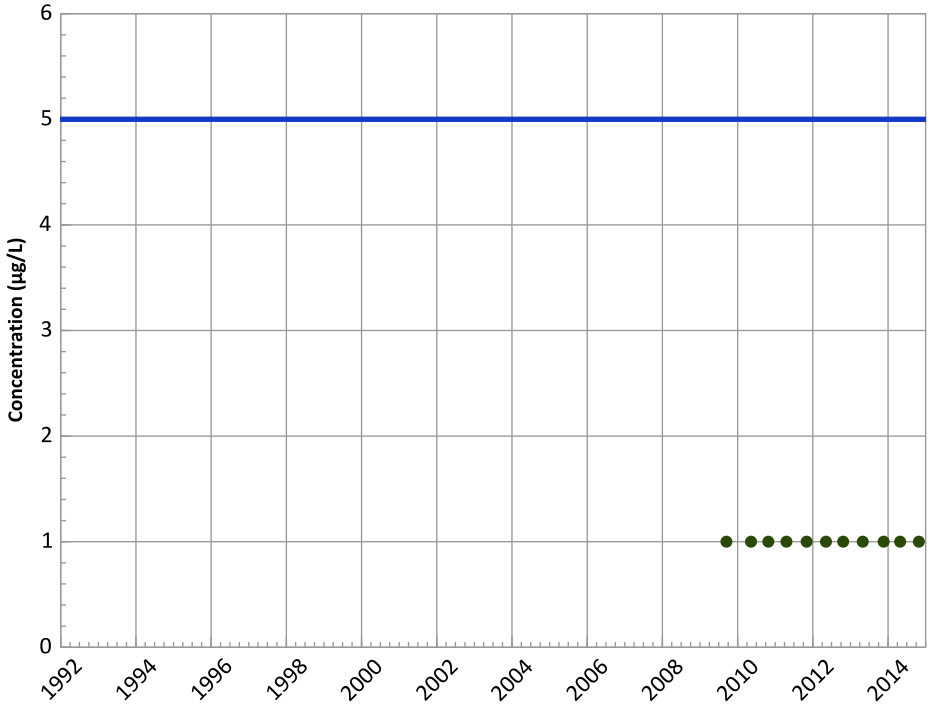
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

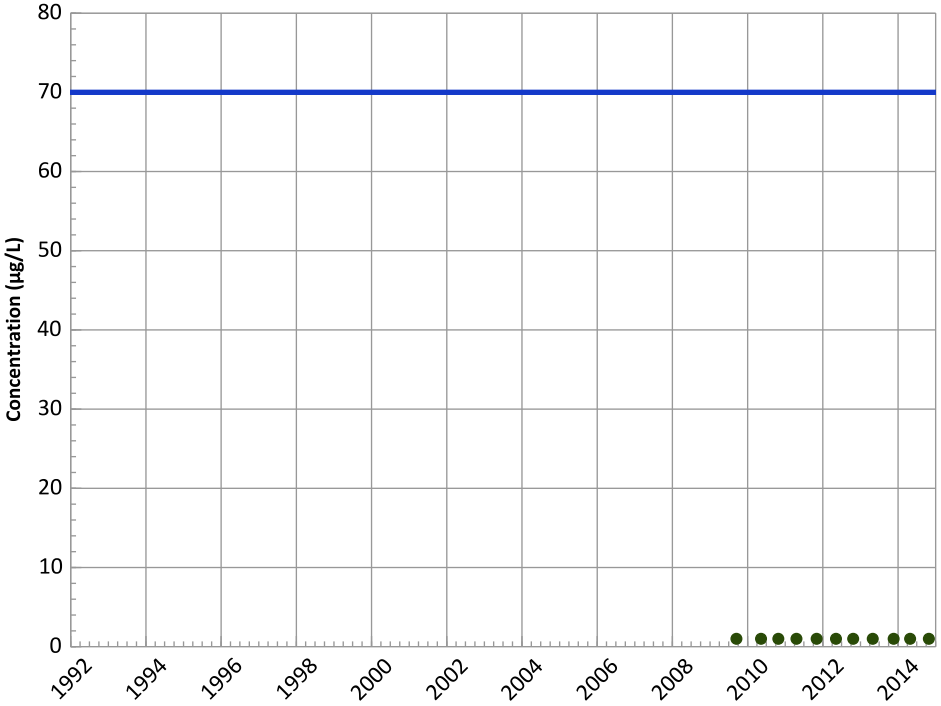


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

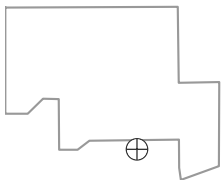
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

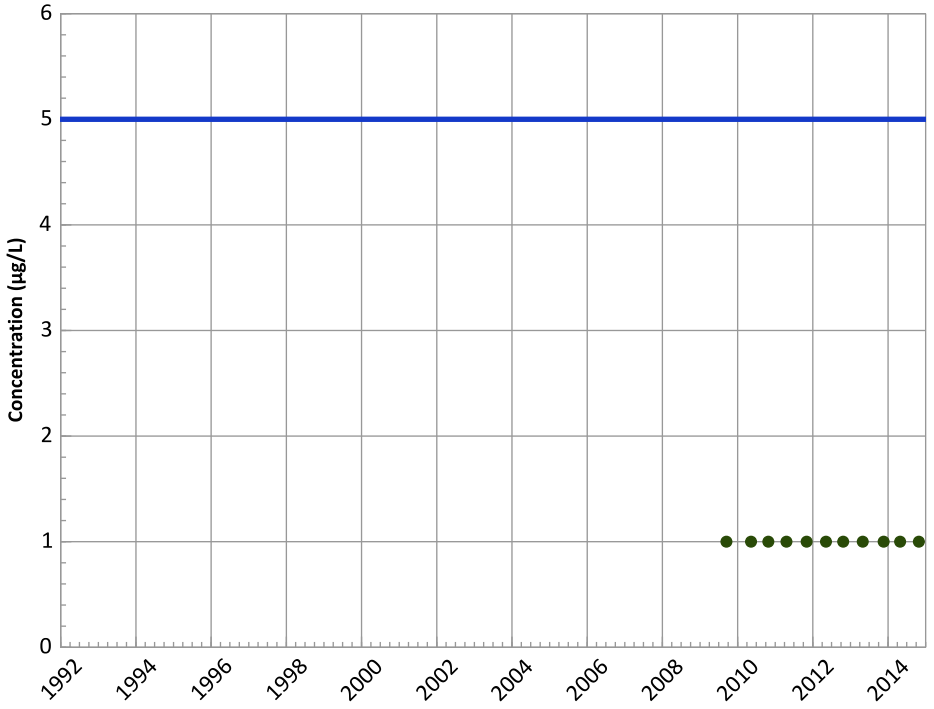
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

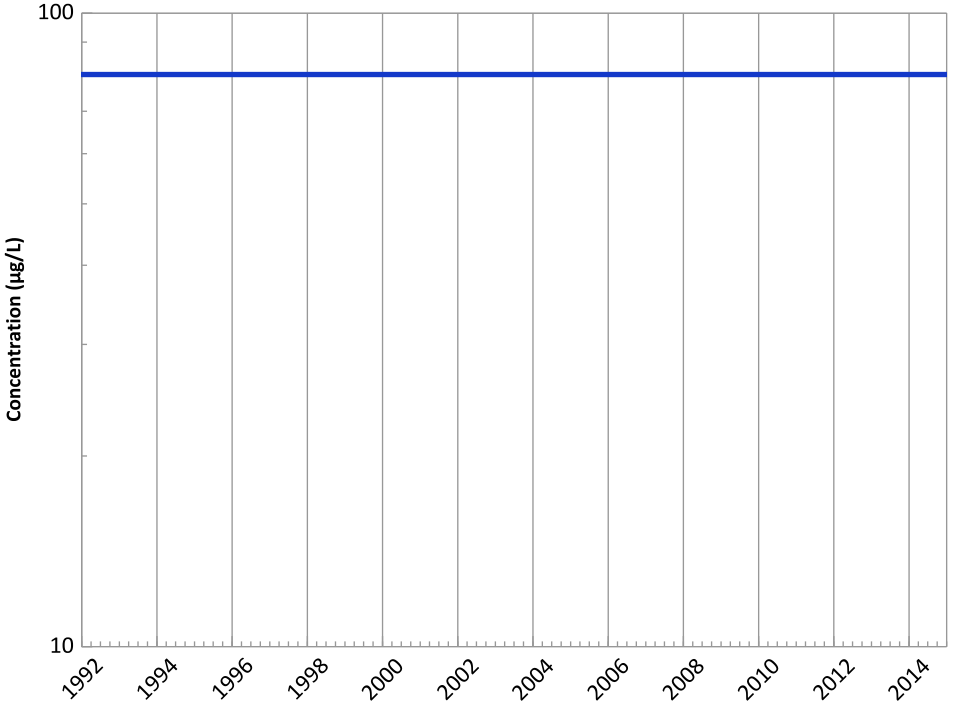


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

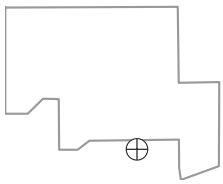
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

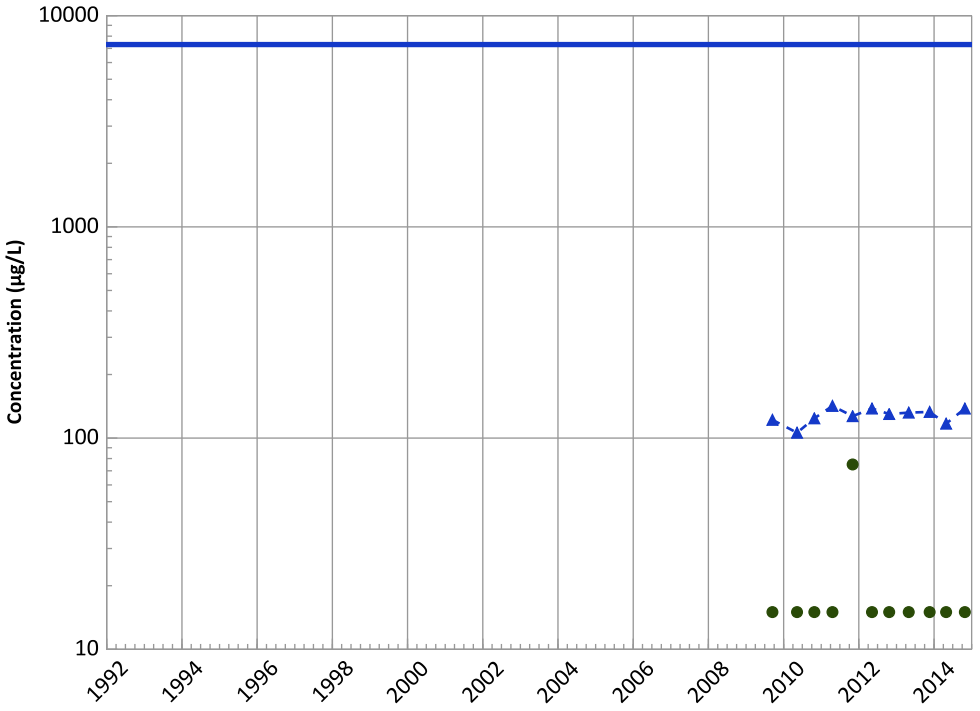
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

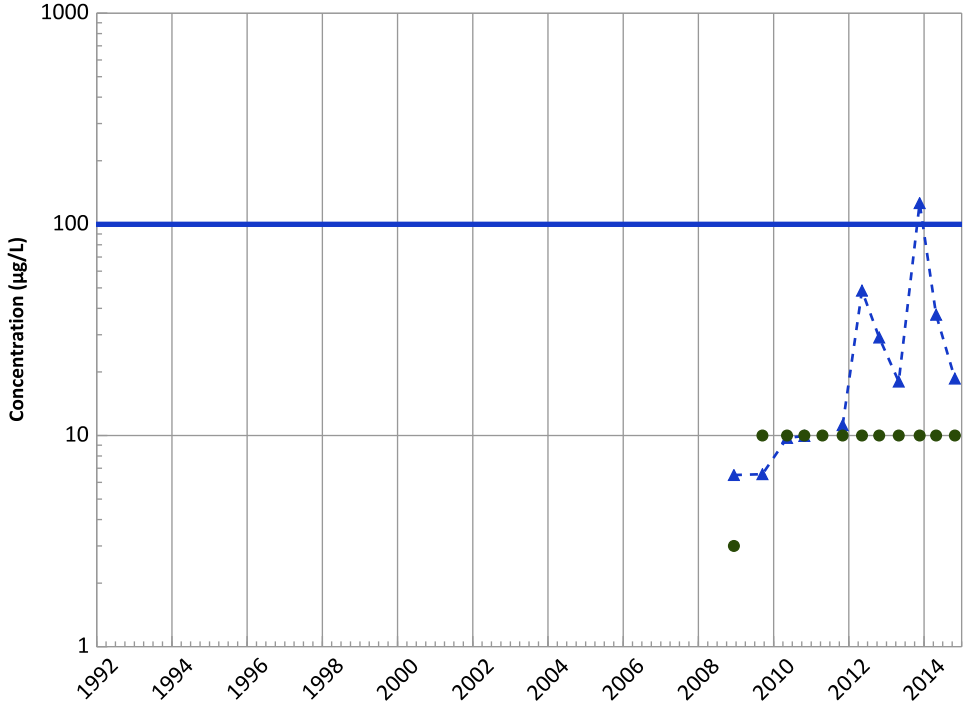


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chromium, Total Trend



Concentration Trend

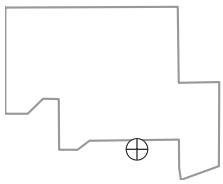
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

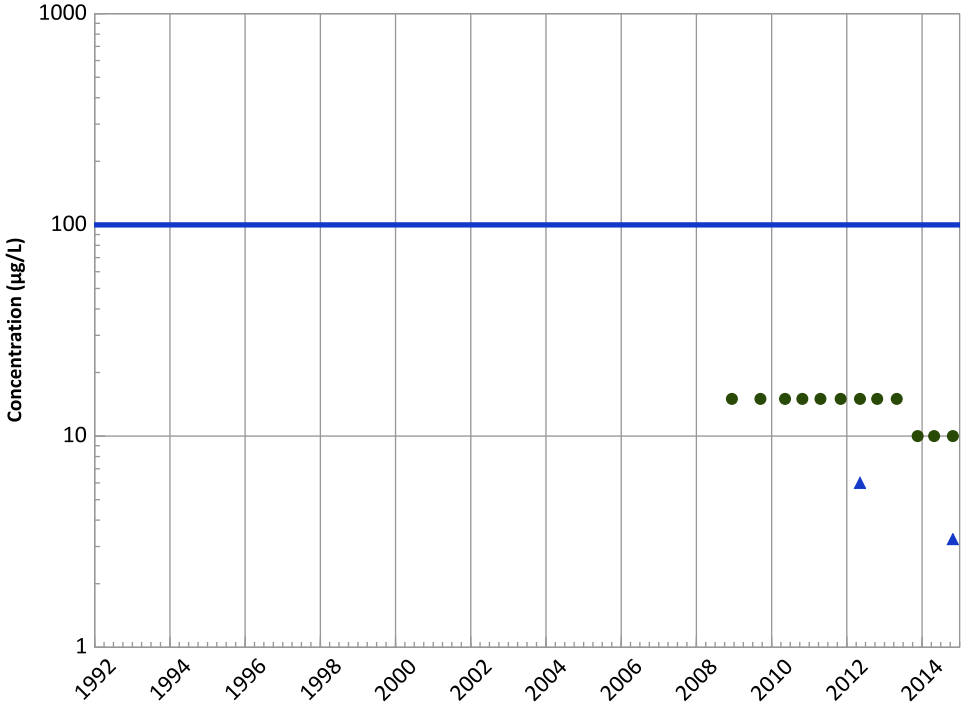
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

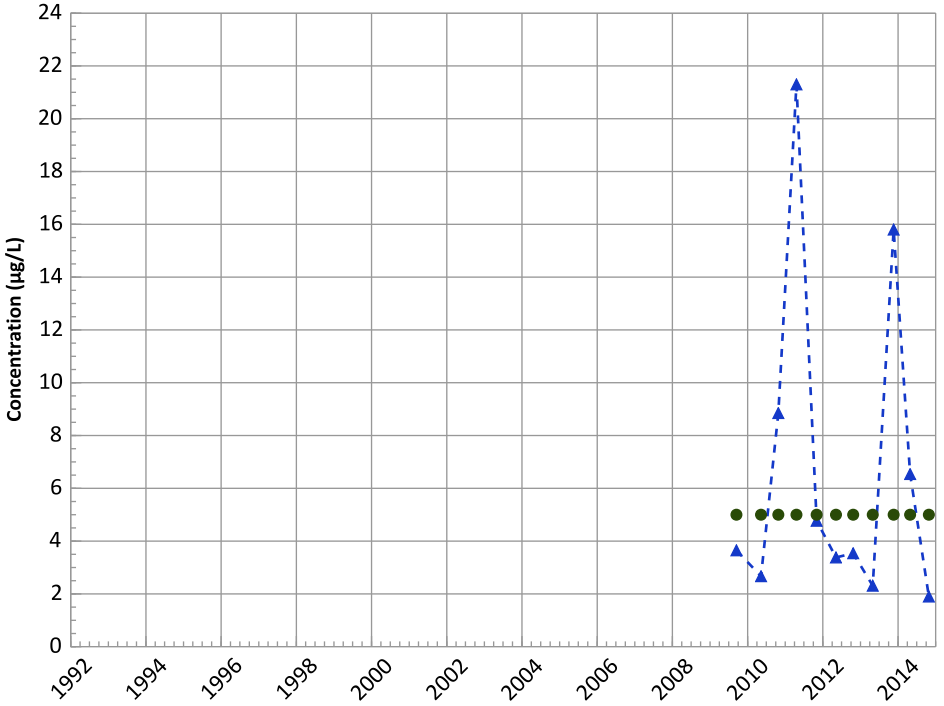


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

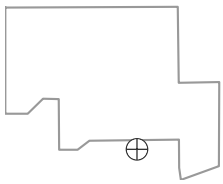
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

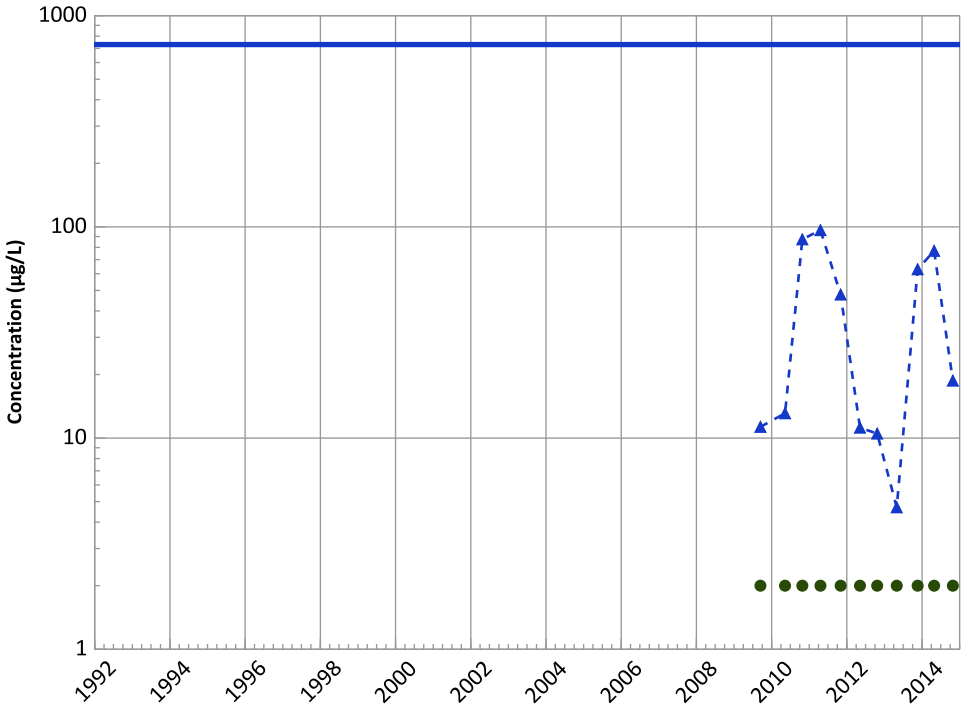
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

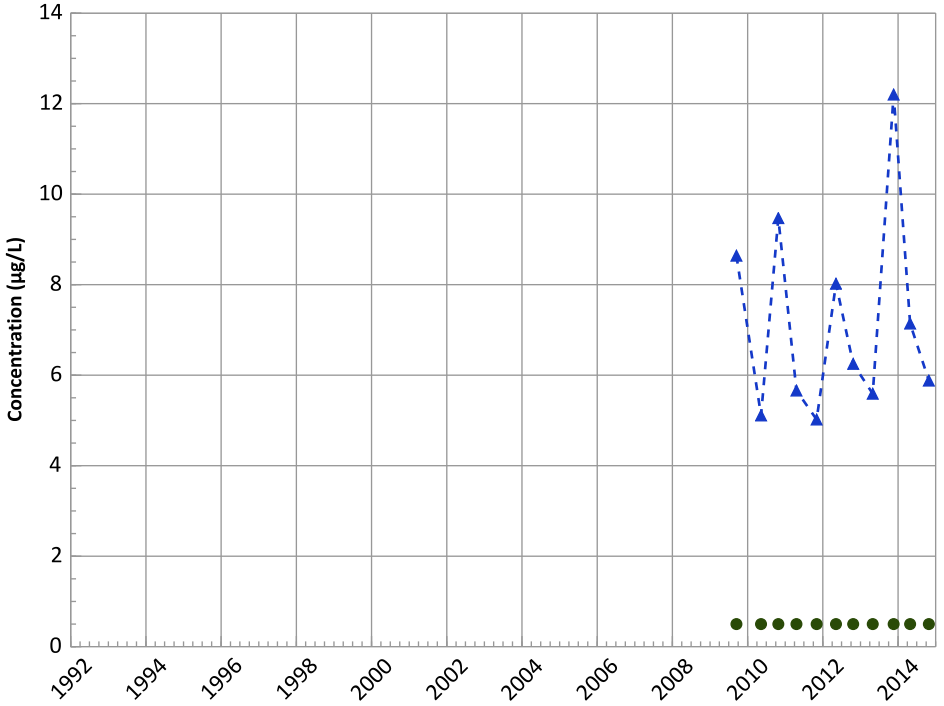


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Molybdenum Trend



Concentration Trend

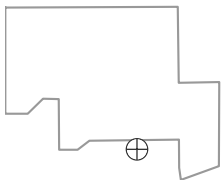
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

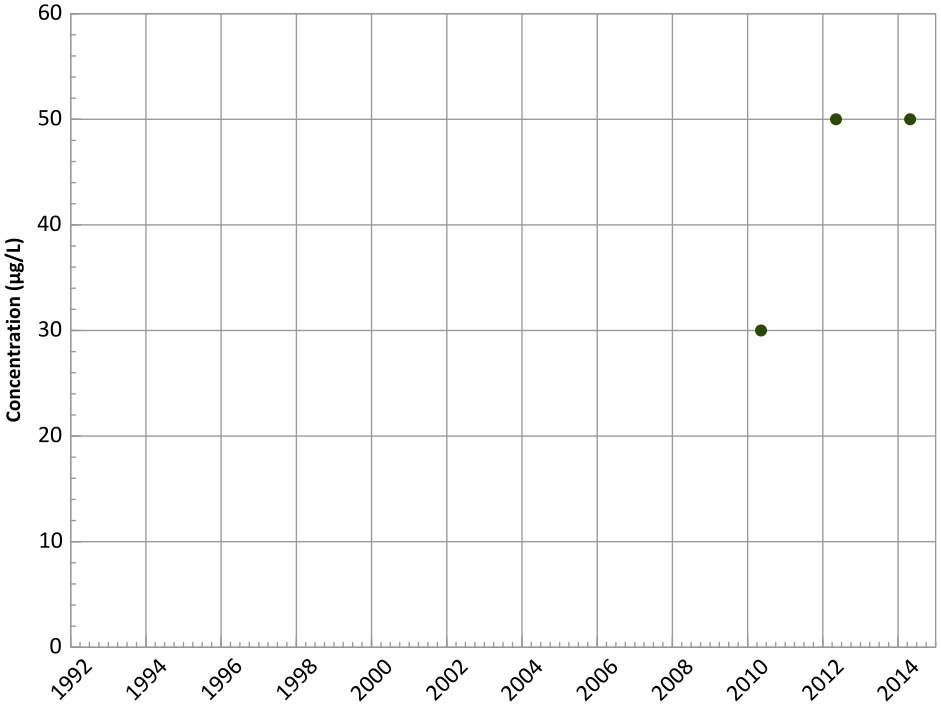
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

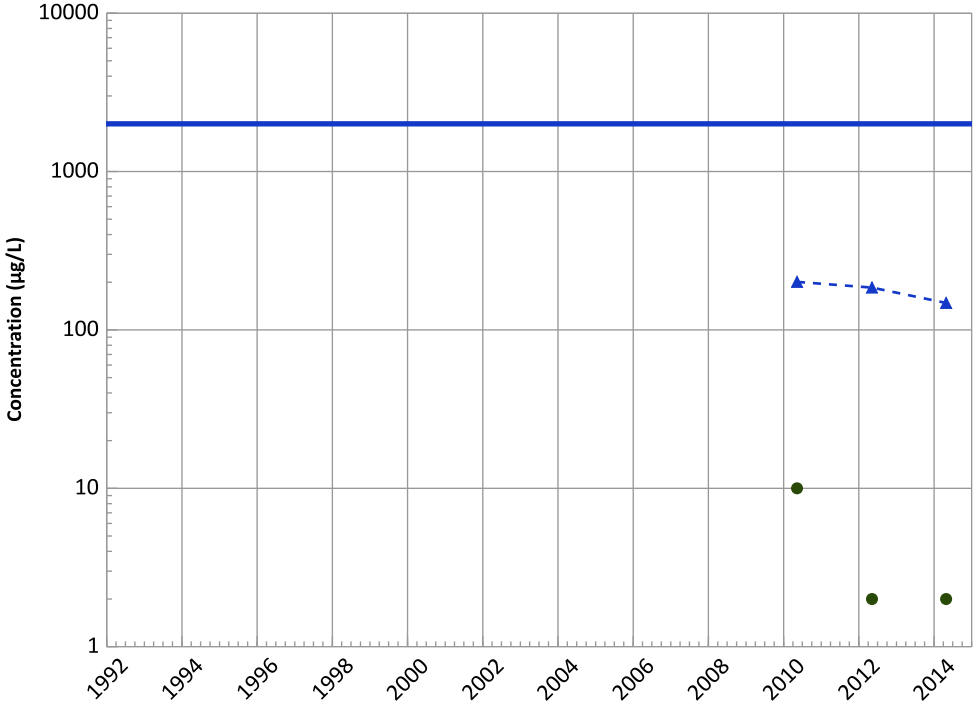


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Barium Trend



Concentration Trend

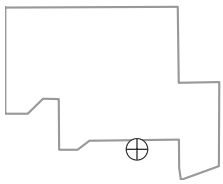
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

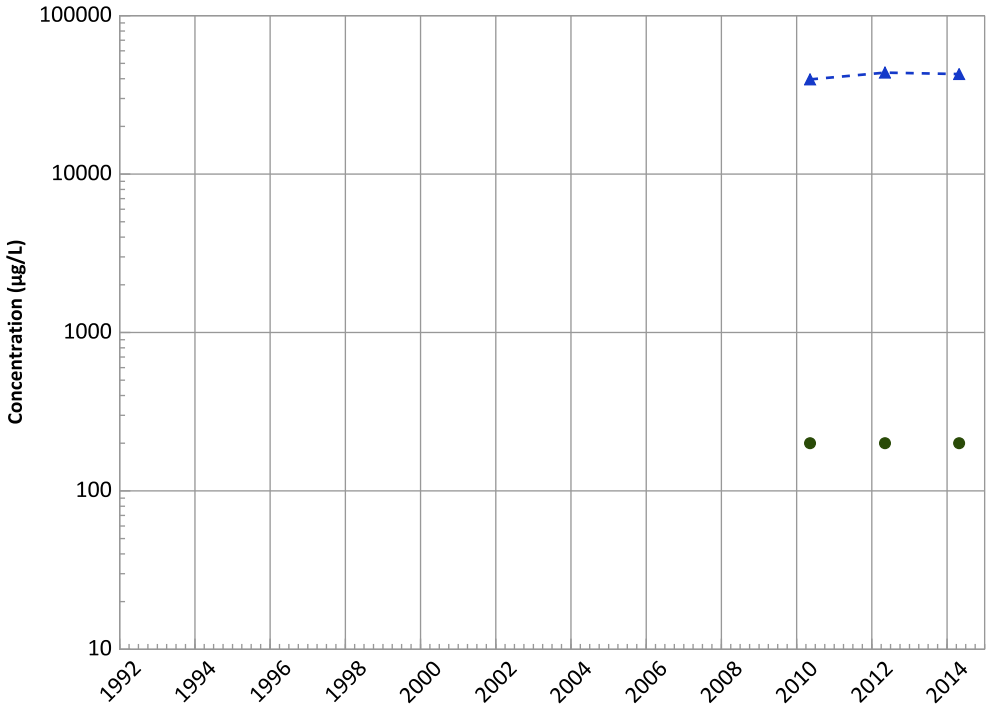
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

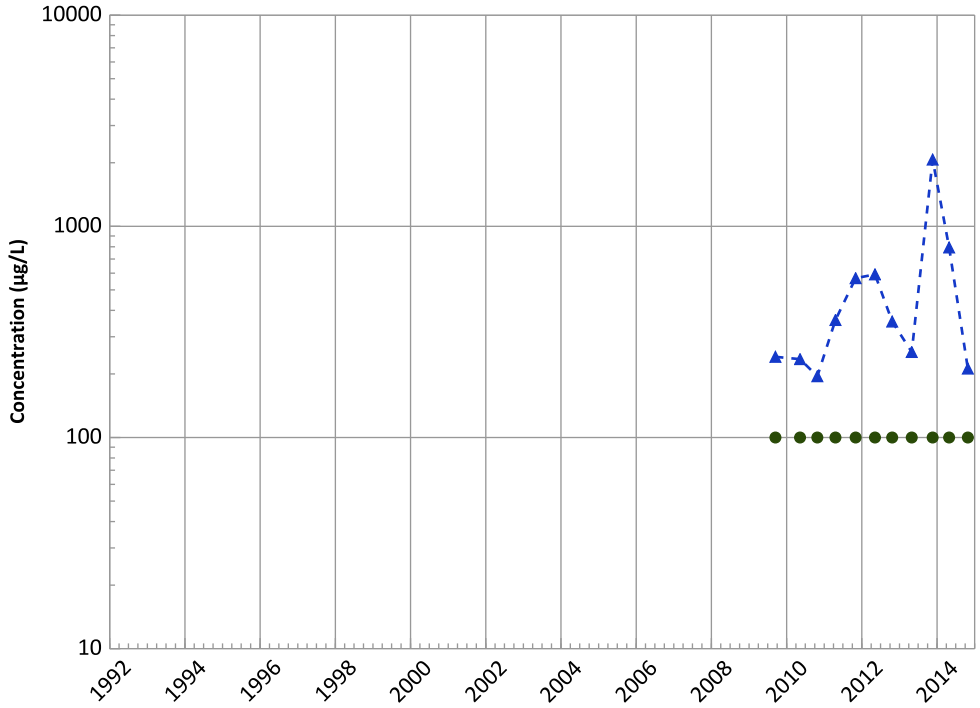


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

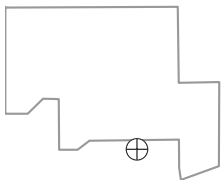
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

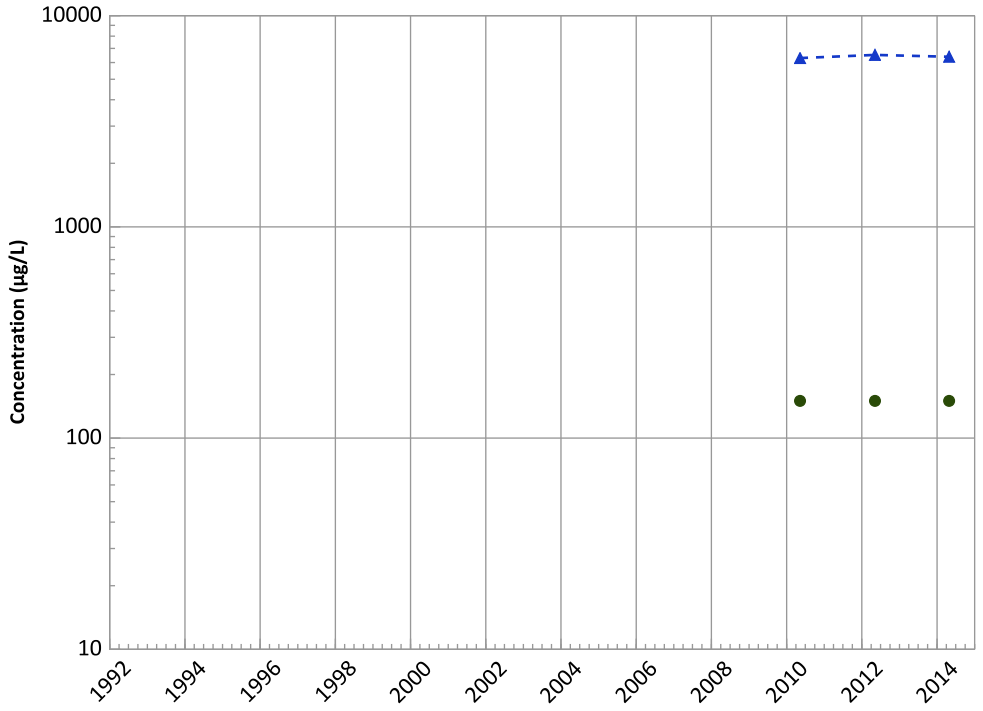
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

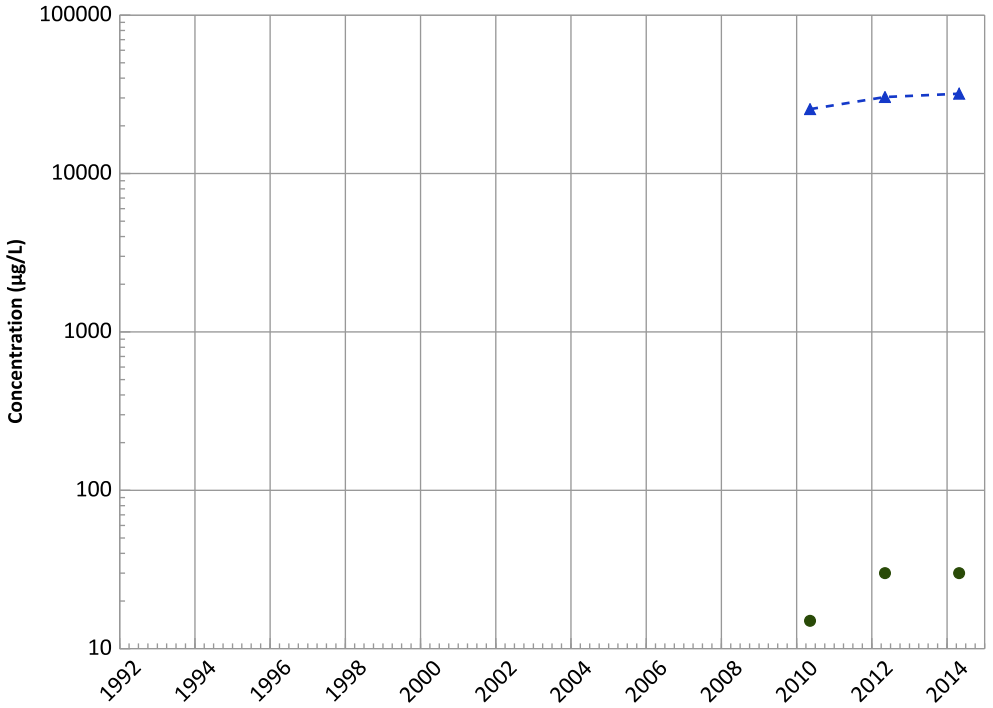


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

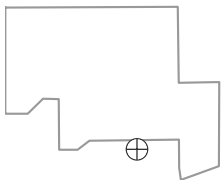
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

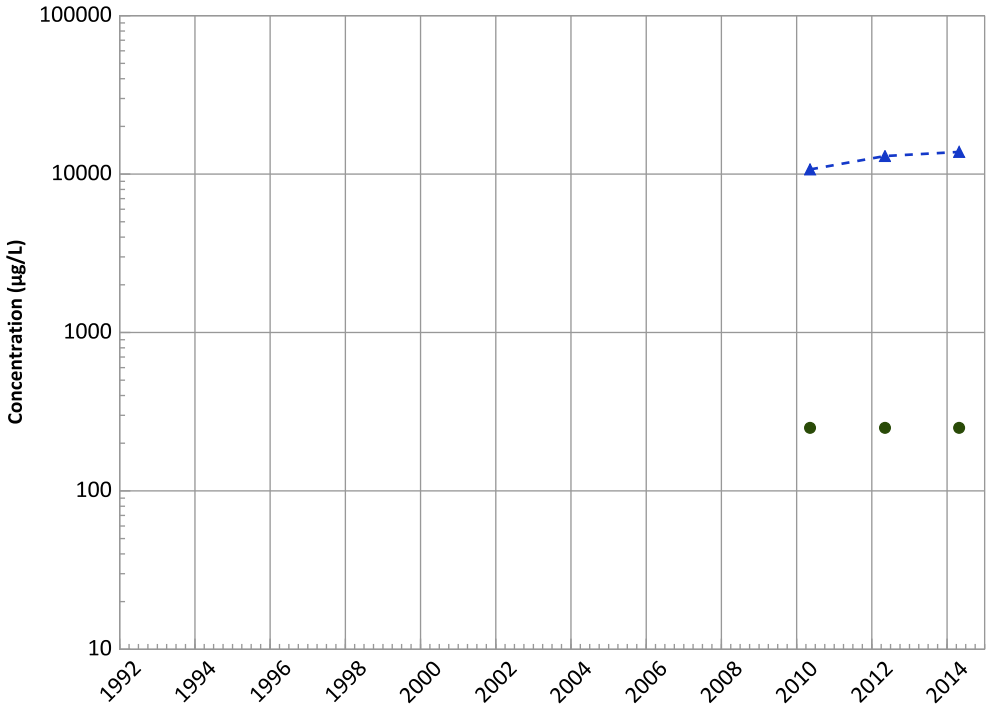
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1135 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

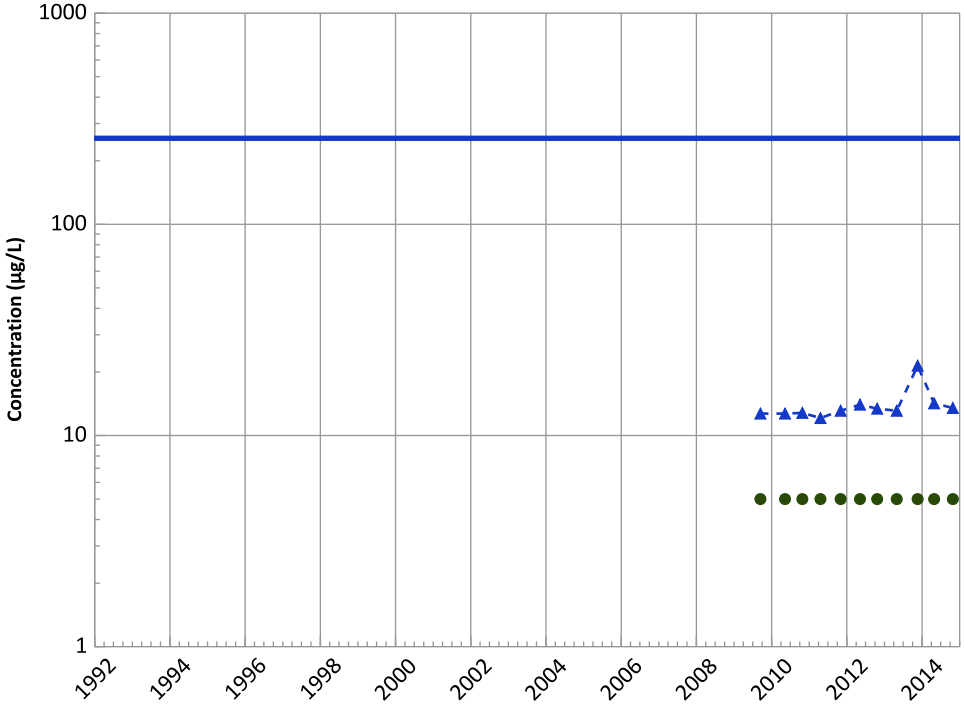


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Vanadium Trend



Concentration Trend

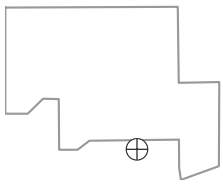
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

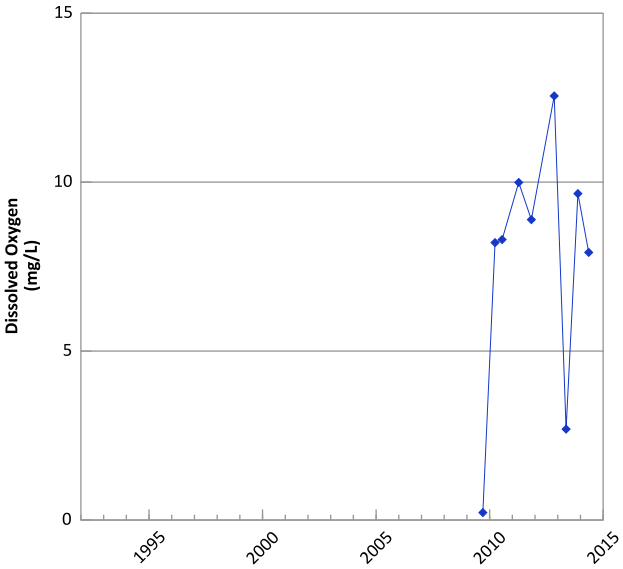
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/2008 to 10/27/2014
Analysis Date: 03/19/2015

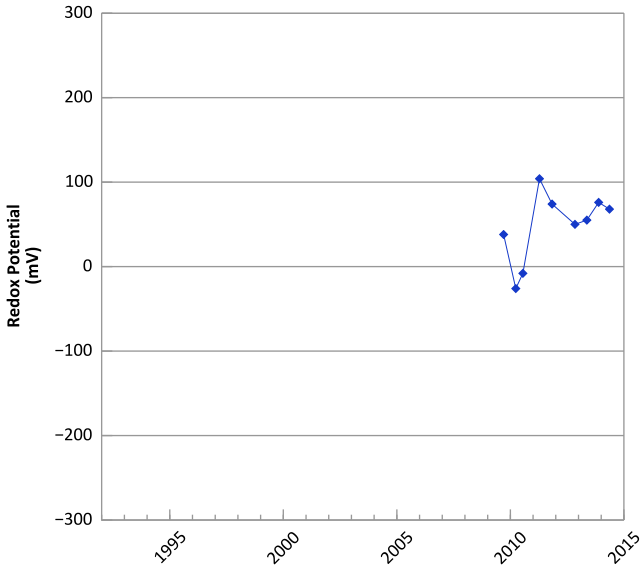
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

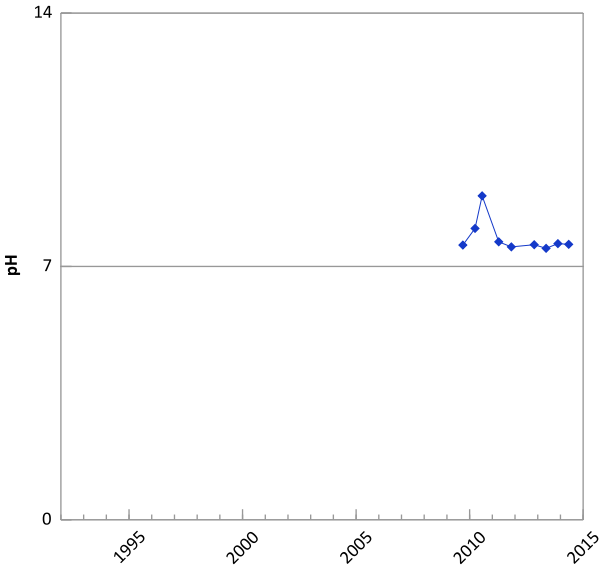
Well Location

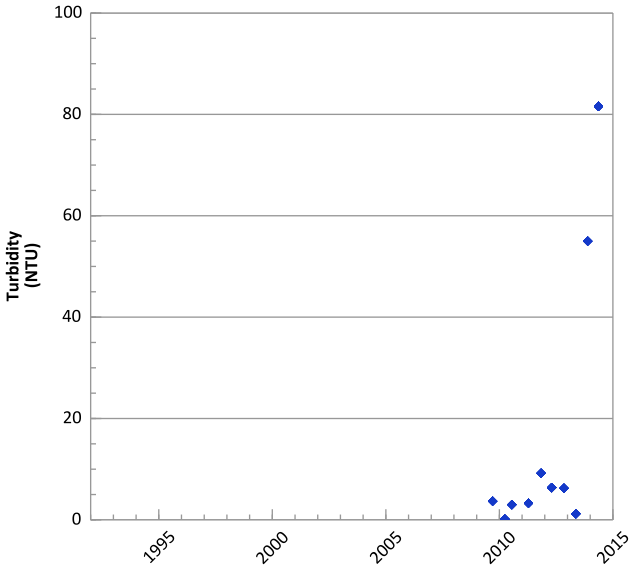


PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



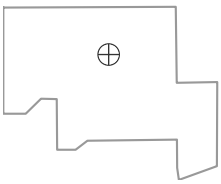






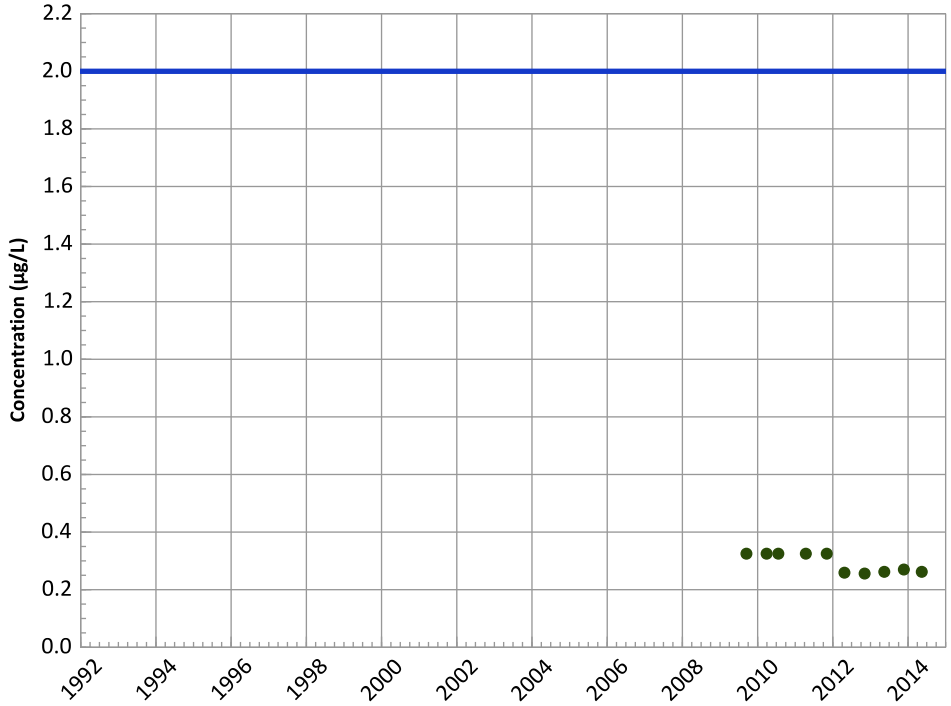
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

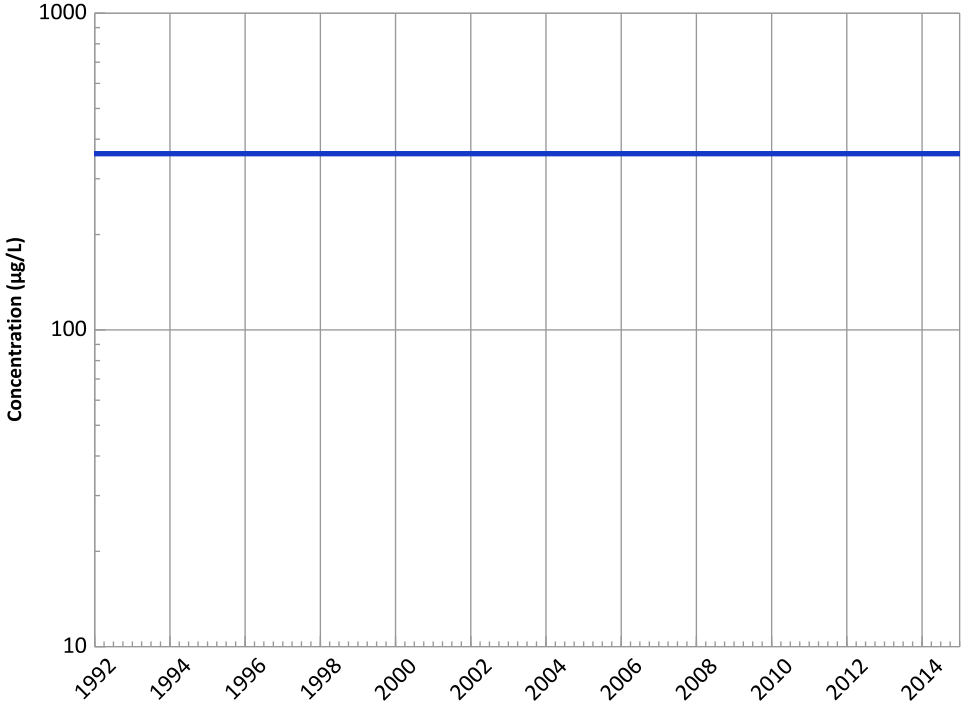


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

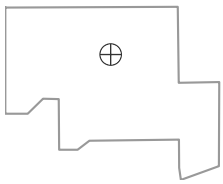
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

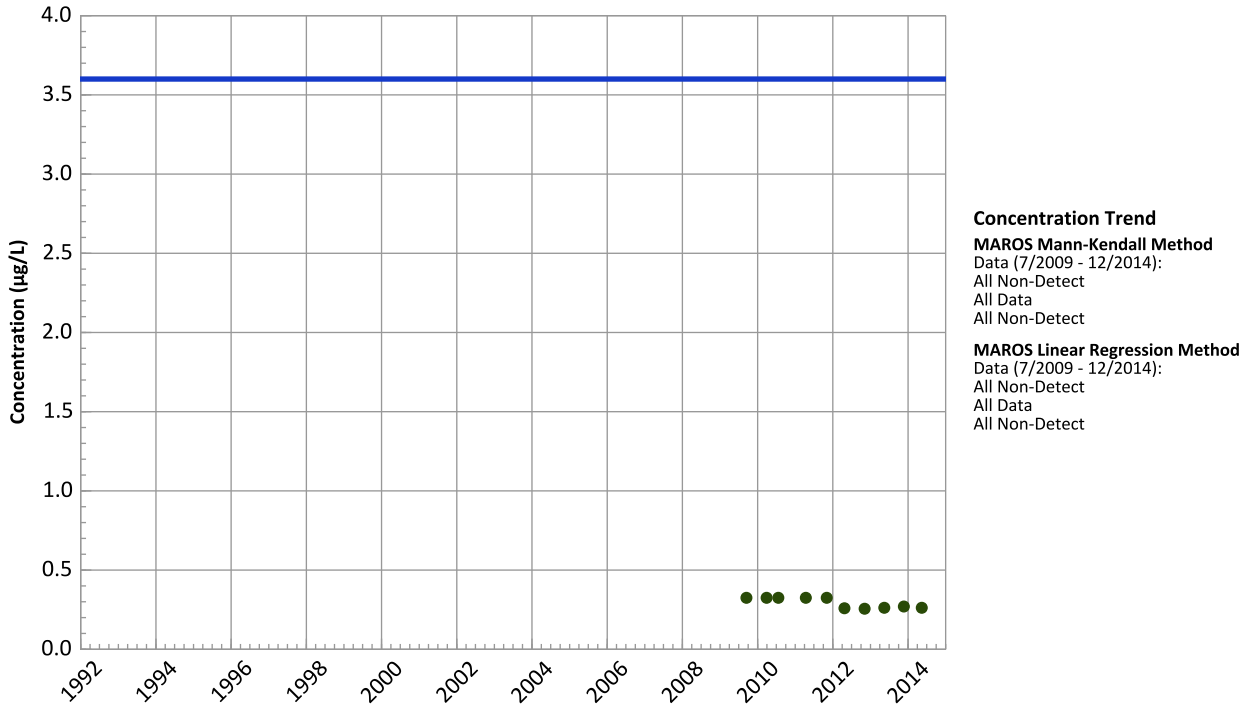
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

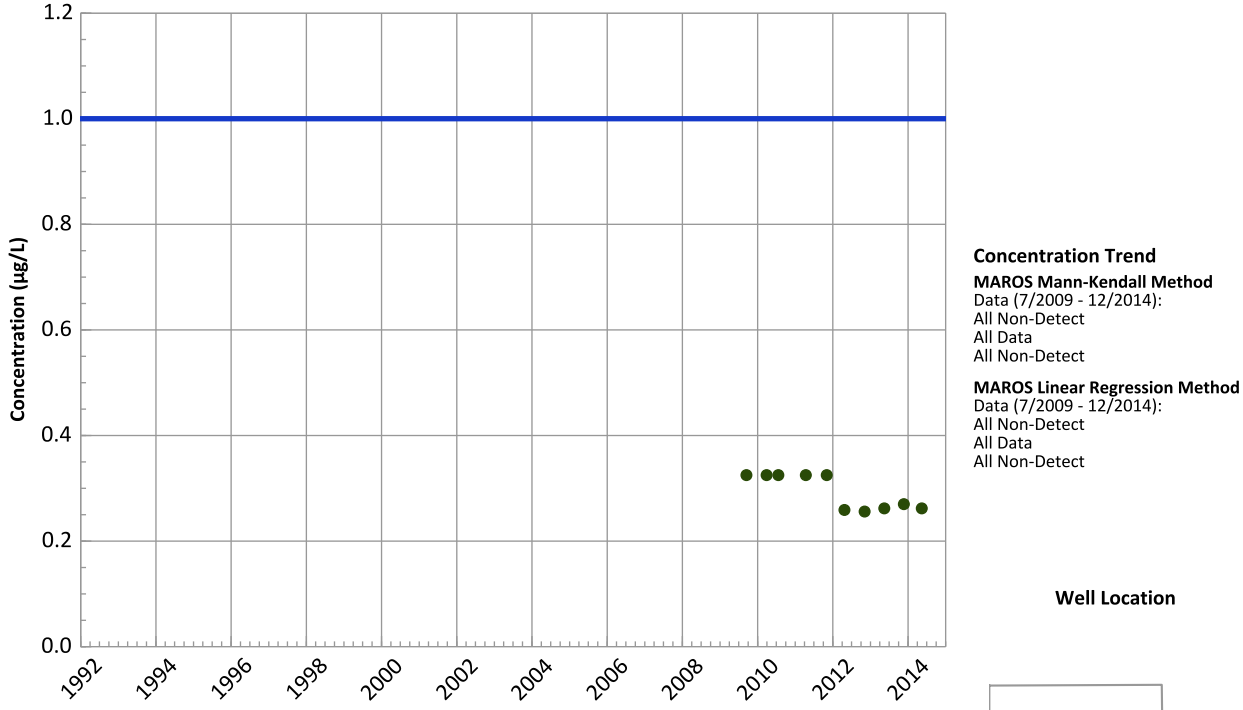


PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



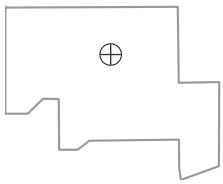
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

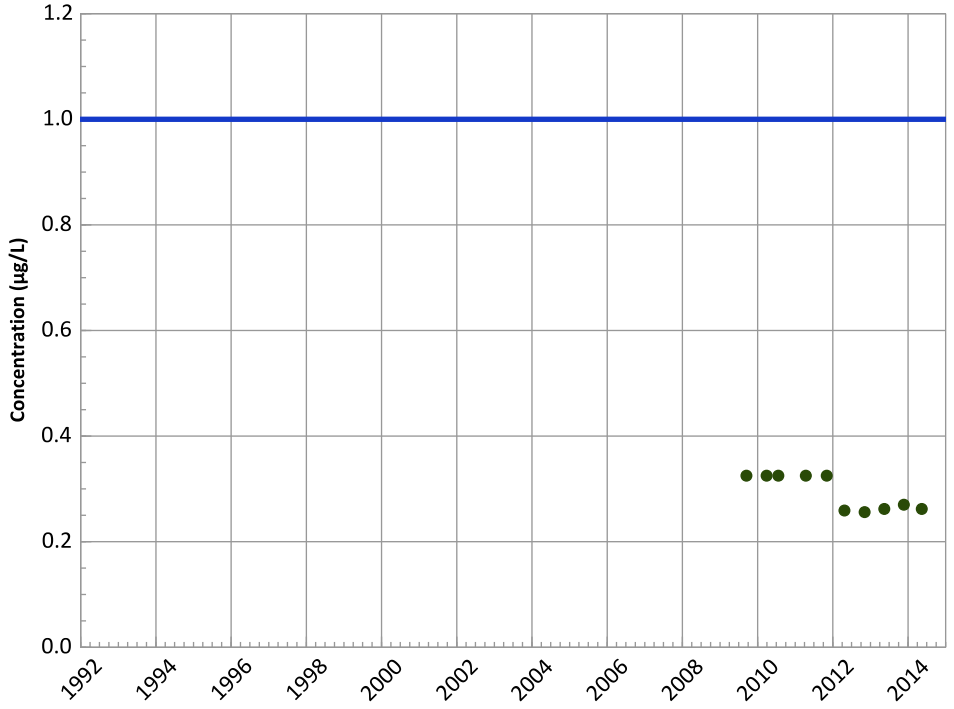
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

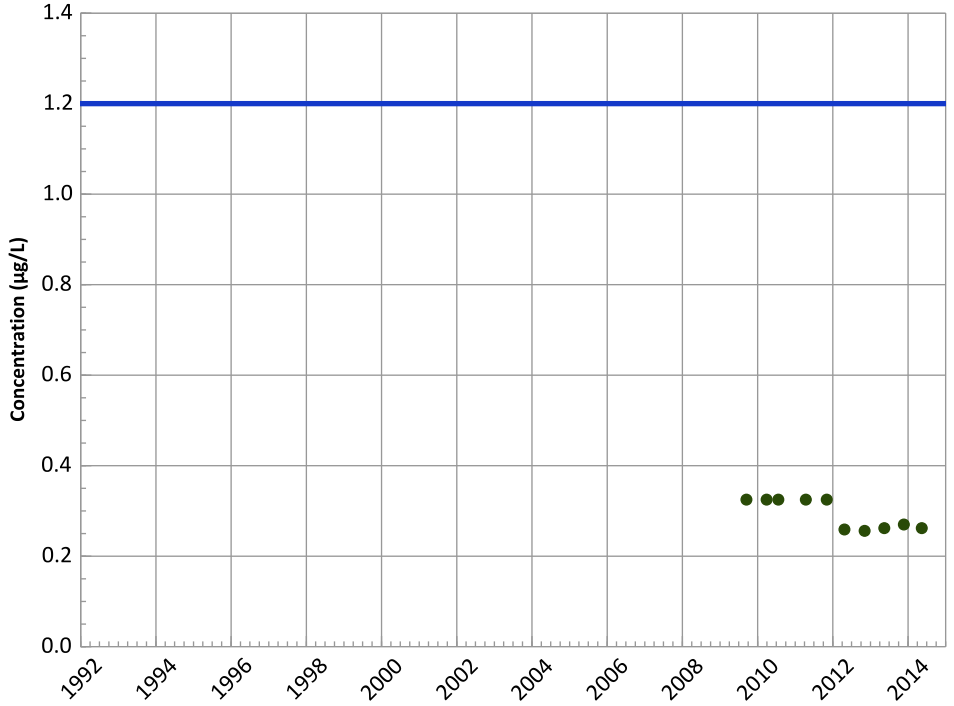


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

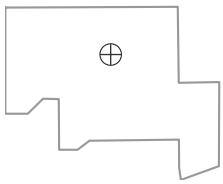
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

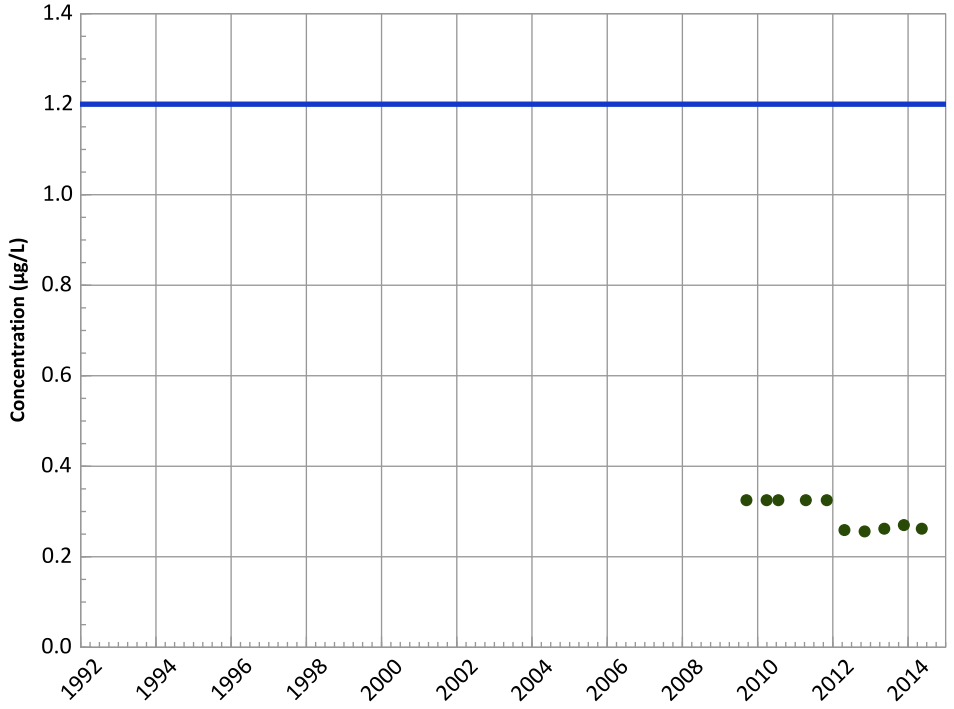
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

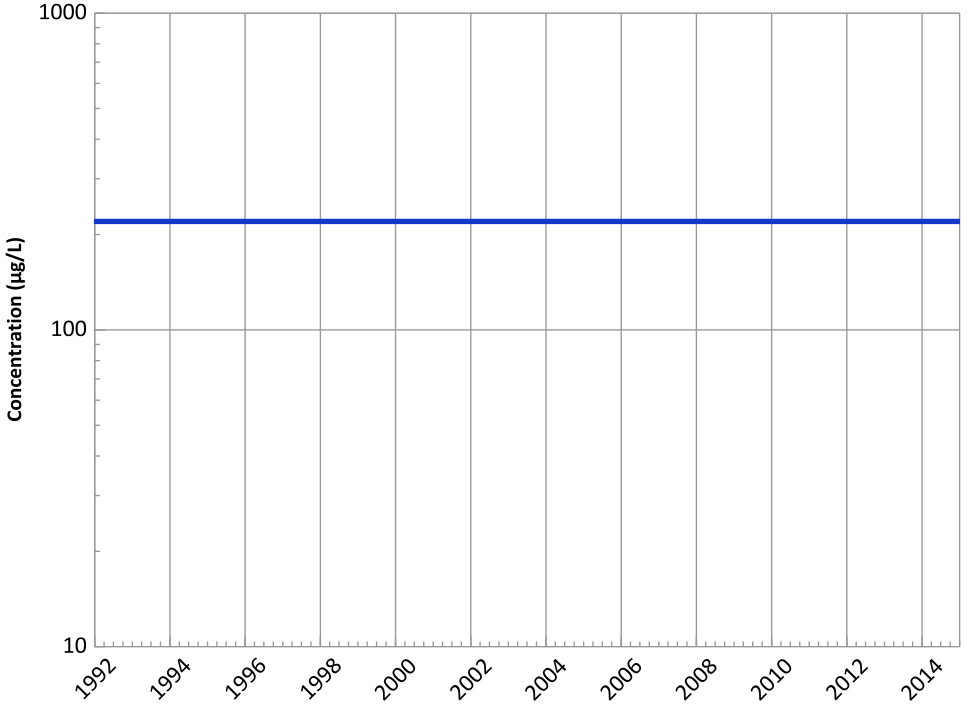


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

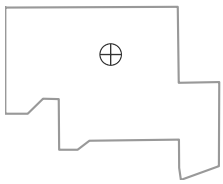
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

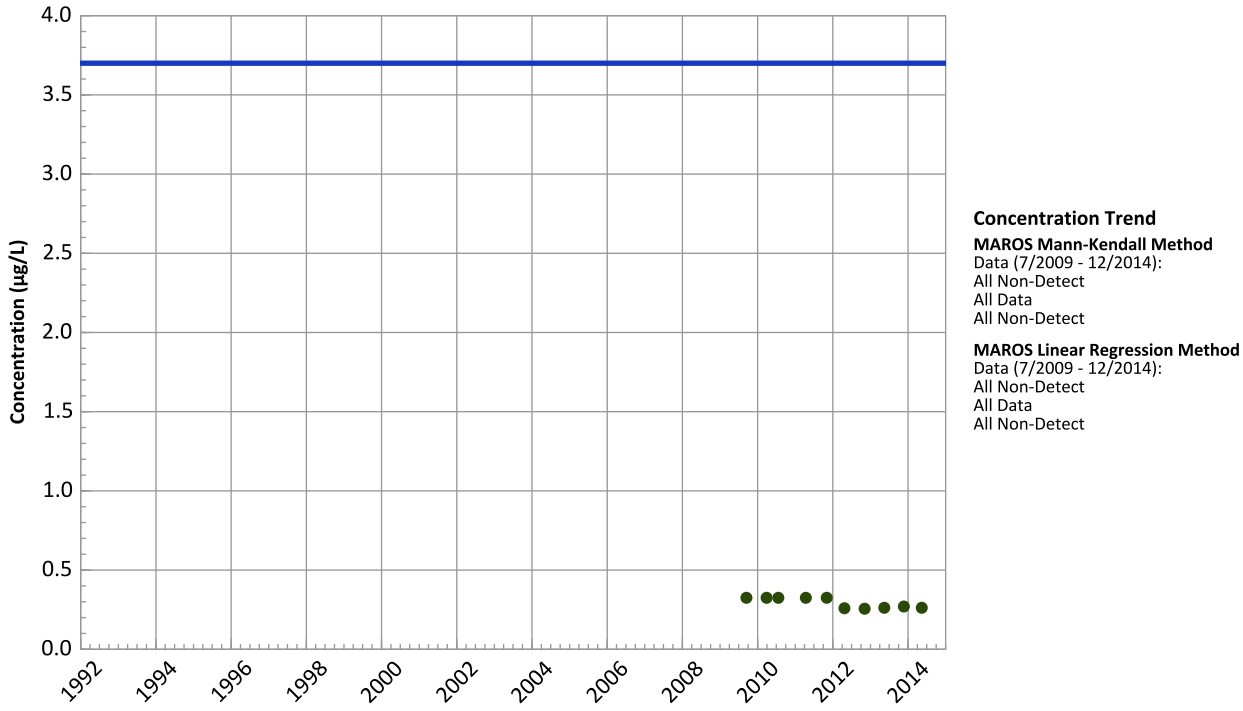
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

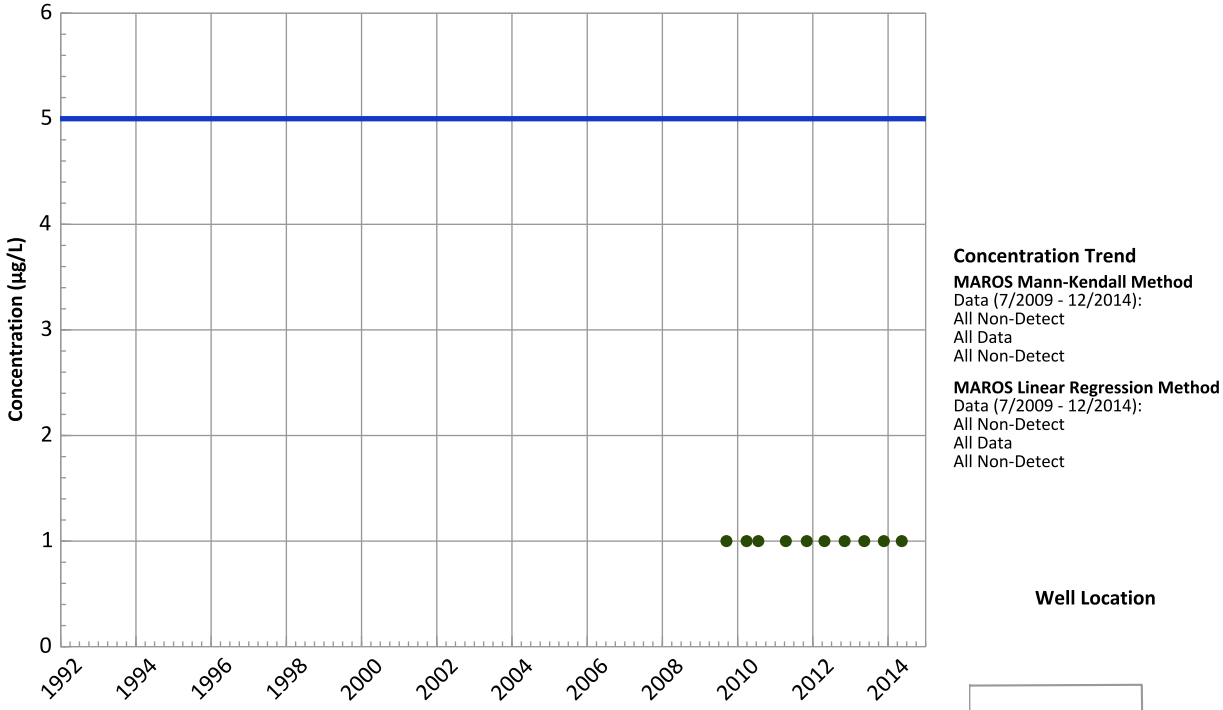


PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



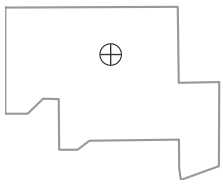
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

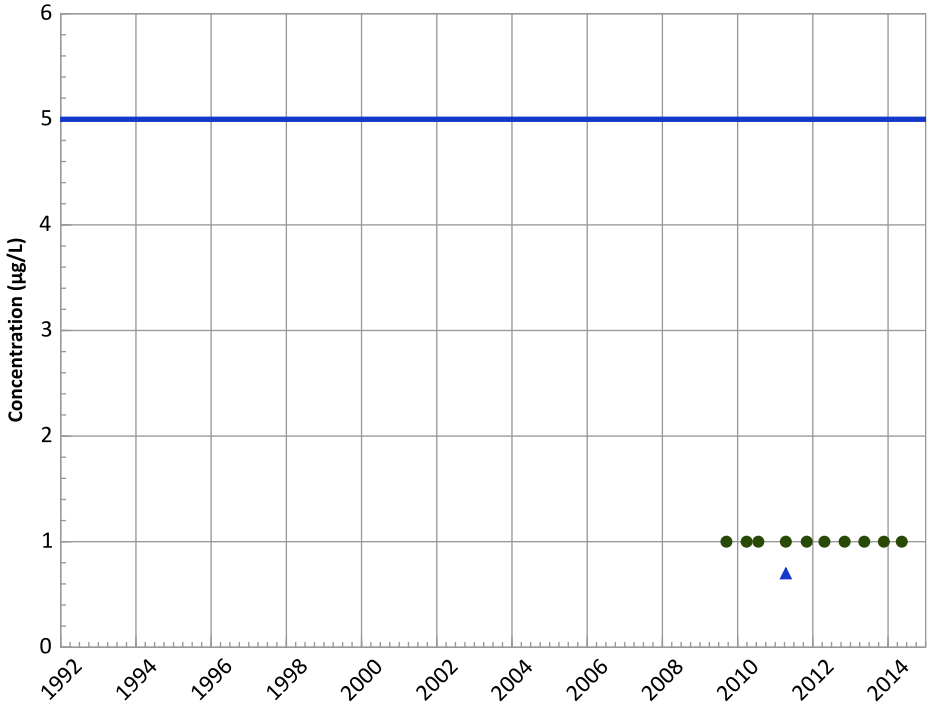
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

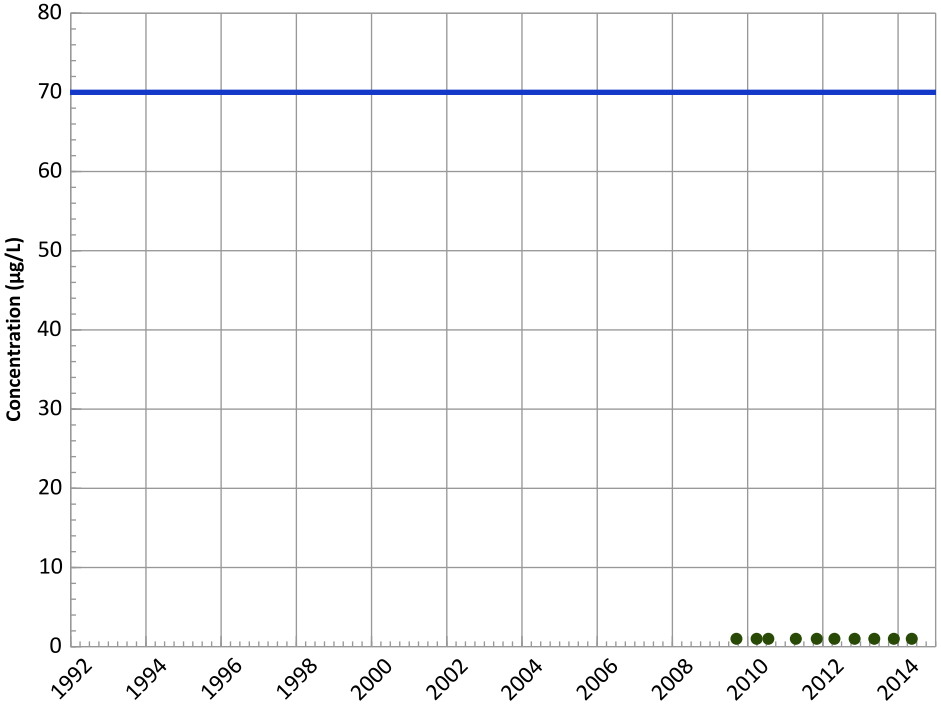


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

cis-1,2-Dichloroethene Trend



Concentration Trend

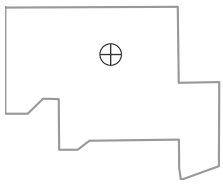
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

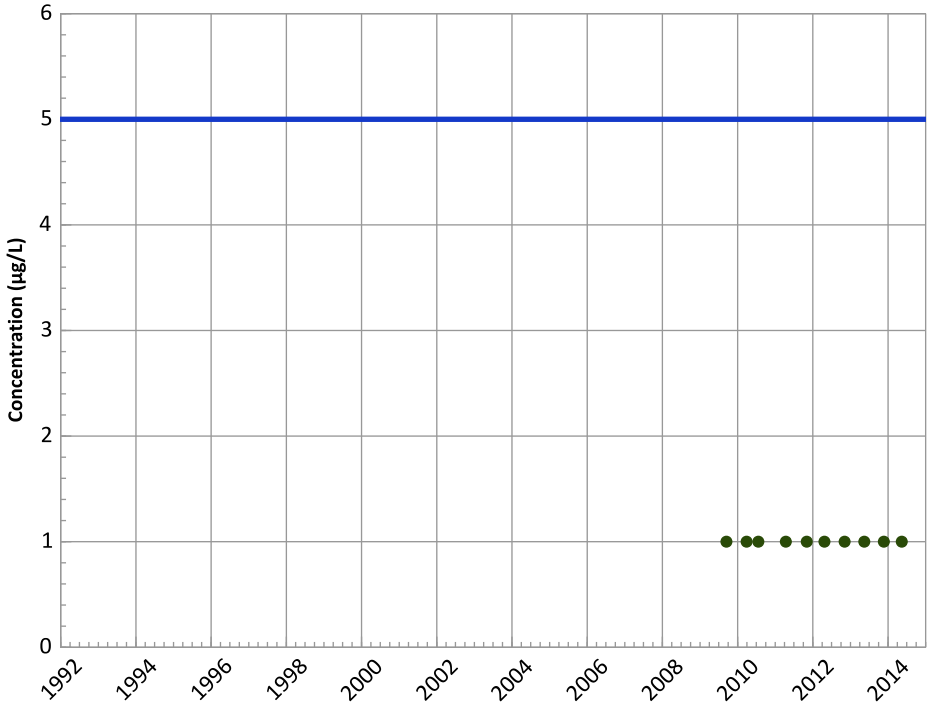
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━ Groundwater Protection Standard

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

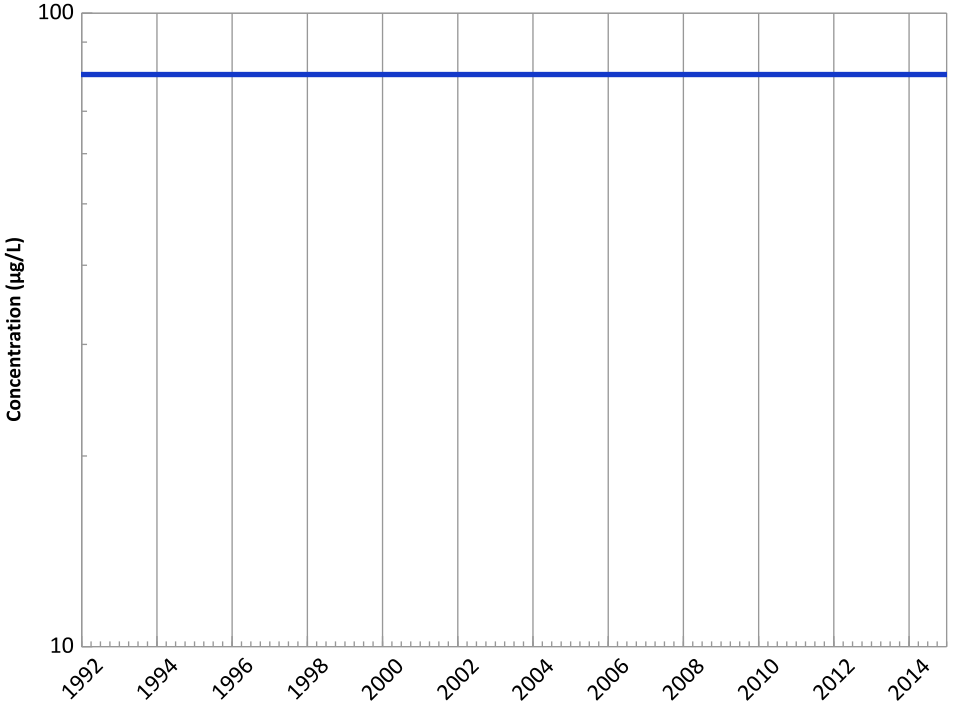


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

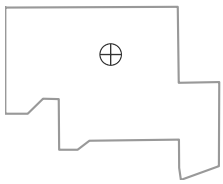
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

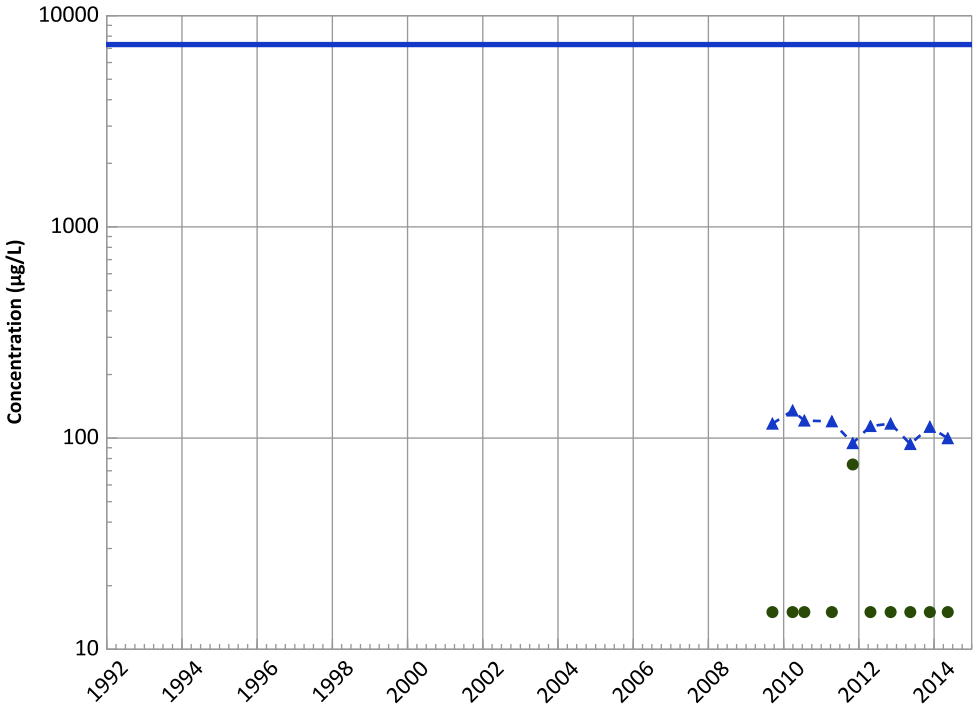
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

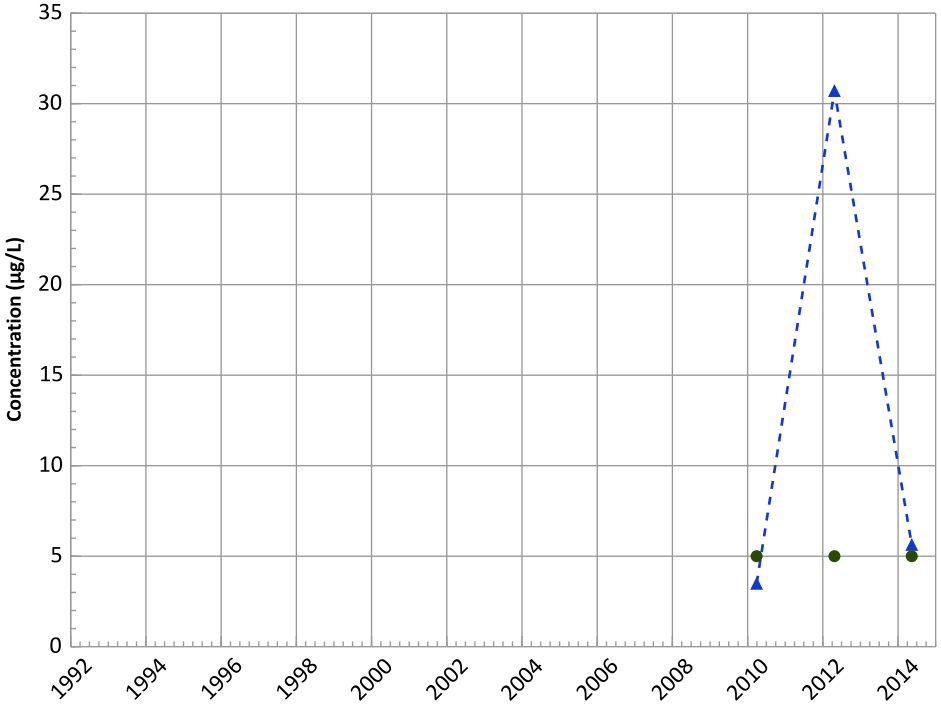


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Manganese Trend



Concentration Trend

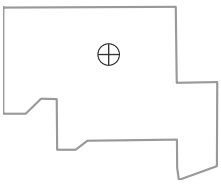
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

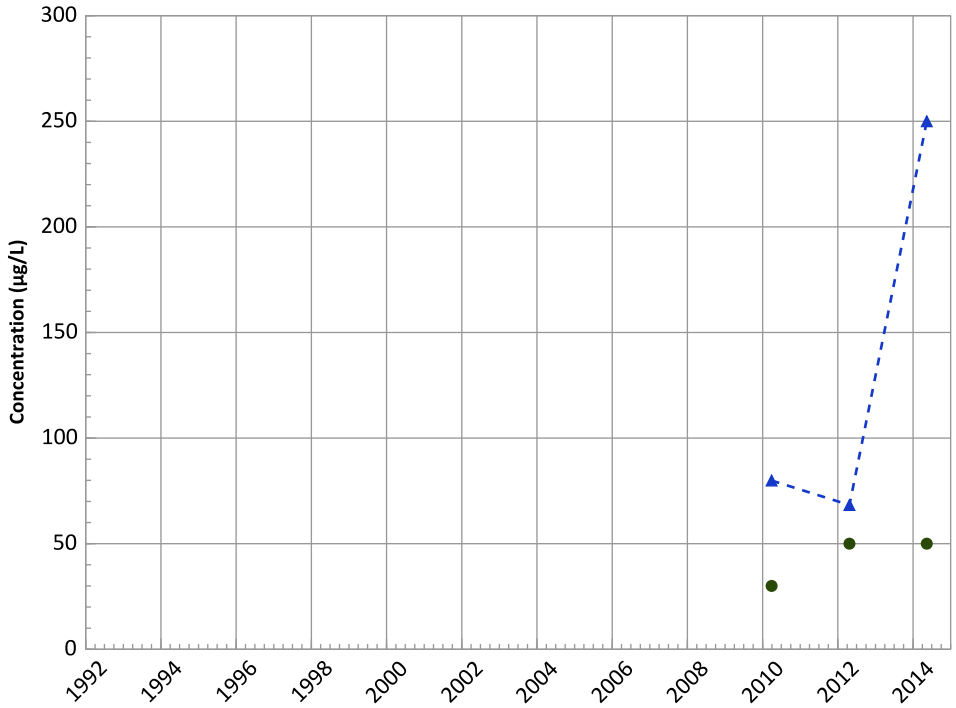
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

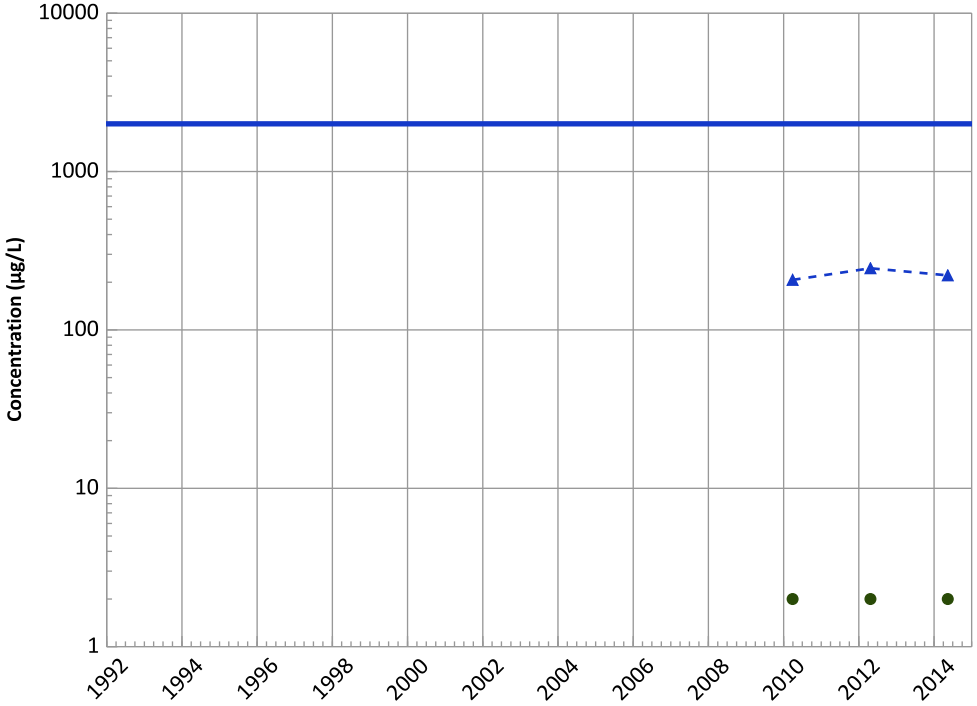


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

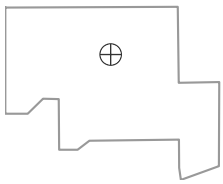
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

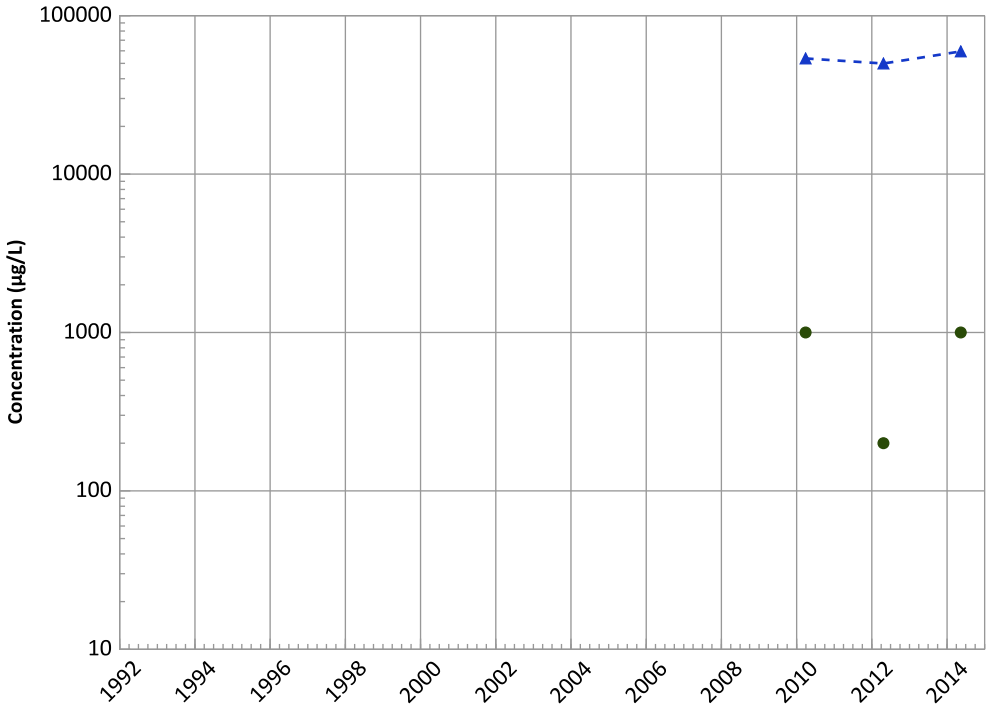
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

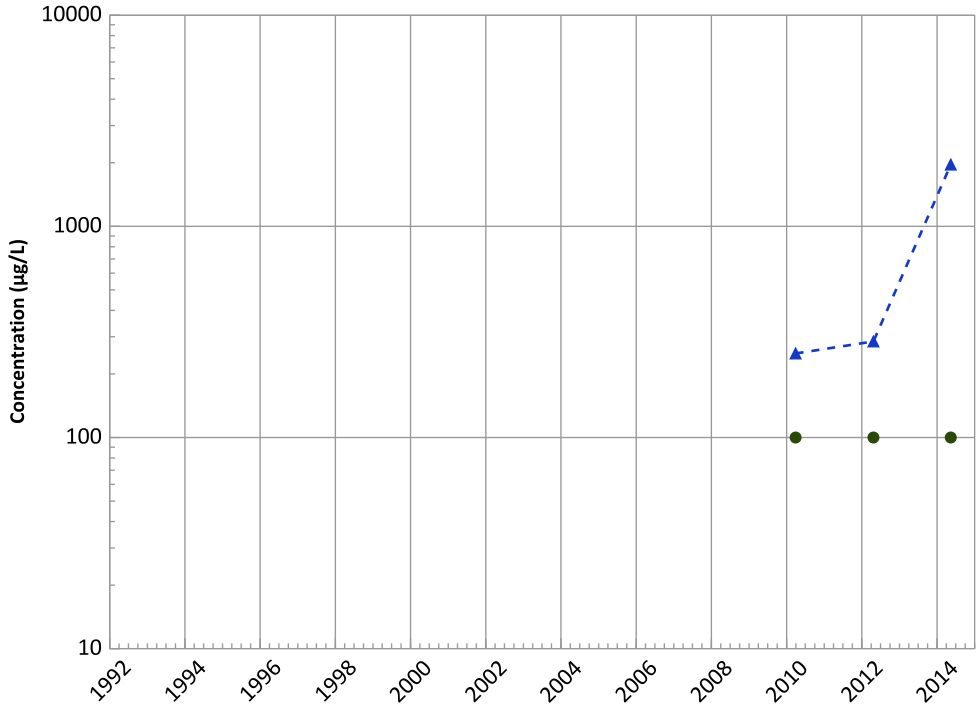


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

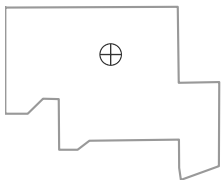
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

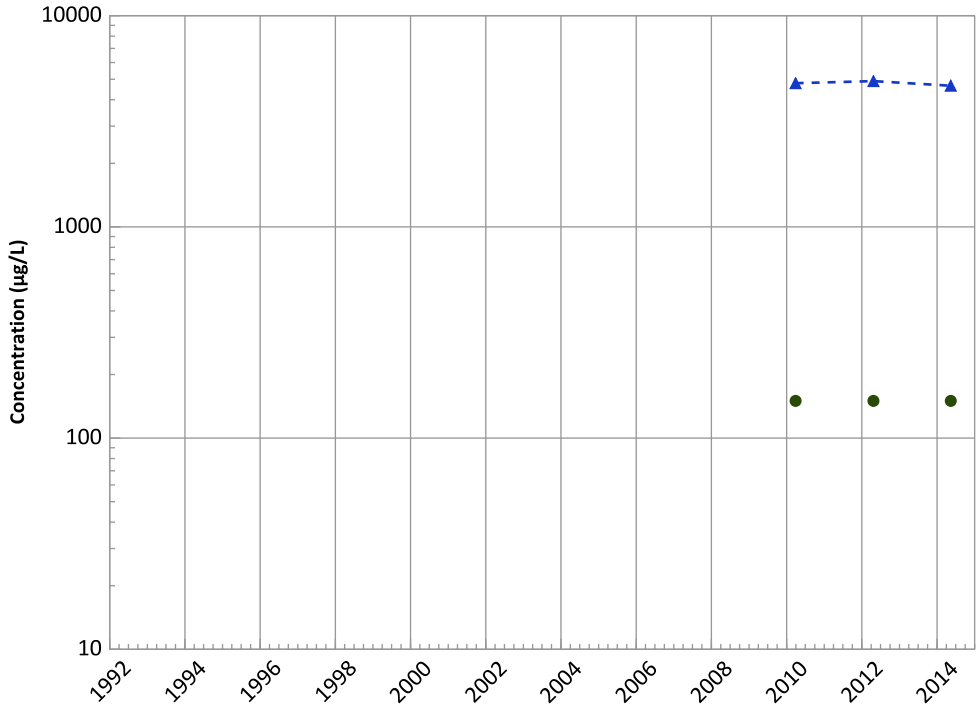
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

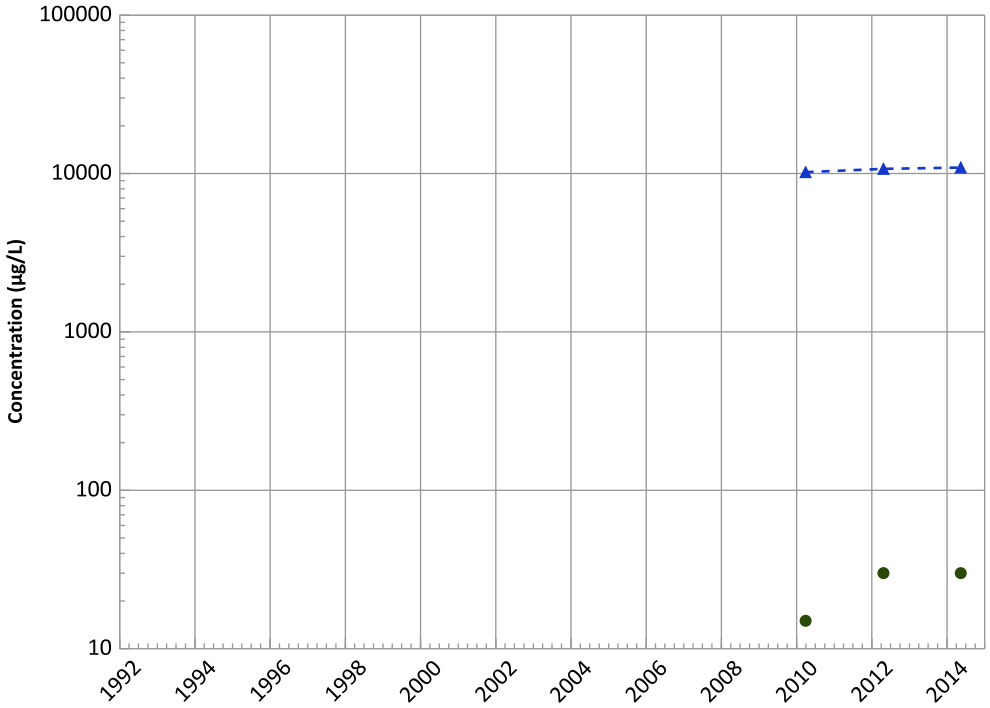


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

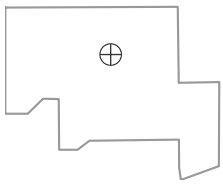
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

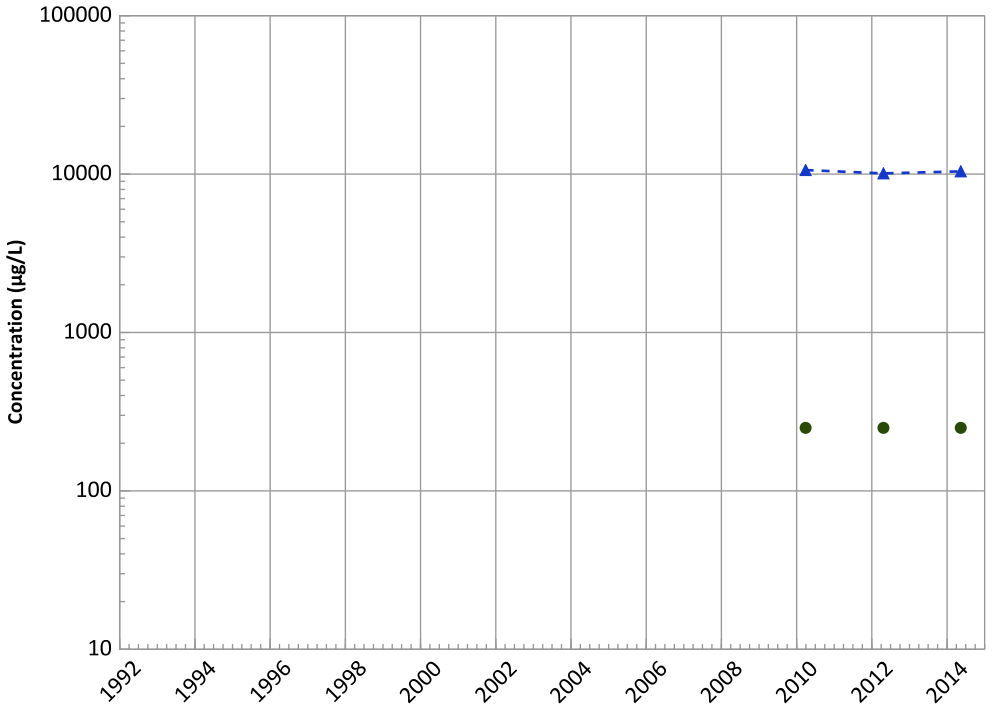
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1136 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

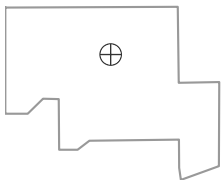
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

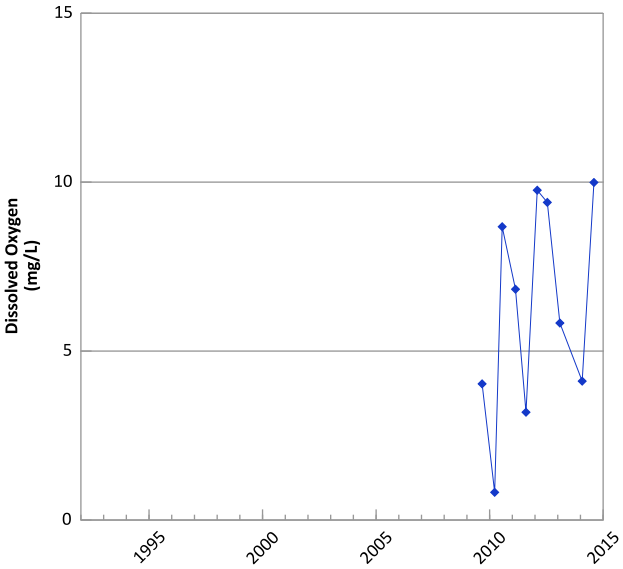
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/14/2009 to 05/14/2014
Analysis Date: 03/19/2015

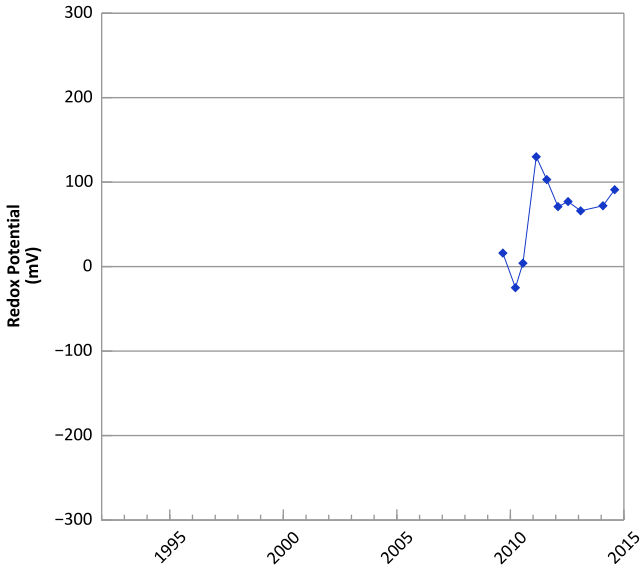
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

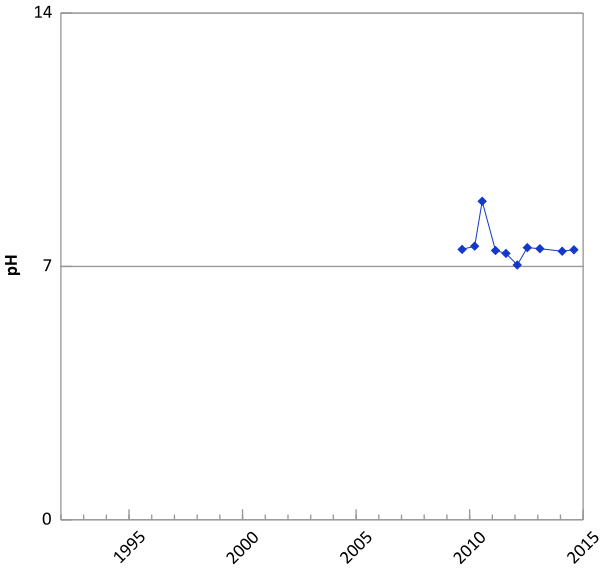
Well Location

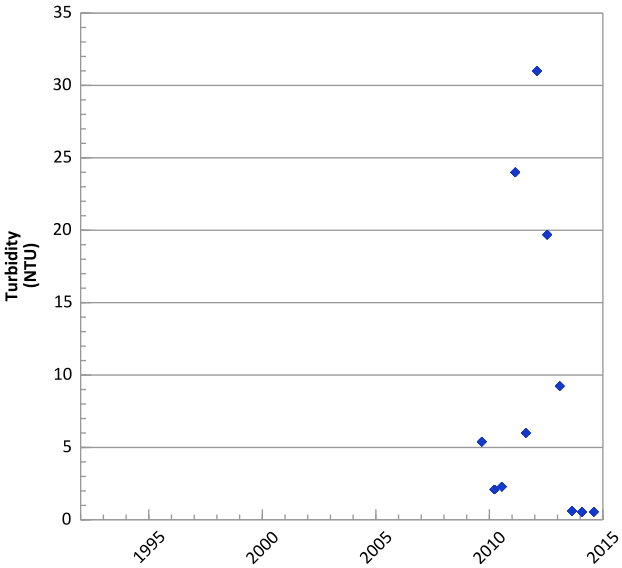


PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



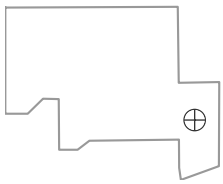






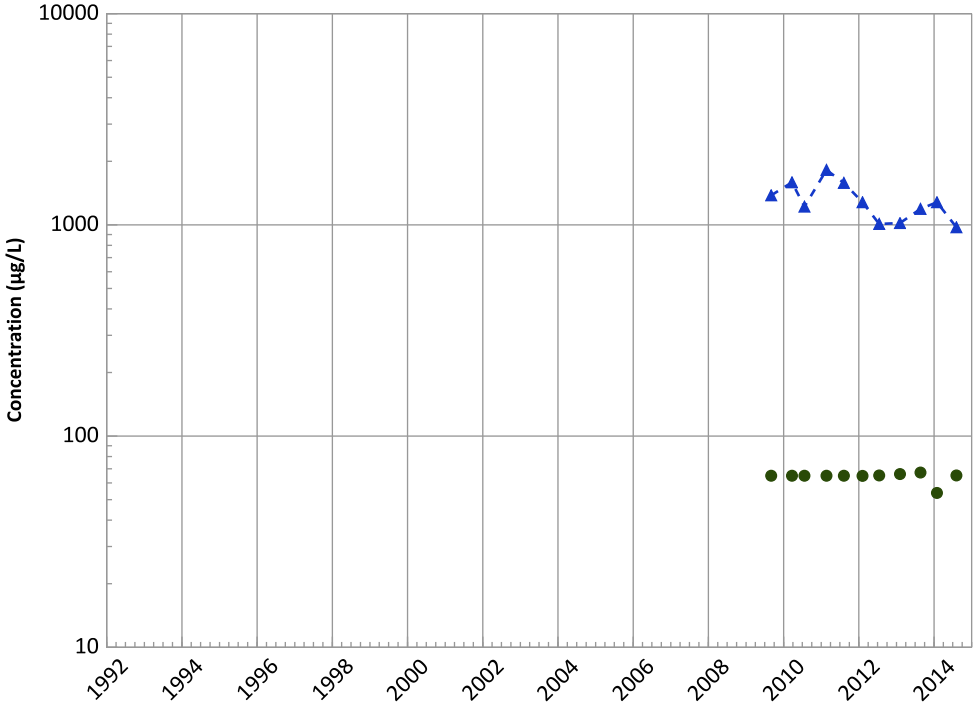
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

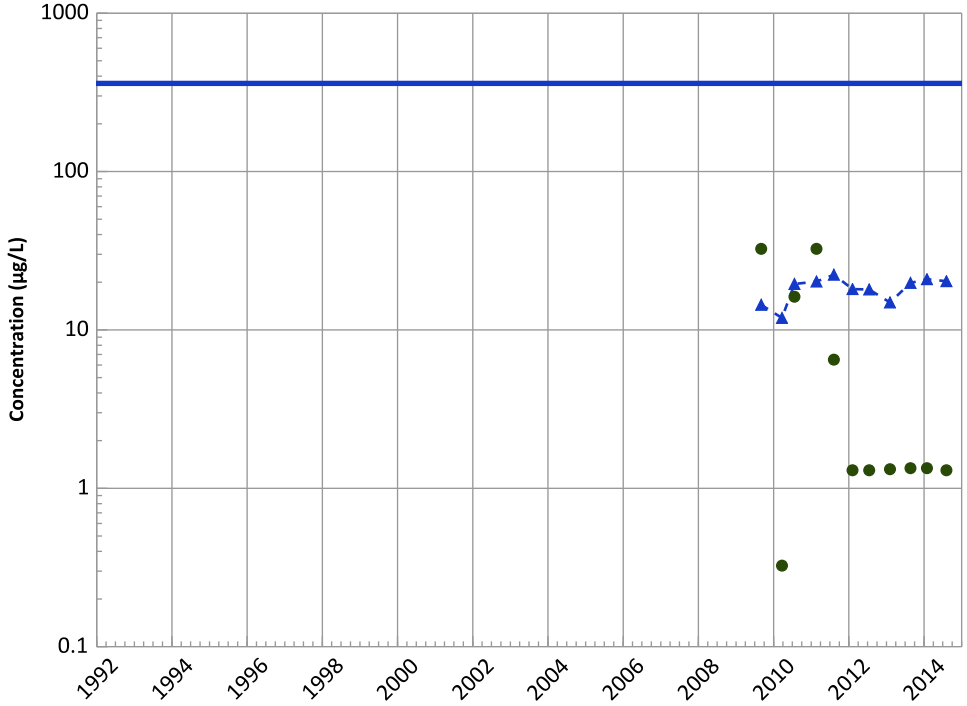


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

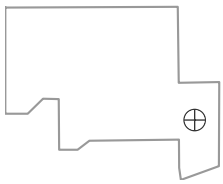
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

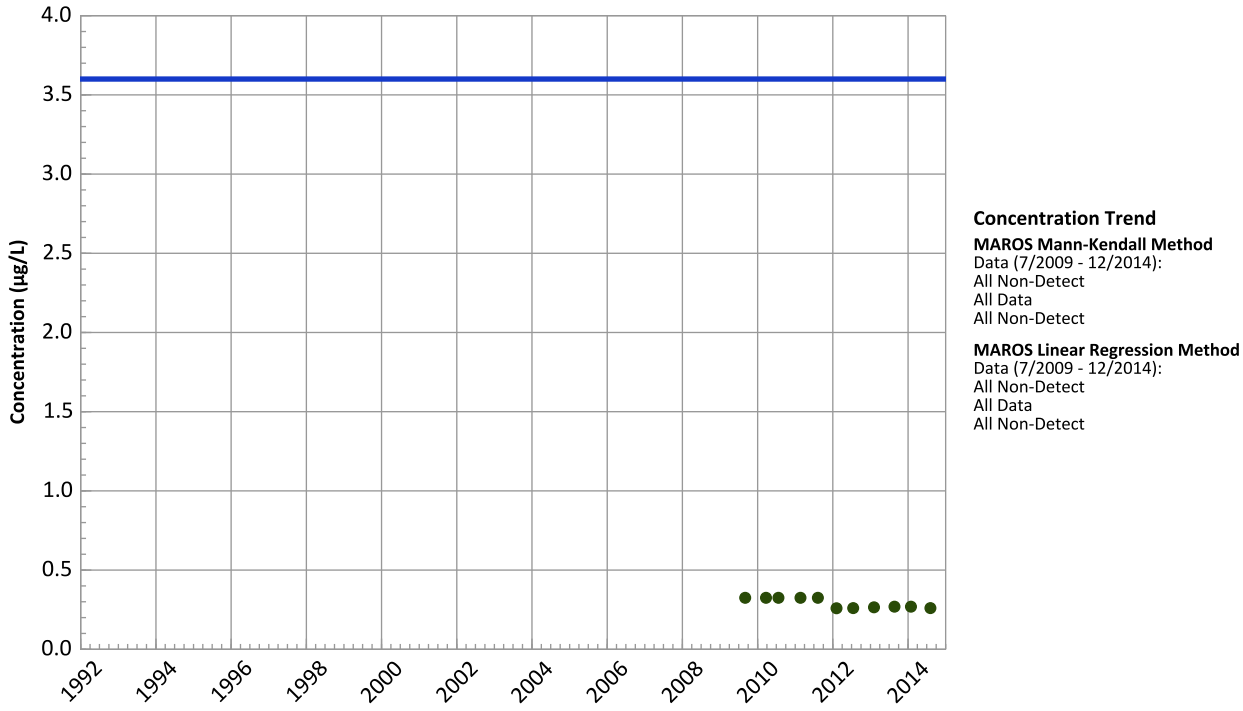
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ═══ Groundwater Protection Standard

Well Location

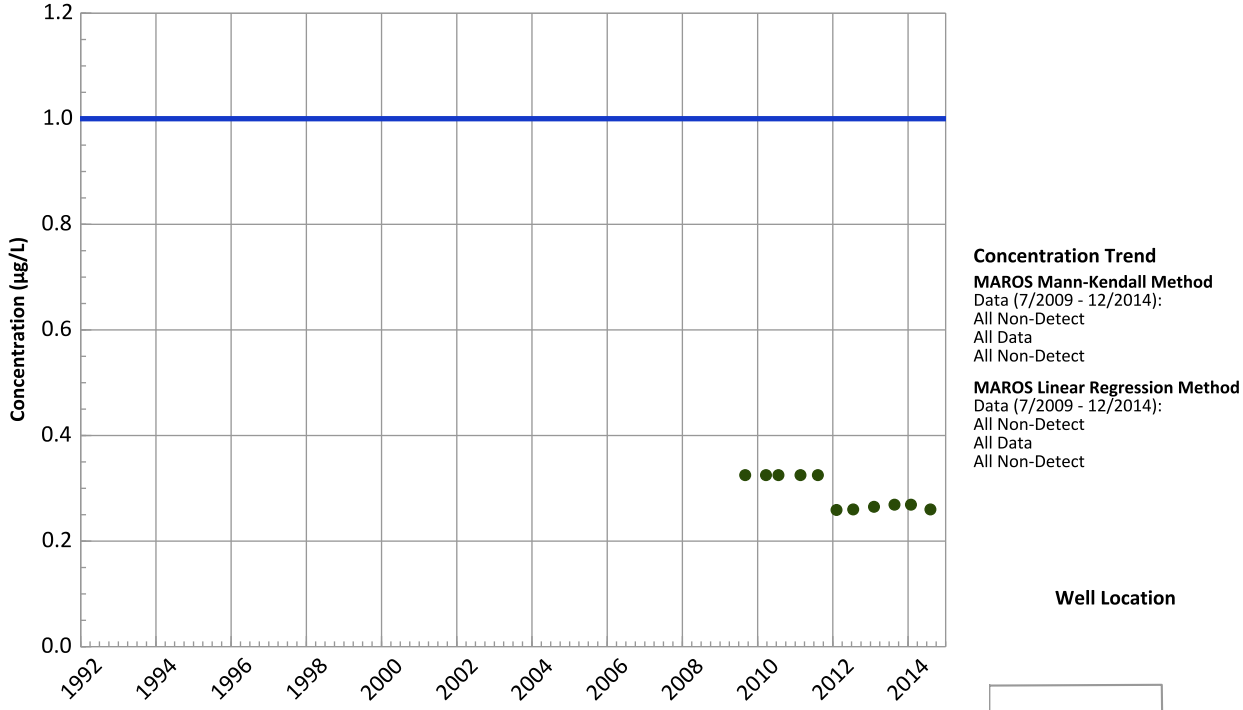


PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



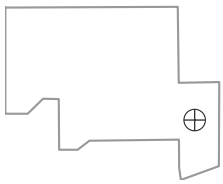
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

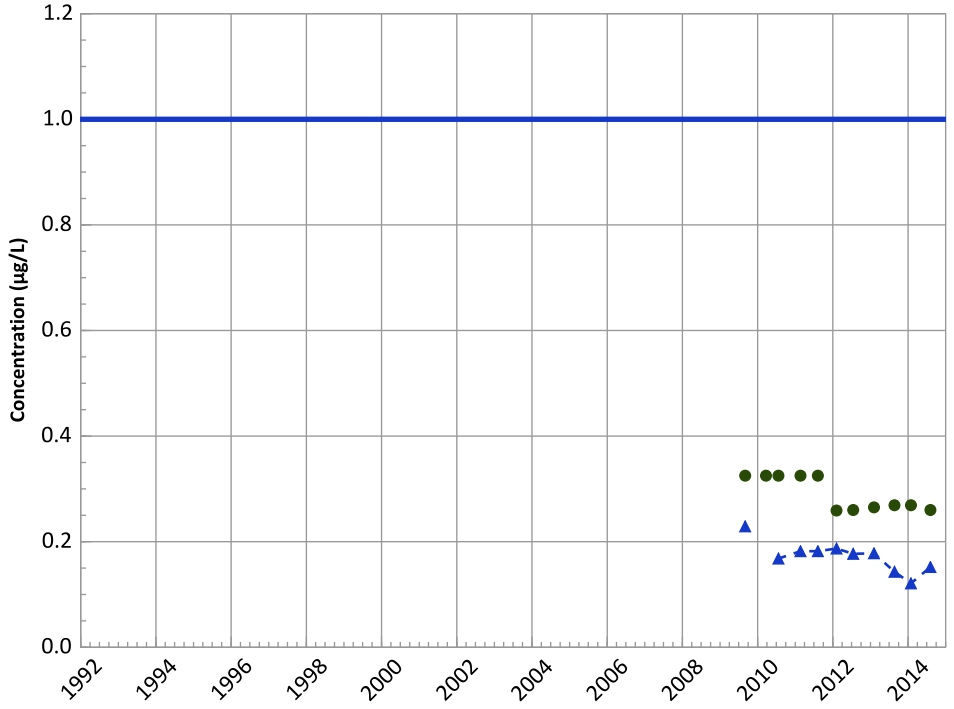
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

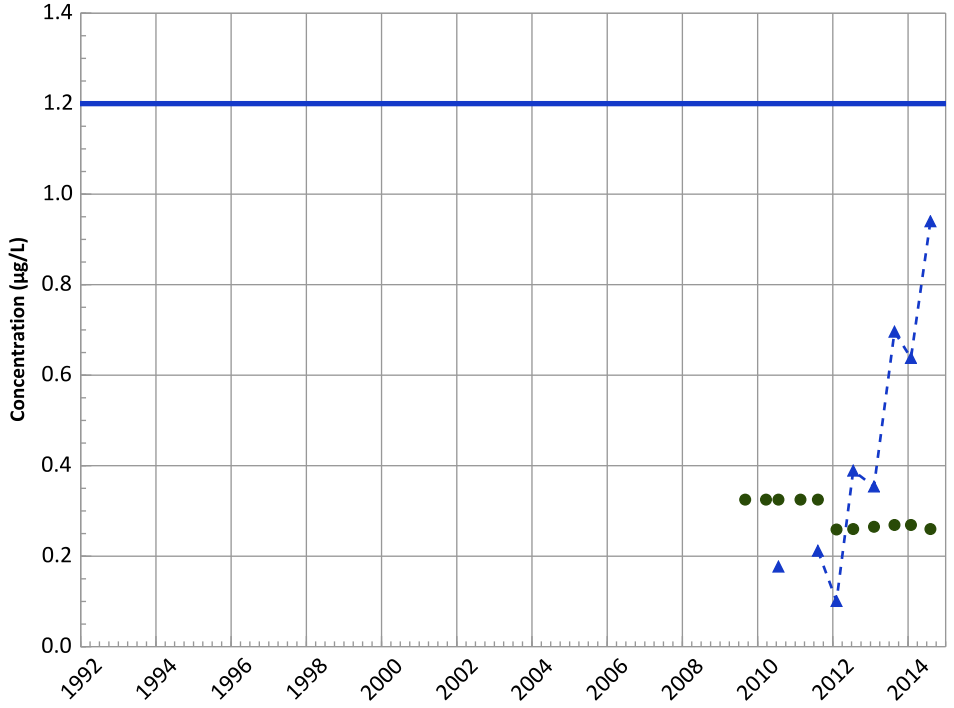


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

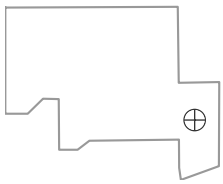
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

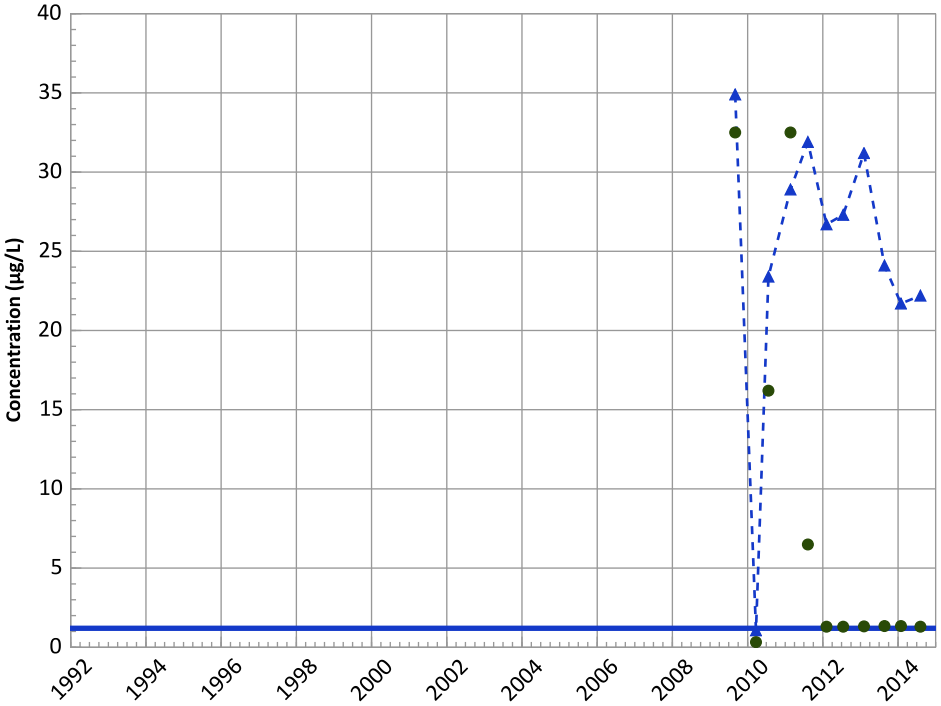
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

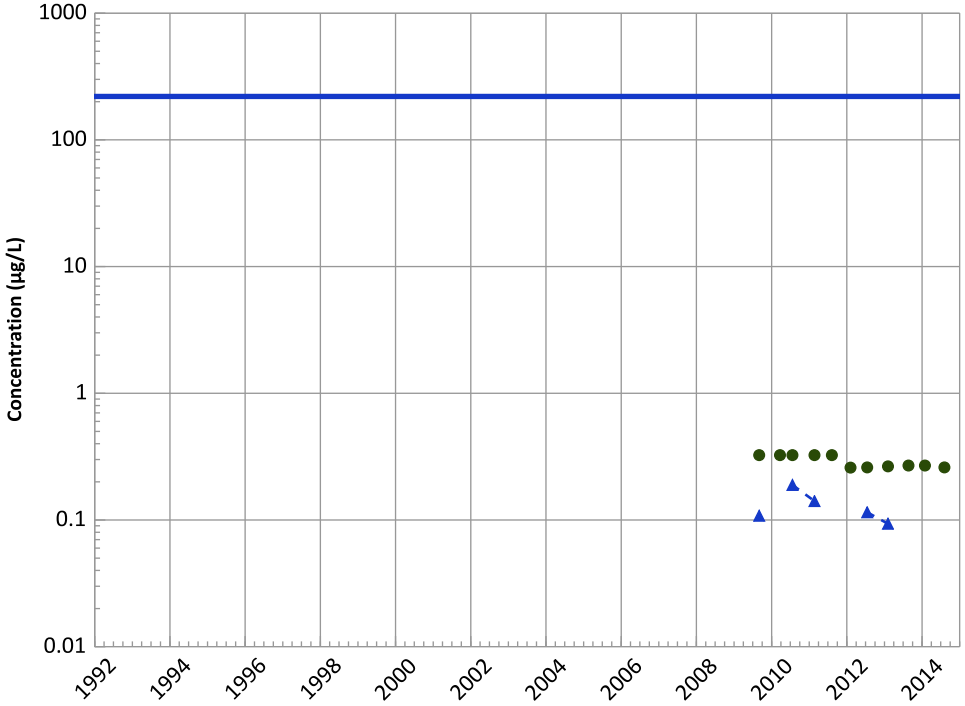


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

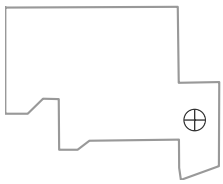
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

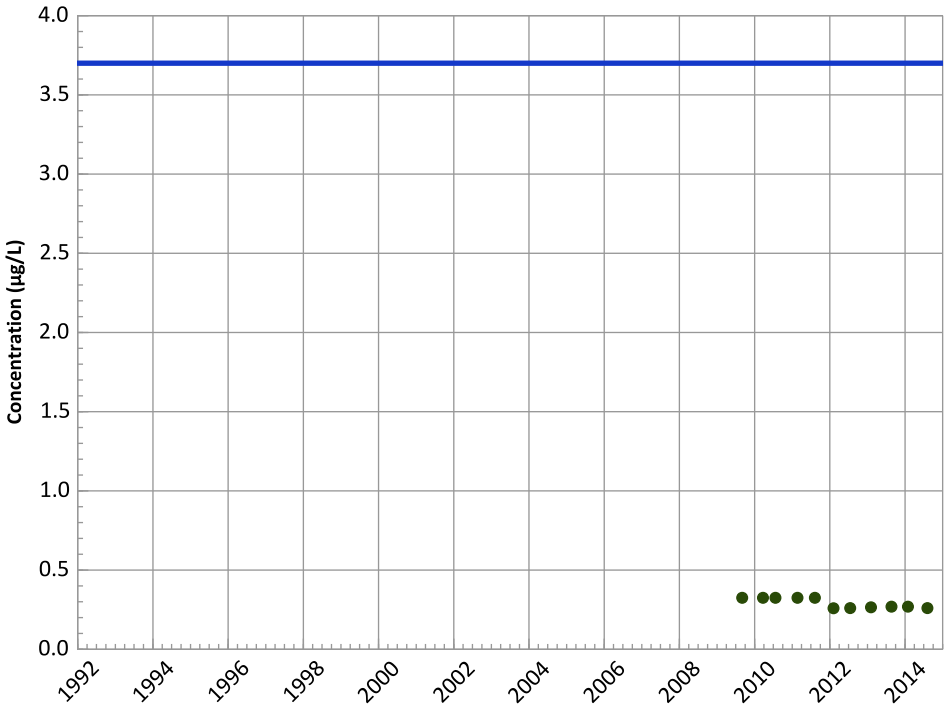
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

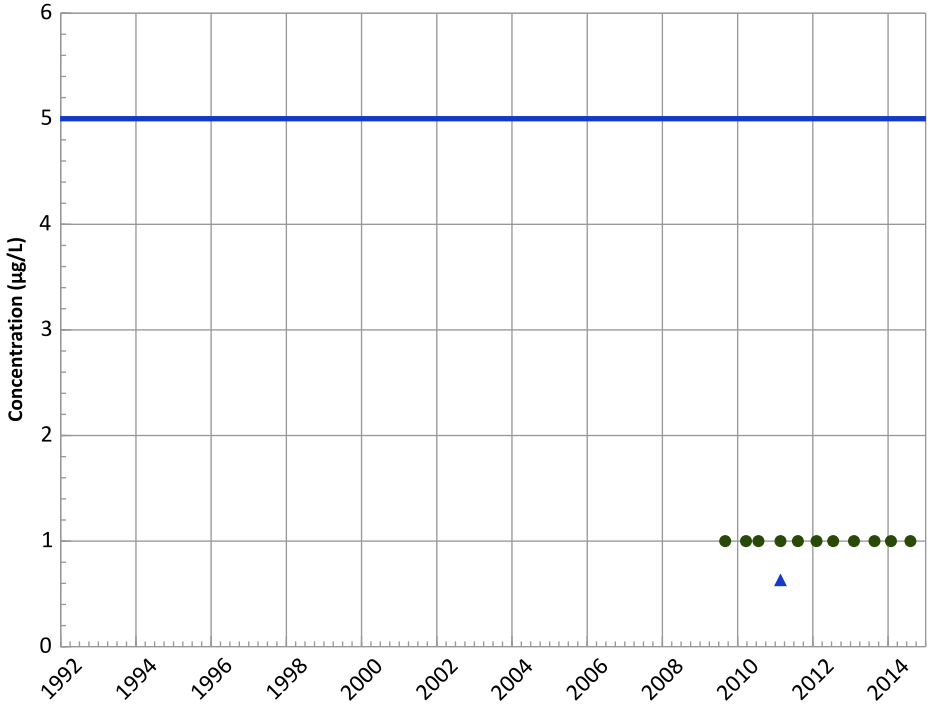


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

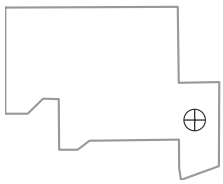
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

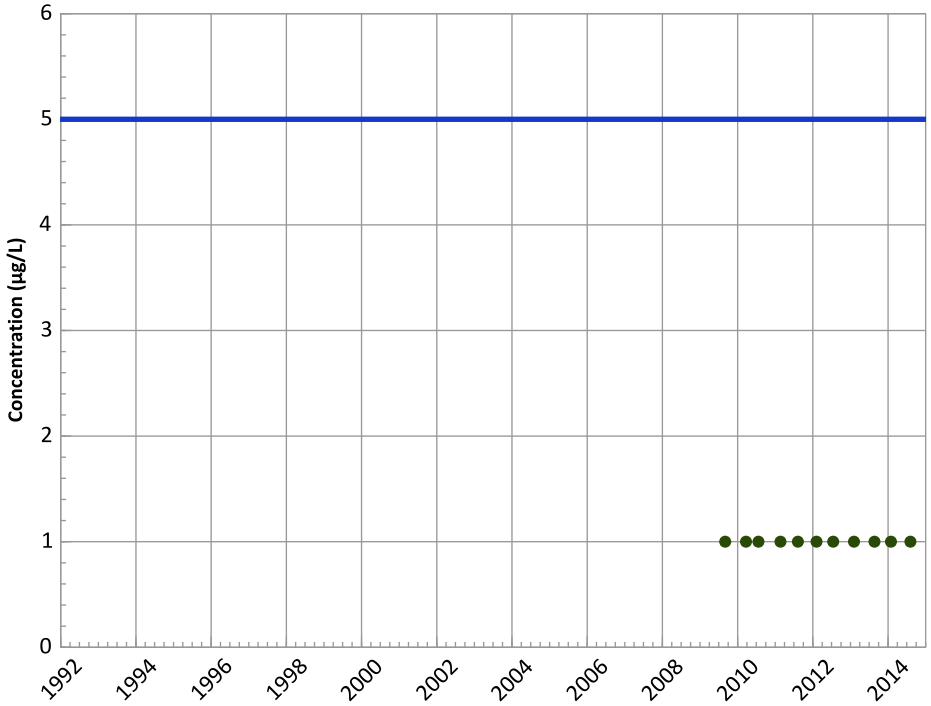
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

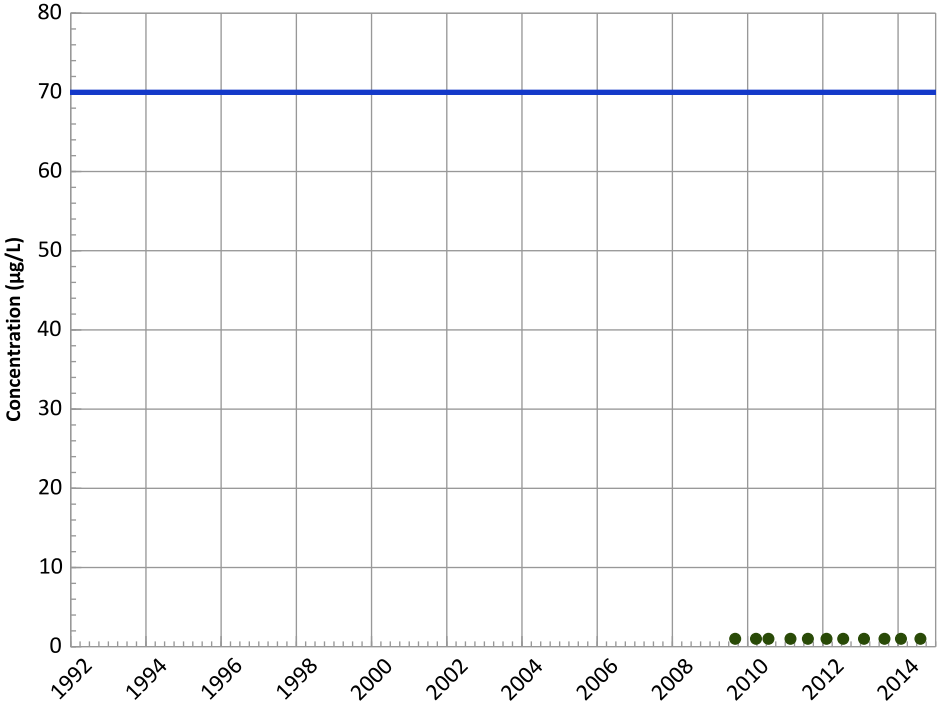


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

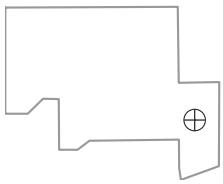
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

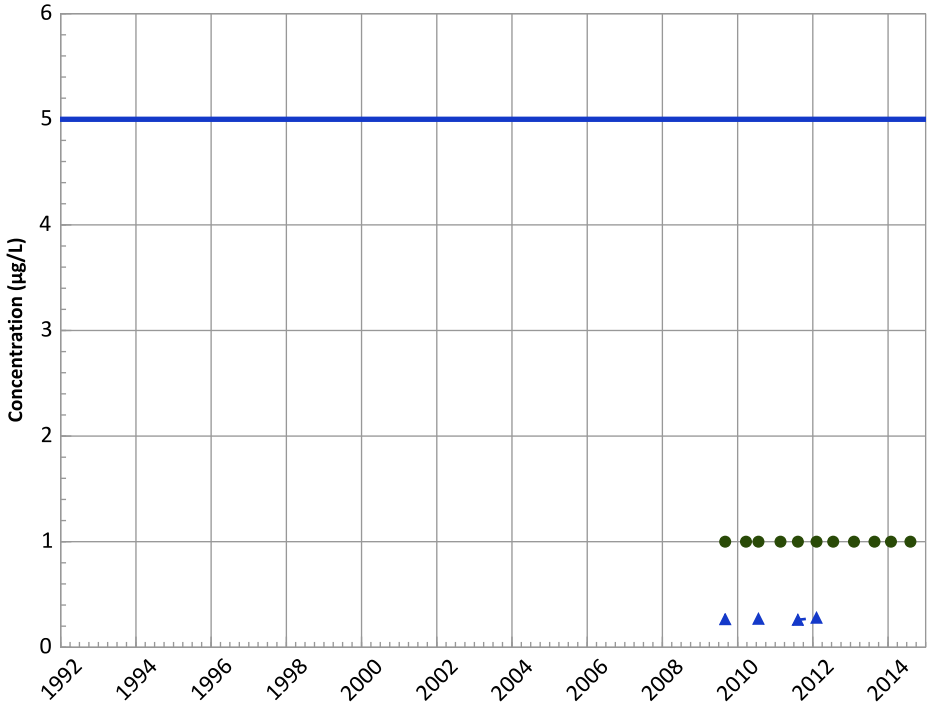
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

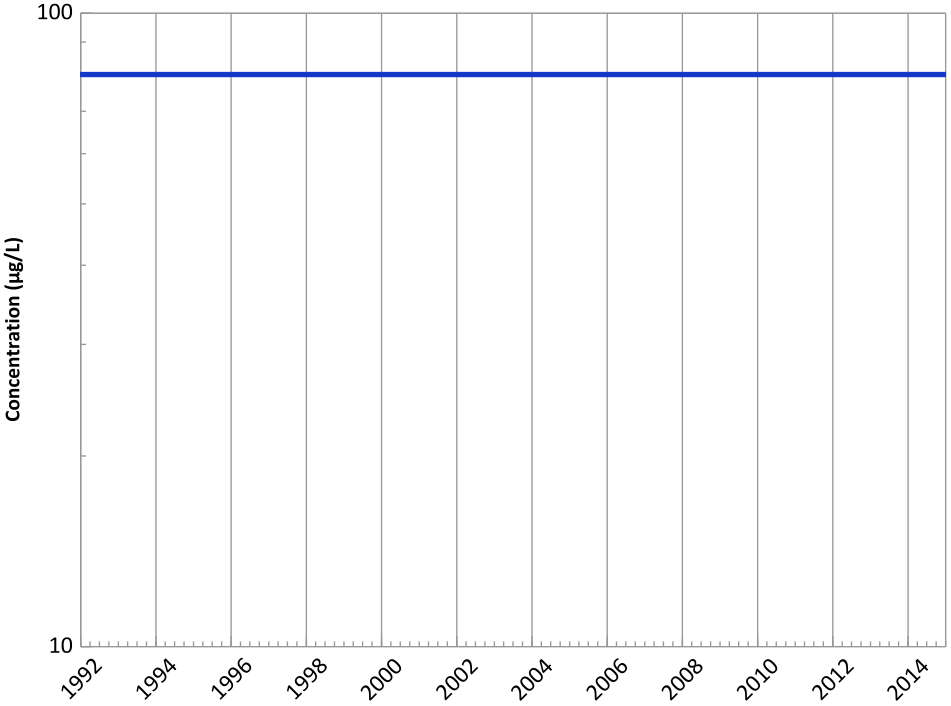


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chloroform Trend



Concentration Trend

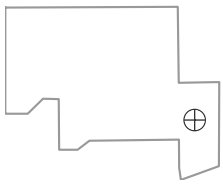
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

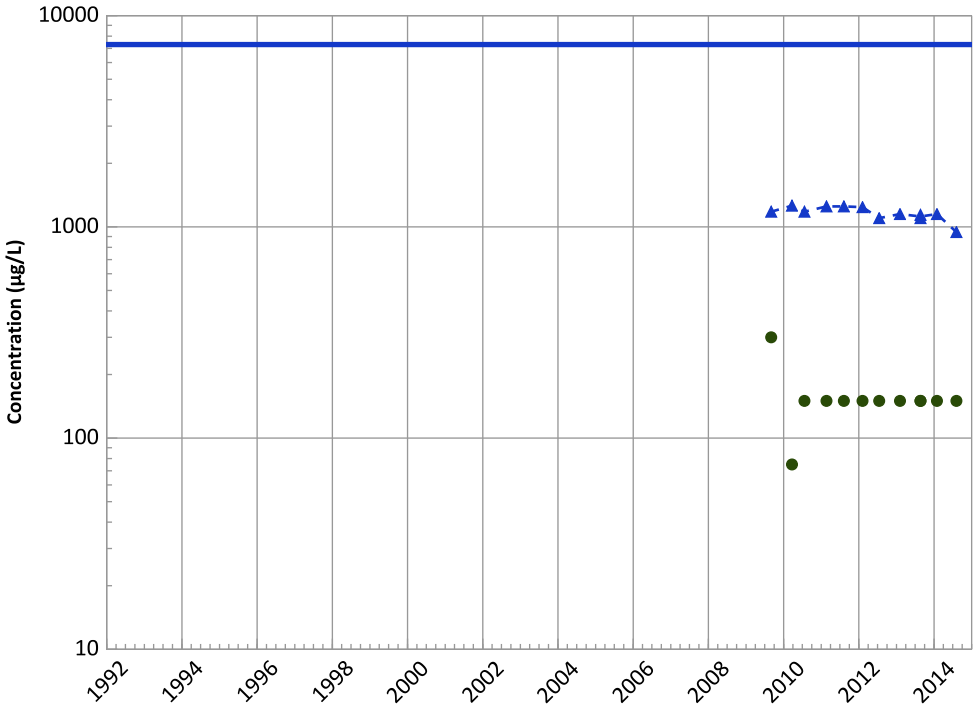
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

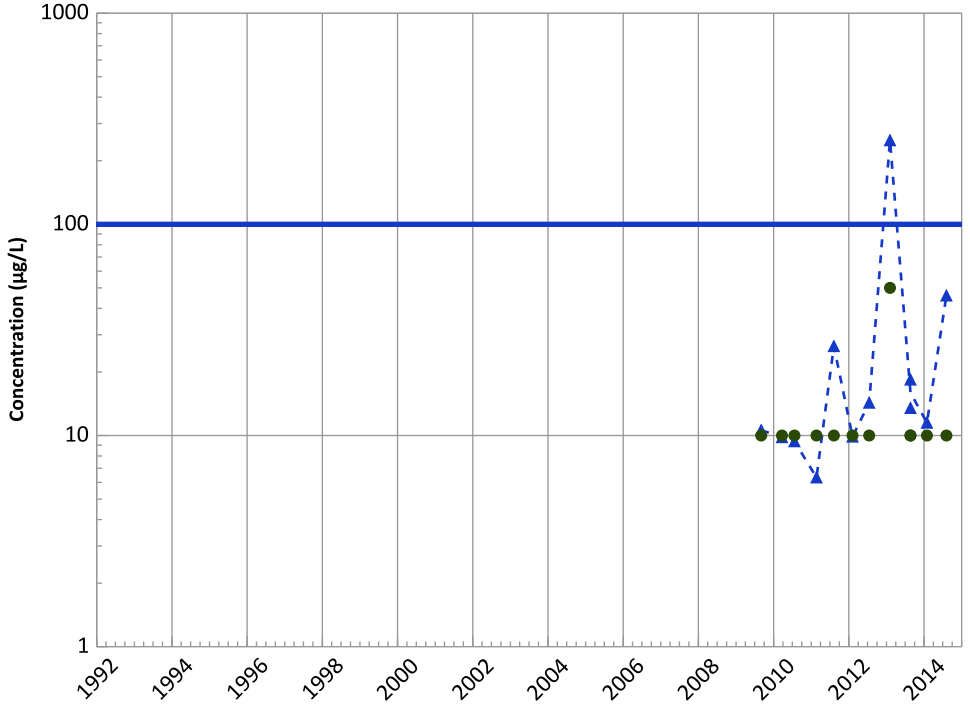


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

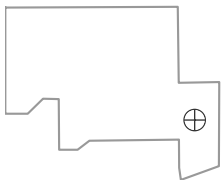
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

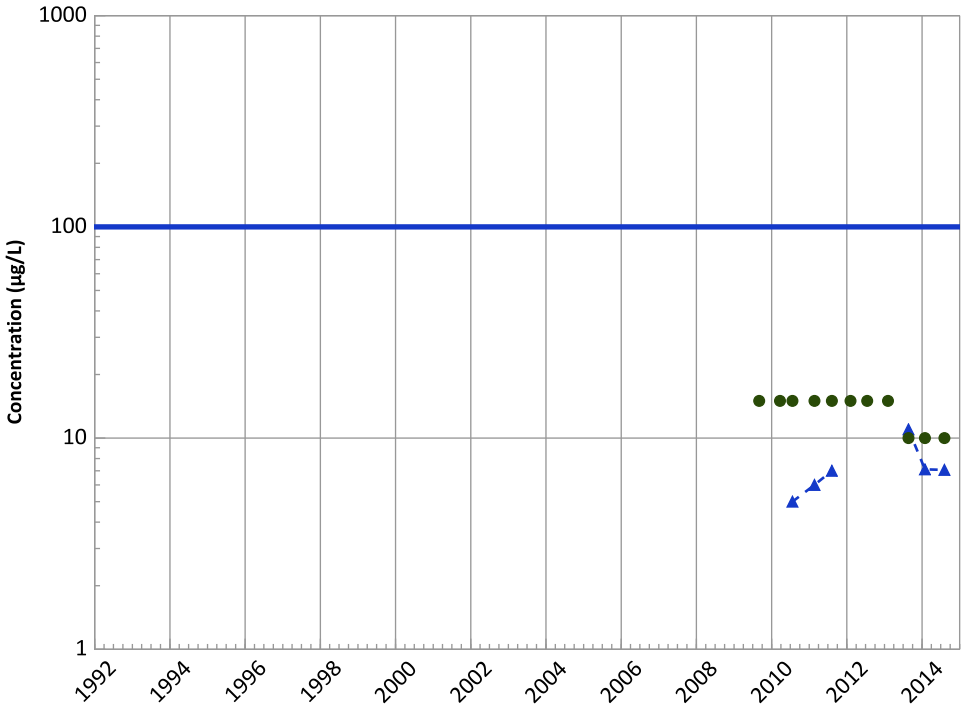
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

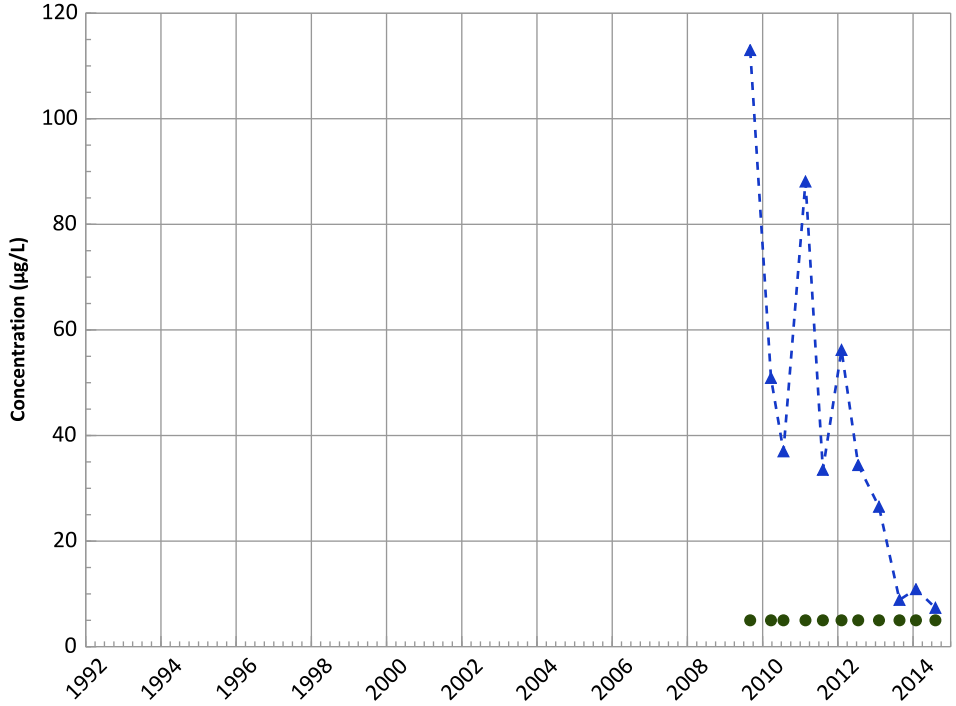


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Manganese Trend



Concentration Trend

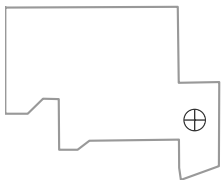
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

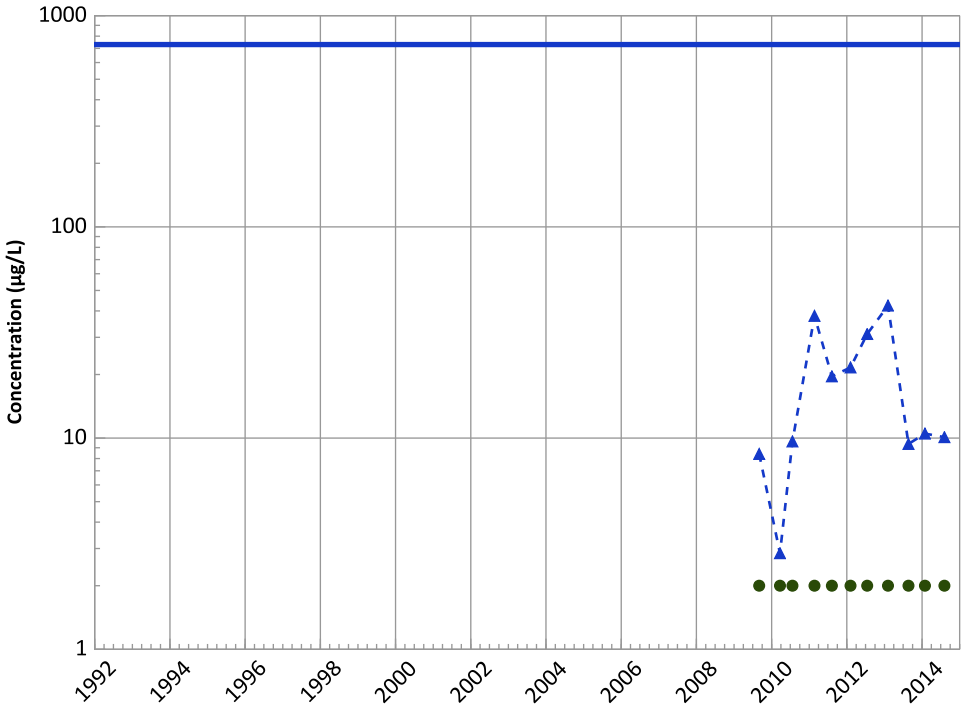
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

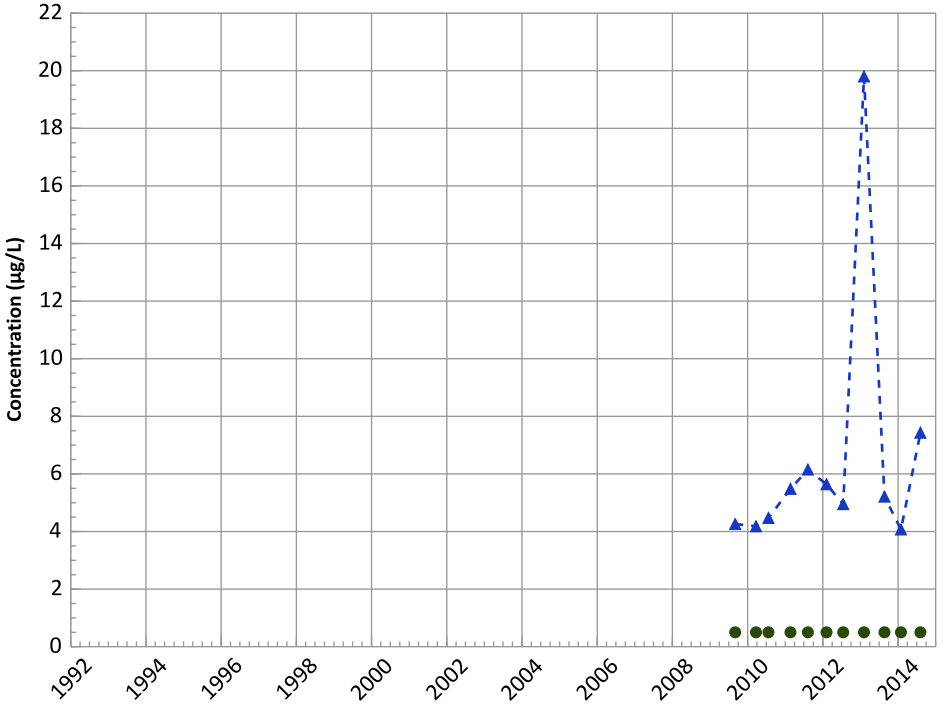


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Molybdenum Trend



Concentration Trend

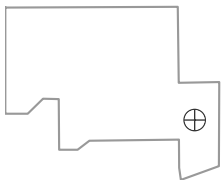
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

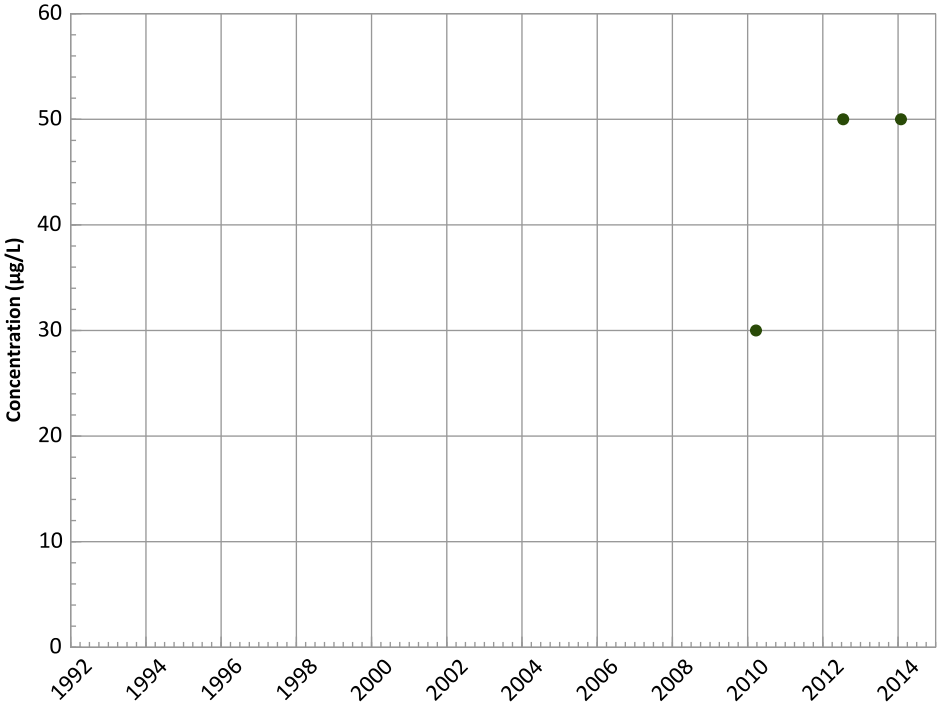
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

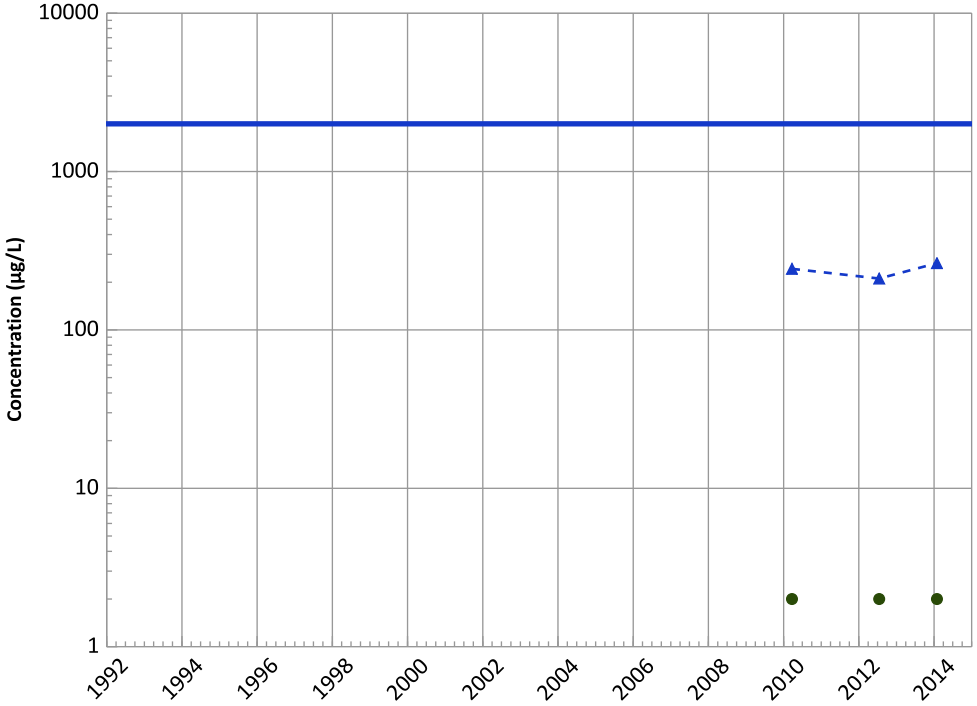


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Barium Trend



Concentration Trend

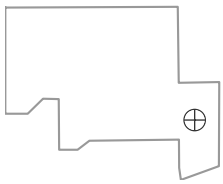
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

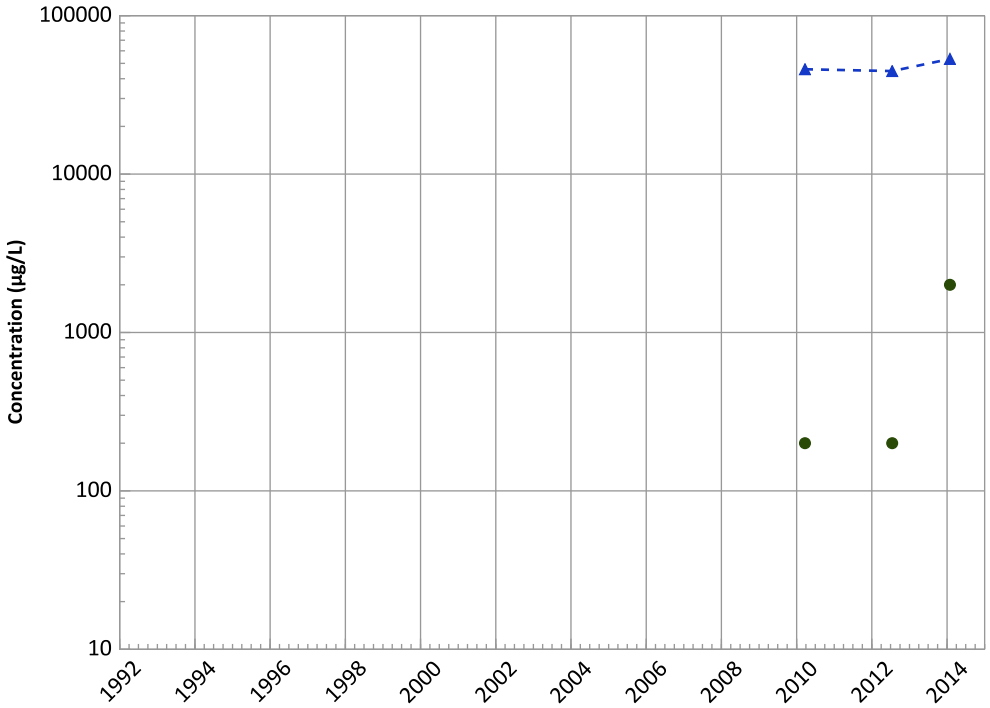
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

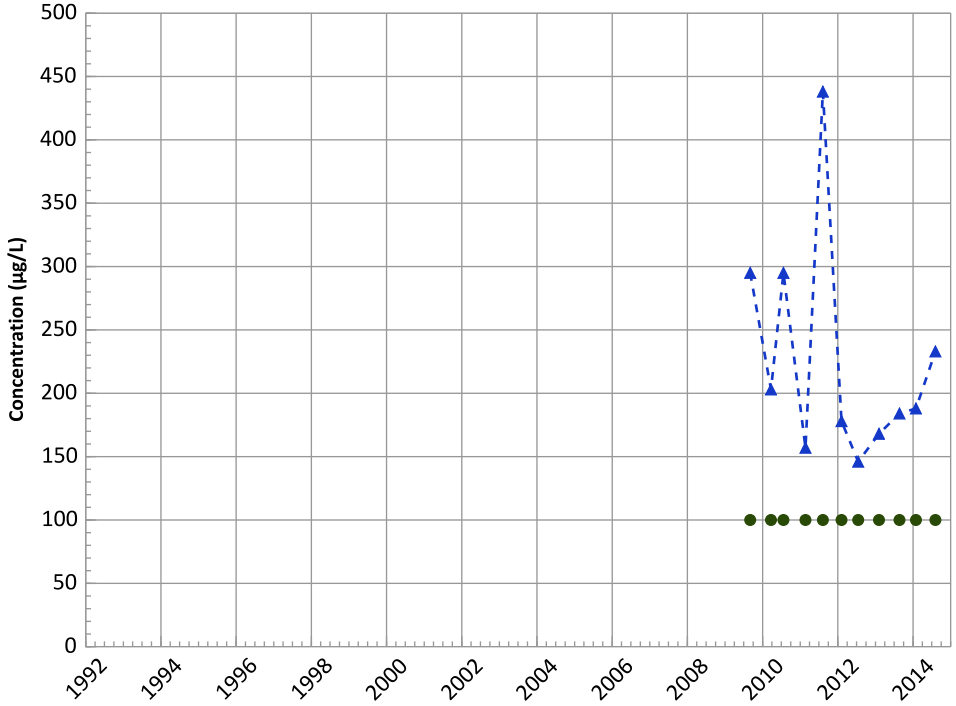


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

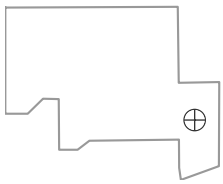
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

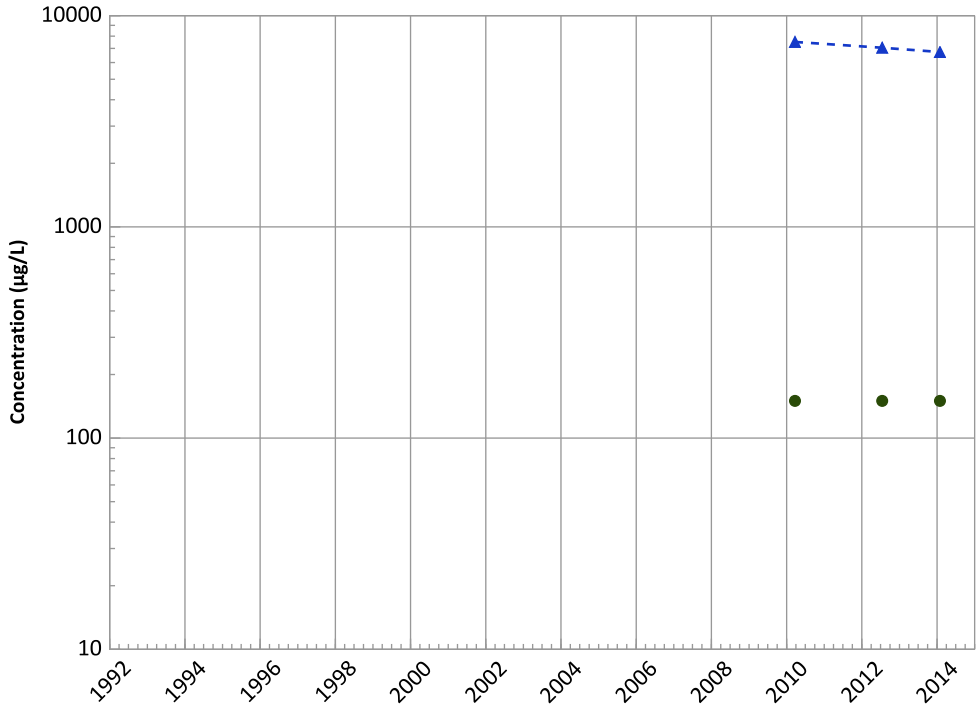
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

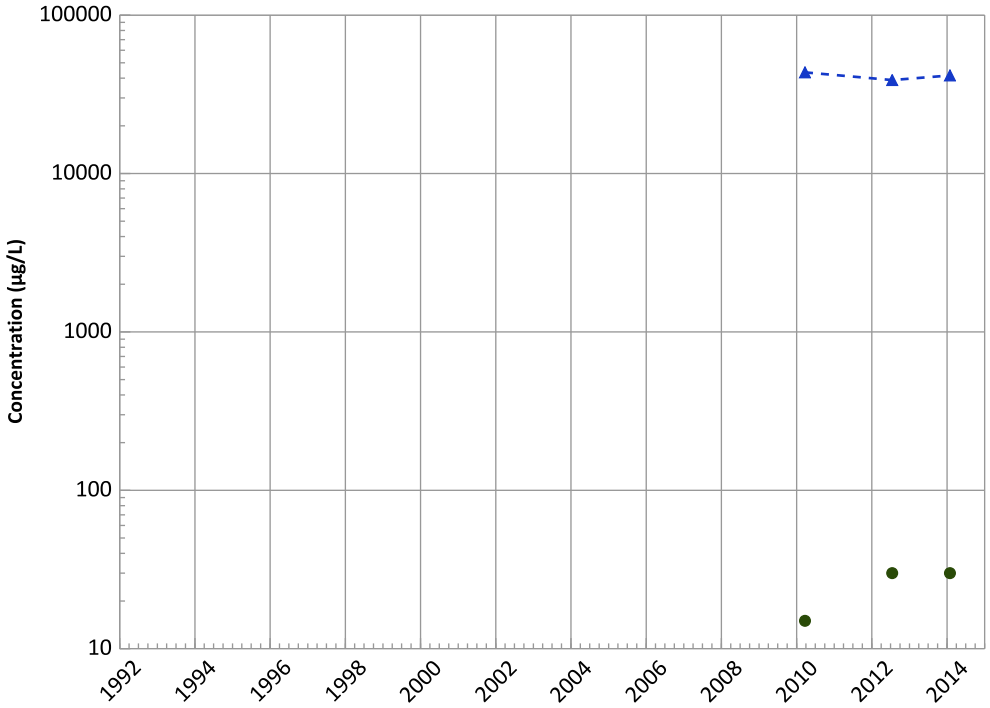


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

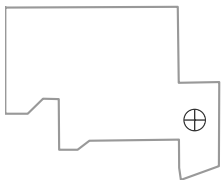
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

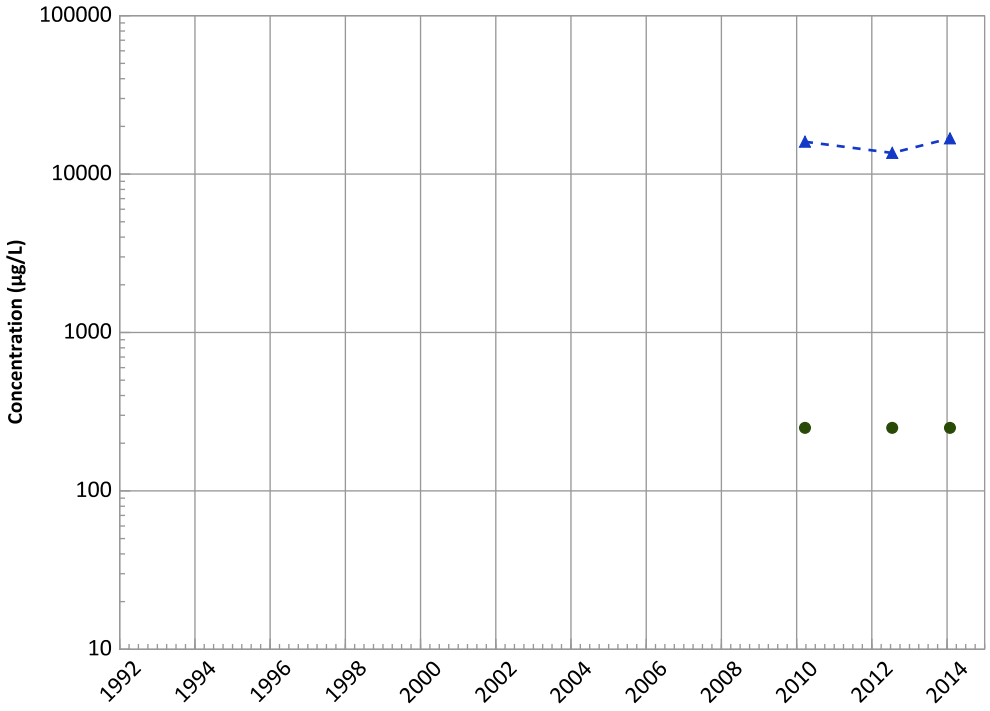
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1146 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

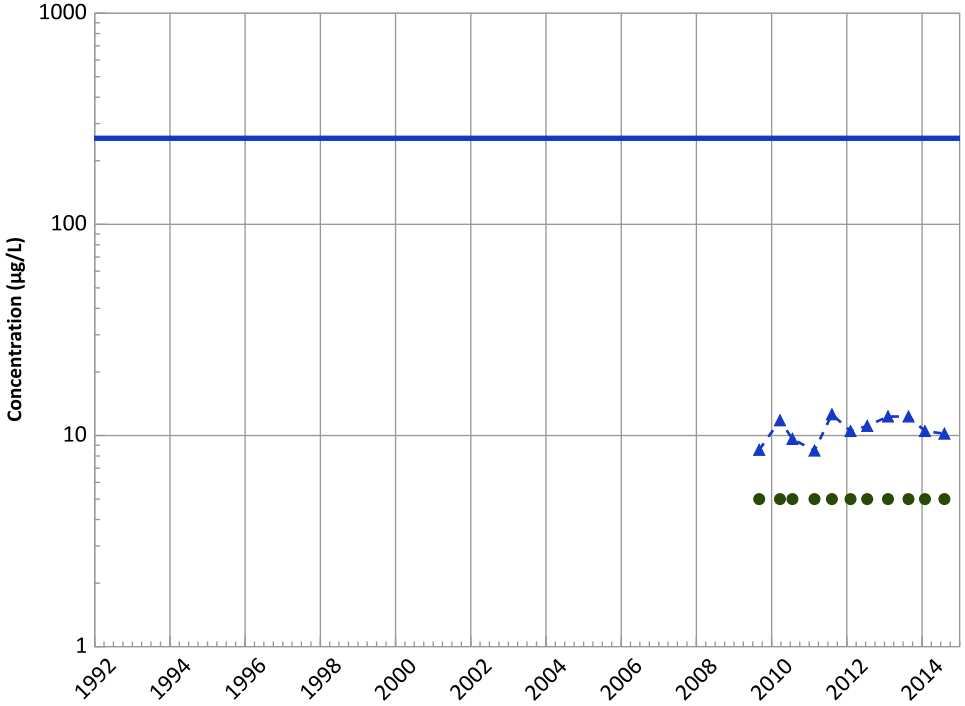


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Vanadium Trend



Concentration Trend

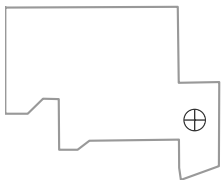
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

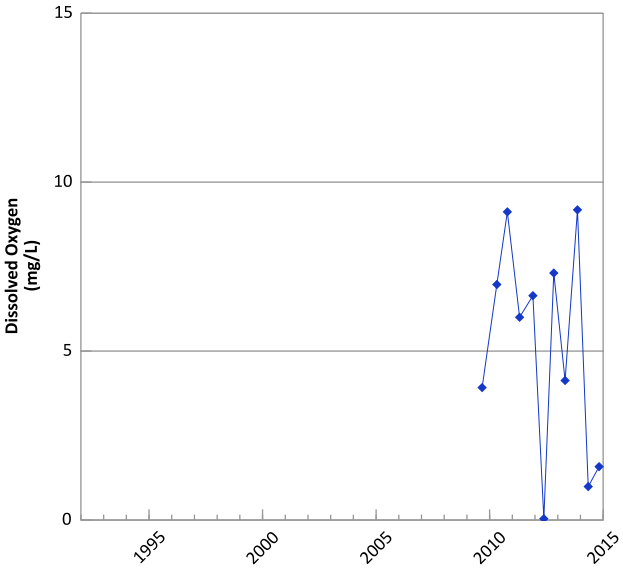
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 08/06/2014
Analysis Date: 03/19/2015

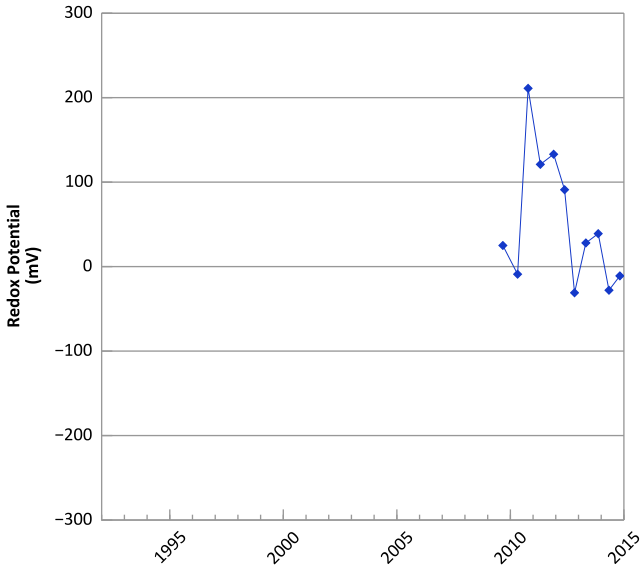
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

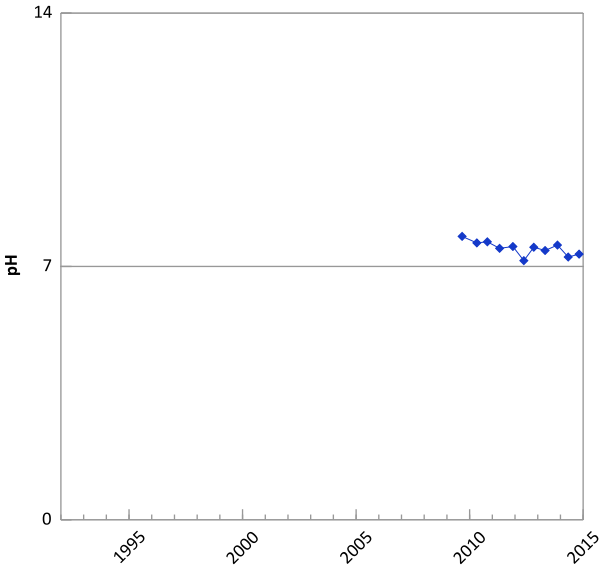
Well Location

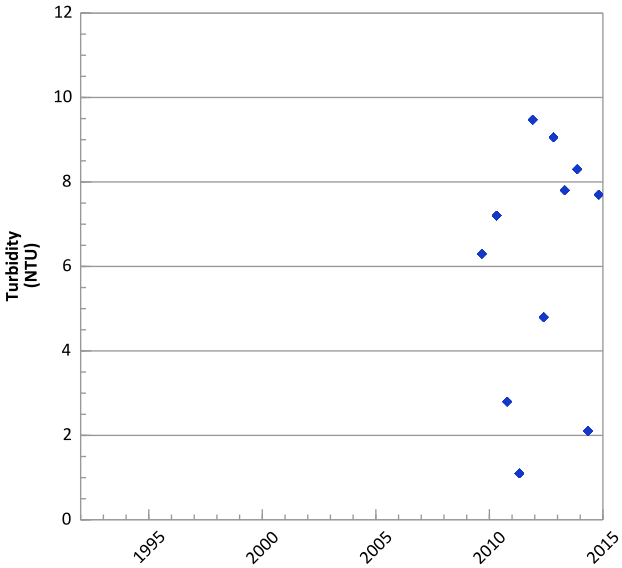


PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



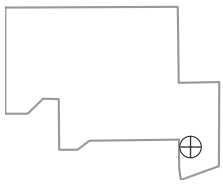






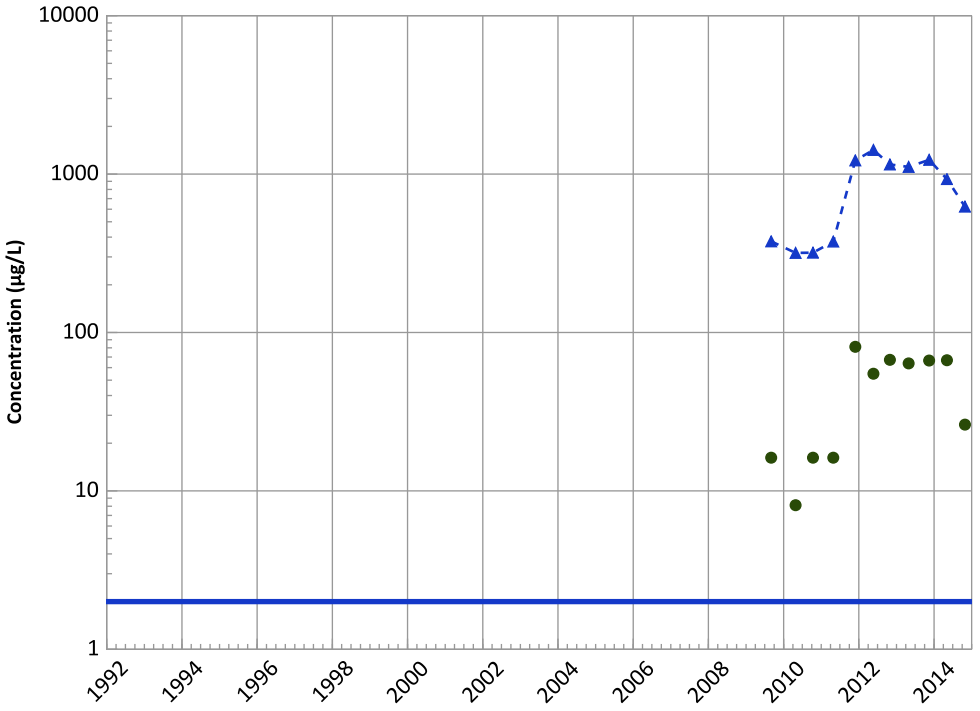
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

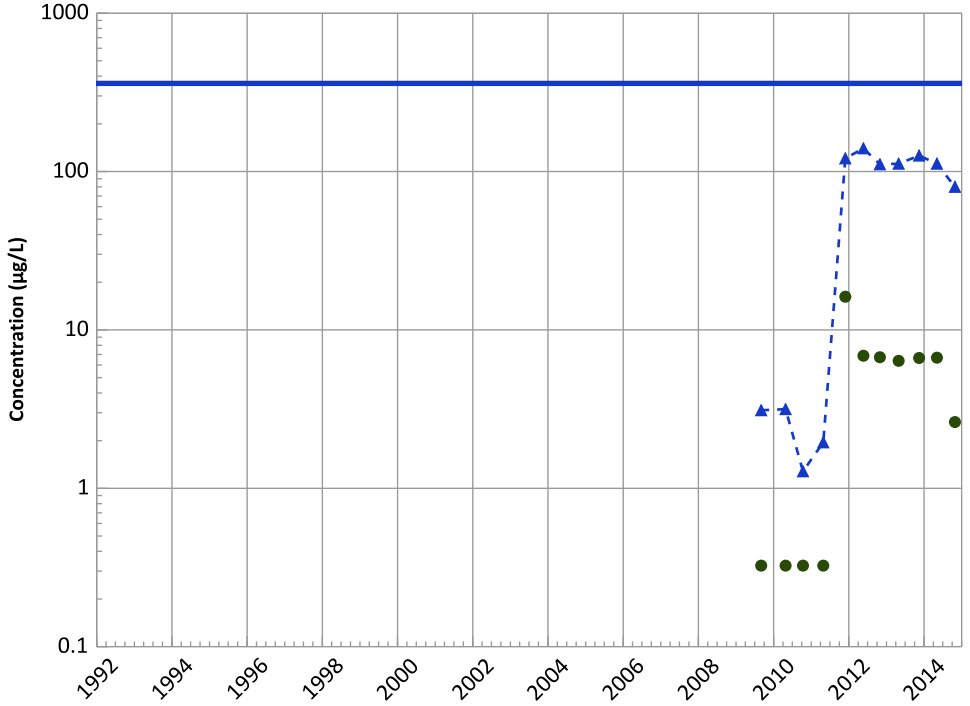


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

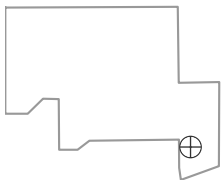
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

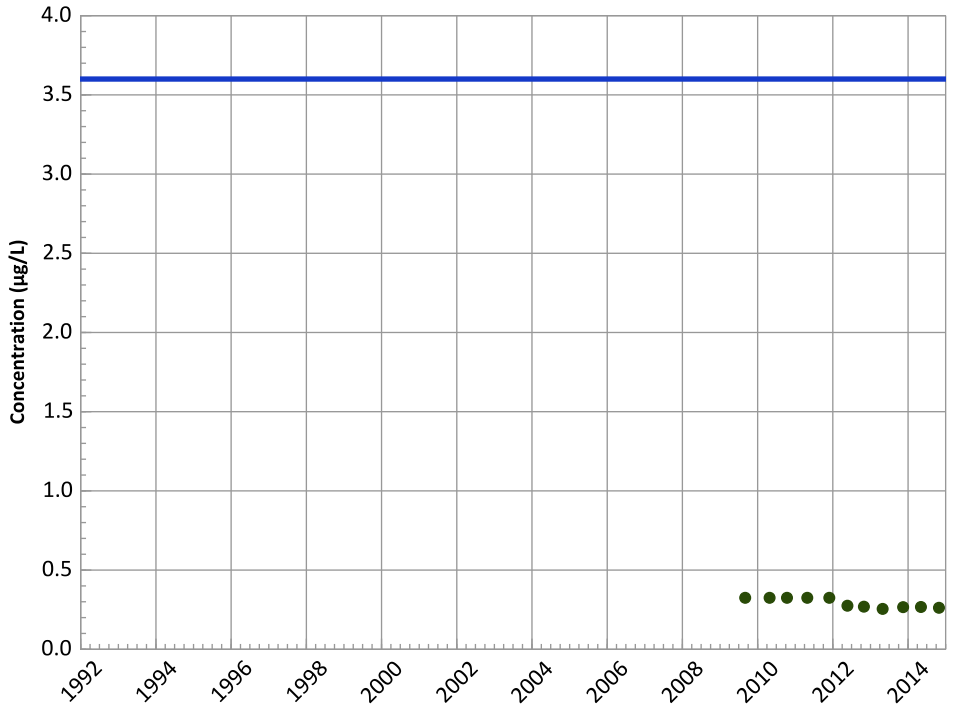
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

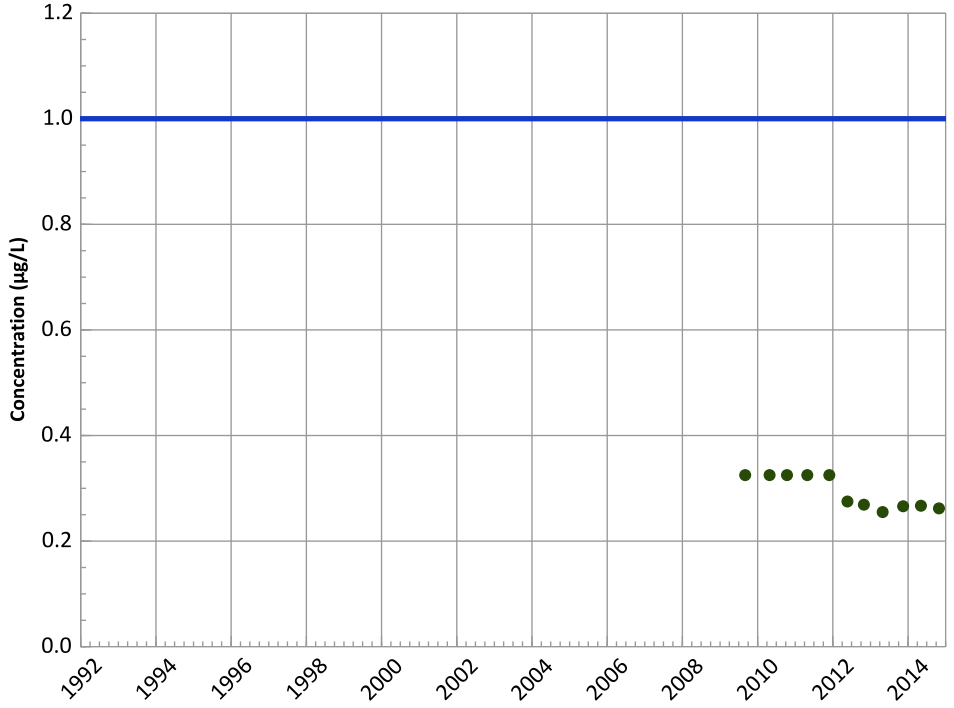


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

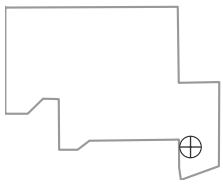
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

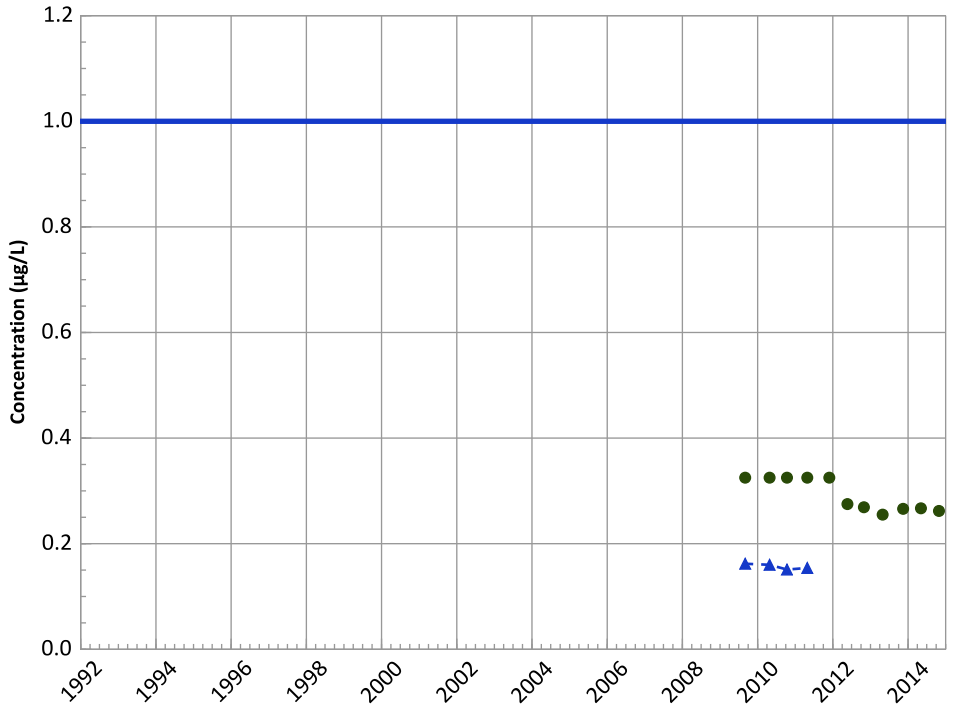
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

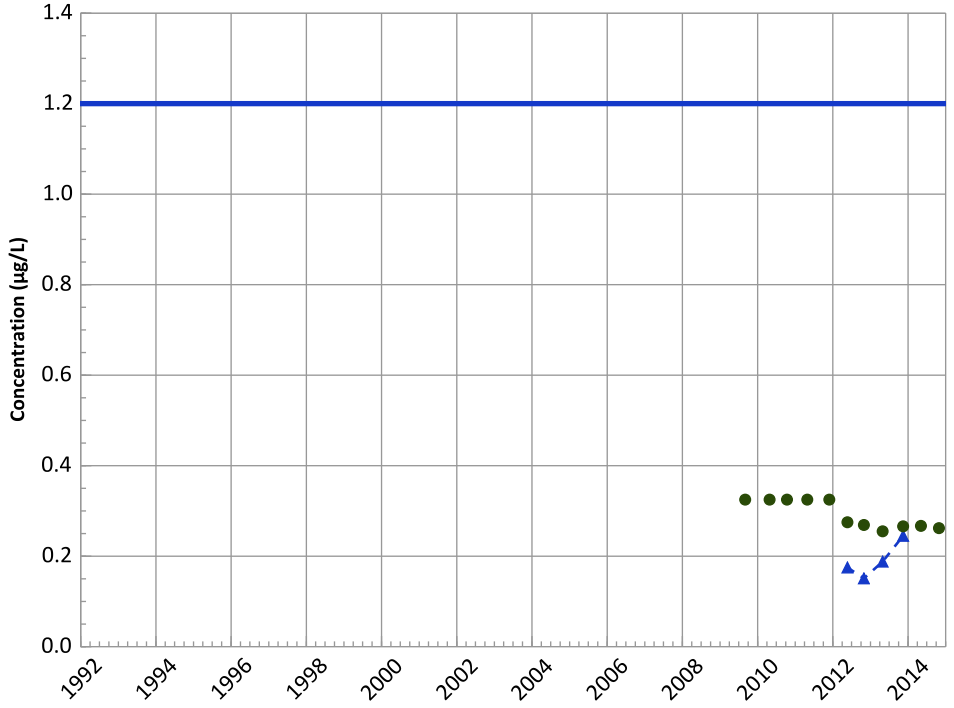


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

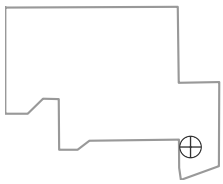
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

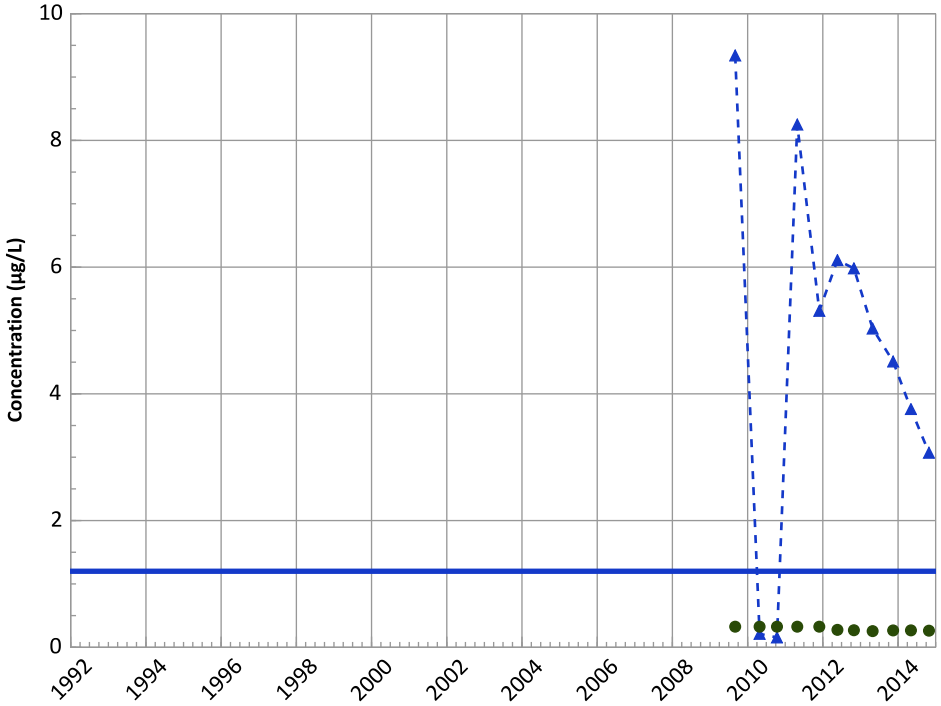
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

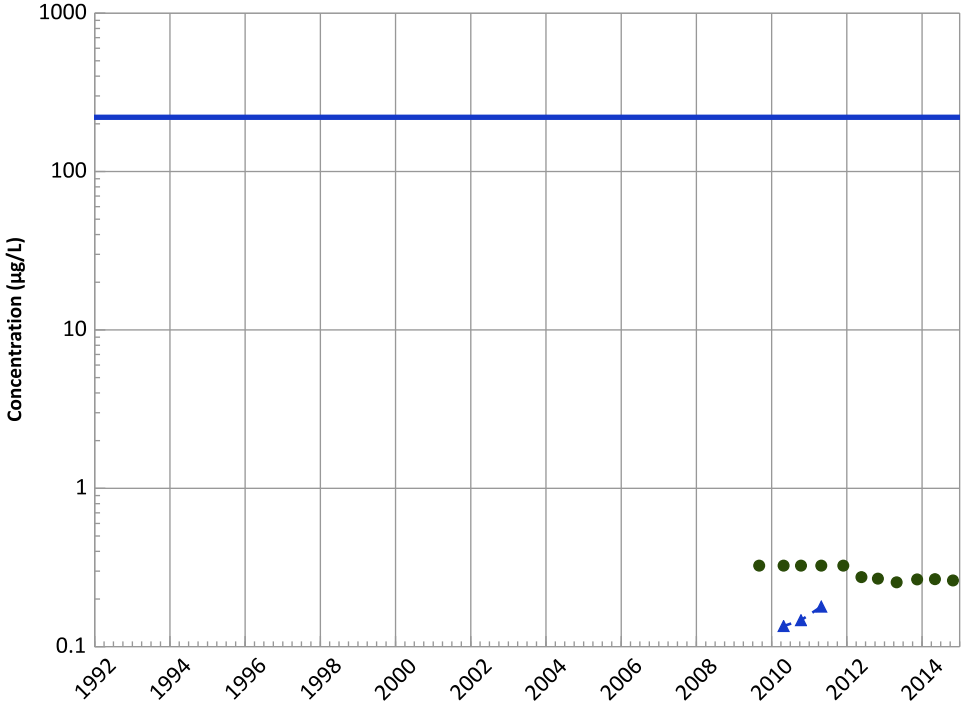


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

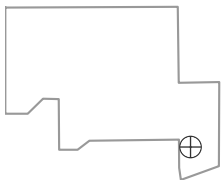
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

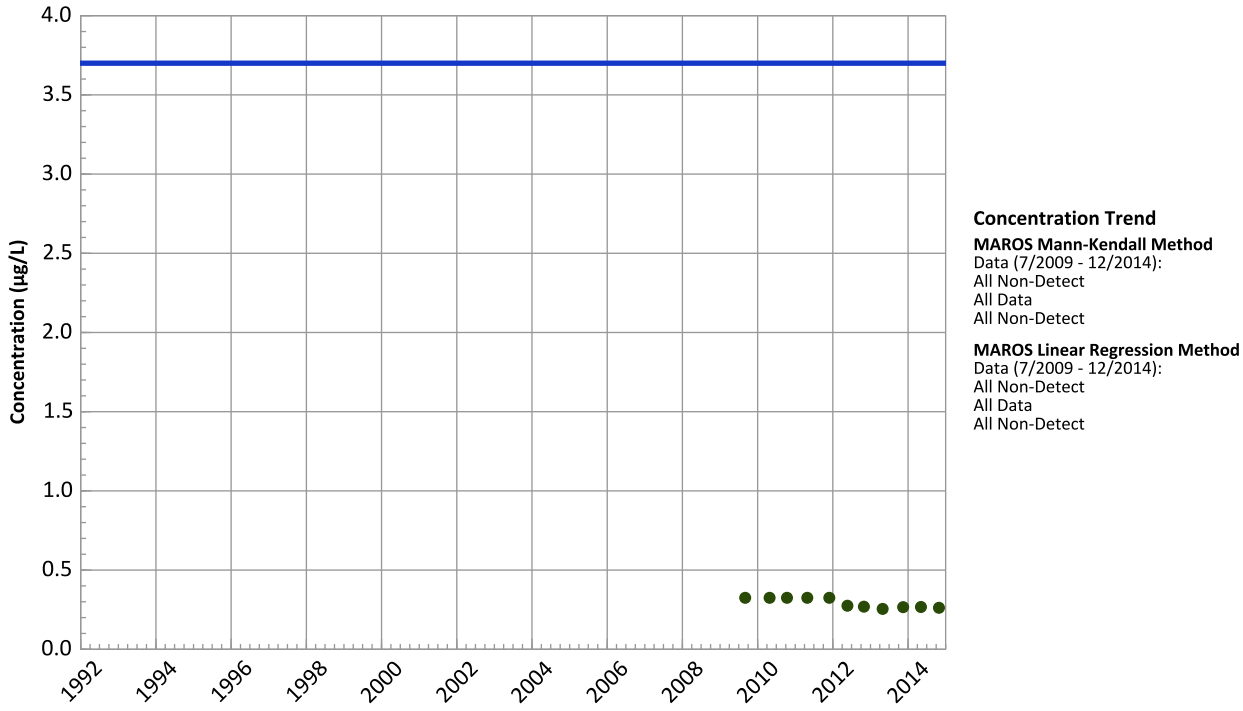
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

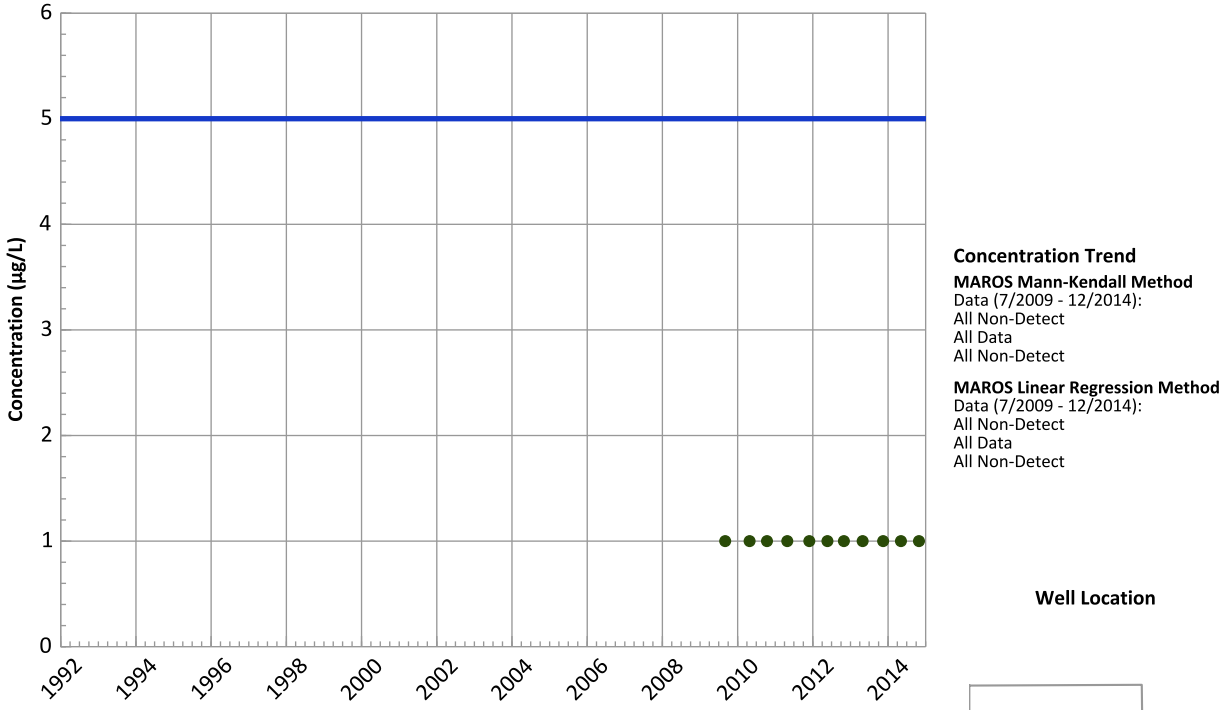


PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



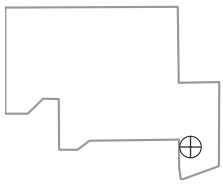
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

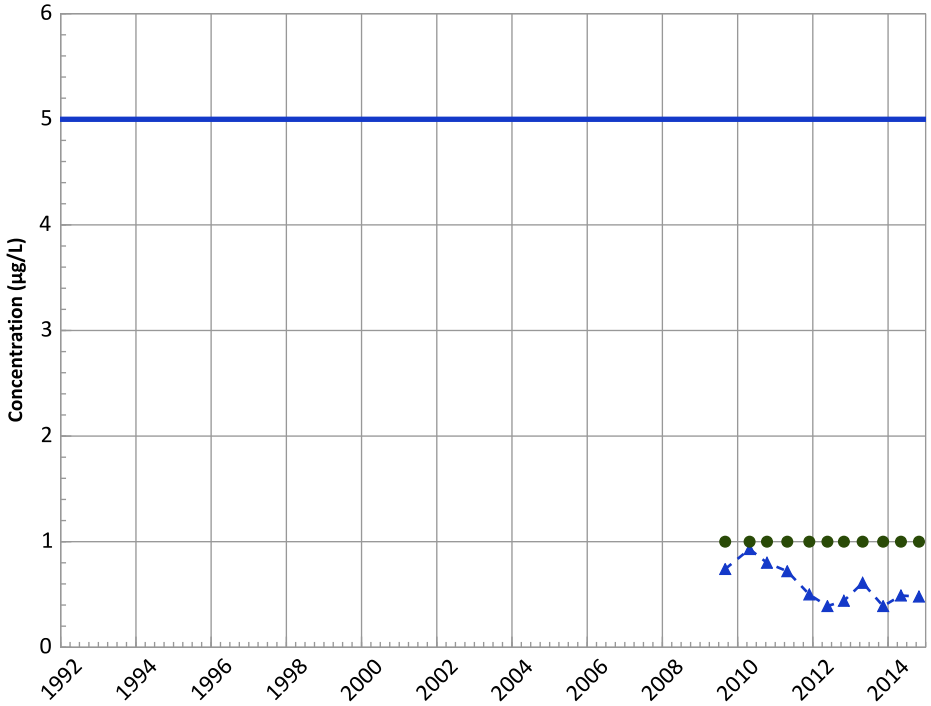
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

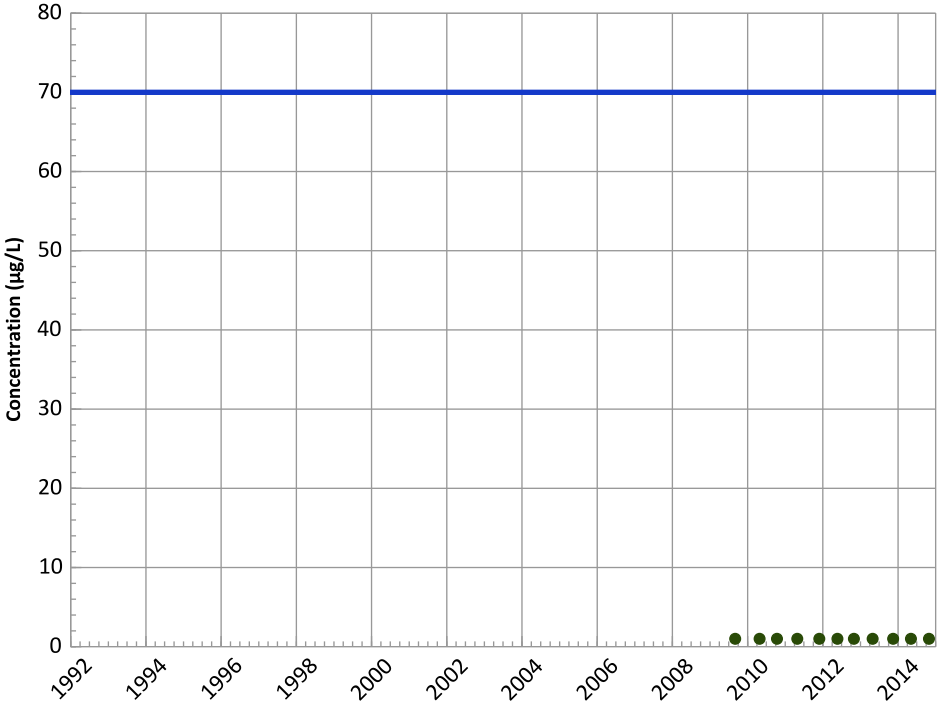


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

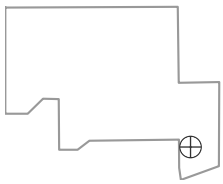
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

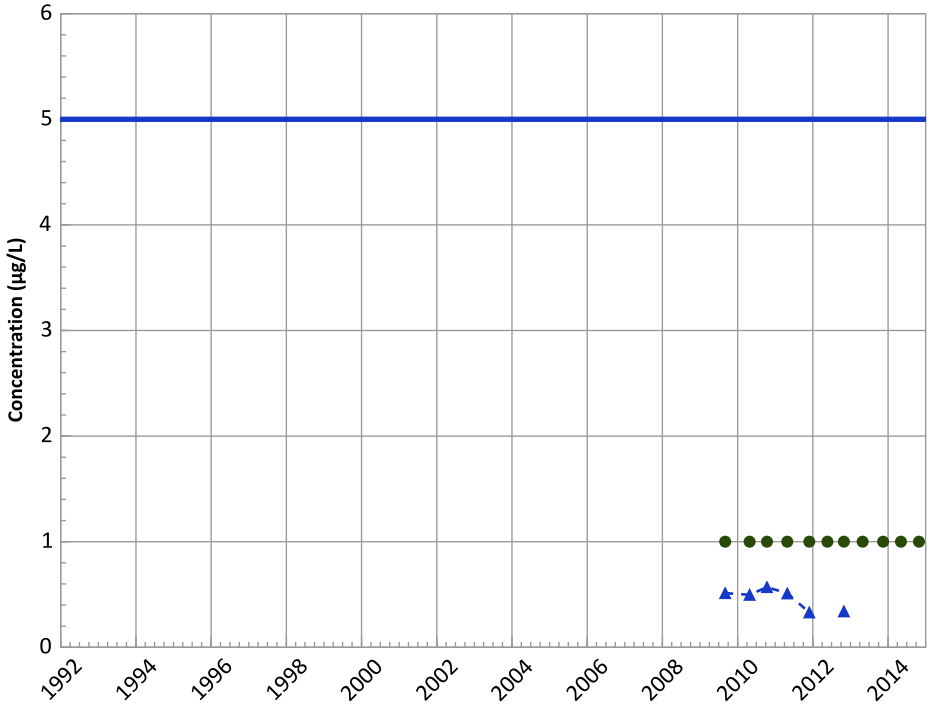
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

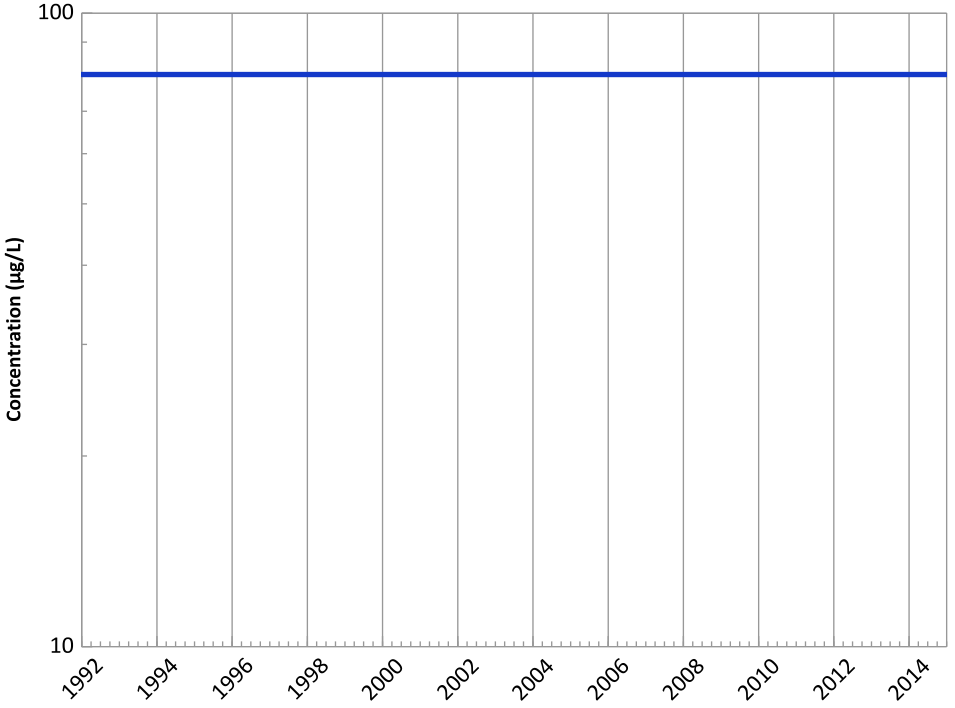


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chloroform Trend



Concentration Trend

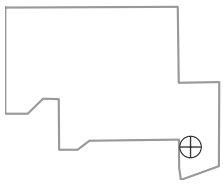
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

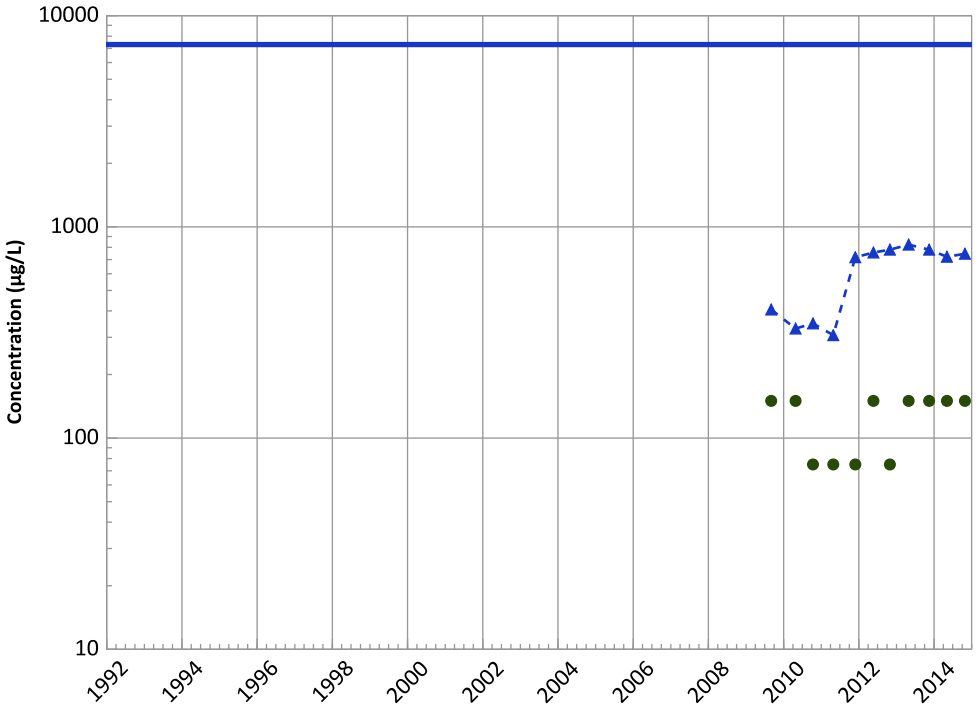
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

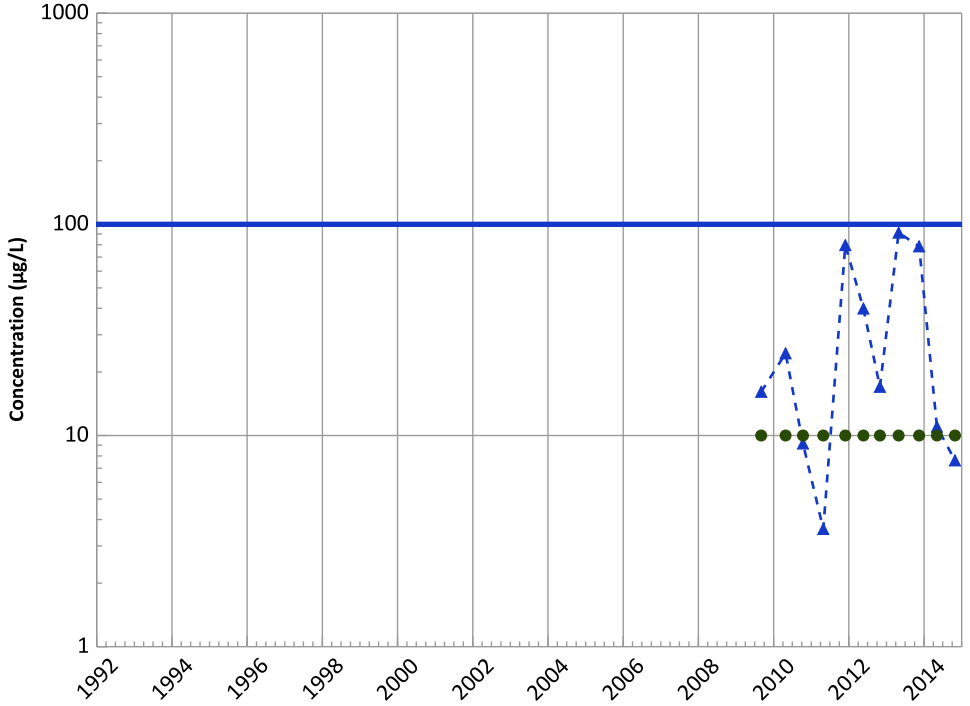


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

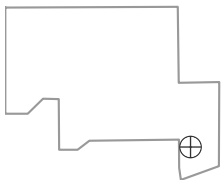
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

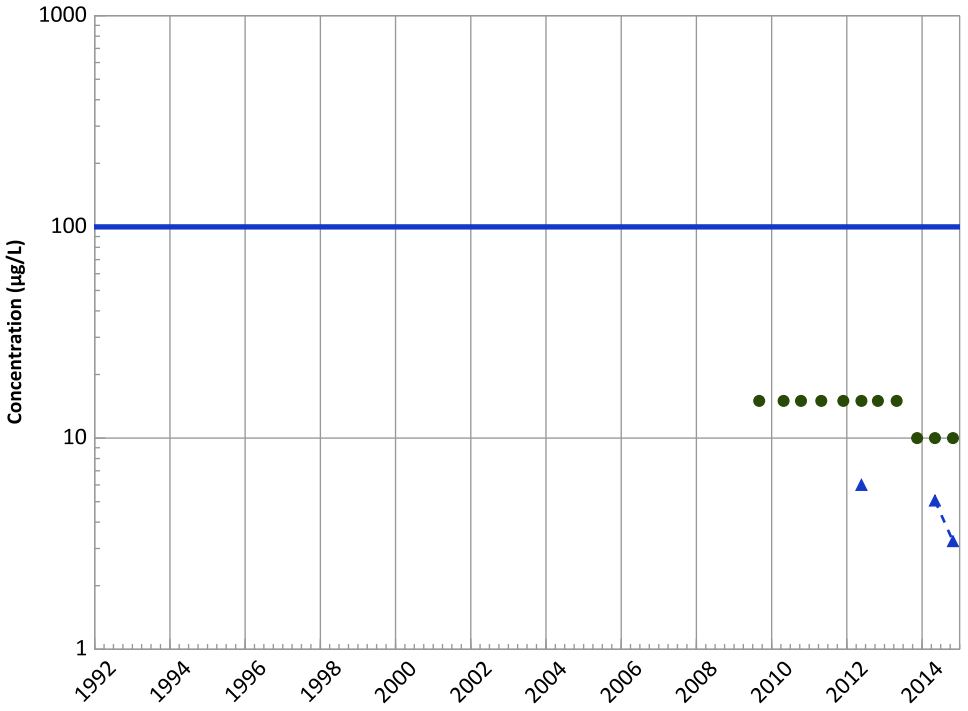
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

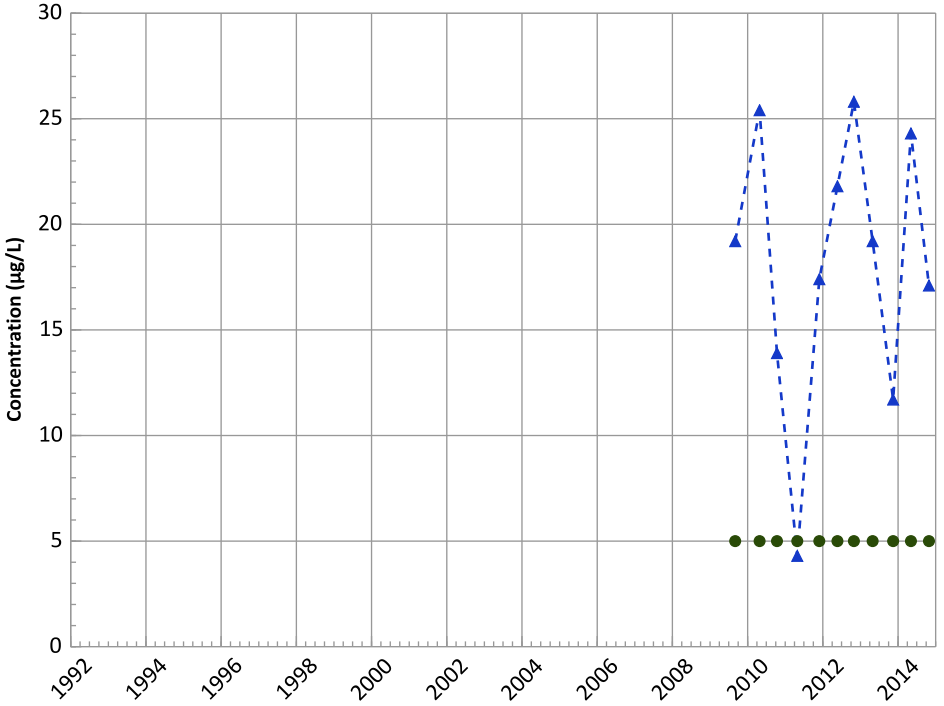


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

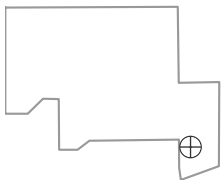
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

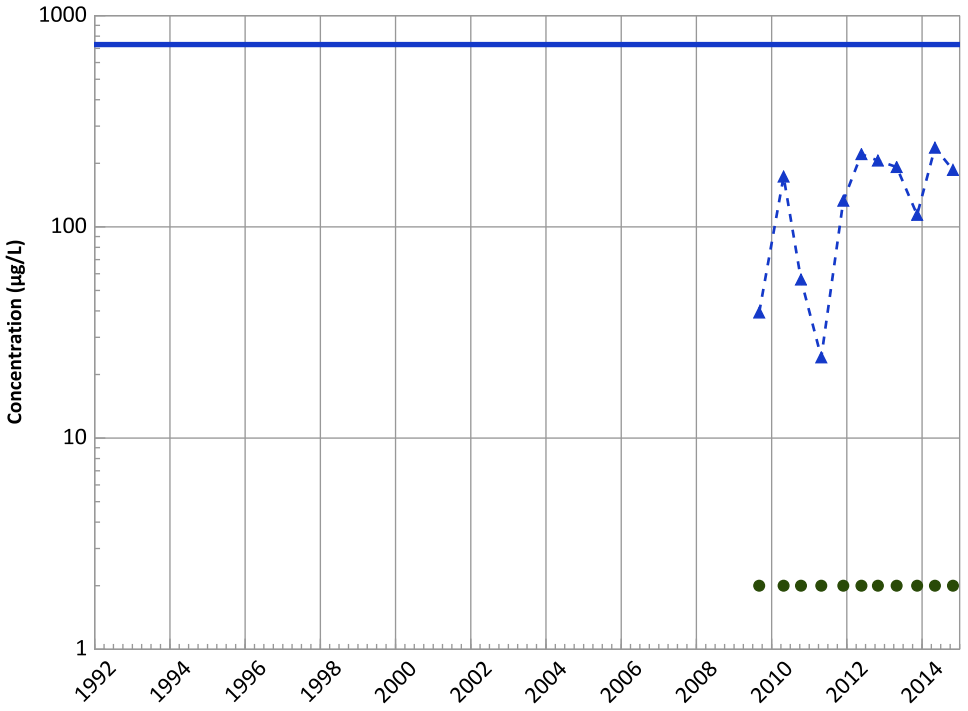
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

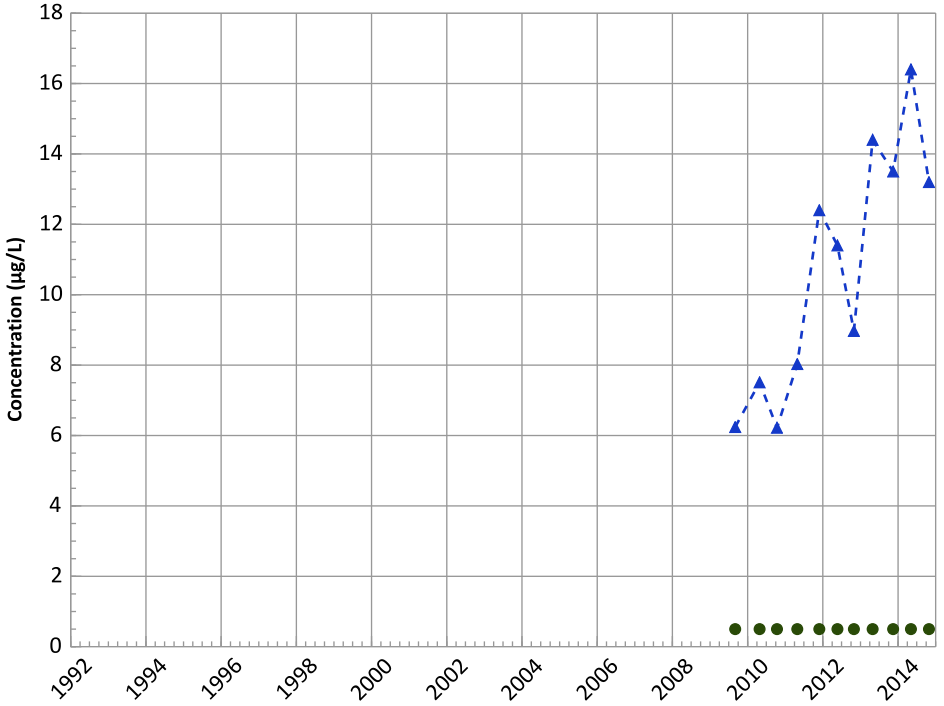


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Molybdenum Trend



Concentration Trend

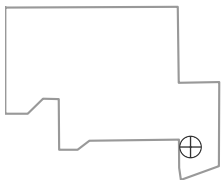
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

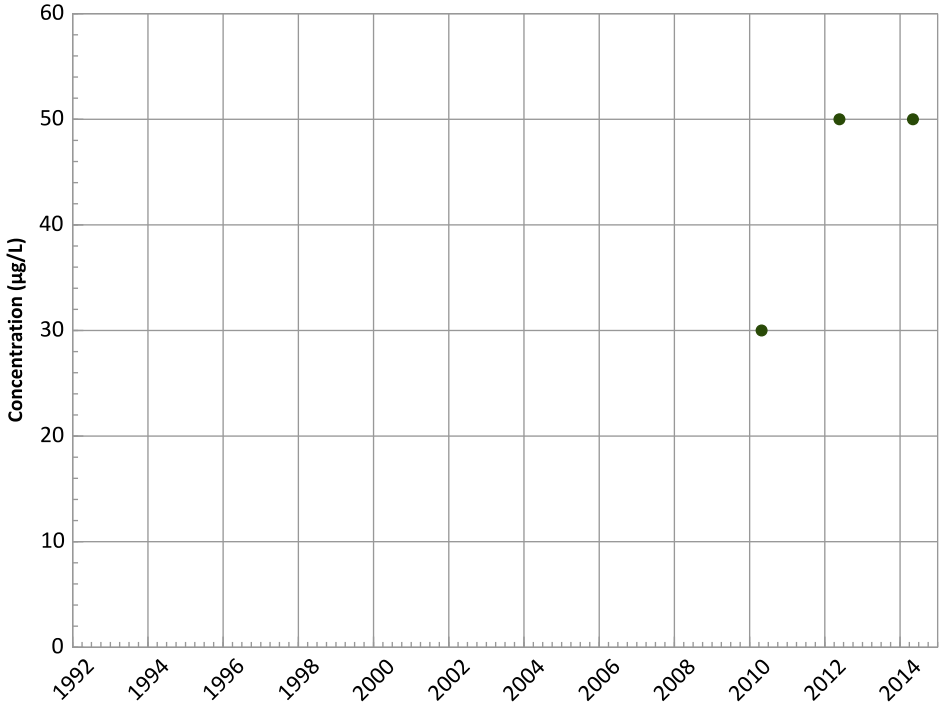
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

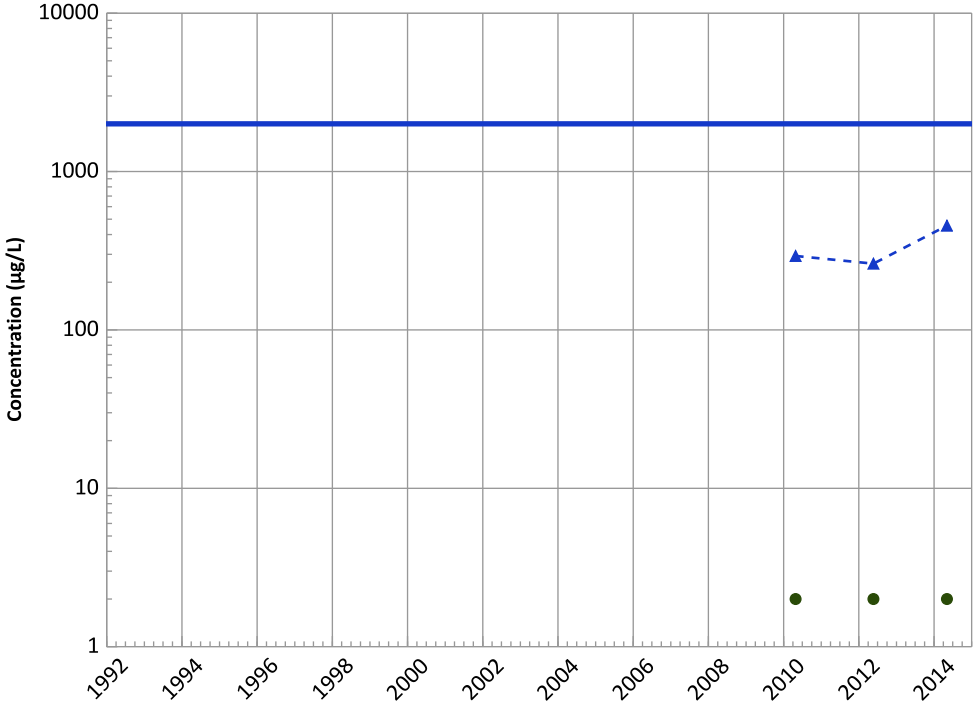


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Barium Trend



Concentration Trend

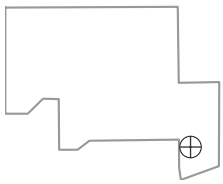
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

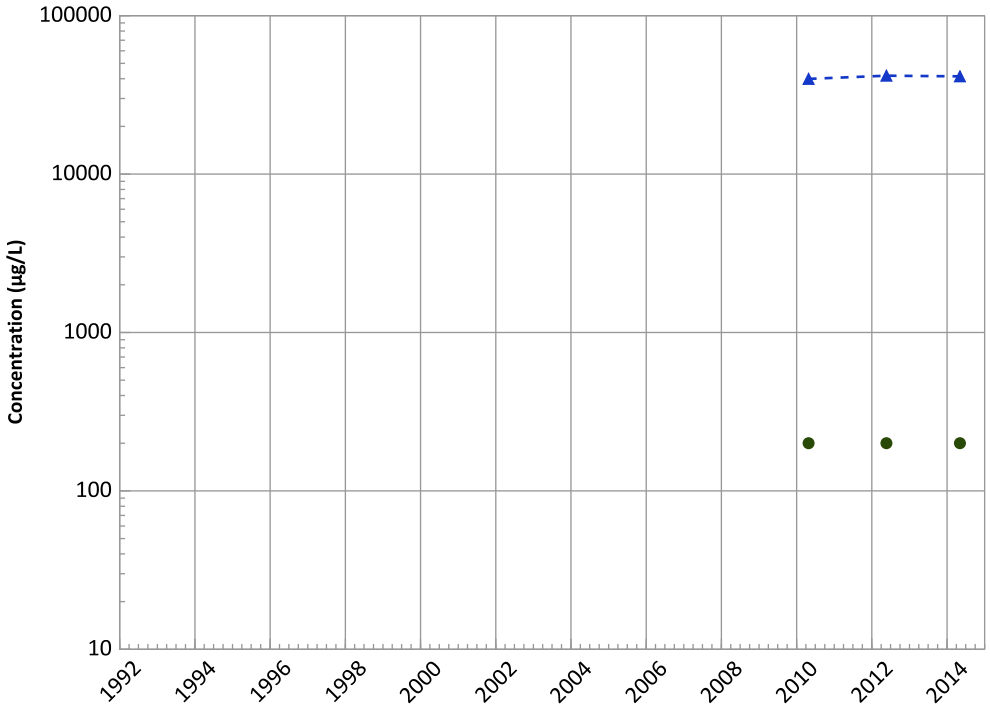
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

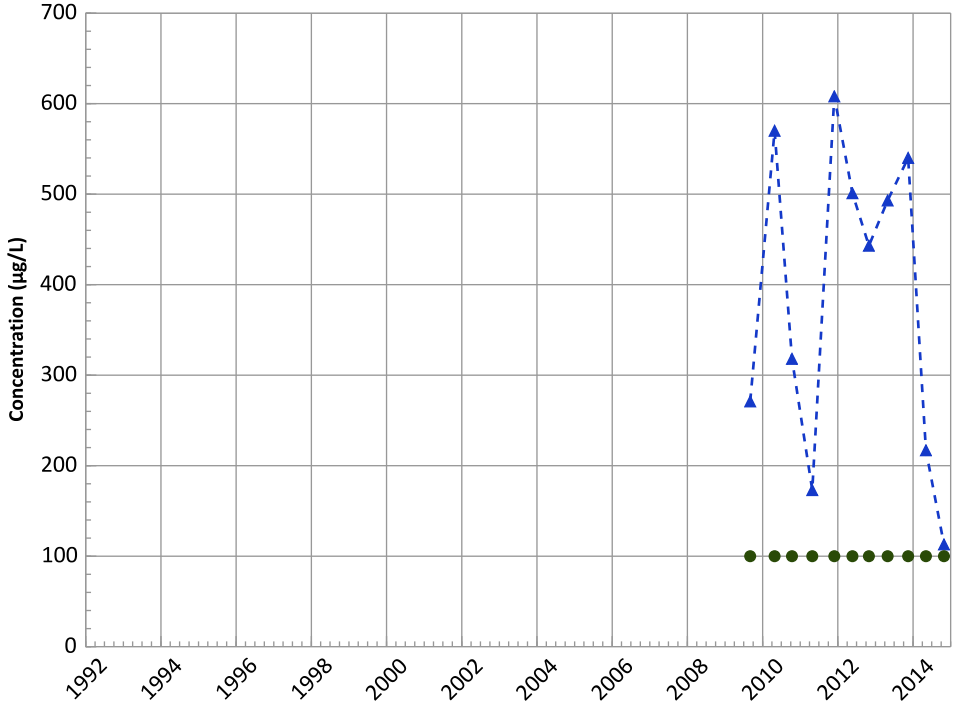


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

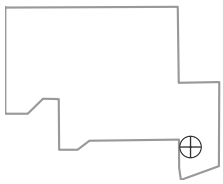
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

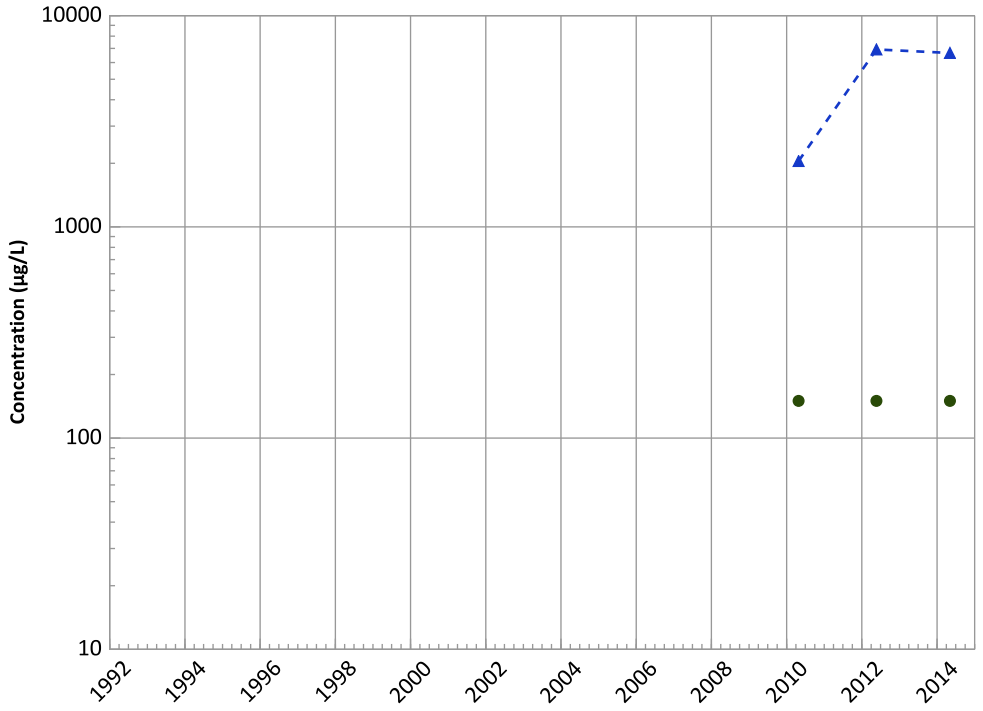
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

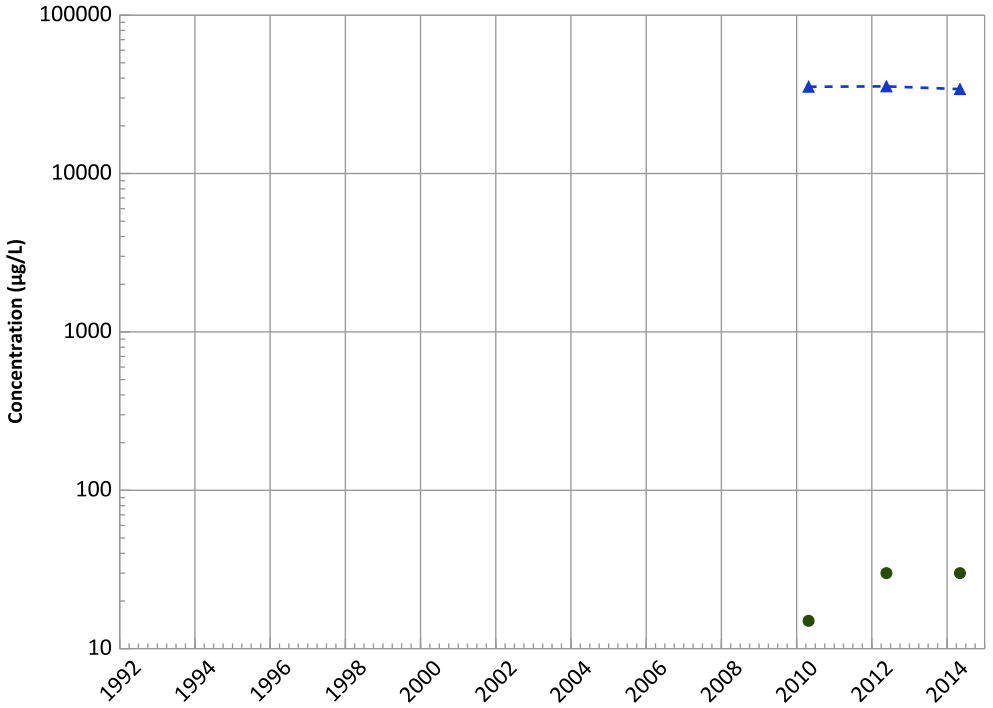


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

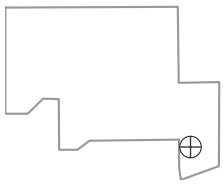
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

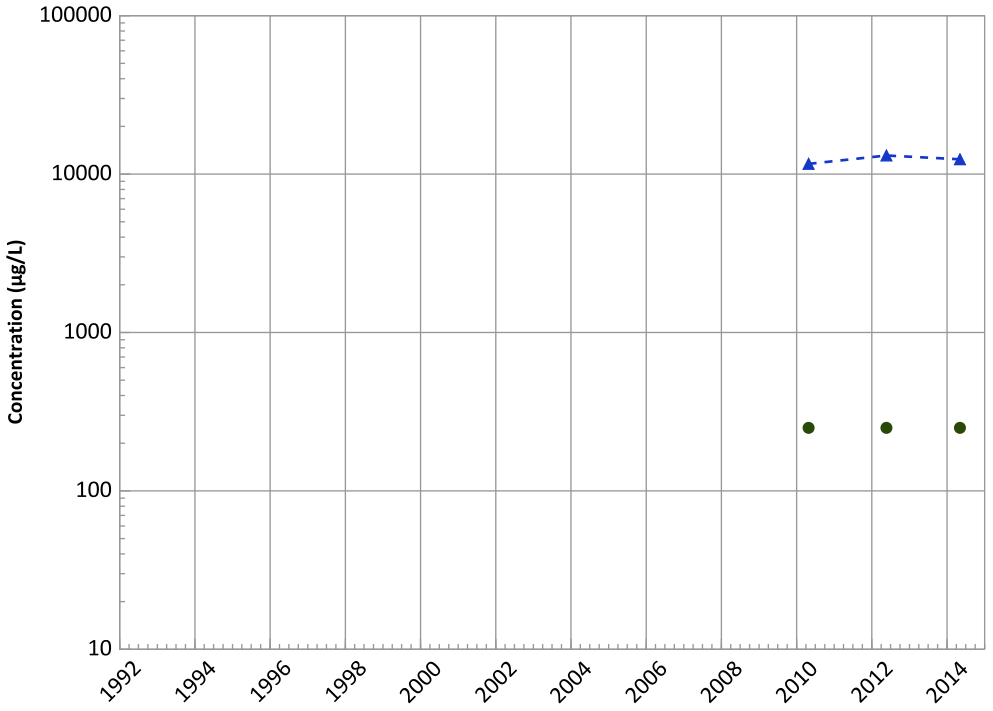
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1147 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

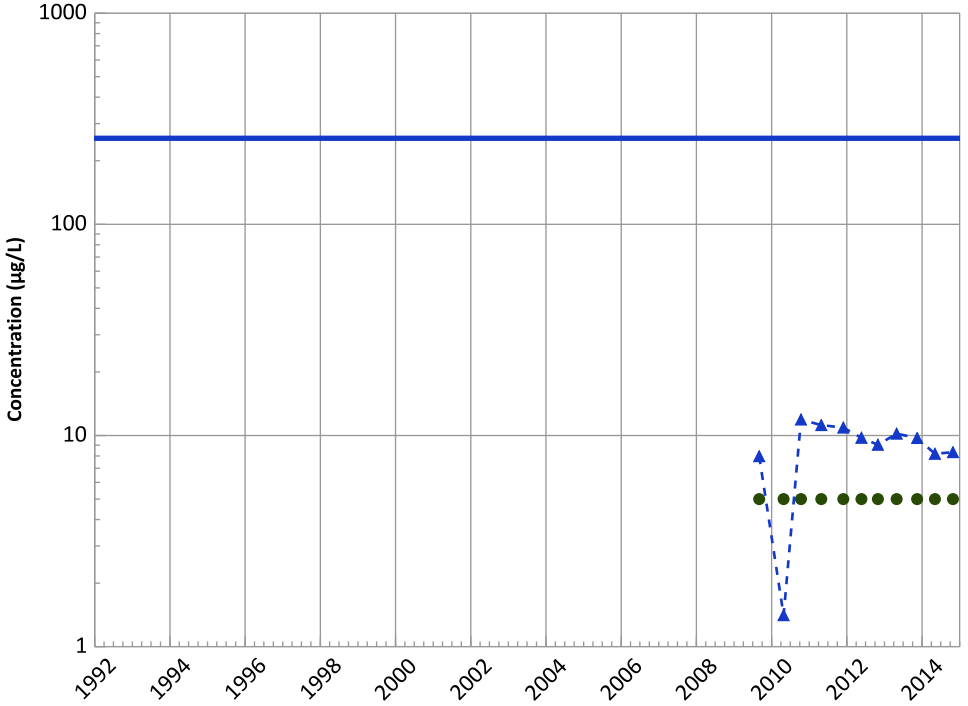


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Vanadium Trend



Concentration Trend

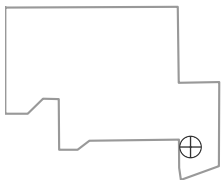
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

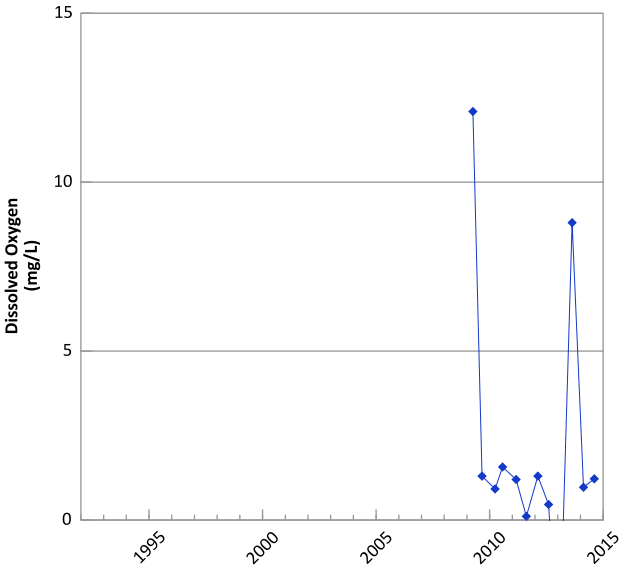
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/02/2009 to 10/28/2014
Analysis Date: 03/19/2015

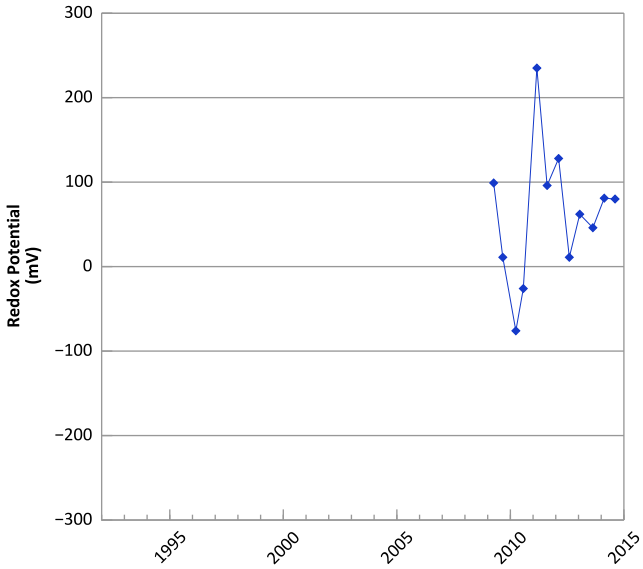
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

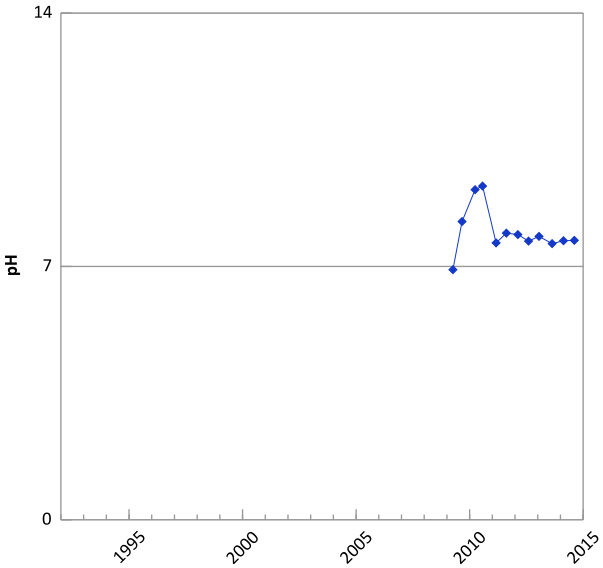
Well Location

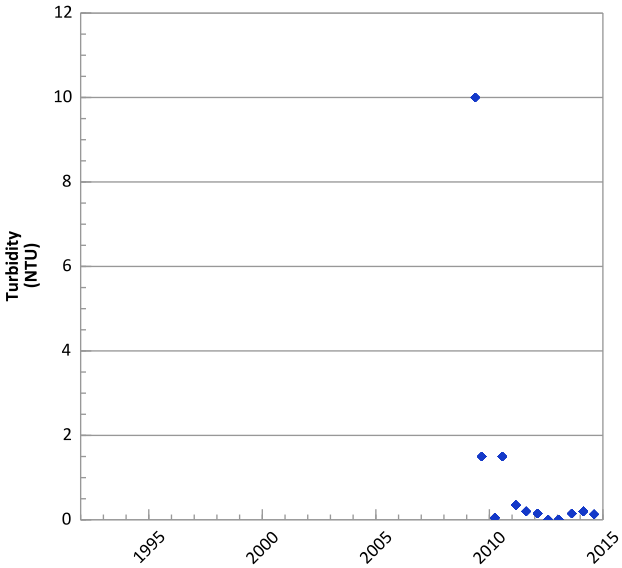


PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



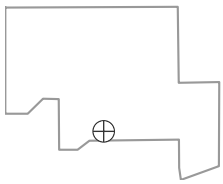






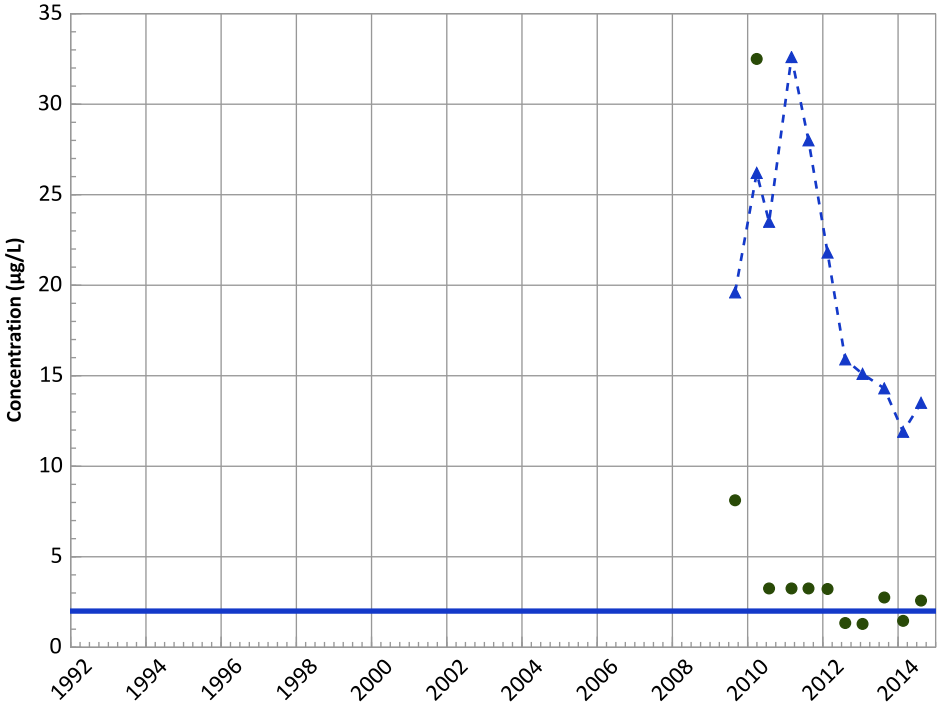
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

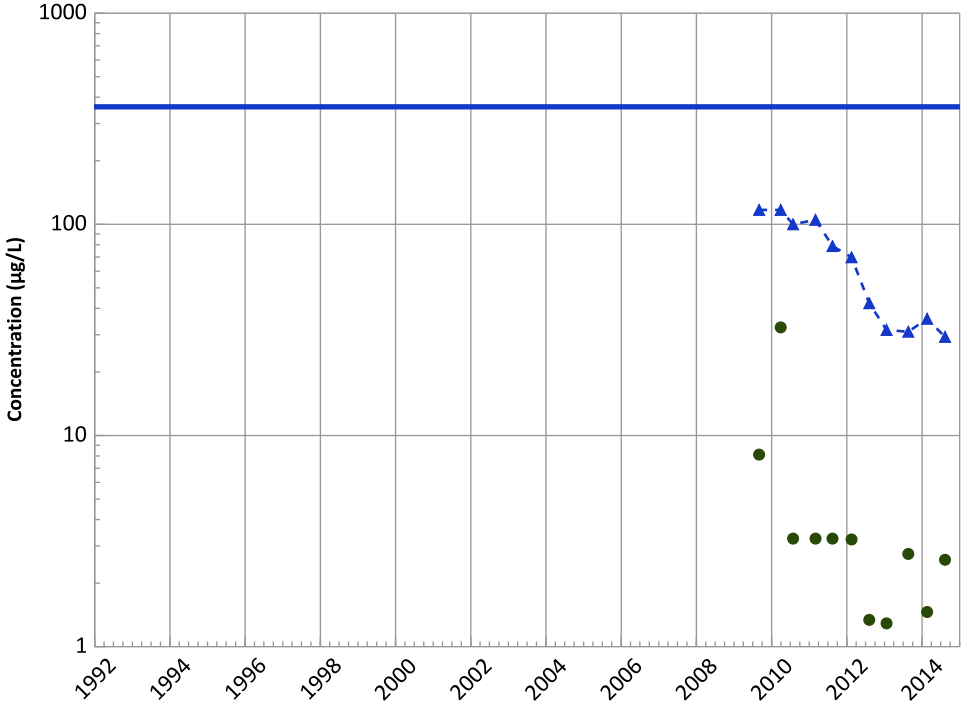


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

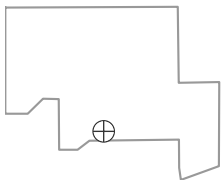
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

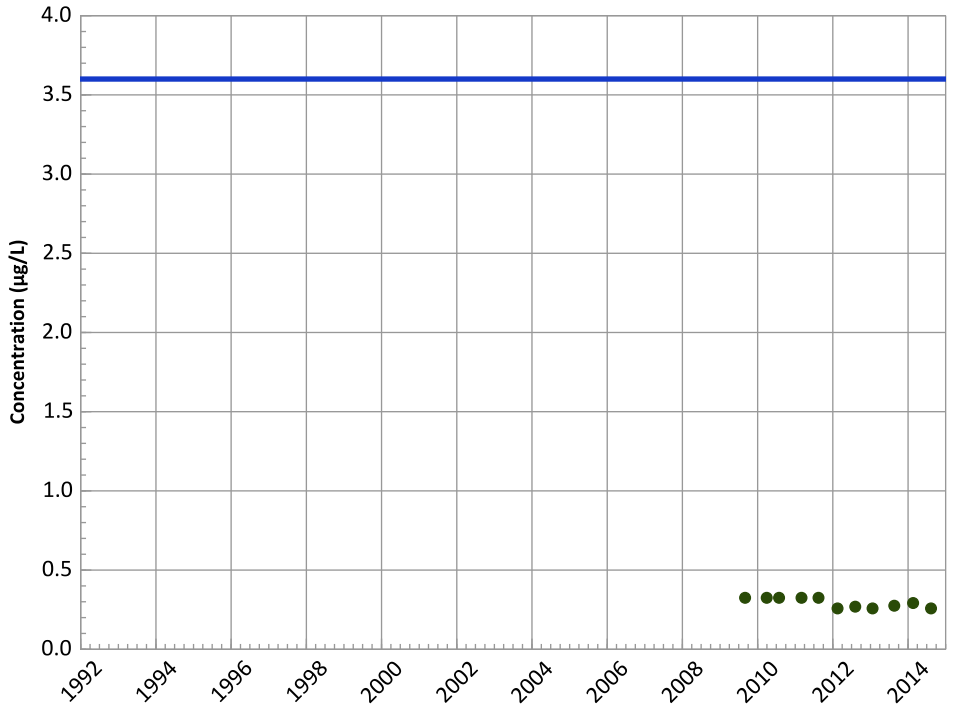
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

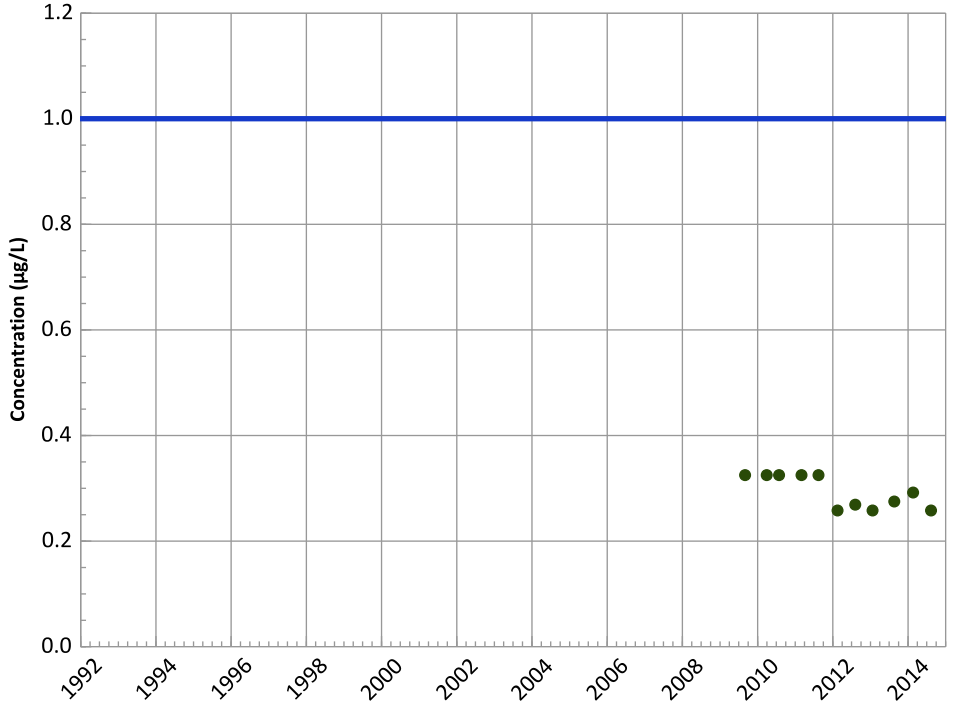


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

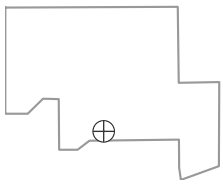
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

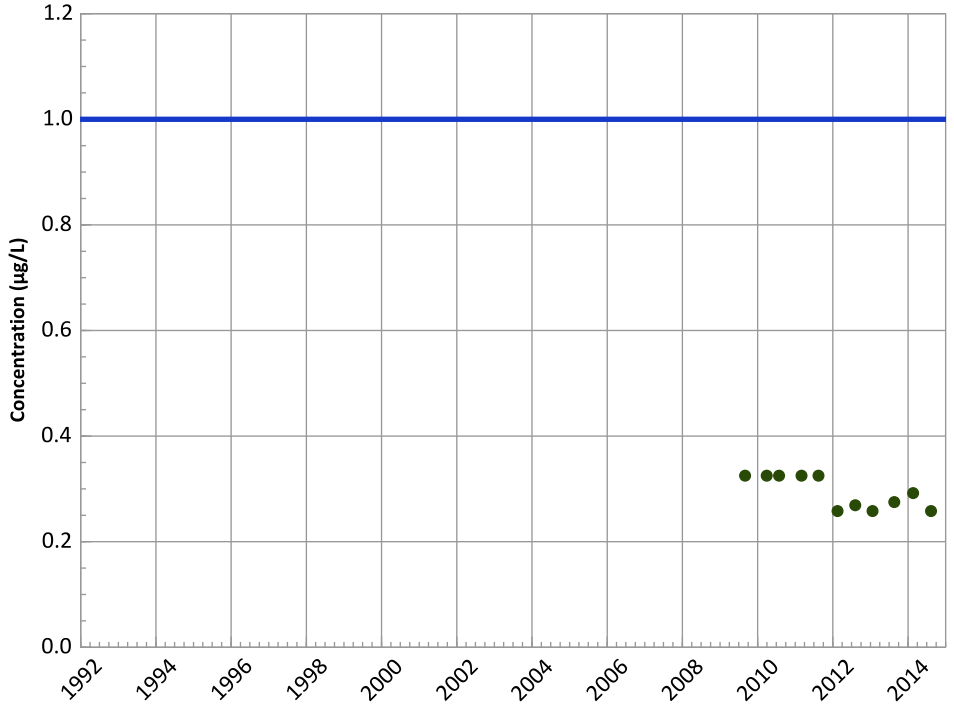
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

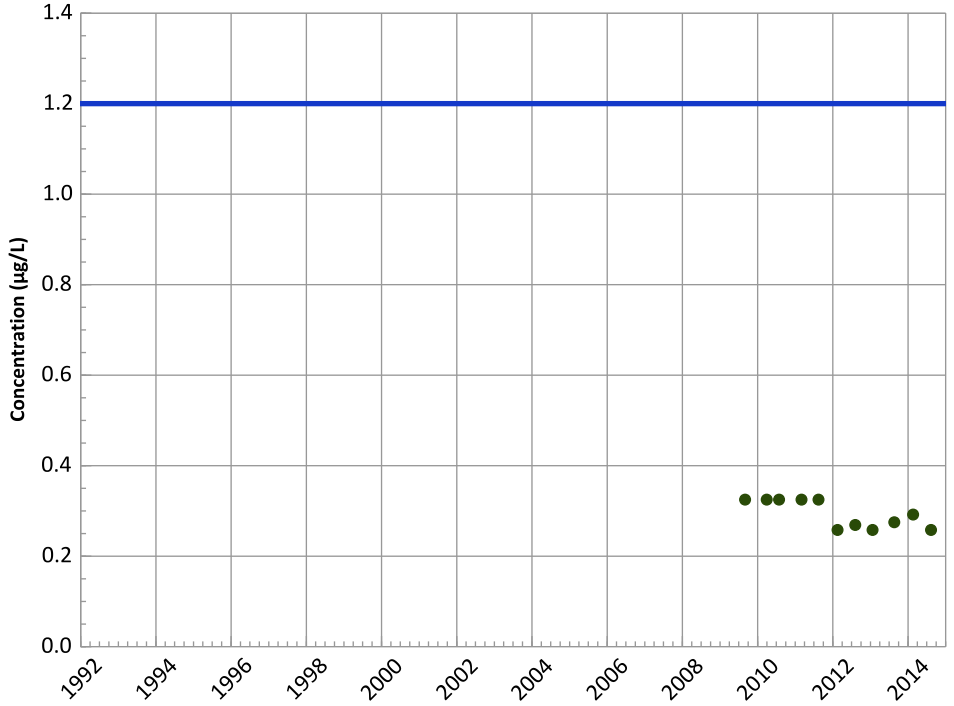


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

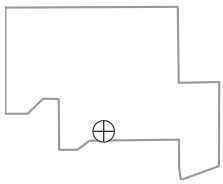
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

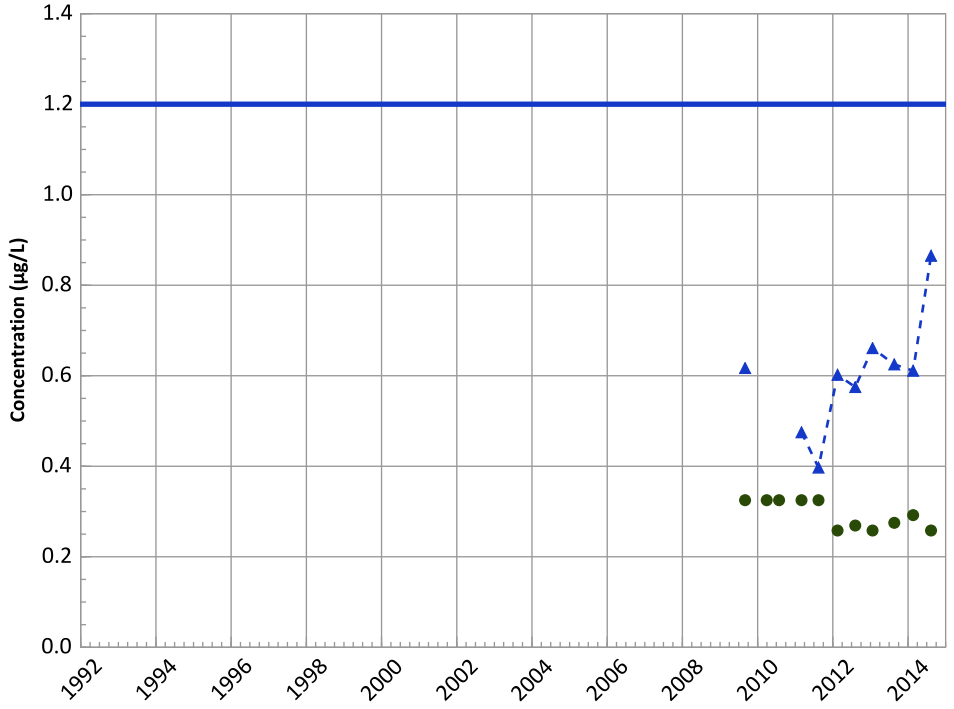
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

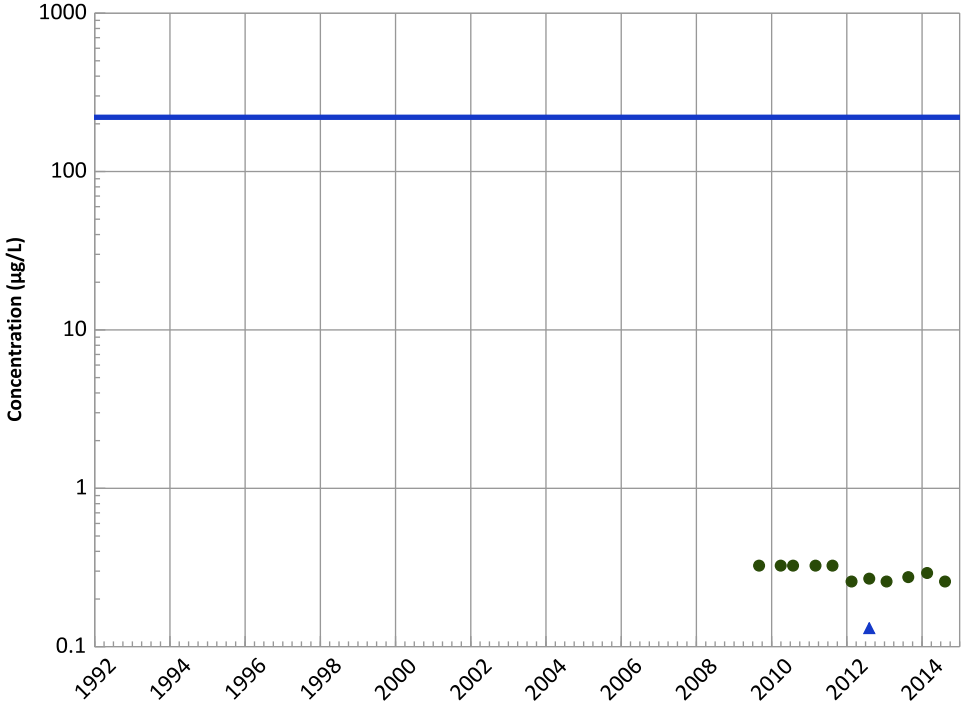


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

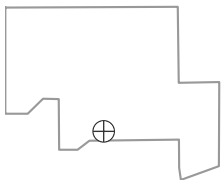
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

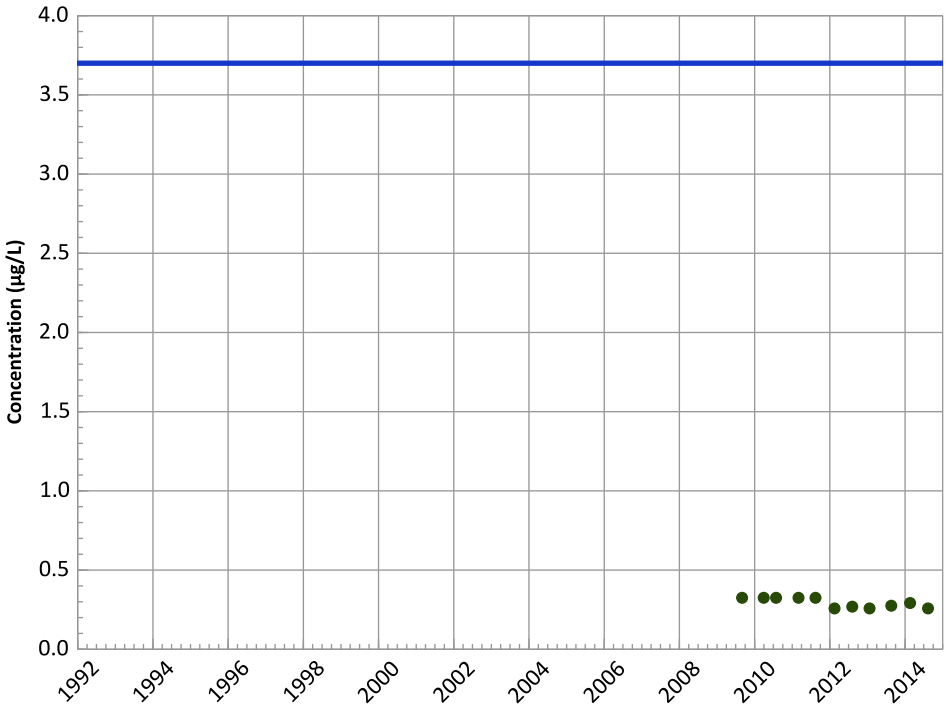
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

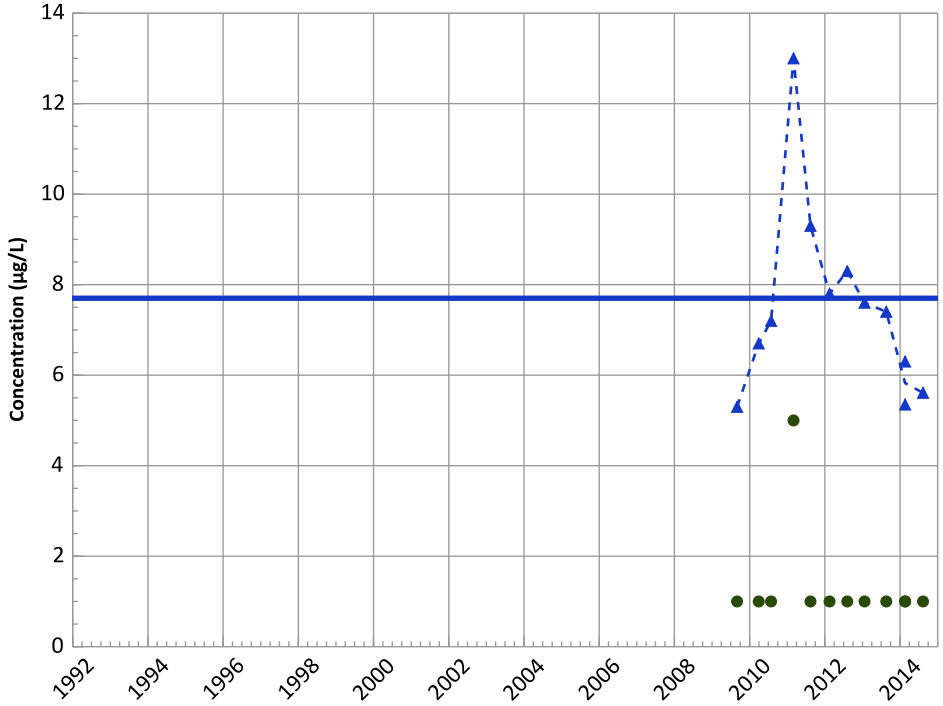


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

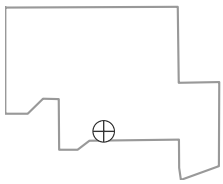
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

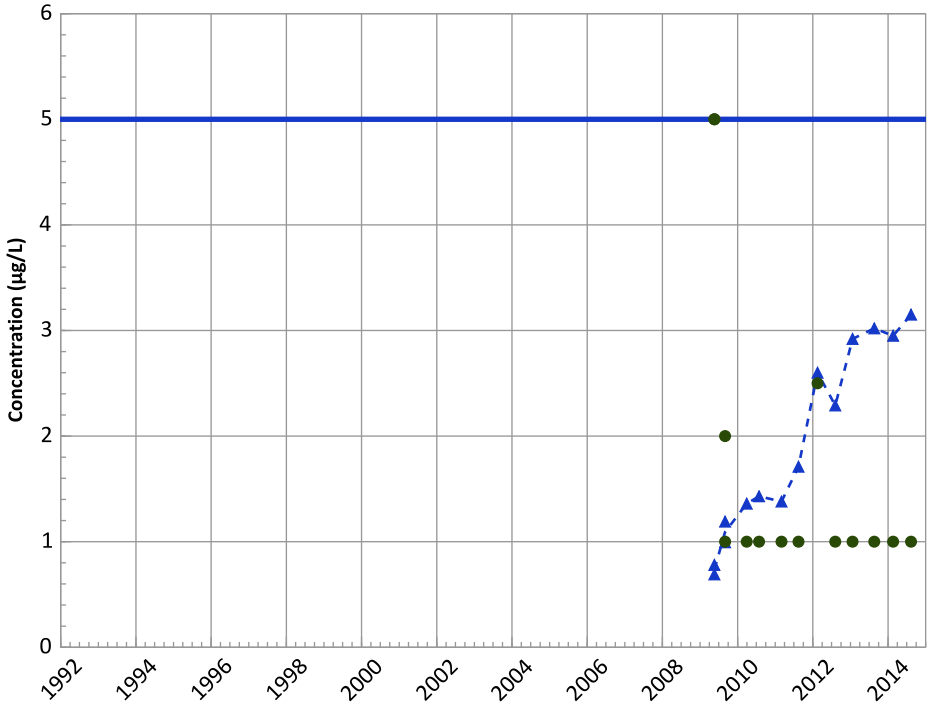
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

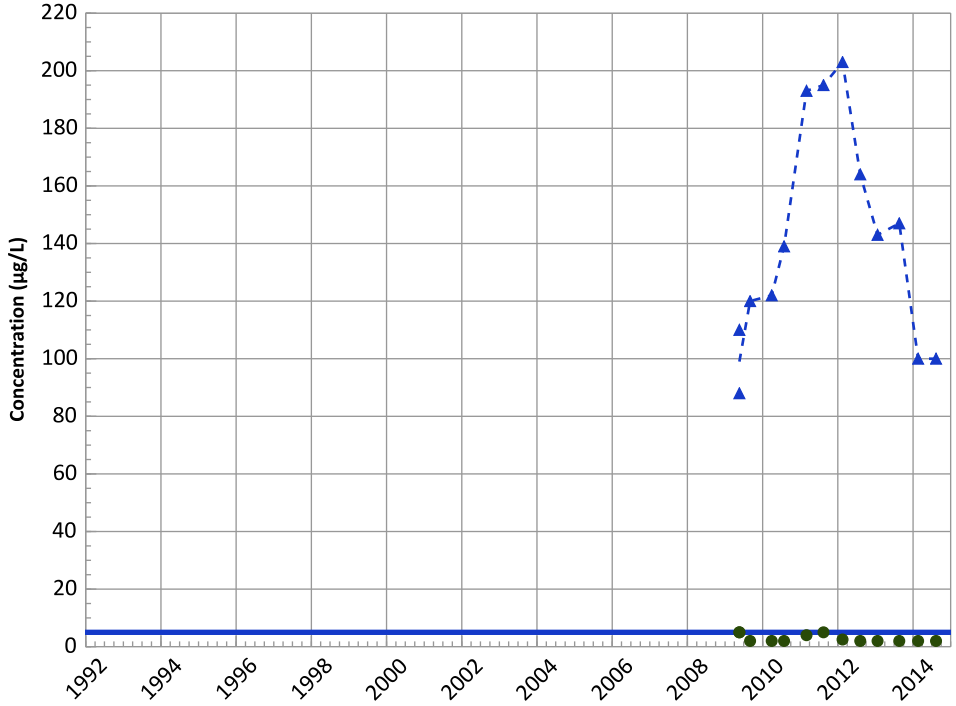


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Trichloroethene Trend



Concentration Trend

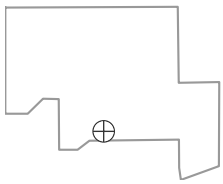
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

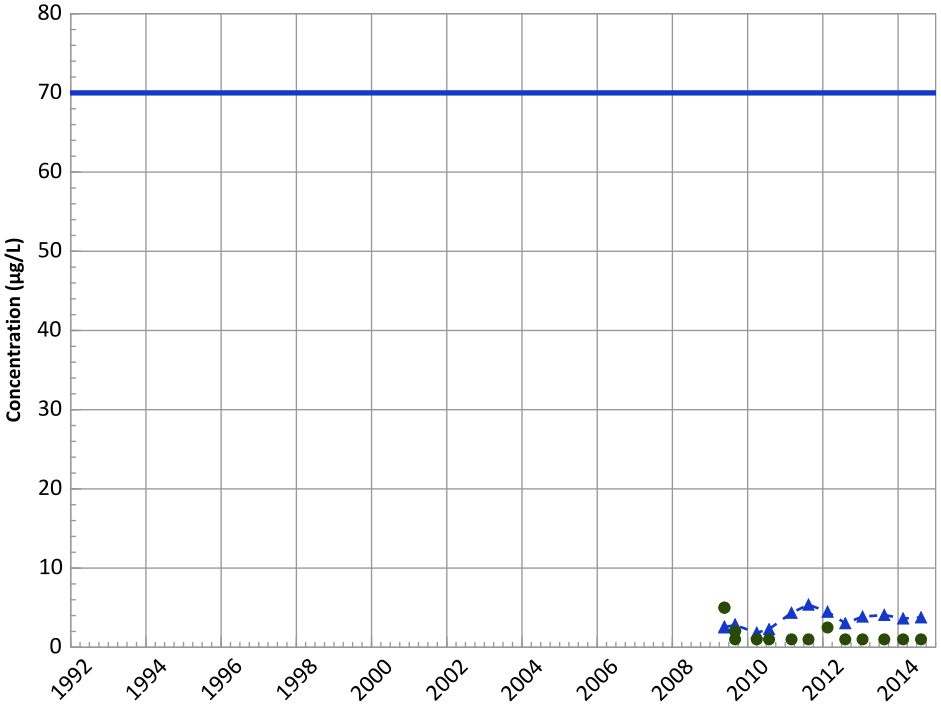
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

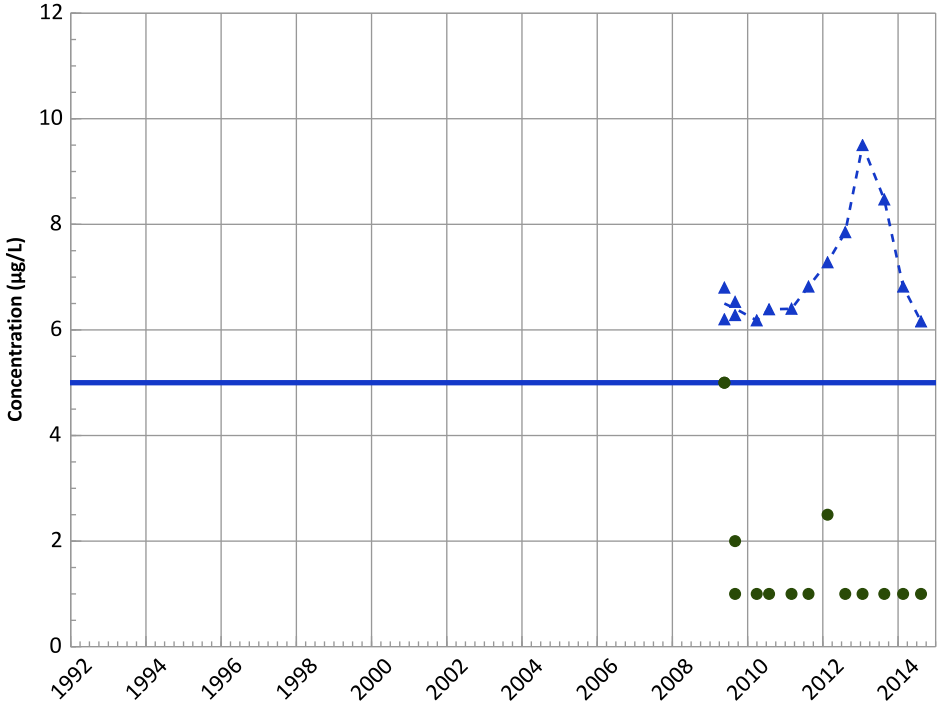


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

1,2-Dichloroethane Trend



Concentration Trend

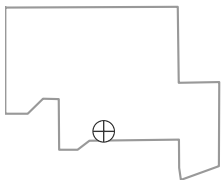
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

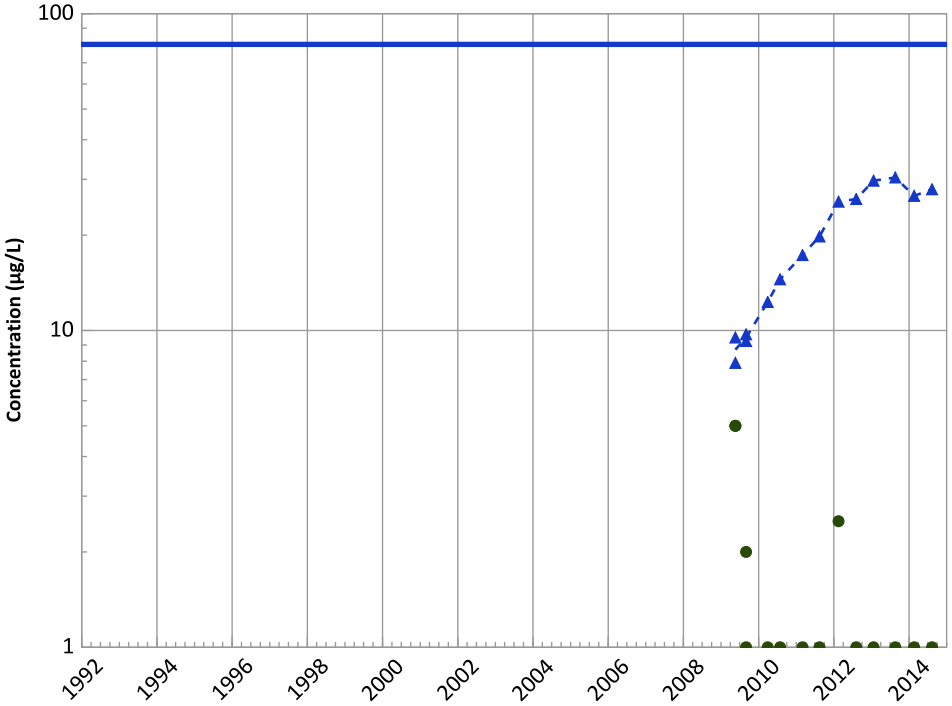
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

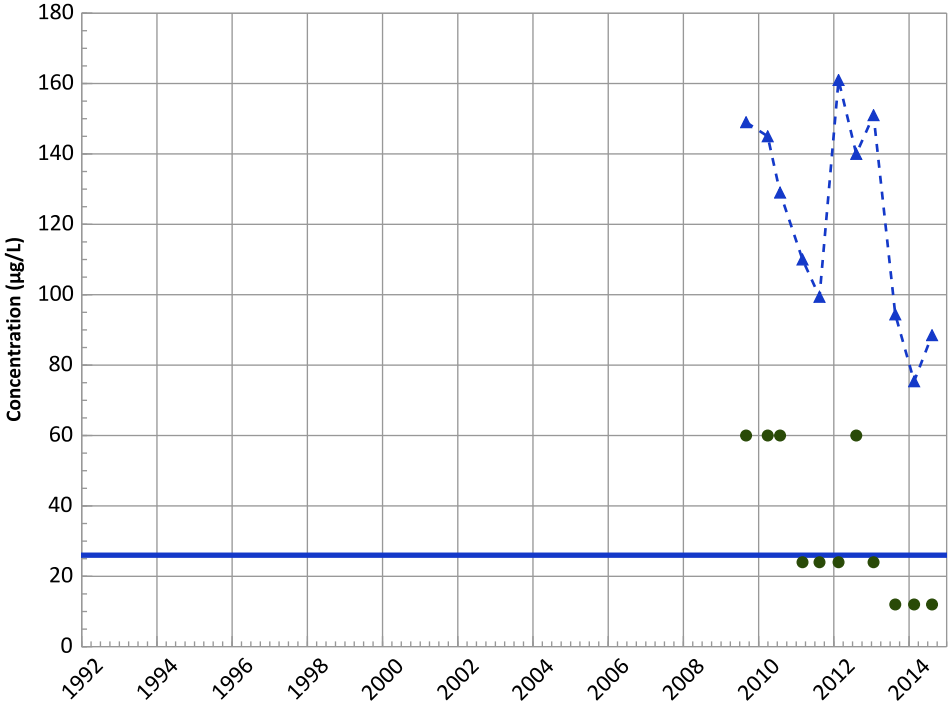


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Perchlorate Trend



Concentration Trend

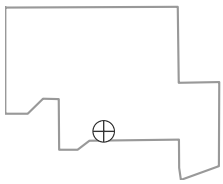
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

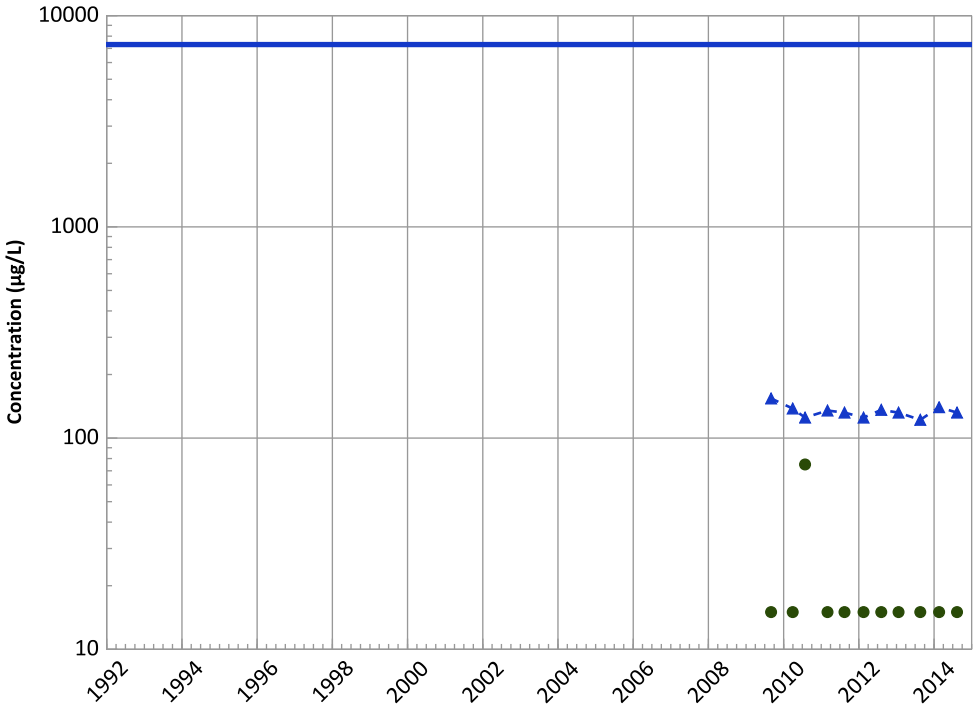
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

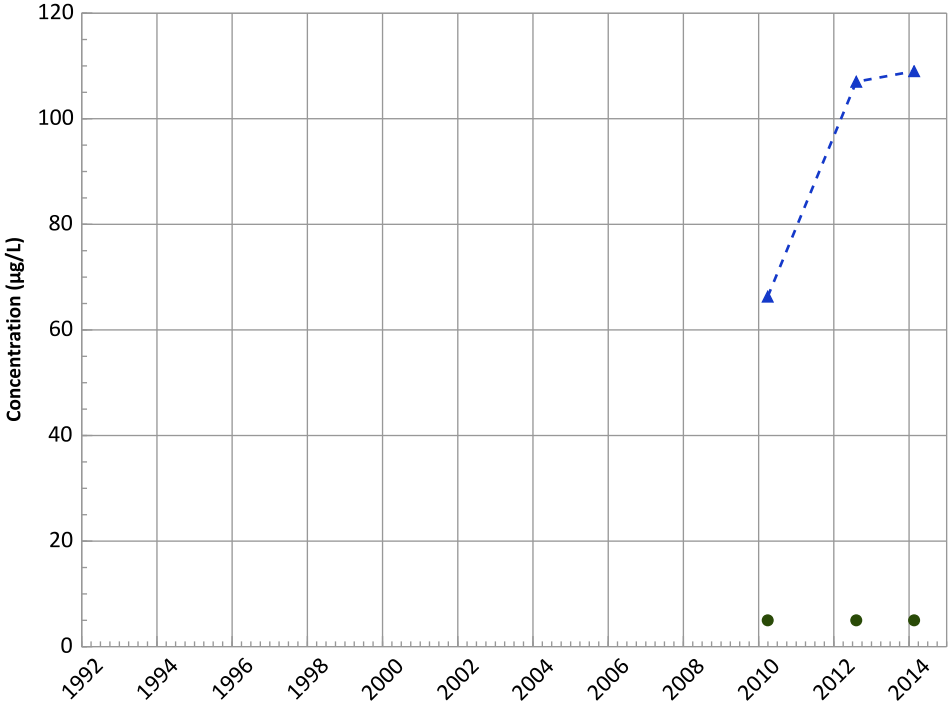


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Manganese Trend



Concentration Trend

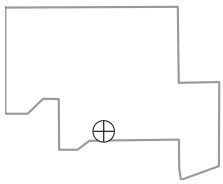
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

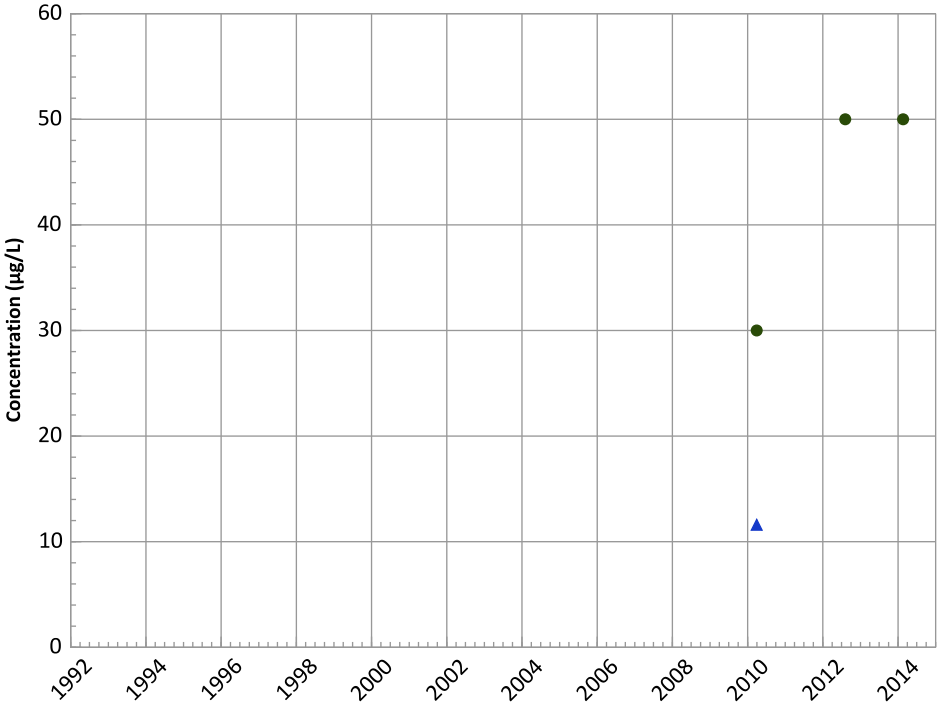
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

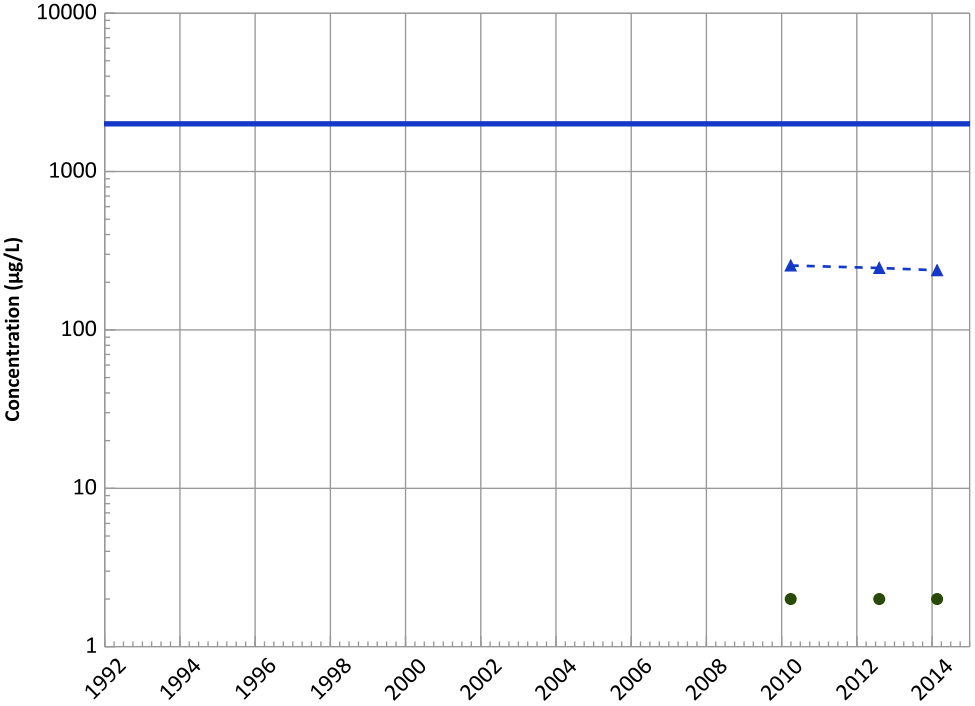


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

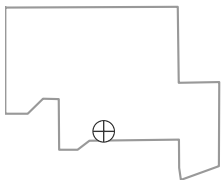
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

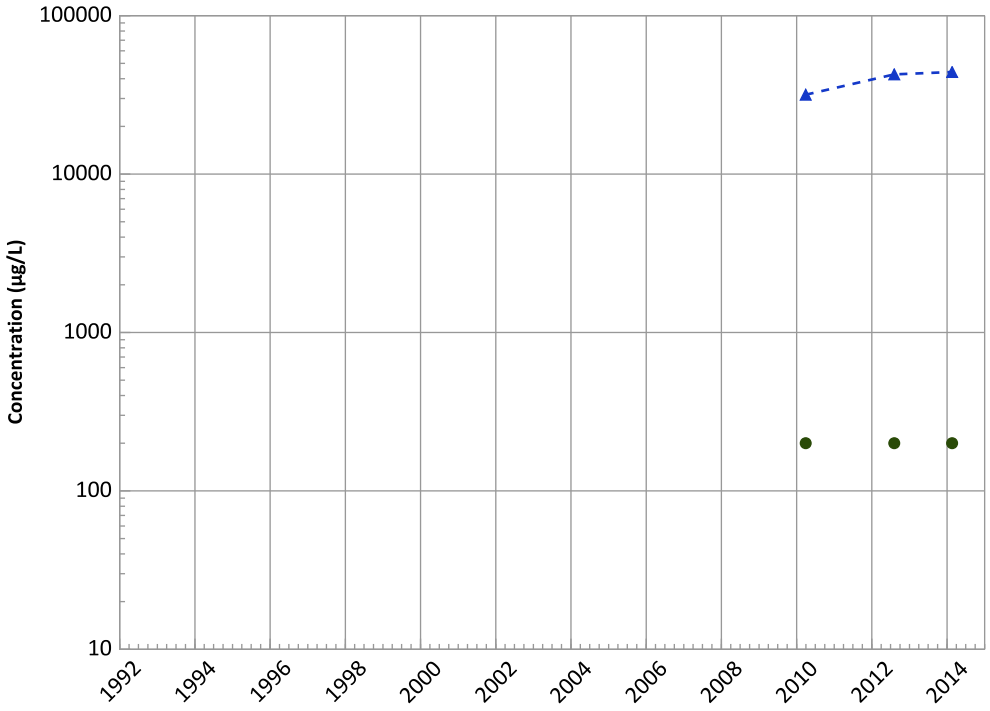
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

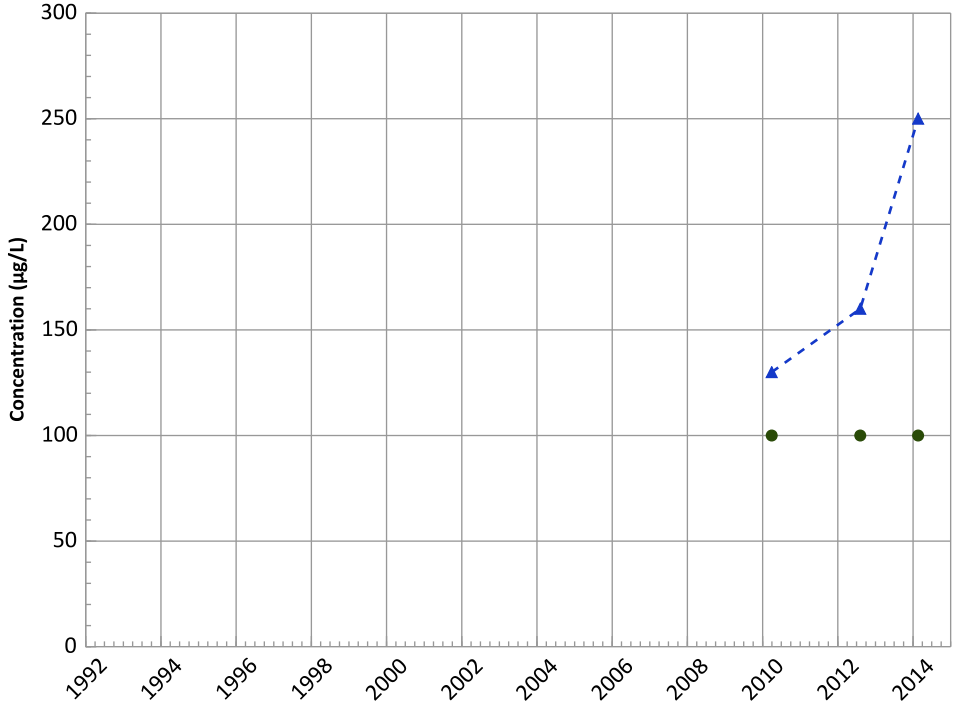


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

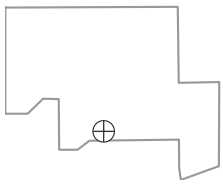
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

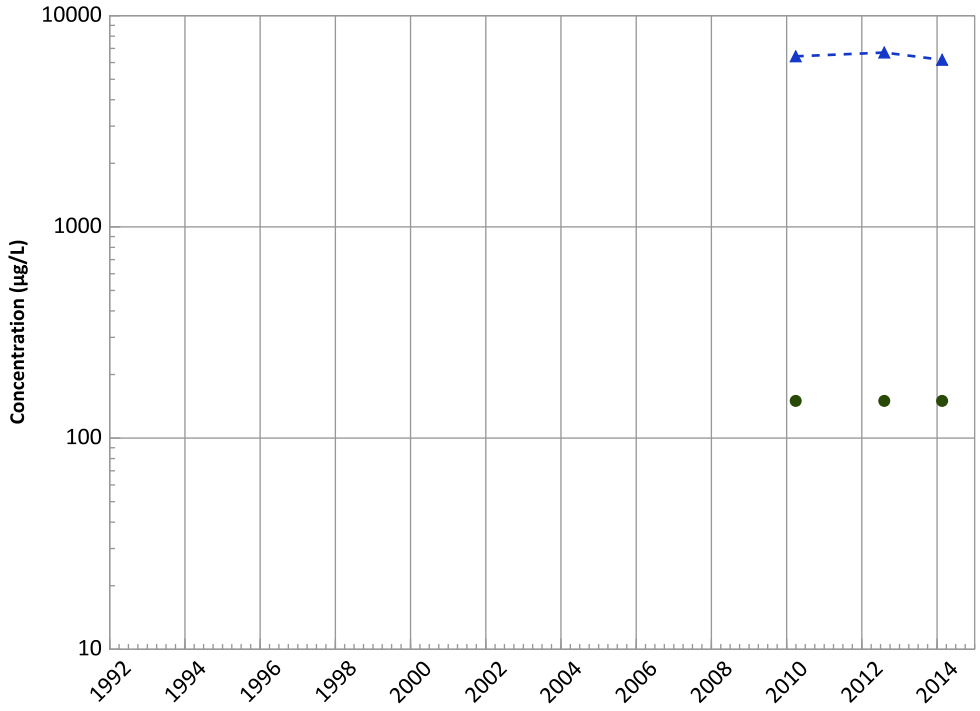
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

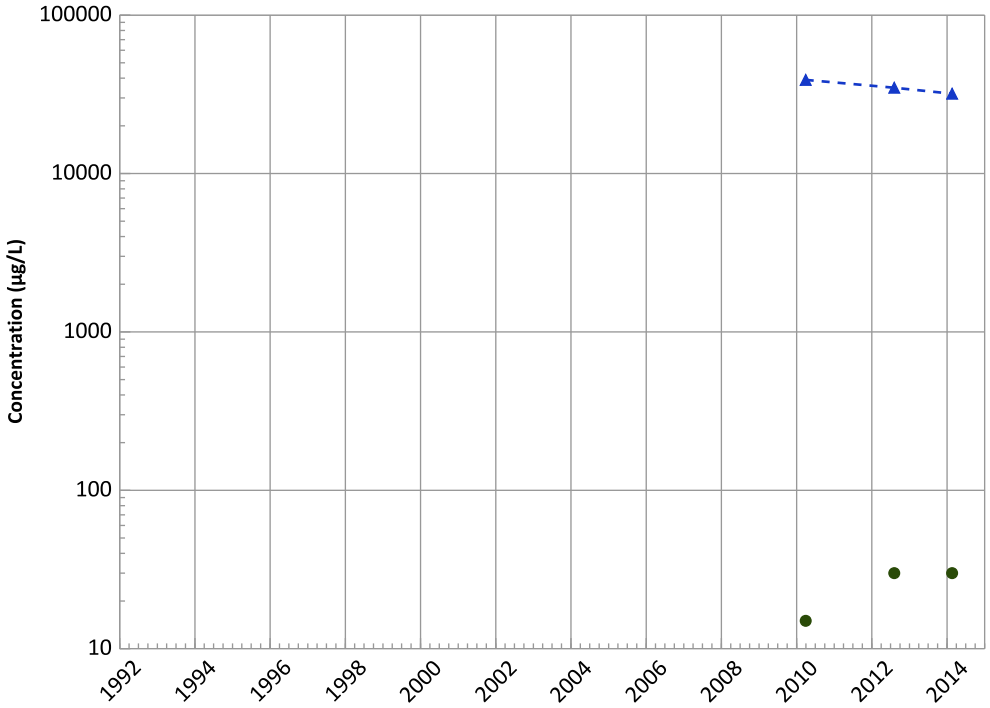


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

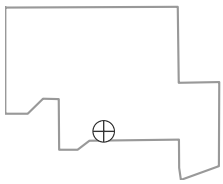
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

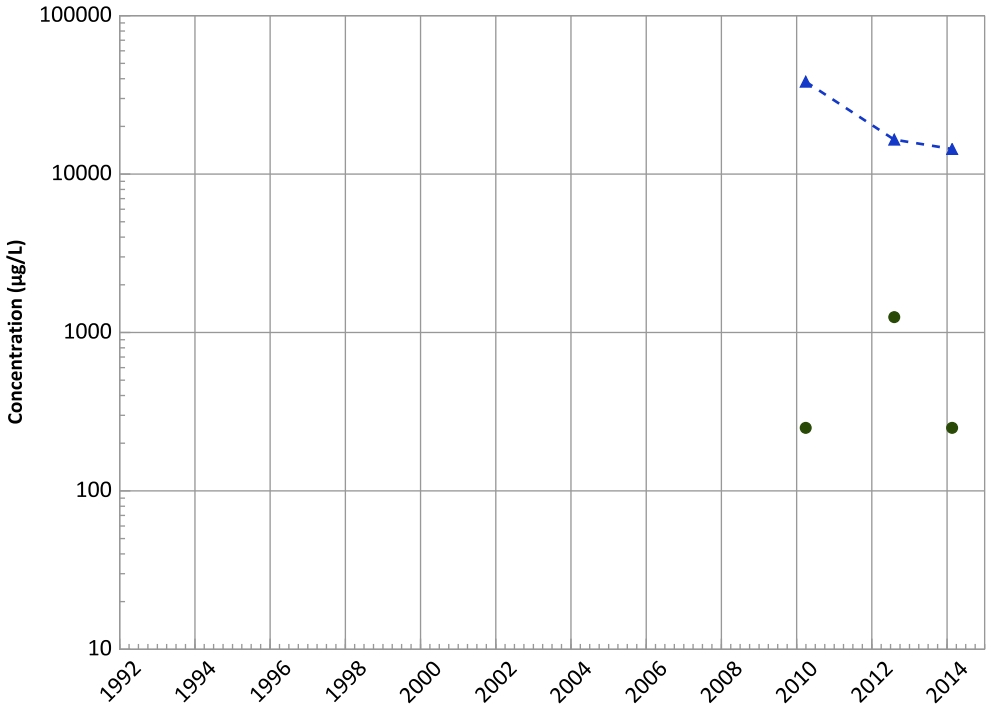
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1151 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

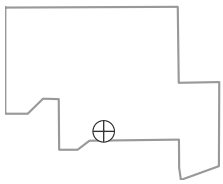
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

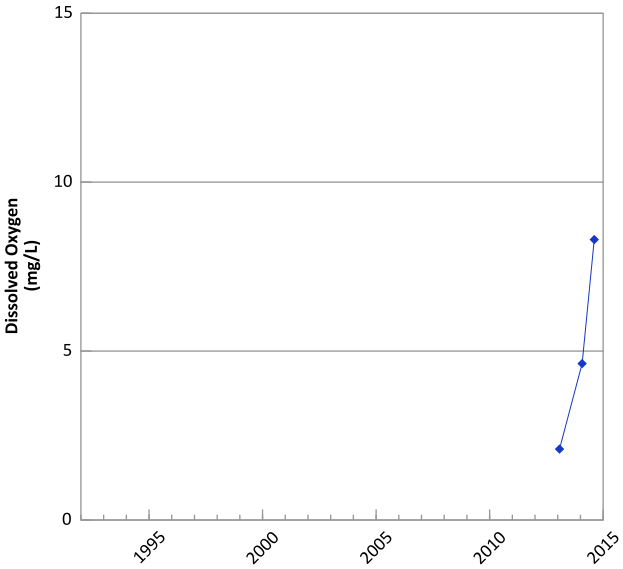
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/20/2009 to 08/12/2014
Analysis Date: 03/19/2015

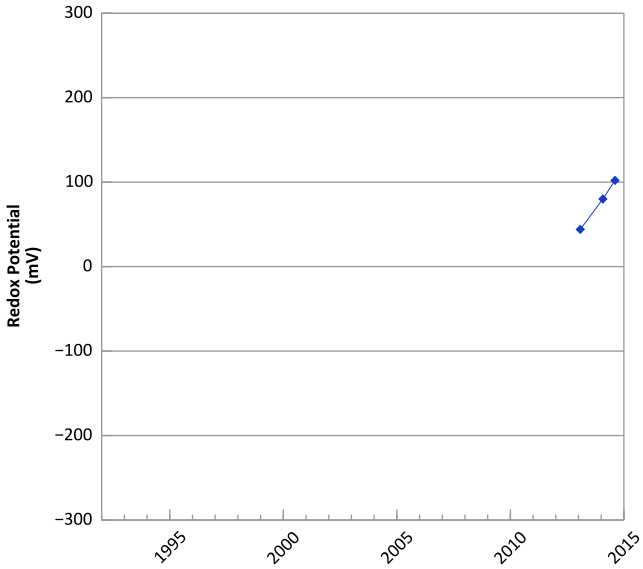
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

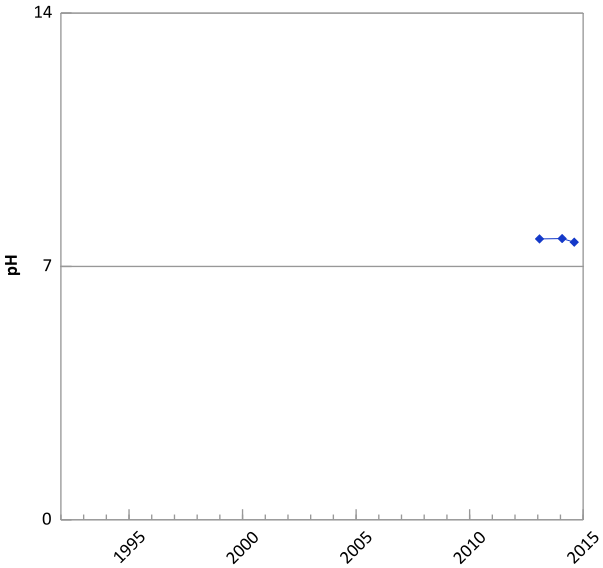
Well Location

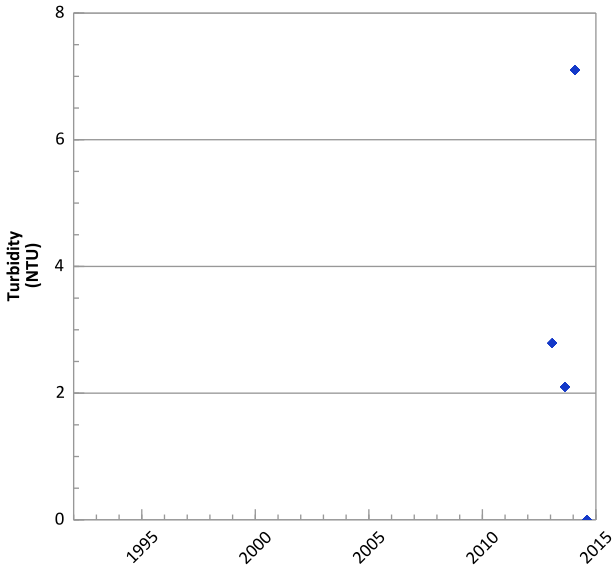


PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



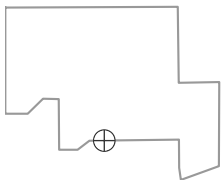






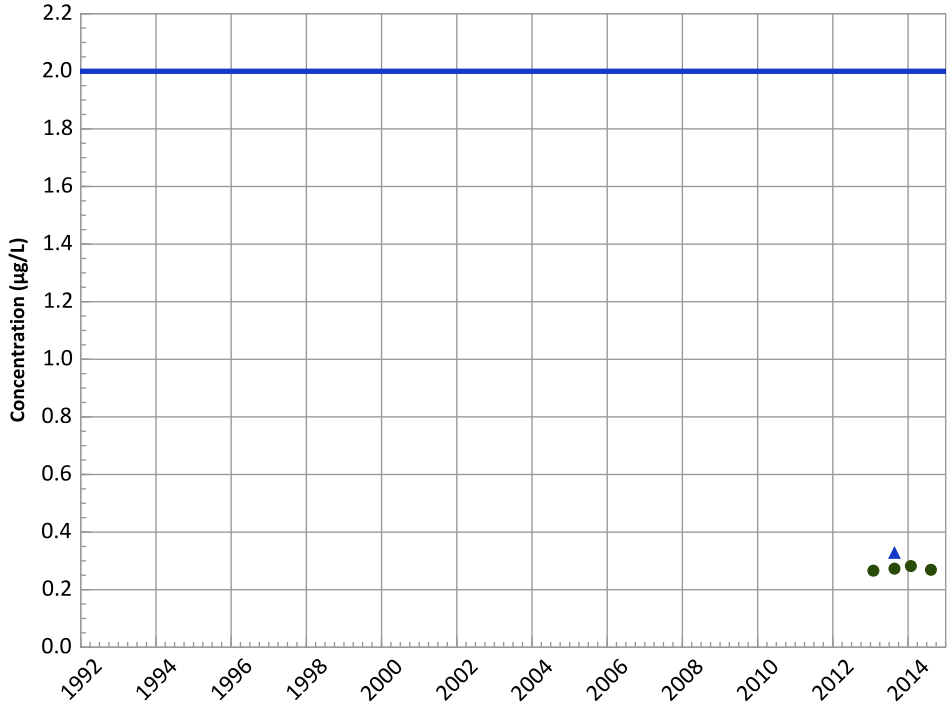
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

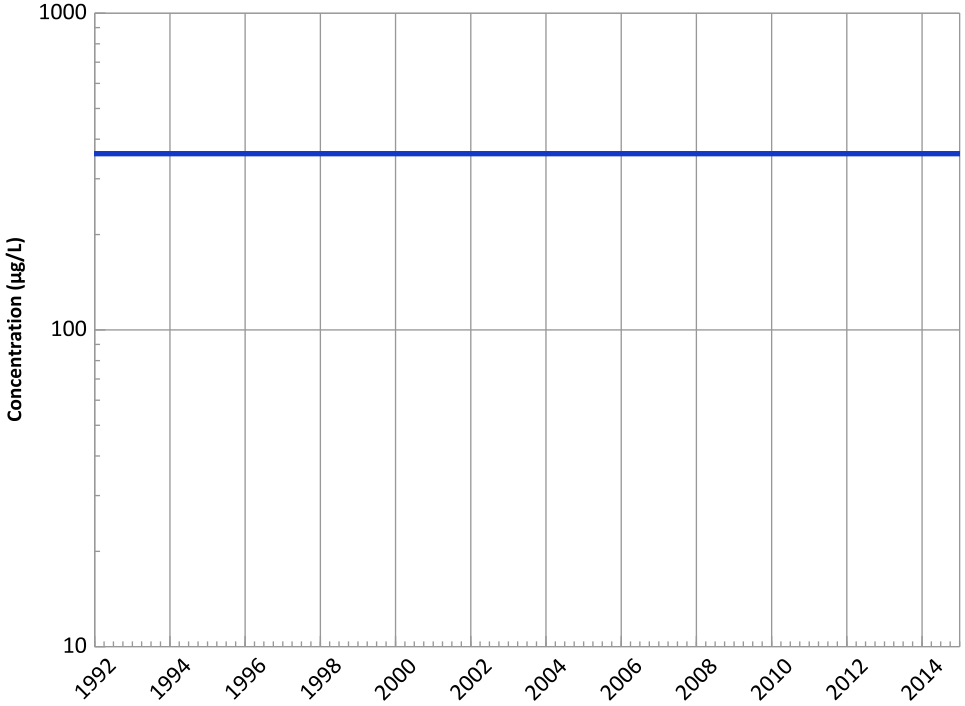


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

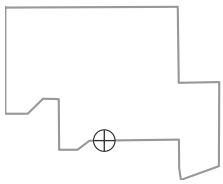
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

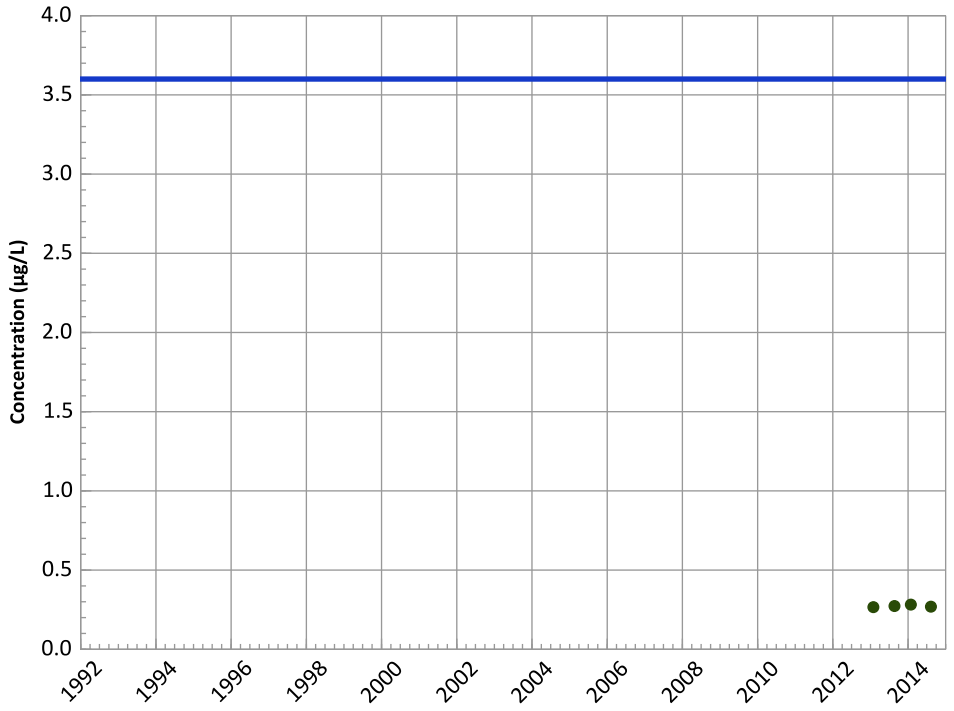
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

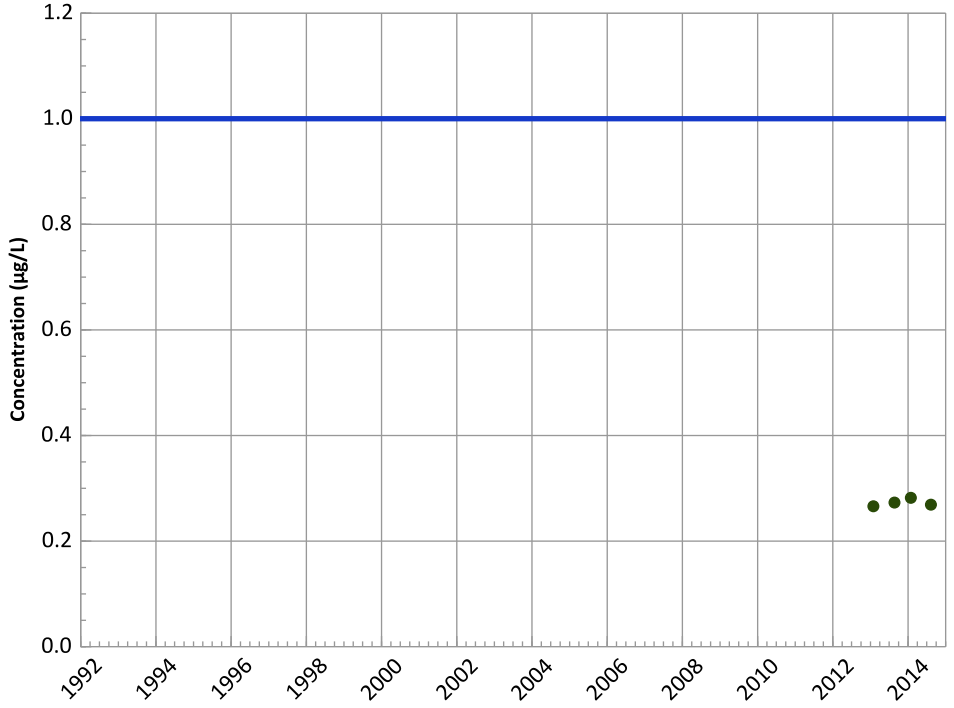


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

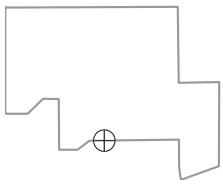
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

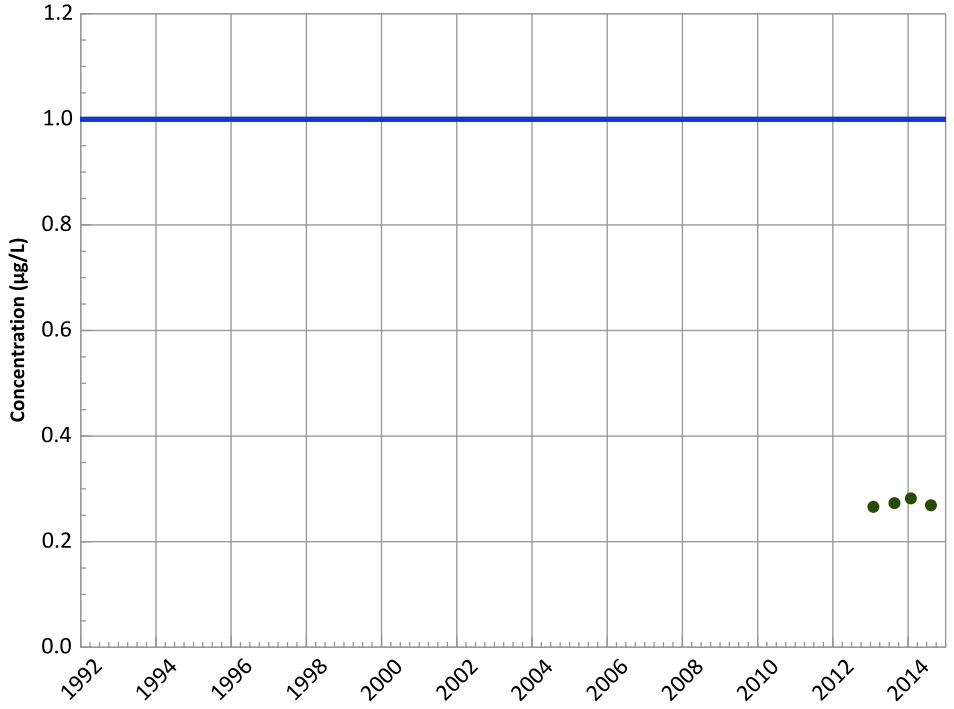
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

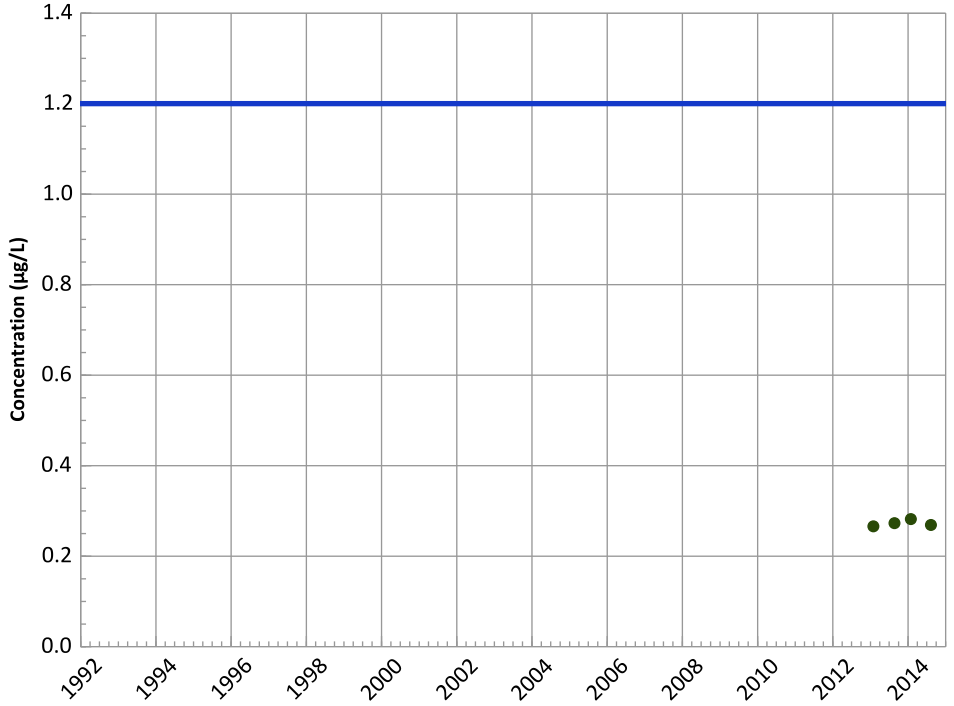


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

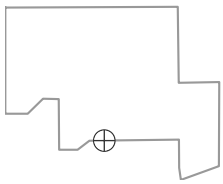
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

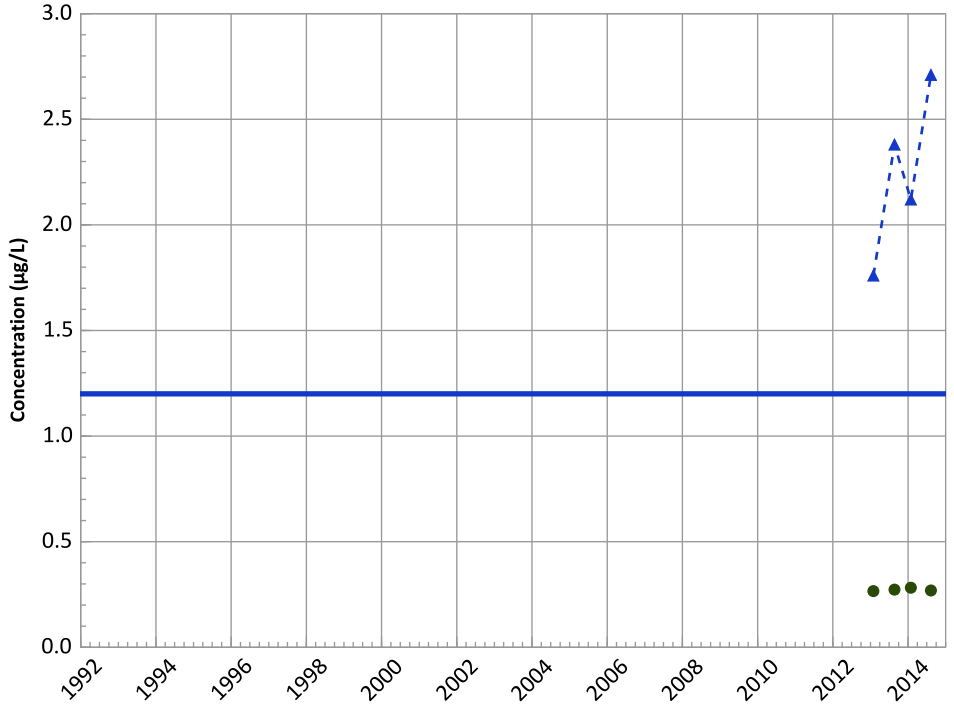
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

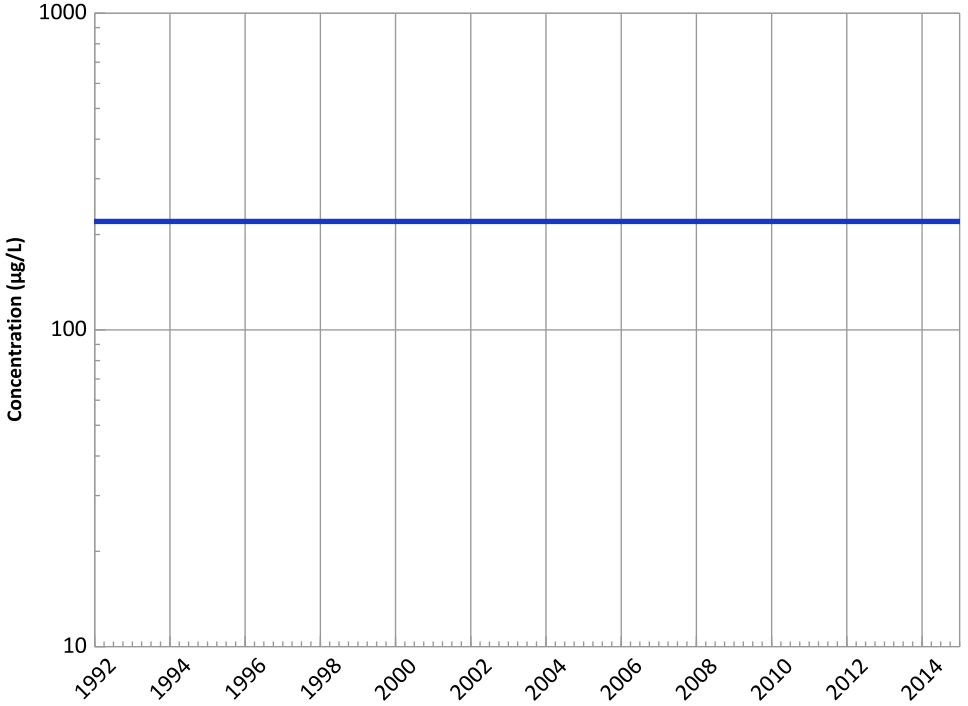


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

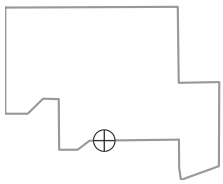
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

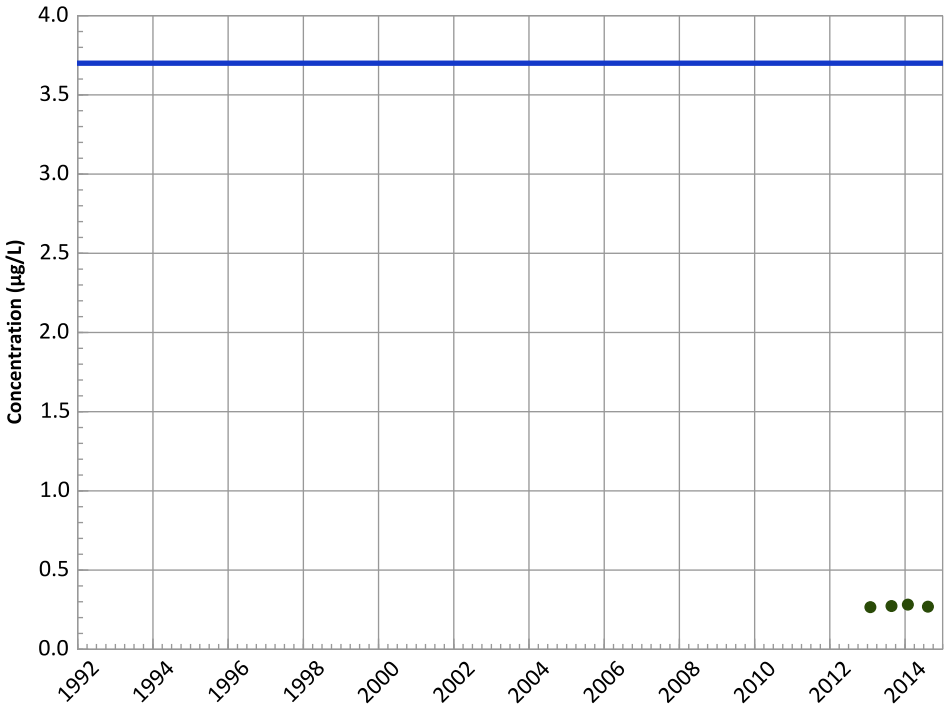
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

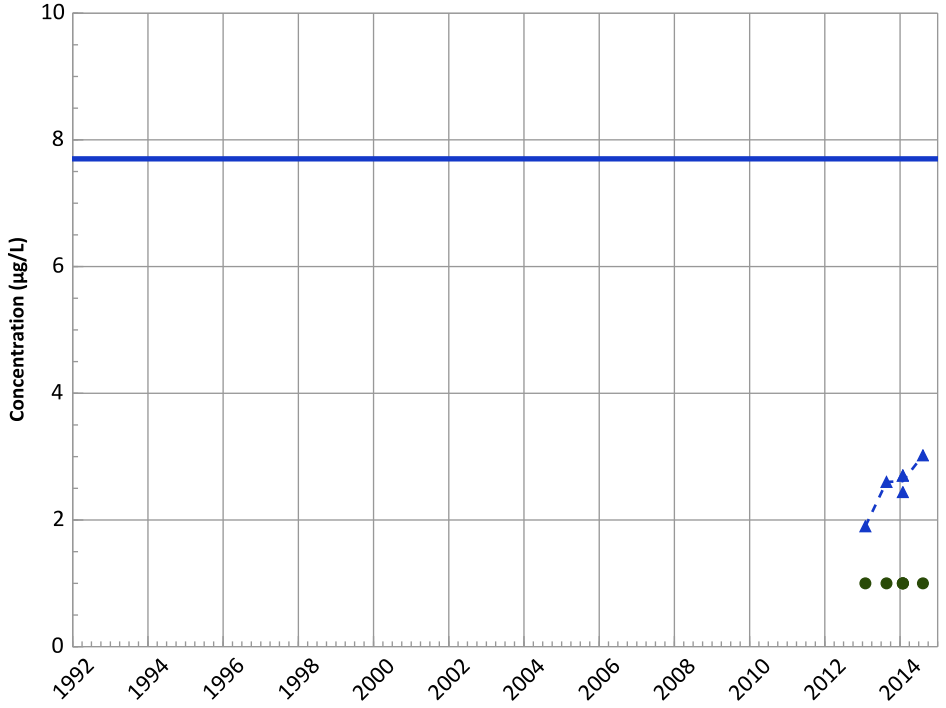


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

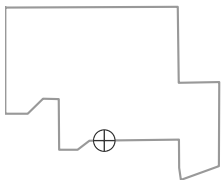
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

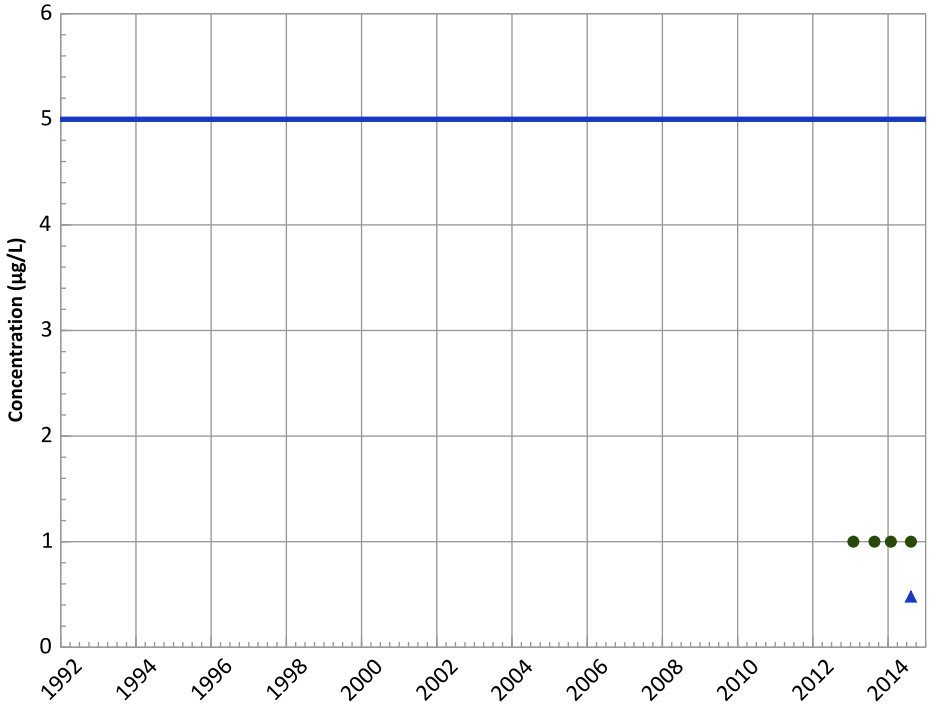
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

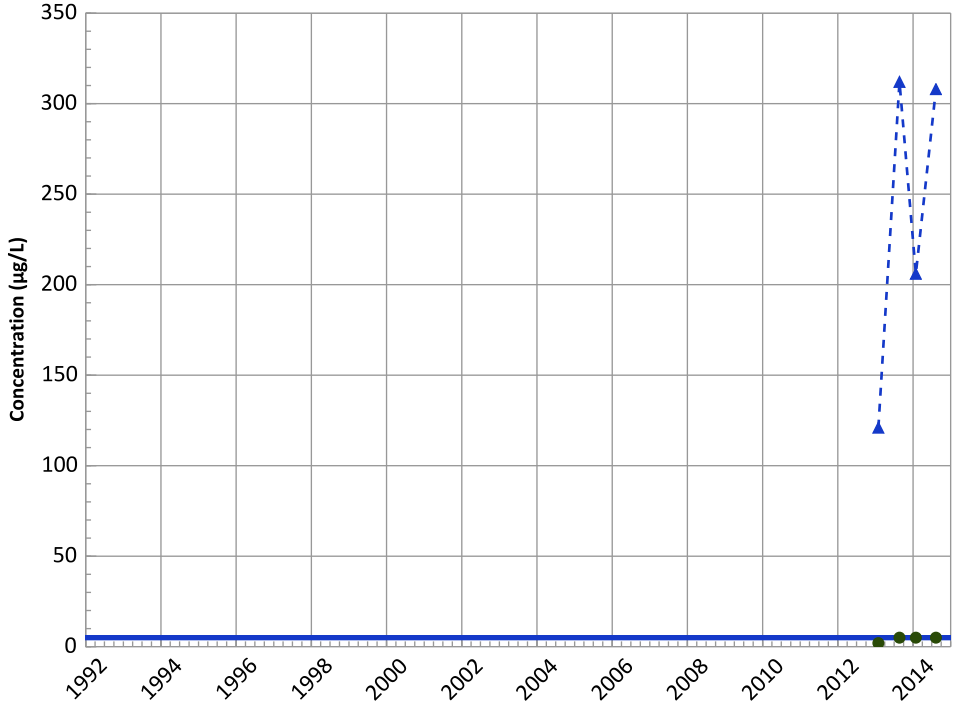


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Trichloroethene Trend



Concentration Trend

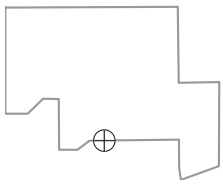
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

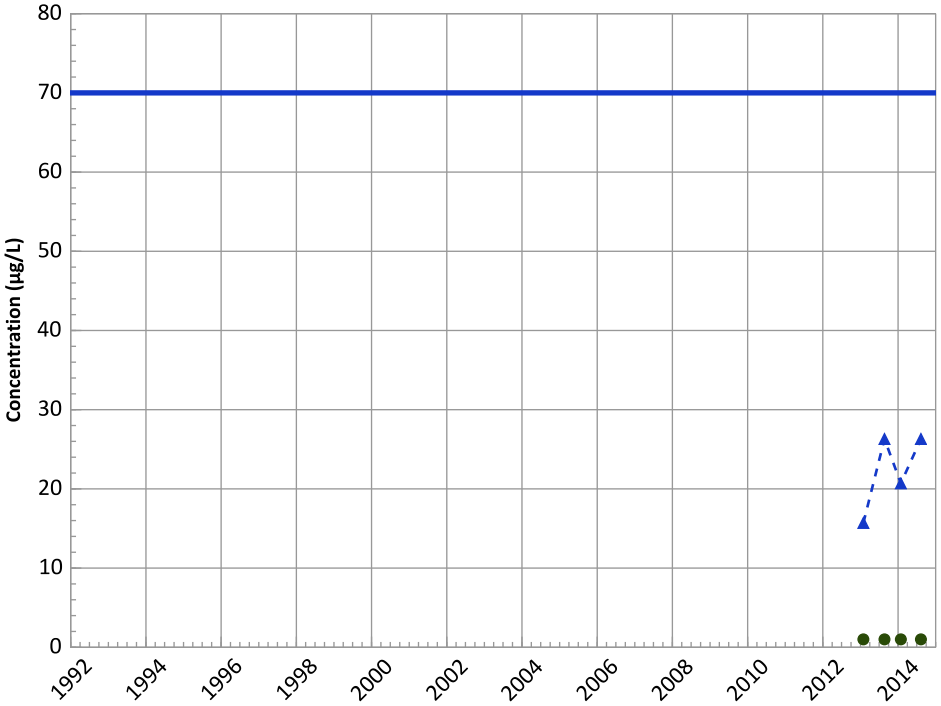
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

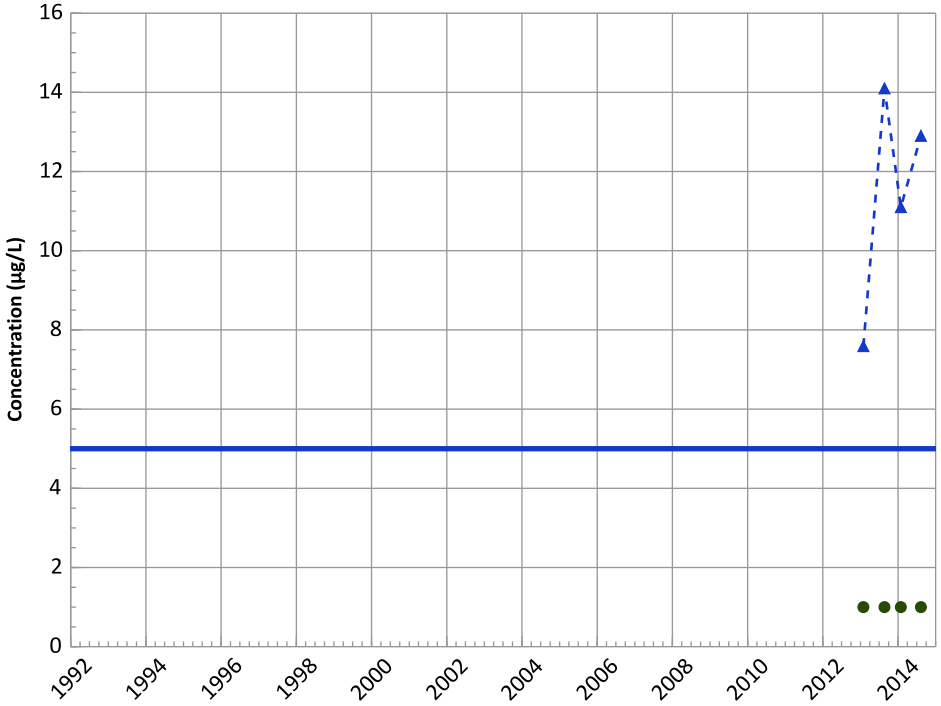


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

1,2-Dichloroethane Trend



Concentration Trend

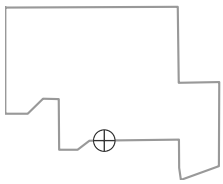
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

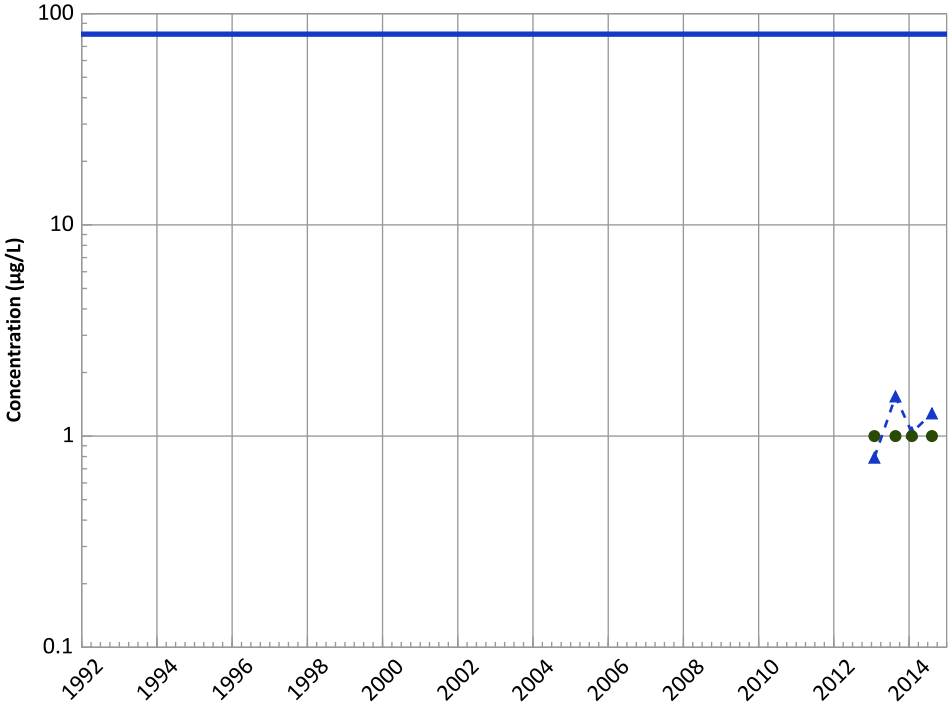
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

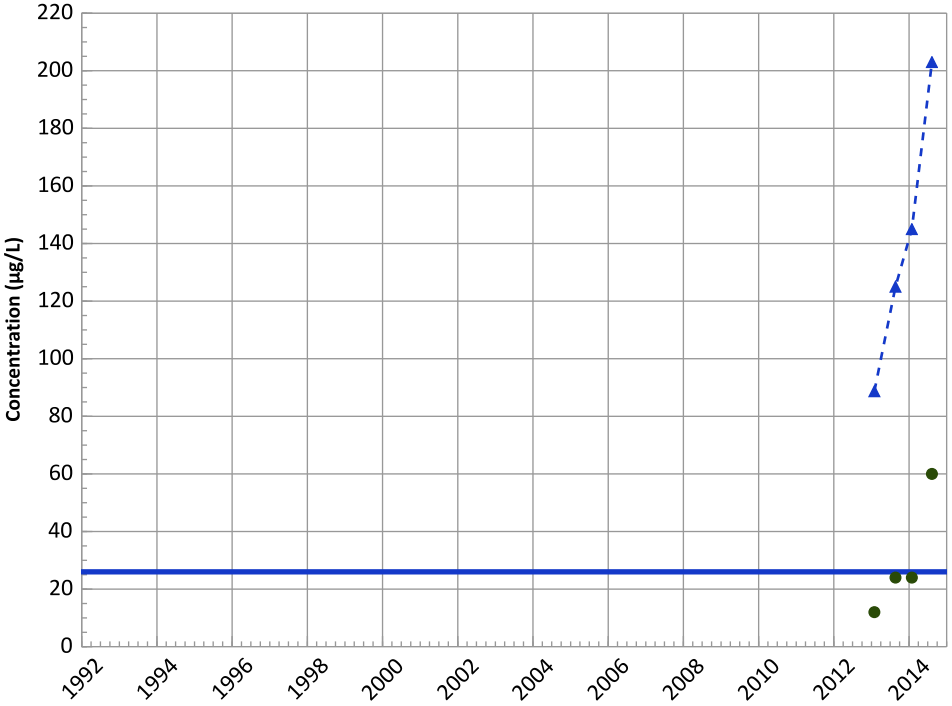


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Perchlorate Trend



Concentration Trend

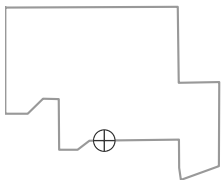
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

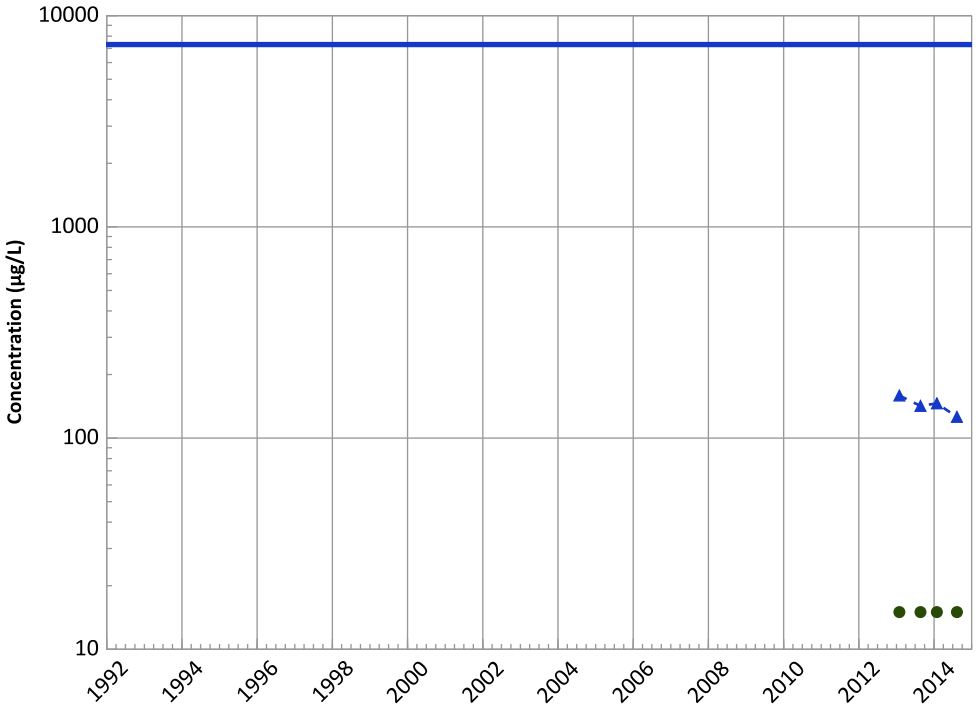
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

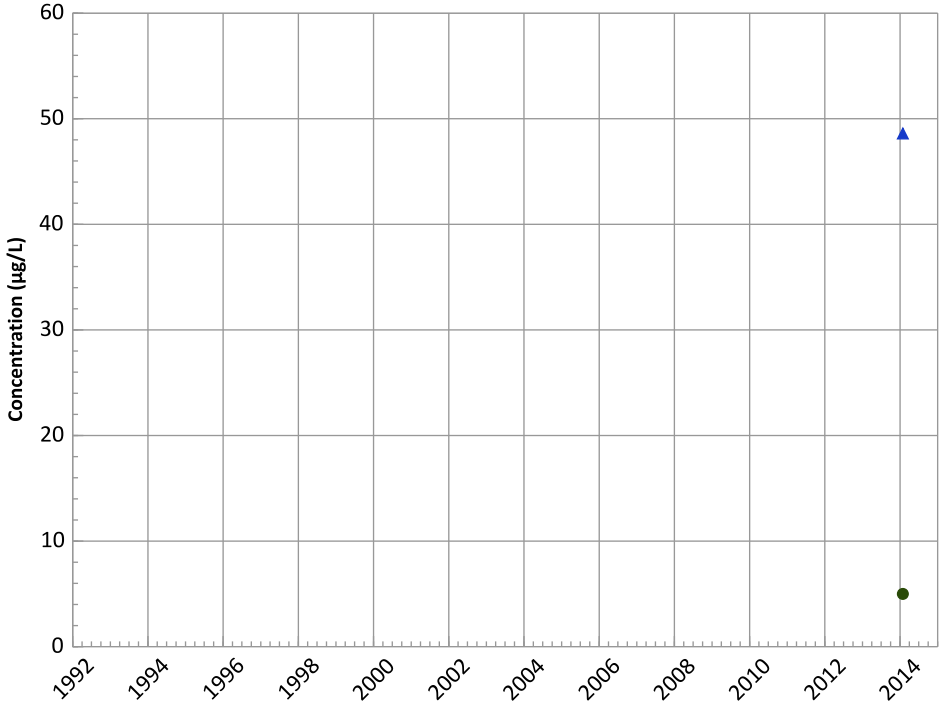


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Manganese Trend



Concentration Trend

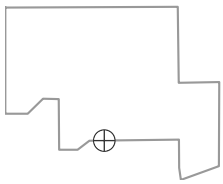
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

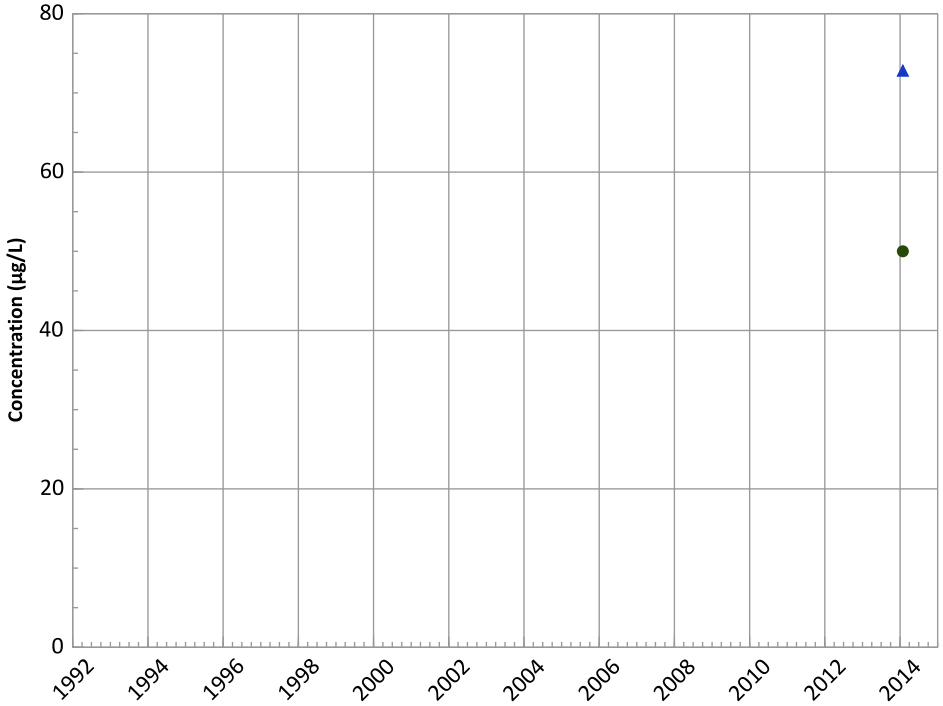
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

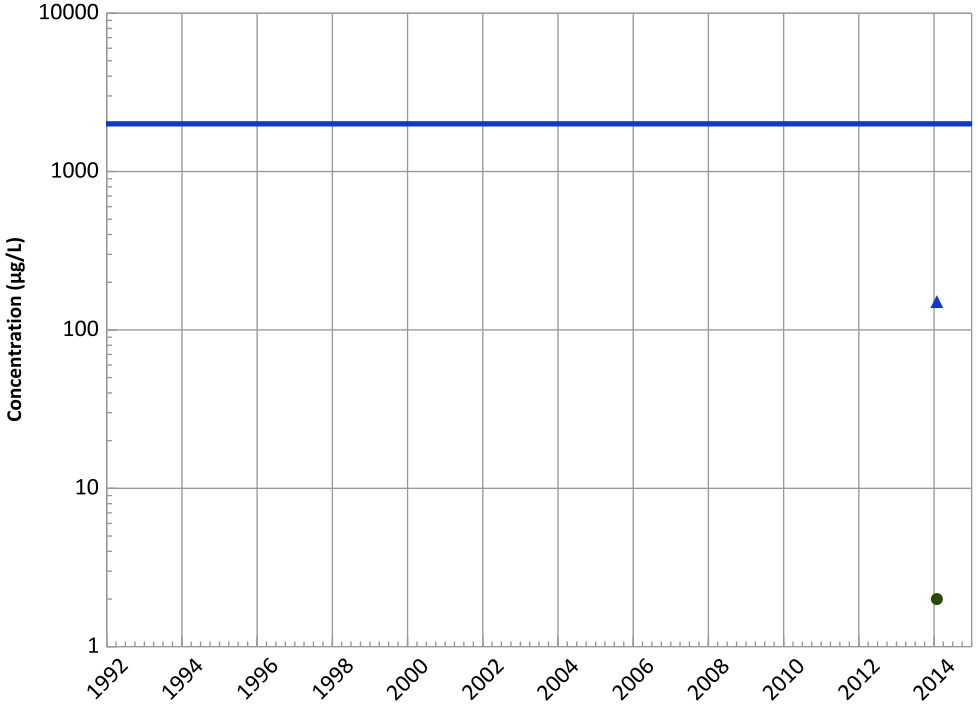


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

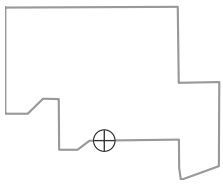
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

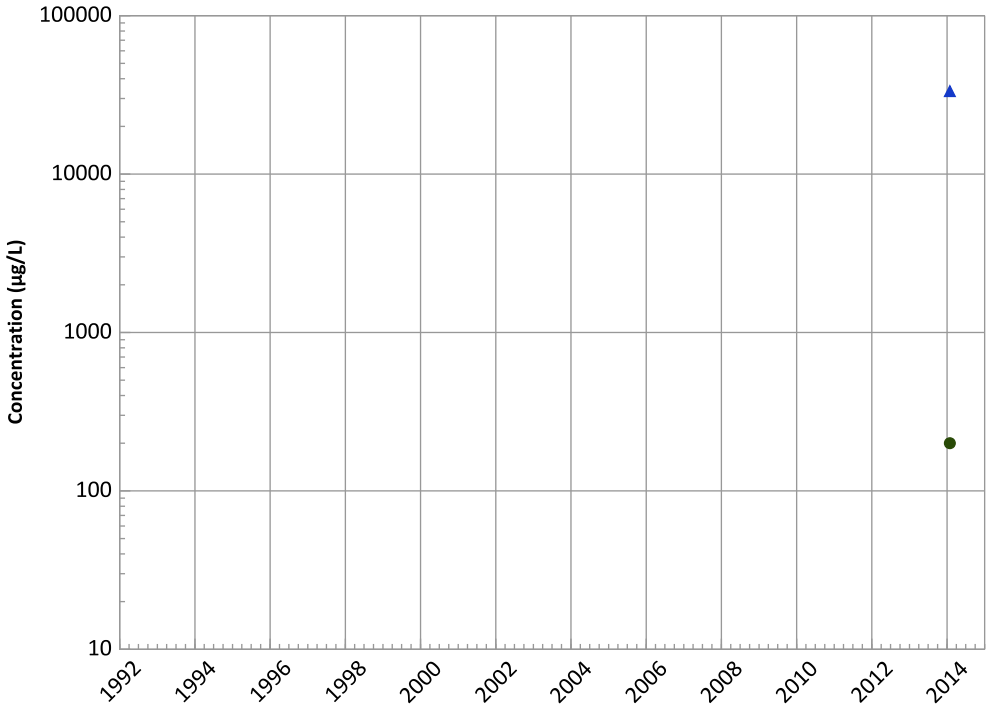
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

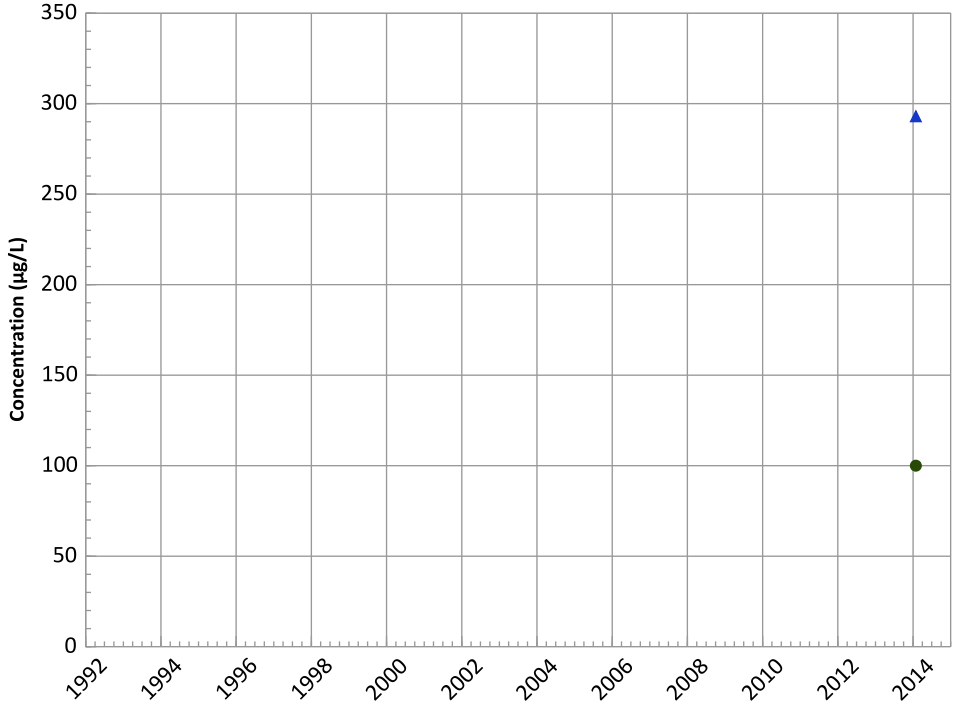


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

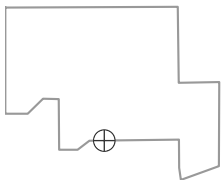
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

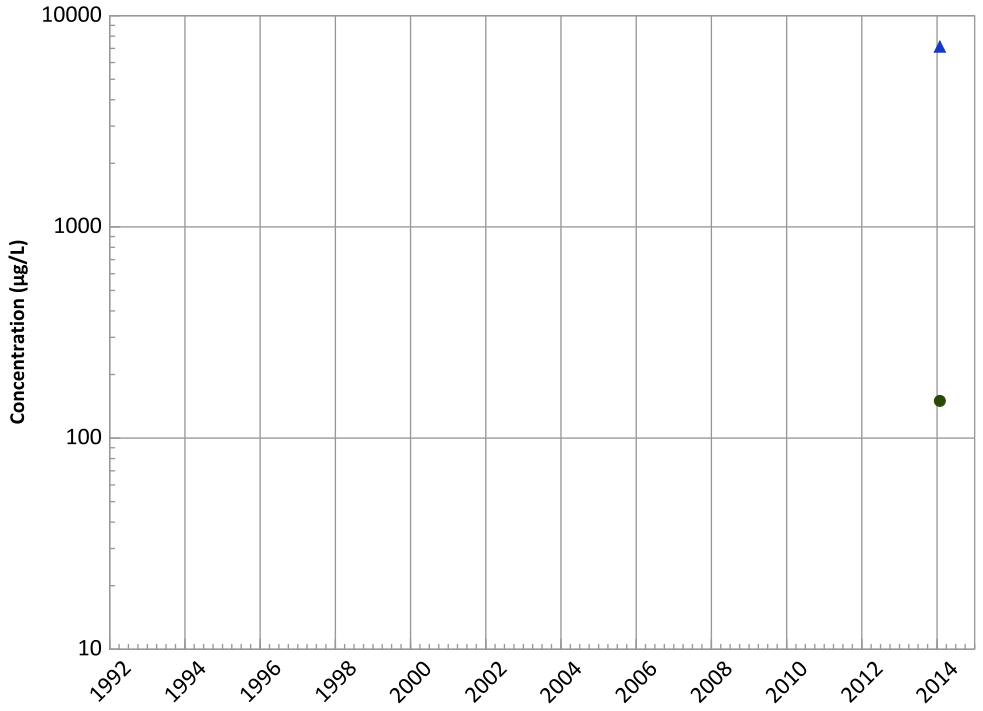
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

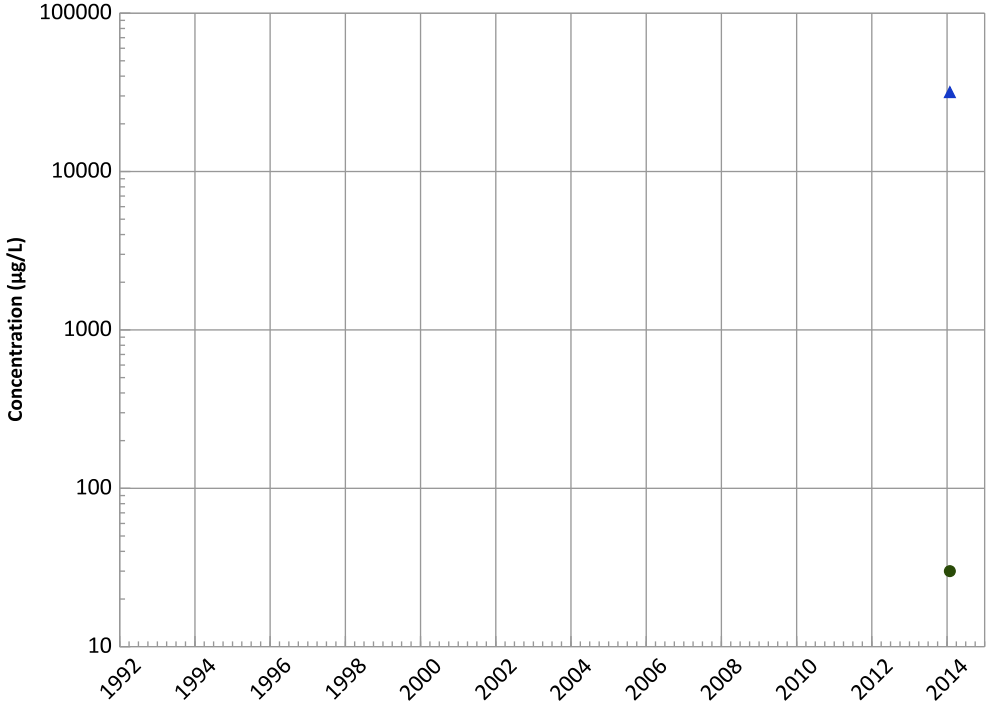


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

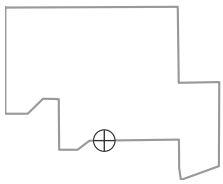
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

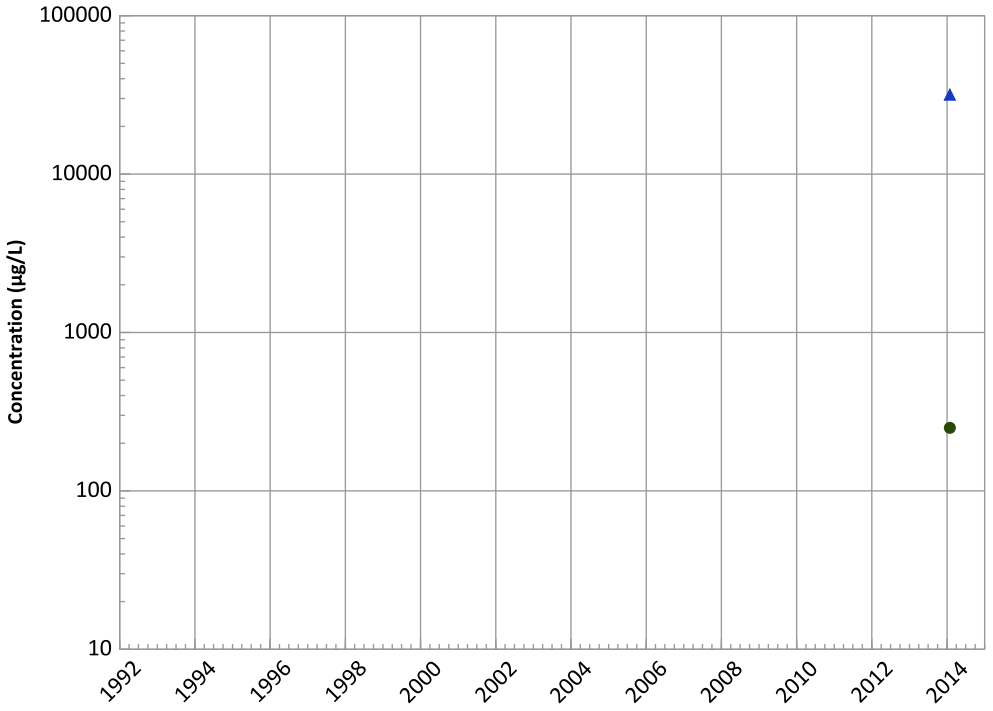
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1159 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

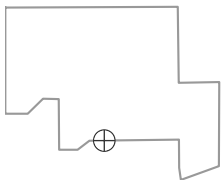
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

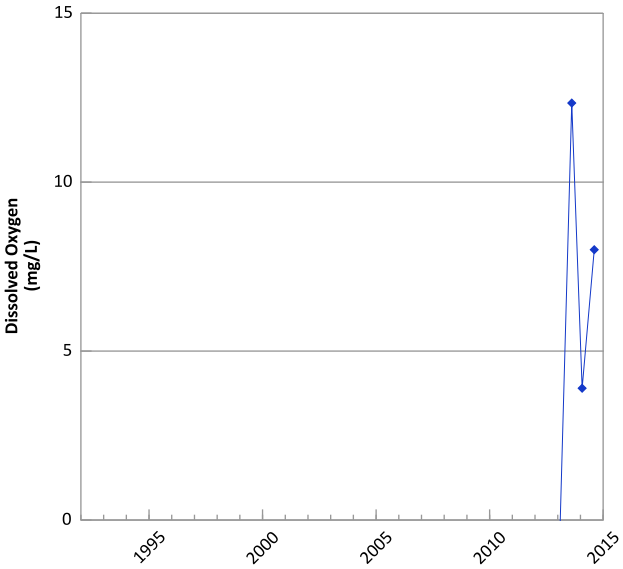
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

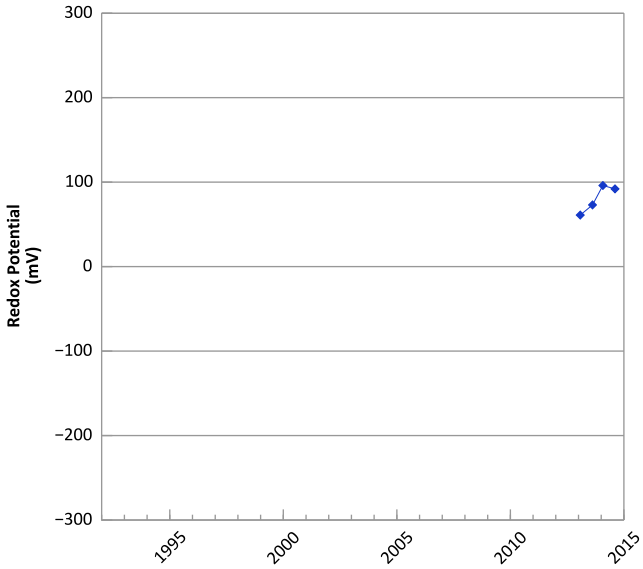
▲ Measured Value
● Sample Detection Limit
- - - - Concentration Trend
▬ Groundwater Protection Standard

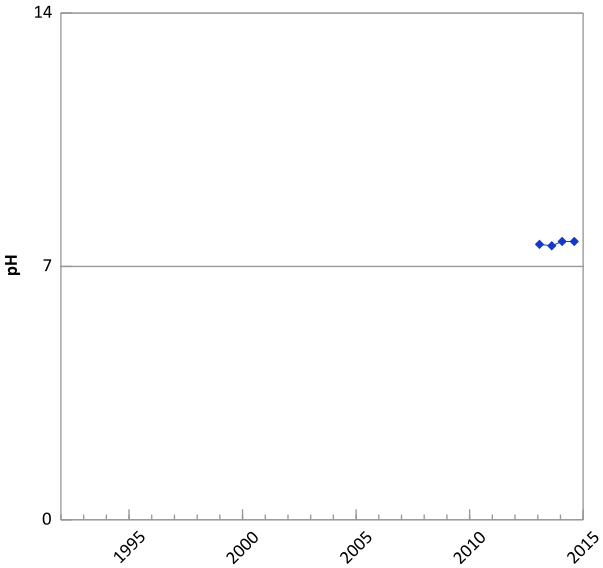
Well Location

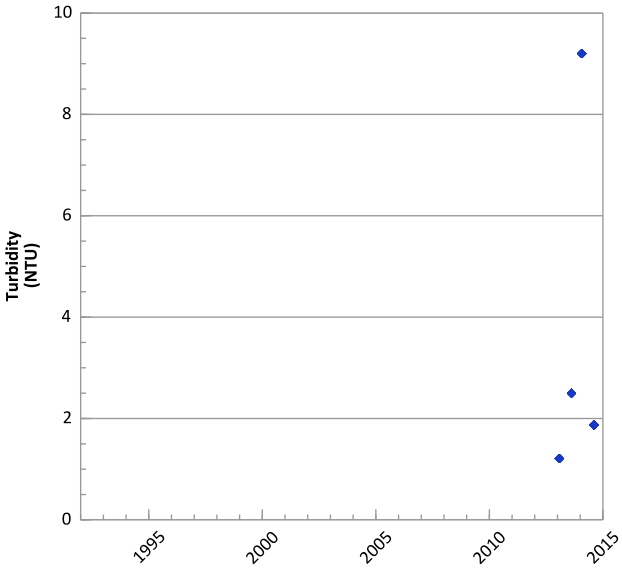


PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



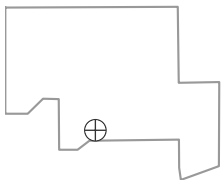






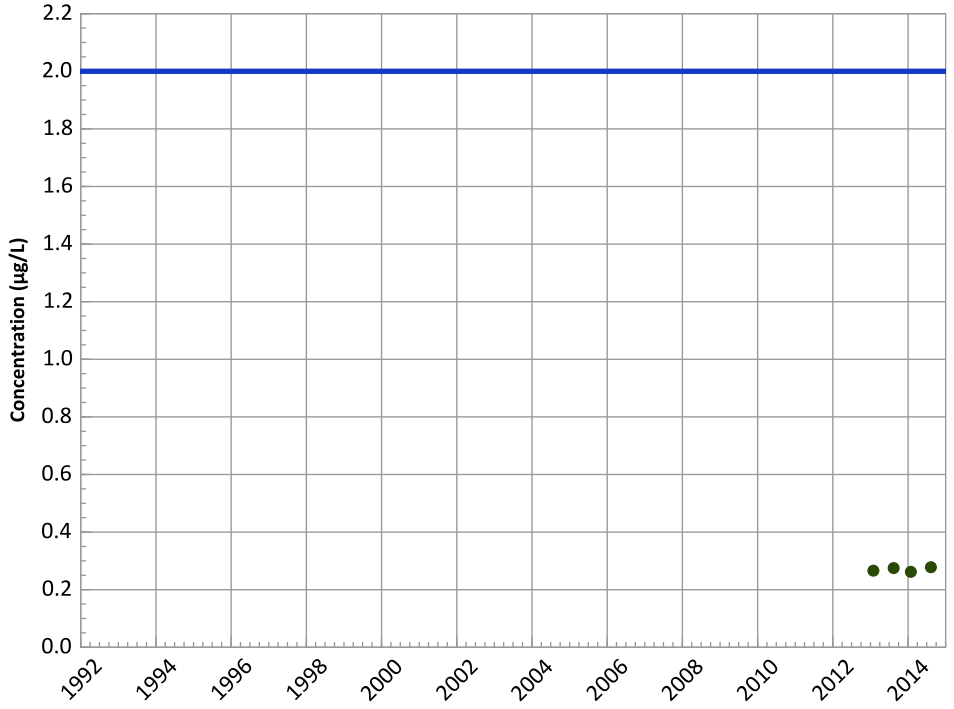
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

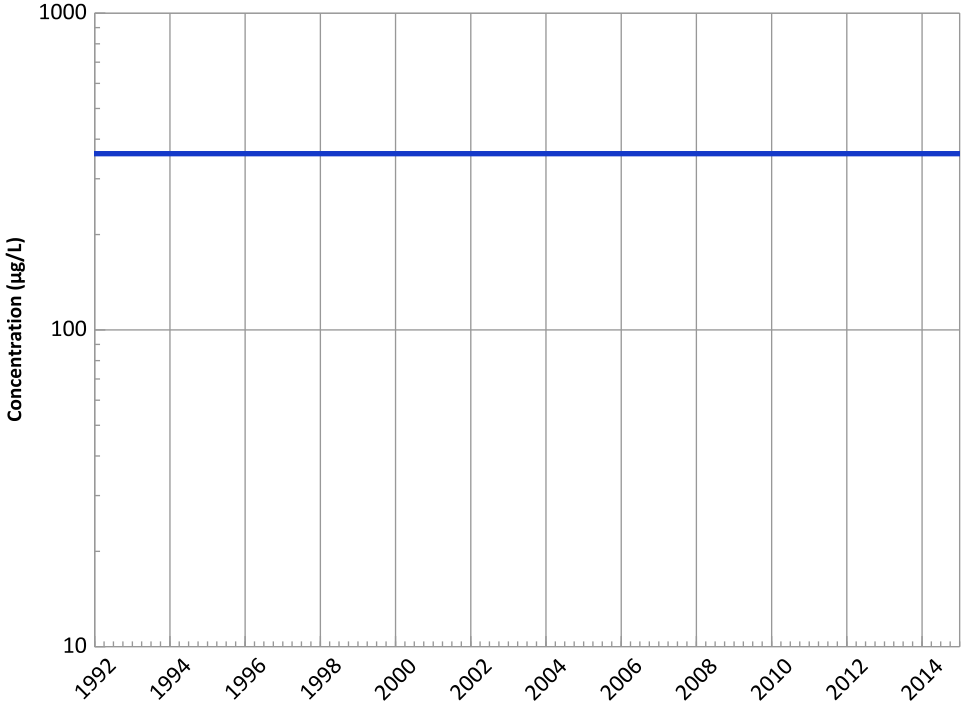


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

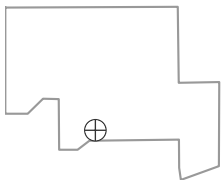
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

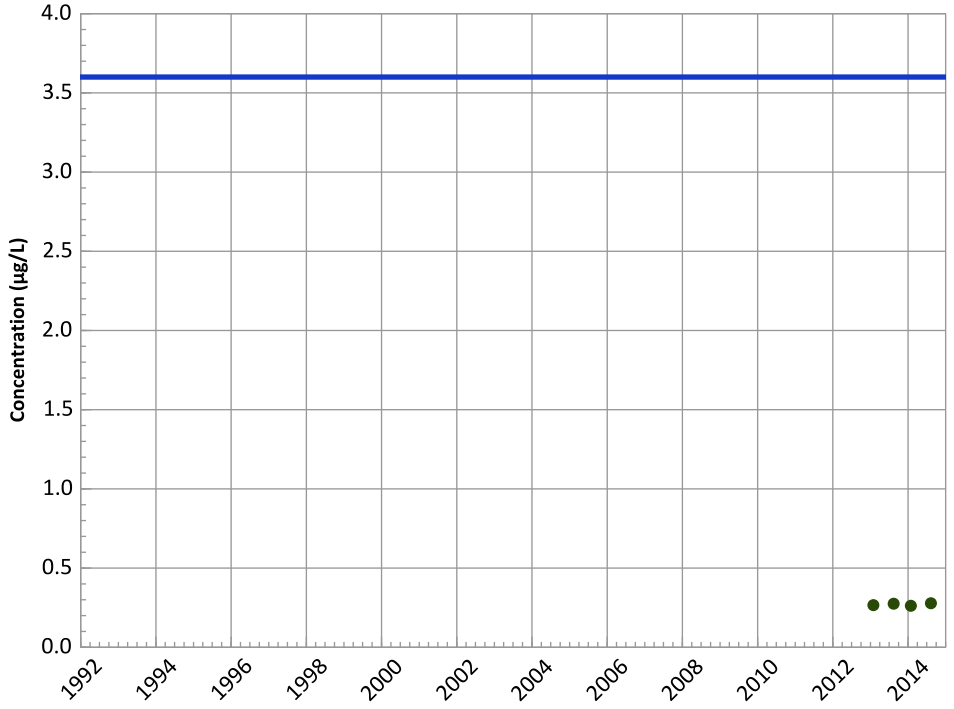
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

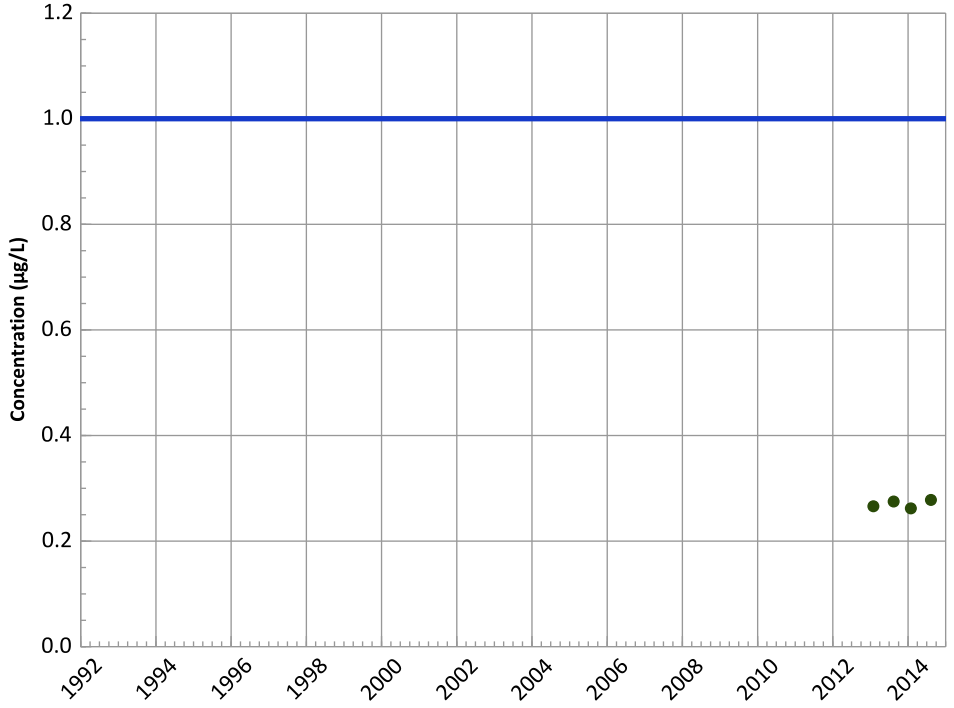


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

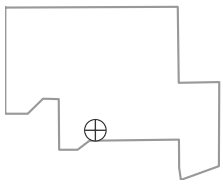
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

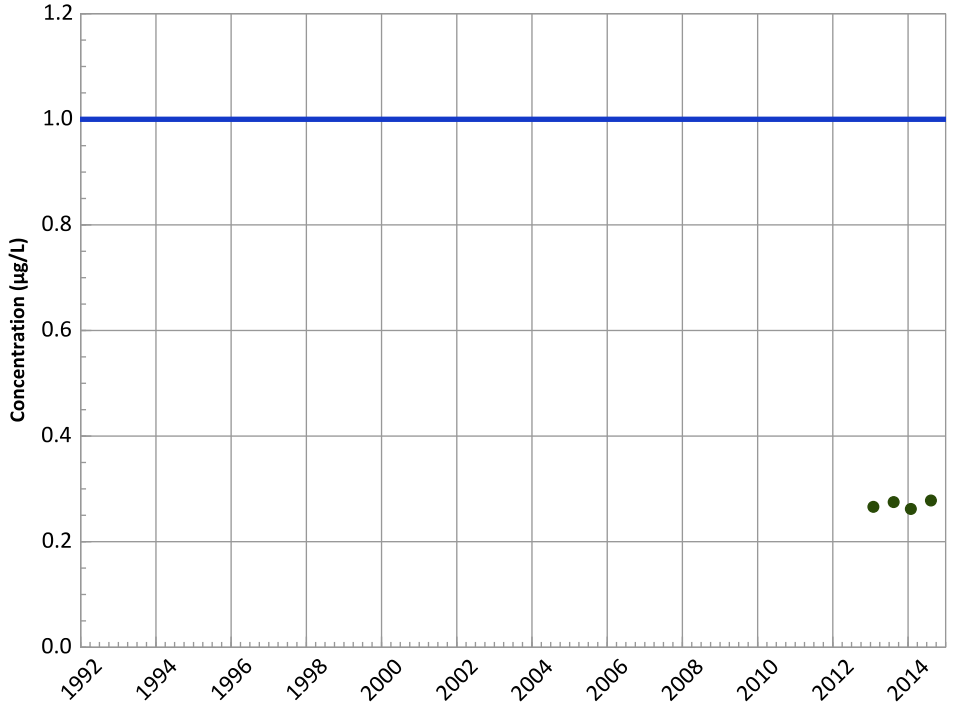
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

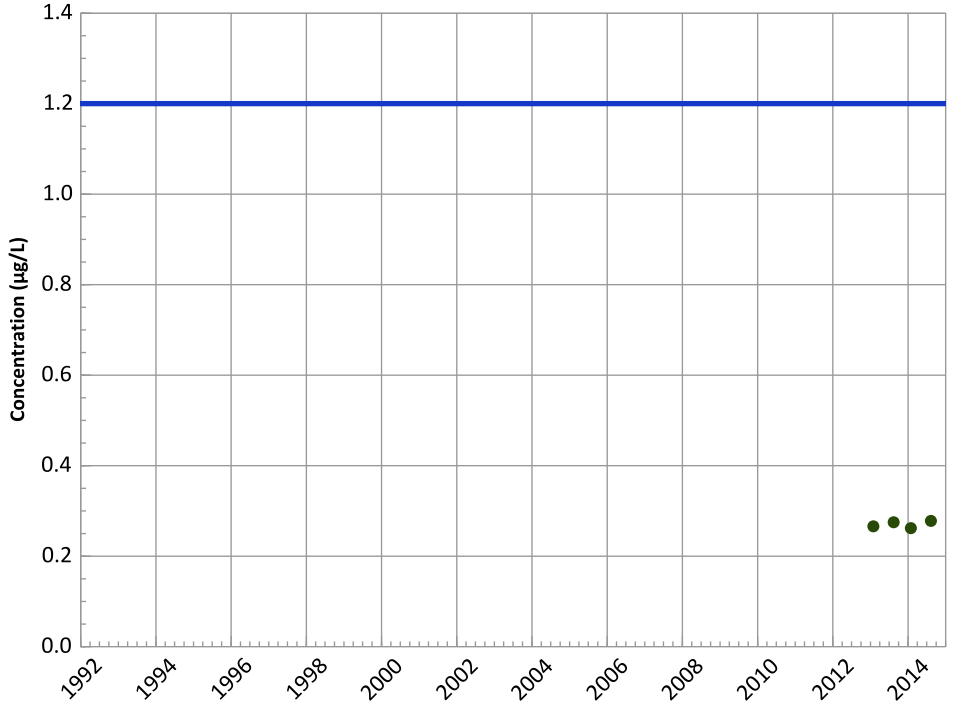


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

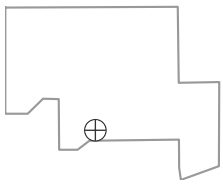
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

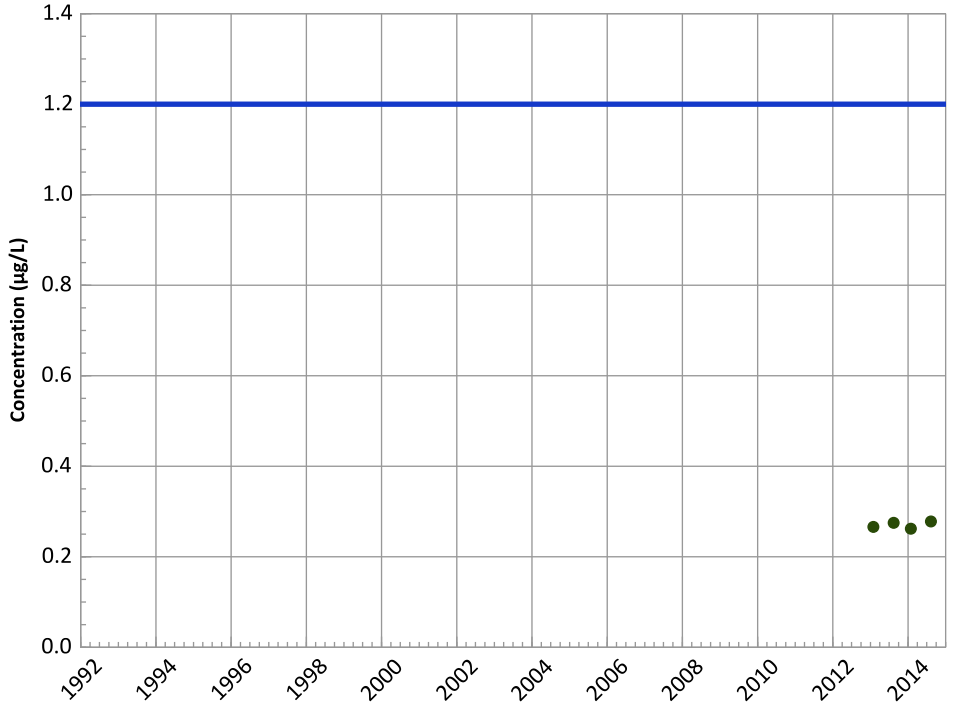
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

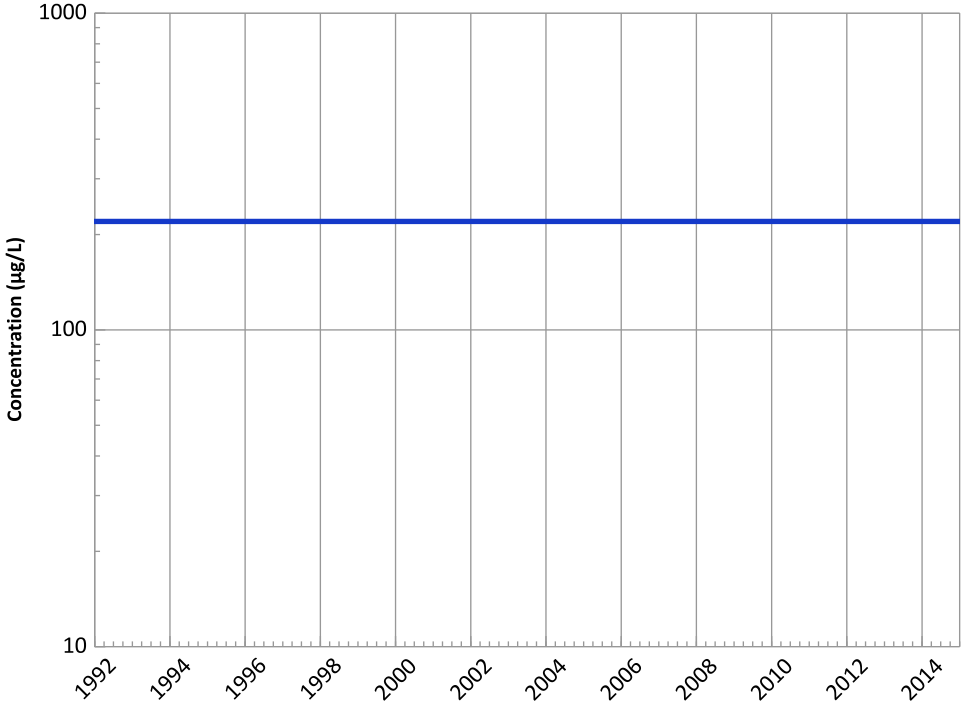


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

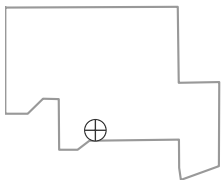
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

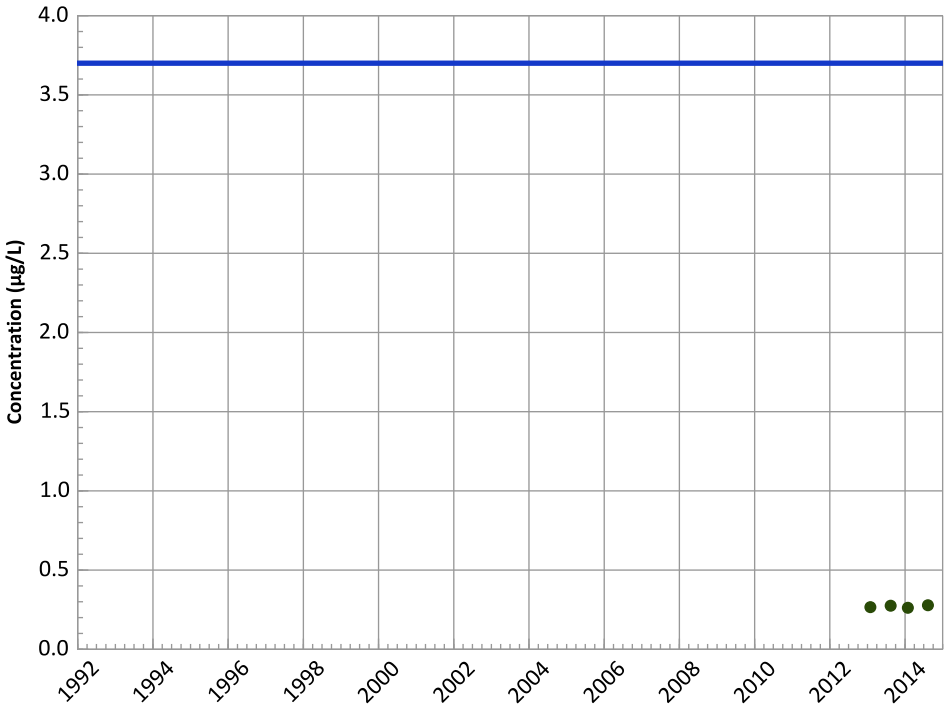
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

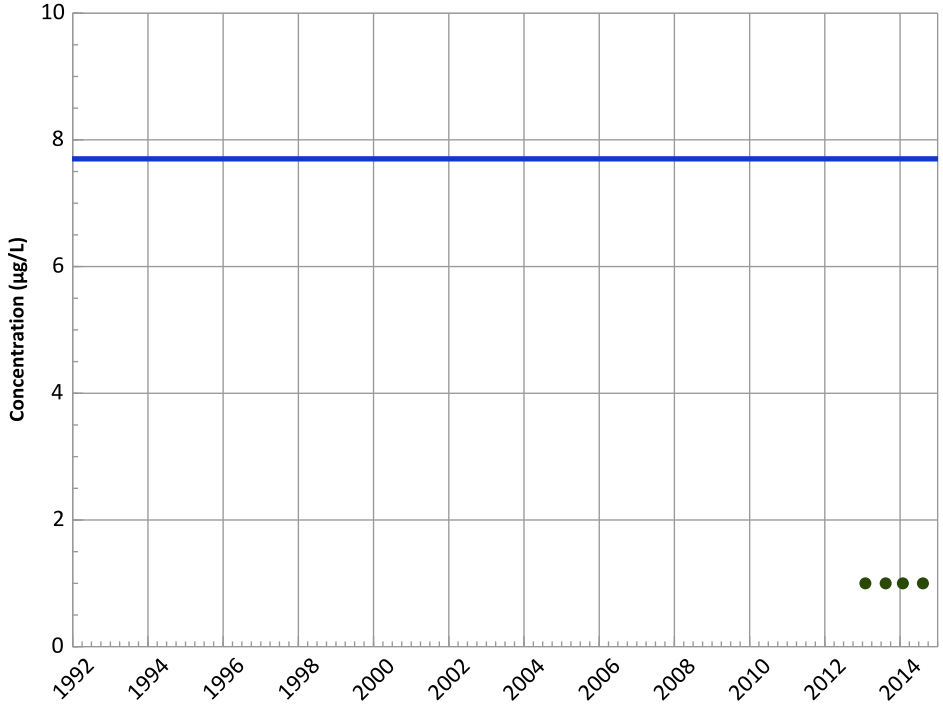


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

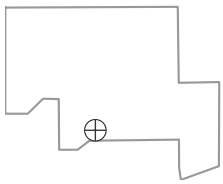
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

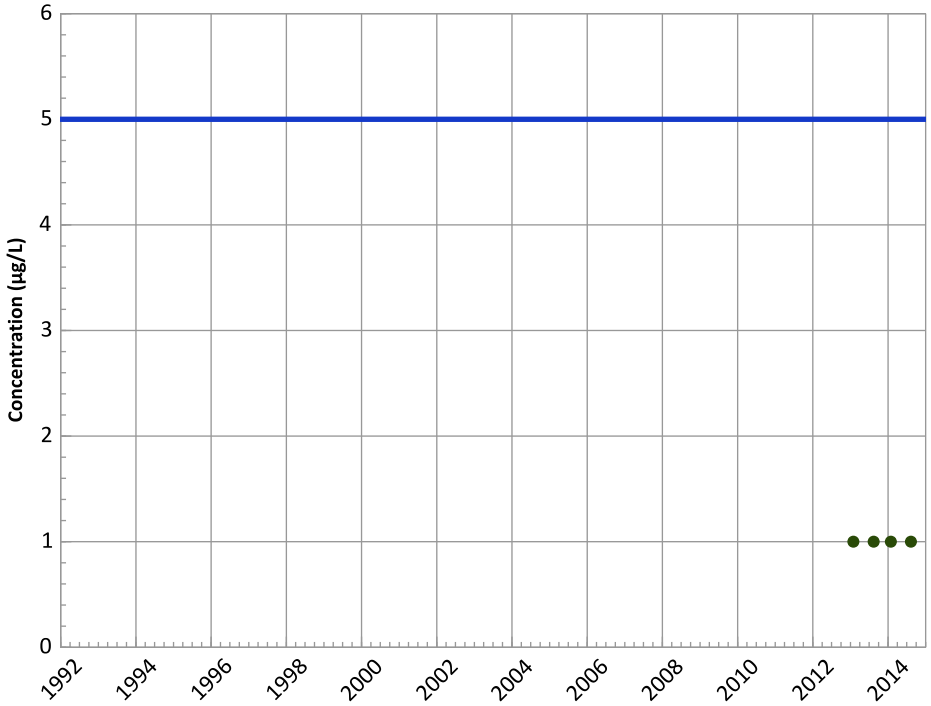
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

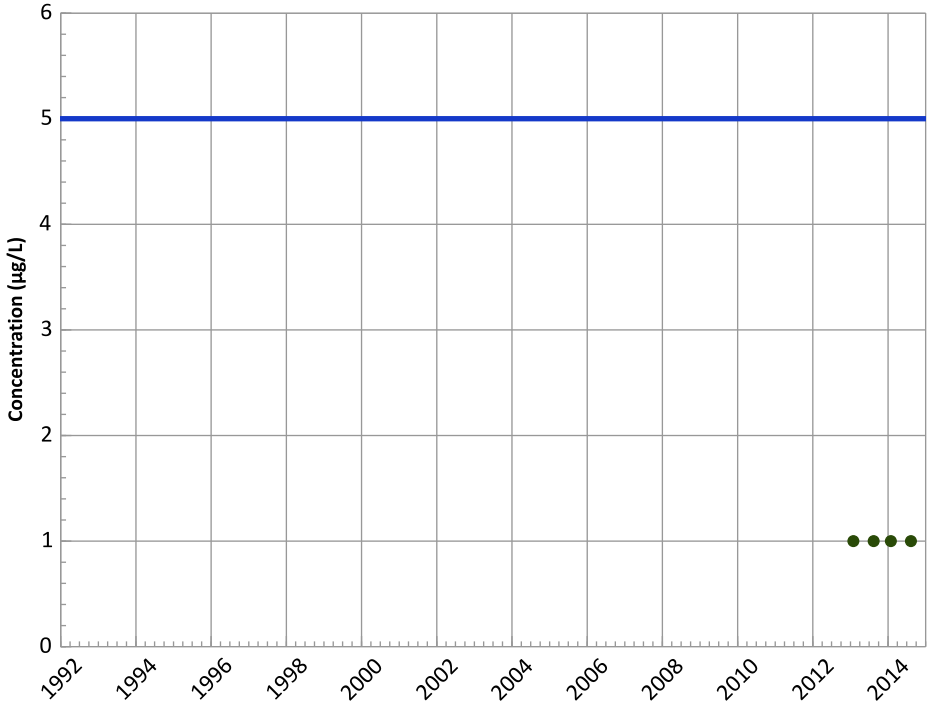


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

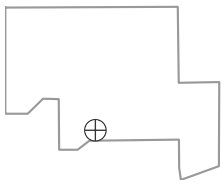
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

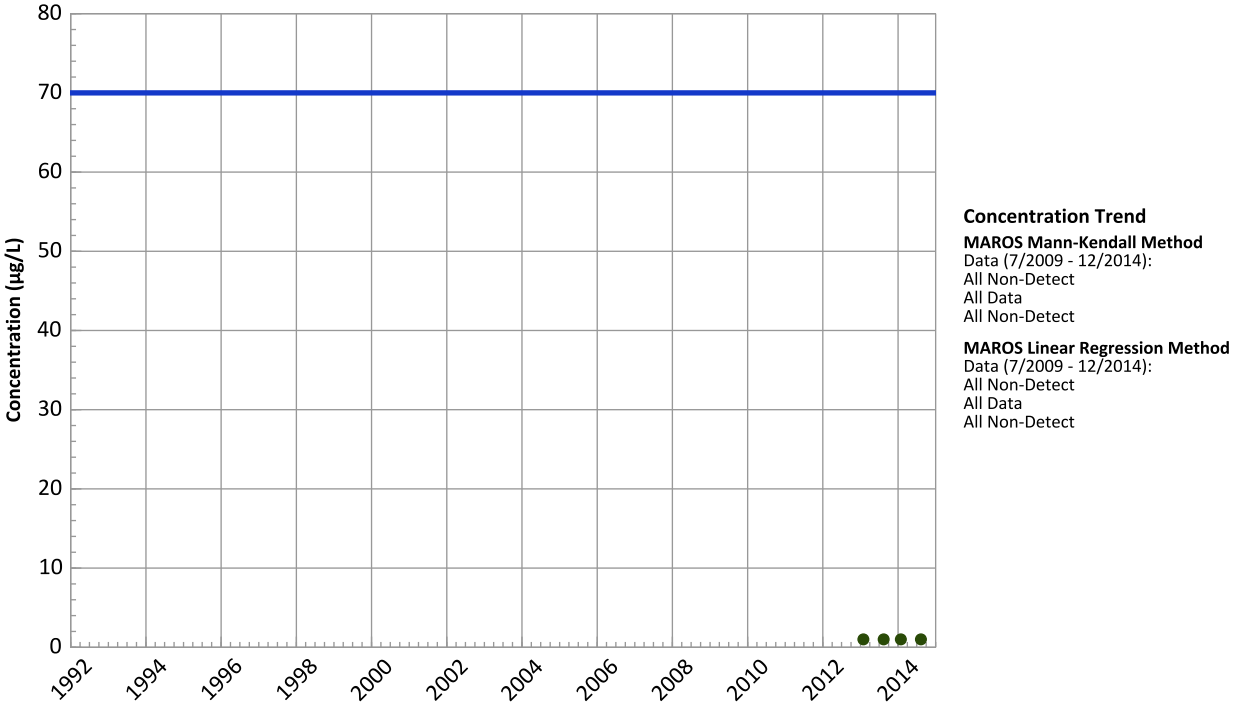
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location

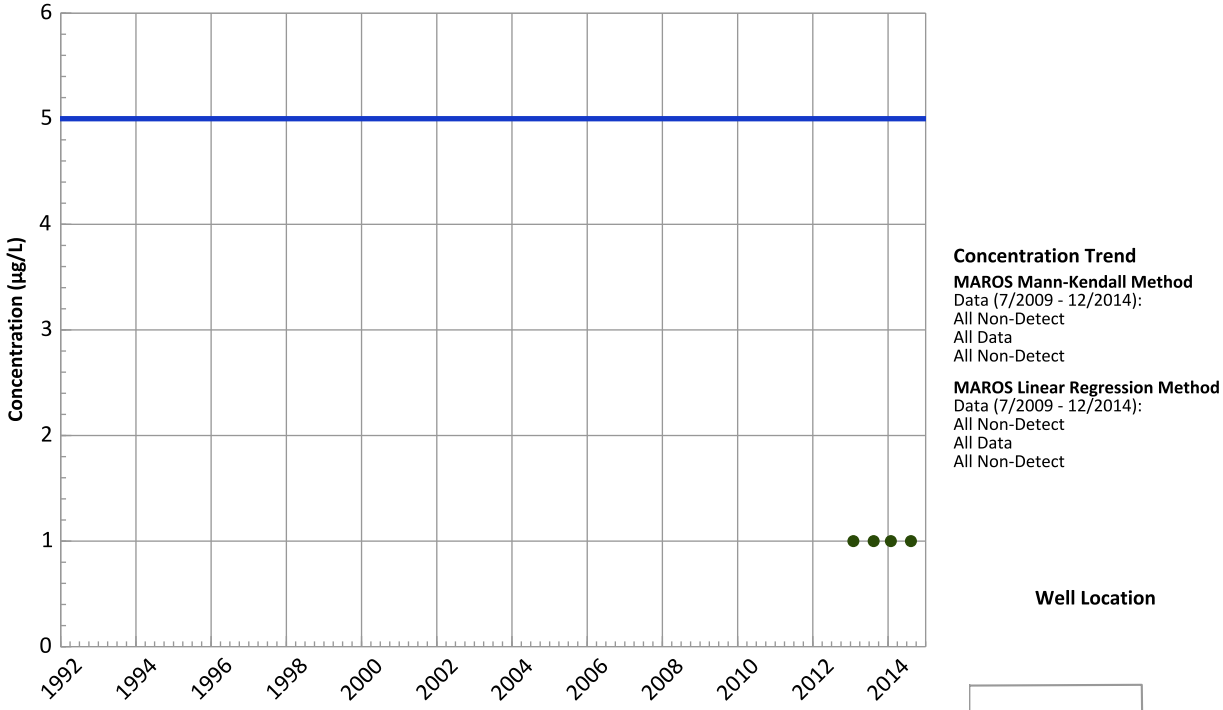


PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend



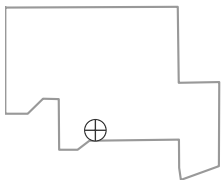
1,2-Dichloroethane Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

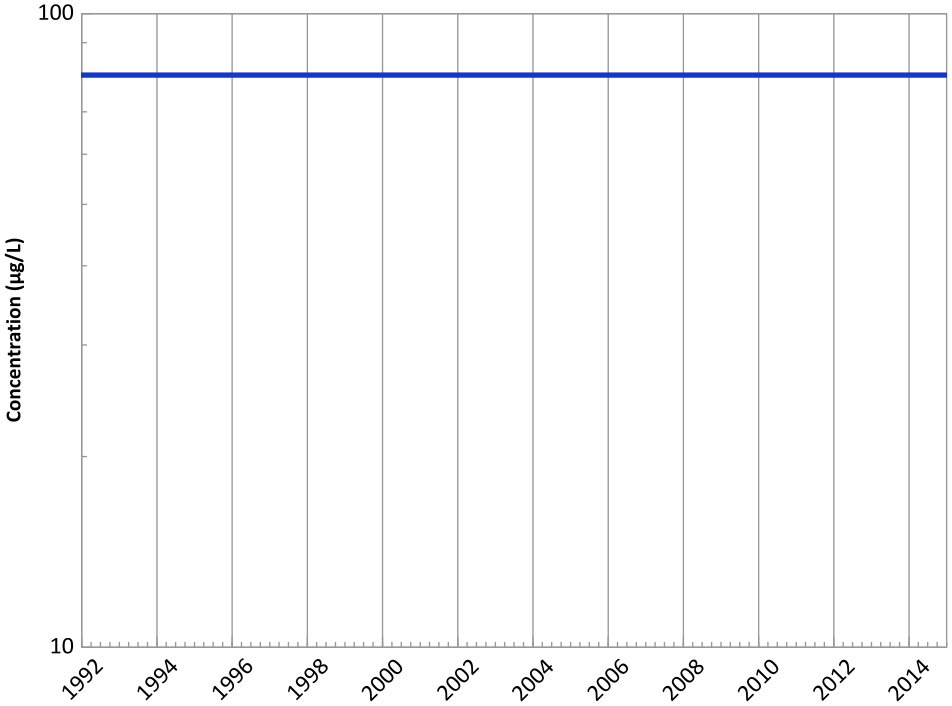
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

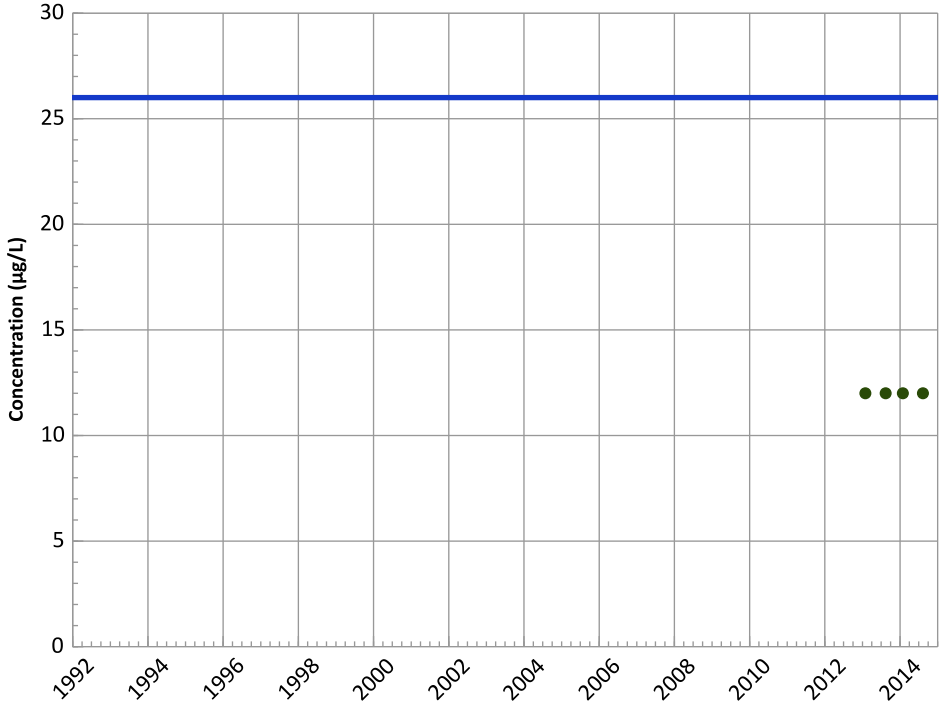


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

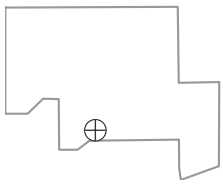
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

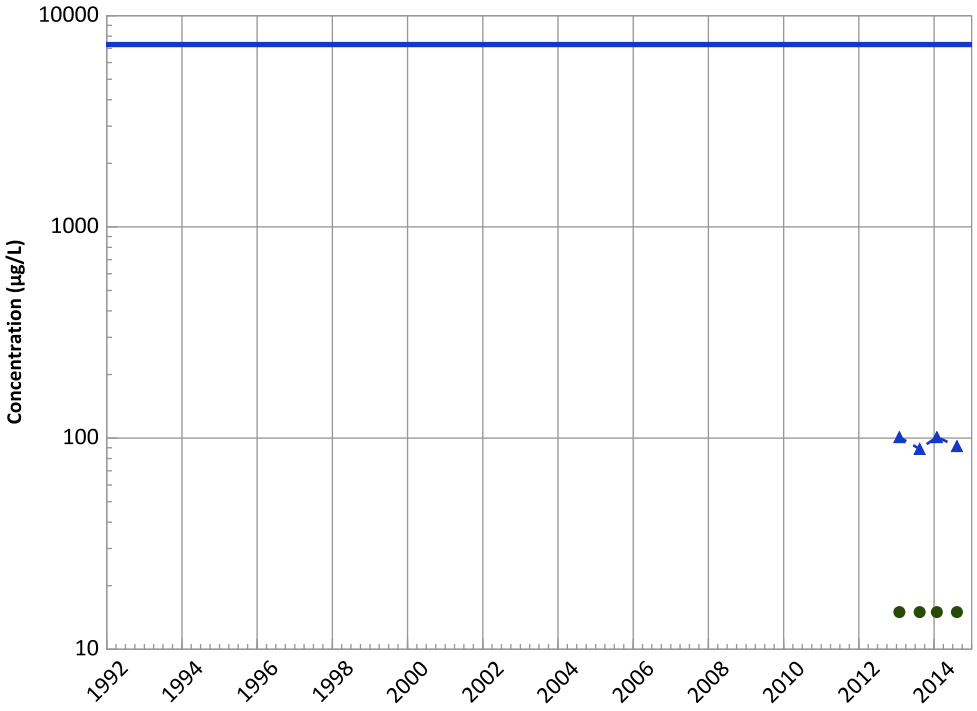
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

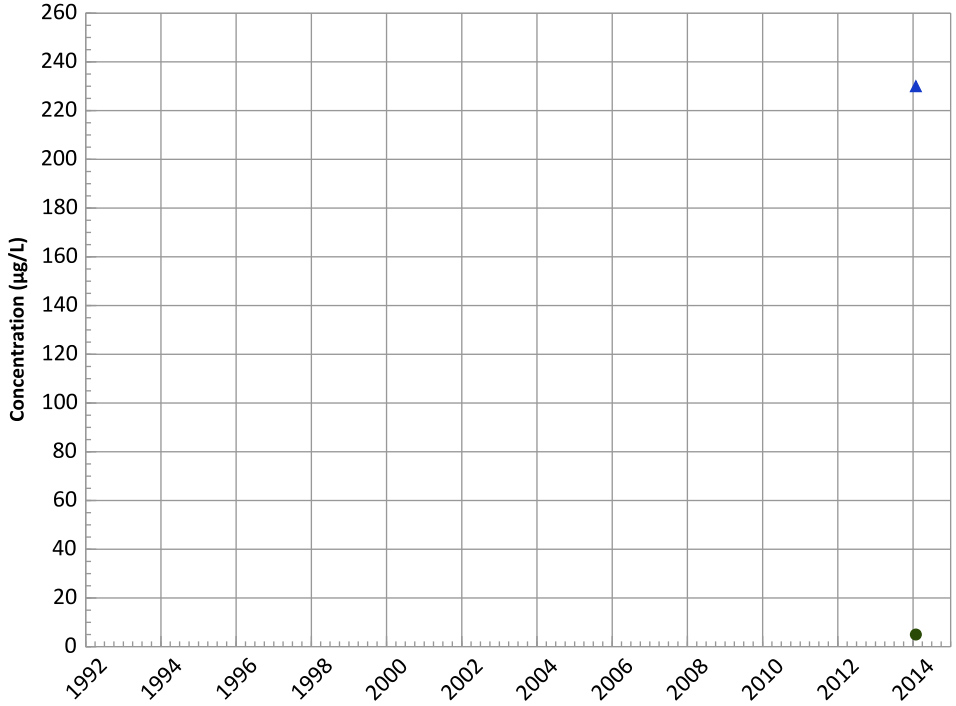


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Manganese Trend



Concentration Trend

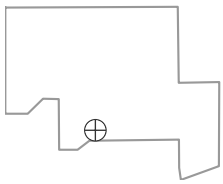
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

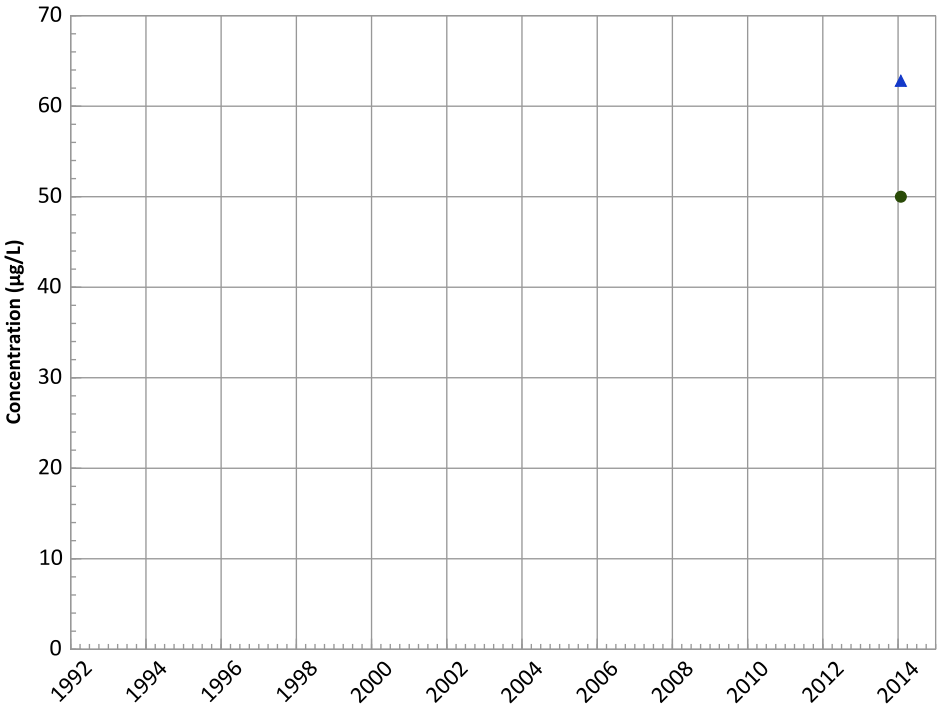
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

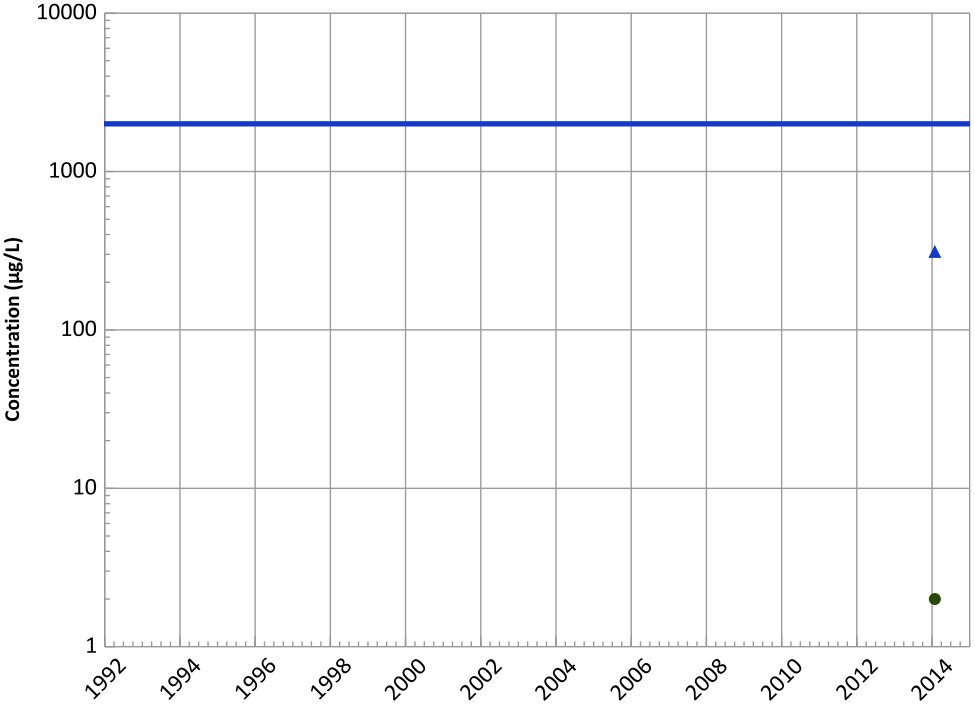


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

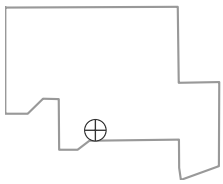
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

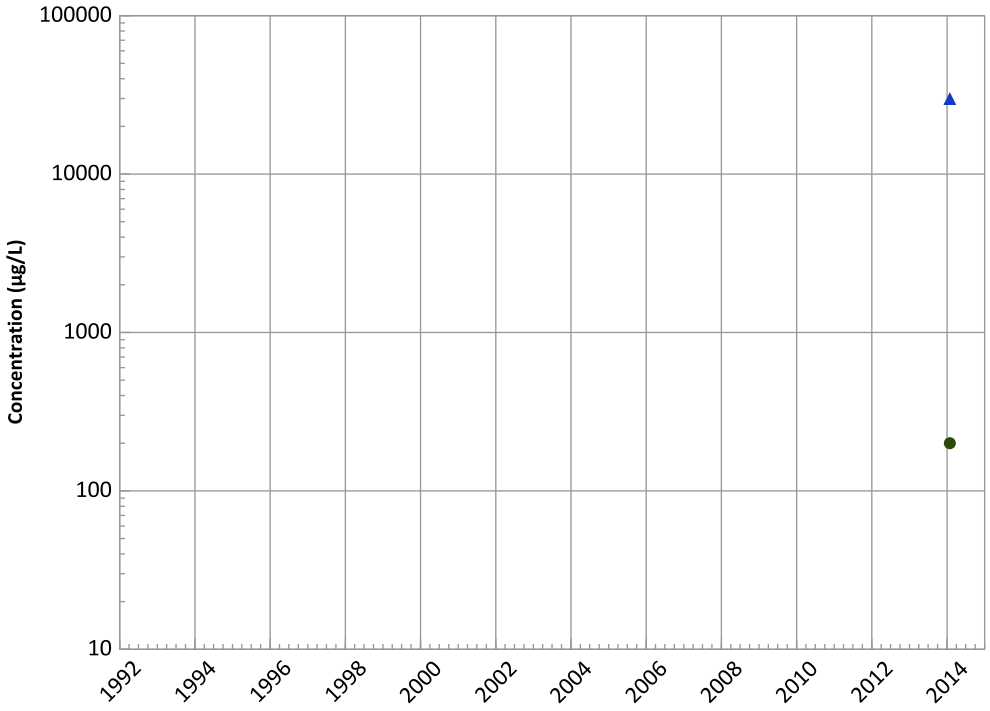
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═ Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

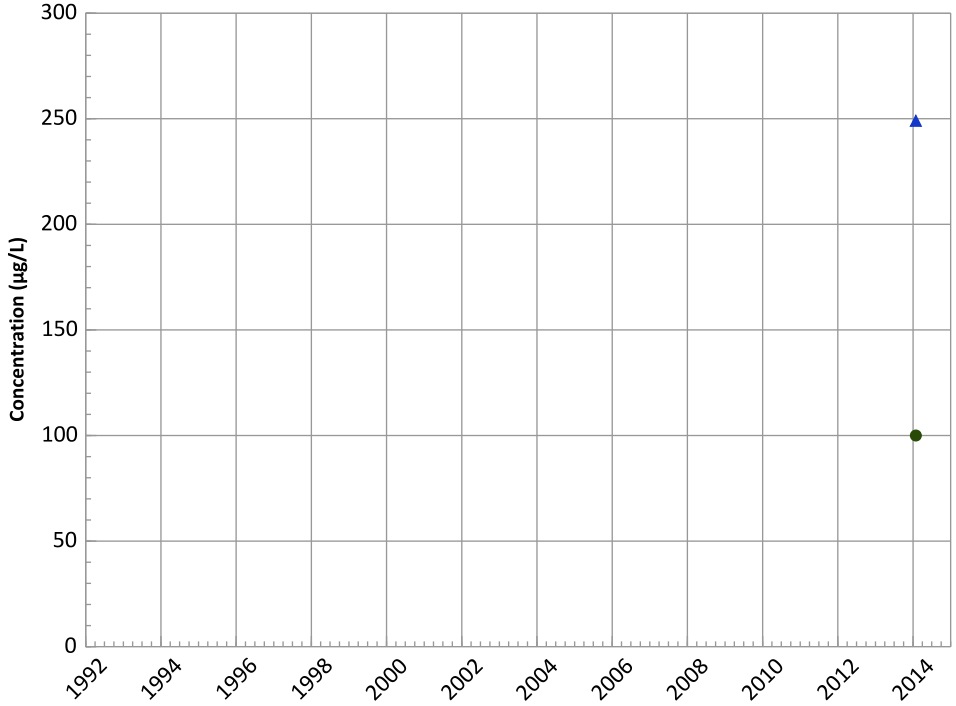


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

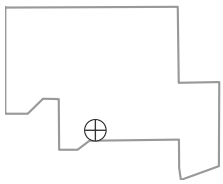
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

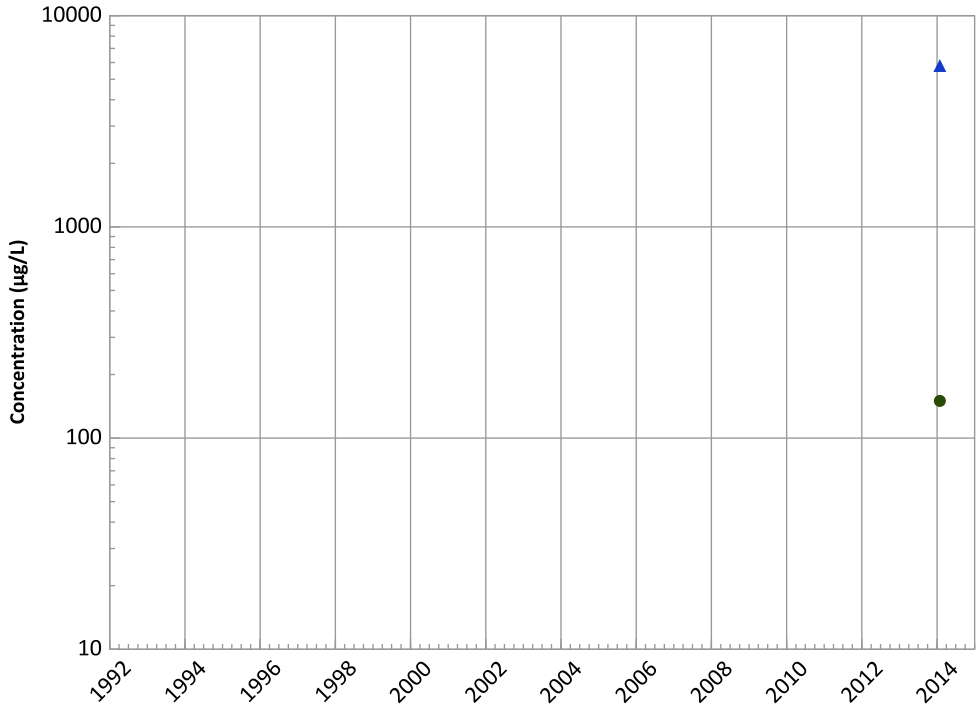
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

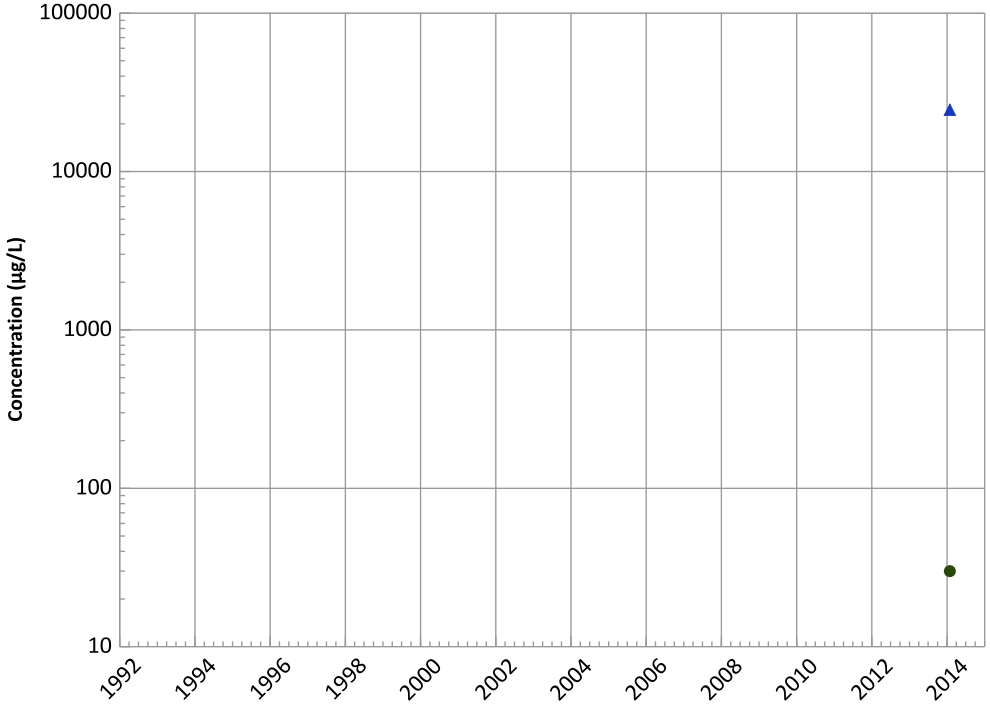


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

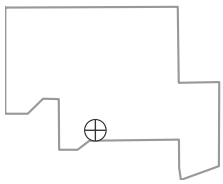
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

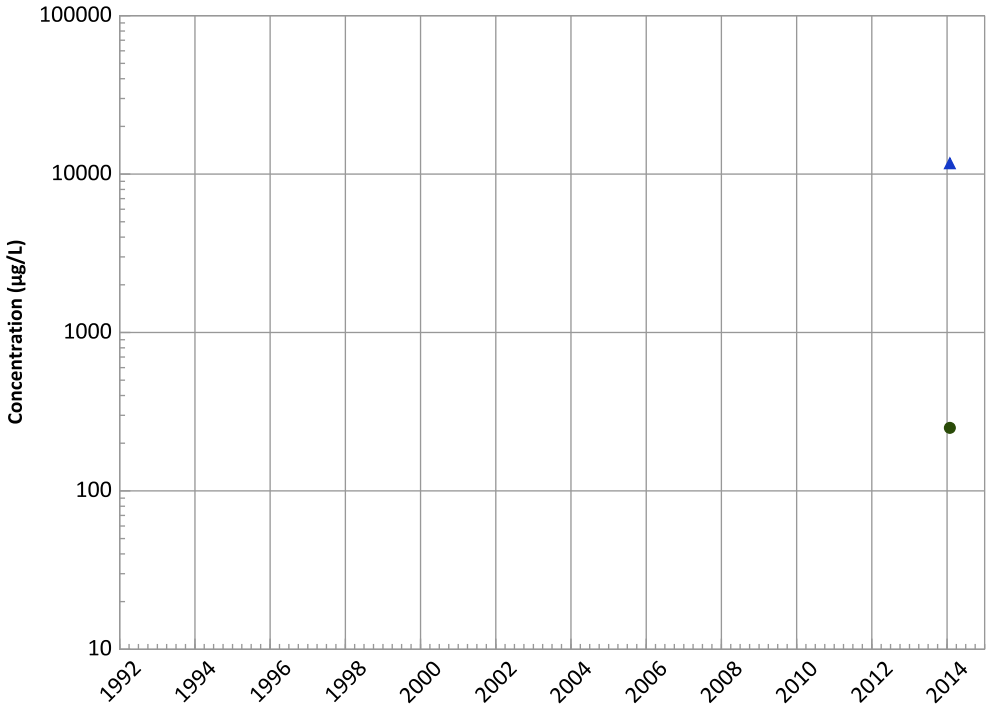
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1160 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

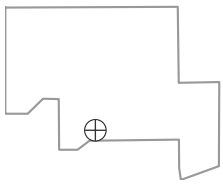
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

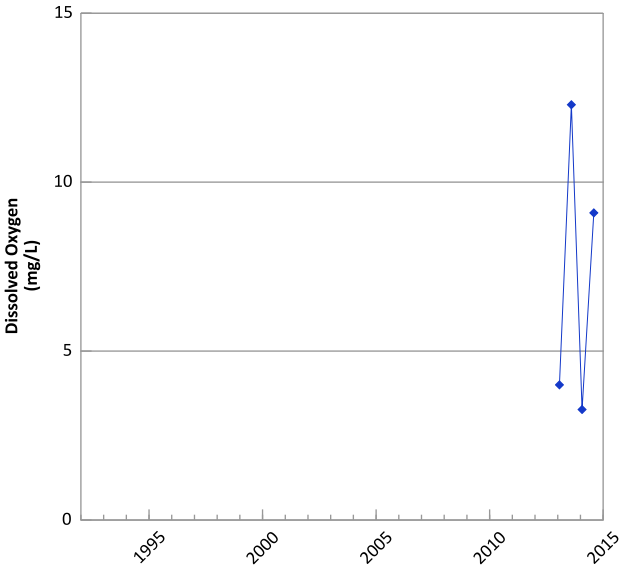
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/29/2013 to 08/11/2014
Analysis Date: 03/19/2015

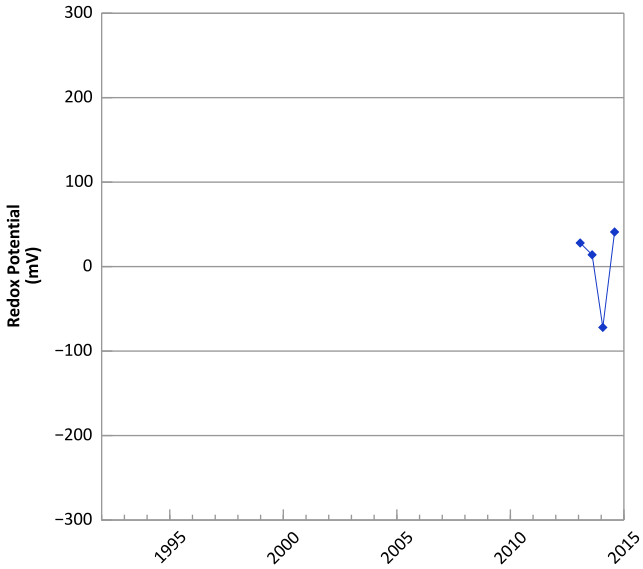
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

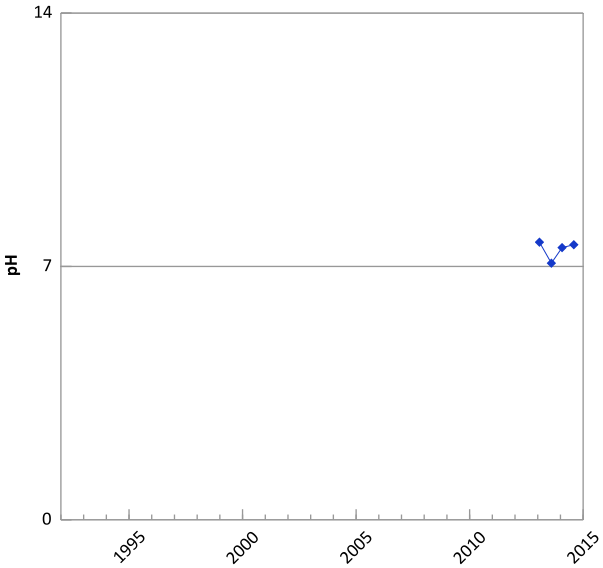
Well Location

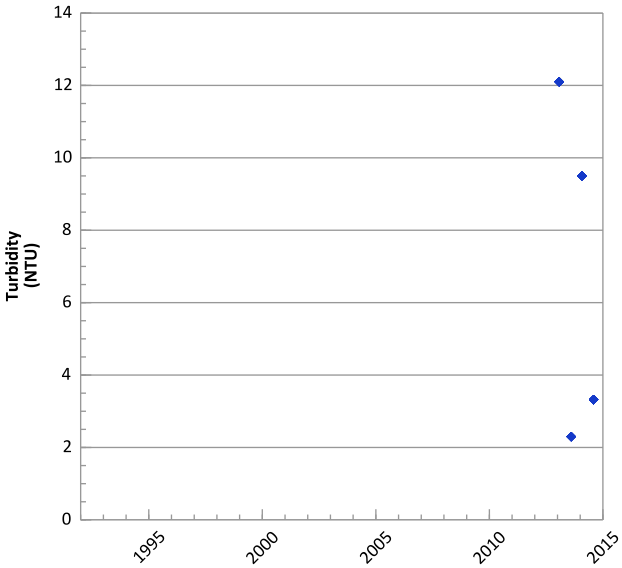


PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



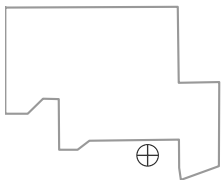






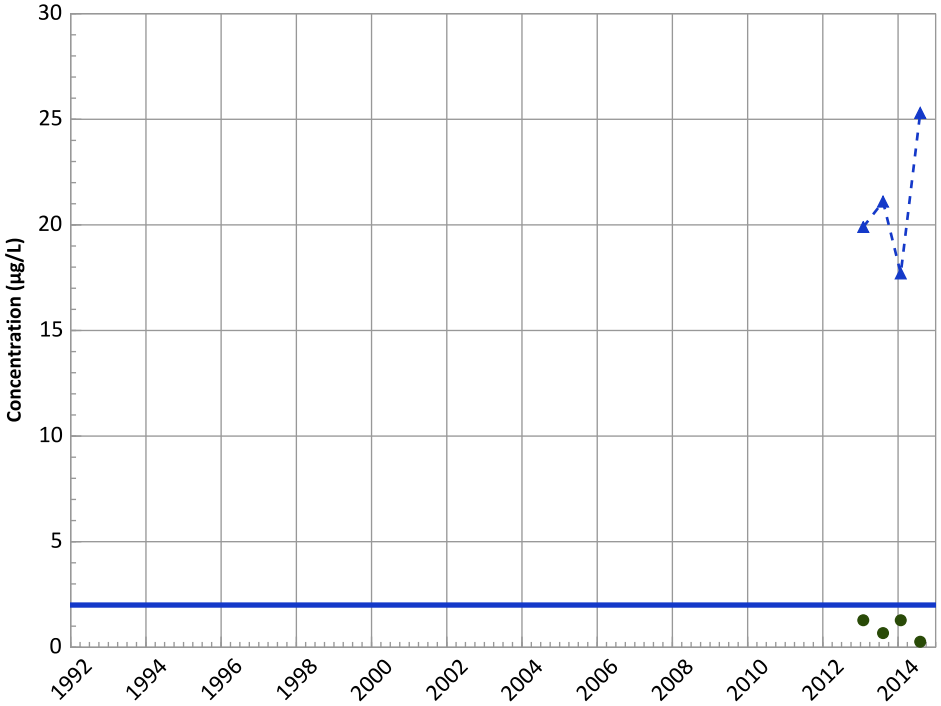
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

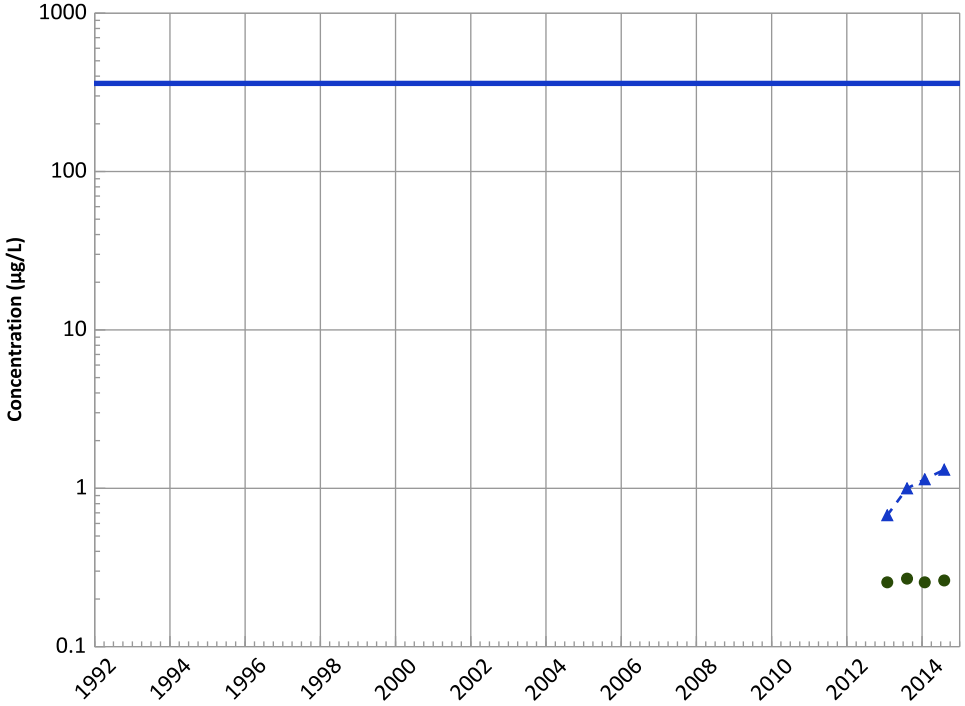


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

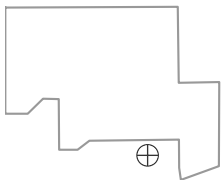
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

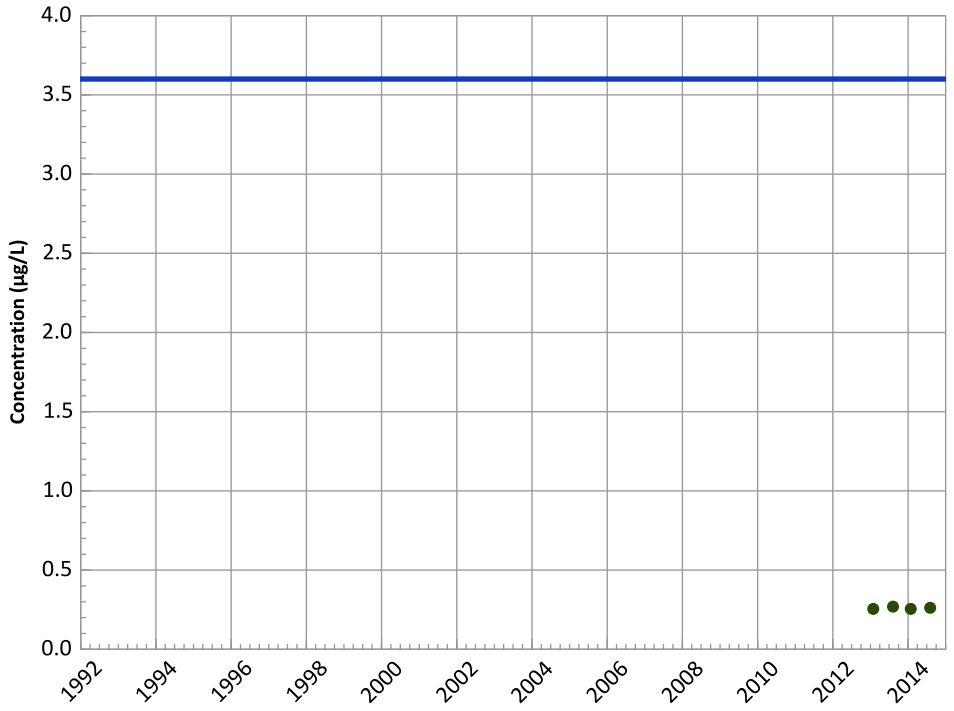
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

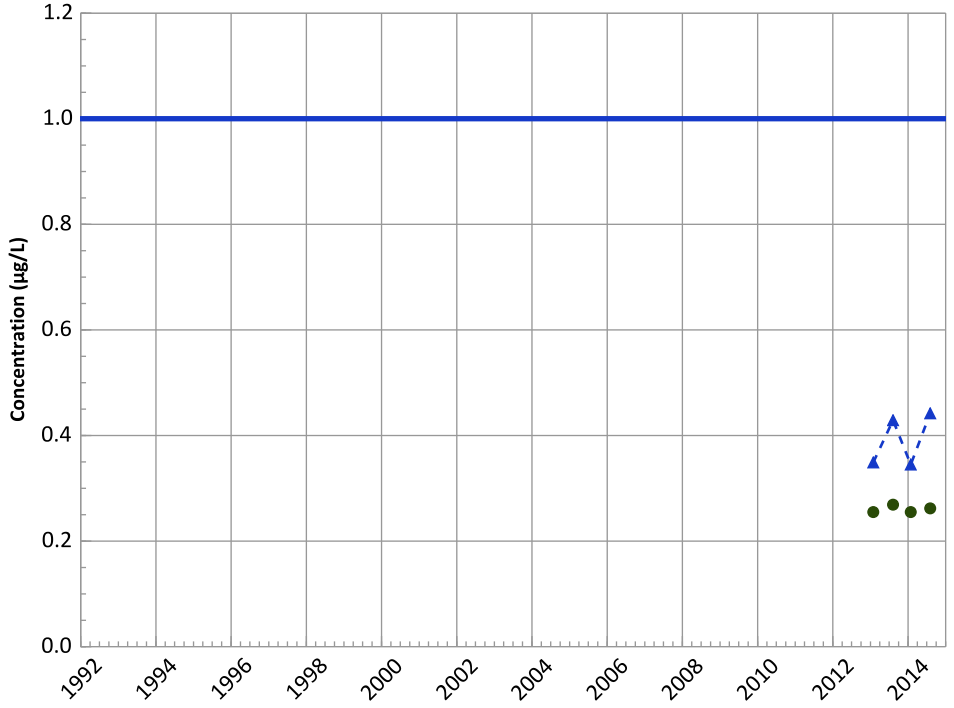


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

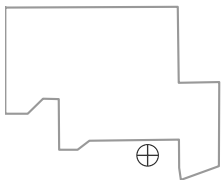
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

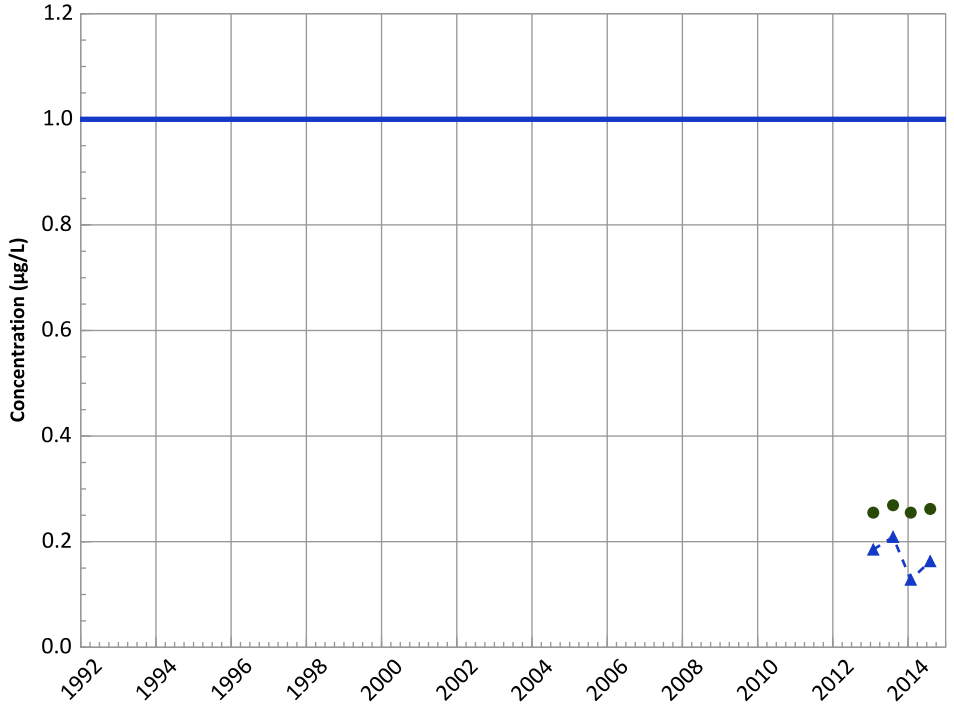
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━ Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

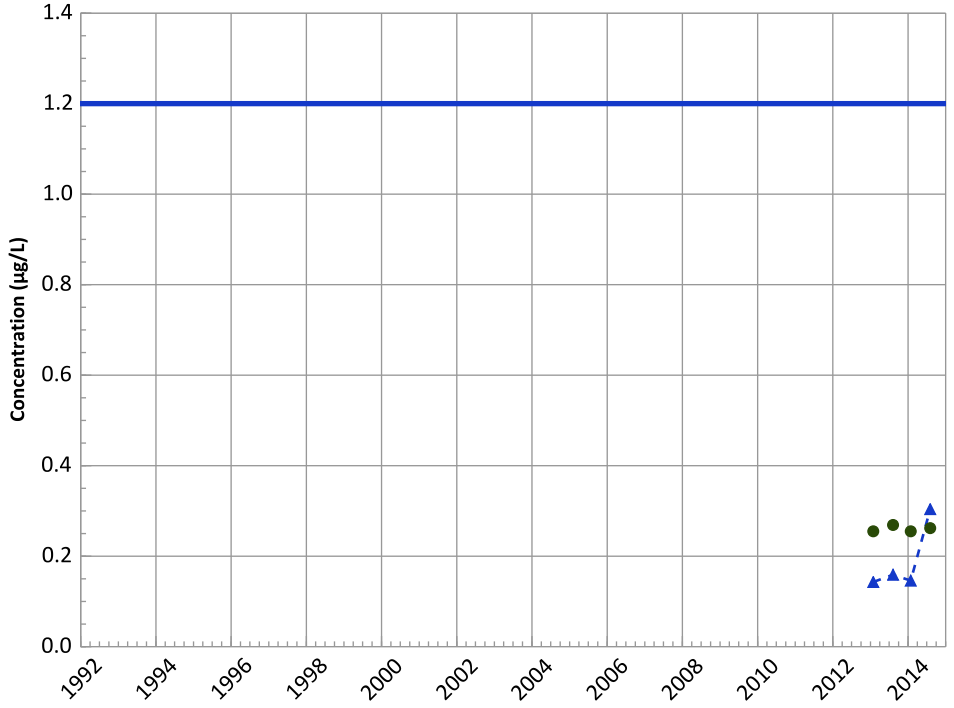


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

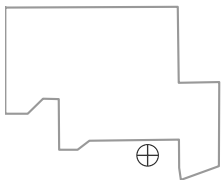
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

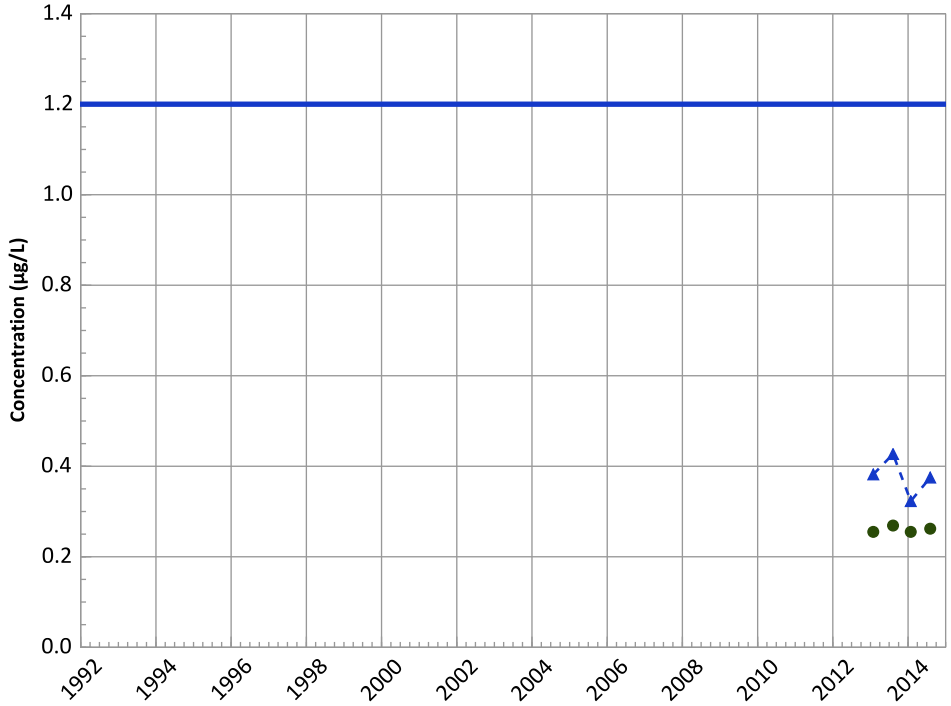
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

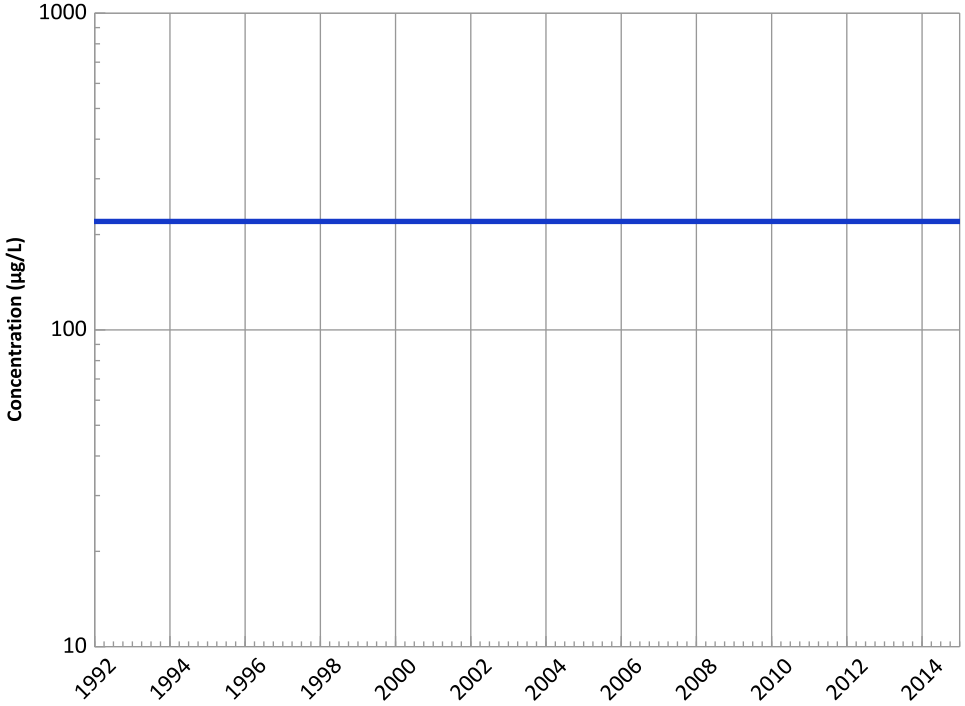


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

1,3,5-Trinitrobenzene Trend



Concentration Trend

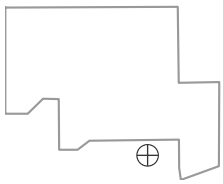
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

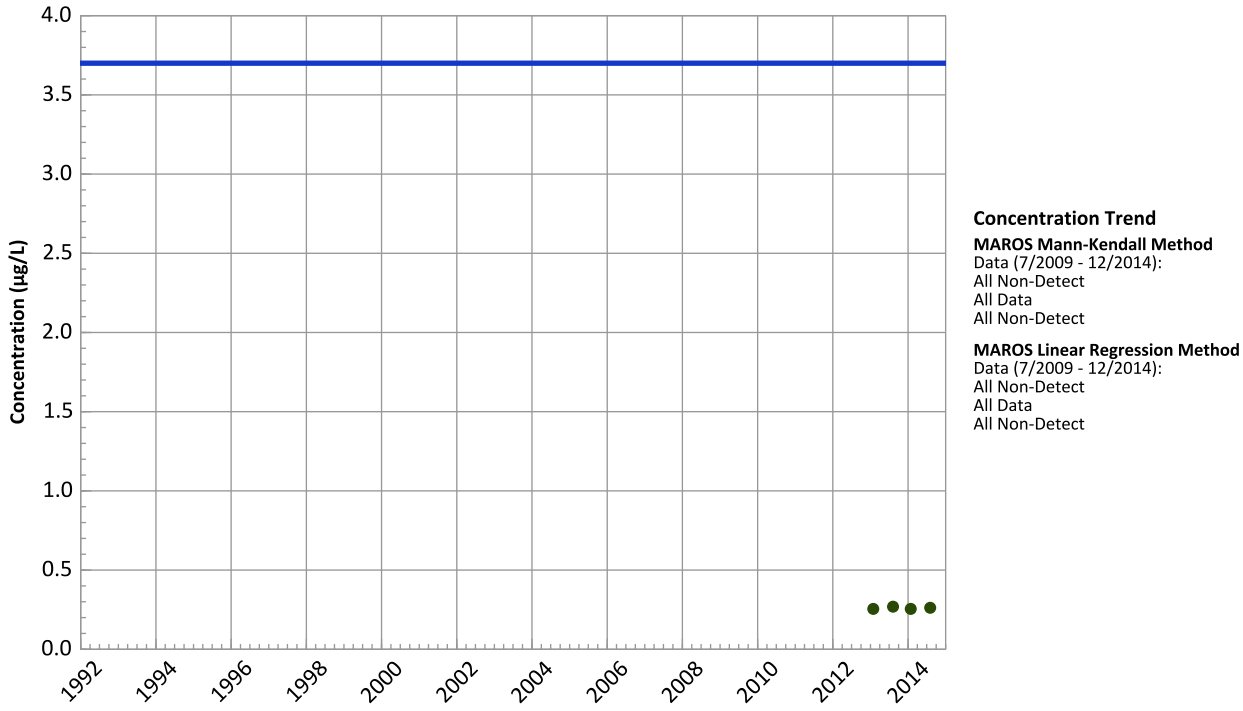
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

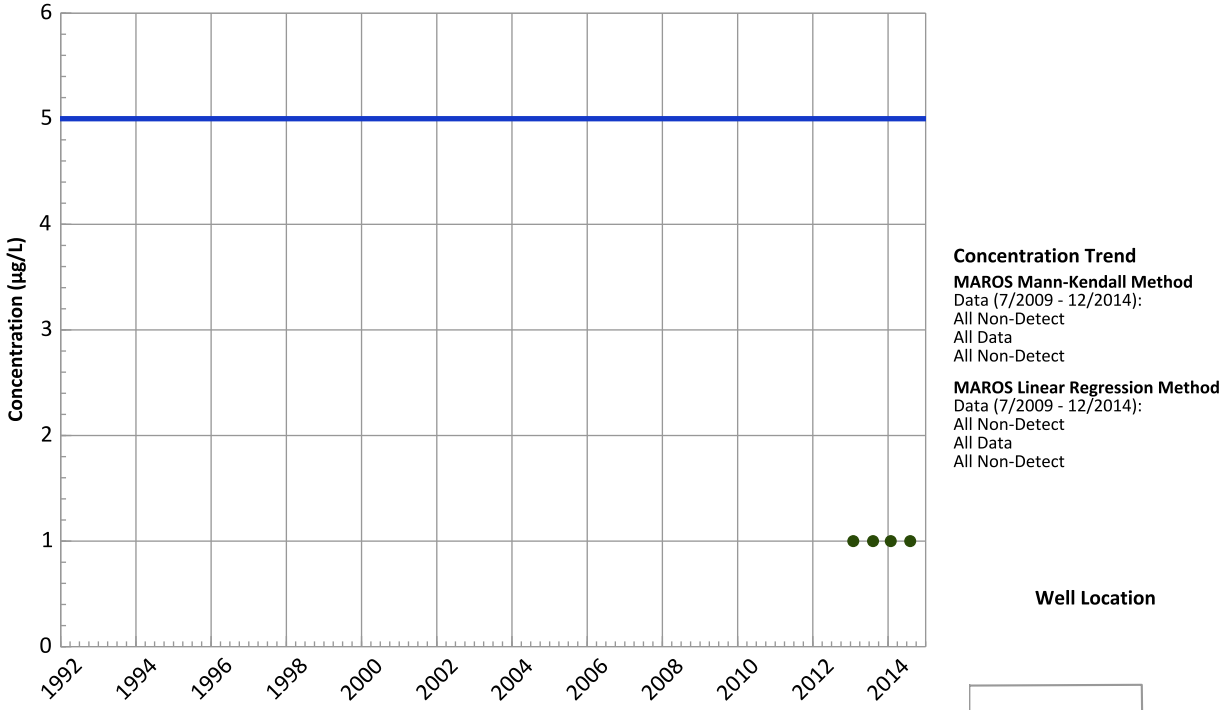


PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



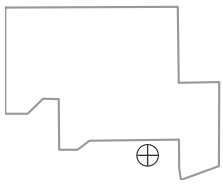
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

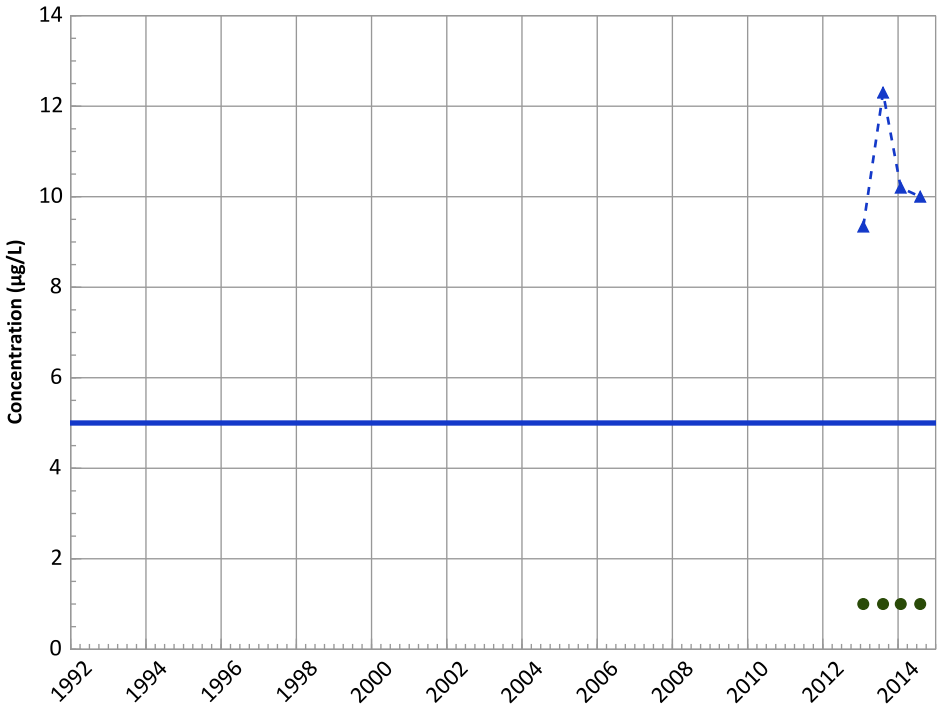
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

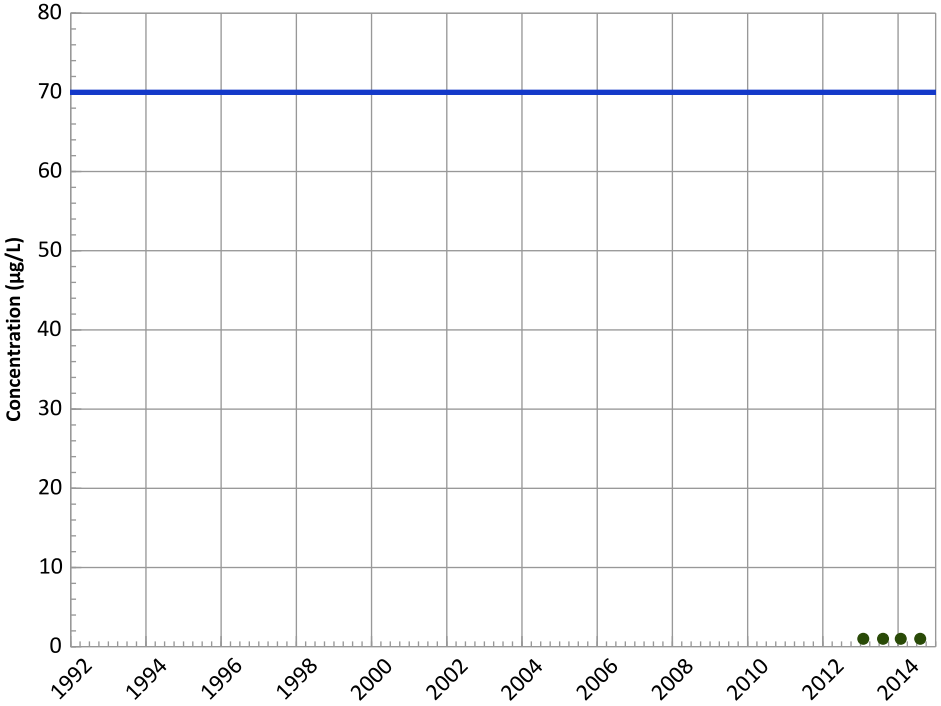


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

cis-1,2-Dichloroethene Trend



Concentration Trend

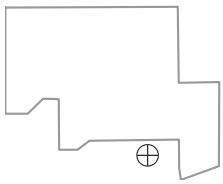
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

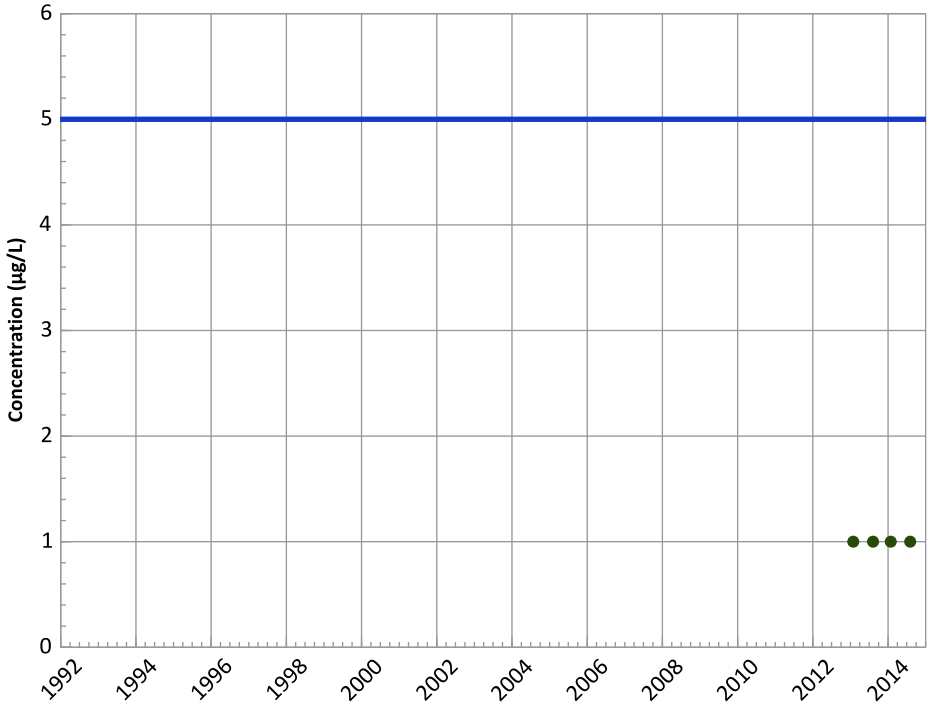
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ═══ Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

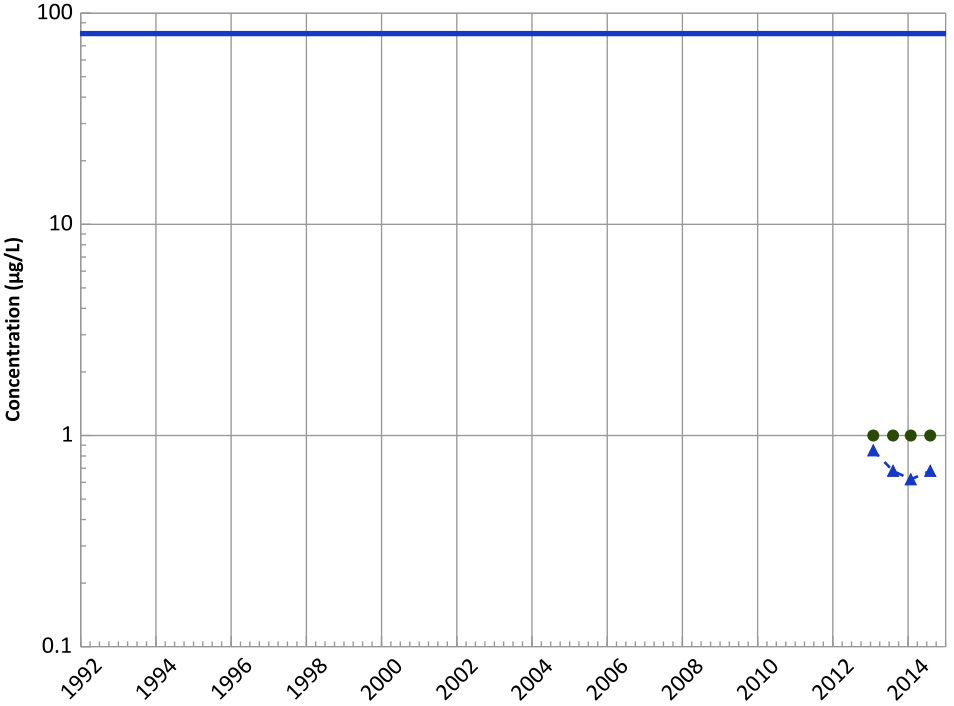


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

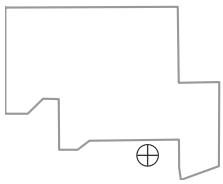
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

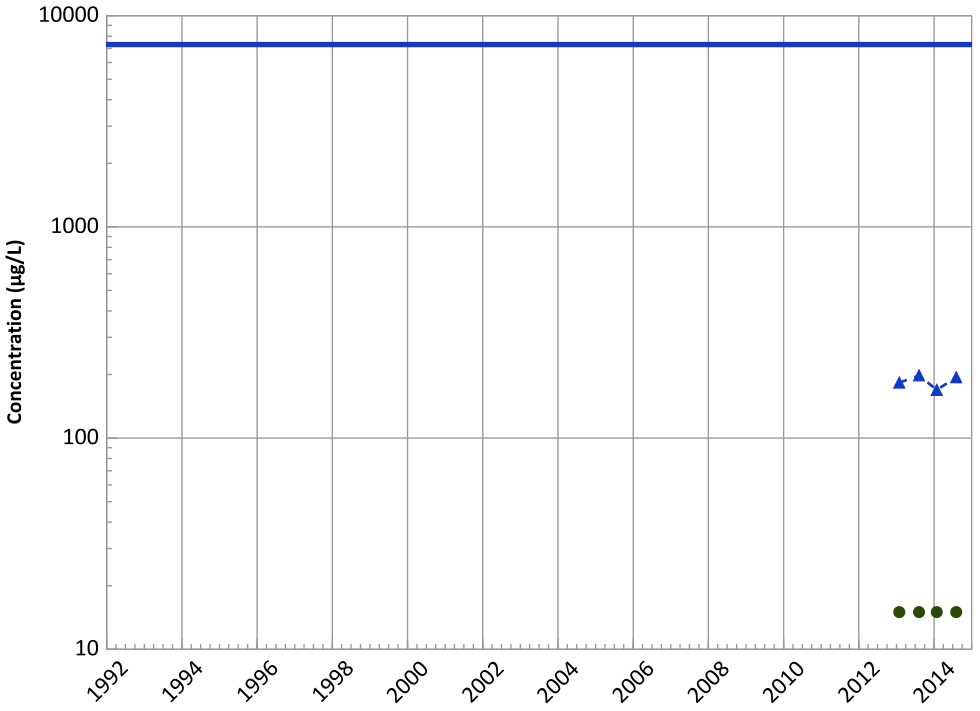
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

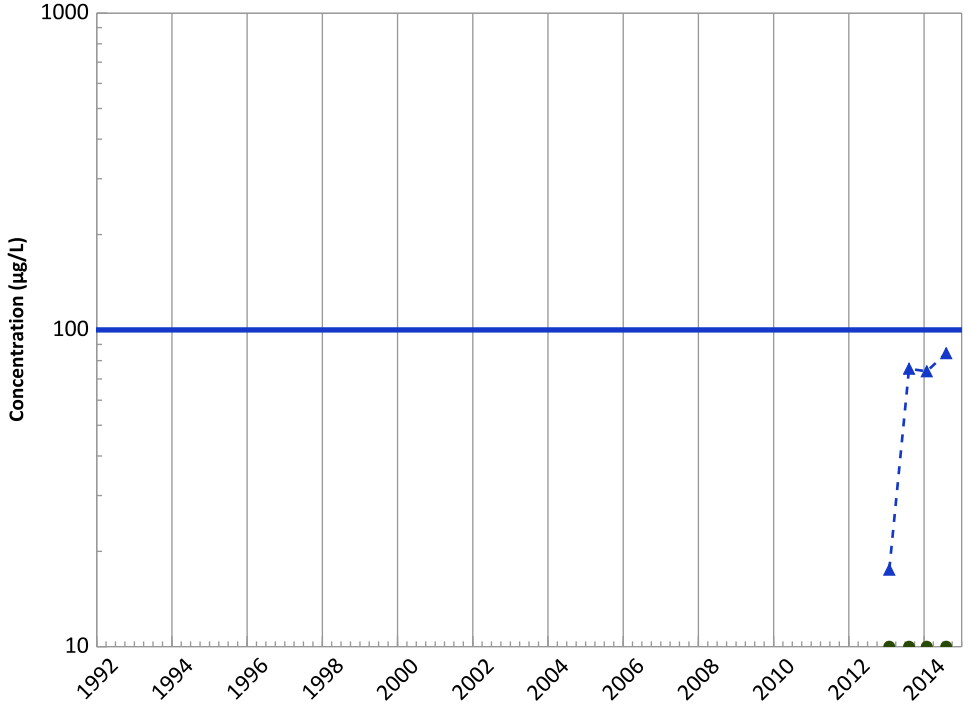


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chromium, Total Trend



Concentration Trend

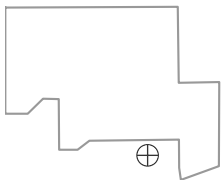
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

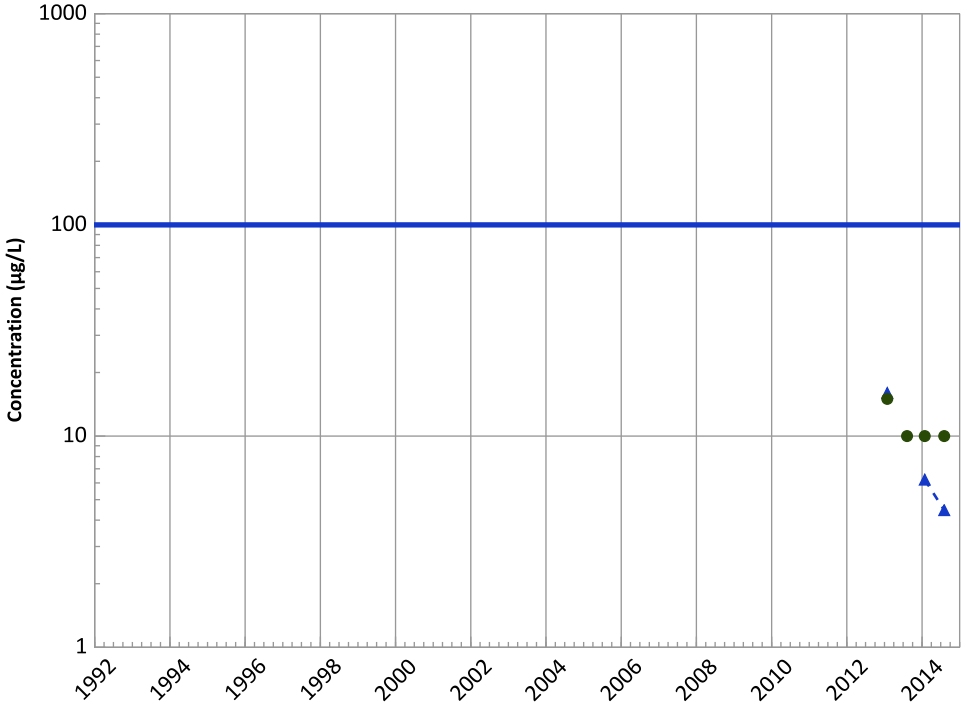
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

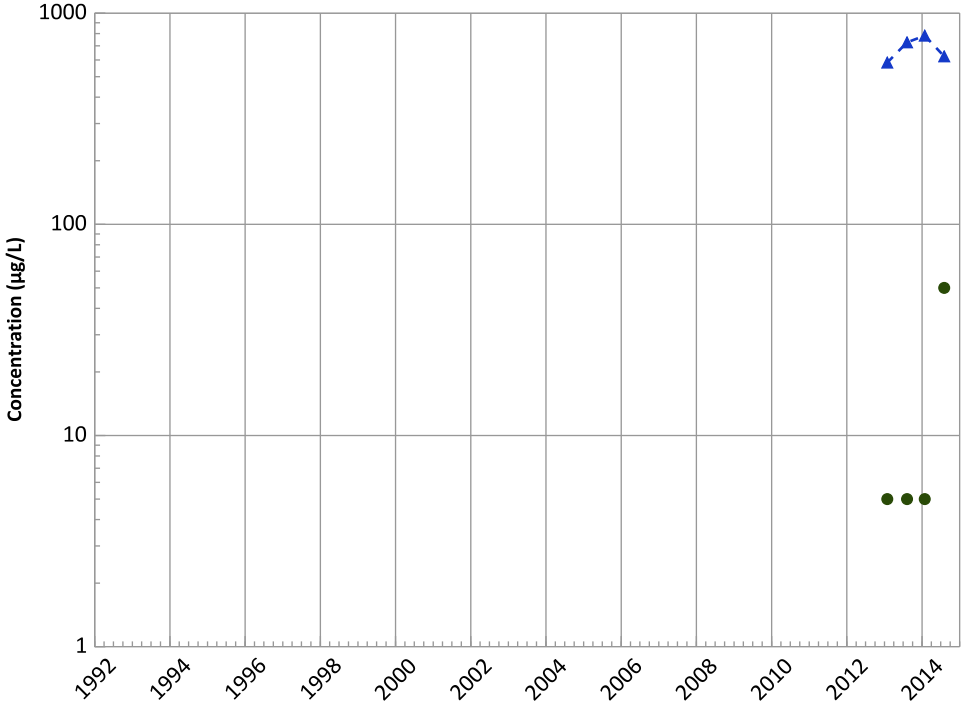


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

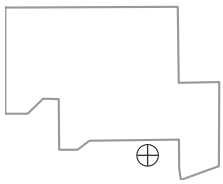
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

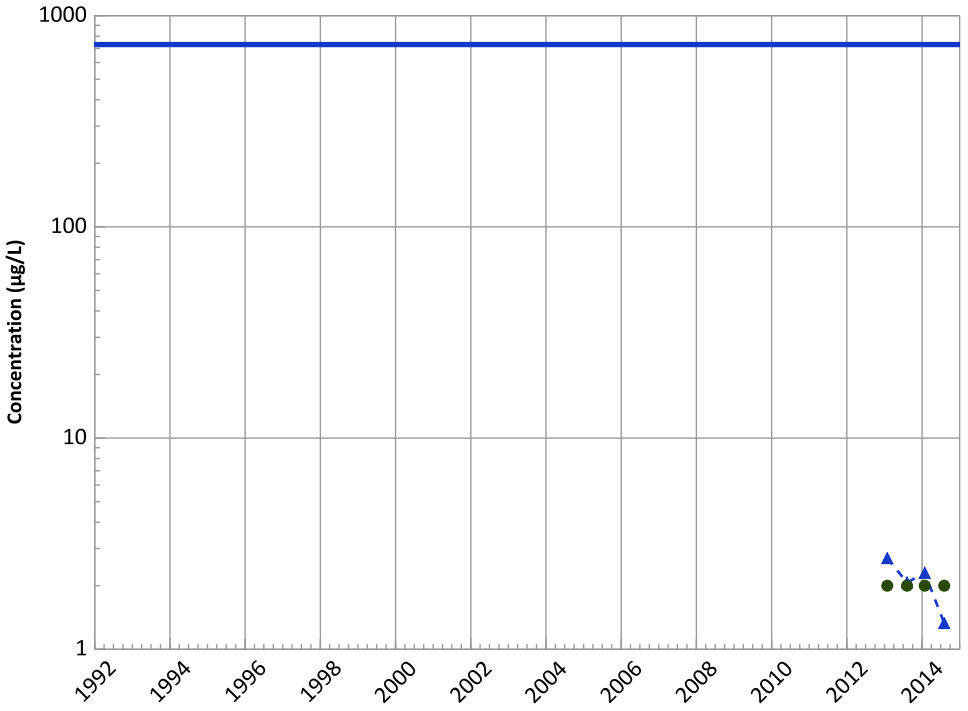
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

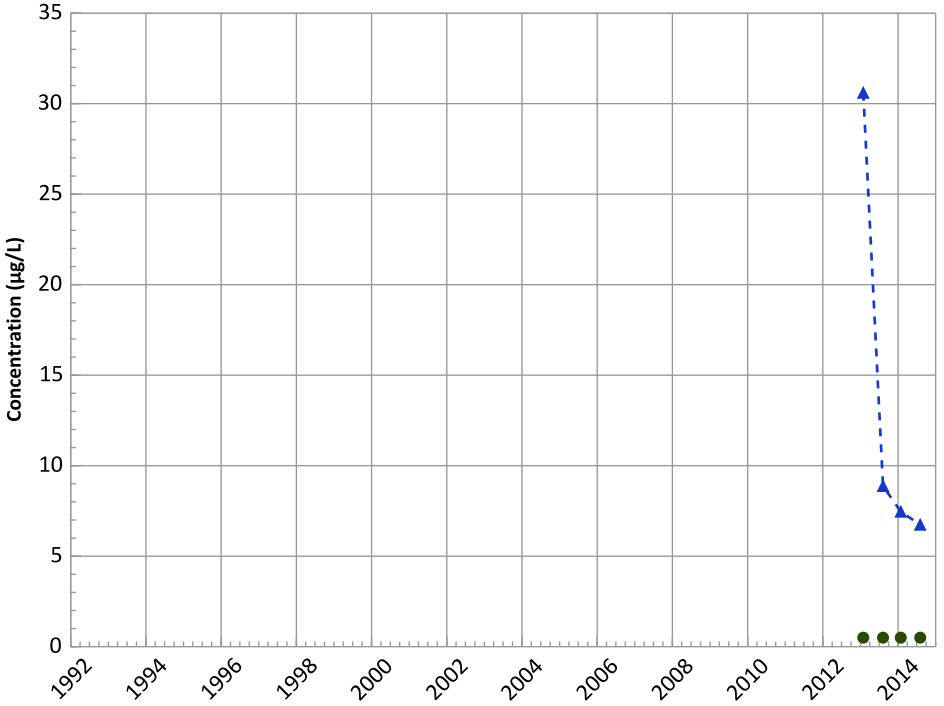


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Molybdenum Trend



Concentration Trend

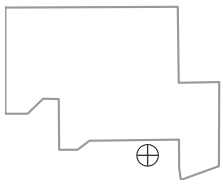
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

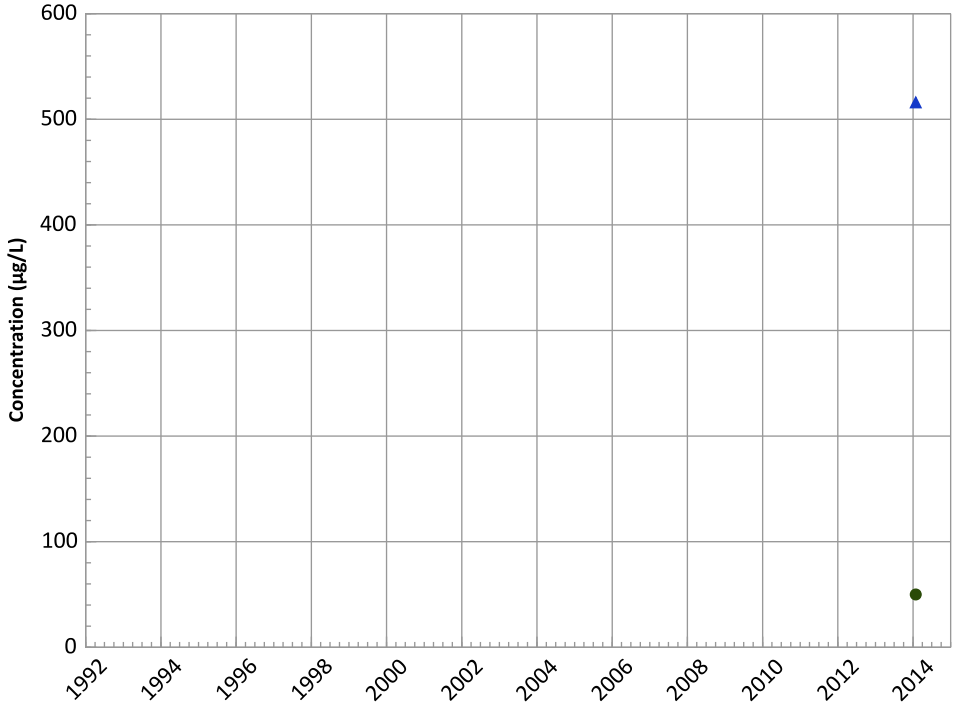
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

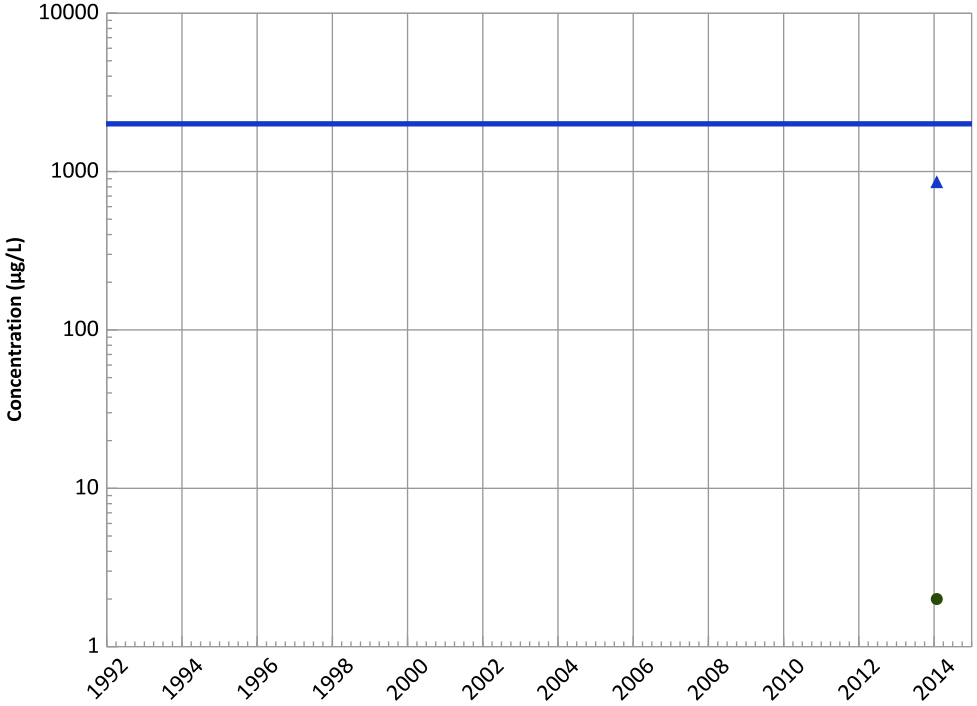


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Barium Trend



Concentration Trend

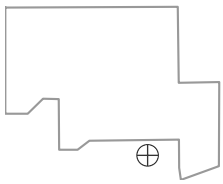
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

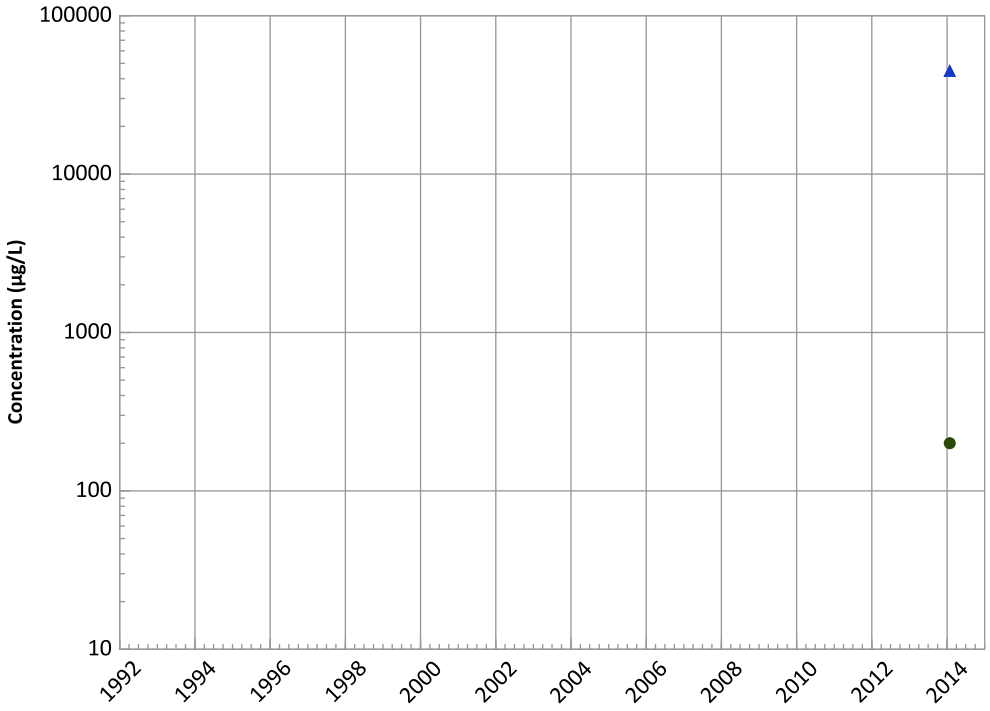
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

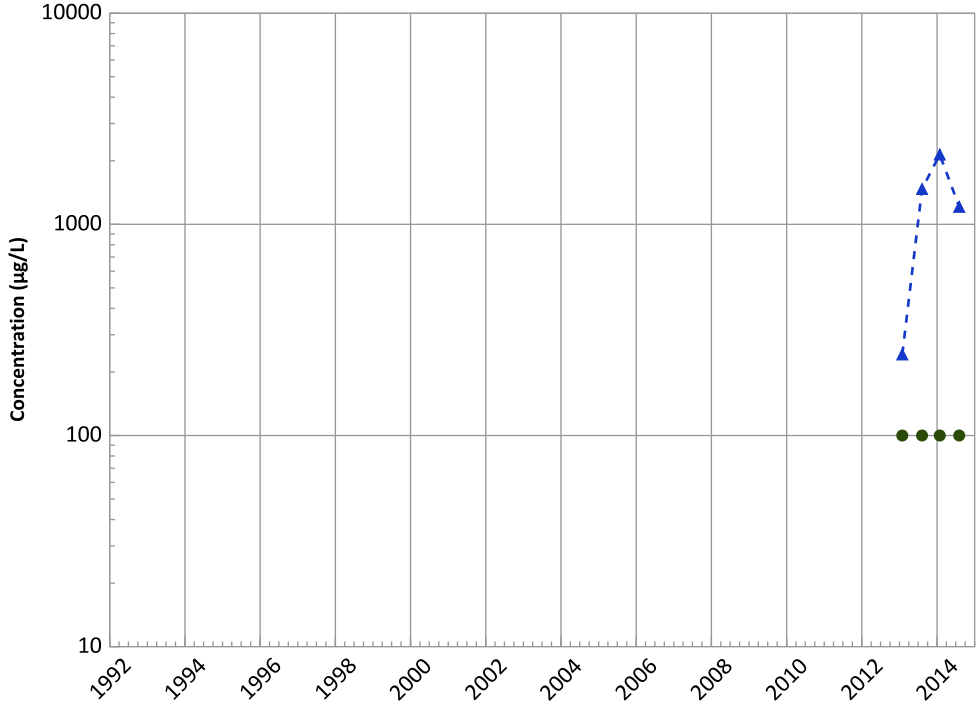


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Iron Trend



Concentration Trend

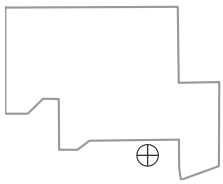
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

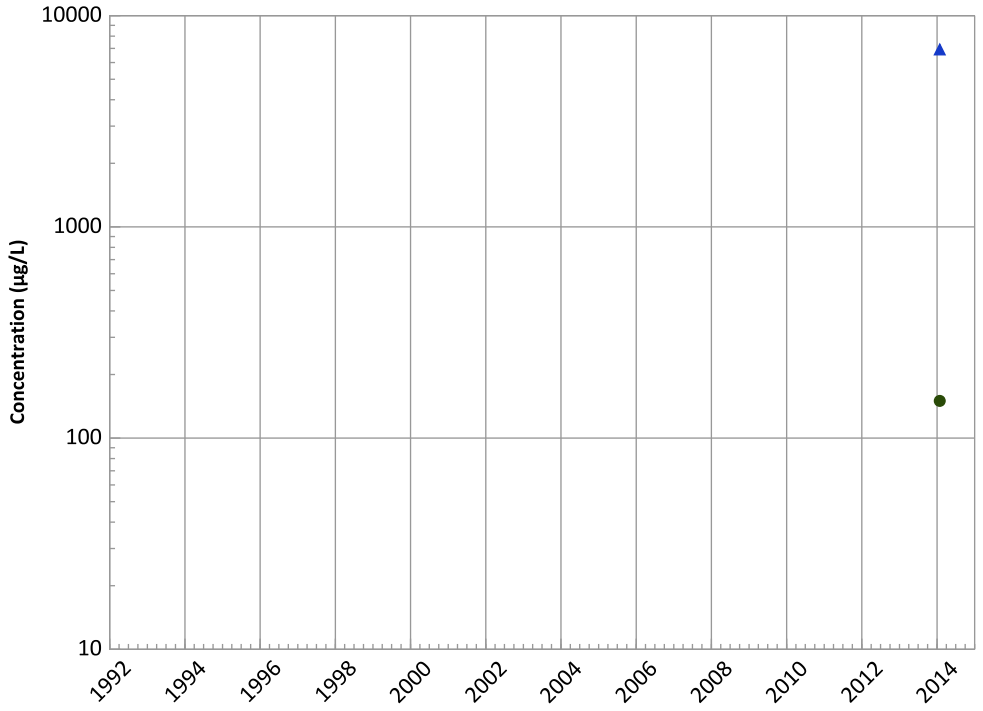
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

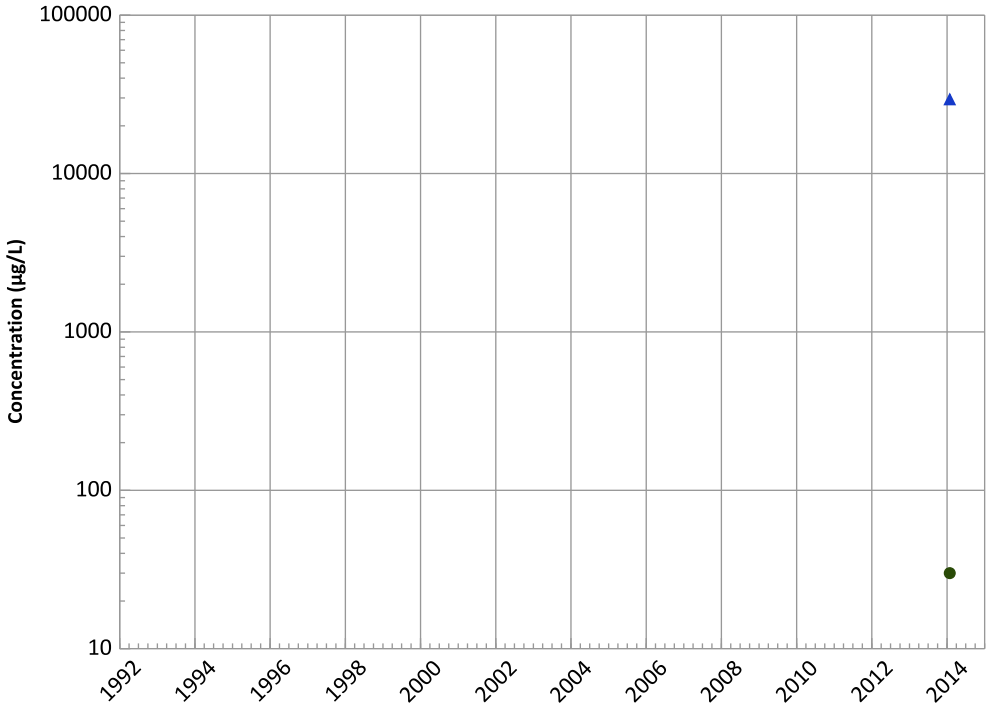


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Magnesium Trend



Concentration Trend

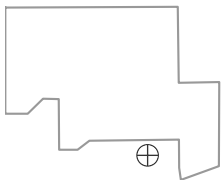
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

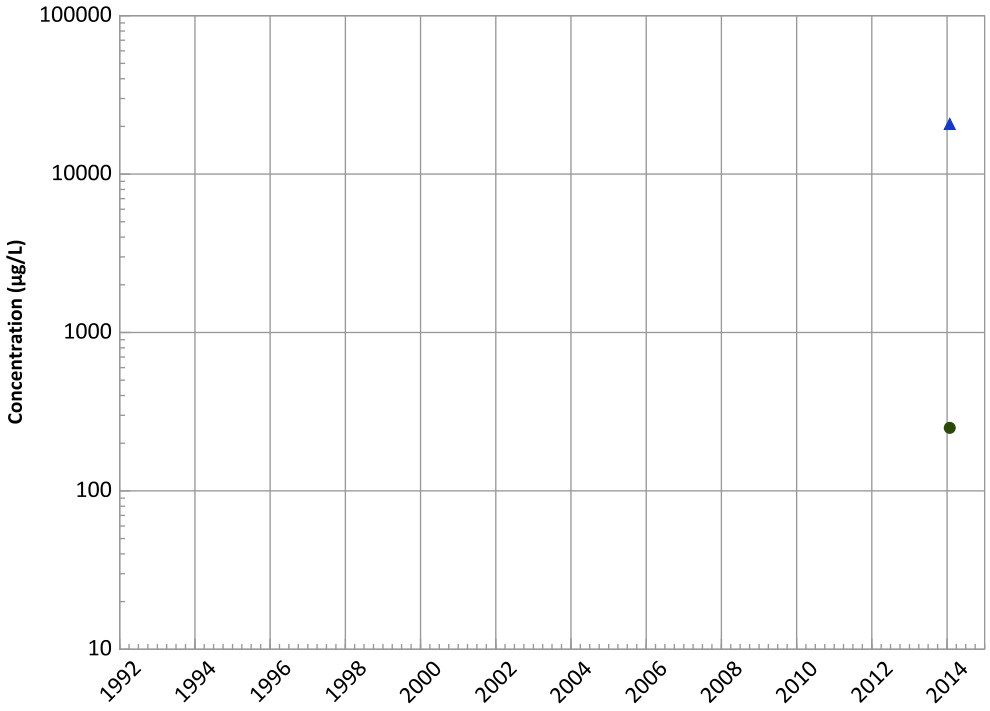
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1166 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

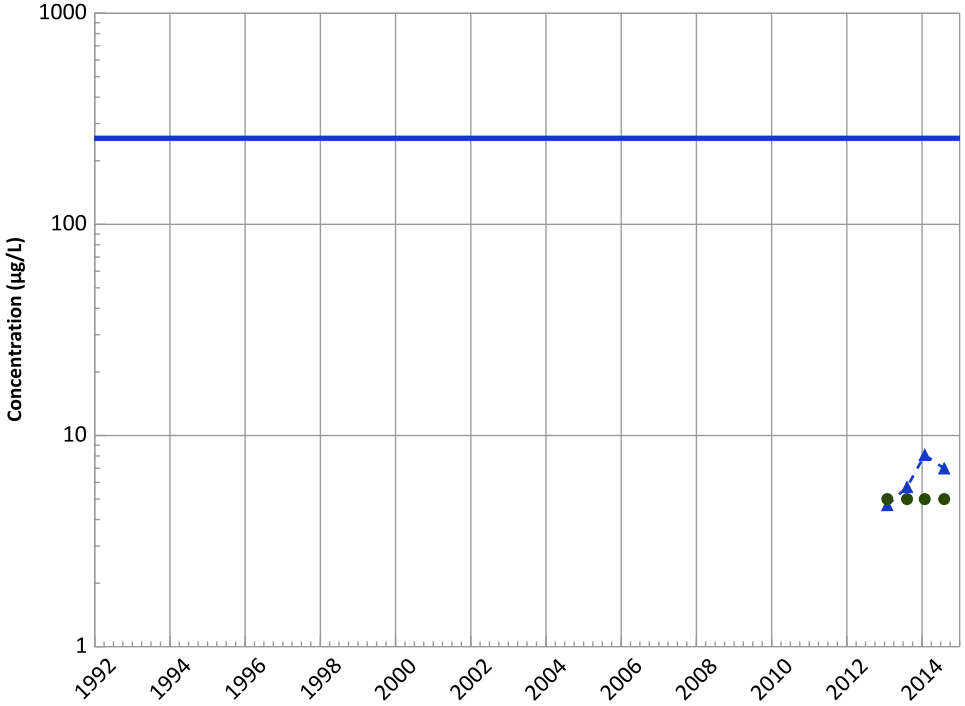


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Vanadium Trend



Concentration Trend

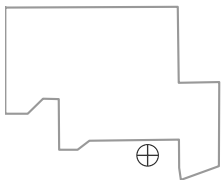
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

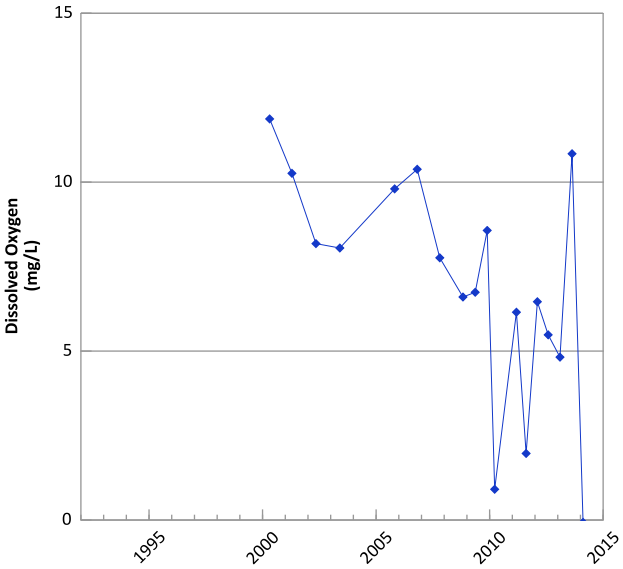
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2013 to 08/04/2014
Analysis Date: 03/19/2015

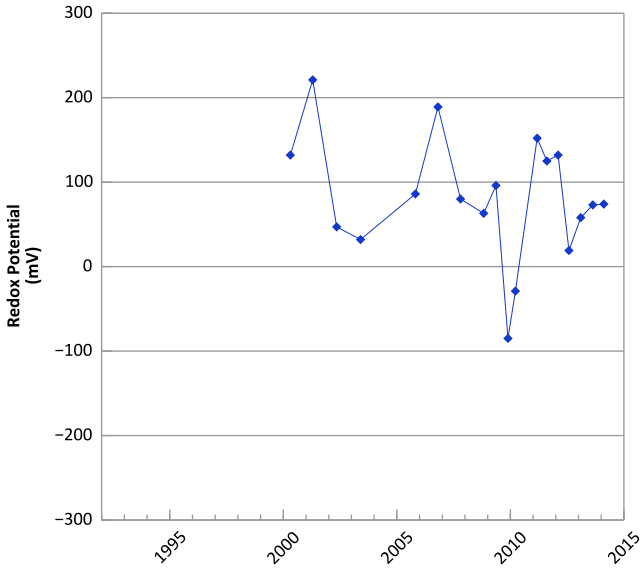
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

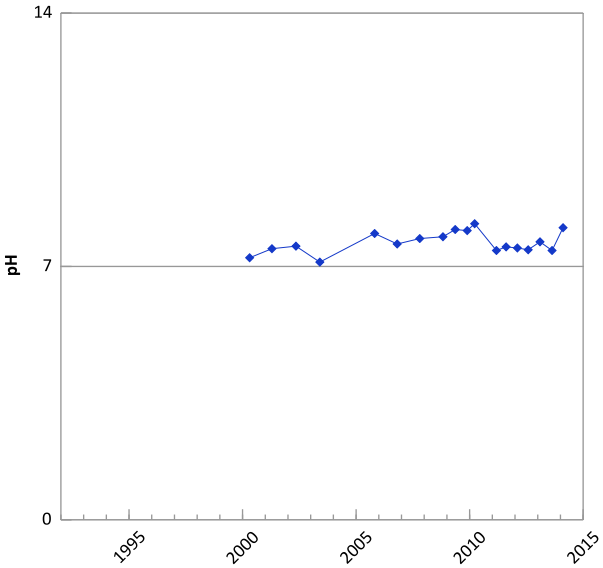
Well Location

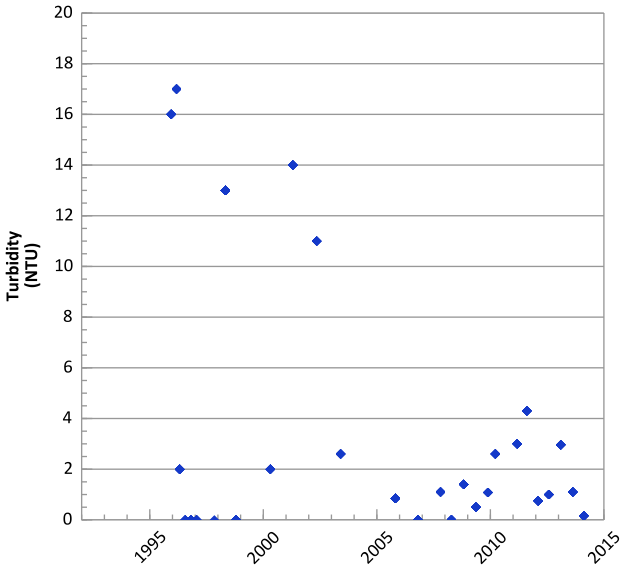


PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



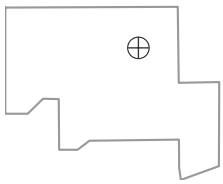






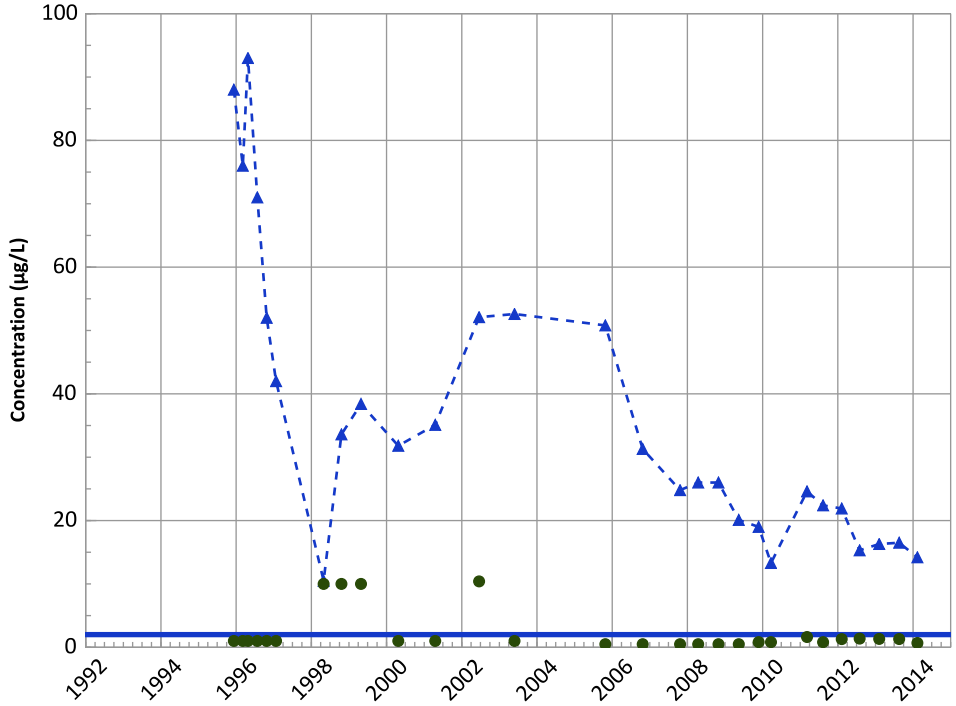
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

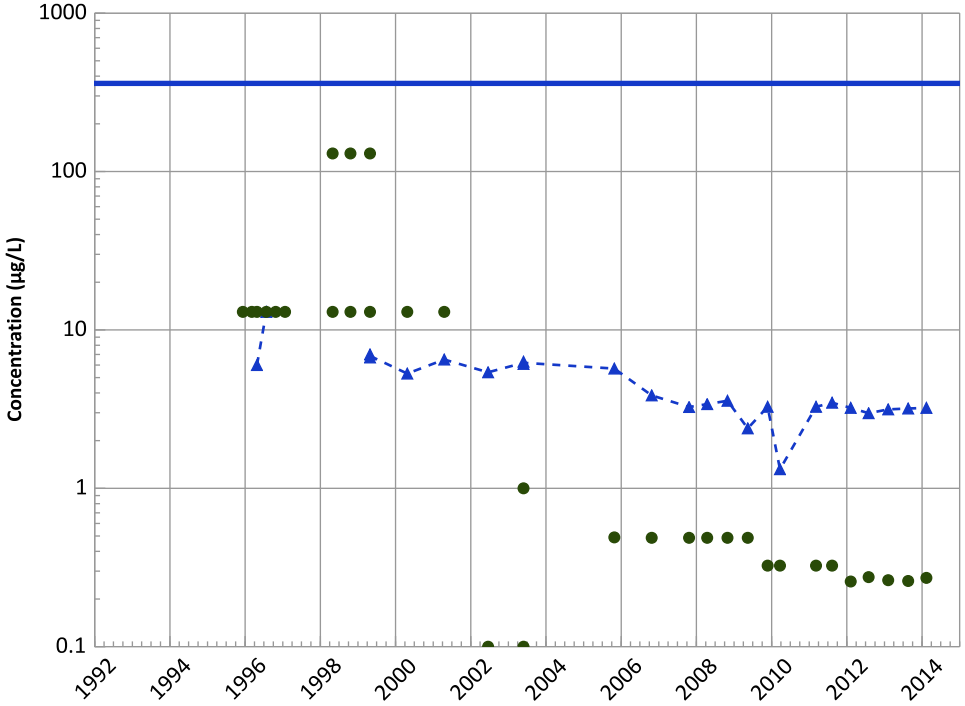


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

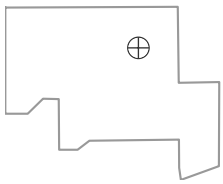
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

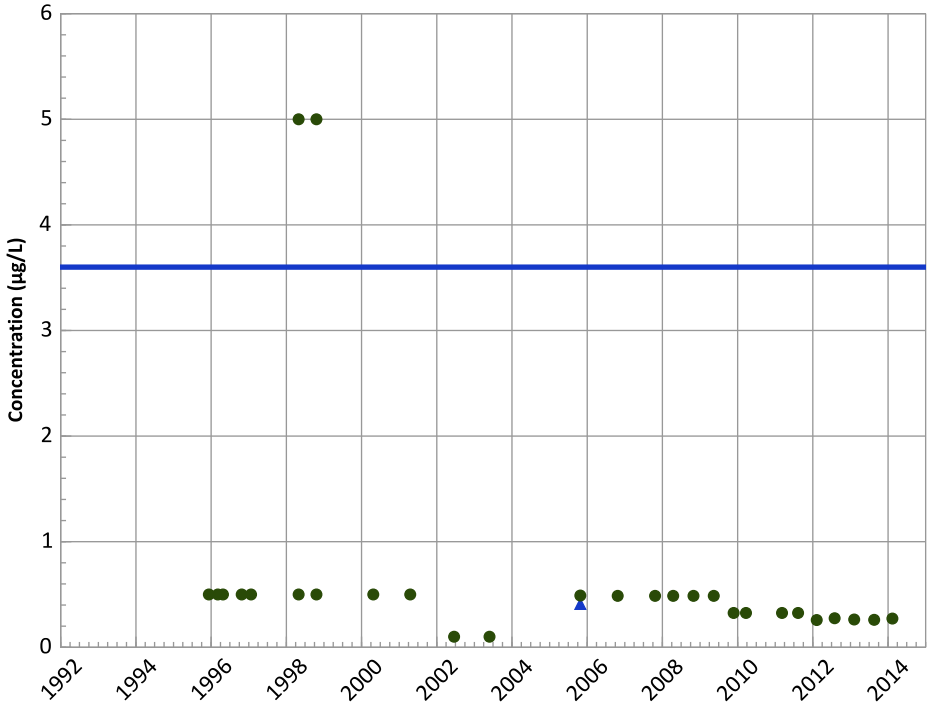
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

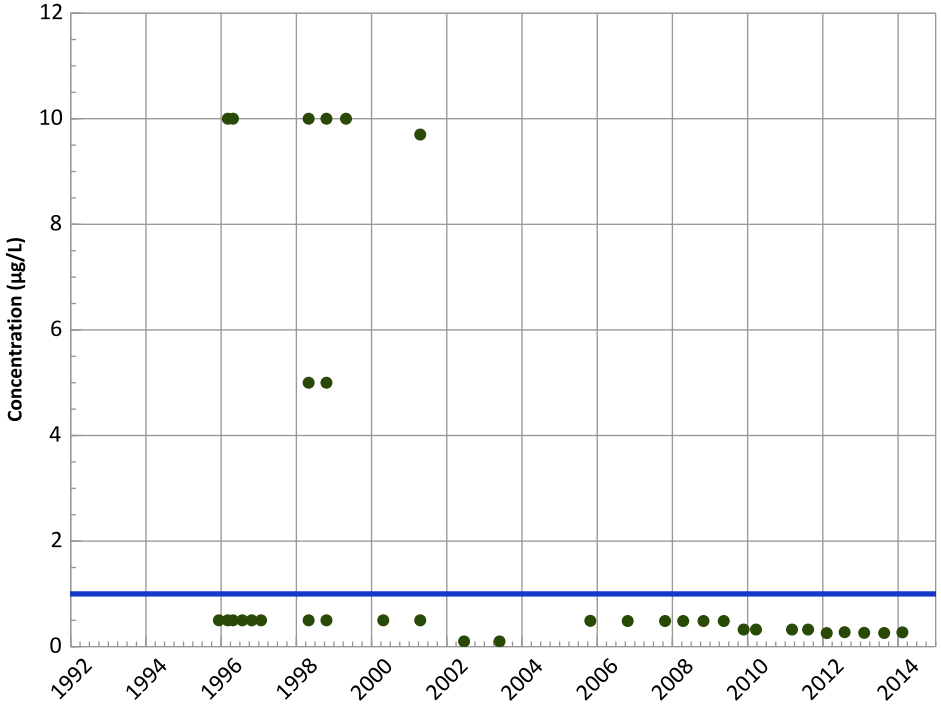


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

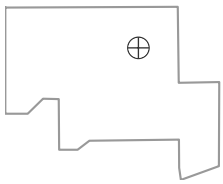
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

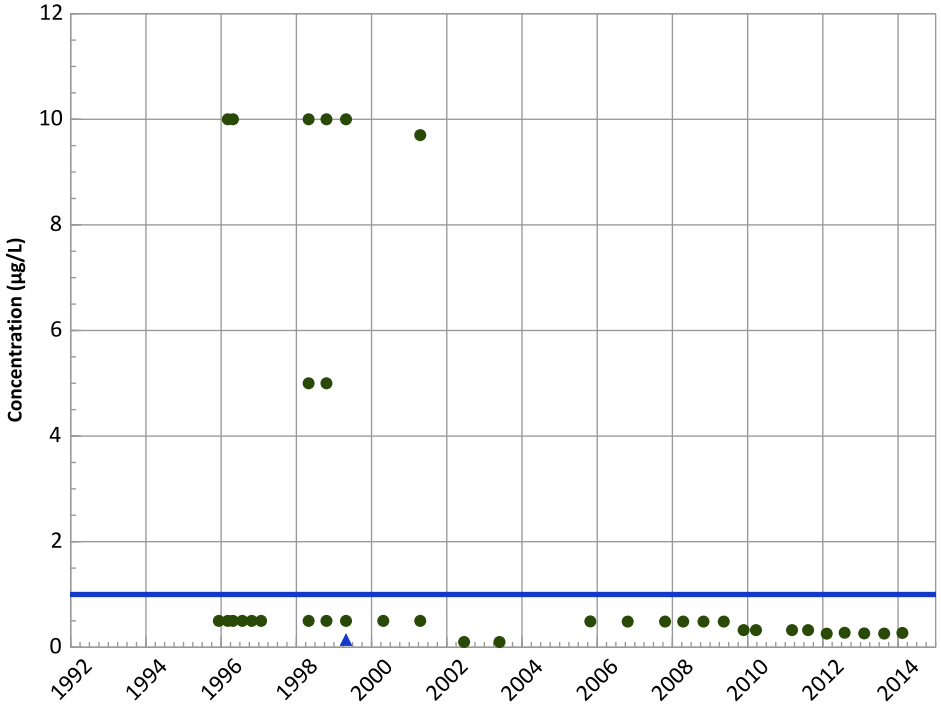
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

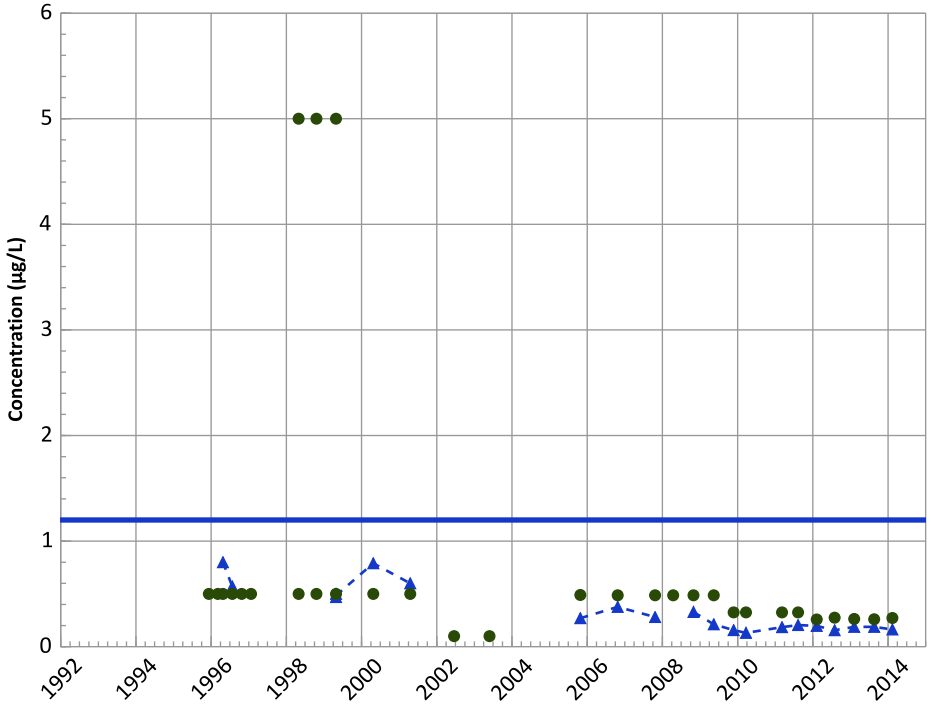


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

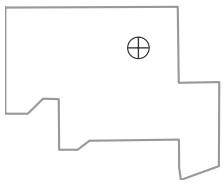
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

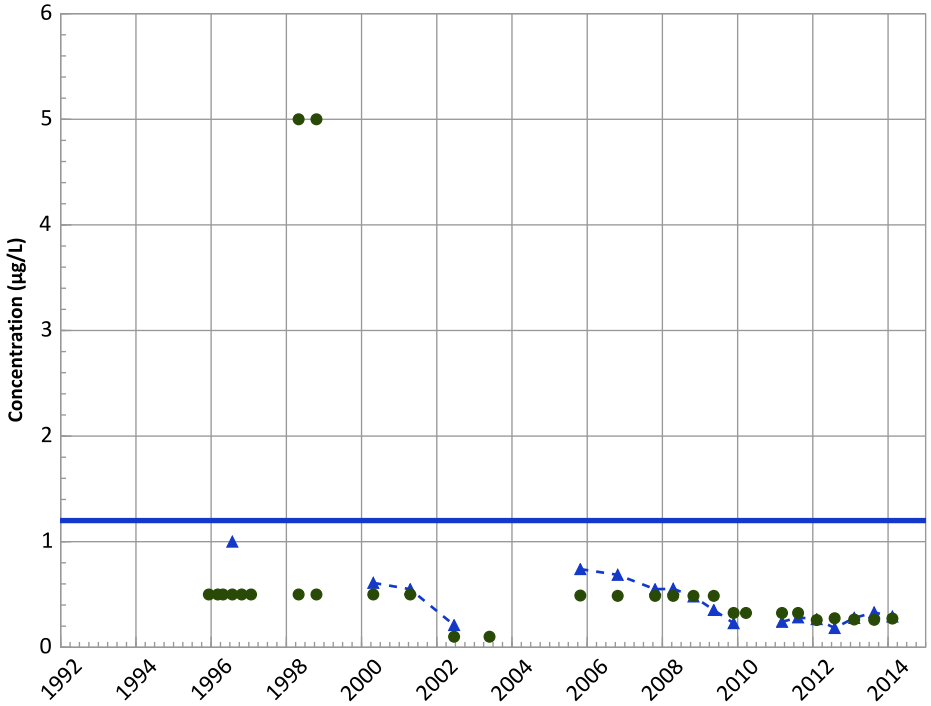
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

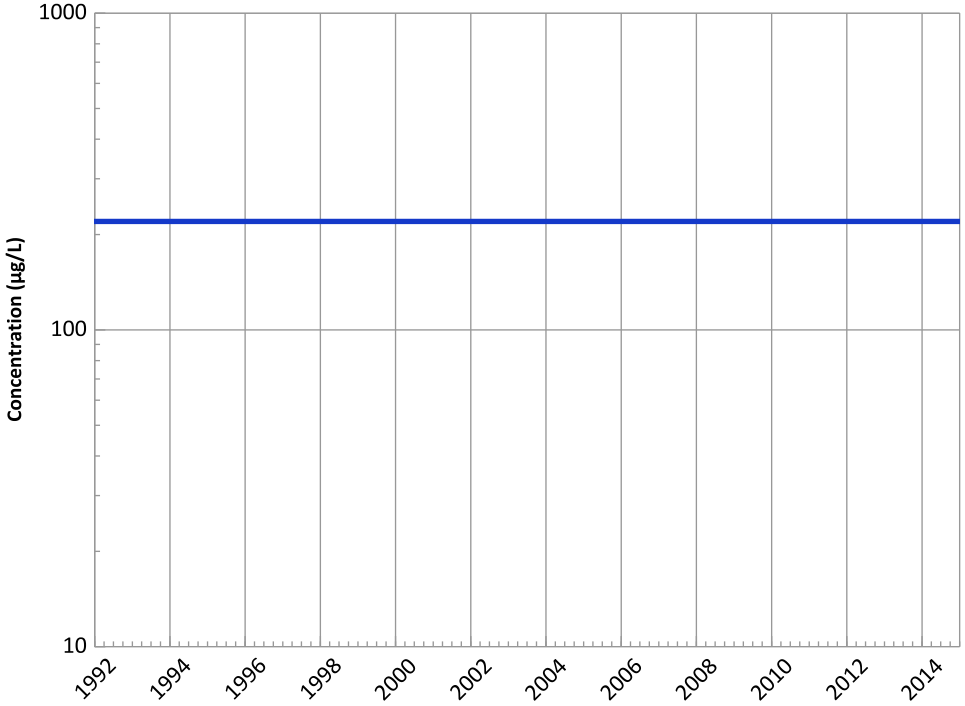


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

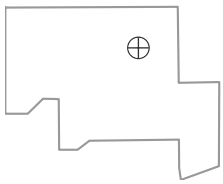
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

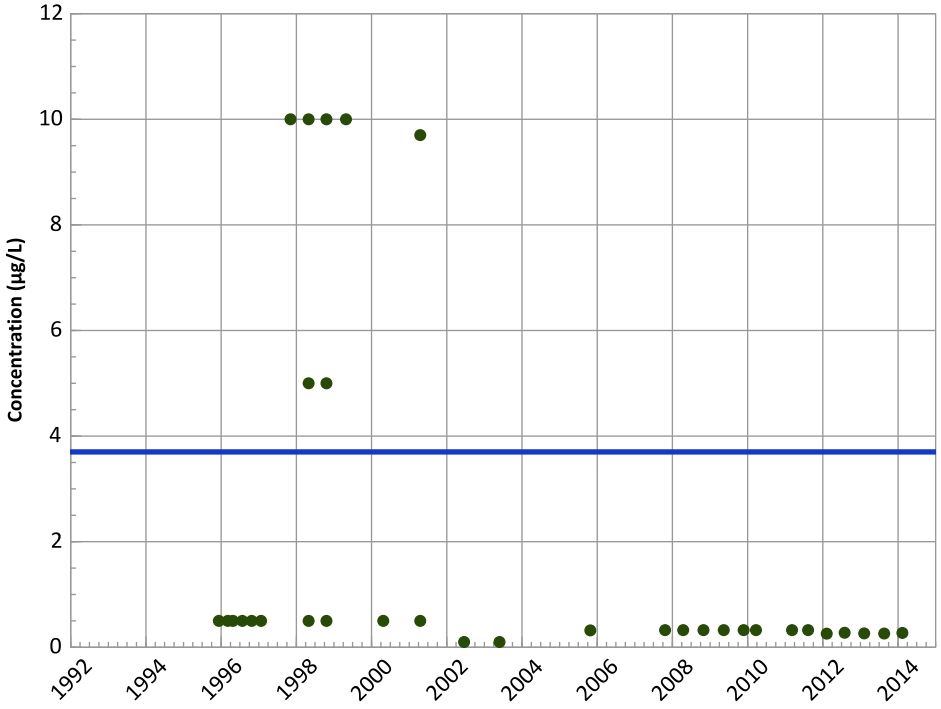
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

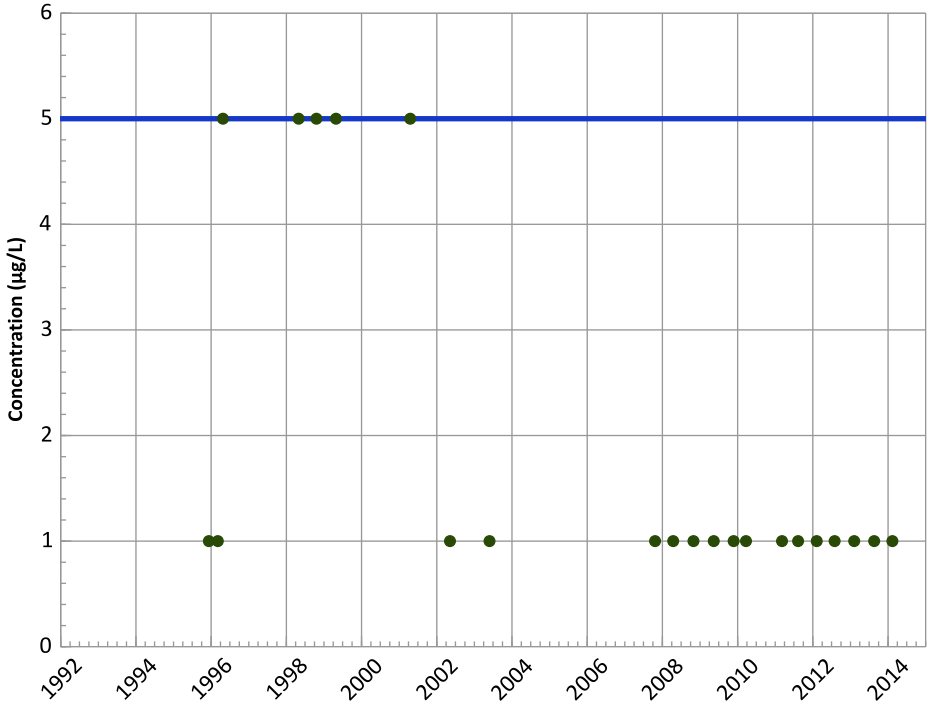


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

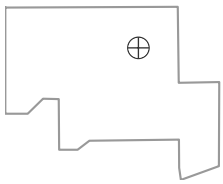
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

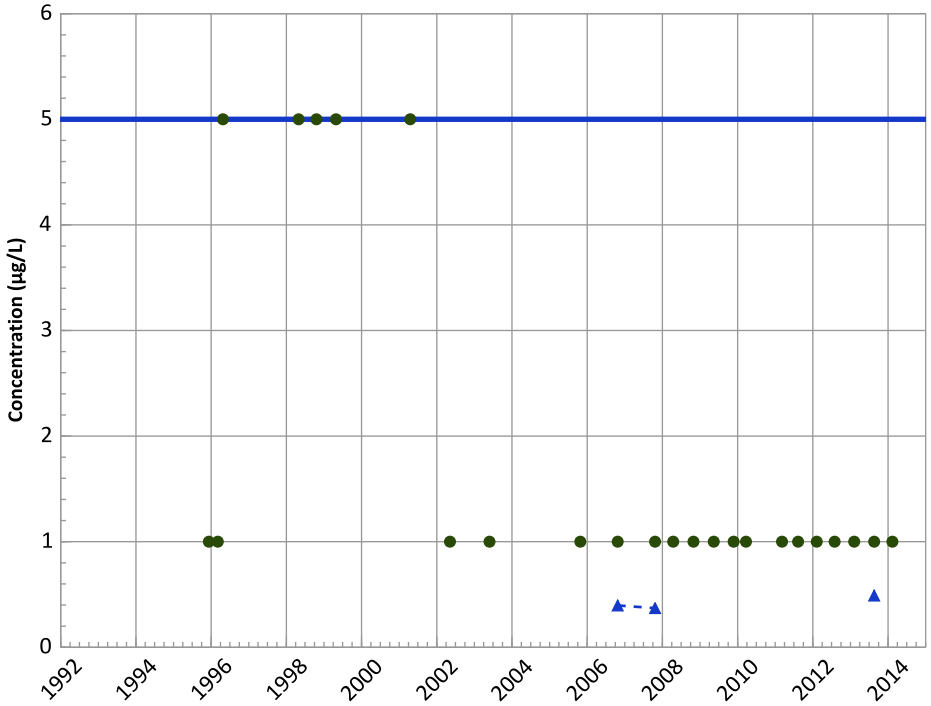
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

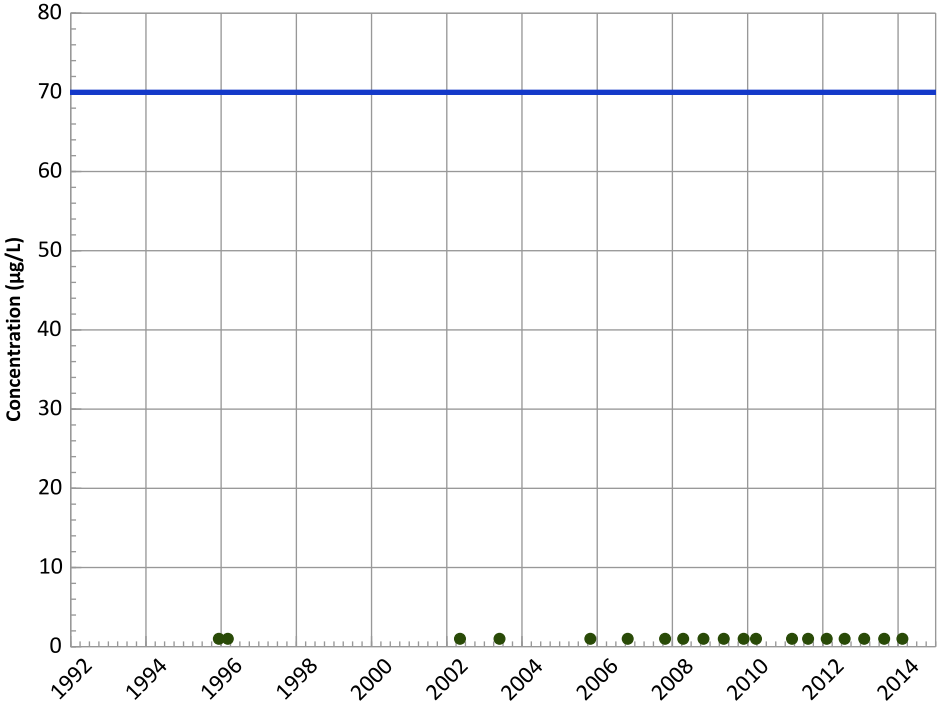


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

cis-1,2-Dichloroethene Trend



Concentration Trend

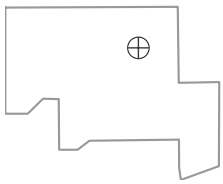
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

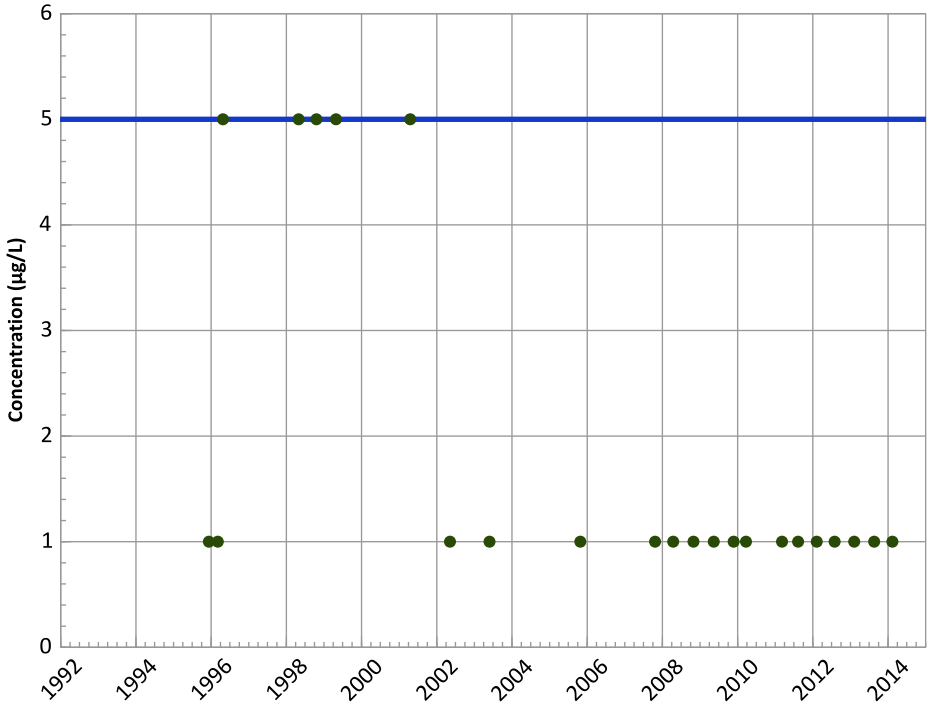
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

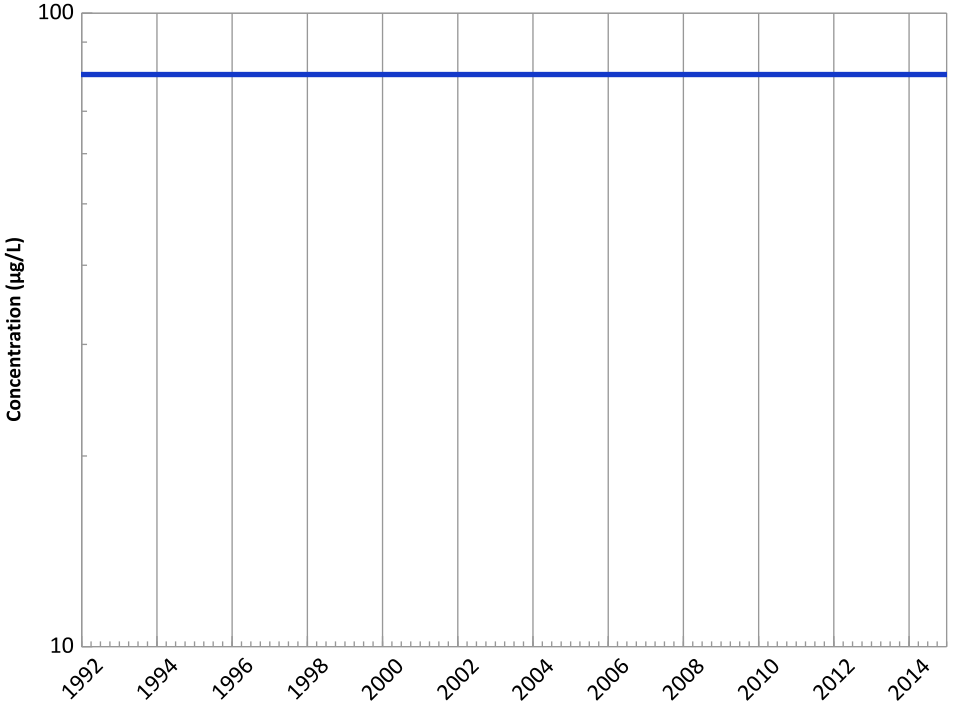


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

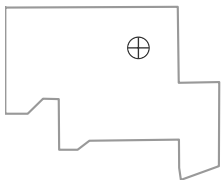
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

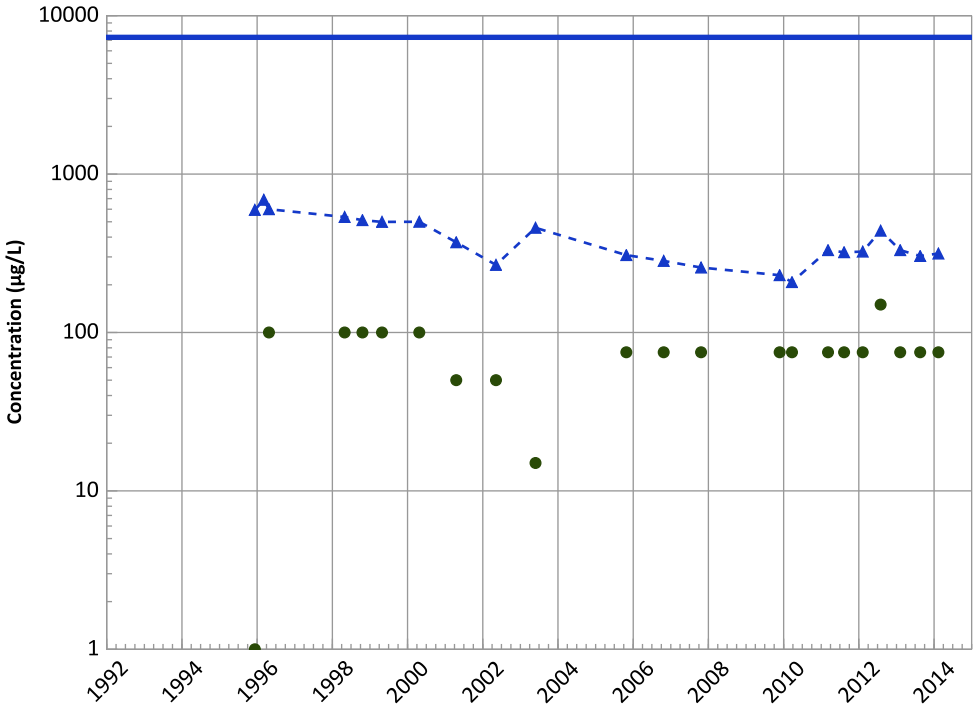
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

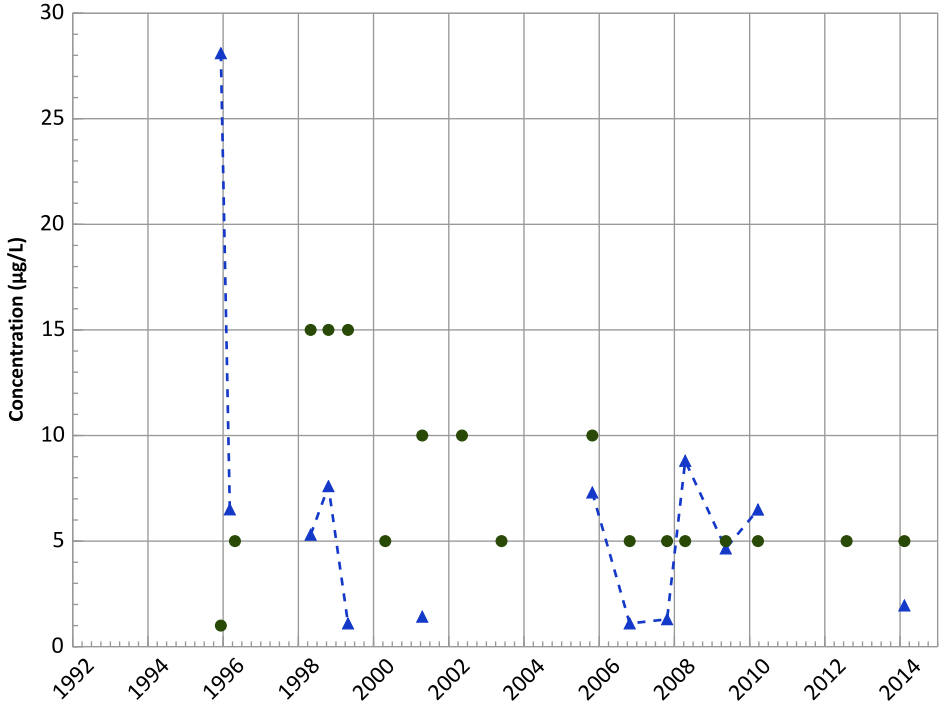


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Manganese Trend



Concentration Trend

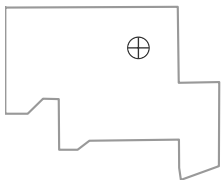
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

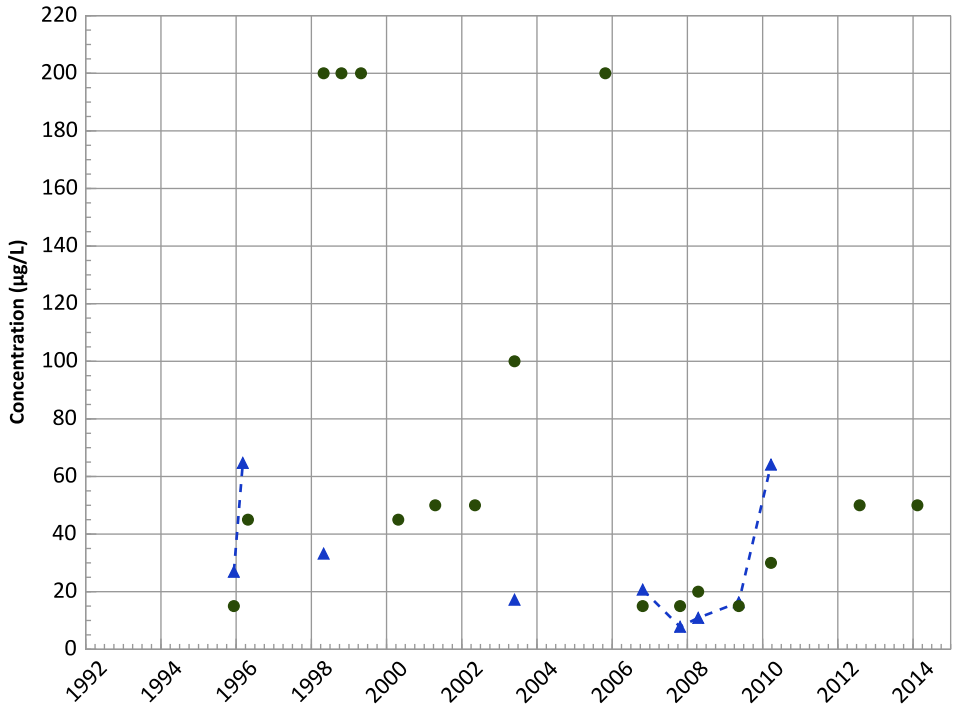
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

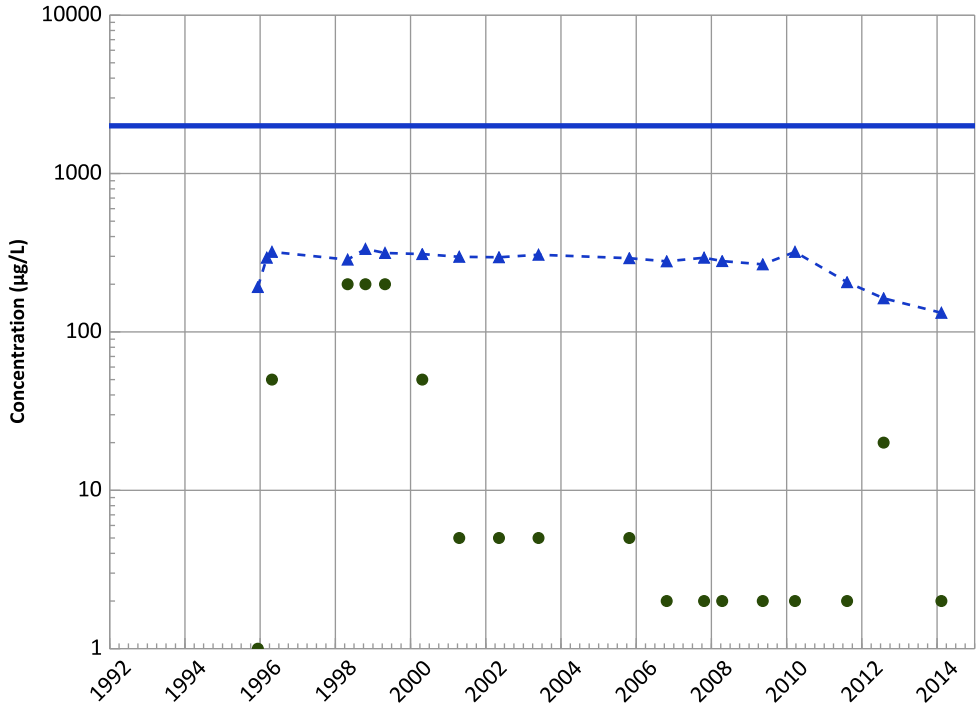


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

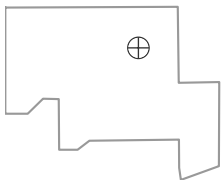
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

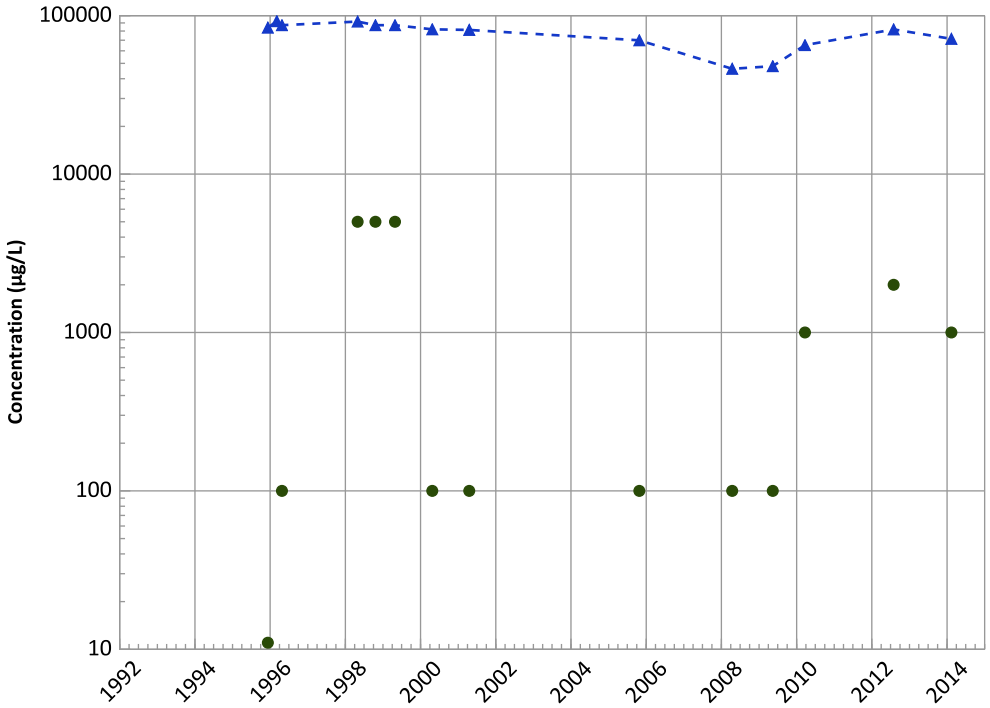
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

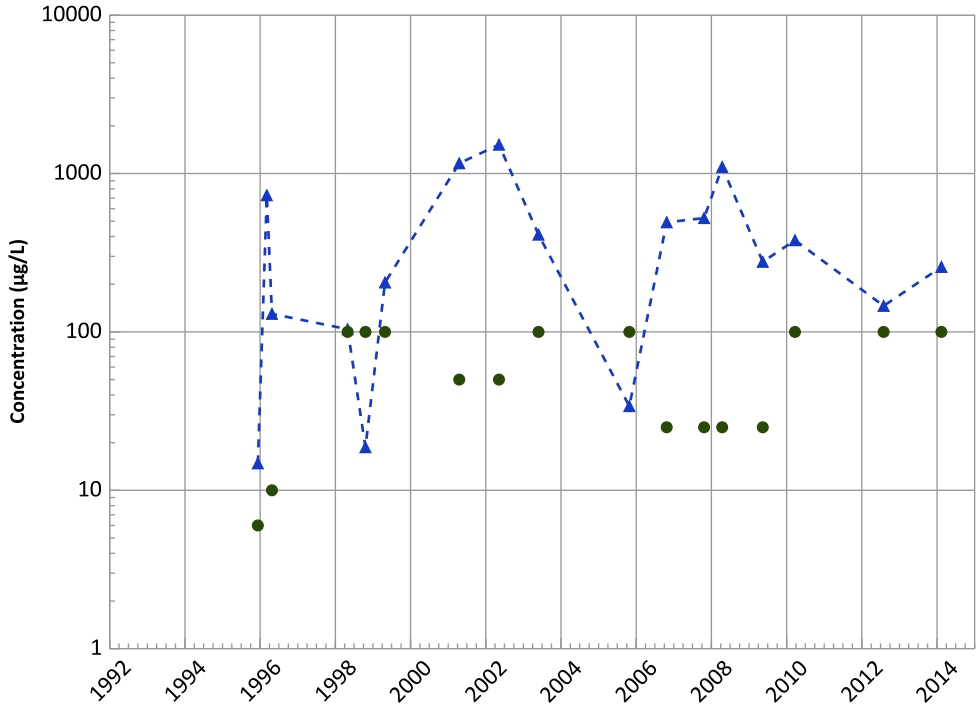


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

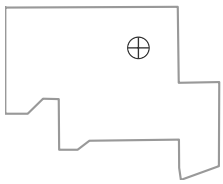
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

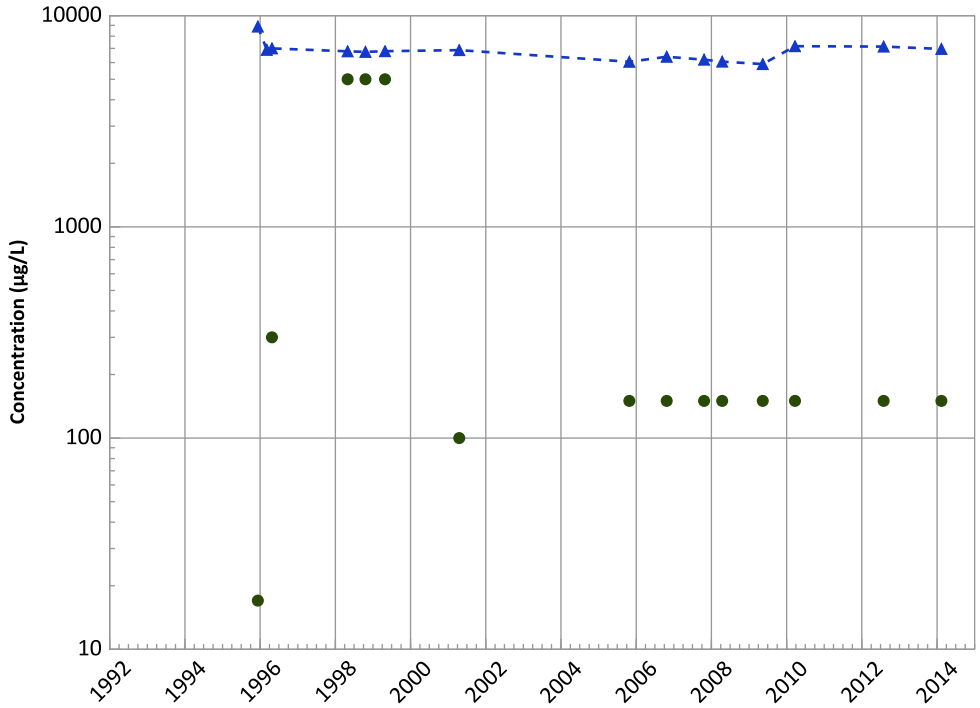
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

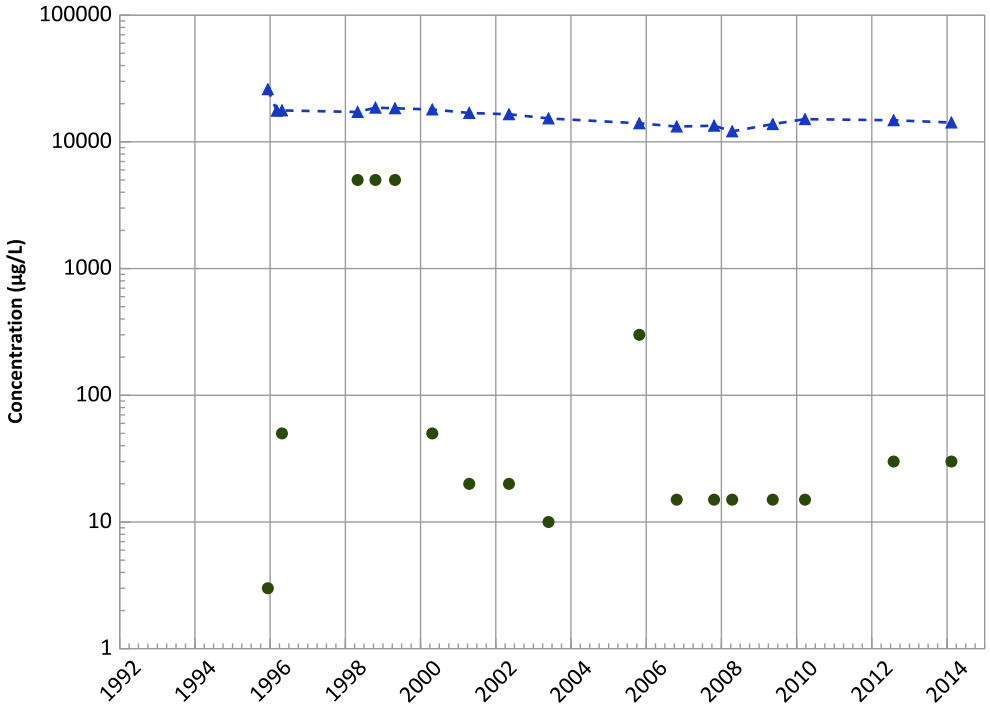


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Magnesium Trend



Concentration Trend

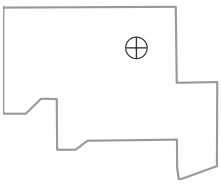
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

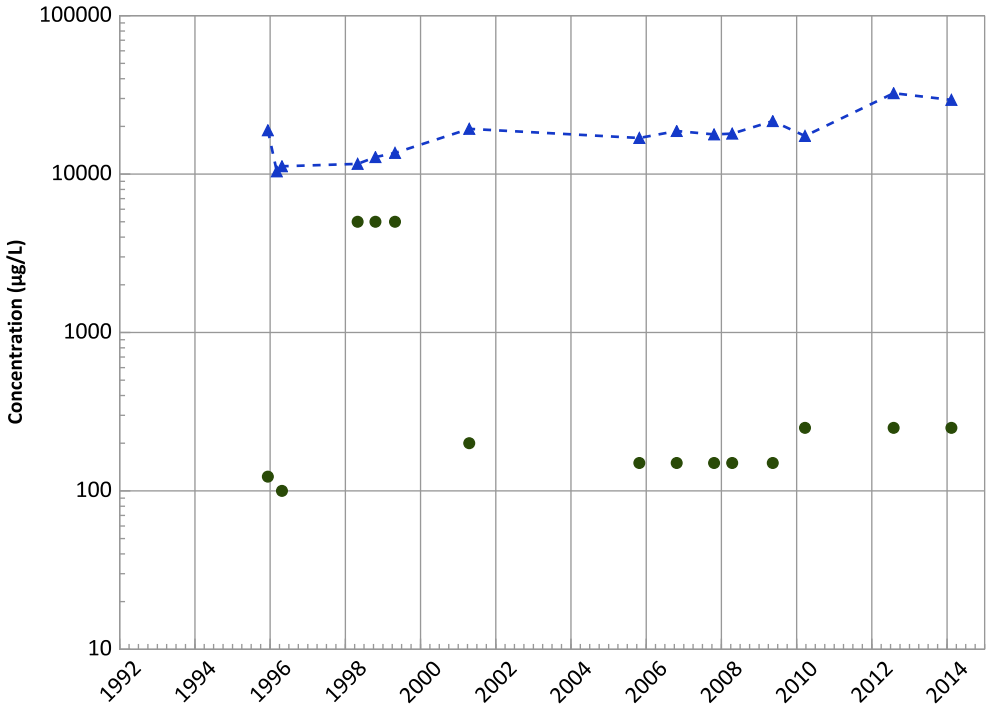
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

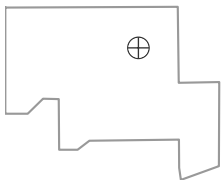
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

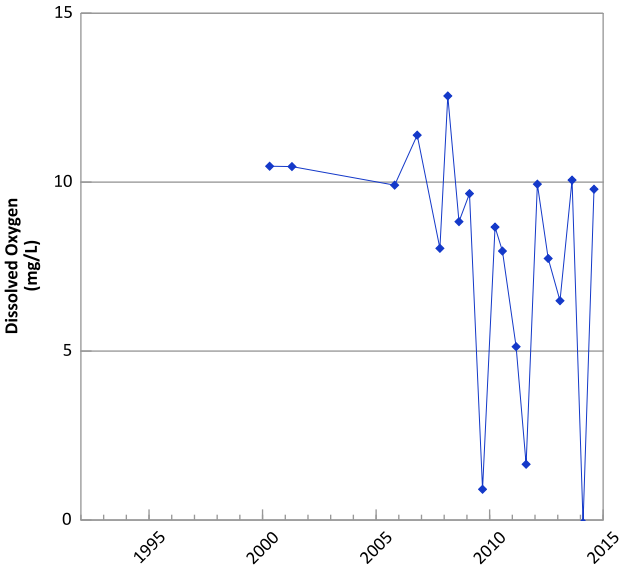
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/10/1995 to 02/12/2014
Analysis Date: 03/19/2015

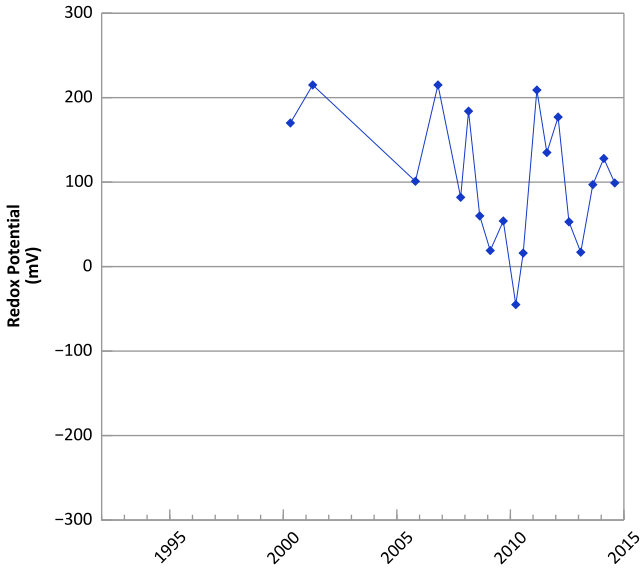
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

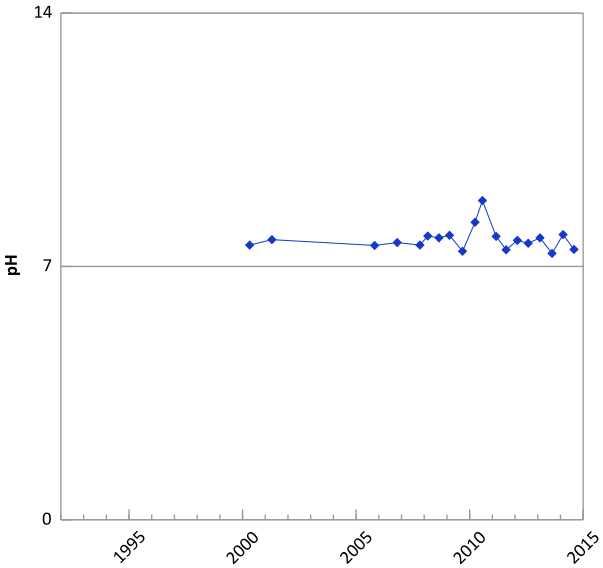
Well Location

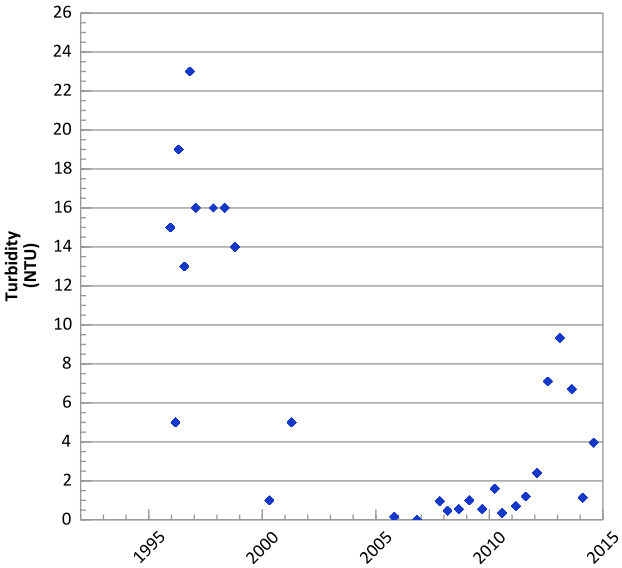


PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



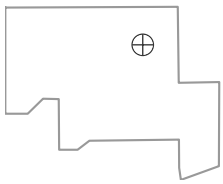






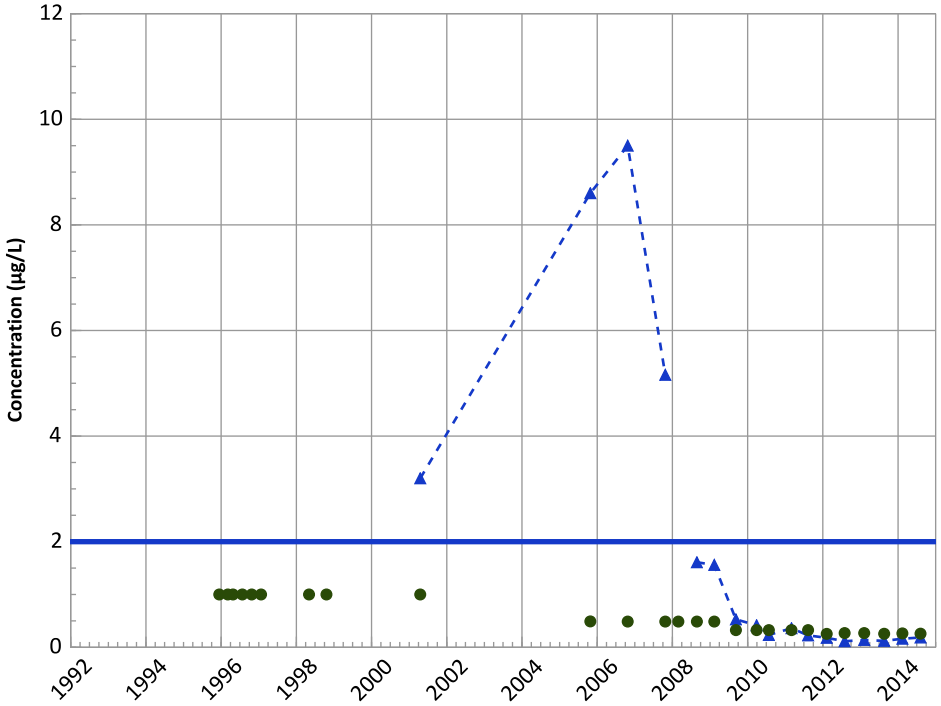
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

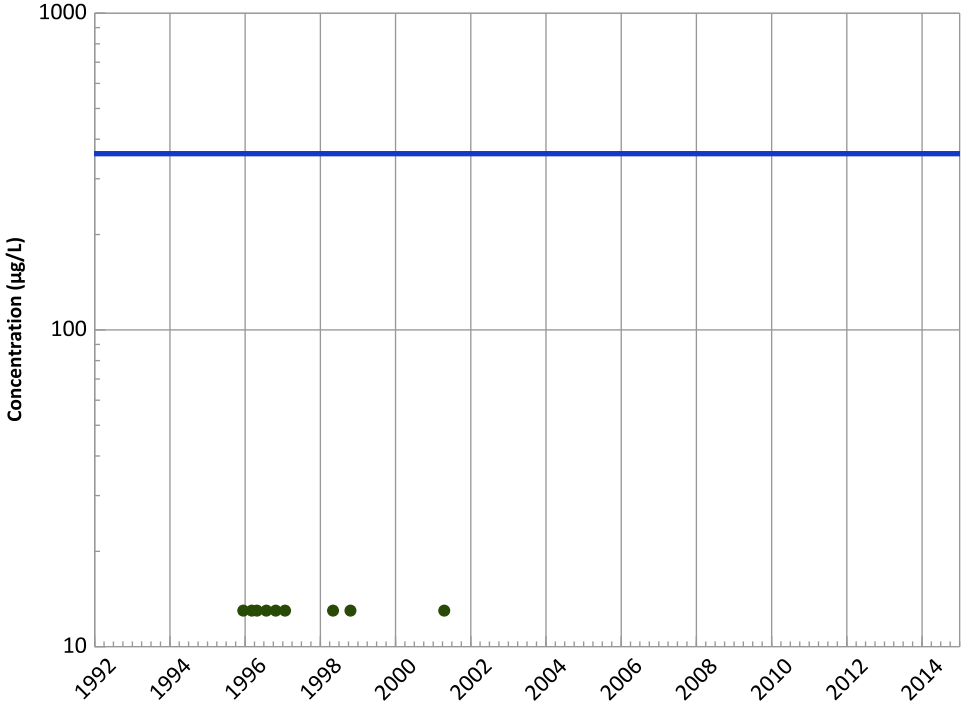


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

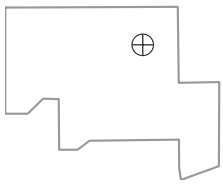
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

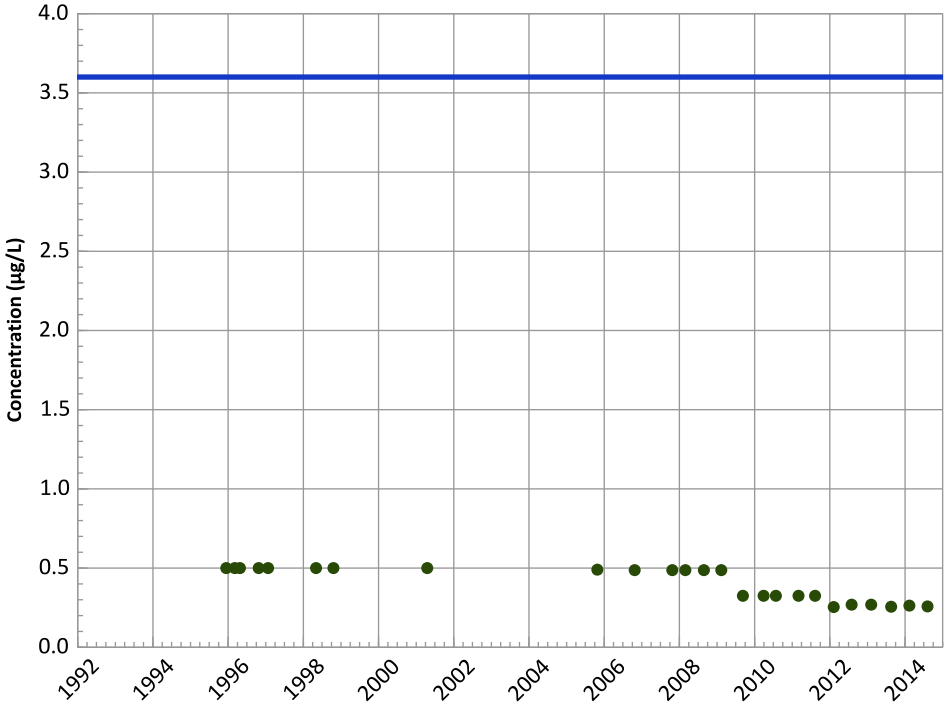
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

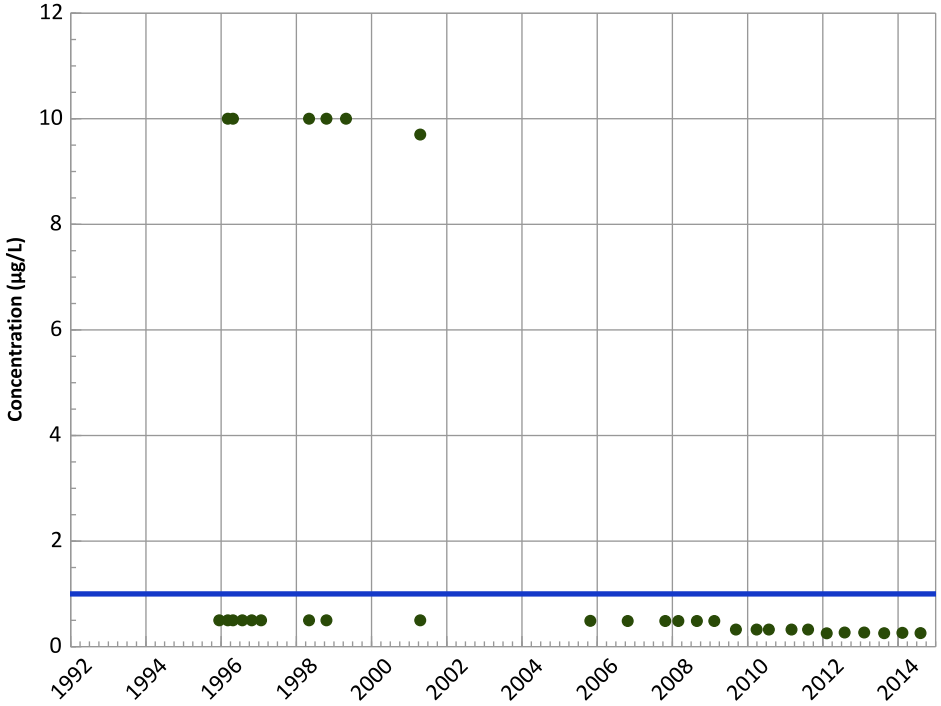


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

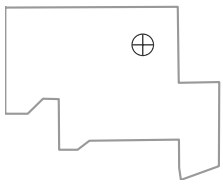
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

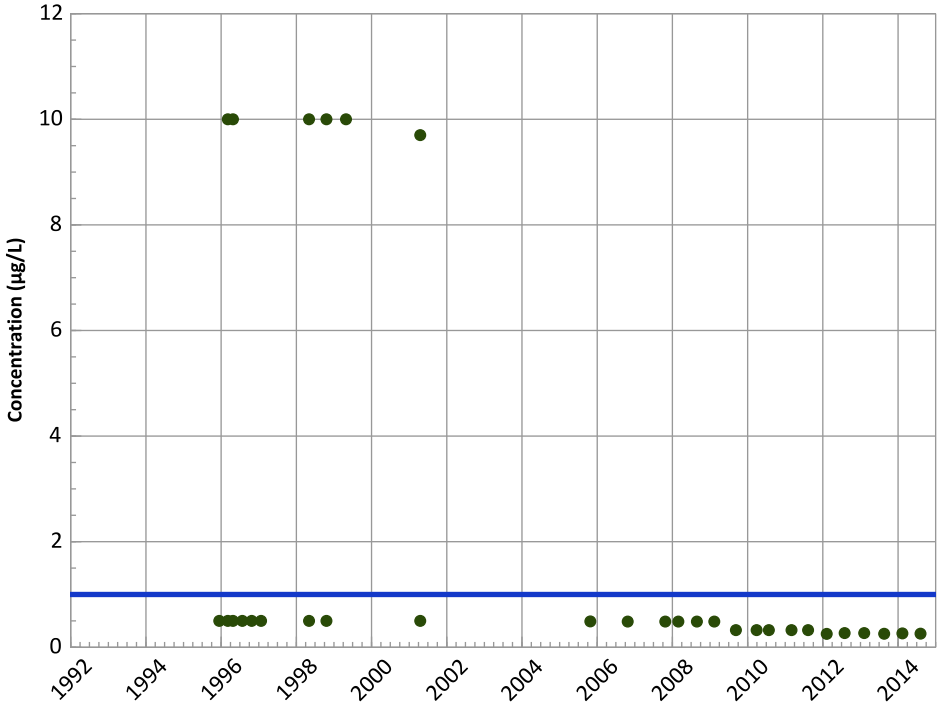
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

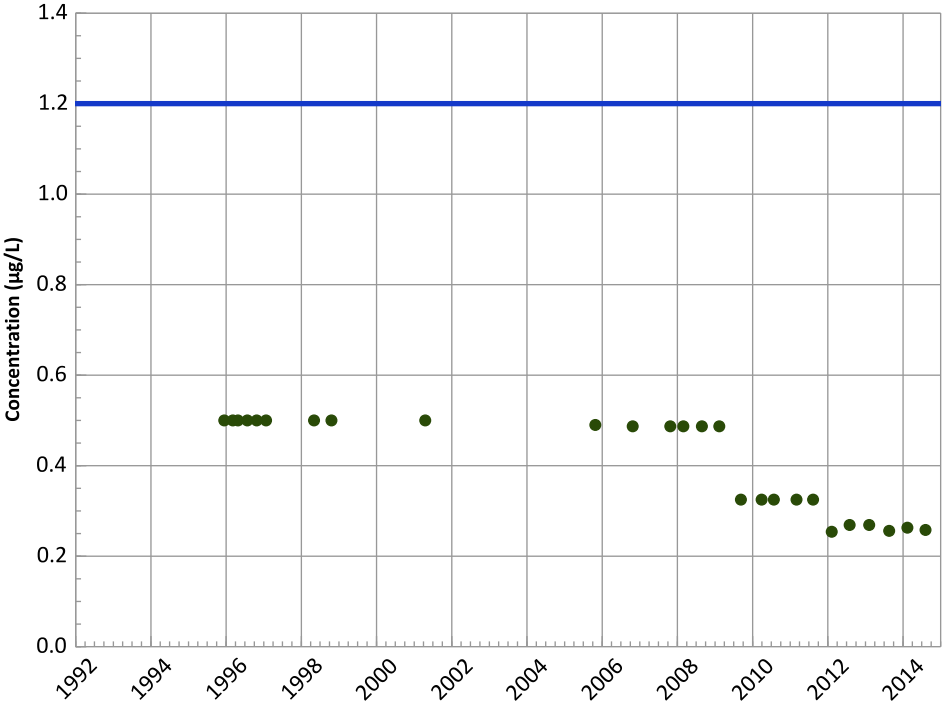


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

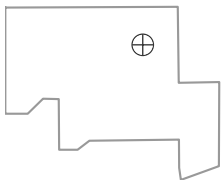
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

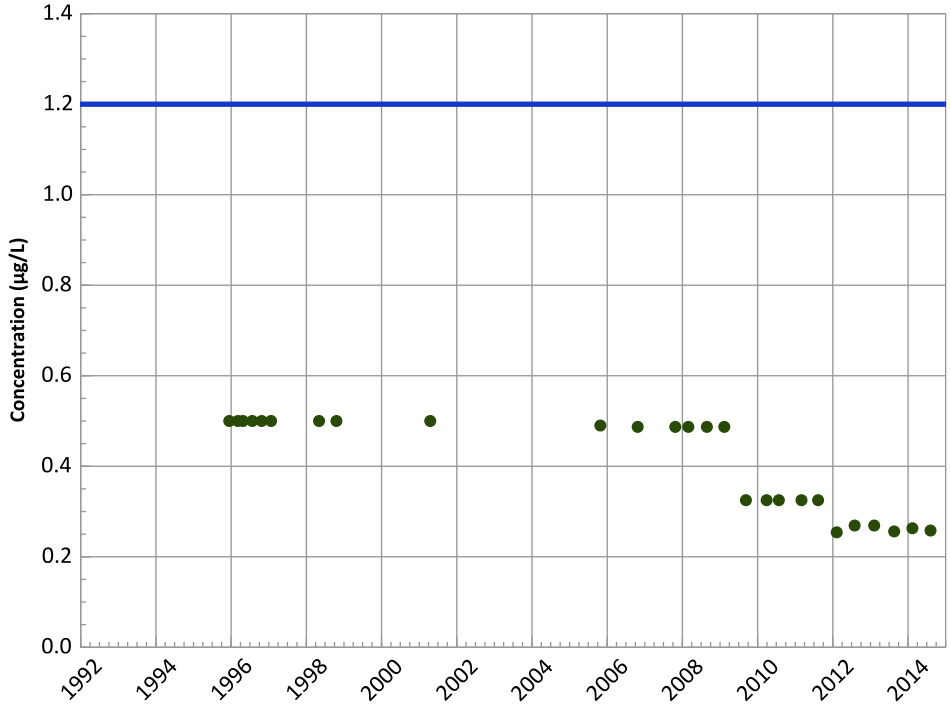
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

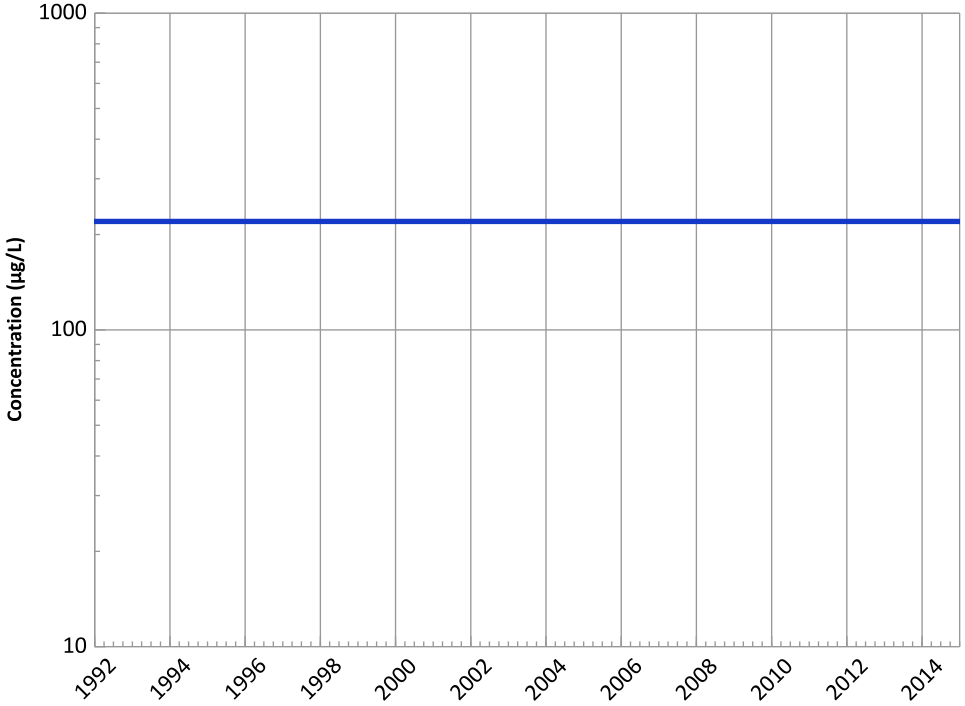


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

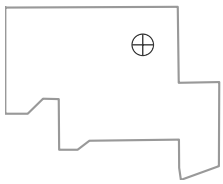
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

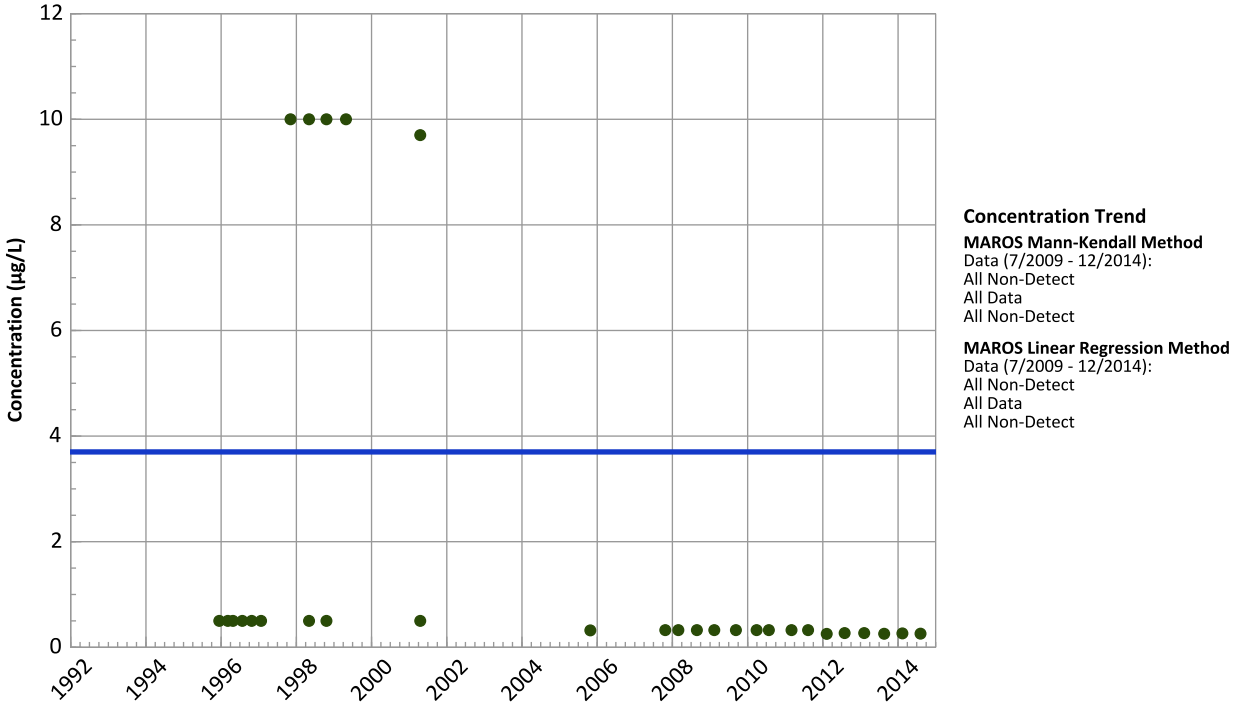
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

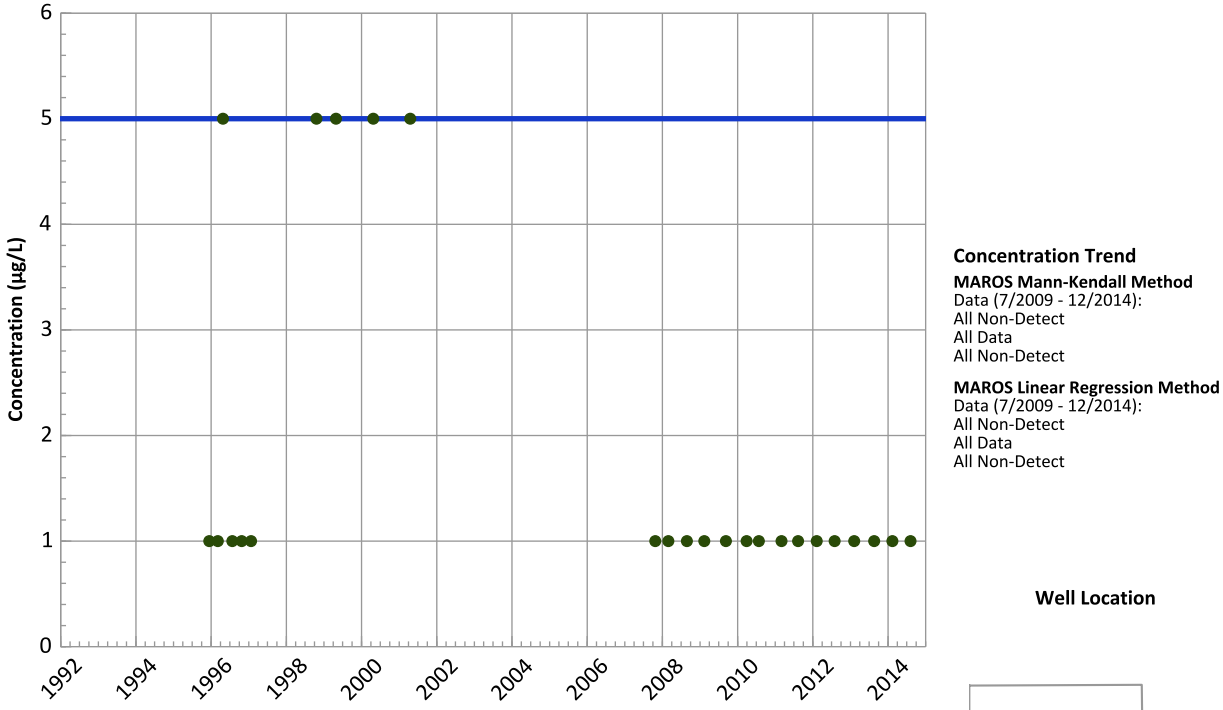


PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



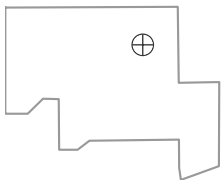
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

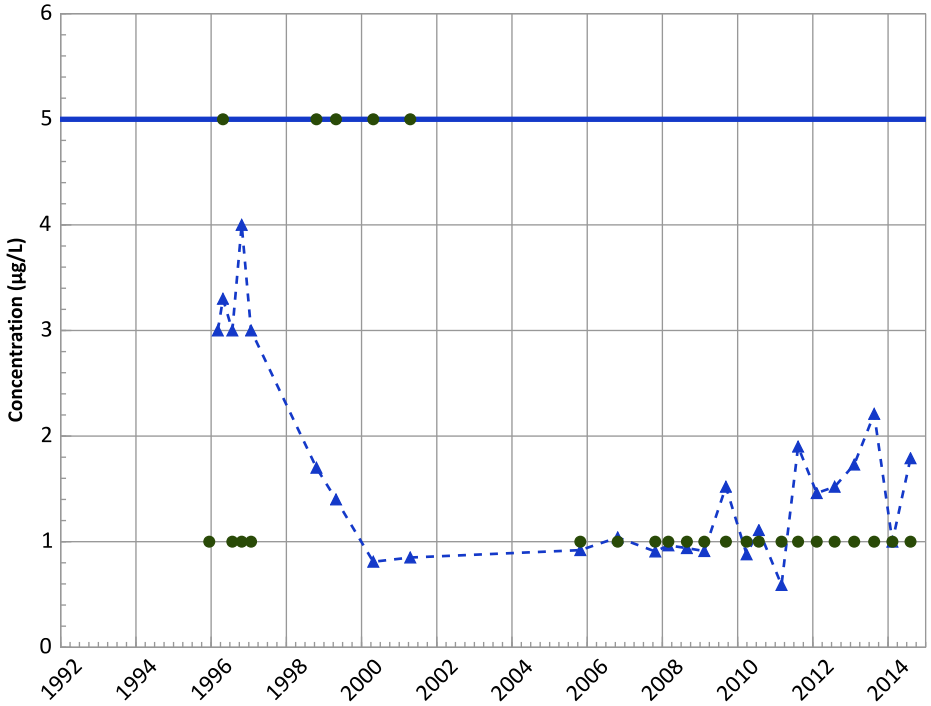
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

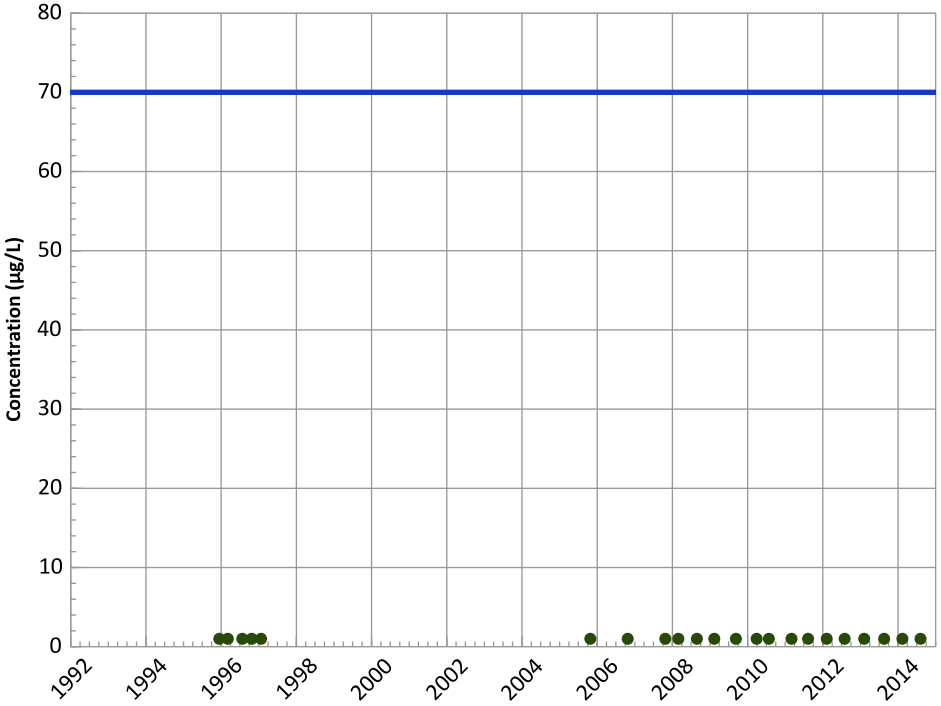


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

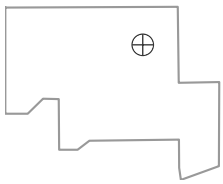
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

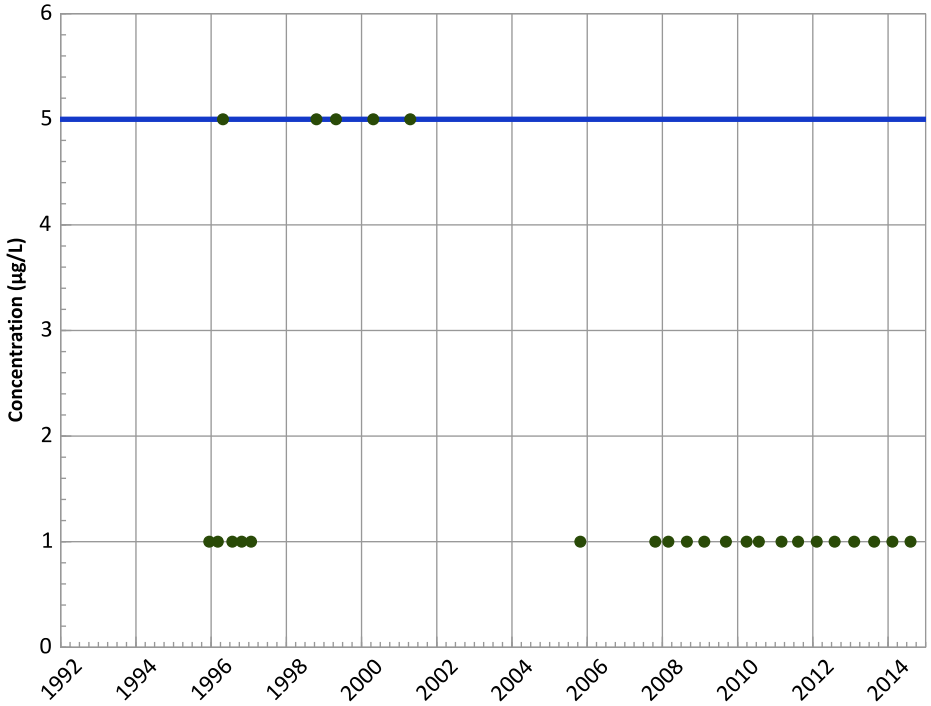
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

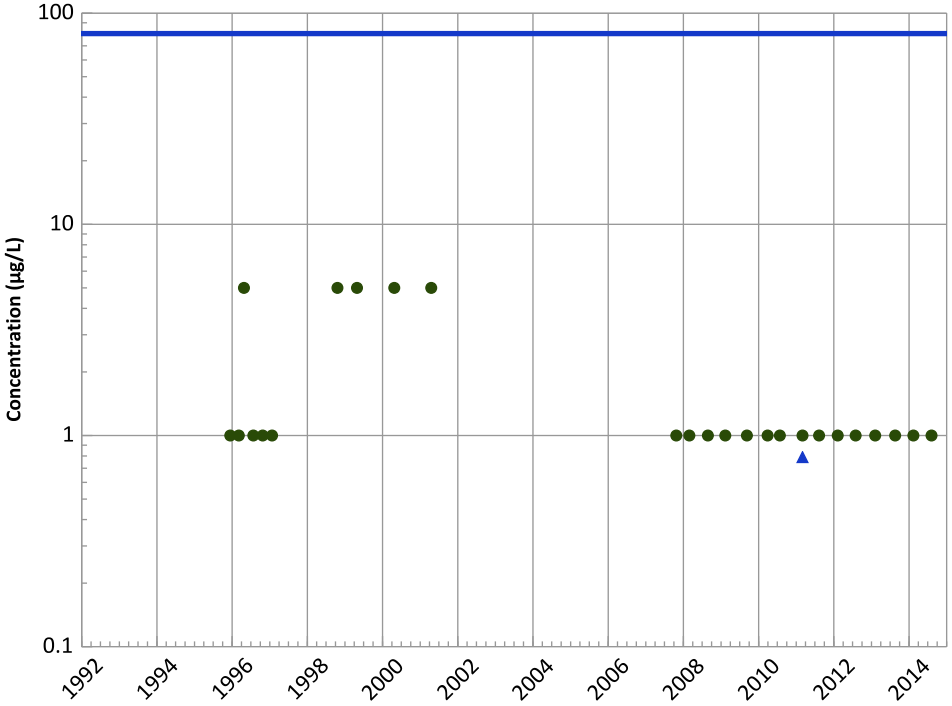


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

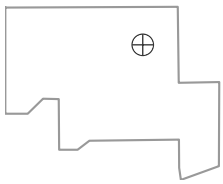
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

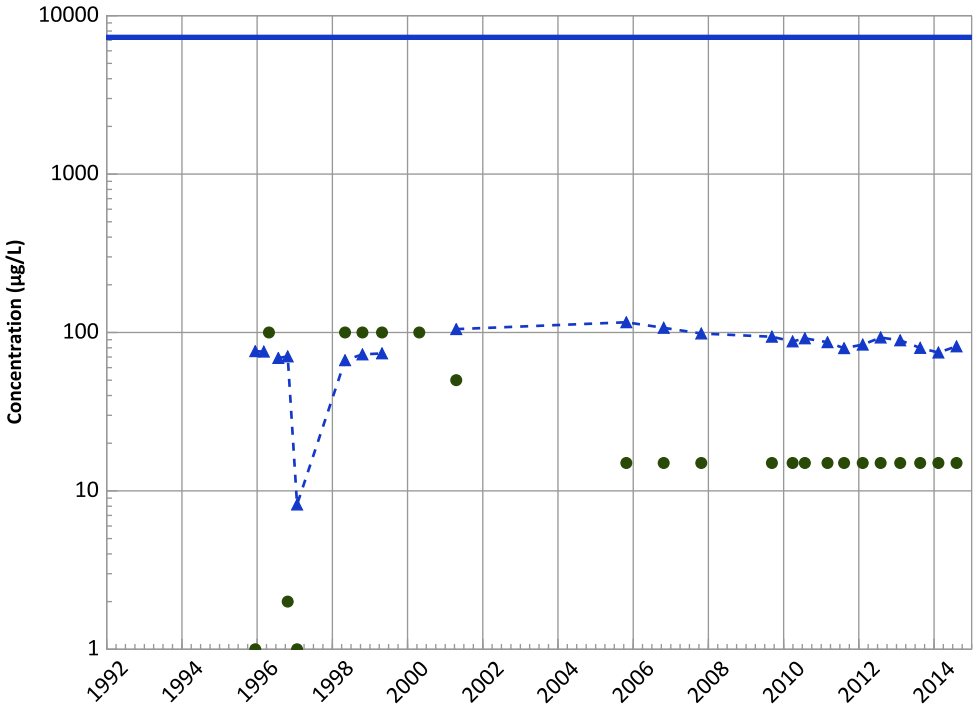
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

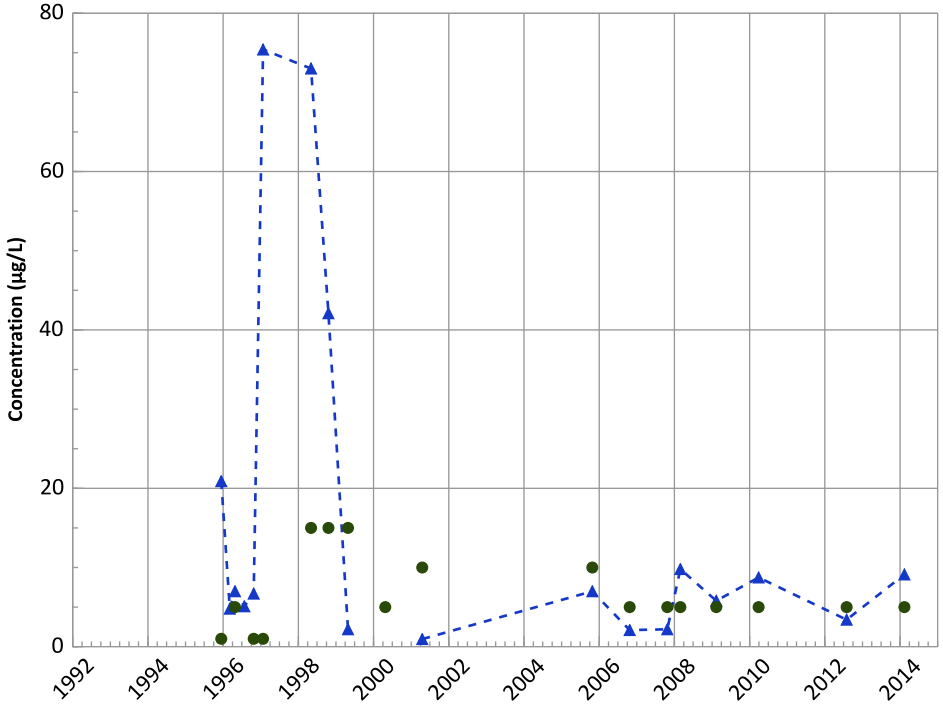


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Manganese Trend



Concentration Trend

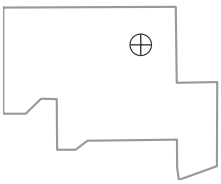
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

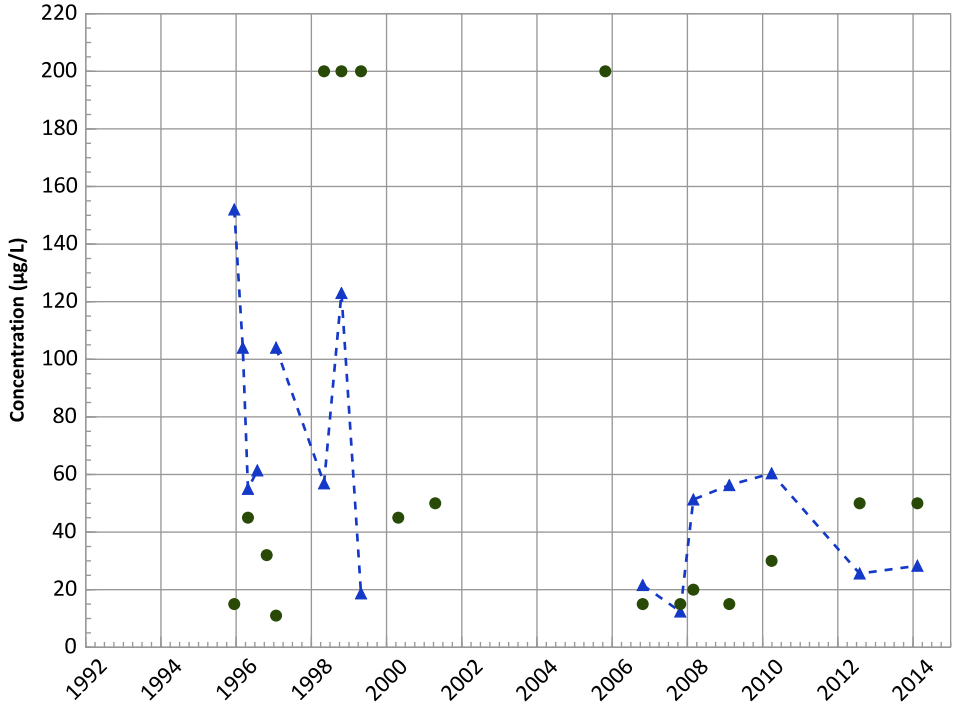
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

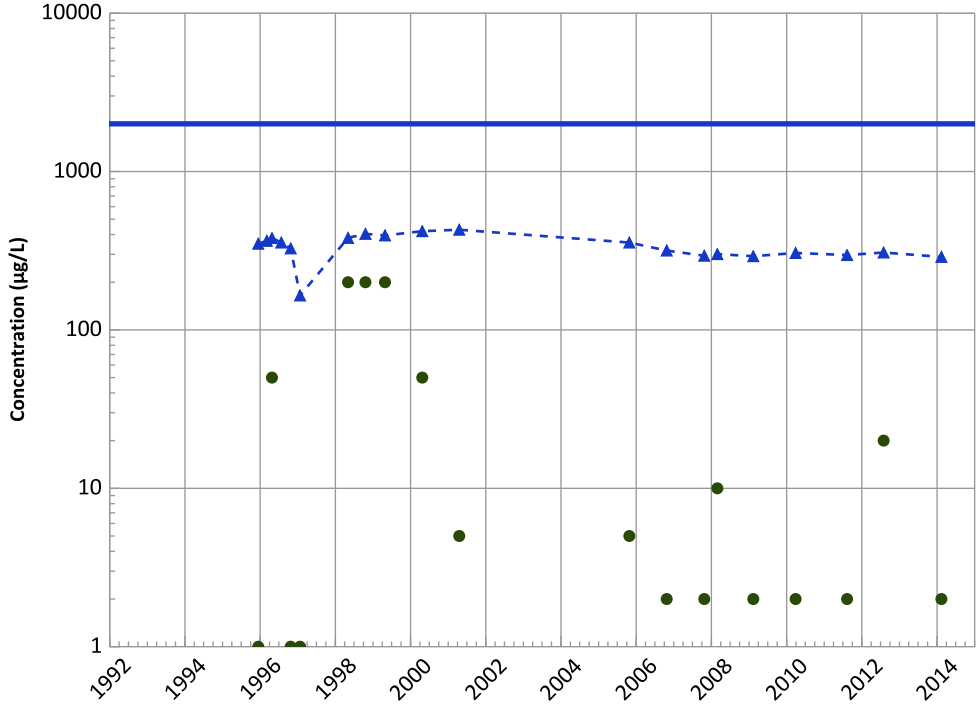


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

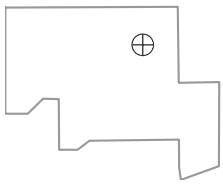
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

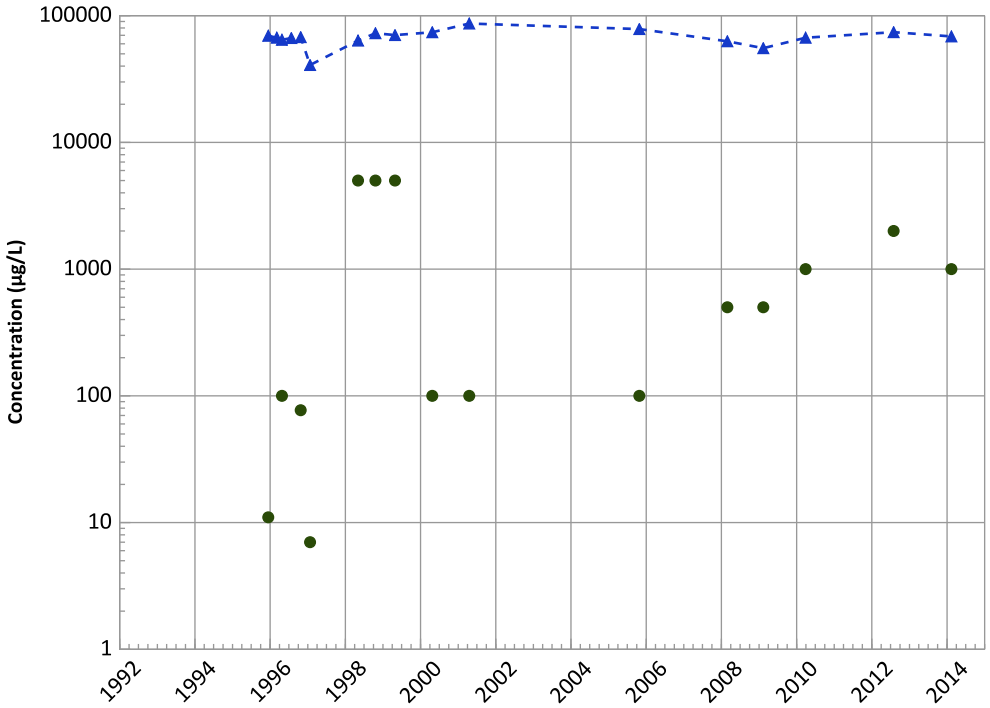
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

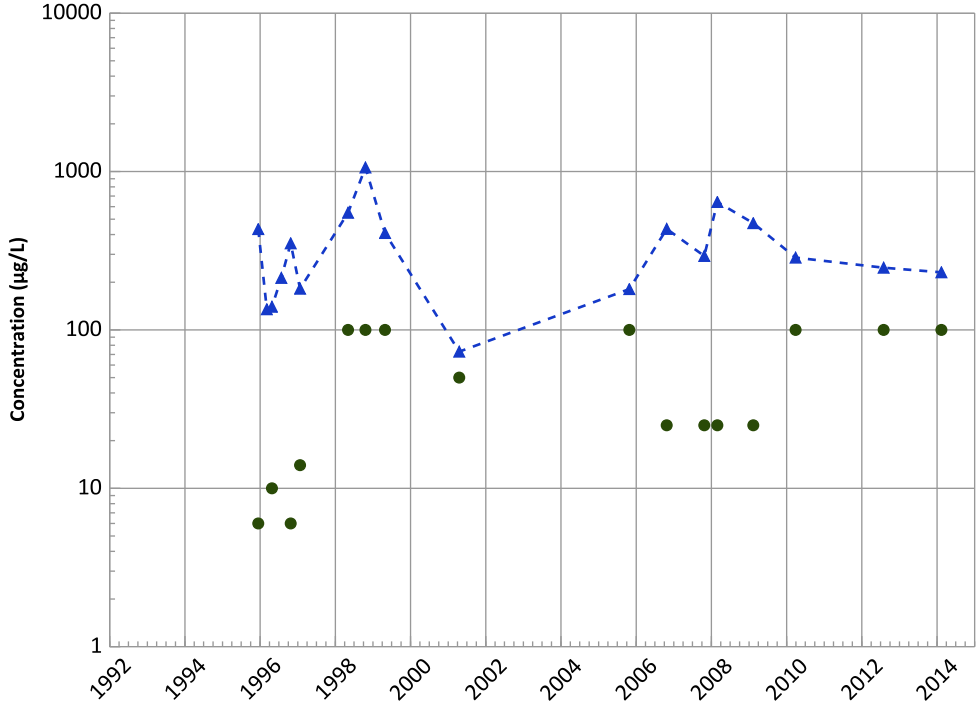


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

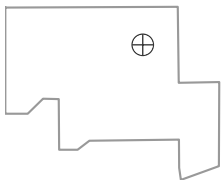
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

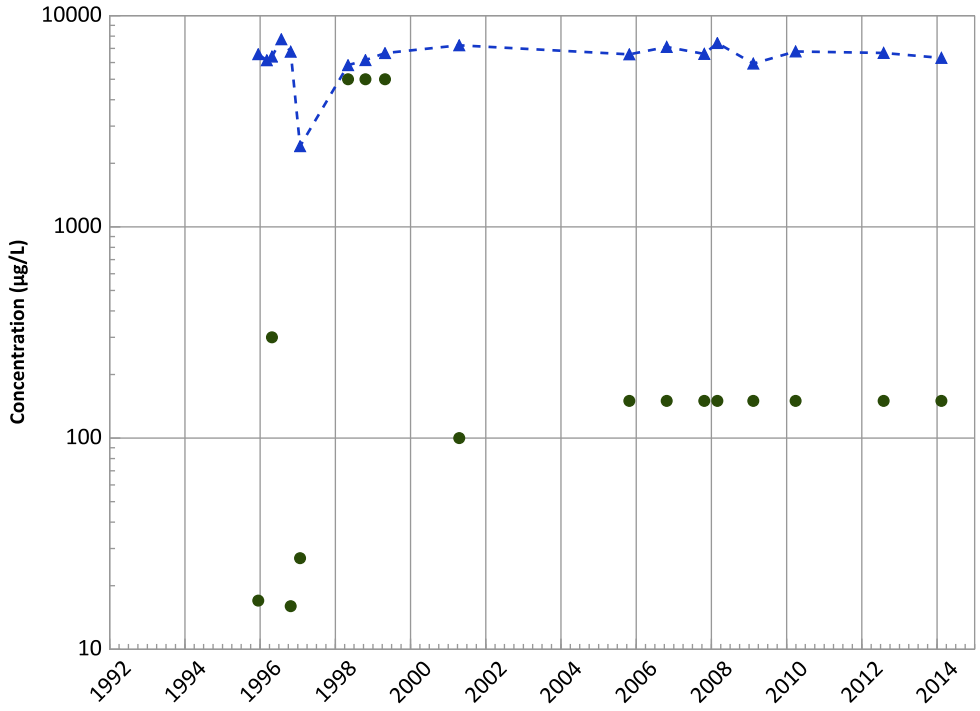
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

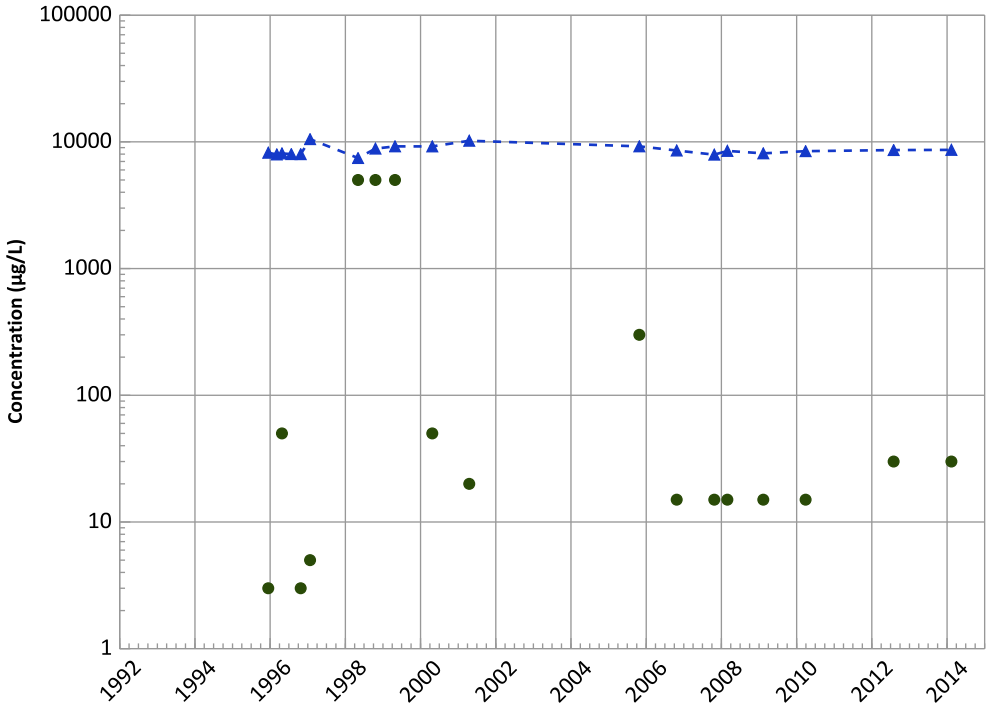


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Magnesium Trend



Concentration Trend

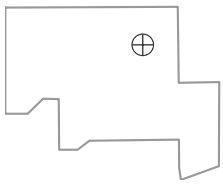
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

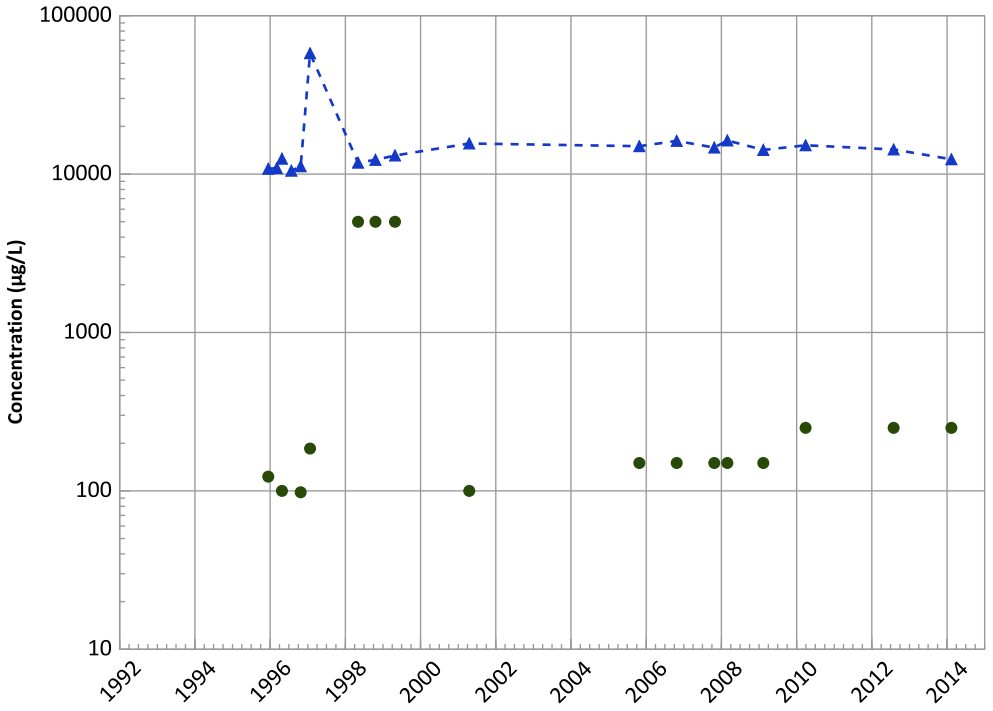
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

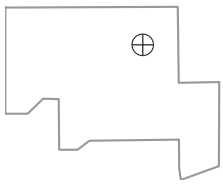
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

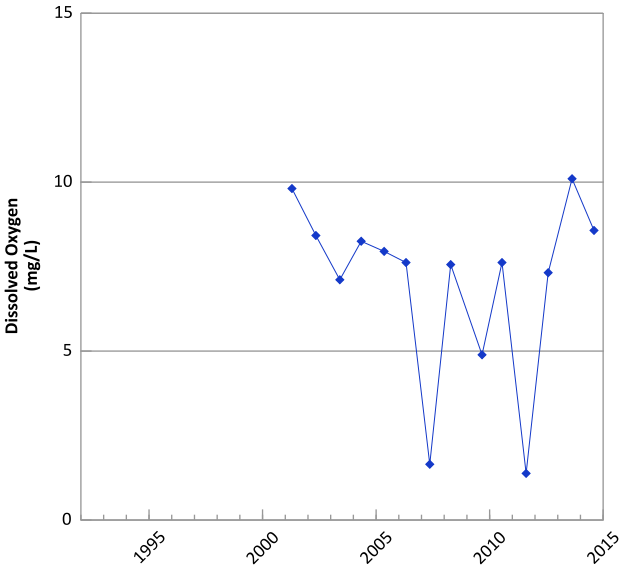
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 08/07/2014
Analysis Date: 03/19/2015

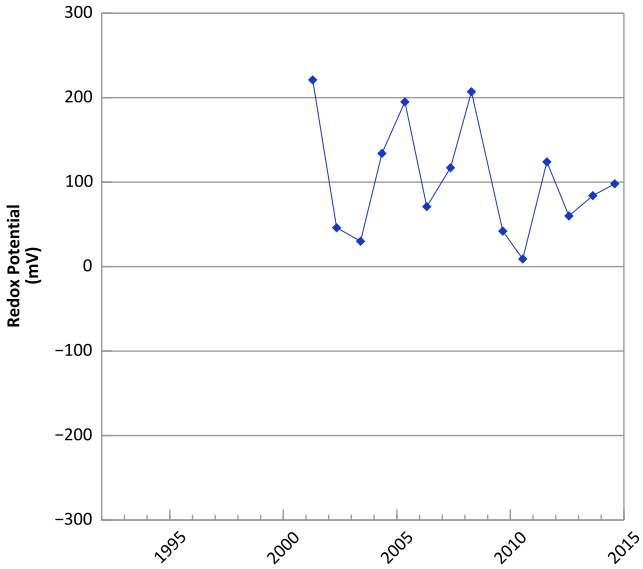
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

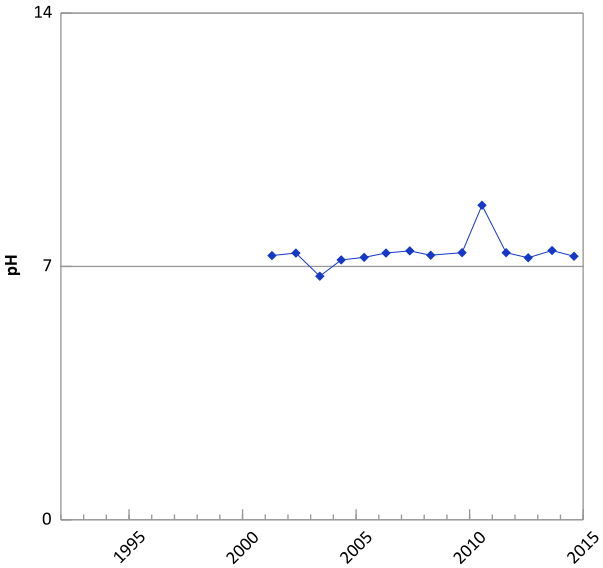
Well Location

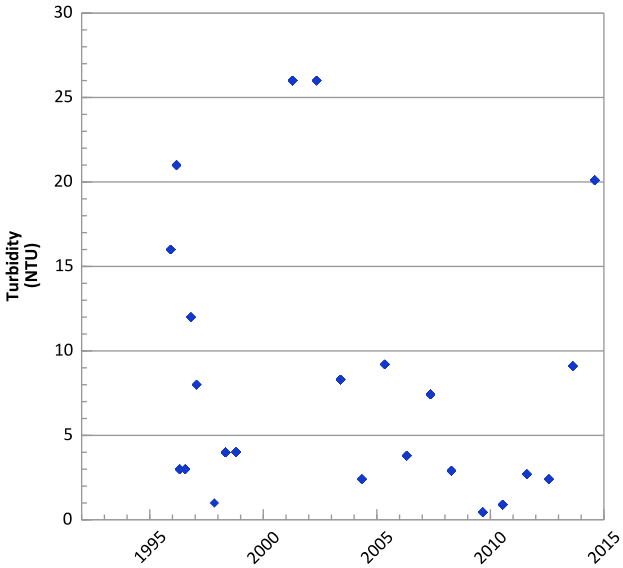


PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



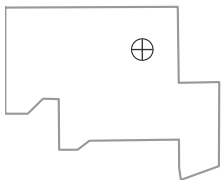






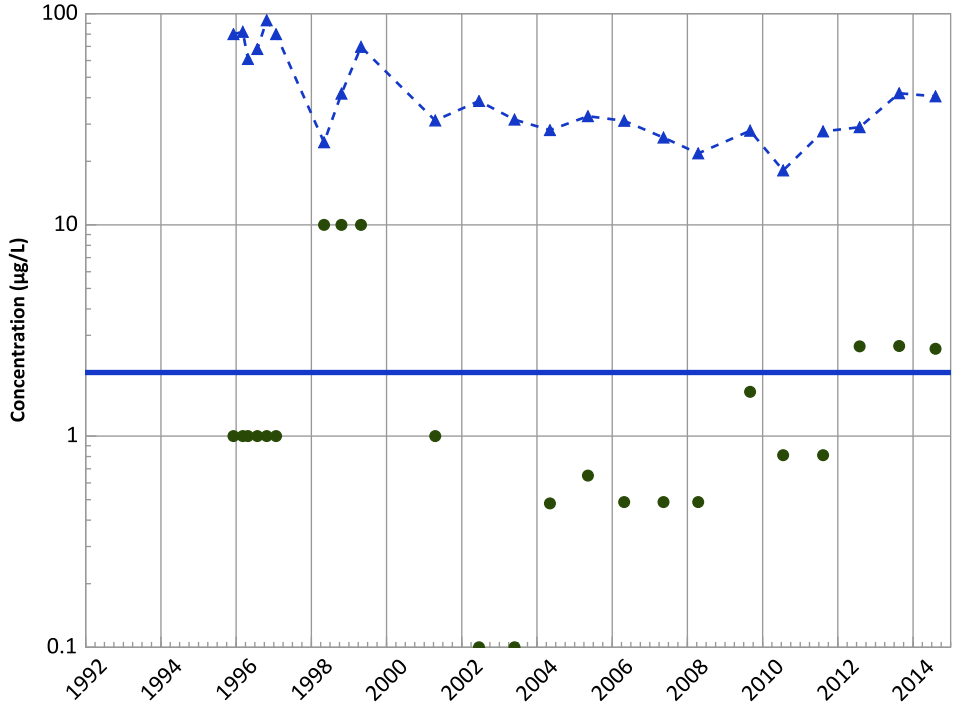
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

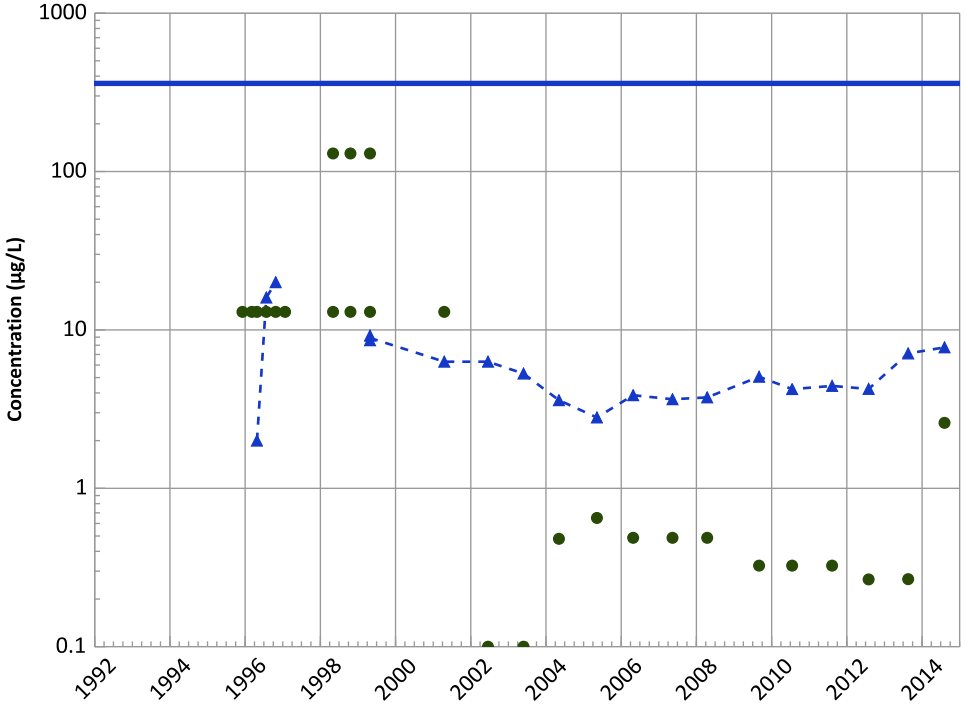


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

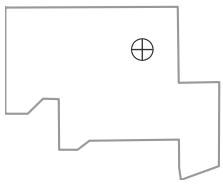
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

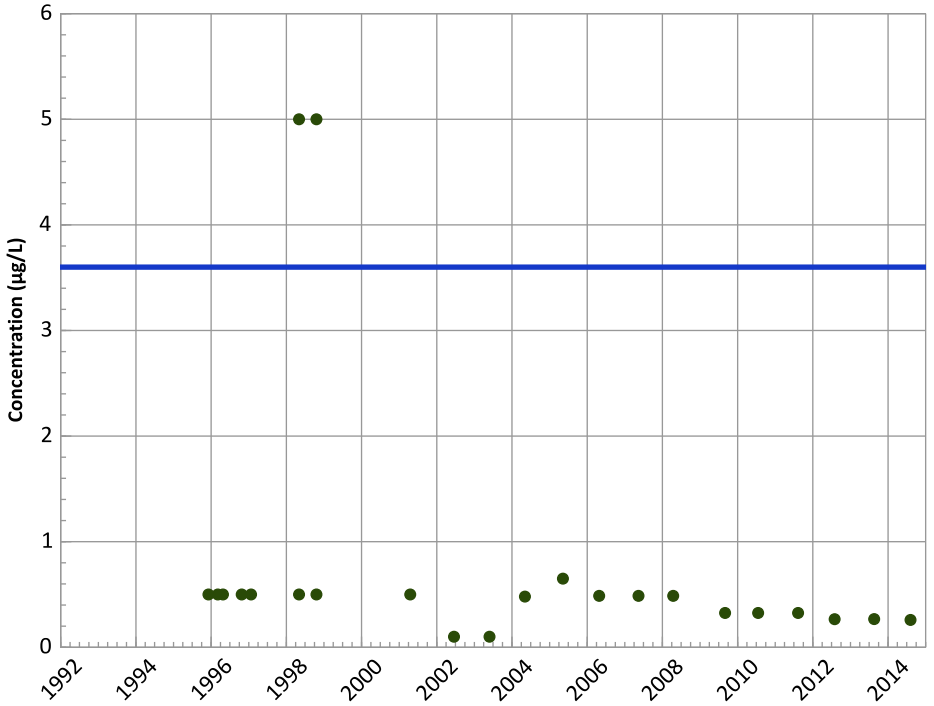
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

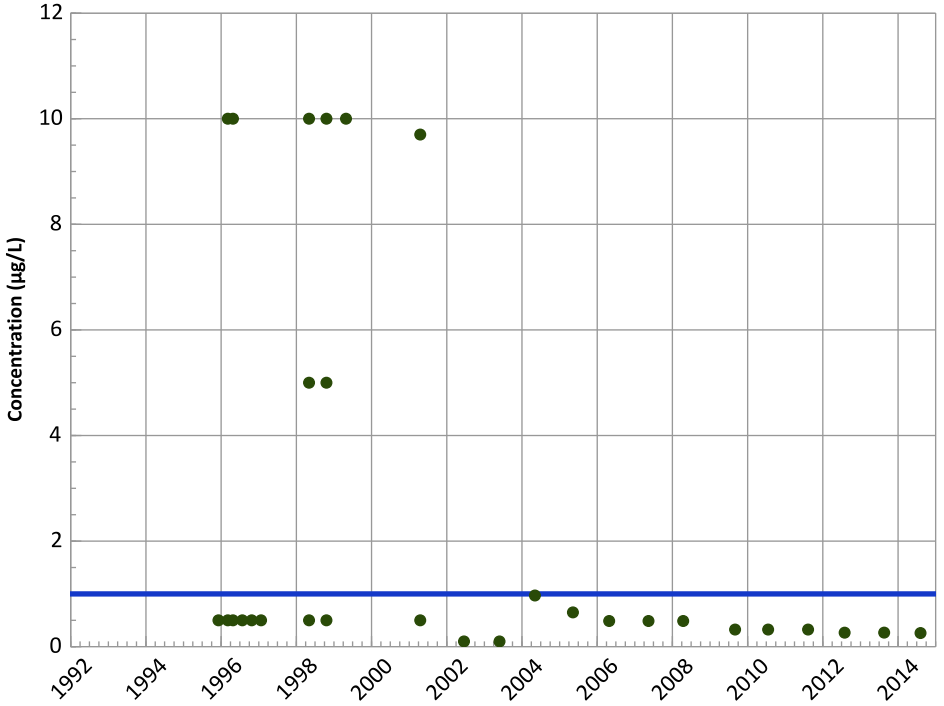


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

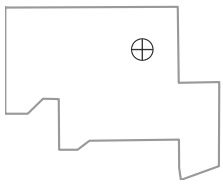
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

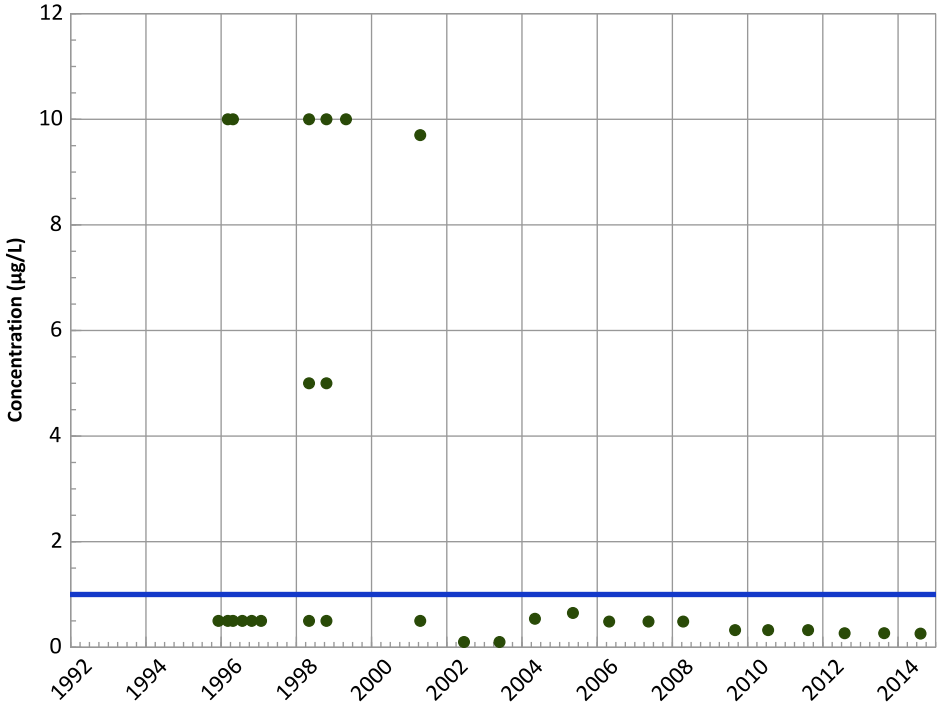
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

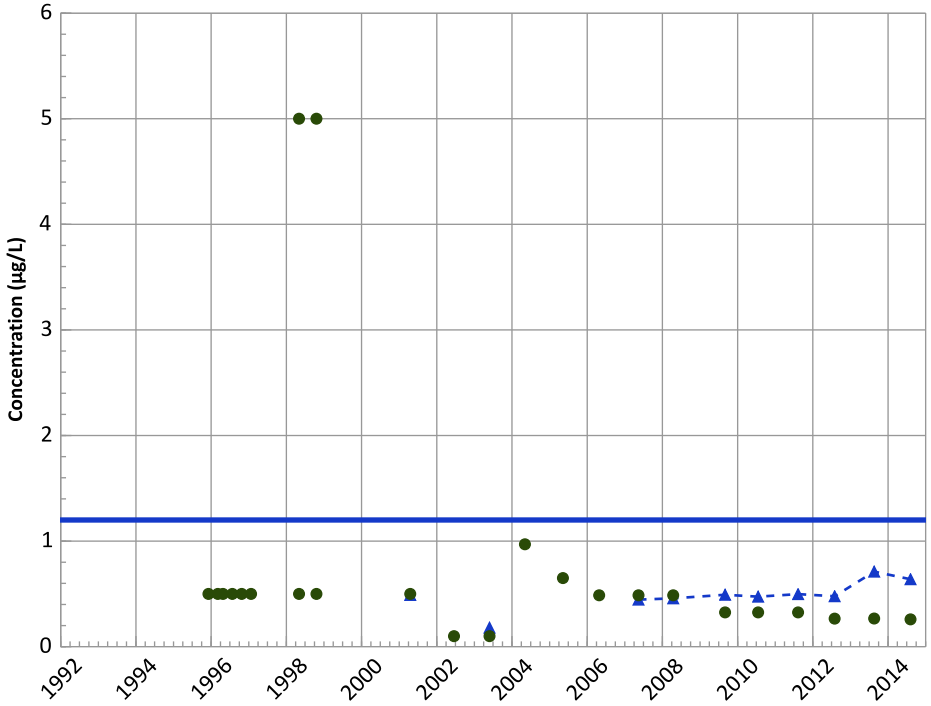


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

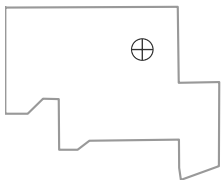
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

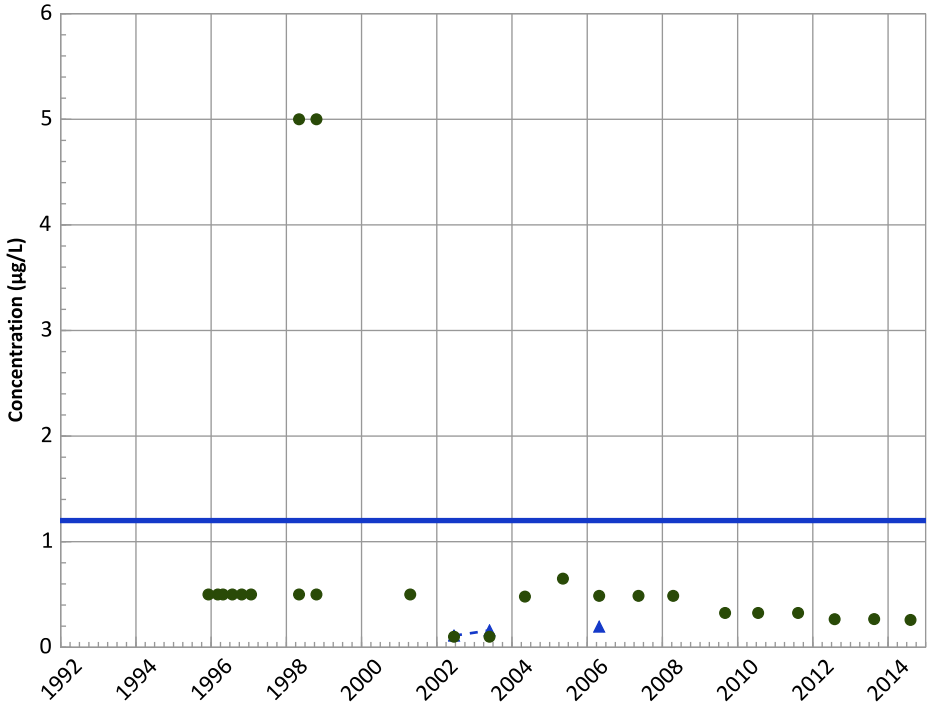
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

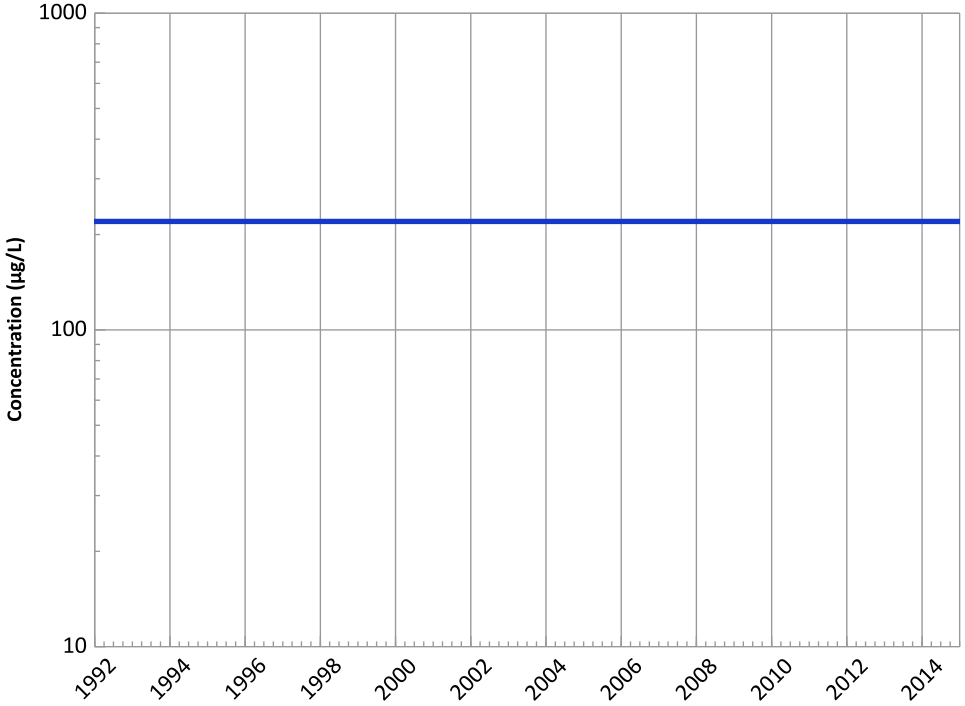


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

1,3,5-Trinitrobenzene Trend



Concentration Trend

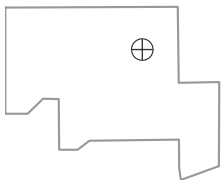
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

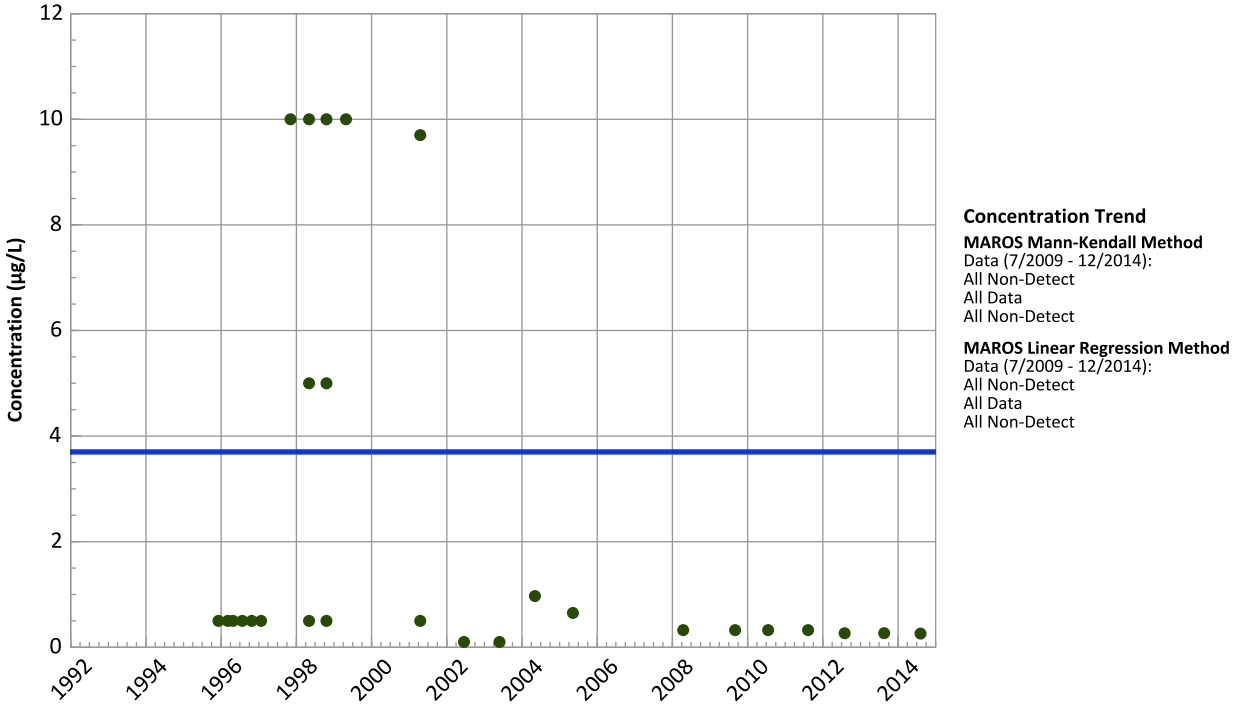
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ═══ Groundwater Protection Standard

Well Location

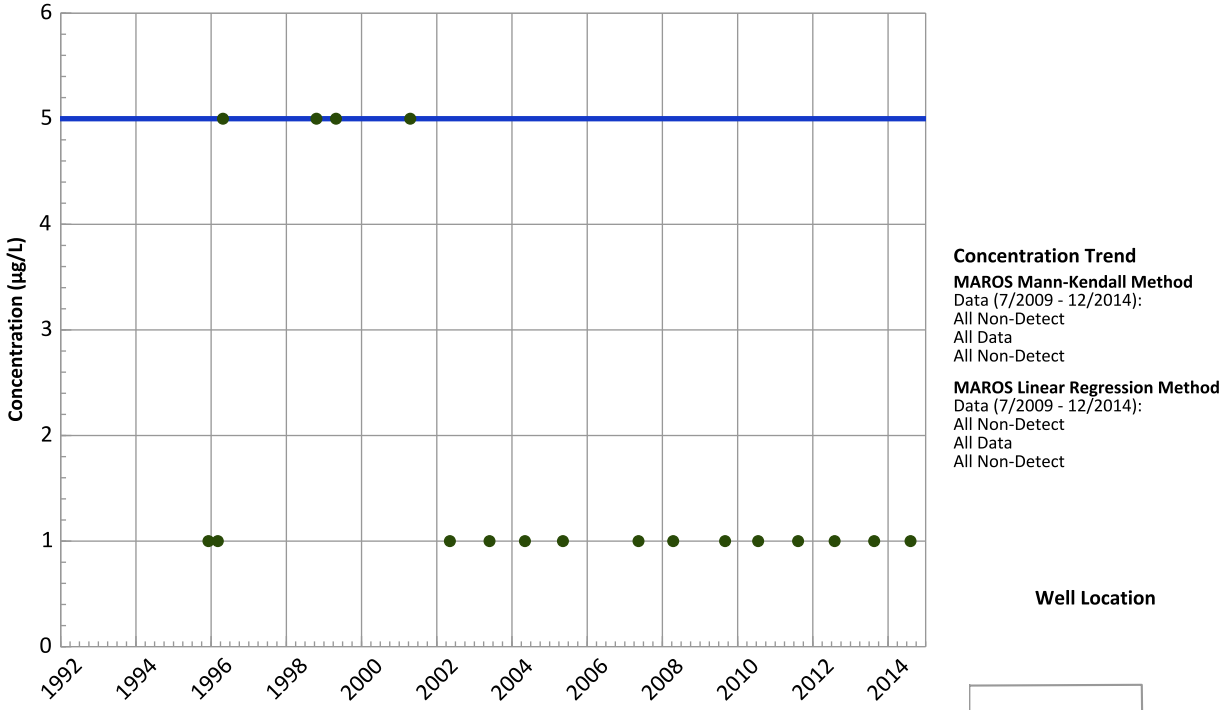


PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



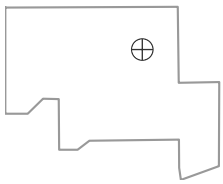
Tetrachloroethylene (PCE) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

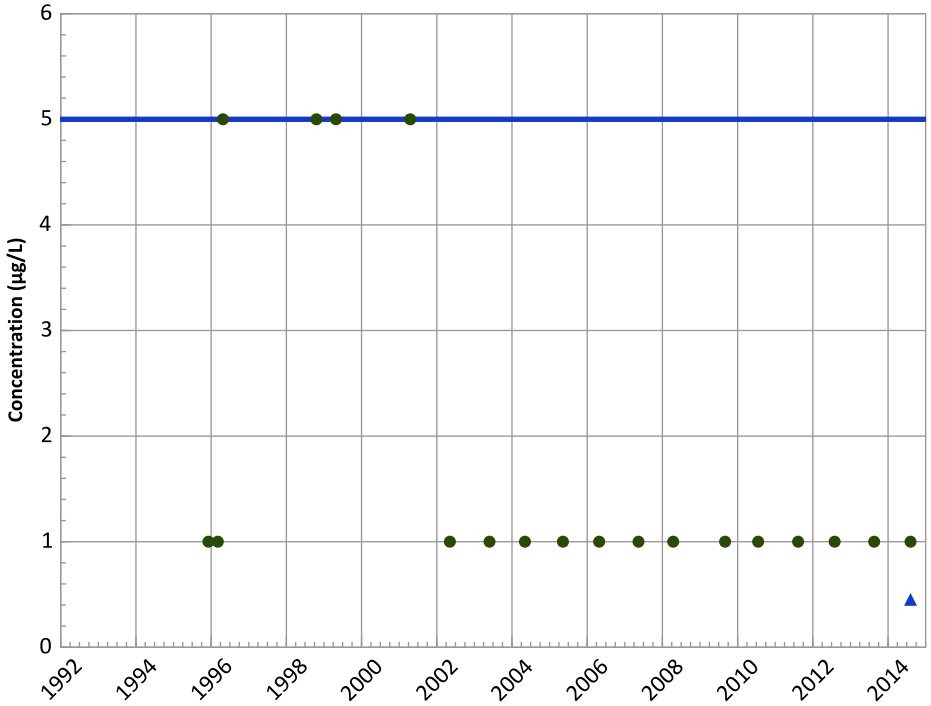
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

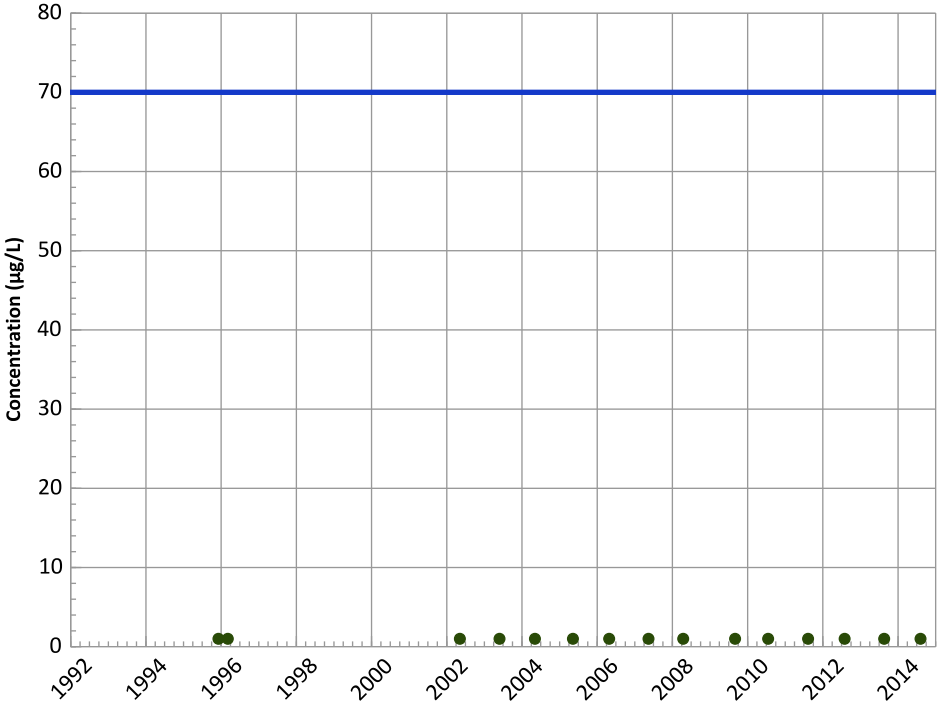


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

cis-1,2-Dichloroethene Trend



Concentration Trend

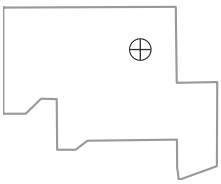
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

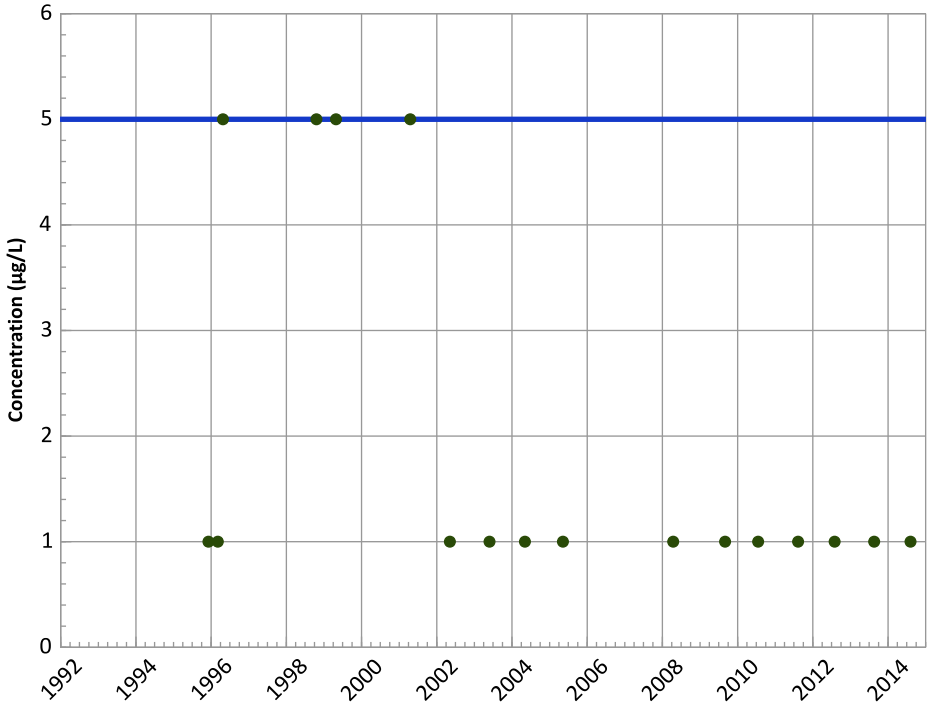
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

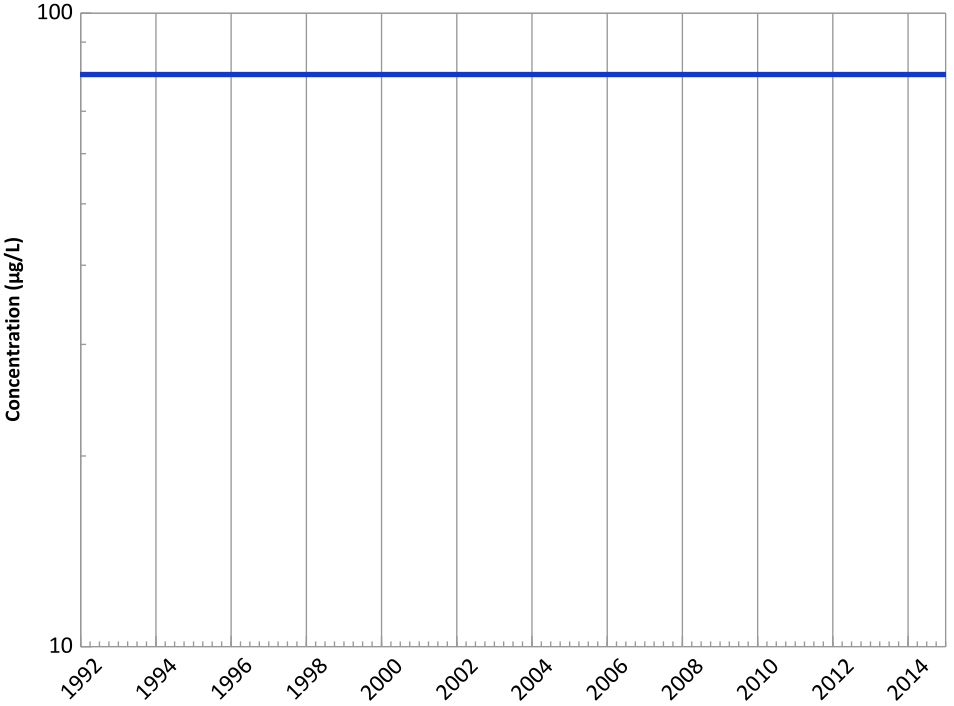


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

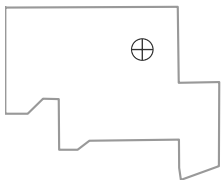
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

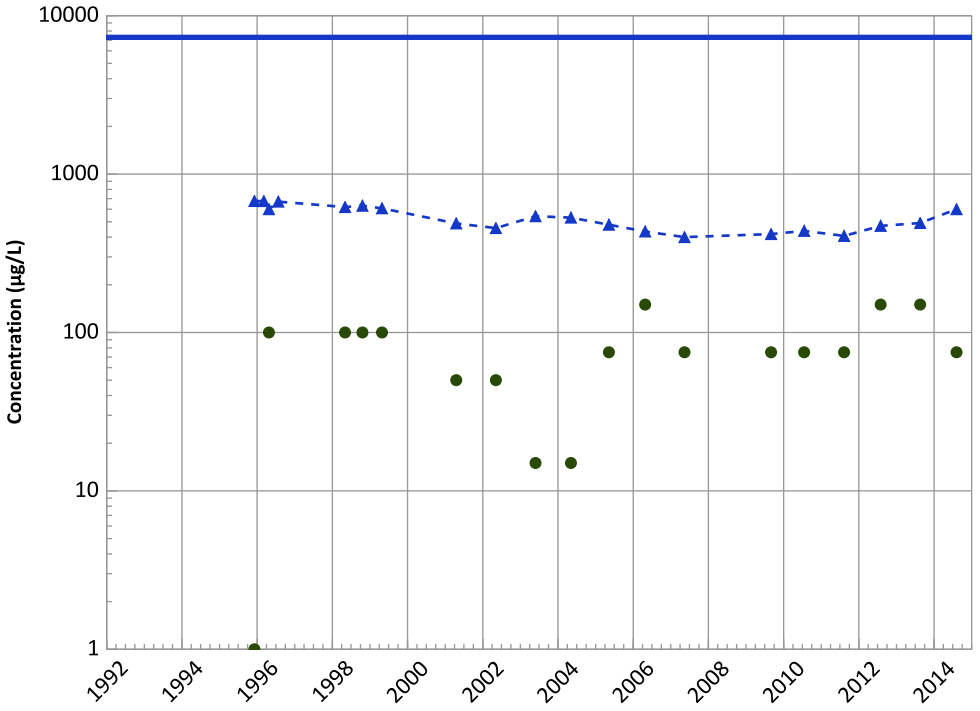
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

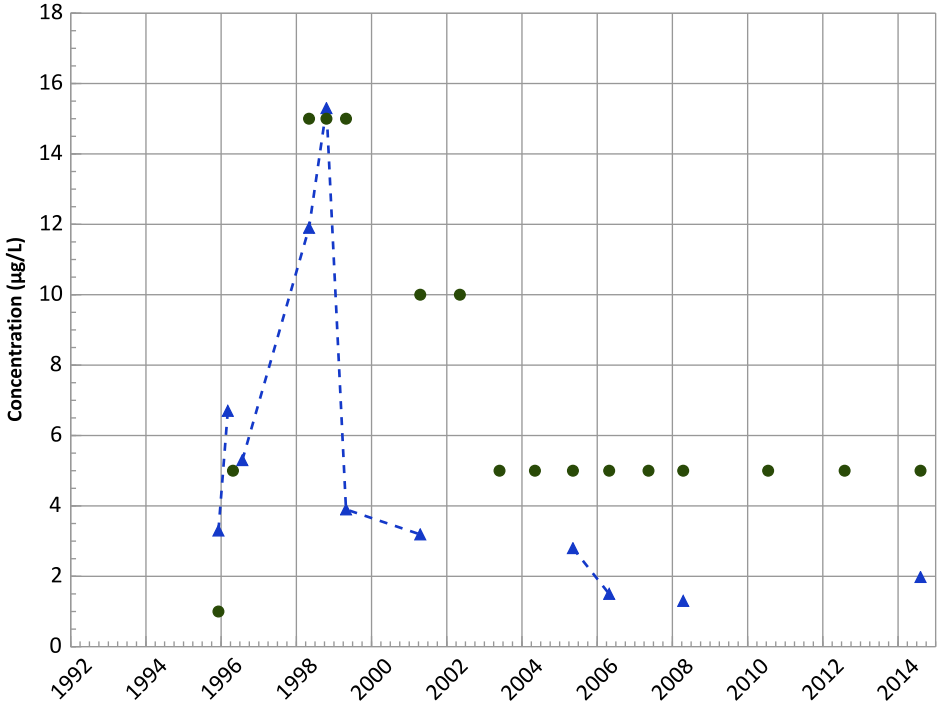


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Manganese Trend



Concentration Trend

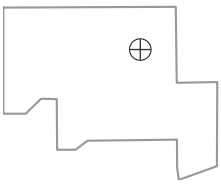
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

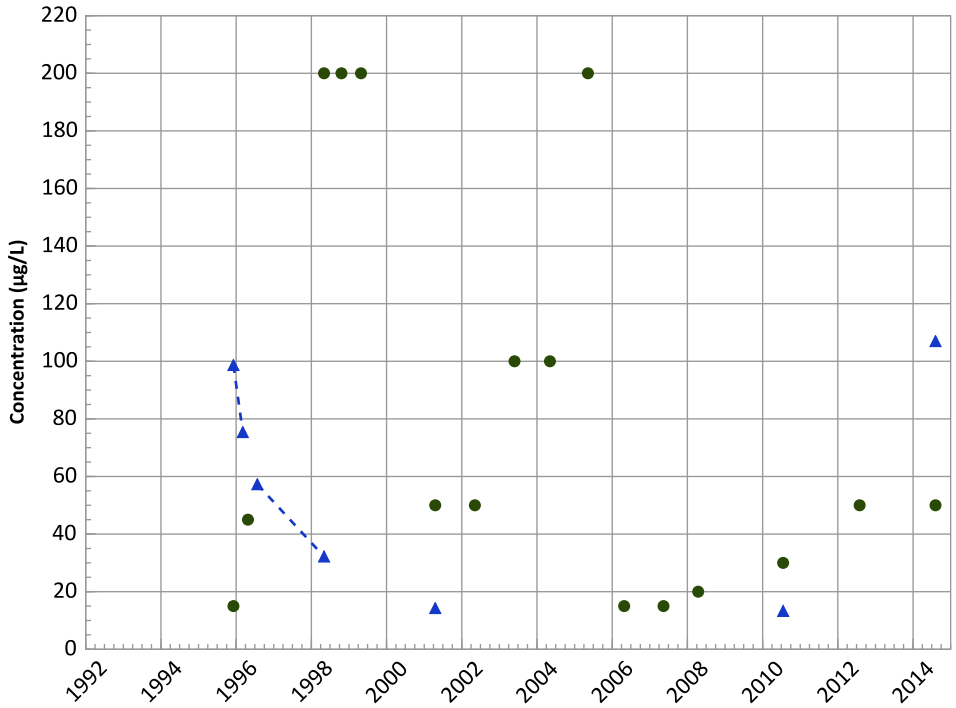
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

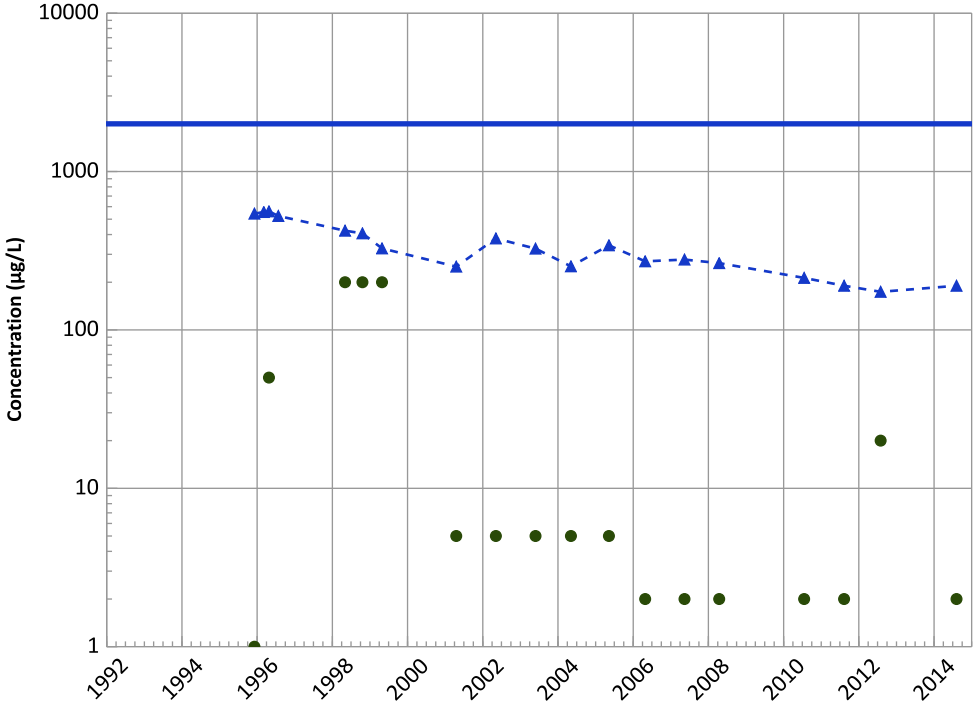


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

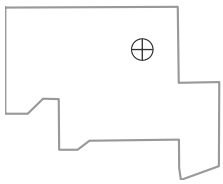
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

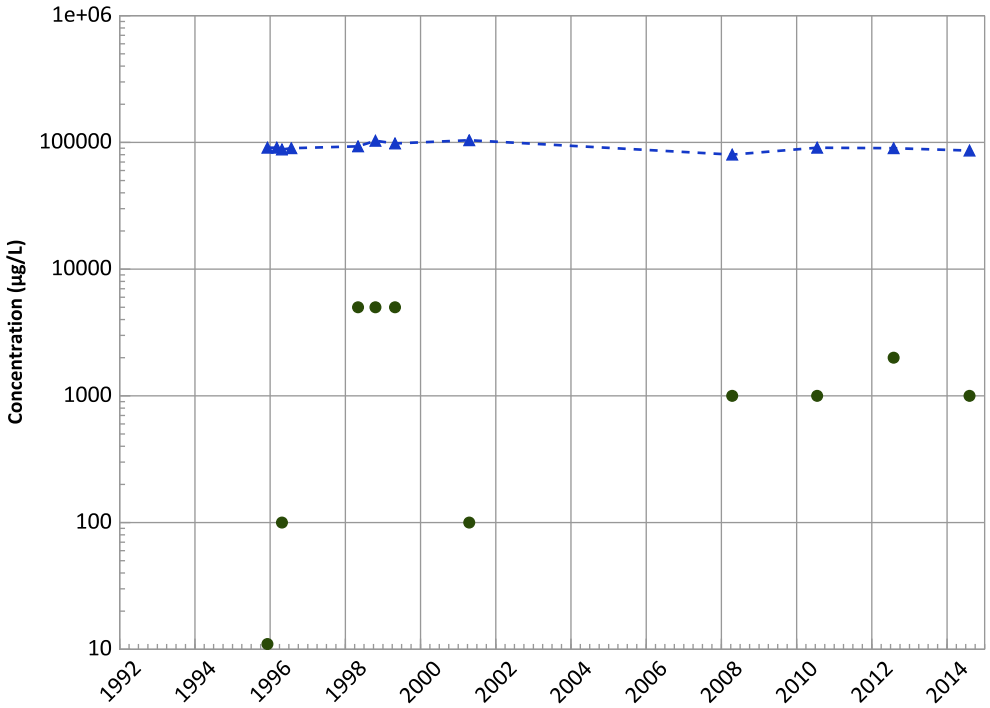
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

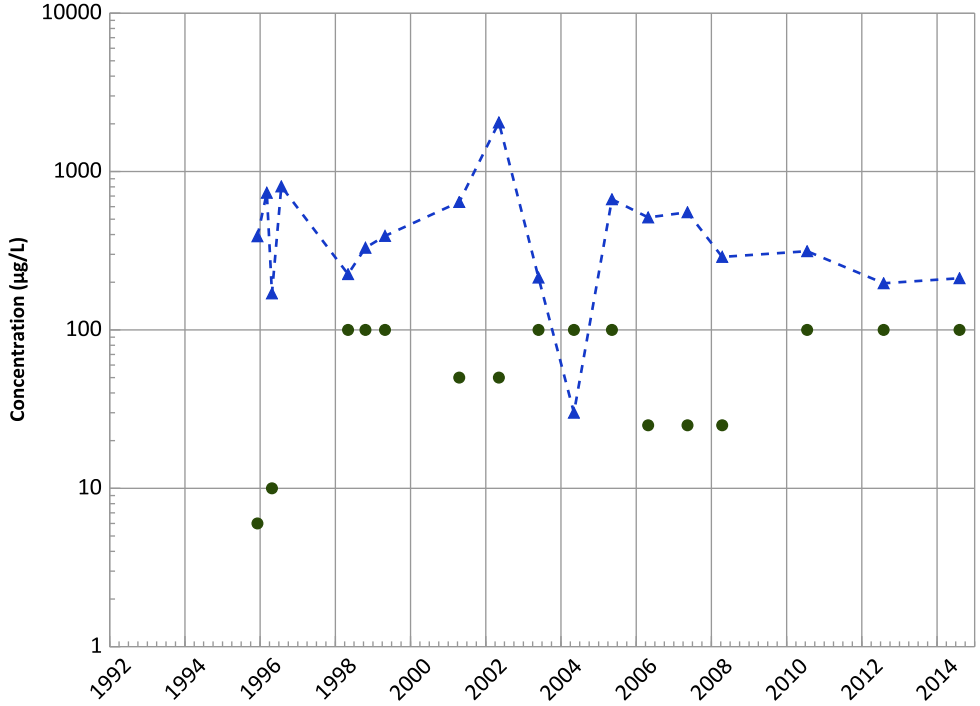


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Iron Trend



Concentration Trend

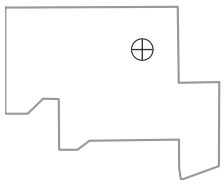
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

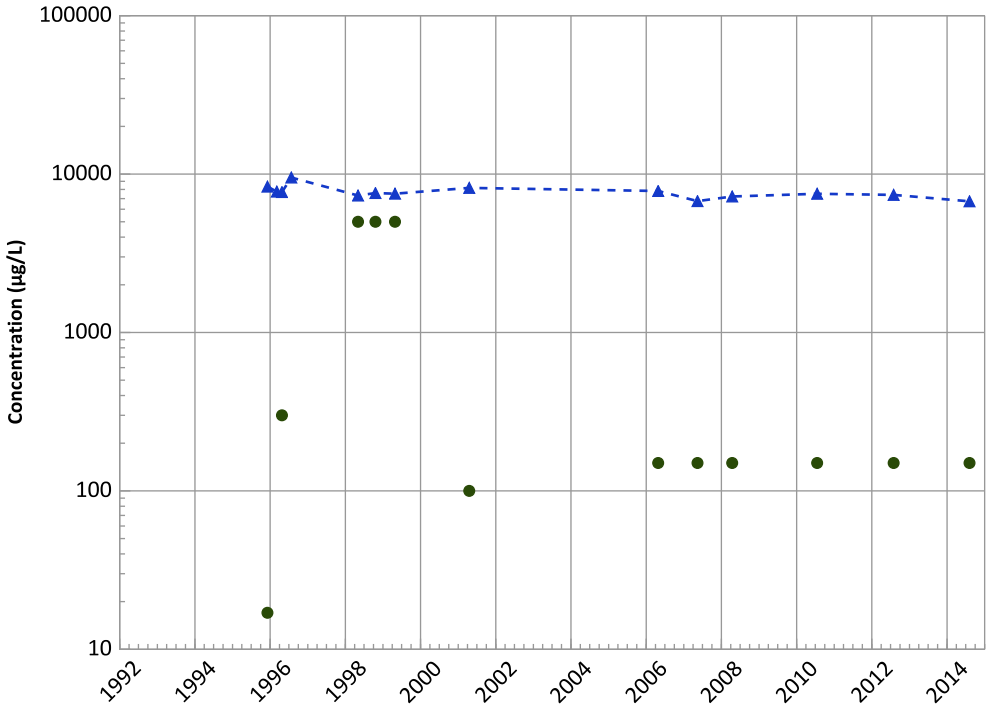
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

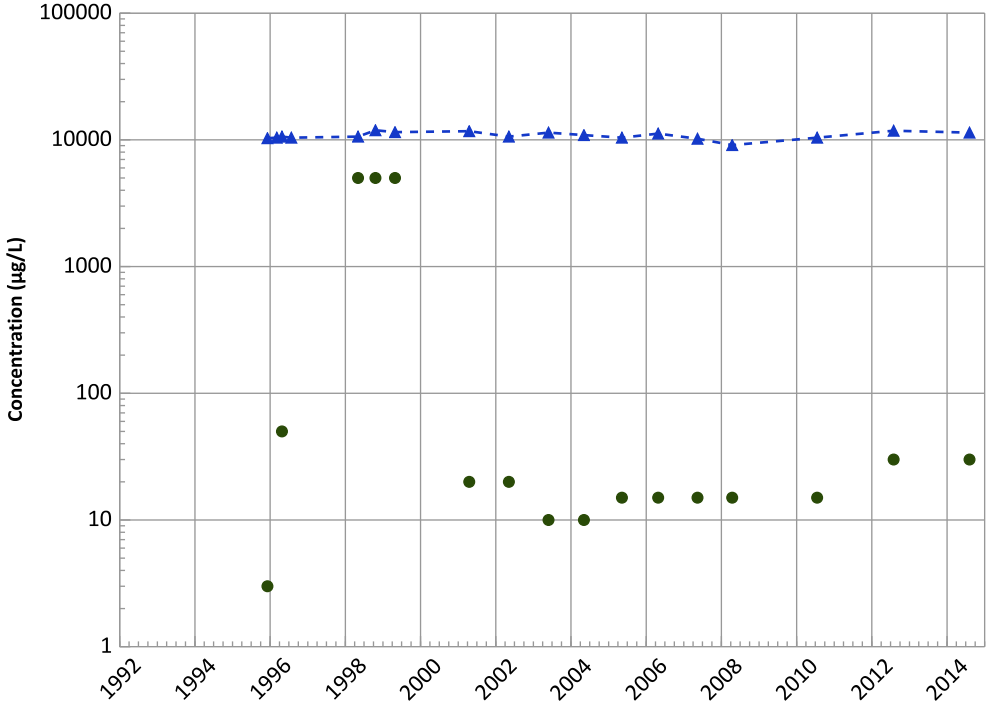


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

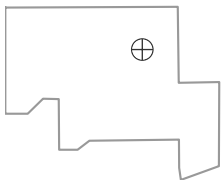
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

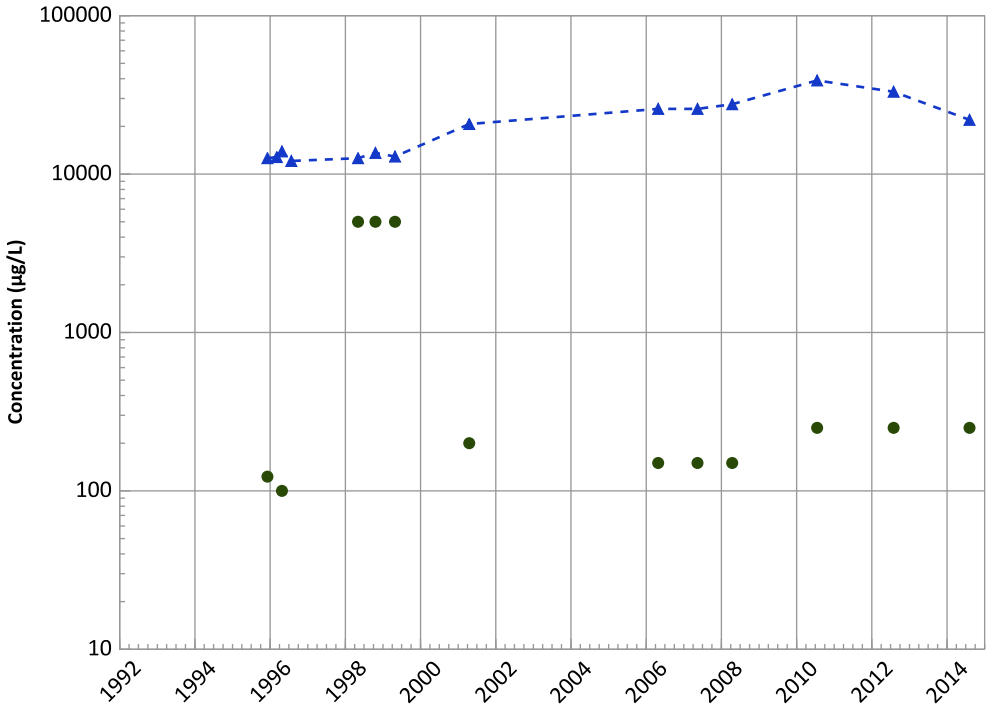
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1O03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

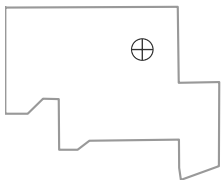
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

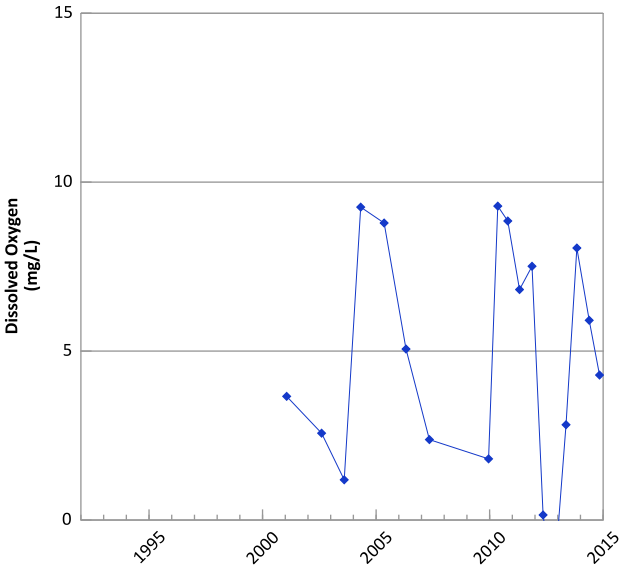
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/06/1995 to 08/07/2014
Analysis Date: 03/19/2015

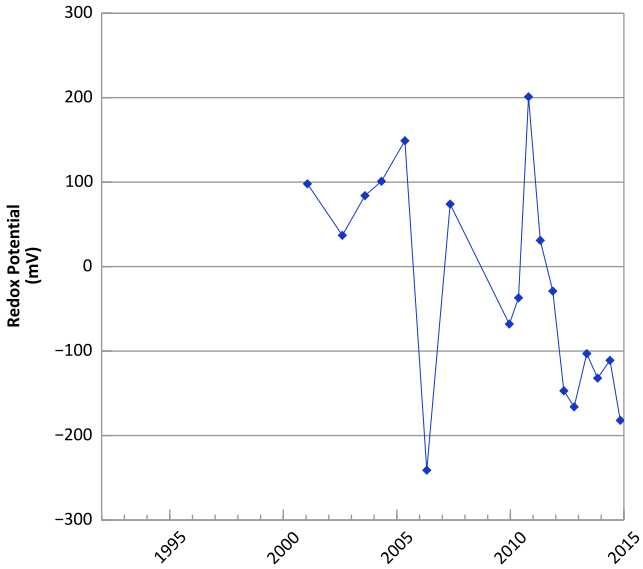
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

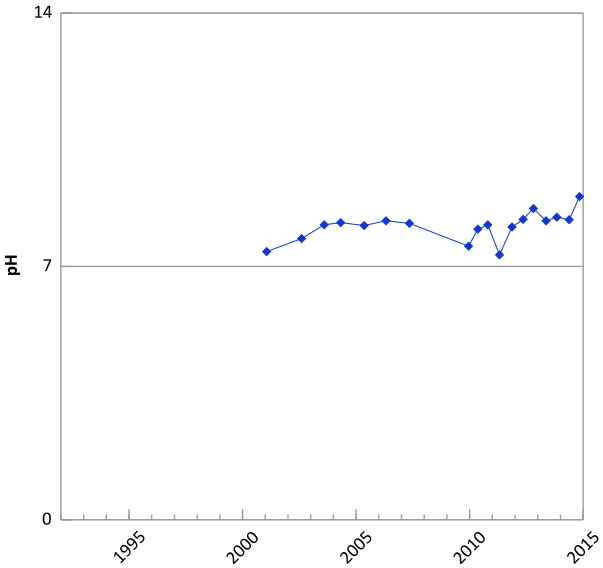
Well Location

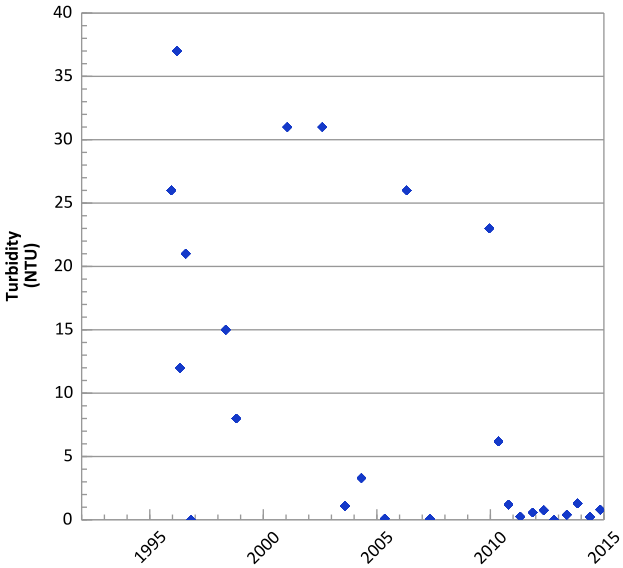


PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



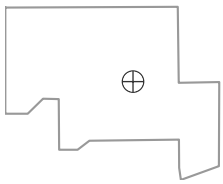






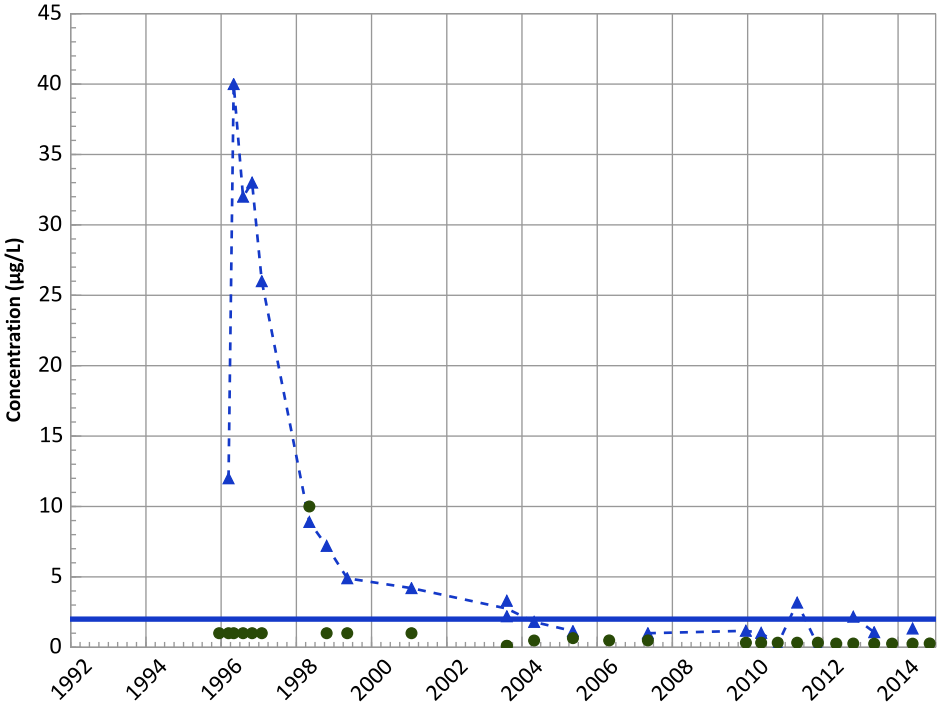
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

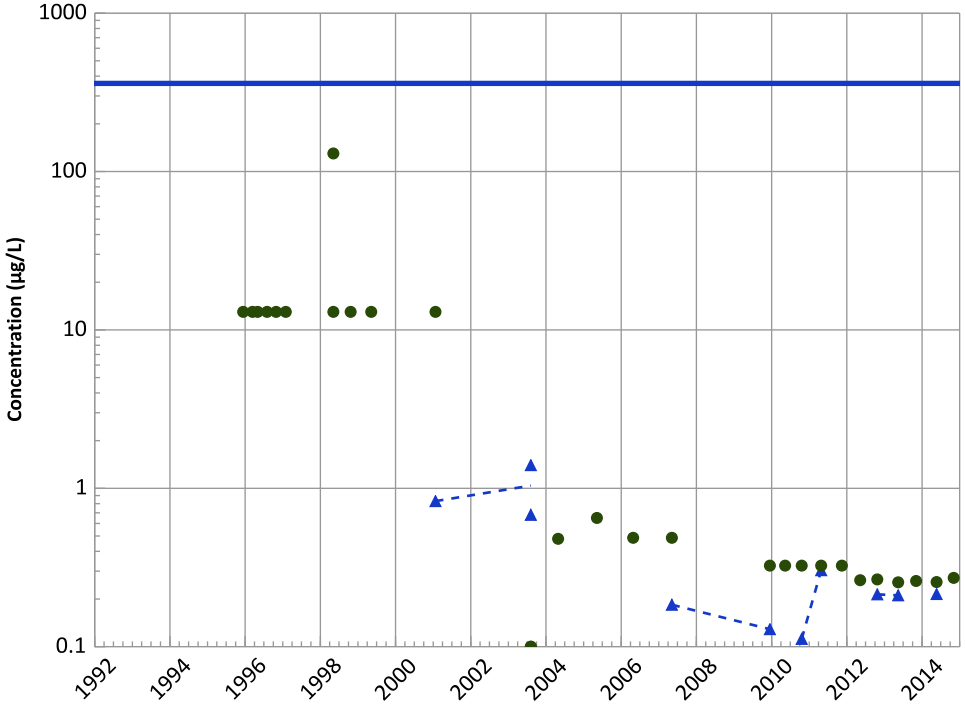


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

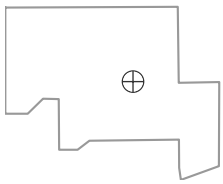
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

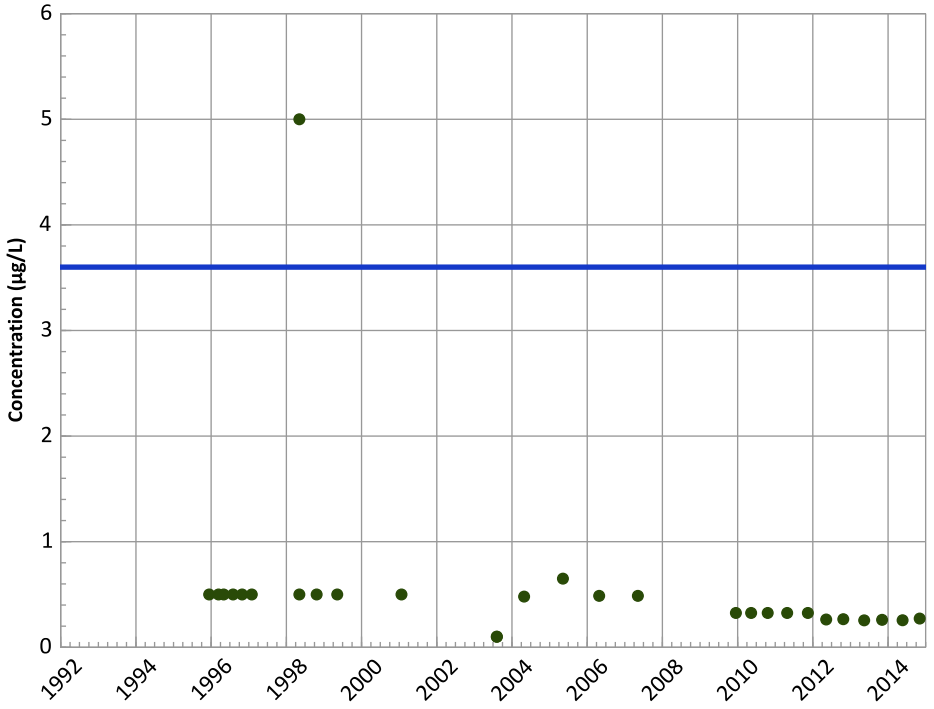
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

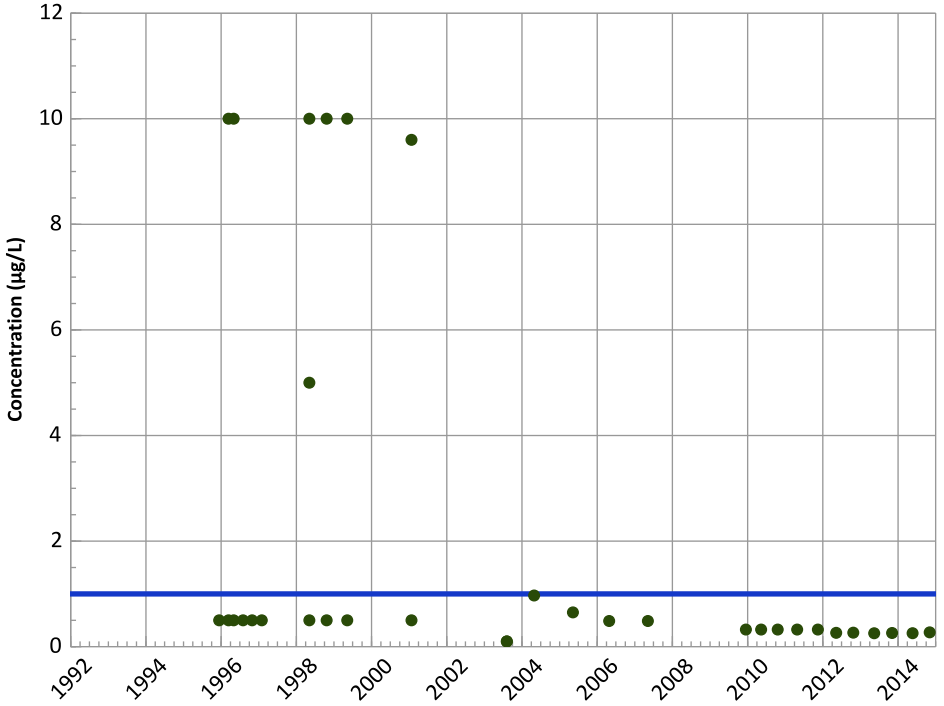


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

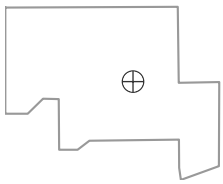
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

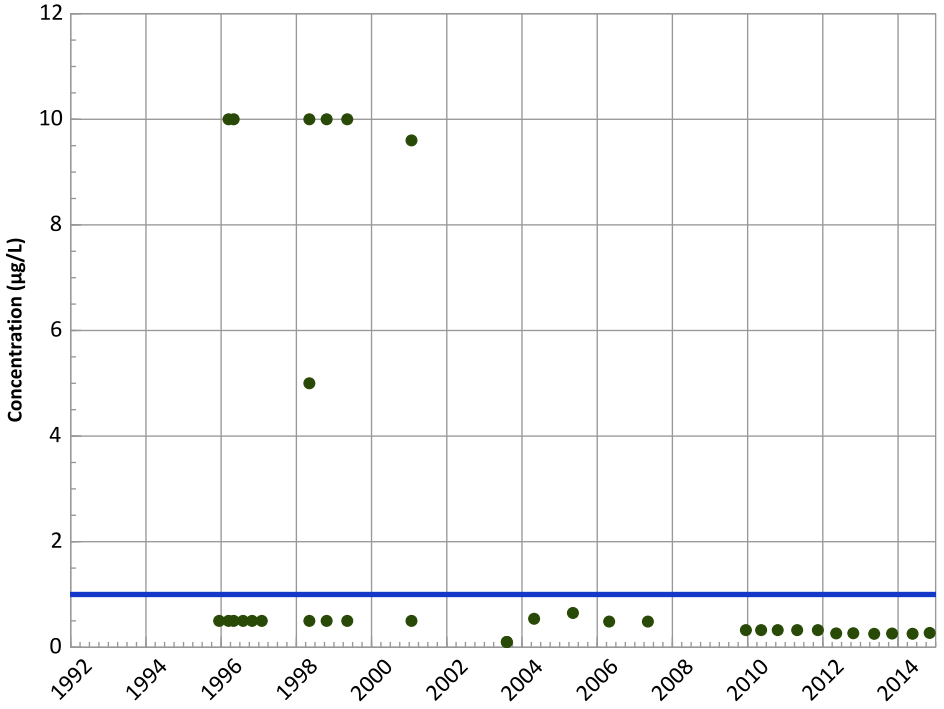
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

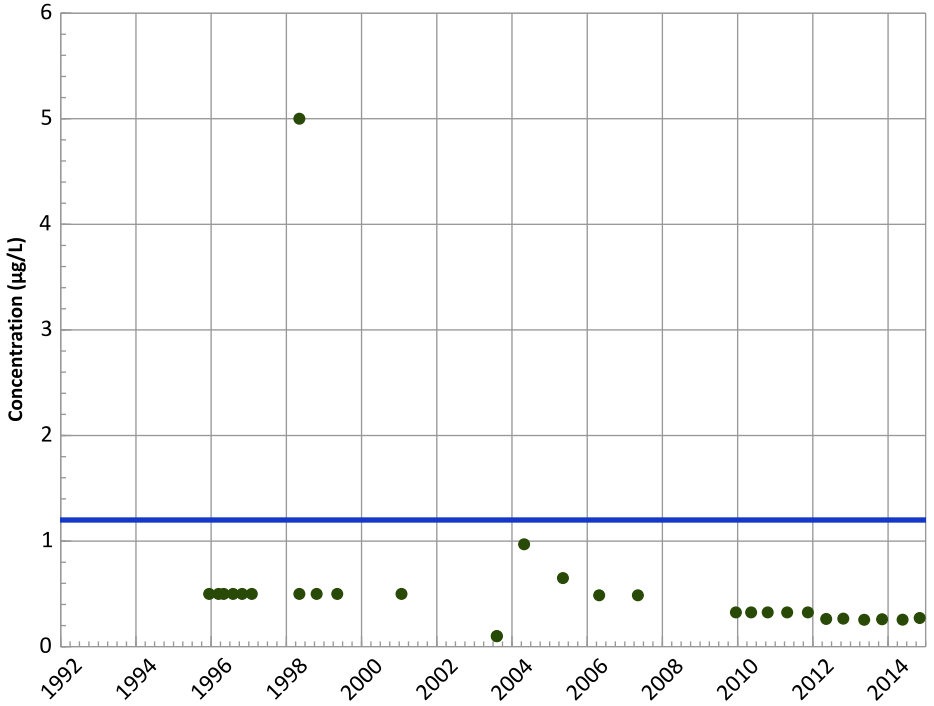


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

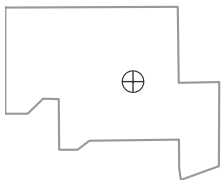
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

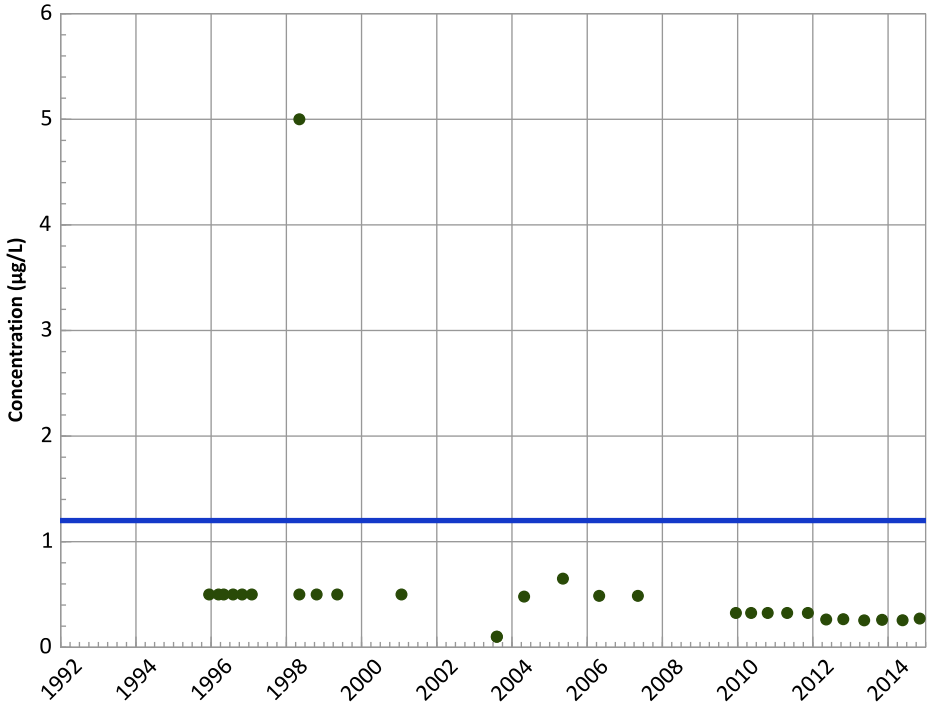
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

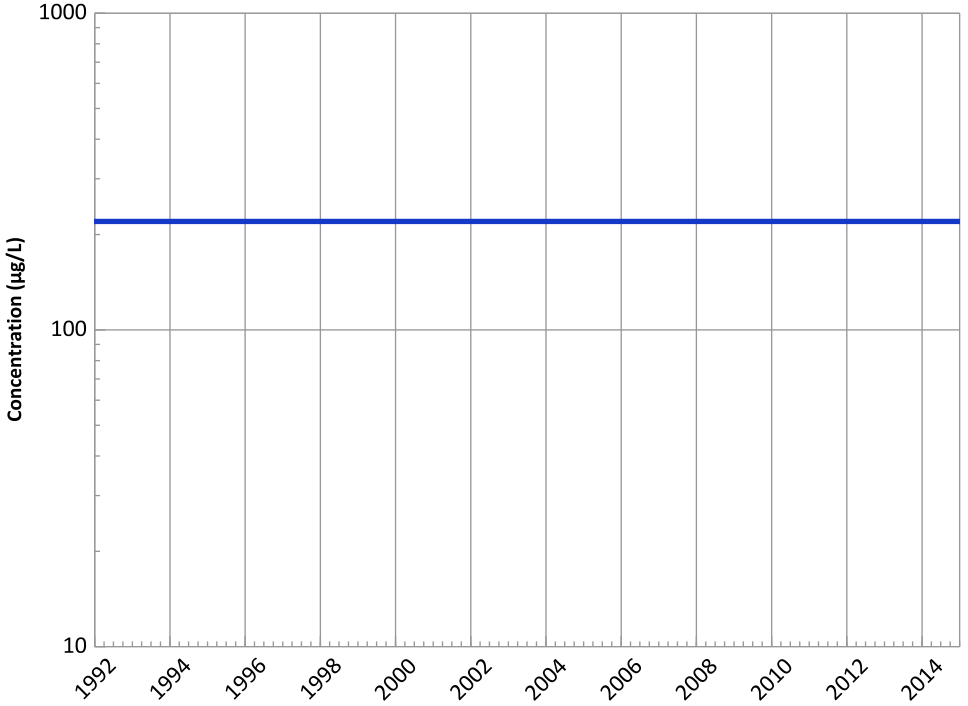


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

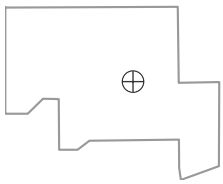
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

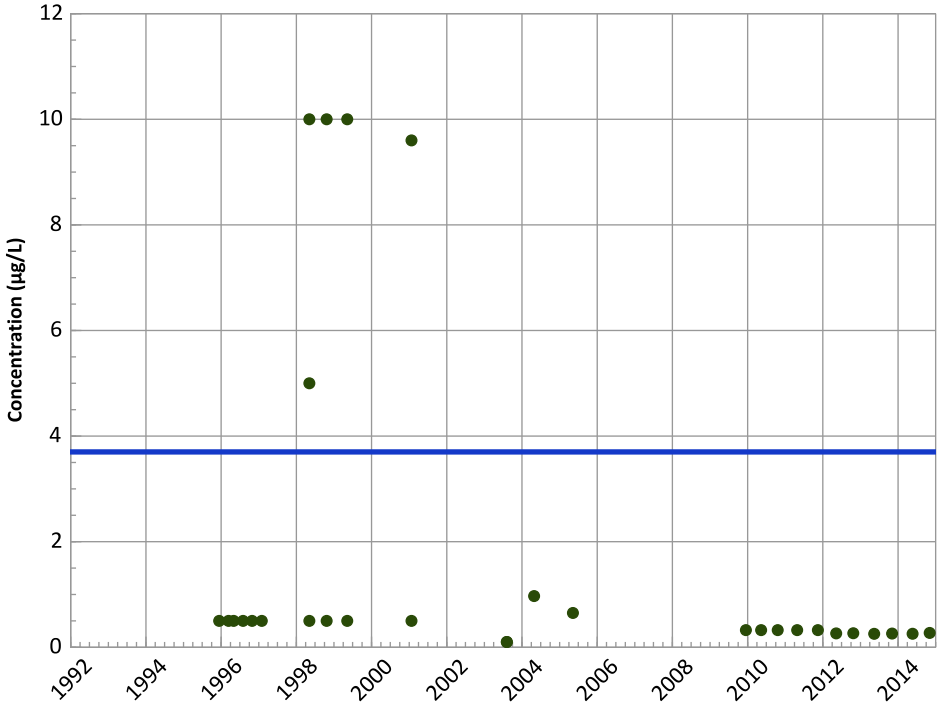
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

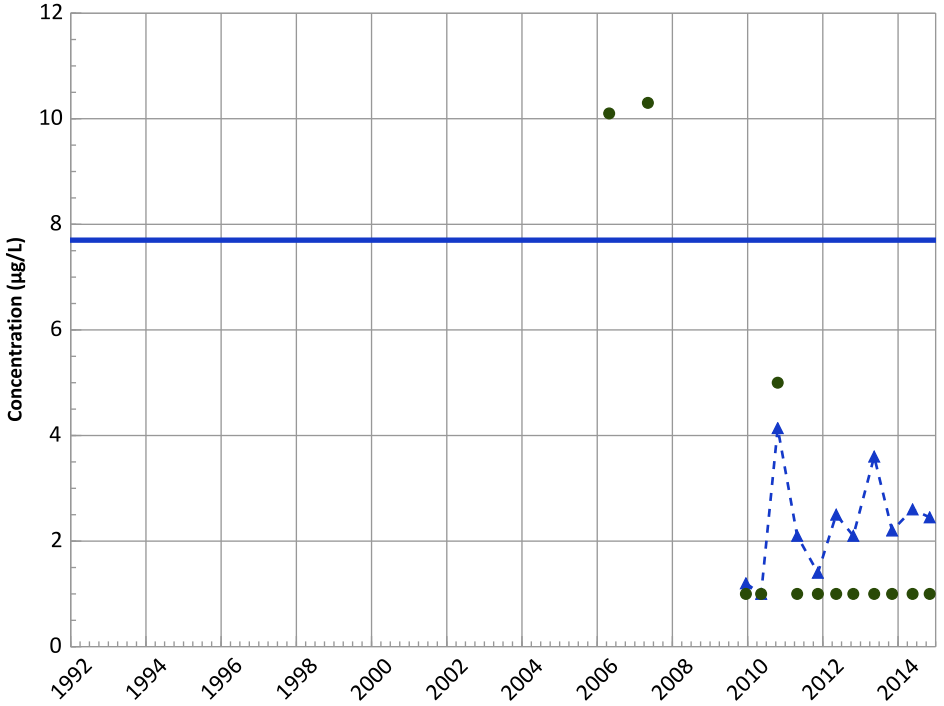


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

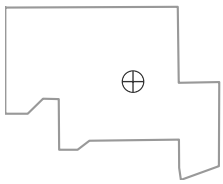
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

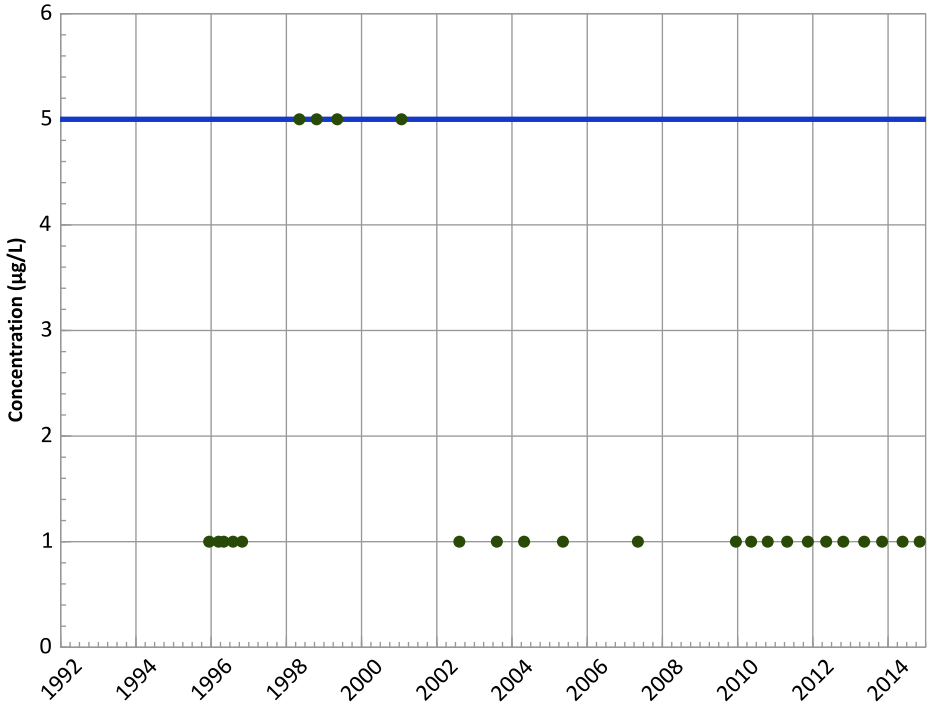
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

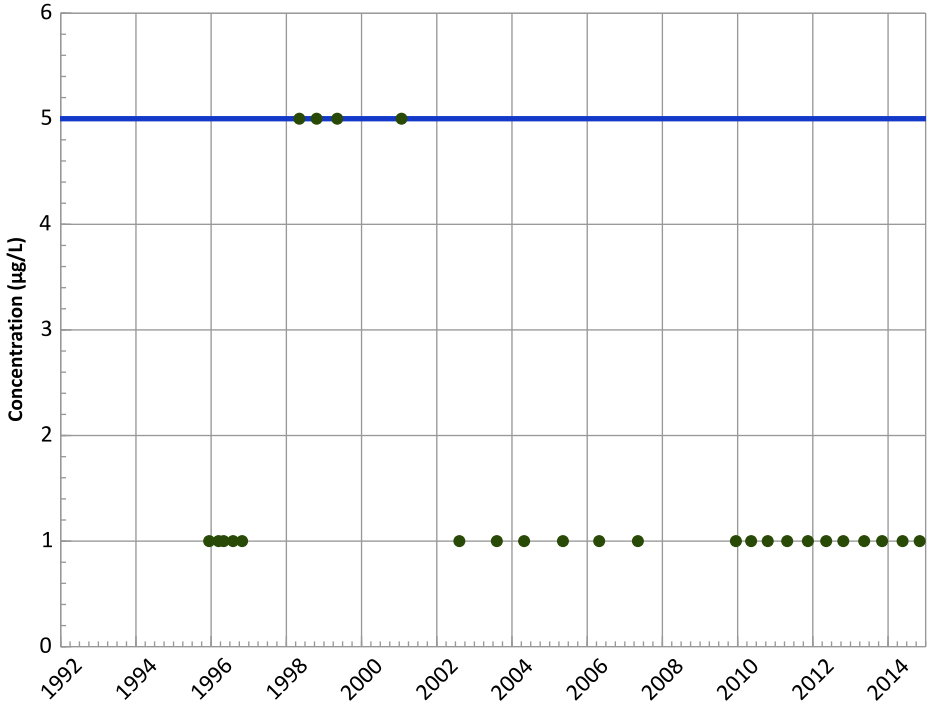


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

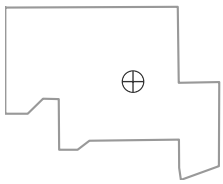
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

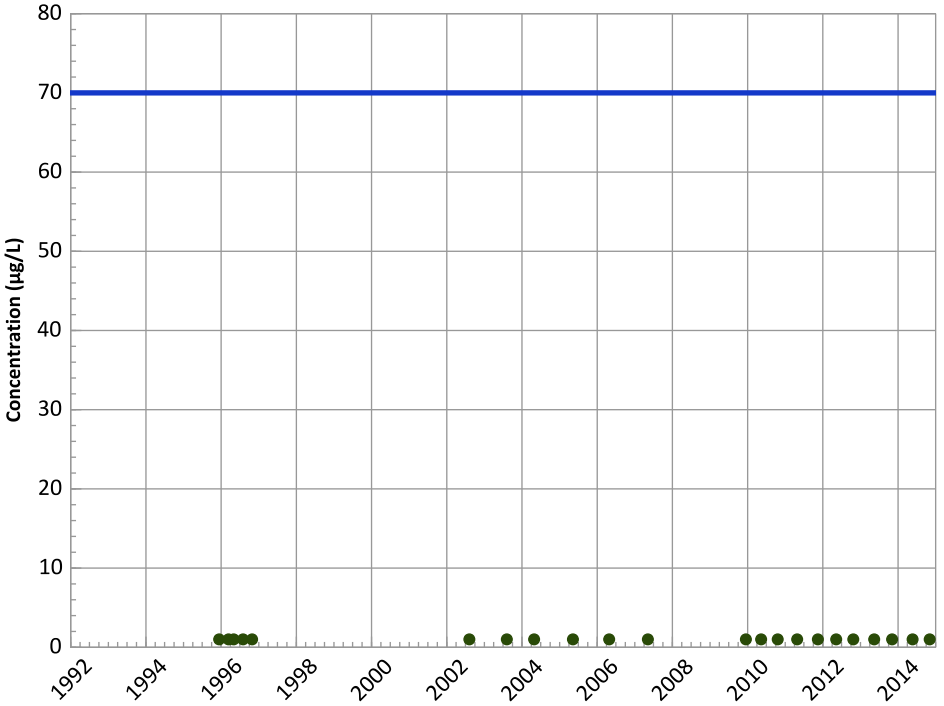
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

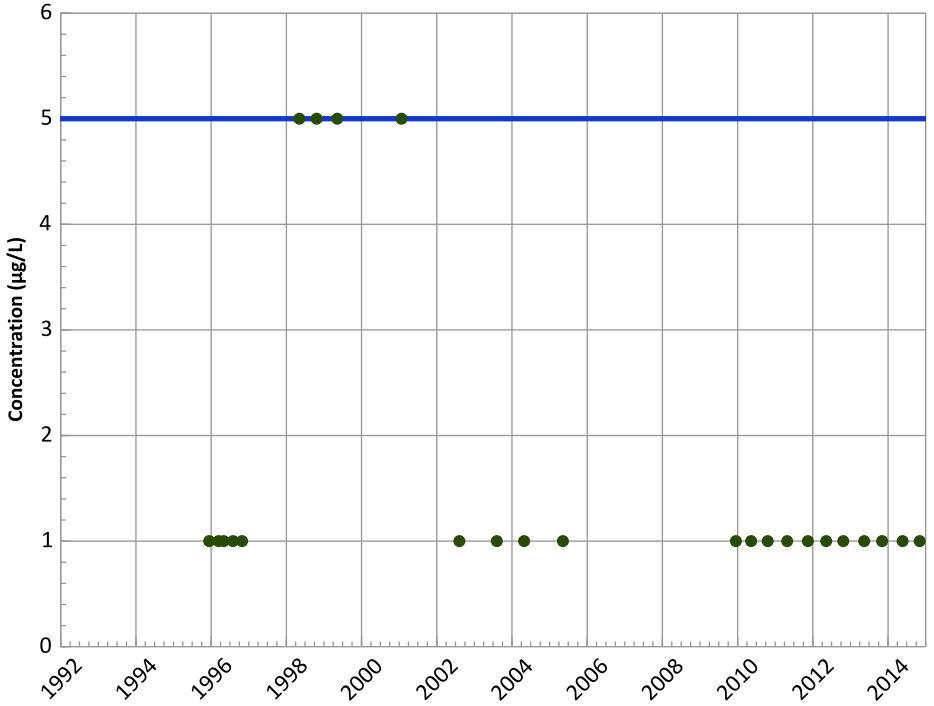


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

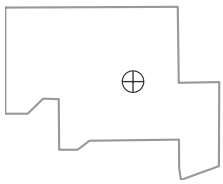
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

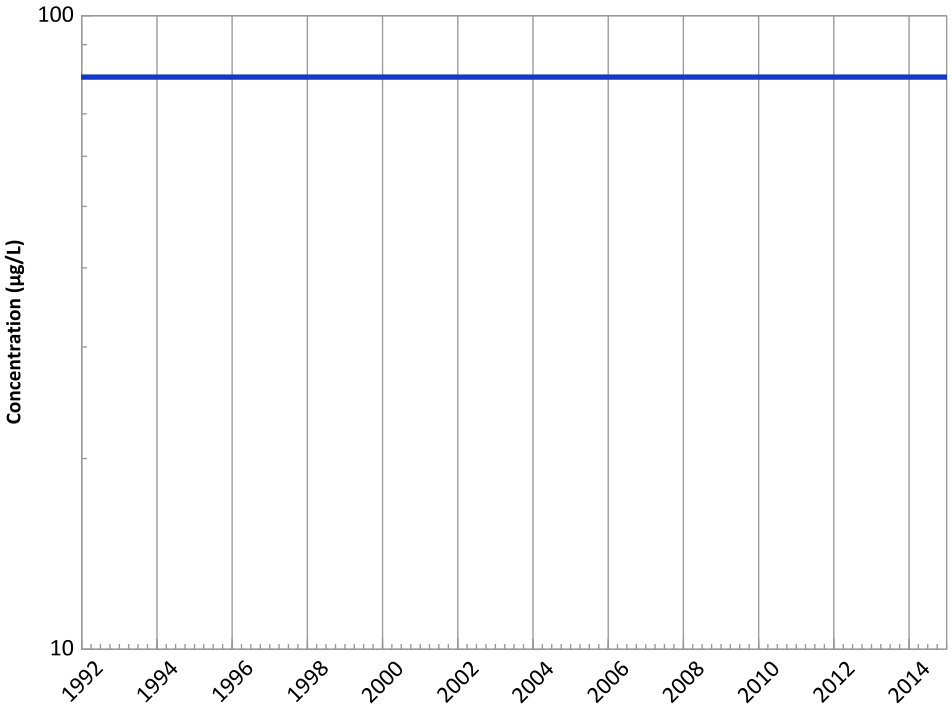
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

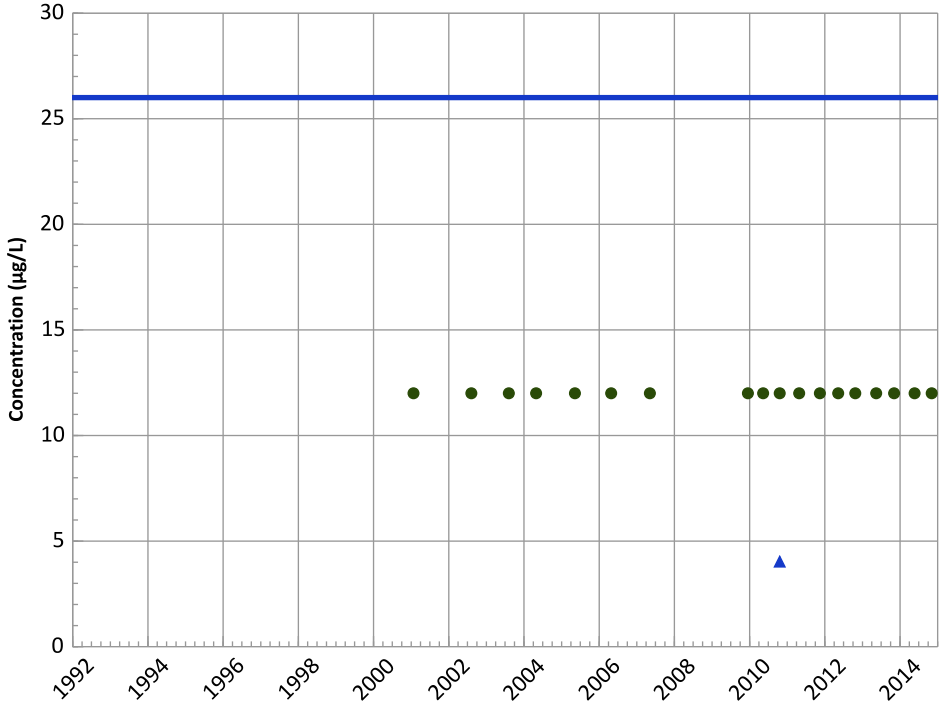


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

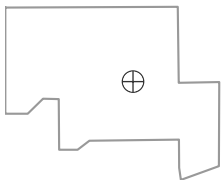
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

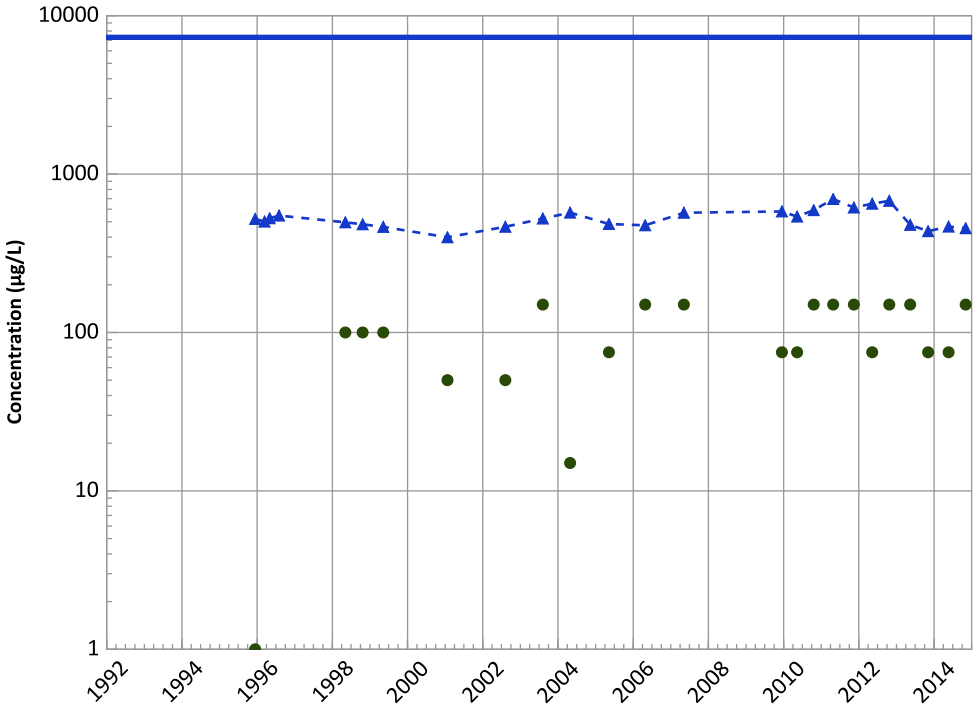
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

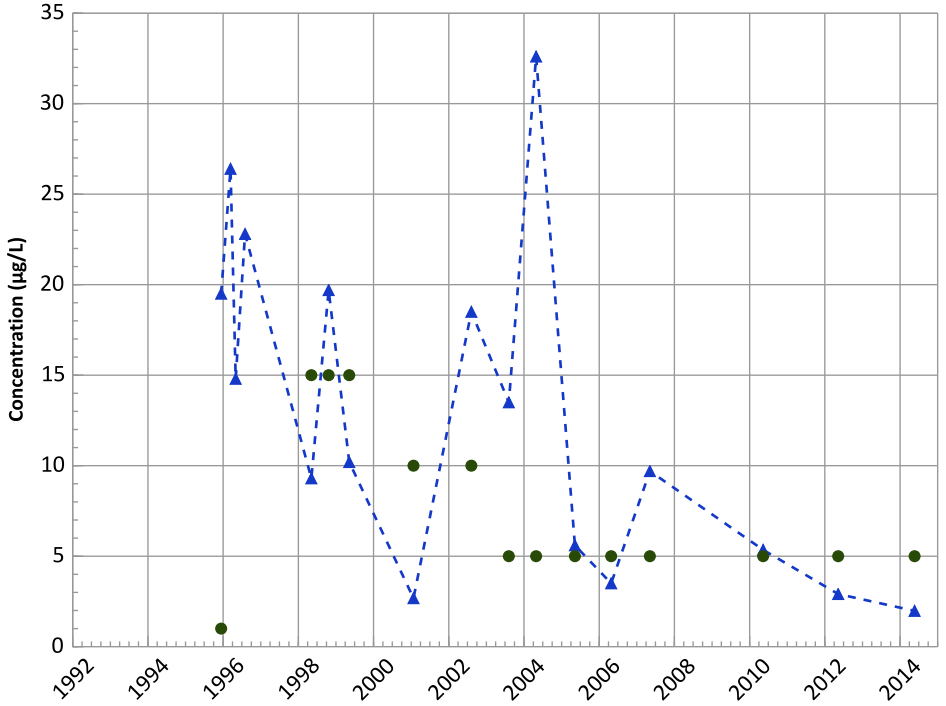


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

Manganese Trend



Concentration Trend

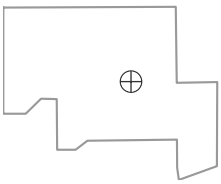
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

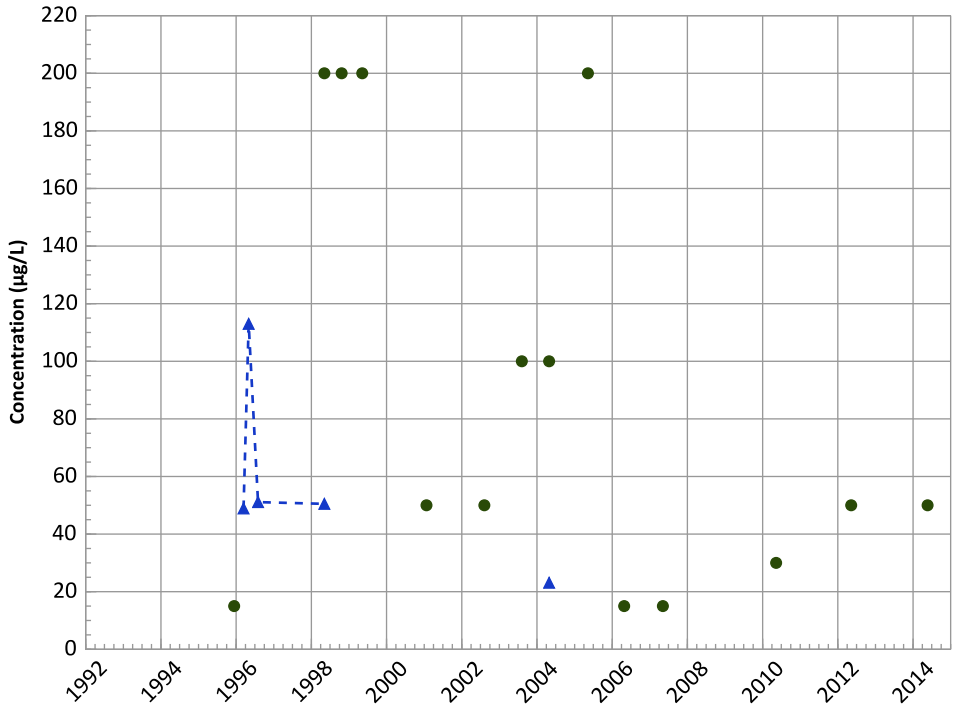
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

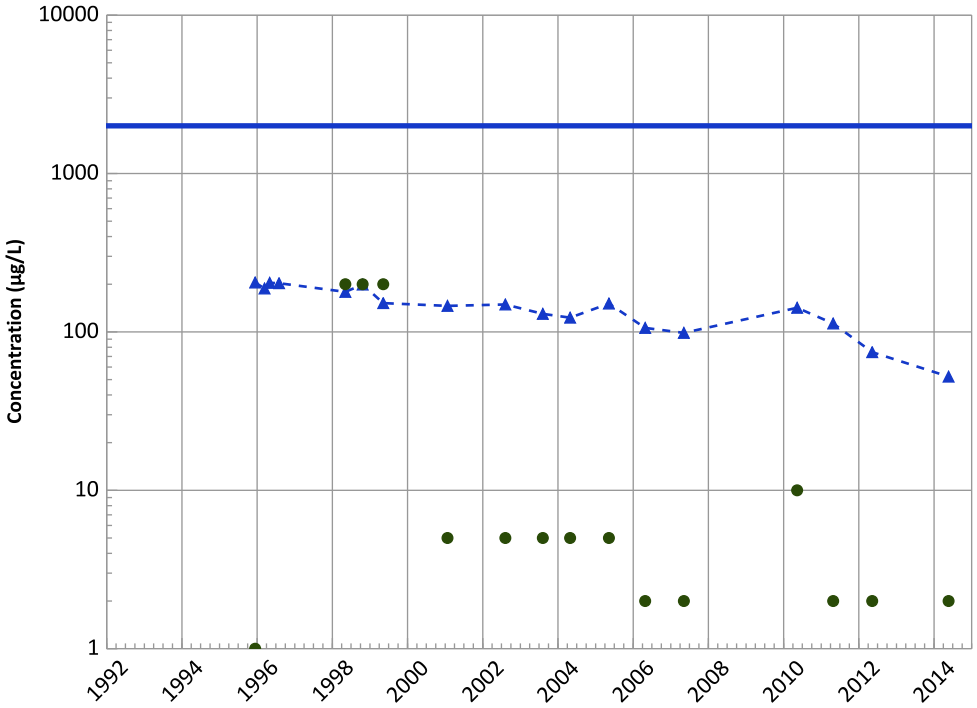


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

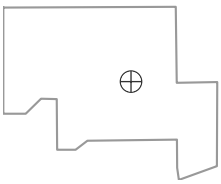
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

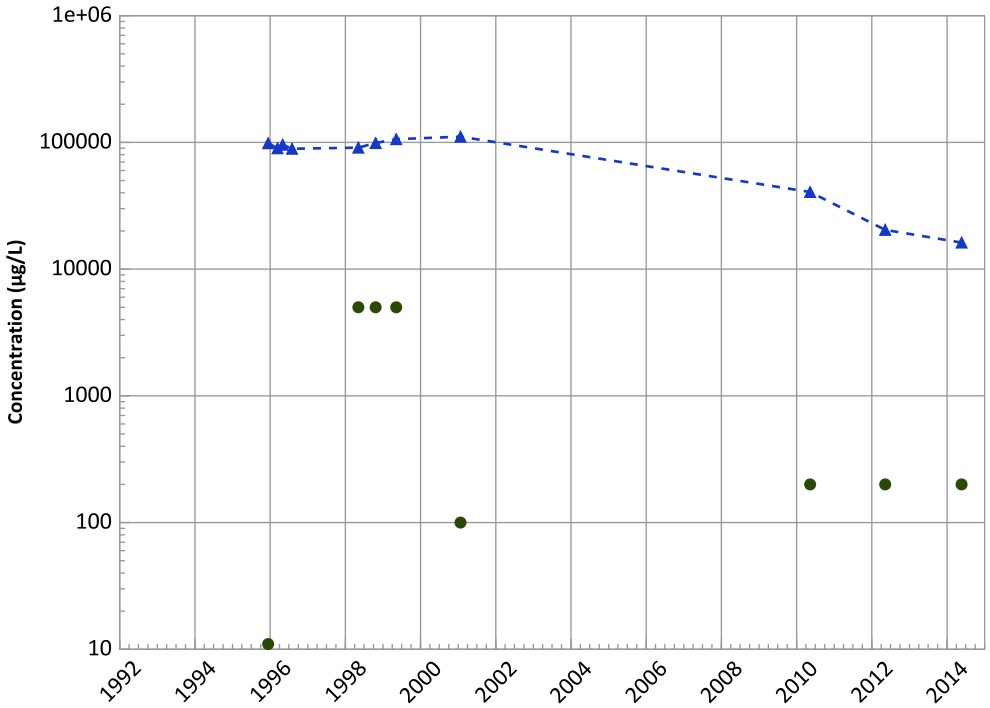
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

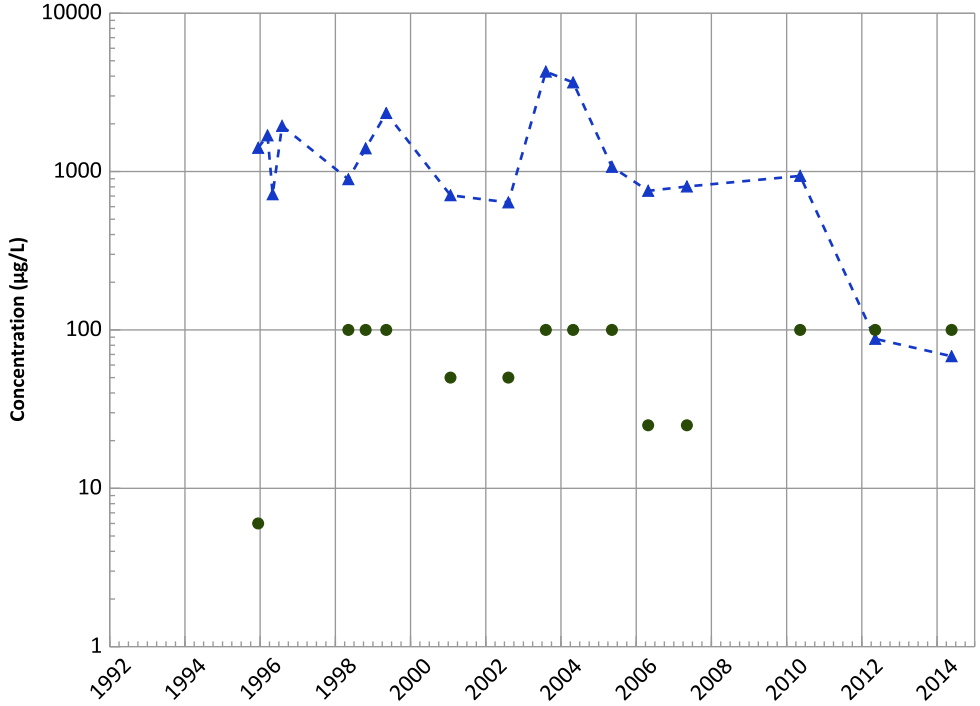


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

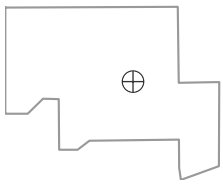
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

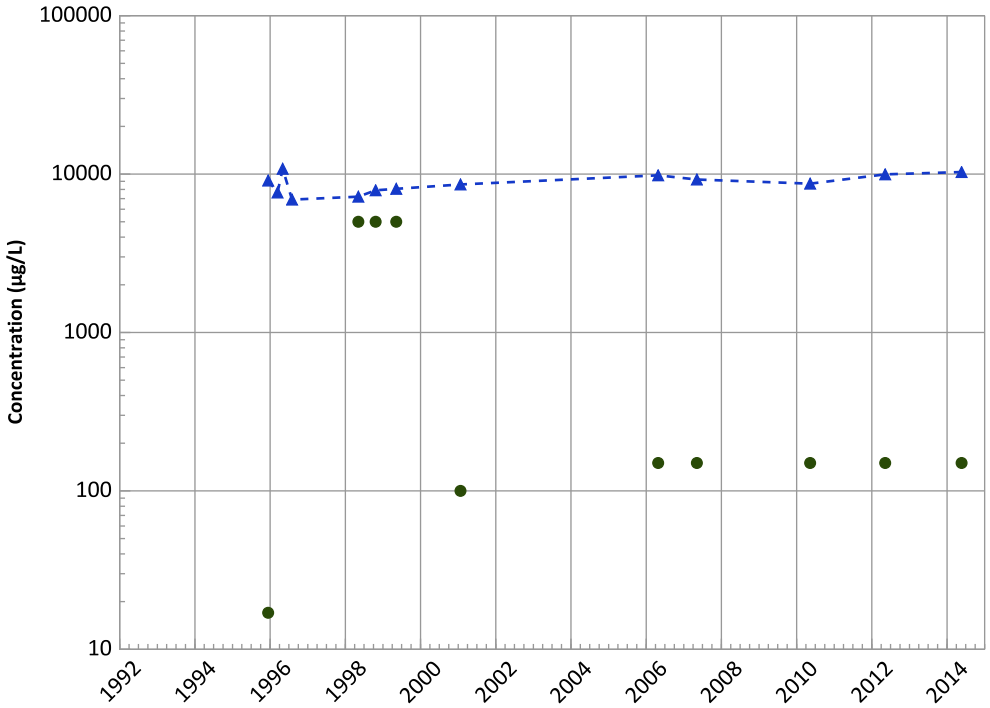
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

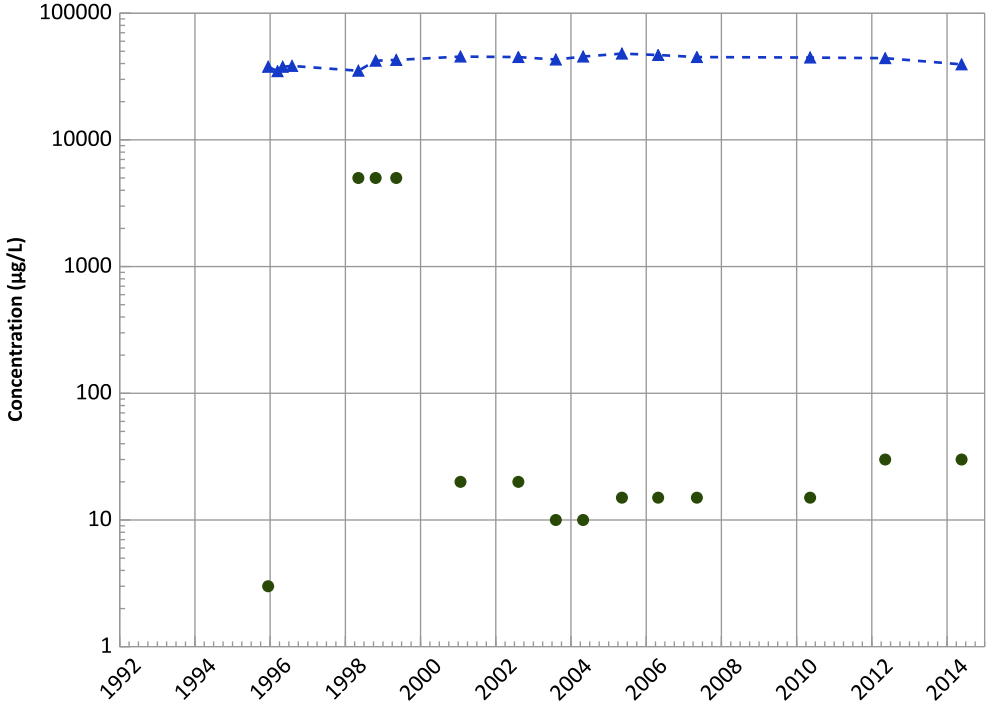


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

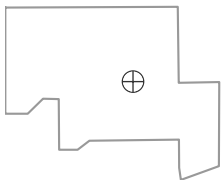
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

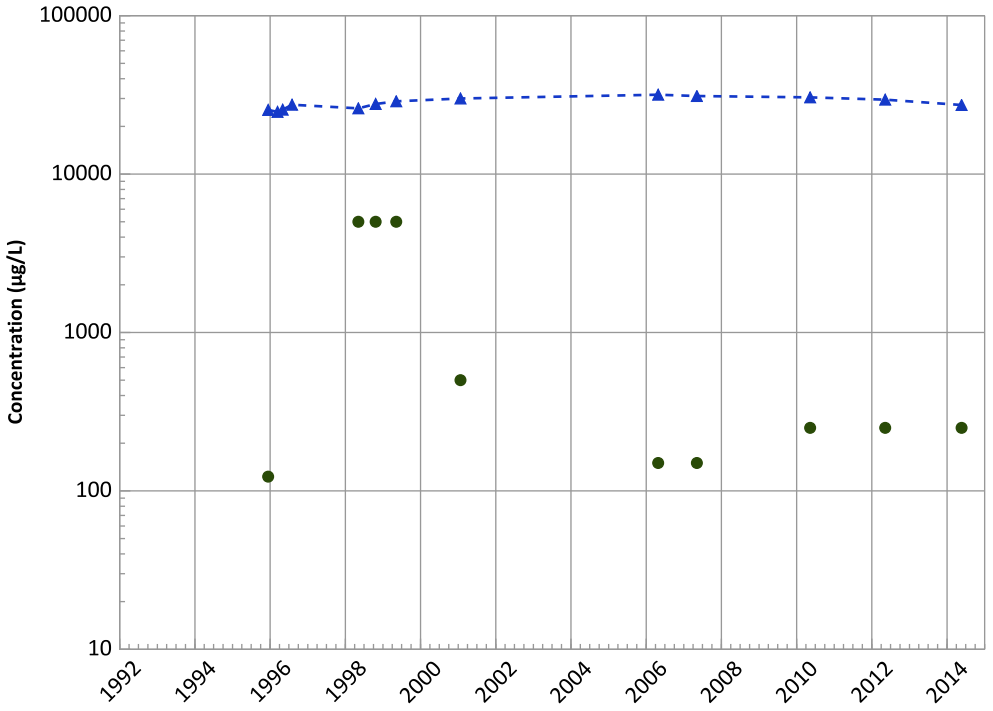
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1P02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

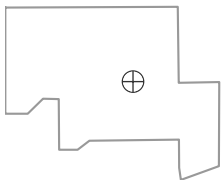
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

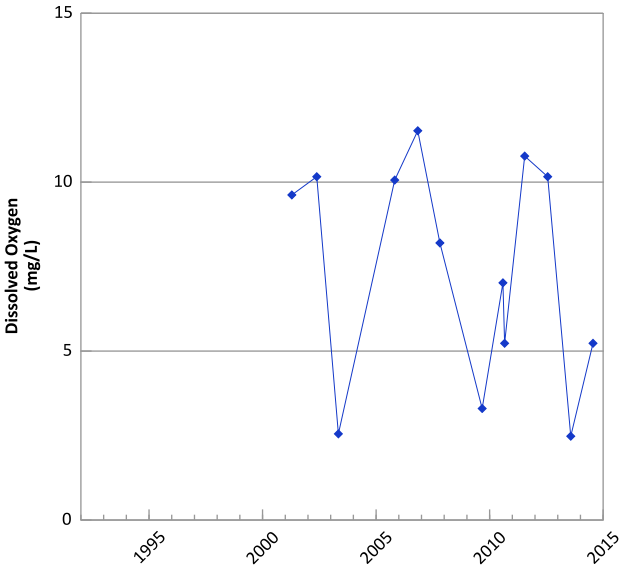
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/13/1995 to 11/04/2014
Analysis Date: 03/19/2015

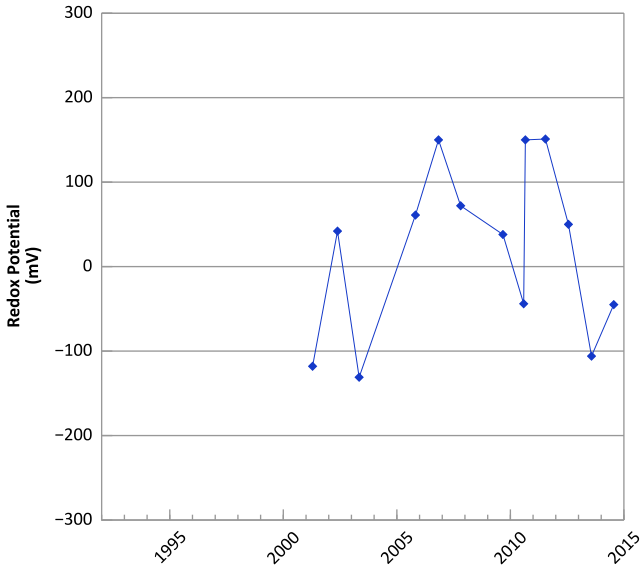
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

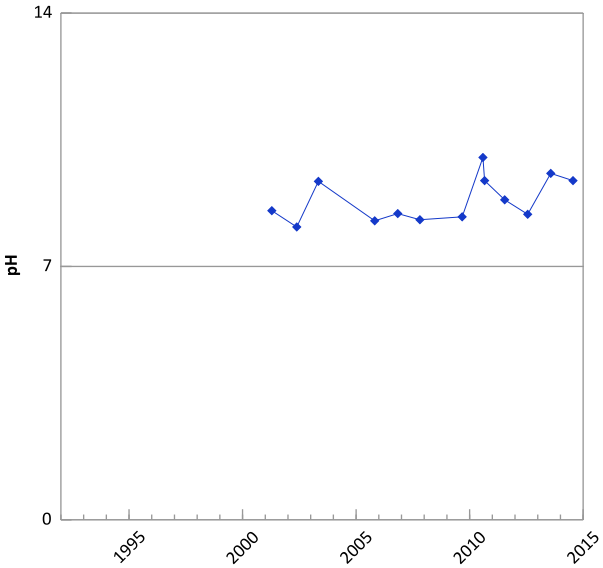
Well Location

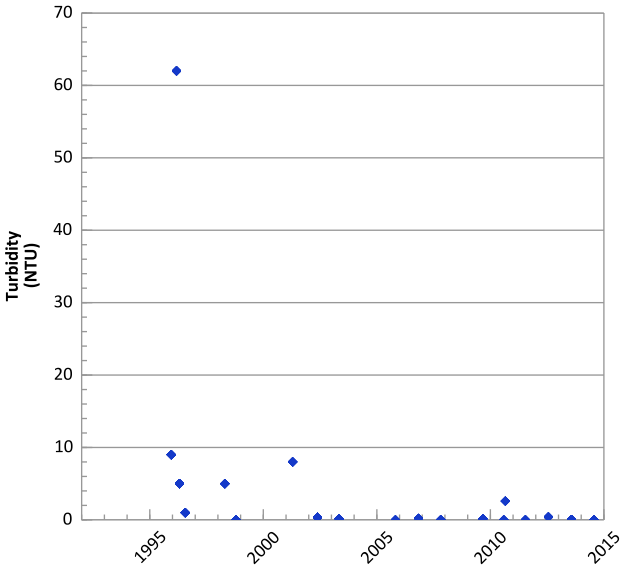


PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



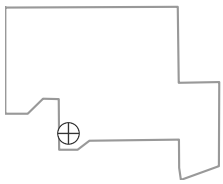






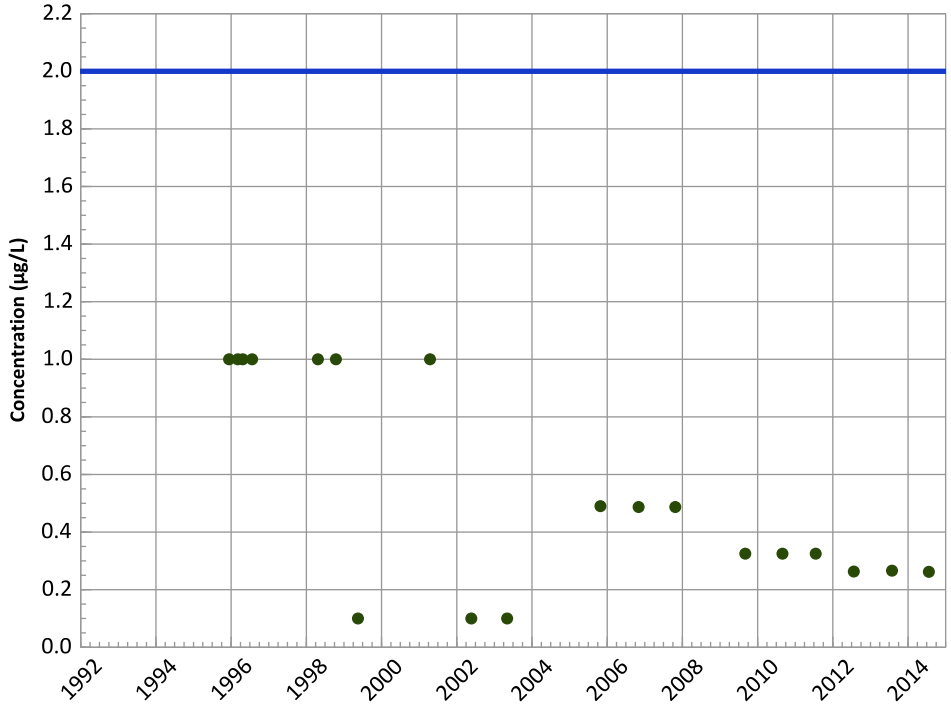
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

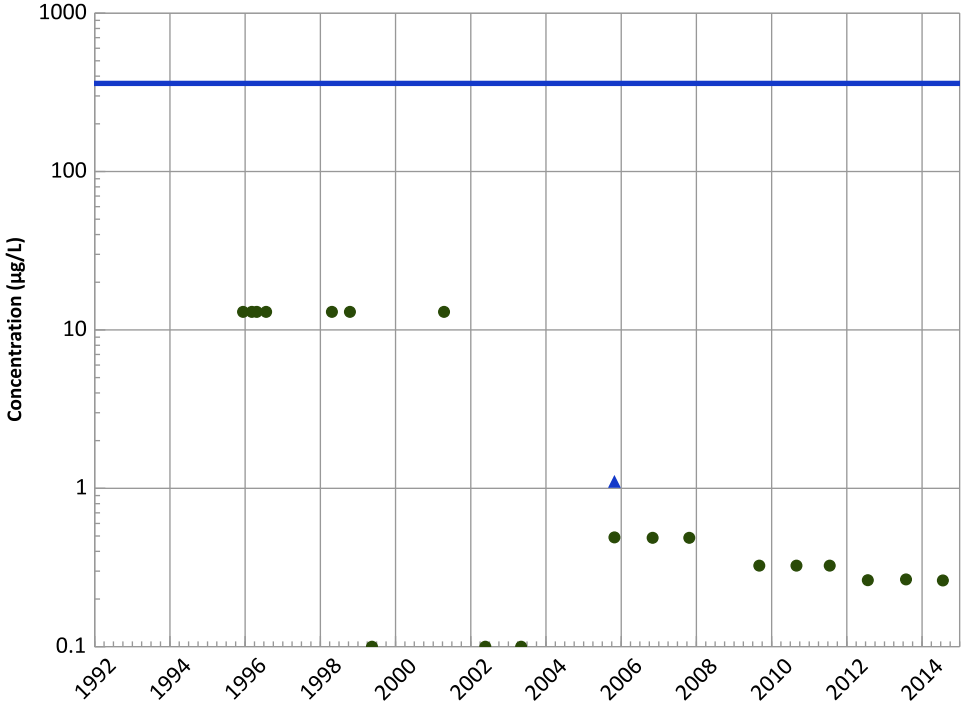


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

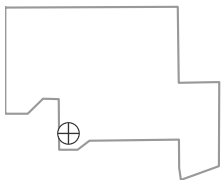
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

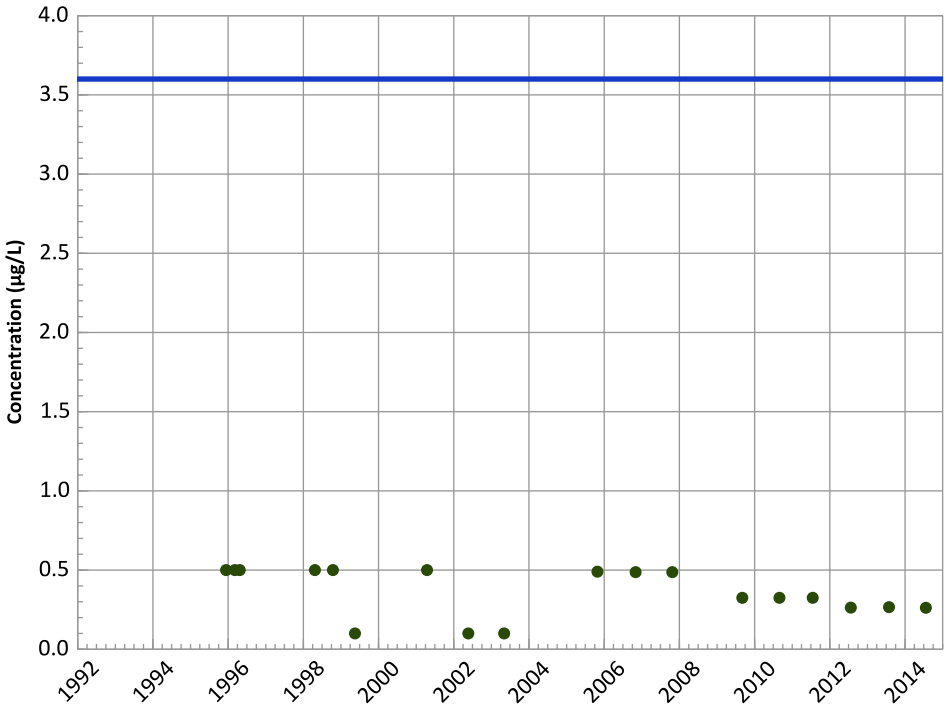
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

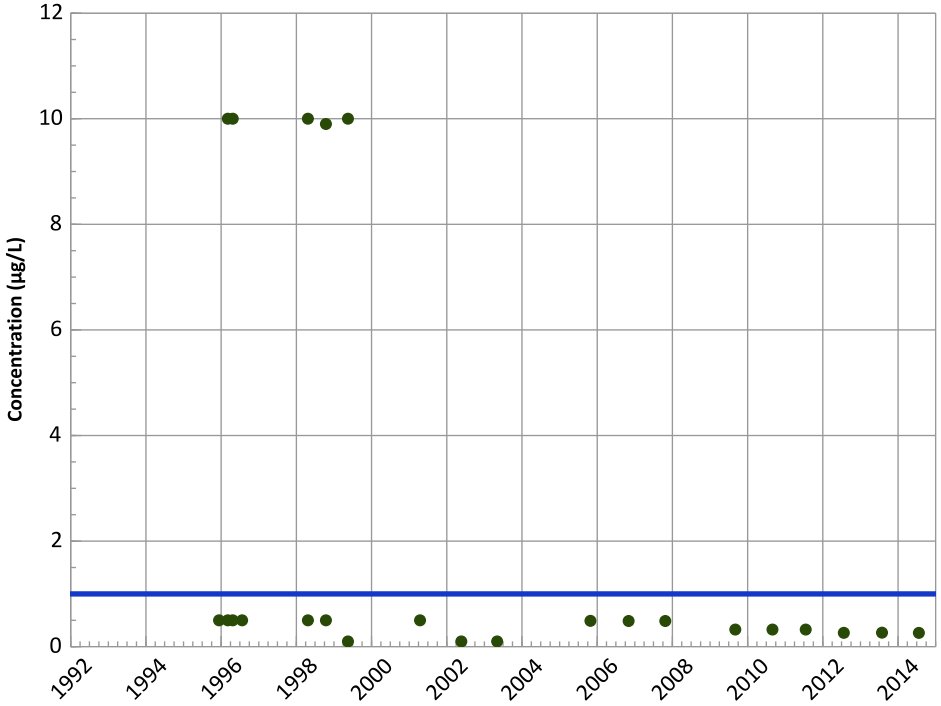


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

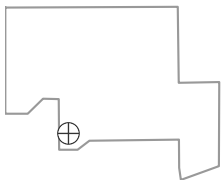
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

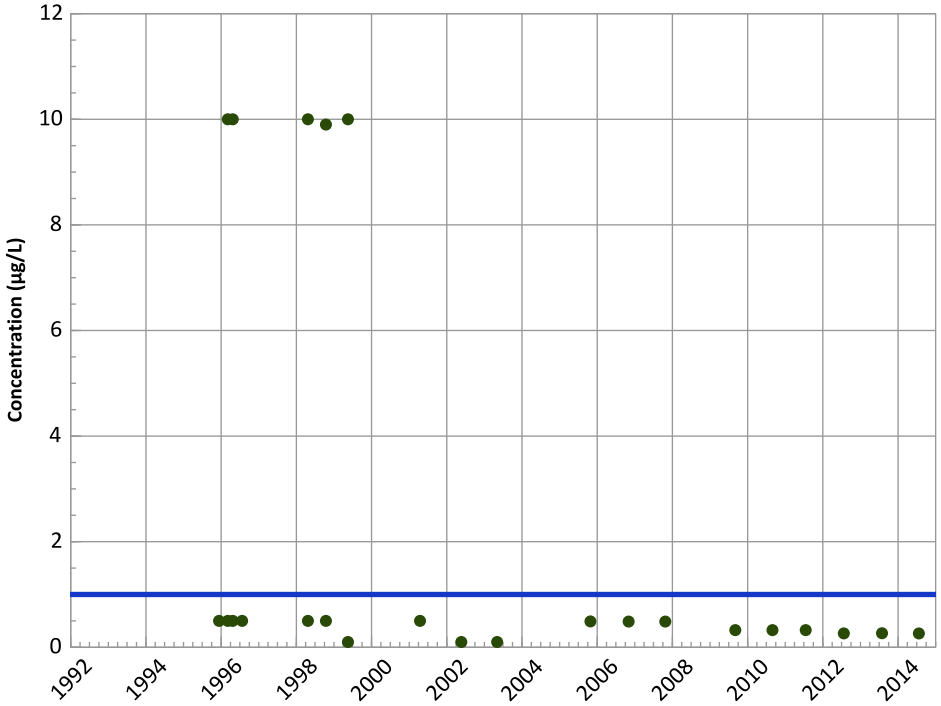
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

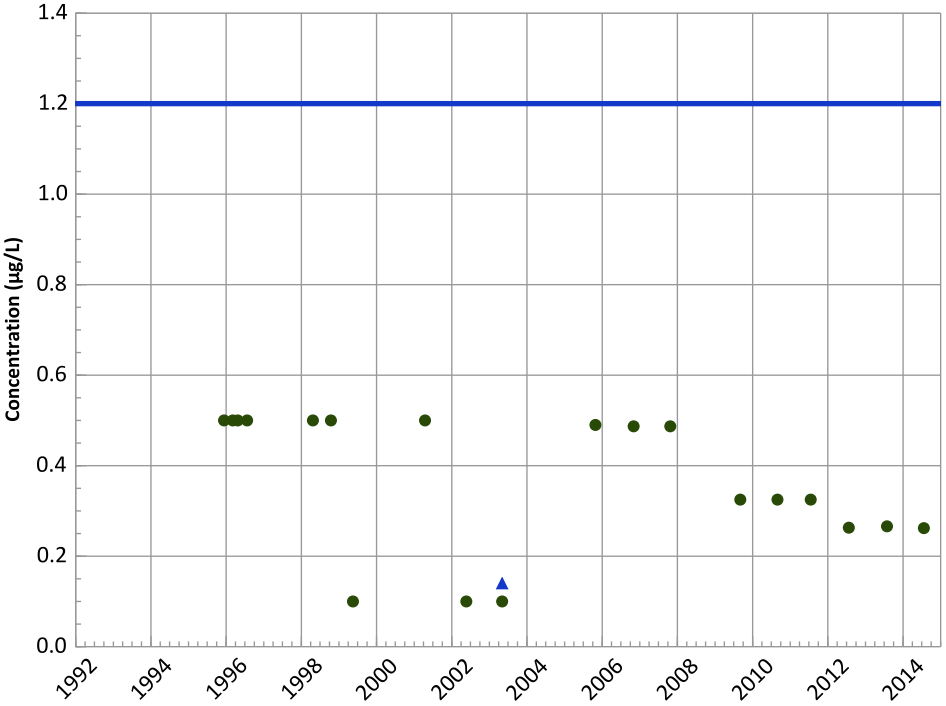


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

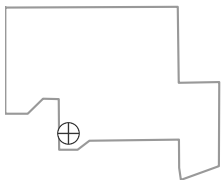
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

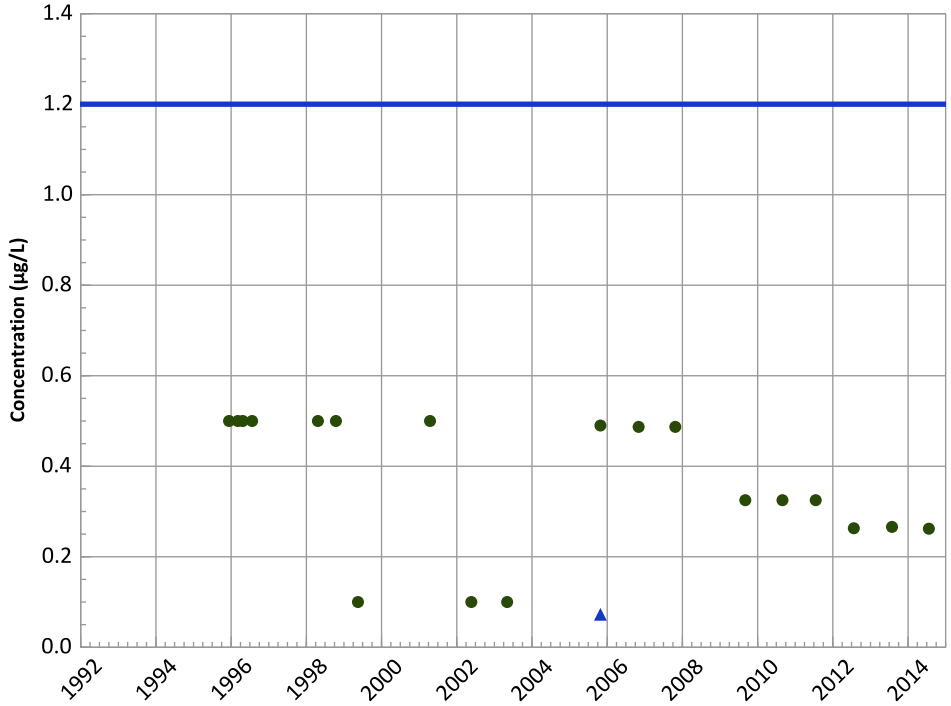
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

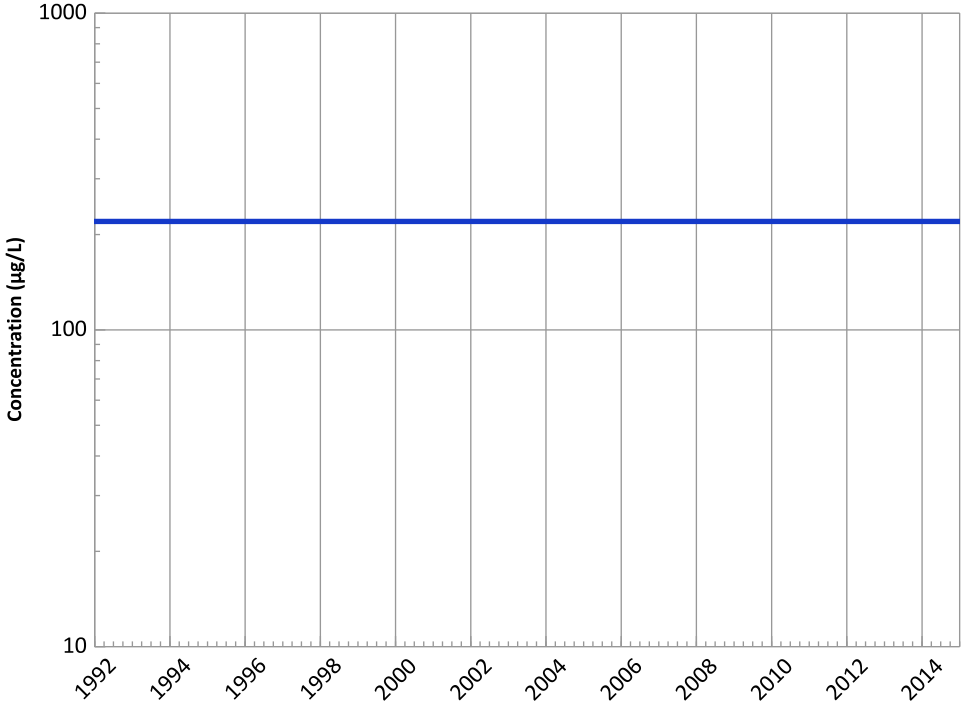


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

1,3,5-Trinitrobenzene Trend



Concentration Trend

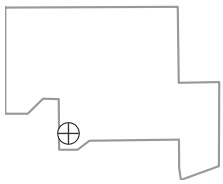
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

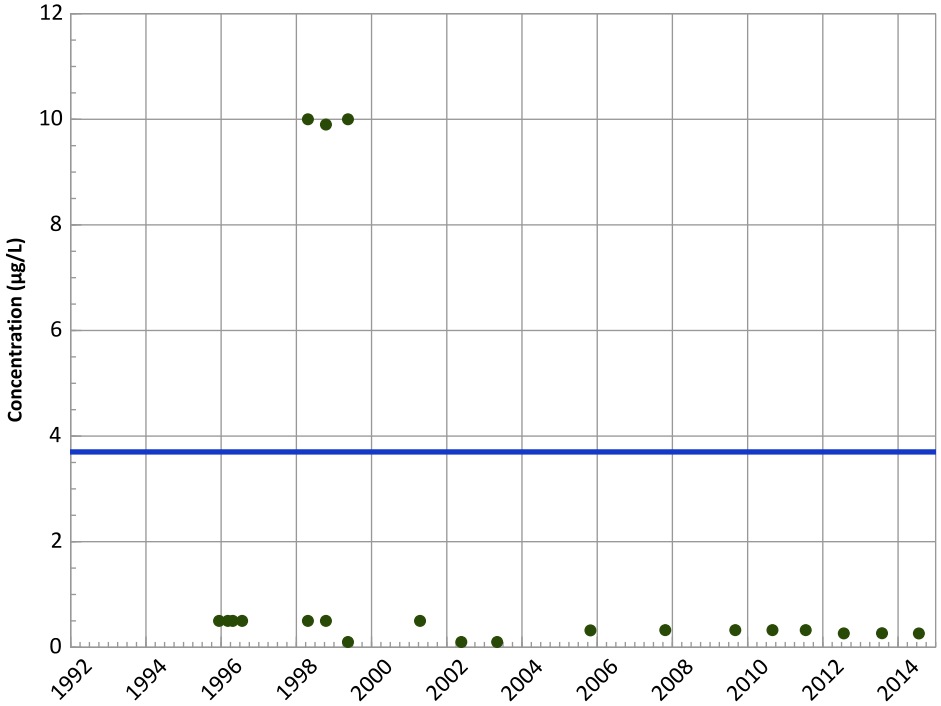
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

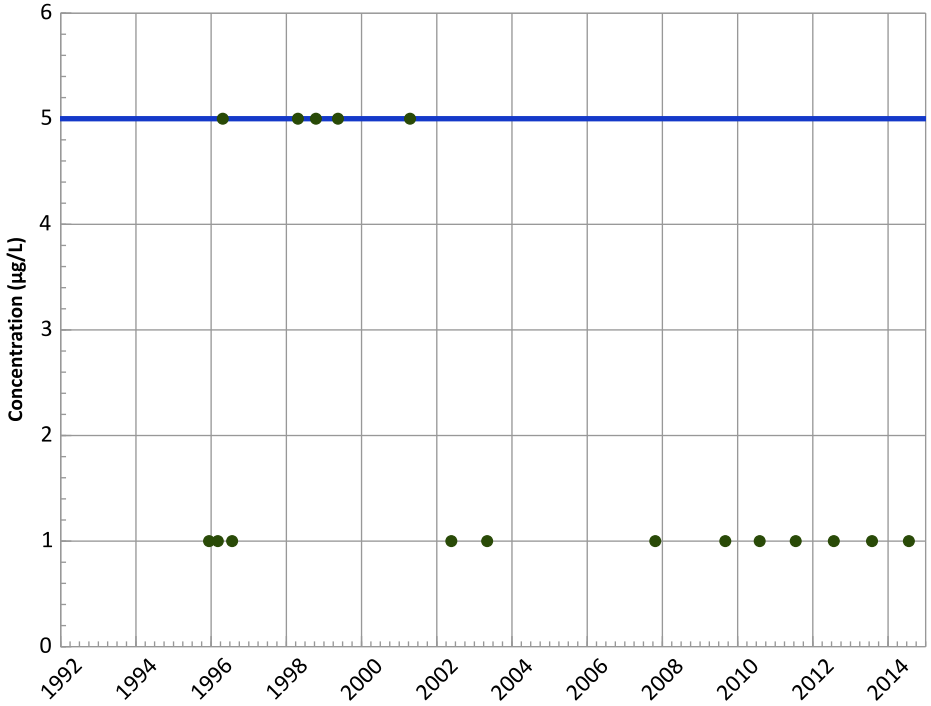


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

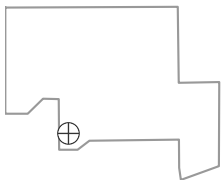
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

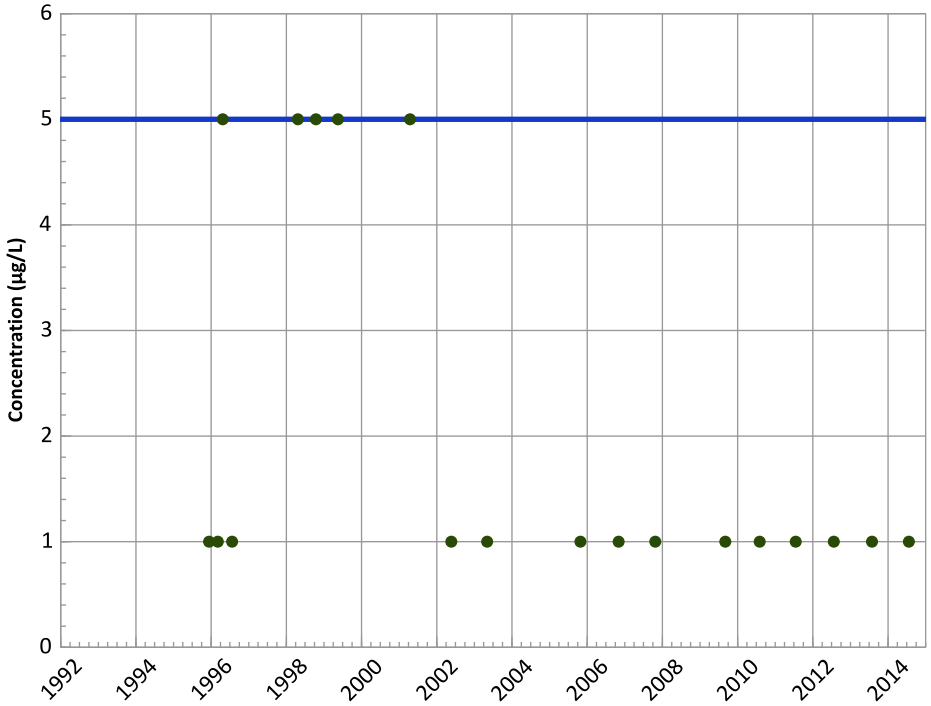
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

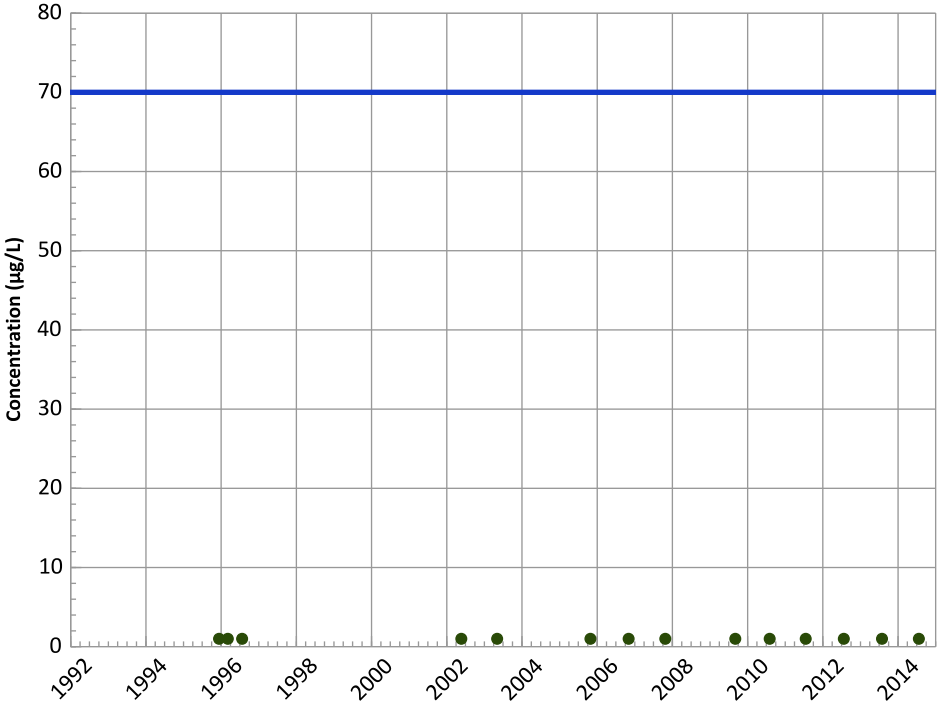


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

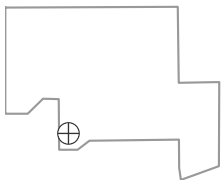
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

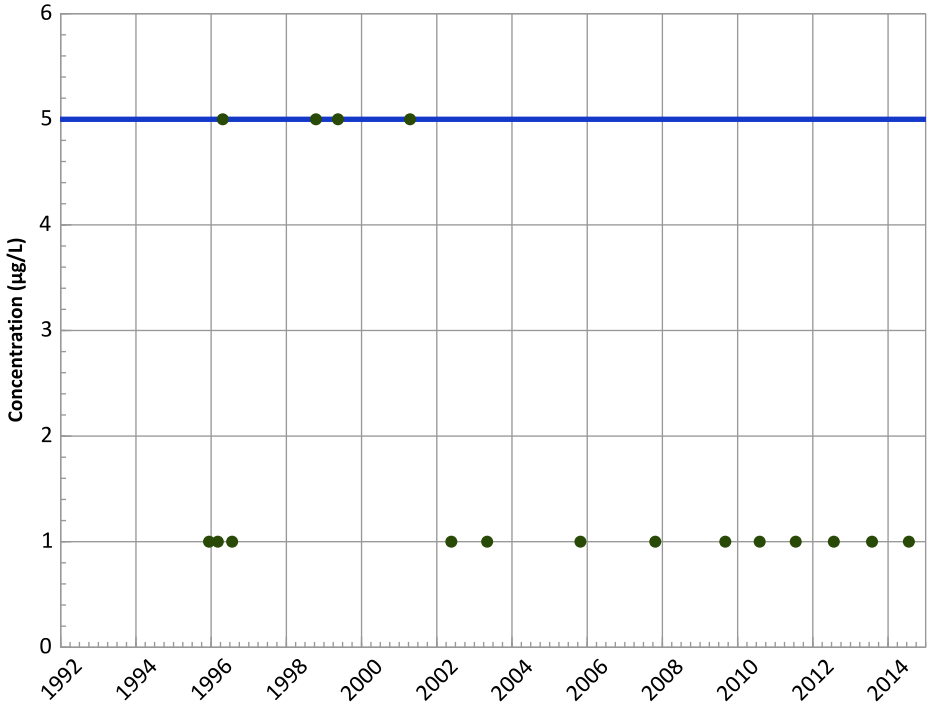
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

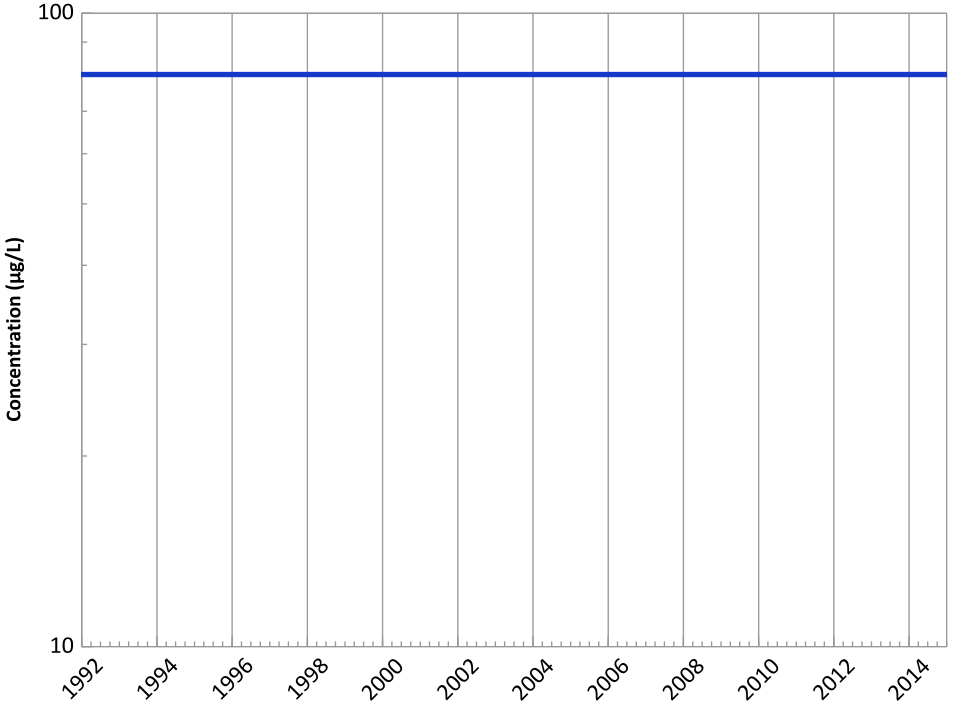


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

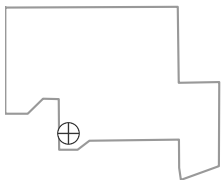
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

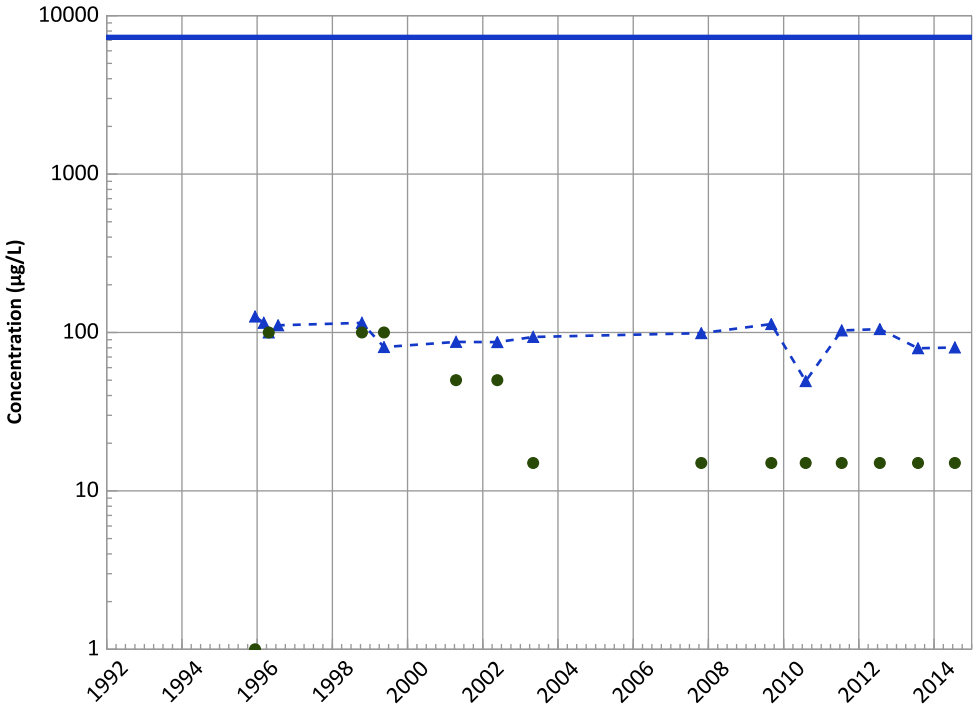
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

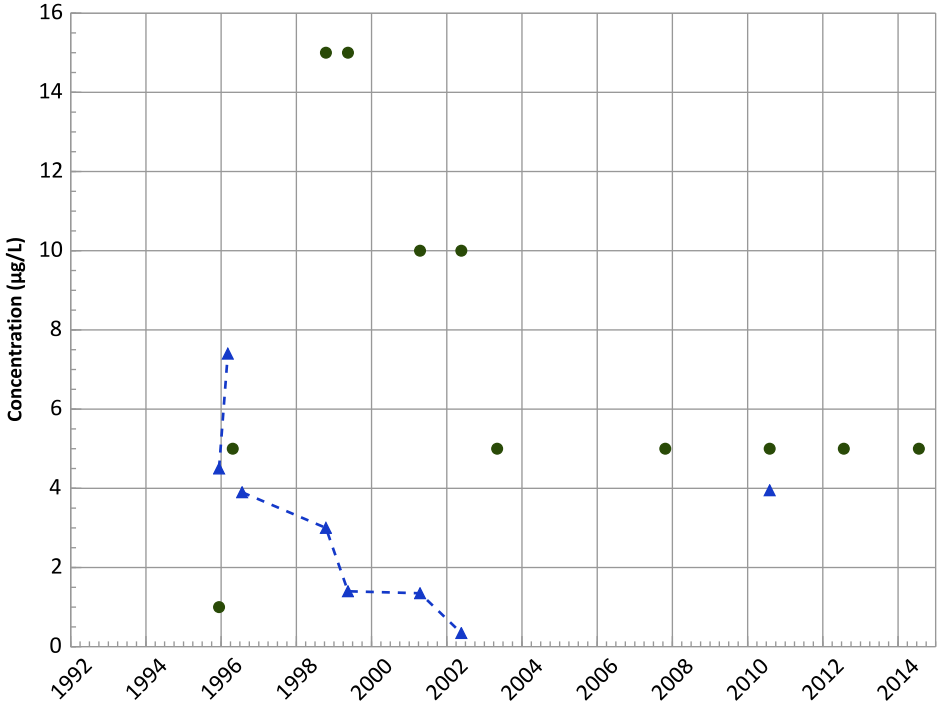


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Manganese Trend



Concentration Trend

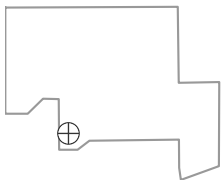
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

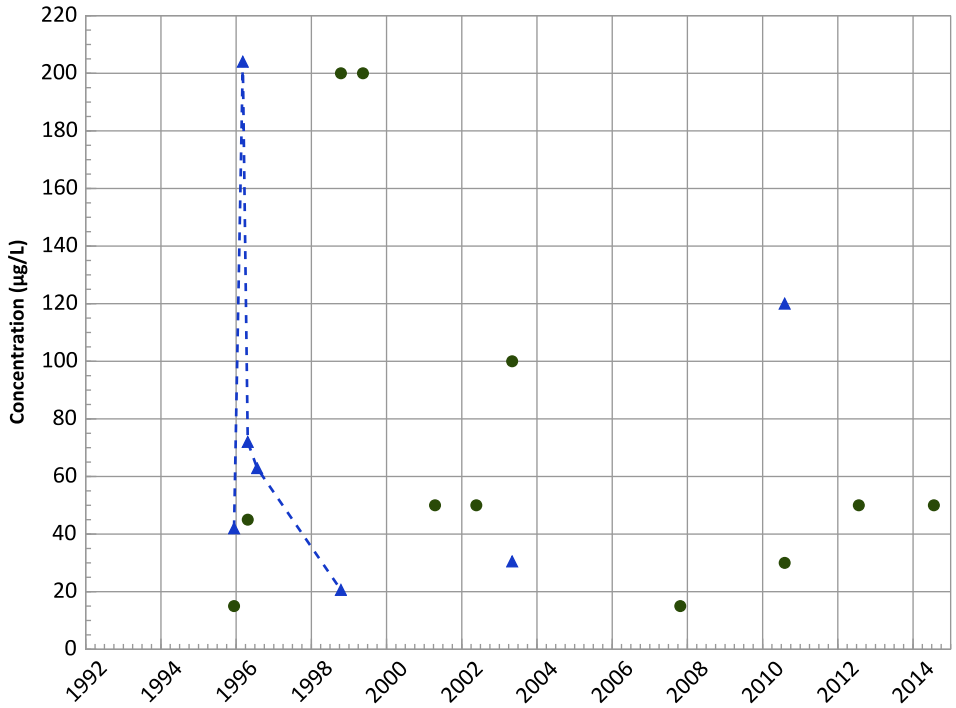
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

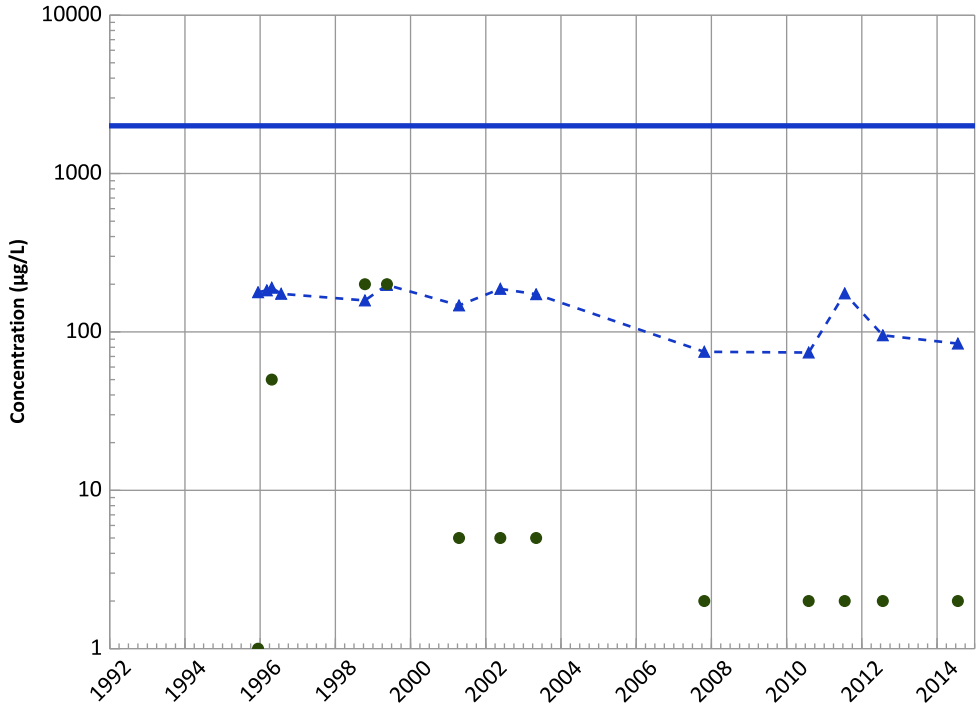


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

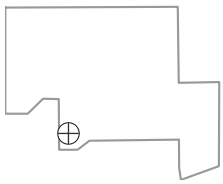
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

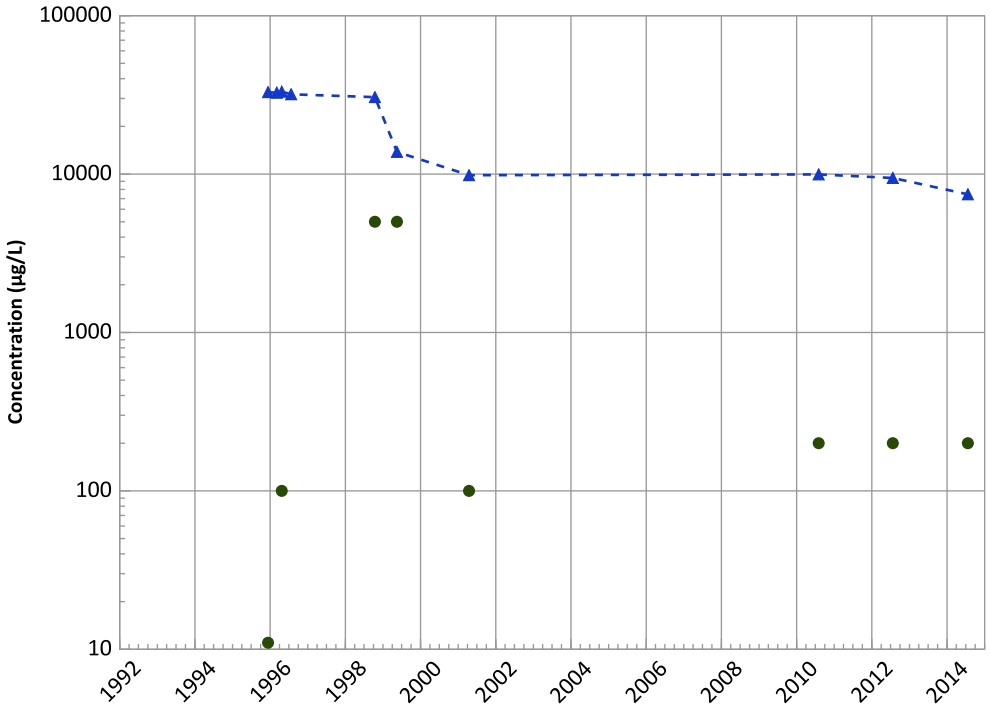
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

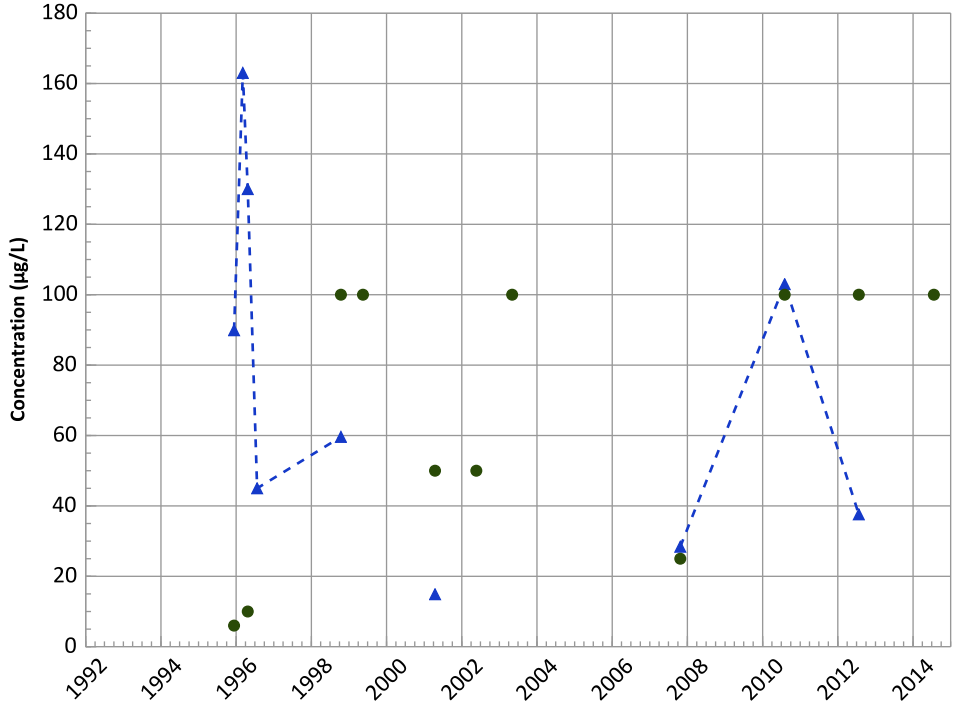


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

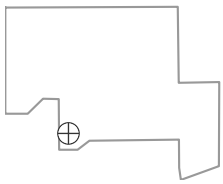
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

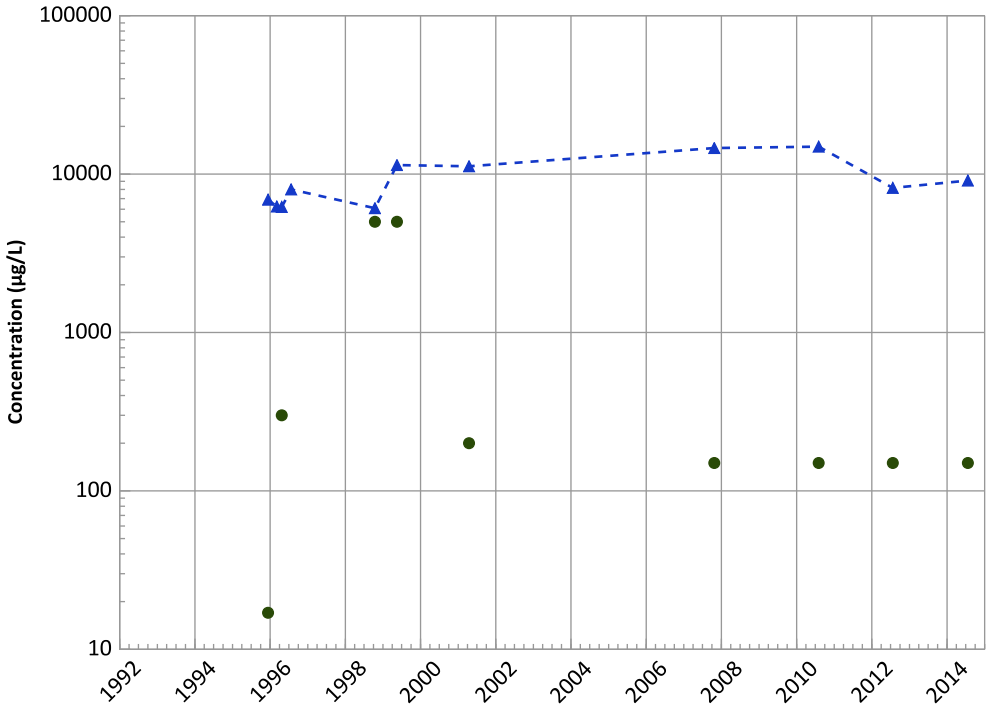
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

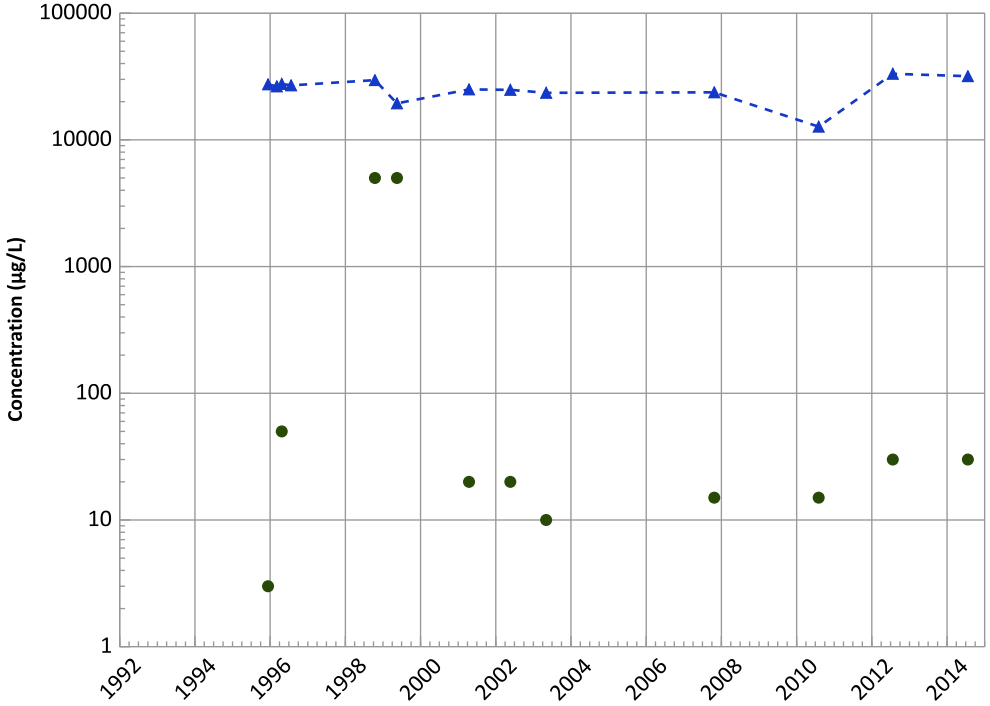


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

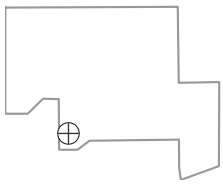
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

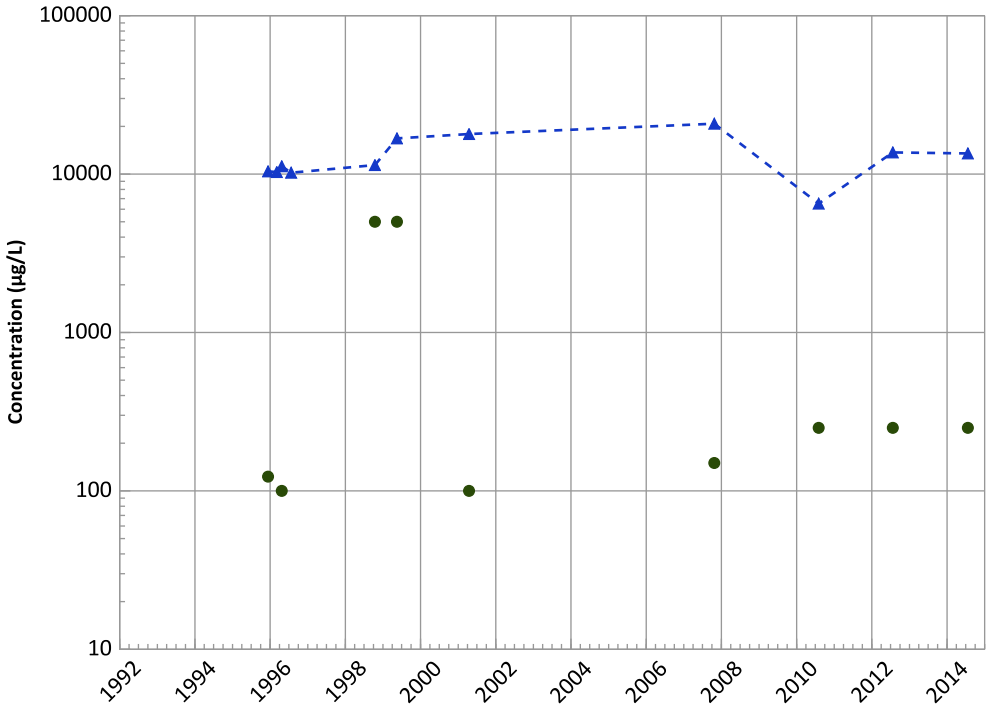
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q01 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

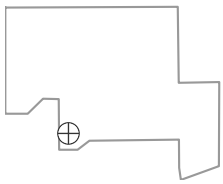
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

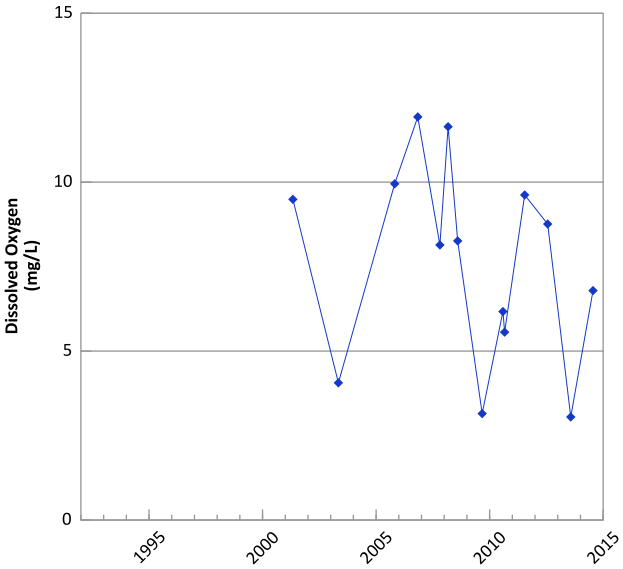
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/22/2014
Analysis Date: 03/19/2015

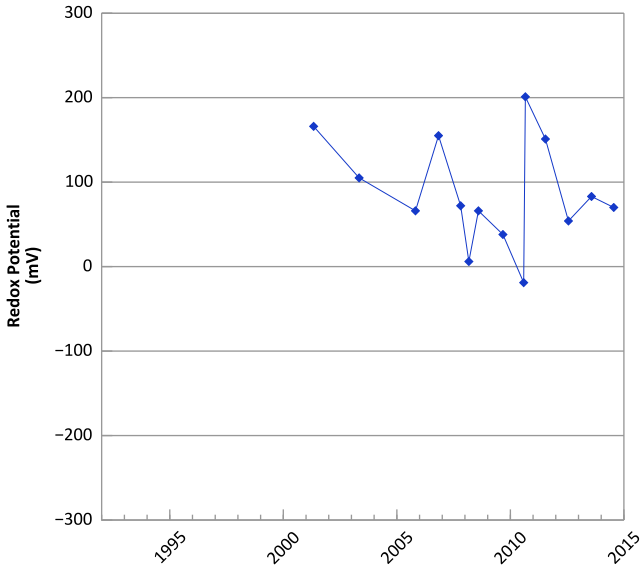
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

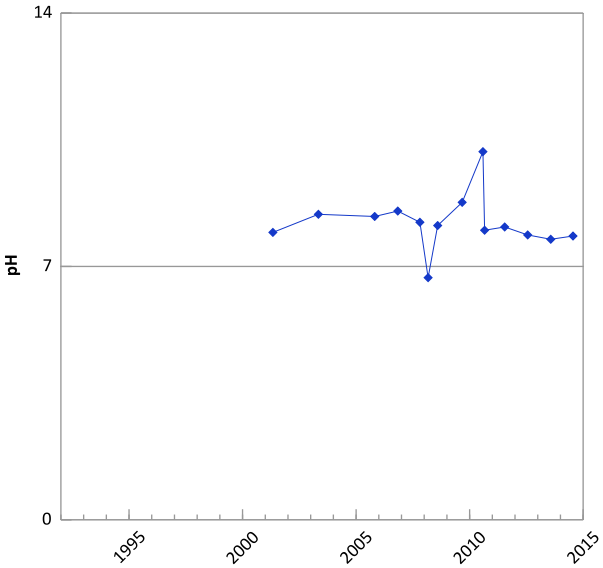
Well Location

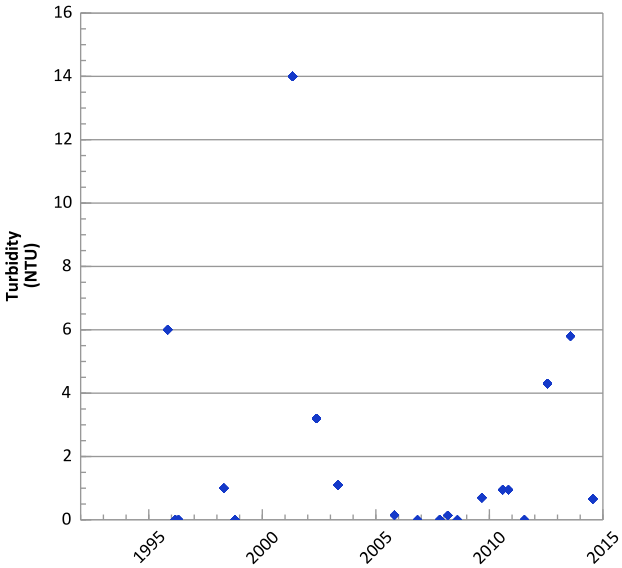


PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



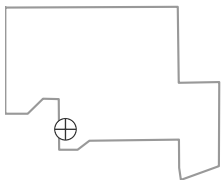






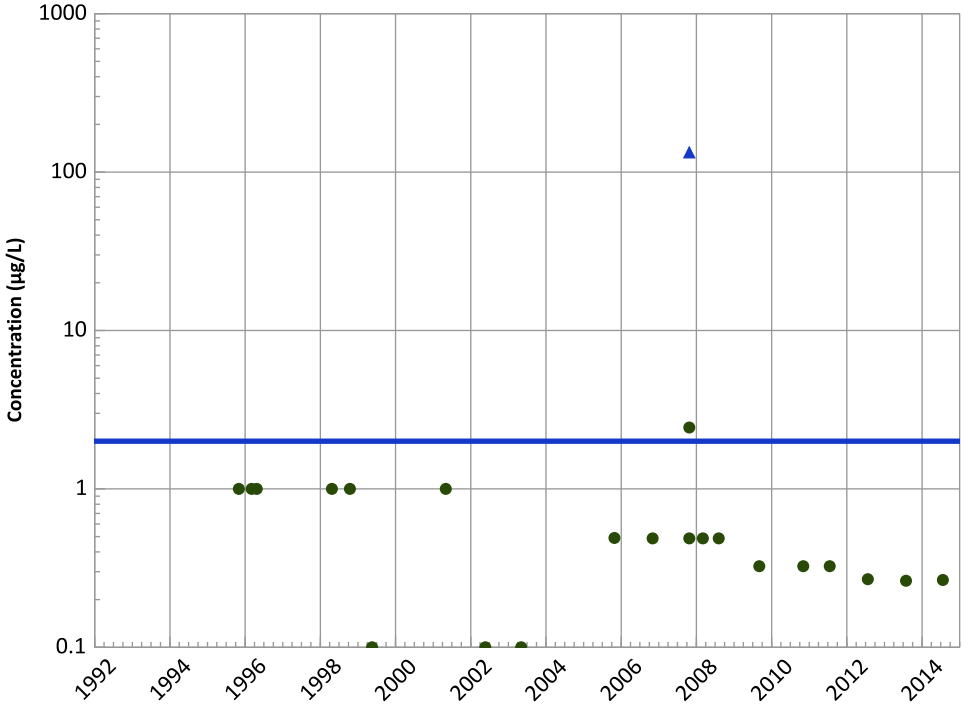
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

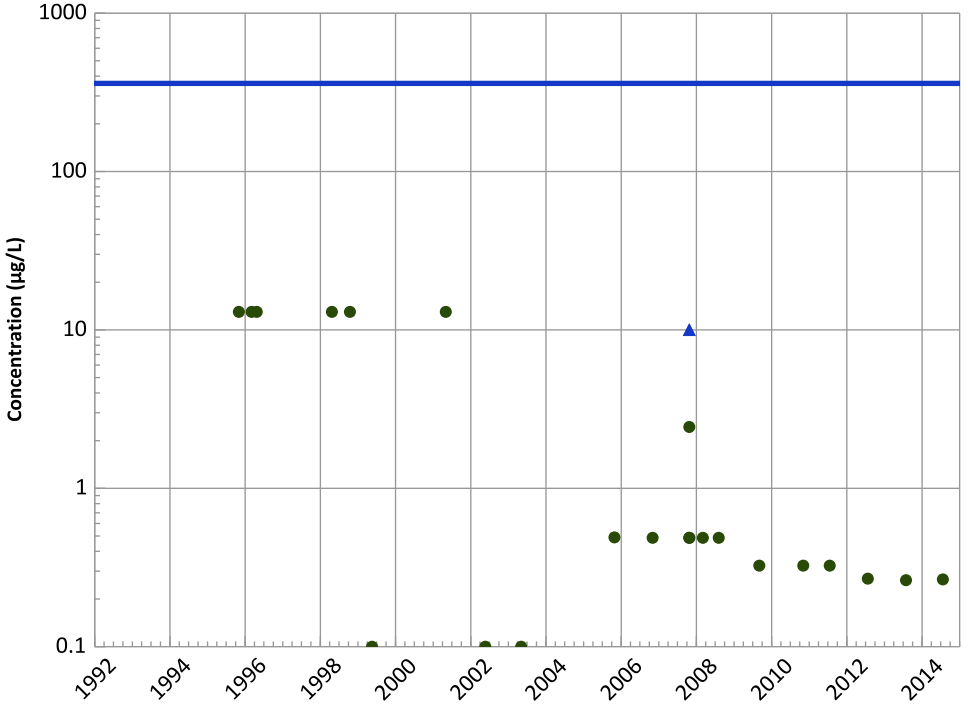


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

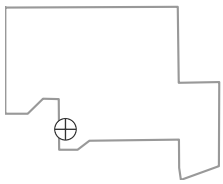
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

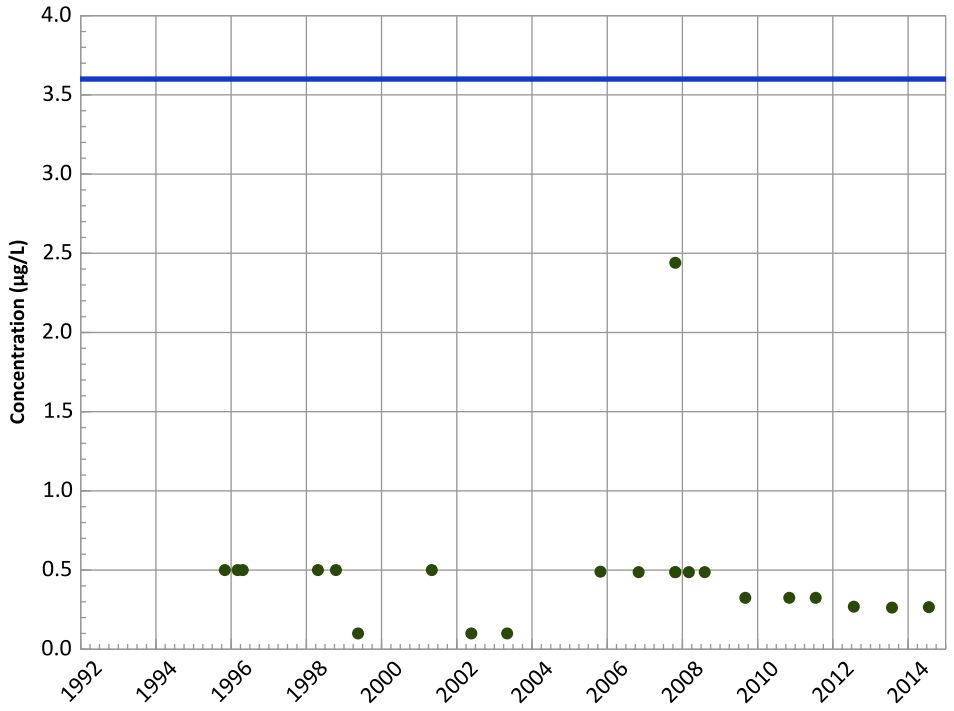
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

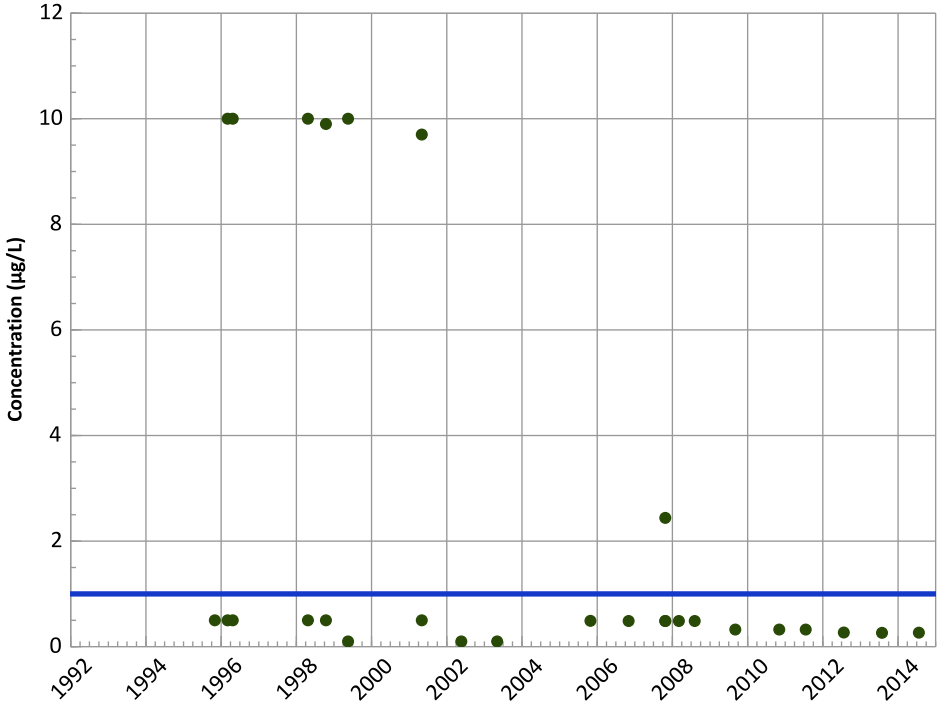


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

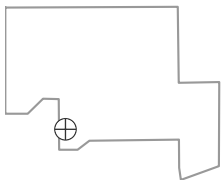
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

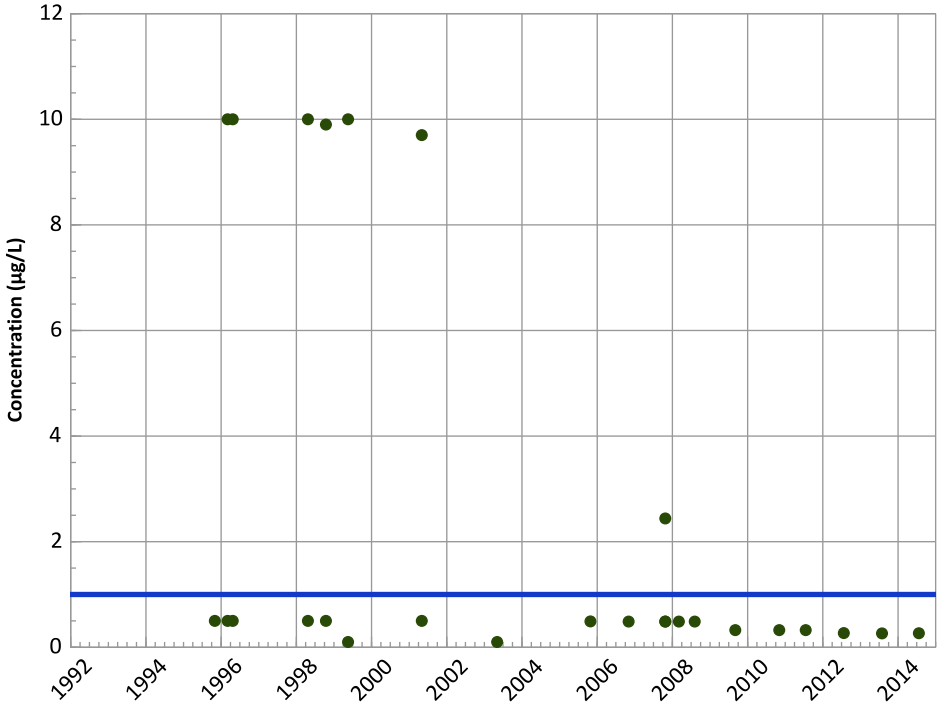
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

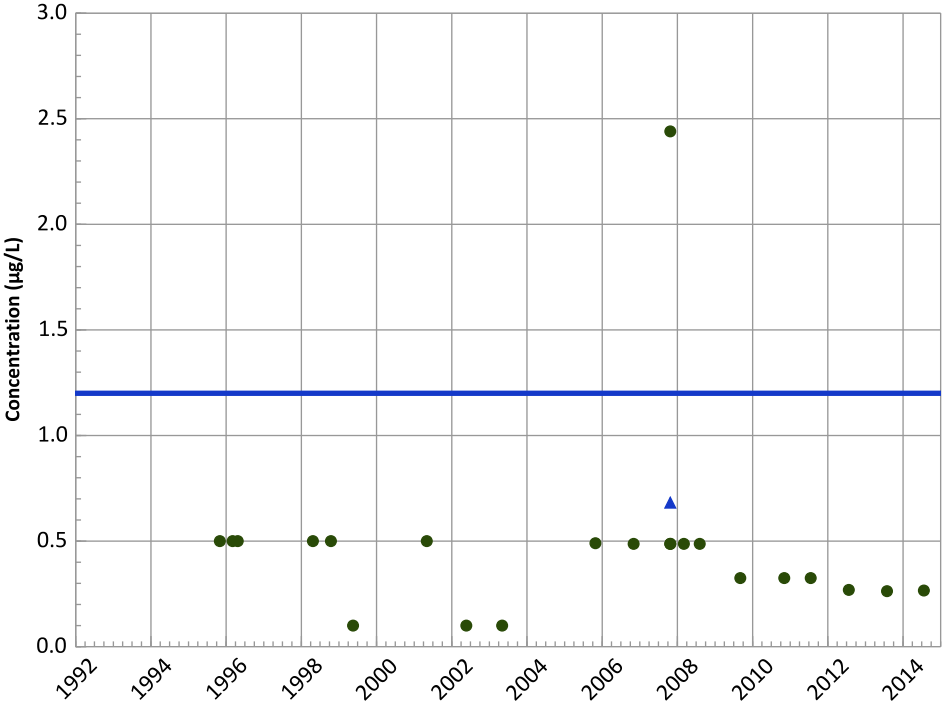


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

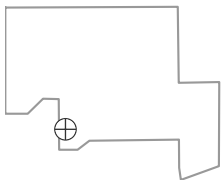
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

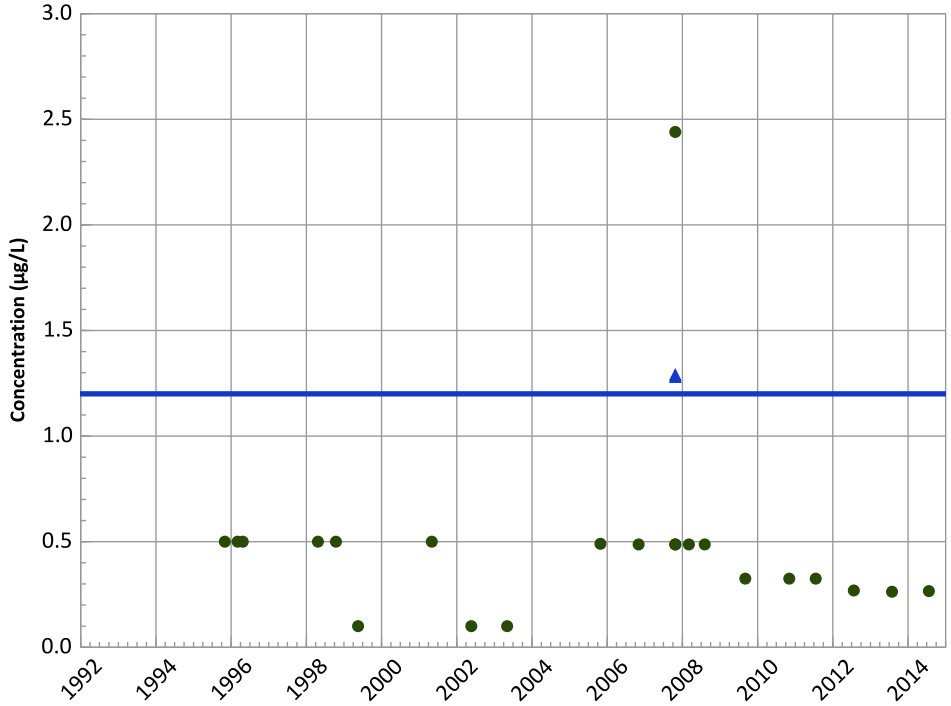
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

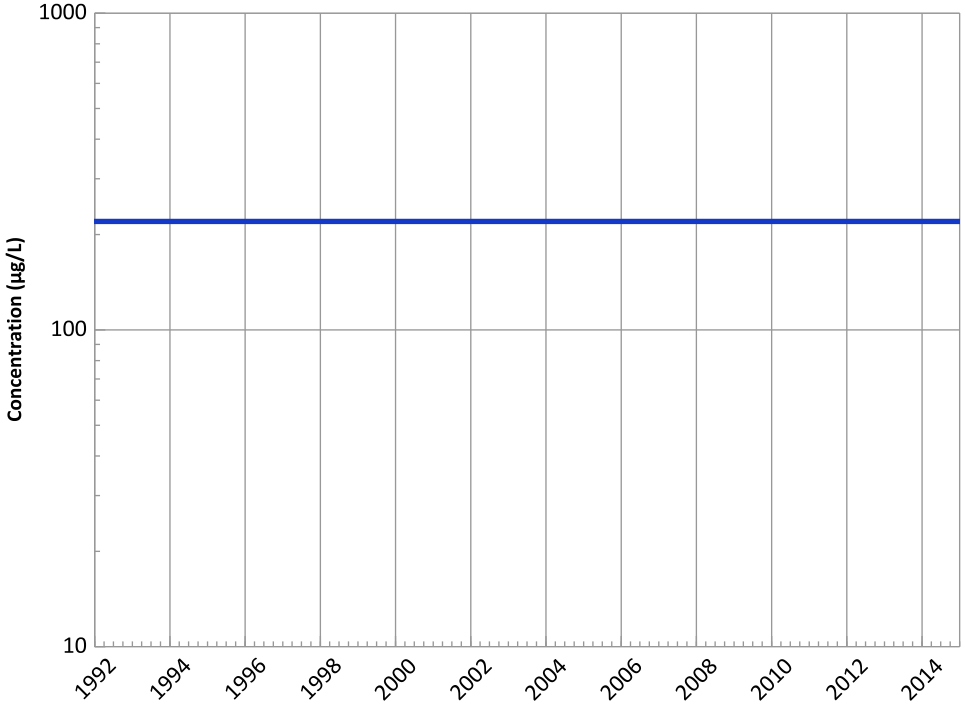


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

1,3,5-Trinitrobenzene Trend



Concentration Trend

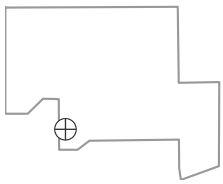
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

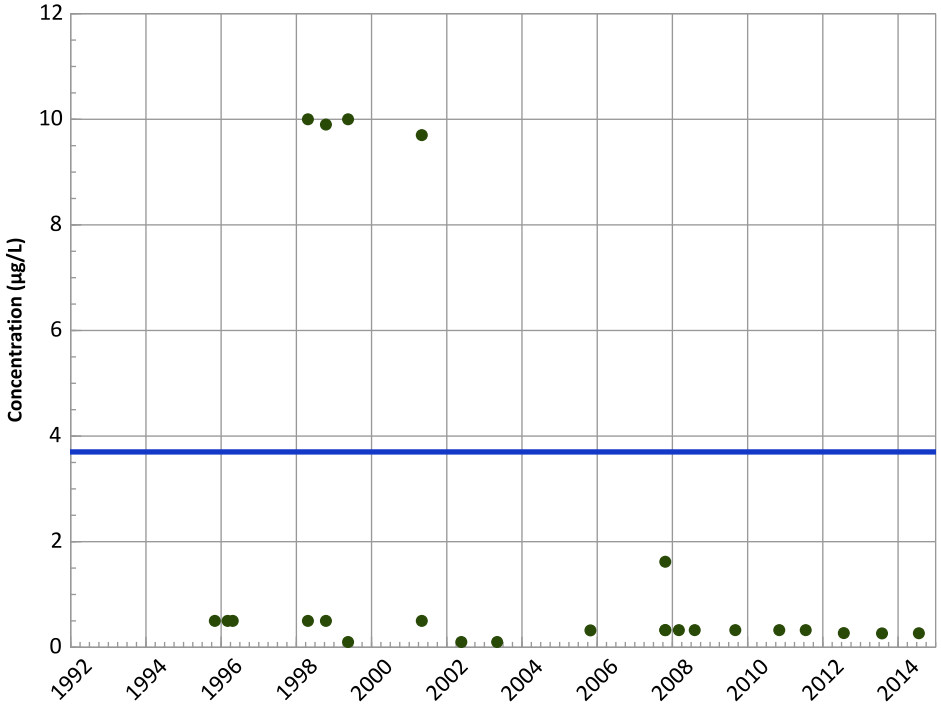
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

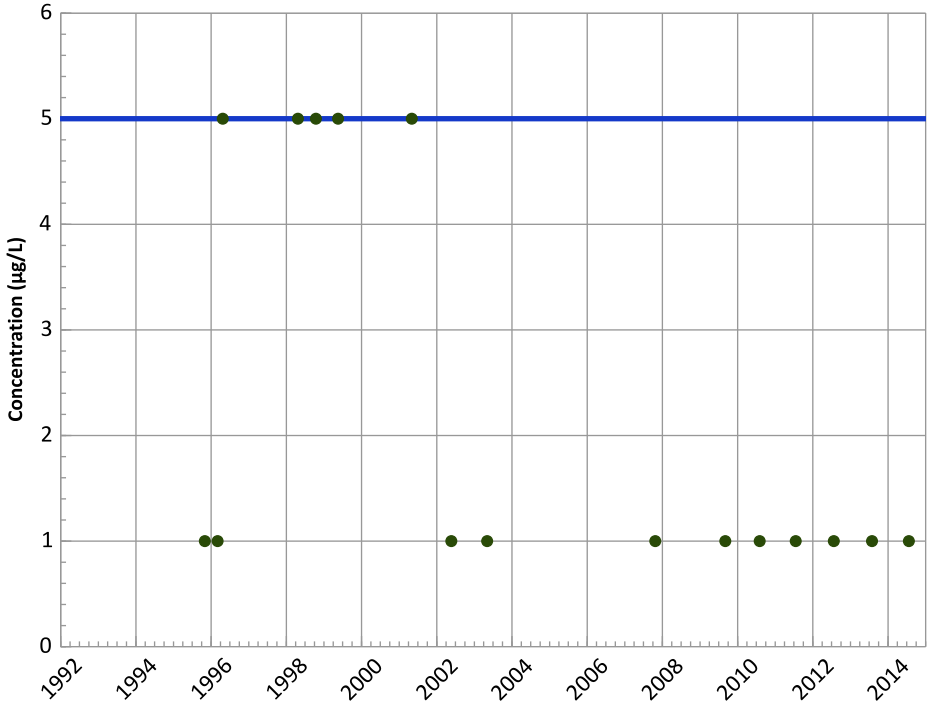


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

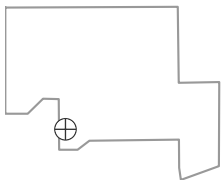
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

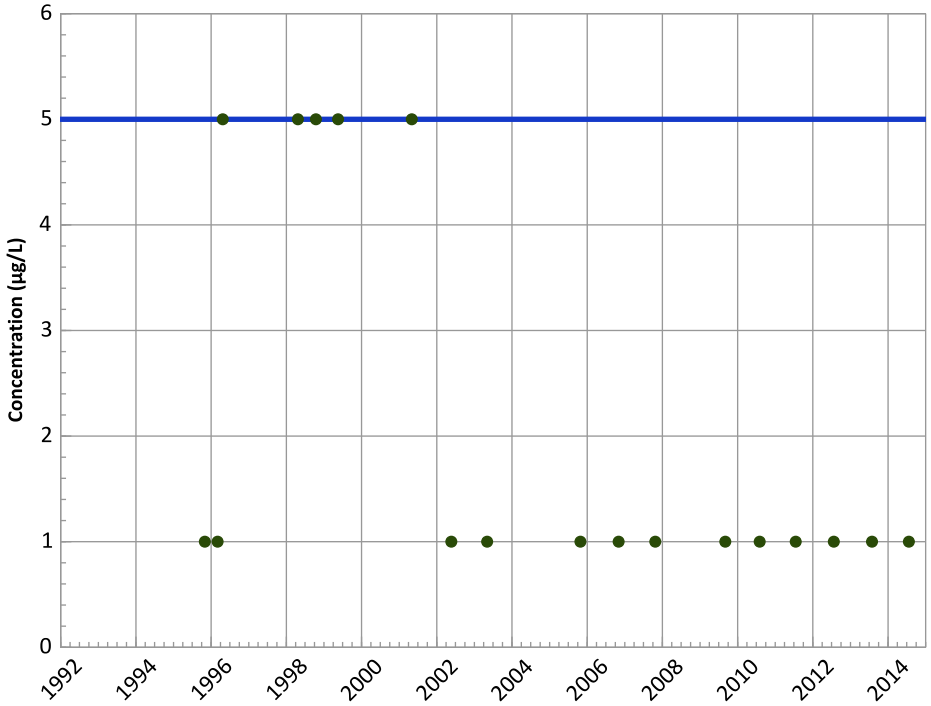
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

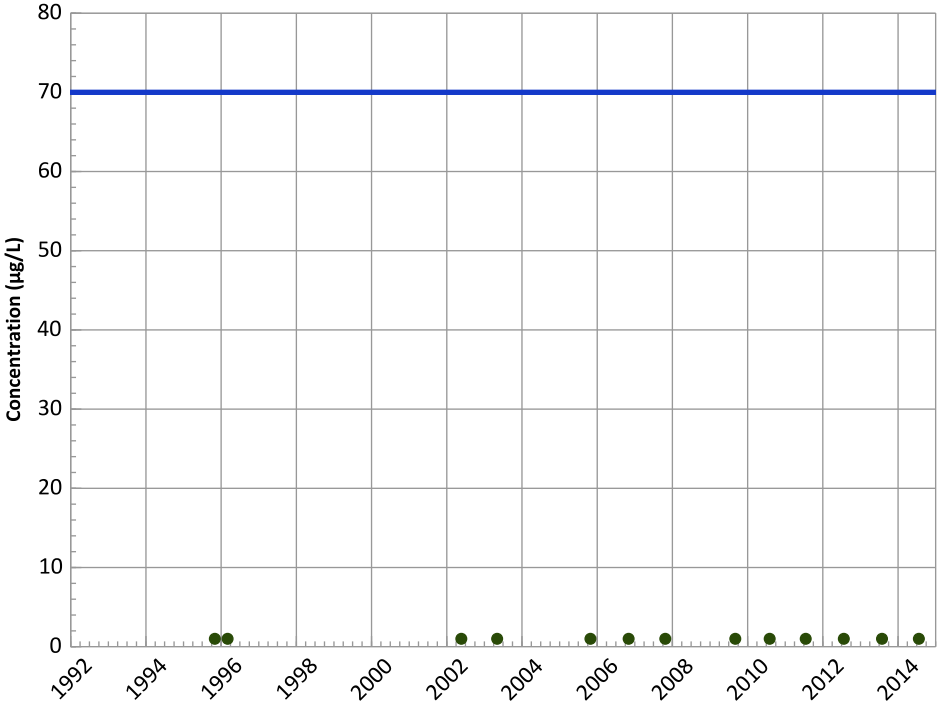


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

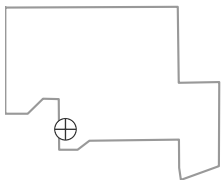
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

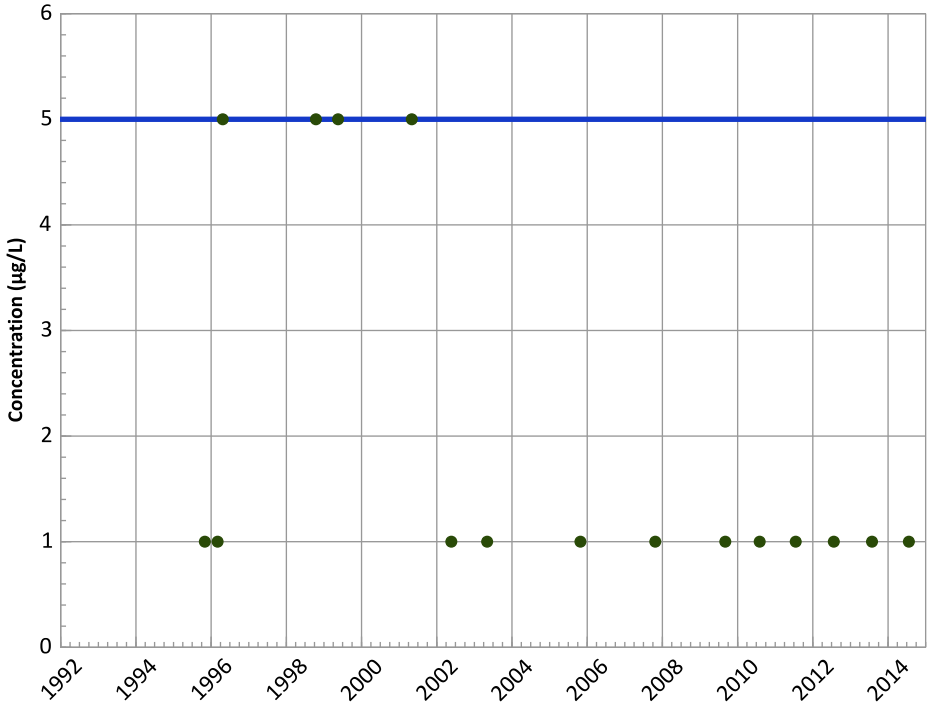
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

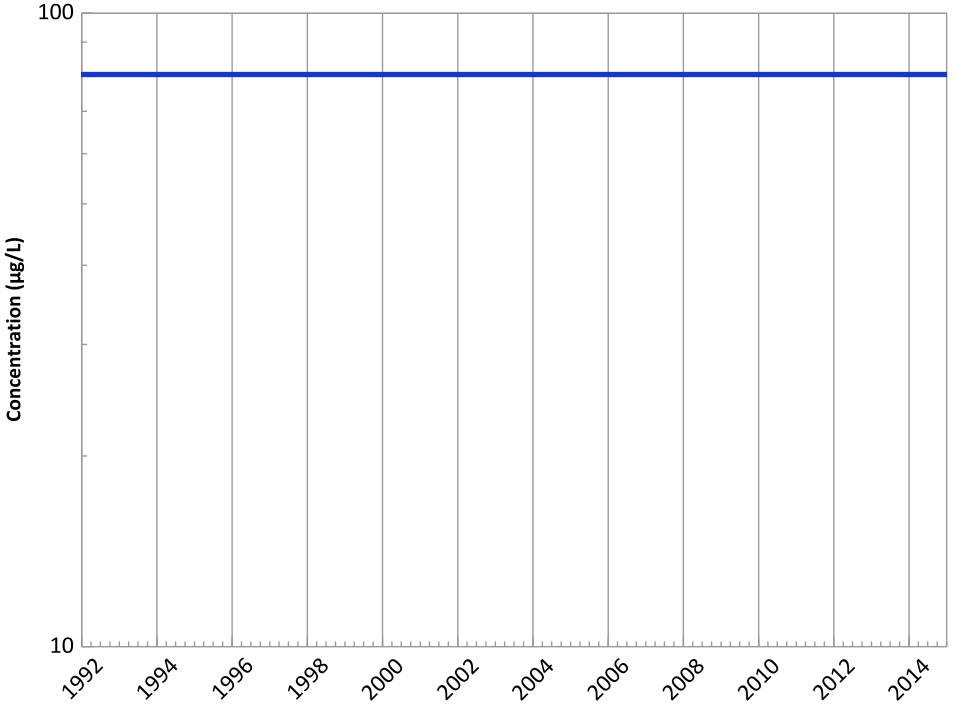


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

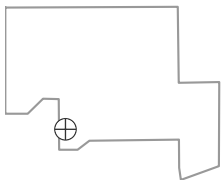
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

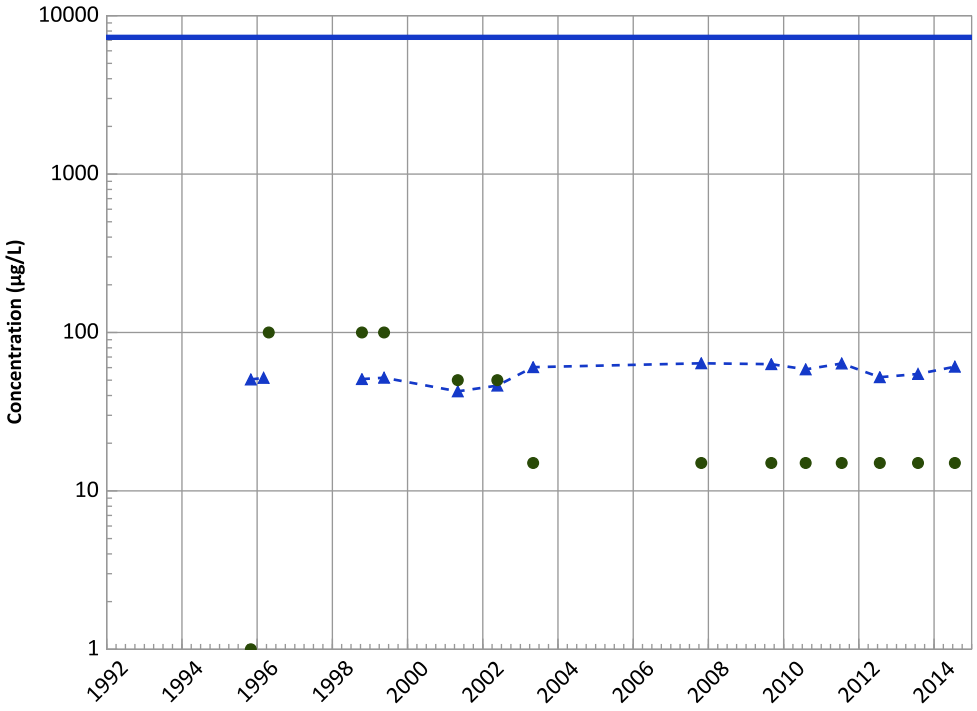
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

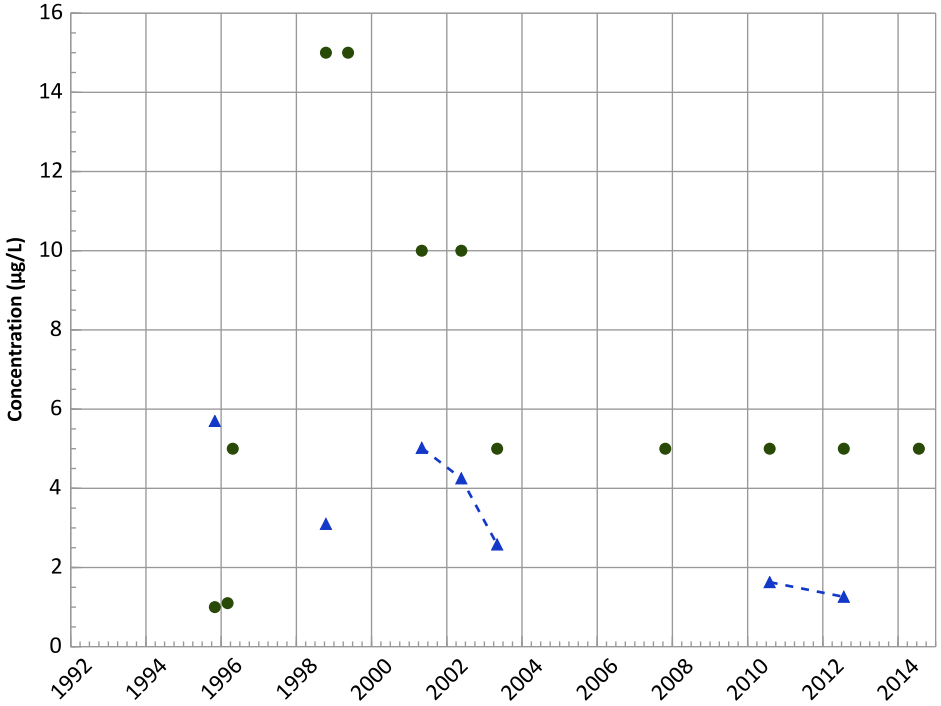


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Manganese Trend



Concentration Trend

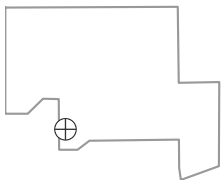
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

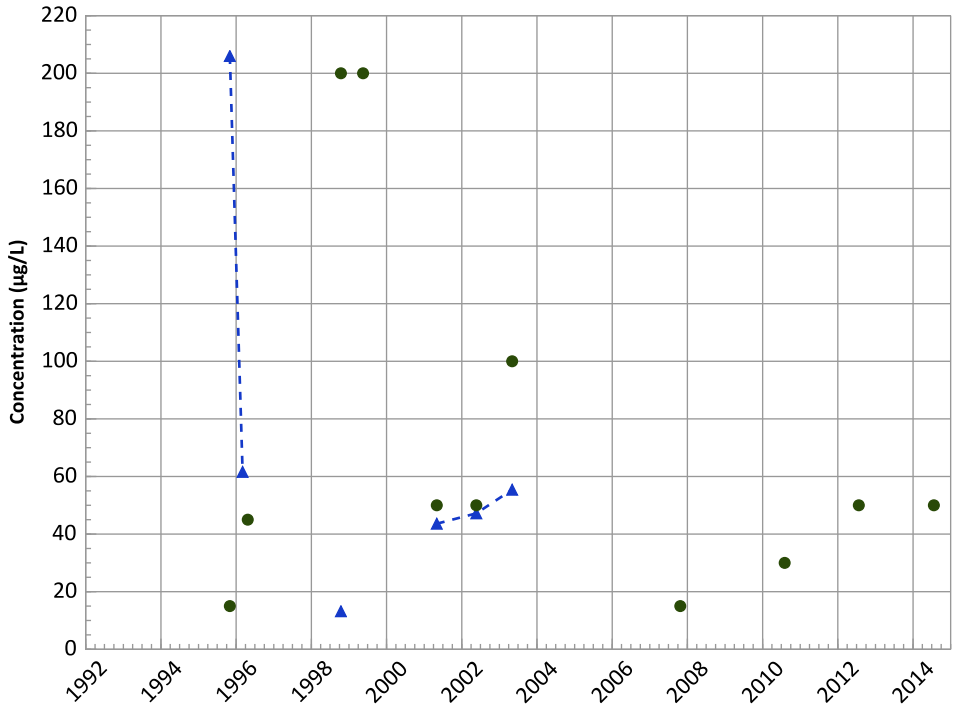
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

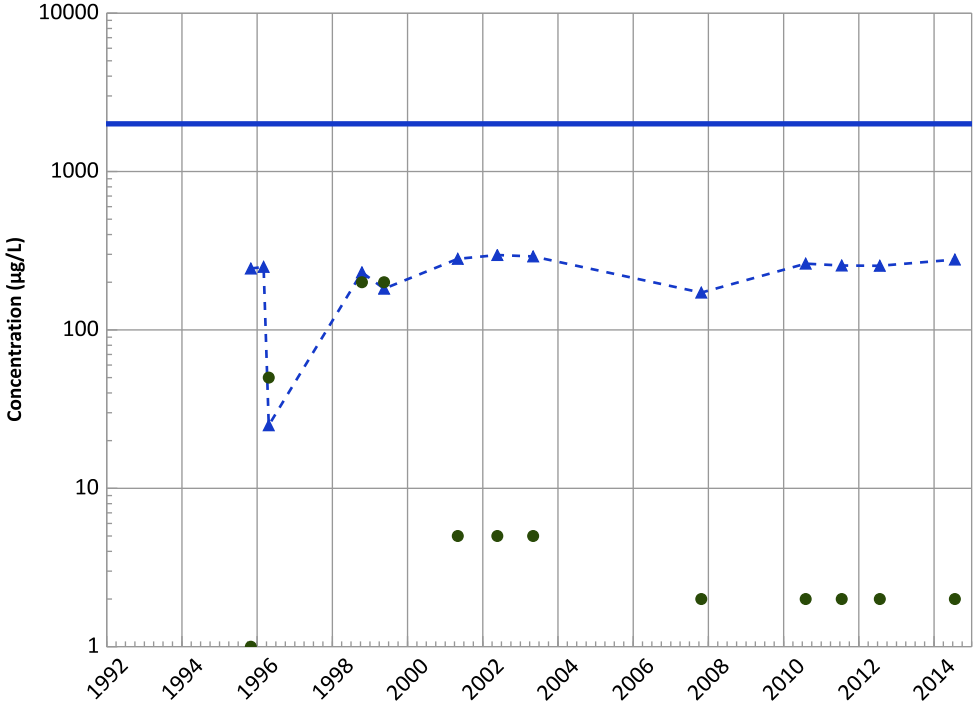


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

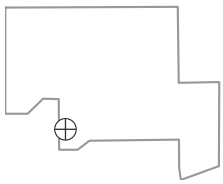
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

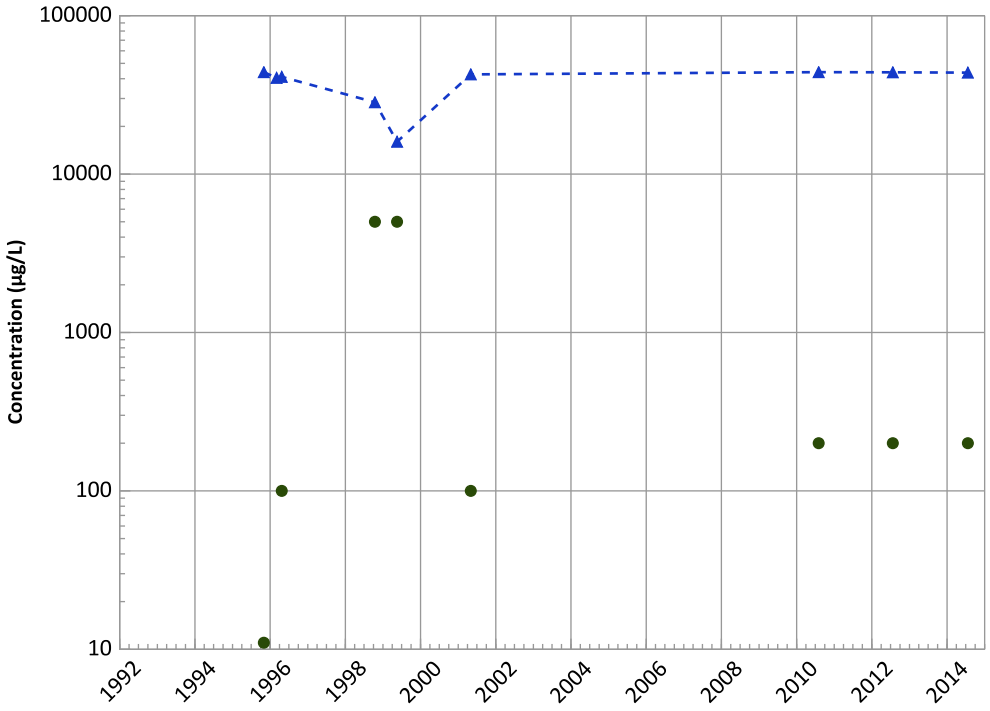
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

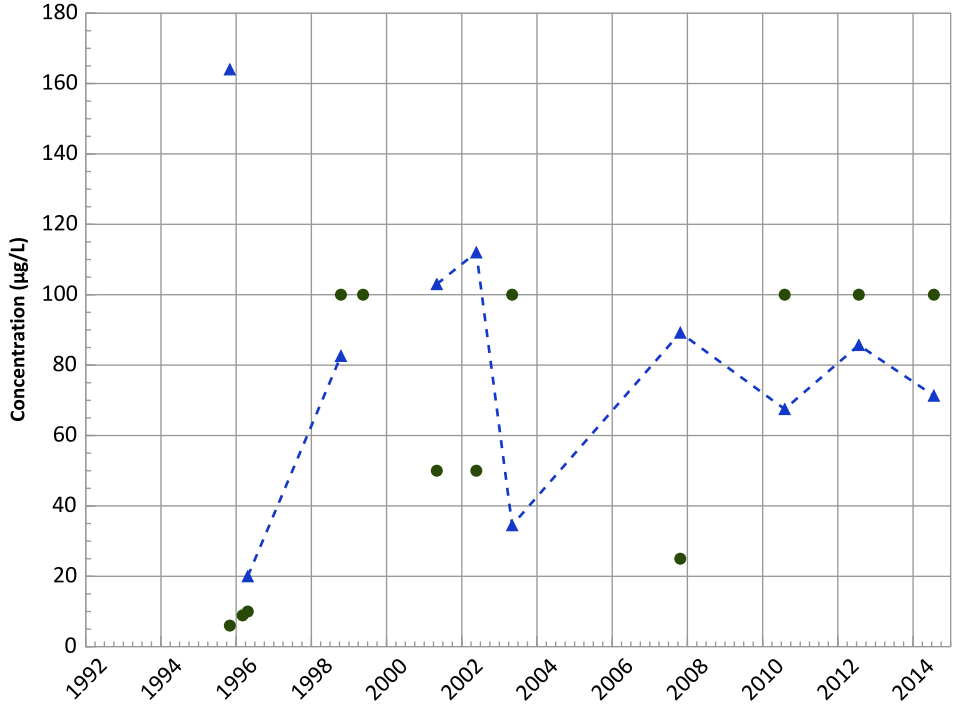


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

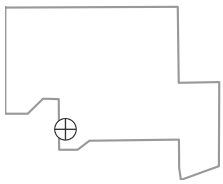
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

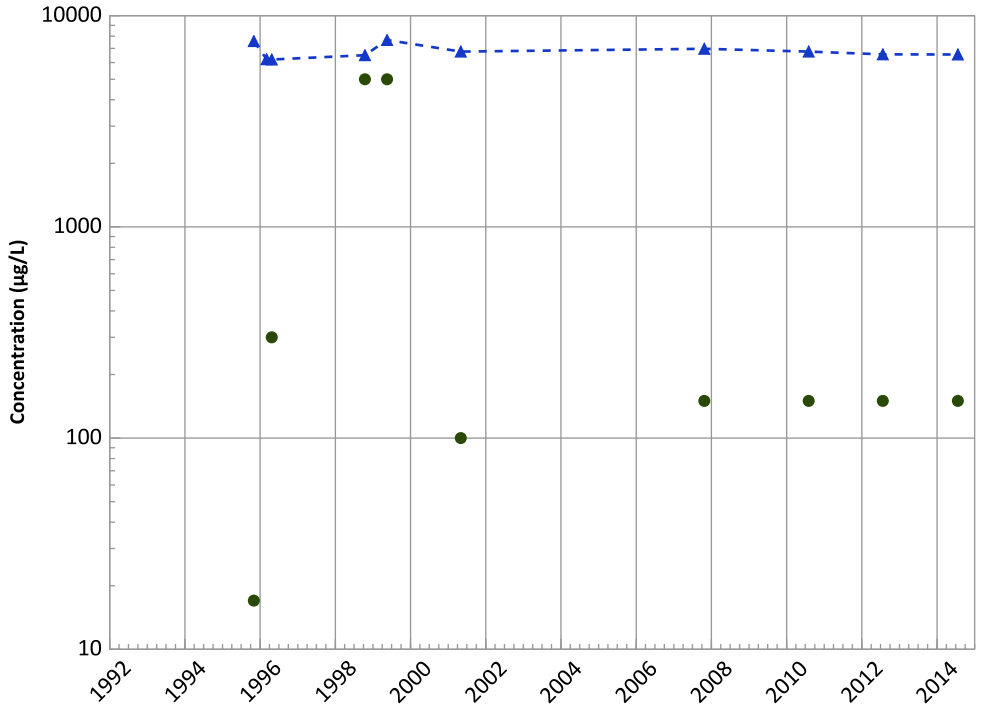
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

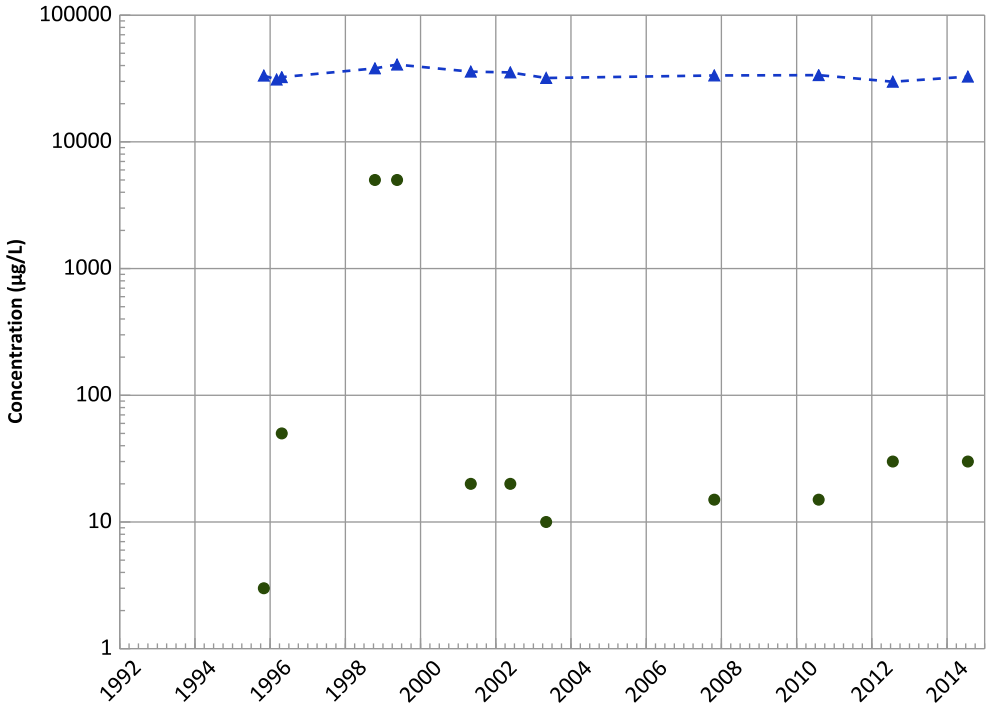


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

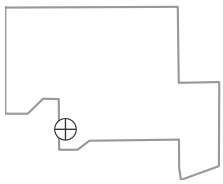
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

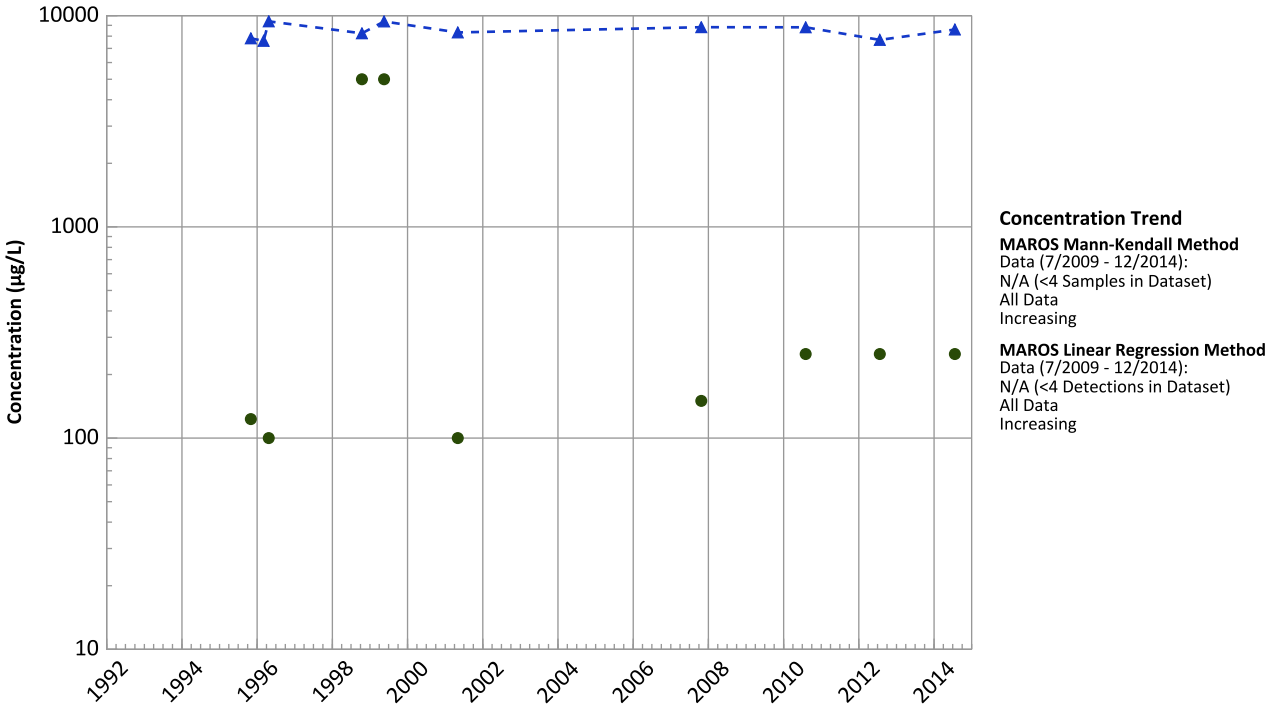
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q02 in Perched Aquifer
USDOE/NNSA Pantex Plant

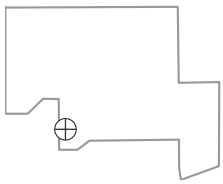
Sodium Trend



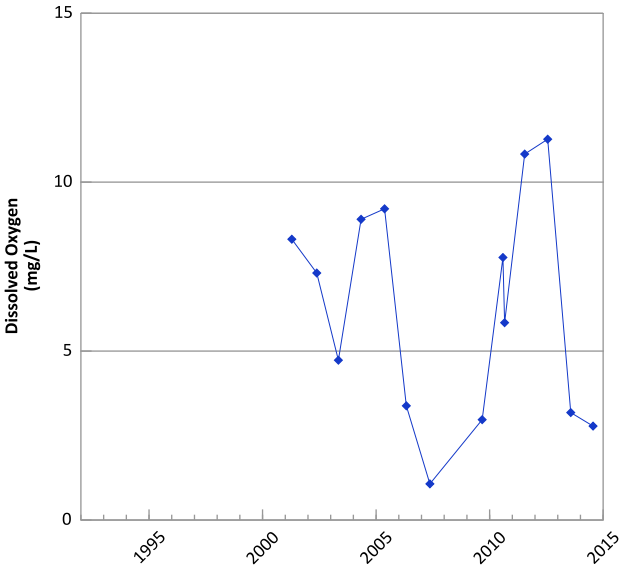
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/01/1995 to 07/22/2014
Analysis Date: 03/19/2015

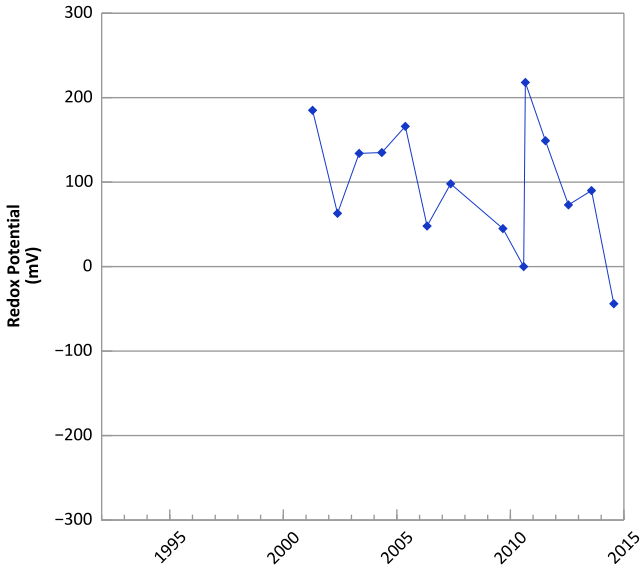
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

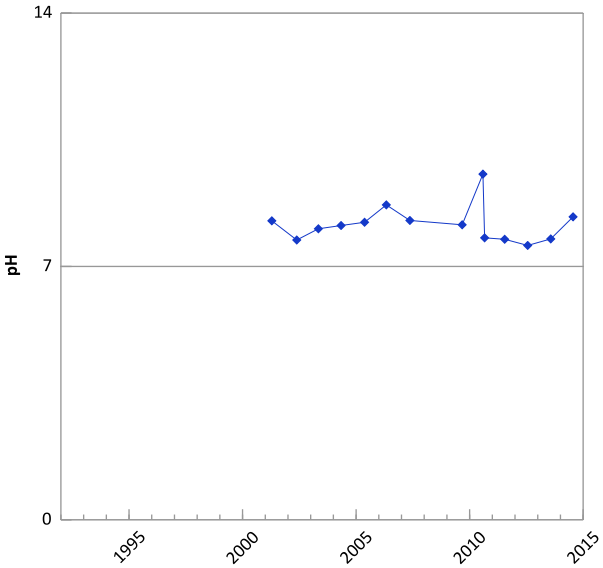
Well Location

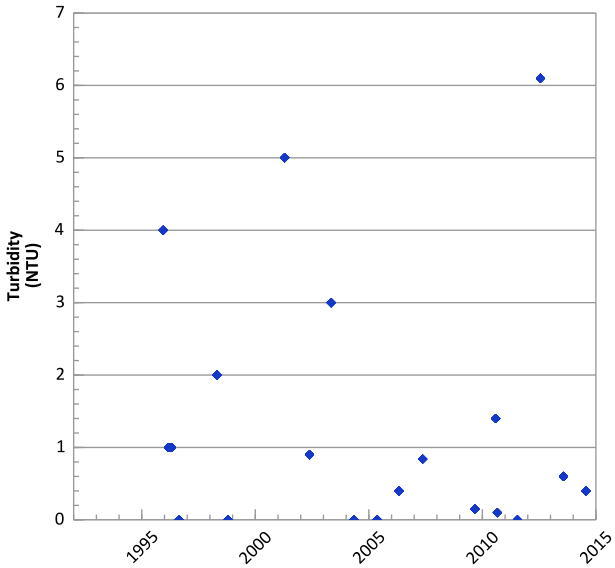


PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



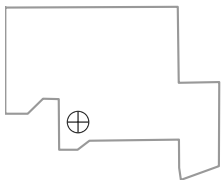






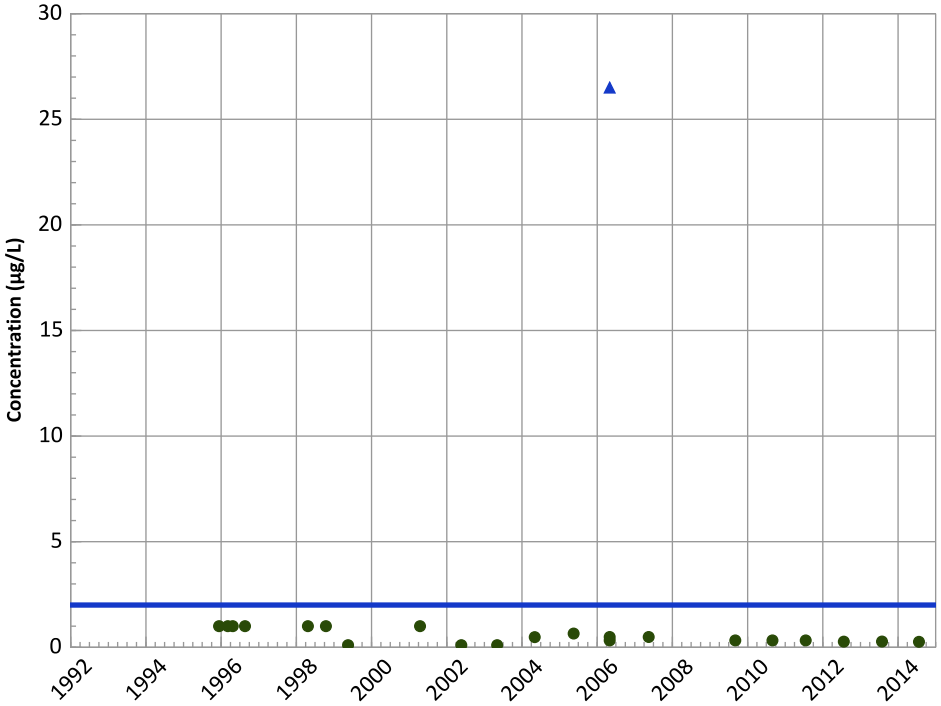
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

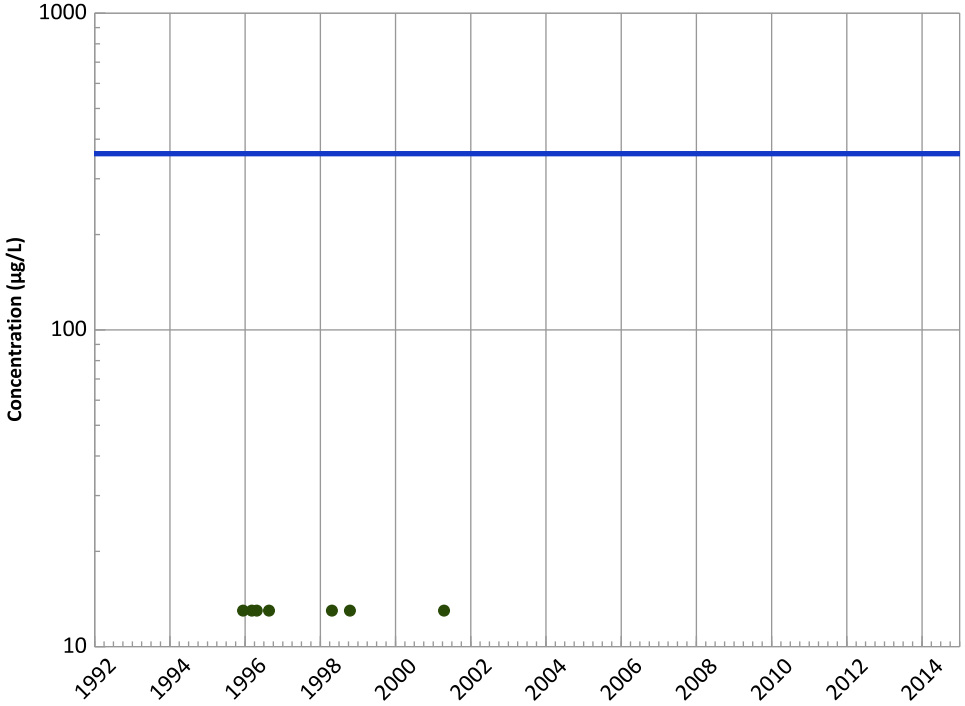


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

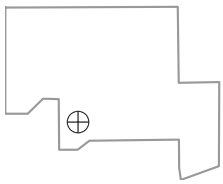
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

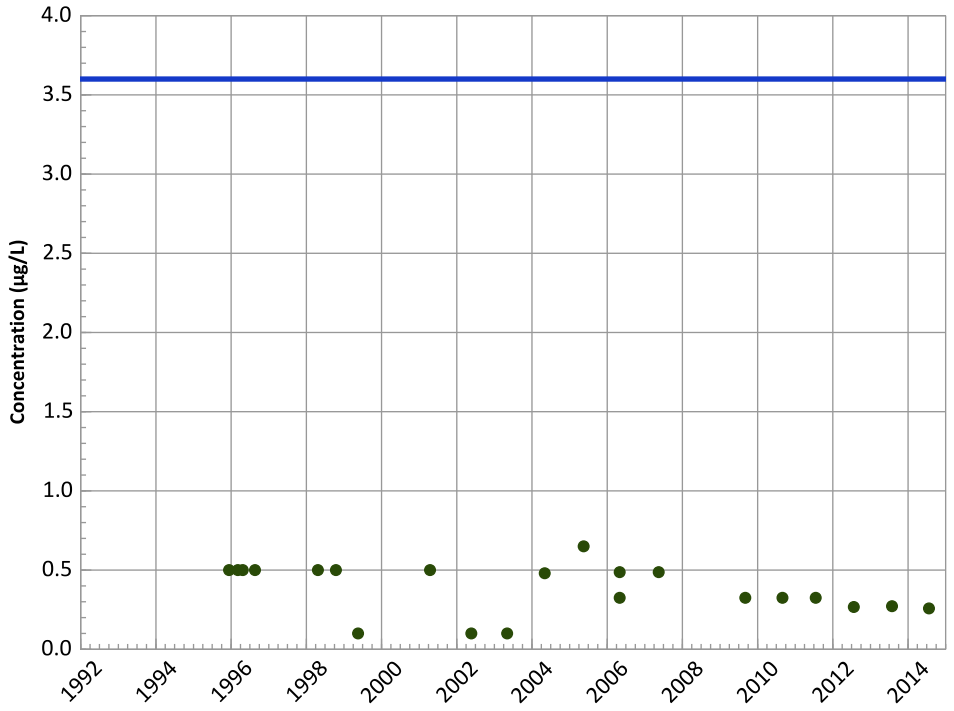
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

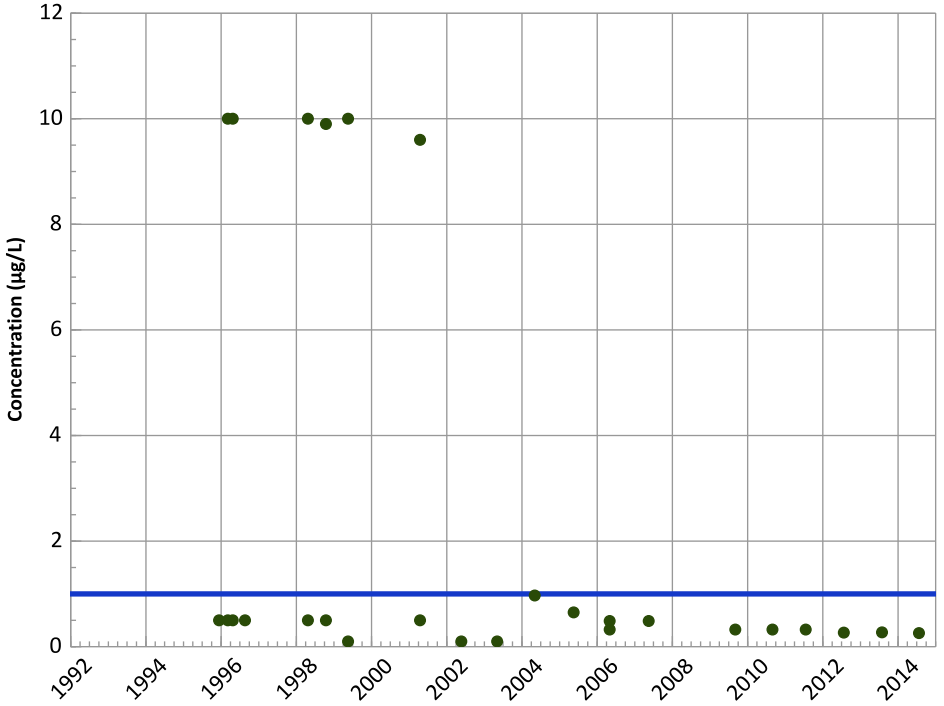


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

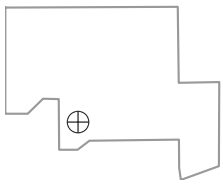
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

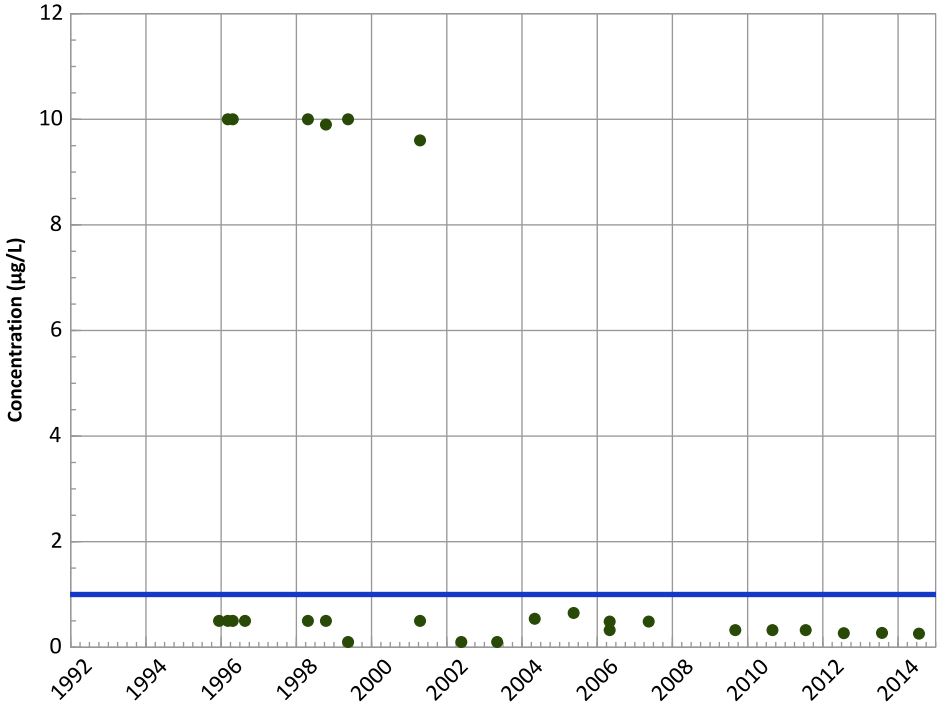
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

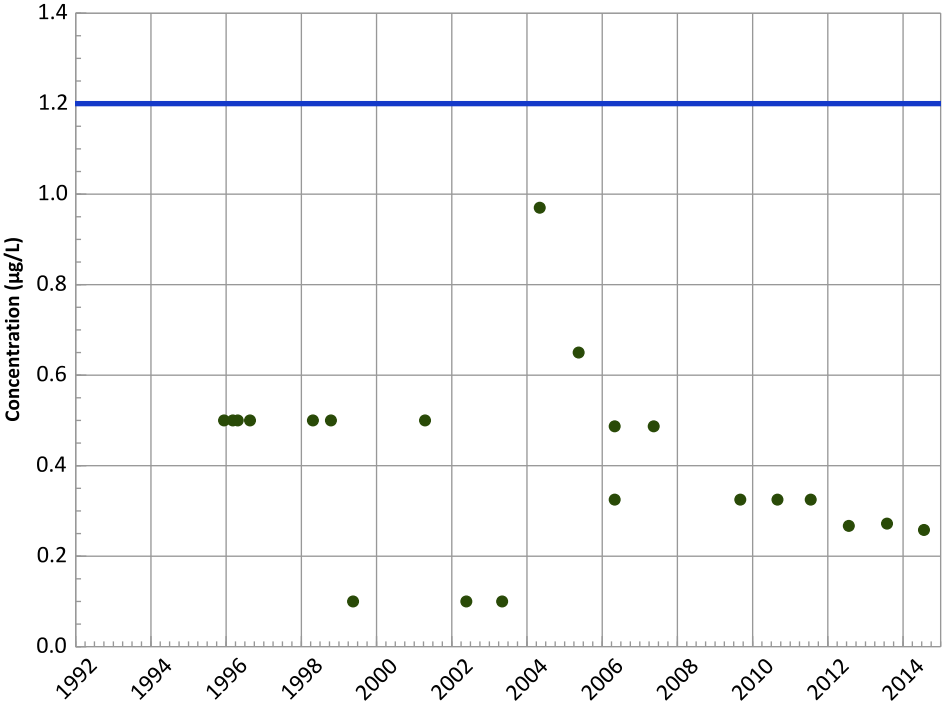


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

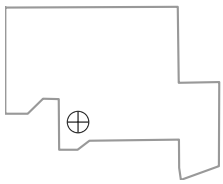
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

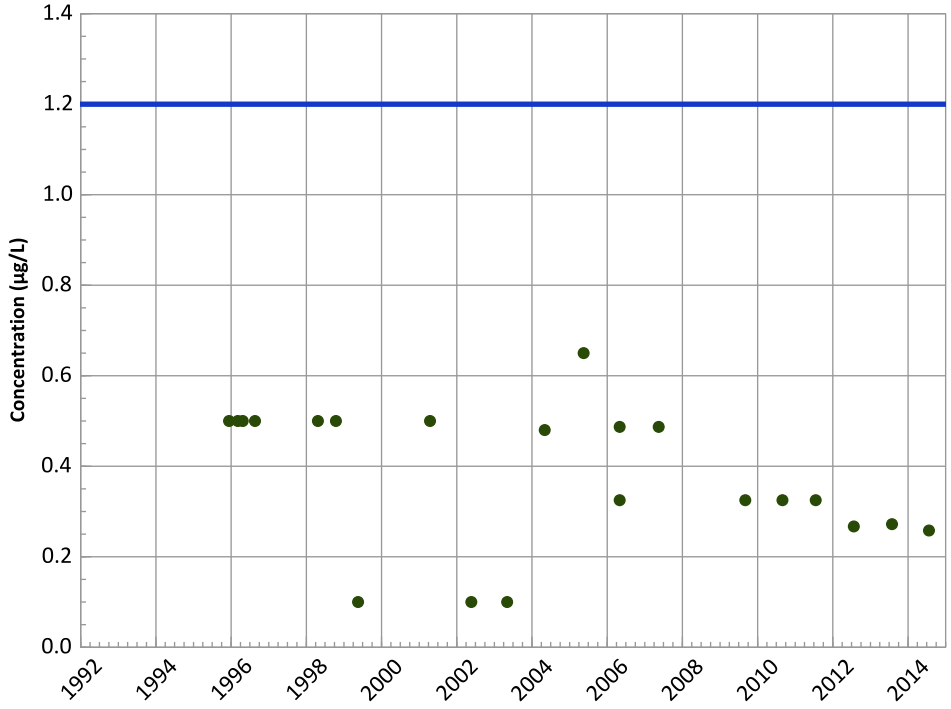
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

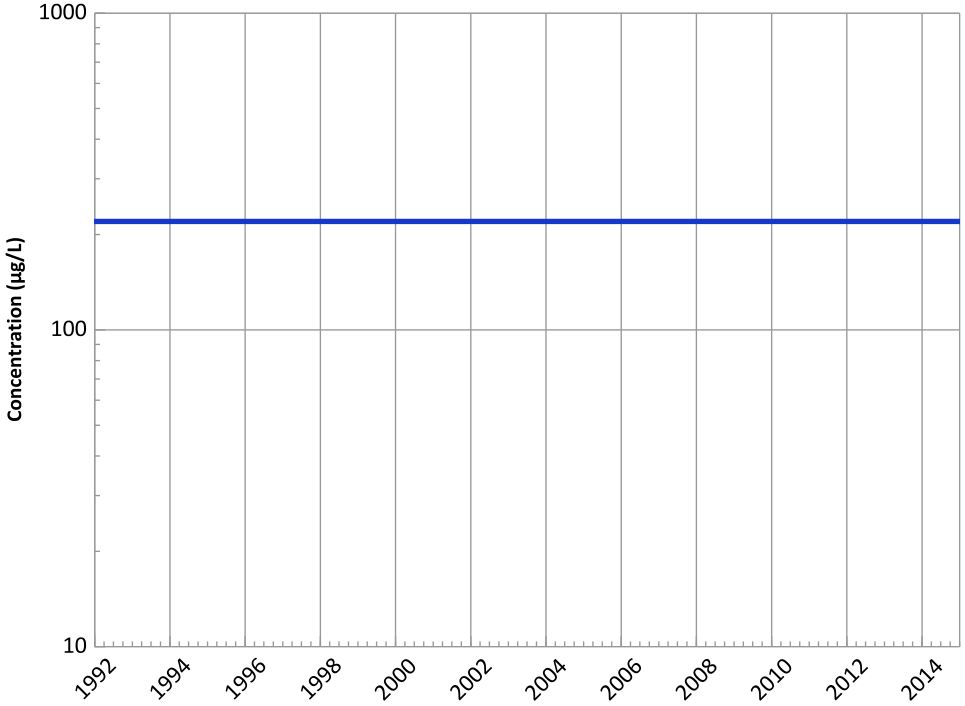


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

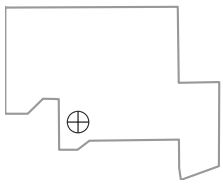
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

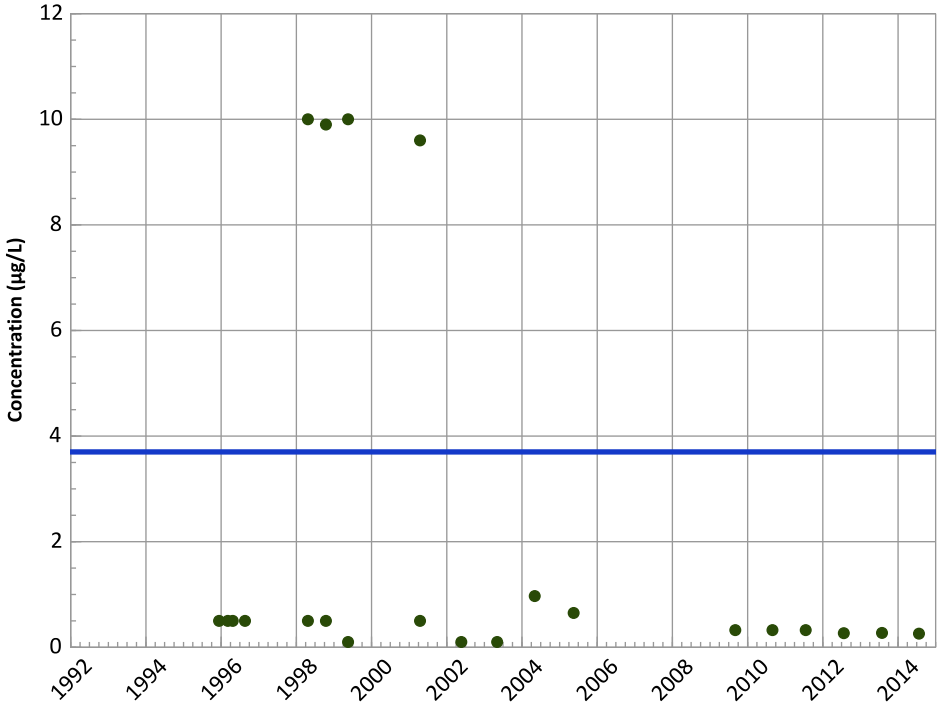
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

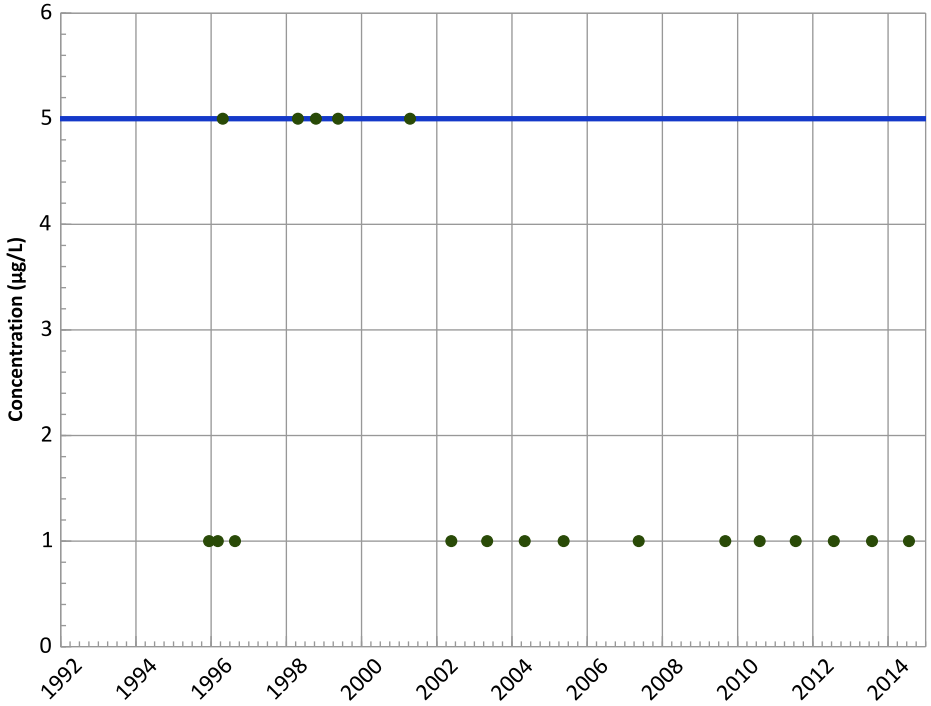


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

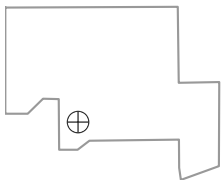
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

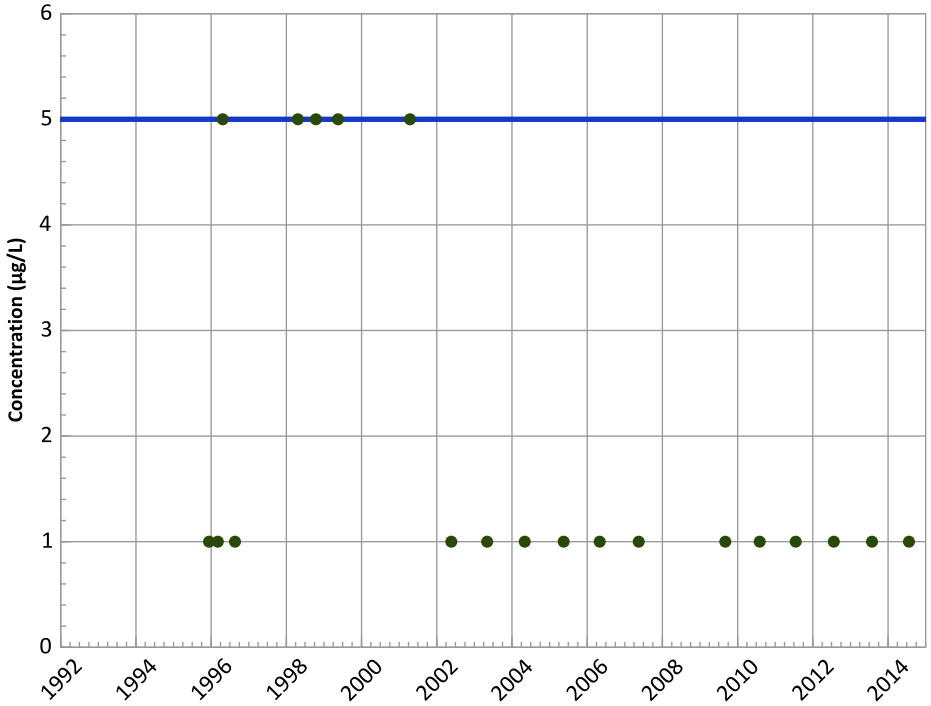
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

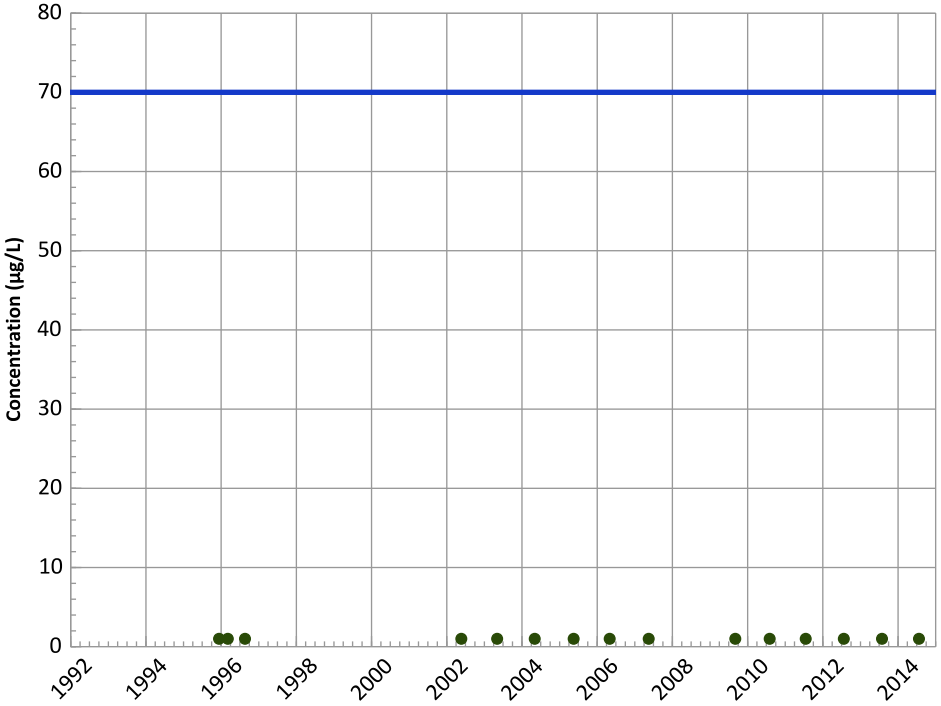


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

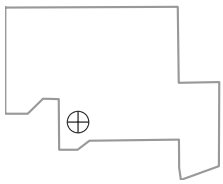
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

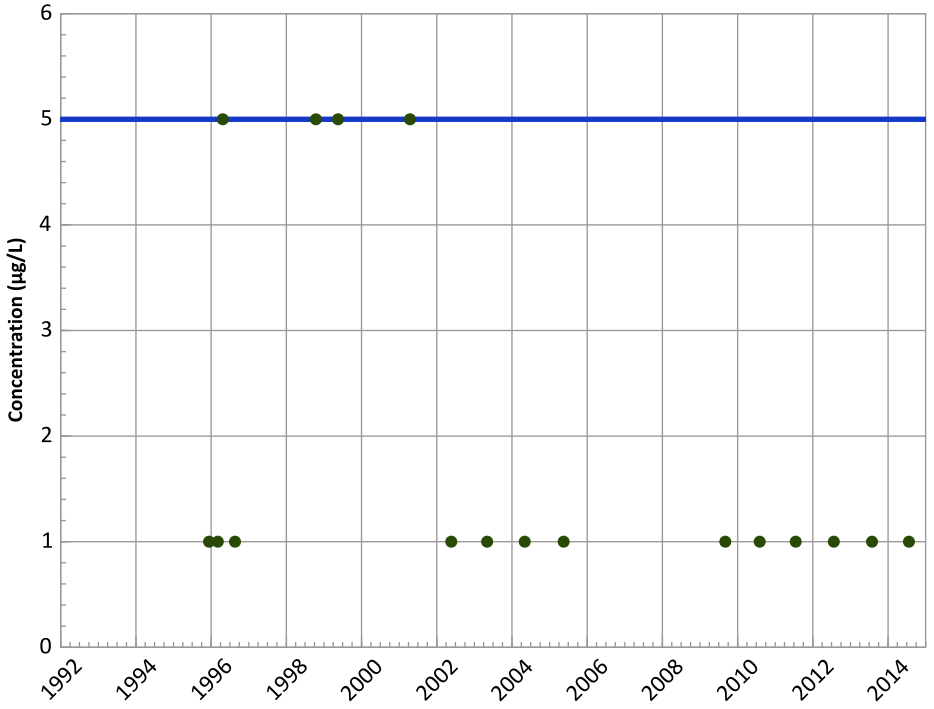
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

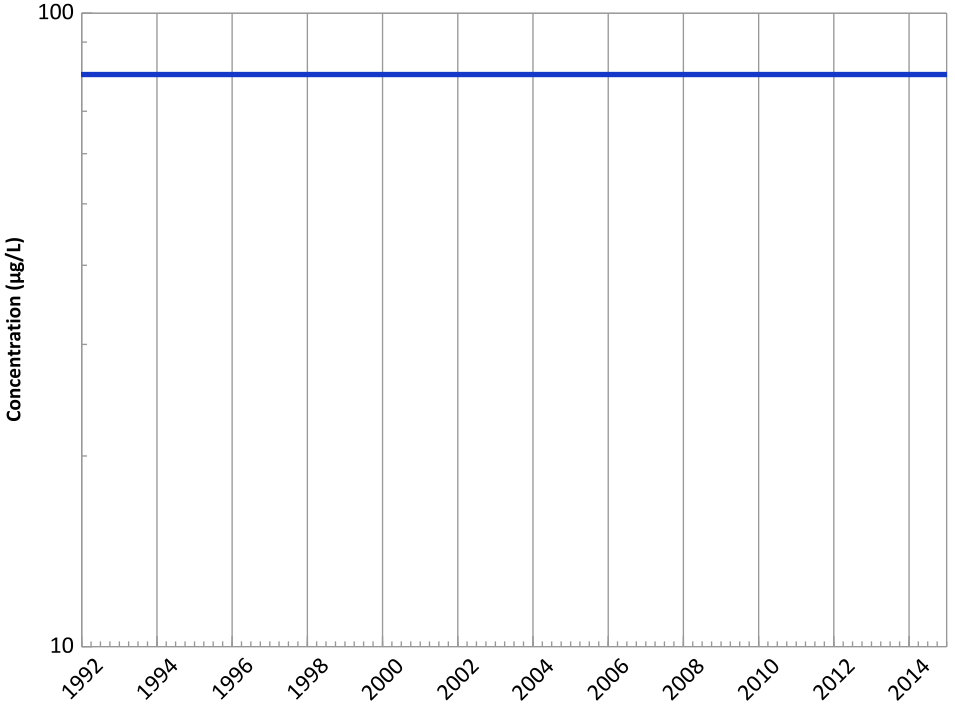


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

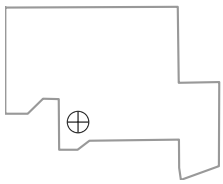
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

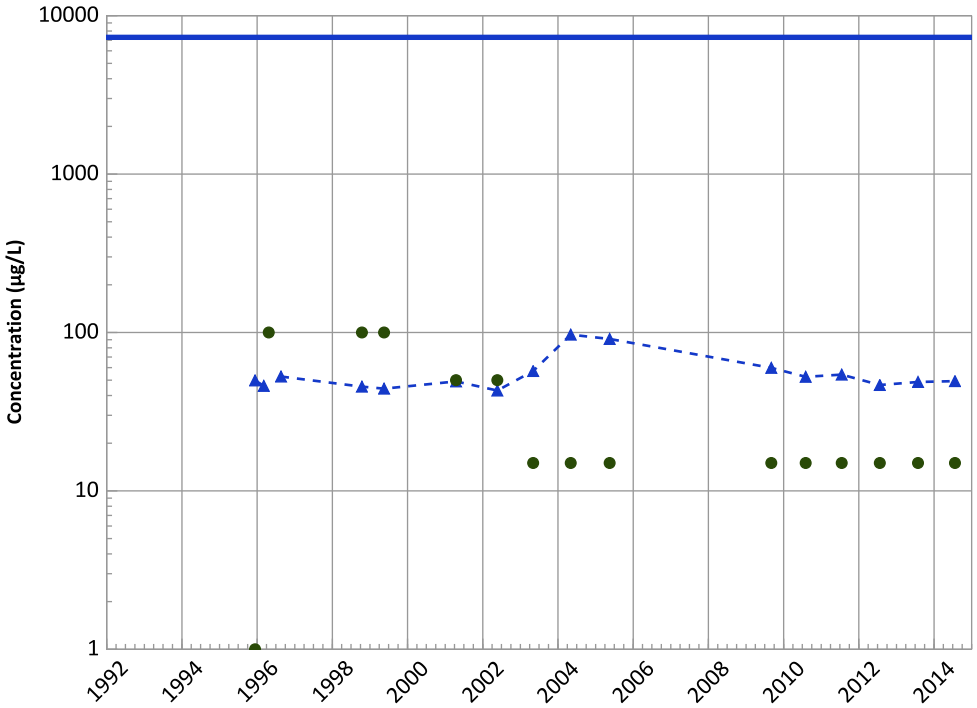
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

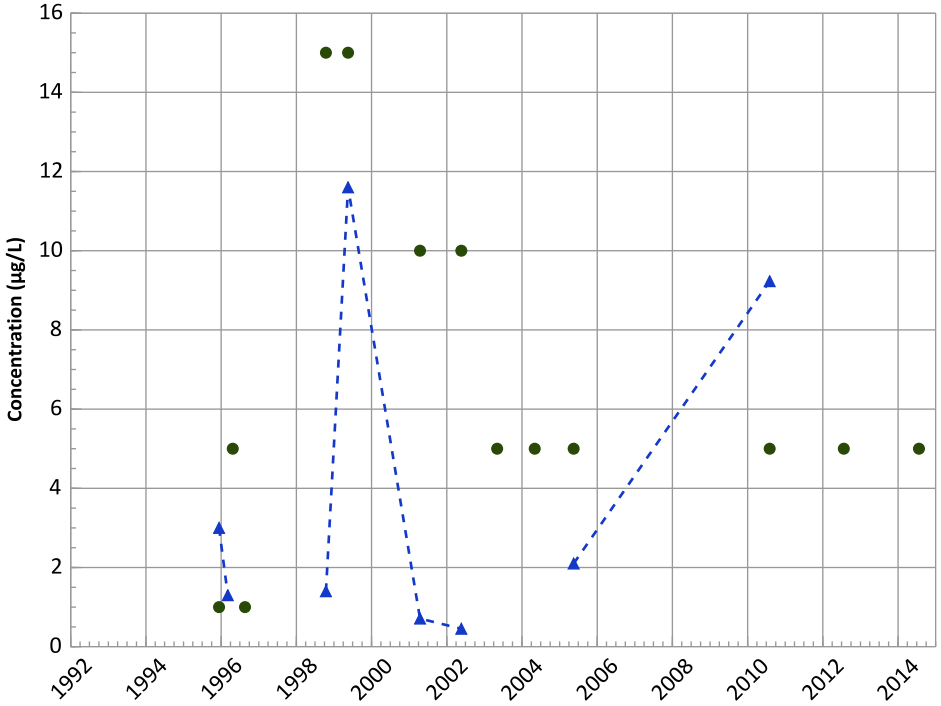


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Manganese Trend



Concentration Trend

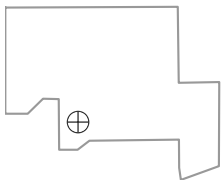
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

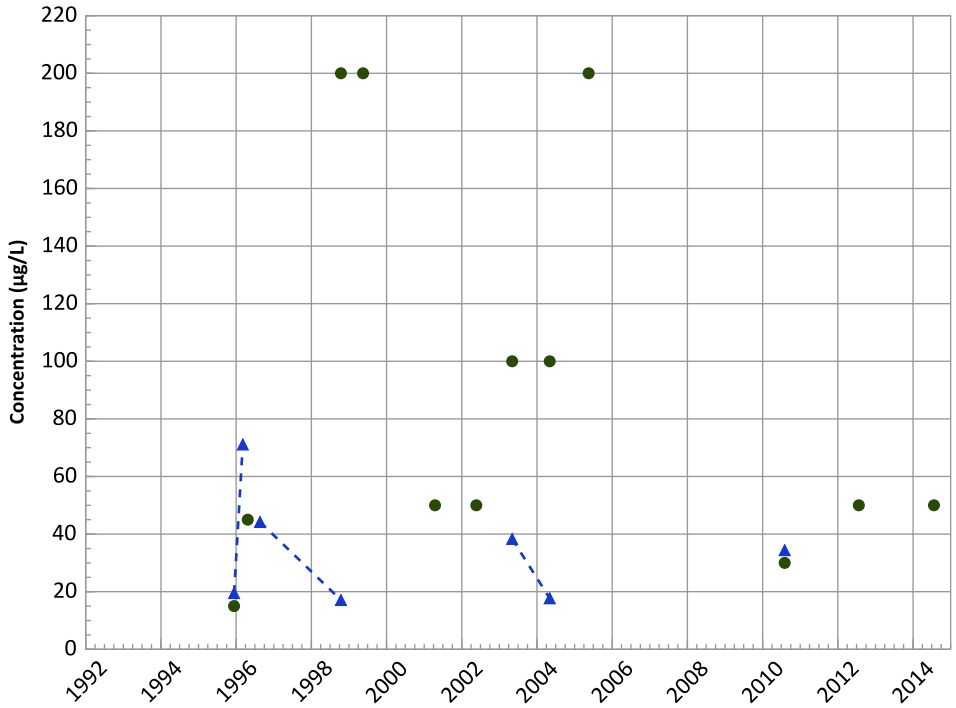
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

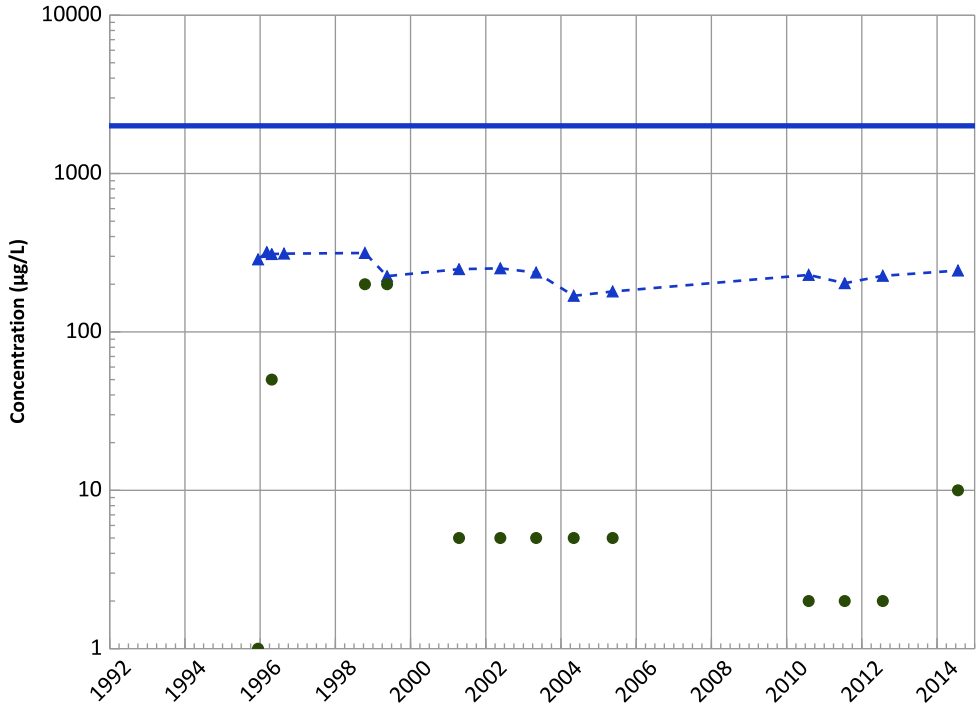


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

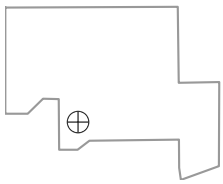
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

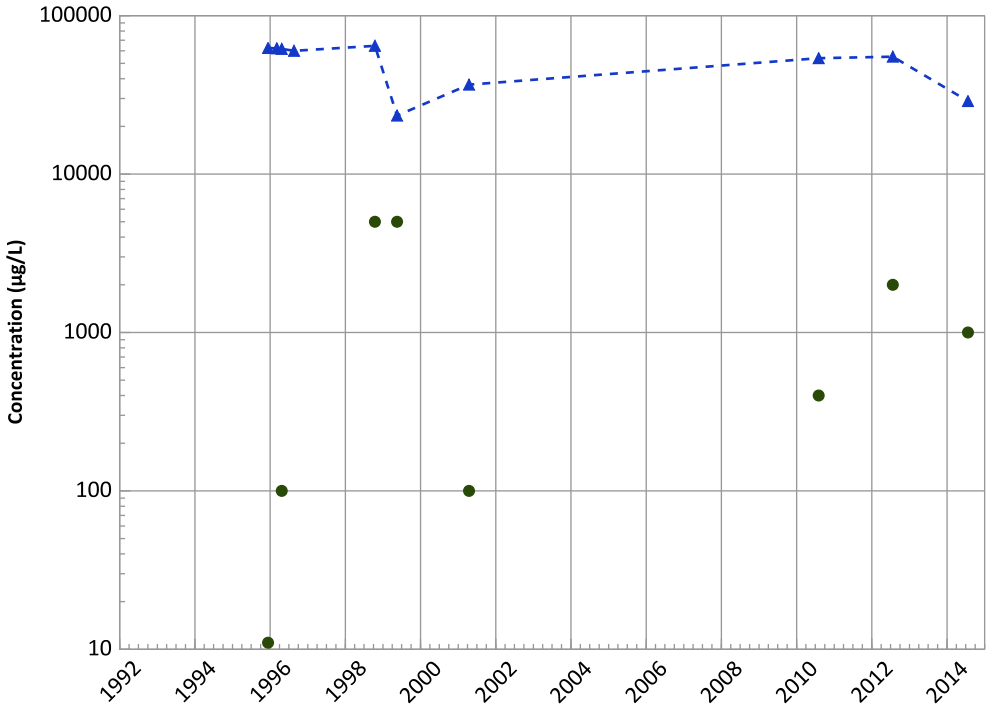
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

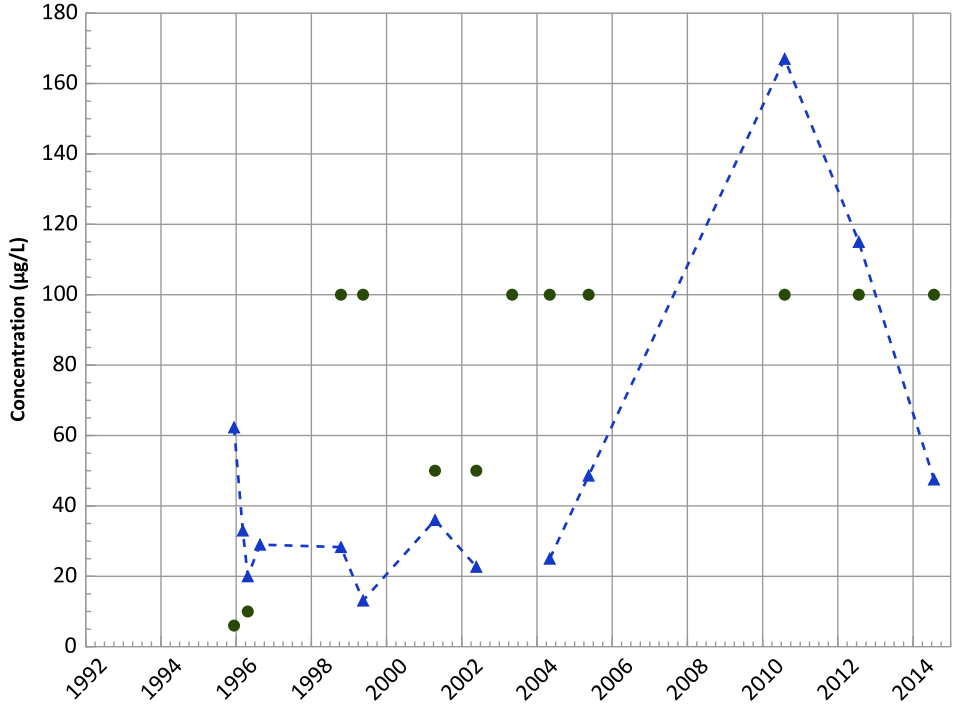


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Iron Trend



Concentration Trend

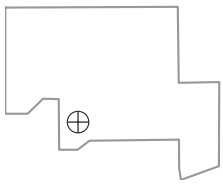
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

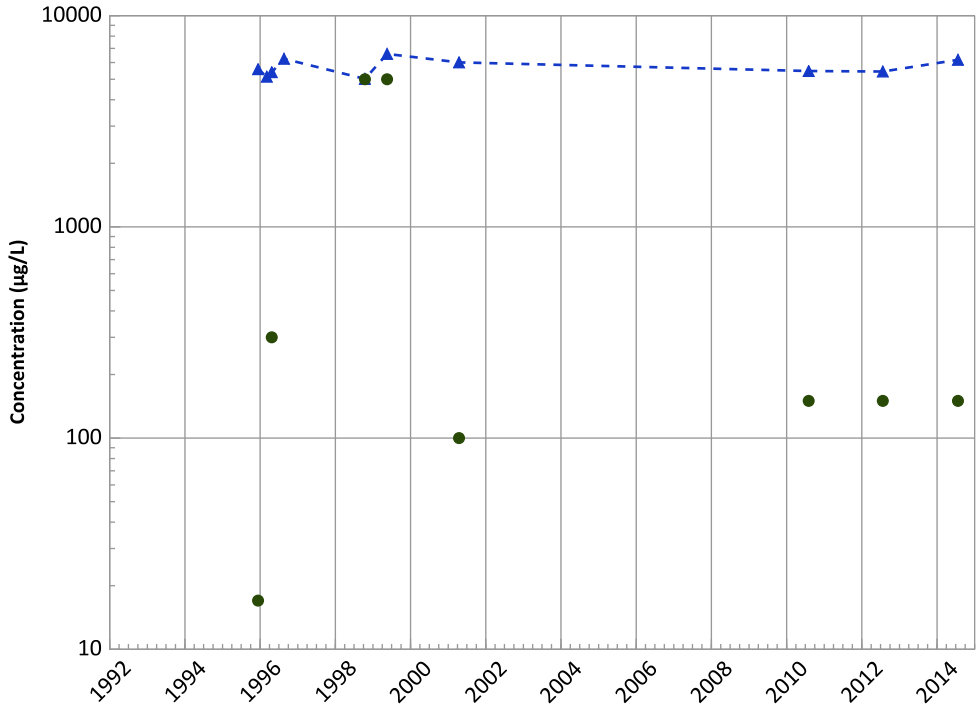
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

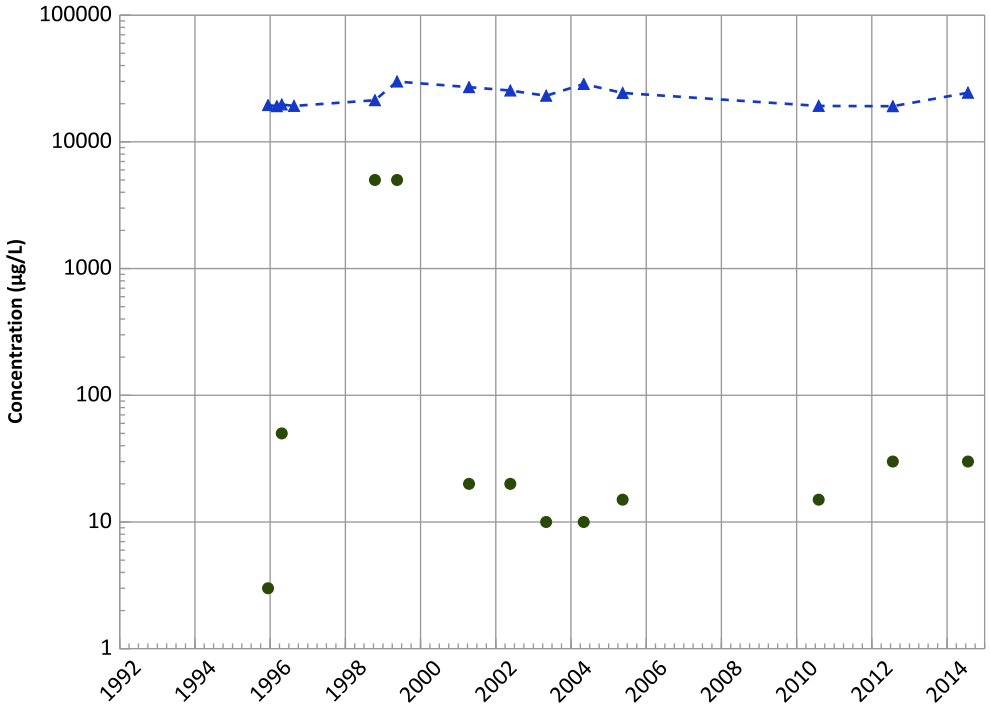


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

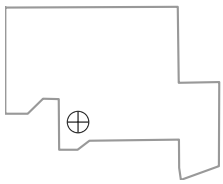
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

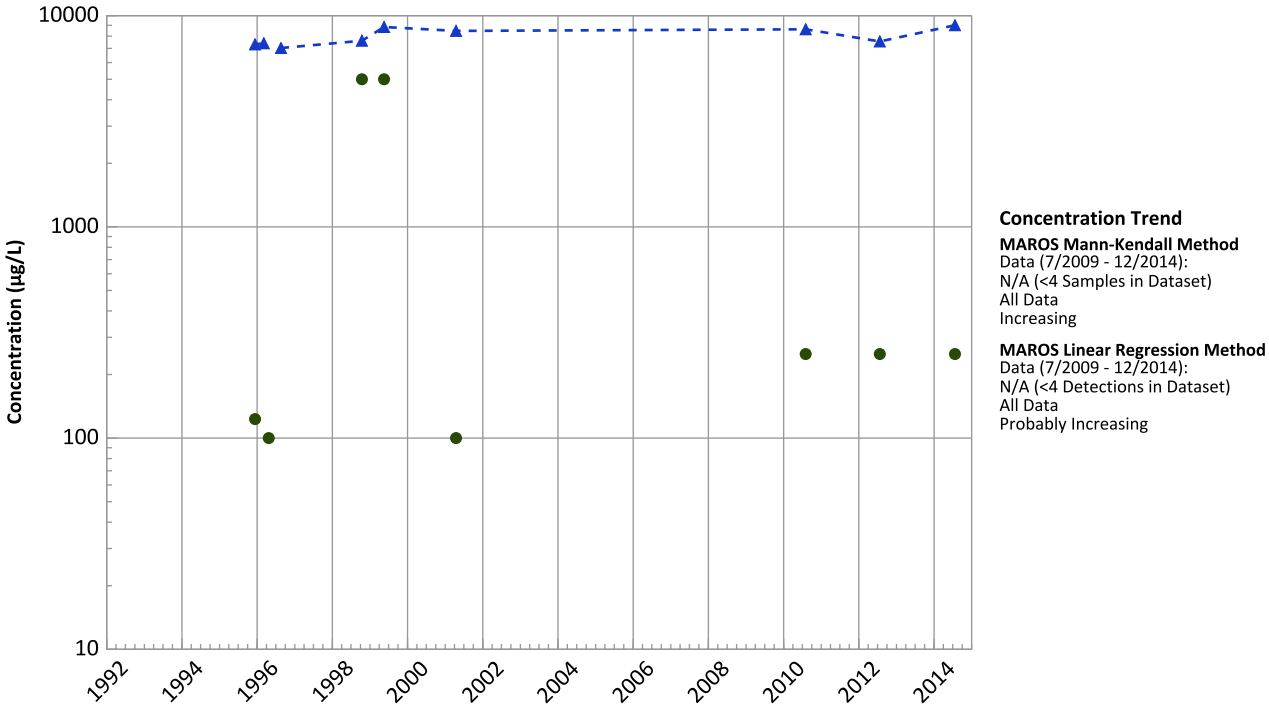
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1Q03 in Perched Aquifer
USDOE/NNSA Pantex Plant

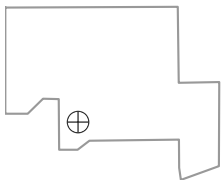
Sodium Trend



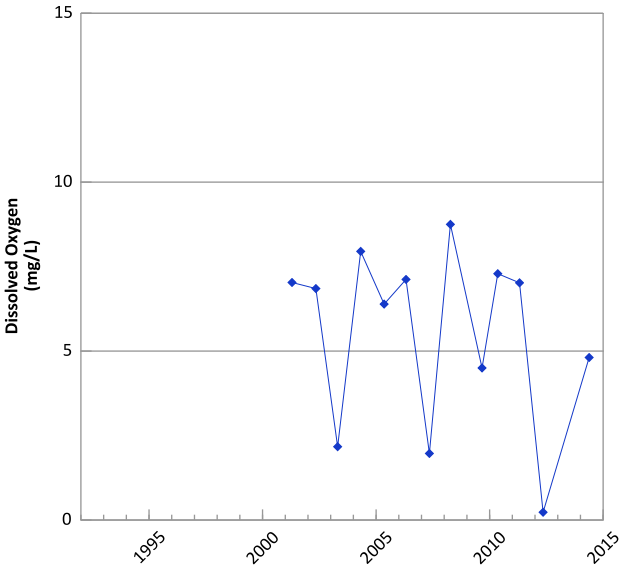
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/12/1995 to 07/23/2014
Analysis Date: 03/19/2015

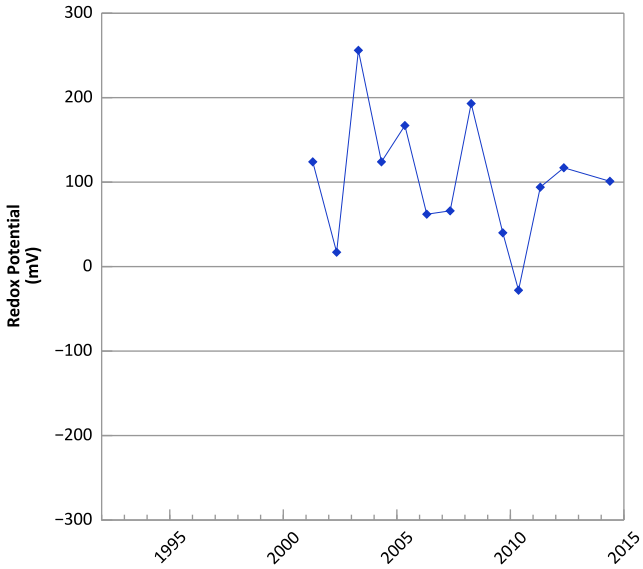
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

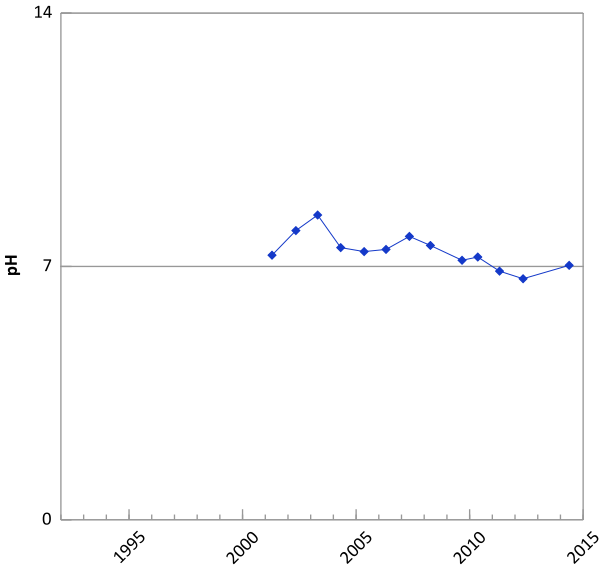
Well Location

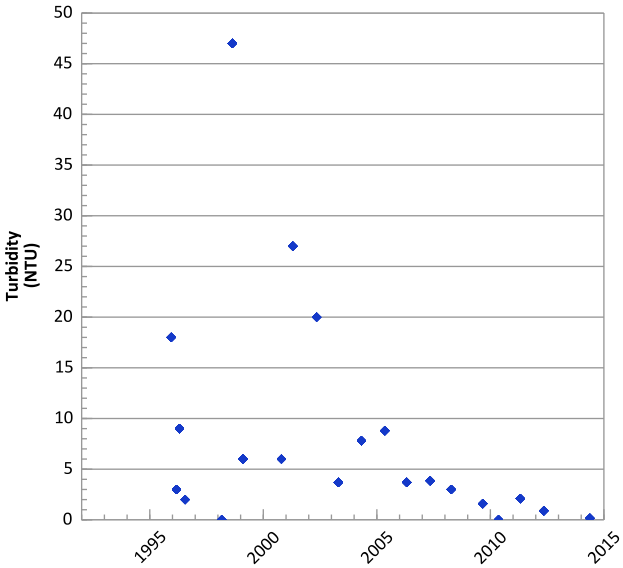


PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



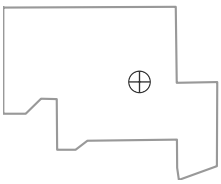






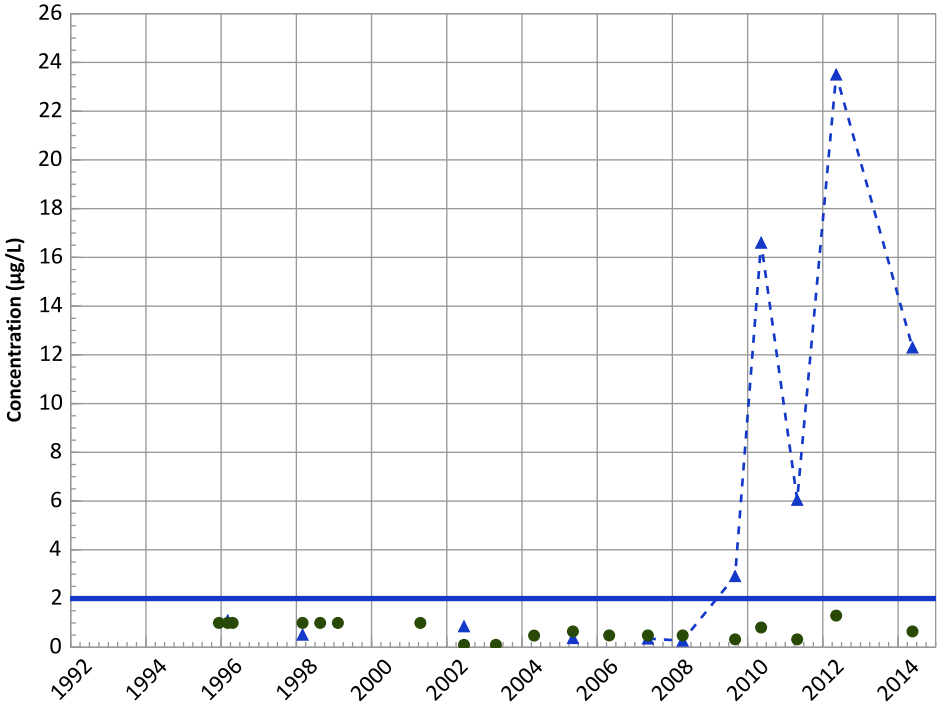
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

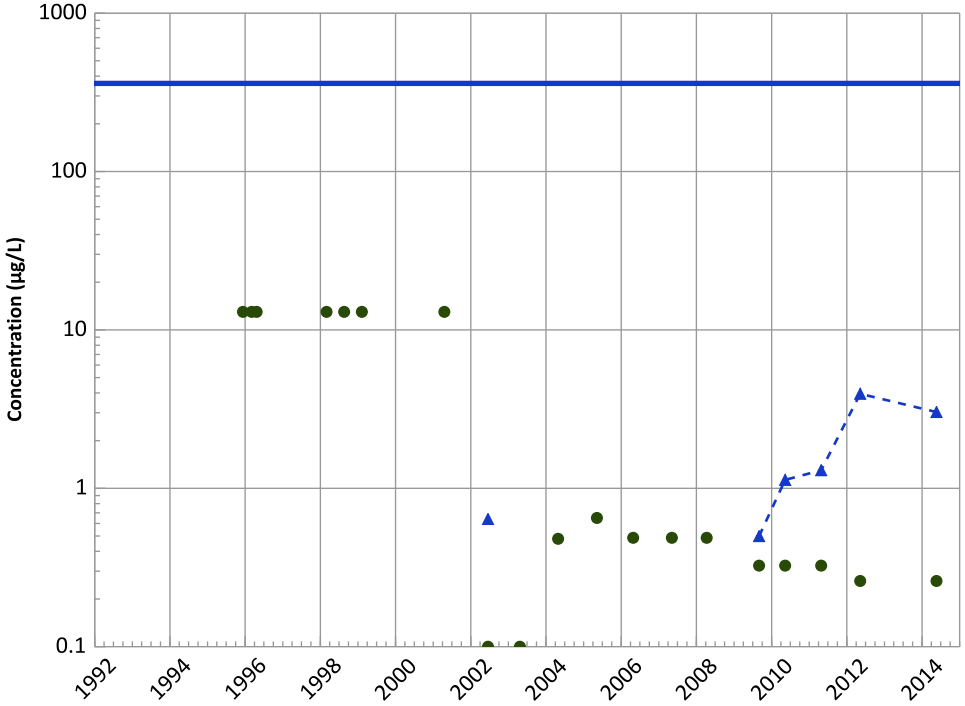


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

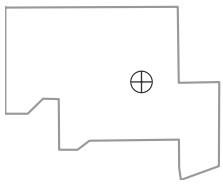
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

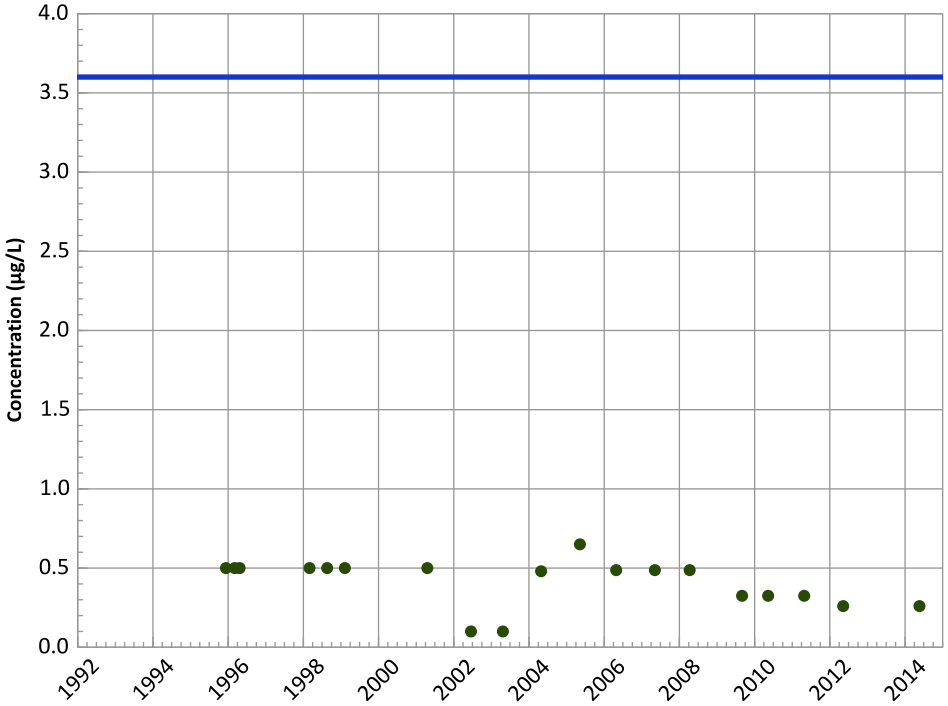
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

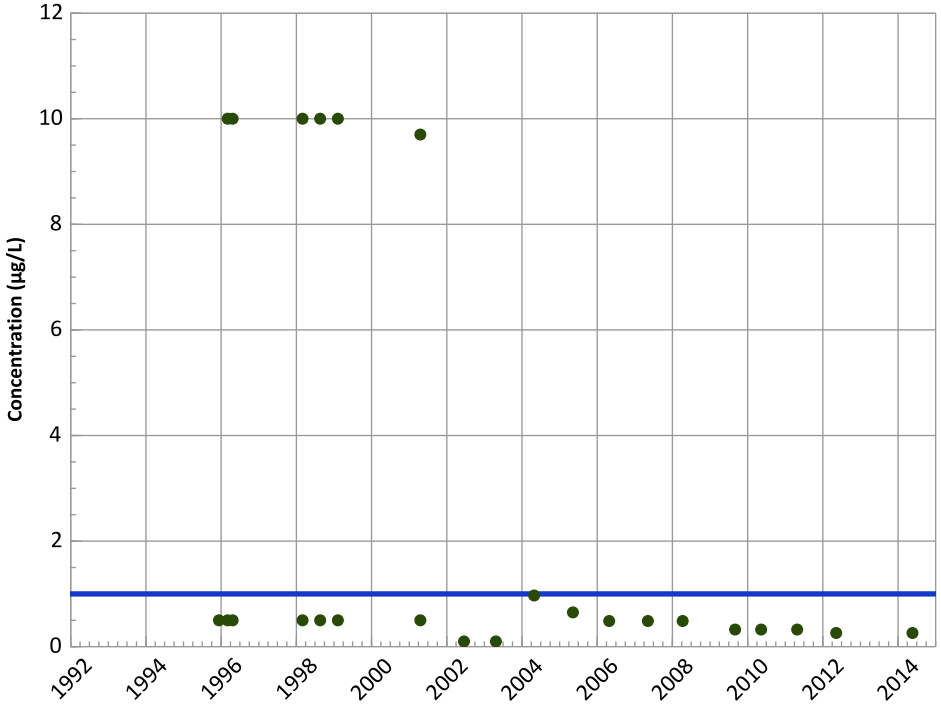


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

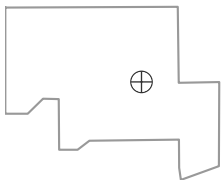
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

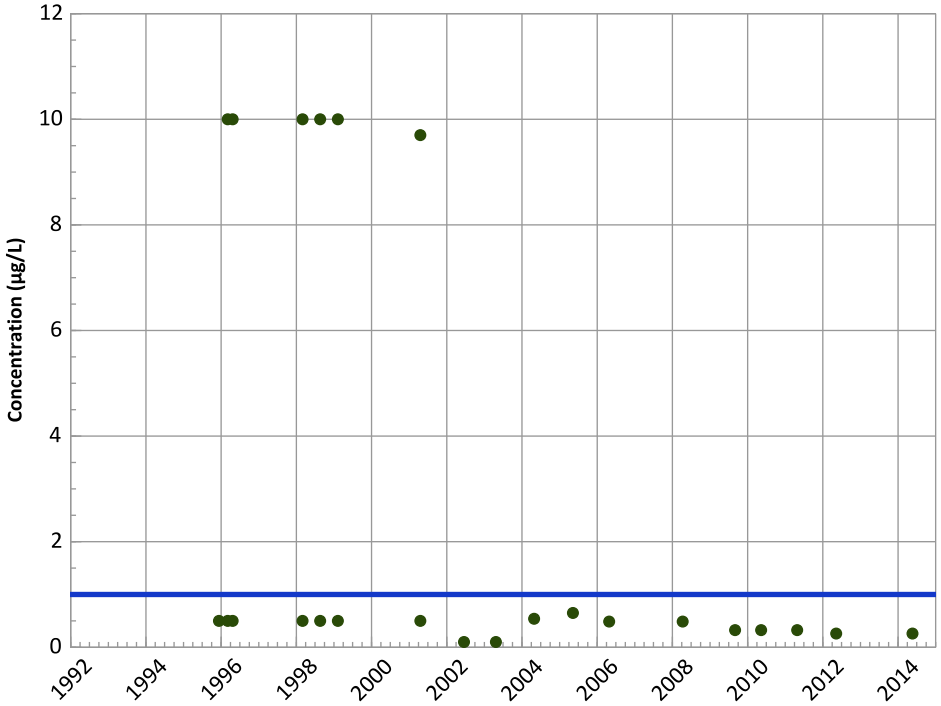
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

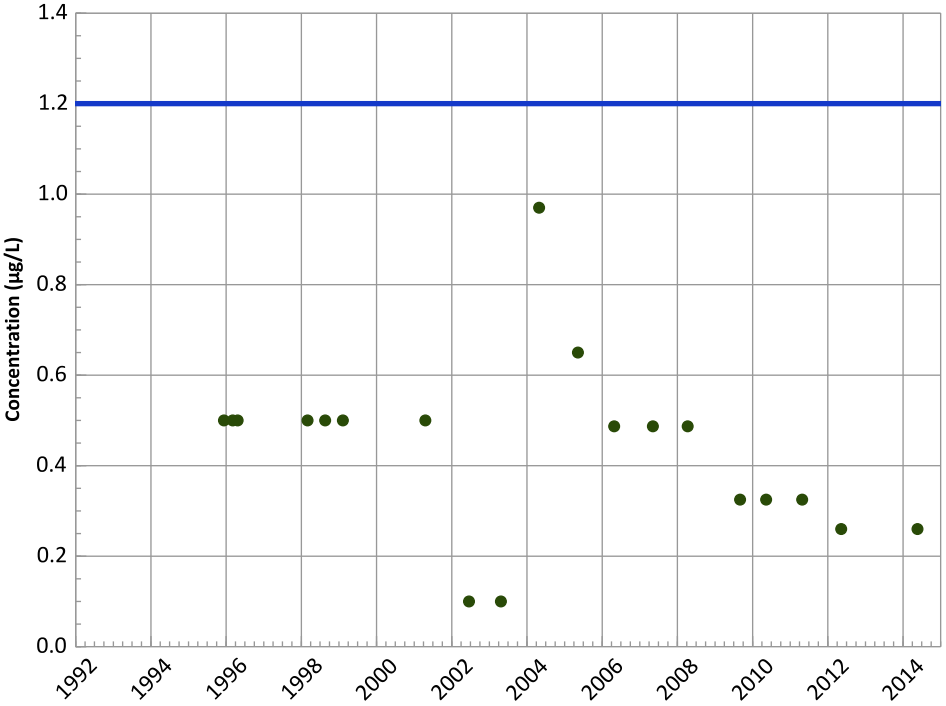


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

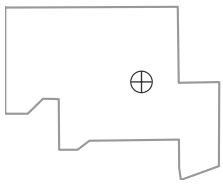
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

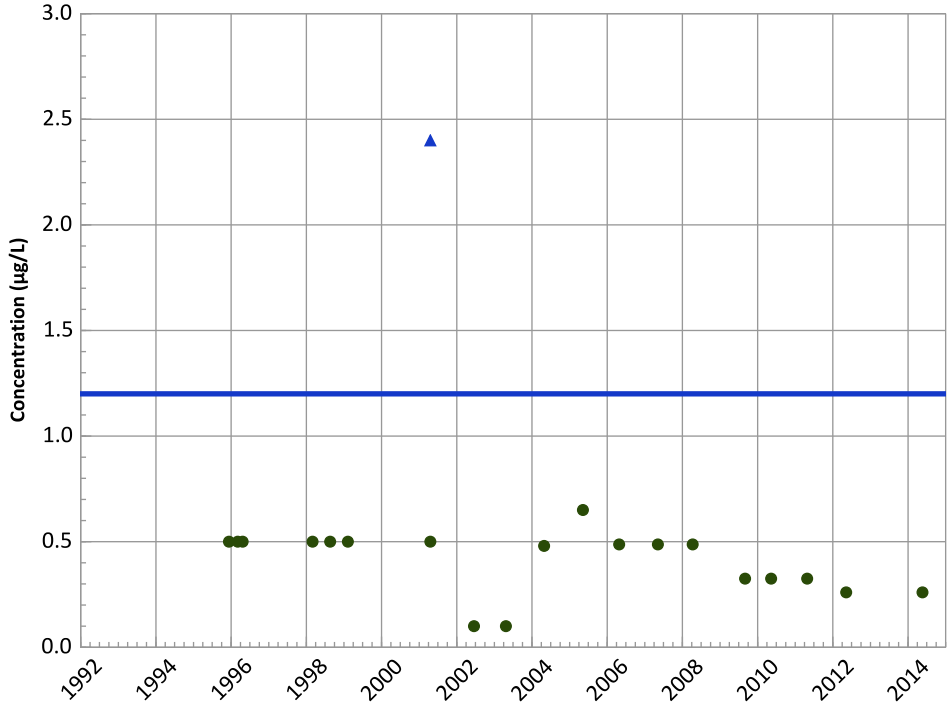
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

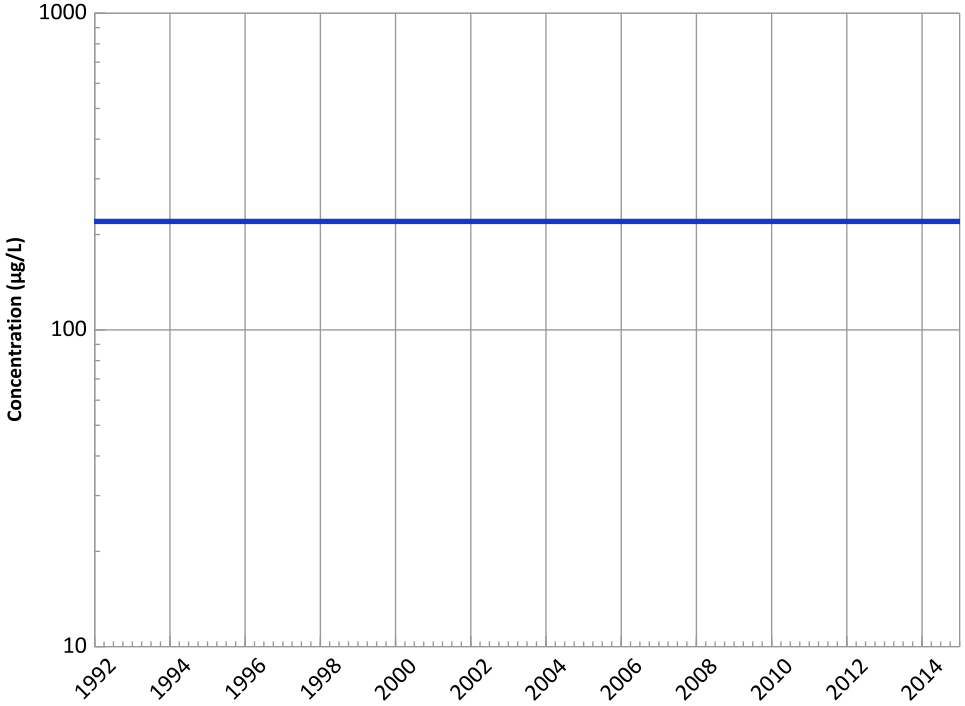


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

1,3,5-Trinitrobenzene Trend



Concentration Trend

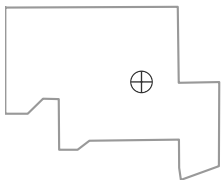
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

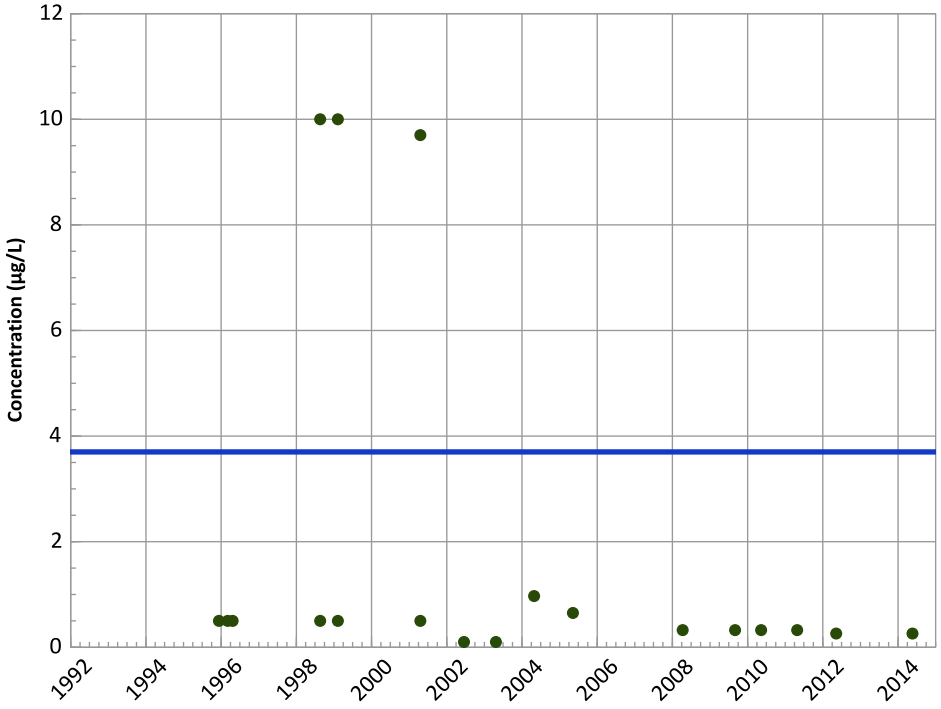
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

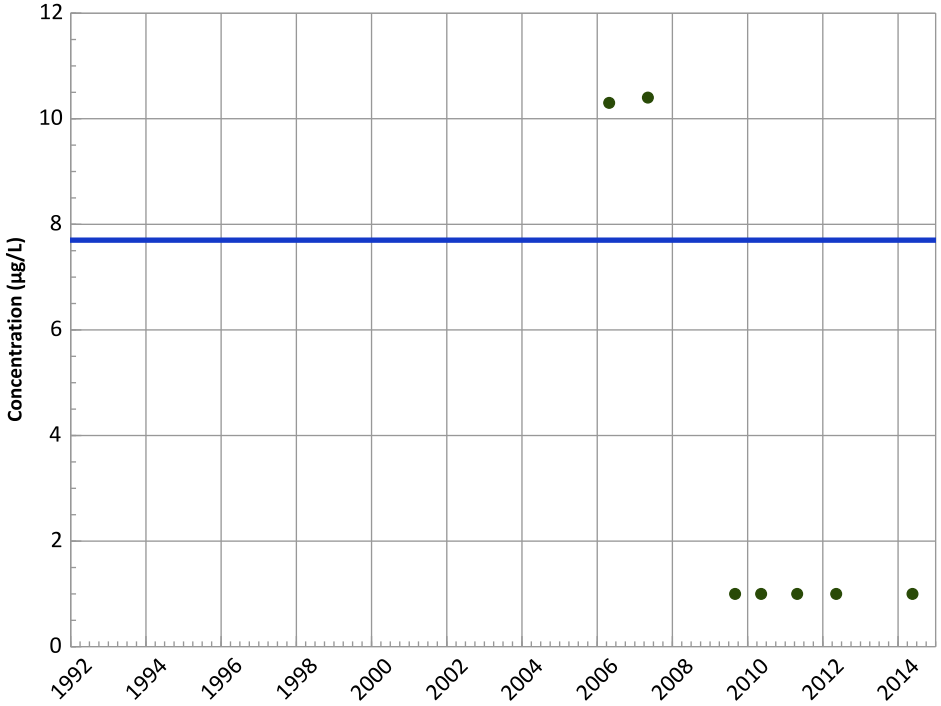


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

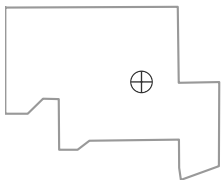
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

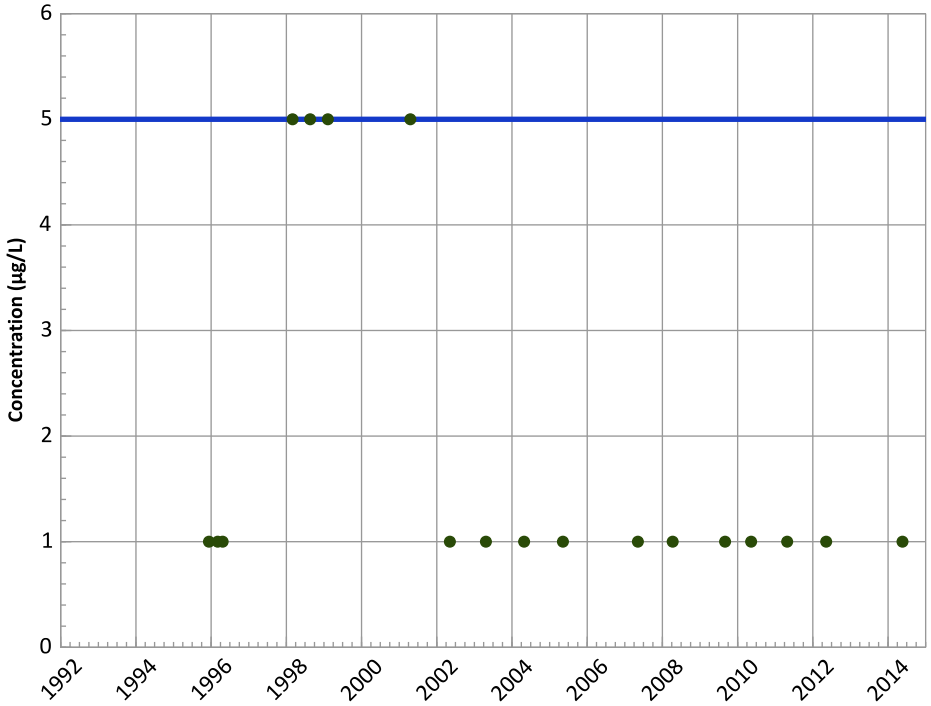
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

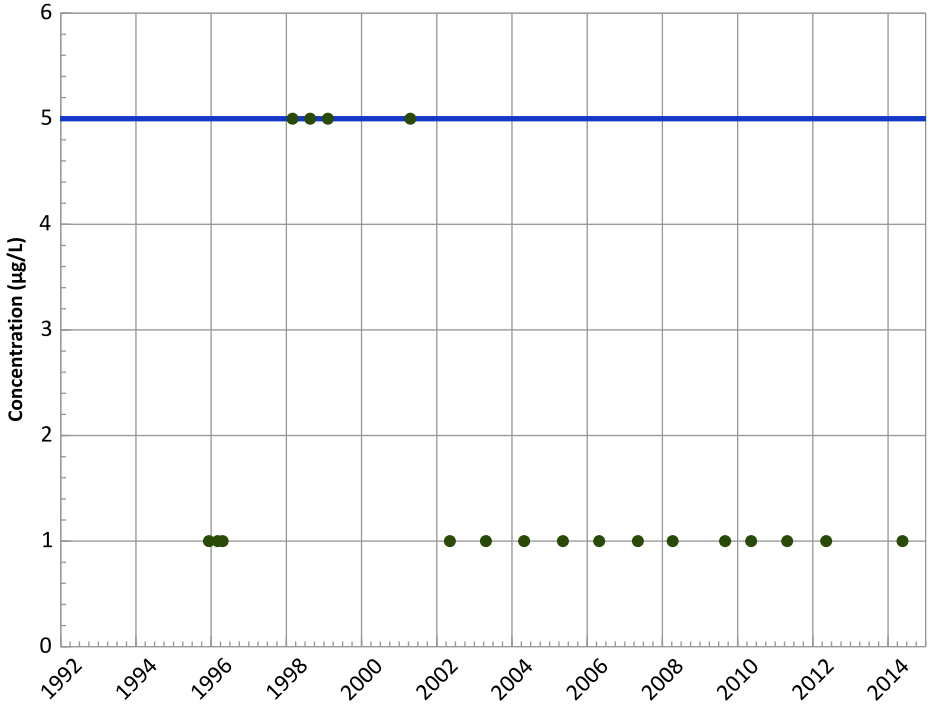


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

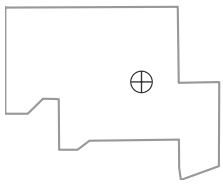
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

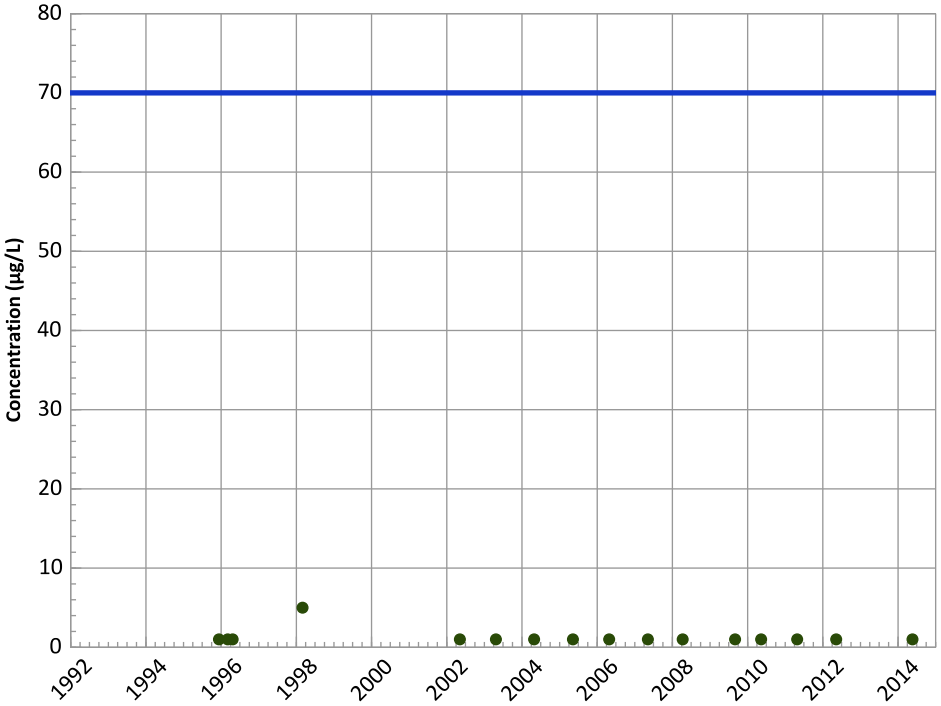
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

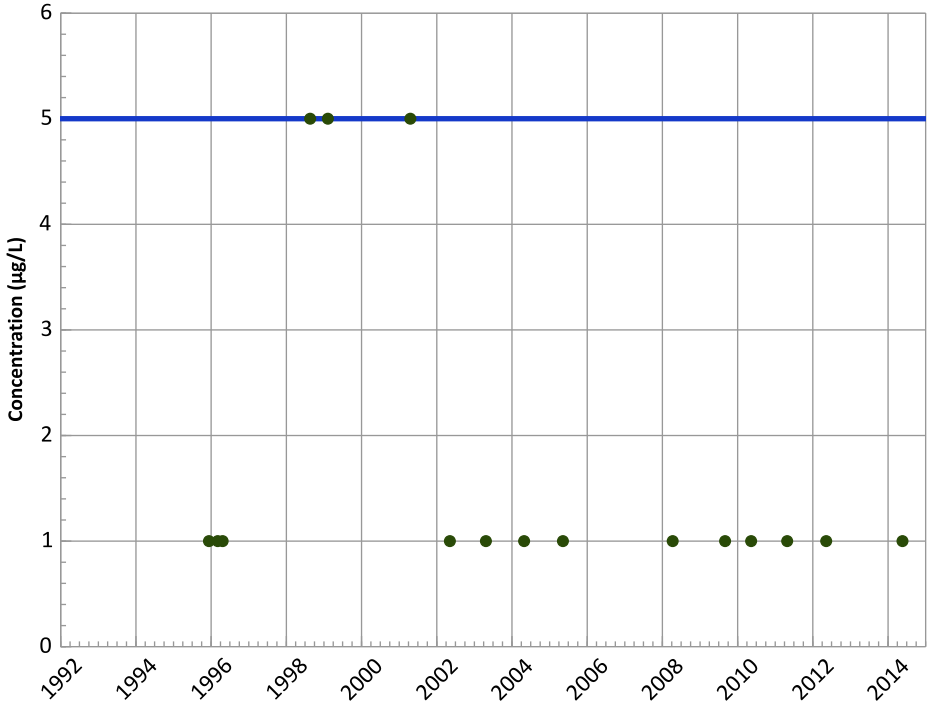


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

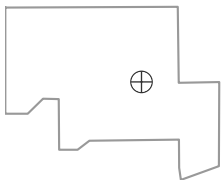
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

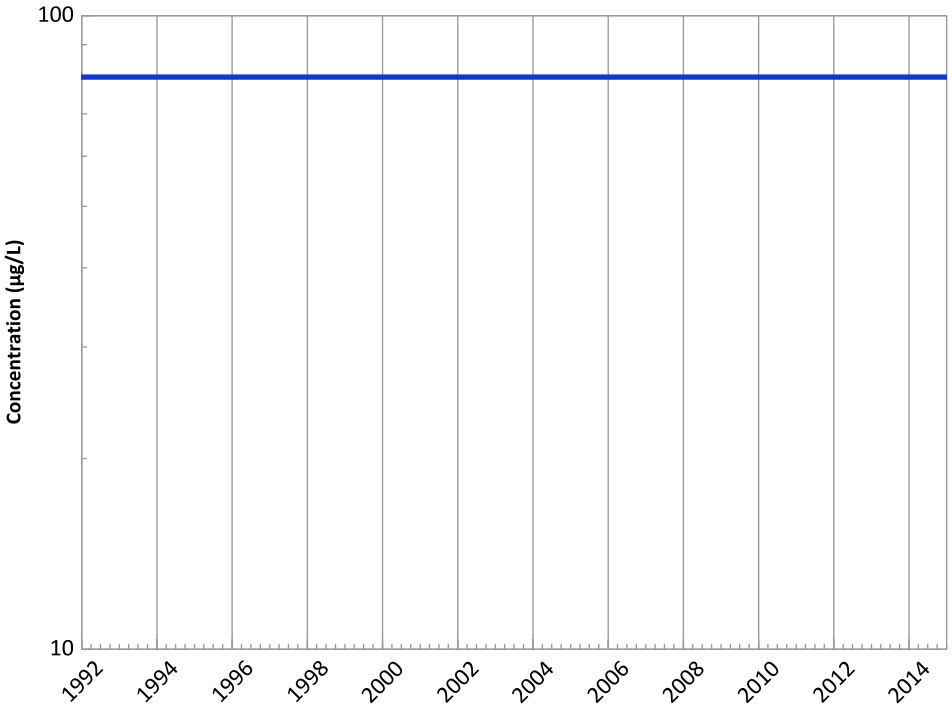
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

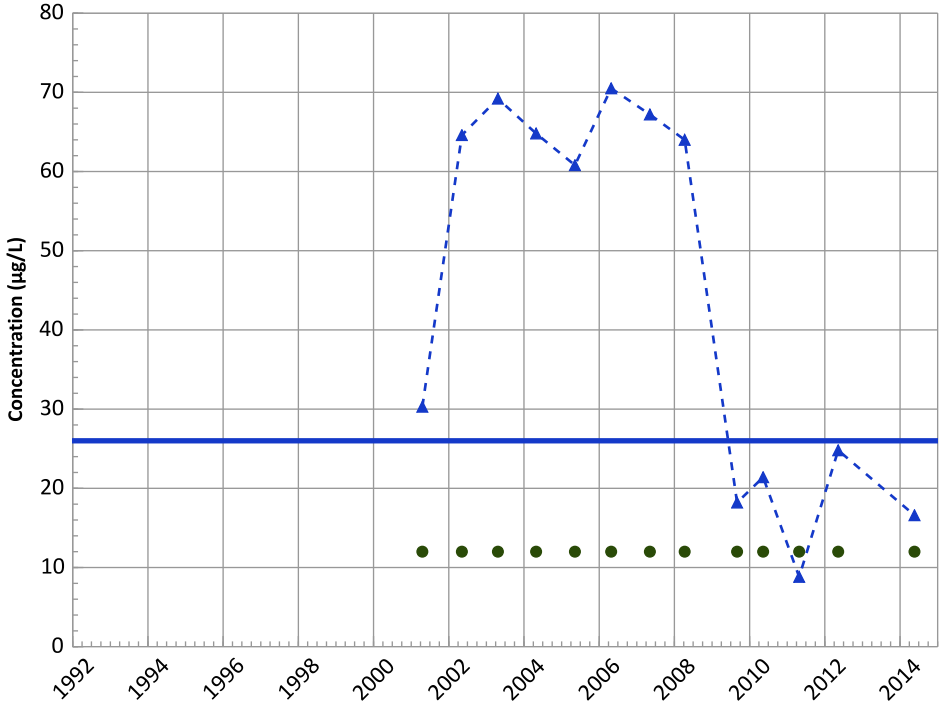


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

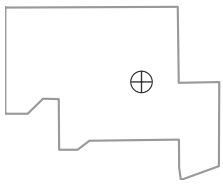
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

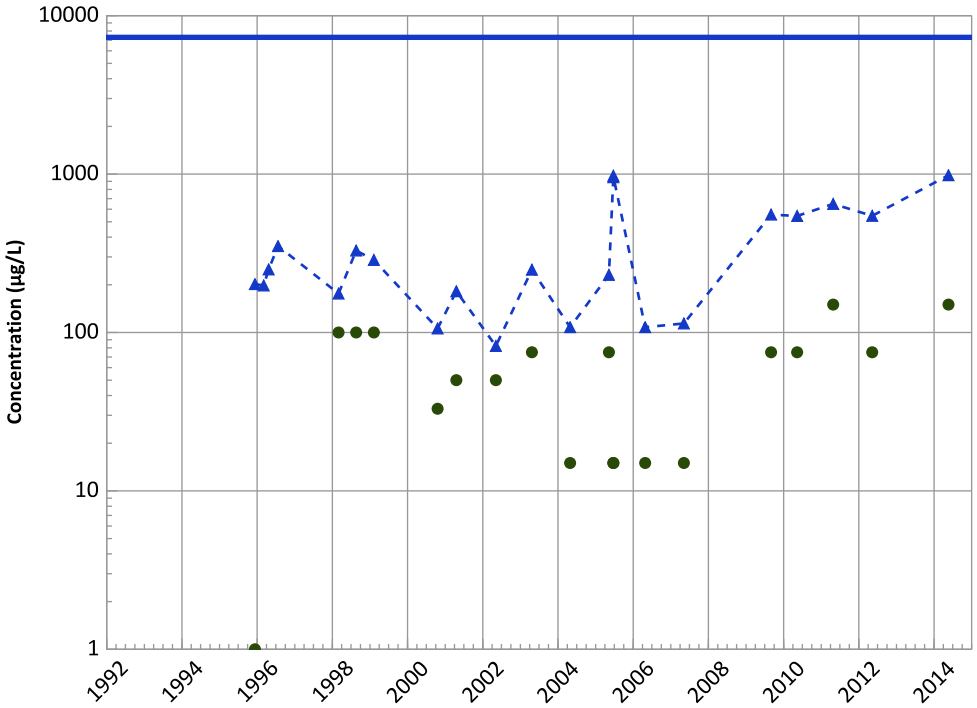
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

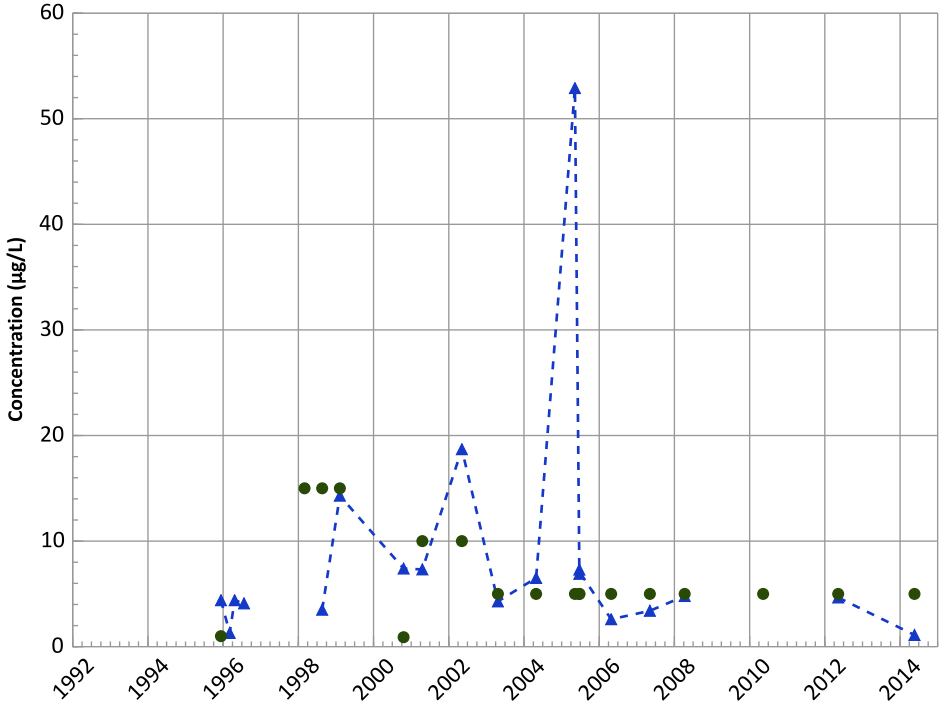


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Manganese Trend



Concentration Trend

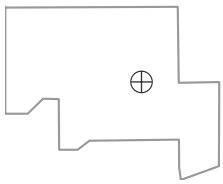
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

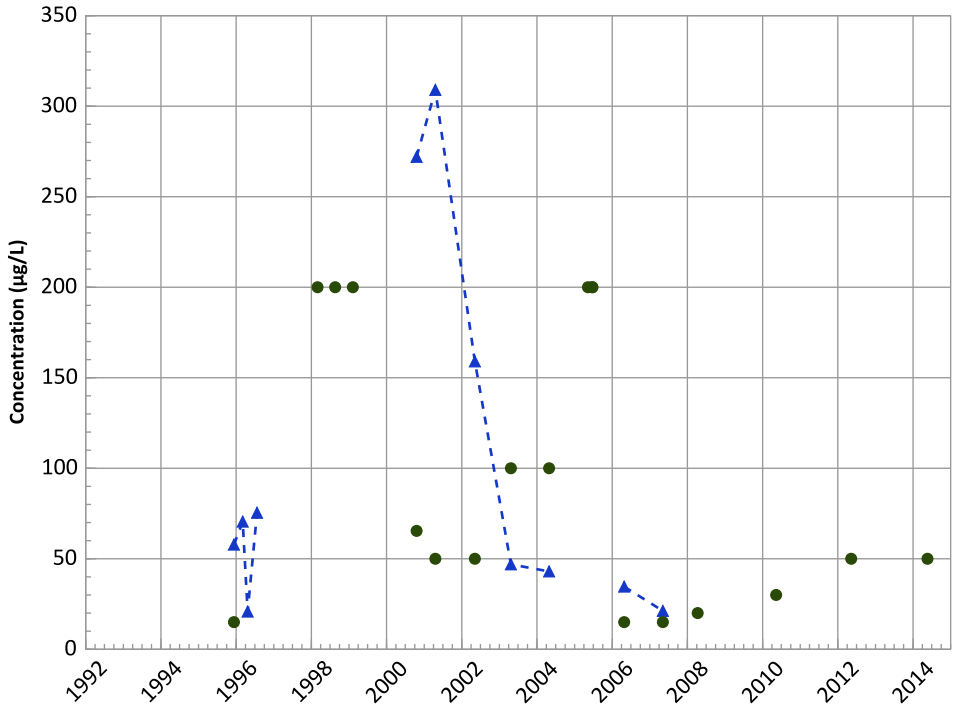
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

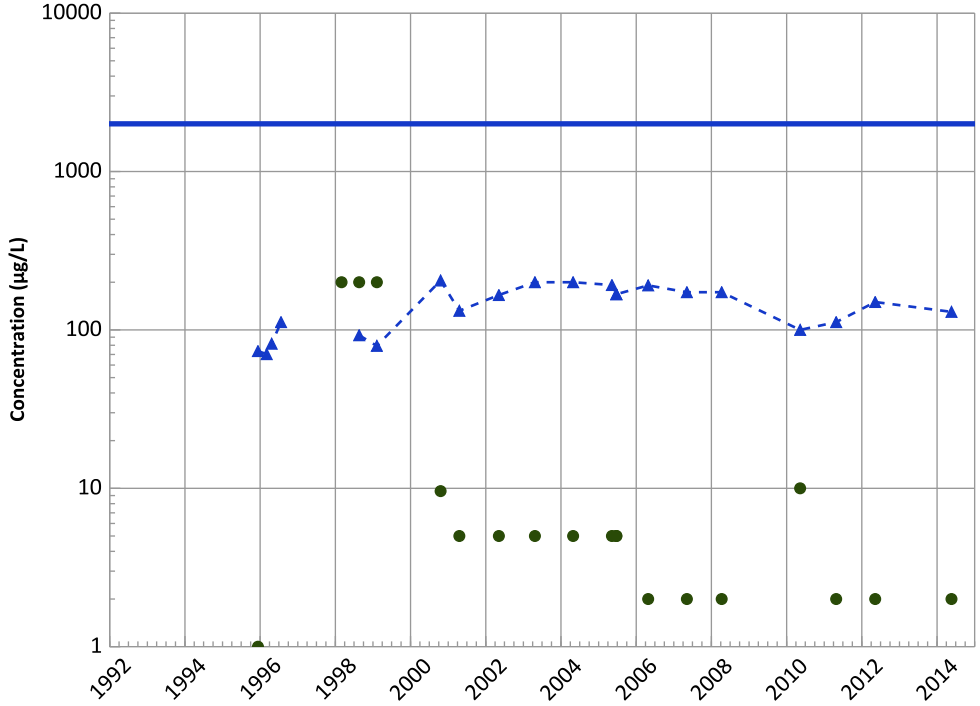


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

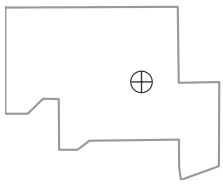
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

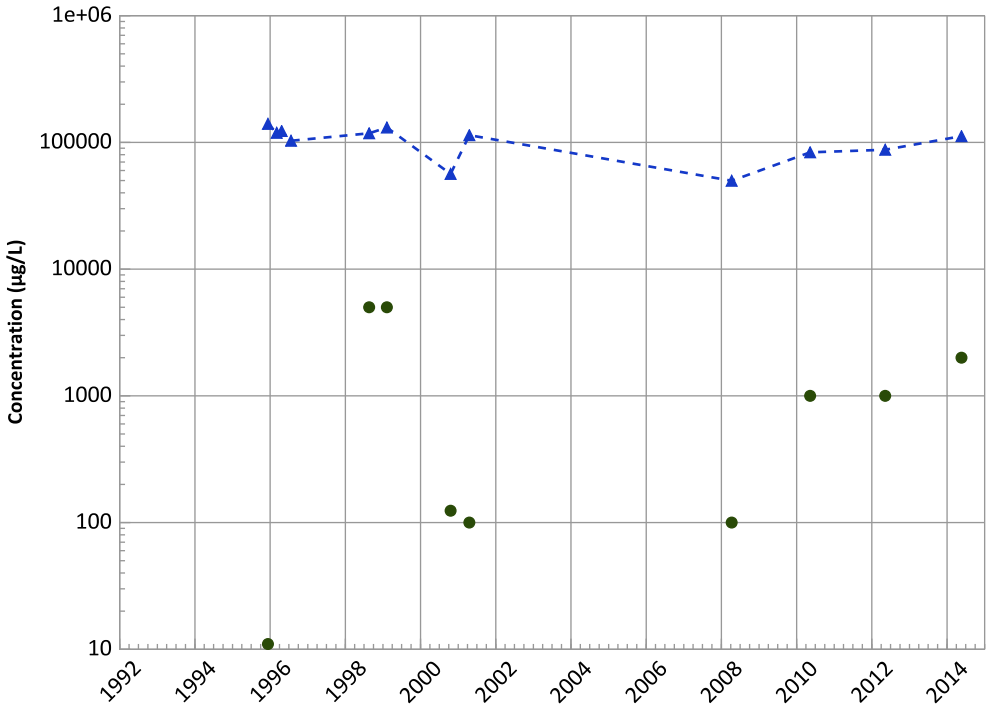
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

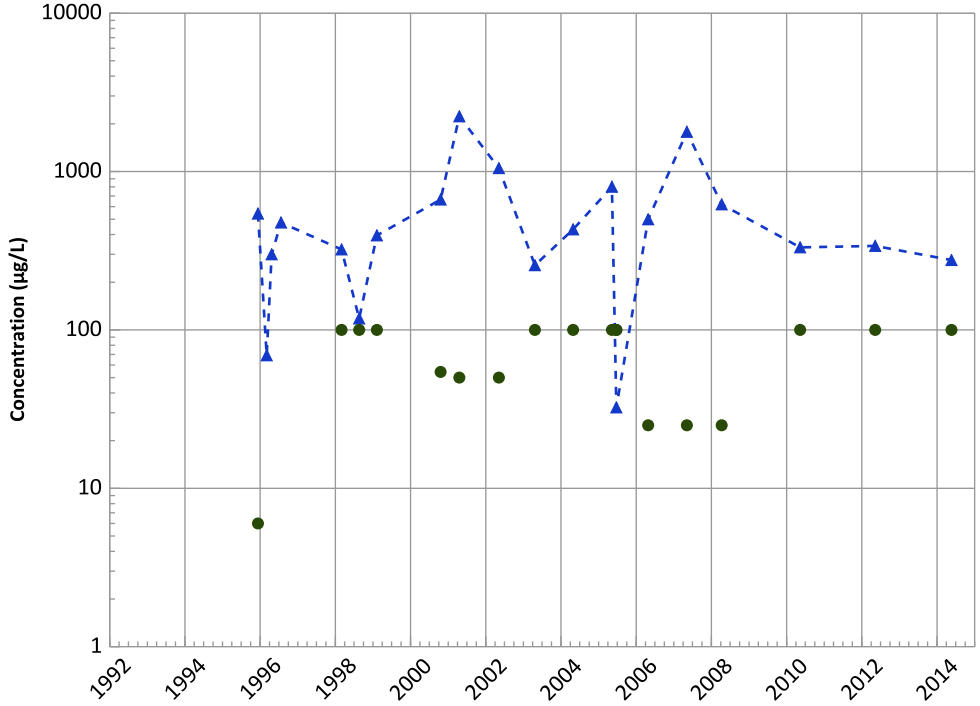


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Iron Trend



Concentration Trend

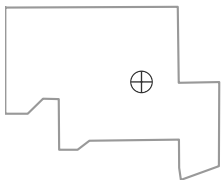
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

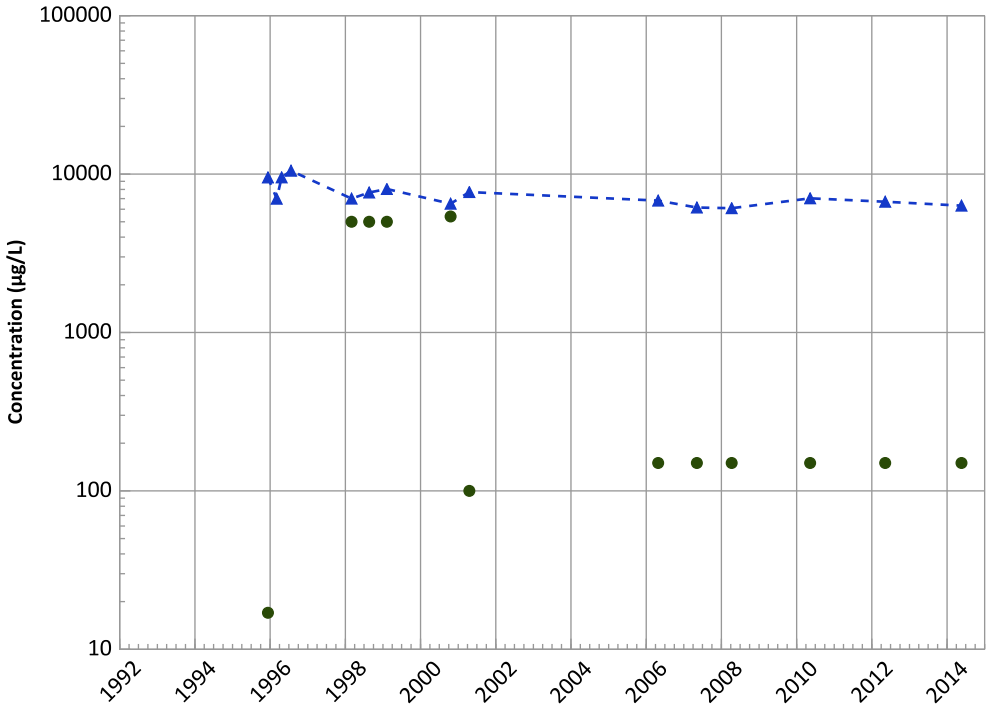
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

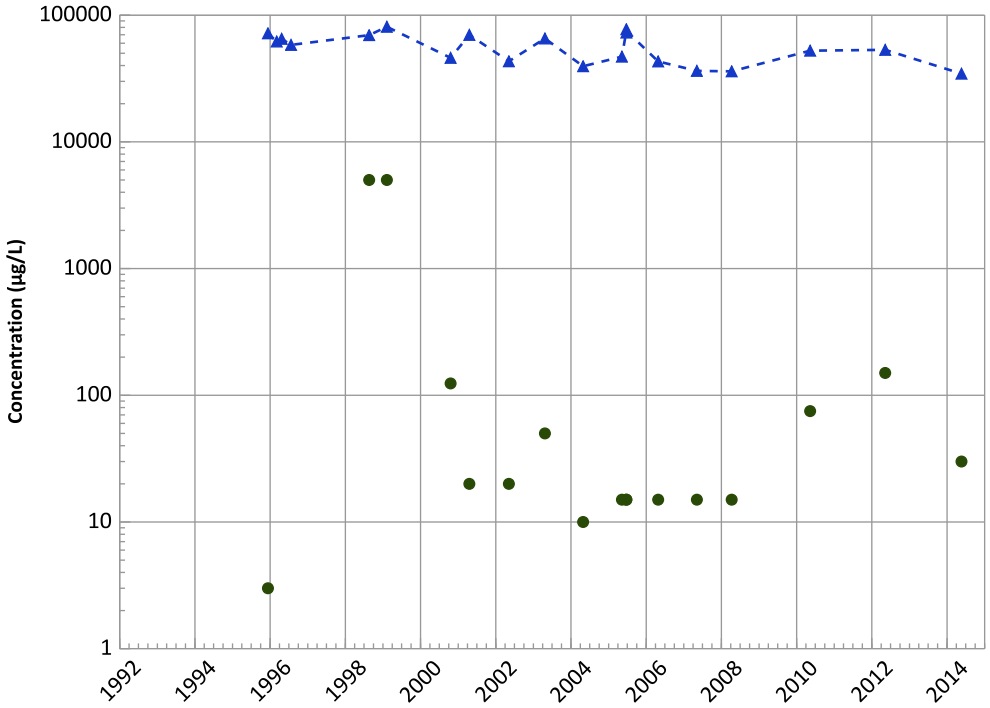


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

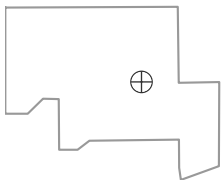
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

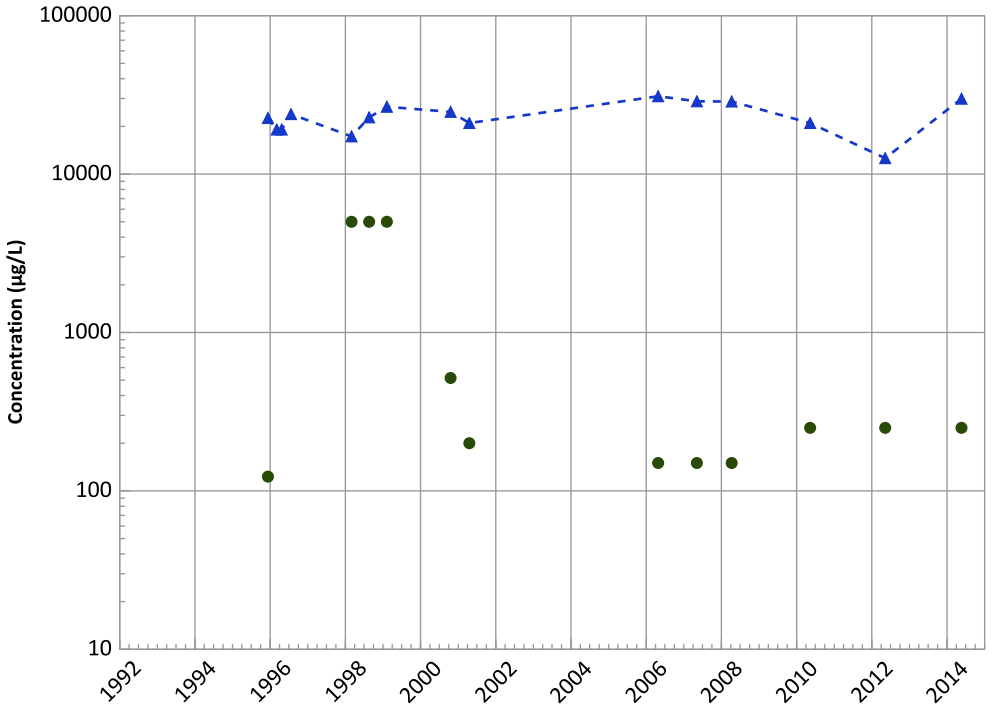
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1001 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

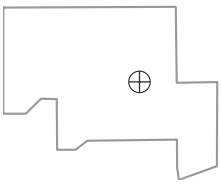
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

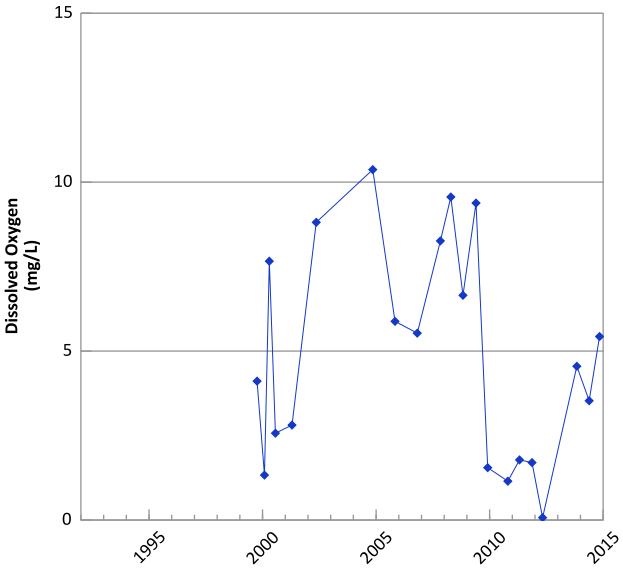
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 05/21/2014
Analysis Date: 03/19/2015

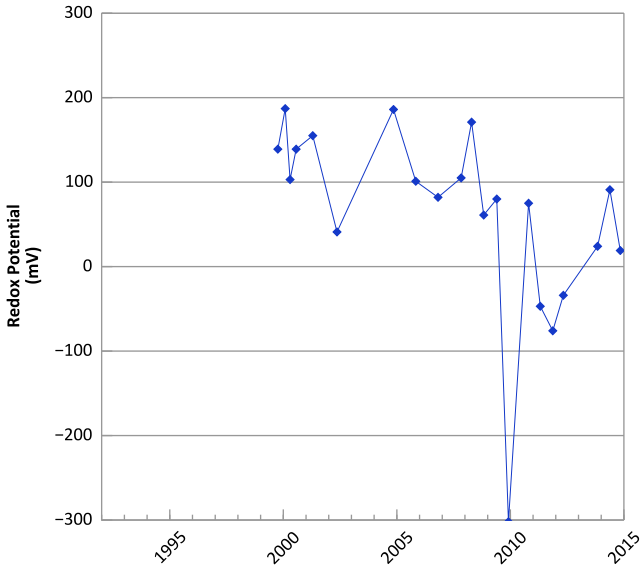
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

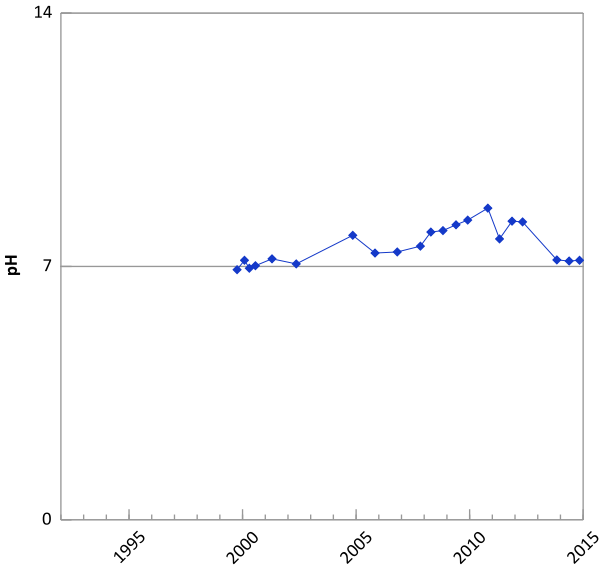
Well Location

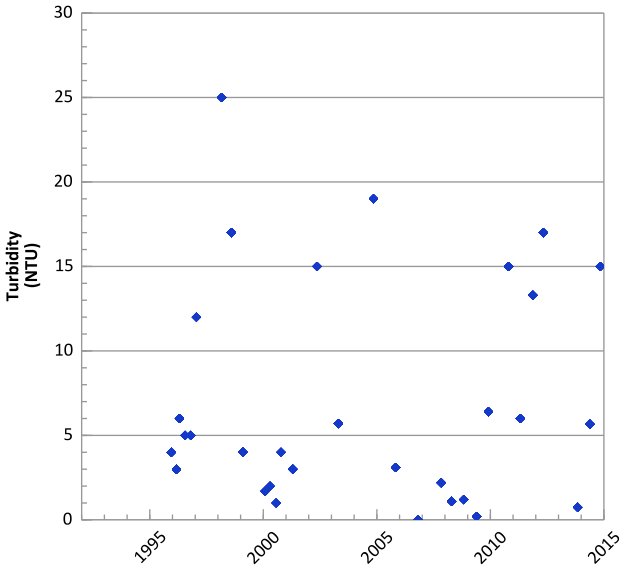


PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



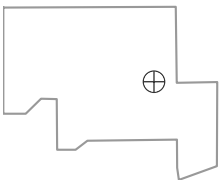






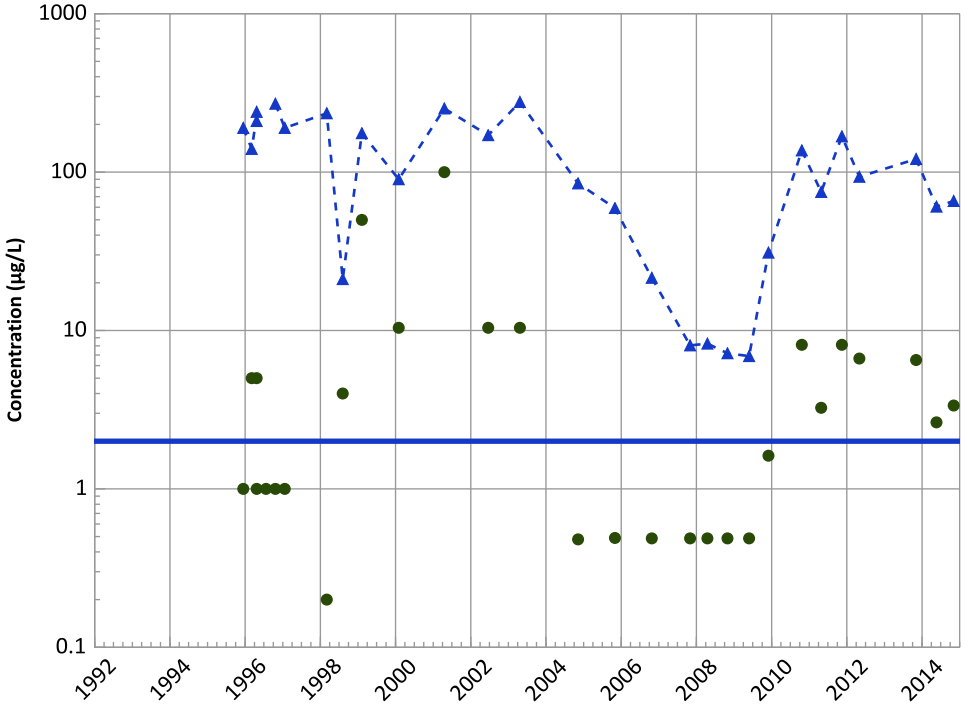
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

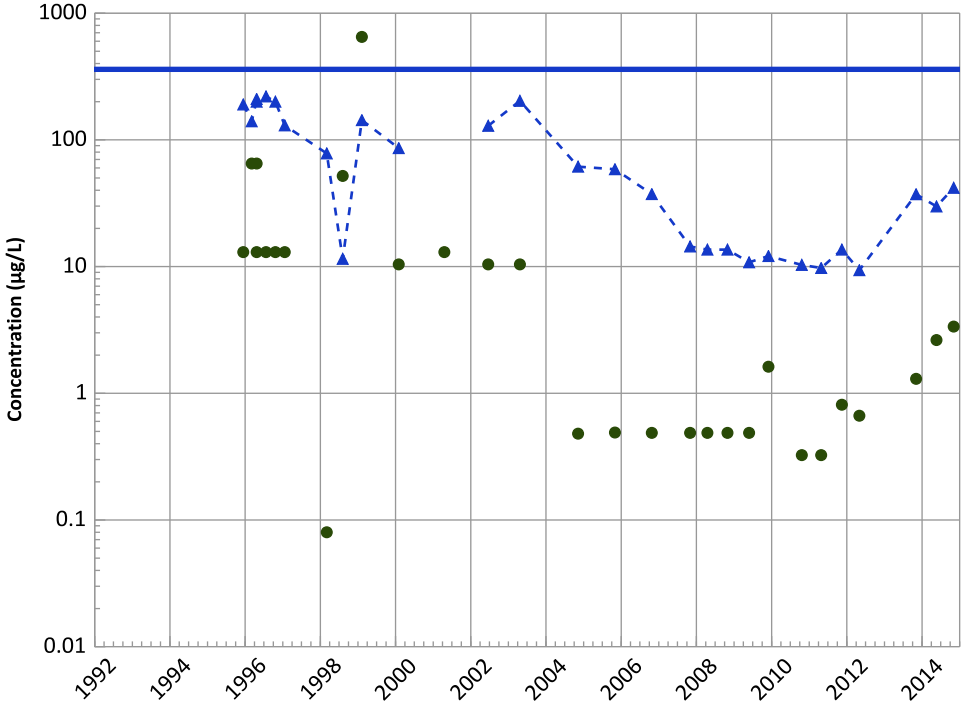


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

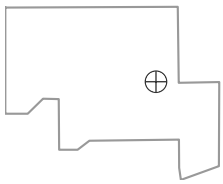
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

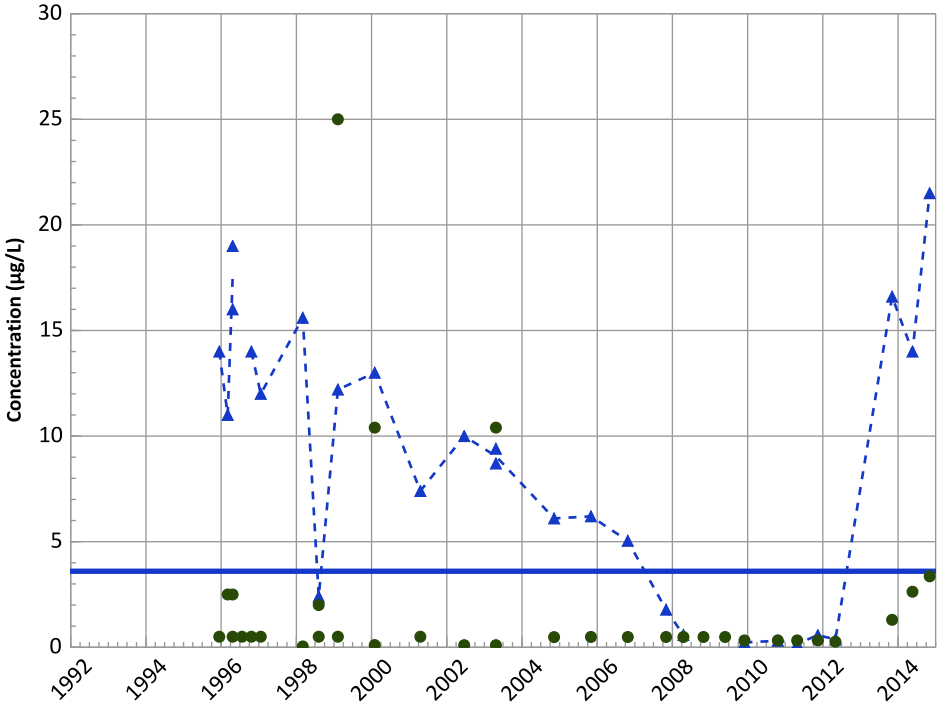
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

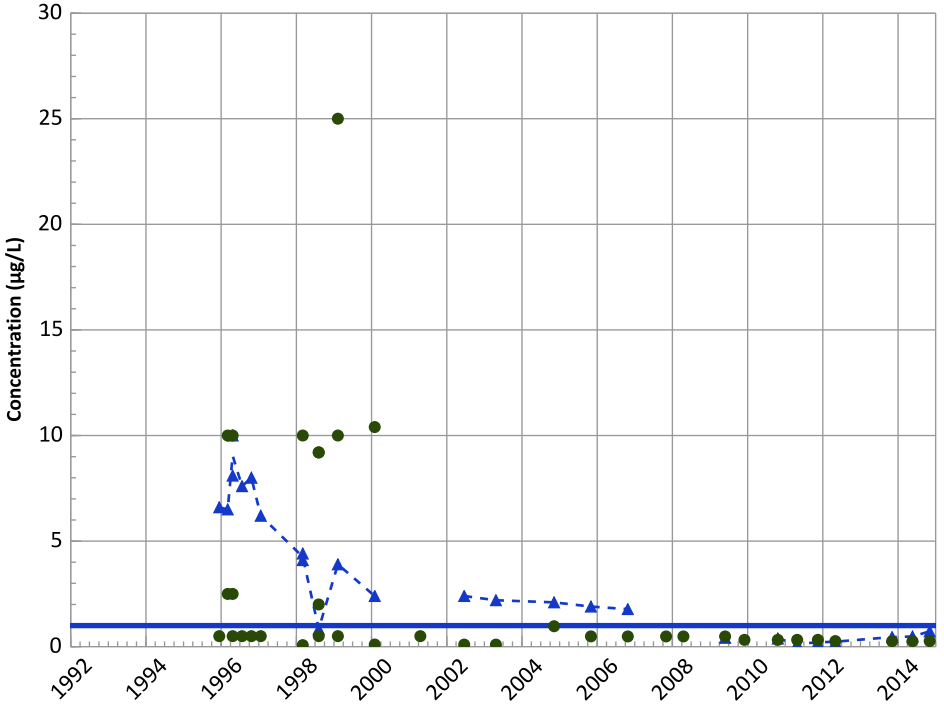


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

2,4-Dinitrotoluene Trend



Concentration Trend

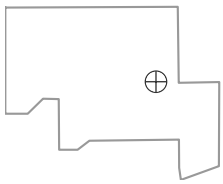
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

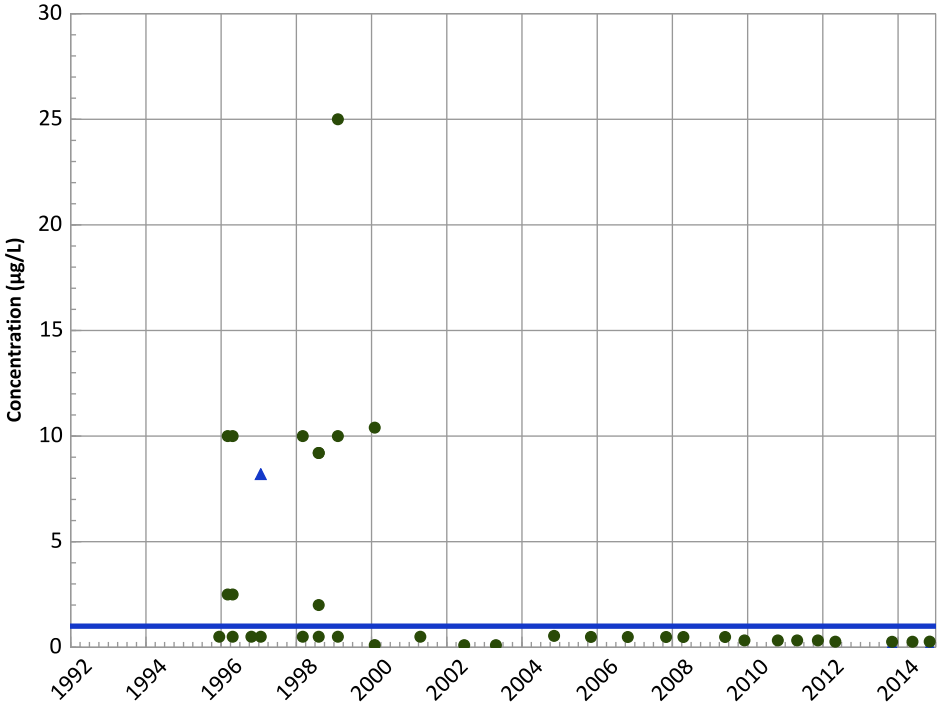
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

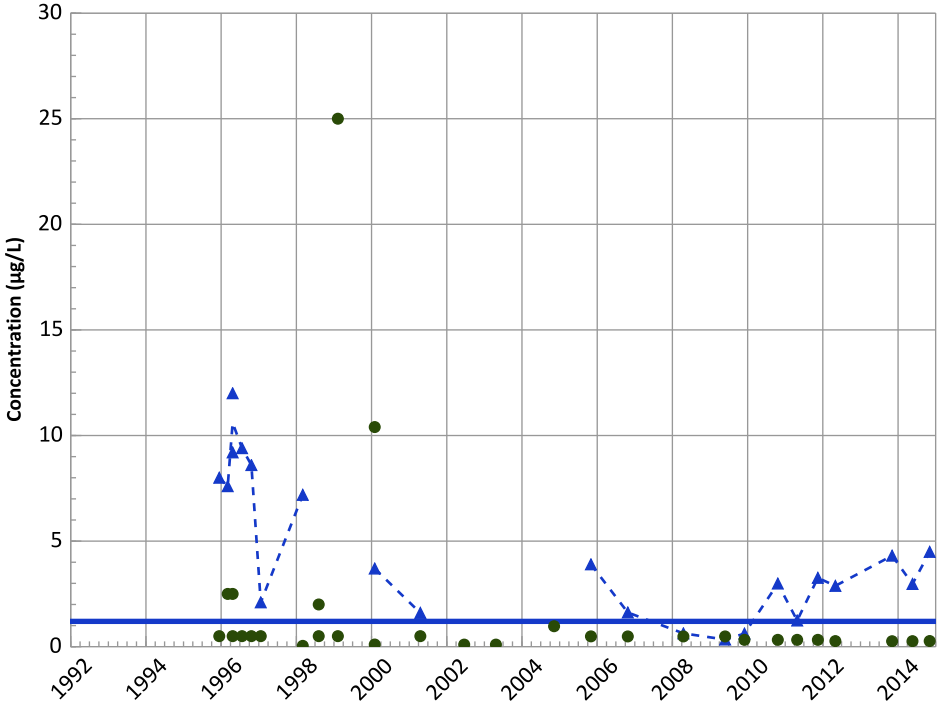


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

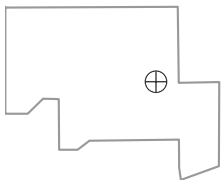
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

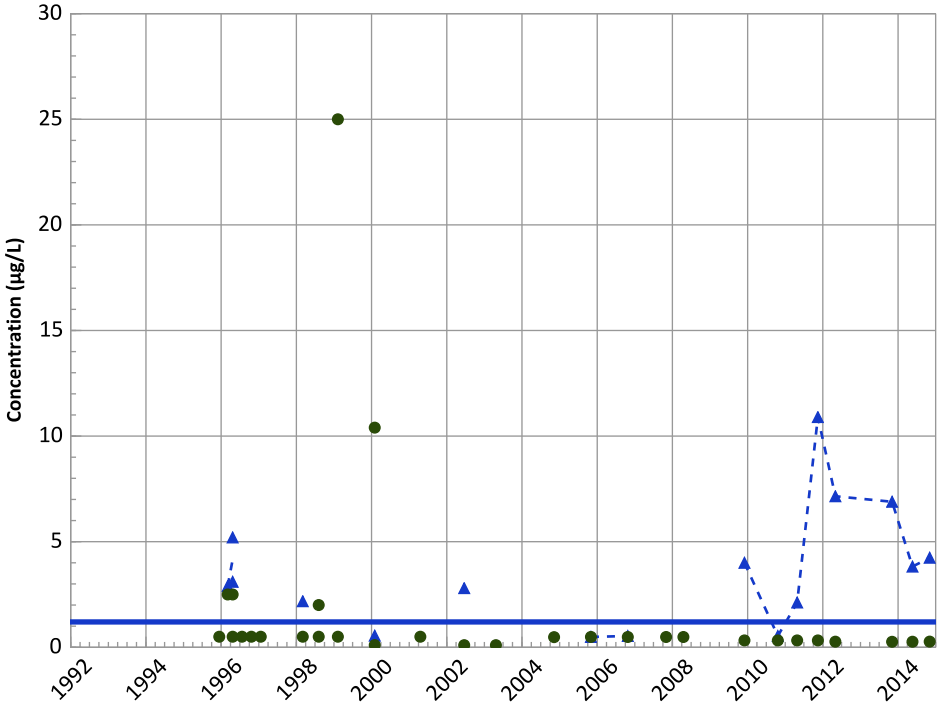
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

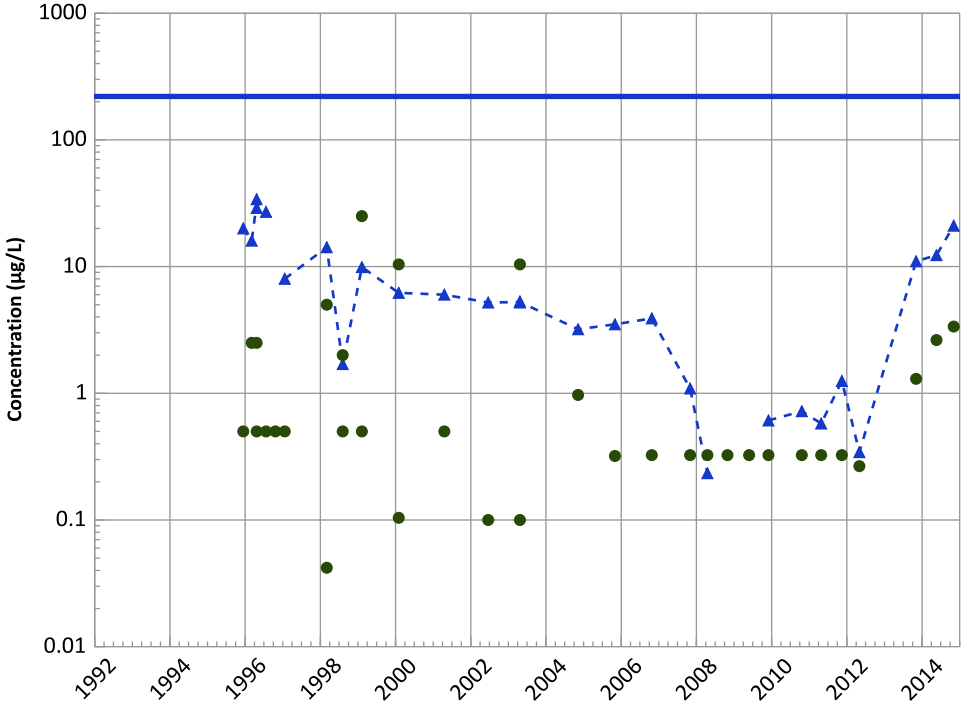


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

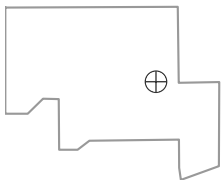
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

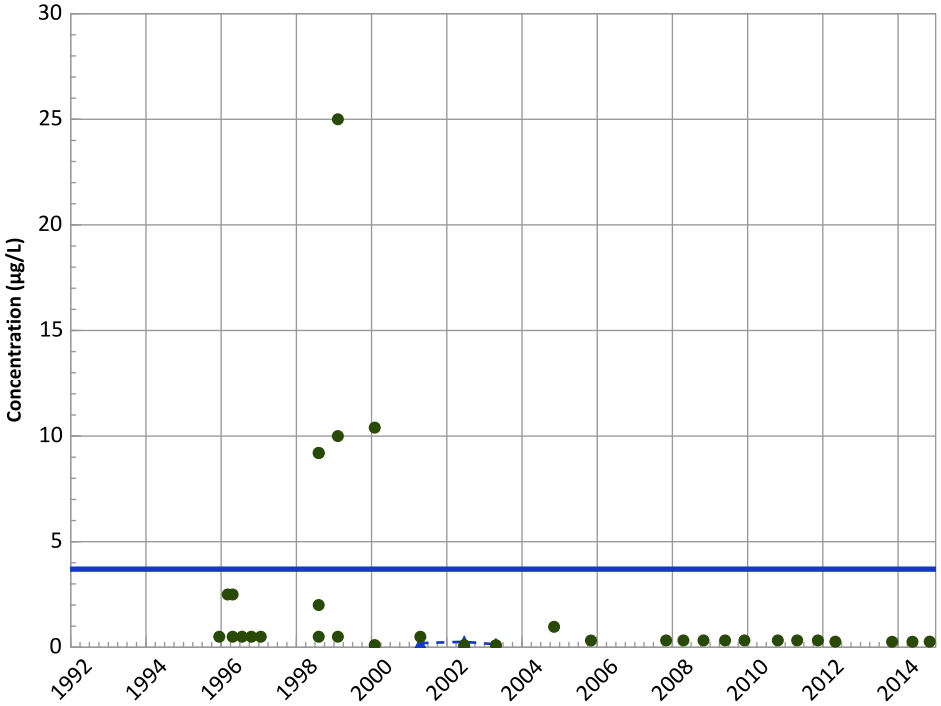
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

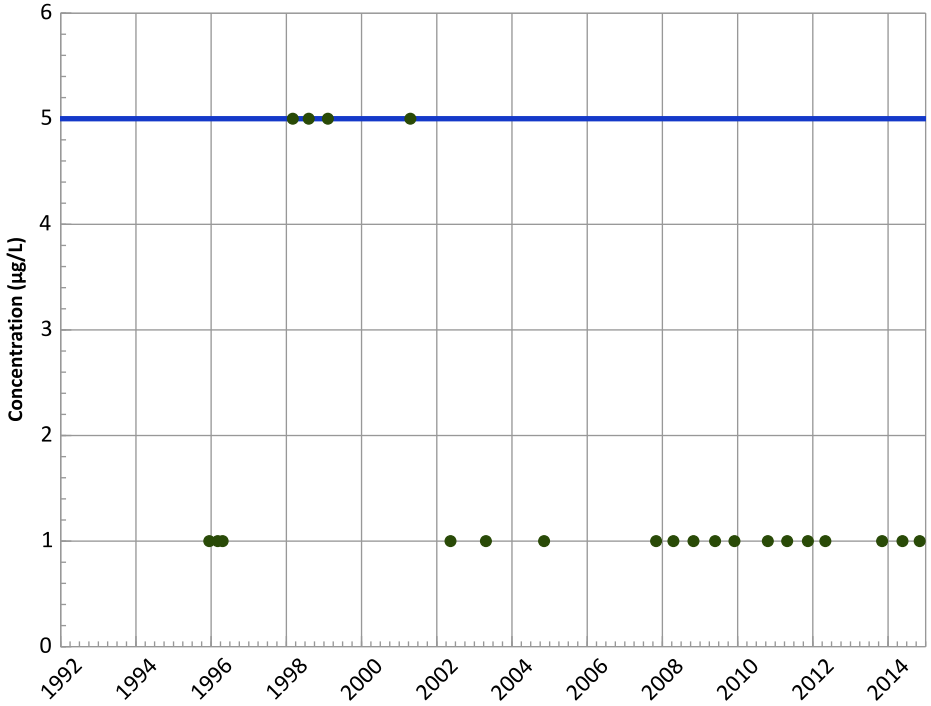


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Tetrachloroethylene (PCE) Trend



Concentration Trend

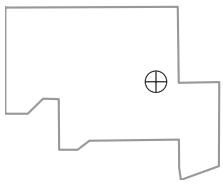
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

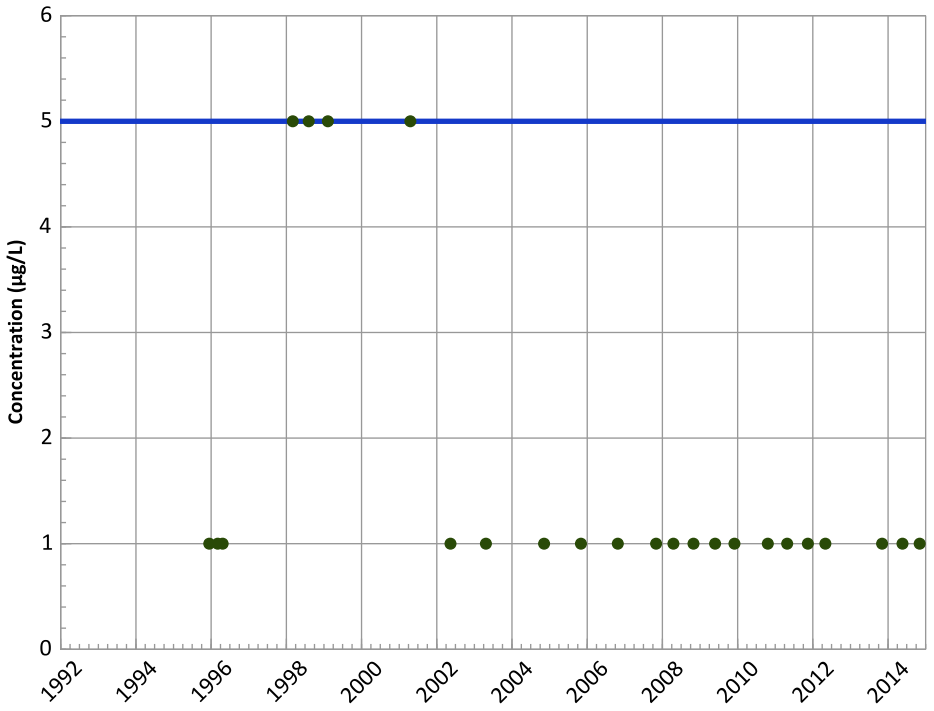
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

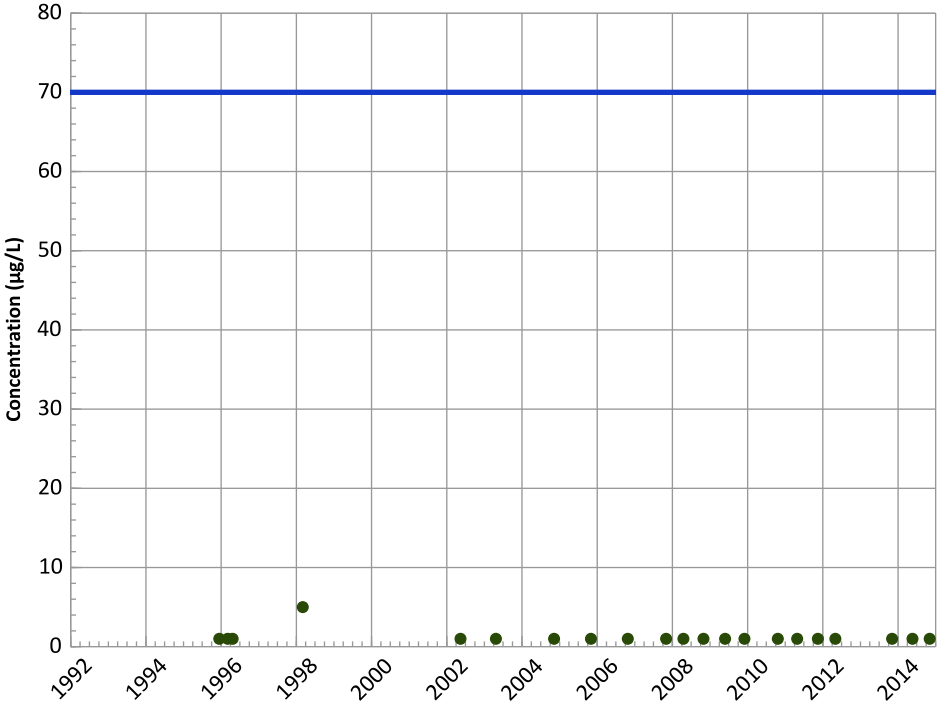


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

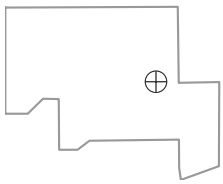
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

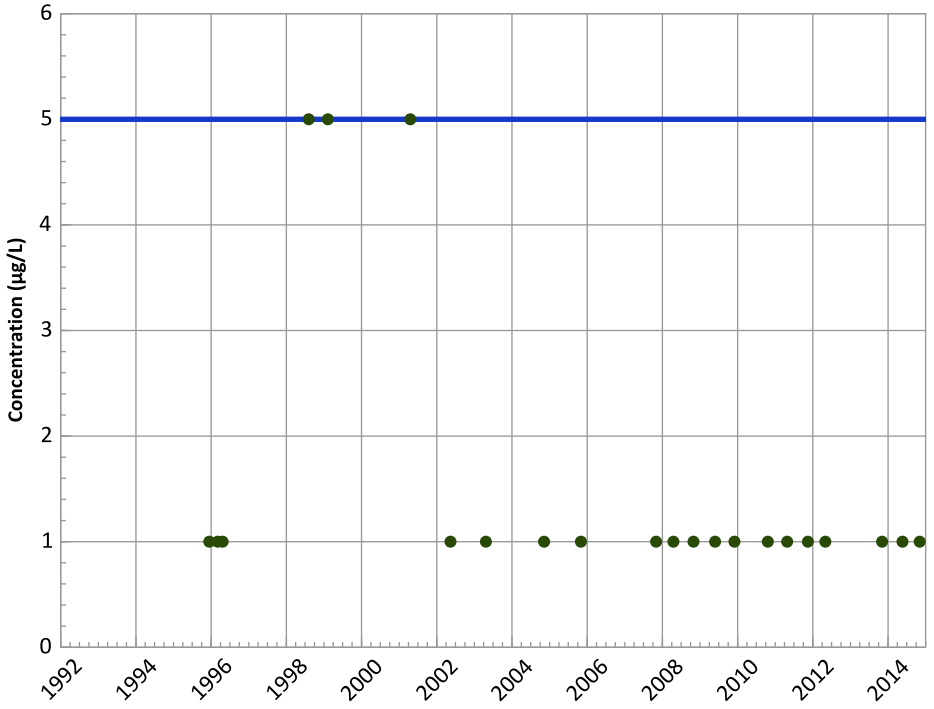
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

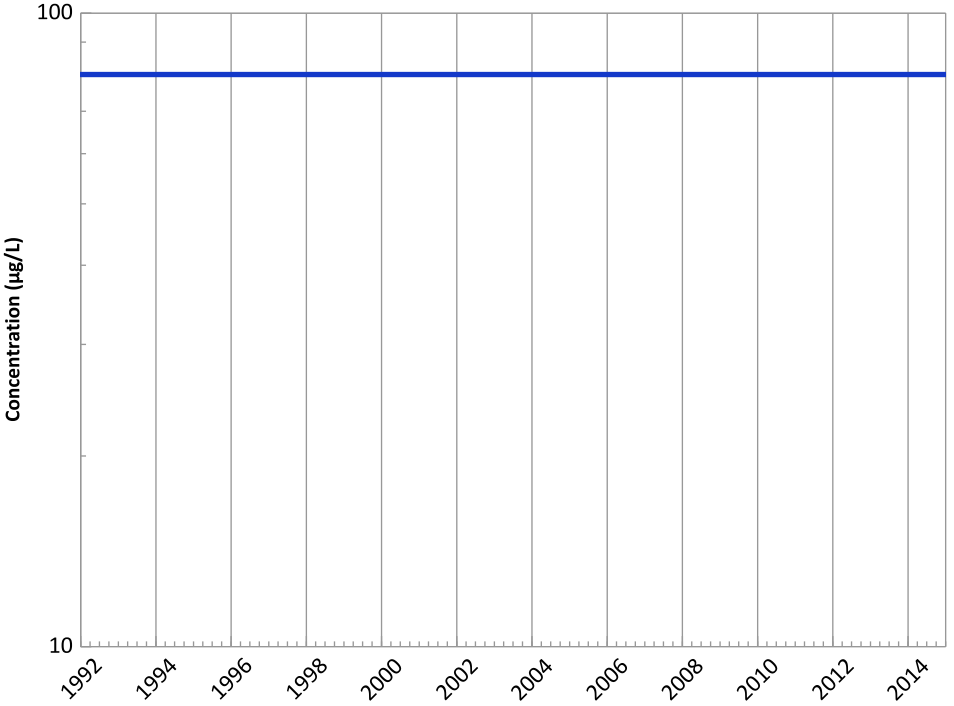


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

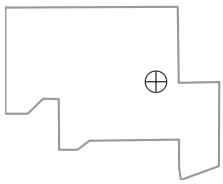
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

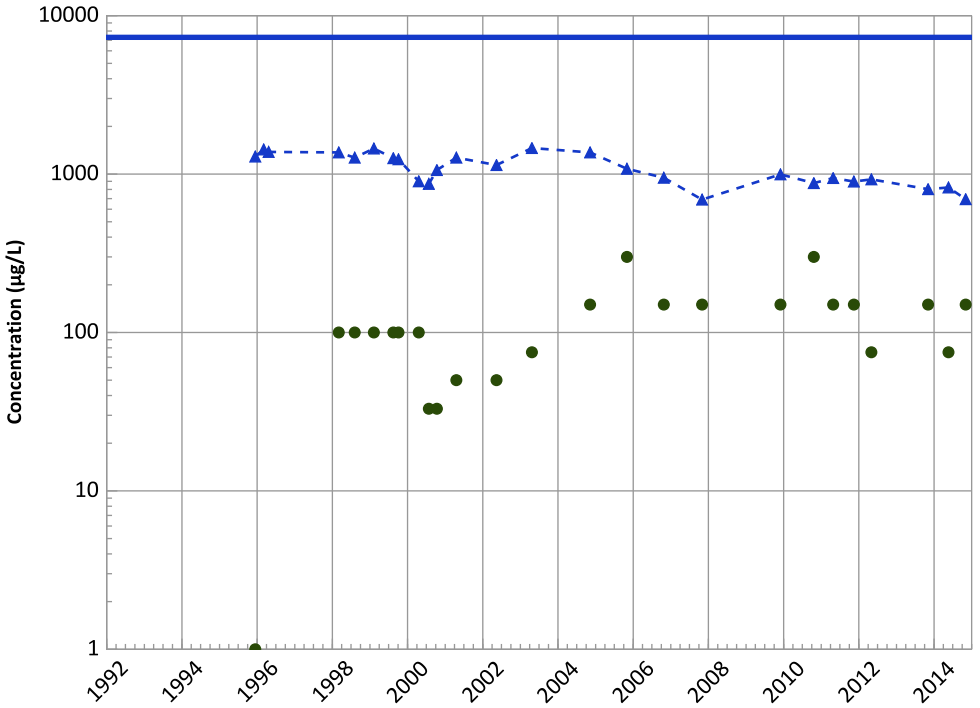
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

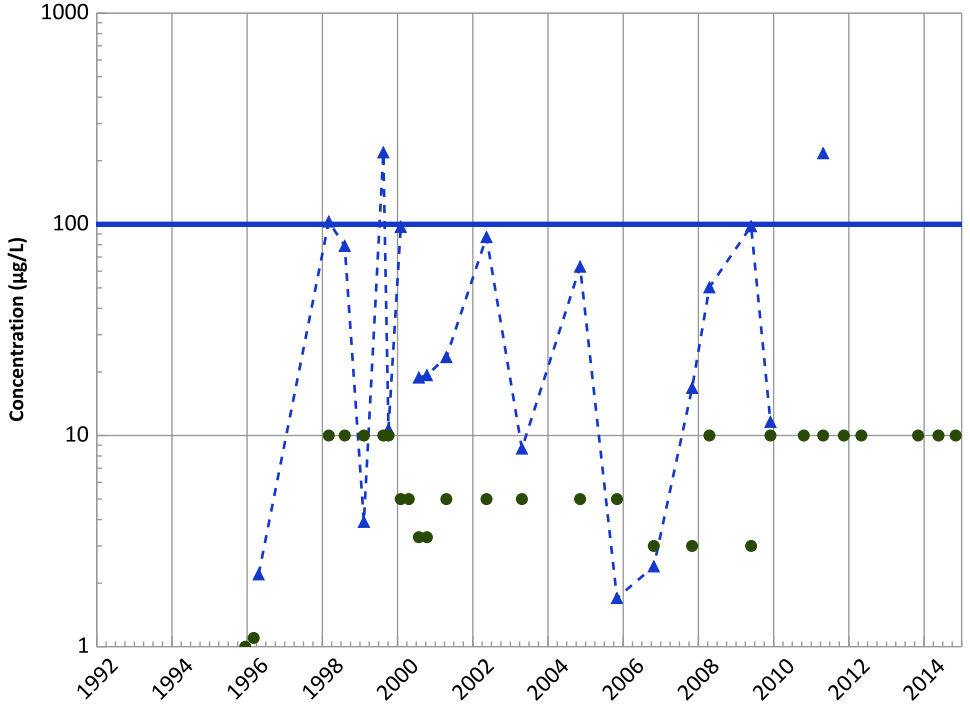


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

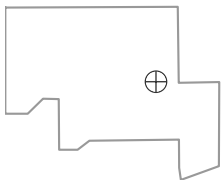
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

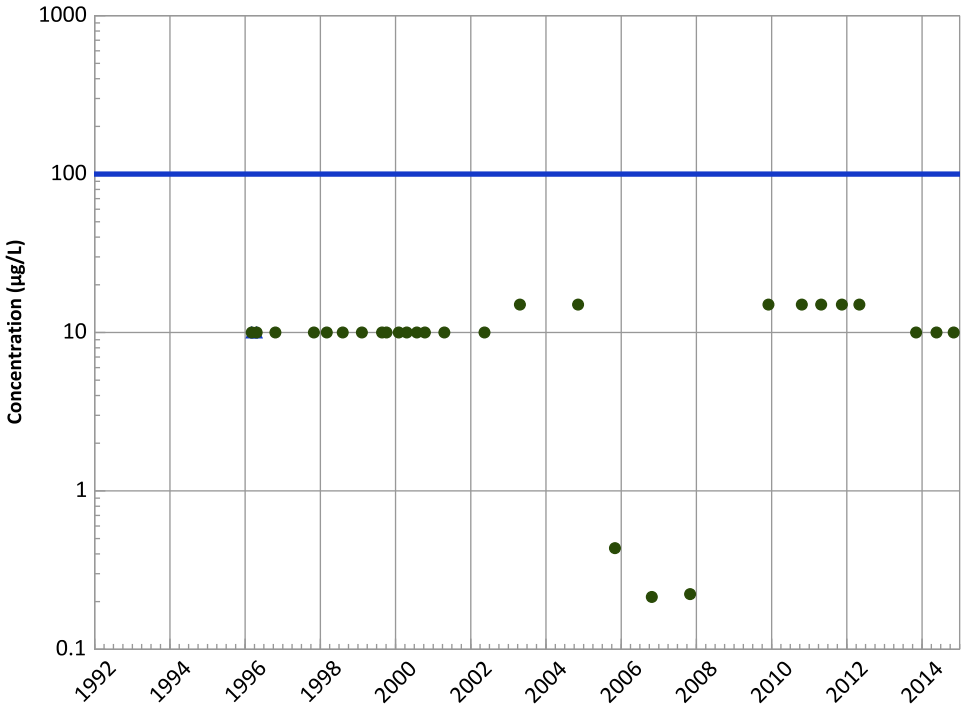
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

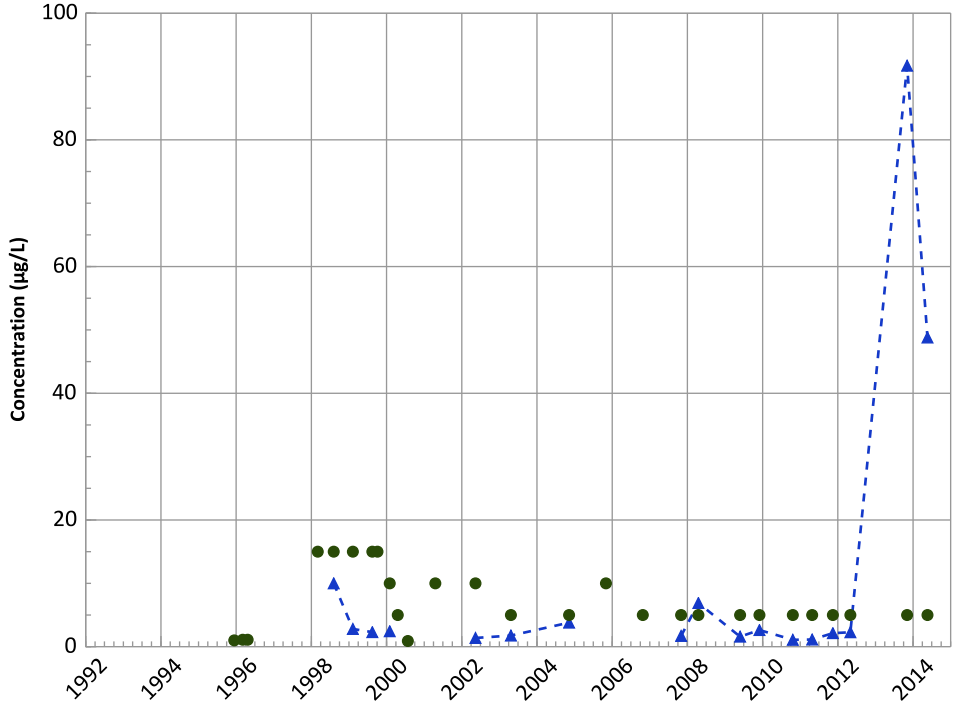


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

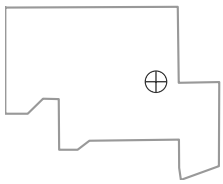
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

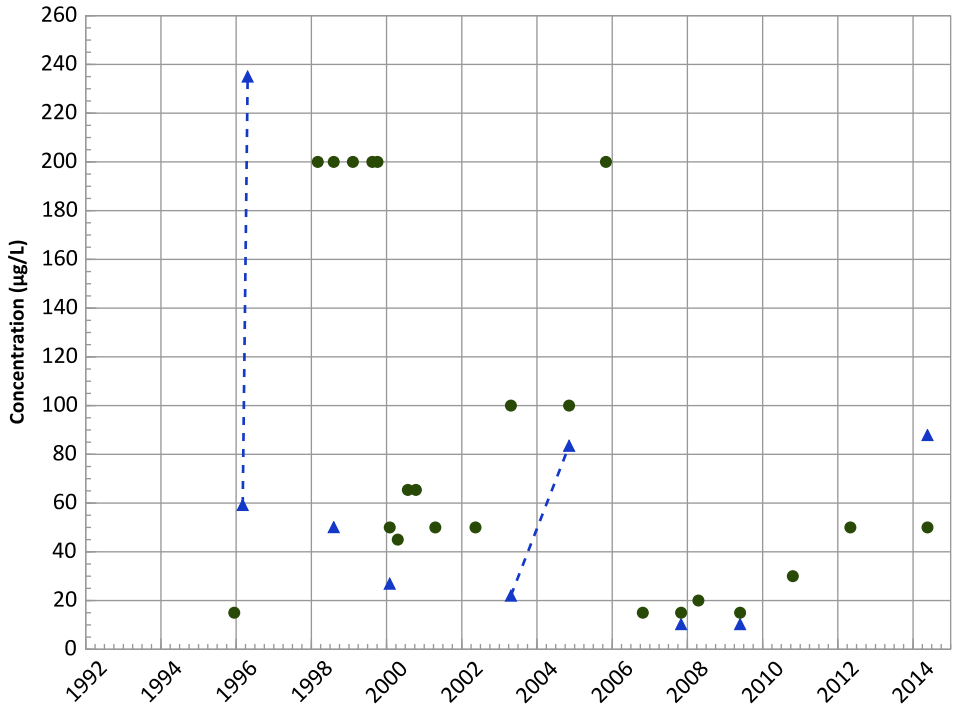
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

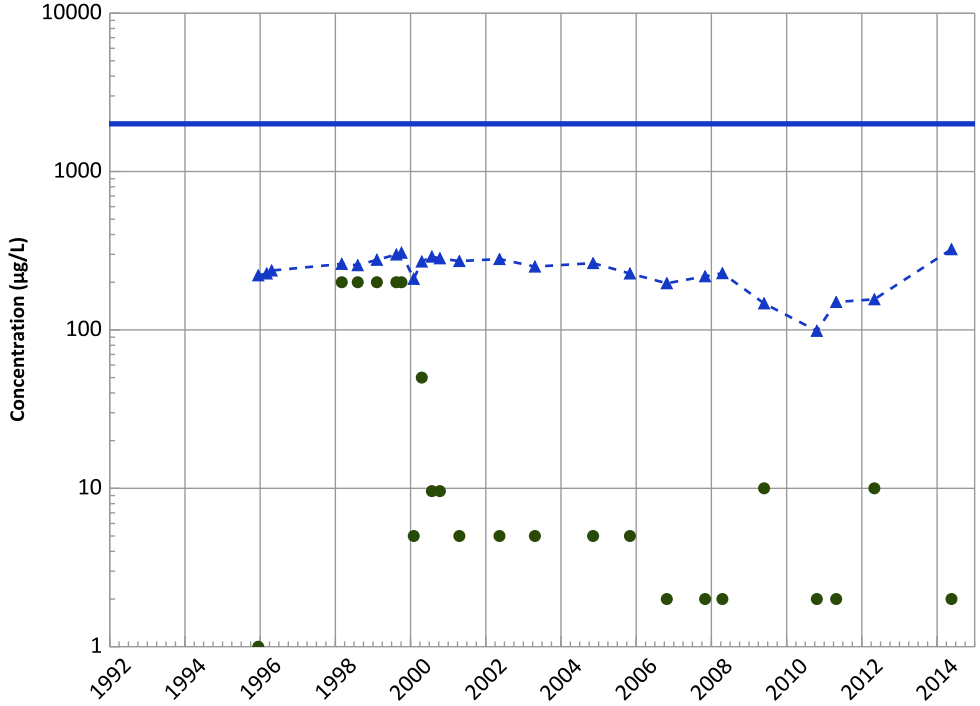


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

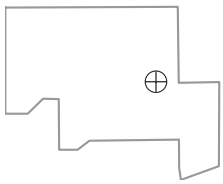
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

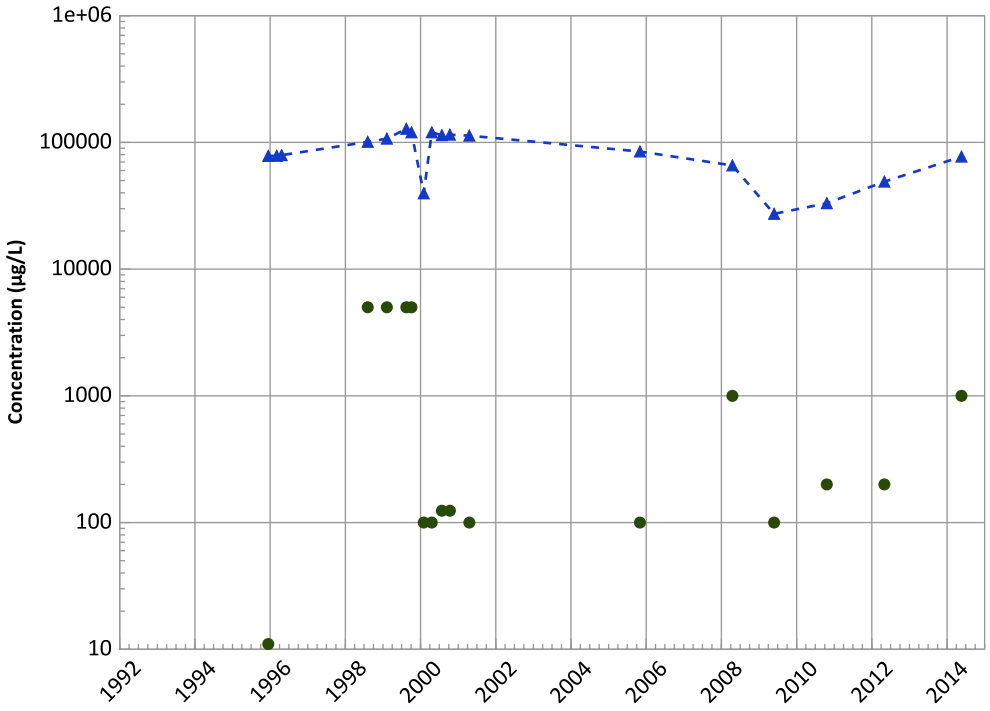
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

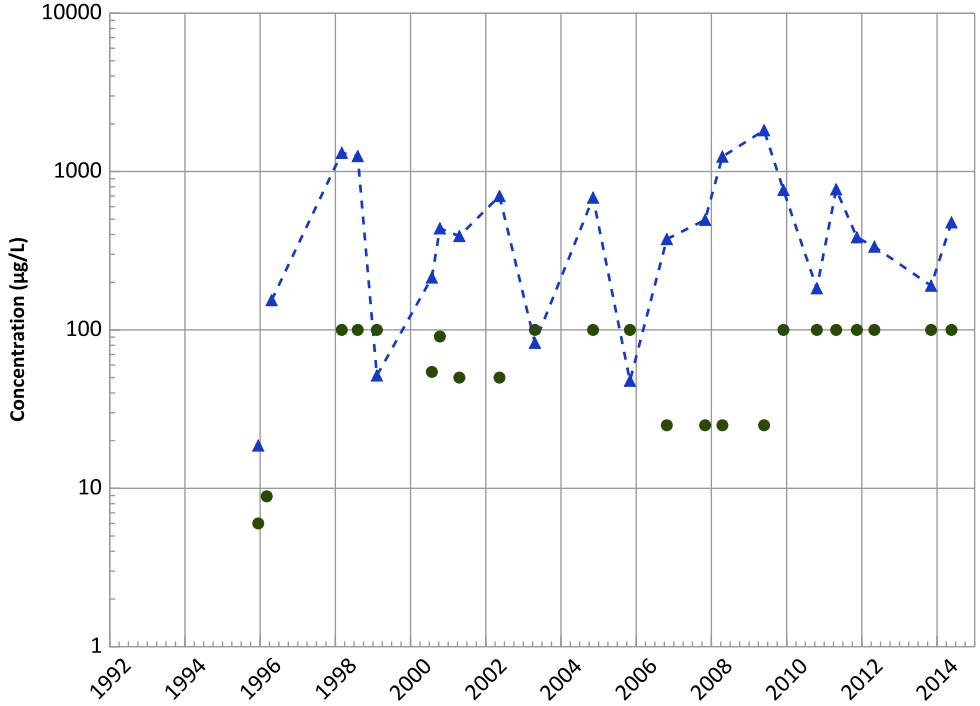


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

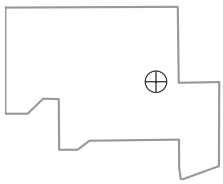
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

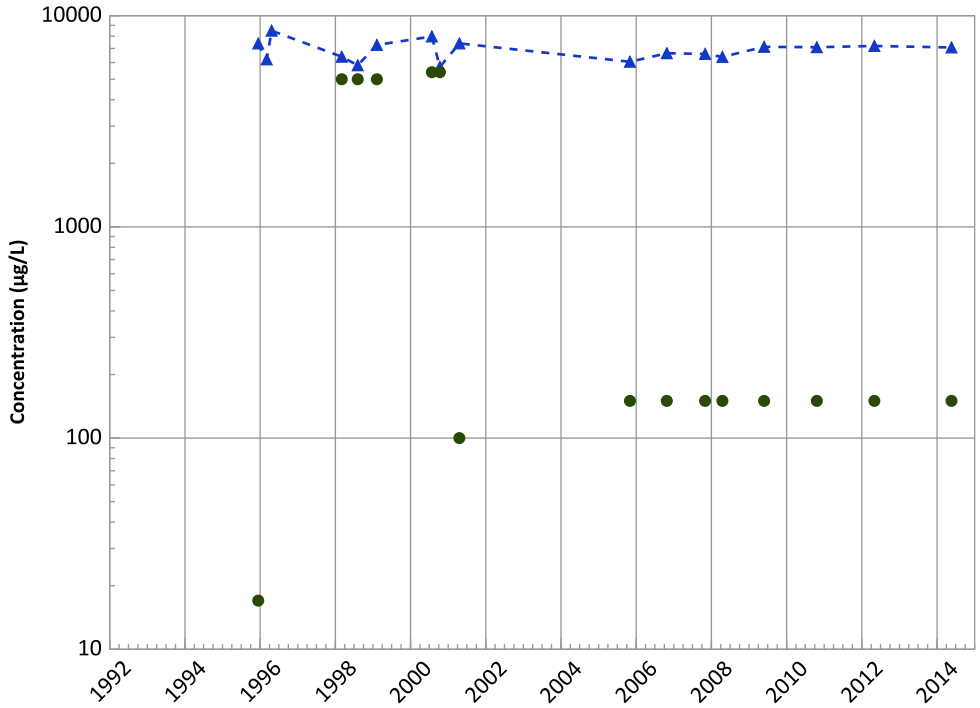
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

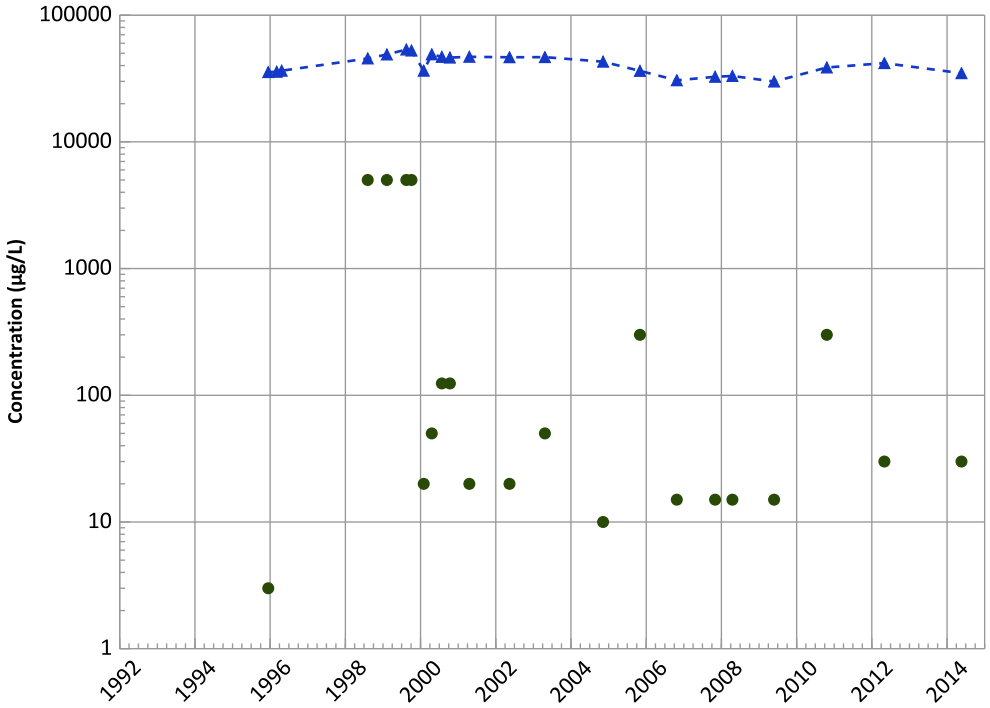


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

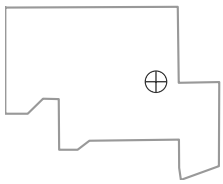
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

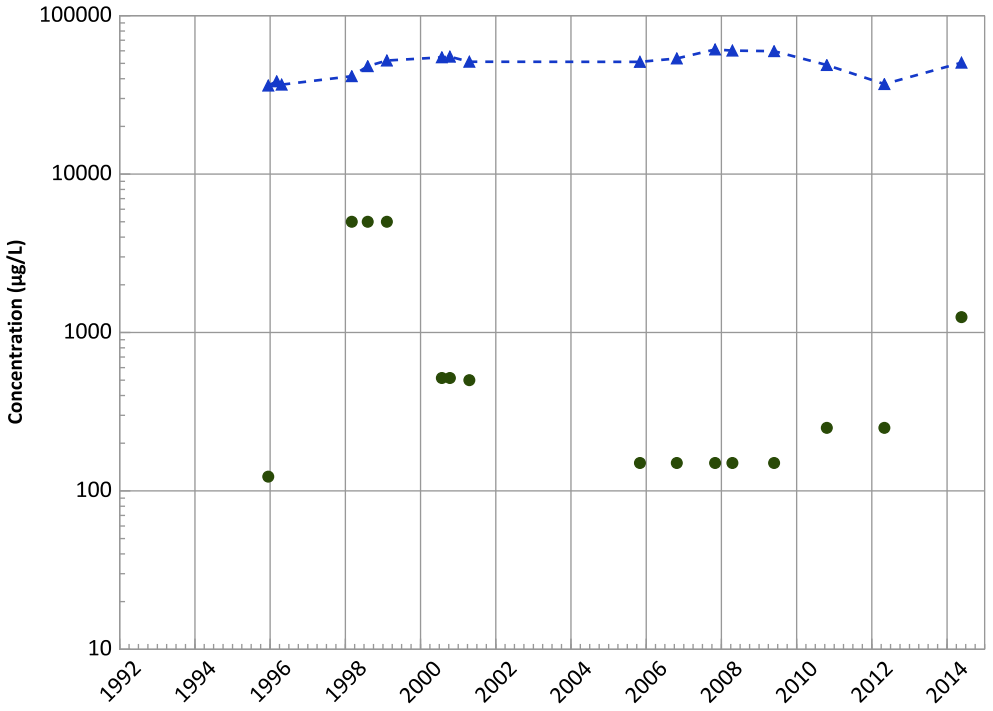
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1002 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

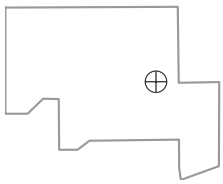
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

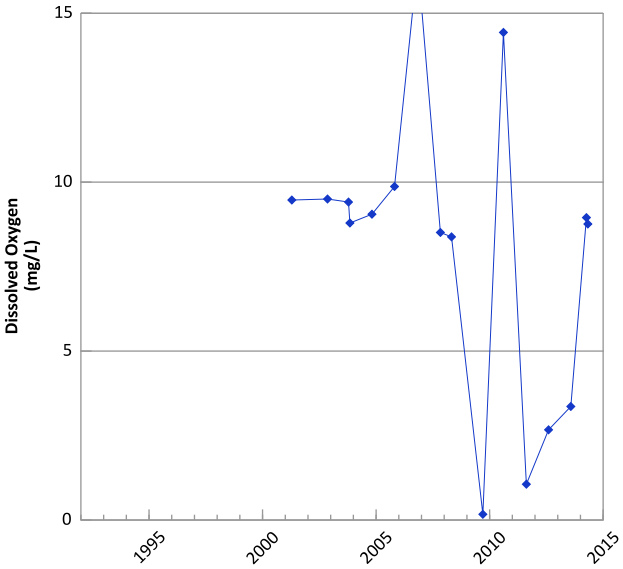
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

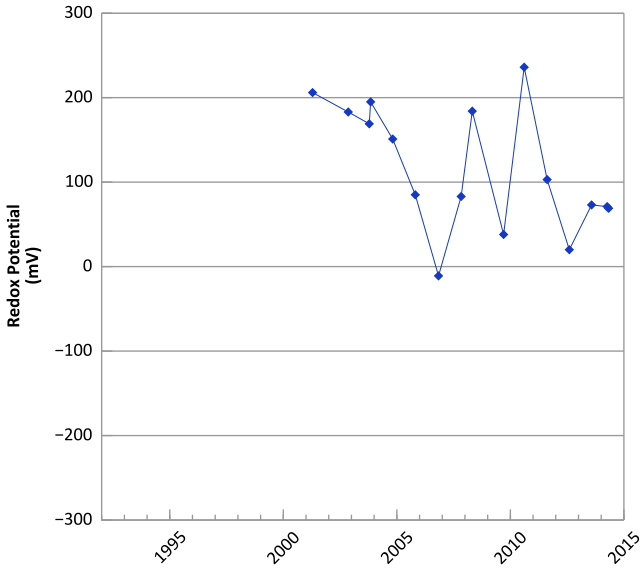
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

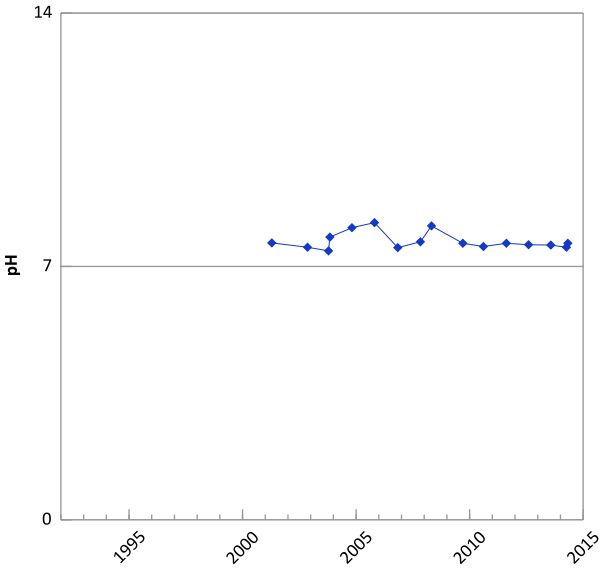
Well Location

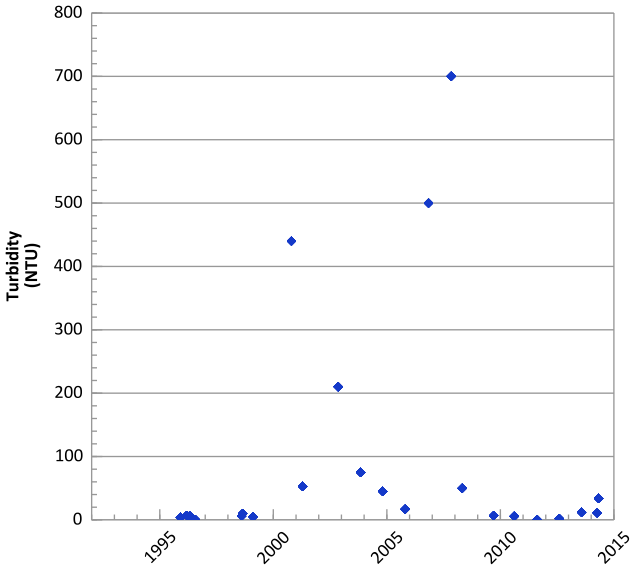


PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



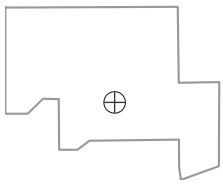






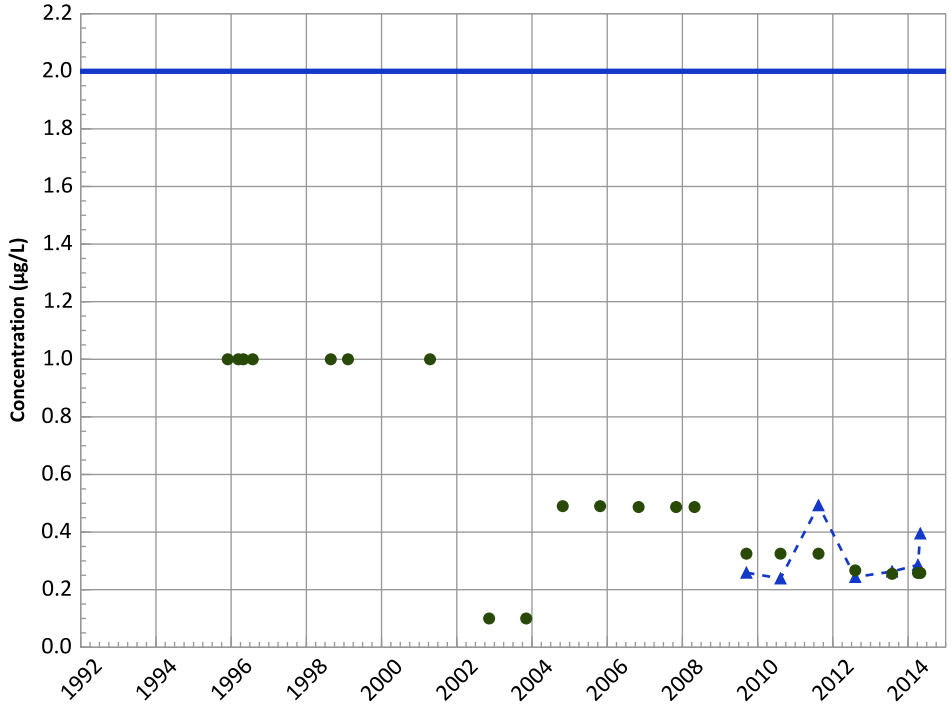
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

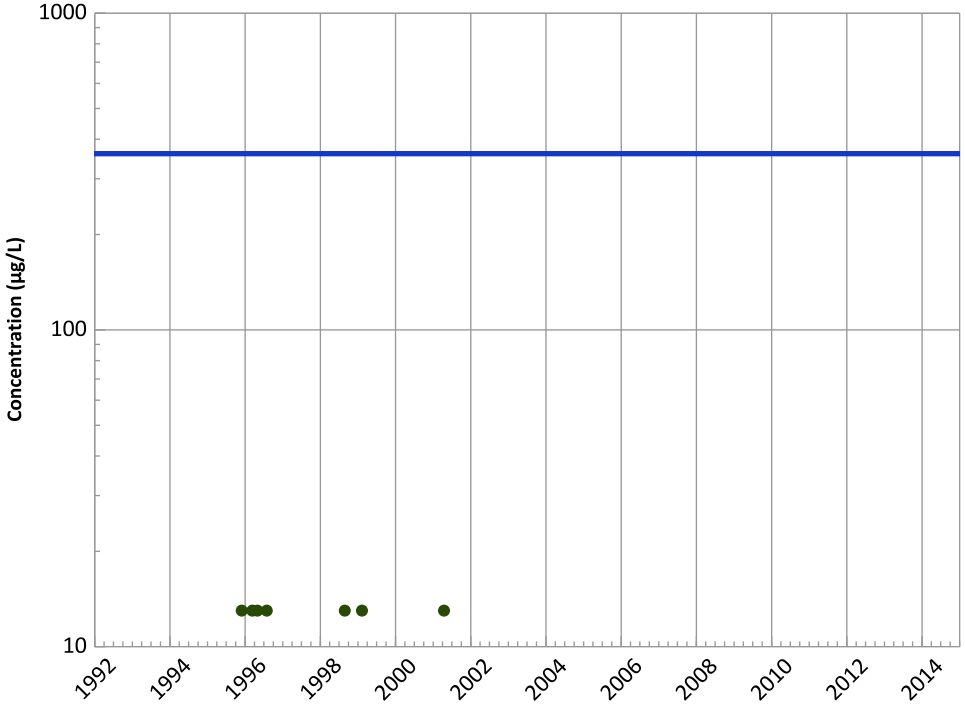


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

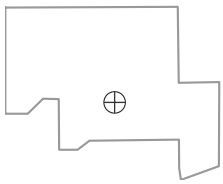
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

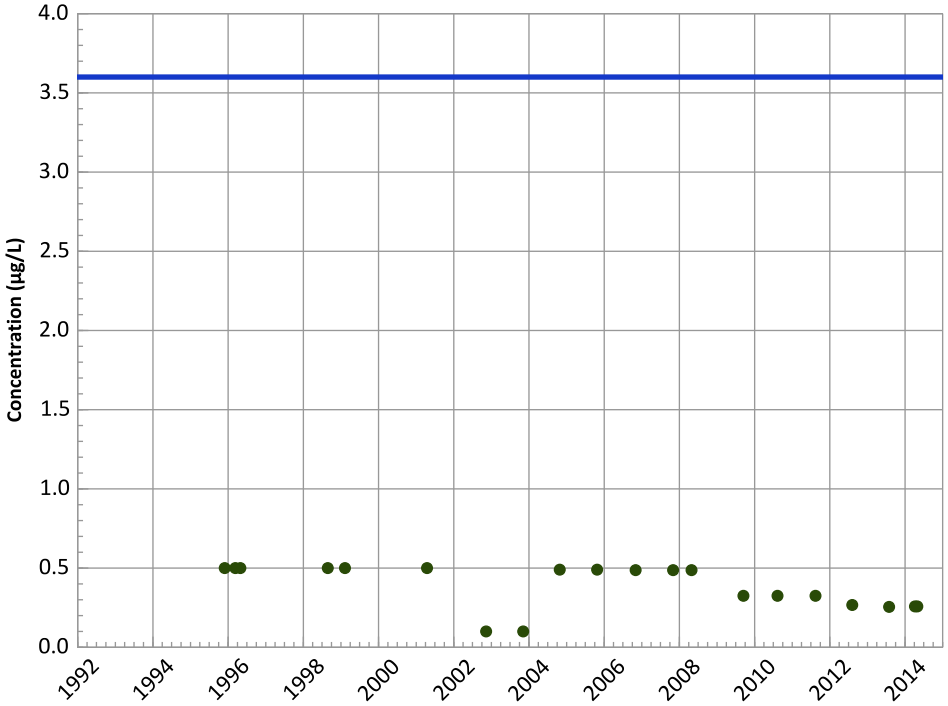
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

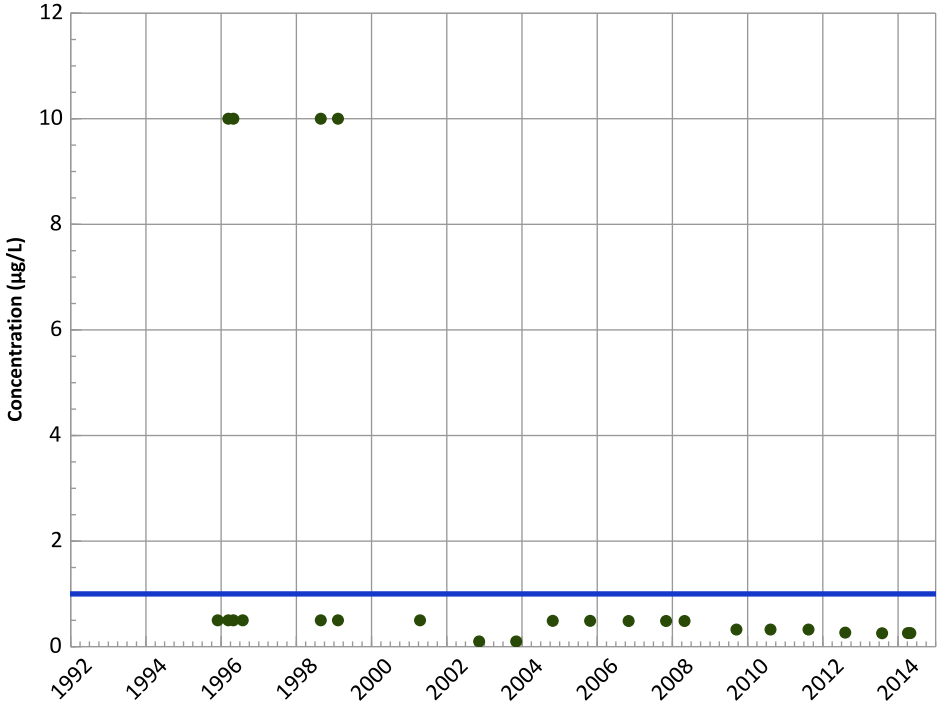


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

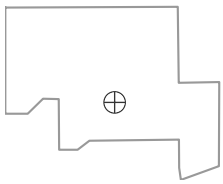
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

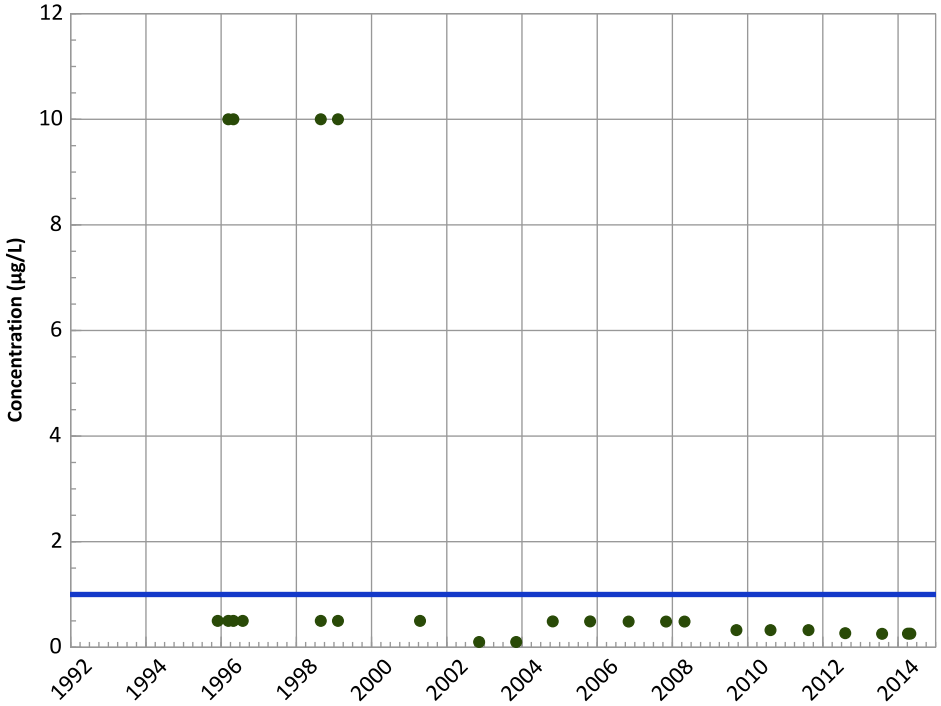
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

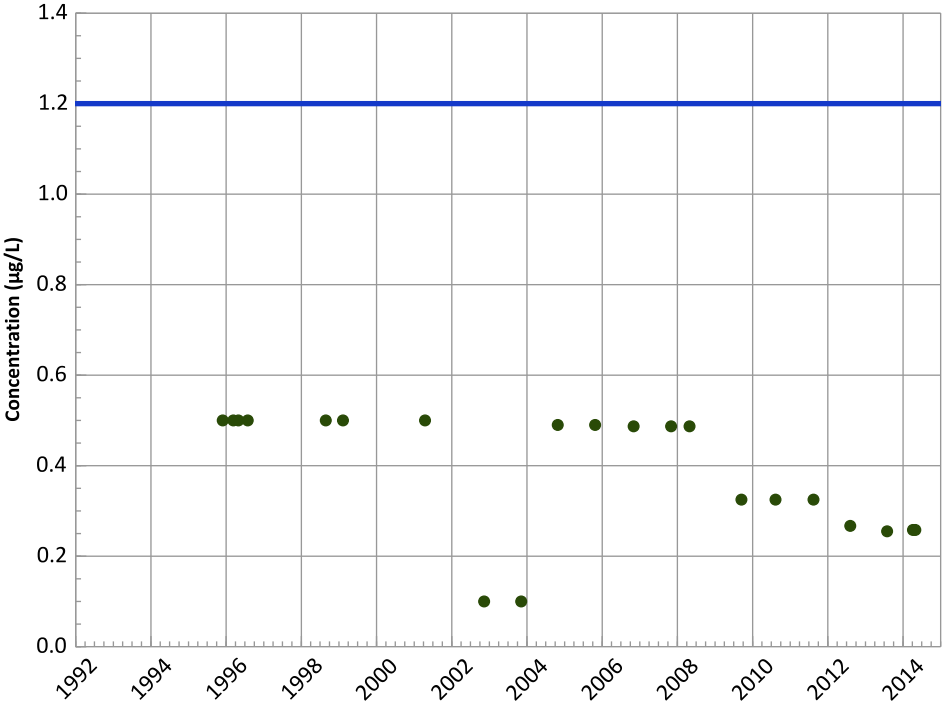


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

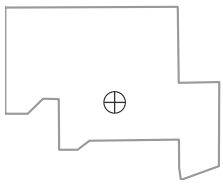
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

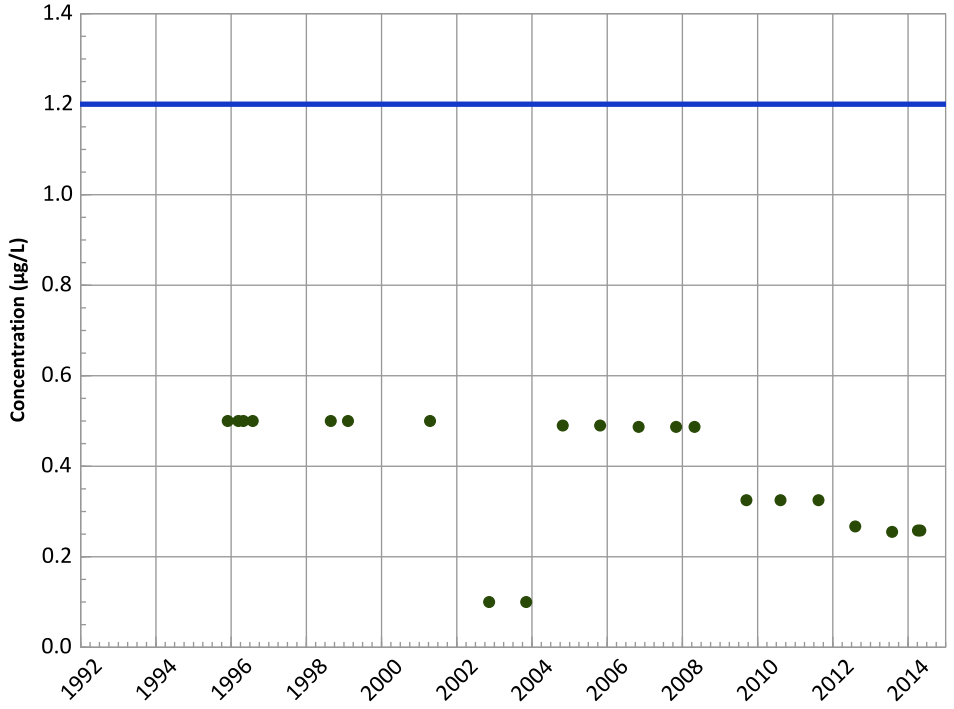
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

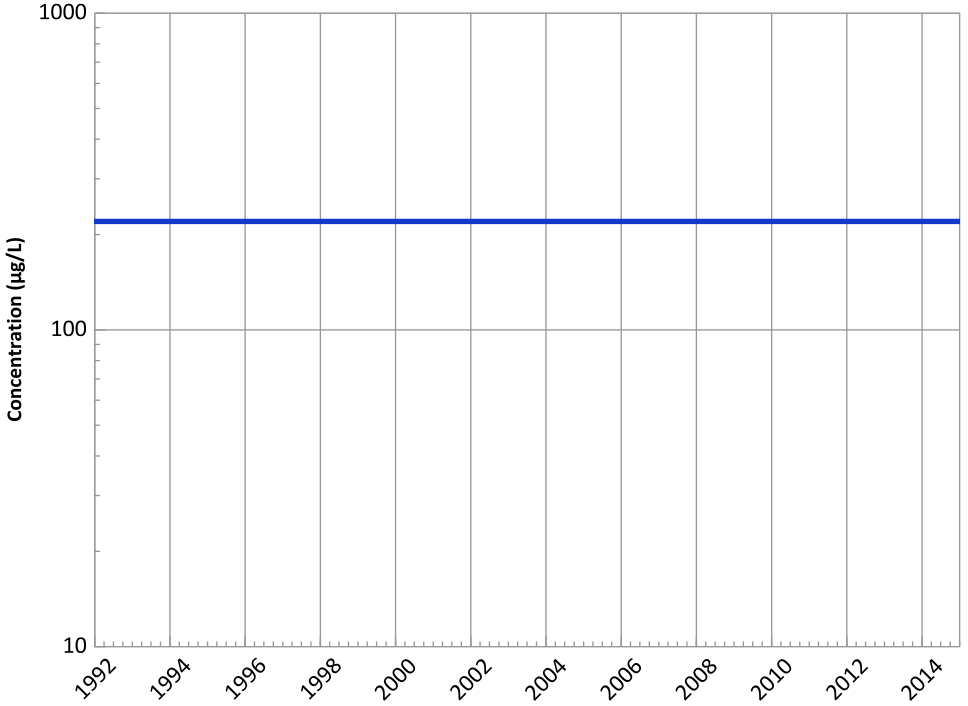


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

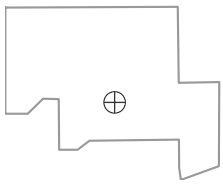
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

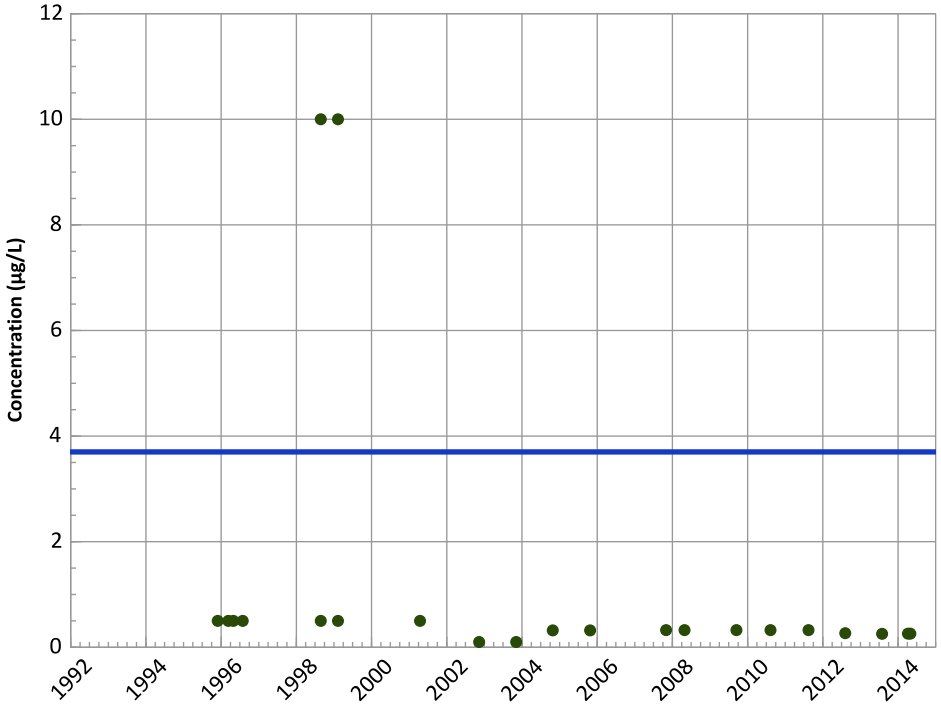
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

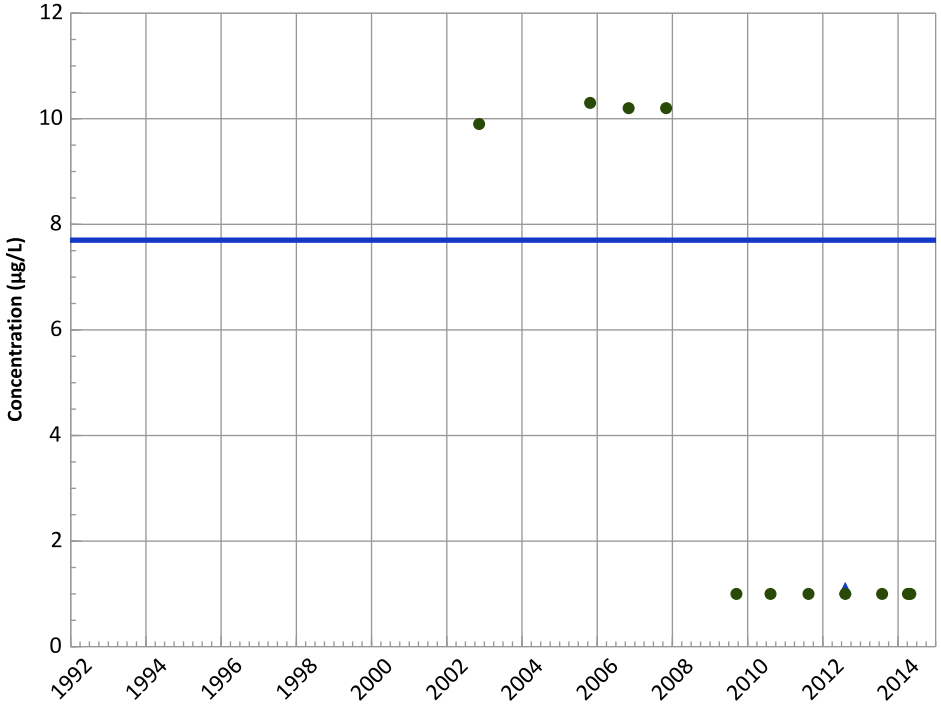


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

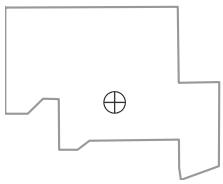
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

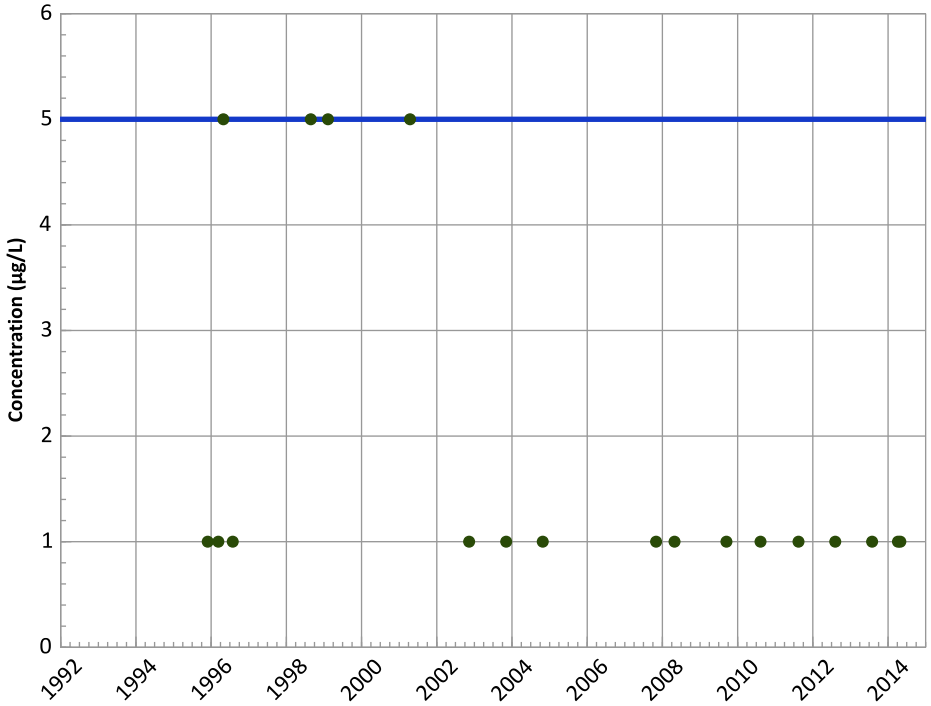
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

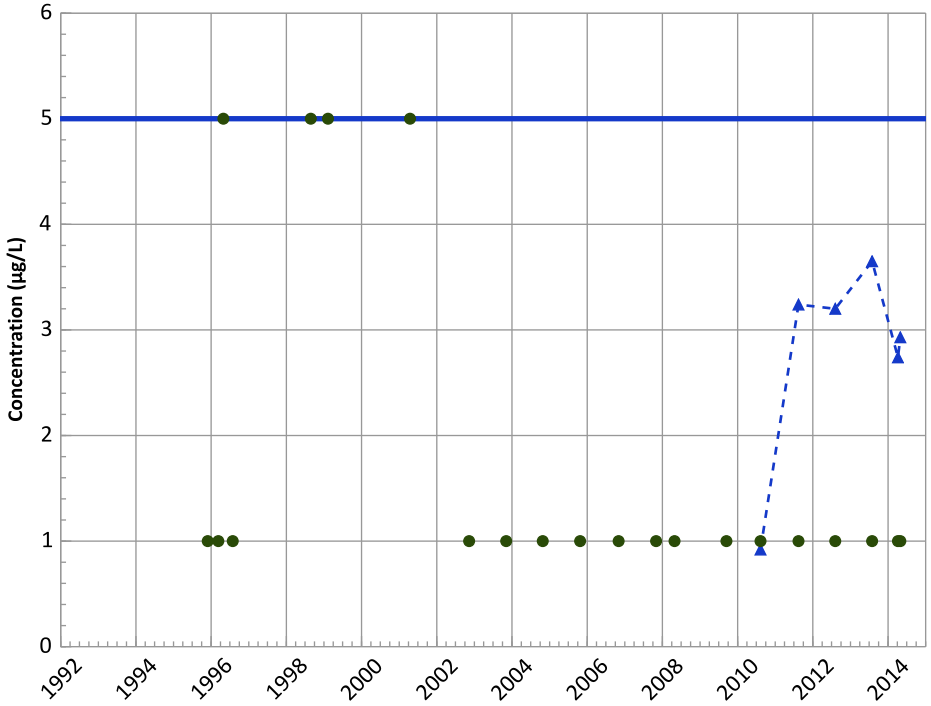


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

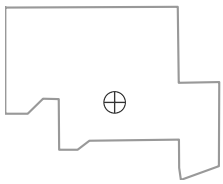
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

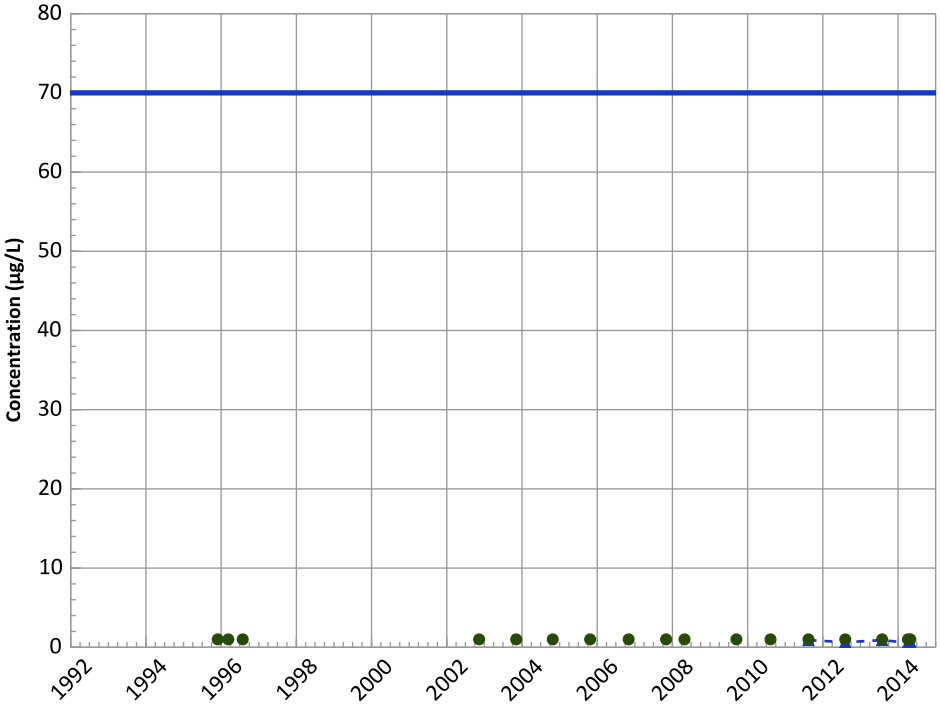
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

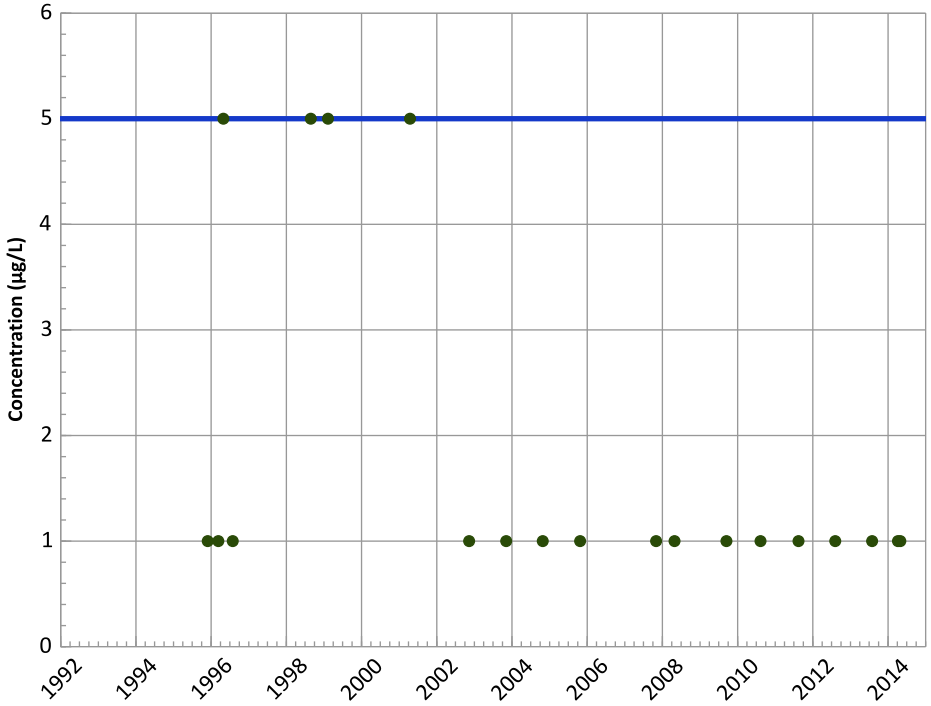


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

1,2-Dichloroethane Trend



Concentration Trend

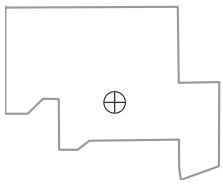
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

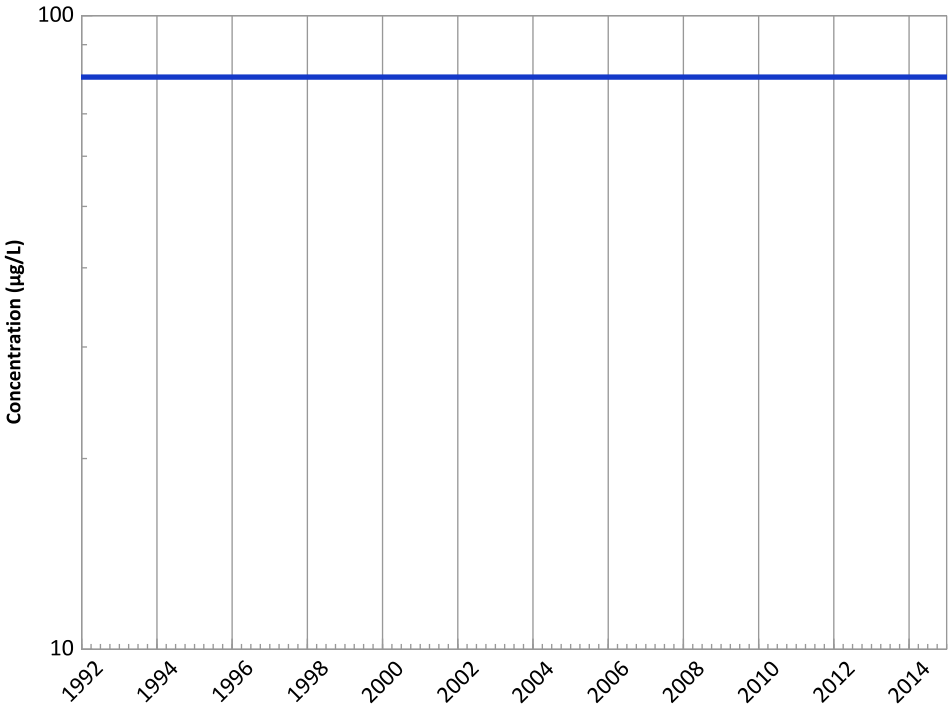
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

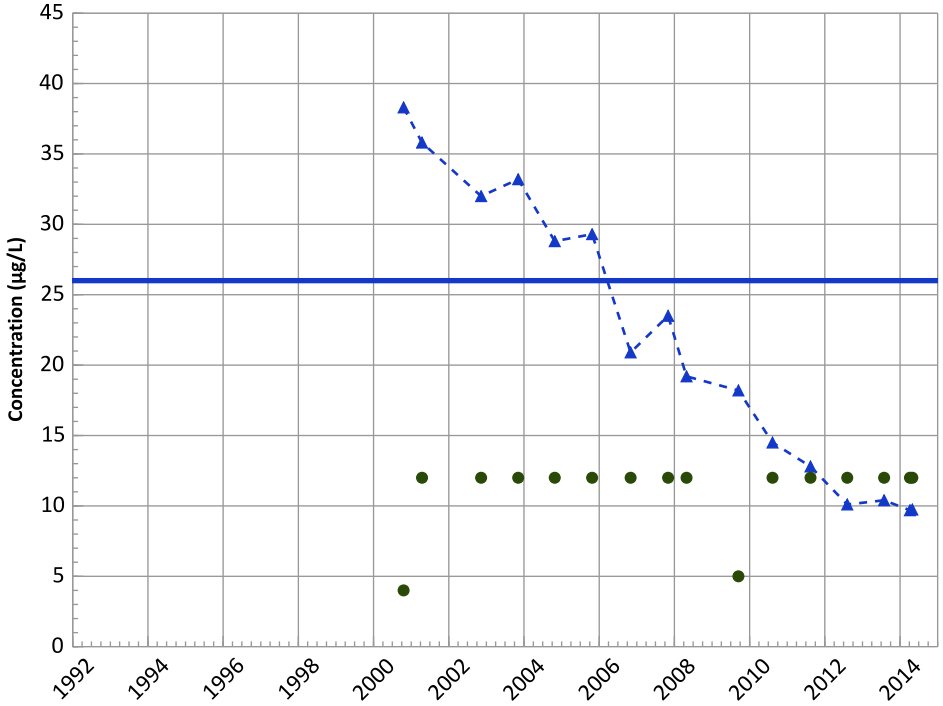


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

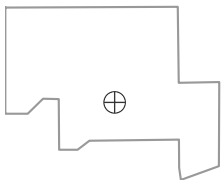
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

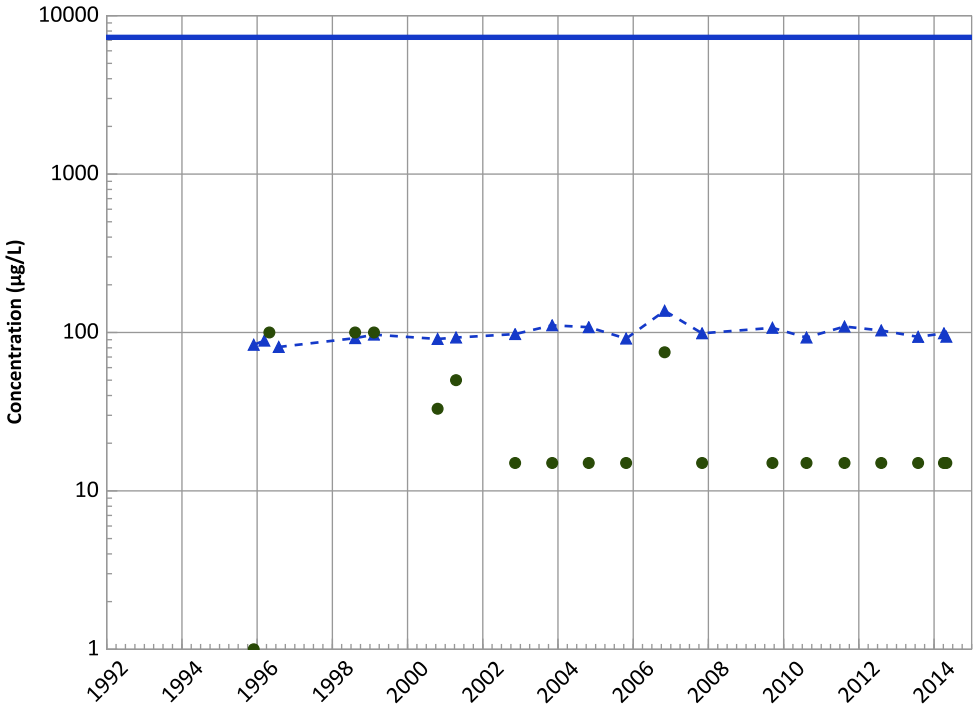
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

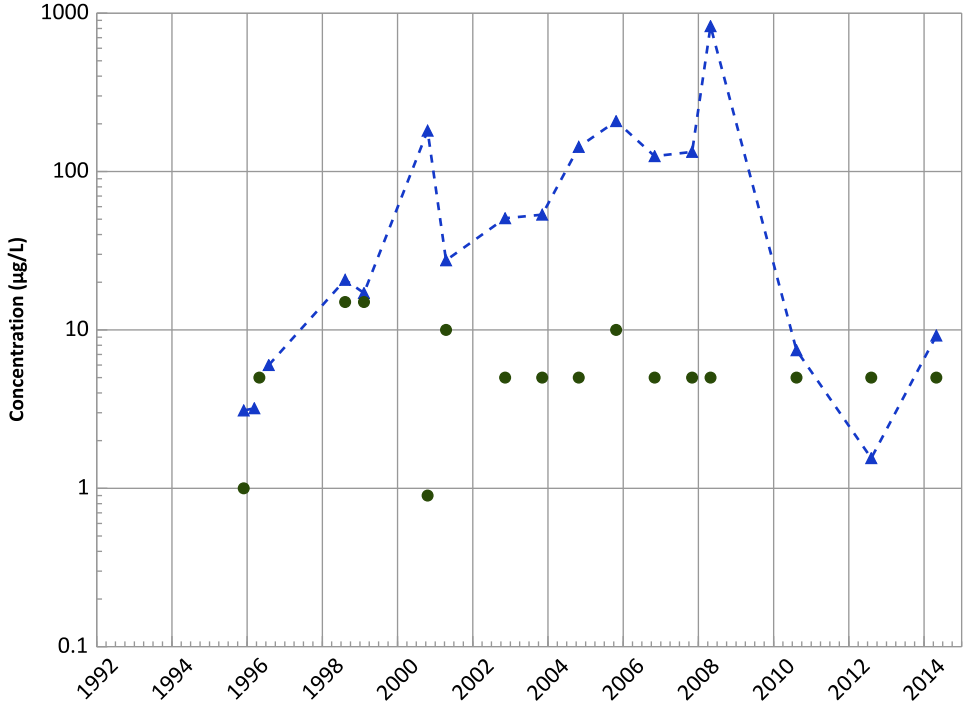


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Manganese Trend



Concentration Trend

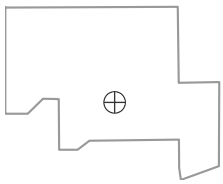
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

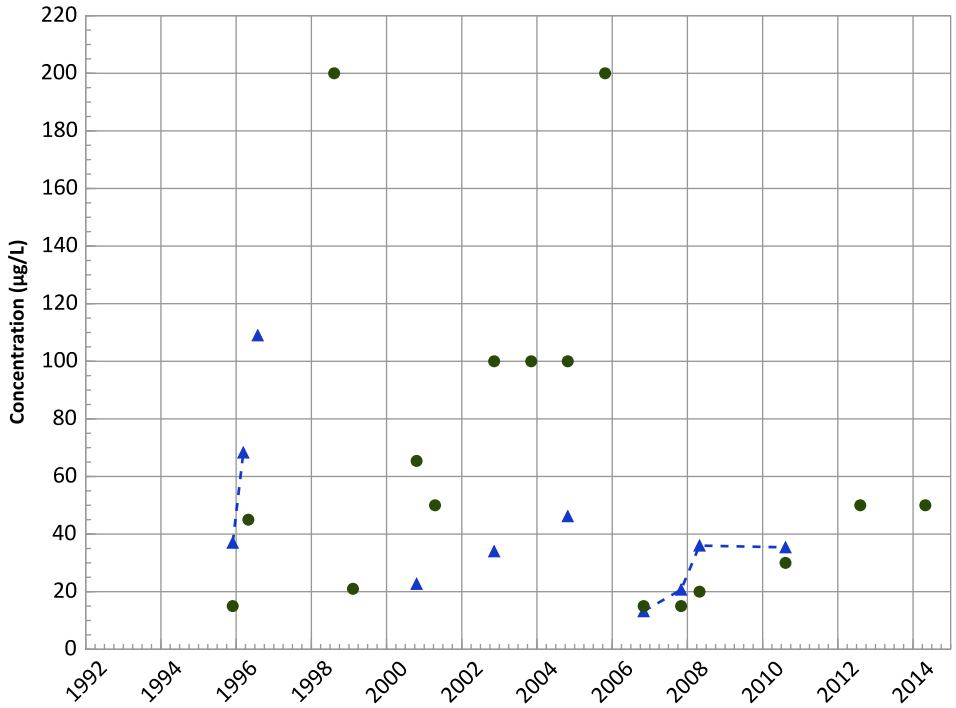
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

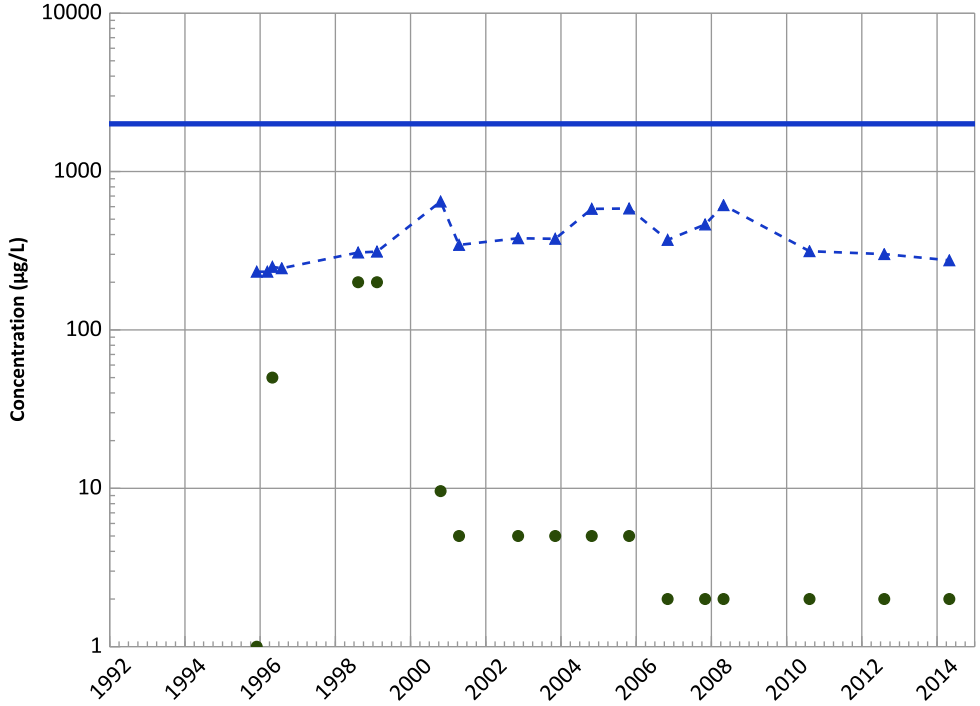


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

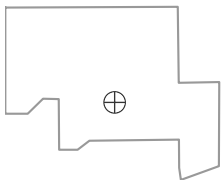
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

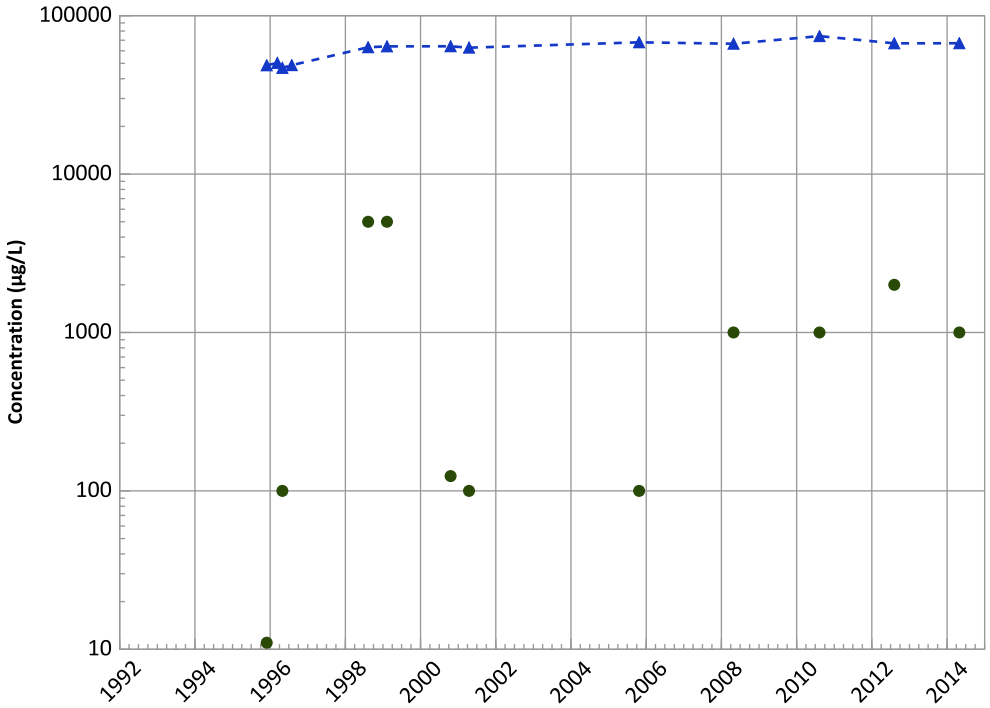
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

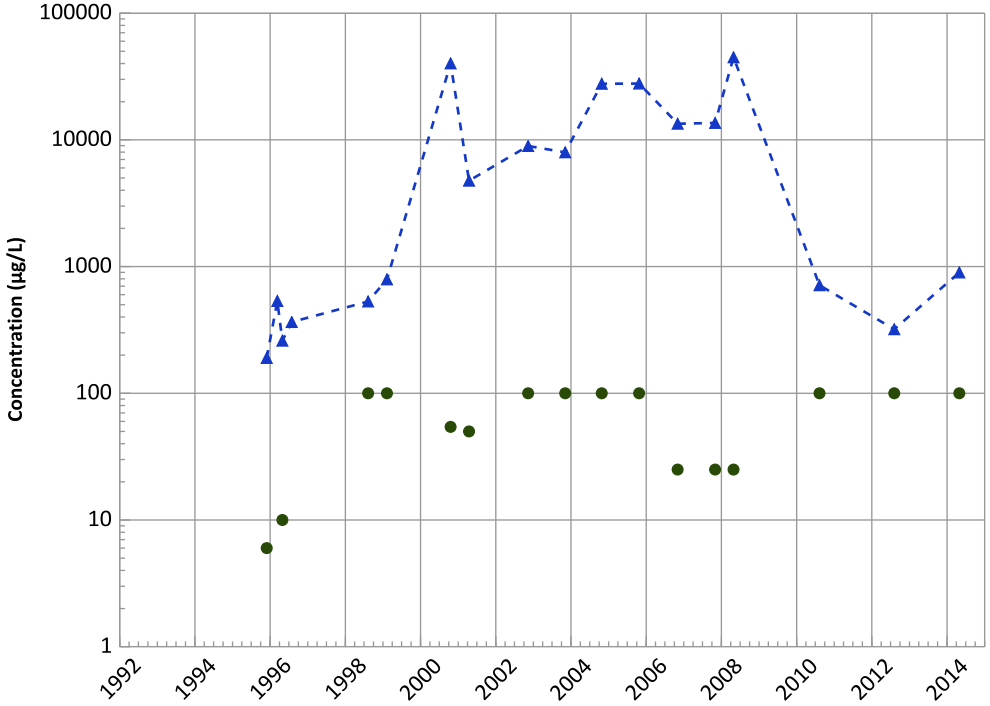


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

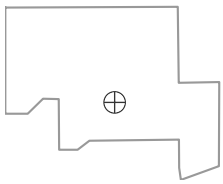
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

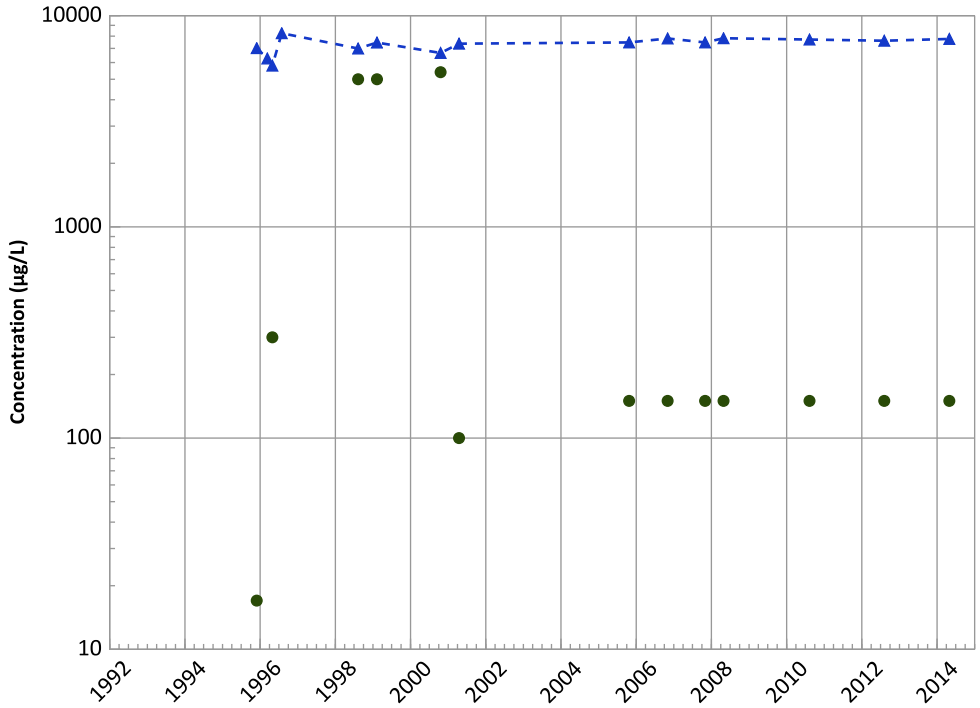
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

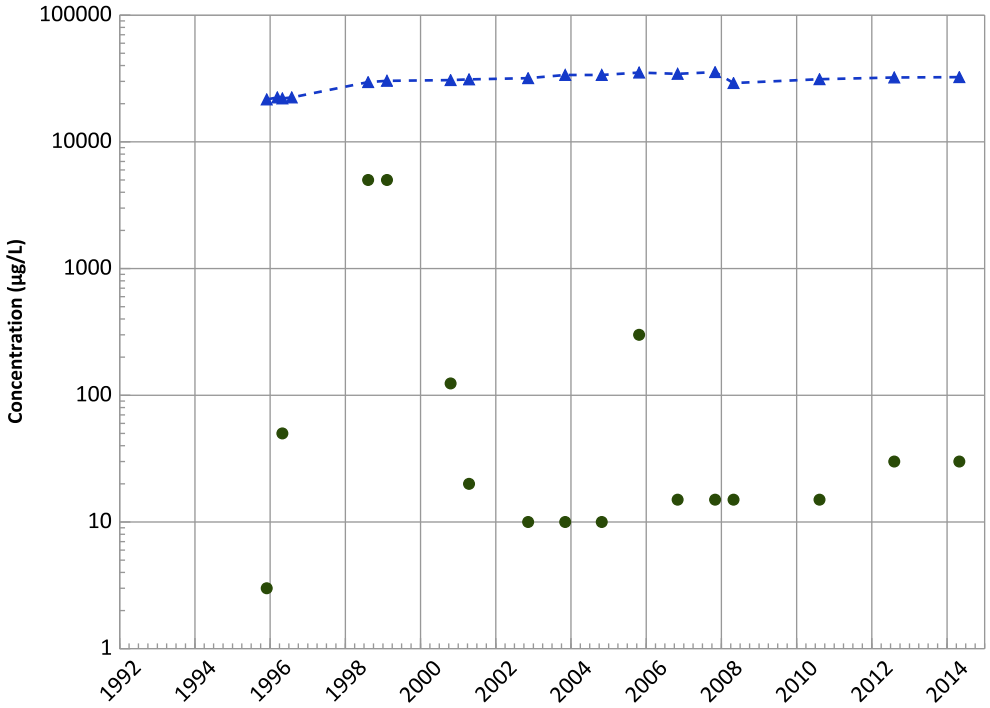


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

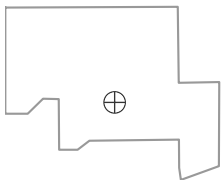
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

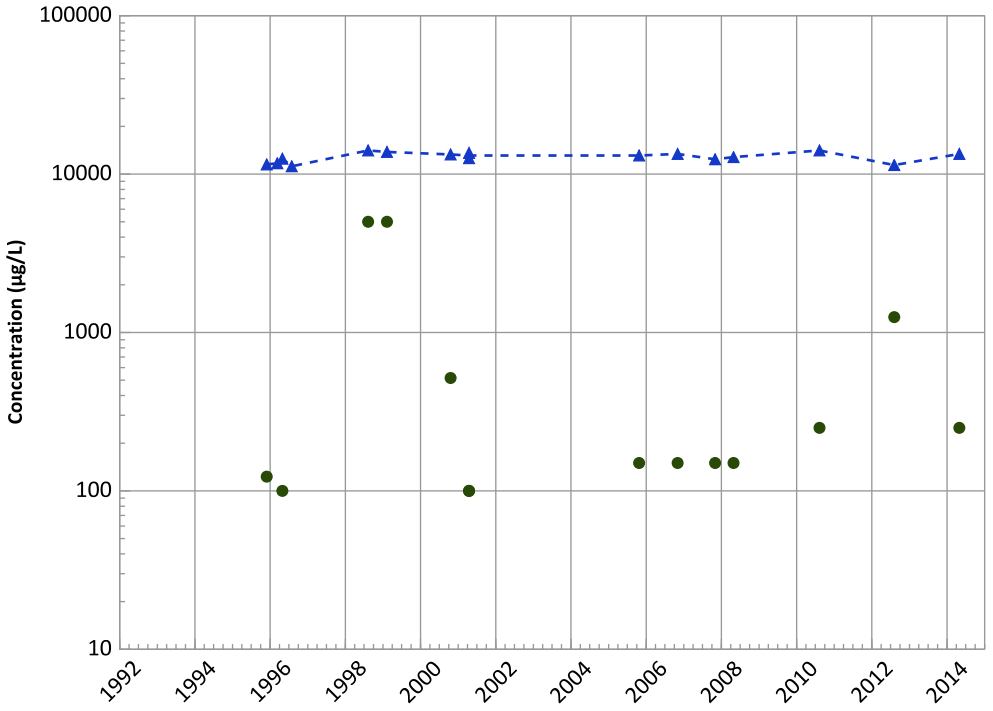
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1003 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

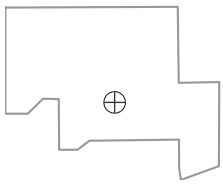
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

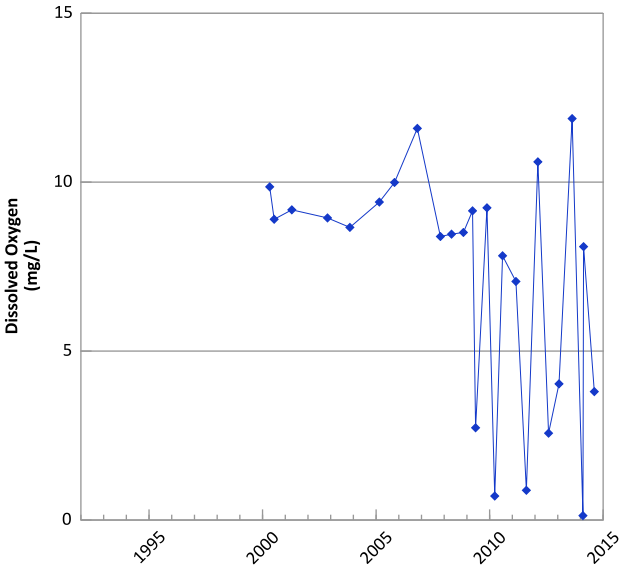
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 04/30/2014
Analysis Date: 03/19/2015

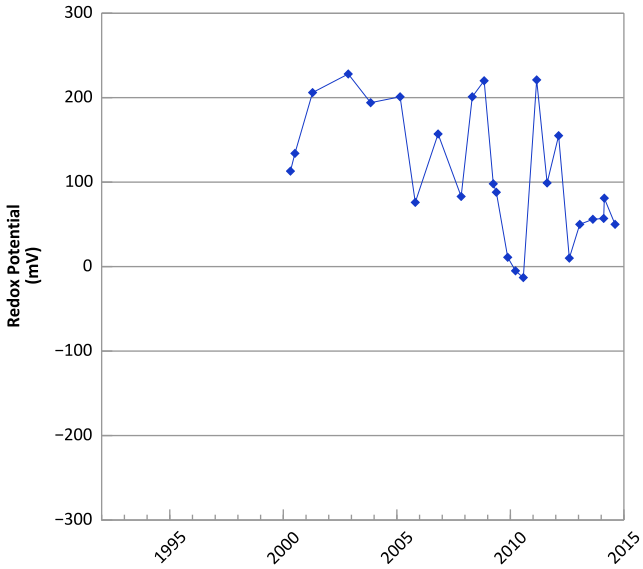
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

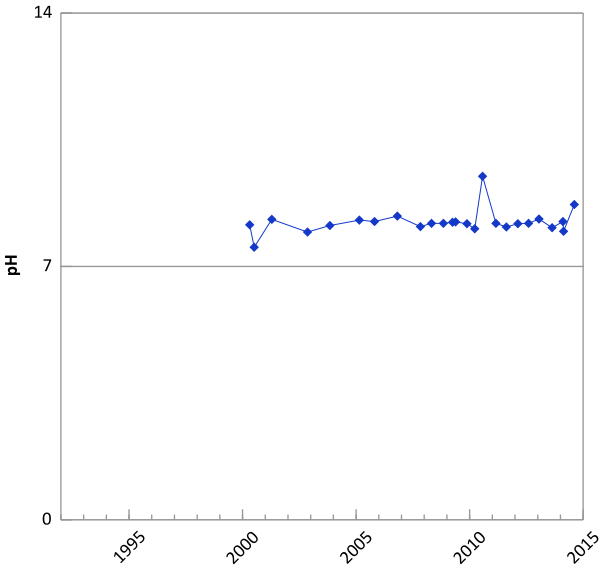
Well Location

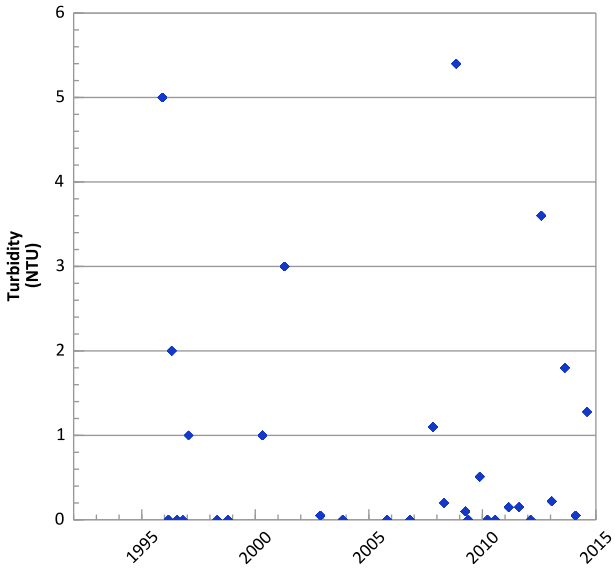


PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



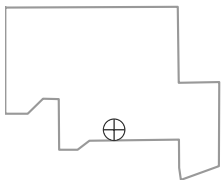






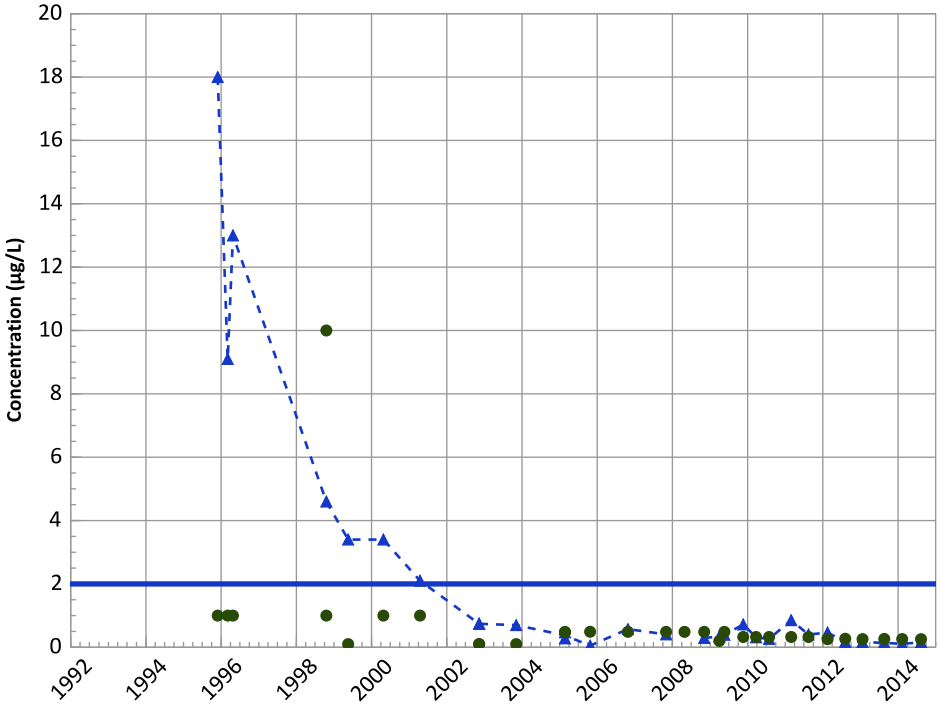
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

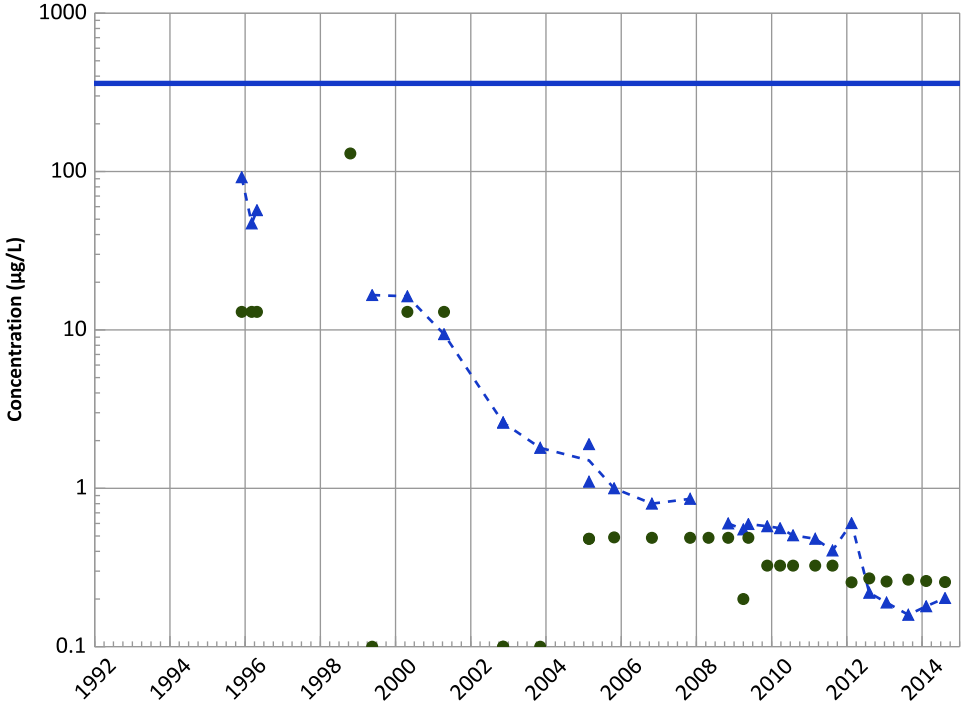


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

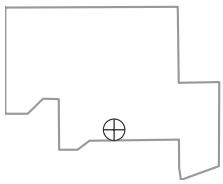
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

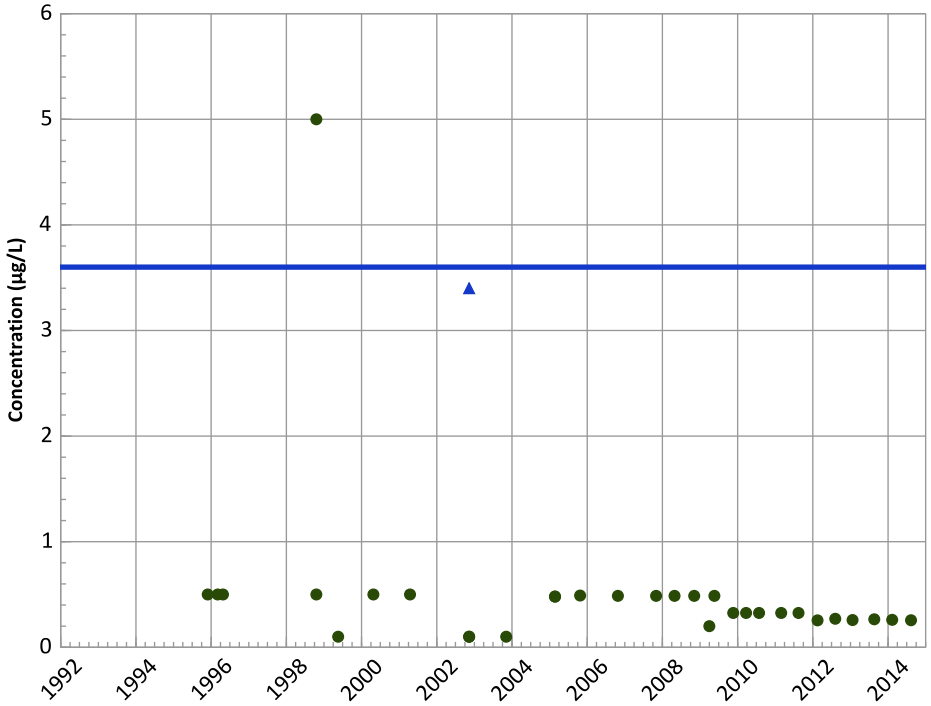
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

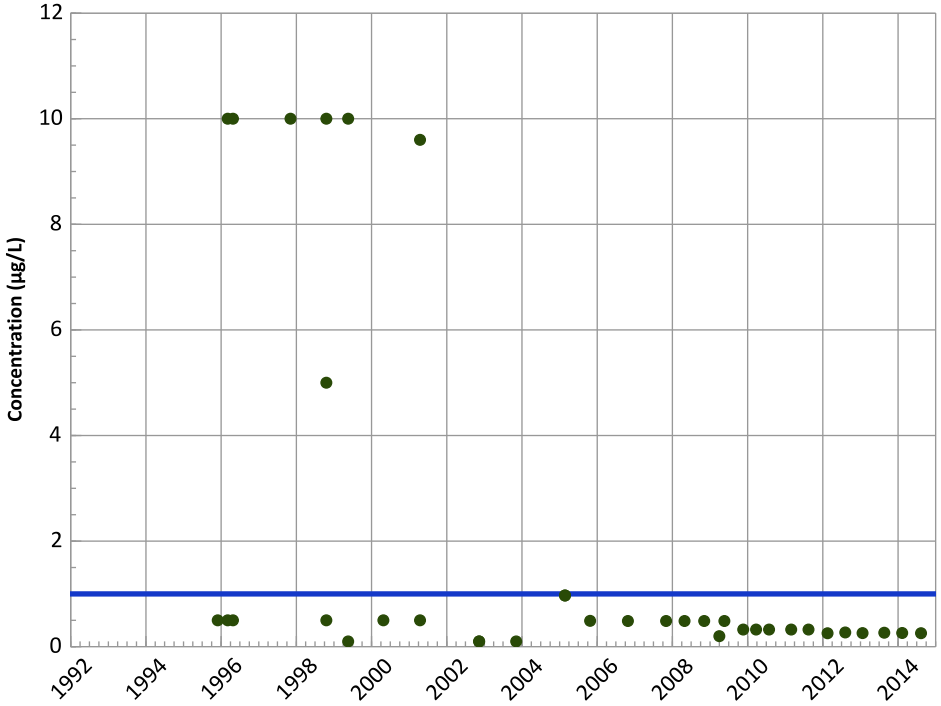


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

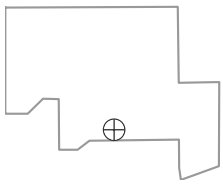
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

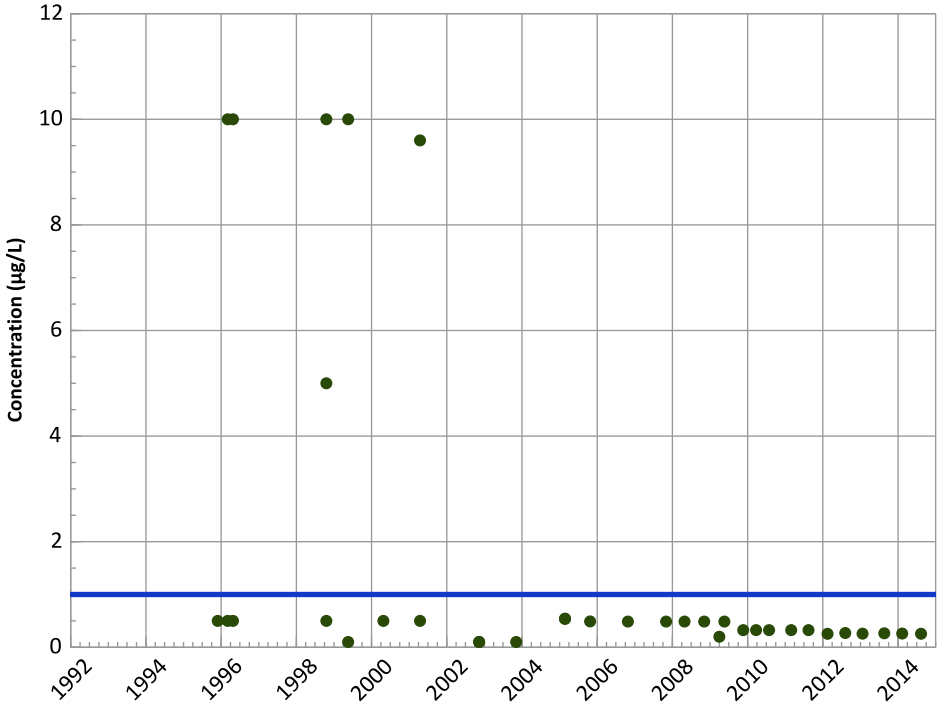
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

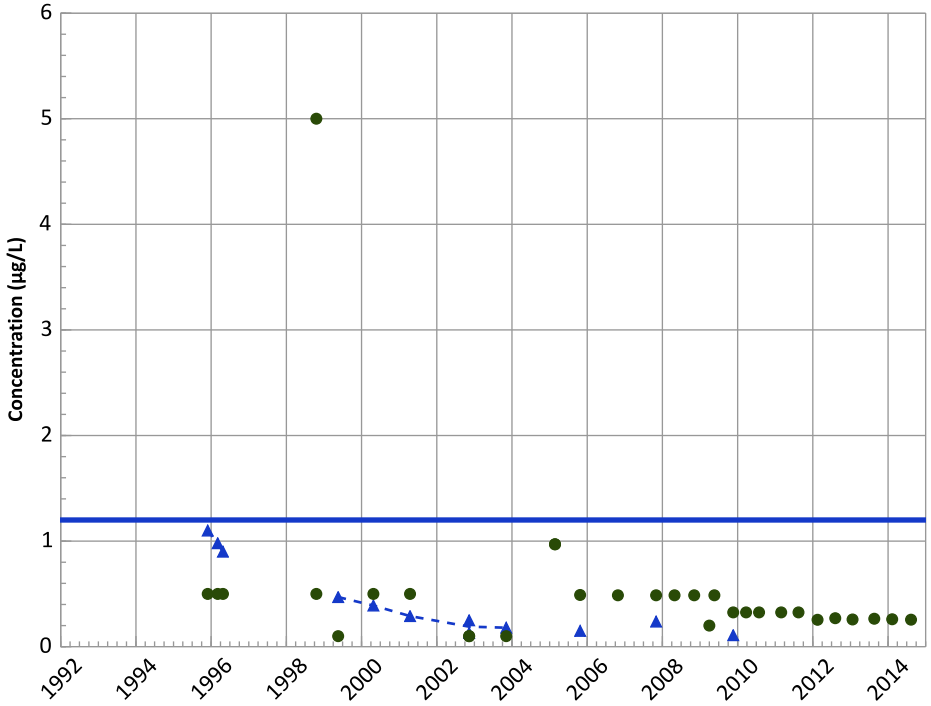


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

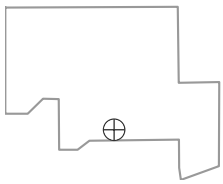
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

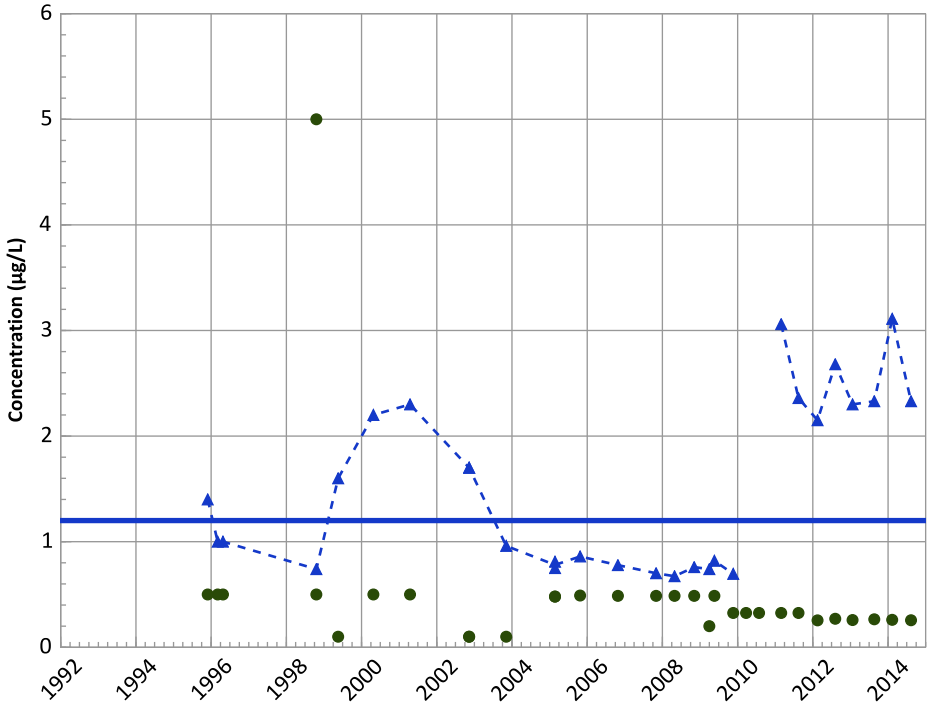
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

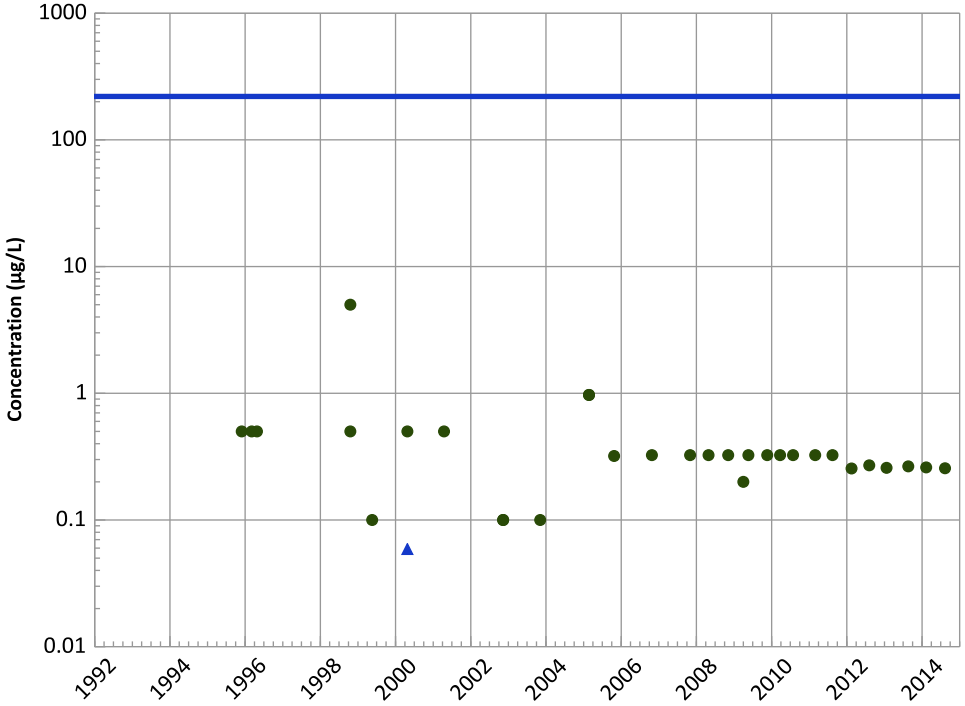


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Probably Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

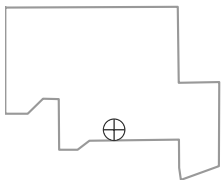
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

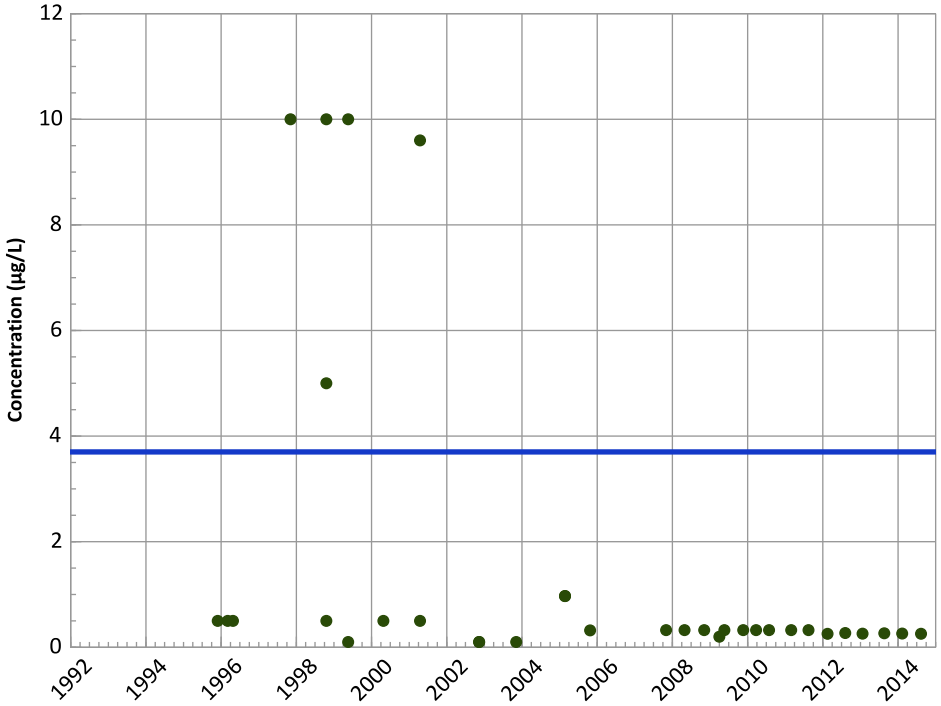
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

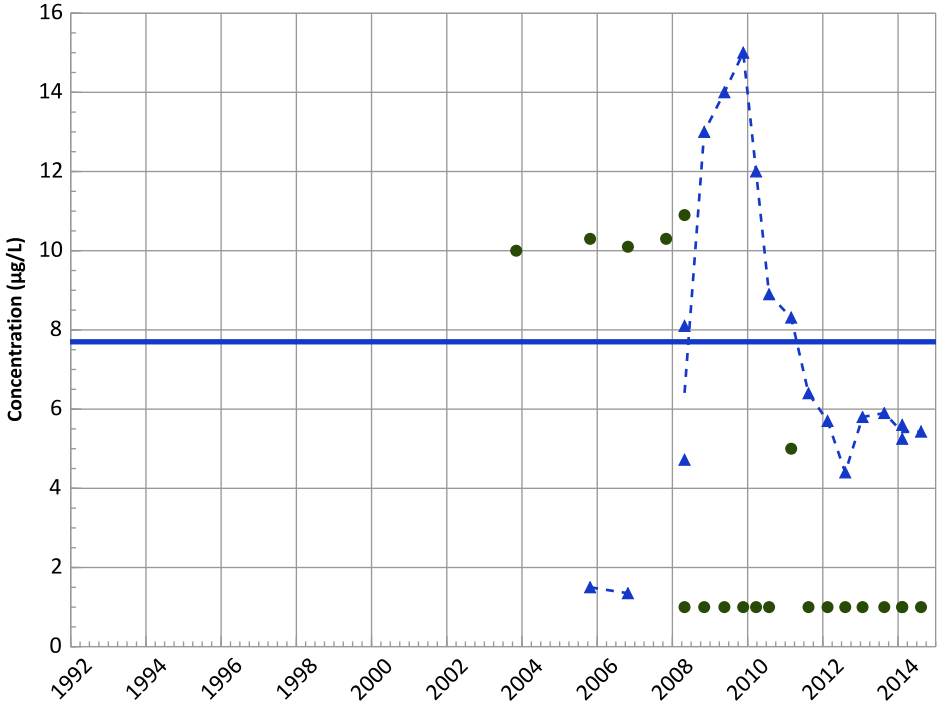


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

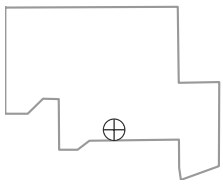
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

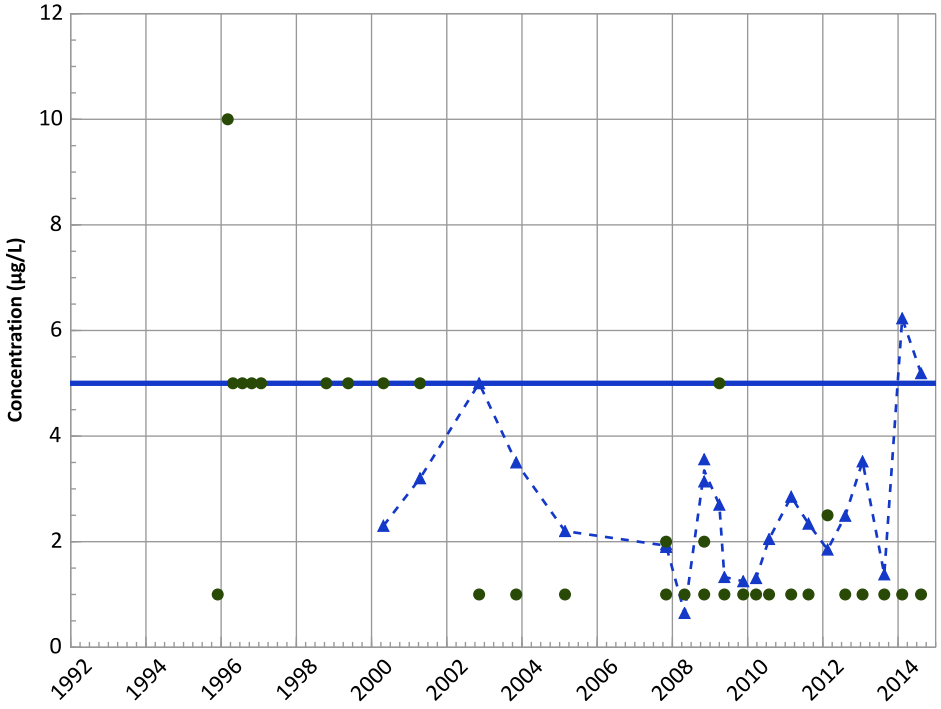
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

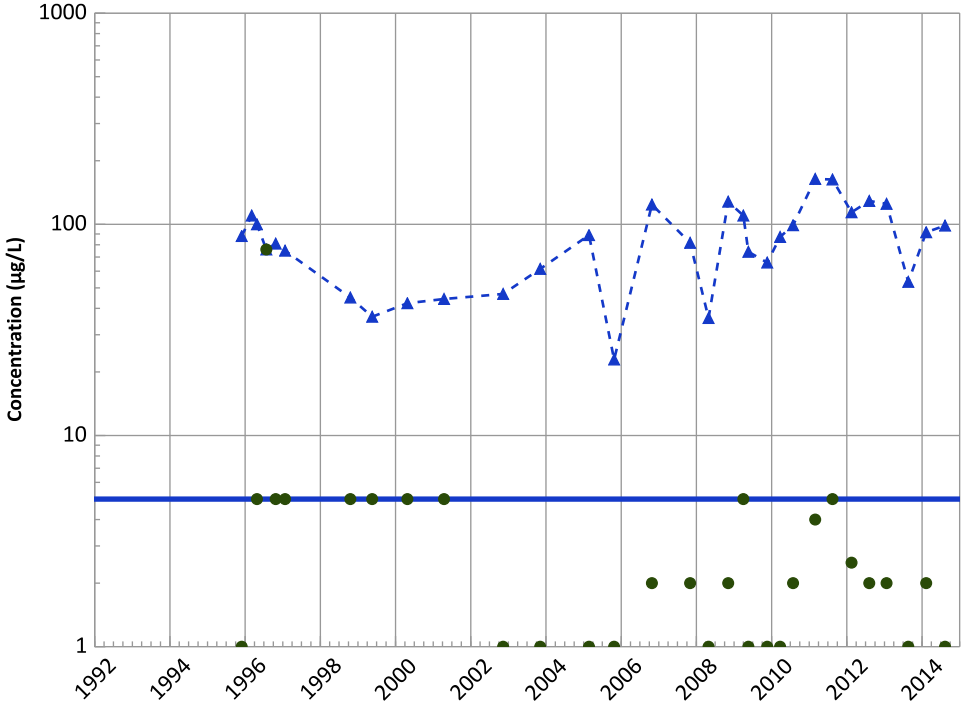


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Trichloroethene Trend



Concentration Trend

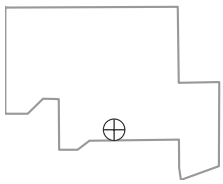
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

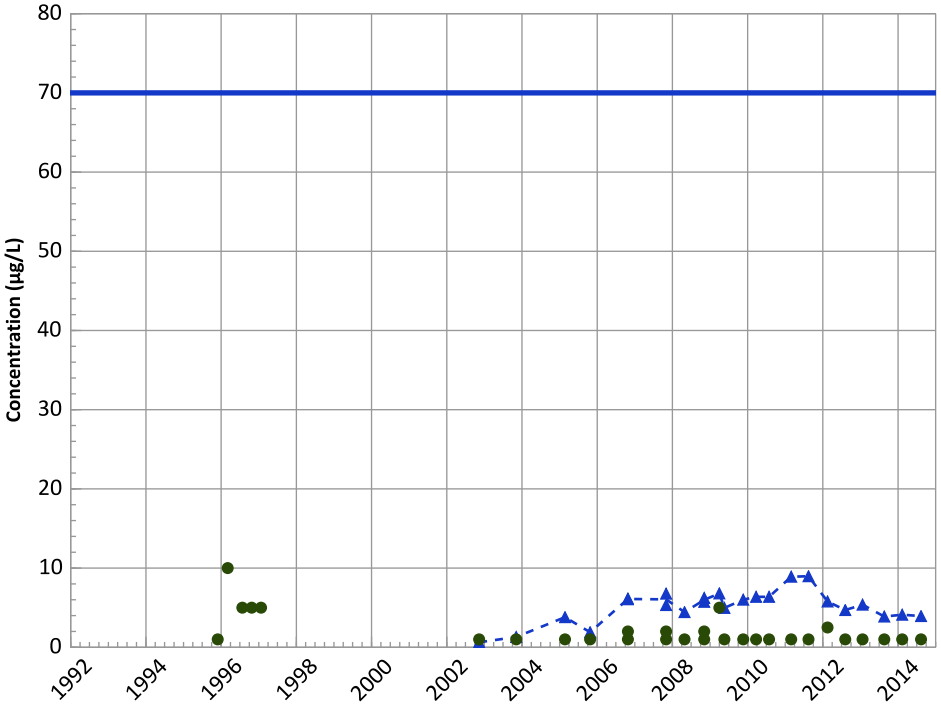
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

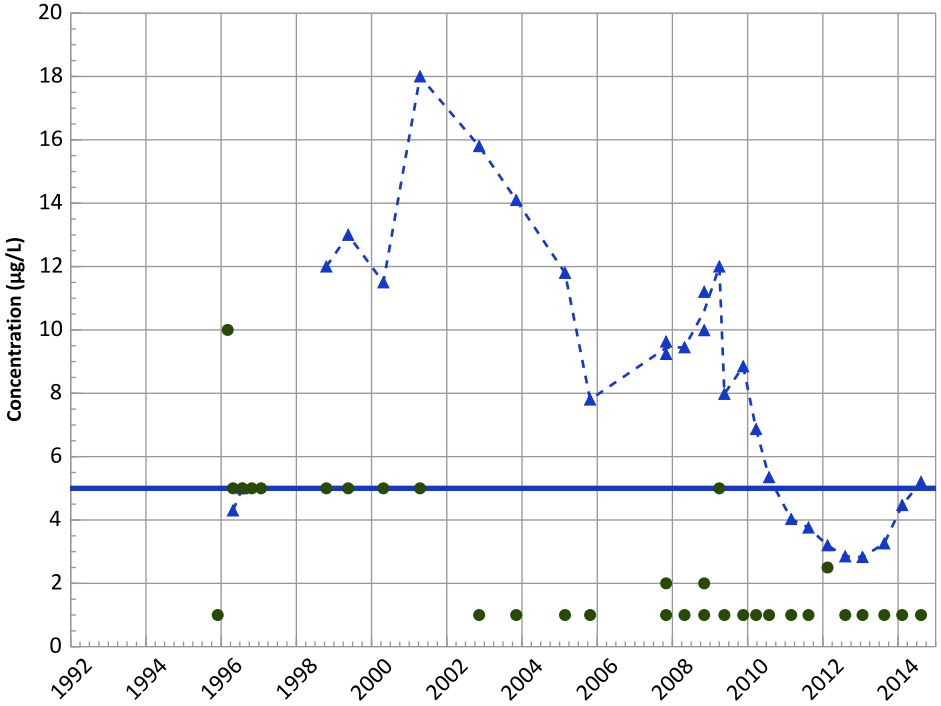


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

1,2-Dichloroethane Trend



Concentration Trend

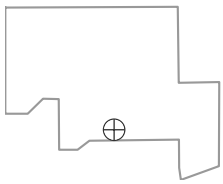
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

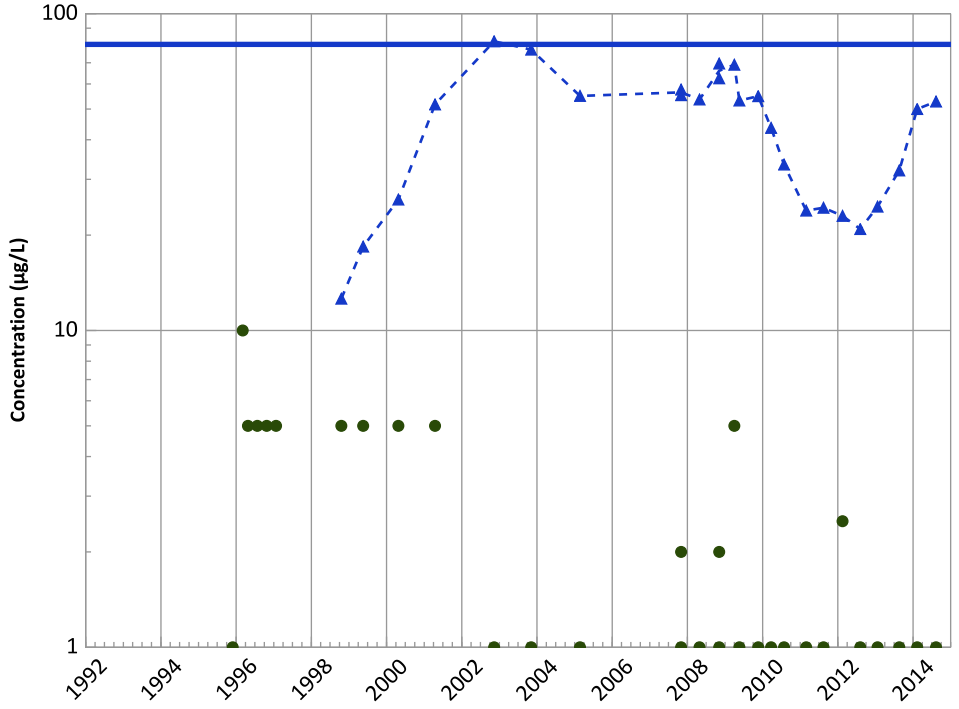
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

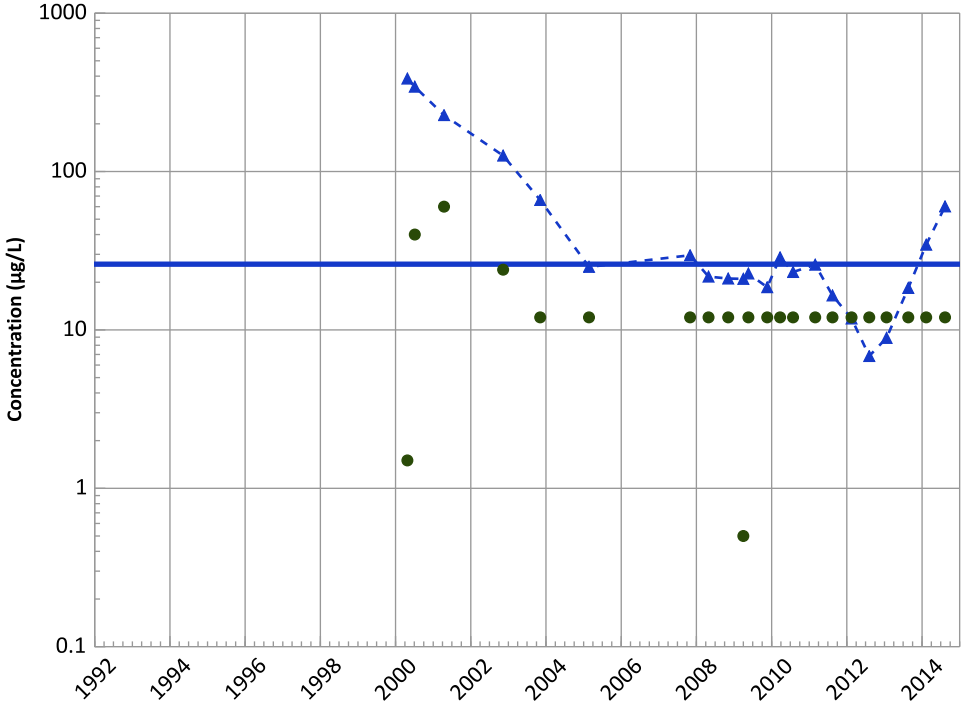


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Perchlorate Trend



Concentration Trend

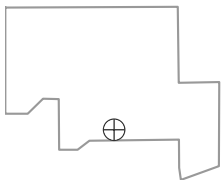
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

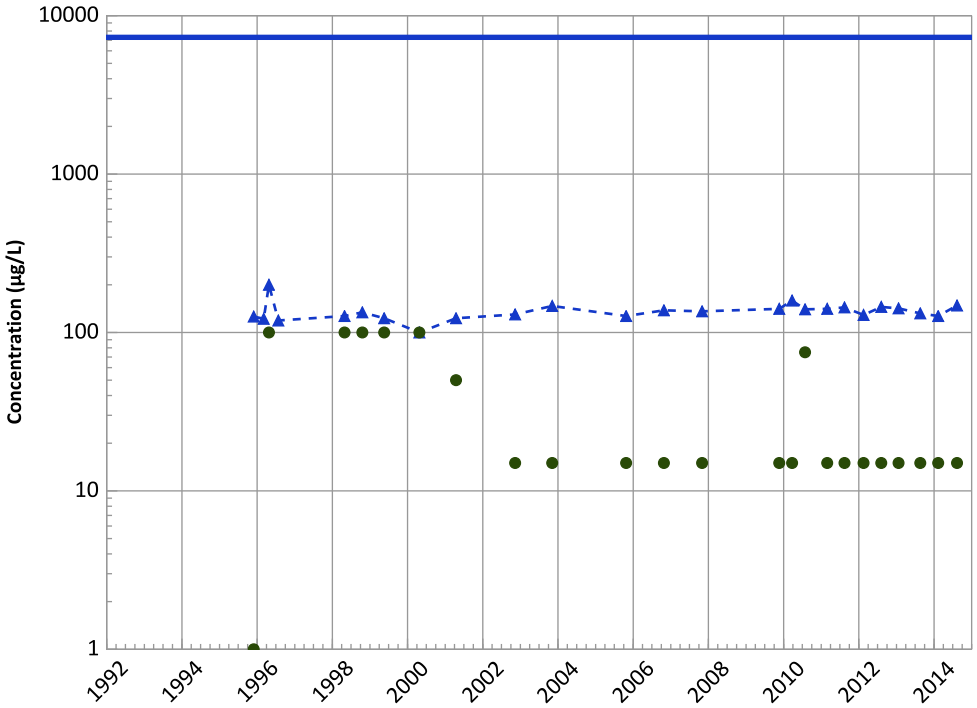
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

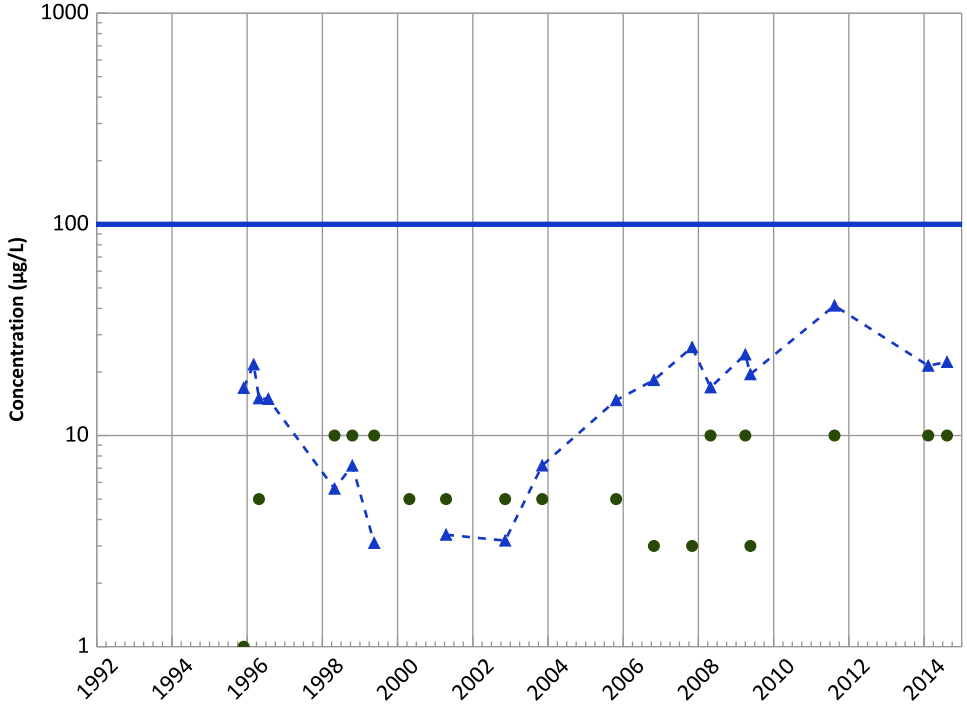


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Chromium, Total Trend



Concentration Trend

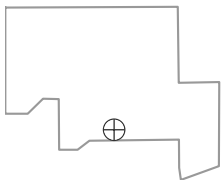
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

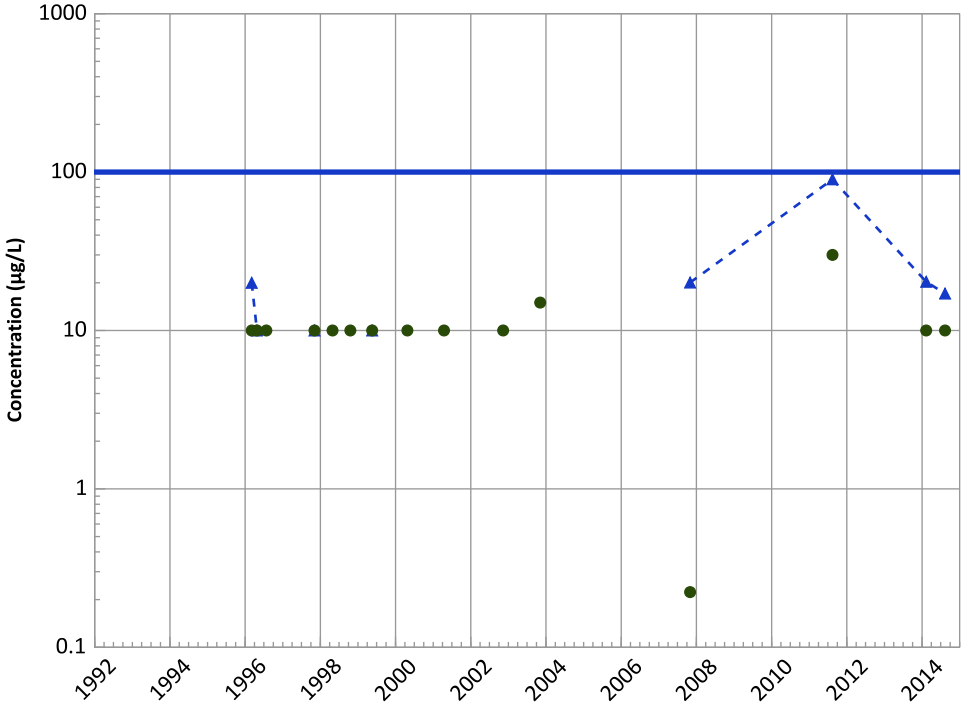
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

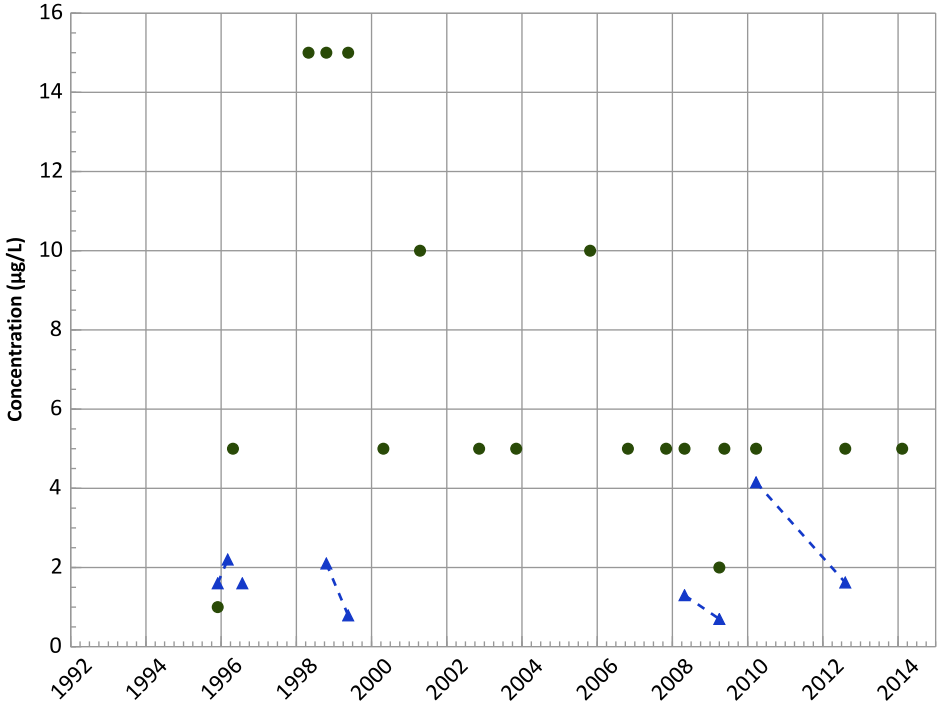


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Manganese Trend



Concentration Trend

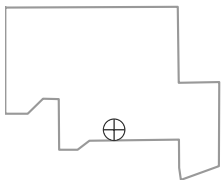
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

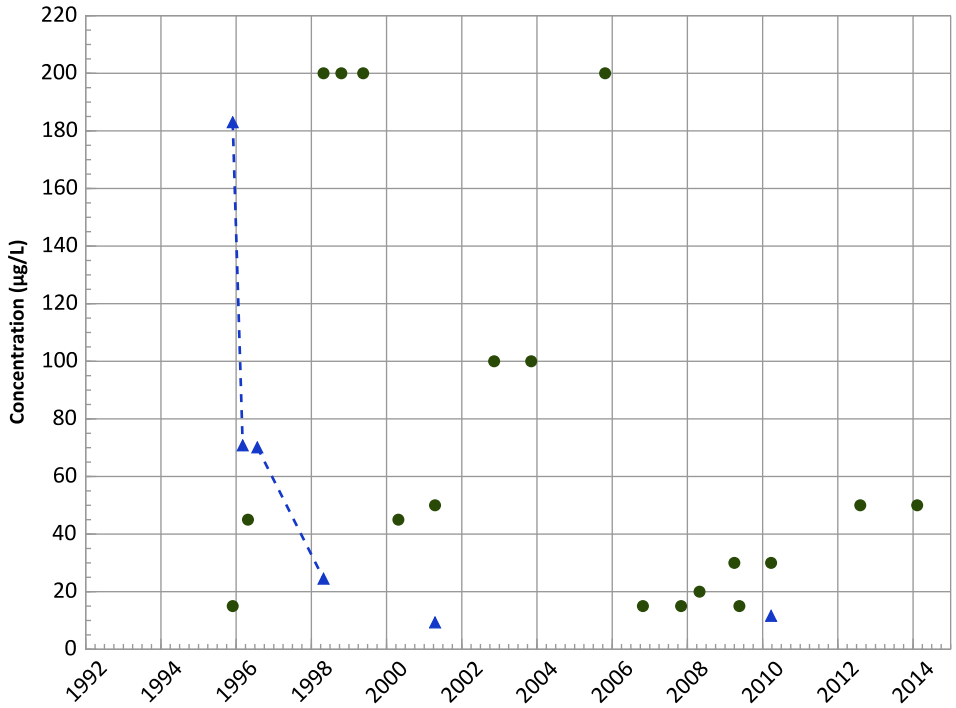
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

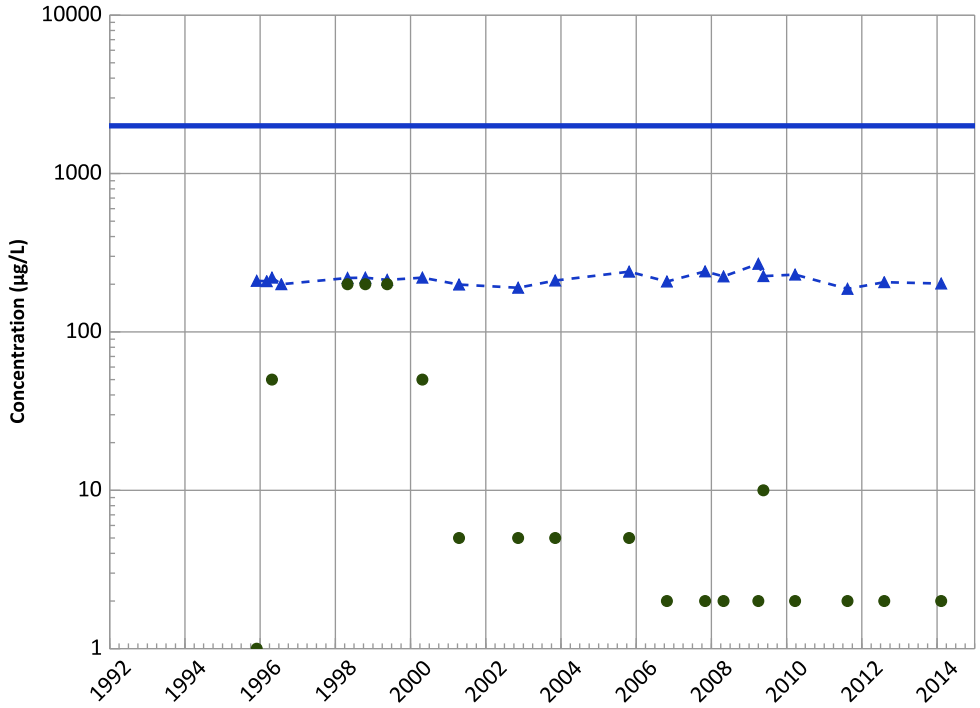


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

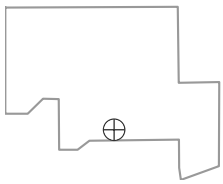
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

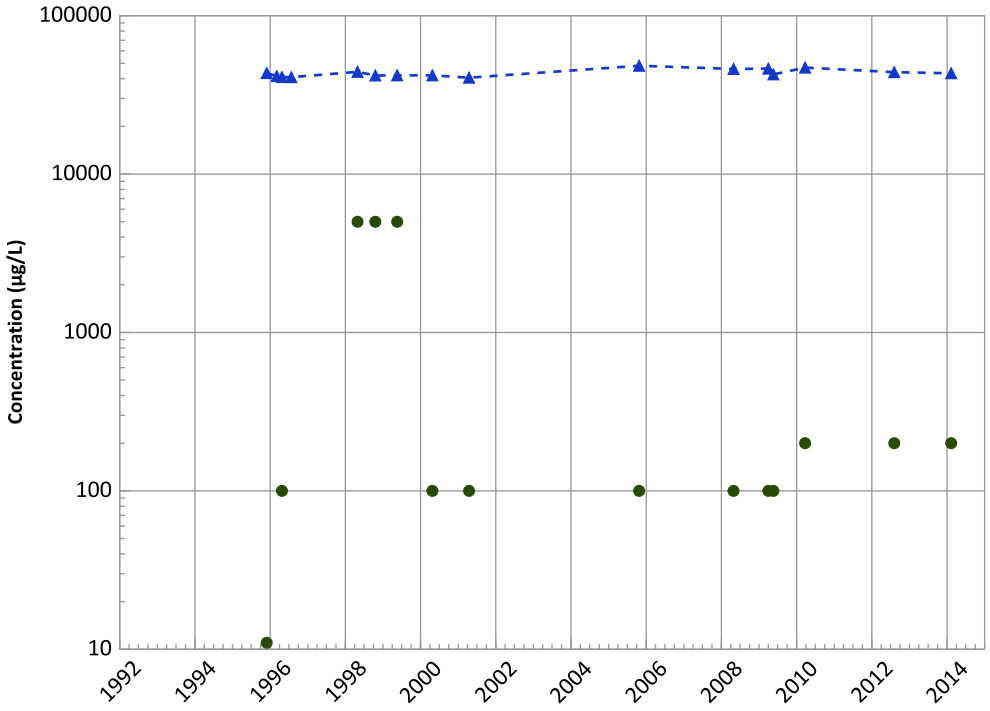
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

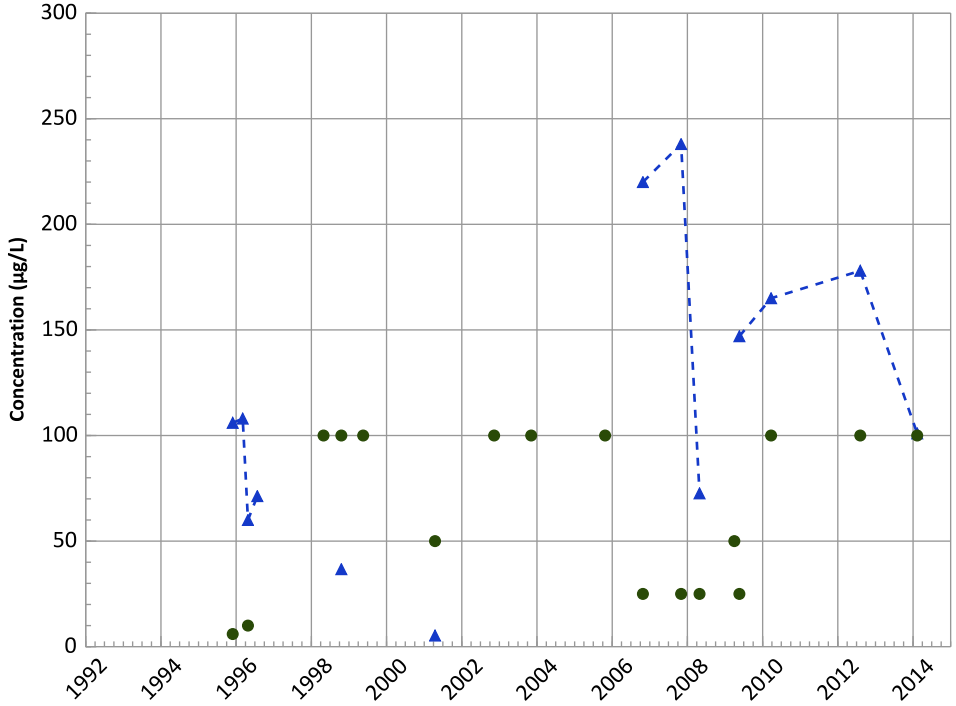


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

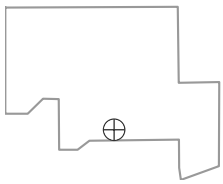
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

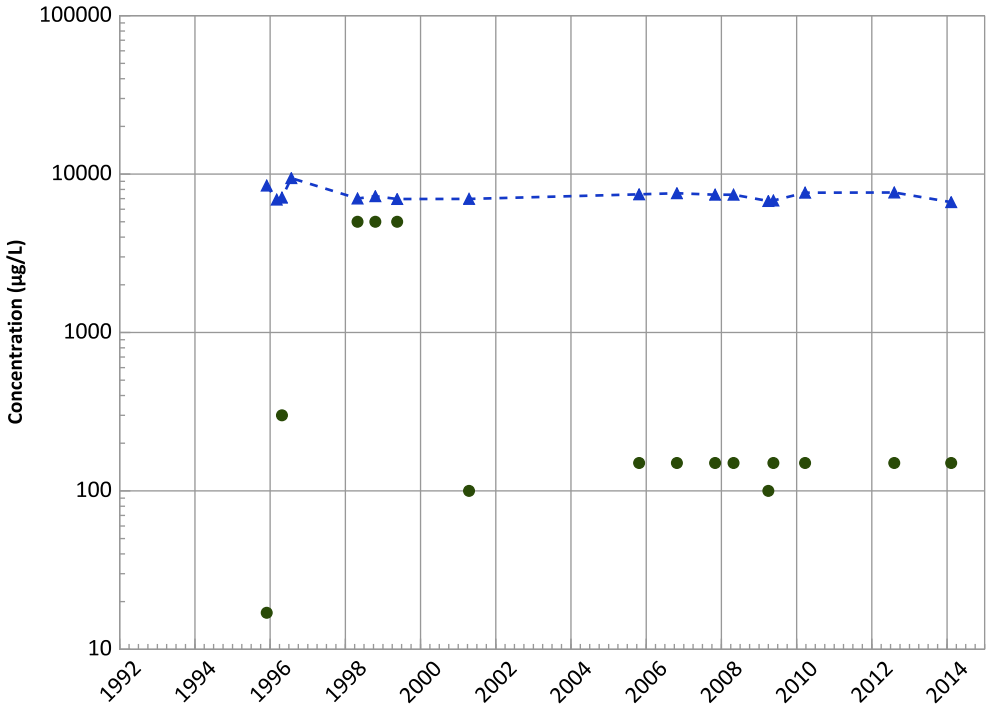
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

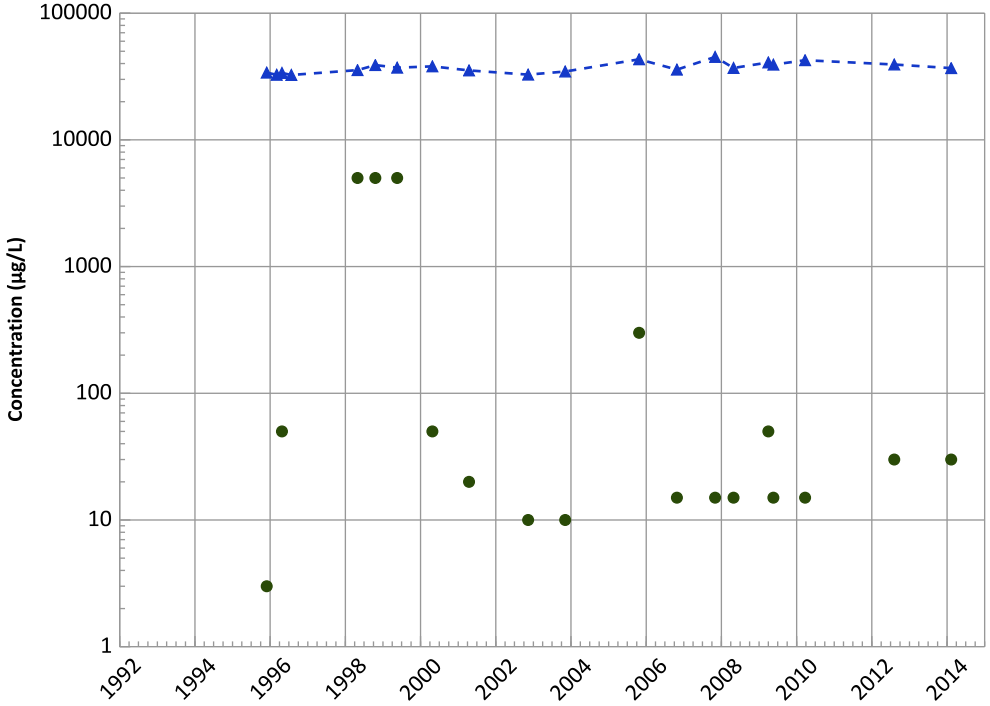


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Magnesium Trend



Concentration Trend

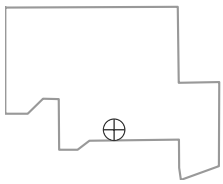
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

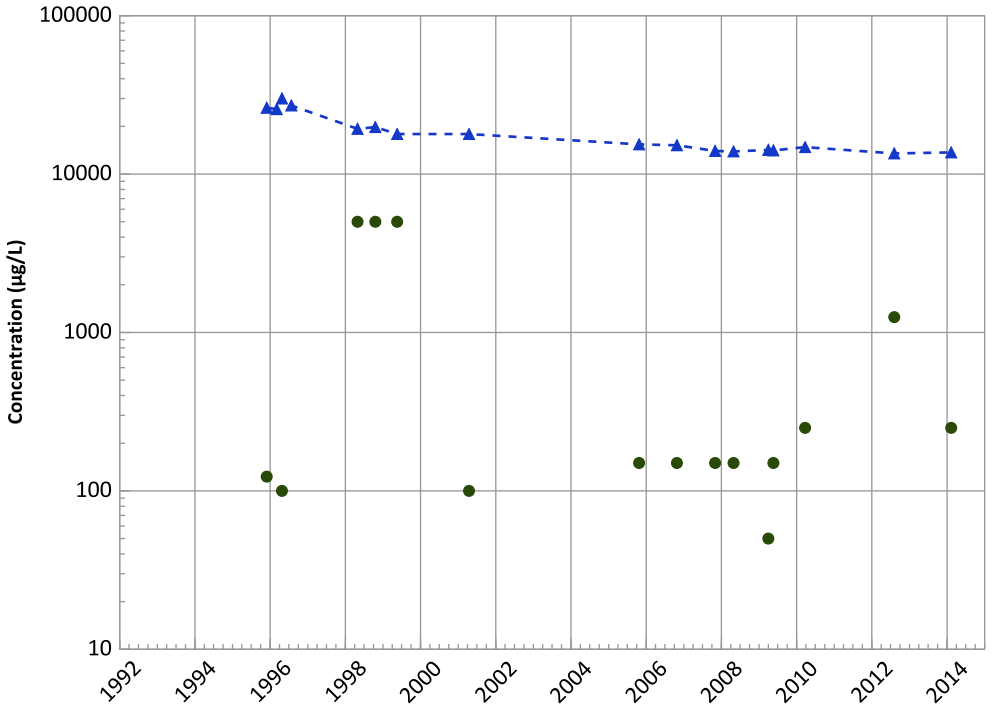
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1005 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

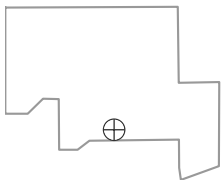
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

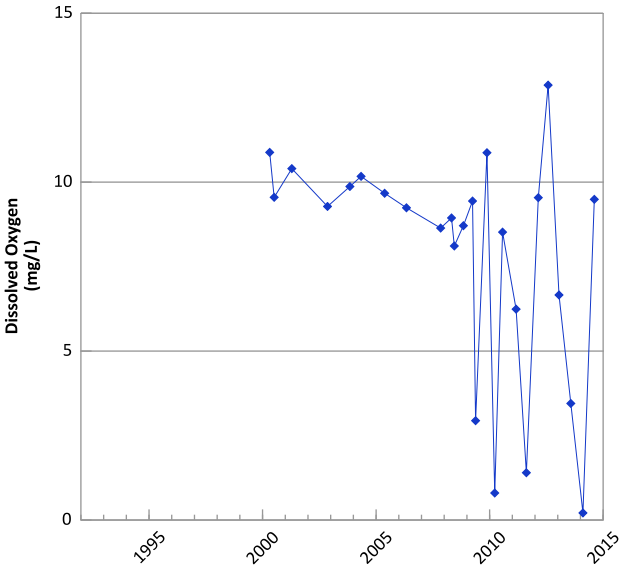
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/29/1995 to 08/12/2014
Analysis Date: 03/19/2015

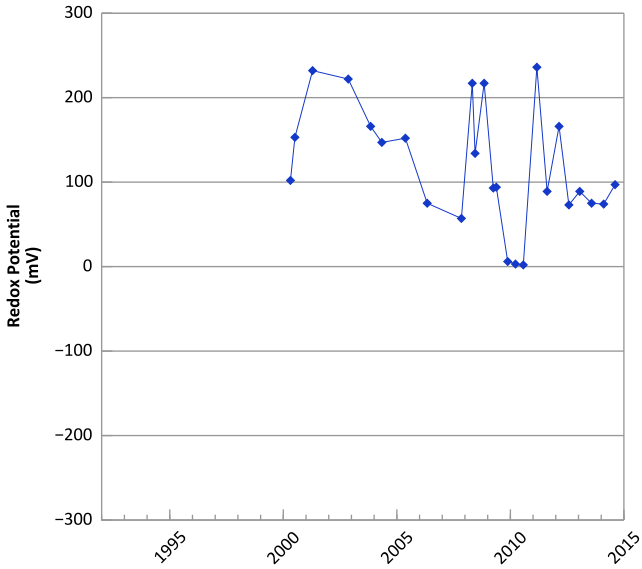
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

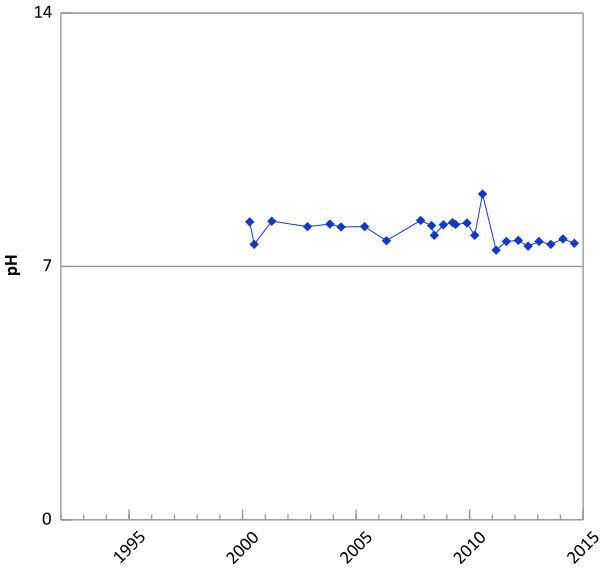
Well Location

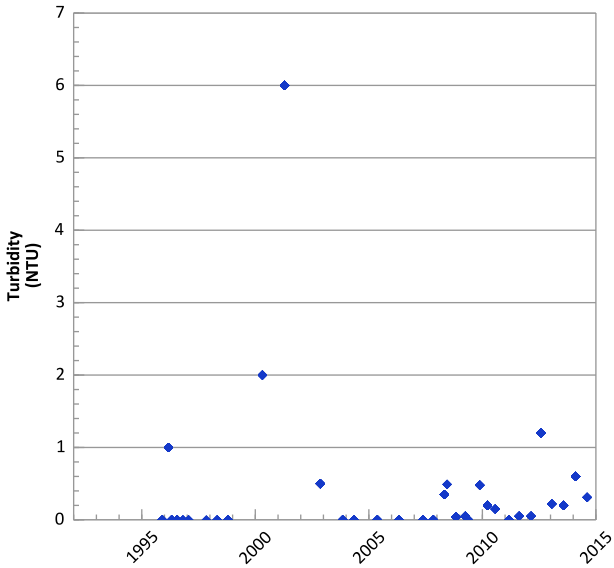


PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



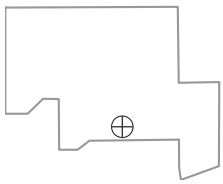






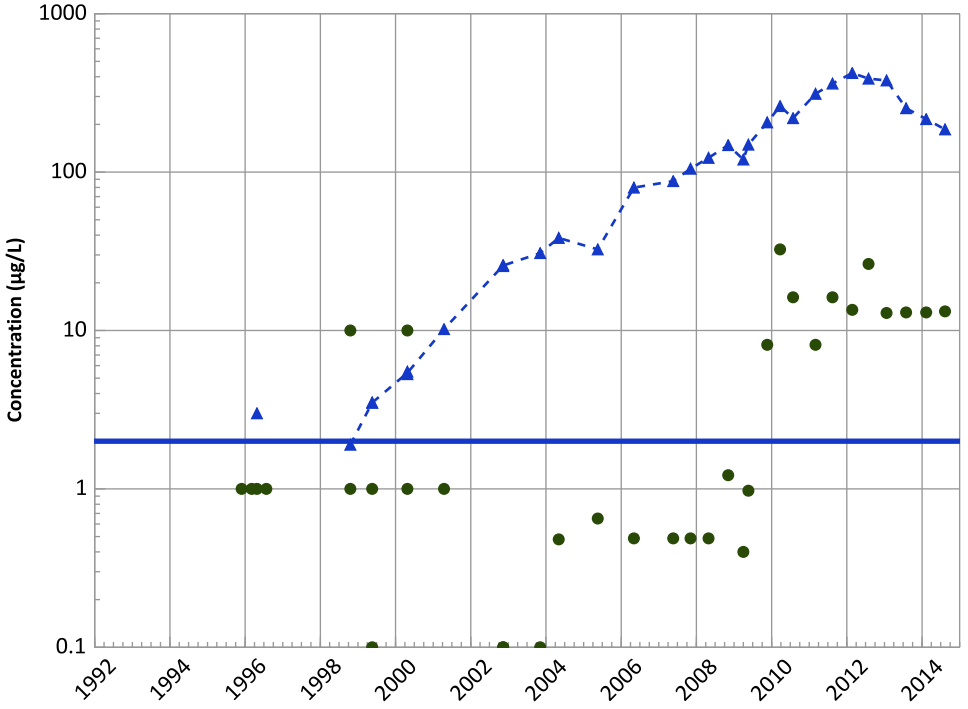
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

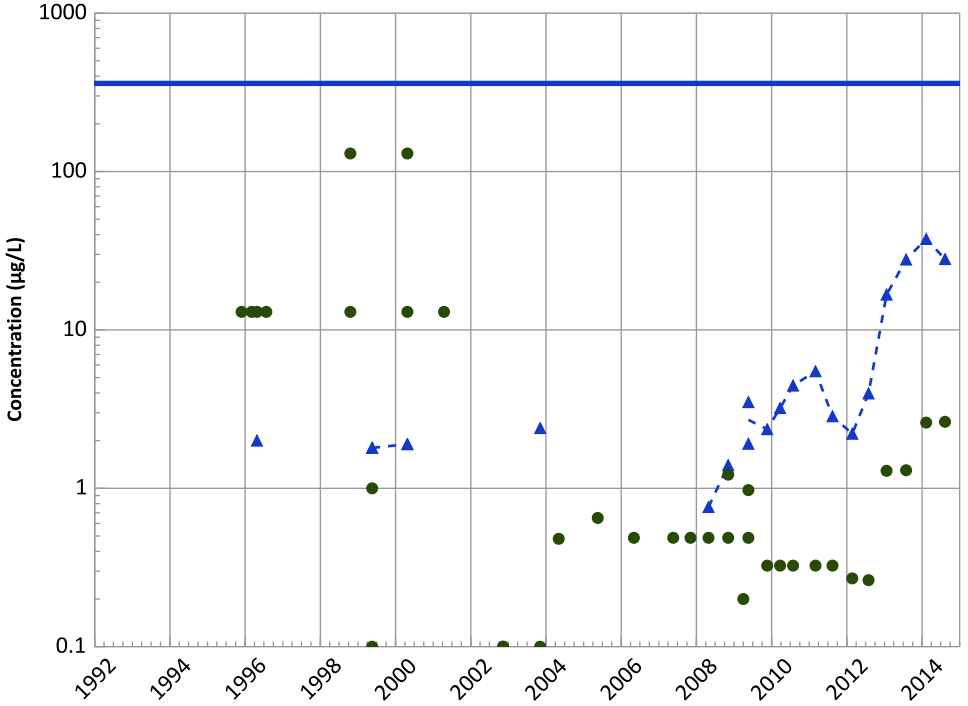


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

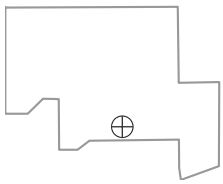
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

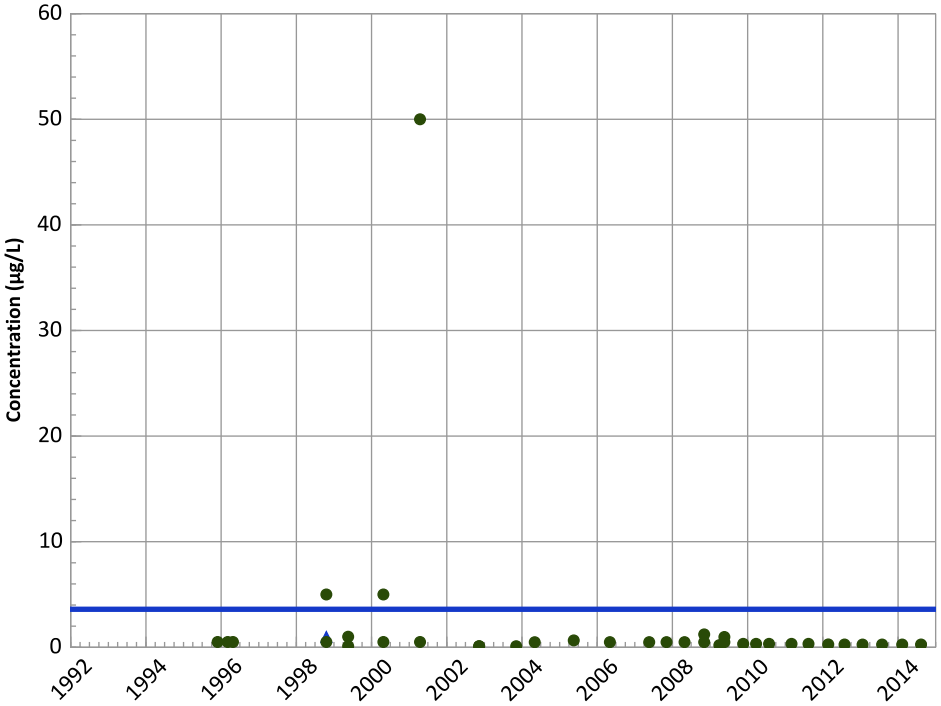
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

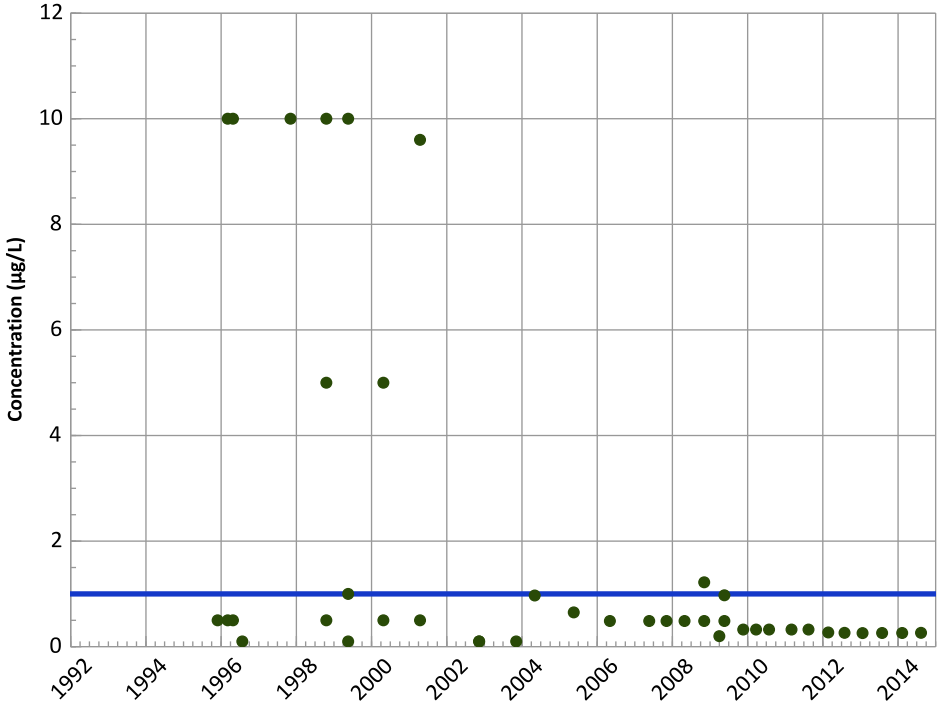


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

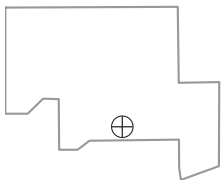
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

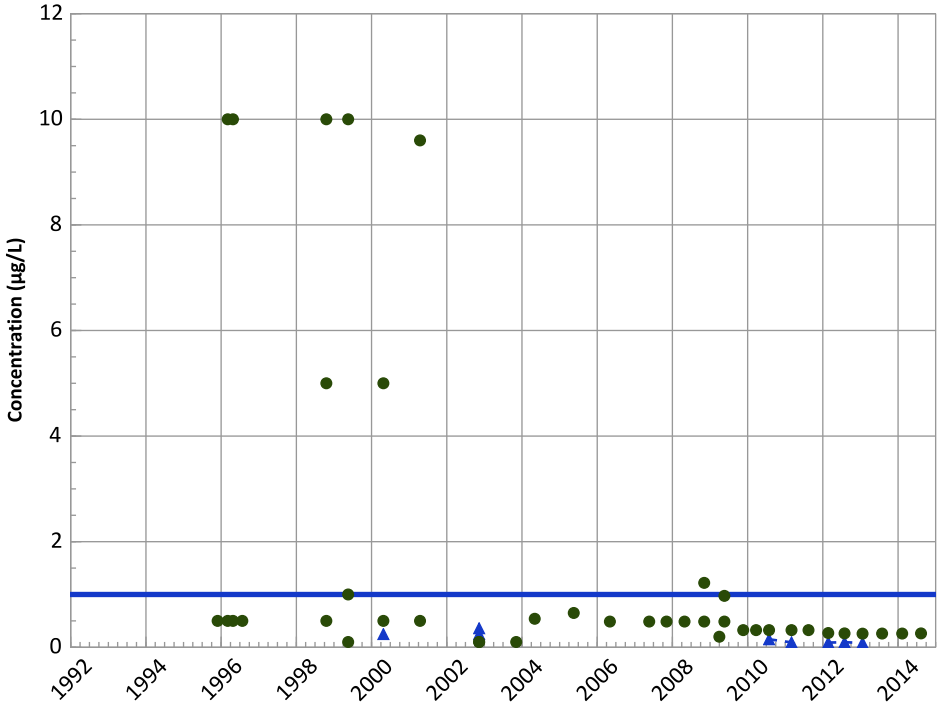
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

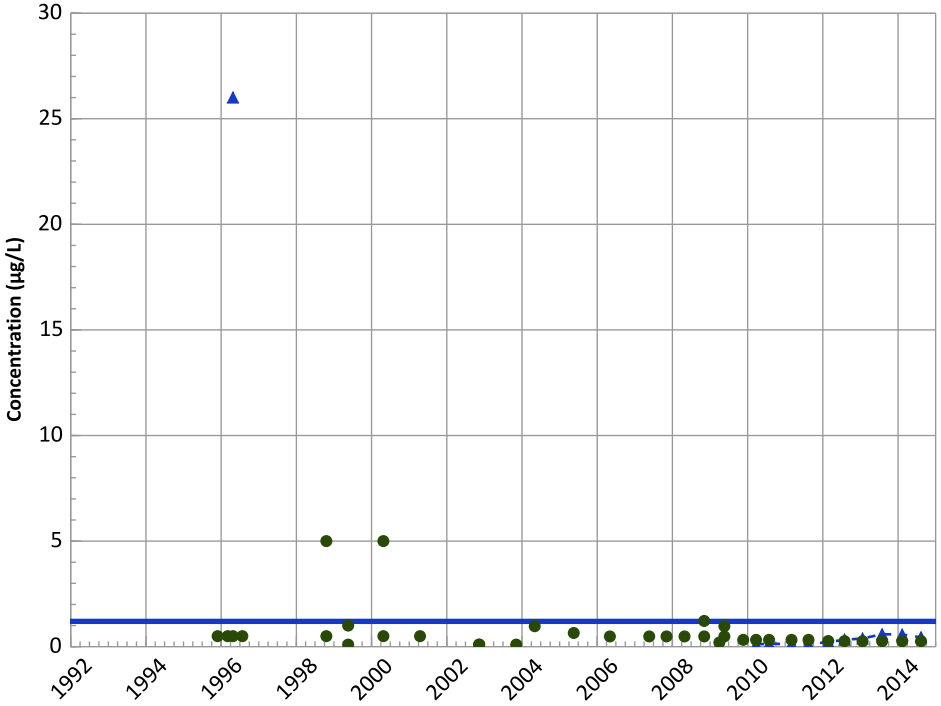


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

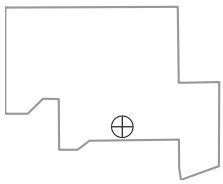
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

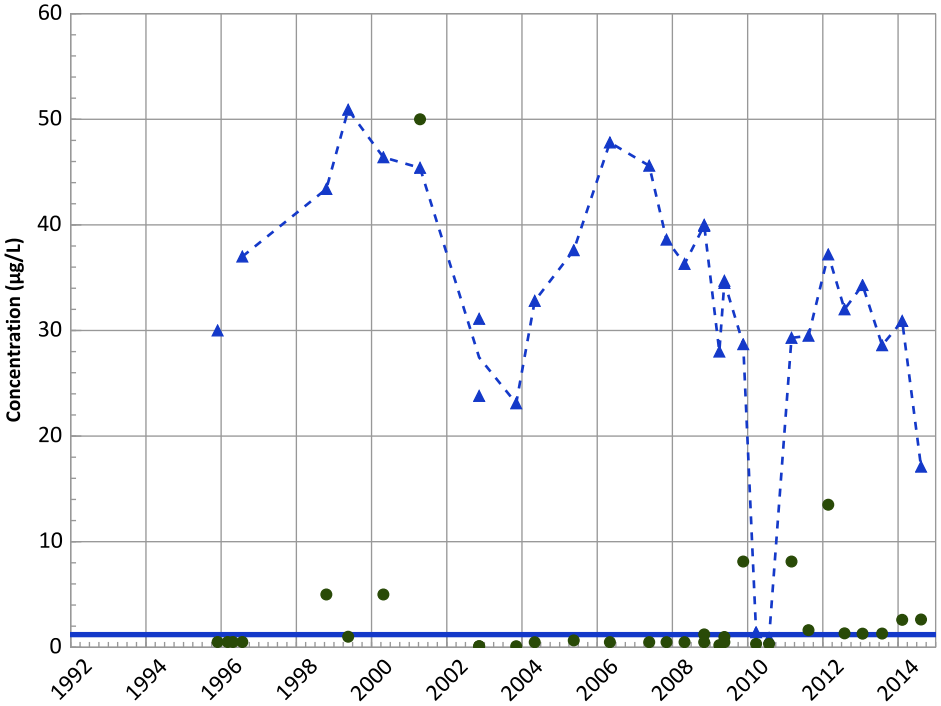
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

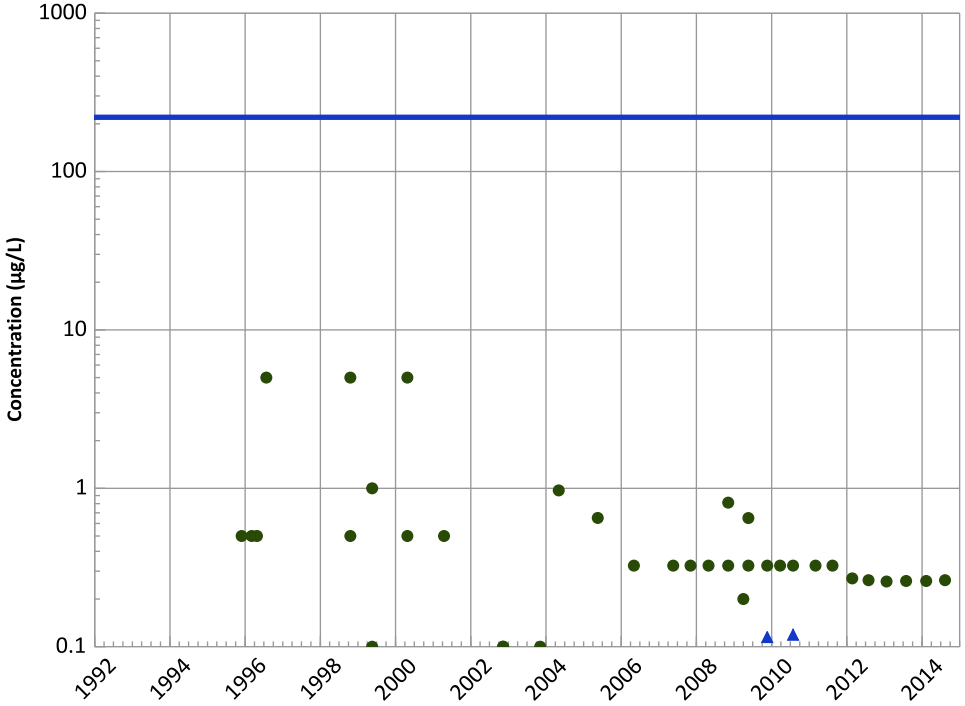


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Decreasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

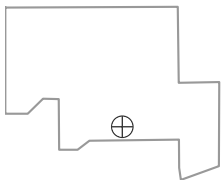
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

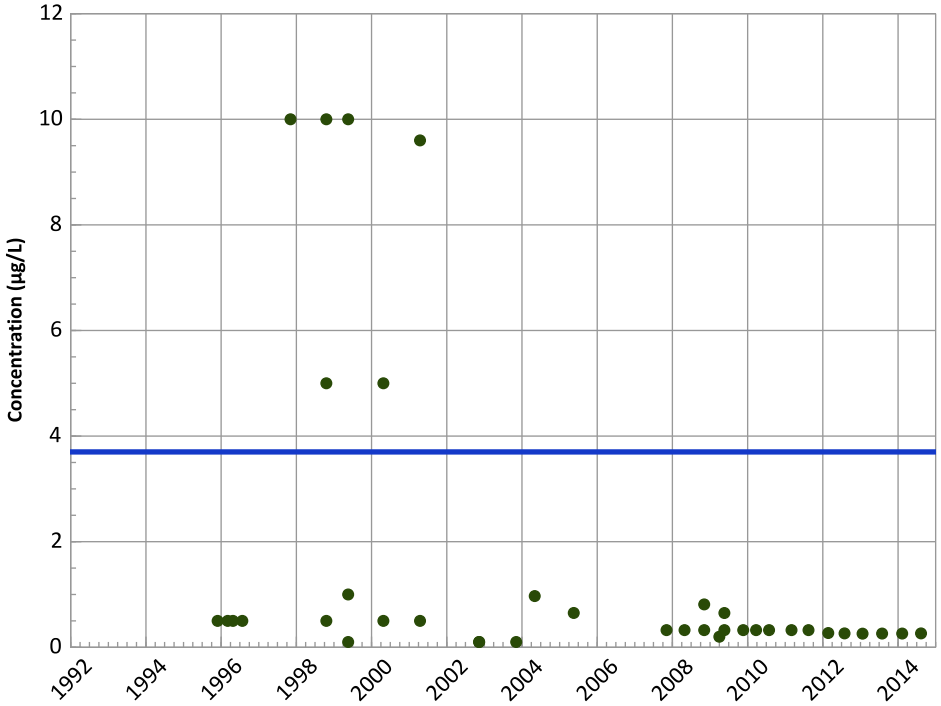
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

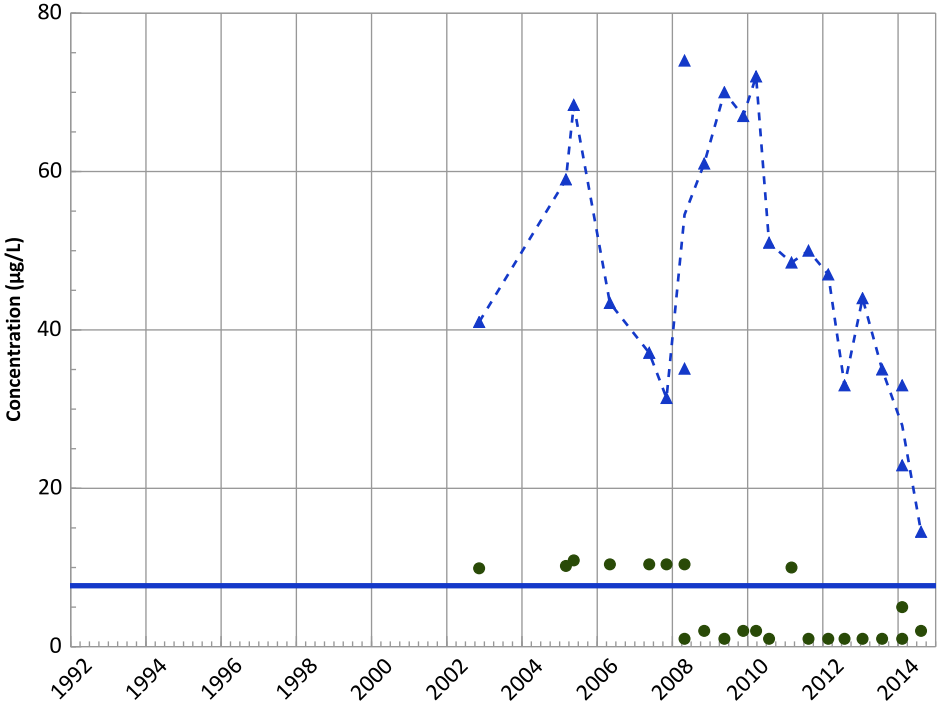


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

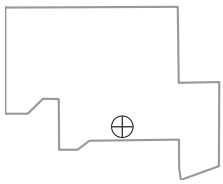
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

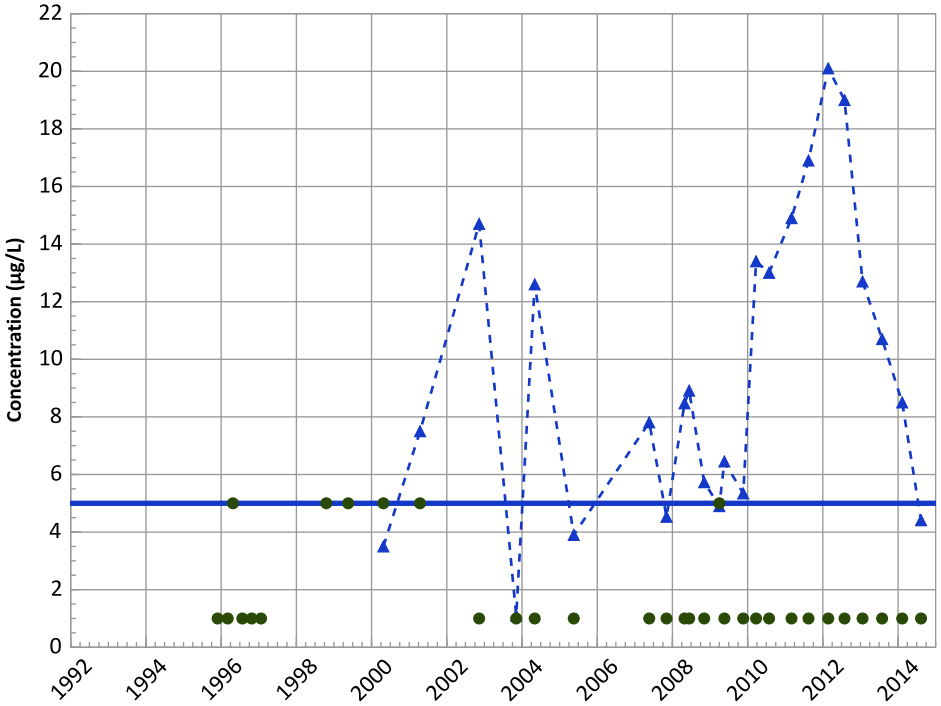
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

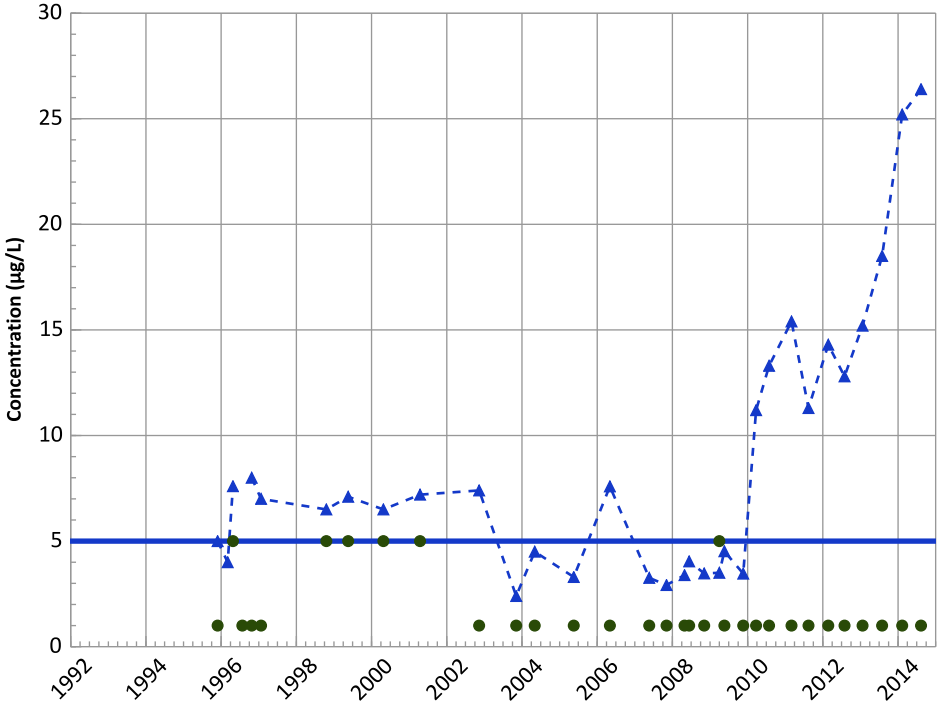


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Trichloroethene Trend



Concentration Trend

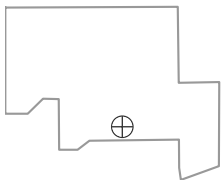
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

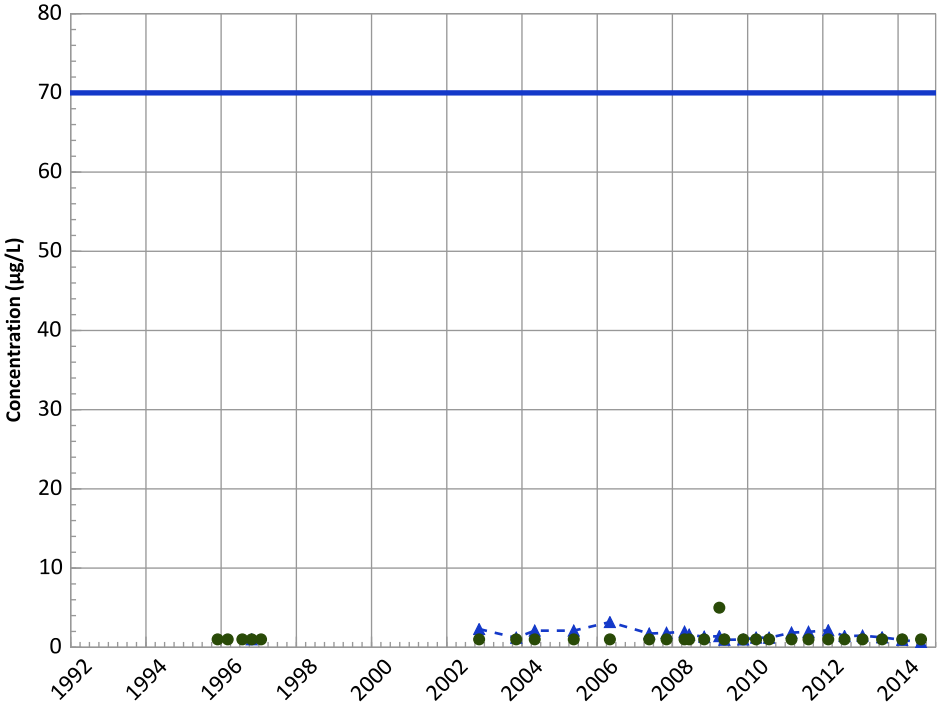
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

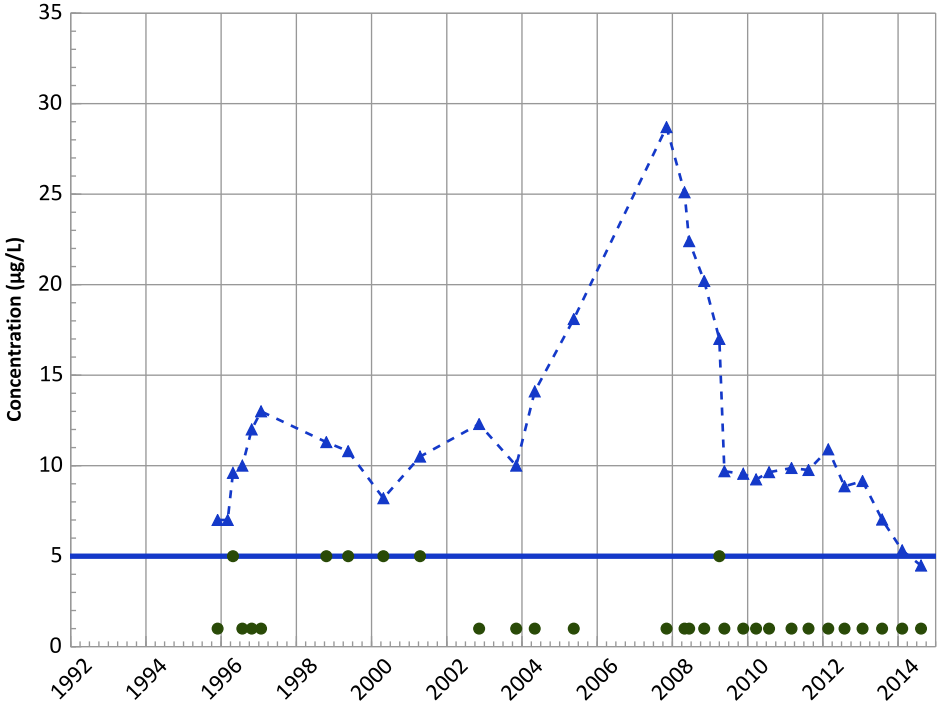


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

1,2-Dichloroethane Trend



Concentration Trend

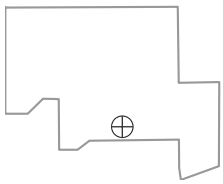
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

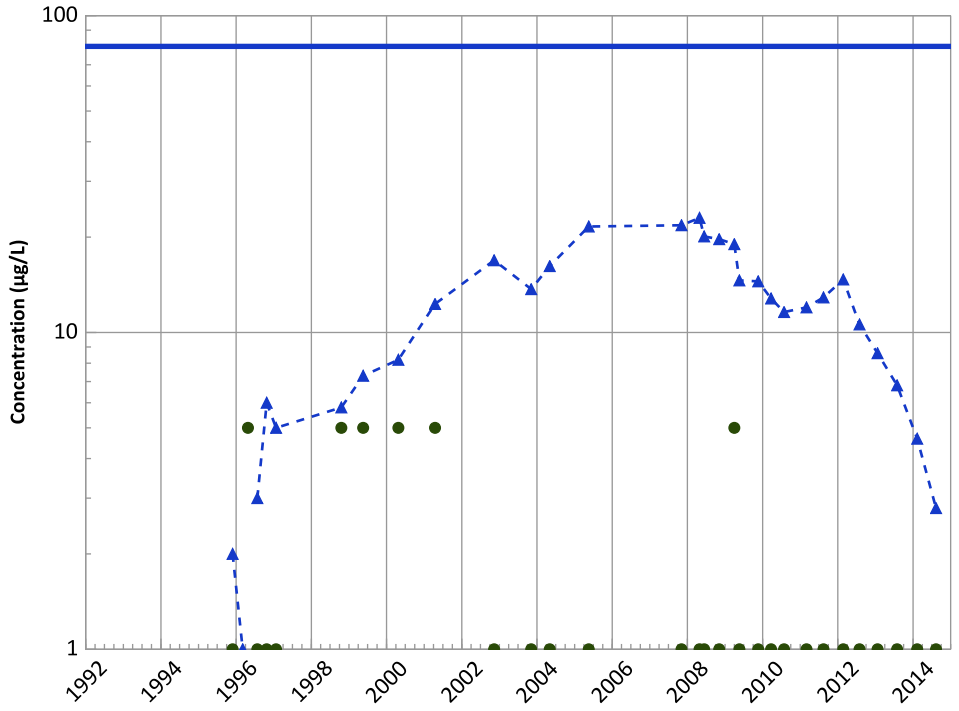
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

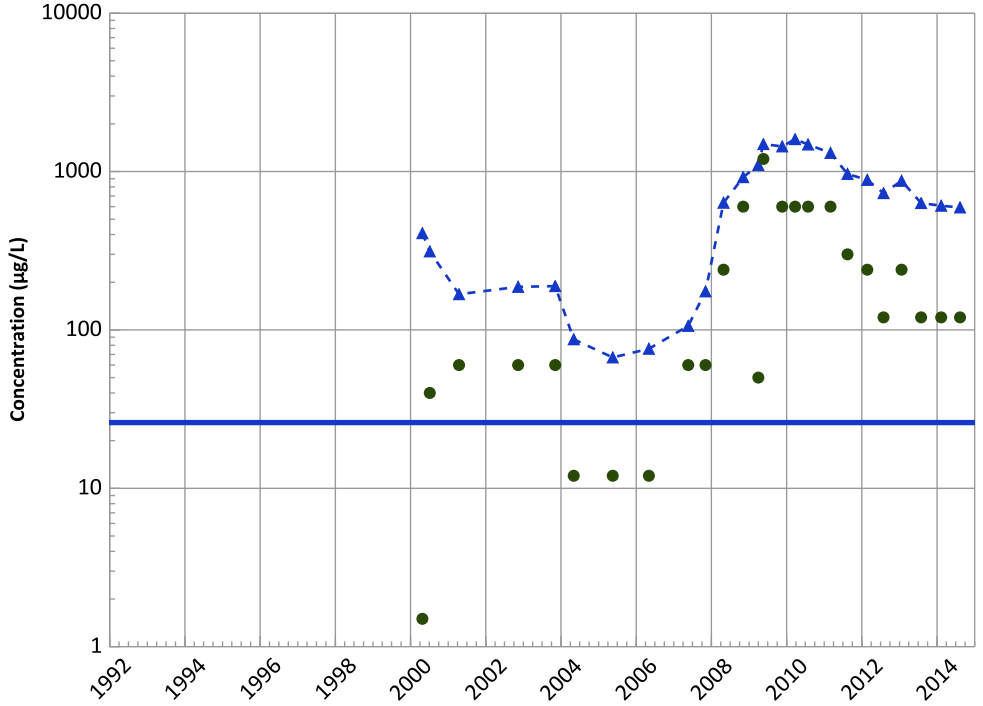


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Perchlorate Trend



Concentration Trend

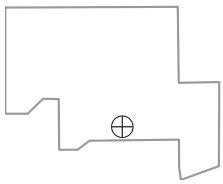
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

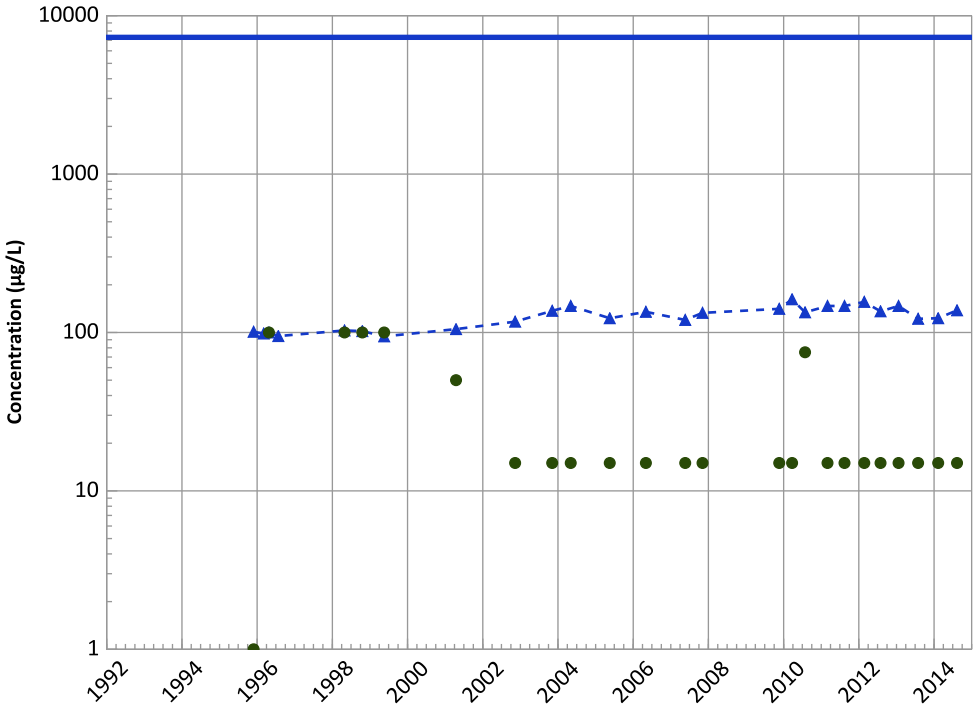
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

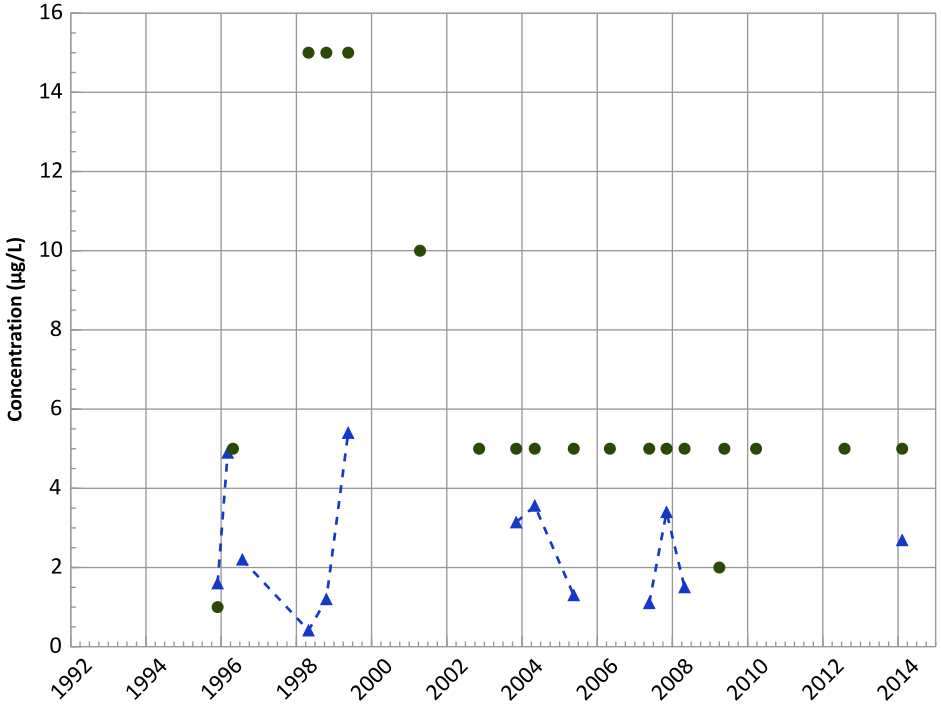


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Manganese Trend



Concentration Trend

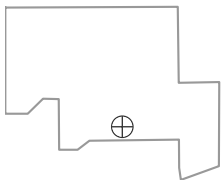
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

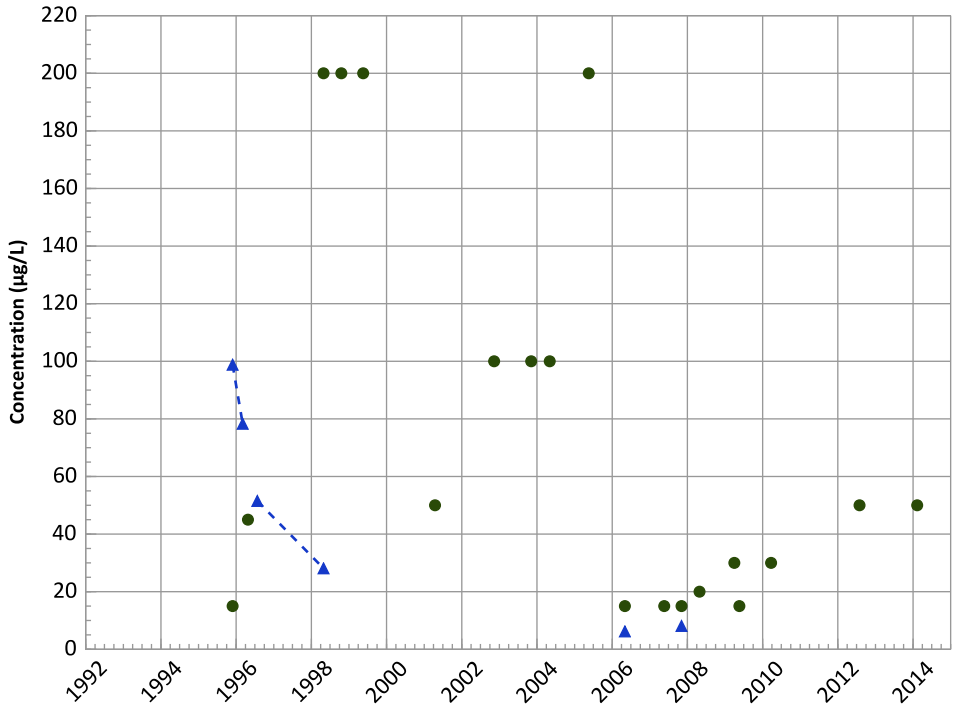
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

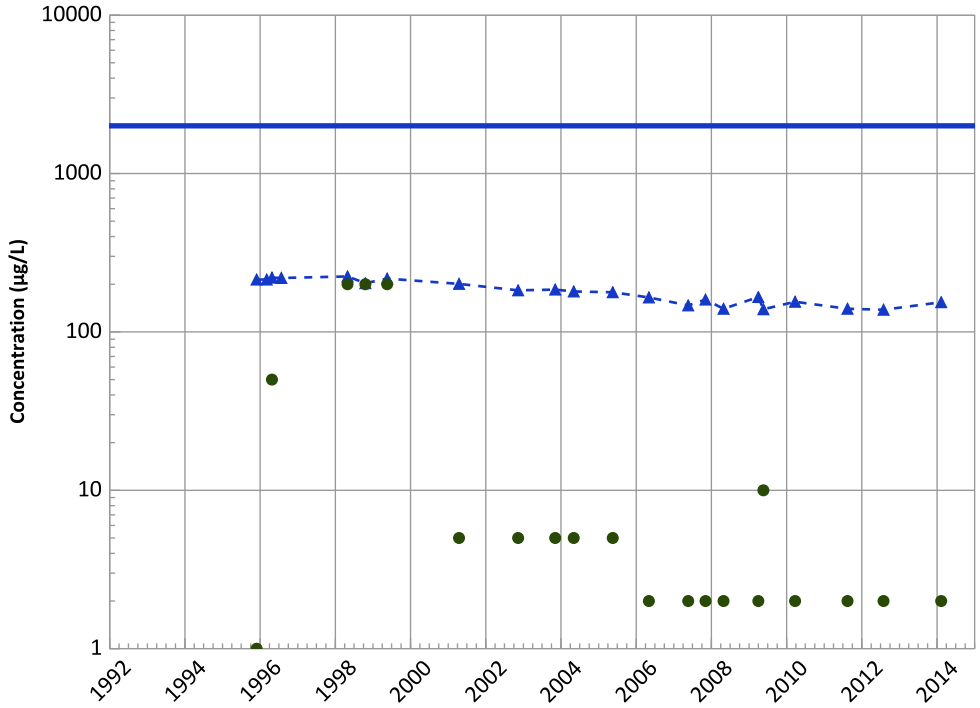


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

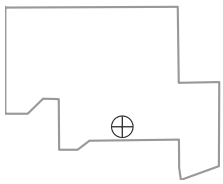
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

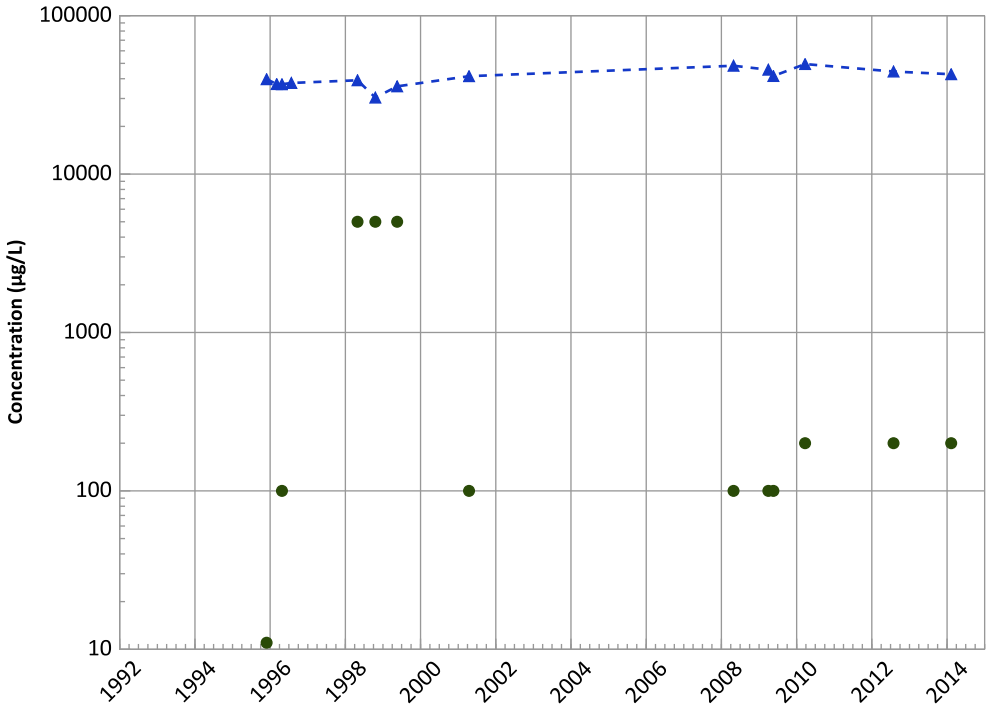
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

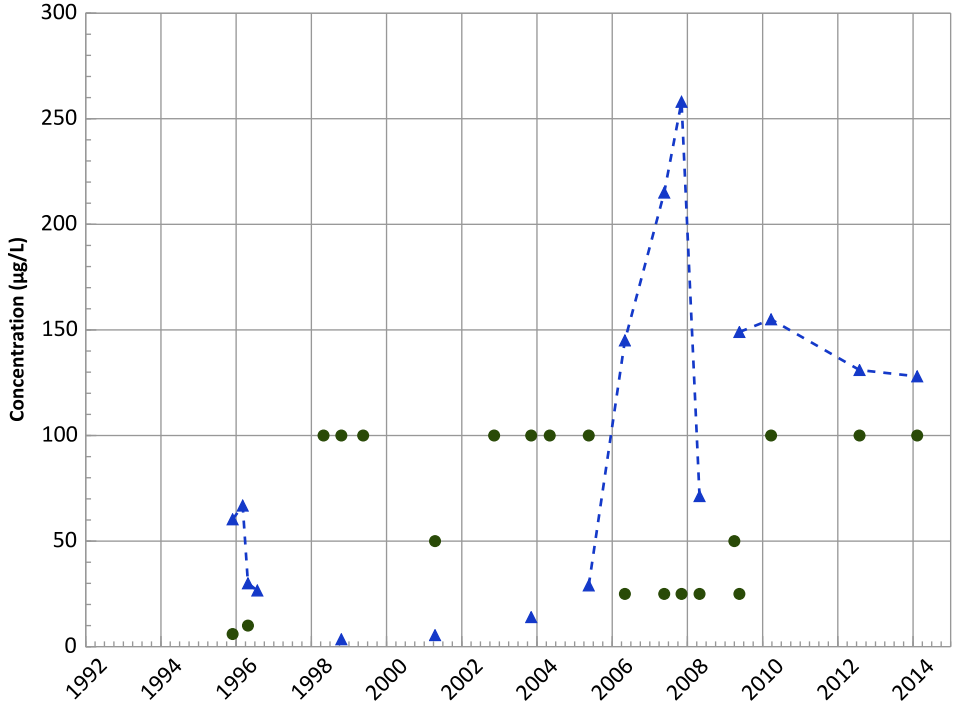


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

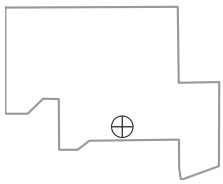
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

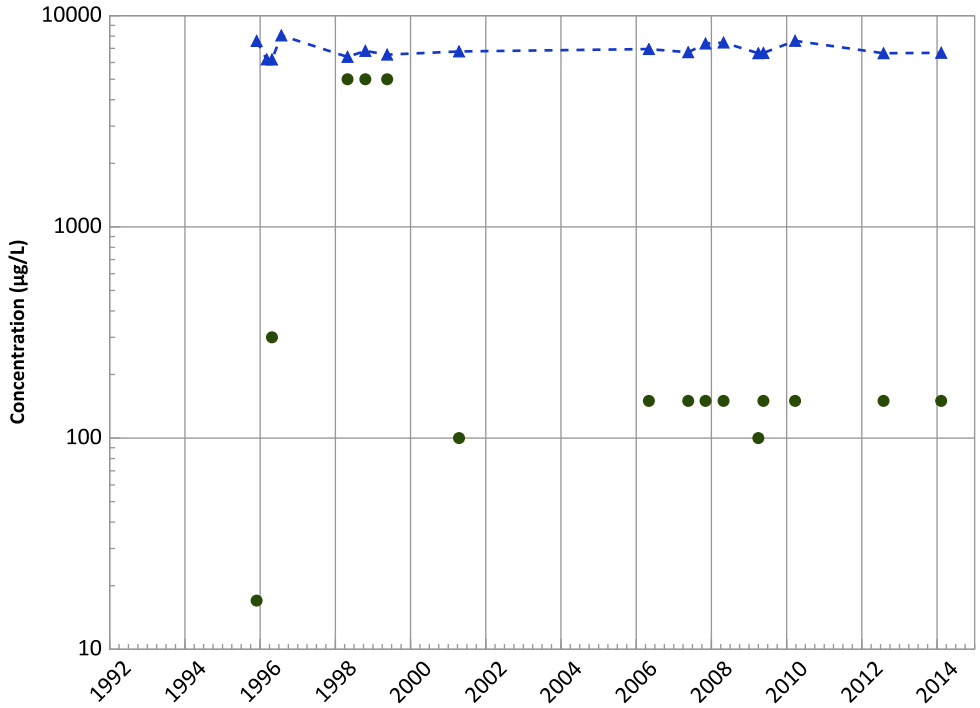
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

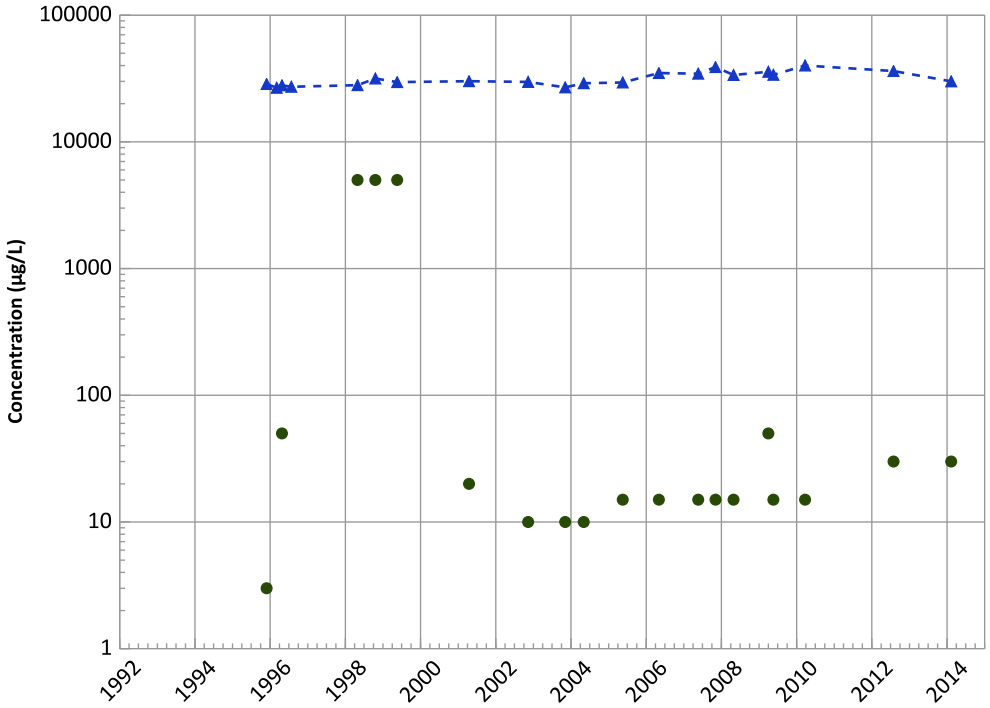


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

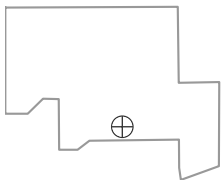
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

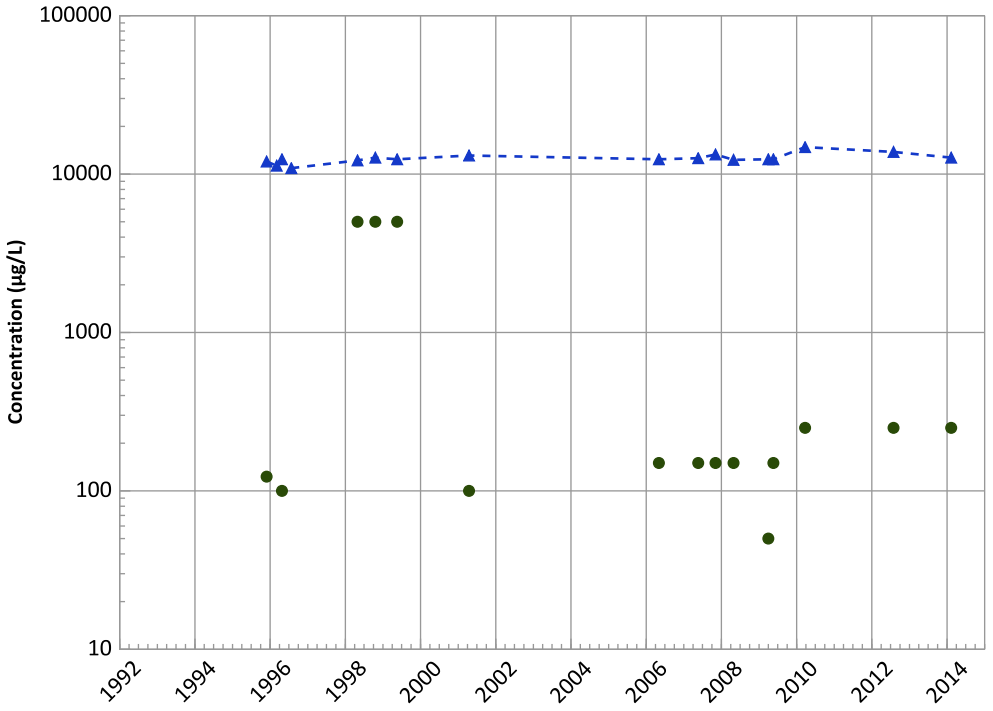
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1006 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

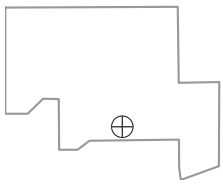
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

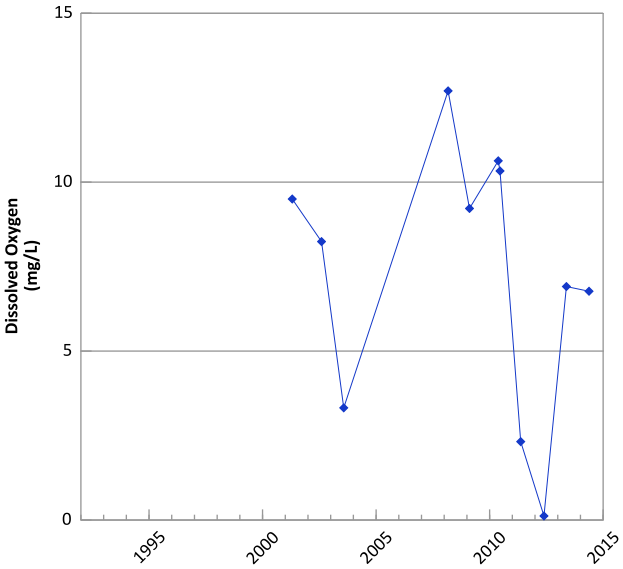
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/28/1995 to 08/12/2014
Analysis Date: 03/19/2015

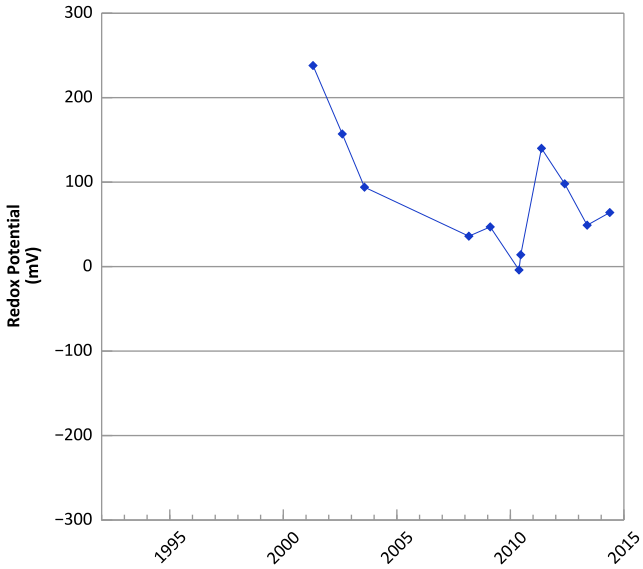
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

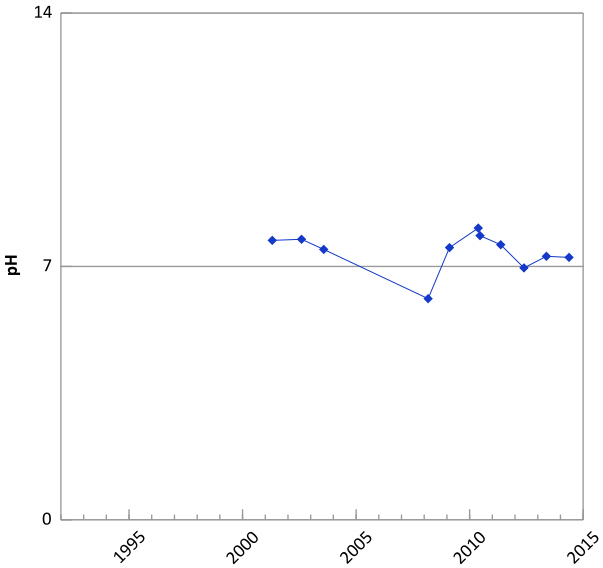
Well Location

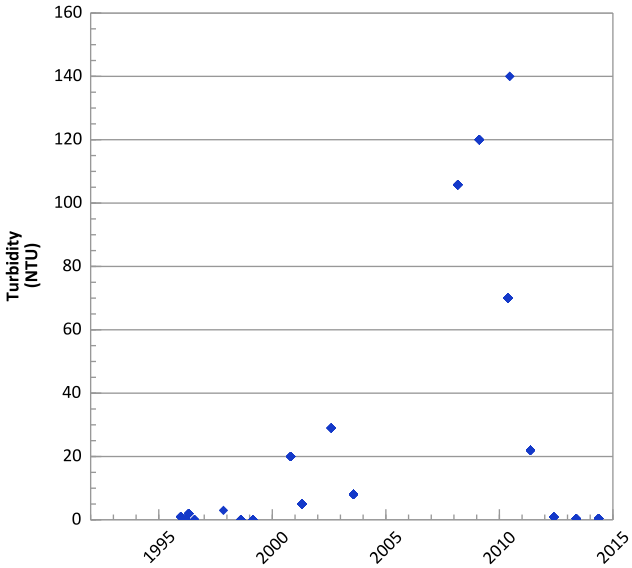


PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



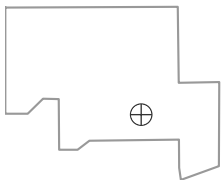






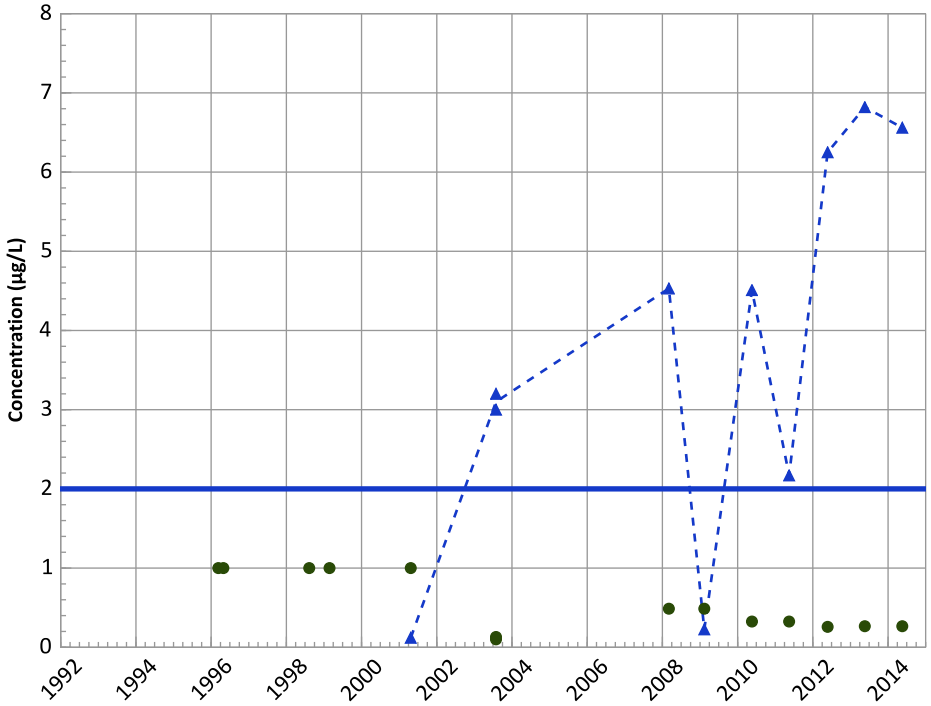
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

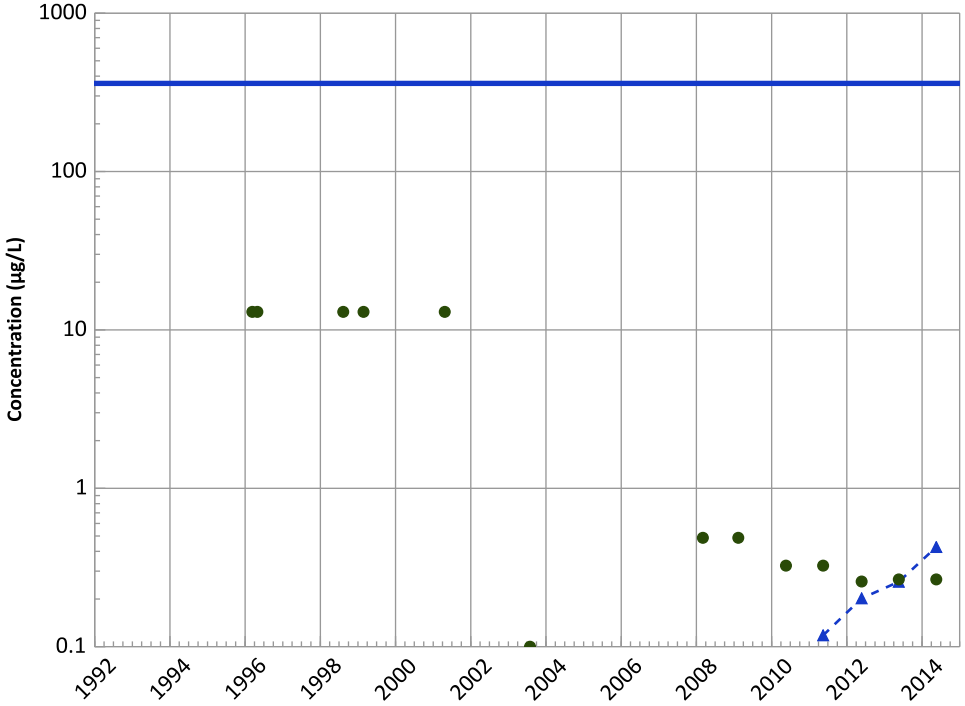


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

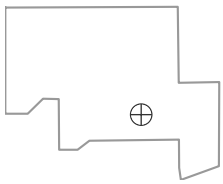
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

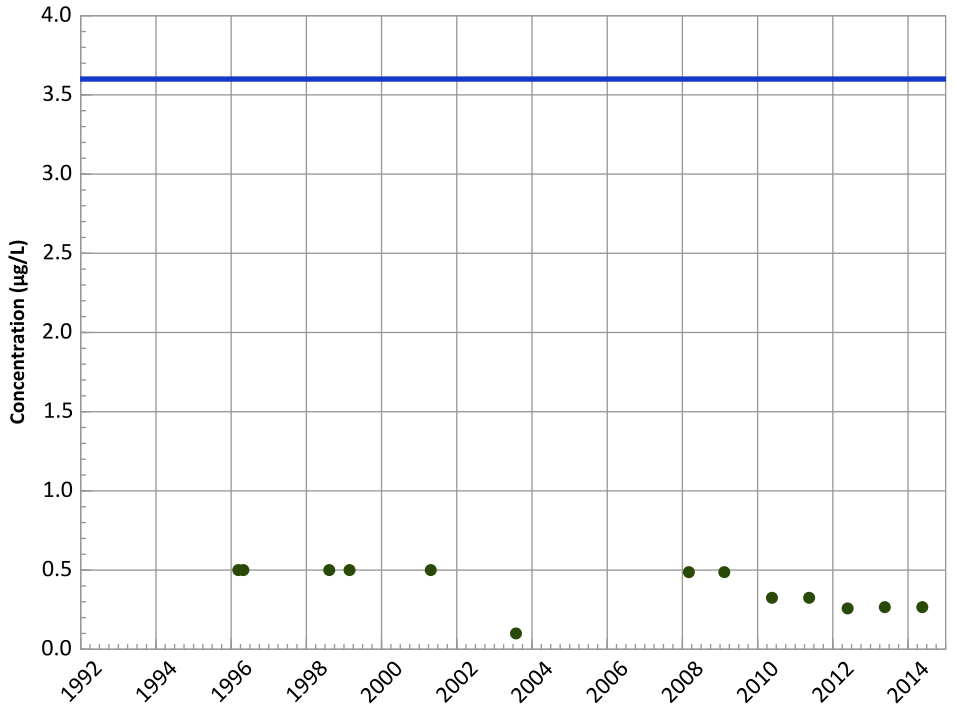
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

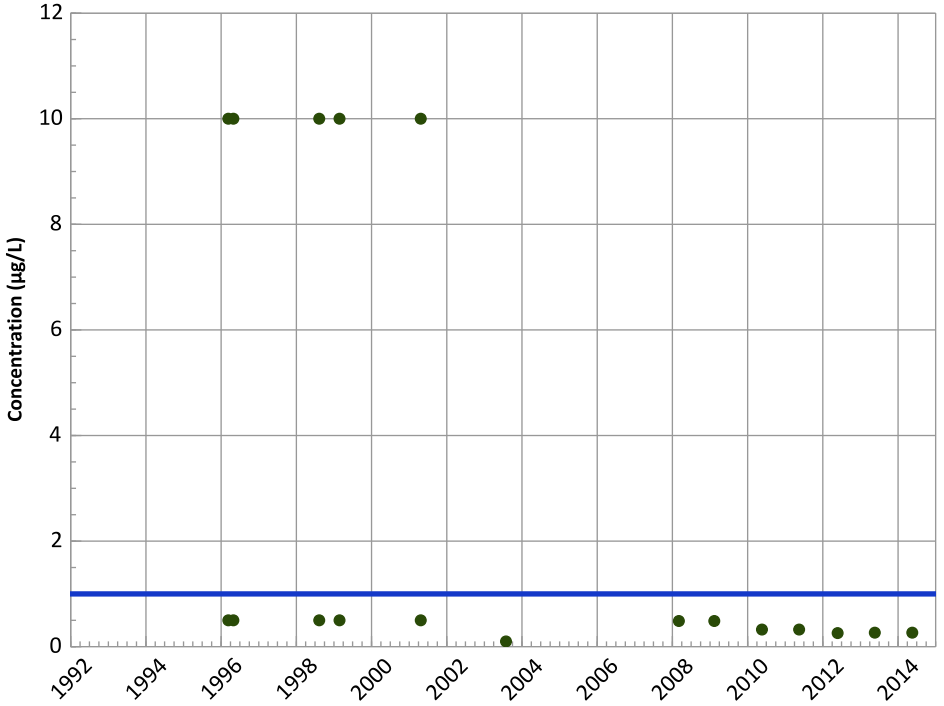


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

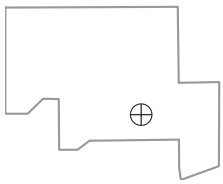
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

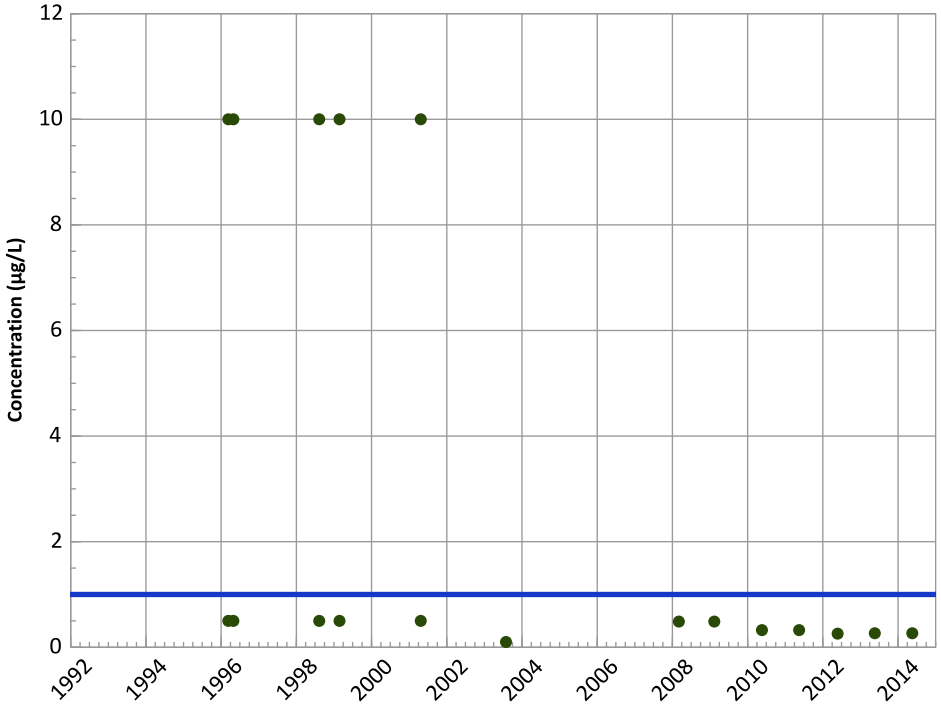
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

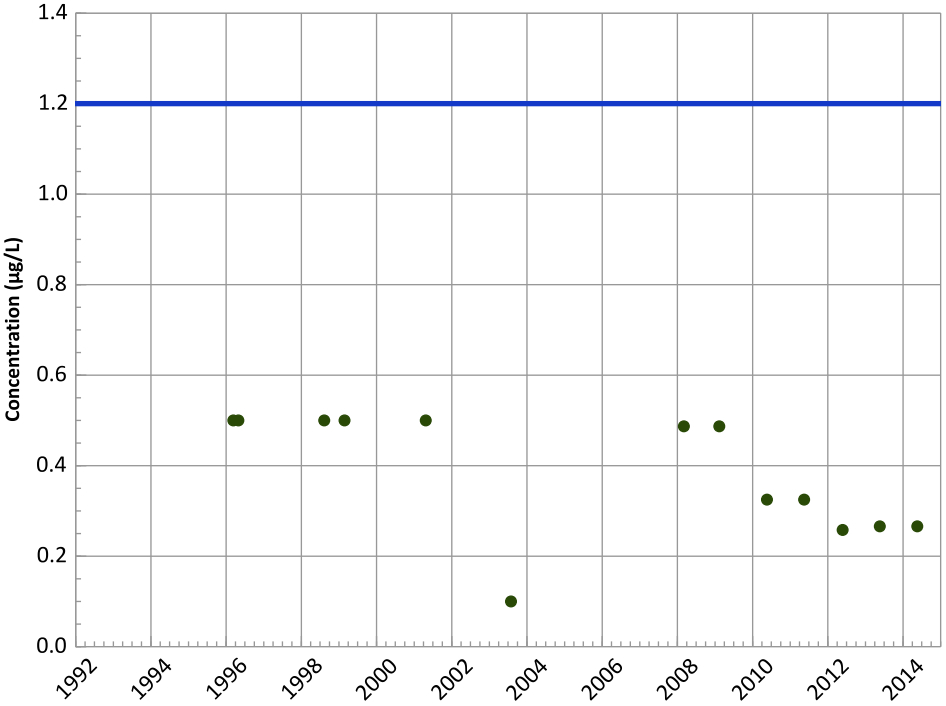


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

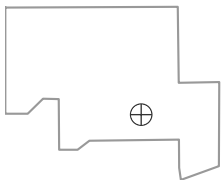
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

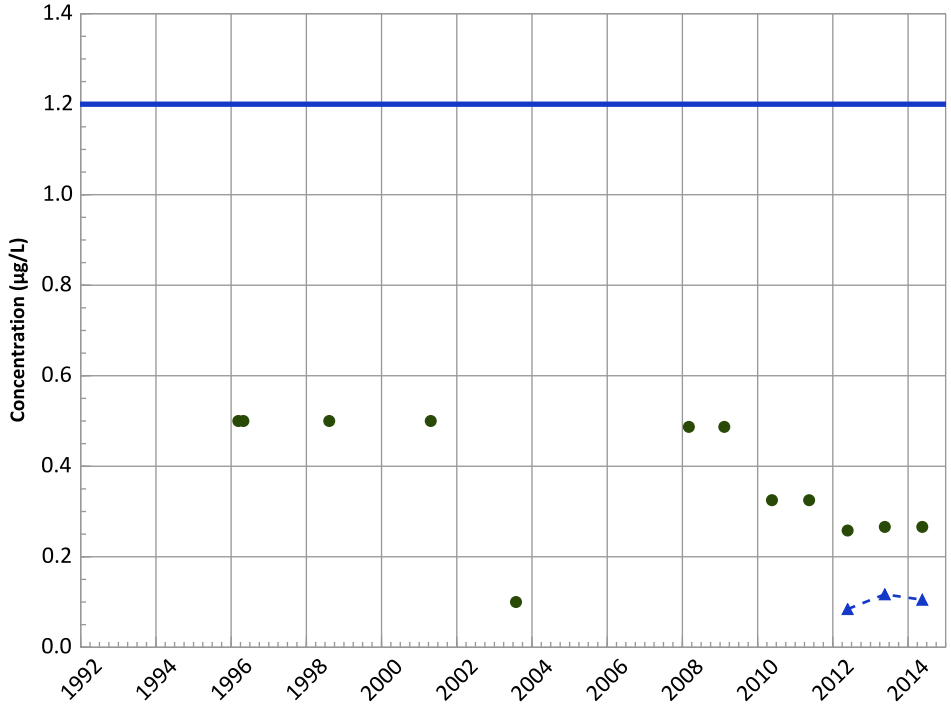
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

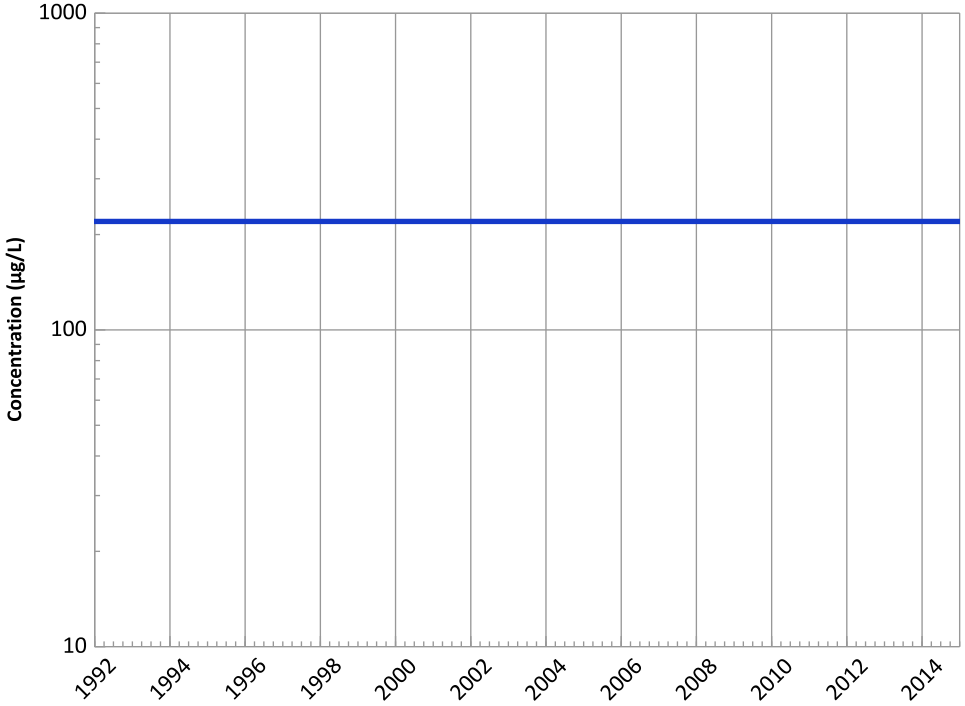


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

1,3,5-Trinitrobenzene Trend



Concentration Trend

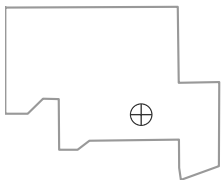
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

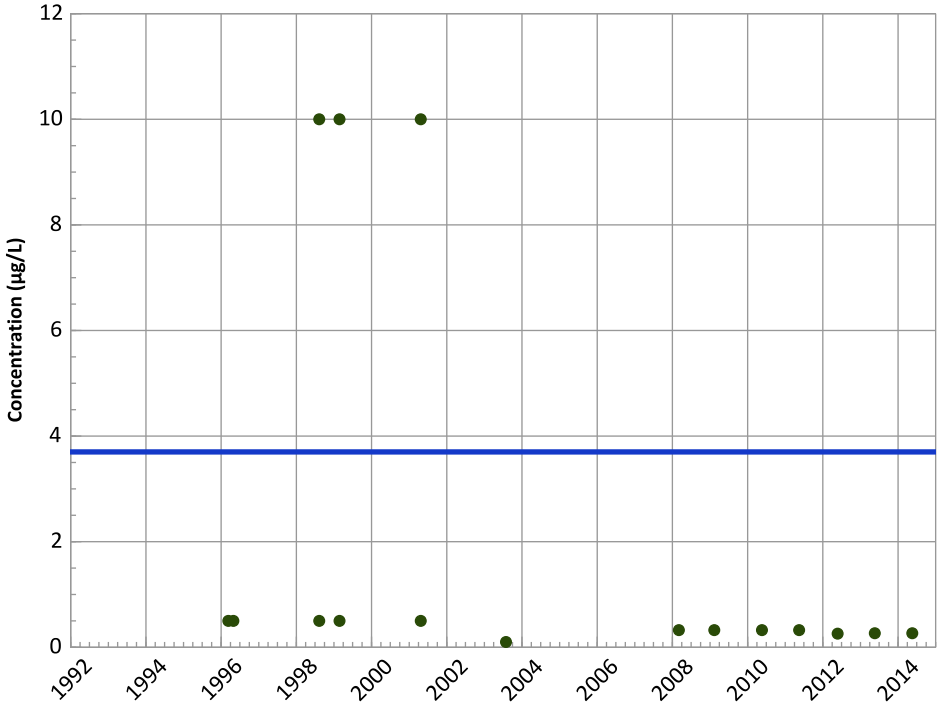
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

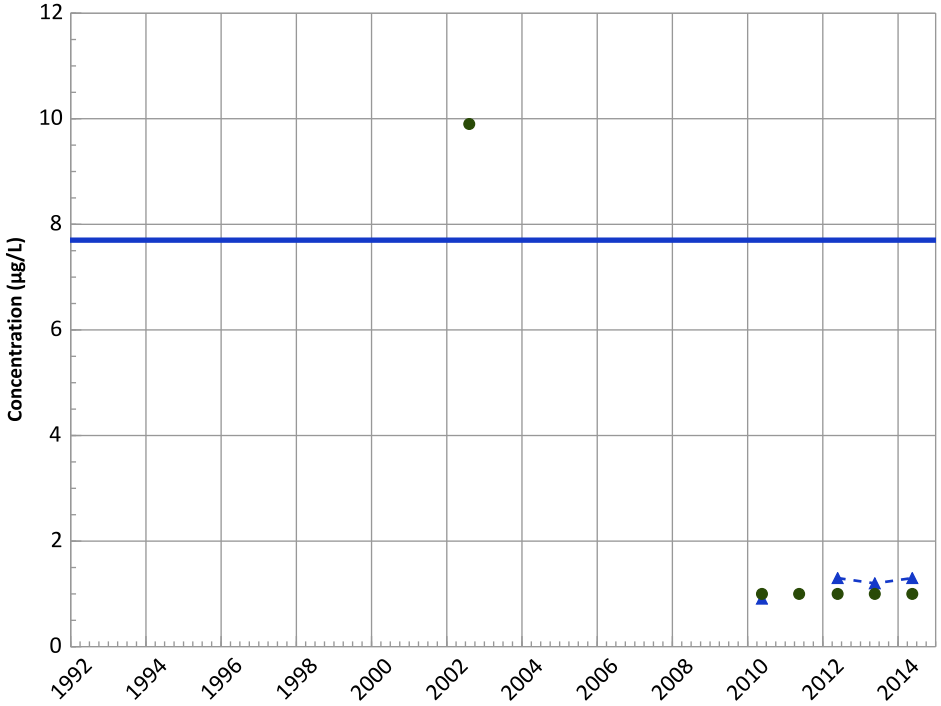


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

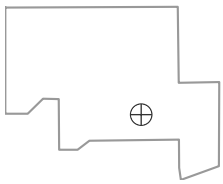
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

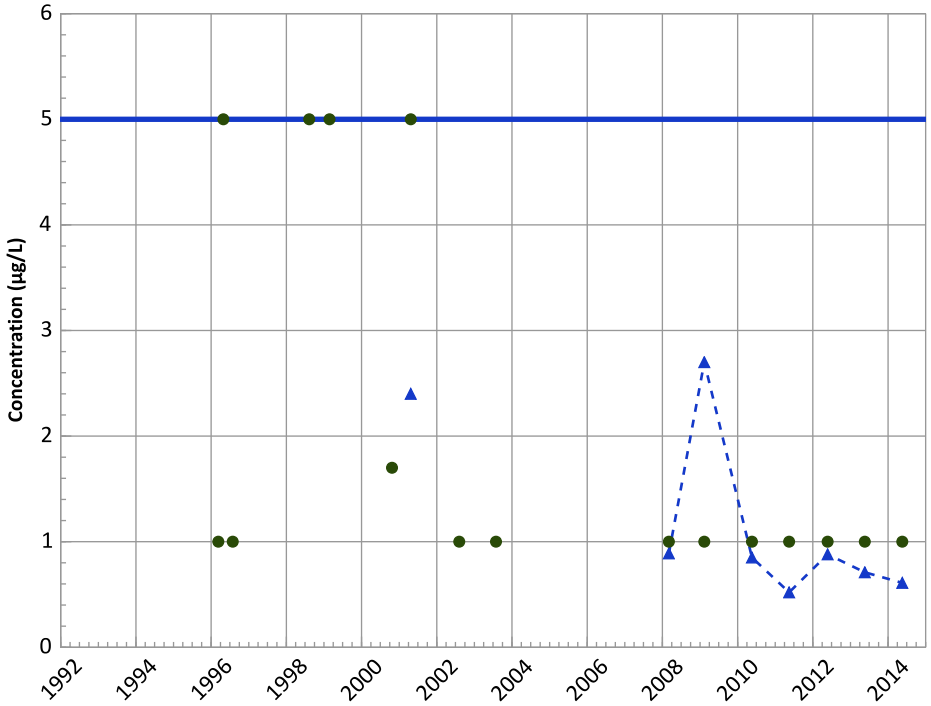
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

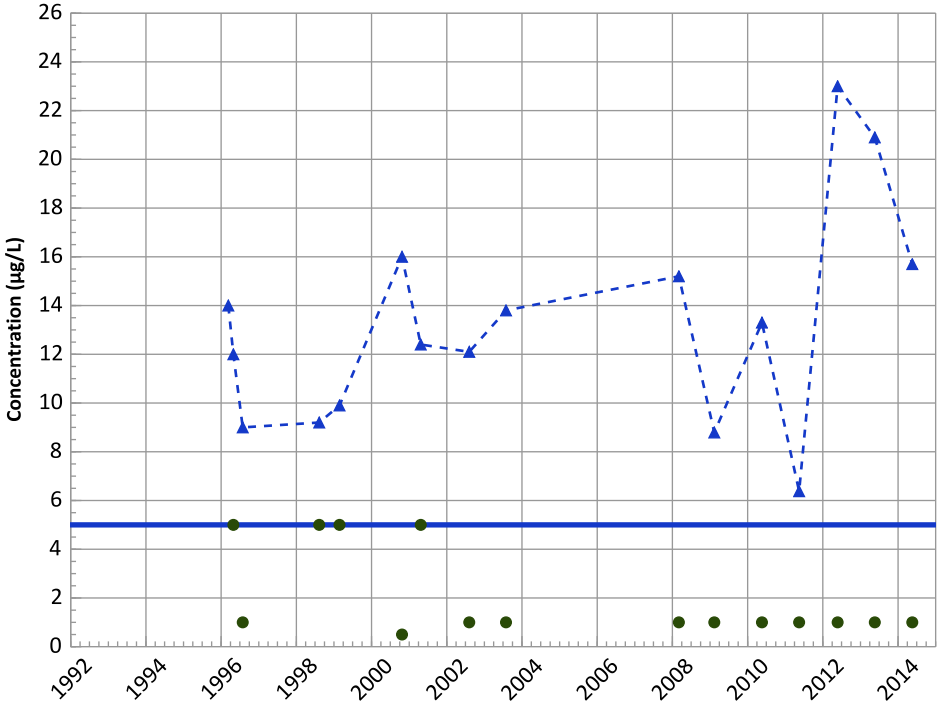


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Trichloroethene Trend



Concentration Trend

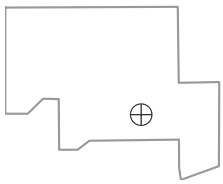
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

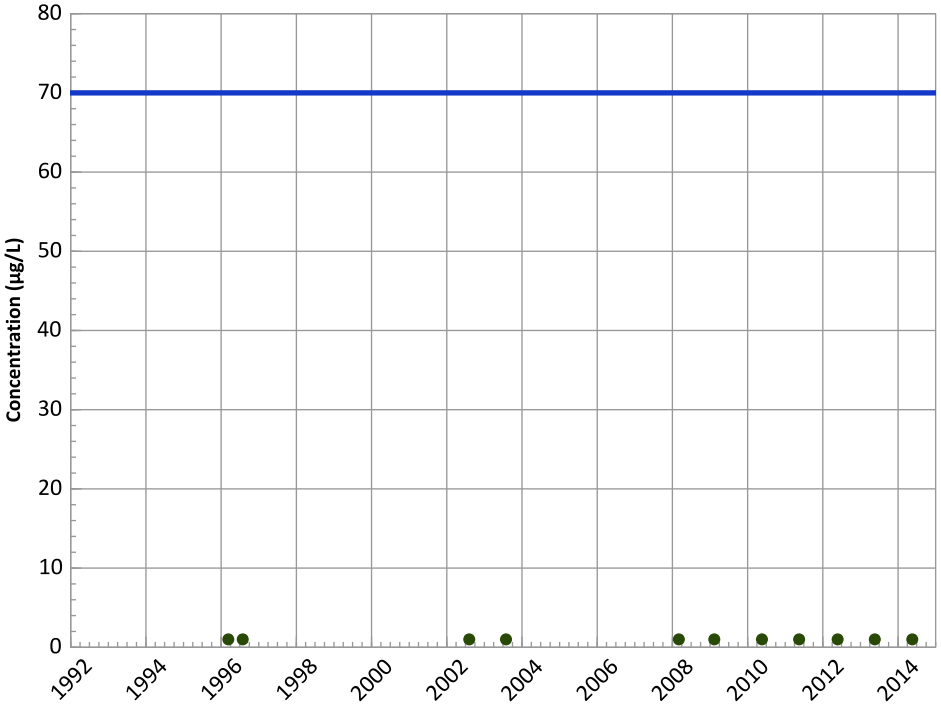
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

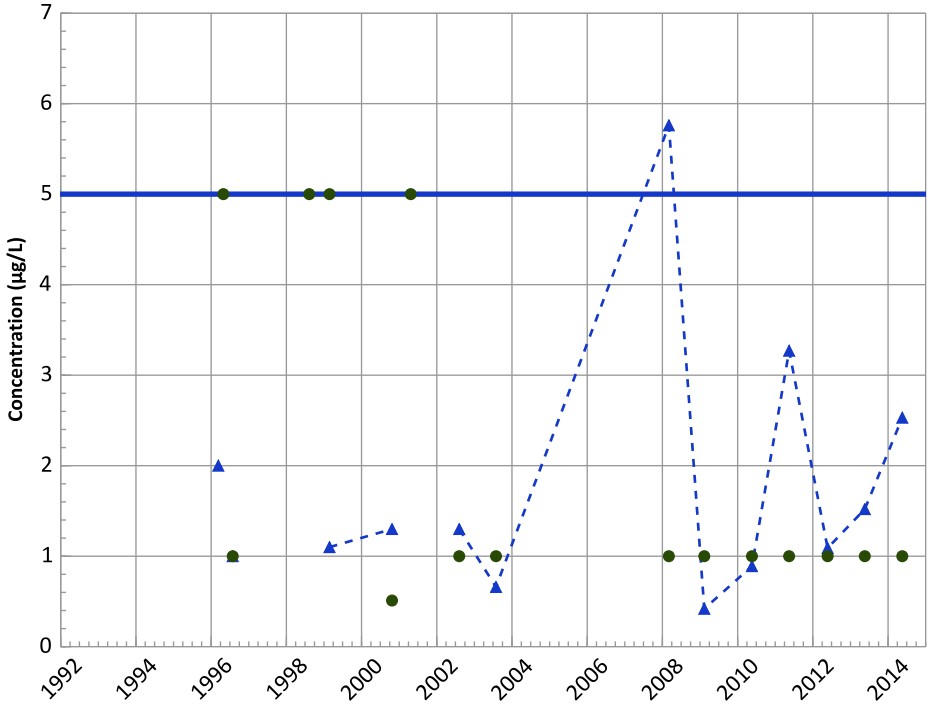


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

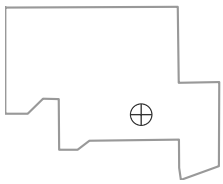
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

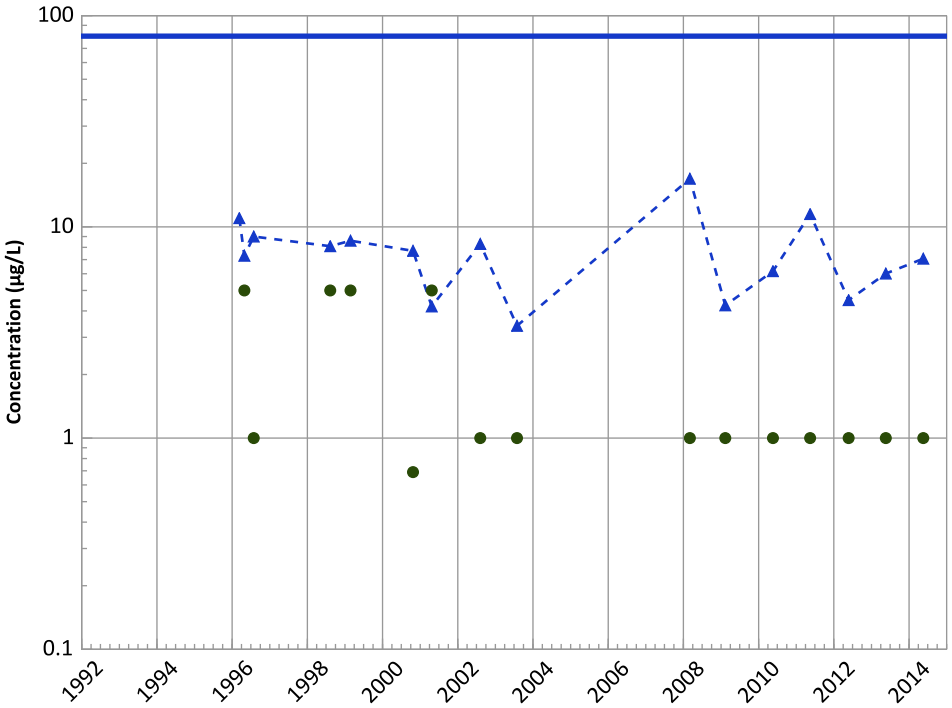
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

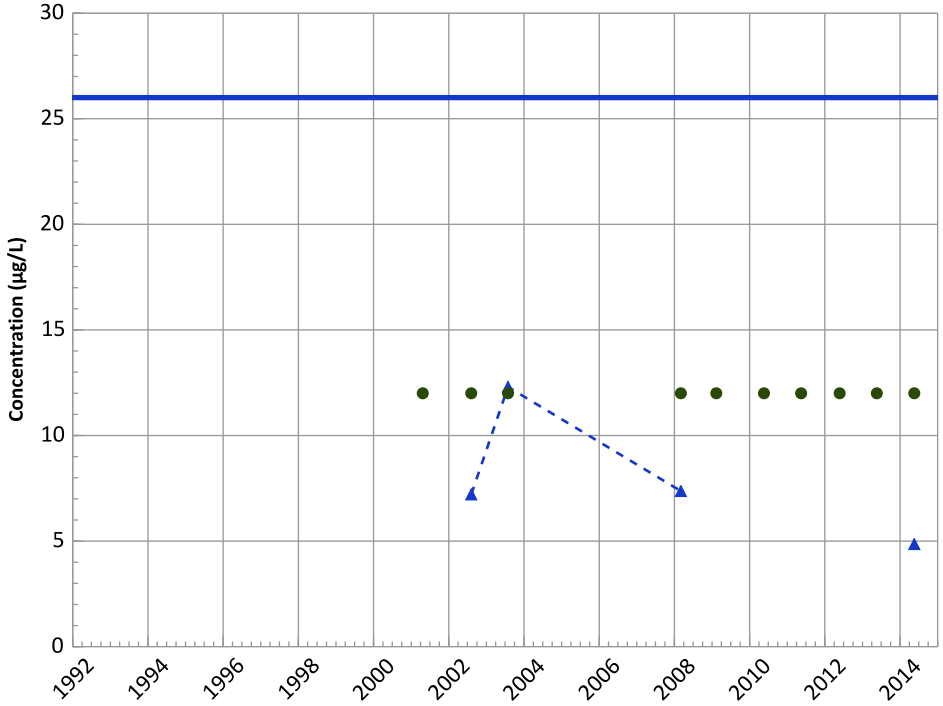


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Perchlorate Trend



Concentration Trend

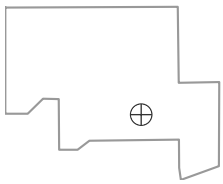
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

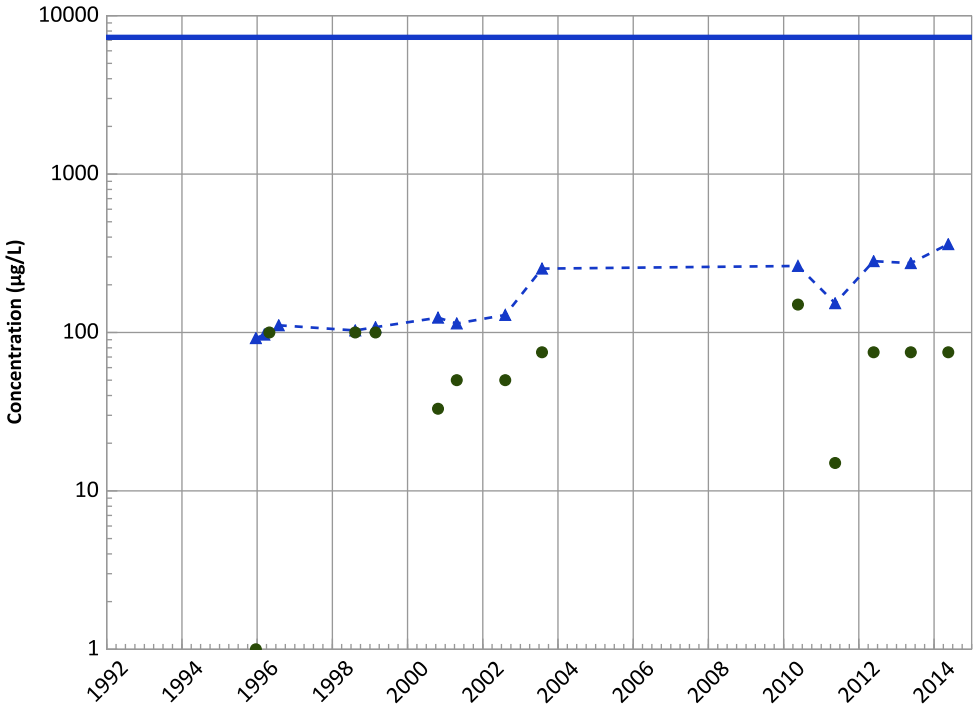
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

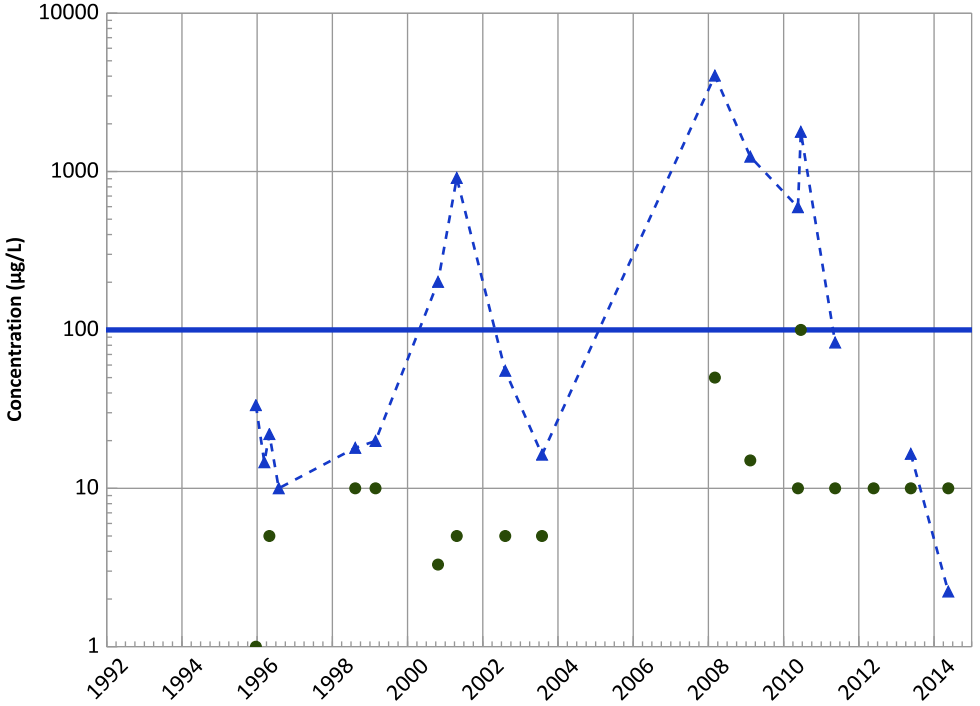


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Chromium, Total Trend



Concentration Trend

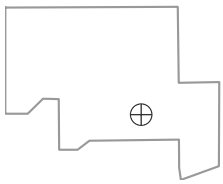
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

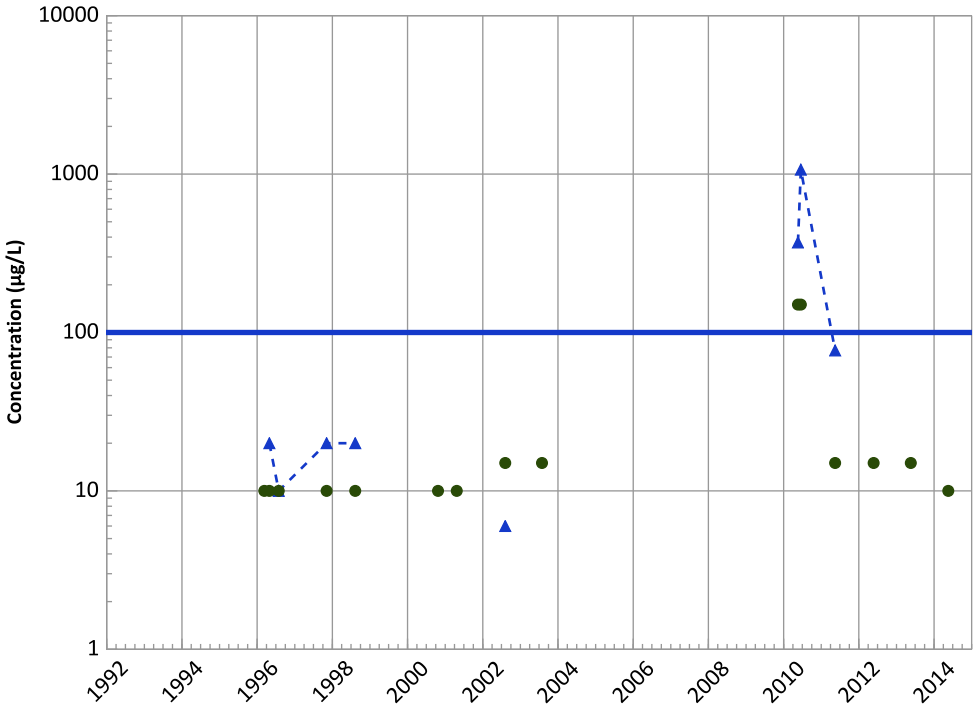
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

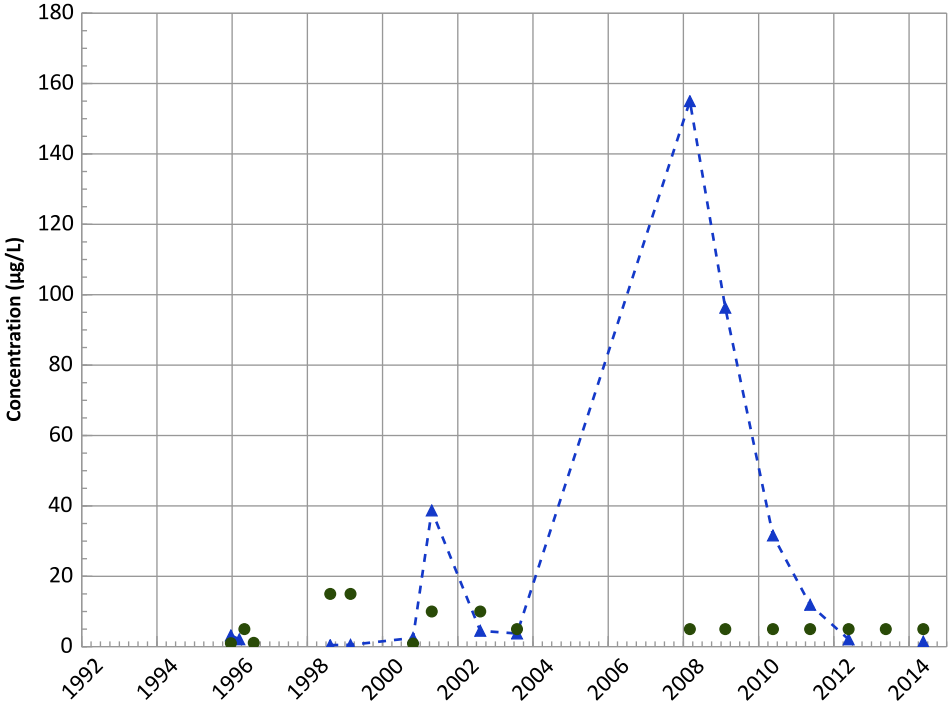


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Manganese Trend



Concentration Trend

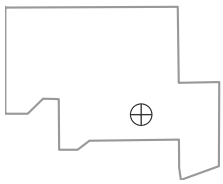
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

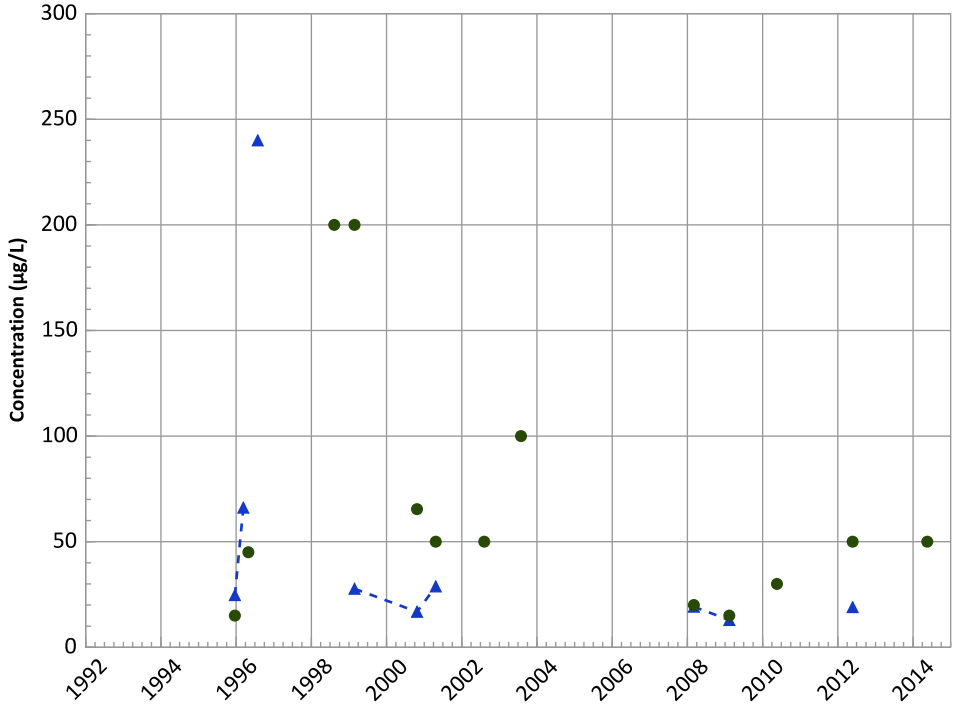
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

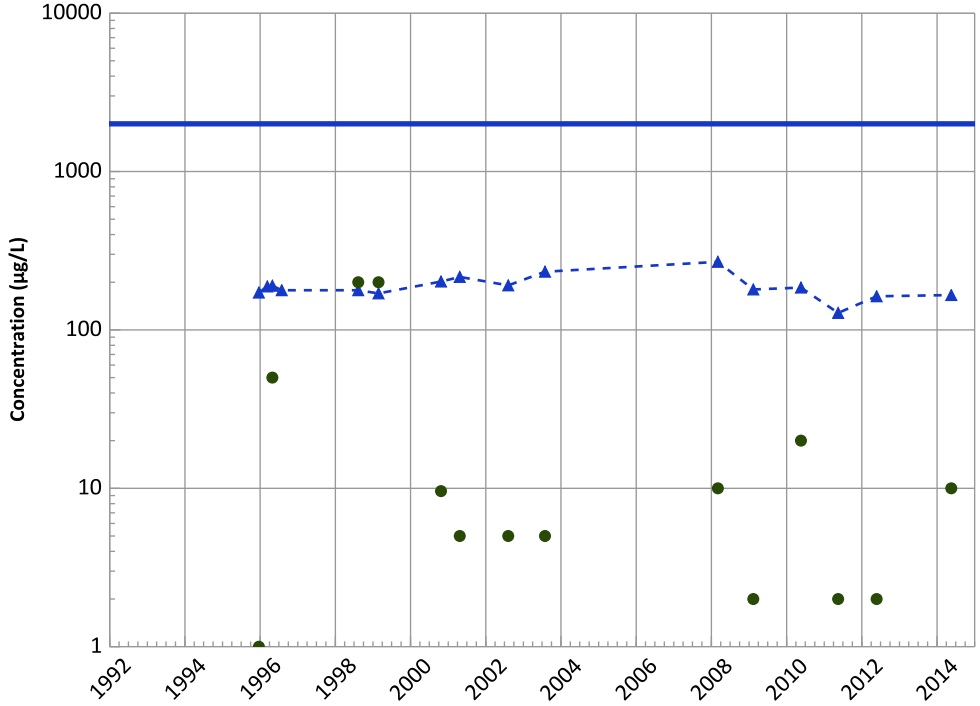


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Barium Trend



Concentration Trend

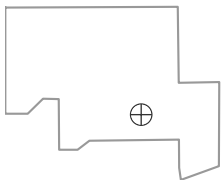
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

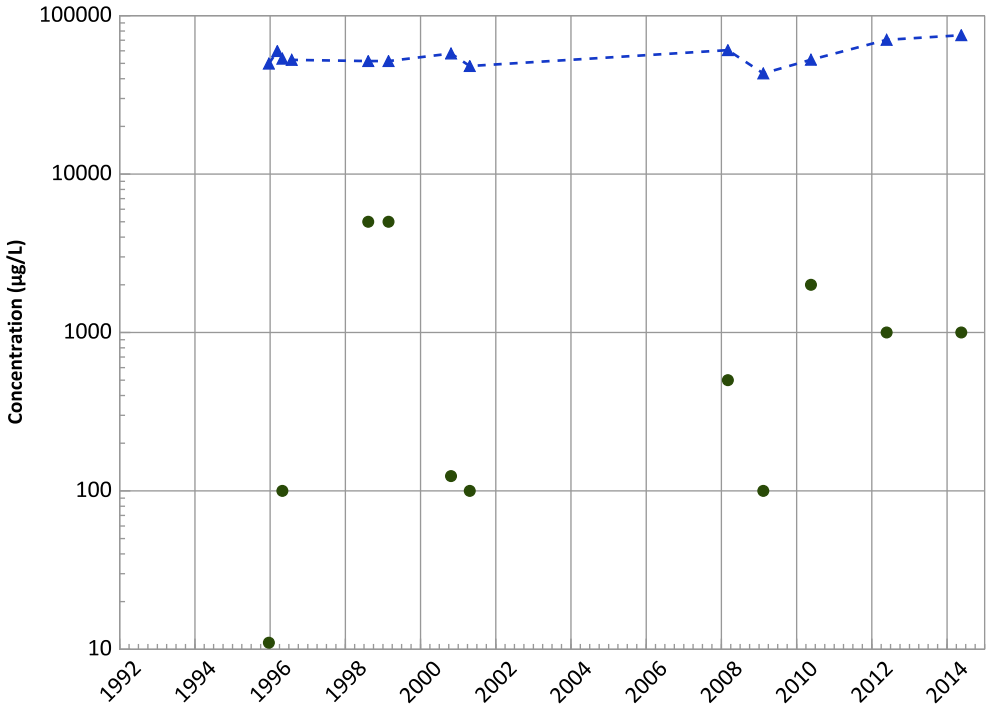
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

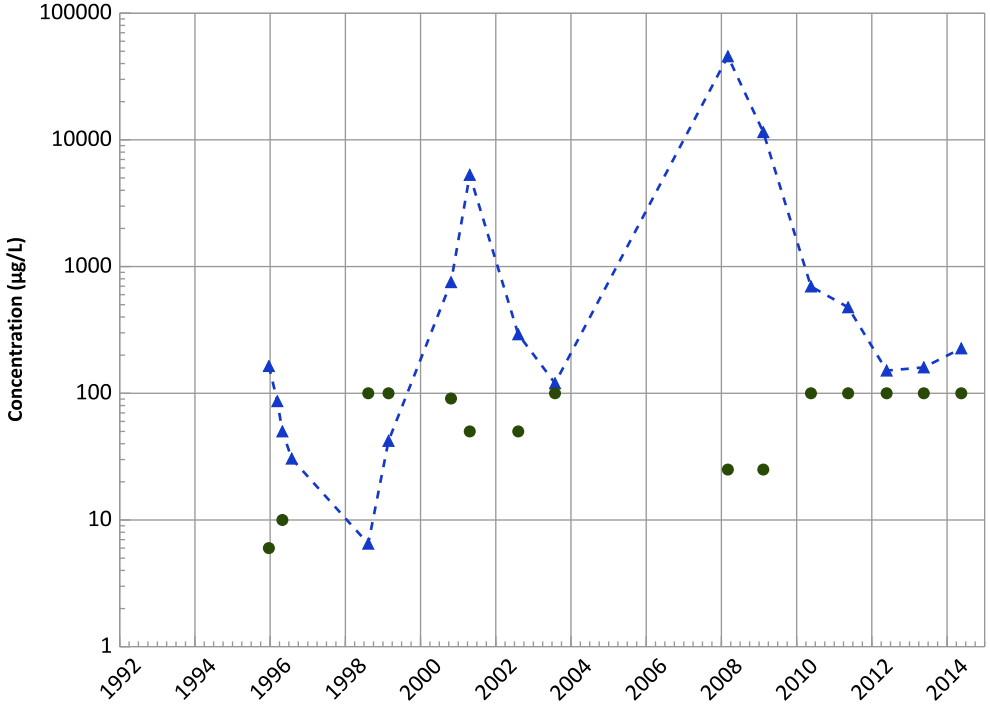


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Iron Trend



Concentration Trend

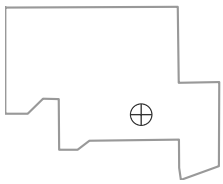
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

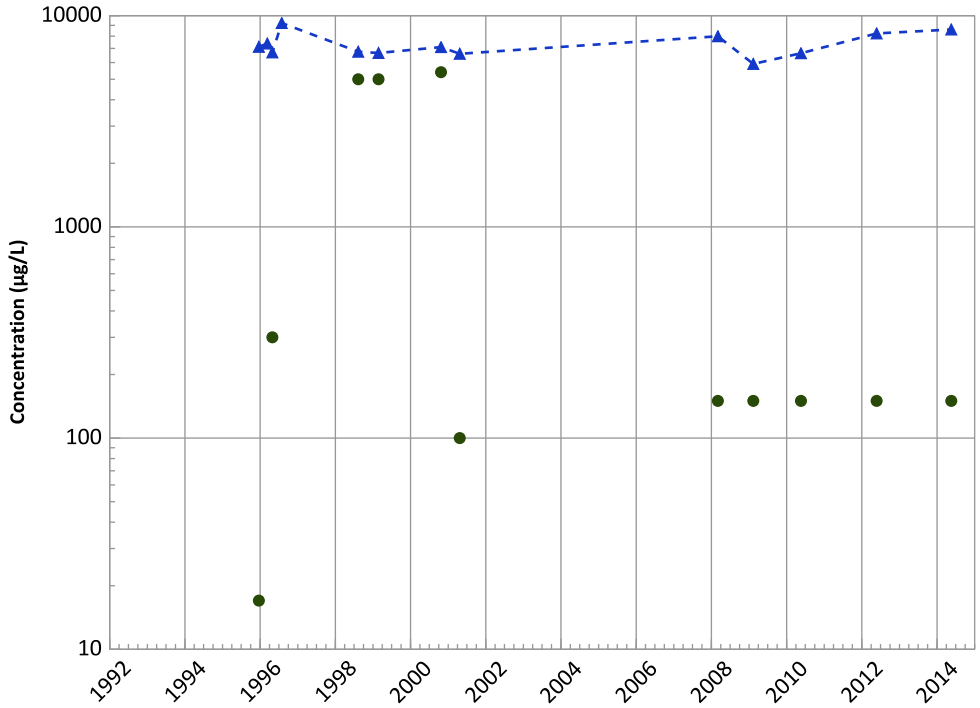
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

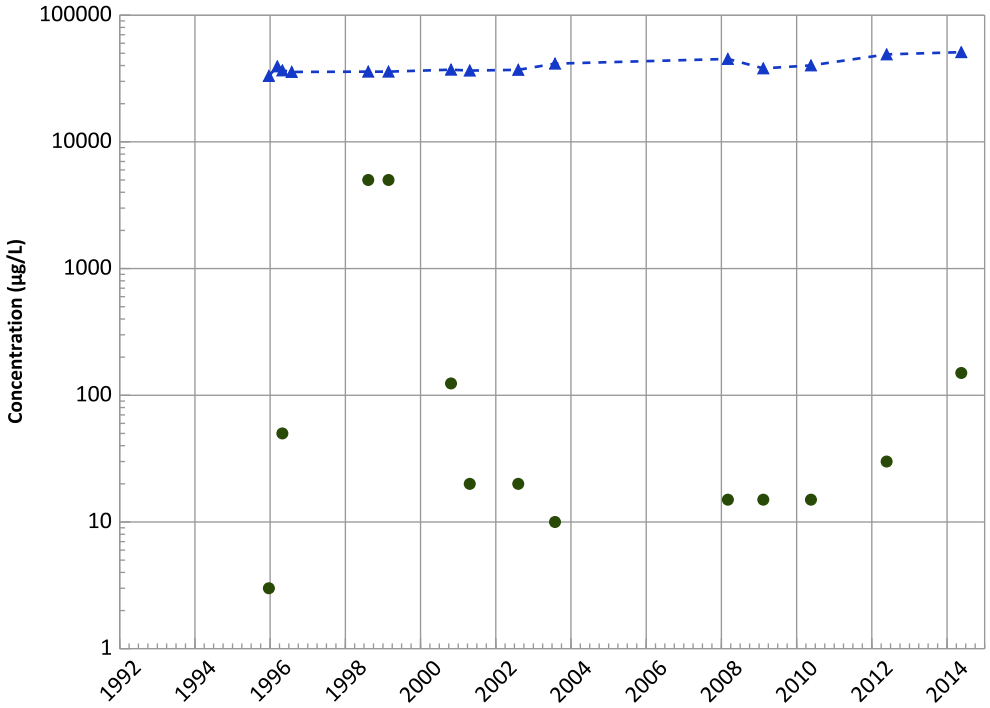


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

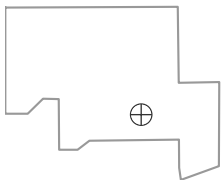
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

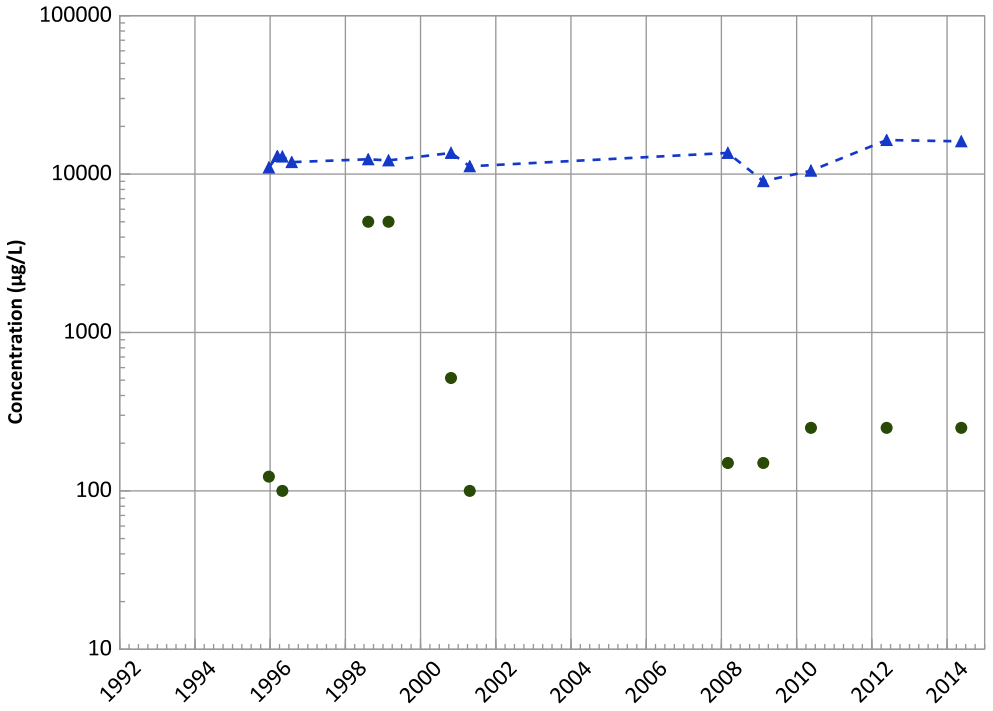
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1007 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend



Concentration Trend

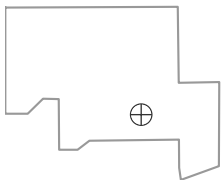
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

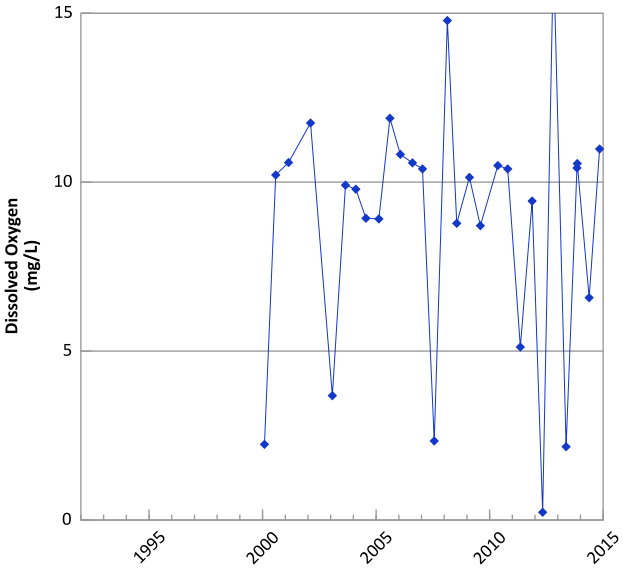
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/20/1995 to 05/19/2014
Analysis Date: 03/19/2015

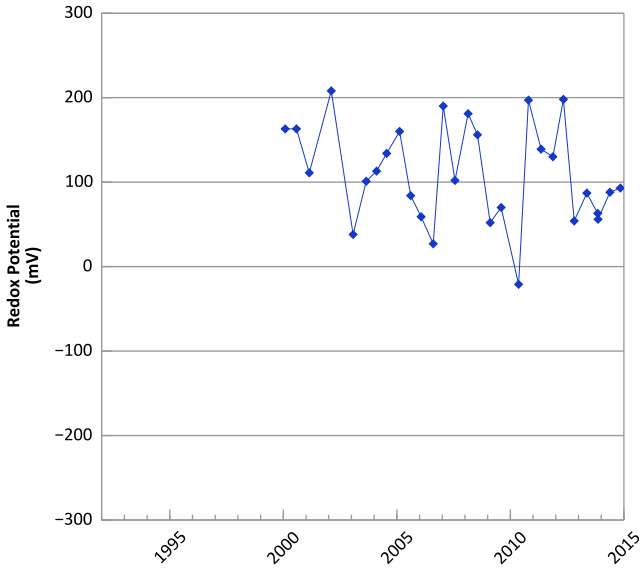
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

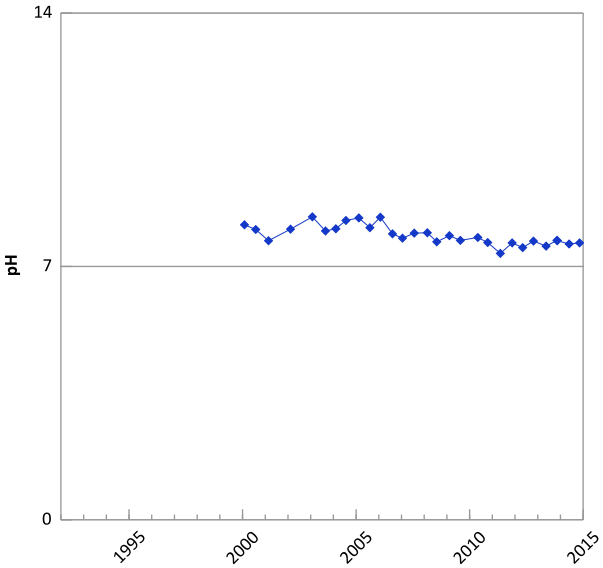
Well Location

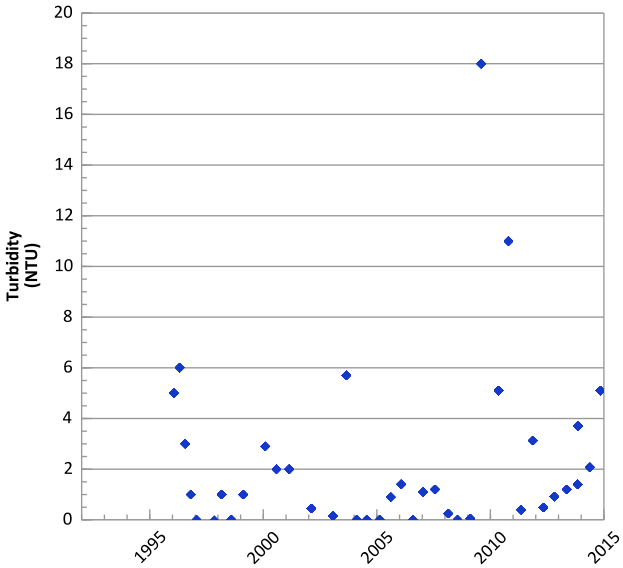


PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



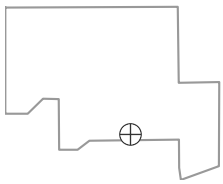






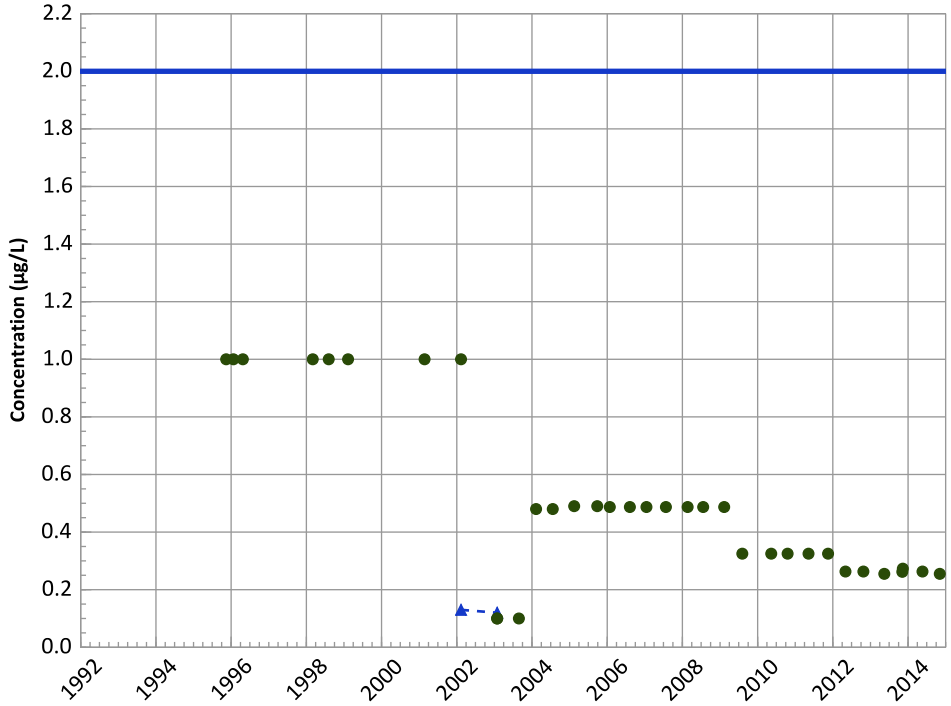
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

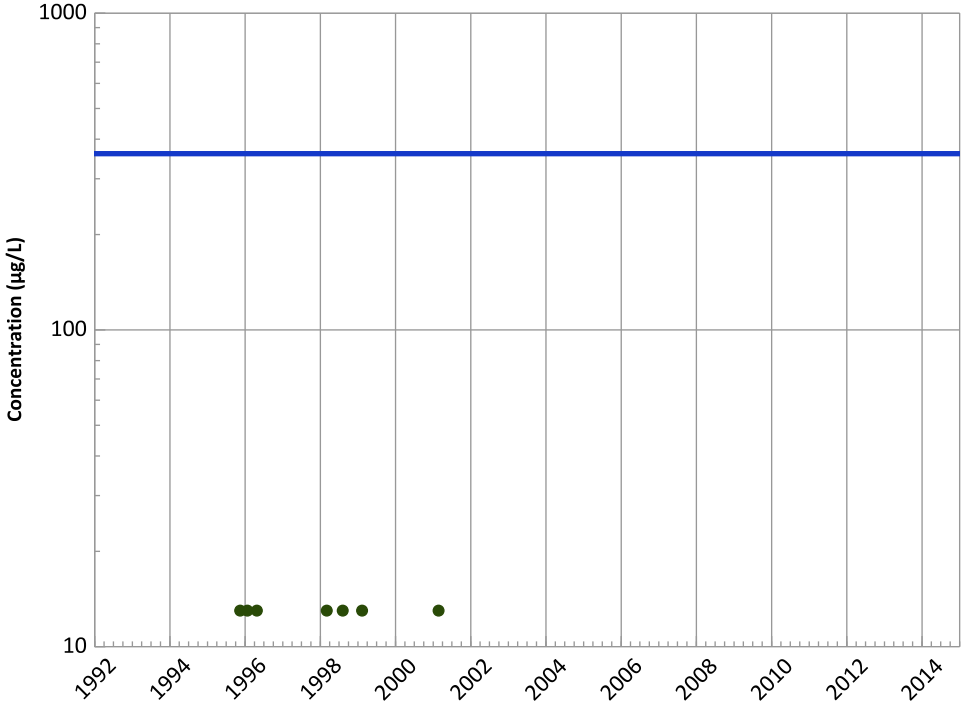


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

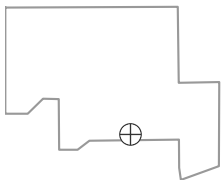
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

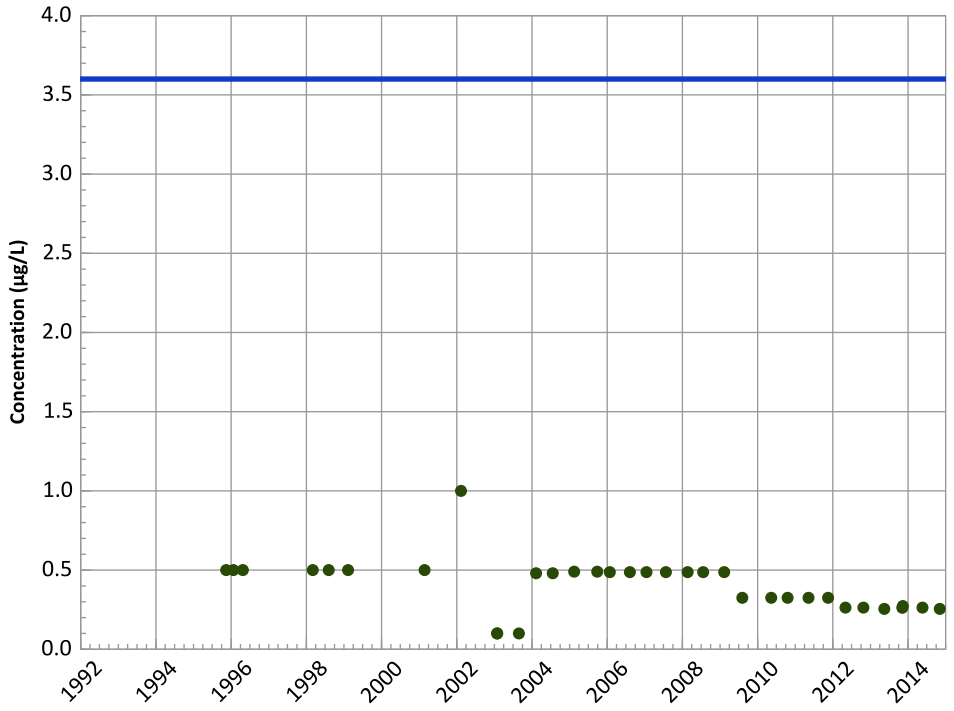
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

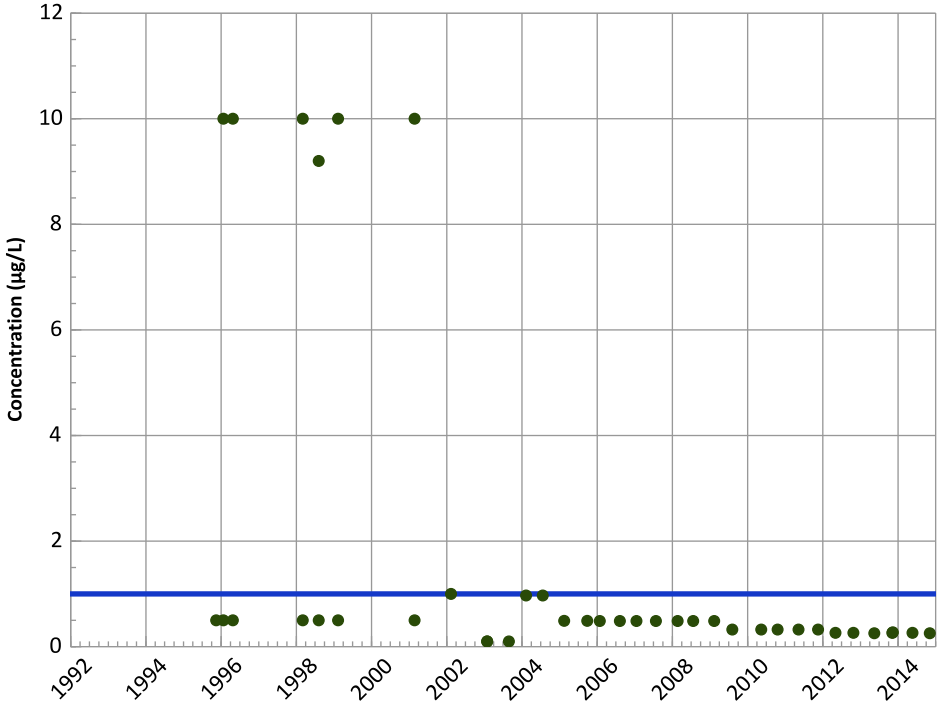


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

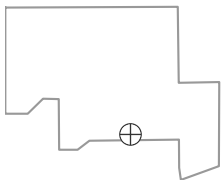
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

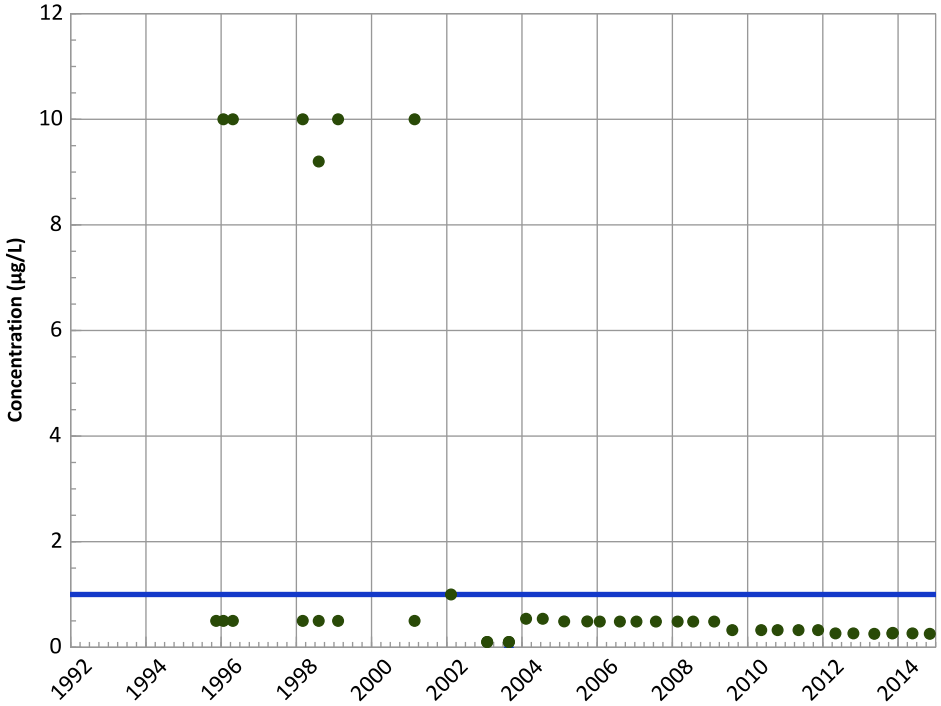
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

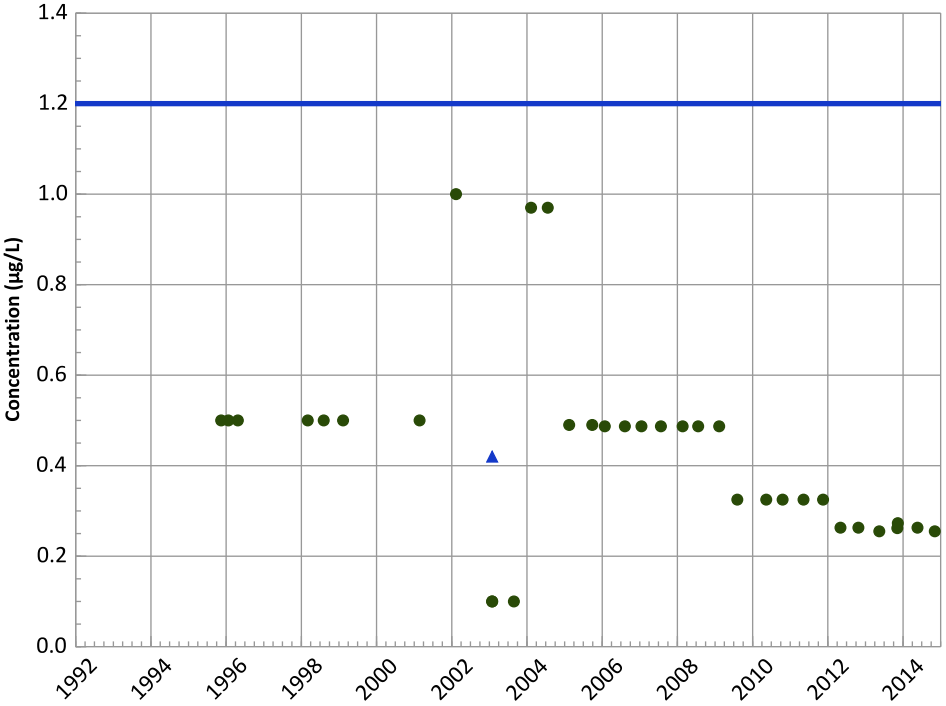


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

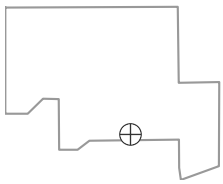
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

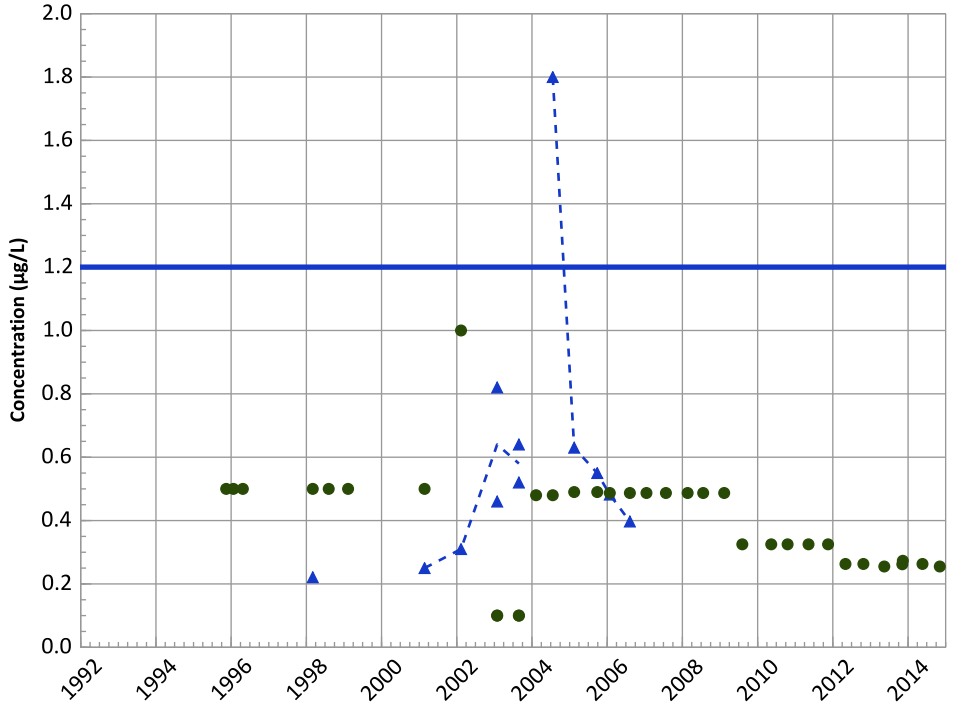
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

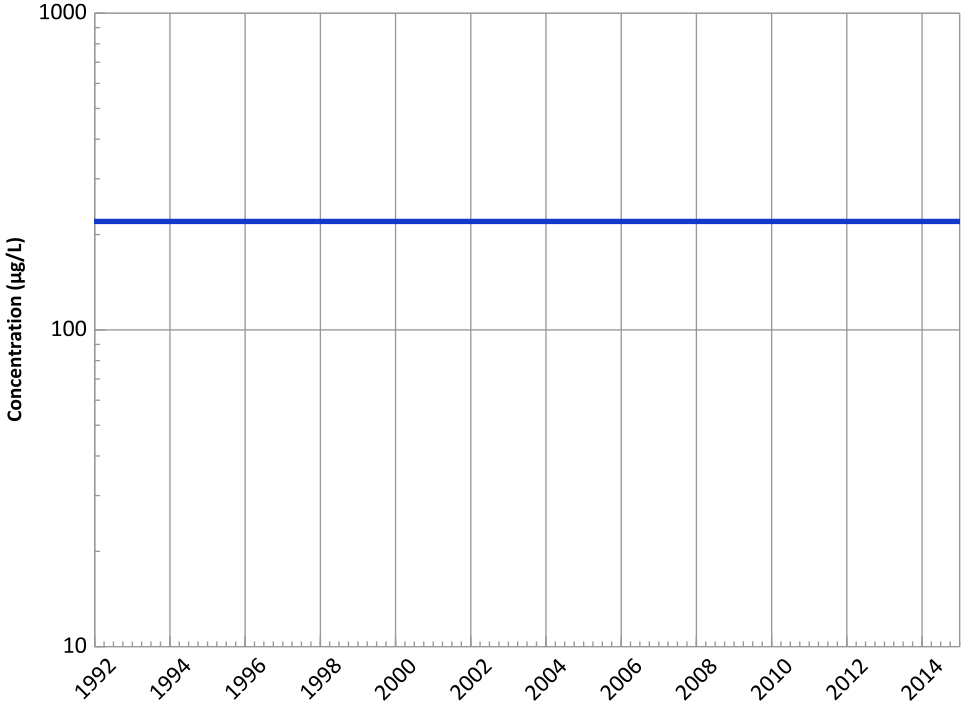


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Increasing

1,3,5-Trinitrobenzene Trend



Concentration Trend

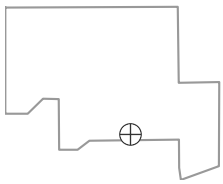
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

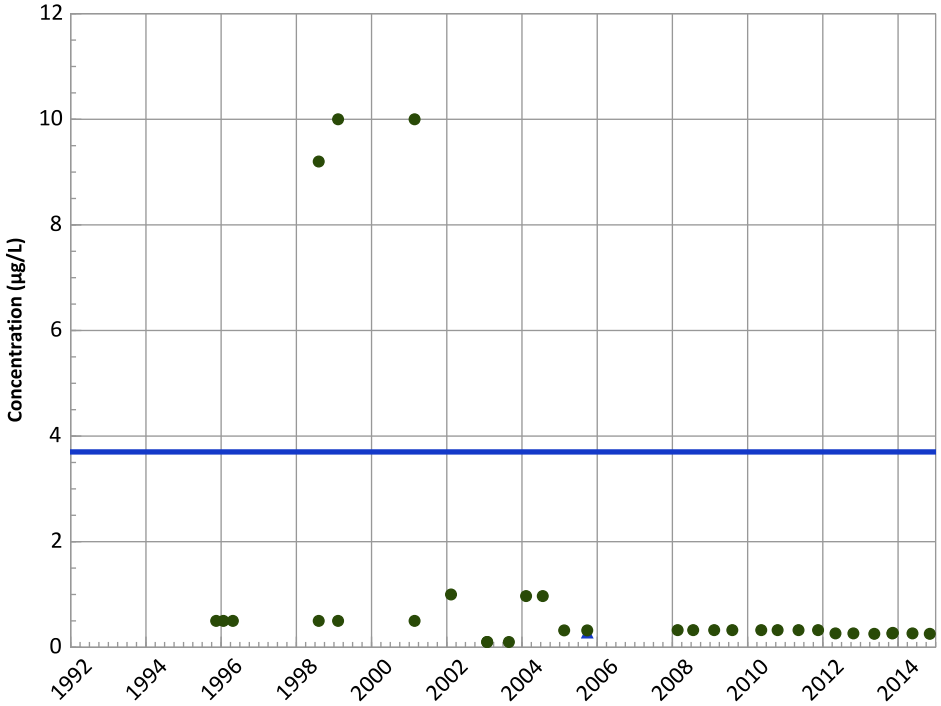
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

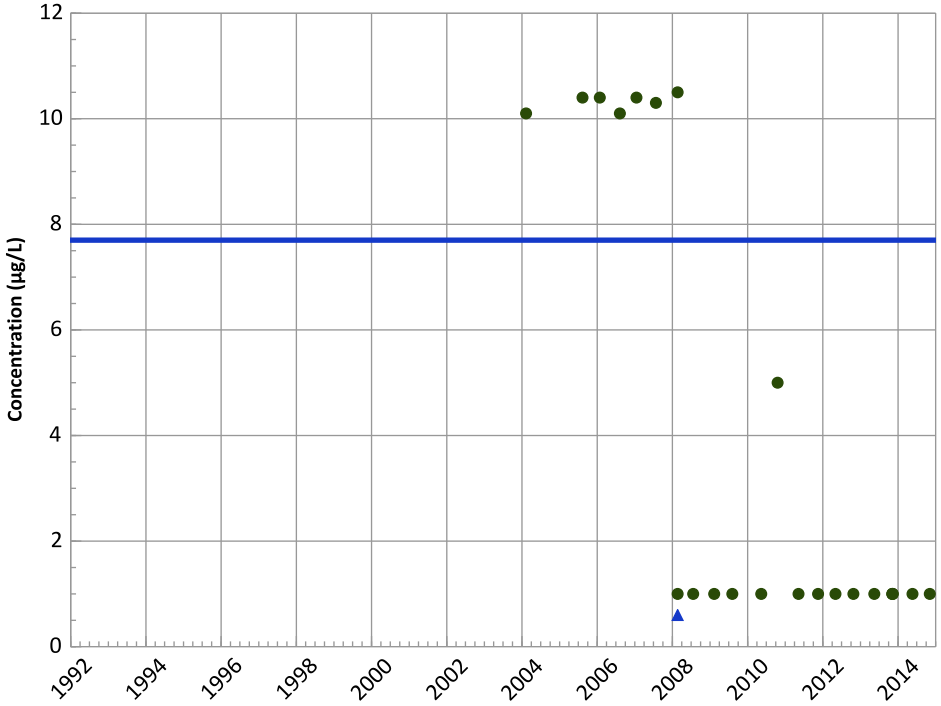


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

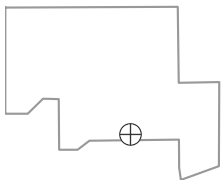
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

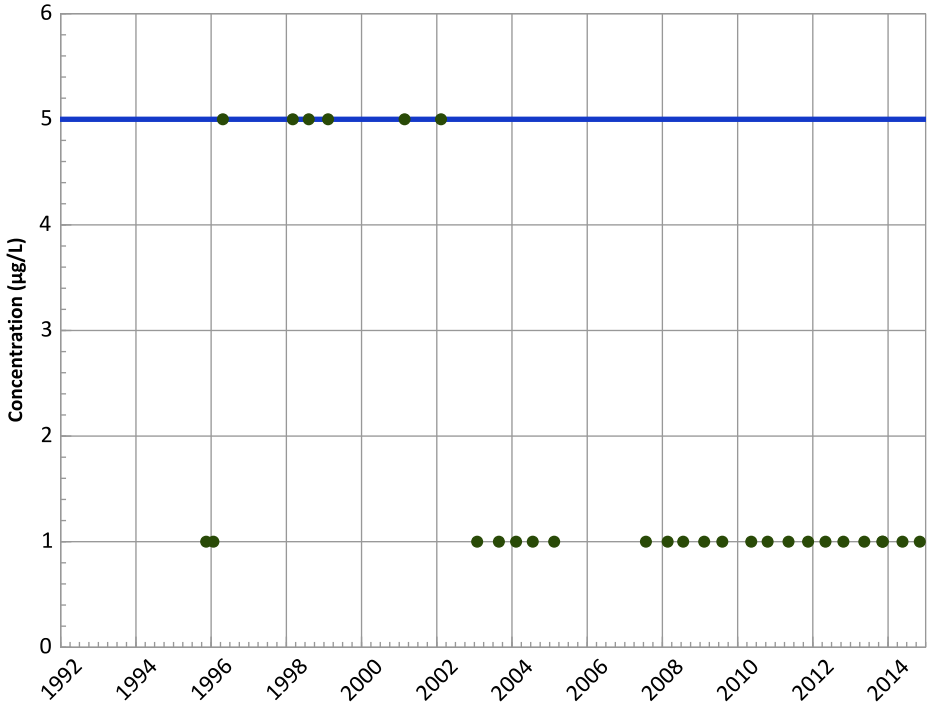
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ═══ Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

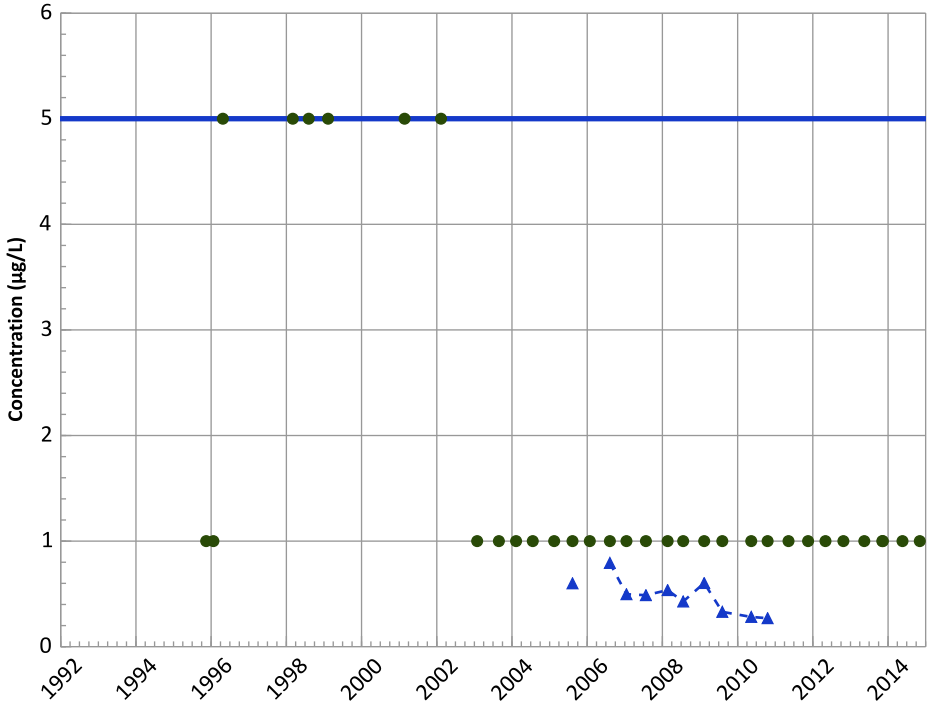


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

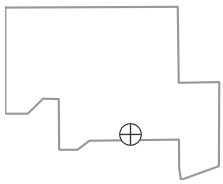
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

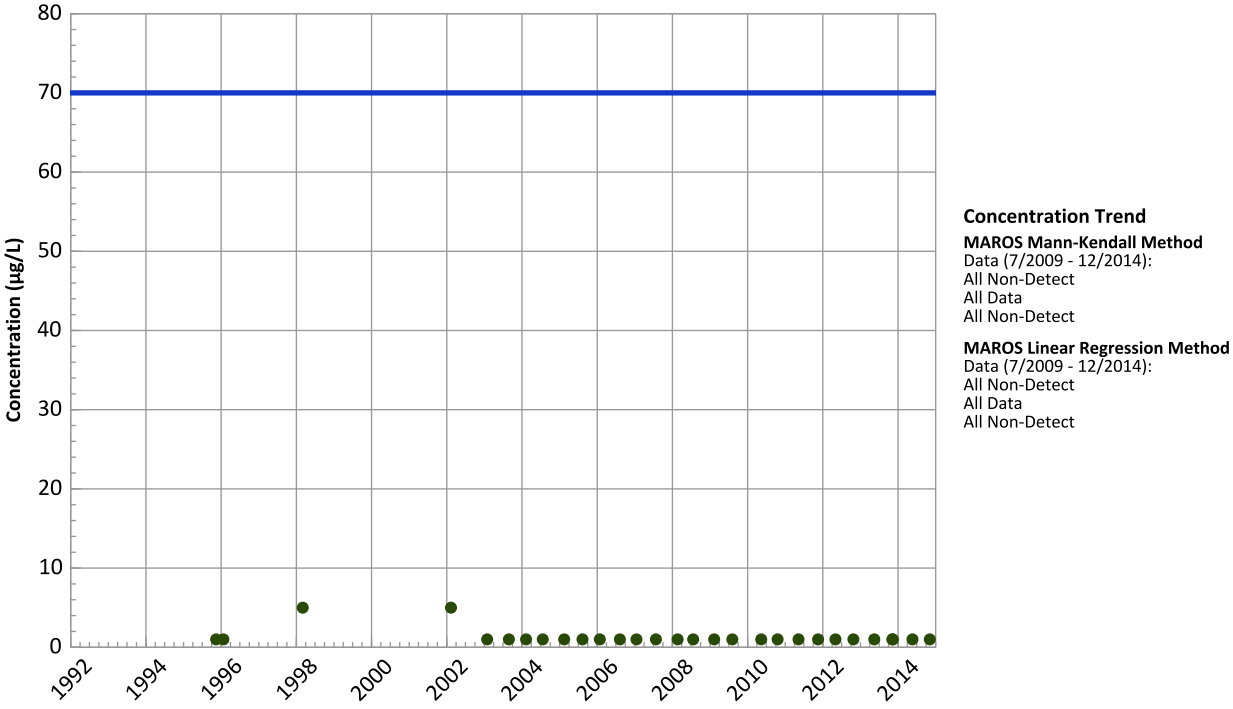
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

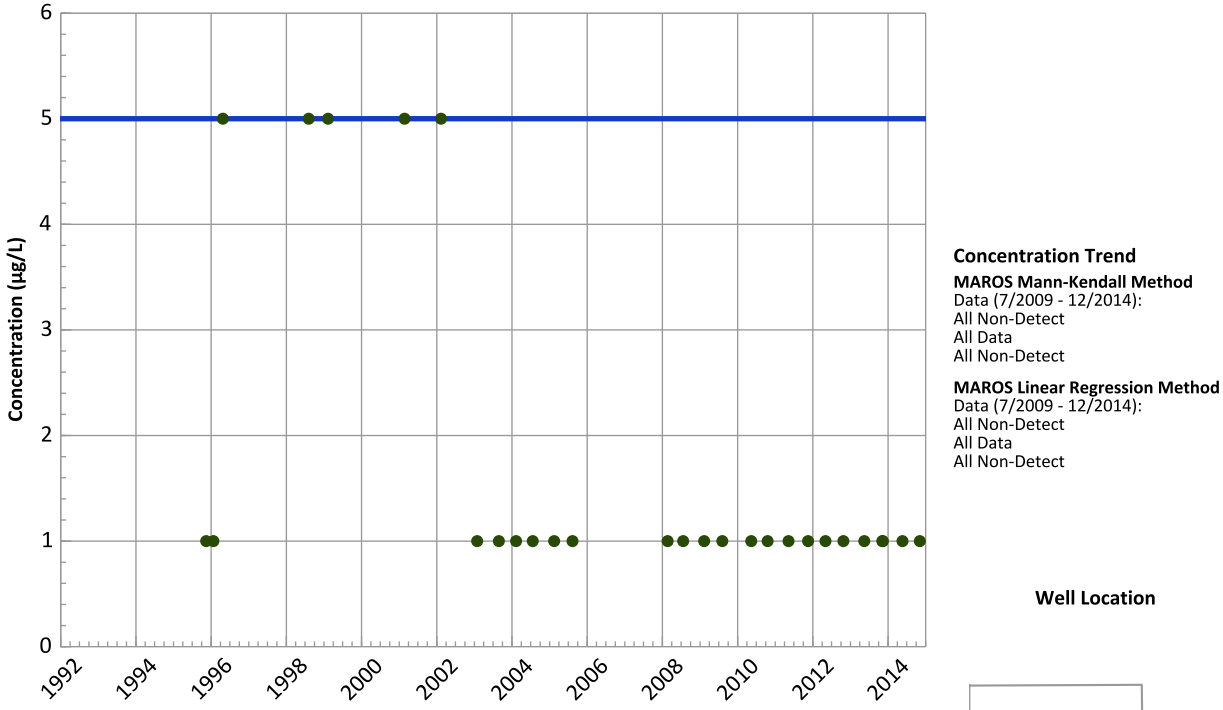


PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend



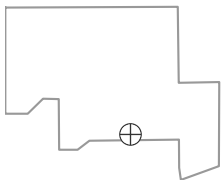
1,2-Dichloroethane Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

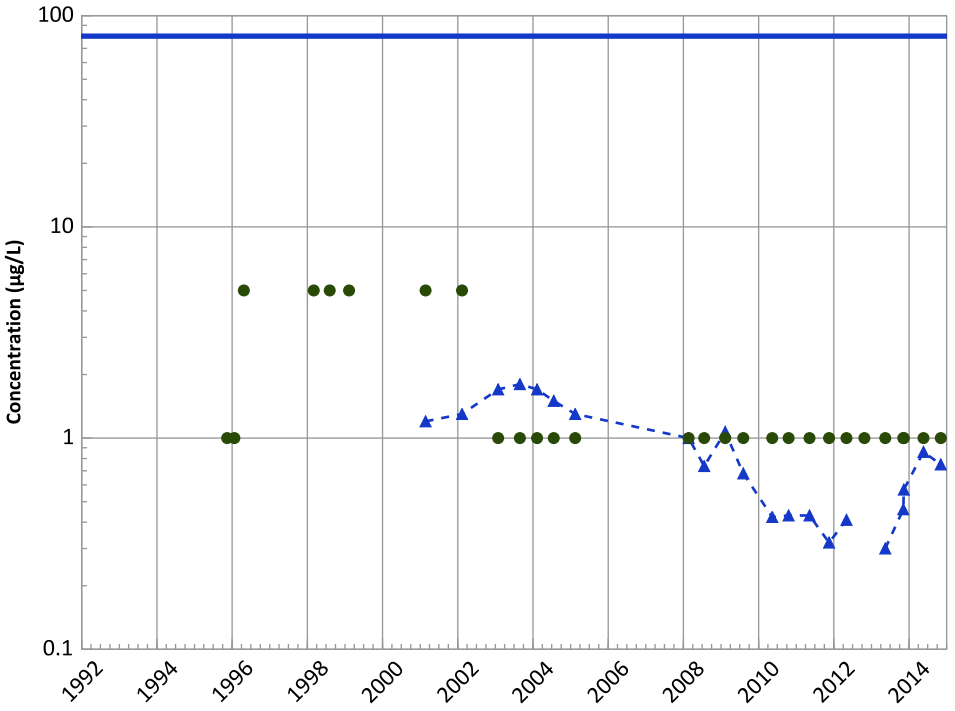
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

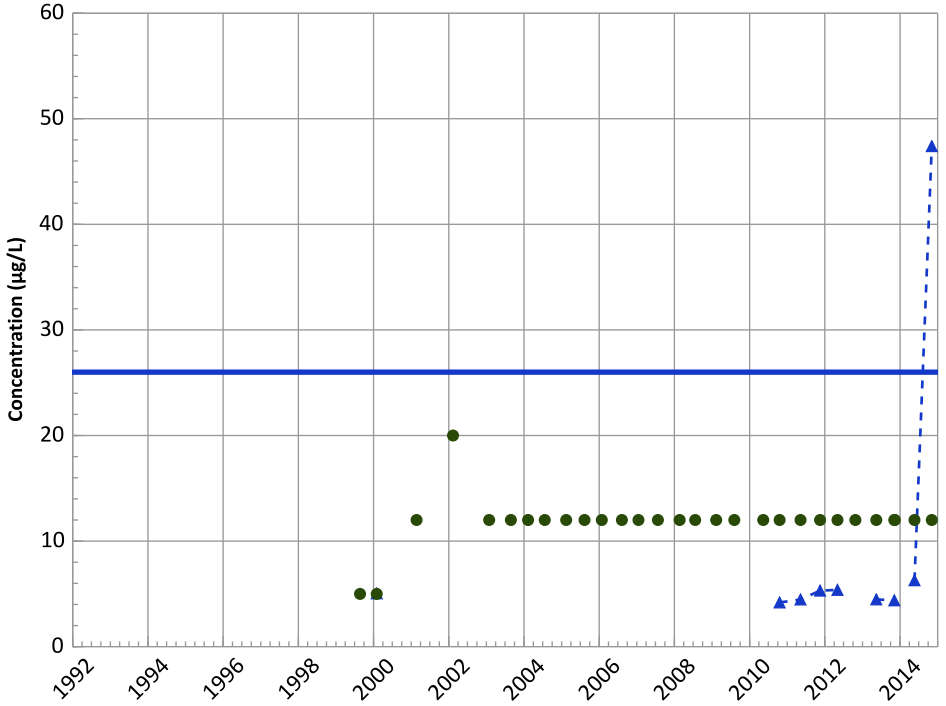


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Perchlorate Trend



Concentration Trend

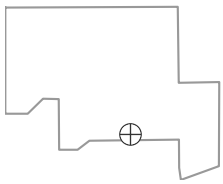
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

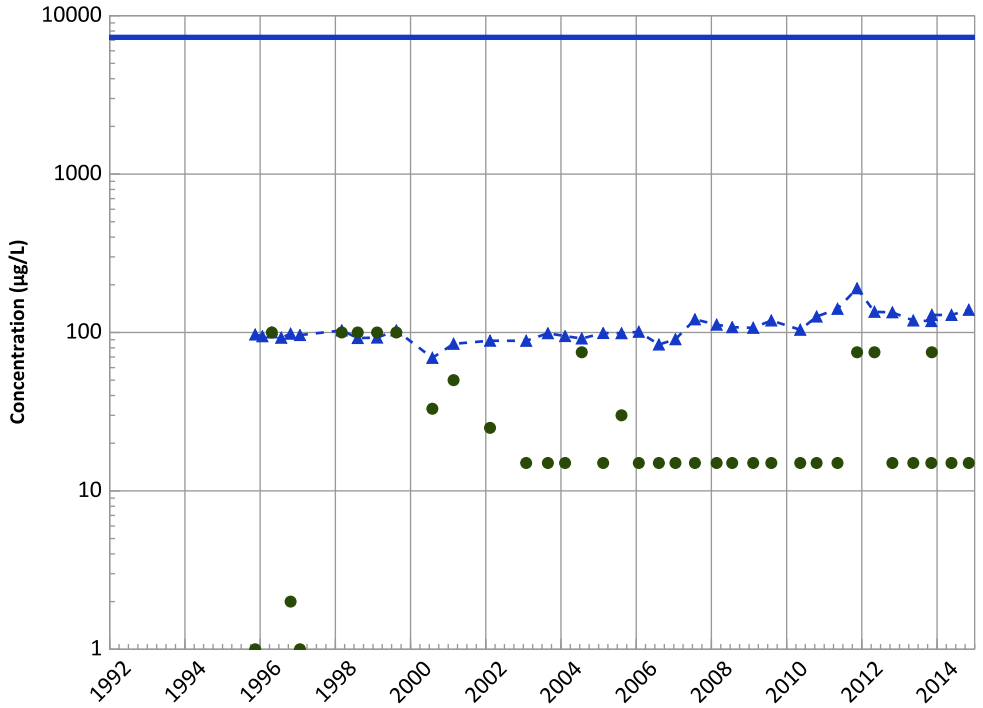
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

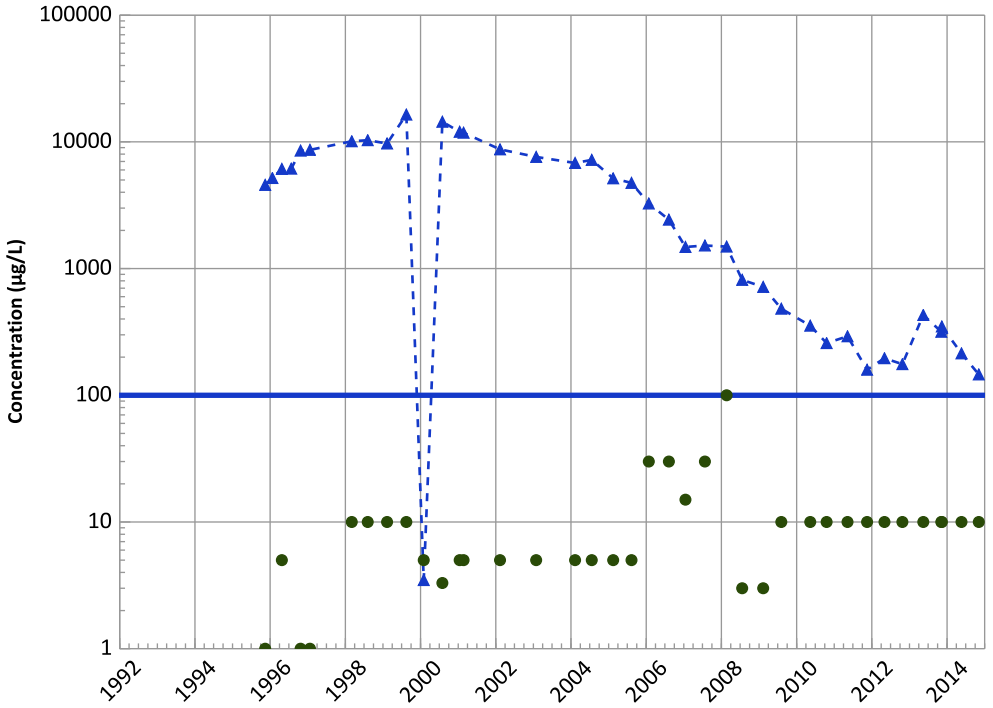


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Chromium, Total Trend



Concentration Trend

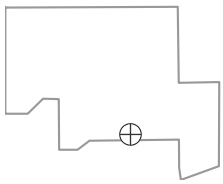
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

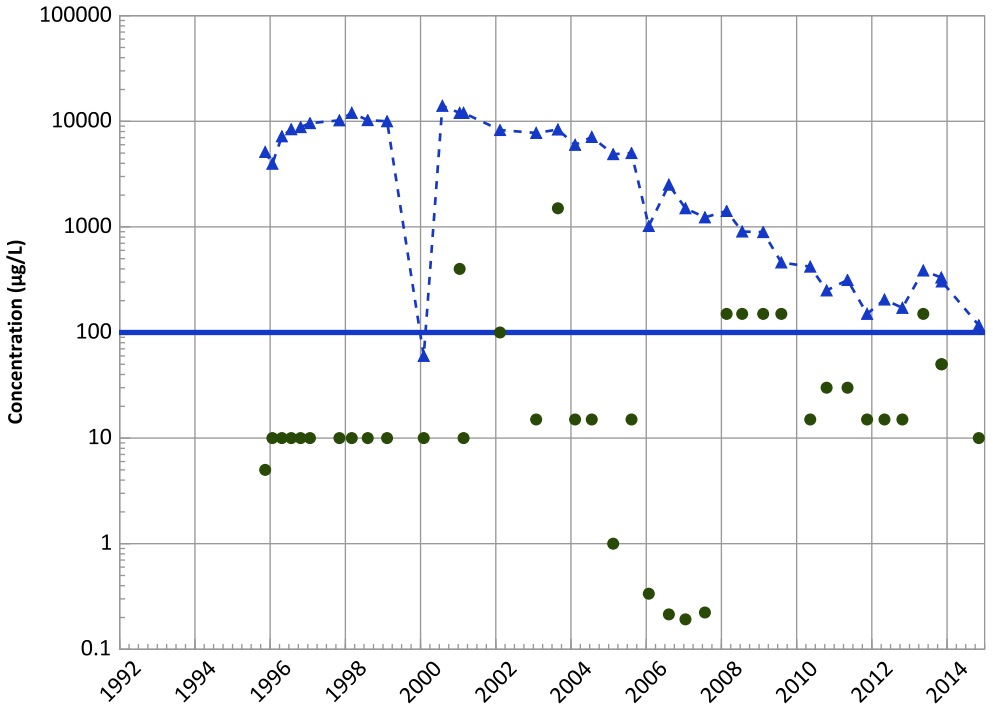
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

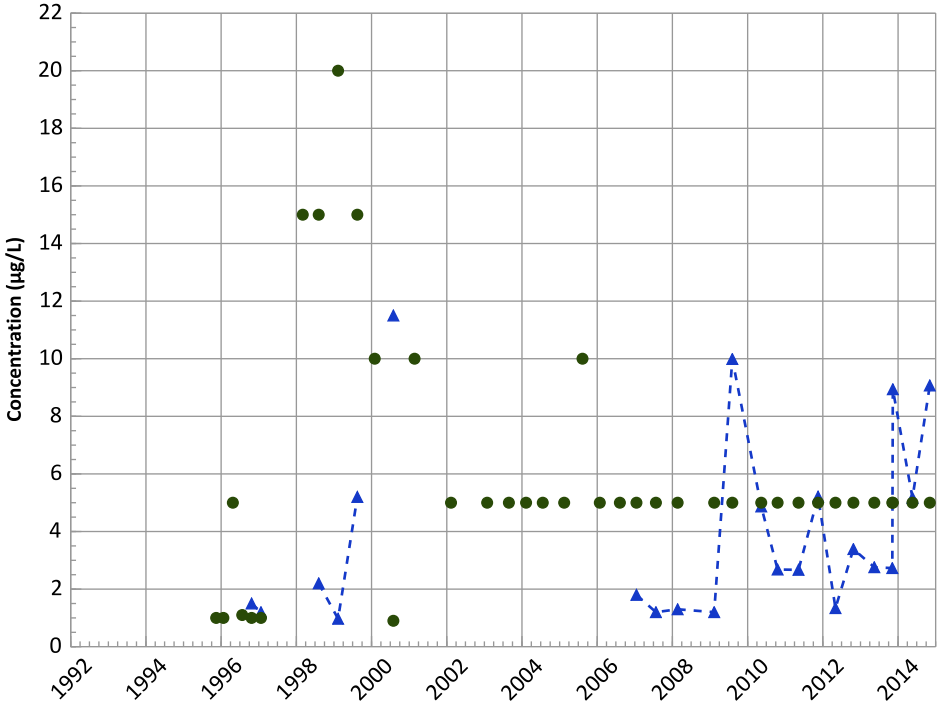


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Manganese Trend



Concentration Trend

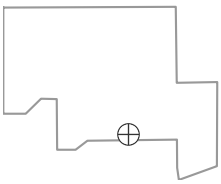
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

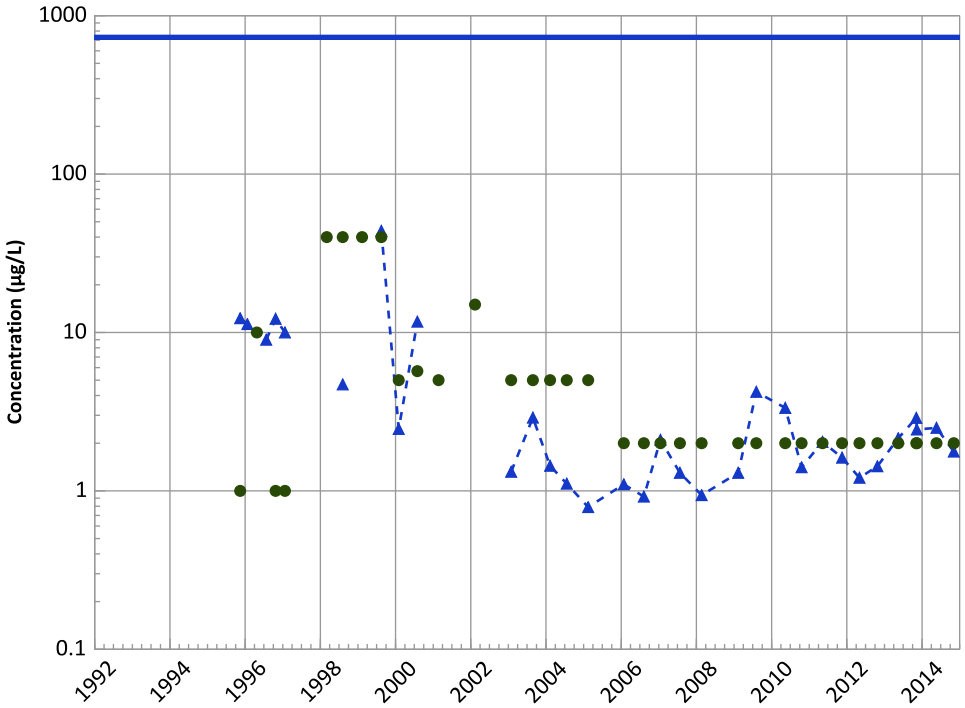
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

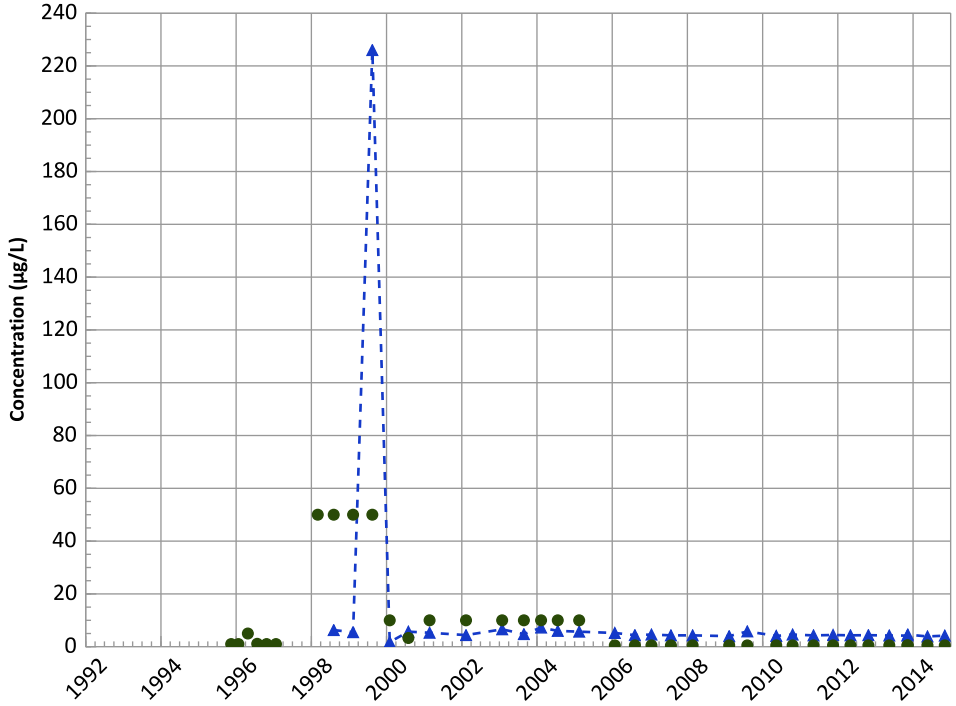


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Molybdenum Trend



Concentration Trend

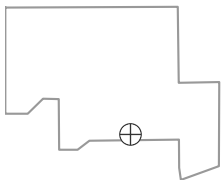
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

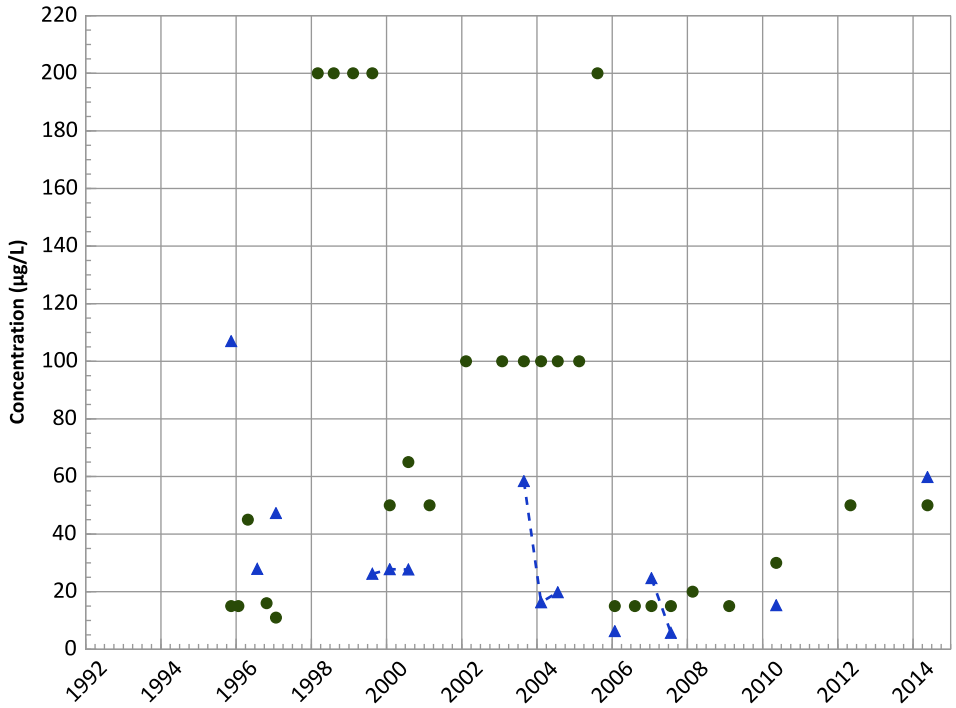
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

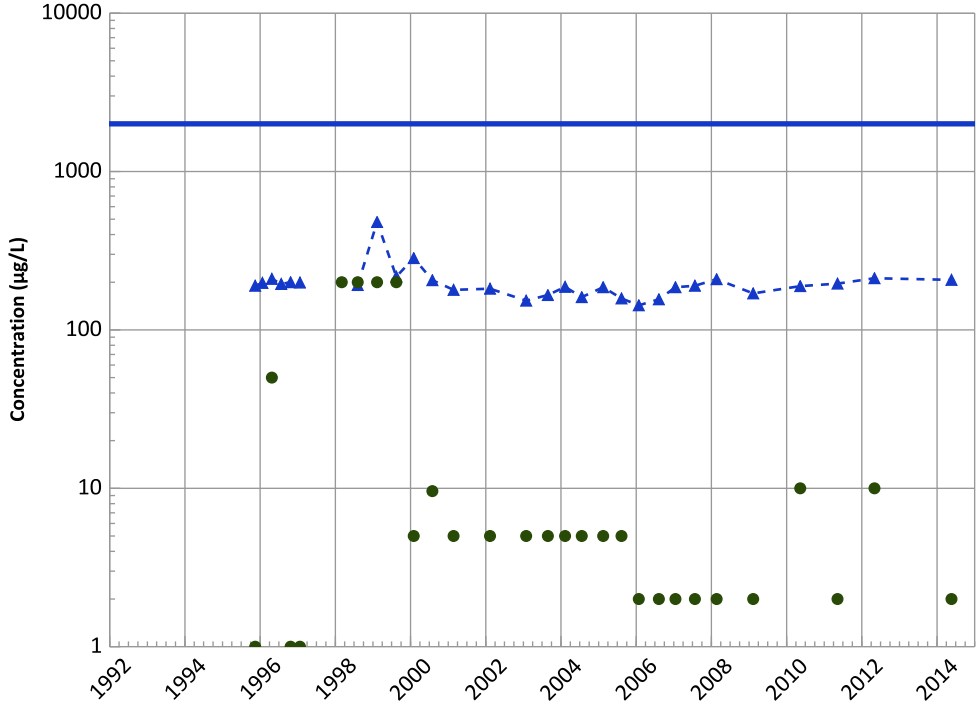


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

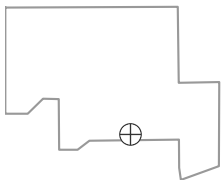
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

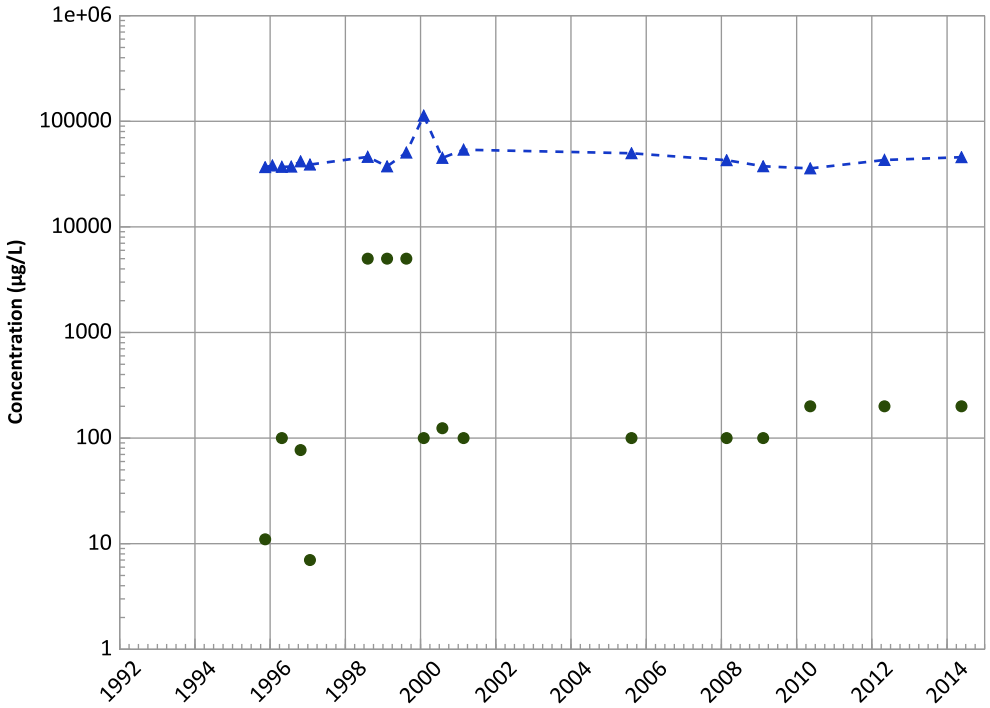
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

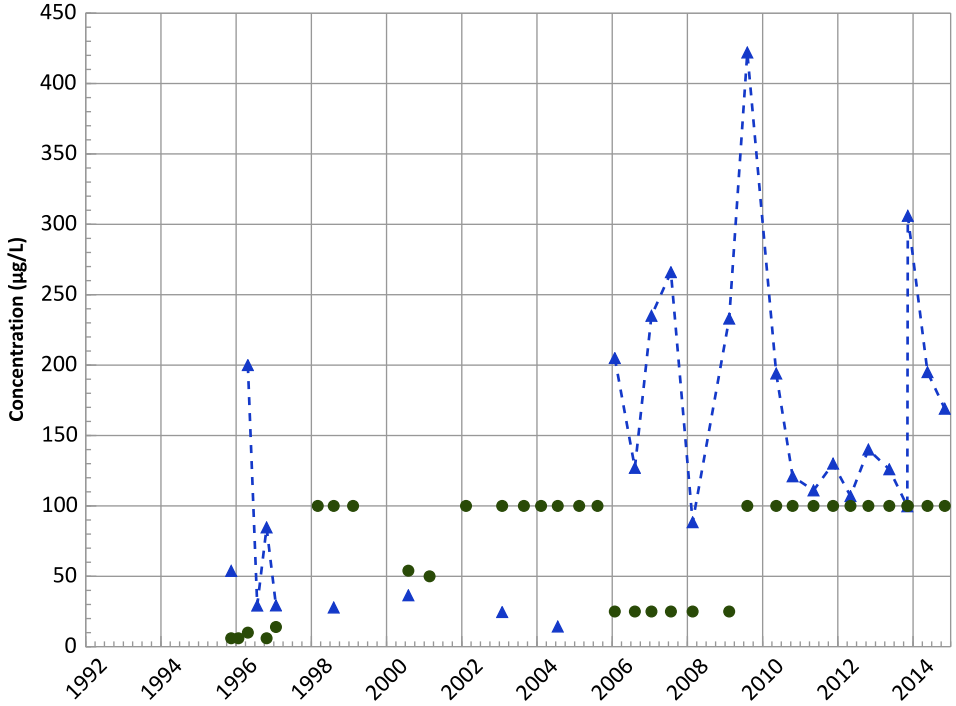


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

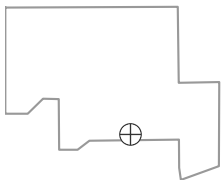
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

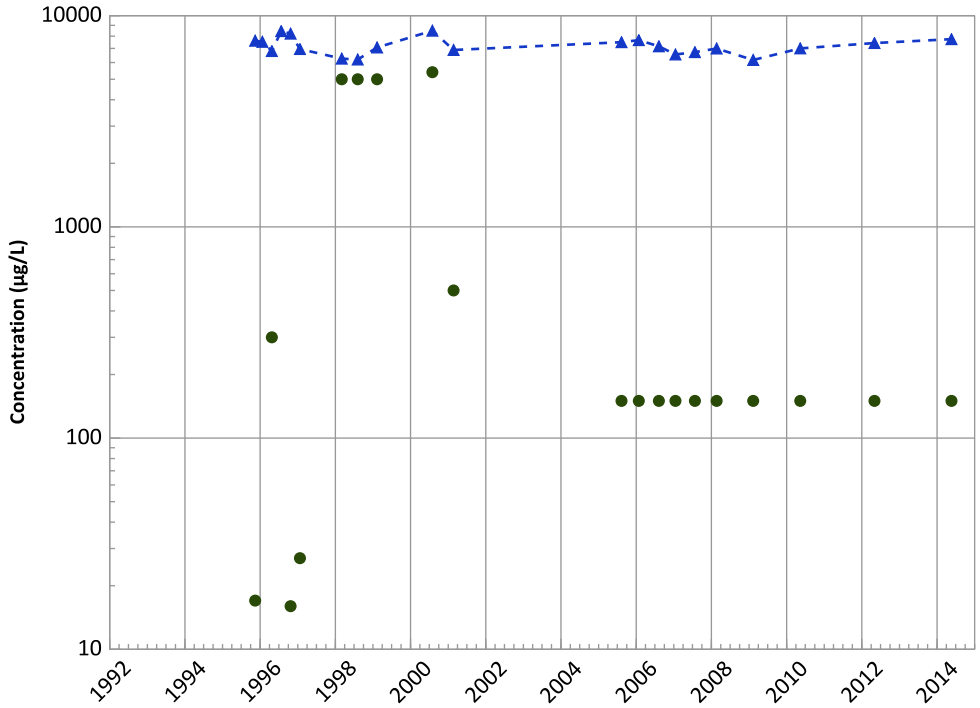
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

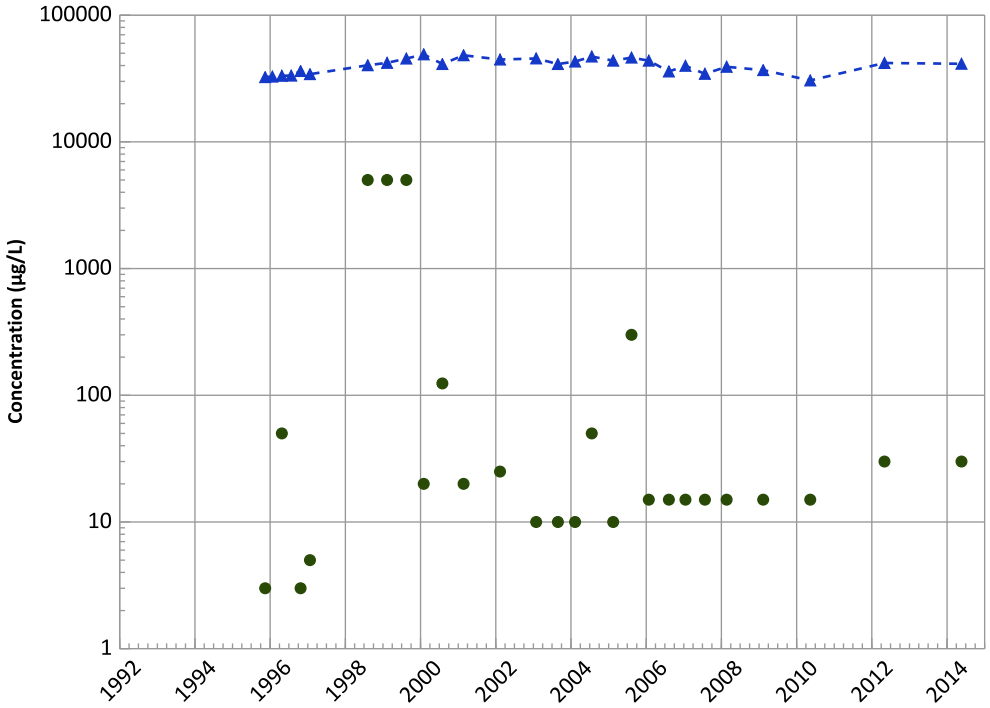


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

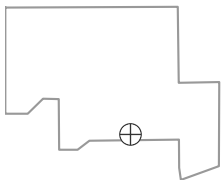
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

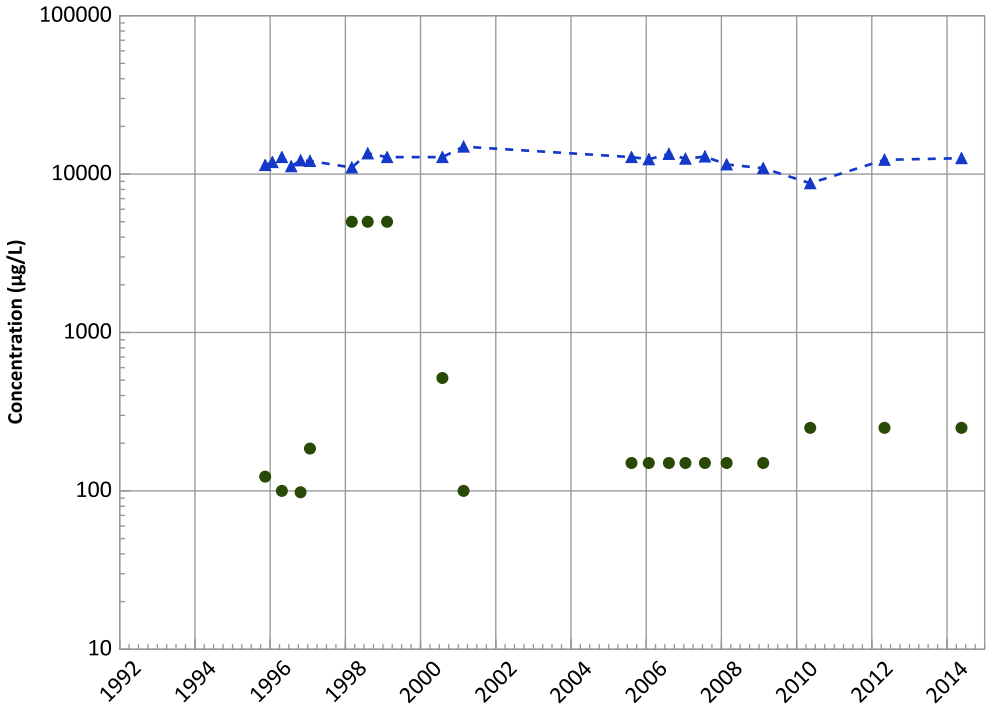
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1008 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

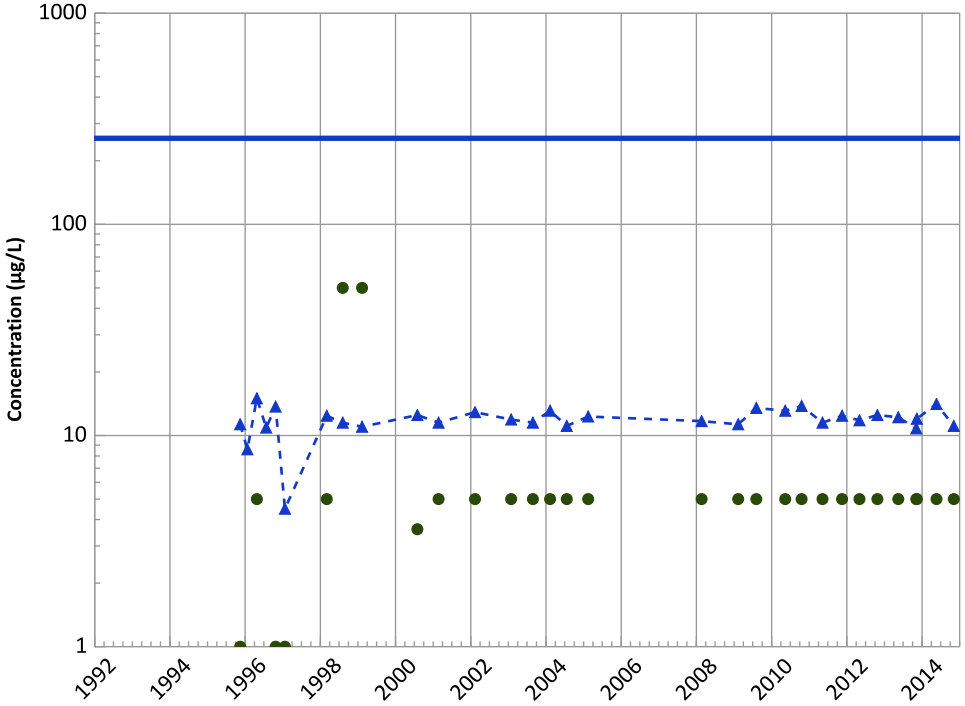


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Vanadium Trend



Concentration Trend

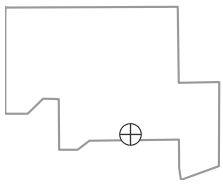
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Increasing

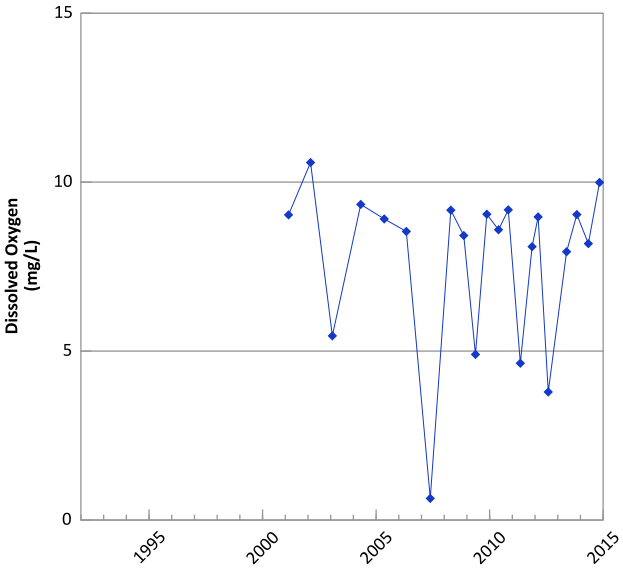
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/05/2014
Analysis Date: 03/19/2015

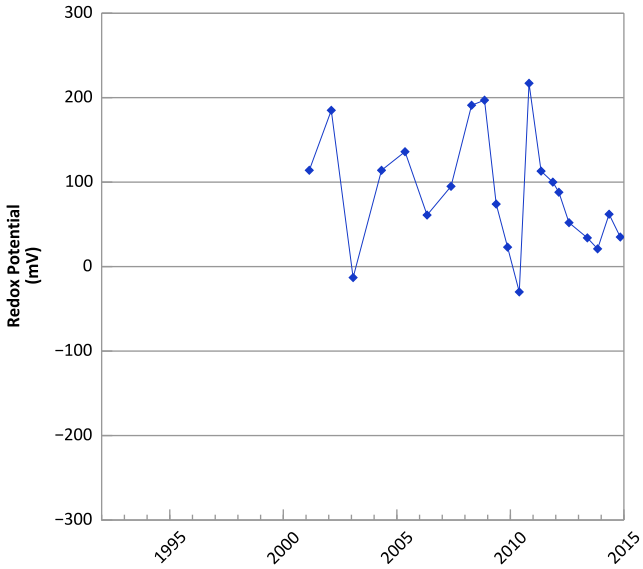
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

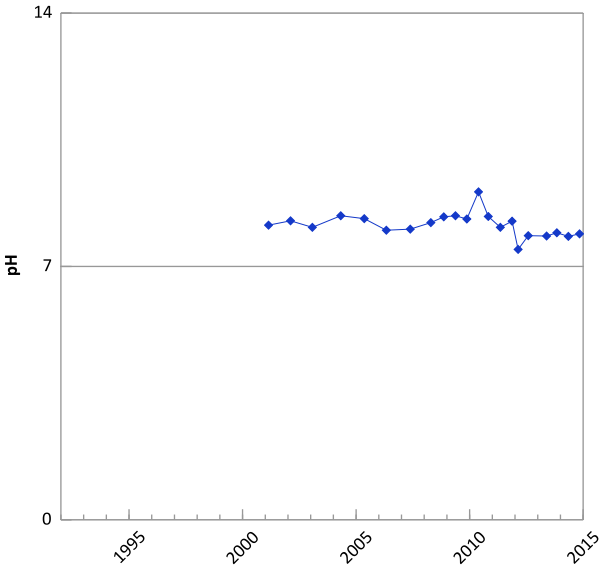
Well Location

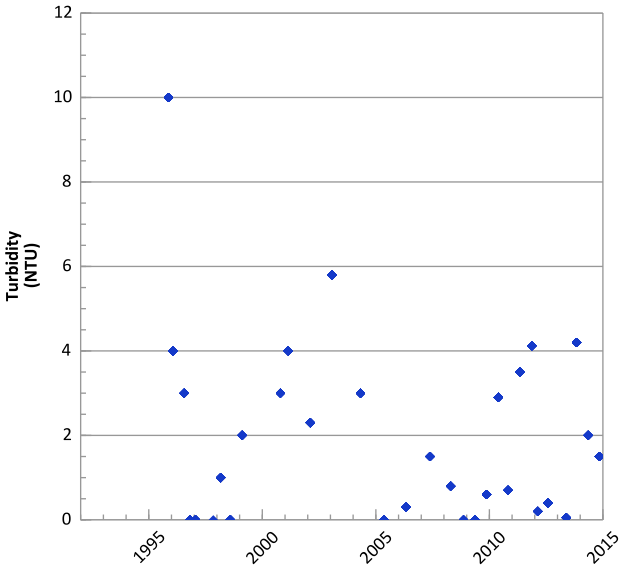


PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



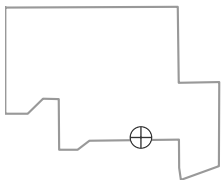






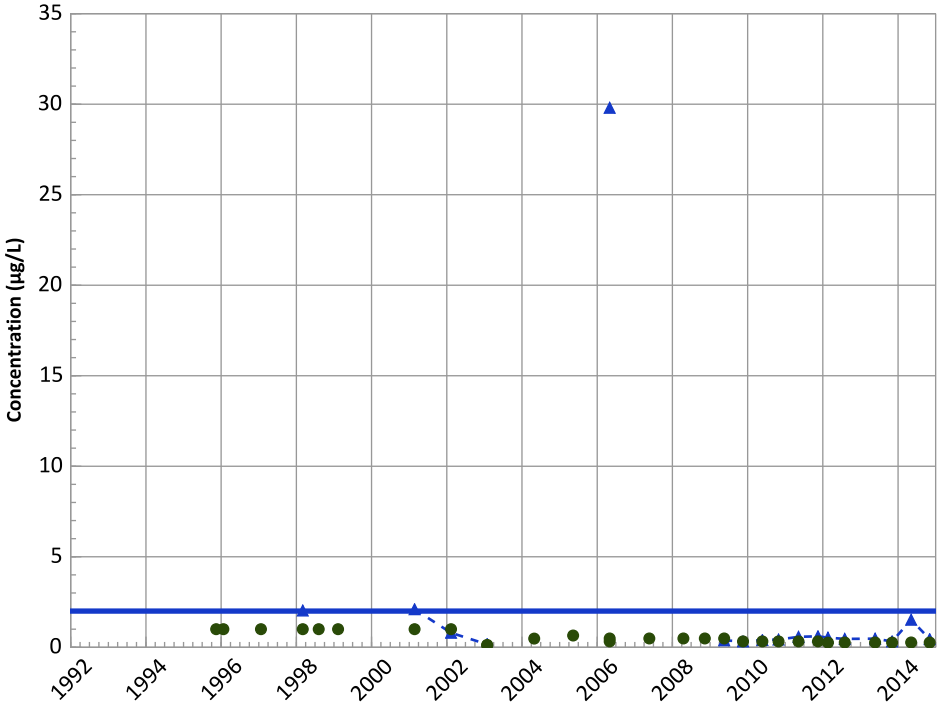
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

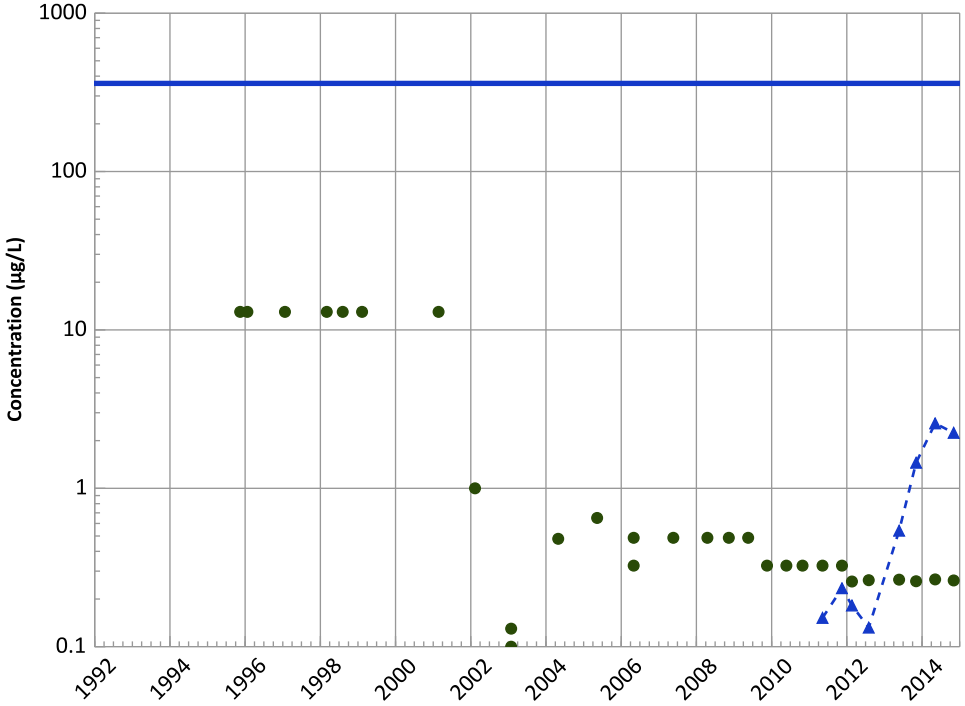


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

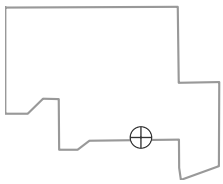
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

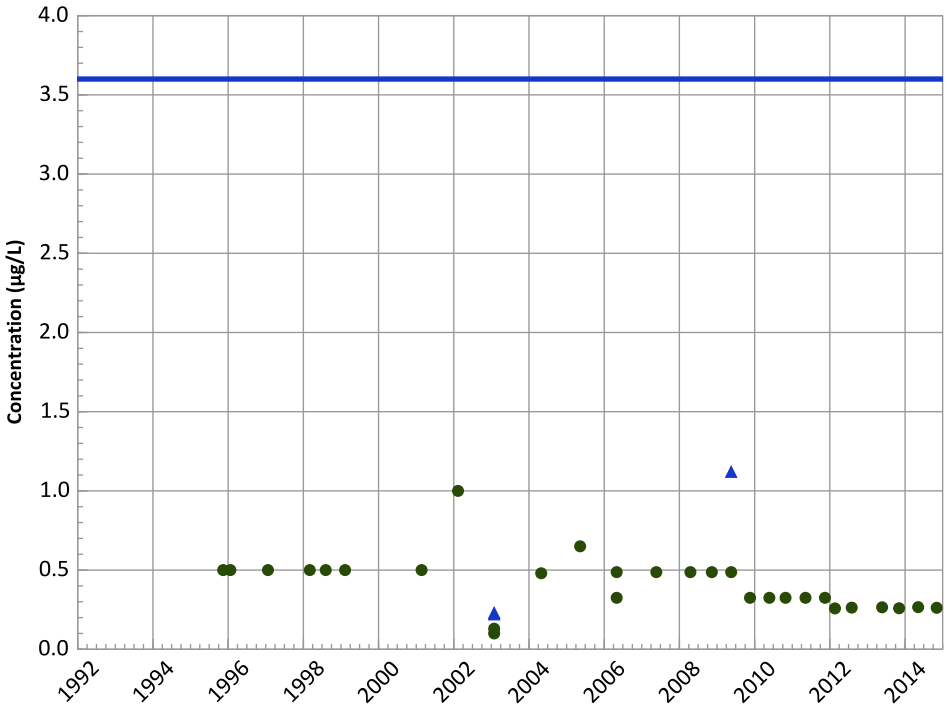
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

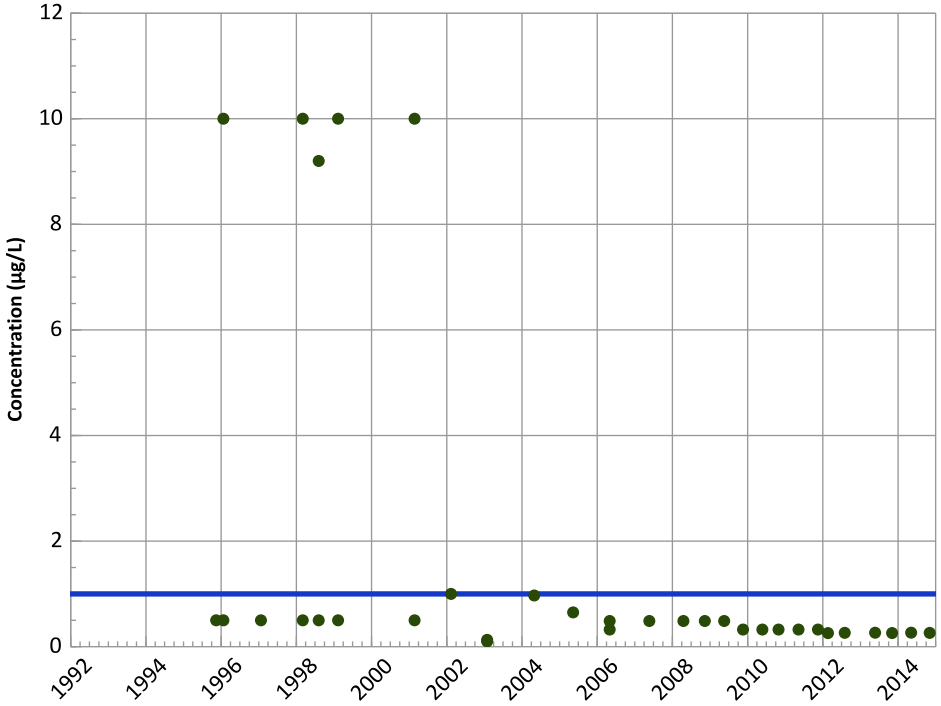


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

2,4-Dinitrotoluene Trend



Concentration Trend

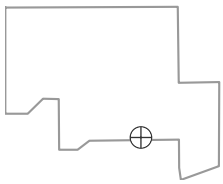
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

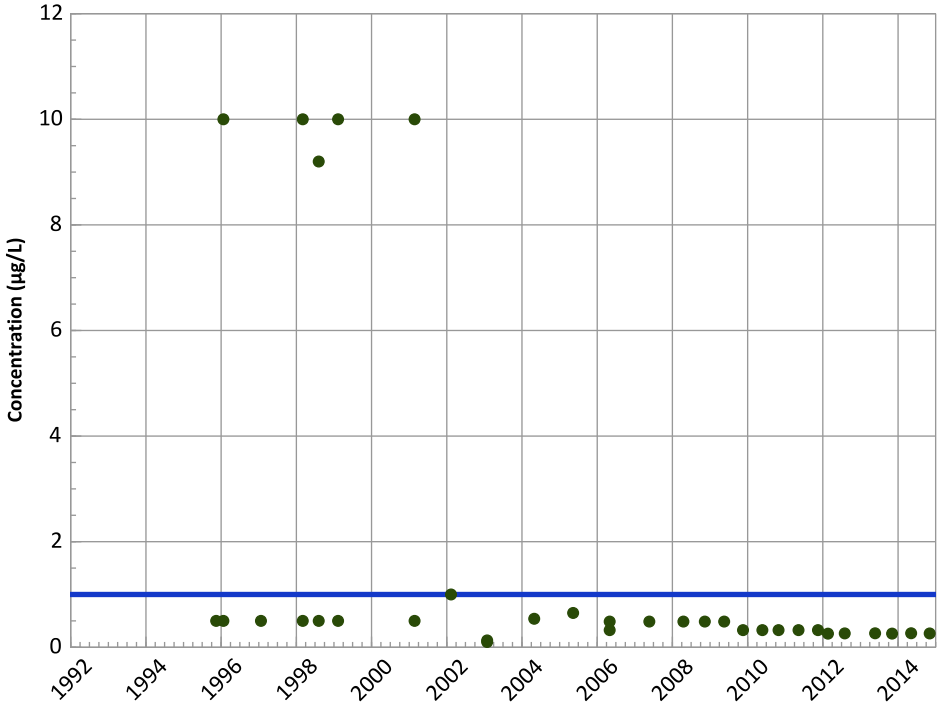
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

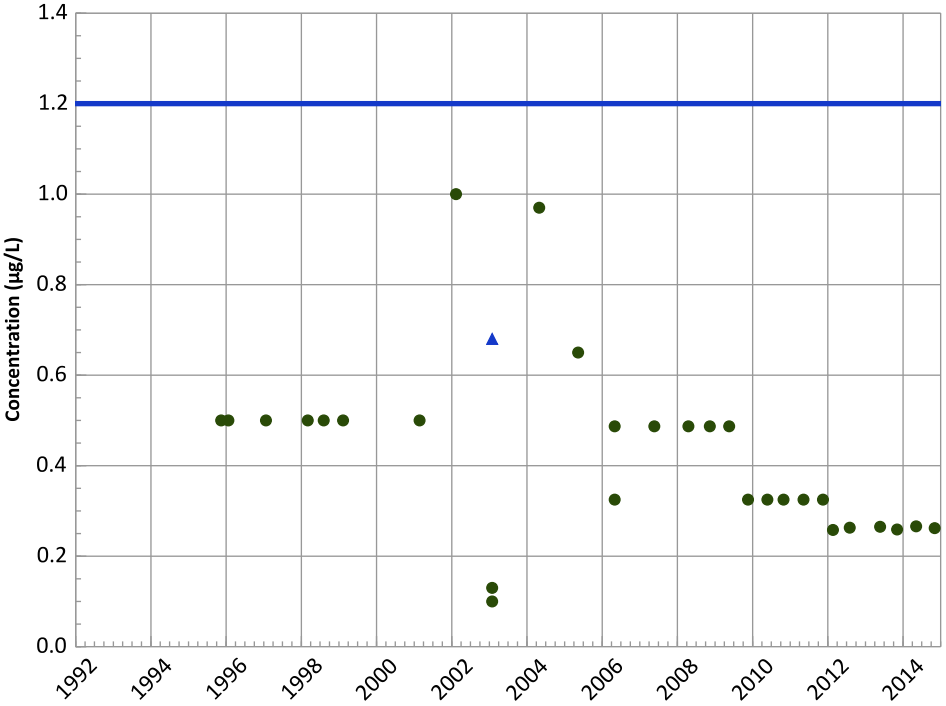


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

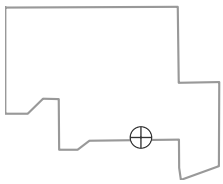
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

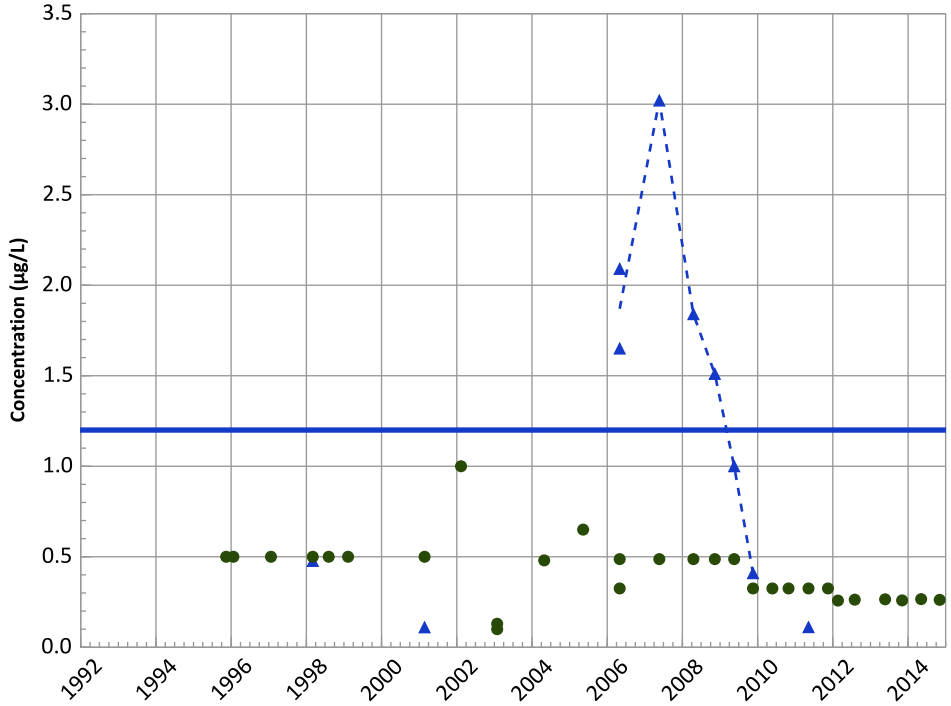
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

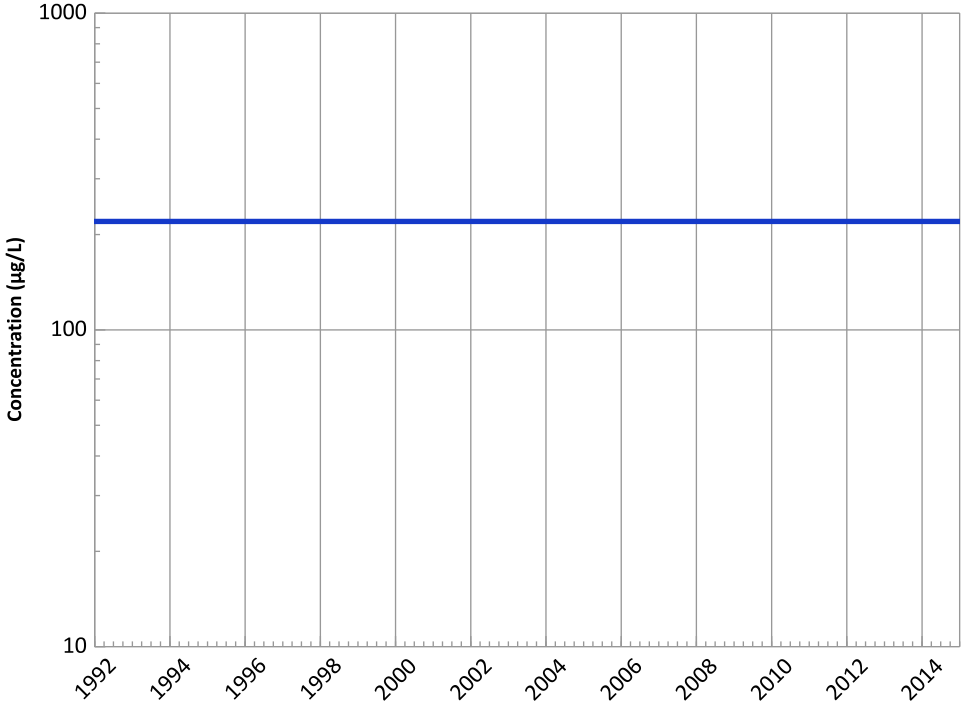


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

1,3,5-Trinitrobenzene Trend



Concentration Trend

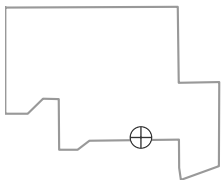
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

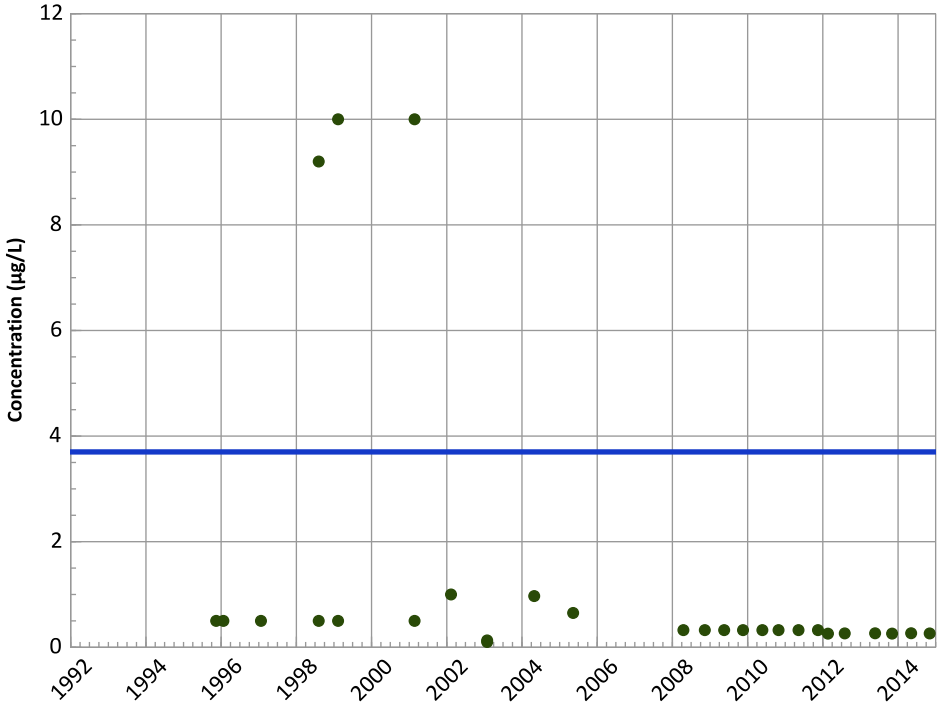
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

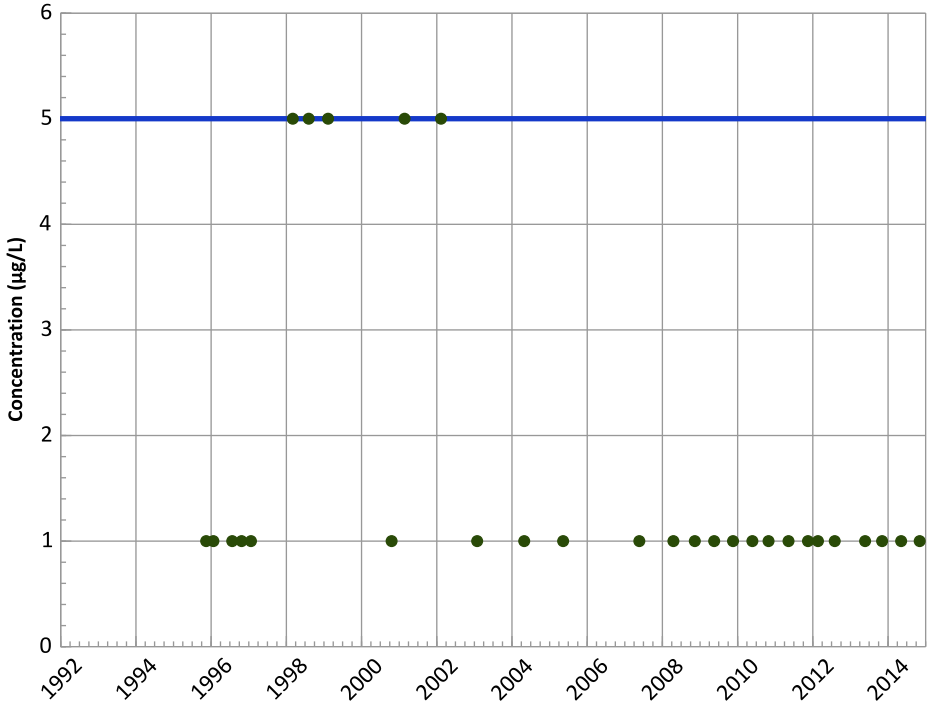


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

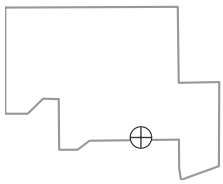
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

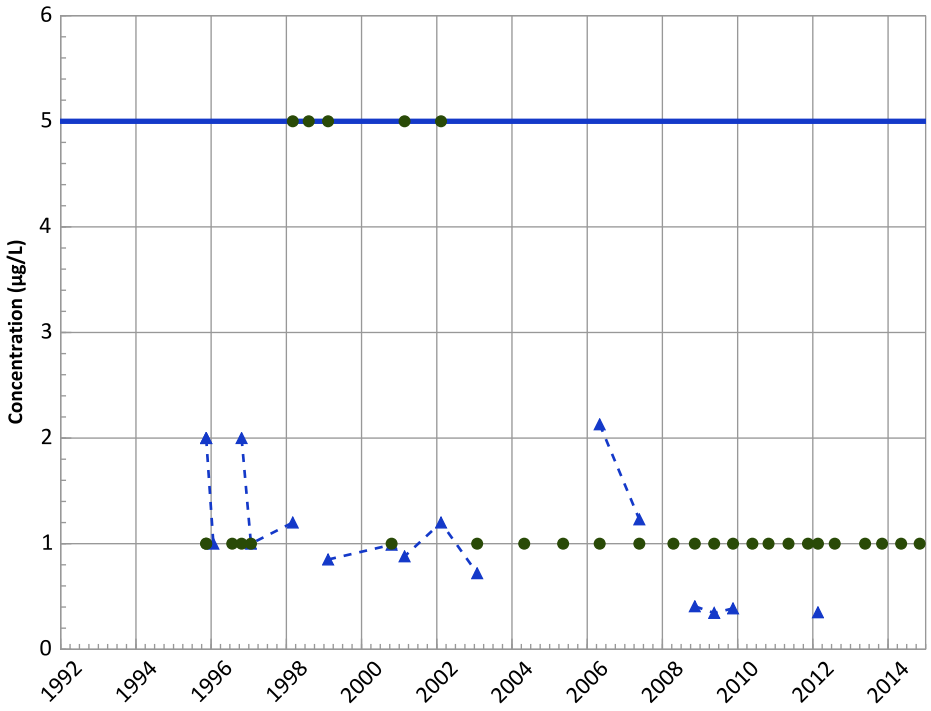
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

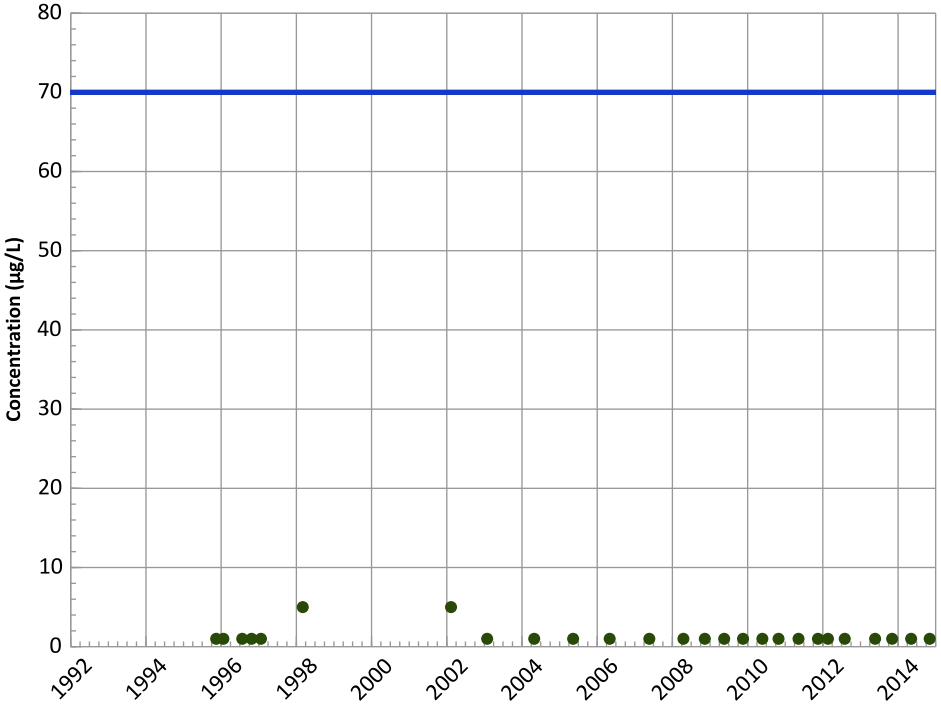


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

cis-1,2-Dichloroethene Trend



Concentration Trend

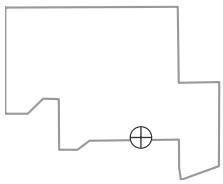
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

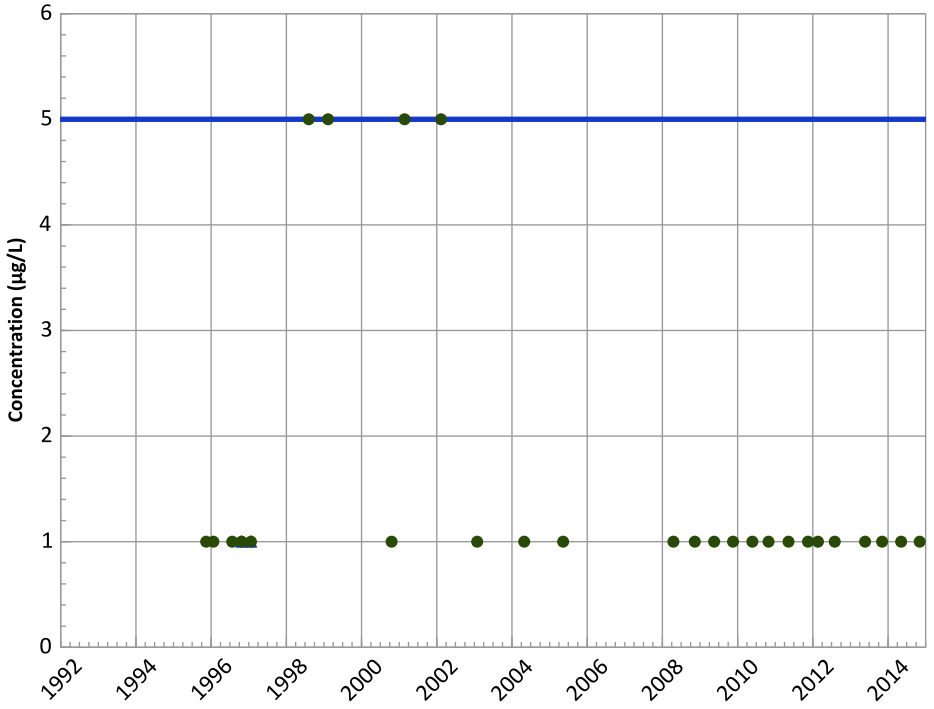
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

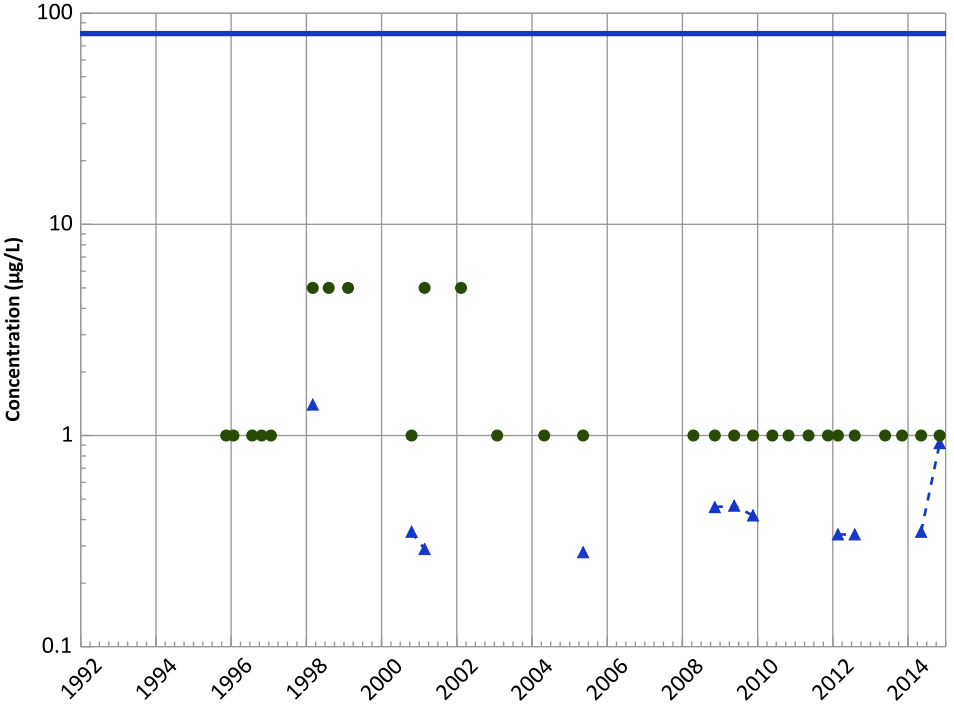


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Chloroform Trend



Concentration Trend

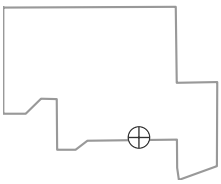
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

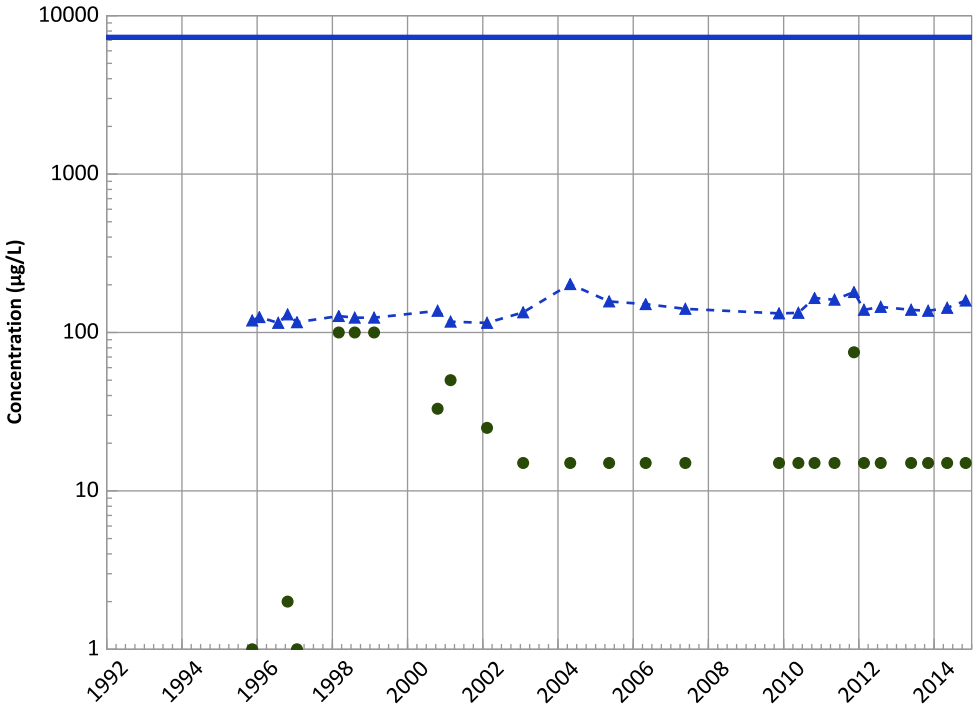
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

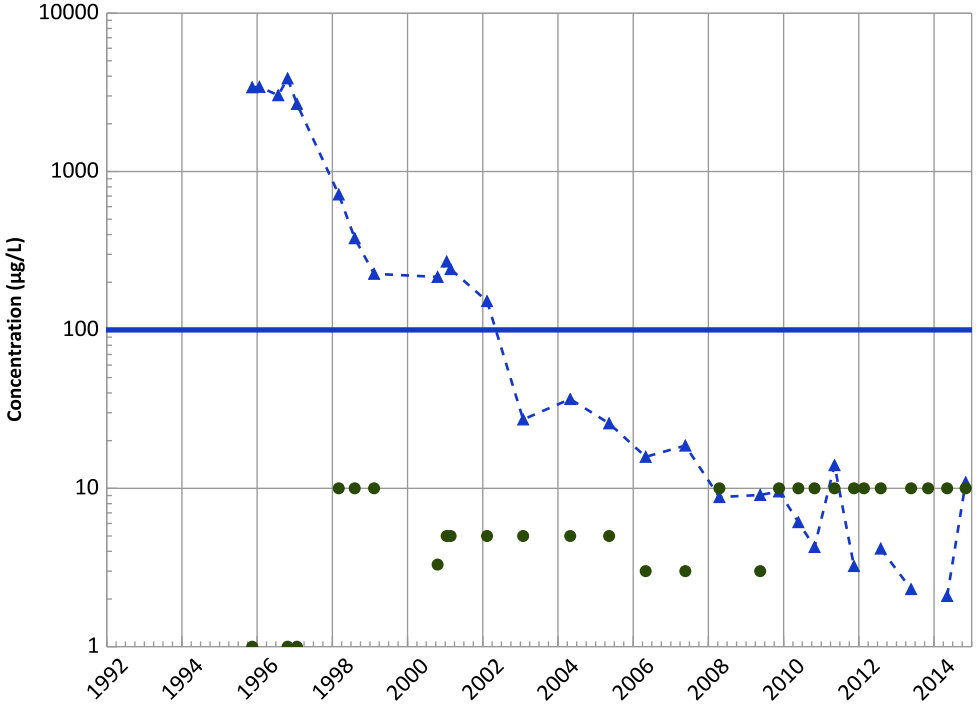


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

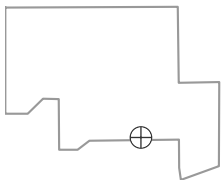
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

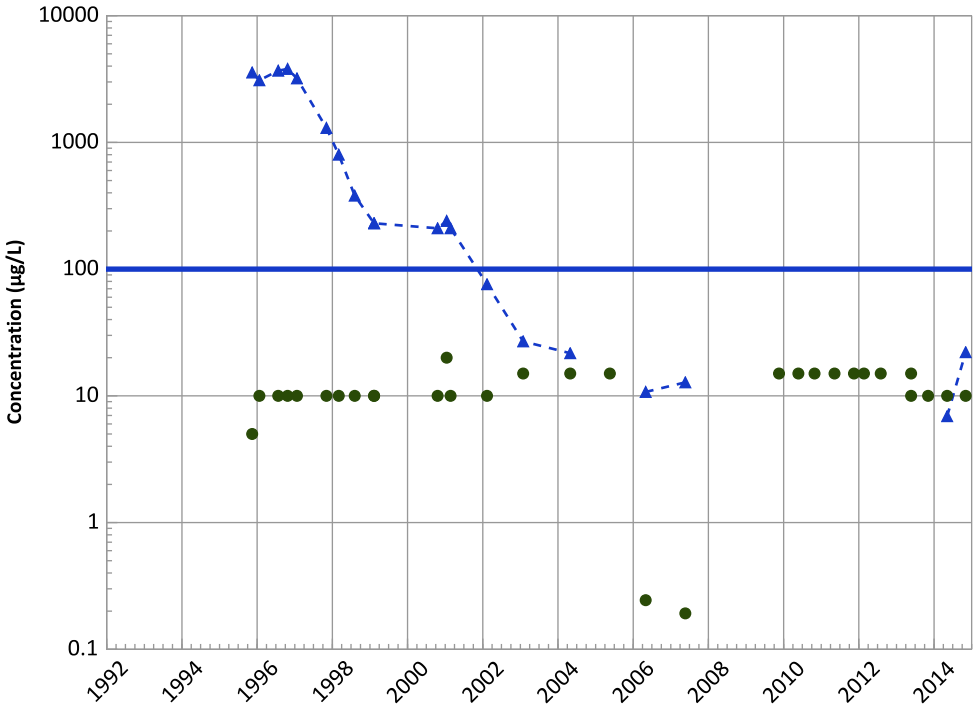
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

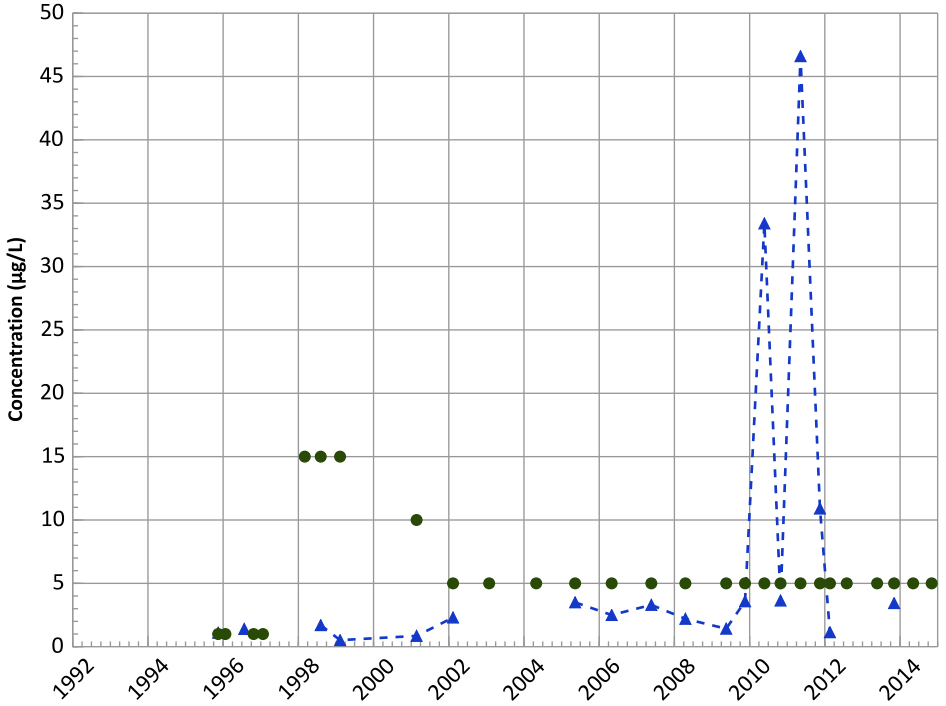


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Manganese Trend



Concentration Trend

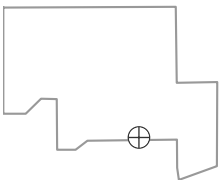
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

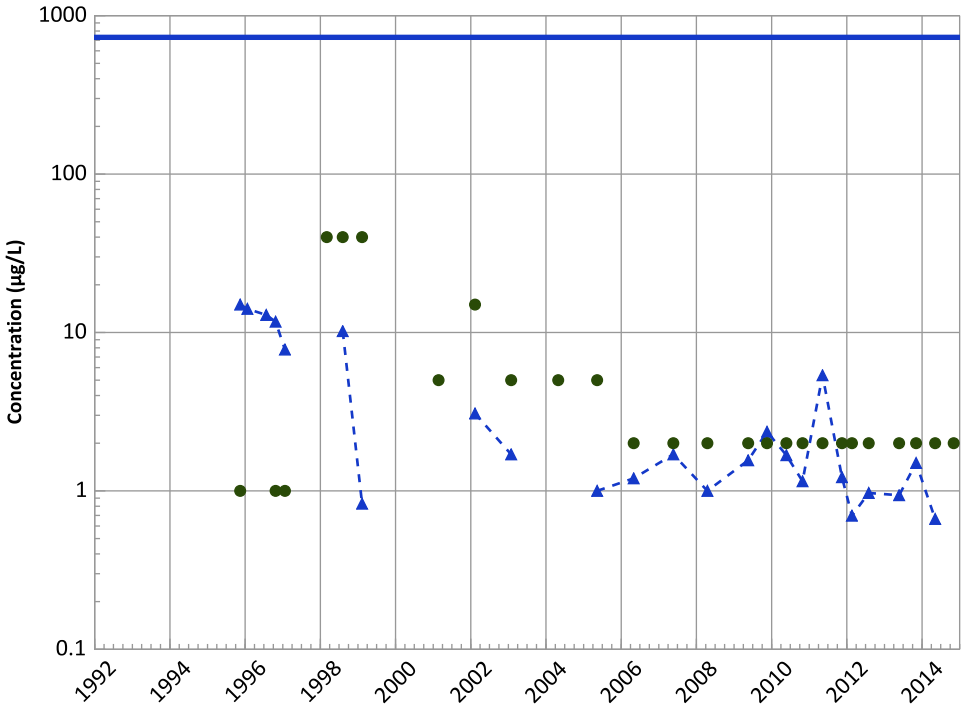
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

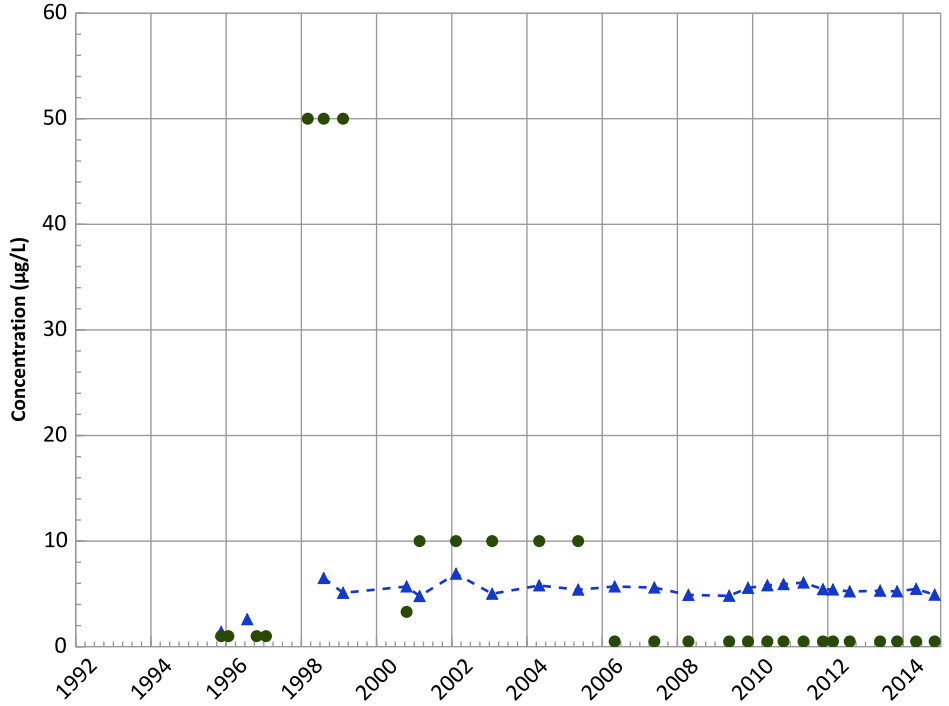


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Molybdenum Trend



Concentration Trend

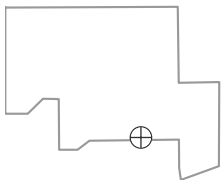
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

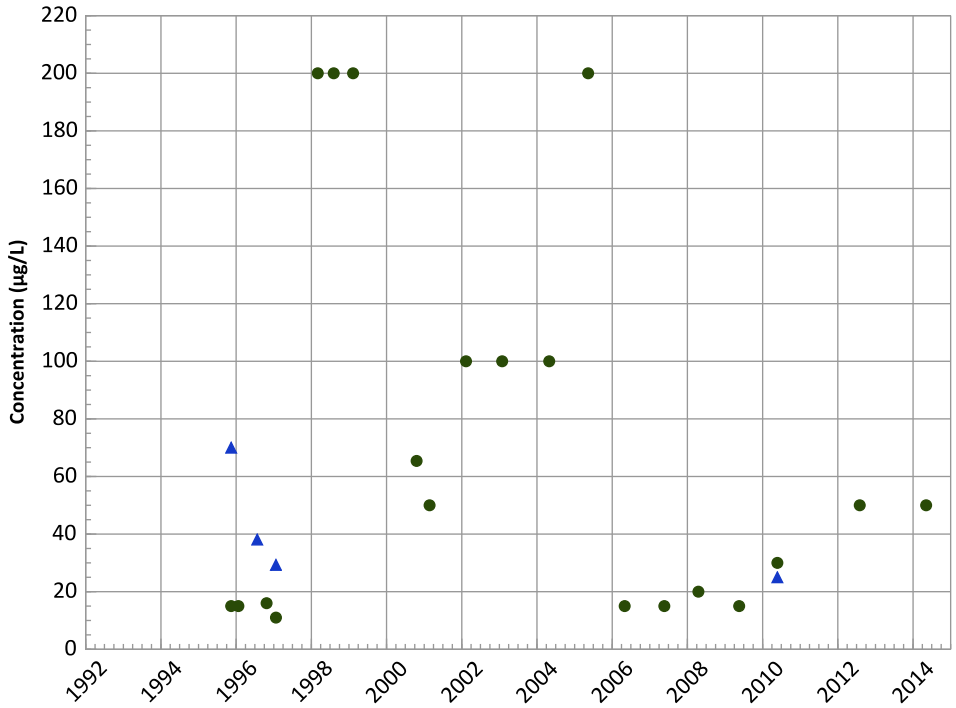
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

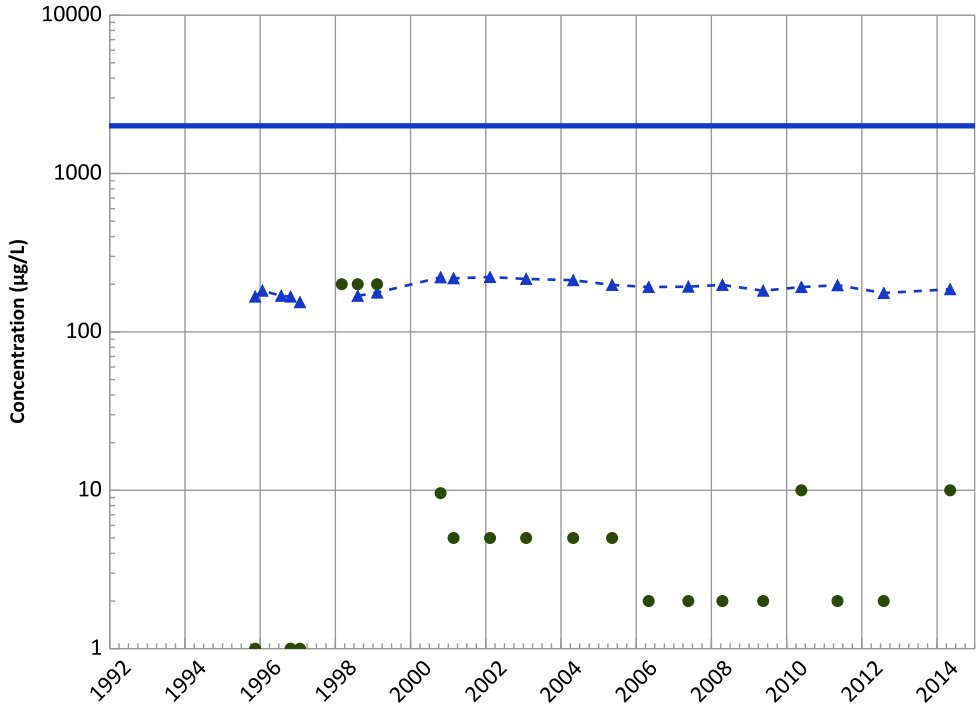


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

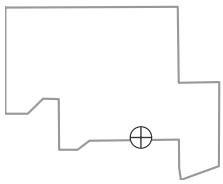
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

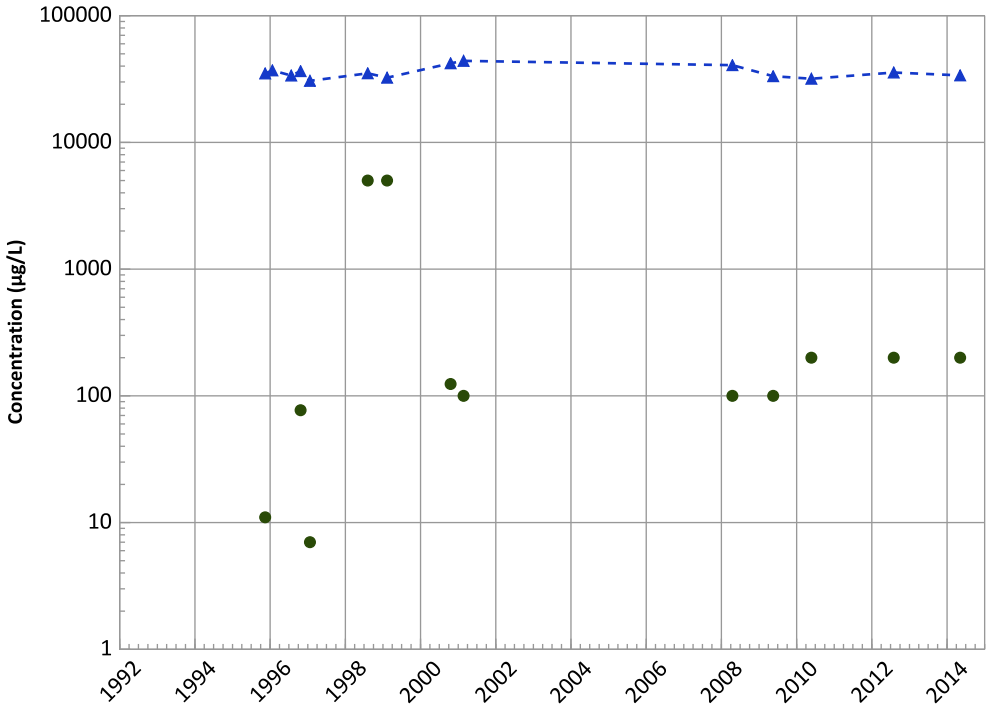
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

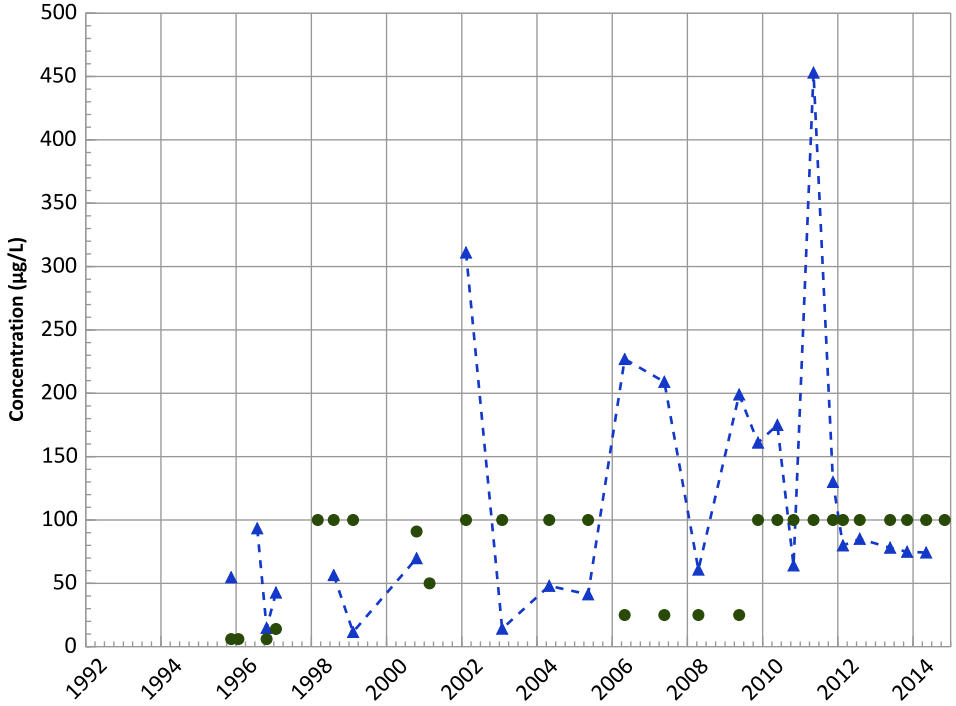


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

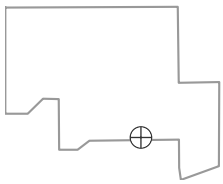
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

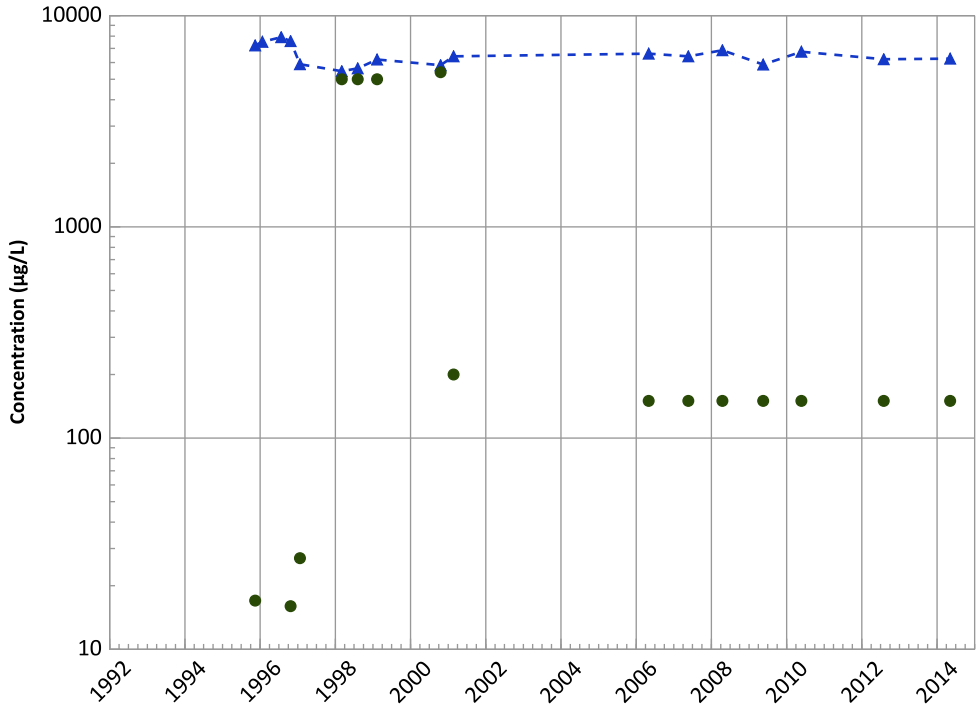
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

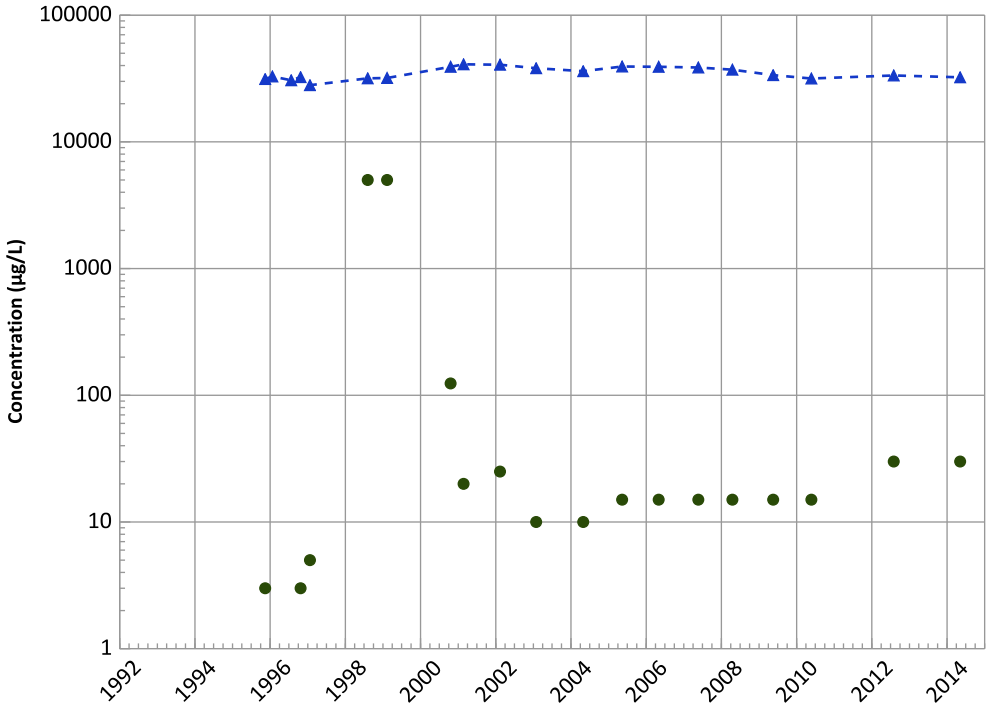


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Magnesium Trend



Concentration Trend

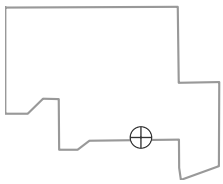
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

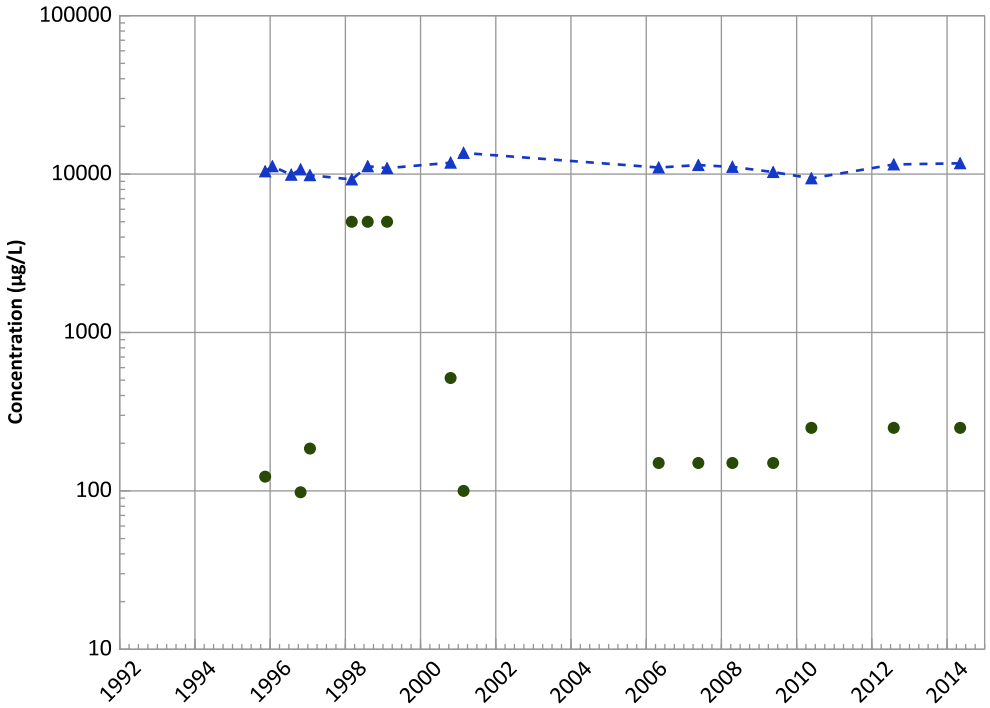
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX08-1009 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

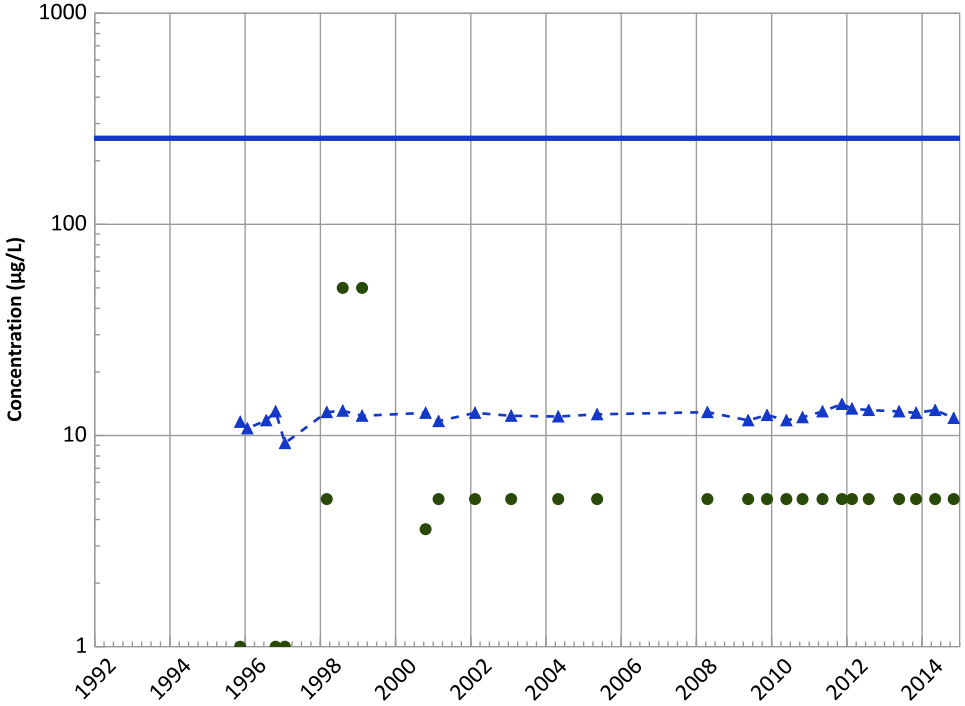


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Vanadium Trend



Concentration Trend

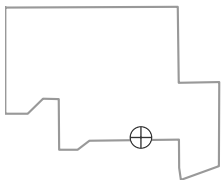
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

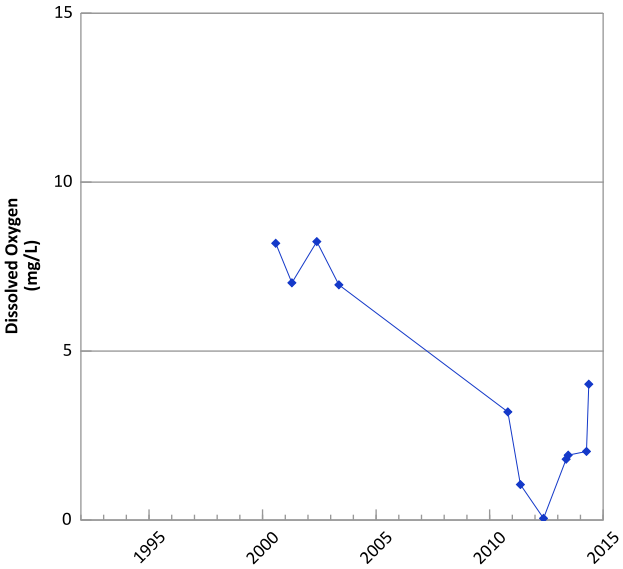
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/14/1995 to 11/04/2014
Analysis Date: 03/19/2015

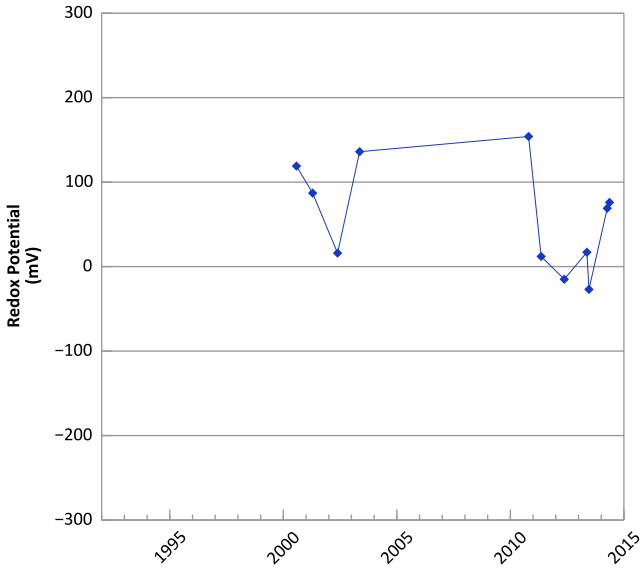
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

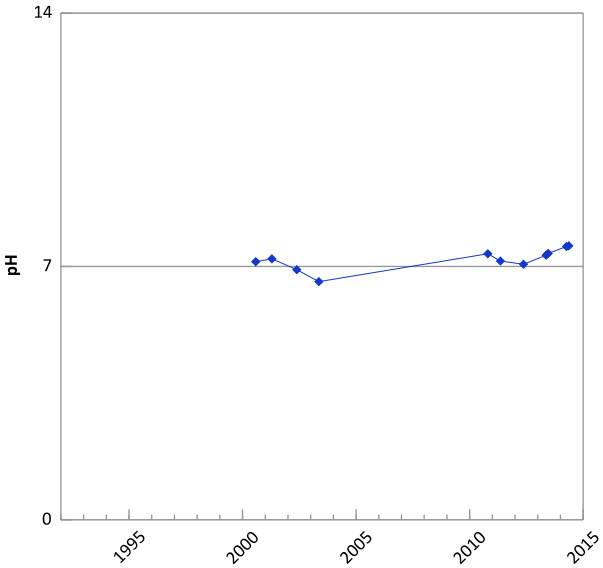
Well Location

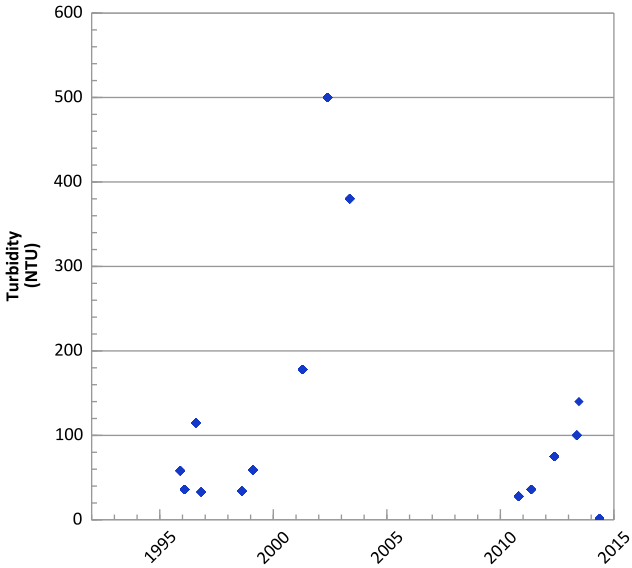


PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



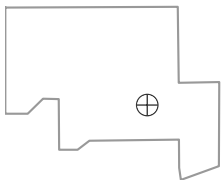






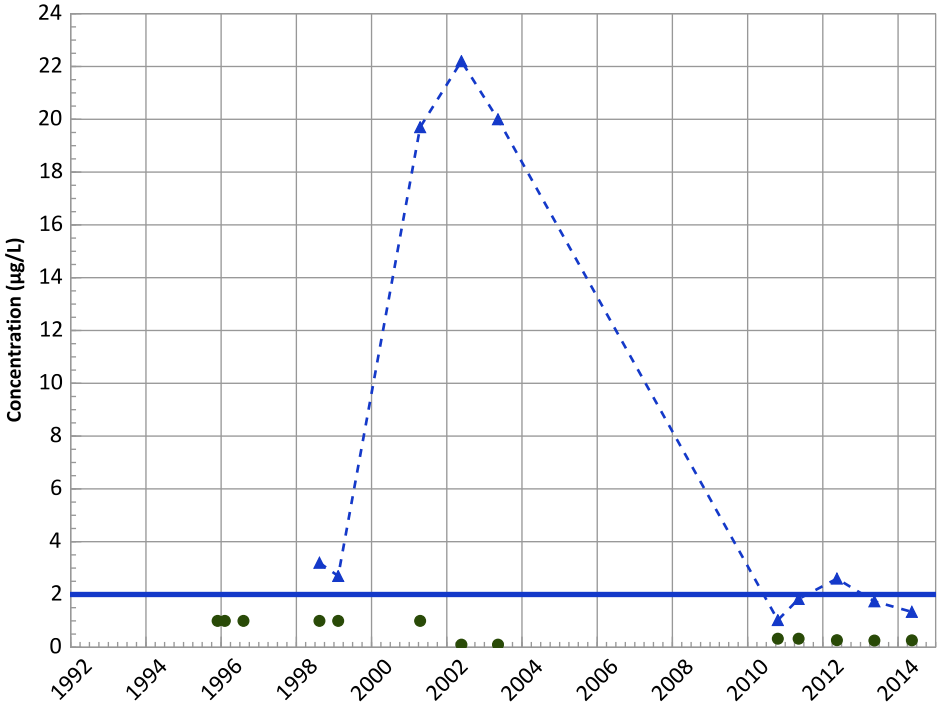
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

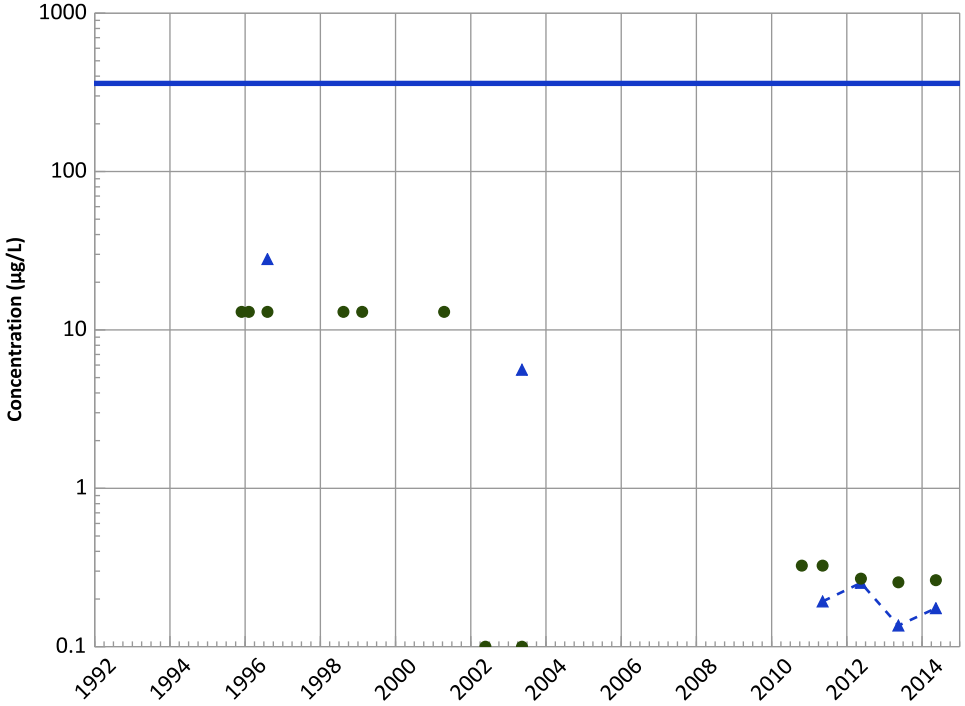


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

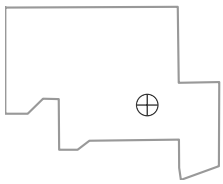
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

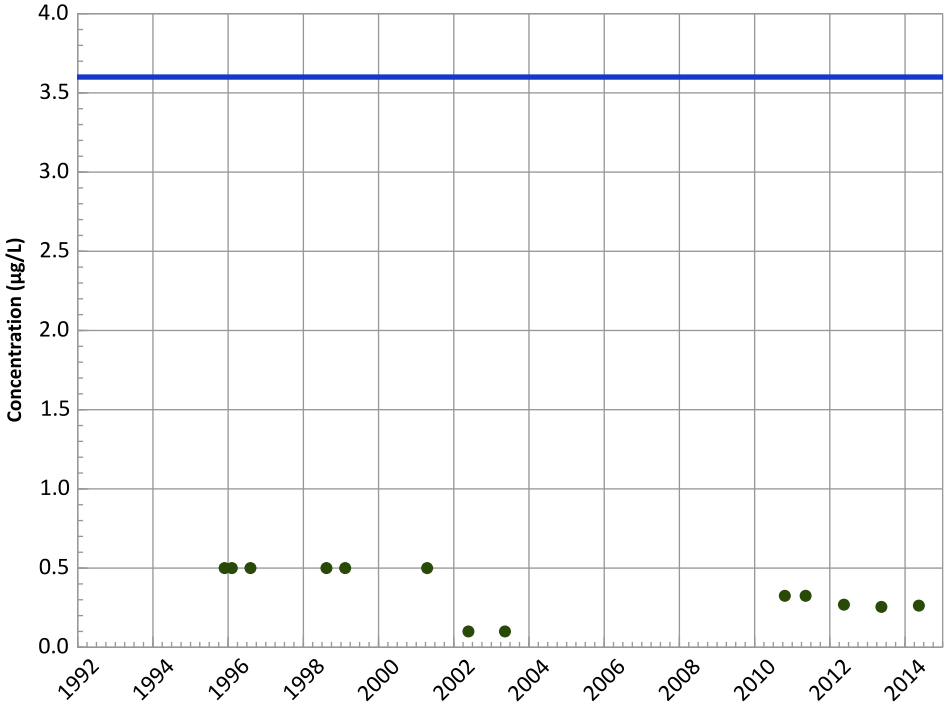
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

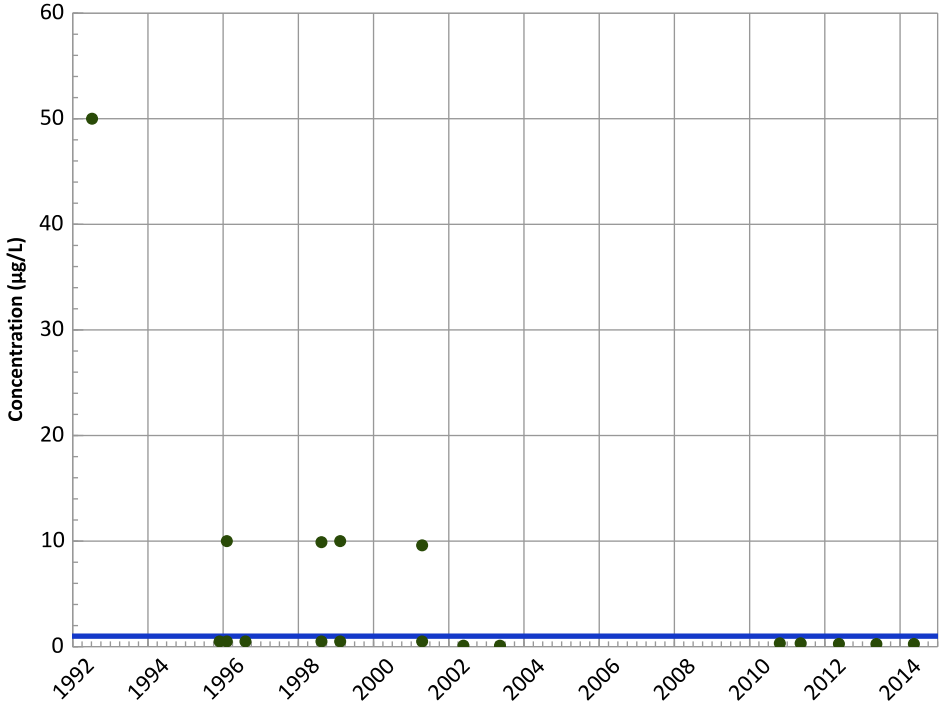


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

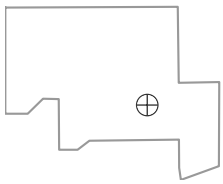
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

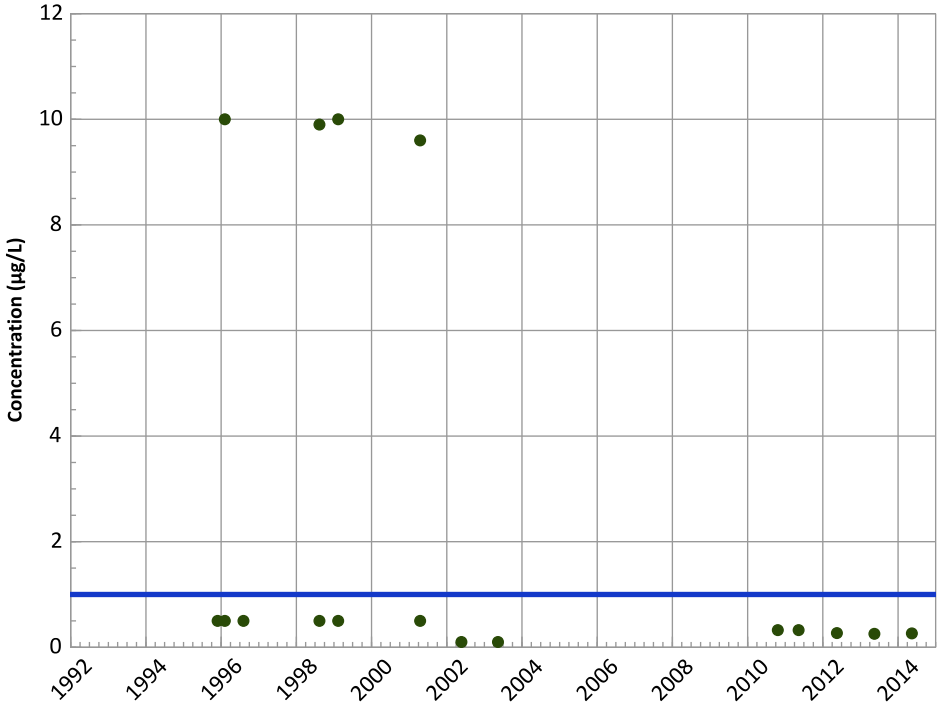
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

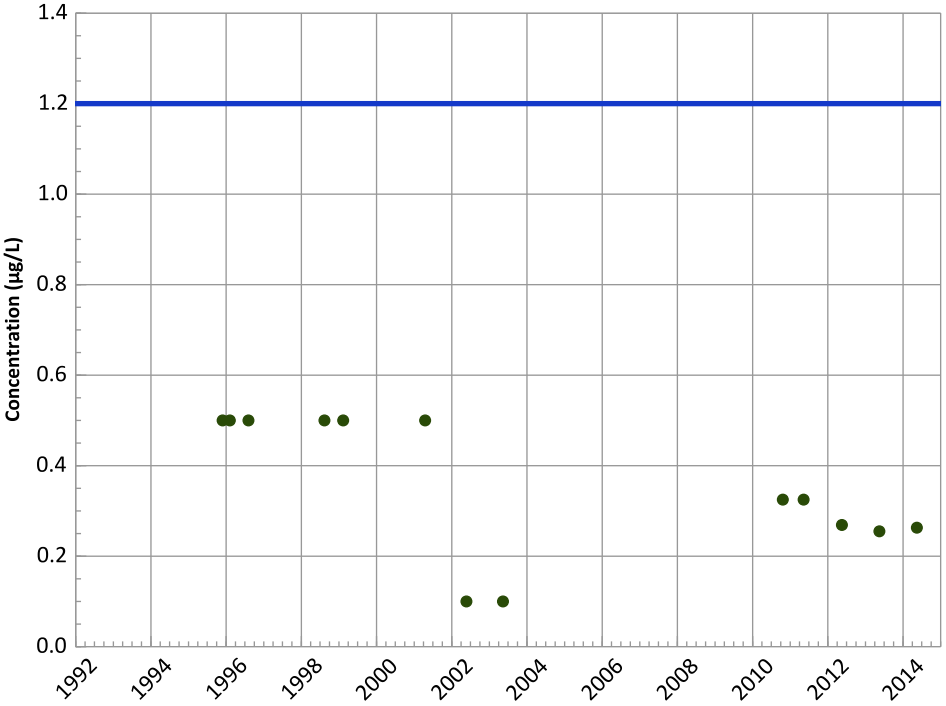


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

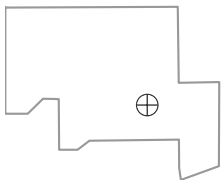
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

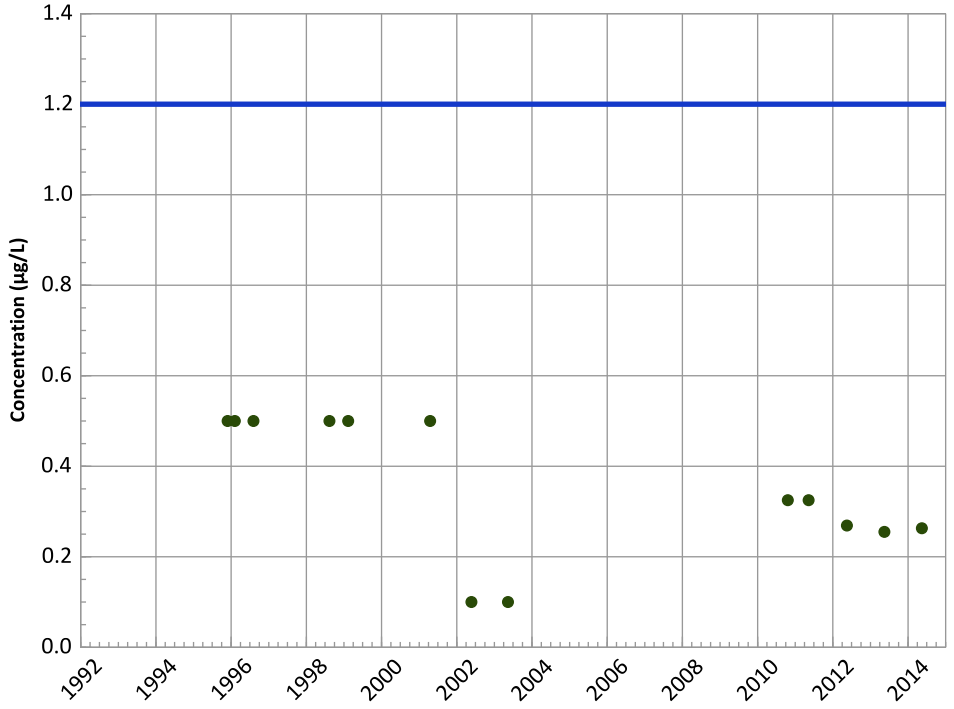
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

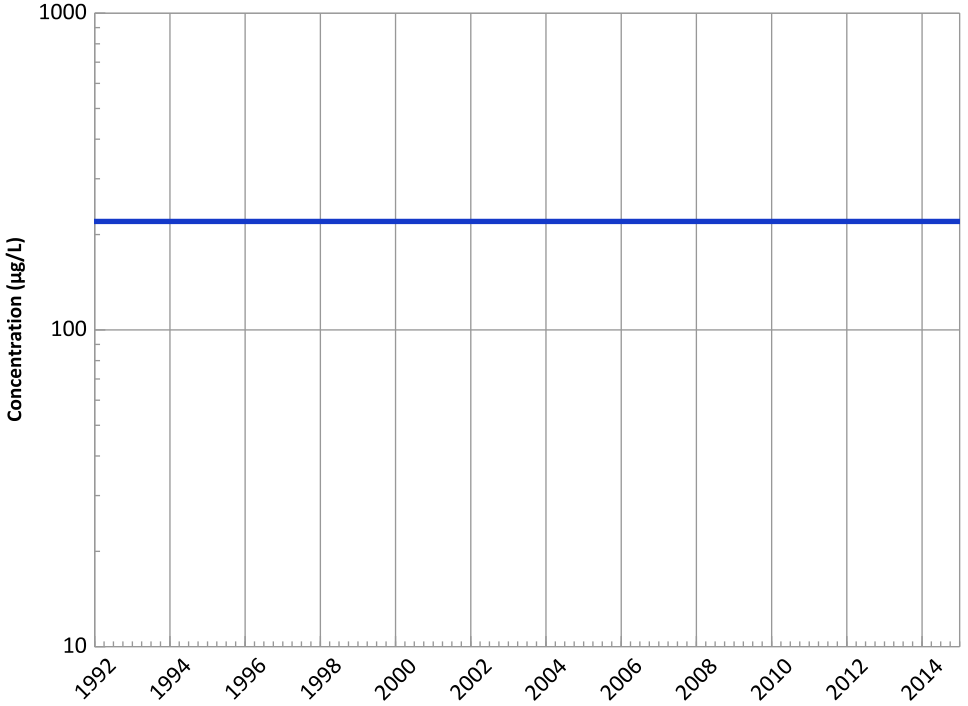


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

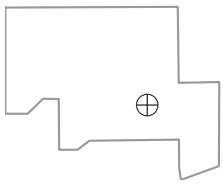
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

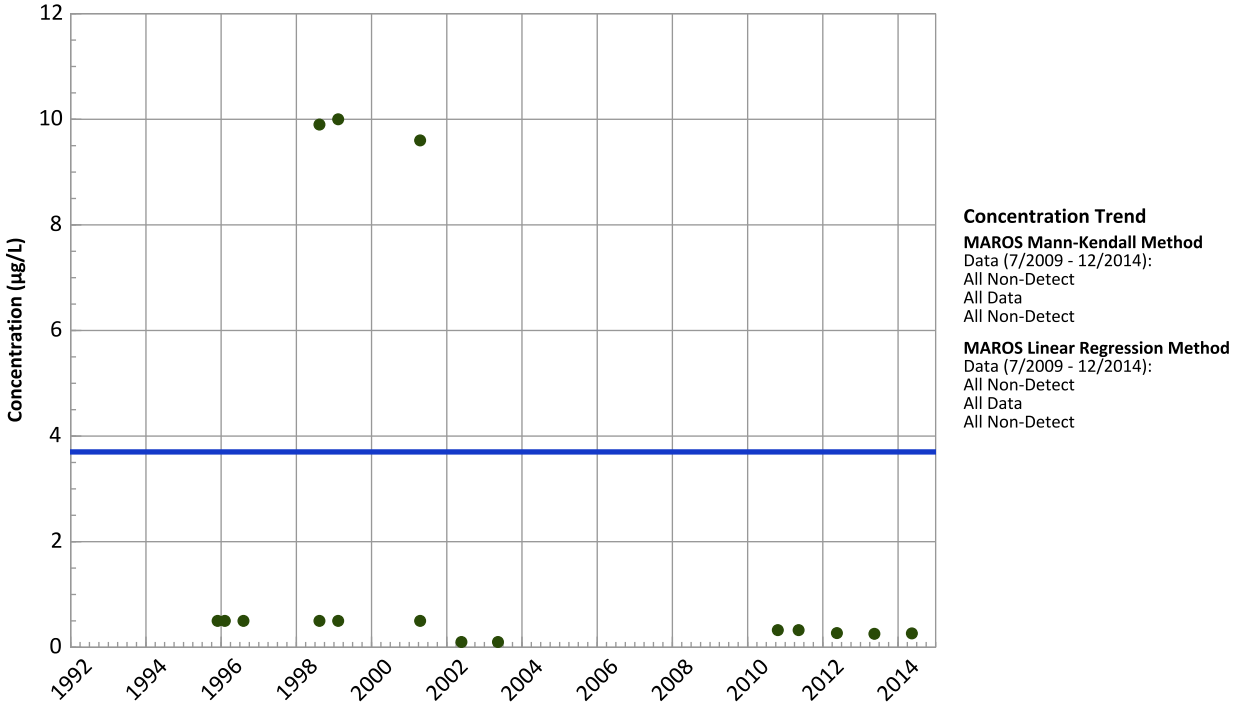
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

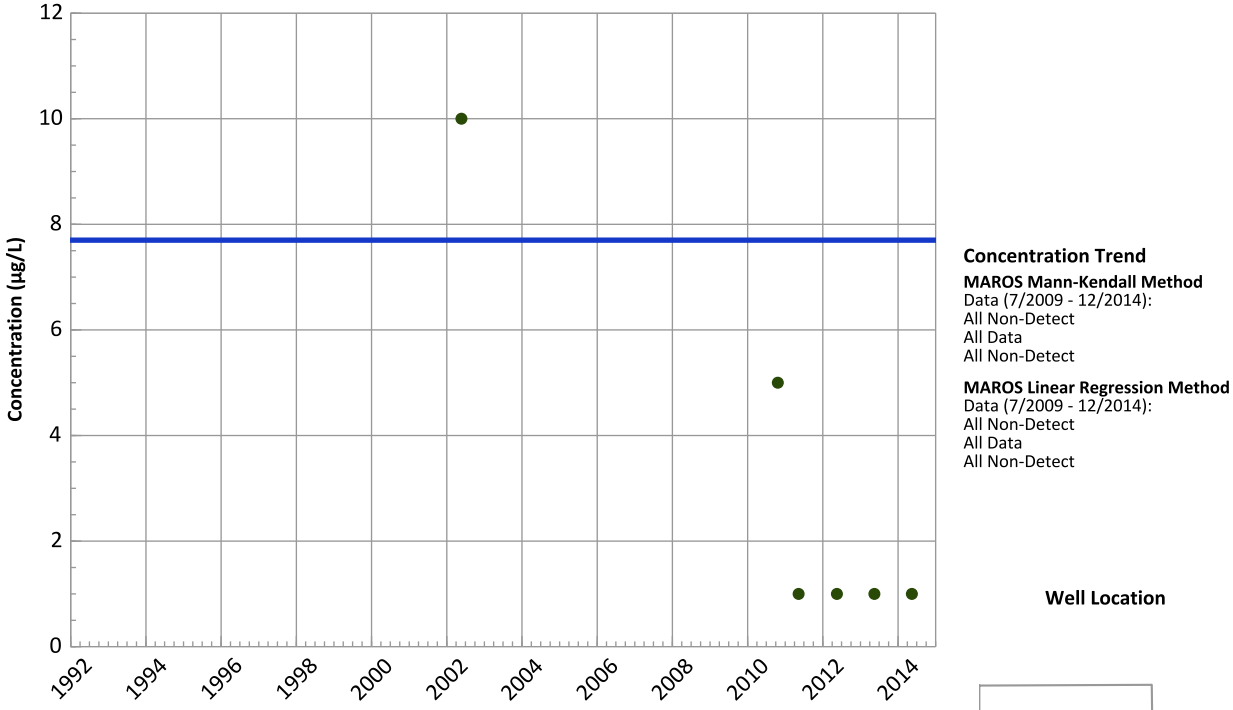


PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend



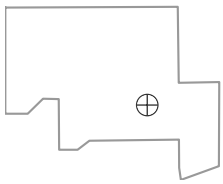
1,4-Dioxane (p-Dioxane) Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

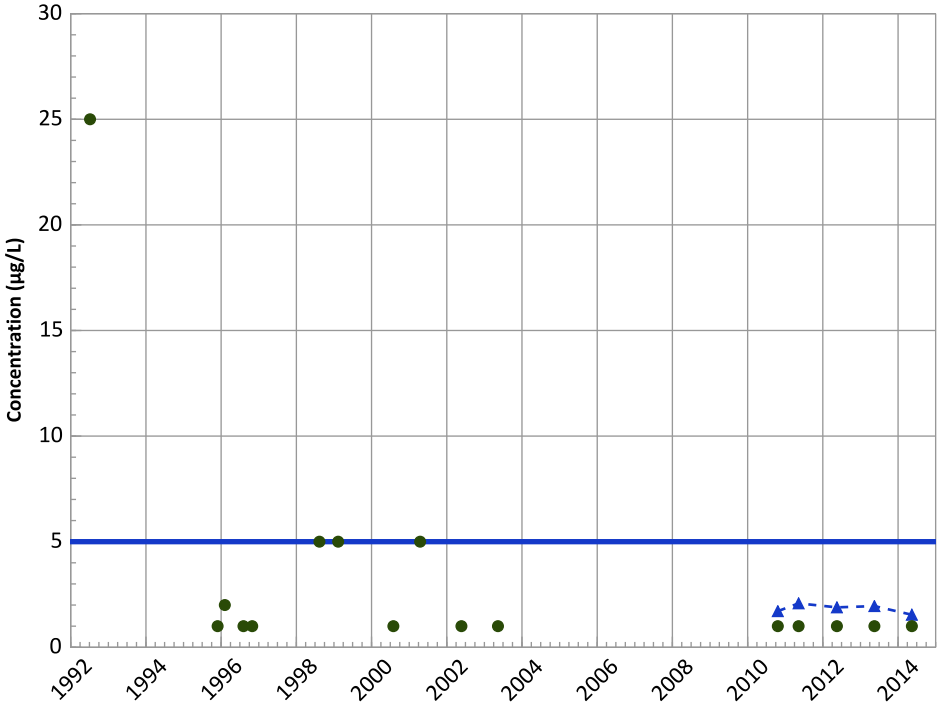
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

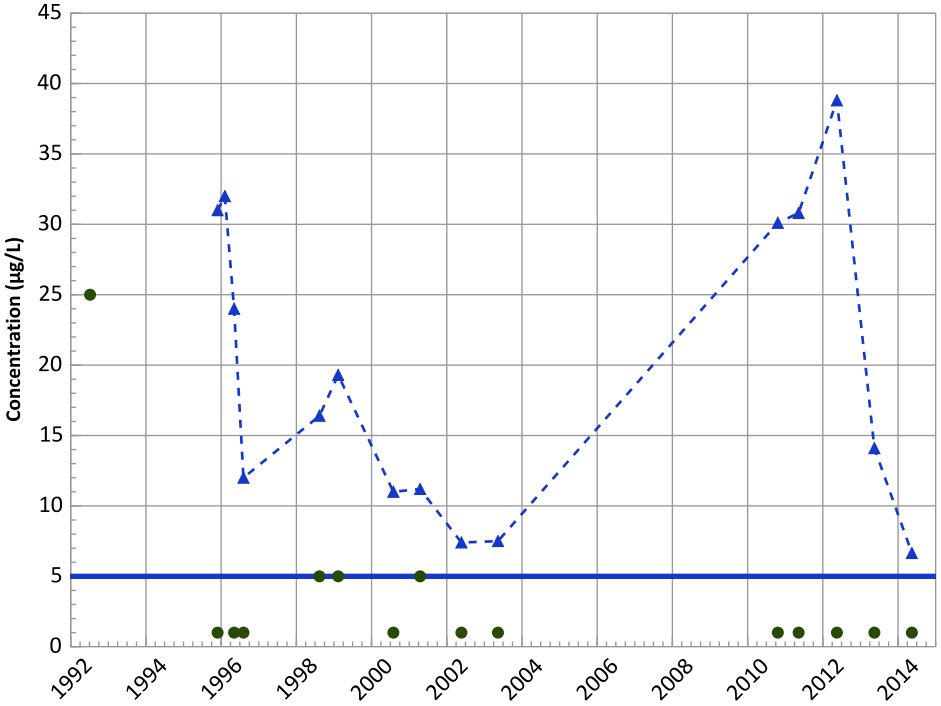


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Trichloroethene Trend



Concentration Trend

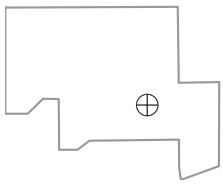
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

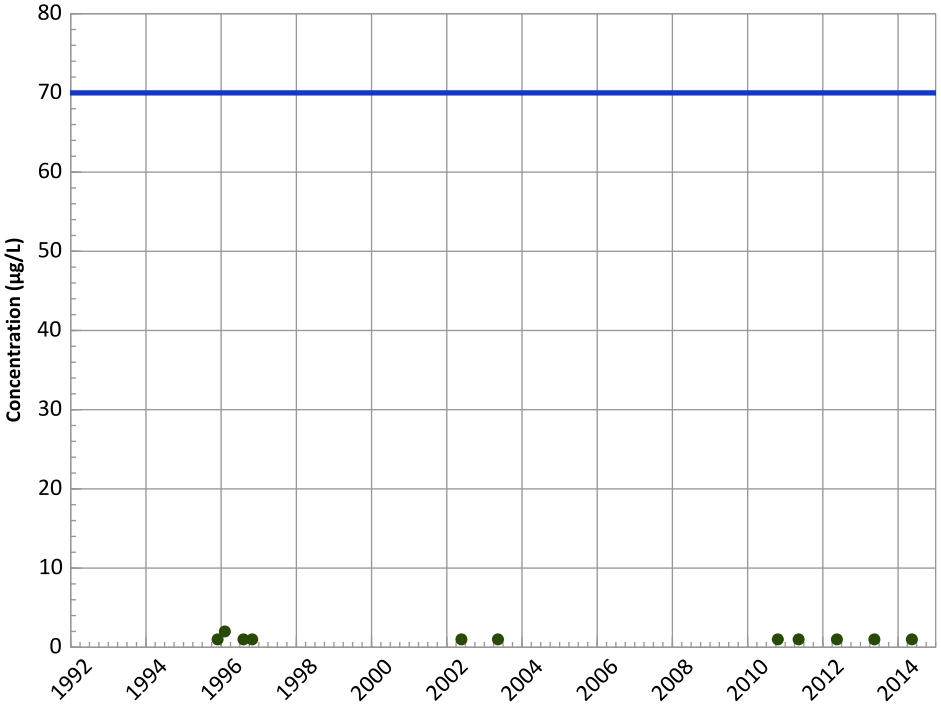
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

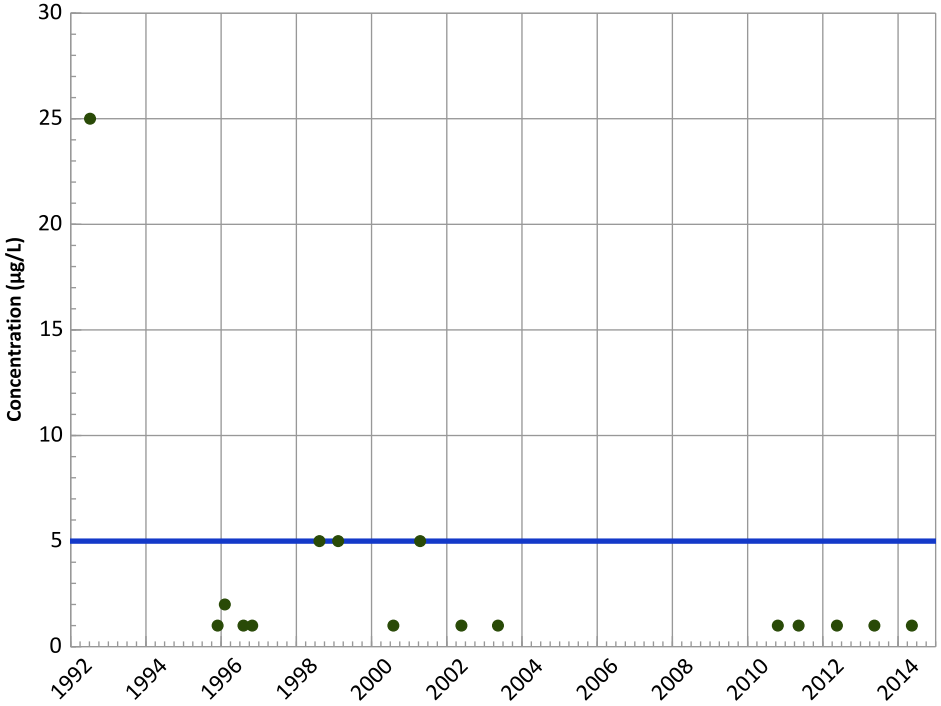


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

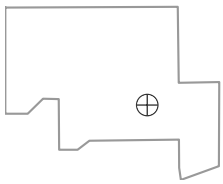
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

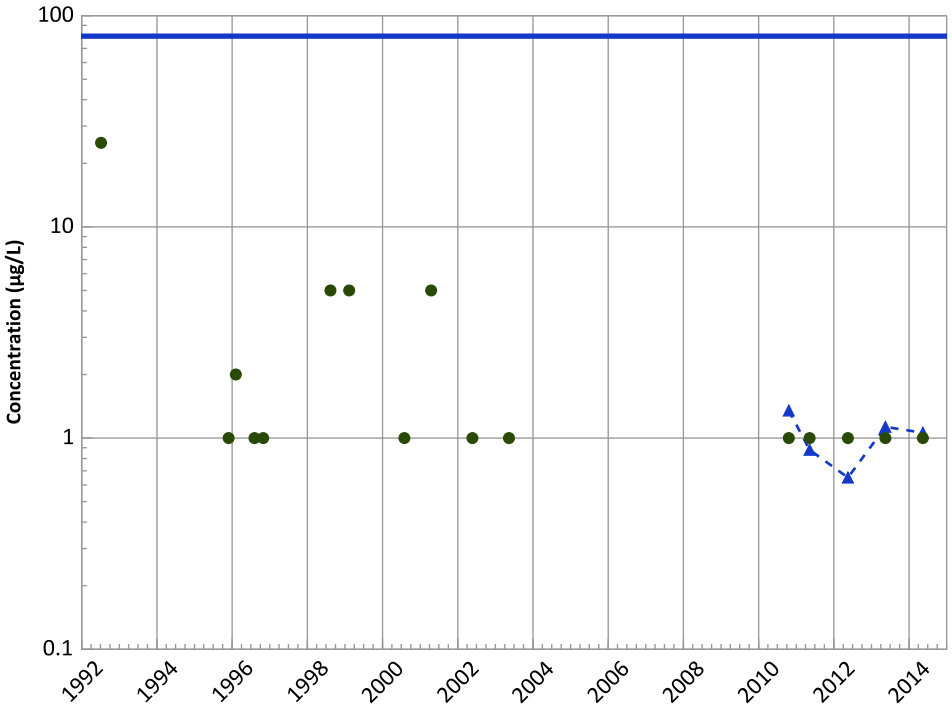
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

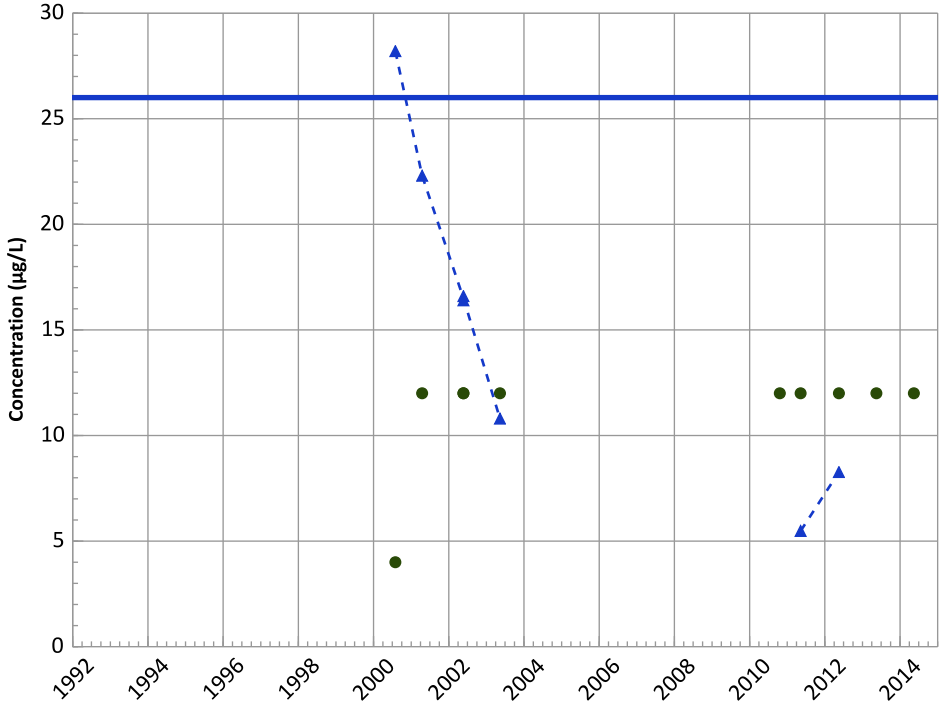


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Perchlorate Trend



Concentration Trend

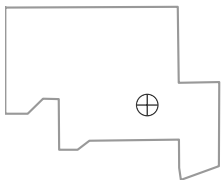
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

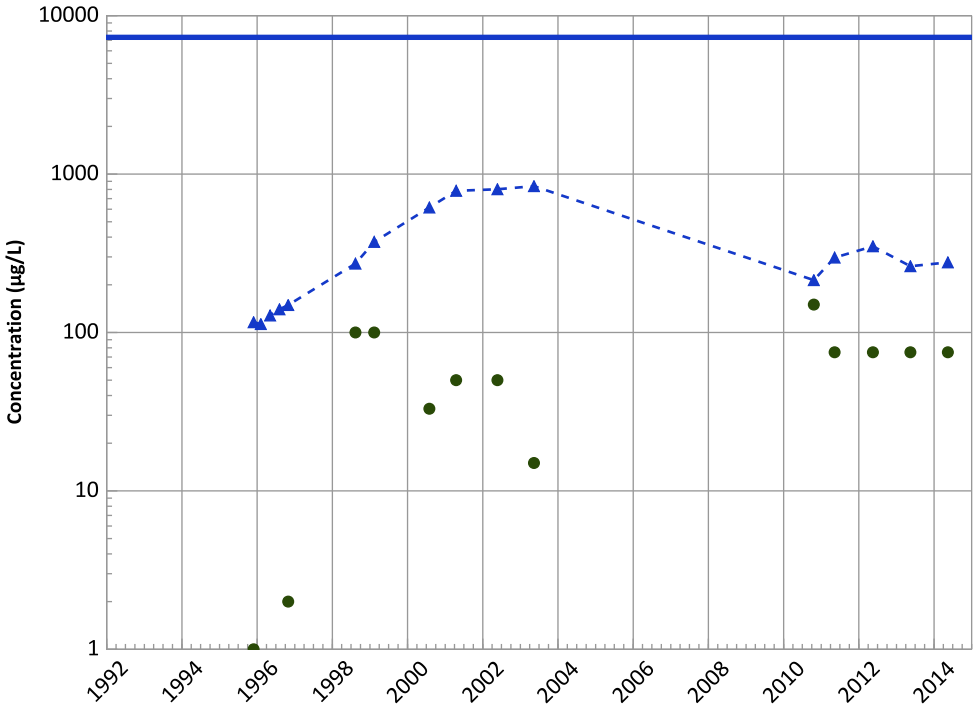
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

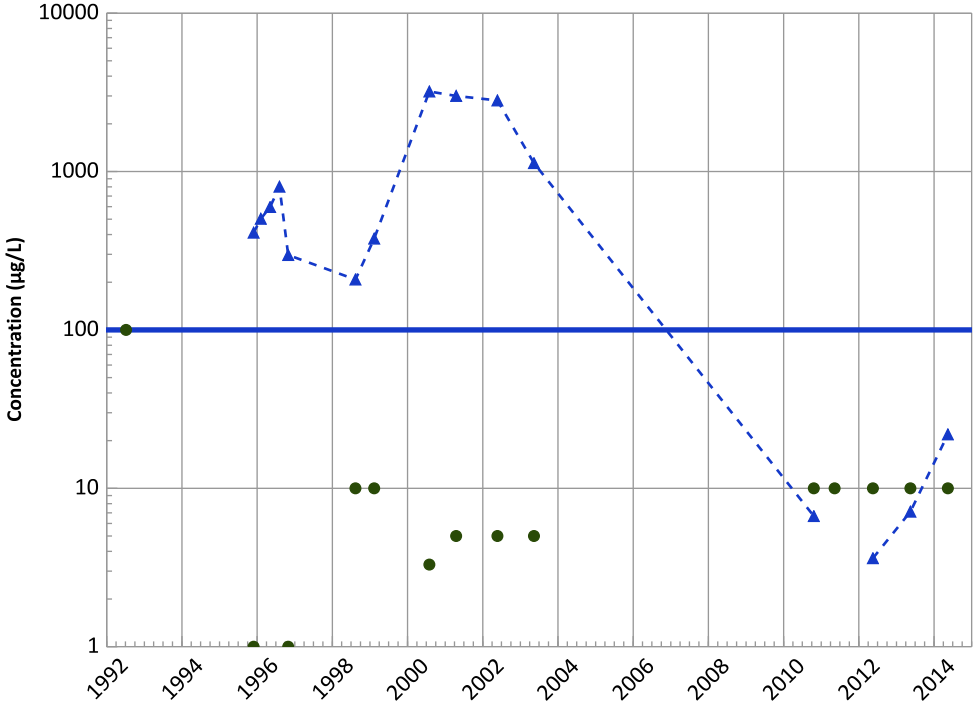


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chromium, Total Trend



Concentration Trend

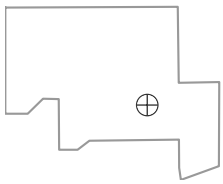
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

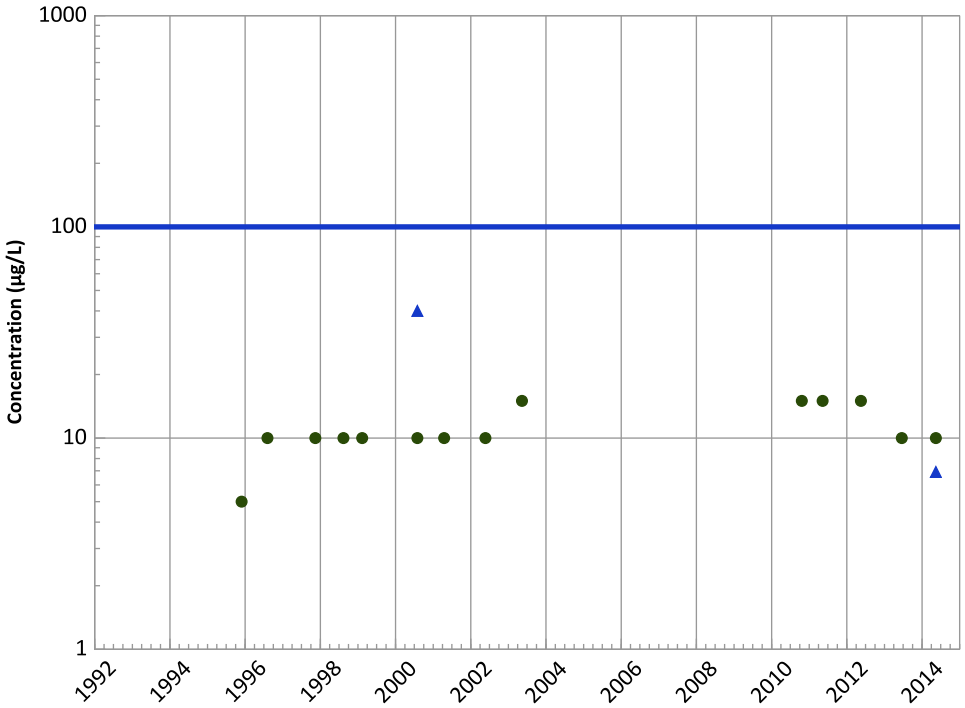
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

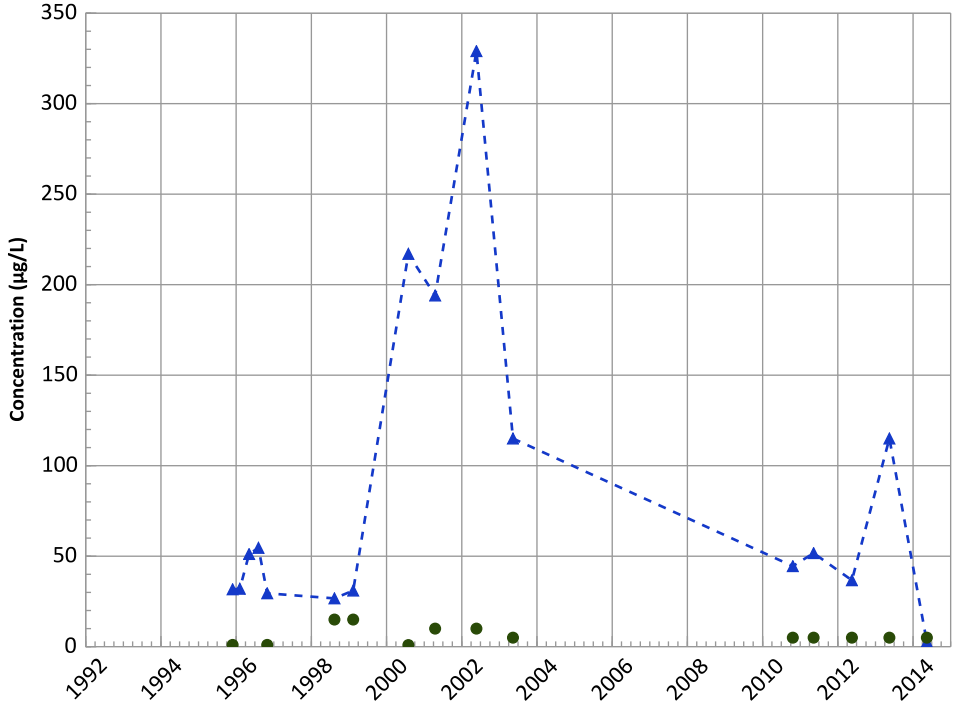


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

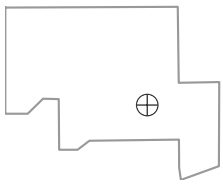
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

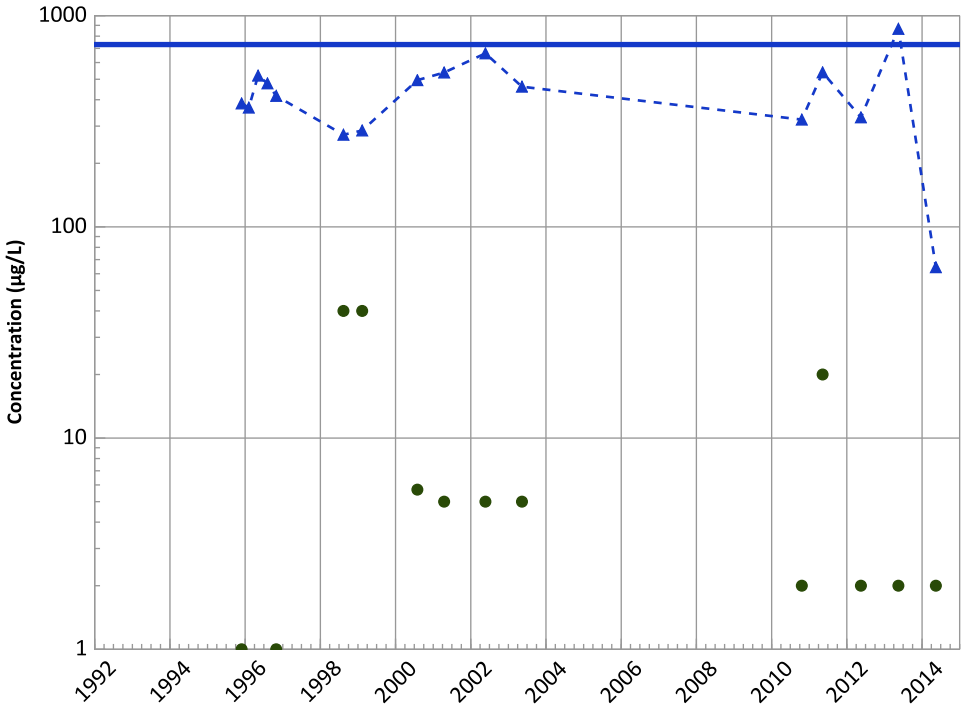
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

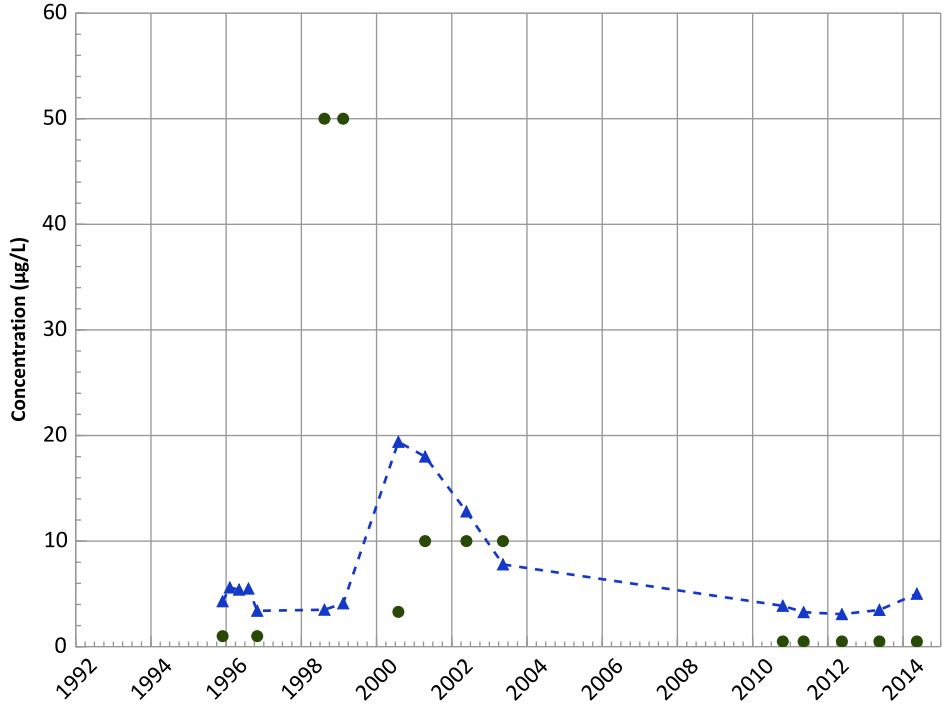


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Molybdenum Trend



Concentration Trend

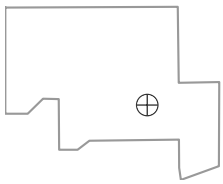
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

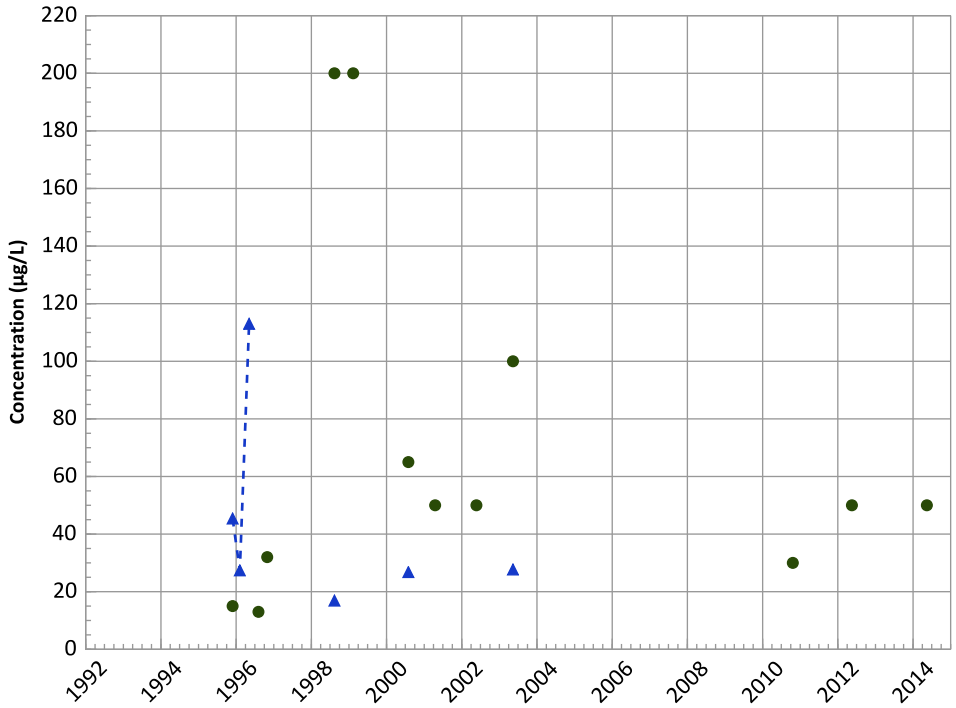
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

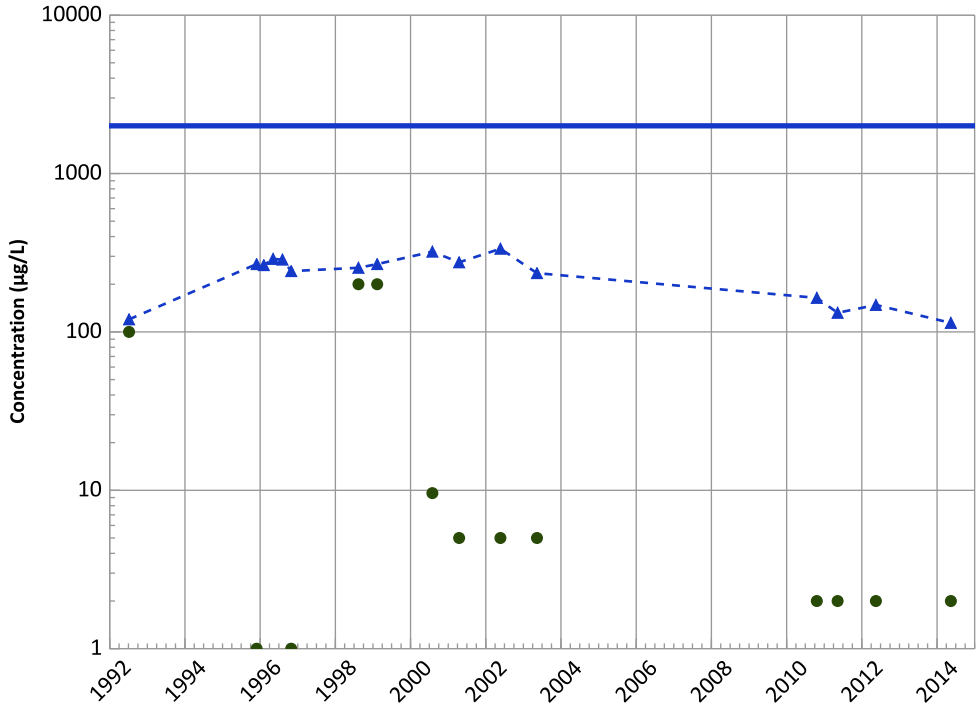


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

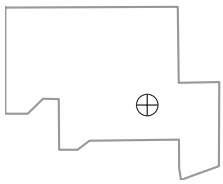
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

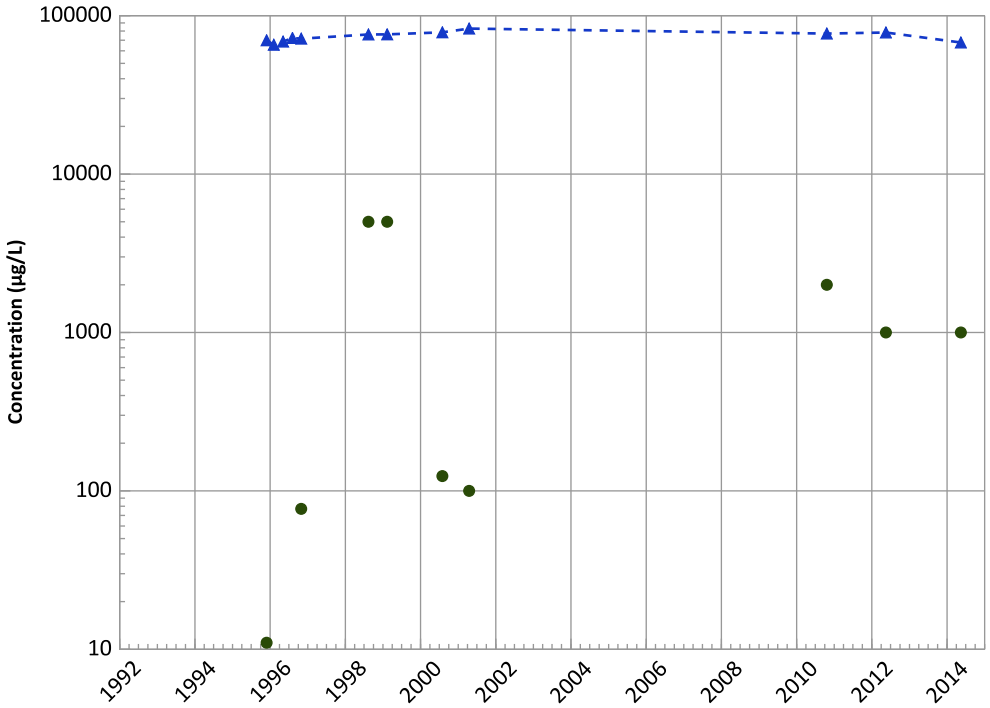
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

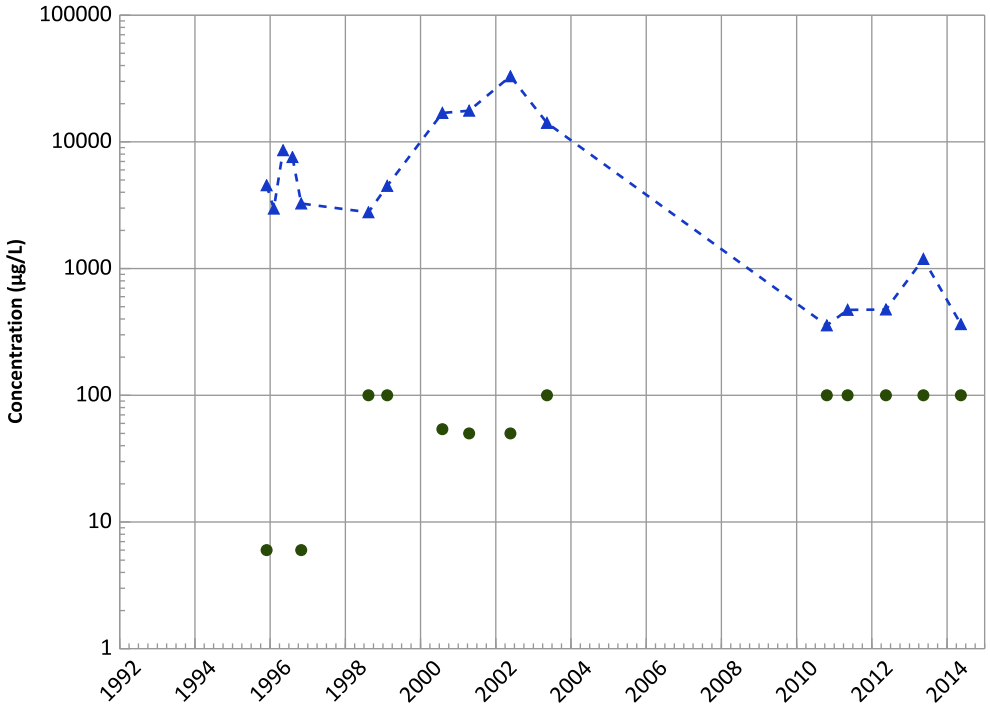


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

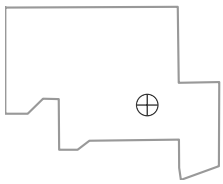
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

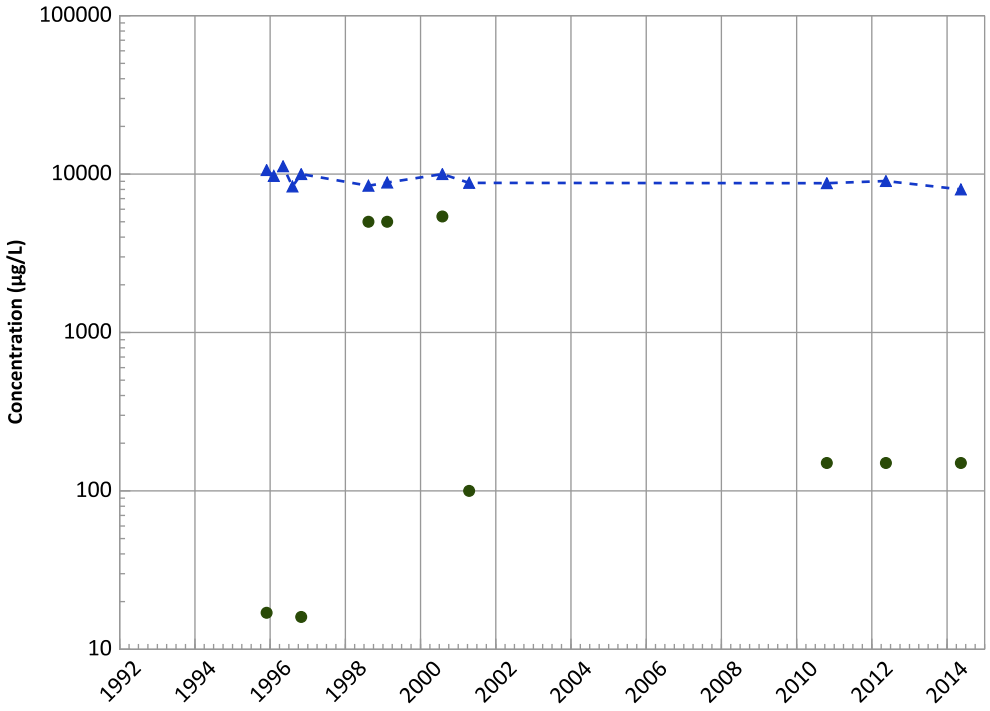
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

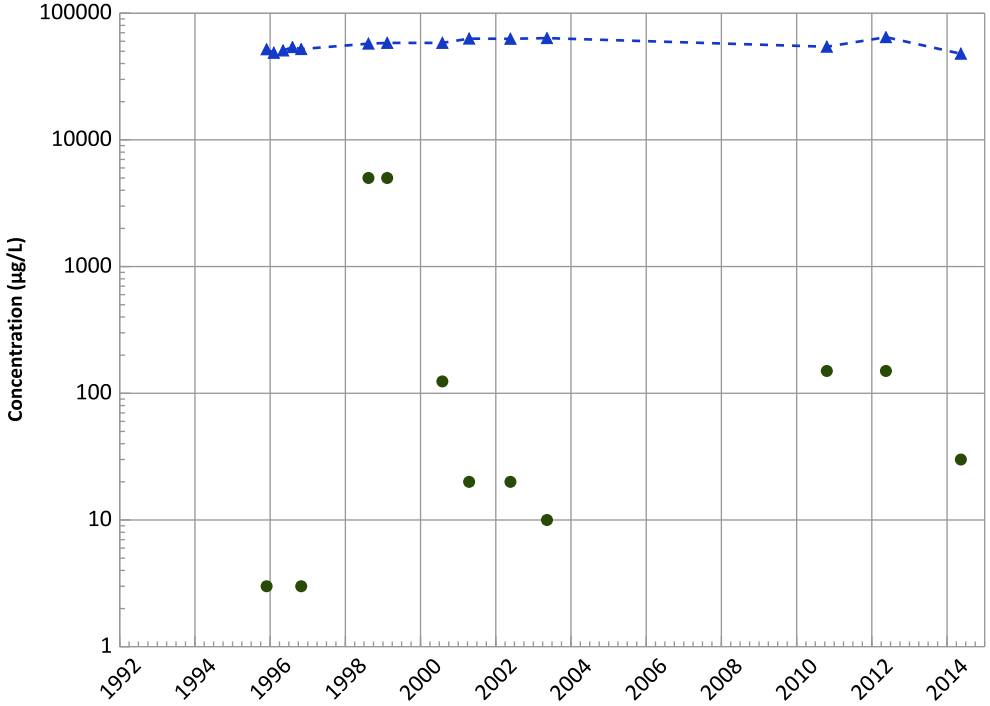


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

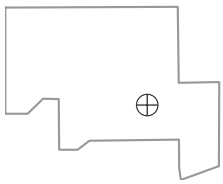
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

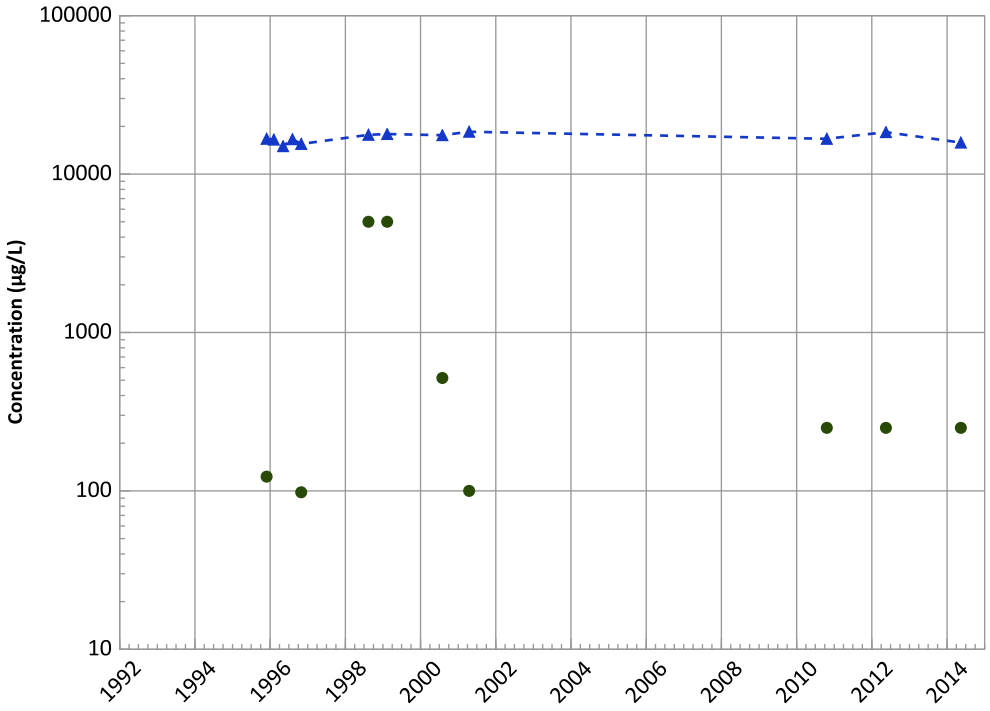
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX10-1014 in Perched Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

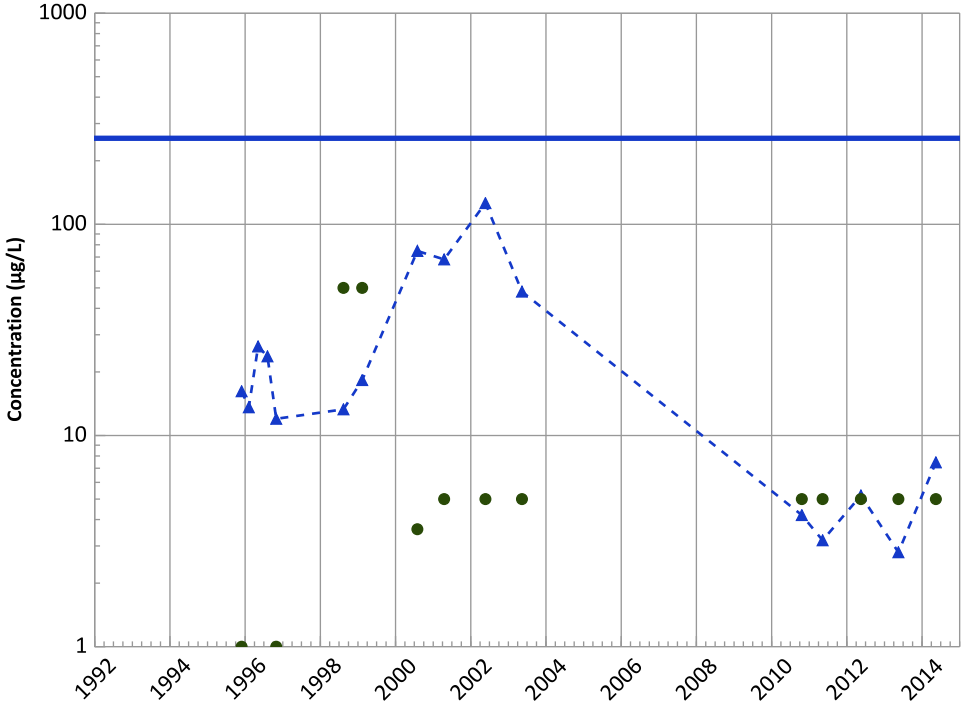


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Vanadium Trend



Concentration Trend

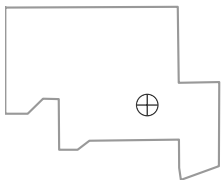
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 07/07/1992 to 05/15/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



ISB Injection Well Concentration Trends

Ogallala Aquifer Well Concentration Trends

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX01-1010	RDX	4/26/2000	8/19/2014	43	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	HMX	4/26/2000	8/19/2014	43	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	TNT	4/26/2000	8/19/2014	43	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	DNT24	4/26/2000	8/19/2014	33	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	DNT26	4/26/2000	8/19/2014	33	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	DNT2A	4/26/2000	8/19/2014	33	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	DNT4A	4/26/2000	8/19/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	TNB135	4/26/2000	8/19/2014	33	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	DNB13	4/26/2000	8/19/2014	33	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	DIOXANE14	2/21/2002	8/19/2014	9	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	2	0	0.0	N/A (<4 Samples in Dataset)
PTX01-1010	PCE	4/26/2000	8/19/2014	44	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	TCE	4/26/2000	8/19/2014	44	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	DCE12C	4/26/2000	8/19/2014	44	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	DCA12	4/26/2000	8/19/2014	36	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	TCLME	4/26/2000	8/19/2014	34	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	PERC	11/1/2001	8/19/2014	42	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1010	B	4/26/2000	8/19/2014	35	35	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX01-1010	MN	4/26/2000	8/19/2014	30	12	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	4	3	0.0	N/A (<4 Detections in Dataset)
PTX01-1010	AL	4/26/2000	1/22/2014	29	11	1.0	Decreasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1010	AS	4/26/2000	8/19/2014	18	4	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	2	0	0.0	N/A (<4 Samples in Dataset)
PTX01-1010	BA	4/26/2000	8/19/2014	37	37	1.0	Decreasing	4	4	1.0	Decreasing	5	5	0.4	Stable
PTX01-1010	CA	4/26/2000	1/22/2014	14	14	1.0	Increasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1010	FE	4/26/2000	1/22/2014	29	19	1.0	Increasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1010	K	4/26/2000	1/22/2014	14	14	0.8	No Trend	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1010	MG	4/26/2000	1/22/2014	29	29	1.0	Decreasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1010	NA	4/26/2000	1/22/2014	14	14	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	RDX	1/28/2002	8/19/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	HMX	1/28/2002	8/19/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	TNT	1/28/2002	8/19/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	DNT24	1/28/2002	8/19/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	DNT26	1/28/2002	8/19/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	DNT2A	1/28/2002	8/19/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	DNT4A	1/28/2002	8/19/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	TNB135	1/28/2002	8/19/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	DNB13	1/28/2002	8/19/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	DIOXANE14	8/1/2002	8/19/2014	5	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	2	0	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	PCE	1/28/2002	8/19/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	TCE	1/28/2002	8/19/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	DCE12C	1/28/2002	8/19/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	DCA12	1/28/2002	8/19/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	TCLME	1/28/2002	8/19/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	PERC	1/28/2002	8/19/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1011	B	1/28/2002	8/19/2014	24	24	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX01-1011	MN	1/28/2002	8/19/2014	19	13	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	4	3	0.0	N/A (<4 Detections in Dataset)
PTX01-1011	AL	1/28/2002	1/22/2014	18	5	1.0	Decreasing	4	0	0.0	All Non-Detect	3	0	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	AS	1/28/2002	8/19/2014	11	5	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	2	1	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	BA	1/28/2002	8/19/2014	22	22	1.0	Decreasing	4	4	1.0	Decreasing	5	5	1.0	Decreasing
PTX01-1011	CA	1/18/2006	1/22/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	FE	1/28/2002	1/22/2014	18	15	0.7	No Trend	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	K	1/18/2006	1/22/2014	9	9	0.5	No Trend	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	MG	1/28/2002	1/22/2014	18	18	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	NA	1/18/2006	1/22/2014	9	9	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	RDX	4/28/2003	7/14/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	HMX	4/28/2003	7/14/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	TNT	4/28/2003	7/14/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	DNT24	4/28/2003	7/14/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	DNT26	4/28/2003	7/14/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	DNT2A	4/28/2003	7/14/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	DNT4A	4/28/2003	7/14/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	TNB135	4/28/2003	7/14/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	DNB13	4/28/2003	7/14/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	DIOXANE14	4/28/2003	7/14/2014	5	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	1	0	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	PCE	6/1/2000	7/14/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	TCE	6/1/2000	7/14/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	DCE12C	6/1/2000	7/14/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	DCA12	6/1/2000	7/14/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	TCLME	6/1/2000	7/14/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	PERC	4/28/2003	7/14/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1012	B	4/28/2003	7/14/2014	21	21	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX01-1012	MN	4/28/2003	7/14/2014	16	13	1.0	Decreasing	4	4	0.6	No Trend	4	4	0.6	No Trend
PTX01-1012	AL	4/28/2003	1/20/2014	15	10	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	3	2	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	AS	4/28/2003	7/14/2014	7	2	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	1	0	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	BA	4/28/2003	7/14/2014	18	18	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX01-1012	CA	1/17/2006	1/20/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	FE	4/28/2003	1/20/2014	15	12	1.0	Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	K	1/17/2006	1/20/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	MG	4/28/2003	1/20/2014	15	15	0.8	No Trend	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	NA	1/17/2006	1/20/2014	9	9	0.5	No Trend	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	RDX	6/8/2000	7/14/2014	41	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	HMX	6/8/2000	7/14/2014	41	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	TNT	6/8/2000	7/14/2014	41	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	DNT24	6/8/2000	7/14/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	DNT26	6/8/2000	7/14/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	DNT2A	6/8/2000	7/14/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	DNT4A	6/8/2000	7/14/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	TNB135	6/8/2000	7/14/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	DNB13	6/8/2000	7/14/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	DIOXANE14	11/20/2002	7/14/2014	2	0	0.0	N/A (<4 Samples in Dataset)	2	2	0.0	N/A (<4 Samples in Dataset)	1	0	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	PCE	6/1/2000	7/14/2014	44	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	TCE	6/1/2000	7/14/2014	44	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	DCE12C	6/1/2000	7/14/2014	43	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	DCA12	6/1/2000	7/14/2014	36	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	TCLME	6/1/2000	7/14/2014	34	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	PERC	8/21/2001	7/14/2014	41	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX01-1013	B	6/8/2000	7/14/2014	34	34	0.5	No Trend	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX01-1013	MN	6/8/2000	7/14/2014	29	18	1.0	Decreasing	4	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect
PTX01-1013	AL	6/8/2000	1/20/2014	28	14	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	AS	6/8/2000	7/14/2014	16	5	1.0	Decreasing	4	0	0.0	All Non-Detect	1	0	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	BA	6/8/2000	7/14/2014	35	35	1.0	Decreasing	4	4	0.8	No Trend	4	4	0.8	No Trend
PTX01-1013	CA	6/8/2000	1/20/2014	14	14	1.0	Decreasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	FE	6/8/2000	1/20/2014	28	23	0.9	Probably Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	K	6/8/2000	1/20/2014	14	14	0.8	No Trend	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	MG	6/8/2000	1/20/2014	28	28	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	NA	6/8/2000	1/20/2014	14	14	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1033	RDX	1/30/1997	11/3/2014	34	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	HMX	1/30/1997	11/3/2014	35	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	TNT	1/30/1997	11/3/2014	35	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	DNT24	1/30/1997	11/3/2014	30	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	DNT26	1/30/1997	11/3/2014	30	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	DNT2A	1/30/1997	11/3/2014	30	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	DNT4A	1/30/1997	11/3/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	TNB135	1/30/1997	11/3/2014	30	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	DNB13	1/30/1997	11/3/2014	30	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	PCE	1/30/1997	11/3/2014	34	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	TCE	1/30/1997	11/3/2014	34	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	DCE12C	1/30/1997	11/3/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	DCA12	1/30/1997	11/3/2014	30	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	TCLME	1/30/1997	11/3/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	PERC	5/3/2001	11/3/2014	26	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1033	B	1/30/1997	11/3/2014	36	36	0.5	No Trend	4	4	0.4	Stable	11	11	1.0	Decreasing
PTX06-1033	CR	1/30/1997	11/3/2014	38	38	1.0	Decreasing	4	4	0.8	No Trend	11	11	0.8	No Trend
PTX06-1033	CR-6	1/30/1997	11/3/2014	38	10	0.7	No Trend	4	3	0.0	N/A (<4 Detections in Dataset)	11	4	1.0	Decreasing
PTX06-1033	MN	1/30/1997	11/3/2014	35	28	0.9	No Trend	4	4	0.8	No Trend	11	9	0.9	Probably Increasing
PTX06-1033	NI	1/30/1997	11/3/2014	36	34	1.0	Decreasing	4	4	1.0	Increasing	11	11	1.0	Decreasing
PTX06-1033	MO	1/30/1997	11/3/2014	35	35	1.0	Decreasing	4	4	1.0	Increasing	11	11	1.0	Decreasing
PTX06-1033	AL	1/30/1997	5/5/2014	27	9	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1033	AS	1/30/1997	11/3/2014	20	15	1.0	Decreasing	4	4	1.0	Decreasing	1	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1033	BA	1/30/1997	11/3/2014	29	29	0.9	No Trend	4	4	0.6	No Trend	4	4	0.6	No Trend
PTX06-1033	CA	1/30/1997	5/5/2014	17	17	1.0	Decreasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1033	FE	1/30/1997	11/3/2014	35	33	0.8	No Trend	4	4	0.8	No Trend	11	11	1.0	Decreasing
PTX06-1033	K	1/30/1997	5/5/2014	17	17	0.7	No Trend	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1033	MG	1/30/1997	5/5/2014	27	27	0.9	Probably Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1033	NA	1/30/1997	5/5/2014	17	17	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1033	V	1/30/1997	11/3/2014	31	31	0.7	No Trend	4	4	0.4	Stable	11	11	1.0	Increasing
PTX06-1043	RDX	10/14/1999	8/5/2014	26	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	HMX	10/14/1999	8/5/2014	26	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	TNT	10/14/1999	8/5/2014	26	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	DNT24	10/14/1999	8/5/2014	24	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	DNT26	10/14/1999	8/5/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	DNT2A	10/14/1999	8/5/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	DNT4A	10/14/1999	8/5/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	TNB135	10/14/1999	8/5/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	DNB13	10/14/1999	8/5/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	PCE	10/14/1999	8/5/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	TCE	10/14/1999	8/5/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	DCE12C	2/12/2002	8/5/2014	18	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1043	DCA12	10/14/1999	8/5/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	TCLME	10/14/1999	8/5/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	PERC	10/14/1999	8/5/2014	22	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1043	B	10/14/1999	8/5/2014	23	23	0.9	Probably Increasing	4	4	1.0	Decreasing	11	11	0.7	No Trend
PTX06-1043	CR	10/14/1999	8/5/2014	24	20	0.9	Probably Increasing	4	3	0.0	N/A (<4 Detections in Dataset)	11	8	1.0	Decreasing
PTX06-1043	CR-6	10/14/1999	8/5/2014	25	4	0.7	No Trend	4	2	0.0	N/A (<4 Detections in Dataset)	11	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1043	MN	10/14/1999	8/5/2014	24	7	1.0	Decreasing	4	0	0.0	All Non-Detect	11	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1043	NI	10/14/1999	8/5/2014	24	16	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	11	10	1.0	Increasing
PTX06-1043	MO	10/14/1999	8/5/2014	24	23	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1043	AL	10/14/1999	1/21/2014	16	6	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1043	AS	10/14/1999	8/5/2014	11	5	1.0	Decreasing	4	0	0.0	All Non-Detect	1	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1043	BA	10/14/1999	8/5/2014	17	17	1.0	Decreasing	4	4	0.6	No Trend	4	4	0.6	No Trend
PTX06-1043	CA	10/14/1999	1/21/2014	12	12	1.0	Decreasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1043	FE	10/14/1999	8/5/2014	24	18	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	11	9	1.0	Decreasing
PTX06-1043	K	10/14/1999	1/21/2014	12	12	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1043	MG	10/14/1999	1/21/2014	16	16	0.7	No Trend	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1043	NA	10/14/1999	1/21/2014	12	12	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1043	V	10/14/1999	8/5/2014	22	22	1.0	Increasing	4	4	1.0	Decreasing	11	11	0.5	Stable
PTX06-1044	RDX	10/13/1999	10/21/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	HMX	10/13/1999	10/21/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	TNT	10/13/1999	10/21/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	DNT24	10/13/1999	10/21/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	DNT26	10/13/1999	10/21/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	DNT2A	10/13/1999	10/21/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	DNT4A	10/13/1999	10/21/2014	26	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	TNB135	1/25/2000	10/21/2014	26	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	DNB13	10/13/1999	10/21/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	PCE	10/13/1999	10/21/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	TCE	10/13/1999	10/21/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	DCE12C	8/1/2002	10/21/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	DCA12	10/13/1999	10/21/2014	26	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	TCLME	10/13/1999	10/21/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	PERC	10/13/1999	10/21/2014	31	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1044	B	10/13/1999	10/21/2014	29	29	0.8	No Trend	4	4	0.6	No Trend	11	11	1.0	Decreasing
PTX06-1044	CR	10/13/1999	10/21/2014	32	30	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	11	9	0.6	No Trend
PTX06-1044	CR-6	10/13/1999	10/21/2014	30	6	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	11	3	0.0	N/A (<4 Detections in Dataset)
PTX06-1044	MN	10/13/1999	10/21/2014	28	18	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	11	8	0.7	No Trend
PTX06-1044	NI	10/13/1999	10/21/2014	30	27	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1044	MO	10/13/1999	10/21/2014	28	28	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1044	AL	10/13/1999	4/15/2014	20	9	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1044	AS	10/13/1999	10/21/2014	12	9	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1044	BA	10/13/1999	10/21/2014	22	22	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1044	CA	10/13/1999	4/15/2014	15	15	0.8	No Trend	4	4	1.0	Increasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1044	FE	10/13/1999	10/21/2014	28	28	0.7	No Trend	4	4	0.4	Stable	11	11	1.0	Decreasing
PTX06-1044	K	10/13/1999	4/15/2014	15	15	1.0	Decreasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1044	MG	10/13/1999	4/15/2014	20	20	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1044	NA	10/13/1999	4/15/2014	15	15	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1044	V	10/13/1999	10/21/2014	24	24	1.0	Increasing	4	4	1.0	Decreasing	11	11	0.5	No Trend
PTX06-1056	RDX	8/20/2001	10/21/2014	30	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	12	0	0.0	All Non-Detect
PTX06-1056	HMX	8/20/2001	10/21/2014	30	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	12	0	0.0	All Non-Detect
PTX06-1056	TNT	8/20/2001	10/21/2014	30	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	12	0	0.0	All Non-Detect
PTX06-1056	DNT24	8/20/2001	10/21/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	12	0	0.0	All Non-Detect
PTX06-1056	DNT26	8/20/2001	10/21/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	12	0	0.0	All Non-Detect
PTX06-1056	DNT2A	8/20/2001	10/21/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	12	0	0.0	All Non-Detect
PTX06-1056	DNT4A	8/20/2001	10/21/2014	25	3	0.0	N/A (<4 Detections in Dataset)	4	3	0.0	N/A (<4 Detections in Dataset)	12	3	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	TNB135	8/20/2001	10/21/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	12	0	0.0	All Non-Detect
PTX06-1056	DNB13	8/20/2001	10/21/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	12	0	0.0	All Non-Detect
PTX06-1056	PCE	8/9/2000	10/21/2014	30	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1056	TCE	8/9/2000	10/21/2014	31	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1056	DCE12C	8/20/2001	10/21/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1056	DCA12	8/9/2000	10/21/2014	26	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1056	TCLME	8/9/2000	10/21/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1056	B	8/20/2001	10/21/2014	26	26	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1056	CR	8/20/2001	10/21/2014	26	15	1.0	Increasing	4	3	0.0	N/A (<4 Detections in Dataset)	11	5	1.0	Decreasing
PTX06-1056	CR-6	8/20/2001	10/21/2014	27	3	0.0	N/A (<4 Detections in Dataset)	4	2	0.0	N/A (<4 Detections in Dataset)	11	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	MN	8/20/2001	10/21/2014	25	11	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	12	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	NI	8/20/2001	10/21/2014	24	20	1.0	Decreasing	4	4	0.4	Stable	11	10	1.0	Decreasing
PTX06-1056	MO	8/20/2001	10/21/2014	24	23	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1056	AL	8/20/2001	4/24/2014	16	6	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1056	AS	8/20/2001	10/21/2014	10	9	1.0	Increasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1056	BA	8/20/2001	10/21/2014	19	19	1.0	Increasing	4	4	0.6	No Trend	5	5	0.9	No Trend
PTX06-1056	CA	1/31/2006	4/24/2014	9	9	1.0	Increasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1056	FE	8/20/2001	10/21/2014	24	19	0.9	Probably Increasing	4	3	0.0	N/A (<4 Detections in Dataset)	11	10	1.0	Decreasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1056	K	1/31/2006	4/24/2014	9	9	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1056	MG	8/20/2001	4/24/2014	16	16	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1056	NA	1/31/2006	4/24/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1056	V	8/20/2001	10/21/2014	20	20	1.0	Increasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1057A	RDX	8/13/2001	4/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	HMX	8/13/2001	4/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	TNT	8/13/2001	4/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	DNT24	8/13/2001	4/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	DNT26	8/13/2001	4/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	DNT2A	8/13/2001	4/15/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	DNT4A	8/13/2001	4/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	TNB135	8/13/2001	4/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	DNB13	8/13/2001	4/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	PCE	8/13/2001	4/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	TCE	8/13/2001	4/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	DCE12C	8/13/2001	4/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	DCA12	8/13/2001	4/15/2014	18	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	TCLME	8/13/2001	4/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	PERC	8/13/2001	4/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1057A	B	8/13/2001	4/15/2014	18	18	1.0	Decreasing	4	4	1.0	Decreasing	5	5	1.0	Decreasing
PTX06-1057A	MN	8/13/2001	4/15/2014	18	18	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1057A	AL	8/13/2001	4/15/2014	19	19	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1057A	BA	8/13/2001	4/15/2014	21	21	1.0	Decreasing	4	4	0.4	Stable	4	4	0.4	Stable
PTX06-1057A	CA	4/20/2006	4/15/2014	9	9	0.9	No Trend	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1057A	FE	8/13/2001	4/15/2014	18	18	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1057A	K	4/20/2006	4/15/2014	9	9	0.5	No Trend	4	4	0.5	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1057A	MG	8/13/2001	4/15/2014	18	18	1.0	Decreasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1057A	NA	4/20/2006	4/15/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	RDX	4/4/2001	7/15/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	HMX	4/4/2001	7/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	TNT	4/4/2001	7/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	DNT24	4/4/2001	7/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	DNT26	4/4/2001	7/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	DNT2A	4/4/2001	7/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	DNT4A	4/4/2001	7/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	TNB135	4/4/2001	7/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	DNB13	4/4/2001	7/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	DIOXANE14	8/13/2001	7/15/2014	7	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	2	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	PCE	4/4/2001	7/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	TCE	4/4/2001	7/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	DCE12C	8/13/2001	7/15/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	DCA12	4/4/2001	7/15/2014	18	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	TCLME	4/4/2001	7/15/2014	17	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	PERC	4/4/2001	7/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1058	B	4/4/2001	7/15/2014	18	18	0.8	No Trend	4	4	1.0	Decreasing	5	5	1.0	Decreasing
PTX06-1058	CR	4/4/2001	7/15/2014	22	21	1.0	Increasing	4	4	0.4	Stable	4	4	0.4	Stable
PTX06-1058	MN	4/4/2001	7/15/2014	19	11	0.8	No Trend	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1058	NI	4/4/2001	7/15/2014	19	14	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1058	MO	4/4/2001	7/15/2014	18	18	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	AL	4/4/2001	7/15/2014	18	9	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	3	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	AS	4/4/2001	7/15/2014	11	10	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	BA	4/4/2001	7/15/2014	20	20	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1058	CA	4/4/2001	7/15/2014	10	10	1.0	Increasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	FE	4/4/2001	7/15/2014	19	15	1.0	Increasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1058	K	4/4/2001	7/15/2014	10	10	1.0	Increasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	MG	4/4/2001	7/15/2014	18	18	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	NA	4/4/2001	7/15/2014	10	10	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	V	8/13/2001	7/15/2014	14	14	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1059	RDX	4/4/2001	7/15/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	HMX	4/4/2001	7/15/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	TNT	4/4/2001	7/15/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	DNT24	4/4/2001	7/15/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	DNT26	4/4/2001	7/15/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	DNT2A	4/4/2001	7/15/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	DNT4A	4/4/2001	7/15/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	TNB135	4/4/2001	7/15/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	DNB13	4/4/2001	7/15/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	DIOXANE14	4/28/2003	7/15/2014	5	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	1	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	PCE	4/4/2001	7/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	TCE	4/4/2001	7/15/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	DCE12C	4/28/2003	7/15/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	DCA12	4/4/2001	7/15/2014	18	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	TCLME	4/4/2001	7/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1059	PERC	4/4/2001	7/15/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1059	B	4/4/2001	7/15/2014	18	18	1.0	Decreasing	4	4	1.0	Decreasing	5	5	1.0	Decreasing
PTX06-1059	MN	4/4/2001	7/15/2014	17	7	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	AL	4/4/2001	7/15/2014	17	10	1.0	Decreasing	4	0	0.0	All Non-Detect	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	AS	4/4/2001	7/15/2014	9	4	0.5	No Trend	4	1	0.0	N/A (<4 Detections in Dataset)	1	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	BA	4/4/2001	7/15/2014	18	18	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	CA	4/4/2001	7/15/2014	10	10	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	FE	4/4/2001	7/15/2014	17	13	0.9	Probably Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	K	4/4/2001	7/15/2014	10	10	1.0	Decreasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	MG	4/4/2001	7/15/2014	17	17	0.7	No Trend	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	NA	4/4/2001	7/15/2014	10	10	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1060	RDX	4/10/2001	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	HMX	4/10/2001	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	TNT	4/10/2001	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	DNT24	4/10/2001	4/21/2014	14	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	DNT26	4/10/2001	4/21/2014	14	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	DNT2A	4/10/2001	4/21/2014	14	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	DNT4A	4/10/2001	4/21/2014	14	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	TNB135	4/10/2001	4/21/2014	14	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	DNB13	4/10/2001	4/21/2014	14	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	PCE	4/10/2001	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	TCE	4/10/2001	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	DCE12C	4/10/2001	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	DCA12	4/10/2001	4/21/2014	14	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	TCLME	4/10/2001	4/21/2014	14	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	PERC	4/10/2001	4/21/2014	15	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1060	B	4/10/2001	4/21/2014	15	15	1.0	Decreasing	4	4	0.4	Stable	6	6	0.5	No Trend
PTX06-1060	MN	4/10/2001	4/21/2014	13	12	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1060	AL	4/10/2001	4/21/2014	13	8	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1060	BA	4/10/2001	4/21/2014	13	13	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1060	CA	4/10/2001	4/21/2014	7	7	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1060	FE	4/10/2001	4/21/2014	13	12	1.0	Increasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1060	K	4/10/2001	4/21/2014	7	7	1.0	Increasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1060	MG	4/10/2001	4/21/2014	13	13	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1060	NA	4/10/2001	4/21/2014	7	7	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1061	RDX	4/28/2003	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	HMX	4/28/2003	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	TNT	4/28/2003	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	DNT24	4/28/2003	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	DNT26	4/28/2003	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	DNT2A	4/28/2003	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	DNT4A	4/28/2003	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	TNB135	4/28/2003	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	DNB13	4/28/2003	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	PCE	4/28/2003	4/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	TCE	4/28/2003	4/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	DCE12C	4/28/2003	4/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	DCA12	4/28/2003	4/21/2014	18	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	TCLME	4/28/2003	4/21/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	PERC	4/28/2003	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	6	0	0.0	All Non-Detect
PTX06-1061	B	4/28/2003	4/21/2014	17	17	1.0	Decreasing	4	4	1.0	Decreasing	6	6	0.9	No Trend
PTX06-1061	MN	4/28/2003	4/21/2014	16	6	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	3	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1061	AL	4/28/2003	4/21/2014	16	7	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1061	BA	4/28/2003	4/21/2014	18	18	0.9	Probably Increasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1061	CA	4/26/2006	4/21/2014	9	9	0.7	No Trend	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1061	FE	4/28/2003	4/21/2014	16	14	0.9	Probably Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1061	K	4/26/2006	4/21/2014	9	9	1.0	Decreasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1061	MG	4/28/2003	4/21/2014	16	16	0.9	No Trend	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1061	NA	4/26/2006	4/21/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1062A	RDX	8/21/2001	8/19/2014	42	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	HMX	8/21/2001	8/19/2014	42	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	TNT	8/21/2001	8/19/2014	42	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	DNT24	8/21/2001	8/19/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	DNT26	8/21/2001	8/19/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	DNT2A	8/21/2001	8/19/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	DNT4A	8/21/2001	8/19/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	TNB135	8/21/2001	8/19/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	DNB13	8/21/2001	8/19/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	DIOXANE14	8/2/2002	8/19/2014	8	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	2	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1062A	PCE	8/21/2001	8/19/2014	42	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	TCE	8/21/2001	8/19/2014	43	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	DCE12C	8/21/2001	8/19/2014	42	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	DCA12	8/21/2001	8/19/2014	34	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1062A	TCLME	8/21/2001	8/19/2014	32	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	PERC	8/21/2001	8/19/2014	42	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1062A	B	8/21/2001	8/19/2014	35	35	1.0	Decreasing	4	4	0.4	Stable	11	11	1.0	Decreasing
PTX06-1062A	MN	8/21/2001	8/19/2014	29	18	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1062A	AL	8/21/2001	1/22/2014	29	19	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1062A	AS	8/21/2001	8/19/2014	17	5	0.5	No Trend	4	2	0.0	N/A (<4 Detections in Dataset)	2	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1062A	BA	8/21/2001	8/19/2014	36	36	1.0	Decreasing	4	4	1.0	Decreasing	5	5	1.0	Decreasing
PTX06-1062A	CA	1/18/2006	1/22/2014	13	13	1.0	Increasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1062A	FE	8/21/2001	1/22/2014	28	21	1.0	Increasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1062A	K	1/18/2006	1/22/2014	13	13	0.9	No Trend	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1062A	MG	8/21/2001	1/22/2014	28	28	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1062A	NA	1/18/2006	1/22/2014	13	13	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1064	RDX	4/21/2003	8/25/2014	37	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	HMX	4/21/2003	8/25/2014	37	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	TNT	4/21/2003	8/25/2014	37	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	DNT24	4/21/2003	8/25/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	DNT26	4/21/2003	8/25/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	DNT2A	4/21/2003	8/25/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	DNT4A	4/21/2003	8/25/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	TNB135	4/21/2003	8/25/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	DNB13	4/21/2003	8/25/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	DIOXANE14	5/21/2003	8/25/2014	6	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	2	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1064	PCE	4/21/2003	8/25/2014	37	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	TCE	4/21/2003	8/25/2014	37	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	DCE12C	4/21/2003	8/25/2014	37	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	DCA12	4/21/2003	8/25/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	TCLME	4/21/2003	8/25/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	PERC	4/21/2003	8/25/2014	37	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1064	B	4/21/2003	8/25/2014	29	29	0.5	No Trend	4	4	0.5	No Trend	11	11	1.0	Decreasing
PTX06-1064	MN	4/21/2003	8/25/2014	24	12	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	4	3	0.0	N/A (<4 Detections in Dataset)
PTX06-1064	AL	4/21/2003	1/20/2014	23	10	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1064	AS	4/21/2003	8/25/2014	12	5	0.7	No Trend	4	1	0.0	N/A (<4 Detections in Dataset)	2	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1064	BA	4/21/2003	8/25/2014	31	31	0.5	No Trend	4	4	1.0	Decreasing	5	5	1.0	Decreasing
PTX06-1064	CA	1/17/2006	1/20/2014	13	13	0.9	No Trend	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1064	FE	4/21/2003	1/20/2014	23	15	1.0	Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1064	K	1/17/2006	1/20/2014	13	13	1.0	Decreasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1064	MG	4/21/2003	1/20/2014	23	23	1.0	Decreasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1064	NA	1/17/2006	1/20/2014	13	13	1.0	Decreasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1068	RDX	11/13/2002	10/22/2014	38	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	HMX	11/13/2002	10/22/2014	38	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	TNT	11/13/2002	10/22/2014	38	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	DNT24	11/13/2002	10/22/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	DNT26	11/13/2002	10/22/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	DNT2A	11/13/2002	10/22/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	DNT4A	11/13/2002	10/22/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	TNB135	11/13/2002	10/22/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	DNB13	11/13/2002	10/22/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	DIOXANE14	10/22/2014	10/22/2014	1	0	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)	1	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1068	PCE	8/26/2002	10/22/2014	39	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1068	TCE	8/26/2002	10/22/2014	39	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	DCE12C	8/26/2002	10/22/2014	39	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	DCA12	8/26/2002	10/22/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	TCLME	8/26/2002	10/22/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	PERC	8/26/2002	10/22/2014	39	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1068	B	8/26/2002	10/22/2014	31	31	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1068	CR	8/26/2002	10/22/2014	38	37	1.0	Increasing	4	3	0.0	N/A (<4 Detections in Dataset)	10	9	1.0	Decreasing
PTX06-1068	CR-6	8/26/2002	10/22/2014	40	8	1.0	Increasing	4	0	0.0	All Non-Detect	10	4	1.0	Decreasing
PTX06-1068	MN	8/26/2002	10/22/2014	31	23	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	9	7	1.0	Decreasing
PTX06-1068	AL	8/26/2002	4/24/2014	25	18	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	3	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1068	AS	8/26/2002	10/22/2014	13	3	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	1	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1068	BA	8/26/2002	10/22/2014	28	28	1.0	Decreasing	4	4	0.4	Stable	4	4	0.4	Stable
PTX06-1068	CA	1/19/2006	4/24/2014	13	13	1.0	Increasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1068	FE	8/26/2002	4/24/2014	30	28	0.8	No Trend	4	4	1.0	Decreasing	8	7	0.8	No Trend
PTX06-1068	K	1/19/2006	4/24/2014	13	13	1.0	Decreasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1068	MG	8/26/2002	4/24/2014	25	25	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1068	NA	1/19/2006	4/24/2014	13	13	1.0	Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	RDX	9/25/2001	8/13/2014	23	2	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	12	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1072	HMX	9/25/2001	8/13/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	TNT	9/25/2001	8/13/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	DNT24	9/25/2001	8/13/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	DNT26	9/25/2001	8/13/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	DNT2A	9/25/2001	8/13/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	DNT4A	9/25/2001	8/13/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1072	TNB135	9/25/2001	8/13/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	DNB13	9/25/2001	8/13/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	DIOXANE14	6/10/2002	8/13/2014	6	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	2	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	PCE	9/25/2001	8/13/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	TCE	9/25/2001	8/13/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	DCE12C	9/25/2001	8/13/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	DCA12	9/25/2001	8/13/2014	19	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	TCLME	9/25/2001	8/13/2014	19	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	PERC	9/25/2001	8/13/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1072	B	9/25/2001	8/13/2014	20	20	1.0	Decreasing	4	4	0.5	No Trend	11	11	0.6	No Trend
PTX06-1072	MN	9/25/2001	8/13/2014	14	7	1.0	Decreasing	4	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect
PTX06-1072	AL	9/25/2001	1/23/2014	13	5	1.0	Decreasing	4	0	0.0	All Non-Detect	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	AS	9/25/2001	8/13/2014	9	4	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	2	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	BA	9/25/2001	8/13/2014	15	15	1.0	Decreasing	4	4	1.0	Decreasing	5	5	1.0	Decreasing
PTX06-1072	CA	4/18/2006	1/23/2014	6	6	0.9	Probably Increasing	4	4	1.0	Increasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	FE	9/25/2001	1/23/2014	13	11	1.0	Increasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	K	4/18/2006	1/23/2014	6	6	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	MG	9/25/2001	1/23/2014	13	13	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	NA	4/18/2006	1/23/2014	6	6	0.5	No Trend	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1074	RDX	6/17/2002	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	HMX	6/17/2002	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	TNT	6/17/2002	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	DNT24	6/17/2002	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	DNT26	6/17/2002	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	DNT2A	6/17/2002	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	DNT4A	6/17/2002	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	TNB135	6/17/2002	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	DNB13	6/17/2002	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	PCE	6/17/2002	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	TCE	6/17/2002	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	DCE12C	6/17/2002	4/21/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	DCA12	6/17/2002	4/21/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	TCLME	6/17/2002	4/21/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	PERC	6/17/2002	4/21/2014	18	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1074	B	6/17/2002	4/21/2014	17	17	1.0	Increasing	4	4	1.0	Decreasing	5	5	1.0	Decreasing
PTX06-1074	MN	6/17/2002	4/21/2014	17	16	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1074	AL	6/17/2002	4/21/2014	17	12	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	3	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1074	BA	6/17/2002	4/21/2014	18	18	1.0	Decreasing	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1074	CA	4/17/2006	4/21/2014	9	9	0.9	Probably Increasing	4	4	0.5	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1074	FE	6/17/2002	4/21/2014	17	15	1.0	Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1074	K	4/17/2006	4/21/2014	9	9	0.7	No Trend	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1074	MG	6/17/2002	4/21/2014	17	17	1.0	Decreasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1074	NA	4/17/2006	4/21/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	RDX	6/17/2002	7/15/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	HMX	6/17/2002	7/15/2014	20	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	TNT	6/17/2002	7/15/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	DNT24	6/17/2002	7/15/2014	15	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	DNT26	6/17/2002	7/15/2014	15	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	DNT2A	6/17/2002	7/15/2014	15	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	DNT4A	6/17/2002	7/15/2014	15	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	TNB135	6/17/2002	7/15/2014	15	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	DNB13	6/17/2002	7/15/2014	15	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	DIOXANE14	6/17/2002	7/15/2014	5	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	1	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	PCE	6/17/2002	7/15/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	TCE	6/17/2002	7/15/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	DCE12C	6/17/2002	7/15/2014	21	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	DCA12	6/17/2002	7/15/2014	17	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	TCLME	6/17/2002	7/15/2014	16	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	PERC	6/17/2002	7/15/2014	18	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	5	0	0.0	All Non-Detect
PTX06-1075	B	6/17/2002	7/15/2014	17	17	1.0	Decreasing	4	4	1.0	Decreasing	5	5	1.0	Decreasing
PTX06-1075	MN	6/17/2002	7/15/2014	17	13	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	AL	6/17/2002	7/15/2014	17	12	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	3	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	AS	6/17/2002	7/15/2014	9	6	0.9	Probably Increasing	4	3	0.0	N/A (<4 Detections in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	BA	6/17/2002	7/15/2014	18	18	1.0	Decreasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	CA	4/17/2006	7/15/2014	9	9	1.0	Increasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	FE	6/17/2002	7/15/2014	17	15	0.9	Probably Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	K	4/17/2006	7/15/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	MG	6/17/2002	7/15/2014	17	17	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	NA	4/17/2006	7/15/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1076	RDX	6/18/2002	10/21/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	HMX	6/18/2002	10/21/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	TNT	6/18/2002	10/21/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	DNT24	6/18/2002	10/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1076	DNT26	6/18/2002	10/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	DNT2A	6/18/2002	10/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	DNT4A	6/18/2002	10/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	TNB135	6/18/2002	10/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	DNB13	6/18/2002	10/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	PCE	6/18/2002	10/21/2014	27	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	TCE	6/18/2002	10/21/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	DCE12C	6/18/2002	10/21/2014	27	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	DCA12	6/18/2002	10/21/2014	23	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	TCLME	6/18/2002	10/21/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	PERC	6/18/2002	10/21/2014	24	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	B	6/18/2002	10/21/2014	23	23	1.0	Decreasing	4	4	0.6	No Trend	11	11	0.6	No Trend
PTX06-1076	CR	6/18/2002	10/21/2014	27	21	1.0	Increasing	4	2	0.0	N/A (<4 Detections in Dataset)	11	6	1.0	Decreasing
PTX06-1076	CR-6	6/18/2002	10/21/2014	28	2	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1076	MN	6/18/2002	10/21/2014	25	20	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	11	7	1.0	Decreasing
PTX06-1076	NI	6/18/2002	10/21/2014	25	19	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1076	MO	6/18/2002	10/21/2014	25	25	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1076	AL	6/18/2002	4/24/2014	17	9	1.0	Decreasing	4	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1076	AS	6/18/2002	10/21/2014	9	8	1.0	Increasing	4	3	0.0	N/A (<4 Detections in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1076	BA	6/18/2002	10/21/2014	19	19	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1076	CA	4/18/2006	4/24/2014	9	9	0.8	No Trend	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1076	FE	6/18/2002	10/21/2014	25	22	0.6	No Trend	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1076	K	4/18/2006	4/24/2014	9	9	0.5	No Trend	4	4	0.4	Stable	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1076	MG	6/18/2002	4/24/2014	17	17	0.7	No Trend	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1076	NA	4/18/2006	4/24/2014	9	9	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1076	V	6/18/2002	10/21/2014	21	21	1.0	Increasing	4	4	0.4	Stable	11	11	1.0	Decreasing
PTX06-1137A	RDX	11/10/2009	10/20/2014	12	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	12	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	HMX	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	TNT	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	DNT24	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	DNT26	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	DNT2A	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	DNT4A	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	TNB135	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	DNB13	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	PCE	11/10/2009	10/20/2014	11	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	TCE	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	DCE12C	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	DCA12	11/10/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1137A	TCLME	11/10/2009	10/20/2014	11	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	B	11/10/2009	10/20/2014	11	11	0.5	No Trend	4	4	1.0	Decreasing	11	11	0.5	No Trend
PTX06-1137A	CR	11/10/2009	10/20/2014	11	8	1.0	Decreasing	4	4	1.0	Decreasing	11	8	1.0	Decreasing
PTX06-1137A	CR-6	11/10/2009	10/20/2014	11	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	MN	11/10/2009	10/20/2014	11	7	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	11	7	1.0	Decreasing
PTX06-1137A	NI	11/10/2009	10/20/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1137A	MO	11/10/2009	10/20/2014	11	11	1.0	Decreasing	4	4	0.4	Stable	11	11	1.0	Decreasing
PTX06-1137A	AL	1/26/2010	5/1/2014	3	0	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1137A	AS	10/20/2014	10/20/2014	1	1	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1137A	BA	1/26/2010	10/20/2014	4	4	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1137A	CA	1/26/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1137A	FE	11/10/2009	10/20/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1137A	K	1/26/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1137A	MG	1/26/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1137A	NA	1/26/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1137A	V	11/10/2009	10/20/2014	11	11	0.6	No Trend	4	4	1.0	Decreasing	11	11	0.6	No Trend
PTX06-1138	RDX	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	HMX	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	TNT	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	DNT24	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	DNT26	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	DNT2A	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	DNT4A	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	TNB135	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	DNB13	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	PCE	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	TCE	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	DCE12C	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	DCA12	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	TCLME	10/1/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1138	B	10/1/2009	10/20/2014	11	11	0.7	No Trend	4	4	1.0	Decreasing	11	11	0.7	No Trend
PTX06-1138	CR	10/1/2009	10/20/2014	11	7	1.0	Decreasing	4	4	1.0	Decreasing	11	7	1.0	Decreasing
PTX06-1138	CR-6	10/1/2009	10/20/2014	11	2	0.0	N/A (<4 Detections in Dataset)	4	2	0.0	N/A (<4 Detections in Dataset)	11	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1138	MN	10/1/2009	10/20/2014	11	9	1.0	Decreasing	4	4	0.6	No Trend	11	9	1.0	Decreasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1138	NI	10/1/2009	10/20/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1138	MO	10/1/2009	10/20/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1138	AL	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1138	AS	10/20/2014	10/20/2014	1	1	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1138	BA	5/4/2010	10/20/2014	4	4	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1138	CA	5/4/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1138	FE	10/1/2009	10/20/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1138	K	5/4/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1138	MG	5/4/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1138	NA	5/4/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1138	V	10/1/2009	10/20/2014	11	11	0.5	No Trend	4	4	1.0	Decreasing	11	11	0.5	No Trend
PTX06-1139	RDX	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	HMX	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	TNT	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	DNT24	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	DNT26	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	DNT2A	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	DNT4A	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	TNB135	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	DNB13	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	PCE	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	TCE	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	DCE12C	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	DCA12	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	TCLME	9/30/2009	8/5/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1139	B	9/30/2009	8/5/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1139	CR	9/30/2009	8/5/2014	11	5	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	11	5	1.0	Decreasing
PTX06-1139	CR-6	9/30/2009	8/5/2014	11	1	0.0	N/A (<4 Detections in Dataset)	4	1	0.0	N/A (<4 Detections in Dataset)	11	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1139	MN	9/30/2009	8/5/2014	11	10	1.0	Decreasing	4	4	0.4	Stable	11	10	1.0	Decreasing
PTX06-1139	NI	9/30/2009	8/5/2014	11	9	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	11	9	1.0	Decreasing
PTX06-1139	MO	9/30/2009	8/5/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1139	AL	5/4/2010	2/18/2014	3	2	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1139	AS	8/5/2014	8/5/2014	1	0	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)	1	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1139	BA	5/4/2010	8/5/2014	4	4	0.6	No Trend	4	4	0.6	No Trend	4	4	0.6	No Trend
PTX06-1139	CA	5/4/2010	2/18/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1139	FE	9/30/2009	8/5/2014	11	11	1.0	Decreasing	4	4	0.8	No Trend	11	11	1.0	Decreasing
PTX06-1139	K	5/4/2010	2/18/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1139	MG	5/4/2010	2/18/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1139	NA	5/4/2010	2/18/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1139	V	9/30/2009	8/5/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1140	RDX	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	HMX	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	TNT	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	DNT24	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	DNT26	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	DNT2A	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	DNT4A	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	TNB135	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	DNB13	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	PCE	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	TCE	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	DCE12C	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	DCA12	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	TCLME	10/5/2009	10/20/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1140	B	10/5/2009	10/20/2014	11	11	0.8	No Trend	4	4	1.0	Decreasing	11	11	0.8	No Trend
PTX06-1140	CR	10/5/2009	10/20/2014	12	11	1.0	Decreasing	4	4	1.0	Decreasing	12	11	1.0	Decreasing
PTX06-1140	CR-6	10/5/2009	10/20/2014	12	4	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	12	4	1.0	Decreasing
PTX06-1140	MN	10/5/2009	10/20/2014	11	6	1.0	Decreasing	4	0	0.0	All Non-Detect	11	6	1.0	Decreasing
PTX06-1140	NI	10/5/2009	10/20/2014	11	10	1.0	Decreasing	4	4	1.0	Decreasing	11	10	1.0	Decreasing
PTX06-1140	MO	10/5/2009	10/20/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1140	AL	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1140	AS	10/20/2014	10/20/2014	1	1	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1140	BA	5/4/2010	10/20/2014	4	4	0.6	No Trend	4	4	0.6	No Trend	4	4	0.6	No Trend
PTX06-1140	CA	5/4/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1140	FE	10/5/2009	10/20/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1140	K	5/4/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1140	MG	5/4/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1140	NA	5/4/2010	5/1/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1140	V	10/5/2009	10/20/2014	11	11	1.0	Increasing	4	4	0.6	No Trend	11	11	1.0	Increasing
PTX06-1141	RDX	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	HMX	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	TNT	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	DNT24	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1141	DNT26	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	DNT2A	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	DNT4A	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	TNB135	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	DNB13	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	DIOXANE14	6/27/2011	8/20/2014	2	0	0.0	N/A (<4 Samples in Dataset)	2	2	0.0	N/A (<4 Samples in Dataset)	2	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1141	PCE	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	TCE	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	DCE12C	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	DCA12	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	TCLME	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	PERC	10/14/2009	8/20/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1141	B	10/14/2009	8/20/2014	10	10	1.0	Decreasing	4	4	1.0	Decreasing	10	10	1.0	Decreasing
PTX06-1141	MN	7/21/2010	8/20/2014	4	4	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1141	AL	7/21/2010	1/23/2014	3	1	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1141	AS	6/27/2011	8/20/2014	2	0	0.0	N/A (<4 Samples in Dataset)	2	2	0.0	N/A (<4 Samples in Dataset)	2	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1141	BA	7/21/2010	8/20/2014	5	5	0.7	No Trend	4	4	0.6	No Trend	5	5	0.7	No Trend
PTX06-1141	CA	7/21/2010	1/23/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1141	FE	7/21/2010	1/23/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1141	K	7/21/2010	1/23/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1141	MG	7/21/2010	1/23/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1141	NA	7/21/2010	1/23/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1143	RDX	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	HMX	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	TNT	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	DNT24	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	DNT26	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	DNT2A	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	DNT4A	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	TNB135	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	DNB13	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	DIOXANE14	6/8/2011	10/30/2014	2	0	0.0	N/A (<4 Samples in Dataset)	2	2	0.0	N/A (<4 Samples in Dataset)	2	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1143	PCE	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	TCE	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	DCE12C	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	DCA12	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	TCLME	10/15/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1143	PERC	10/15/2009	10/30/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1143	B	10/15/2009	10/30/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1143	MN	5/5/2010	10/30/2014	5	2	0.0	N/A (<4 Detections in Dataset)	4	2	0.0	N/A (<4 Detections in Dataset)	5	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1143	AL	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1143	AS	6/8/2011	10/30/2014	2	2	0.0	N/A (<4 Samples in Dataset)	2	2	0.0	N/A (<4 Samples in Dataset)	2	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1143	BA	5/5/2010	10/30/2014	5	5	0.8	No Trend	4	4	0.7	No Trend	5	5	0.8	No Trend
PTX06-1143	CA	5/5/2010	5/5/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1143	FE	5/5/2010	5/5/2014	4	4	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing
PTX06-1143	K	5/5/2010	5/5/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1143	MG	5/5/2010	5/5/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1143	NA	5/5/2010	5/5/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1144	RDX	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	HMX	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	TNT	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	DNT24	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	DNT26	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	DNT2A	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	DNT4A	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	TNB135	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	DNB13	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	DIOXANE14	10/30/2014	10/30/2014	1	0	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)	1	0	0.0	N/A (<4 Samples in Dataset)
PTX06-1144	PCE	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	TCE	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	DCE12C	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	DCA12	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	TCLME	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	PERC	11/4/2009	10/30/2014	11	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX06-1144	B	11/4/2009	10/30/2014	11	11	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX06-1144	CR	5/5/2010	12/17/2014	4	2	0.0	N/A (<4 Detections in Dataset)	4	2	0.0	N/A (<4 Detections in Dataset)	4	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1144	CR-6	5/5/2010	12/17/2014	4	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect
PTX06-1144	MN	5/5/2010	10/30/2014	5	4	1.0	Decreasing	4	4	0.4	Stable	5	4	1.0	Decreasing
PTX06-1144	AL	5/5/2010	5/5/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1144	AS	10/30/2014	10/30/2014	1	1	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1144	BA	5/5/2010	10/30/2014	4	4	0.5	No Trend	4	4	0.5	No Trend	4	4	0.5	No Trend
PTX06-1144	CA	5/5/2010	5/5/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1144	FE	5/5/2010	5/5/2014	4	4	1.0	Decreasing	4	4	1.0	Decreasing	4	4	1.0	Decreasing

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX06-1144	K	5/5/2010	5/5/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1144	MG	5/5/2010	5/5/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1144	NA	5/5/2010	5/5/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1157	RDX	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	HMX	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	TNT	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	DNT24	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	DNT26	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	DNT2A	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	DNT4A	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	TNB135	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	DNB13	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	PCE	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	TCE	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	DCE12C	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	DCA12	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	TCLME	6/15/2010	8/5/2014	10	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	10	0	0.0	All Non-Detect
PTX06-1157	B	6/15/2010	8/5/2014	10	10	1.0	Increasing	4	4	1.0	Decreasing	10	10	1.0	Increasing
PTX06-1157	CR	6/15/2010	8/5/2014	10	10	1.0	Decreasing	4	4	0.4	Stable	10	10	1.0	Decreasing
PTX06-1157	CR-6	6/15/2010	8/5/2014	10	2	0.0	N/A (<4 Detections in Dataset)	4	2	0.0	N/A (<4 Detections in Dataset)	10	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1157	MN	6/15/2010	8/5/2014	10	8	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	10	8	1.0	Decreasing
PTX06-1157	NI	6/15/2010	8/5/2014	10	9	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	10	9	1.0	Decreasing
PTX06-1157	MO	6/15/2010	8/5/2014	10	10	1.0	Decreasing	4	4	1.0	Decreasing	10	10	1.0	Decreasing
PTX06-1157	AL	10/21/2010	1/21/2014	3	2	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1157	AS	6/7/2011	8/5/2014	2	1	0.0	N/A (<4 Samples in Dataset)	2	2	0.0	N/A (<4 Samples in Dataset)	2	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1157	BA	10/21/2010	8/5/2014	5	5	0.4	Stable	4	4	1.0	Decreasing	5	5	0.4	Stable
PTX06-1157	CA	10/21/2010	1/21/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1157	FE	6/15/2010	8/5/2014	10	9	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	10	9	1.0	Decreasing
PTX06-1157	K	10/21/2010	1/21/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1157	MG	10/21/2010	1/21/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1157	NA	10/21/2010	1/21/2014	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)	3	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1157	V	6/15/2010	8/5/2014	10	10	1.0	Decreasing	4	4	0.4	Stable	10	10	1.0	Decreasing
PTX07-1R01	RDX	9/19/2000	11/3/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	HMX	9/19/2000	11/3/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	TNT	9/19/2000	11/3/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	DNT24	9/19/2000	11/3/2014	19	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	DNT26	9/19/2000	11/3/2014	19	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	DNT2A	9/19/2000	11/3/2014	19	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	DNT4A	9/19/2000	11/3/2014	19	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	TNB135	9/19/2000	11/3/2014	19	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	DNB13	9/19/2000	11/3/2014	19	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	DIOXANE14	7/26/2001	11/3/2014	4	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	2	0	0.0	N/A (<4 Samples in Dataset)
PTX07-1R01	PCE	5/8/2000	11/3/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	TCE	5/8/2000	11/3/2014	22	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	DCE12C	5/8/2000	11/3/2014	18	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	DCA12	5/8/2000	11/3/2014	20	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	TCLME	5/8/2000	11/3/2014	19	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX07-1R01	PERC	9/19/2000	11/3/2014	21	1	0.0	N/A (<4 Detections in Dataset)	4	0	0.0	All Non-Detect	11	1	0.0	N/A (<4 Detections in Dataset)
PTX07-1R01	B	9/19/2000	11/3/2014	20	20	0.9	Probably Increasing	4	4	1.0	Decreasing	11	11	0.9	No Trend
PTX07-1R01	MN	9/19/2000	11/3/2014	14	12	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	4	3	0.0	N/A (<4 Detections in Dataset)
PTX07-1R01	AL	9/19/2000	4/16/2014	13	7	1.0	Decreasing	4	2	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Samples in Dataset)
PTX07-1R01	AS	9/19/2000	11/3/2014	9	8	0.7	No Trend	4	4	0.4	Stable	2	2	0.0	N/A (<4 Samples in Dataset)
PTX07-1R01	BA	9/19/2000	11/3/2014	16	16	1.0	Decreasing	4	4	0.4	Stable	5	5	1.0	Decreasing
PTX07-1R01	CA	9/19/2000	4/16/2014	10	10	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX07-1R01	FE	9/19/2000	4/16/2014	13	13	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX07-1R01	K	9/19/2000	4/16/2014	10	10	1.0	Decreasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX07-1R01	MG	9/19/2000	4/16/2014	13	13	0.9	No Trend	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX07-1R01	NA	9/19/2000	4/16/2014	10	10	1.0	Decreasing	4	4	0.7	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	RDX	3/19/1996	8/13/2014	34	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	HMX	3/19/1996	8/13/2014	34	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	TNT	3/19/1996	8/13/2014	34	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	DNT24	3/19/1996	8/13/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	DNT26	3/19/1996	8/13/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	DNT2A	3/19/1996	8/13/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	DNT4A	3/19/1996	8/13/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	TNB135	3/19/1996	8/13/2014	28	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	DNB13	3/19/1996	8/13/2014	29	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	DIOXANE14	8/13/2014	8/13/2014	1	0	0.0	N/A (<4 Samples in Dataset)	1	1	0.0	N/A (<4 Samples in Dataset)	1	0	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	PCE	12/11/1995	8/13/2014	36	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	TCE	3/19/1996	8/13/2014	35	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	DCE12C	3/19/1996	8/13/2014	35	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	DCA12	3/19/1996	8/13/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	TCLME	12/11/1995	8/13/2014	31	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect

Ogallala Mann-Kendall Trends

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend	Number of Samples	Number of Detects	Confidence in Trend	Concentration Trend
PTX-BEG2	PERC	8/14/2000	8/13/2014	25	0	0.0	All Non-Detect	4	0	0.0	All Non-Detect	11	0	0.0	All Non-Detect
PTX-BEG2	B	12/11/1995	8/13/2014	32	32	1.0	Decreasing	4	4	1.0	Decreasing	11	11	1.0	Decreasing
PTX-BEG2	MN	12/11/1995	8/13/2014	27	7	1.0	Increasing	4	2	0.0	N/A (<4 Detections in Dataset)	4	2	0.0	N/A (<4 Detections in Dataset)
PTX-BEG2	AL	12/11/1995	1/23/2014	26	14	1.0	Decreasing	4	3	0.0	N/A (<4 Detections in Dataset)	3	2	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	AS	12/11/1995	8/13/2014	18	11	0.9	No Trend	4	2	0.0	N/A (<4 Detections in Dataset)	1	0	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	BA	12/11/1995	8/13/2014	28	28	1.0	Decreasing	4	4	0.4	Stable	4	4	0.4	Stable
PTX-BEG2	CA	12/11/1995	1/23/2014	21	21	1.0	Decreasing	4	4	0.8	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	FE	12/11/1995	1/23/2014	25	20	1.0	Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	K	12/11/1995	1/23/2014	20	20	1.0	Increasing	4	4	1.0	Decreasing	3	3	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	MG	12/11/1995	1/23/2014	26	26	0.8	No Trend	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	NA	12/11/1995	1/23/2014	20	20	1.0	Increasing	4	4	0.6	No Trend	3	3	0.0	N/A (<4 Samples in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX01-1010	RDX	4/26/2000	8/19/2014	1	42	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX01-1010	HMX	4/26/2000	8/19/2014	0	43	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	TNT	4/26/2000	8/19/2014	0	43	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	DNT24	4/26/2000	8/19/2014	0	33	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	DNT26	4/26/2000	8/19/2014	0	33	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	DNT2A	4/26/2000	8/19/2014	0	33	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	DNT4A	4/26/2000	8/19/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	TNB135	4/26/2000	8/19/2014	0	33	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	DNB13	4/26/2000	8/19/2014	0	33	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	DIOXANE14	2/21/2002	8/19/2014	0	9	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX01-1010	PCE	4/26/2000	8/19/2014	0	44	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	TCE	4/26/2000	8/19/2014	0	44	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	DCE12C	4/26/2000	8/19/2014	0	44	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	DCA12	4/26/2000	8/19/2014	0	36	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	TCLME	4/26/2000	8/19/2014	0	34	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	PERC	11/1/2001	8/19/2014	0	42	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1010	B	4/26/2000	8/19/2014	35	0	1.0	Decreasing	4	0	0.7	Stable	11	0	0.9	Probably Decreasing
PTX01-1010	MN	4/26/2000	8/19/2014	12	18	0.7	No Trend	4	0	0.9	No Trend	3	1	0.0	N/A (<4 Detections in Dataset)
PTX01-1010	AL	4/26/2000	1/22/2014	11	18	0.7	No Trend	4	0	0.9	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1010	AS	4/26/2000	8/19/2014	4	14	0.9	No Trend	4	0	0.9	No Trend	0	2	0.0	N/A (<4 Samples in Dataset)
PTX01-1010	BA	4/26/2000	8/19/2014	37	0	0.9	Probably Increasing	4	0	0.7	Stable	5	0	1.0	Decreasing
PTX01-1010	CA	4/26/2000	1/22/2014	14	0	1.0	Increasing	4	0	1.0	Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1010	FE	4/26/2000	1/22/2014	19	10	0.9	Probably Increasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1010	K	4/26/2000	1/22/2014	14	0	0.8	No Trend	4	0	0.9	Probably Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1010	MG	4/26/2000	1/22/2014	29	0	1.0	Increasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1010	NA	4/26/2000	1/22/2014	14	0	1.0	Decreasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1011	RDX	1/28/2002	8/19/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	HMX	1/28/2002	8/19/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	TNT	1/28/2002	8/19/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	DNT24	1/28/2002	8/19/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	DNT26	1/28/2002	8/19/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	DNT2A	1/28/2002	8/19/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	DNT4A	1/28/2002	8/19/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	TNB135	1/28/2002	8/19/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	DNB13	1/28/2002	8/19/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	DIOXANE14	8/1/2002	8/19/2014	0	5	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	PCE	1/28/2002	8/19/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	TCE	1/28/2002	8/19/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	DCE12C	1/28/2002	8/19/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	DCA12	1/28/2002	8/19/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	TCLME	1/28/2002	8/19/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	PERC	1/28/2002	8/19/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1011	B	1/28/2002	8/19/2014	24	0	0.9	Probably Decreasing	4	0	0.8	Stable	11	0	0.9	Probably Decreasing
PTX01-1011	MN	1/28/2002	8/19/2014	13	6	0.9	No Trend	4	0	0.9	Probably Increasing	3	1	0.0	N/A (<4 Detections in Dataset)
PTX01-1011	AL	1/28/2002	1/22/2014	5	13	0.8	No Trend	4	0	0.7	No Trend	0	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1011	AS	1/28/2002	8/19/2014	5	6	0.6	Stable	4	0	0.8	No Trend	1	1	0.0	N/A (<4 Detections in Dataset)
PTX01-1011	BA	1/28/2002	8/19/2014	22	0	1.0	Decreasing	4	0	0.8	Stable	5	0	0.6	Stable
PTX01-1011	CA	1/18/2006	1/22/2014	9	0	1.0	Decreasing	4	0	0.9	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1011	FE	1/28/2002	1/22/2014	15	3	0.6	No Trend	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1011	K	1/18/2006	1/22/2014	9	0	1.0	Decreasing	4	0	0.9	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1011	MG	1/28/2002	1/22/2014	18	0	1.0	Decreasing	4	0	0.8	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1011	NA	1/18/2006	1/22/2014	9	0	0.8	Stable	4	0	0.5	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1012	RDX	4/28/2003	7/14/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	HMX	4/28/2003	7/14/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	TNT	4/28/2003	7/14/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	DNT24	4/28/2003	7/14/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	DNT26	4/28/2003	7/14/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	DNT2A	4/28/2003	7/14/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	DNT4A	4/28/2003	7/14/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	TNB135	4/28/2003	7/14/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	DNB13	4/28/2003	7/14/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	DIOXANE14	4/28/2003	7/14/2014	0	5	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	1	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	PCE	6/1/2000	7/14/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	TCE	6/1/2000	7/14/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	DCE12C	6/1/2000	7/14/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	DCA12	6/1/2000	7/14/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	TCLME	6/1/2000	7/14/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	PERC	4/28/2003	7/14/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1012	B	4/28/2003	7/14/2014	21	0	1.0	Decreasing	4	0	0.7	Stable	11	0	0.7	Stable
PTX01-1012	MN	4/28/2003	7/14/2014	13	3	0.6	No Trend	4	0	0.5	Stable	4	0	0.7	No Trend
PTX01-1012	AL	4/28/2003	1/20/2014	10	5	0.6	Stable	4	0	0.9	No Trend	2	1	0.0	N/A (<4 Detections in Dataset)
PTX01-1012	AS	4/28/2003	7/14/2014	2	5	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	0	1	0.0	N/A (<4 Samples in Dataset)
PTX01-1012	BA	4/28/2003	7/14/2014	18	0	1.0	Decreasing	4	0	1.0	Decreasing	4	0	1.0	Decreasing
PTX01-1012	CA	1/17/2006	1/20/2014	9	0	0.9	Probably Decreasing	4	0	0.5	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1012	FE	4/28/2003	1/20/2014	12	3	1.0	Increasing	4	0	0.9	Probably Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1012	K	1/17/2006	1/20/2014	9	0	0.7	Stable	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1012	MG	4/28/2003	1/20/2014	15	0	0.8	No Trend	4	0	0.5	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1012	NA	1/17/2006	1/20/2014	9	0	0.8	No Trend	4	0	0.6	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX01-1013	RDX	6/8/2000	7/14/2014	0	41	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	HMX	6/8/2000	7/14/2014	0	41	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	TNT	6/8/2000	7/14/2014	0	41	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	DNT24	6/8/2000	7/14/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	DNT26	6/8/2000	7/14/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	DNT2A	6/8/2000	7/14/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	DNT4A	6/8/2000	7/14/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	TNB135	6/8/2000	7/14/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	DNB13	6/8/2000	7/14/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	DIOXANE14	11/20/2002	7/14/2014	0	2	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	1	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	PCE	6/1/2000	7/14/2014	0	44	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	TCE	6/1/2000	7/14/2014	0	44	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	DCE12C	6/1/2000	7/14/2014	0	43	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	DCA12	6/1/2000	7/14/2014	0	36	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	TCLME	6/1/2000	7/14/2014	0	34	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	PERC	8/21/2001	7/14/2014	0	41	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX01-1013	B	6/8/2000	7/14/2014	34	0	0.8	Stable	4	0	0.7	Stable	11	0	0.6	Stable
PTX01-1013	MN	6/8/2000	7/14/2014	18	11	1.0	Decreasing	4	0	0.7	No Trend	0	4	0.0	All Non-Detect
PTX01-1013	AL	6/8/2000	1/20/2014	14	14	1.0	Decreasing	4	0	0.6	Stable	0	3	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	AS	6/8/2000	7/14/2014	5	11	1.0	Decreasing	4	0	0.5	Stable	0	1	0.0	N/A (<4 Samples in Dataset)
PTX01-1013	BA	6/8/2000	7/14/2014	35	0	1.0	Decreasing	4	0	0.9	Probably Increasing	4	0	0.9	No Trend
PTX01-1013	CA	6/8/2000	1/20/2014	14	0	0.9	Probably Decreasing	4	0	0.9	Probably Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1013	FE	6/8/2000	1/20/2014	23	5	0.6	No Trend	4	0	0.9	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1013	K	6/8/2000	1/20/2014	14	0	0.8	No Trend	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1013	MG	6/8/2000	1/20/2014	28	0	1.0	Increasing	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX01-1013	NA	6/8/2000	1/20/2014	14	0	1.0	Decreasing	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1033	RDX	1/30/1997	11/3/2014	1	33	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1033	HMX	1/30/1997	11/3/2014	0	35	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	TNT	1/30/1997	11/3/2014	0	35	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	DNT24	1/30/1997	11/3/2014	0	30	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	DNT26	1/30/1997	11/3/2014	0	30	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	DNT2A	1/30/1997	11/3/2014	0	30	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	DNT4A	1/30/1997	11/3/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	TNB135	1/30/1997	11/3/2014	0	30	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	DNB13	1/30/1997	11/3/2014	0	30	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	PCE	1/30/1997	11/3/2014	1	33	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1033	TCE	1/30/1997	11/3/2014	1	33	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1033	DCE12C	1/30/1997	11/3/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	DCA12	1/30/1997	11/3/2014	0	30	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	TCLME	1/30/1997	11/3/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	PERC	5/3/2001	11/3/2014	0	26	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1033	B	1/30/1997	11/3/2014	36	0	1.0	Increasing	4	0	0.6	Stable	11	0	0.9	Probably Decreasing
PTX06-1033	CR	1/30/1997	11/3/2014	38	0	0.6	No Trend	4	0	0.9	Probably Increasing	11	0	0.9	No Trend
PTX06-1033	CR-6	1/30/1997	11/3/2014	10	28	1.0	Decreasing	4	0	0.8	Stable	4	7	0.8	Stable
PTX06-1033	MN	1/30/1997	11/3/2014	28	7	0.9	No Trend	4	0	1.0	Increasing	9	2	0.6	No Trend
PTX06-1033	NI	1/30/1997	11/3/2014	34	2	0.7	Stable	4	0	1.0	Increasing	11	0	0.9	Stable
PTX06-1033	MO	1/30/1997	11/3/2014	35	0	0.6	Stable	4	0	0.9	Probably Increasing	11	0	1.0	Decreasing
PTX06-1033	AL	1/30/1997	5/5/2014	9	18	0.8	No Trend	4	0	0.6	Stable	1	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1033	AS	1/30/1997	11/3/2014	15	5	0.6	No Trend	4	0	0.8	Stable	1	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1033	BA	1/30/1997	11/3/2014	29	0	0.9	No Trend	4	0	0.7	No Trend	4	0	0.7	No Trend
PTX06-1033	CA	1/30/1997	5/5/2014	17	0	0.8	Stable	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1033	FE	1/30/1997	11/3/2014	33	2	0.8	No Trend	4	0	1.0	Increasing	11	0	0.6	No Trend
PTX06-1033	K	1/30/1997	5/5/2014	17	0	1.0	Decreasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1033	MG	1/30/1997	5/5/2014	27	0	0.9	Probably Increasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1033	NA	1/30/1997	5/5/2014	17	0	1.0	Decreasing	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1033	V	1/30/1997	11/3/2014	31	0	1.0	Decreasing	4	0	0.7	Stable	11	0	1.0	Increasing
PTX06-1043	RDX	10/14/1999	8/5/2014	0	26	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	HMX	10/14/1999	8/5/2014	0	26	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	TNT	10/14/1999	8/5/2014	0	26	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	DNT24	10/14/1999	8/5/2014	1	23	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1043	DNT26	10/14/1999	8/5/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	DNT2A	10/14/1999	8/5/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	DNT4A	10/14/1999	8/5/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	TNB135	10/14/1999	8/5/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	DNB13	10/14/1999	8/5/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	PCE	10/14/1999	8/5/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	TCE	10/14/1999	8/5/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	DCE12C	2/12/2002	8/5/2014	0	18	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	DCA12	10/14/1999	8/5/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	TCLME	10/14/1999	8/5/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1043	PERC	10/14/1999	8/5/2014	1	21	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1043	B	10/14/1999	8/5/2014	23	0	0.9	No Trend	4	0	0.9	Stable	11	0	0.6	Stable
PTX06-1043	CR	10/14/1999	8/5/2014	20	4	0.9	No Trend	4	0	0.7	Stable	8	3	0.9	Stable
PTX06-1043	CR-6	10/14/1999	8/5/2014	4	21	0.7	Stable	4	0	0.7	Stable	2	9	0.0	N/A (<4 Detections in Dataset)
PTX06-1043	MN	10/14/1999	8/5/2014	7	17	0.8	Stable	4	0	0.7	No Trend	1	10	0.0	N/A (<4 Detections in Dataset)
PTX06-1043	NI	10/14/1999	8/5/2014	16	8	1.0	Decreasing	4	0	0.6	No Trend	10	1	1.0	Increasing
PTX06-1043	MO	10/14/1999	8/5/2014	23	1	1.0	Decreasing	4	0	0.9	Stable	11	0	0.8	Stable
PTX06-1043	AL	10/14/1999	1/21/2014	6	10	1.0	Decreasing	4	0	0.8	Stable	0	3	0.0	N/A (<4 Samples in Dataset)

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1043	AS	10/14/1999	8/5/2014	5	6	0.9	Stable	4	0	0.7	Stable	0	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1043	BA	10/14/1999	8/5/2014	17	0	1.0	Decreasing	4	0	0.7	No Trend	4	0	0.5	No Trend
PTX06-1043	CA	10/14/1999	1/21/2014	12	0	1.0	Decreasing	4	0	0.9	Probably Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1043	FE	10/14/1999	8/5/2014	18	6	0.5	No Trend	4	0	0.8	No Trend	9	2	0.9	Probably Decreasing
PTX06-1043	K	10/14/1999	1/21/2014	12	0	0.9	Probably Decreasing	4	0	1.0	Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1043	MG	10/14/1999	1/21/2014	16	0	0.8	Stable	4	0	0.8	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1043	NA	10/14/1999	1/21/2014	12	0	1.0	Decreasing	4	0	0.6	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1043	V	10/14/1999	8/5/2014	22	0	1.0	Increasing	4	0	0.9	Probably Decreasing	11	0	0.6	No Trend
PTX06-1044	RDX	10/13/1999	10/21/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	HMX	10/13/1999	10/21/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	TNT	10/13/1999	10/21/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	DNT24	10/13/1999	10/21/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	DNT26	10/13/1999	10/21/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	DNT2A	10/13/1999	10/21/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	DNT4A	10/13/1999	10/21/2014	0	26	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	TNB135	1/25/2000	10/21/2014	0	26	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	DNB13	10/13/1999	10/21/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	PCE	10/13/1999	10/21/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	TCE	10/13/1999	10/21/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	DCE12C	8/1/2002	10/21/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	DCA12	10/13/1999	10/21/2014	0	26	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	TCLME	10/13/1999	10/21/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1044	PERC	10/13/1999	10/21/2014	1	30	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1044	B	10/13/1999	10/21/2014	29	0	1.0	Increasing	4	0	0.7	No Trend	11	0	0.9	Stable
PTX06-1044	CR	10/13/1999	10/21/2014	30	2	0.8	No Trend	4	0	0.6	No Trend	9	2	0.6	No Trend
PTX06-1044	CR-6	10/13/1999	10/21/2014	6	24	1.0	Decreasing	4	0	0.9	Probably Decreasing	3	8	0.0	N/A (<4 Detections in Dataset)
PTX06-1044	MN	10/13/1999	10/21/2014	18	10	1.0	Decreasing	4	0	0.7	No Trend	8	3	0.6	No Trend
PTX06-1044	NI	10/13/1999	10/21/2014	27	3	1.0	Decreasing	4	0	0.8	Stable	11	0	1.0	Decreasing
PTX06-1044	MO	10/13/1999	10/21/2014	28	0	1.0	Decreasing	4	0	0.9	Stable	11	0	1.0	Decreasing
PTX06-1044	AL	10/13/1999	4/15/2014	9	11	1.0	Decreasing	4	0	0.6	Stable	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1044	AS	10/13/1999	10/21/2014	9	3	0.8	Stable	4	0	1.0	Decreasing	1	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1044	BA	10/13/1999	10/21/2014	22	0	1.0	Decreasing	4	0	0.9	Probably Decreasing	4	0	1.0	Decreasing
PTX06-1044	CA	10/13/1999	4/15/2014	15	0	0.6	Stable	4	0	1.0	Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1044	FE	10/13/1999	10/21/2014	28	0	0.8	No Trend	4	0	0.5	Stable	11	0	0.7	Stable
PTX06-1044	K	10/13/1999	4/15/2014	15	0	0.9	Probably Decreasing	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1044	MG	10/13/1999	4/15/2014	20	0	1.0	Decreasing	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1044	NA	10/13/1999	4/15/2014	15	0	1.0	Decreasing	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1044	V	10/13/1999	10/21/2014	24	0	1.0	Increasing	4	0	1.0	Decreasing	11	0	1.0	Increasing
PTX06-1056	RDX	8/20/2001	10/21/2014	0	30	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	12	0.0	All Non-Detect
PTX06-1056	HMX	8/20/2001	10/21/2014	1	29	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	12	0.0	All Non-Detect
PTX06-1056	TNT	8/20/2001	10/21/2014	0	30	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	12	0.0	All Non-Detect
PTX06-1056	DNT24	8/20/2001	10/21/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	12	0.0	All Non-Detect
PTX06-1056	DNT26	8/20/2001	10/21/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	12	0.0	All Non-Detect
PTX06-1056	DNT2A	8/20/2001	10/21/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	12	0.0	All Non-Detect
PTX06-1056	DNT4A	8/20/2001	10/21/2014	3	22	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	9	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	TNB135	8/20/2001	10/21/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	12	0.0	All Non-Detect
PTX06-1056	DNB13	8/20/2001	10/21/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	12	0.0	All Non-Detect
PTX06-1056	PCE	8/9/2000	10/21/2014	0	30	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1056	TCE	8/9/2000	10/21/2014	1	30	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1056	DCE12C	8/20/2001	10/21/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1056	DCA12	8/9/2000	10/21/2014	0	26	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1056	TCLME	8/9/2000	10/21/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1056	B	8/20/2001	10/21/2014	26	0	1.0	Decreasing	4	0	1.0	Decreasing	11	0	0.9	Probably Decreasing
PTX06-1056	CR	8/20/2001	10/21/2014	15	11	1.0	Increasing	4	0	1.0	Decreasing	5	6	1.0	Decreasing
PTX06-1056	CR-6	8/20/2001	10/21/2014	3	24	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	2	9	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	MN	8/20/2001	10/21/2014	11	14	1.0	Decreasing	4	0	0.9	Stable	2	10	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	NI	8/20/2001	10/21/2014	20	4	1.0	Decreasing	4	0	0.7	Stable	10	1	0.9	Stable
PTX06-1056	MO	8/20/2001	10/21/2014	23	1	1.0	Decreasing	4	0	0.7	Stable	11	0	1.0	Decreasing
PTX06-1056	AL	8/20/2001	4/24/2014	6	10	1.0	Decreasing	4	0	0.8	Stable	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1056	AS	8/20/2001	10/21/2014	9	1	0.8	No Trend	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	BA	8/20/2001	10/21/2014	19	0	1.0	Increasing	4	0	0.8	No Trend	5	0	1.0	Increasing
PTX06-1056	CA	1/31/2006	4/24/2014	9	0	1.0	Increasing	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	FE	8/20/2001	10/21/2014	19	5	1.0	Increasing	4	0	0.6	Stable	10	1	0.8	Stable
PTX06-1056	K	1/31/2006	4/24/2014	9	0	0.8	Stable	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	MG	8/20/2001	4/24/2014	16	0	0.9	Probably Decreasing	4	0	0.5	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	NA	1/31/2006	4/24/2014	9	0	1.0	Decreasing	4	0	0.9	Probably Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1056	V	8/20/2001	10/21/2014	20	0	0.9	Probably Increasing	4	0	0.8	Stable	11	0	0.8	No Trend
PTX06-1057A	RDX	8/13/2001	4/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	HMX	8/13/2001	4/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	TNT	8/13/2001	4/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	DNT24	8/13/2001	4/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	DNT26	8/13/2001	4/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	DNT2A	8/13/2001	4/15/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	DNT4A	8/13/2001	4/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	TNB135	8/13/2001	4/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	DNB13	8/13/2001	4/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	PCE	8/13/2001	4/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	TCE	8/13/2001	4/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1057A	DCE12C	8/13/2001	4/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	DCA12	8/13/2001	4/15/2014	0	18	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	TCLME	8/13/2001	4/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	PERC	8/13/2001	4/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1057A	B	8/13/2001	4/15/2014	18	0	0.8	Stable	4	0	1.0	Decreasing	5	0	0.8	Stable
PTX06-1057A	MN	8/13/2001	4/15/2014	18	0	1.0	Decreasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1057A	AL	8/13/2001	4/15/2014	19	0	1.0	Decreasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1057A	BA	8/13/2001	4/15/2014	21	0	1.0	Decreasing	4	0	0.5	Stable	4	0	1.0	Decreasing
PTX06-1057A	CA	4/20/2006	4/15/2014	9	0	0.9	Probably Increasing	4	0	0.9	Probably Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1057A	FE	8/13/2001	4/15/2014	18	0	1.0	Decreasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1057A	K	4/20/2006	4/15/2014	9	0	1.0	Decreasing	4	0	1.0	Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1057A	MG	8/13/2001	4/15/2014	18	0	1.0	Decreasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1057A	NA	4/20/2006	4/15/2014	9	0	1.0	Decreasing	4	0	1.0	Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1058	RDX	4/4/2001	7/15/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	HMX	4/4/2001	7/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	TNT	4/4/2001	7/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	DNT24	4/4/2001	7/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	DNT26	4/4/2001	7/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	DNT2A	4/4/2001	7/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	DNT4A	4/4/2001	7/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	TNB135	4/4/2001	7/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	DNB13	4/4/2001	7/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	DIOXANE14	8/13/2001	7/15/2014	0	7	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1058	PCE	4/4/2001	7/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	TCE	4/4/2001	7/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	DCE12C	8/13/2001	7/15/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	DCA12	4/4/2001	7/15/2014	0	18	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	TCLME	4/4/2001	7/15/2014	1	16	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	5	0.0	All Non-Detect
PTX06-1058	PERC	4/4/2001	7/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1058	B	4/4/2001	7/15/2014	18	0	0.8	No Trend	4	0	0.9	Probably Decreasing	5	0	0.9	Probably Decreasing
PTX06-1058	CR	4/4/2001	7/15/2014	21	1	1.0	Increasing	4	0	0.8	Stable	4	0	0.8	Stable
PTX06-1058	MN	4/4/2001	7/15/2014	11	8	0.7	No Trend	4	0	0.9	Probably Decreasing	4	0	0.9	Probably Decreasing
PTX06-1058	NI	4/4/2001	7/15/2014	14	5	0.6	No Trend	4	0	1.0	Decreasing	4	0	0.9	Probably Decreasing
PTX06-1058	MO	4/4/2001	7/15/2014	18	0	0.9	Stable	4	0	0.5	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1058	AL	4/4/2001	7/15/2014	9	9	0.7	No Trend	4	0	0.6	No Trend	2	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1058	AS	4/4/2001	7/15/2014	10	1	0.6	Stable	4	0	0.7	No Trend	2	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1058	BA	4/4/2001	7/15/2014	20	0	0.8	Stable	4	0	0.8	Stable	4	0	0.7	Stable
PTX06-1058	CA	4/4/2001	7/15/2014	10	0	1.0	Increasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1058	FE	4/4/2001	7/15/2014	15	4	1.0	Increasing	4	0	0.8	Stable	4	0	0.5	Stable
PTX06-1058	K	4/4/2001	7/15/2014	10	0	1.0	Decreasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1058	MG	4/4/2001	7/15/2014	18	0	0.9	Probably Decreasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1058	NA	4/4/2001	7/15/2014	10	0	1.0	Decreasing	4	0	0.8	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1058	V	8/13/2001	7/15/2014	14	0	1.0	Decreasing	4	0	1.0	Decreasing	4	0	0.9	Stable
PTX06-1059	RDX	4/4/2001	7/15/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	HMX	4/4/2001	7/15/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	TNT	4/4/2001	7/15/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	DNT24	4/4/2001	7/15/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	DNT26	4/4/2001	7/15/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	DNT2A	4/4/2001	7/15/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	DNT4A	4/4/2001	7/15/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	TNB135	4/4/2001	7/15/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	DNB13	4/4/2001	7/15/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	DIOXANE14	4/28/2003	7/15/2014	0	5	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	PCE	4/4/2001	7/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	TCE	4/4/2001	7/15/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	DCE12C	4/28/2003	7/15/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	DCA12	4/4/2001	7/15/2014	0	18	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	TCLME	4/4/2001	7/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	PERC	4/4/2001	7/15/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1059	B	4/4/2001	7/15/2014	18	0	1.0	Increasing	4	0	1.0	Decreasing	5	0	1.0	Decreasing
PTX06-1059	MN	4/4/2001	7/15/2014	7	10	1.0	Decreasing	4	0	0.8	Stable	1	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1059	AL	4/4/2001	7/15/2014	10	7	1.0	Decreasing	4	0	0.6	No Trend	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	AS	4/4/2001	7/15/2014	4	5	0.6	Stable	4	0	0.6	Stable	0	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1059	BA	4/4/2001	7/15/2014	18	0	0.9	Probably Decreasing	4	0	0.5	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1059	CA	4/4/2001	7/15/2014	10	0	0.9	Probably Decreasing	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1059	FE	4/4/2001	7/15/2014	13	4	0.8	No Trend	4	0	0.9	Probably Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1059	K	4/4/2001	7/15/2014	10	0	0.9	Probably Decreasing	4	0	0.9	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1059	MG	4/4/2001	7/15/2014	17	0	1.0	Decreasing	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1059	NA	4/4/2001	7/15/2014	10	0	1.0	Decreasing	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1060	RDX	4/10/2001	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	HMX	4/10/2001	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	TNT	4/10/2001	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	DNT24	4/10/2001	4/21/2014	0	14	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	DNT26	4/10/2001	4/21/2014	0	14	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	DNT2A	4/10/2001	4/21/2014	0	14	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	DNT4A	4/10/2001	4/21/2014	0	14	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	TNB135	4/10/2001	4/21/2014	0	14	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	DNB13	4/10/2001	4/21/2014	0	14	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1060	PCE	4/10/2001	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	TCE	4/10/2001	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	DCE12C	4/10/2001	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	DCA12	4/10/2001	4/21/2014	0	14	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	TCLME	4/10/2001	4/21/2014	0	14	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	PERC	4/10/2001	4/21/2014	0	15	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1060	B	4/10/2001	4/21/2014	15	0	1.0	Decreasing	4	0	1.0	Increasing	6	0	0.7	No Trend
PTX06-1060	MN	4/10/2001	4/21/2014	12	1	0.9	Probably Decreasing	4	0	0.8	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1060	AL	4/10/2001	4/21/2014	8	5	0.8	No Trend	4	0	0.6	No Trend	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1060	BA	4/10/2001	4/21/2014	13	0	1.0	Decreasing	4	0	0.8	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1060	CA	4/10/2001	4/21/2014	7	0	0.8	Stable	4	0	1.0	Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1060	FE	4/10/2001	4/21/2014	12	1	0.7	No Trend	4	0	0.5	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1060	K	4/10/2001	4/21/2014	7	0	1.0	Increasing	4	0	1.0	Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1060	MG	4/10/2001	4/21/2014	13	0	0.9	Probably Decreasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1060	NA	4/10/2001	4/21/2014	7	0	1.0	Decreasing	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1061	RDX	4/28/2003	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	HMX	4/28/2003	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	TNT	4/28/2003	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	DNT24	4/28/2003	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	DNT26	4/28/2003	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	DNT2A	4/28/2003	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	DNT4A	4/28/2003	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	TNB135	4/28/2003	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	DNB13	4/28/2003	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	PCE	4/28/2003	4/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	TCE	4/28/2003	4/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	DCE12C	4/28/2003	4/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	DCA12	4/28/2003	4/21/2014	0	18	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	TCLME	4/28/2003	4/21/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	PERC	4/28/2003	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	6	0.0	All Non-Detect
PTX06-1061	B	4/28/2003	4/21/2014	17	0	1.0	Increasing	4	0	0.6	Stable	6	0	0.9	Probably Increasing
PTX06-1061	MN	4/28/2003	4/21/2014	6	10	0.9	Stable	4	0	0.6	Stable	2	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1061	AL	4/28/2003	4/21/2014	7	9	0.9	Probably Decreasing	4	0	0.9	No Trend	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1061	BA	4/28/2003	4/21/2014	18	0	1.0	Increasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1061	CA	4/26/2006	4/21/2014	9	0	0.9	Probably Increasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1061	FE	4/28/2003	4/21/2014	14	2	0.9	Probably Increasing	4	0	0.9	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1061	K	4/26/2006	4/21/2014	9	0	1.0	Increasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1061	MG	4/28/2003	4/21/2014	16	0	0.9	No Trend	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1061	NA	4/26/2006	4/21/2014	9	0	0.9	Probably Decreasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1062A	RDX	8/21/2001	8/19/2014	0	42	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	HMX	8/21/2001	8/19/2014	0	42	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	TNT	8/21/2001	8/19/2014	0	42	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	DNT24	8/21/2001	8/19/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	DNT26	8/21/2001	8/19/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	DNT2A	8/21/2001	8/19/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	DNT4A	8/21/2001	8/19/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	TNB135	8/21/2001	8/19/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	DNB13	8/21/2001	8/19/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	DIOXANE14	8/2/2002	8/19/2014	0	8	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1062A	PCE	8/21/2001	8/19/2014	0	42	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	TCE	8/21/2001	8/19/2014	1	42	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1062A	DCE12C	8/21/2001	8/19/2014	0	42	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	DCA12	8/21/2001	8/19/2014	0	34	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	TCLME	8/21/2001	8/19/2014	0	32	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	PERC	8/21/2001	8/19/2014	0	42	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1062A	B	8/21/2001	8/19/2014	35	0	1.0	Decreasing	4	0	0.5	Stable	11	0	0.9	Stable
PTX06-1062A	MN	8/21/2001	8/19/2014	18	11	1.0	Decreasing	4	0	0.7	No Trend	4	0	0.6	No Trend
PTX06-1062A	AL	8/21/2001	1/22/2014	19	10	0.9	Probably Decreasing	4	0	1.0	Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1062A	AS	8/21/2001	8/19/2014	5	12	0.9	Stable	4	0	1.0	Decreasing	1	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1062A	BA	8/21/2001	8/19/2014	36	0	1.0	Decreasing	4	0	0.9	Probably Decreasing	5	0	0.6	Stable
PTX06-1062A	CA	1/18/2006	1/22/2014	13	0	1.0	Increasing	4	0	0.9	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1062A	FE	8/21/2001	1/22/2014	21	7	0.7	No Trend	4	0	0.9	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1062A	K	1/18/2006	1/22/2014	13	0	1.0	Increasing	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1062A	MG	8/21/2001	1/22/2014	28	0	1.0	Decreasing	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1062A	NA	1/18/2006	1/22/2014	13	0	1.0	Decreasing	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1064	RDX	4/21/2003	8/25/2014	0	37	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	HMX	4/21/2003	8/25/2014	0	37	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	TNT	4/21/2003	8/25/2014	0	37	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	DNT24	4/21/2003	8/25/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	DNT26	4/21/2003	8/25/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	DNT2A	4/21/2003	8/25/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	DNT4A	4/21/2003	8/25/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	TNB135	4/21/2003	8/25/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	DNB13	4/21/2003	8/25/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	DIOXANE14	5/21/2003	8/25/2014	0	6	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1064	PCE	4/21/2003	8/25/2014	0	37	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	TCE	4/21/2003	8/25/2014	0	37	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	DCE12C	4/21/2003	8/25/2014	0	37	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1064	DCA12	4/21/2003	8/25/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	TCLME	4/21/2003	8/25/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	PERC	4/21/2003	8/25/2014	0	37	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1064	B	4/21/2003	8/25/2014	29	0	1.0	Increasing	4	0	0.8	No Trend	11	0	0.8	Stable
PTX06-1064	MN	4/21/2003	8/25/2014	12	12	0.8	Stable	4	0	0.7	Stable	3	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1064	AL	4/21/2003	1/20/2014	10	13	1.0	Decreasing	4	0	0.5	No Trend	1	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1064	AS	4/21/2003	8/25/2014	5	7	0.8	No Trend	4	0	0.9	No Trend	1	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1064	BA	4/21/2003	8/25/2014	31	0	1.0	Decreasing	4	0	1.0	Decreasing	5	0	0.9	Probably Decreasing
PTX06-1064	CA	1/17/2006	1/20/2014	13	0	0.9	No Trend	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1064	FE	4/21/2003	1/20/2014	15	8	0.9	No Trend	4	0	0.9	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1064	K	1/17/2006	1/20/2014	13	0	1.0	Decreasing	4	0	0.6	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1064	MG	4/21/2003	1/20/2014	23	0	1.0	Increasing	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1064	NA	1/17/2006	1/20/2014	13	0	1.0	Decreasing	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1068	RDX	11/13/2002	10/22/2014	0	38	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	HMX	11/13/2002	10/22/2014	0	38	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	TNT	11/13/2002	10/22/2014	0	38	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	DNT24	11/13/2002	10/22/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	DNT26	11/13/2002	10/22/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	DNT2A	11/13/2002	10/22/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	DNT4A	11/13/2002	10/22/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	TNB135	11/13/2002	10/22/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	DNB13	11/13/2002	10/22/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	DIOXANE14	10/22/2014	10/22/2014	0	1	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1068	PCE	8/26/2002	10/22/2014	1	38	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	10	0.0	N/A (<4 Detections in Dataset)
PTX06-1068	TCE	8/26/2002	10/22/2014	0	39	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	DCE12C	8/26/2002	10/22/2014	0	39	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	DCA12	8/26/2002	10/22/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	TCLME	8/26/2002	10/22/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	PERC	8/26/2002	10/22/2014	0	39	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1068	B	8/26/2002	10/22/2014	31	0	1.0	Increasing	4	0	0.8	Stable	11	0	1.0	Decreasing
PTX06-1068	CR	8/26/2002	10/22/2014	37	1	1.0	Increasing	4	0	1.0	Increasing	9	1	0.6	Stable
PTX06-1068	CR-6	8/26/2002	10/22/2014	8	32	1.0	Increasing	4	0	0.9	No Trend	4	6	0.9	No Trend
PTX06-1068	MN	8/26/2002	10/22/2014	23	8	0.9	Probably Decreasing	4	0	0.9	No Trend	7	2	0.6	Stable
PTX06-1068	AL	8/26/2002	4/24/2014	18	7	1.0	Decreasing	4	0	0.7	No Trend	2	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1068	AS	8/26/2002	10/22/2014	3	10	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	0	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1068	BA	8/26/2002	10/22/2014	28	0	1.0	Decreasing	4	0	0.8	No Trend	4	0	0.9	No Trend
PTX06-1068	CA	1/19/2006	4/24/2014	13	0	1.0	Decreasing	4	0	0.6	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1068	FE	8/26/2002	4/24/2014	28	2	0.8	No Trend	4	0	0.9	Stable	7	1	0.9	Probably Increasing
PTX06-1068	K	1/19/2006	4/24/2014	13	0	0.7	Stable	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1068	MG	8/26/2002	4/24/2014	25	0	1.0	Decreasing	4	0	0.6	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1068	NA	1/19/2006	4/24/2014	13	0	0.6	No Trend	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1072	RDX	9/25/2001	8/13/2014	2	21	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	1	11	0.0	N/A (<4 Detections in Dataset)
PTX06-1072	HMX	9/25/2001	8/13/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	TNT	9/25/2001	8/13/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	DNT24	9/25/2001	8/13/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	DNT26	9/25/2001	8/13/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	DNT2A	9/25/2001	8/13/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	DNT4A	9/25/2001	8/13/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	TNB135	9/25/2001	8/13/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	DNB13	9/25/2001	8/13/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	DIOXANE14	6/10/2002	8/13/2014	0	6	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	PCE	9/25/2001	8/13/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	TCE	9/25/2001	8/13/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	DCE12C	9/25/2001	8/13/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	DCA12	9/25/2001	8/13/2014	0	19	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	TCLME	9/25/2001	8/13/2014	0	19	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	PERC	9/25/2001	8/13/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1072	B	9/25/2001	8/13/2014	20	0	1.0	Decreasing	4	0	0.7	No Trend	11	0	1.0	Increasing
PTX06-1072	MN	9/25/2001	8/13/2014	7	7	0.9	Probably Decreasing	4	0	0.9	Stable	0	4	0.0	All Non-Detect
PTX06-1072	AL	9/25/2001	1/23/2014	5	8	0.9	Probably Decreasing	4	0	0.9	Probably Decreasing	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	AS	9/25/2001	8/13/2014	4	5	0.7	No Trend	4	0	0.7	No Trend	0	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1072	BA	9/25/2001	8/13/2014	15	0	1.0	Decreasing	4	0	0.6	Stable	5	0	0.8	Stable
PTX06-1072	CA	4/18/2006	1/23/2014	6	0	0.8	No Trend	4	0	0.9	Probably Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1072	FE	9/25/2001	1/23/2014	11	2	0.6	No Trend	4	0	0.5	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1072	K	4/18/2006	1/23/2014	6	0	0.9	Stable	4	0	0.9	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1072	MG	9/25/2001	1/23/2014	13	0	0.9	Stable	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1072	NA	4/18/2006	1/23/2014	6	0	0.6	Stable	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1074	RDX	6/17/2002	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	HMX	6/17/2002	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	TNT	6/17/2002	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	DNT24	6/17/2002	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	DNT26	6/17/2002	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	DNT2A	6/17/2002	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	DNT4A	6/17/2002	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	TNB135	6/17/2002	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	DNB13	6/17/2002	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	PCE	6/17/2002	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	TCE	6/17/2002	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1074	DCE12C	6/17/2002	4/21/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	DCA12	6/17/2002	4/21/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	TCLME	6/17/2002	4/21/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	PERC	6/17/2002	4/21/2014	0	18	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1074	B	6/17/2002	4/21/2014	17	0	1.0	Increasing	4	0	0.9	Stable	5	0	1.0	Decreasing
PTX06-1074	MN	6/17/2002	4/21/2014	16	1	0.8	No Trend	4	0	0.6	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1074	AL	6/17/2002	4/21/2014	12	5	0.8	Stable	4	0	1.0	Increasing	2	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1074	BA	6/17/2002	4/21/2014	18	0	1.0	Decreasing	4	0	0.6	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1074	CA	4/17/2006	4/21/2014	9	0	0.9	No Trend	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1074	FE	6/17/2002	4/21/2014	15	2	1.0	Increasing	4	0	0.9	Probably Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1074	K	4/17/2006	4/21/2014	9	0	1.0	Increasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1074	MG	6/17/2002	4/21/2014	17	0	1.0	Decreasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1074	NA	4/17/2006	4/21/2014	9	0	1.0	Decreasing	4	0	0.9	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1075	RDX	6/17/2002	7/15/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	HMX	6/17/2002	7/15/2014	1	19	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	5	0.0	All Non-Detect
PTX06-1075	TNT	6/17/2002	7/15/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	DNT24	6/17/2002	7/15/2014	0	15	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	DNT26	6/17/2002	7/15/2014	0	15	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	DNT2A	6/17/2002	7/15/2014	0	15	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	DNT4A	6/17/2002	7/15/2014	0	15	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	TNB135	6/17/2002	7/15/2014	0	15	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	DNB13	6/17/2002	7/15/2014	0	15	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	DIOXANE14	6/17/2002	7/15/2014	0	5	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1075	PCE	6/17/2002	7/15/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	TCE	6/17/2002	7/15/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	DCE12C	6/17/2002	7/15/2014	0	21	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	DCA12	6/17/2002	7/15/2014	0	17	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	TCLME	6/17/2002	7/15/2014	0	16	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	PERC	6/17/2002	7/15/2014	0	18	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	5	0.0	All Non-Detect
PTX06-1075	B	6/17/2002	7/15/2014	17	0	1.0	Decreasing	4	0	1.0	Decreasing	5	0	0.9	Probably Decreasing
PTX06-1075	MN	6/17/2002	7/15/2014	13	4	1.0	Decreasing	4	0	0.9	No Trend	1	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1075	AL	6/17/2002	7/15/2014	12	5	0.9	Probably Decreasing	4	0	0.7	No Trend	2	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1075	AS	6/17/2002	7/15/2014	6	3	1.0	Decreasing	4	0	0.7	Stable	1	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1075	BA	6/17/2002	7/15/2014	18	0	0.7	Stable	4	0	0.9	Probably Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1075	CA	4/17/2006	7/15/2014	9	0	1.0	Increasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1075	FE	6/17/2002	7/15/2014	15	2	0.6	No Trend	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1075	K	4/17/2006	7/15/2014	9	0	1.0	Decreasing	4	0	0.9	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1075	MG	6/17/2002	7/15/2014	17	0	1.0	Decreasing	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1075	NA	4/17/2006	7/15/2014	9	0	1.0	Decreasing	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1076	RDX	6/18/2002	10/21/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	HMX	6/18/2002	10/21/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	TNT	6/18/2002	10/21/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	DNT24	6/18/2002	10/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	DNT26	6/18/2002	10/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	DNT2A	6/18/2002	10/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	DNT4A	6/18/2002	10/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	TNB135	6/18/2002	10/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	DNB13	6/18/2002	10/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	PCE	6/18/2002	10/21/2014	1	26	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1076	TCE	6/18/2002	10/21/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	DCE12C	6/18/2002	10/21/2014	0	27	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	DCA12	6/18/2002	10/21/2014	0	23	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	TCLME	6/18/2002	10/21/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	PERC	6/18/2002	10/21/2014	0	24	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1076	B	6/18/2002	10/21/2014	23	0	0.9	Probably Decreasing	4	0	0.6	No Trend	11	0	0.7	No Trend
PTX06-1076	CR	6/18/2002	10/21/2014	21	6	0.9	No Trend	4	0	1.0	Decreasing	6	5	0.6	Stable
PTX06-1076	CR-6	6/18/2002	10/21/2014	2	26	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	0	11	0.0	All Non-Detect
PTX06-1076	MN	6/18/2002	10/21/2014	20	5	1.0	Decreasing	4	0	0.8	Stable	7	4	0.8	Stable
PTX06-1076	NI	6/18/2002	10/21/2014	19	6	0.9	Stable	4	0	0.9	Probably Decreasing	11	0	1.0	Decreasing
PTX06-1076	MO	6/18/2002	10/21/2014	25	0	1.0	Decreasing	4	0	0.9	Probably Decreasing	11	0	0.9	Stable
PTX06-1076	AL	6/18/2002	4/24/2014	9	8	1.0	Decreasing	4	0	1.0	Decreasing	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1076	AS	6/18/2002	10/21/2014	8	1	0.8	No Trend	4	0	0.6	No Trend	1	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1076	BA	6/18/2002	10/21/2014	19	0	1.0	Decreasing	4	0	0.6	Stable	4	0	1.0	Increasing
PTX06-1076	CA	4/18/2006	4/24/2014	9	0	0.8	No Trend	4	0	0.9	Probably Increasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1076	FE	6/18/2002	10/21/2014	22	3	0.8	No Trend	4	0	0.6	Stable	11	0	1.0	Decreasing
PTX06-1076	K	4/18/2006	4/24/2014	9	0	1.0	Increasing	4	0	0.6	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1076	MG	6/18/2002	4/24/2014	17	0	1.0	Increasing	4	0	0.8	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1076	NA	4/18/2006	4/24/2014	9	0	1.0	Decreasing	4	0	0.9	Probably Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1076	V	6/18/2002	10/21/2014	21	0	1.0	Increasing	4	0	0.7	Stable	11	0	1.0	Decreasing
PTX06-1137A	RDX	11/10/2009	10/20/2014	1	11	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	11	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	HMX	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	TNT	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	DNT24	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	DNT26	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	DNT2A	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	DNT4A	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	TNB135	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	DNB13	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect

				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1137A	PCE	11/10/2009	10/20/2014	1	10	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	10	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	TCE	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	DCE12C	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	DCA12	11/10/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1137A	TCLME	11/10/2009	10/20/2014	1	10	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	10	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	B	11/10/2009	10/20/2014	11	0	0.6	Stable	4	0	0.9	Stable	11	0	0.6	Stable
PTX06-1137A	CR	11/10/2009	10/20/2014	8	3	0.9	Stable	4	0	0.9	Probably Decreasing	8	3	0.9	Stable
PTX06-1137A	CR-6	11/10/2009	10/20/2014	1	10	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	10	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	MN	11/10/2009	10/20/2014	7	4	0.9	No Trend	4	0	0.7	No Trend	7	4	0.9	No Trend
PTX06-1137A	NI	11/10/2009	10/20/2014	11	0	0.9	Probably Decreasing	4	0	0.9	Stable	11	0	0.9	Probably Decreasing
PTX06-1137A	MO	11/10/2009	10/20/2014	11	0	0.8	Stable	4	0	0.6	No Trend	11	0	0.8	Stable
PTX06-1137A	AL	1/26/2010	5/1/2014	0	3	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1137A	AS	10/20/2014	10/20/2014	1	0	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	BA	1/26/2010	10/20/2014	4	0	0.9	Probably Decreasing	4	0	0.9	Probably Decreasing	4	0	0.9	Probably Decreasing
PTX06-1137A	CA	1/26/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	FE	11/10/2009	10/20/2014	11	0	1.0	Decreasing	4	0	0.9	Stable	11	0	1.0	Decreasing
PTX06-1137A	K	1/26/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	MG	1/26/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	NA	1/26/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1137A	V	11/10/2009	10/20/2014	11	0	1.0	Increasing	4	0	0.9	Stable	11	0	1.0	Increasing
PTX06-1138	RDX	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	HMX	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	TNT	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	DNT24	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	DNT26	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	DNT2A	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	DNT4A	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	TNB135	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	DNB13	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	PCE	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	TCE	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	DCE12C	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	DCA12	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	TCLME	10/1/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1138	B	10/1/2009	10/20/2014	11	0	0.8	No Trend	4	0	0.7	Stable	11	0	0.8	No Trend
PTX06-1138	CR	10/1/2009	10/20/2014	7	4	1.0	Decreasing	4	0	0.9	Probably Decreasing	7	4	1.0	Decreasing
PTX06-1138	CR-6	10/1/2009	10/20/2014	2	9	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	2	9	0.0	N/A (<4 Detections in Dataset)
PTX06-1138	MN	10/1/2009	10/20/2014	9	2	0.6	No Trend	4	0	0.7	No Trend	9	2	0.6	No Trend
PTX06-1138	NI	10/1/2009	10/20/2014	11	0	1.0	Decreasing	4	0	0.7	Stable	11	0	1.0	Decreasing
PTX06-1138	MO	10/1/2009	10/20/2014	11	0	0.9	Probably Decreasing	4	0	0.6	Stable	11	0	0.9	Probably Decreasing
PTX06-1138	AL	5/4/2010	5/1/2014	0	3	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1138	AS	10/20/2014	10/20/2014	1	0	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1138	BA	5/4/2010	10/20/2014	4	0	0.9	Probably Decreasing	4	0	0.9	Probably Decreasing	4	0	0.9	Probably Decreasing
PTX06-1138	CA	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1138	FE	10/1/2009	10/20/2014	11	0	1.0	Decreasing	4	0	0.9	Stable	11	0	1.0	Decreasing
PTX06-1138	K	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1138	MG	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1138	NA	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1138	V	10/1/2009	10/20/2014	11	0	1.0	Decreasing	4	0	0.8	Stable	11	0	1.0	Decreasing
PTX06-1139	RDX	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	HMX	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	TNT	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	DNT24	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	DNT26	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	DNT2A	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	DNT4A	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	TNB135	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	DNB13	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	PCE	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	TCE	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	DCE12C	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	DCA12	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	TCLME	9/30/2009	8/5/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1139	B	9/30/2009	8/5/2014	11	0	0.8	Stable	4	0	0.9	Probably Decreasing	11	0	0.8	Stable
PTX06-1139	CR	9/30/2009	8/5/2014	5	6	0.8	Stable	4	0	0.7	No Trend	5	6	0.8	Stable
PTX06-1139	CR-6	9/30/2009	8/5/2014	1	10	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	10	0.0	N/A (<4 Detections in Dataset)
PTX06-1139	MN	9/30/2009	8/5/2014	10	1	0.7	Stable	4	0	0.6	Stable	10	1	0.7	Stable
PTX06-1139	NI	9/30/2009	8/5/2014	9	2	0.5	No Trend	4	0	1.0	Increasing	9	2	0.5	No Trend
PTX06-1139	MO	9/30/2009	8/5/2014	11	0	1.0	Decreasing	4	0	1.0	Decreasing	11	0	1.0	Decreasing
PTX06-1139	AL	5/4/2010	2/18/2014	2	1	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	2	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1139	AS	8/5/2014	8/5/2014	0	1	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1139	BA	5/4/2010	8/5/2014	4	0	0.7	No Trend	4	0	0.7	No Trend	4	0	0.7	No Trend
PTX06-1139	CA	5/4/2010	2/18/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1139	FE	9/30/2009	8/5/2014	11	0	1.0	Decreasing	4	0	0.8	No Trend	11	0	1.0	Decreasing
PTX06-1139	K	5/4/2010	2/18/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1139	MG	5/4/2010	2/18/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1139	NA	5/4/2010	2/18/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1139	V	9/30/2009	8/5/2014	11	0	1.0	Decreasing	4	0	0.8	Stable	11	0	1.0	Decreasing

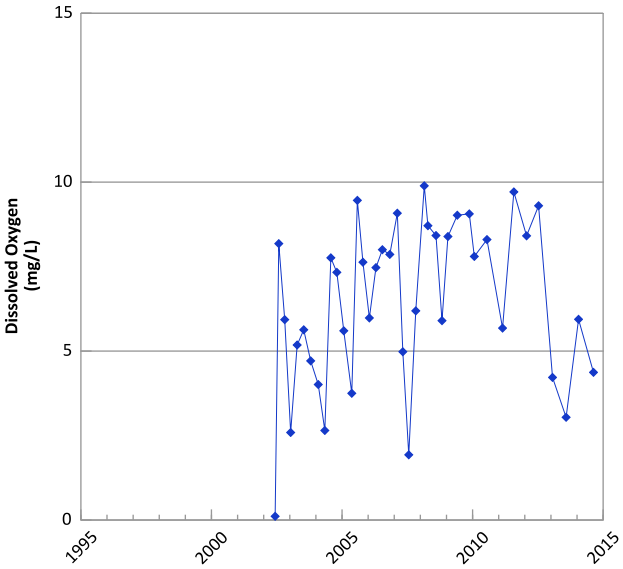
				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1140	RDX	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	HMX	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	TNT	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	DNT24	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	DNT26	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	DNT2A	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	DNT4A	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	TNB135	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	DNB13	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	PCE	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	TCE	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	DCE12C	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	DCA12	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	TCLME	10/5/2009	10/20/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1140	B	10/5/2009	10/20/2014	11	0	0.8	No Trend	4	0	0.9	Stable	11	0	0.8	No Trend
PTX06-1140	CR	10/5/2009	10/20/2014	11	1	0.7	No Trend	4	0	1.0	Decreasing	11	1	0.7	No Trend
PTX06-1140	CR-6	10/5/2009	10/20/2014	4	8	0.9	Probably Decreasing	4	0	0.9	Probably Decreasing	4	8	0.9	Probably Decreasing
PTX06-1140	MN	10/5/2009	10/20/2014	6	5	1.0	Decreasing	4	0	0.8	Stable	6	5	1.0	Decreasing
PTX06-1140	NI	10/5/2009	10/20/2014	10	1	0.9	Probably Decreasing	4	0	1.0	Decreasing	10	1	0.9	Probably Decreasing
PTX06-1140	MO	10/5/2009	10/20/2014	11	0	1.0	Decreasing	4	0	0.7	Stable	11	0	1.0	Decreasing
PTX06-1140	AL	5/4/2010	5/1/2014	0	3	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1140	AS	10/20/2014	10/20/2014	1	0	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1140	BA	5/4/2010	10/20/2014	4	0	0.7	No Trend	4	0	0.7	No Trend	4	0	0.7	No Trend
PTX06-1140	CA	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1140	FE	10/5/2009	10/20/2014	11	0	1.0	Decreasing	4	0	0.9	Probably Decreasing	11	0	1.0	Decreasing
PTX06-1140	K	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1140	MG	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1140	NA	5/4/2010	5/1/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1140	V	10/5/2009	10/20/2014	11	0	1.0	Increasing	4	0	0.6	No Trend	11	0	1.0	Increasing
PTX06-1141	RDX	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	HMX	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	TNT	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	DNT24	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	DNT26	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	DNT2A	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	DNT4A	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	TNB135	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	DNB13	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	DIOXANE14	6/27/2011	8/20/2014	0	2	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1141	PCE	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	TCE	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	DCE12C	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	DCA12	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	TCLME	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	PERC	10/14/2009	8/20/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1141	B	10/14/2009	8/20/2014	10	0	1.0	Decreasing	4	0	1.0	Decreasing	10	0	1.0	Decreasing
PTX06-1141	MN	7/21/2010	8/20/2014	4	0	1.0	Decreasing	4	0	1.0	Decreasing	4	0	1.0	Decreasing
PTX06-1141	AL	7/21/2010	1/23/2014	1	2	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1141	AS	6/27/2011	8/20/2014	0	2	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1141	BA	7/21/2010	8/20/2014	5	0	0.8	No Trend	4	0	0.6	No Trend	5	0	0.8	No Trend
PTX06-1141	CA	7/21/2010	1/23/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1141	FE	7/21/2010	1/23/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1141	K	7/21/2010	1/23/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1141	MG	7/21/2010	1/23/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1141	NA	7/21/2010	1/23/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1143	RDX	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	HMX	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	TNT	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	DNT24	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	DNT26	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	DNT2A	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	DNT4A	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	TNB135	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	DNB13	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	DIOXANE14	6/8/2011	10/30/2014	0	2	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX06-1143	PCE	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	TCE	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	DCE12C	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	DCA12	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	TCLME	10/15/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1143	PERC	10/15/2009	10/30/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1143	B	10/15/2009	10/30/2014	11	0	0.6	Stable	4	0	0.8	Stable	11	0	0.6	Stable
PTX06-1143	MN	5/5/2010	10/30/2014	2	3	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	2	3	0.0	N/A (<4 Detections in Dataset)
PTX06-1143	AL	5/5/2010	5/5/2014	0	3	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	3	0.0	N/A (<4 Samples in Dataset)
PTX06-1143	AS	6/8/2011	10/30/2014	2	0	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	2	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1143	BA	5/5/2010	10/30/2014	5	0	0.8	No Trend	4	0	0.9	No Trend	5	0	0.8	No Trend
PTX06-1143	CA	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1143	FE	5/5/2010	5/5/2014	4	0	0.9	Stable	4	0	0.9	Stable	4	0	0.9	Stable

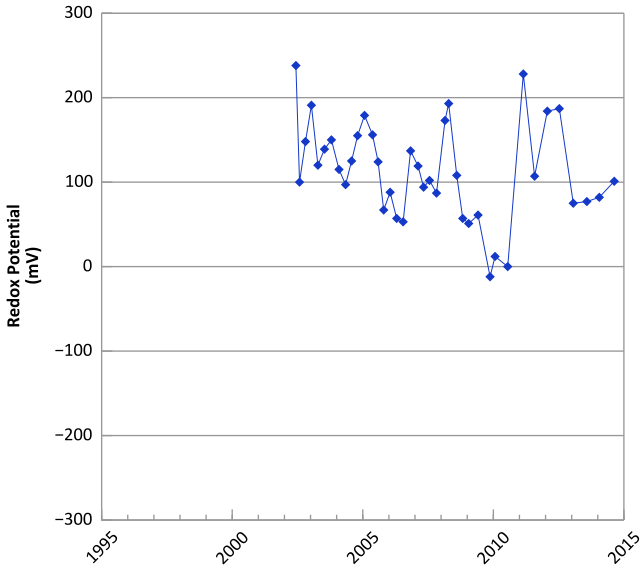
				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX06-1143	K	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1143	MG	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1143	NA	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1144	RDX	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	HMX	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	TNT	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	DNT24	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	DNT26	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	DNT2A	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	DNT4A	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	TNB135	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	DNB13	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	DIOXANE14	10/30/2014	10/30/2014	0	1	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	1	0.0	N/A (<4 Samples in Dataset)
PTX06-1144	PCE	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	TCE	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	DCE12C	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	DCA12	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	TCLME	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	PERC	11/4/2009	10/30/2014	0	11	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX06-1144	B	11/4/2009	10/30/2014	11	0	0.7	Stable	4	0	0.7	Stable	11	0	0.7	Stable
PTX06-1144	CR	5/5/2010	12/17/2014	2	2	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)
PTX06-1144	CR-6	5/5/2010	12/17/2014	0	4	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	4	0.0	All Non-Detect
PTX06-1144	MN	5/5/2010	10/30/2014	4	1	0.6	Stable	4	0	0.6	Stable	4	1	0.6	Stable
PTX06-1144	AL	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1144	AS	10/30/2014	10/30/2014	1	0	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1144	BA	5/5/2010	10/30/2014	4	0	1.0	Decreasing	4	0	1.0	Decreasing	4	0	1.0	Decreasing
PTX06-1144	CA	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1144	FE	5/5/2010	5/5/2014	4	0	0.9	Probably Decreasing	4	0	0.9	Probably Decreasing	4	0	0.9	Probably Decreasing
PTX06-1144	K	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1144	MG	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1144	NA	5/5/2010	5/5/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1157	RDX	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	HMX	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	TNT	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	DNT24	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	DNT26	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	DNT2A	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	DNT4A	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	TNB135	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	DNB13	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	PCE	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	TCE	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	DCE12C	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	DCA12	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	TCLME	6/15/2010	8/5/2014	0	10	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	10	0.0	All Non-Detect
PTX06-1157	B	6/15/2010	8/5/2014	10	0	1.0	Increasing	4	0	0.8	Stable	10	0	1.0	Increasing
PTX06-1157	CR	6/15/2010	8/5/2014	10	0	0.8	Stable	4	0	0.5	No Trend	10	0	0.8	Stable
PTX06-1157	CR-6	6/15/2010	8/5/2014	2	8	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	2	8	0.0	N/A (<4 Detections in Dataset)
PTX06-1157	MN	6/15/2010	8/5/2014	8	2	1.0	Decreasing	4	0	0.7	Stable	8	2	1.0	Decreasing
PTX06-1157	NI	6/15/2010	8/5/2014	9	1	1.0	Decreasing	4	0	0.6	Stable	9	1	1.0	Decreasing
PTX06-1157	MO	6/15/2010	8/5/2014	10	0	0.9	Probably Decreasing	4	0	1.0	Decreasing	10	0	0.9	Probably Decreasing
PTX06-1157	AL	10/21/2010	1/21/2014	2	1	0.0	N/A (<4 Detections in Dataset)	2	2	0.0	N/A (<4 Detections in Dataset)	2	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1157	AS	6/7/2011	8/5/2014	1	1	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	1	0.0	N/A (<4 Detections in Dataset)
PTX06-1157	BA	10/21/2010	8/5/2014	5	0	0.6	No Trend	4	0	0.8	Stable	5	0	0.6	No Trend
PTX06-1157	CA	10/21/2010	1/21/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1157	FE	6/15/2010	8/5/2014	9	1	1.0	Decreasing	4	0	0.5	No Trend	9	1	1.0	Decreasing
PTX06-1157	K	10/21/2010	1/21/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1157	MG	10/21/2010	1/21/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1157	NA	10/21/2010	1/21/2014	3	0	0.0	N/A (<4 Detections in Dataset)	3	1	0.0	N/A (<4 Detections in Dataset)	3	0	0.0	N/A (<4 Detections in Dataset)
PTX06-1157	V	6/15/2010	8/5/2014	10	0	0.8	Stable	4	0	0.6	Stable	10	0	0.8	Stable
PTX07-1R01	RDX	9/19/2000	11/3/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	HMX	9/19/2000	11/3/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	TNT	9/19/2000	11/3/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	DNT24	9/19/2000	11/3/2014	0	19	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	DNT26	9/19/2000	11/3/2014	0	19	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	DNT2A	9/19/2000	11/3/2014	0	19	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	DNT4A	9/19/2000	11/3/2014	0	19	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	TNB135	9/19/2000	11/3/2014	0	19	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	DNB13	9/19/2000	11/3/2014	0	19	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	DIOXANE14	7/26/2001	11/3/2014	0	4	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	2	0.0	N/A (<4 Samples in Dataset)
PTX07-1R01	PCE	5/8/2000	11/3/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	TCE	5/8/2000	11/3/2014	0	22	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	DCE12C	5/8/2000	11/3/2014	0	18	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	DCA12	5/8/2000	11/3/2014	0	20	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	TCLME	5/8/2000	11/3/2014	0	19	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX07-1R01	PERC	9/19/2000	11/3/2014	1	20	0.0	N/A (<4 Detections in Dataset)	1	3	0.0	N/A (<4 Detections in Dataset)	1	10	0.0	N/A (<4 Detections in Dataset)
PTX07-1R01	B	9/19/2000	11/3/2014	20	0	1.0	Increasing	4	0	0.8	Stable	11	0	0.9	Probably Increasing
PTX07-1R01	MN	9/19/2000	11/3/2014	12	2	1.0	Decreasing	4	0	0.7	No Trend	3	1	0.0	N/A (<4 Detections in Dataset)

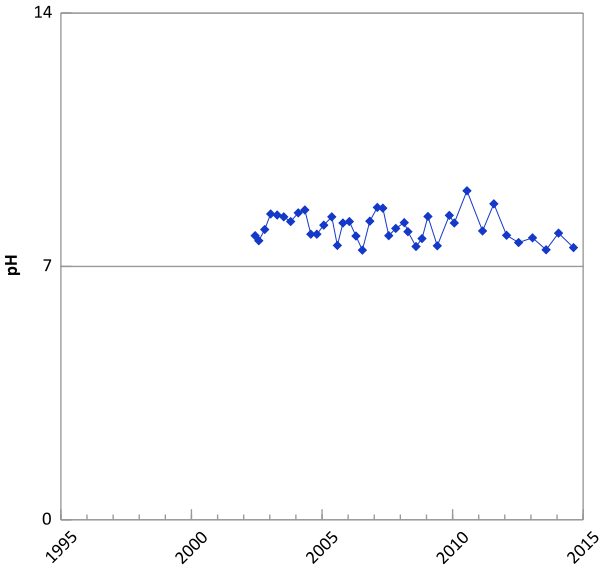
Ogallala Linear Regression Trends

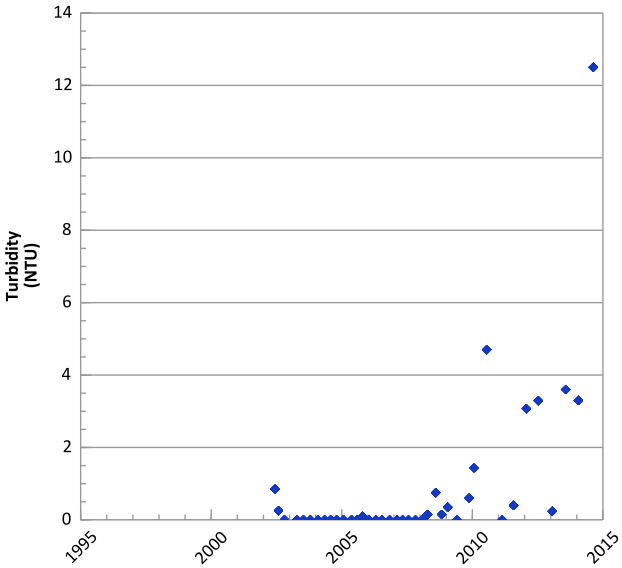
				All Data through 2014				Last 4 Measurements				Since Start of Remedial Actions			
Well	COC	First_Date	Last_Date	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend	Number of Detects	Number of Non-Detects	Confidence in Trend	Concentration Trend
PTX07-1R01	AL	9/19/2000	4/16/2014	7	6	0.7	Stable	4	0	0.6	No Trend	1	2	0.0	N/A (<4 Detections in Dataset)
PTX07-1R01	AS	9/19/2000	11/3/2014	8	1	0.6	No Trend	4	0	0.5	Stable	2	0	0.0	N/A (<4 Detections in Dataset)
PTX07-1R01	BA	9/19/2000	11/3/2014	16	0	1.0	Decreasing	4	0	0.5	No Trend	5	0	0.6	Stable
PTX07-1R01	CA	9/19/2000	4/16/2014	10	0	0.7	Stable	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX07-1R01	FE	9/19/2000	4/16/2014	13	0	0.8	Stable	4	0	0.7	Stable	3	0	0.0	N/A (<4 Detections in Dataset)
PTX07-1R01	K	9/19/2000	4/16/2014	10	0	0.9	No Trend	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX07-1R01	MG	9/19/2000	4/16/2014	13	0	0.9	No Trend	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX07-1R01	NA	9/19/2000	4/16/2014	10	0	1.0	Decreasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX-BEG2	RDX	3/19/1996	8/13/2014	0	34	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	HMX	3/19/1996	8/13/2014	0	34	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	TNT	3/19/1996	8/13/2014	0	34	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	DNT24	3/19/1996	8/13/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	DNT26	3/19/1996	8/13/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	DNT2A	3/19/1996	8/13/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	DNT4A	3/19/1996	8/13/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	TNB135	3/19/1996	8/13/2014	0	28	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	DNB13	3/19/1996	8/13/2014	0	29	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	DIOXANE14	8/13/2014	8/13/2014	0	1	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	1	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	PCE	12/11/1995	8/13/2014	0	36	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	TCE	3/19/1996	8/13/2014	0	35	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	DCE12C	3/19/1996	8/13/2014	0	35	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	DCA12	3/19/1996	8/13/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	TCLME	12/11/1995	8/13/2014	0	31	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	PERC	8/14/2000	8/13/2014	0	25	0.0	All Non-Detect	0	4	0.0	All Non-Detect	0	11	0.0	All Non-Detect
PTX-BEG2	B	12/11/1995	8/13/2014	32	0	1.0	Increasing	4	0	0.9	Stable	11	0	0.7	Stable
PTX-BEG2	MN	12/11/1995	8/13/2014	7	20	0.6	No Trend	4	0	0.6	No Trend	2	2	0.0	N/A (<4 Detections in Dataset)
PTX-BEG2	AL	12/11/1995	1/23/2014	14	12	0.6	Stable	4	0	0.6	Stable	2	1	0.0	N/A (<4 Detections in Dataset)
PTX-BEG2	AS	12/11/1995	8/13/2014	11	7	1.0	Increasing	4	0	0.7	No Trend	0	1	0.0	N/A (<4 Samples in Dataset)
PTX-BEG2	BA	12/11/1995	8/13/2014	28	0	1.0	Decreasing	4	0	0.5	Stable	4	0	0.6	No Trend
PTX-BEG2	CA	12/11/1995	1/23/2014	21	0	1.0	Decreasing	4	0	0.8	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX-BEG2	FE	12/11/1995	1/23/2014	20	5	1.0	Increasing	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX-BEG2	K	12/11/1995	1/23/2014	20	0	1.0	Decreasing	4	0	1.0	Decreasing	3	0	0.0	N/A (<4 Detections in Dataset)
PTX-BEG2	MG	12/11/1995	1/23/2014	26	0	0.8	No Trend	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)
PTX-BEG2	NA	12/11/1995	1/23/2014	20	0	1.0	Increasing	4	0	0.7	No Trend	3	0	0.0	N/A (<4 Detections in Dataset)

PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



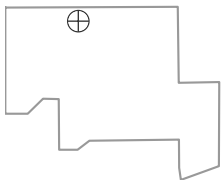






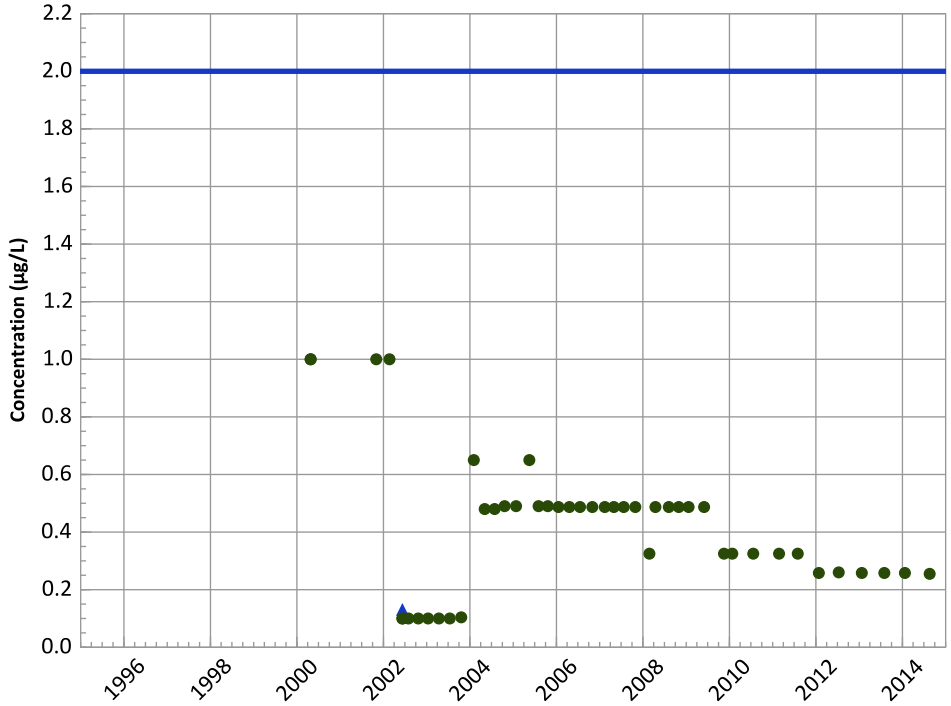
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

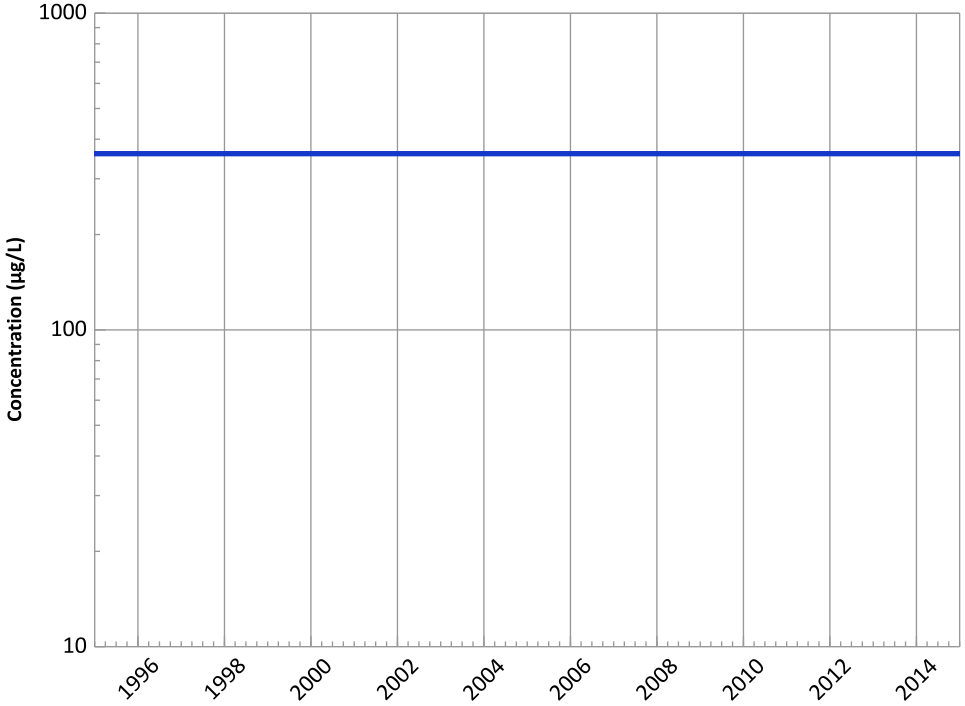


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

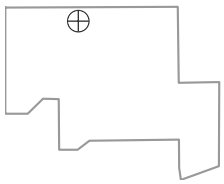
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

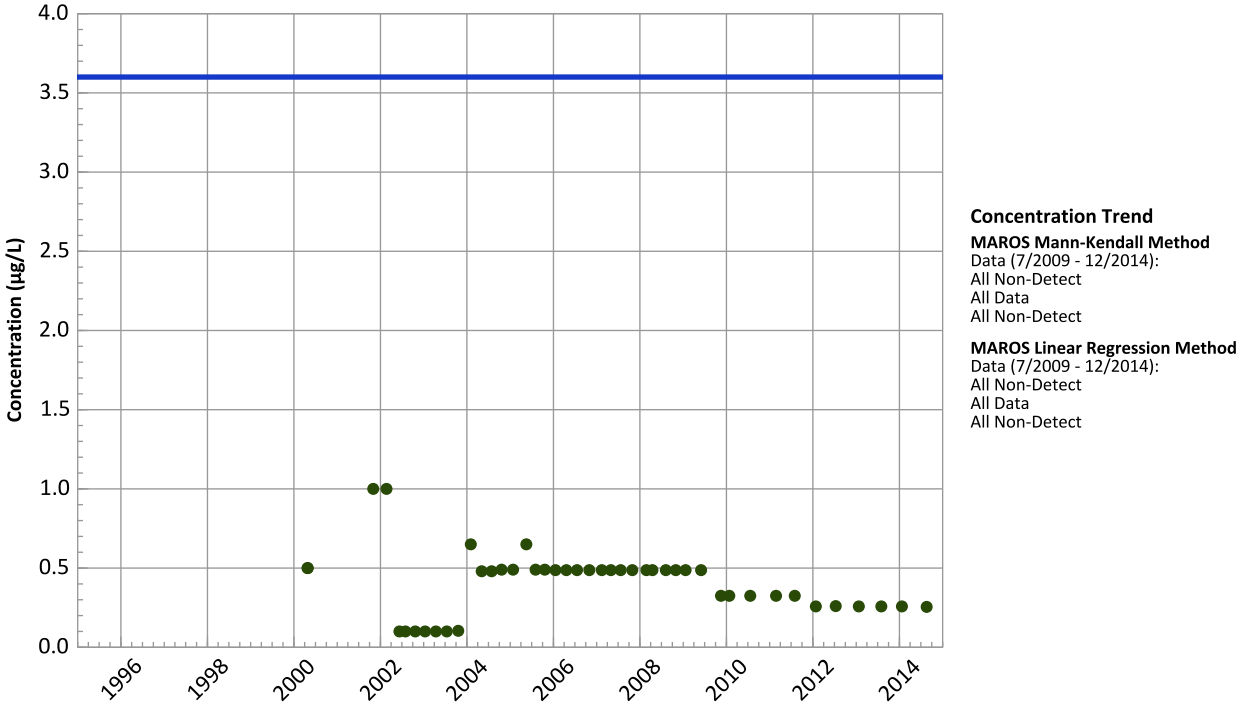
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

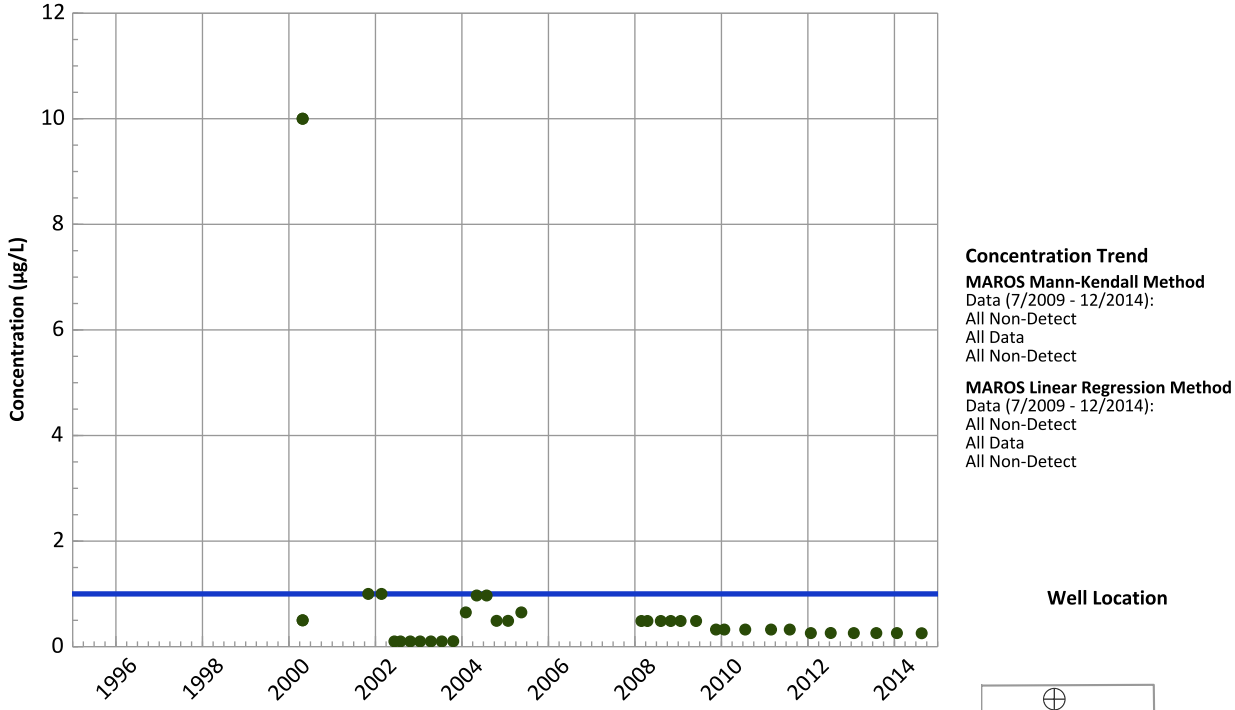


PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



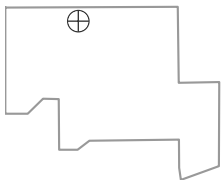
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

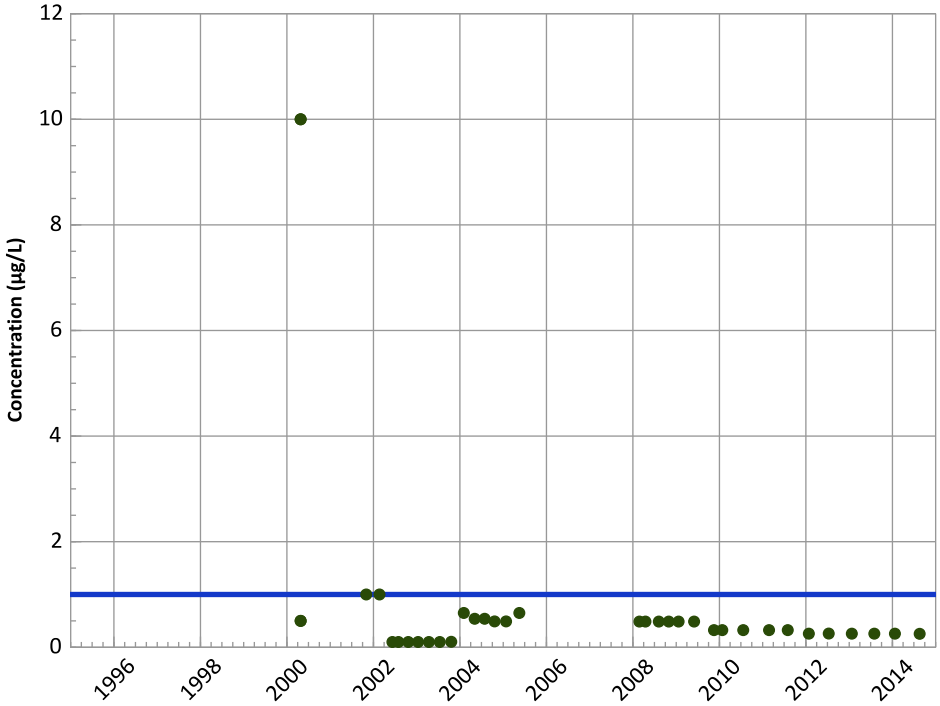
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

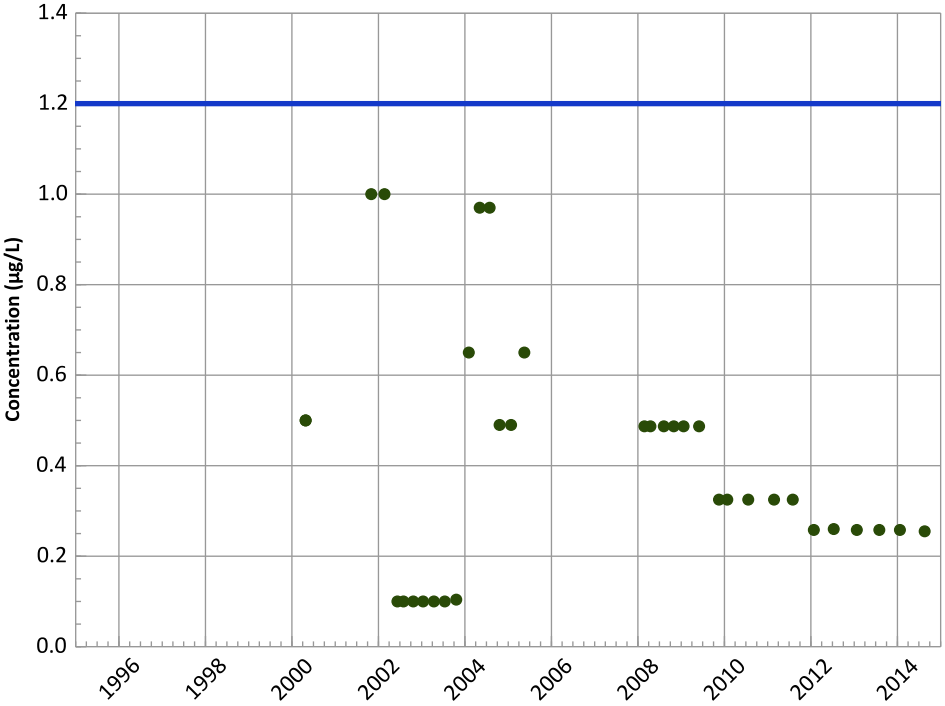


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

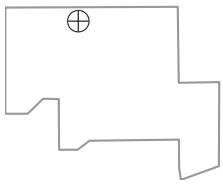
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

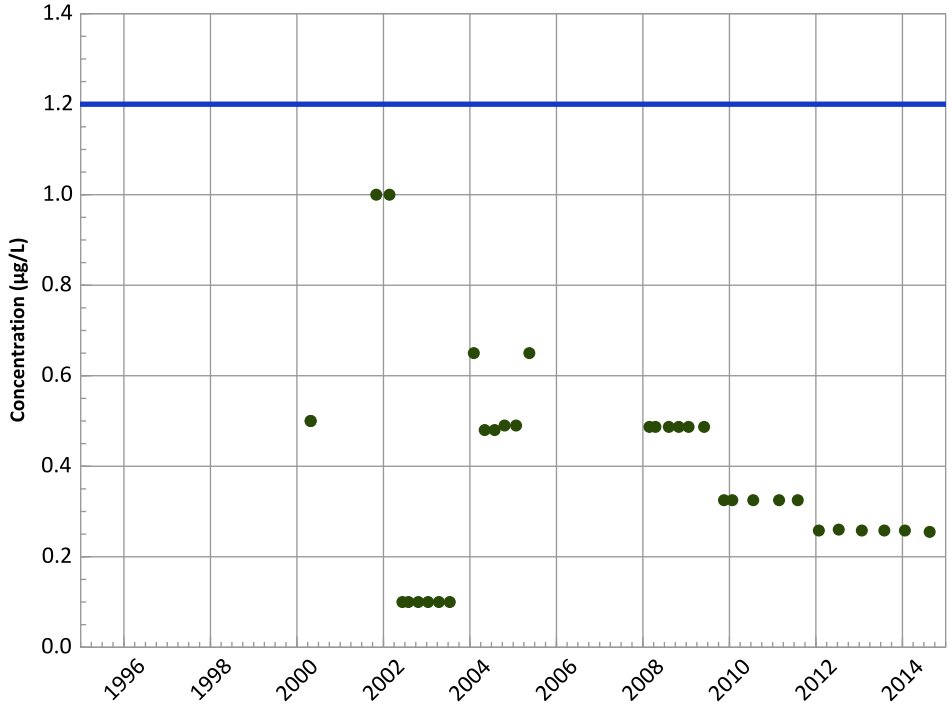
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

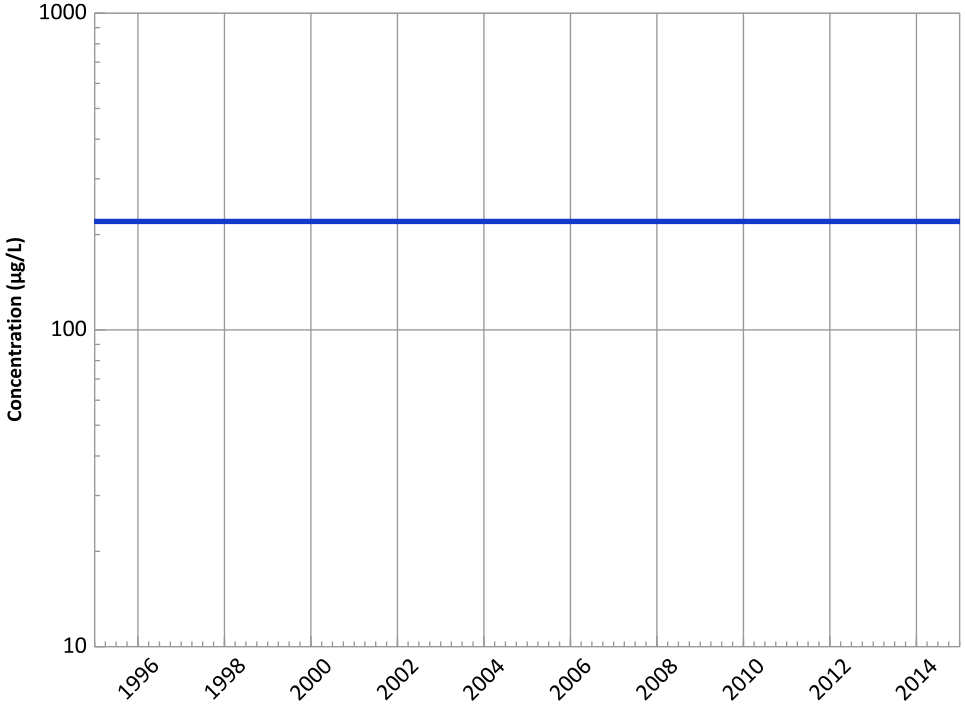


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

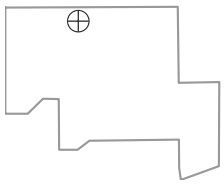


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

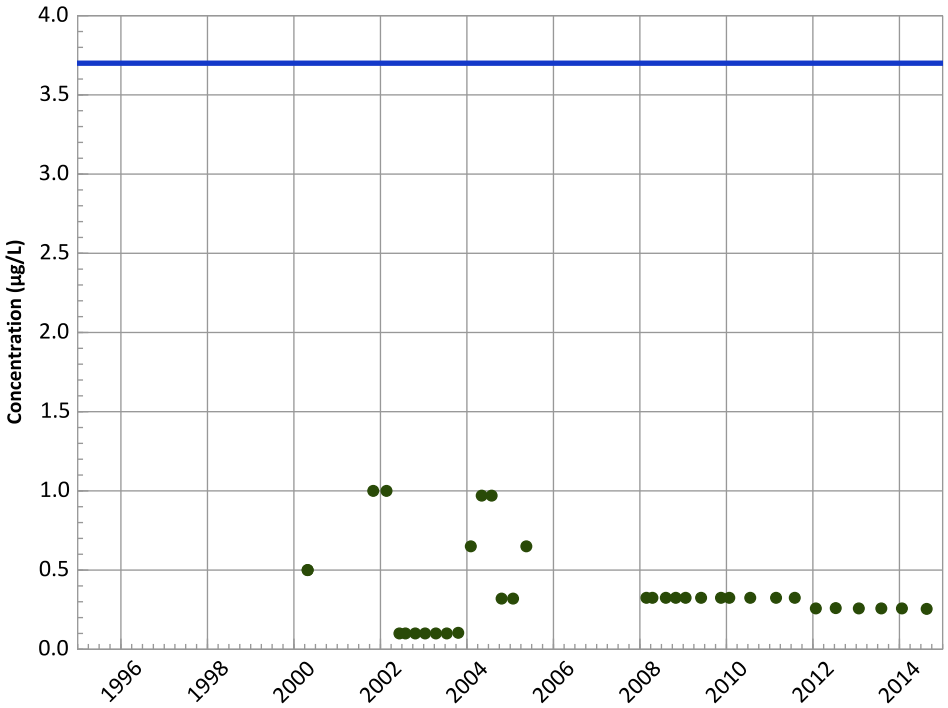


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

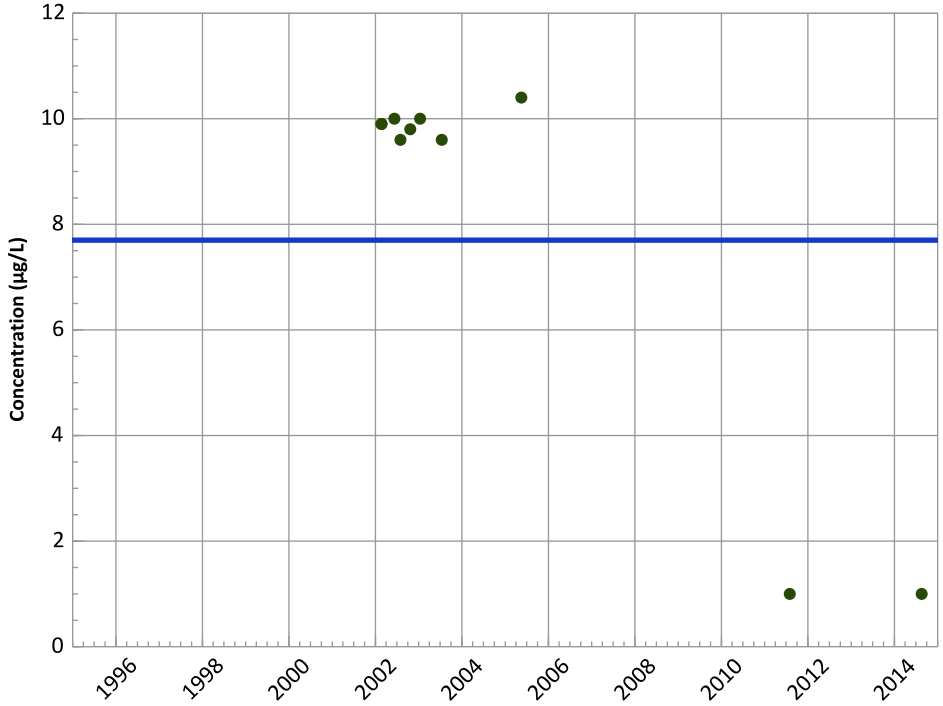


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

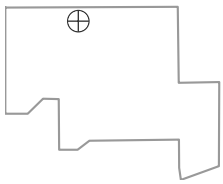
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

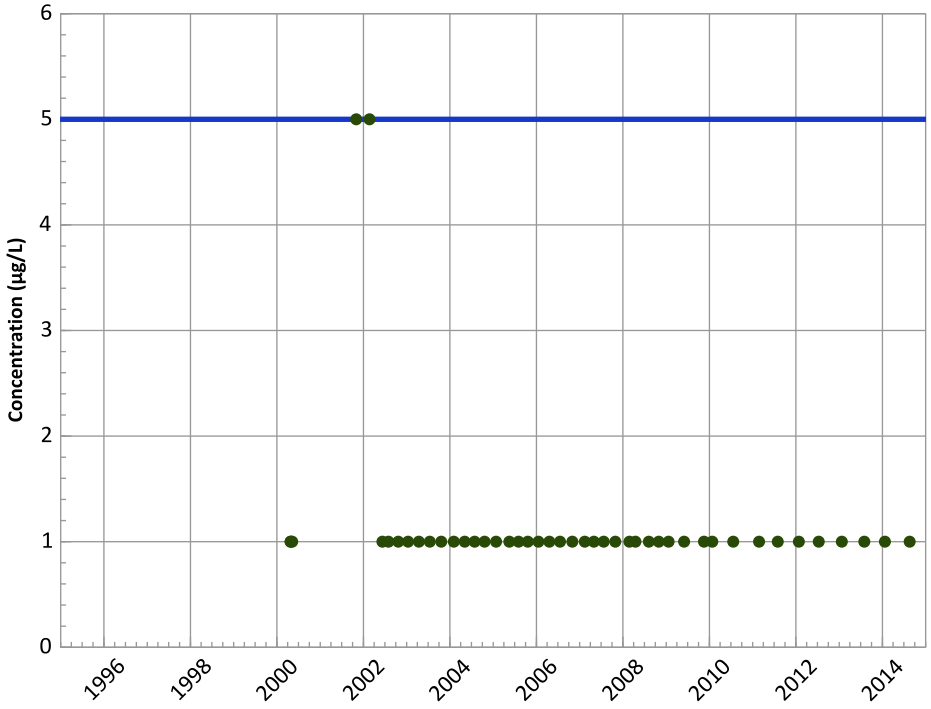
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

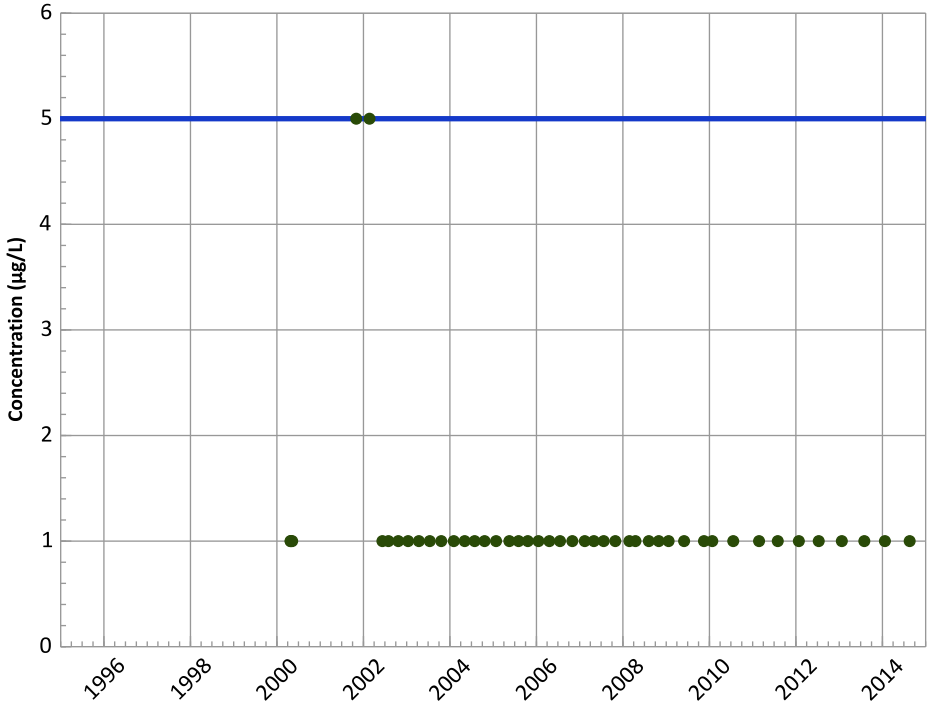


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

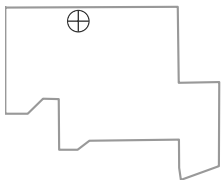
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

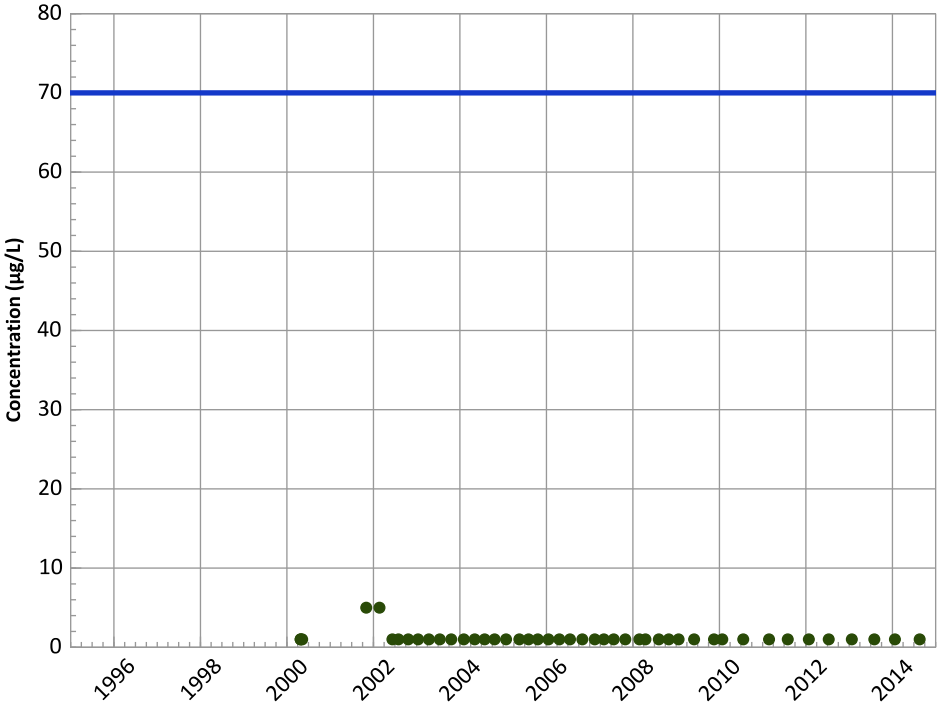
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

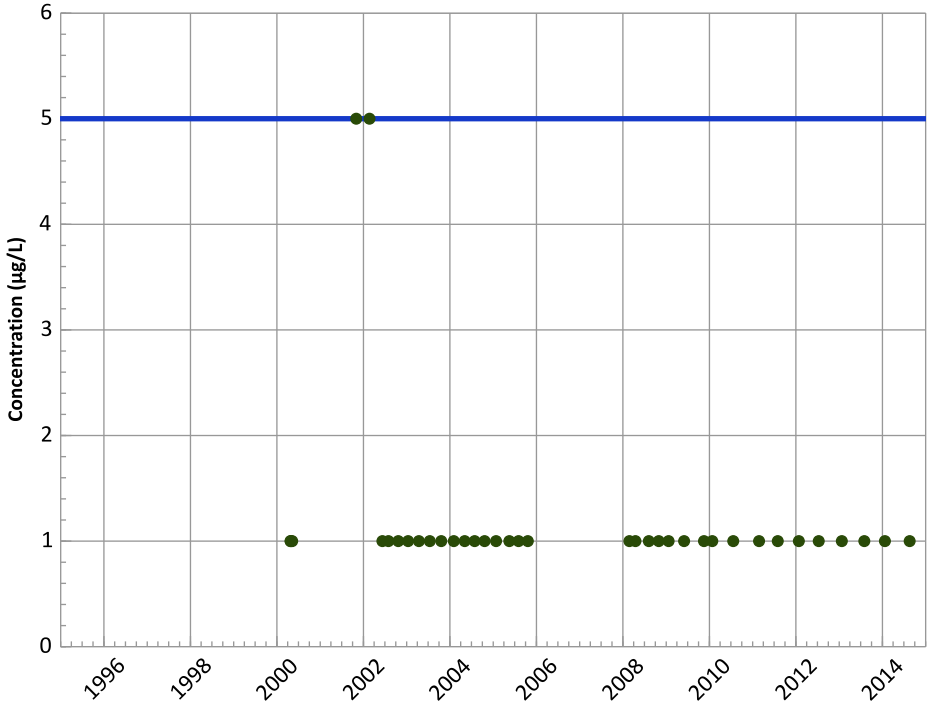


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

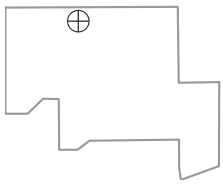
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

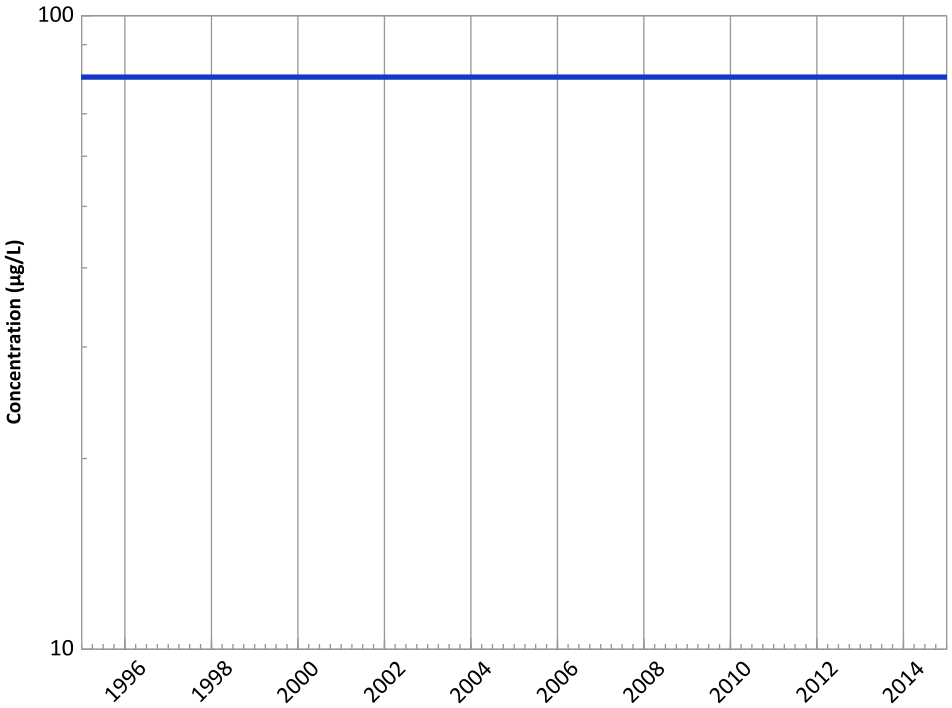
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

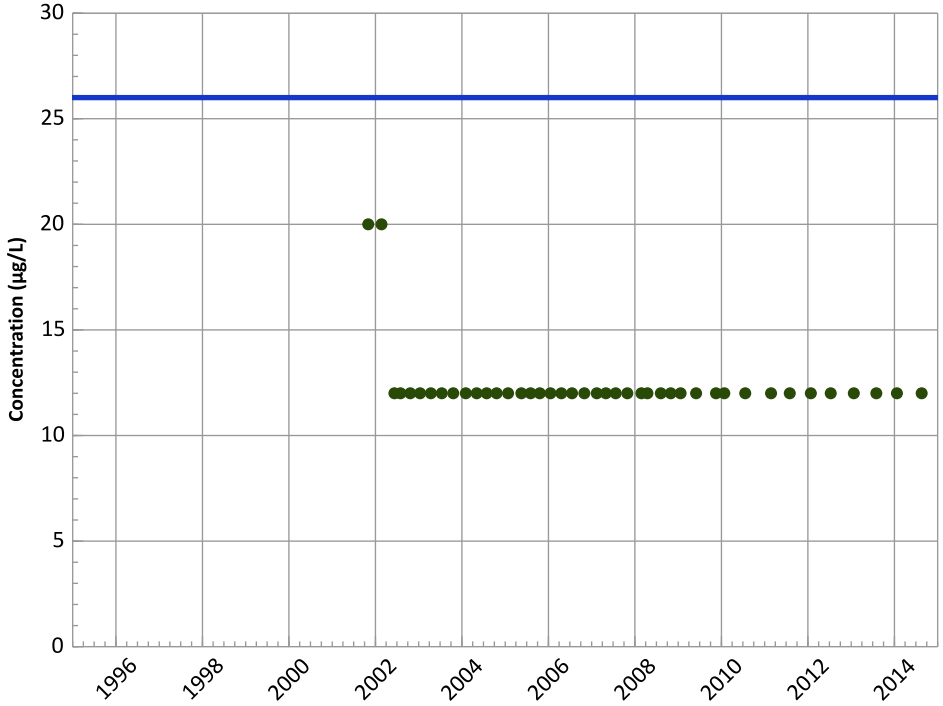


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

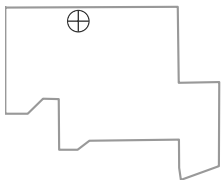
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

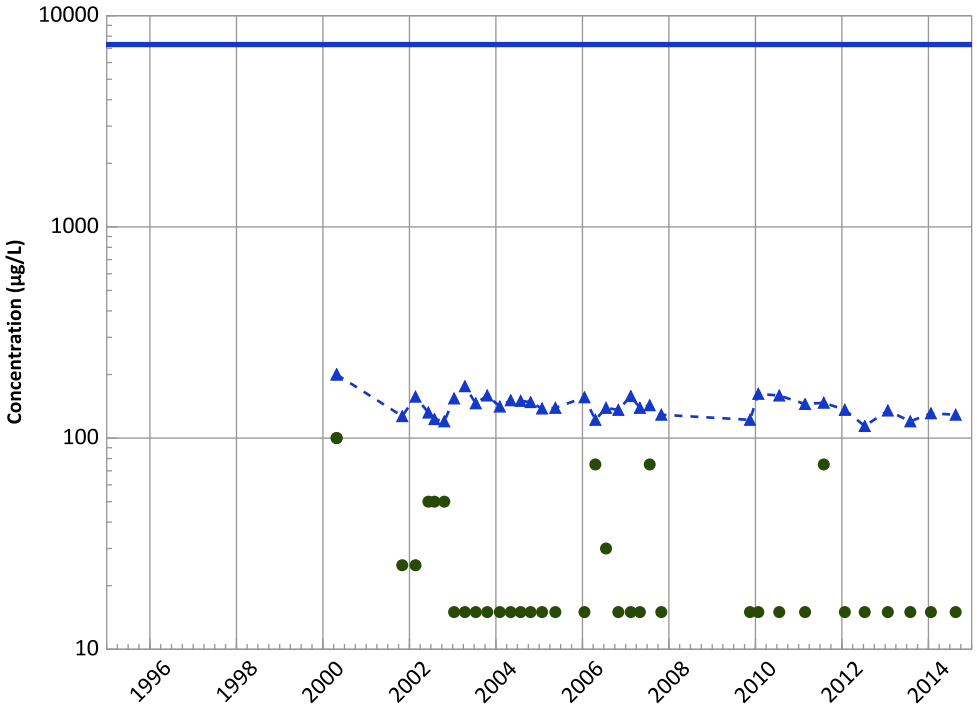
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

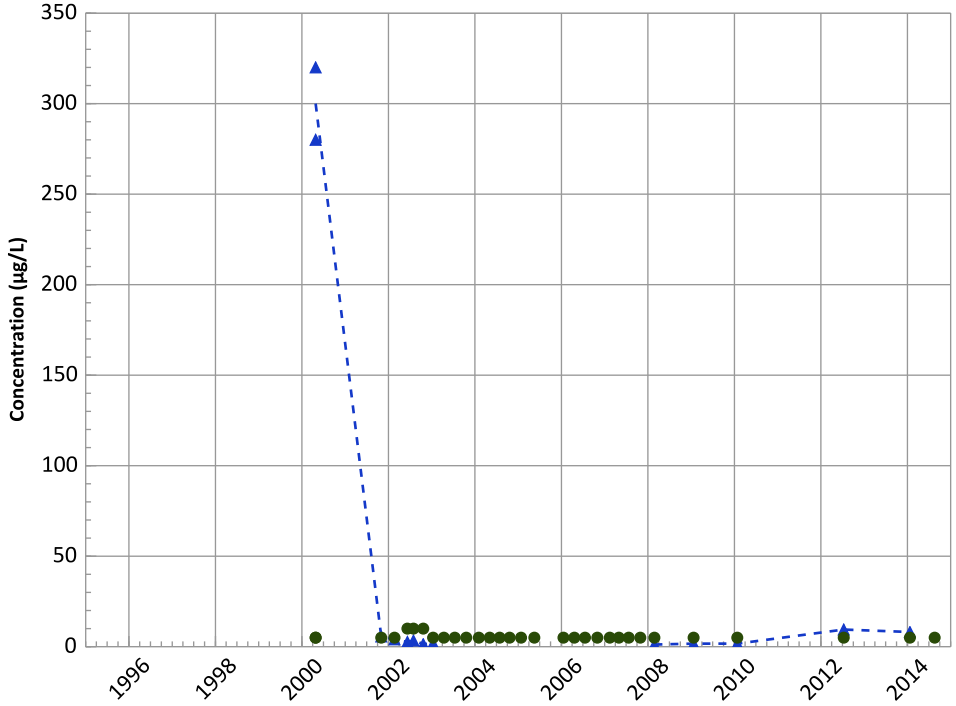


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Manganese Trend



Concentration Trend

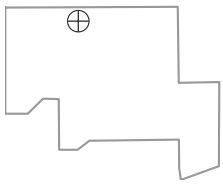
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

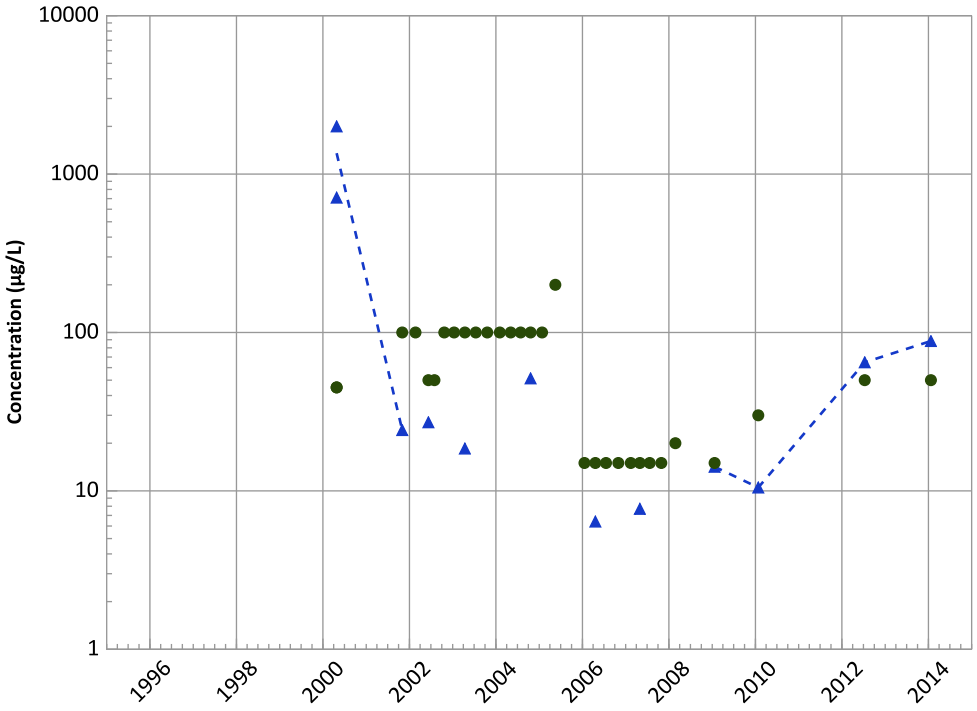
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

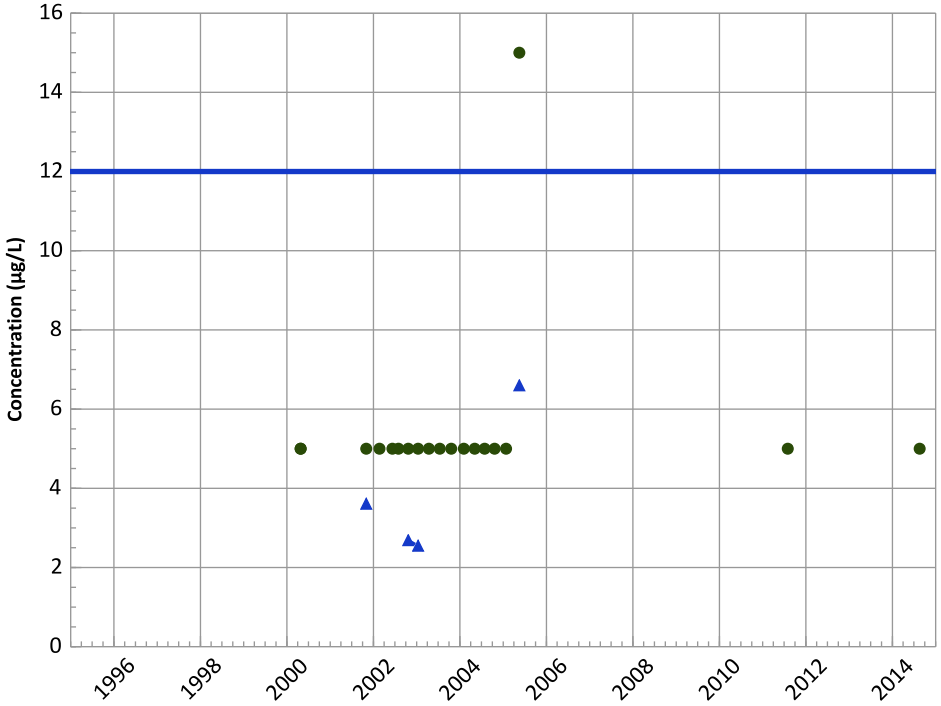


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Arsenic Trend



Concentration Trend

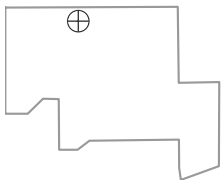
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

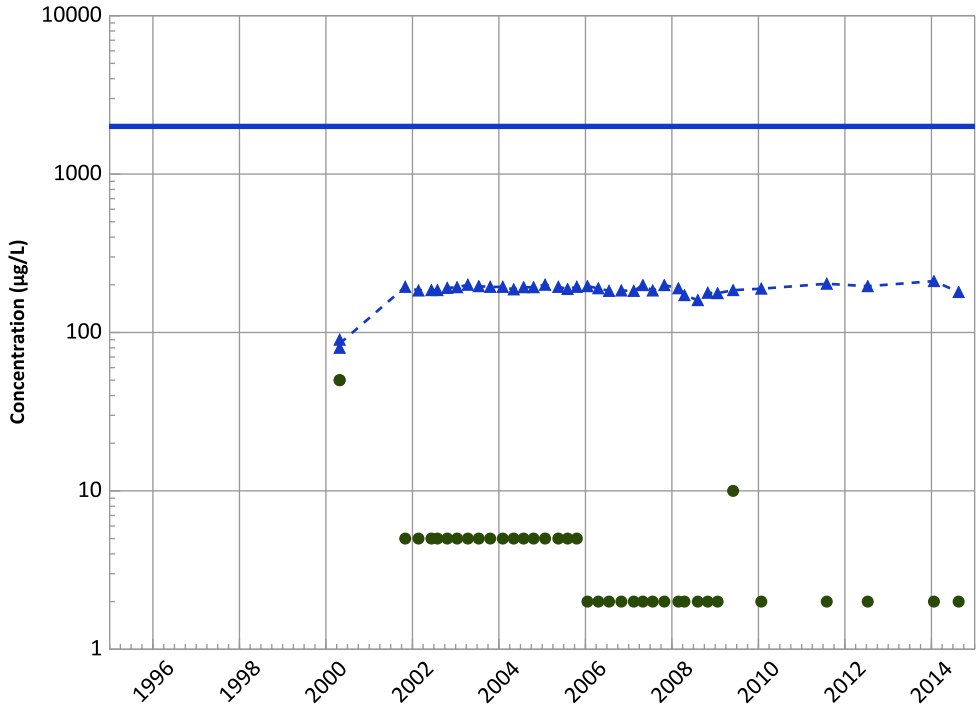
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

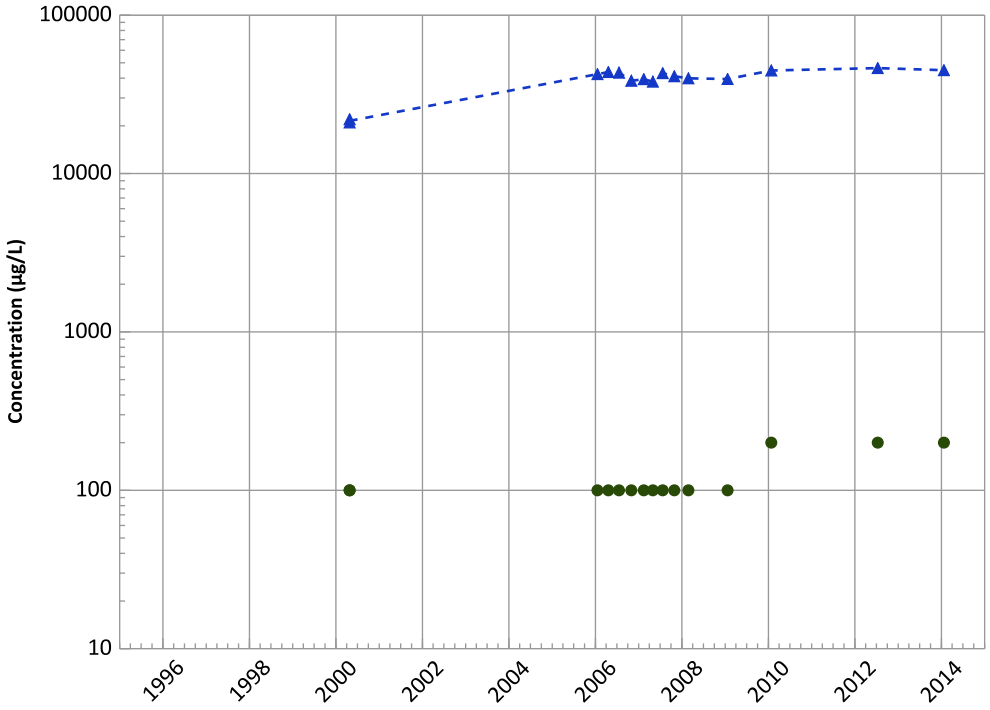


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

Calcium Trend



Concentration Trend

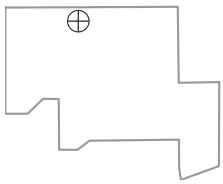
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

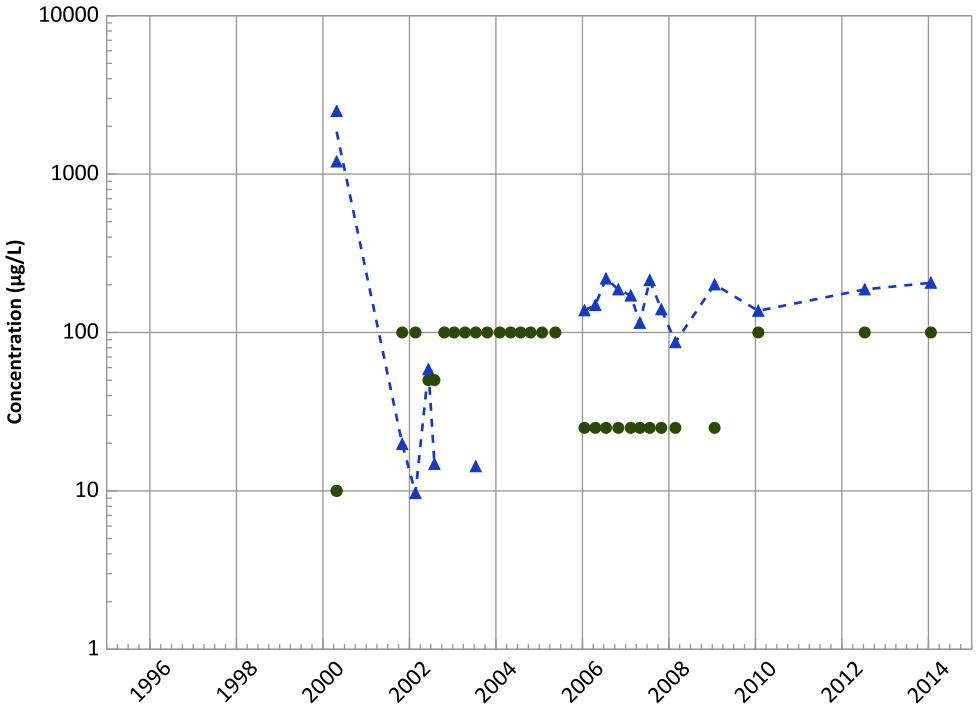
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

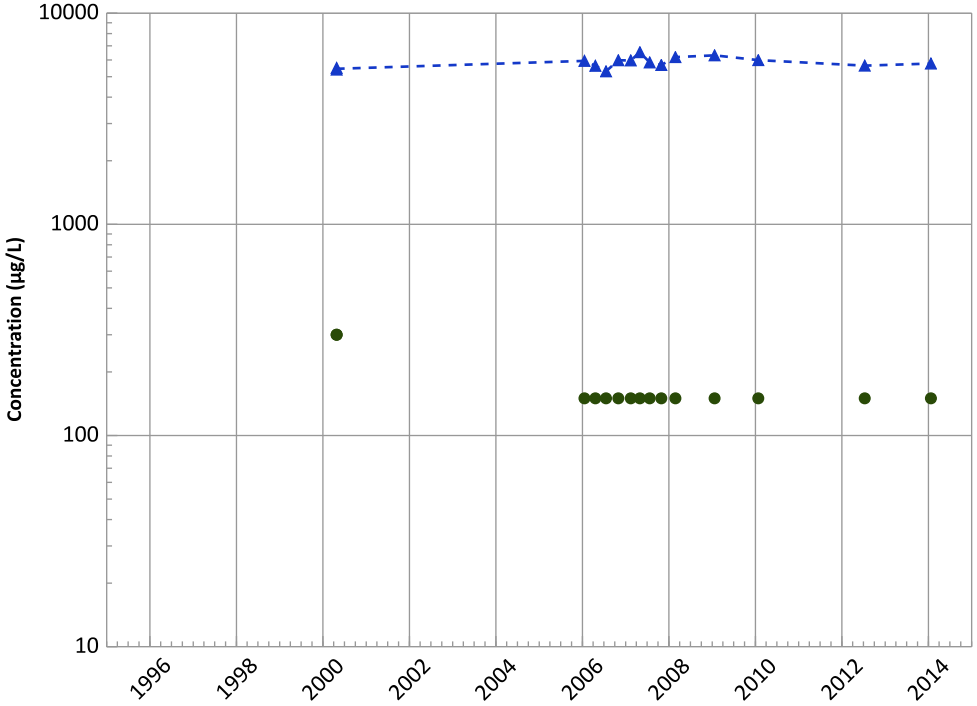


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Potassium Trend



Concentration Trend

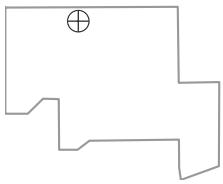
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

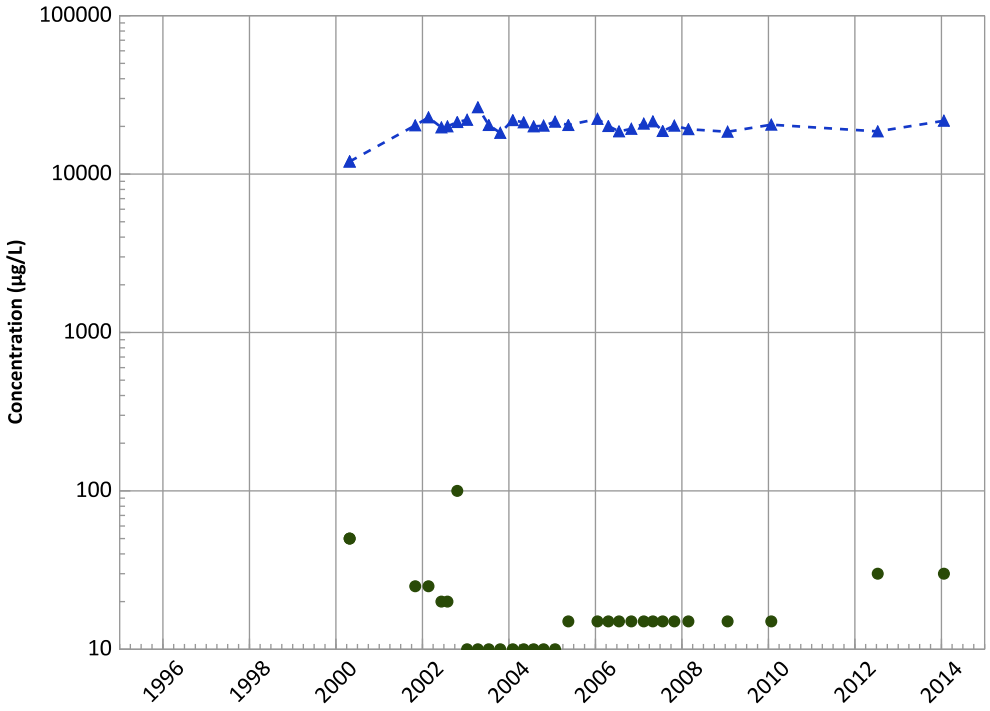
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1010 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

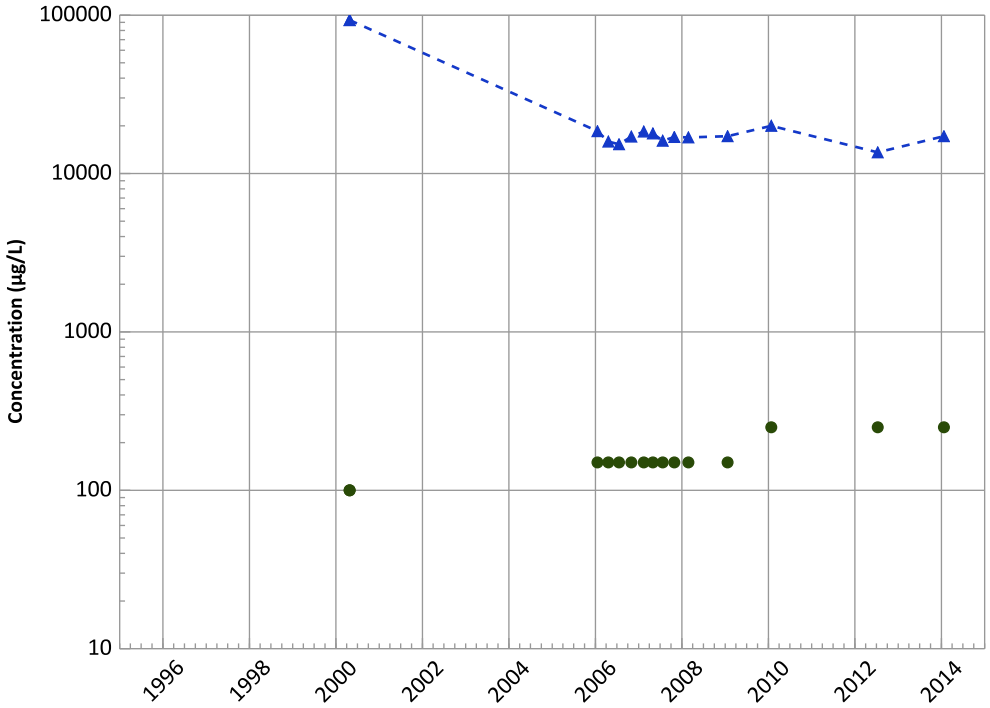


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Sodium Trend



Concentration Trend

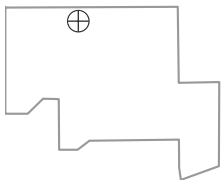
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

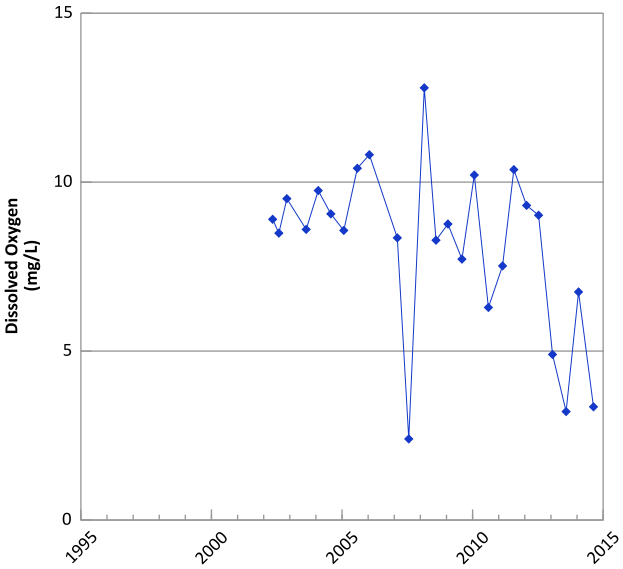
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/26/2000 to 08/19/2014
Analysis Date: 03/19/2015

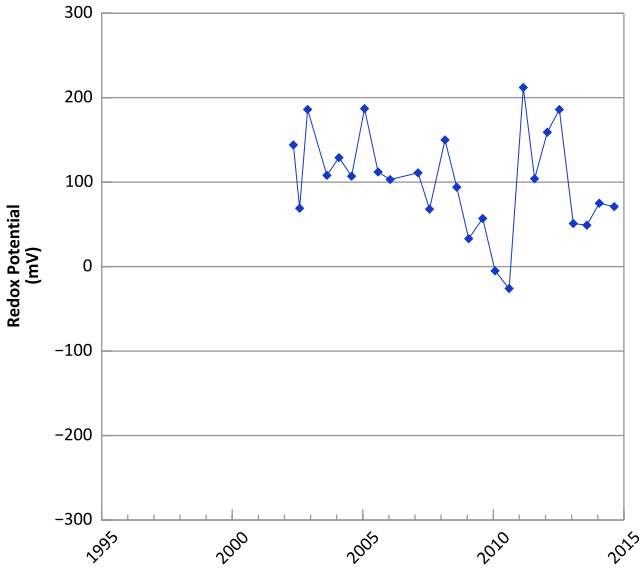
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

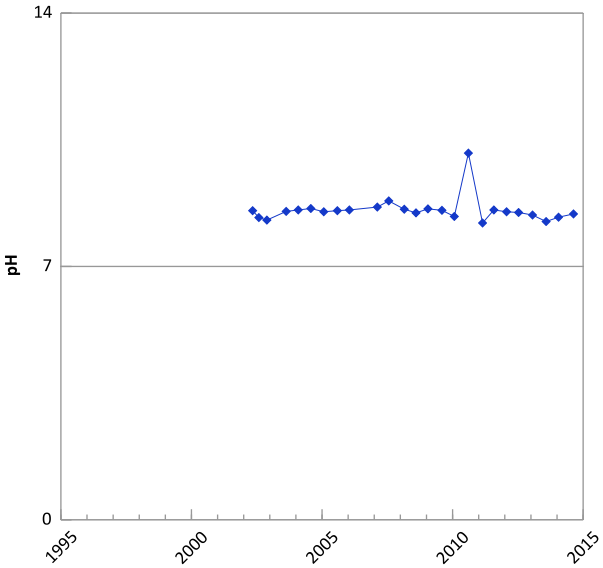
Well Location

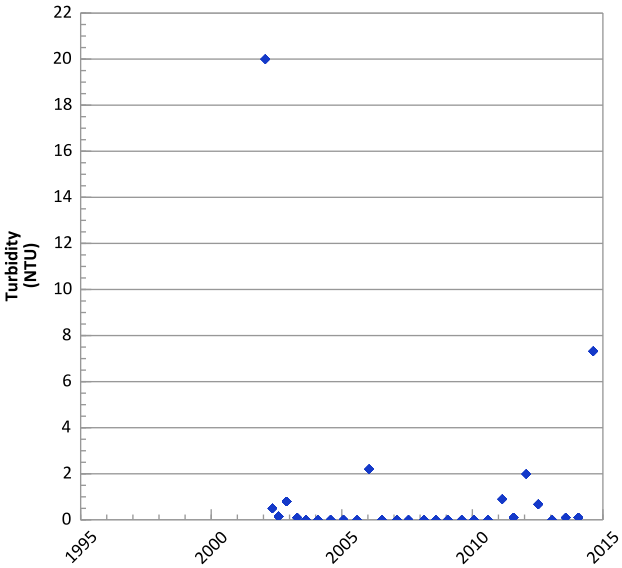


PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



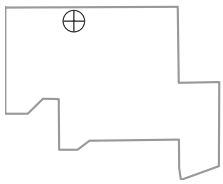






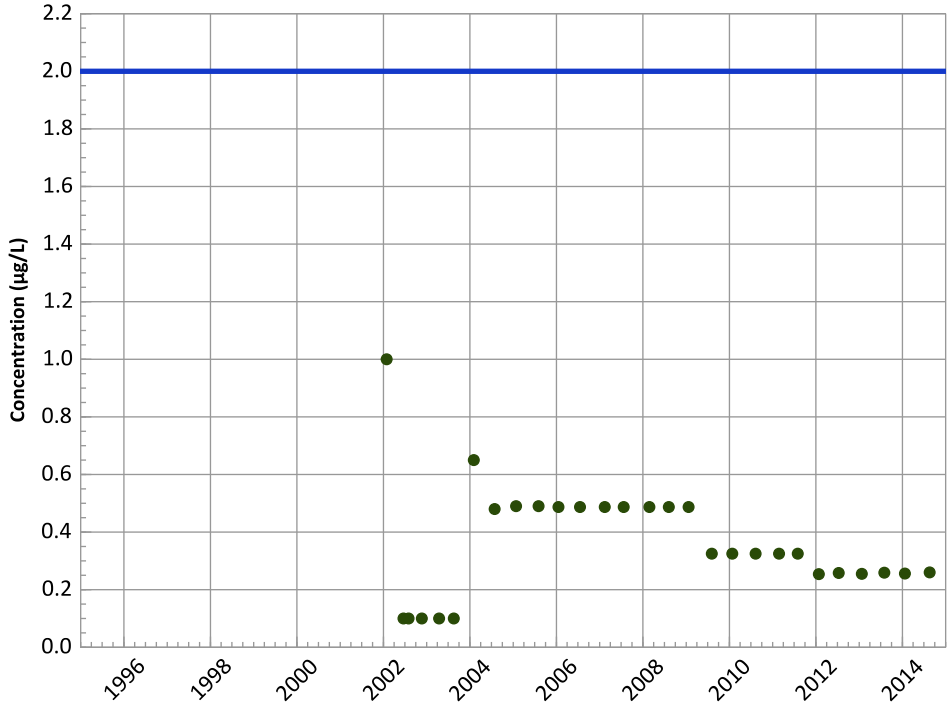
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

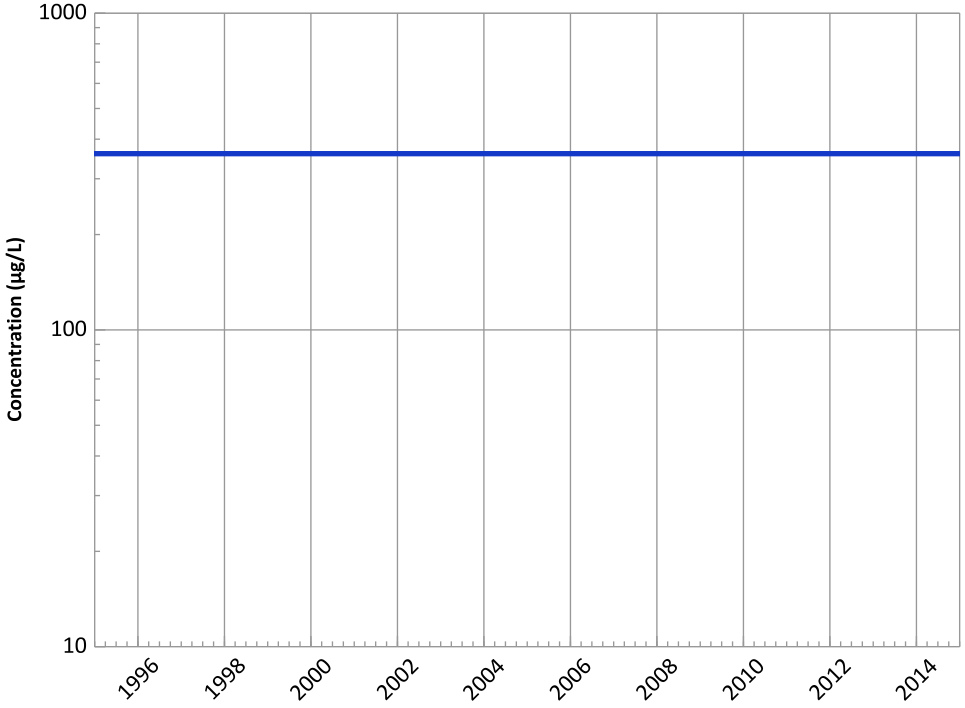


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

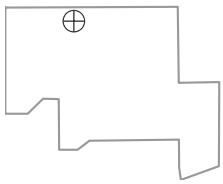
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

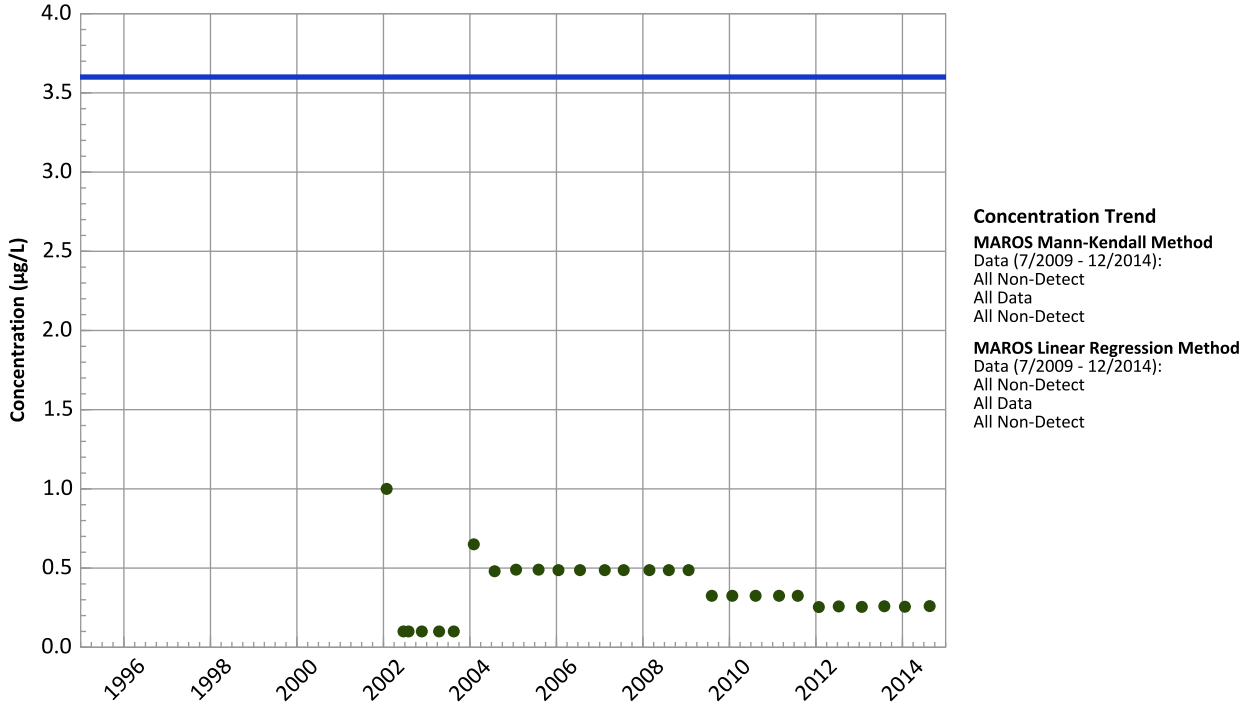
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location

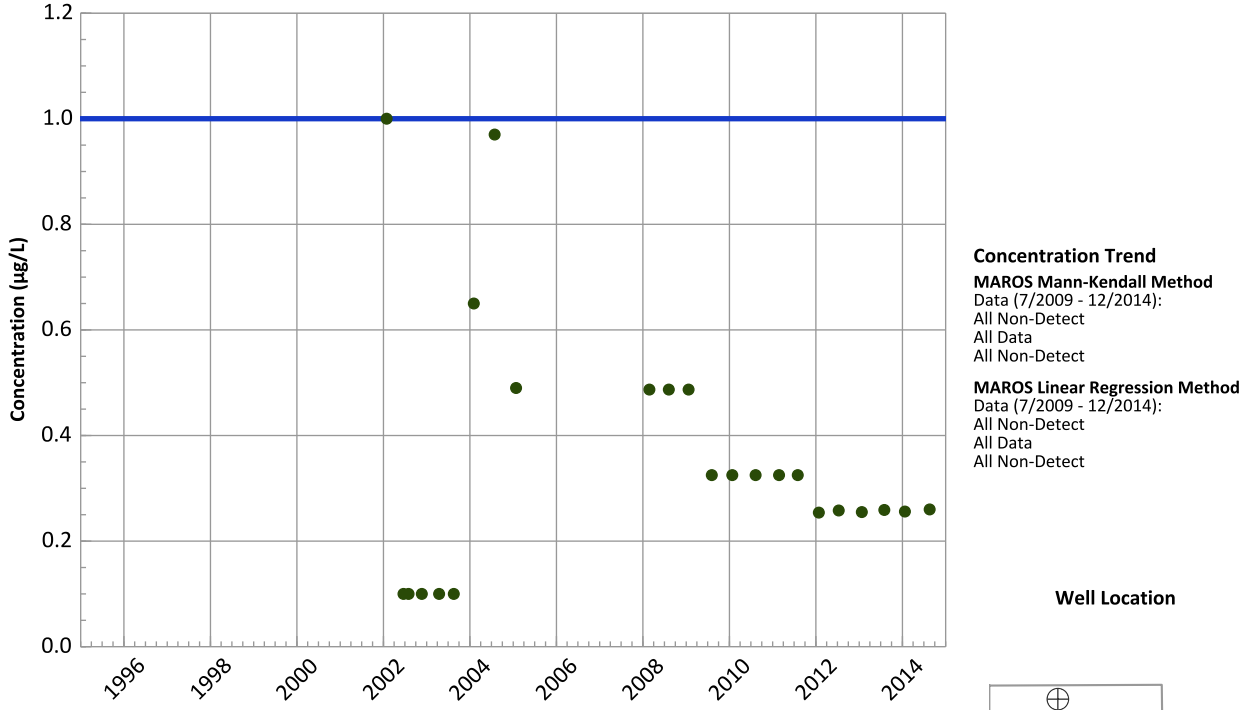


PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



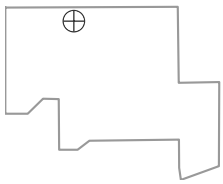
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

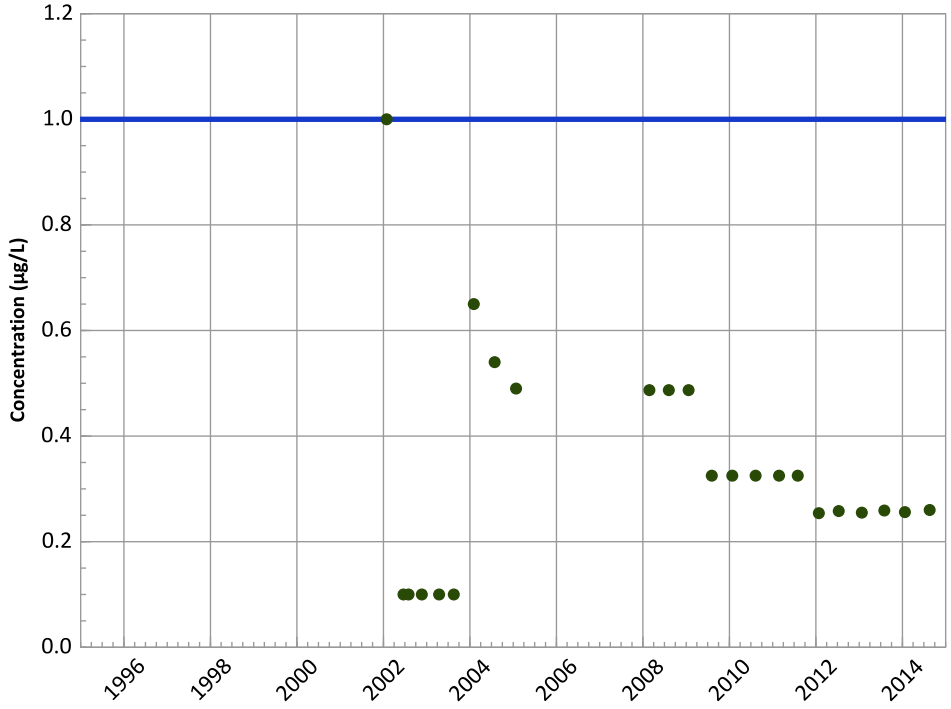
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

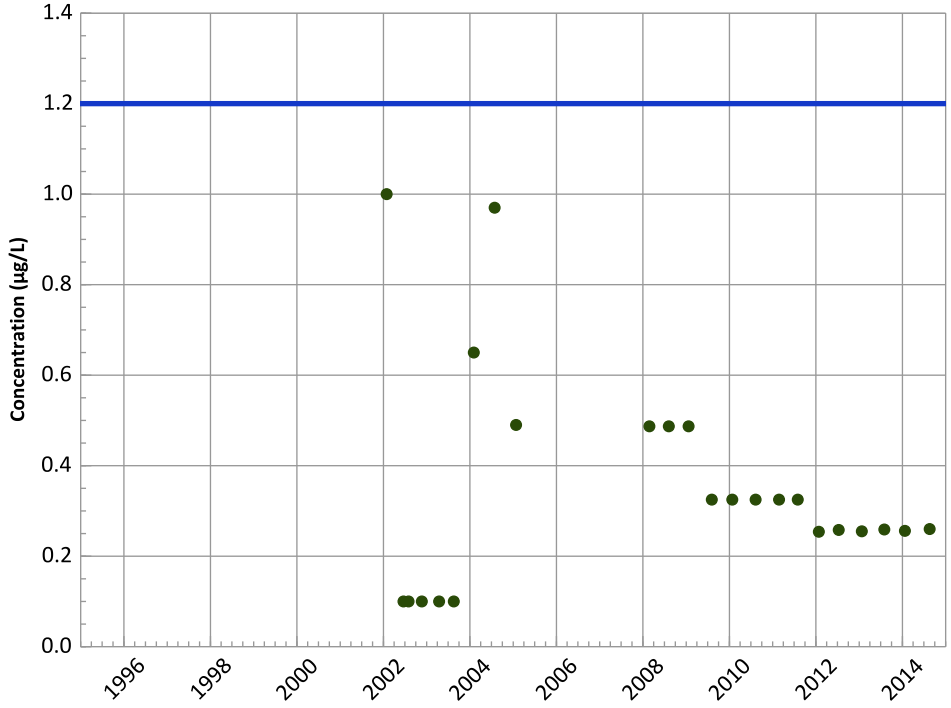


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

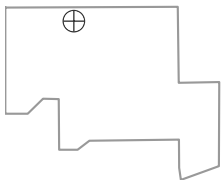
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

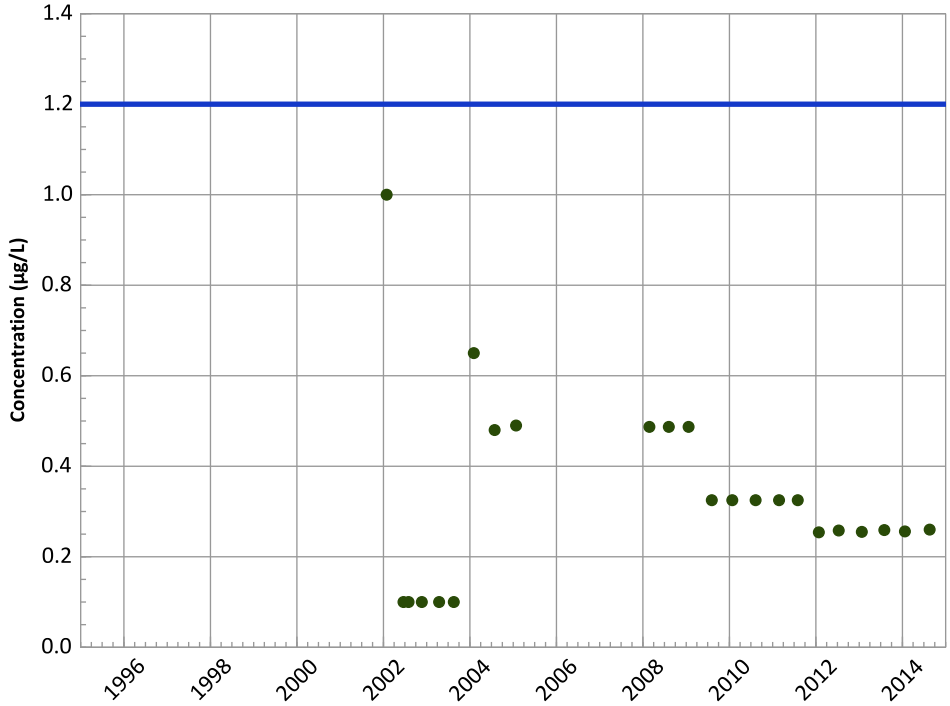
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

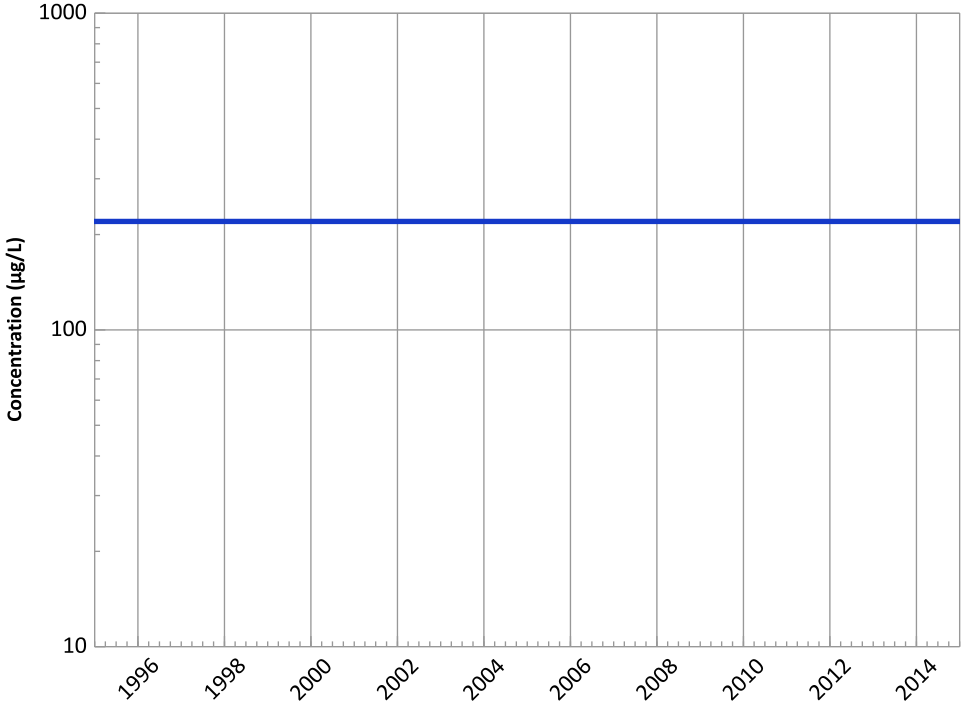


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

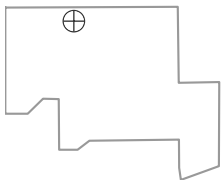


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

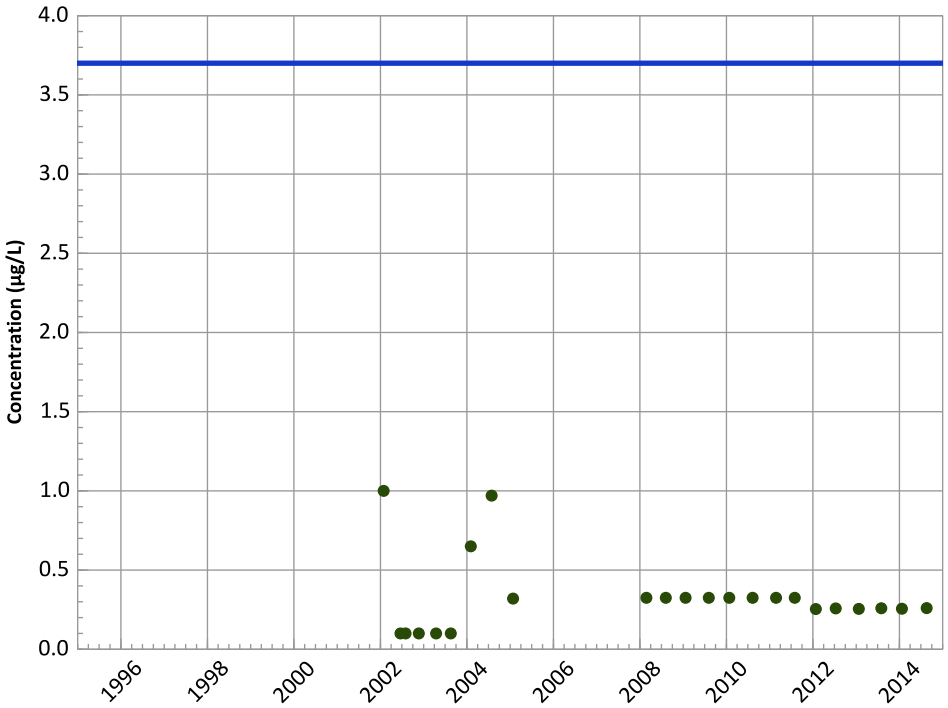


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━ Groundwater Protection Standard

PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

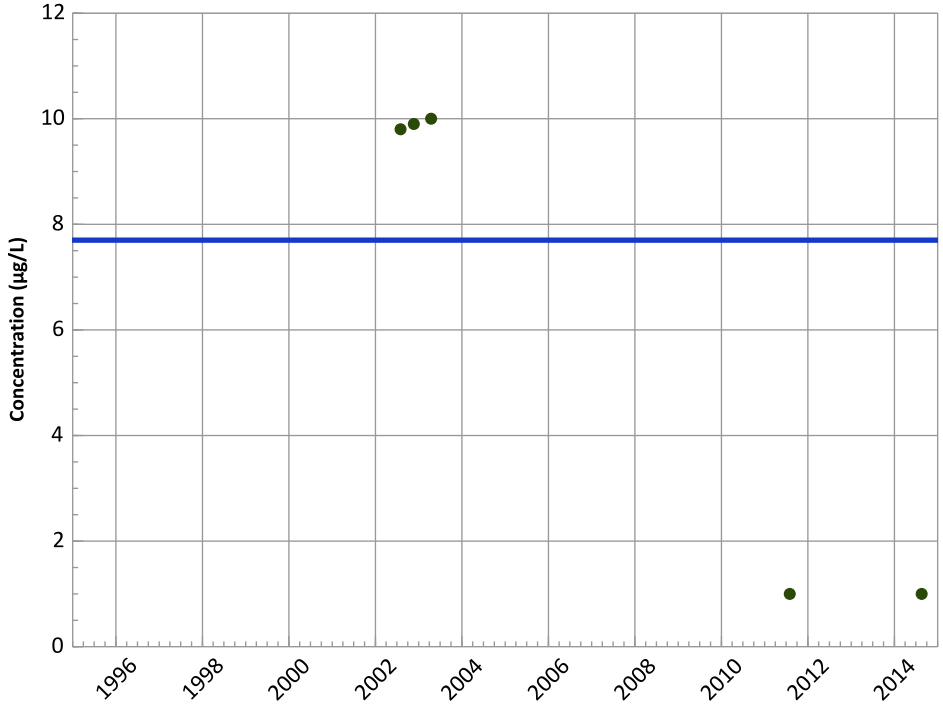


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

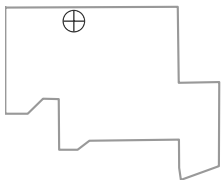
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

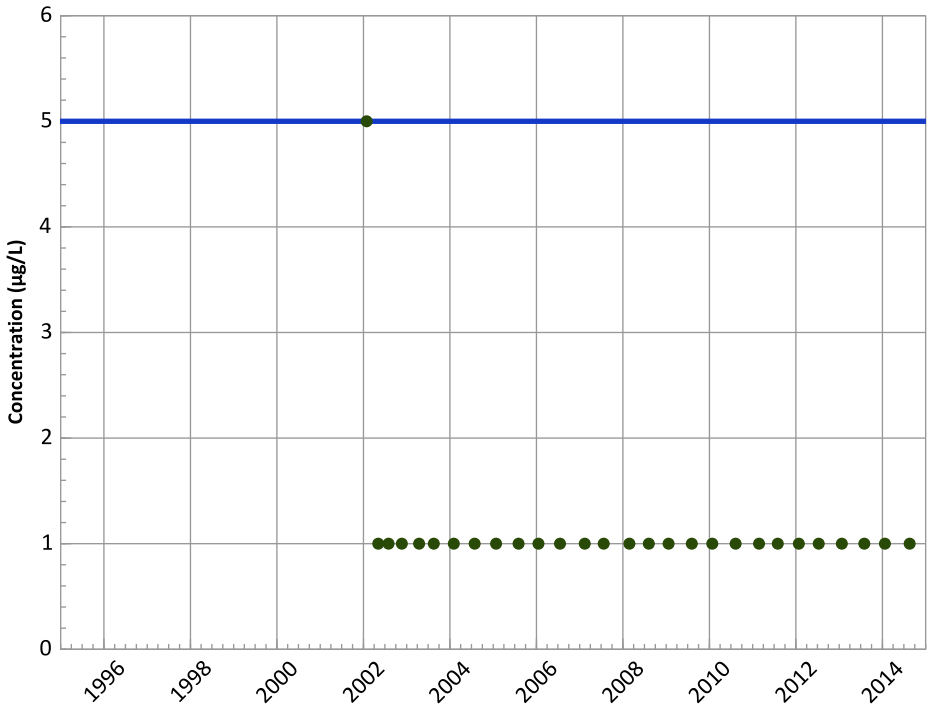
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

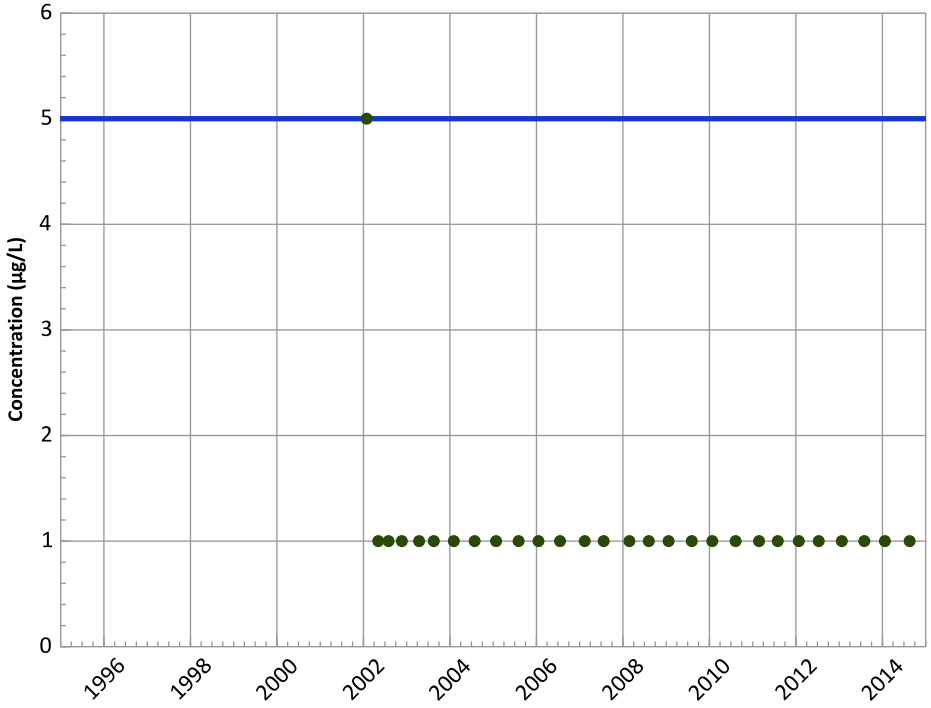


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

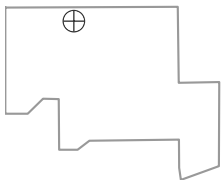
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

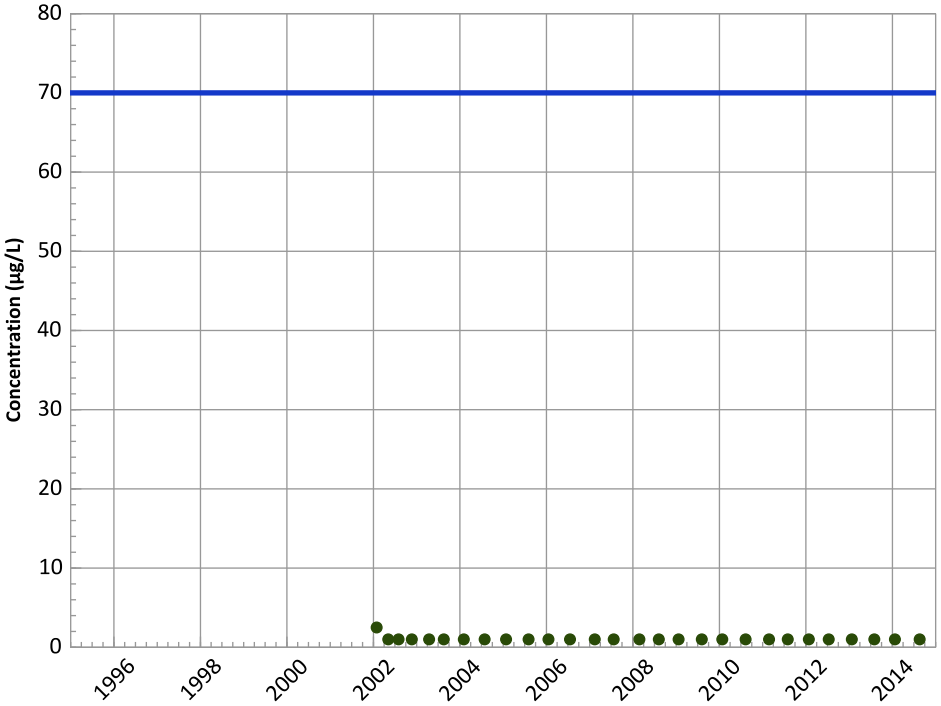
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

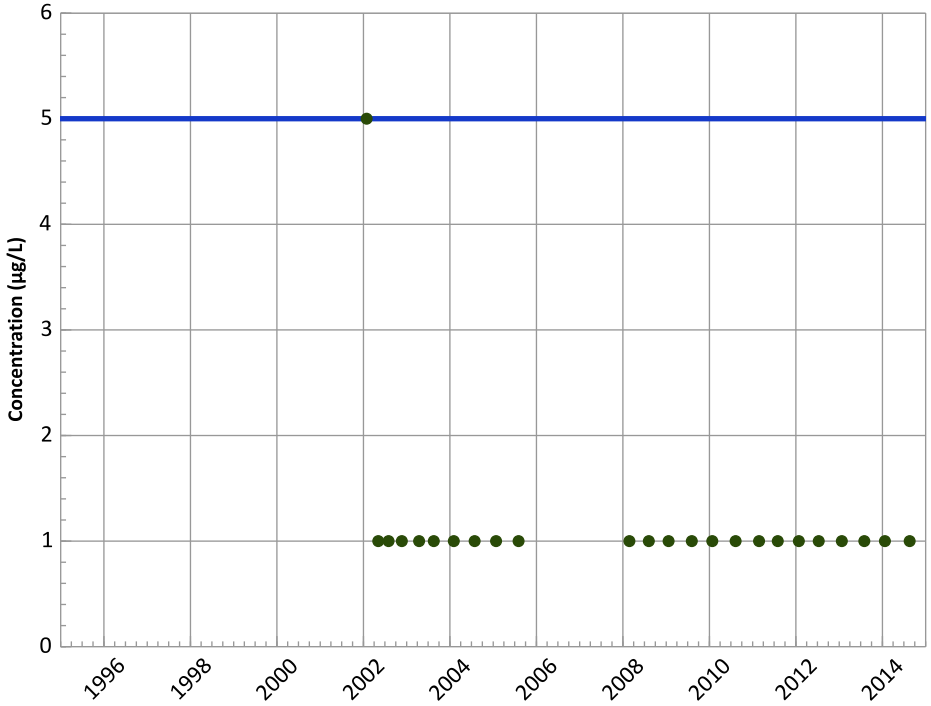


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

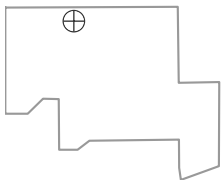
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

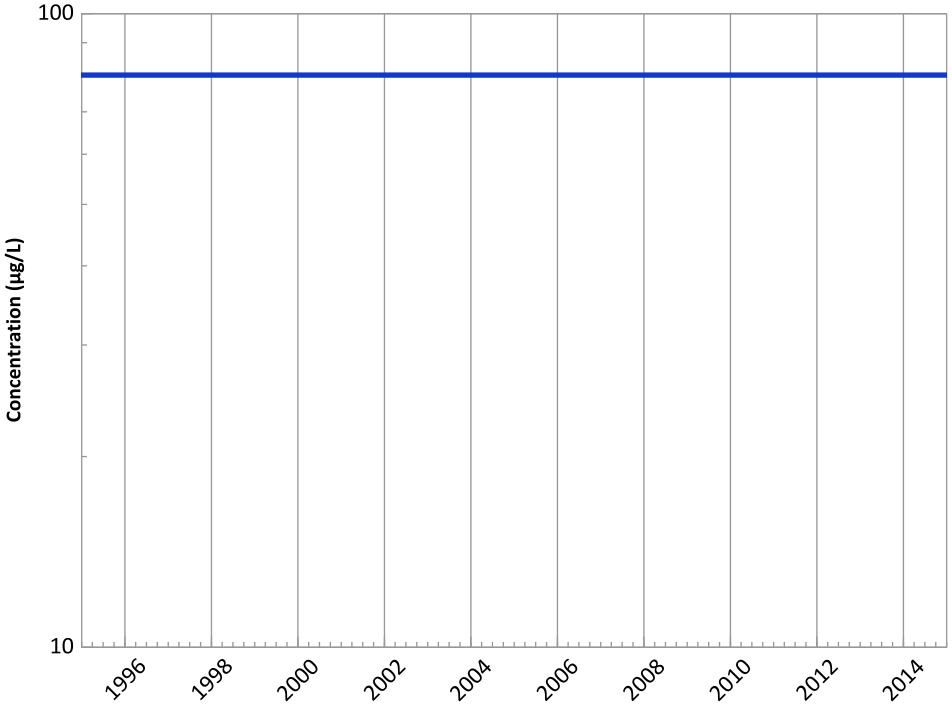
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

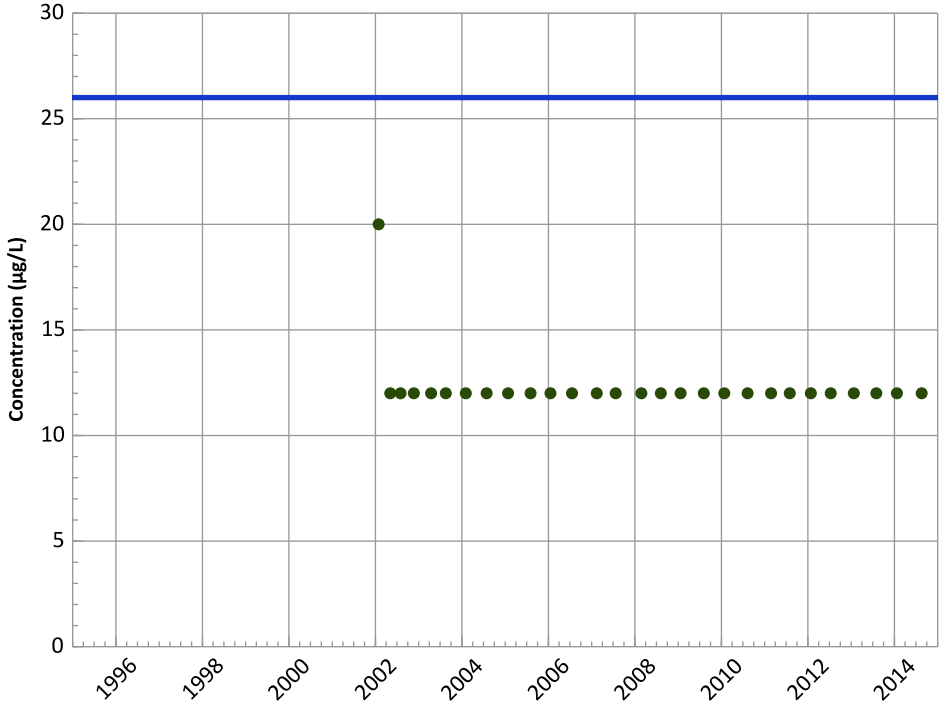


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

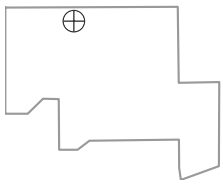
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

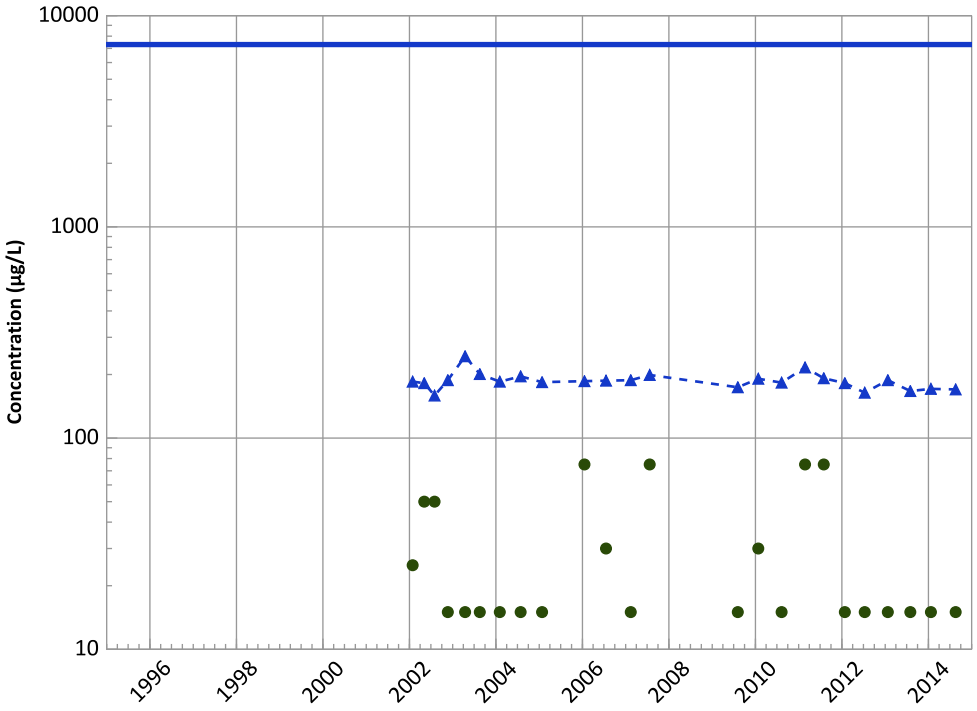
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

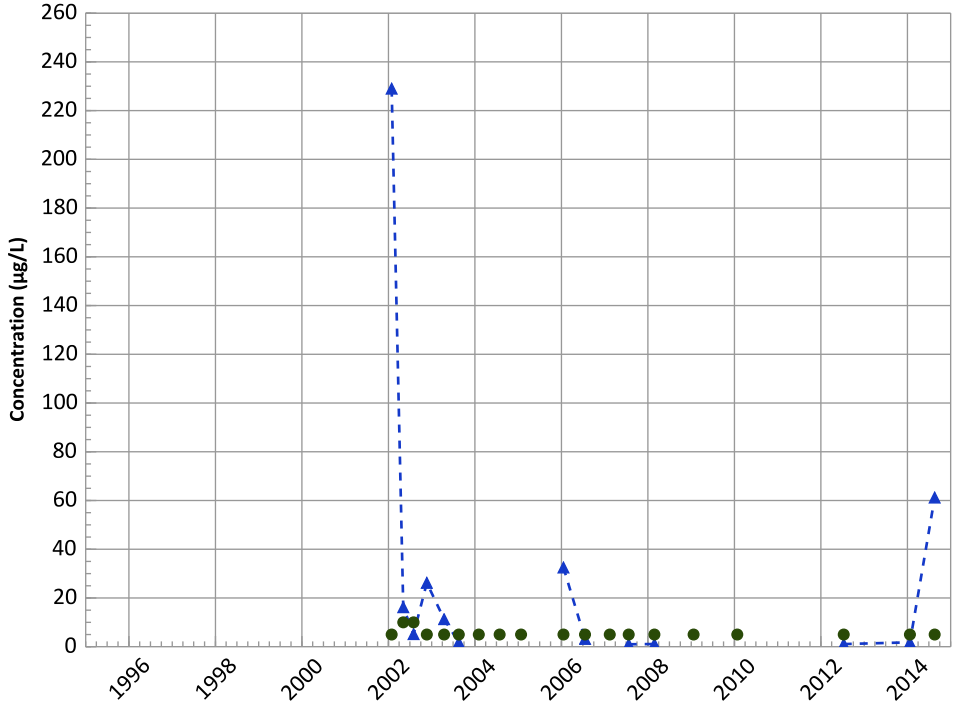


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Manganese Trend



Concentration Trend

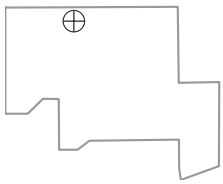
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

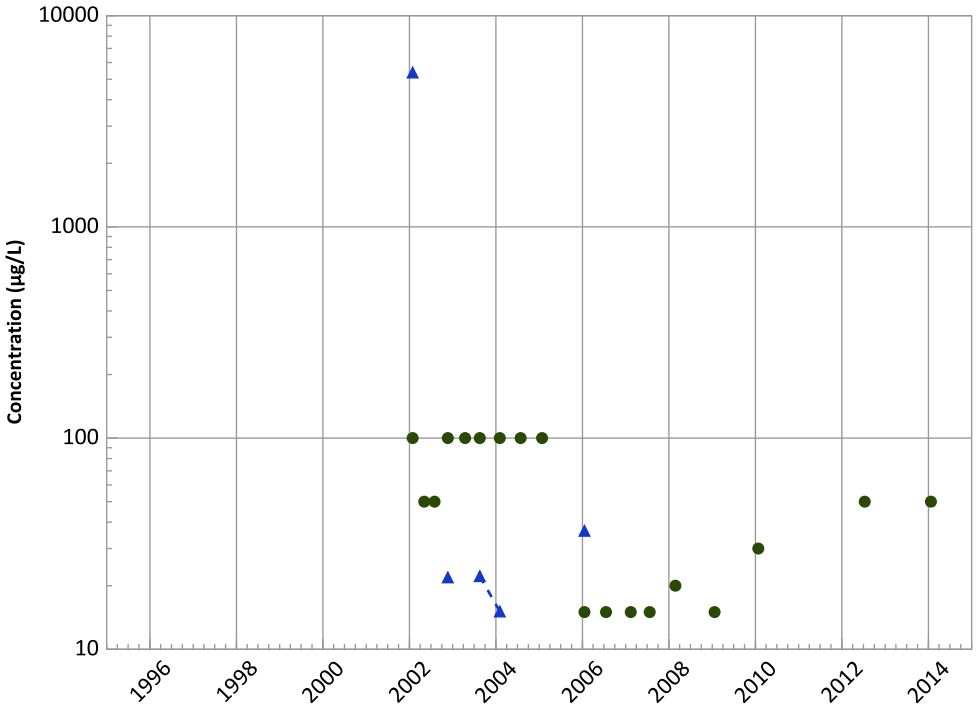
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

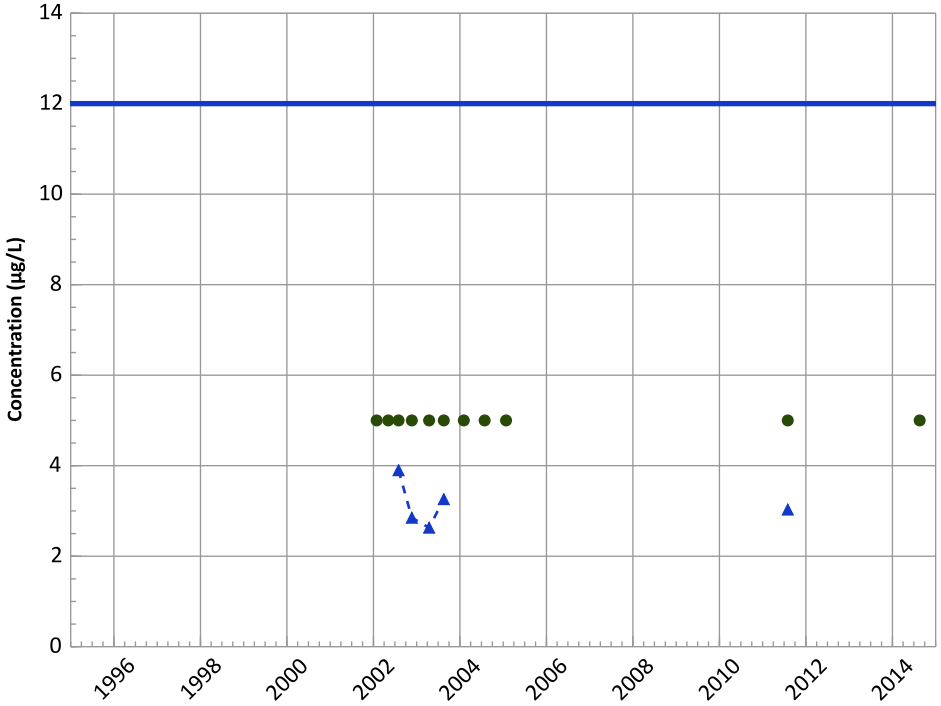


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

Arsenic Trend



Concentration Trend

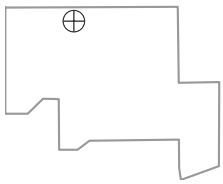
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

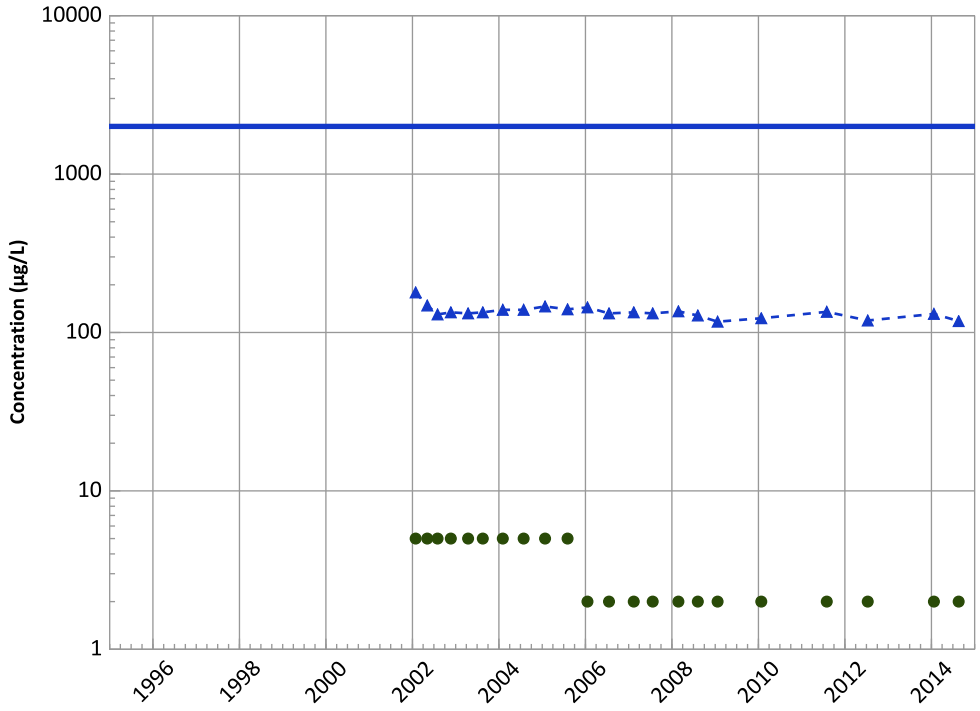
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

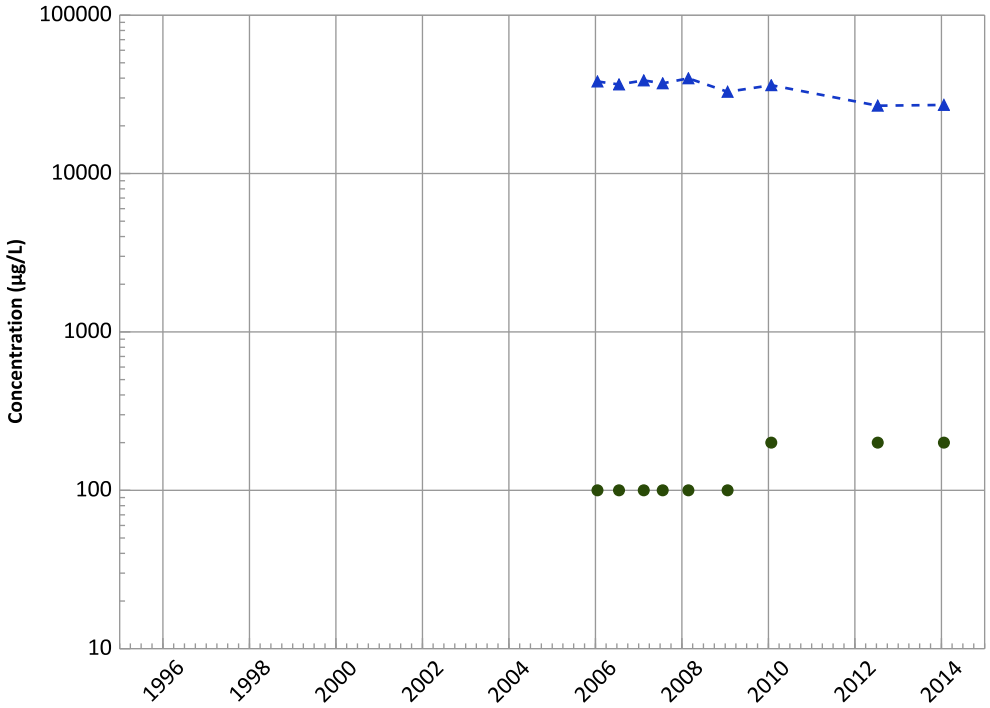


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Calcium Trend



Concentration Trend

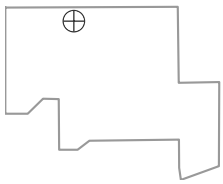
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

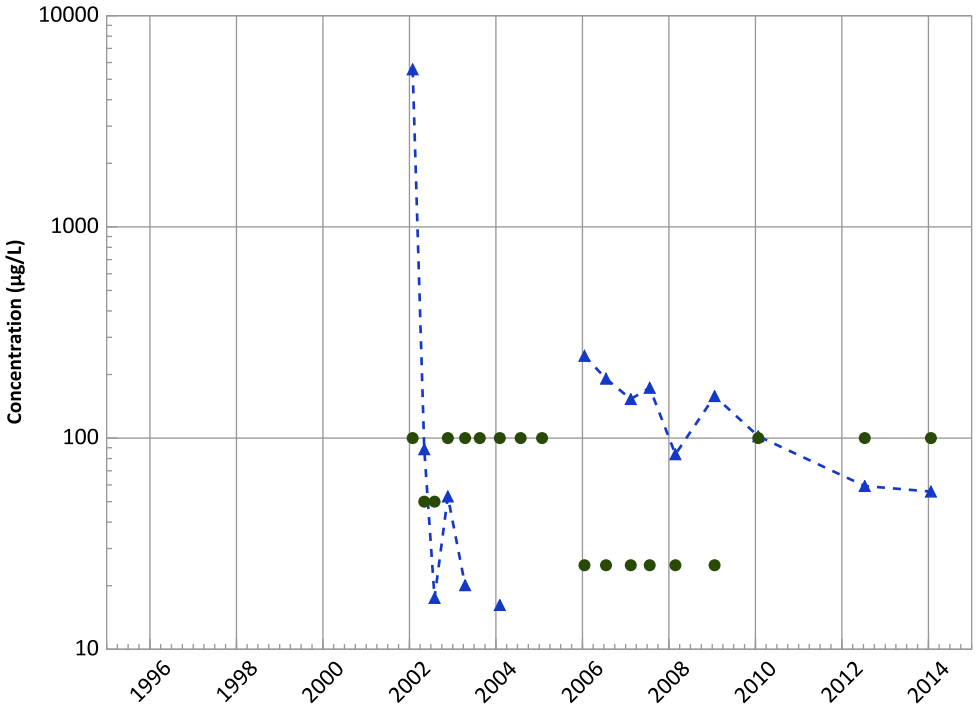
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

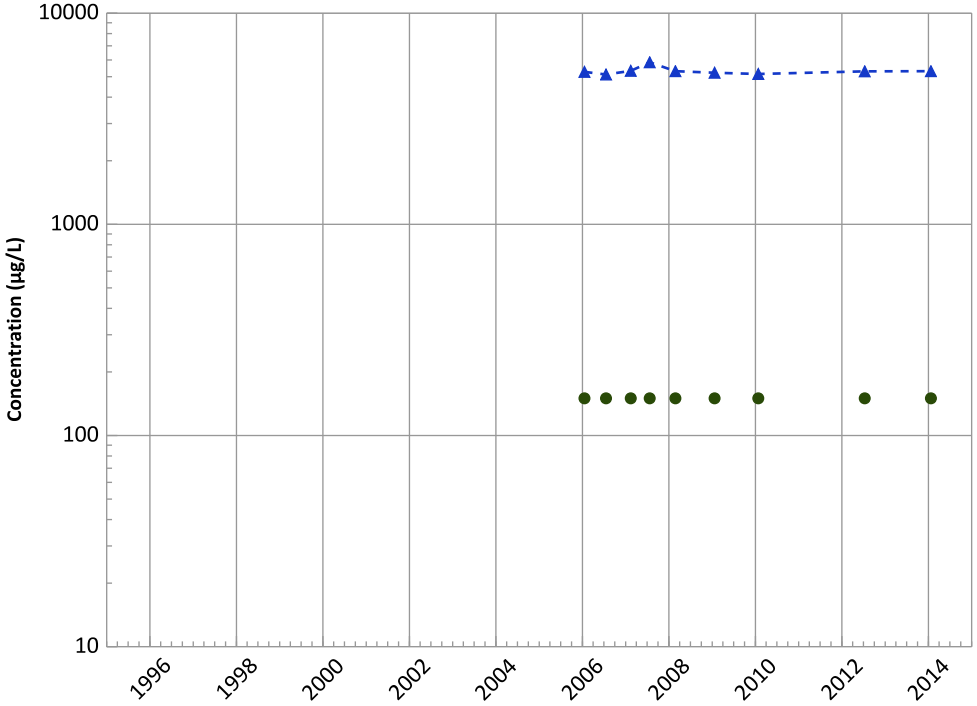


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Potassium Trend



Concentration Trend

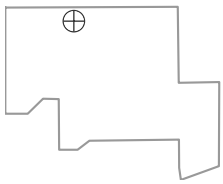
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

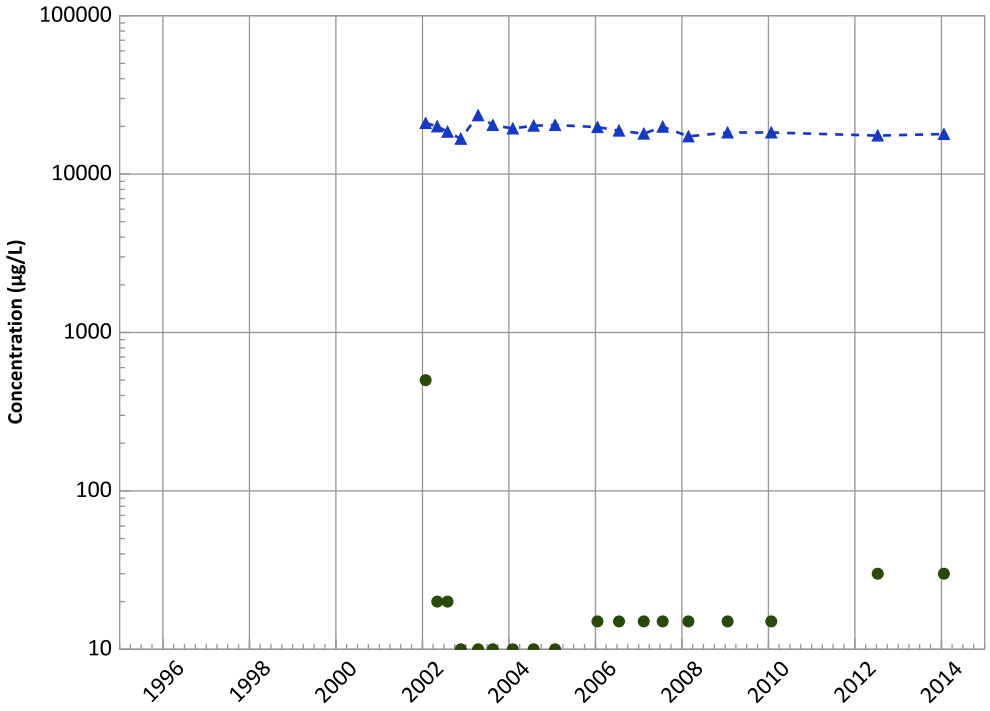
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1011 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

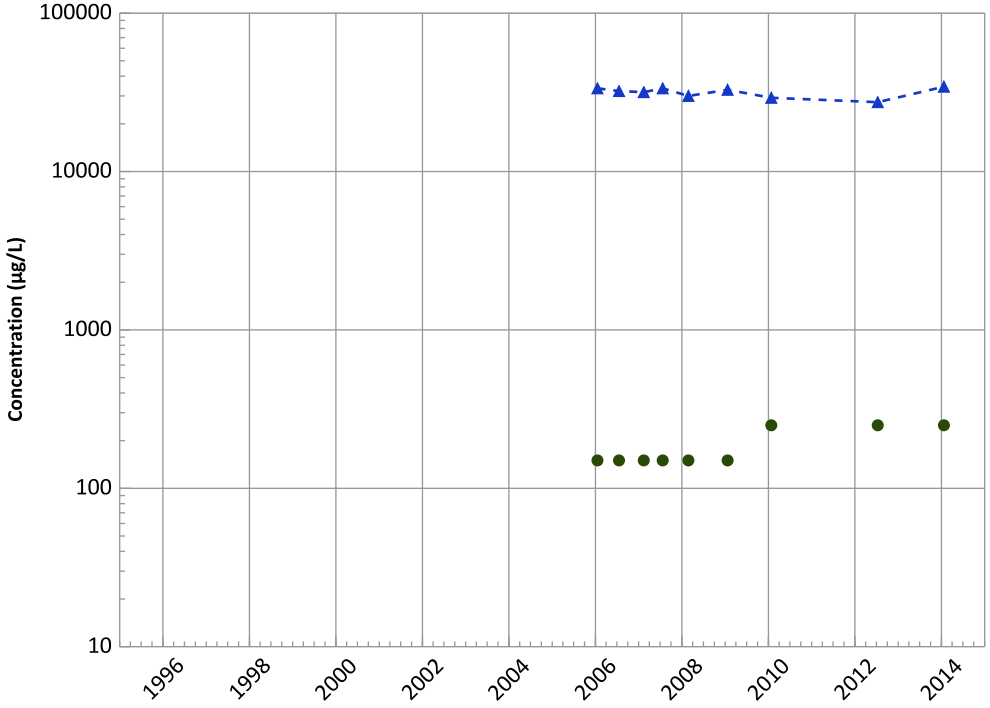


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Sodium Trend



Concentration Trend

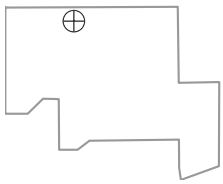
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

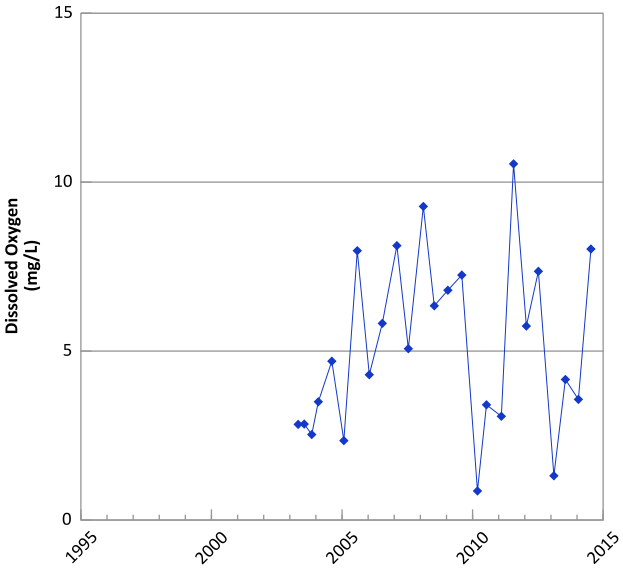
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/28/2002 to 08/19/2014
Analysis Date: 03/19/2015

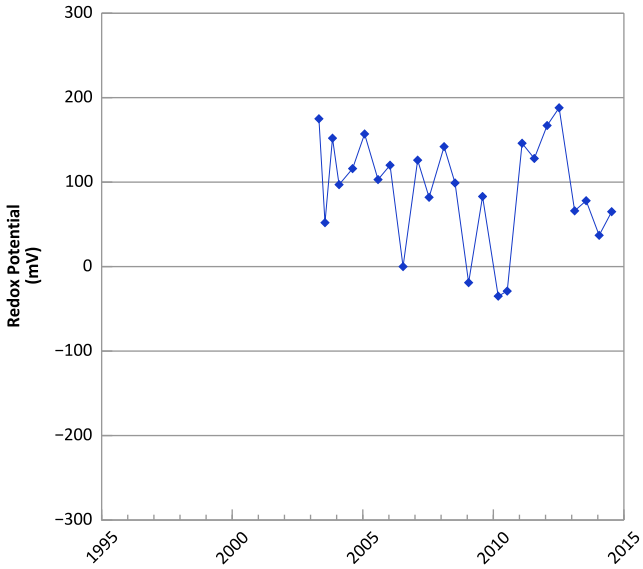
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

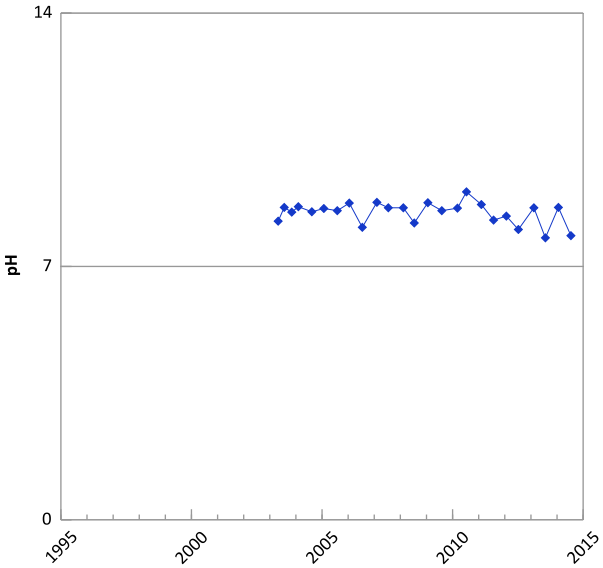
Well Location

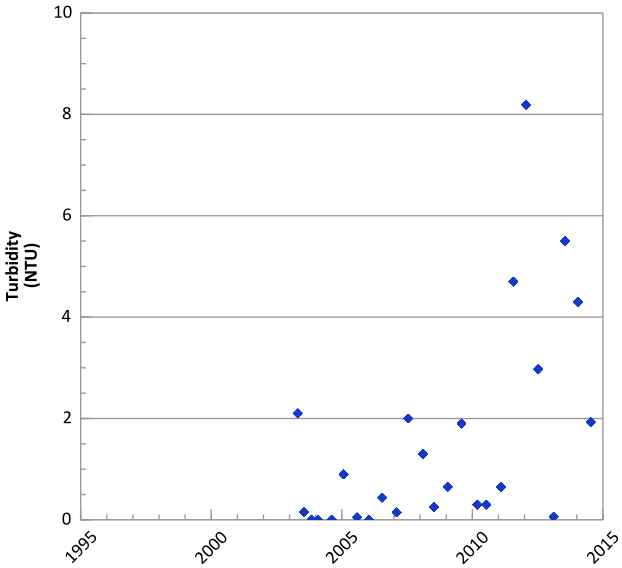


PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



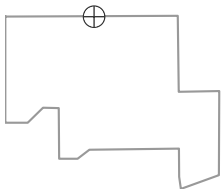






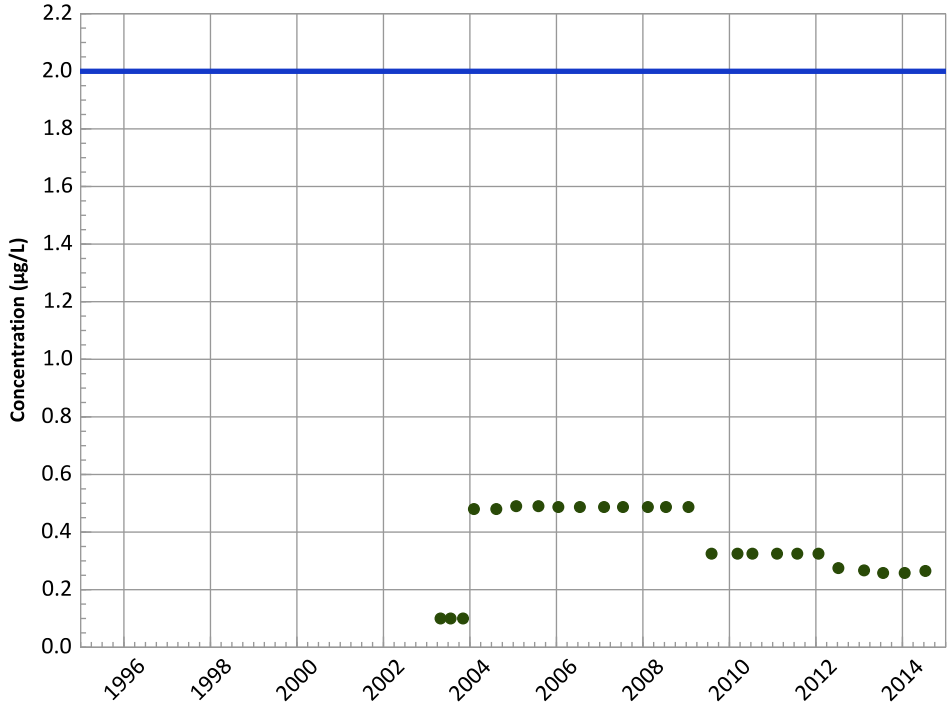
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

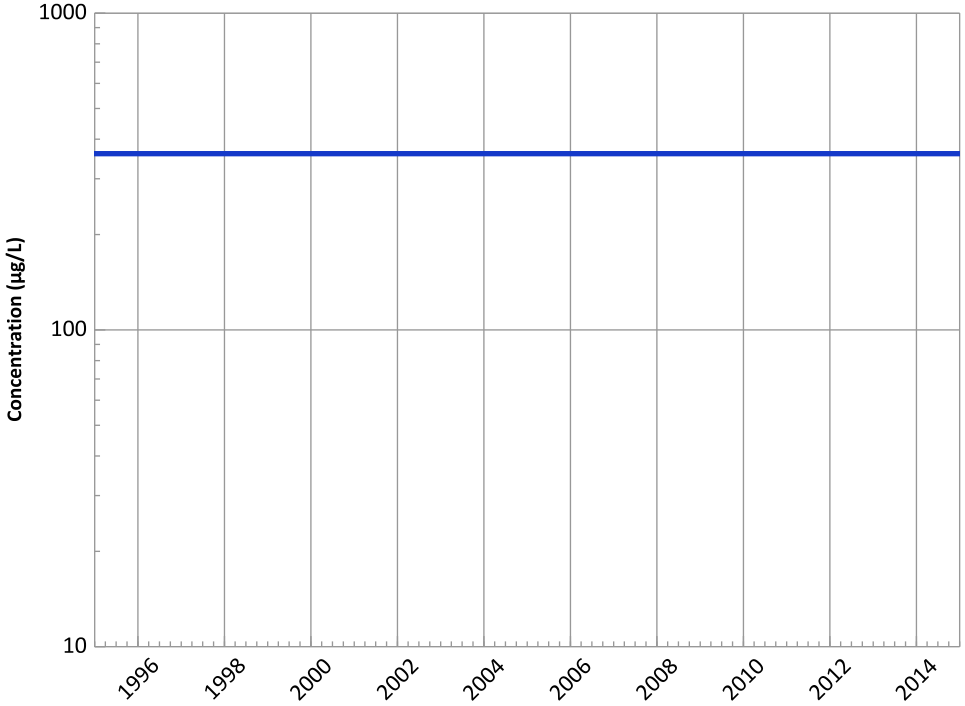


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

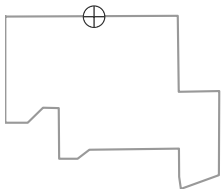
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

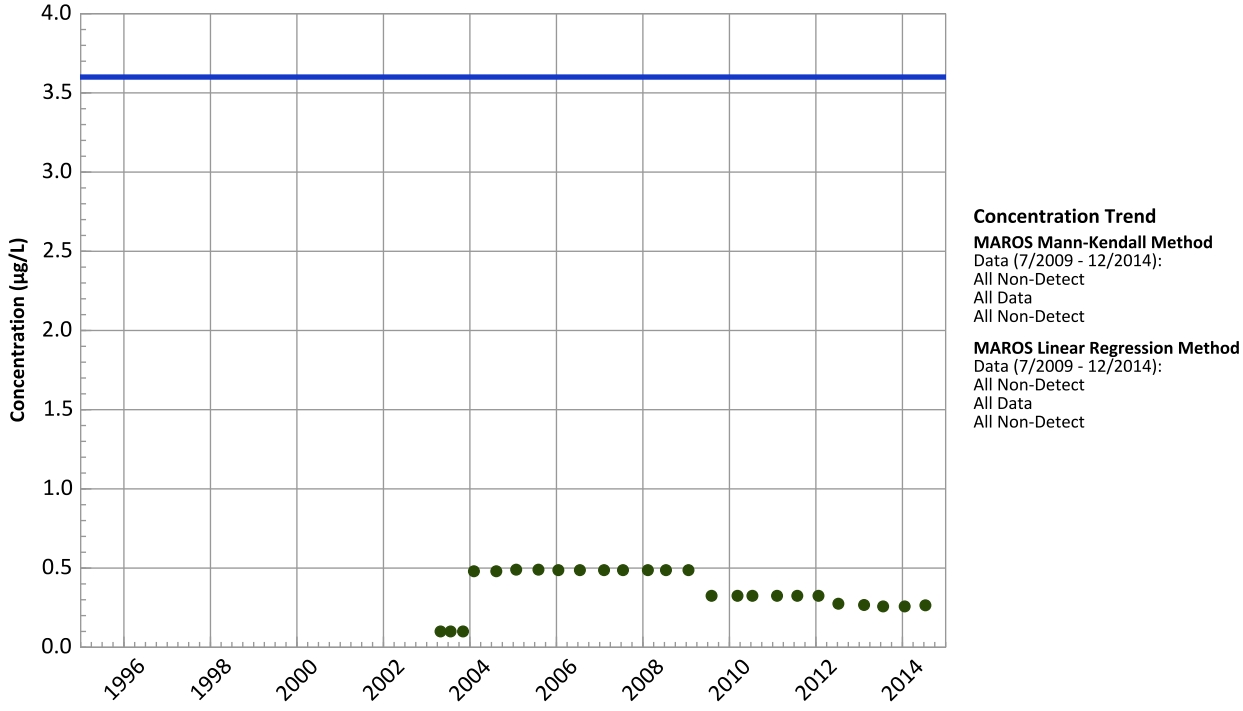
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location

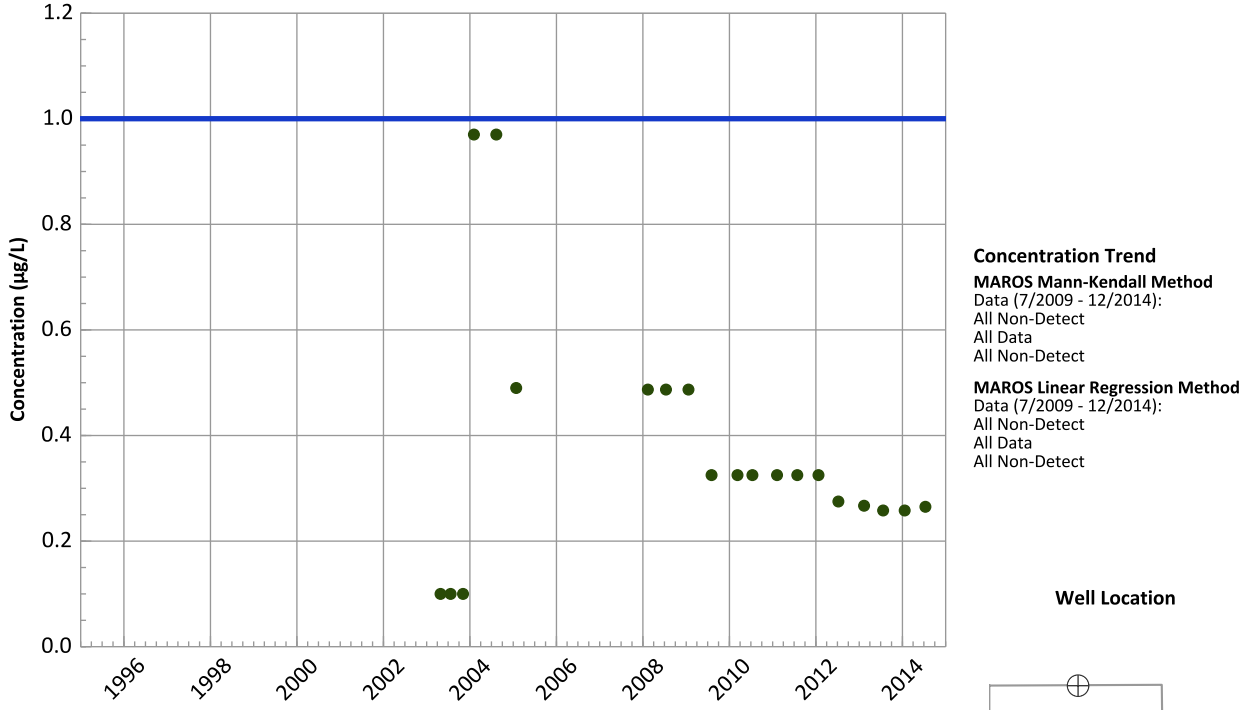


PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend



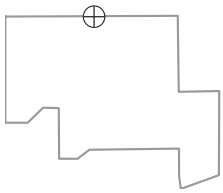
2,4-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

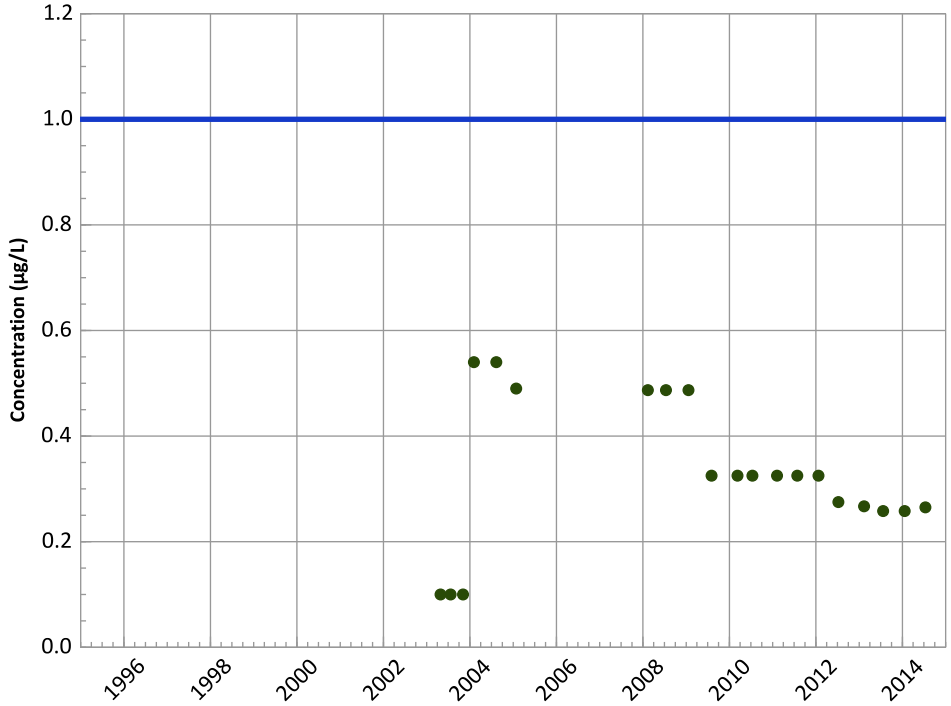
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

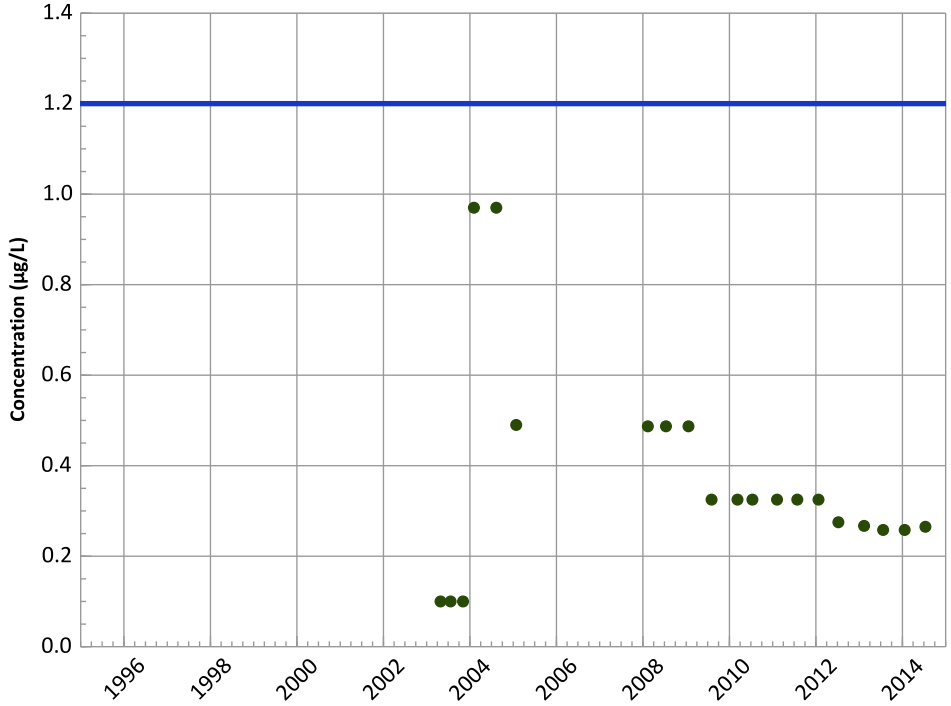


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

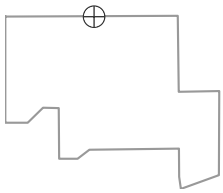
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

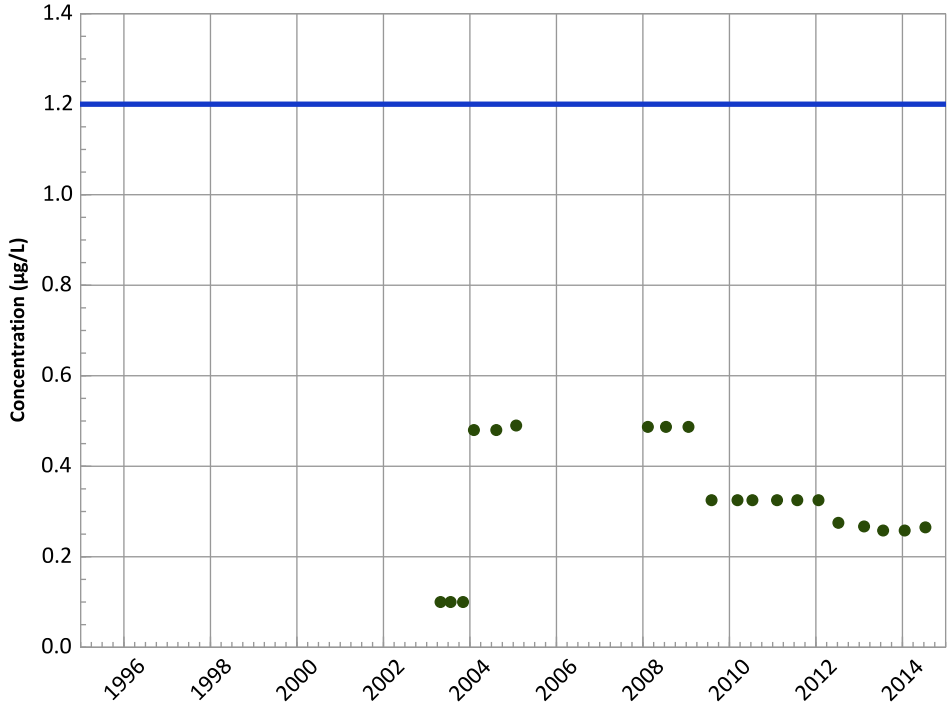
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

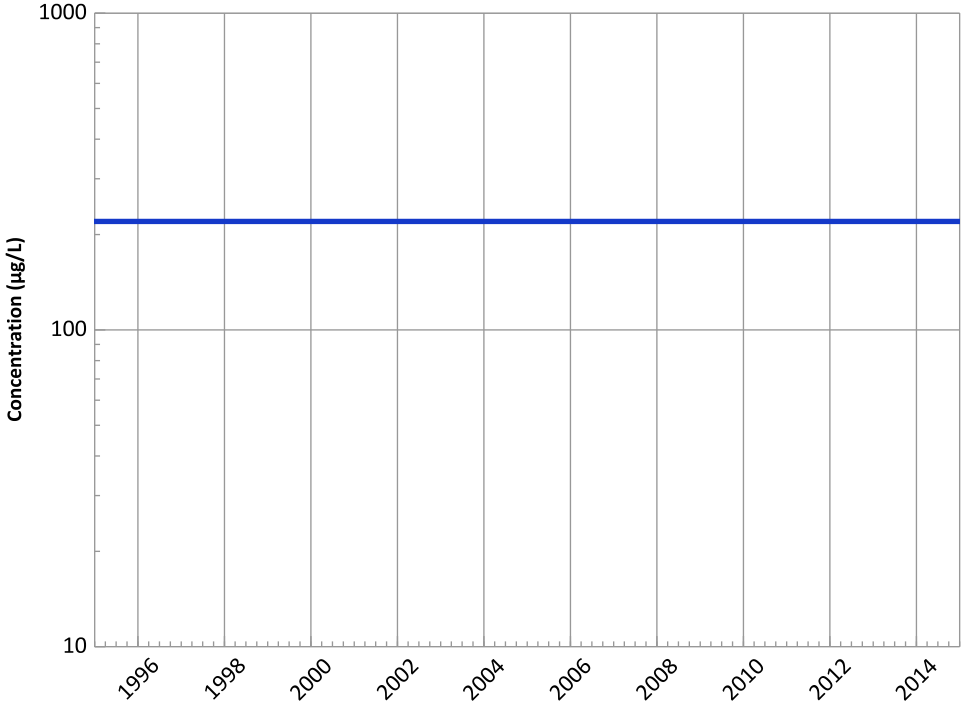


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

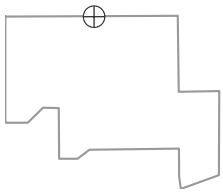
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

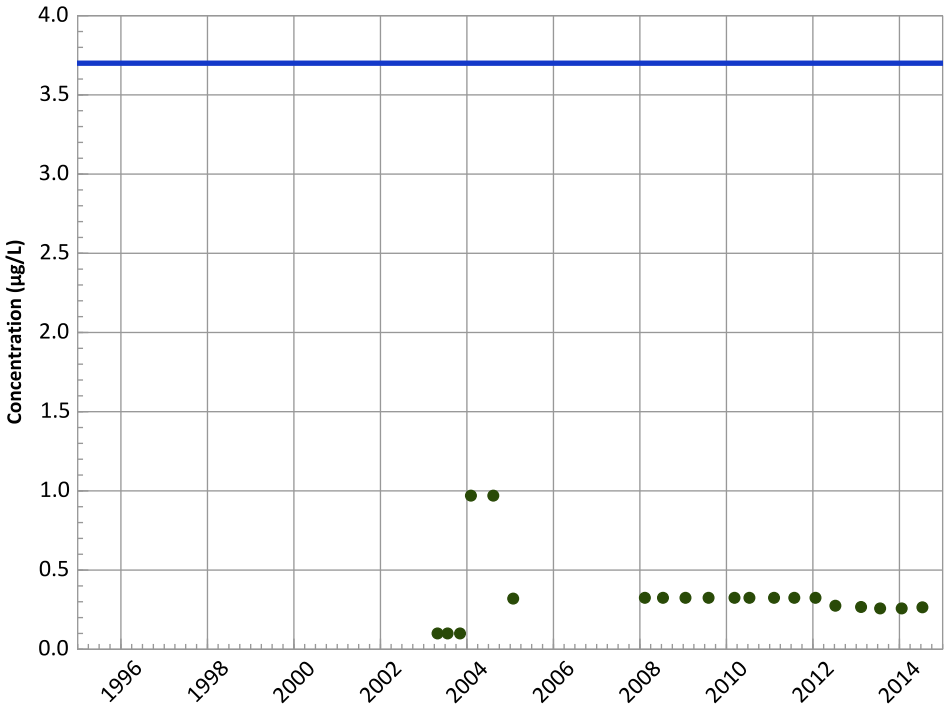
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

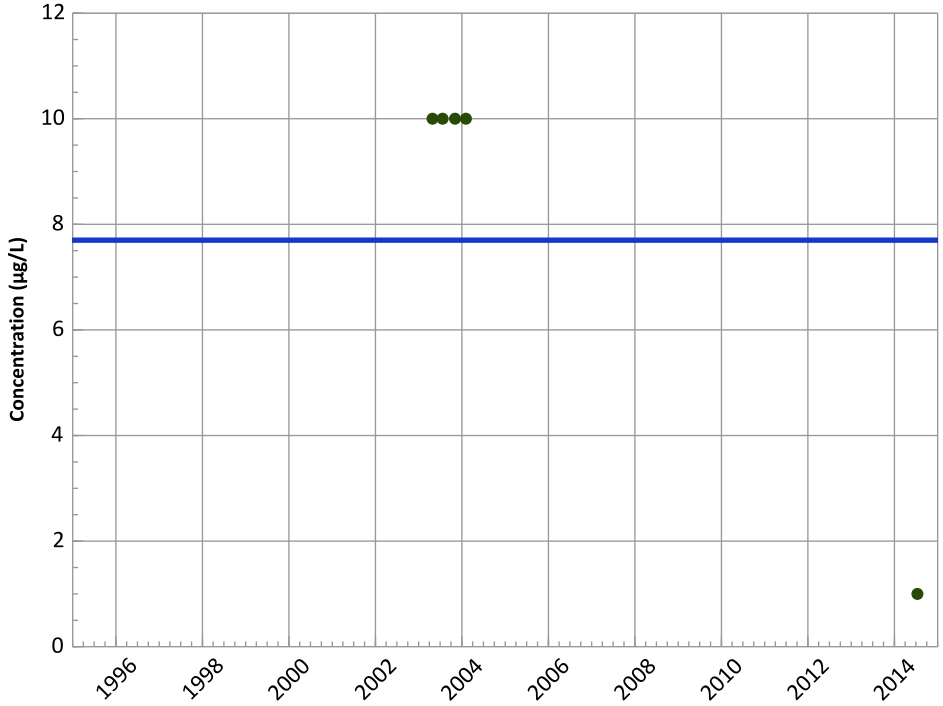


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

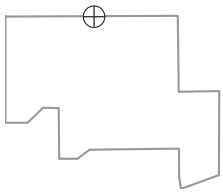
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

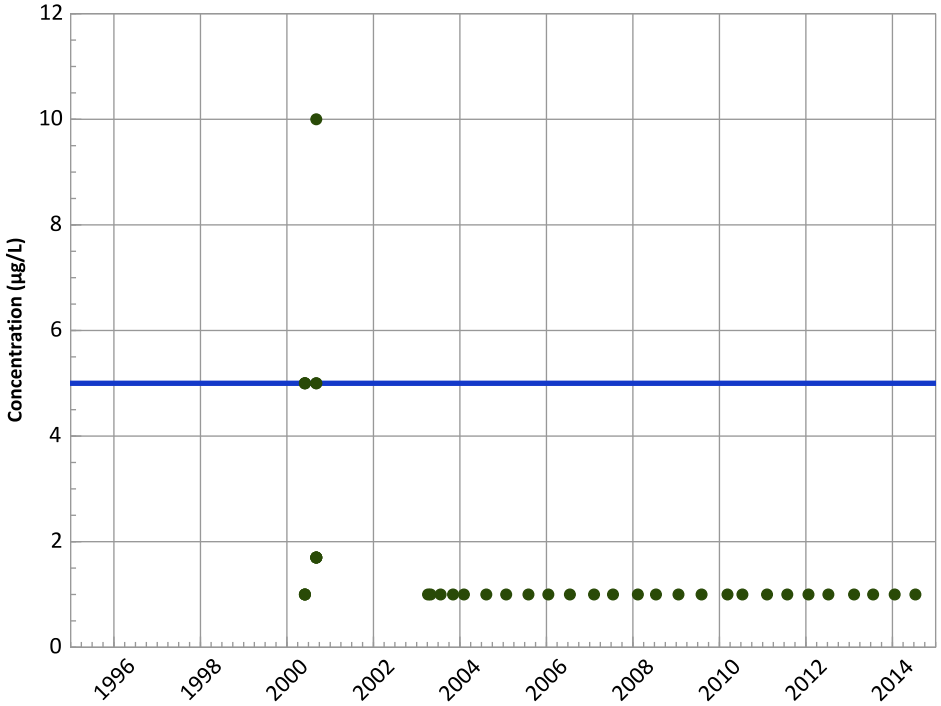
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

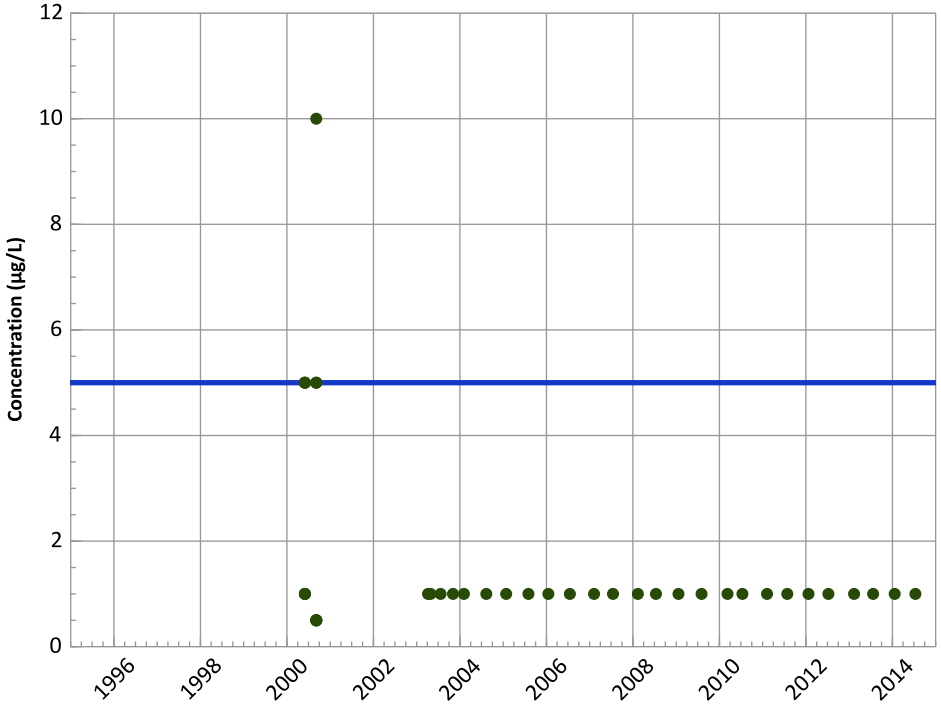


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

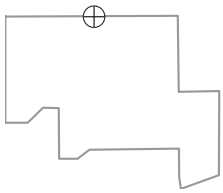
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

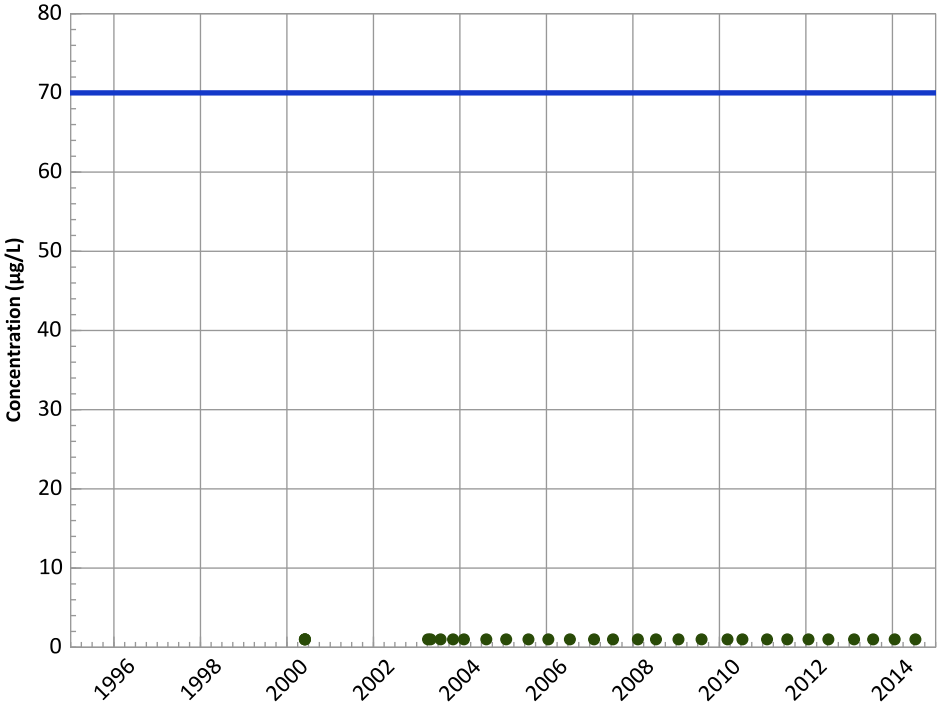
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

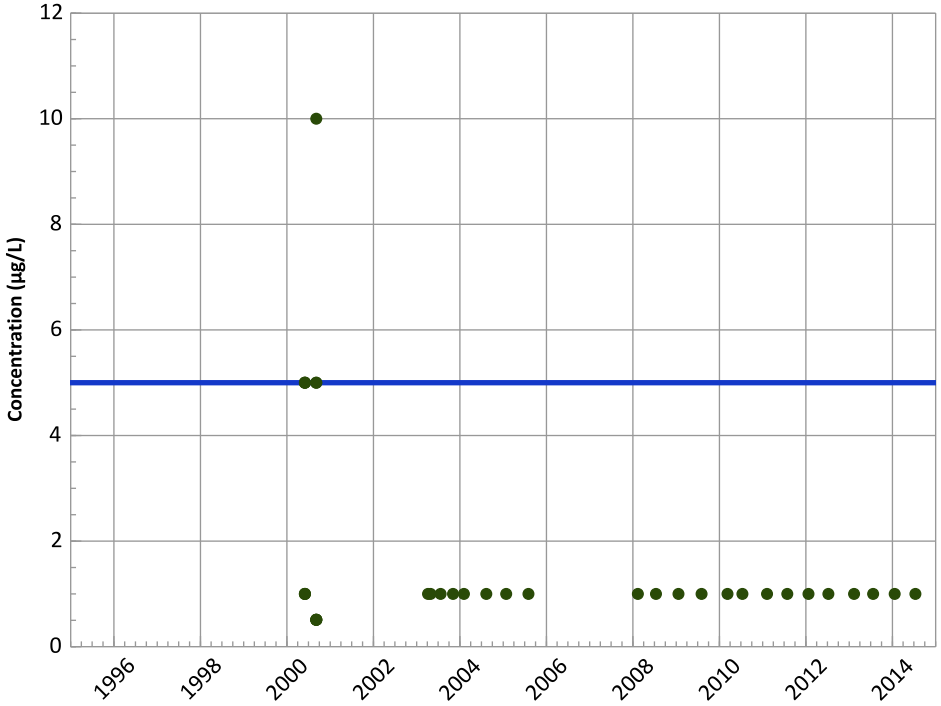


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

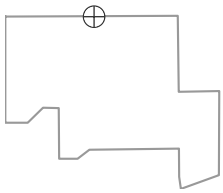
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

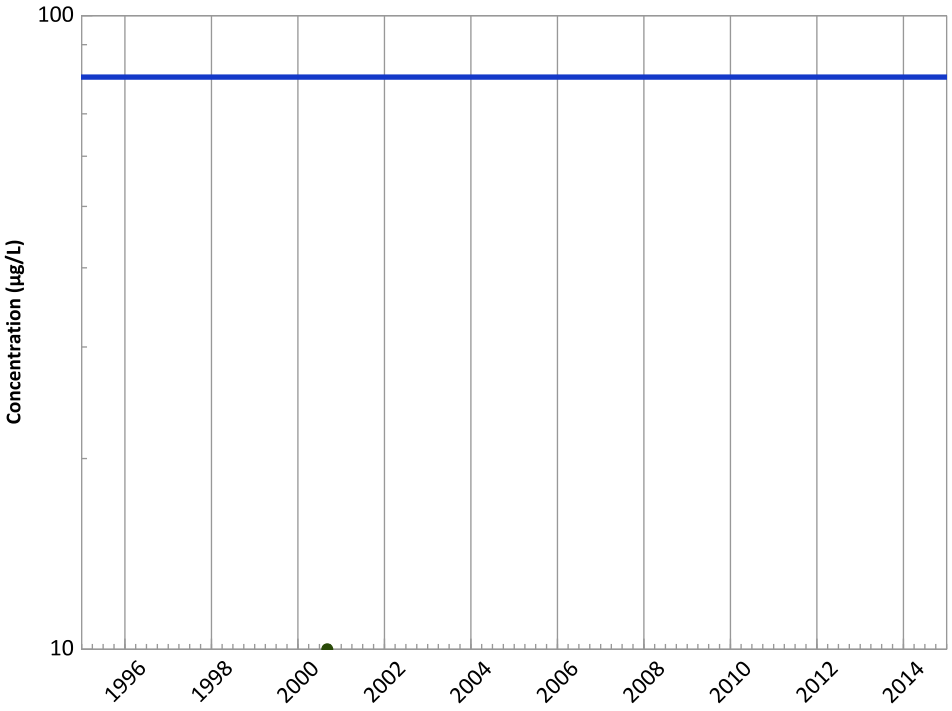
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

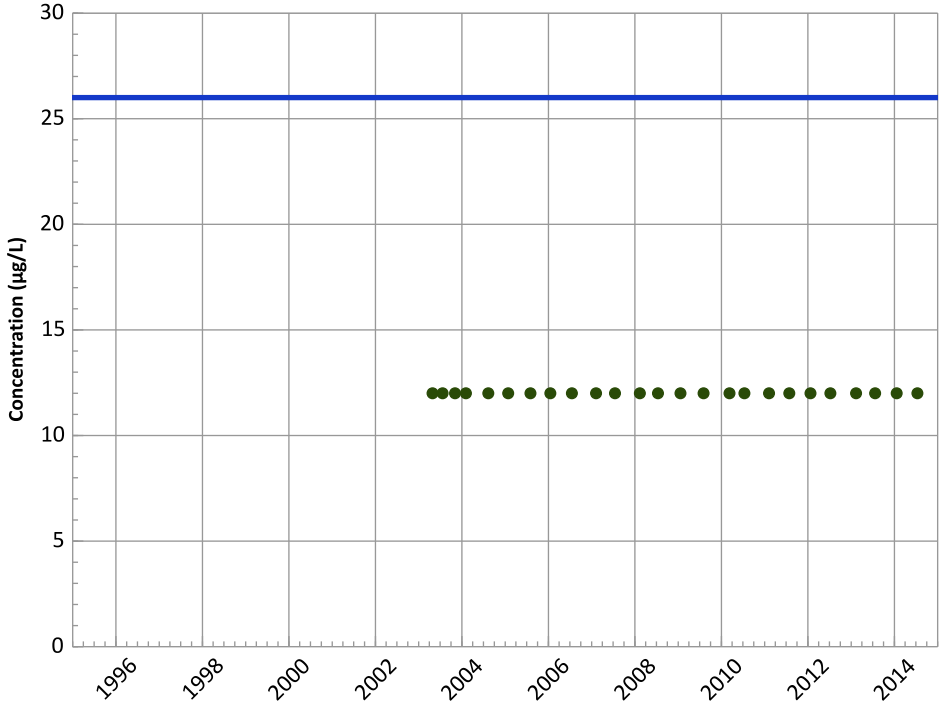


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

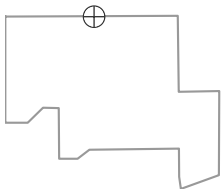
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

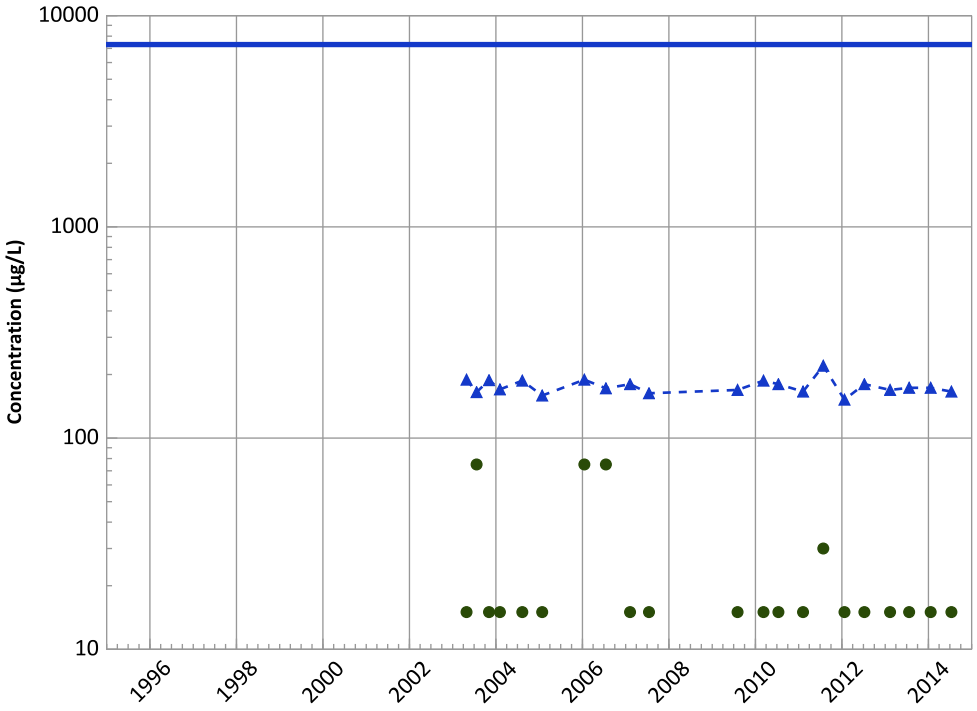
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

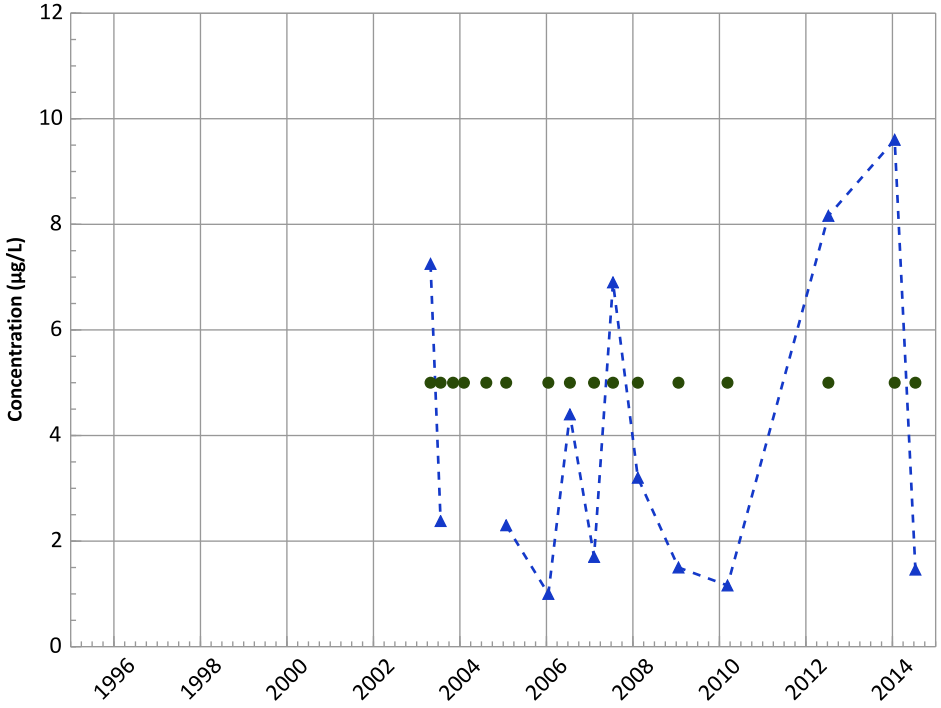


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Manganese Trend



Concentration Trend

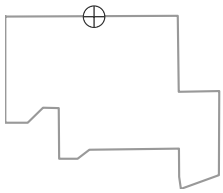
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

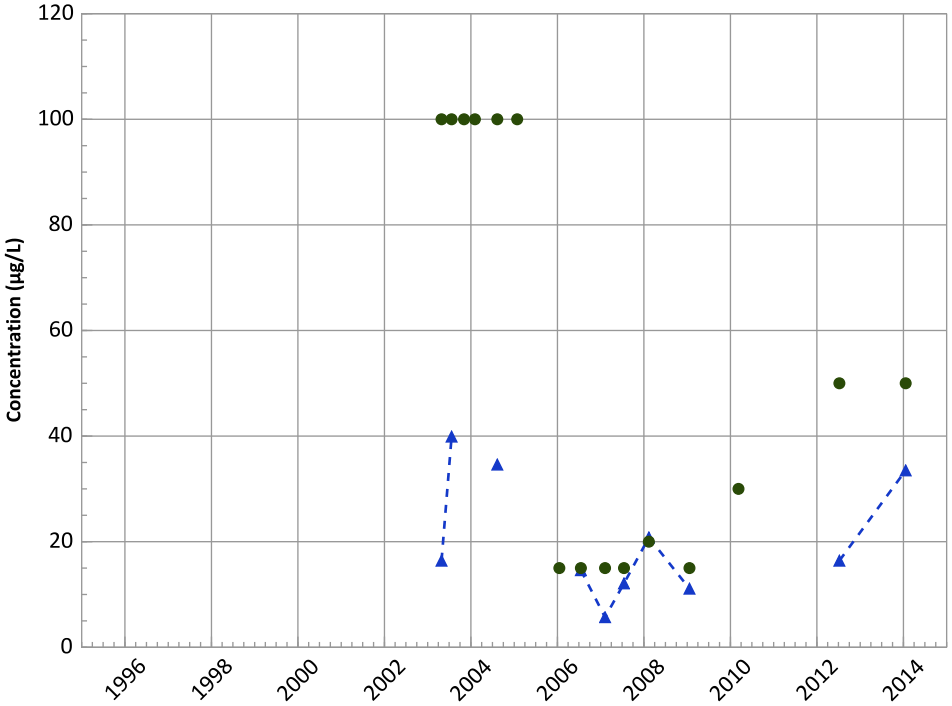
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

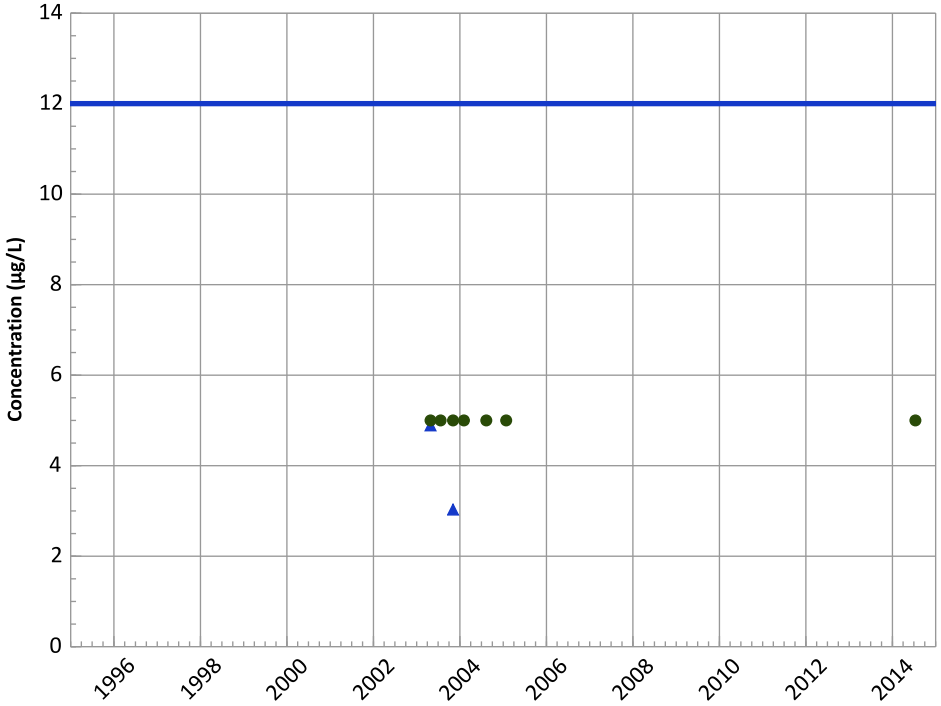


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Arsenic Trend



Concentration Trend

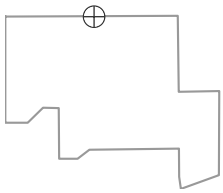
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

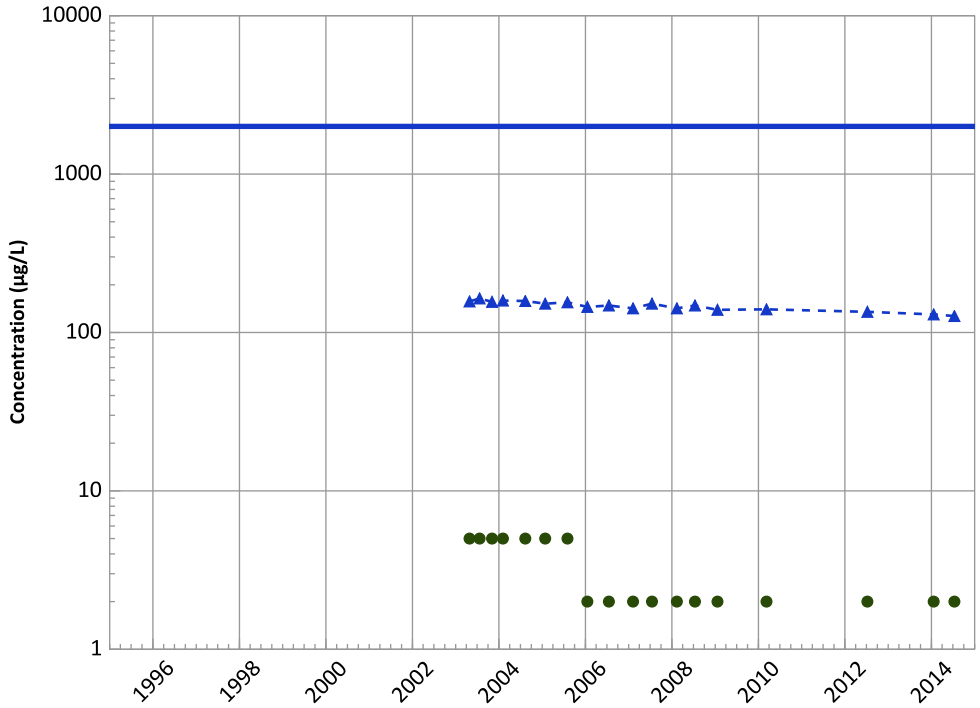
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

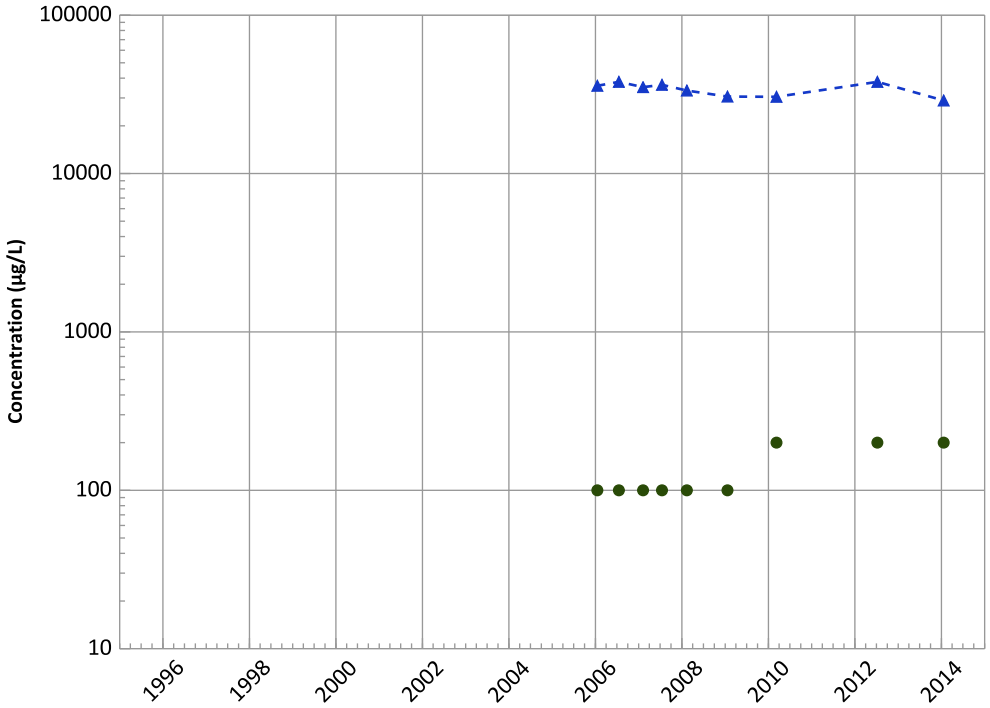


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Calcium Trend



Concentration Trend

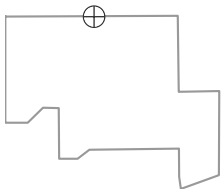
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

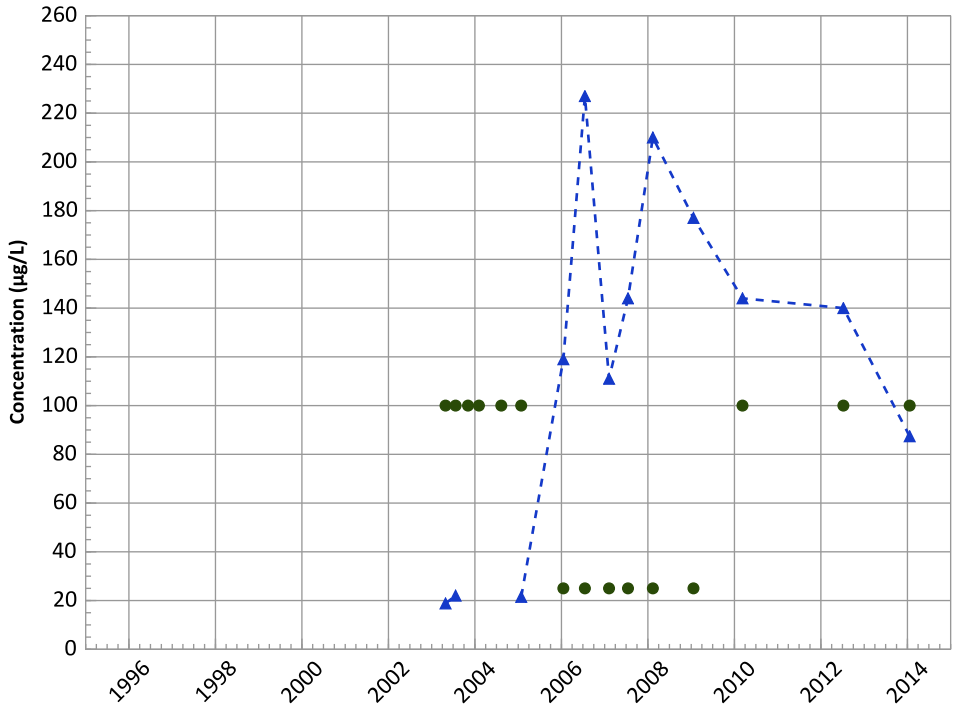
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

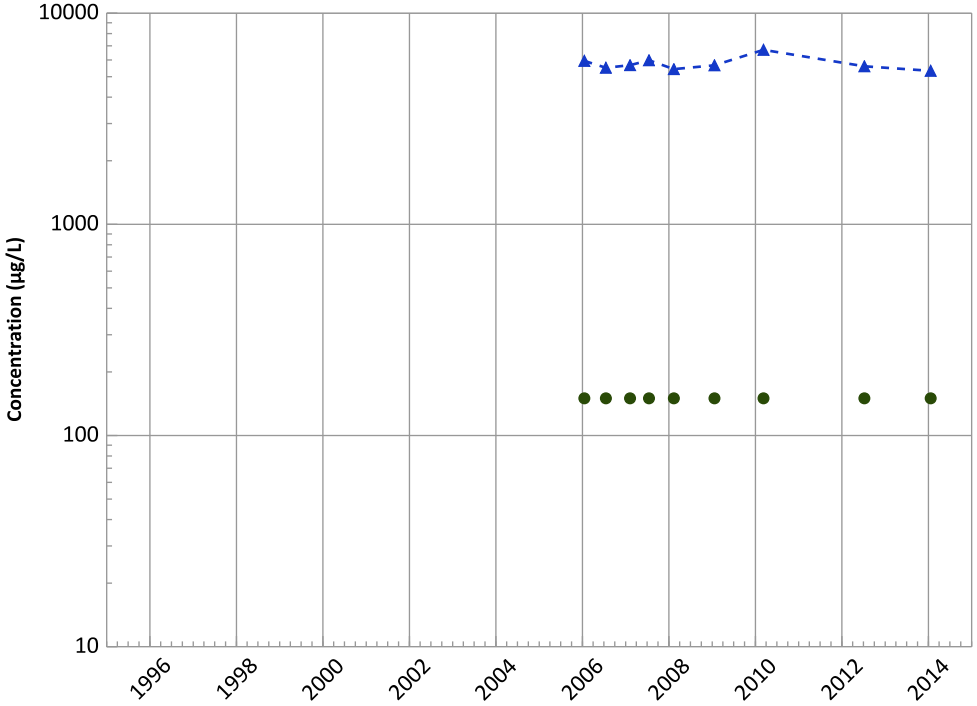


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Potassium Trend



Concentration Trend

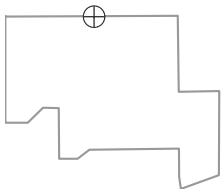
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

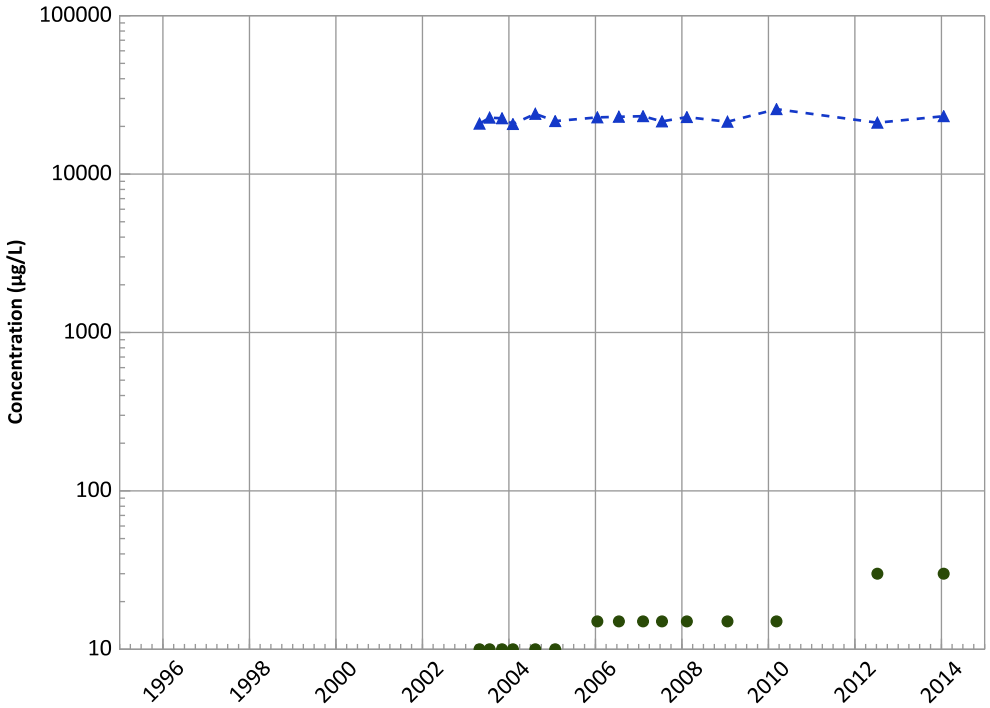
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1012 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

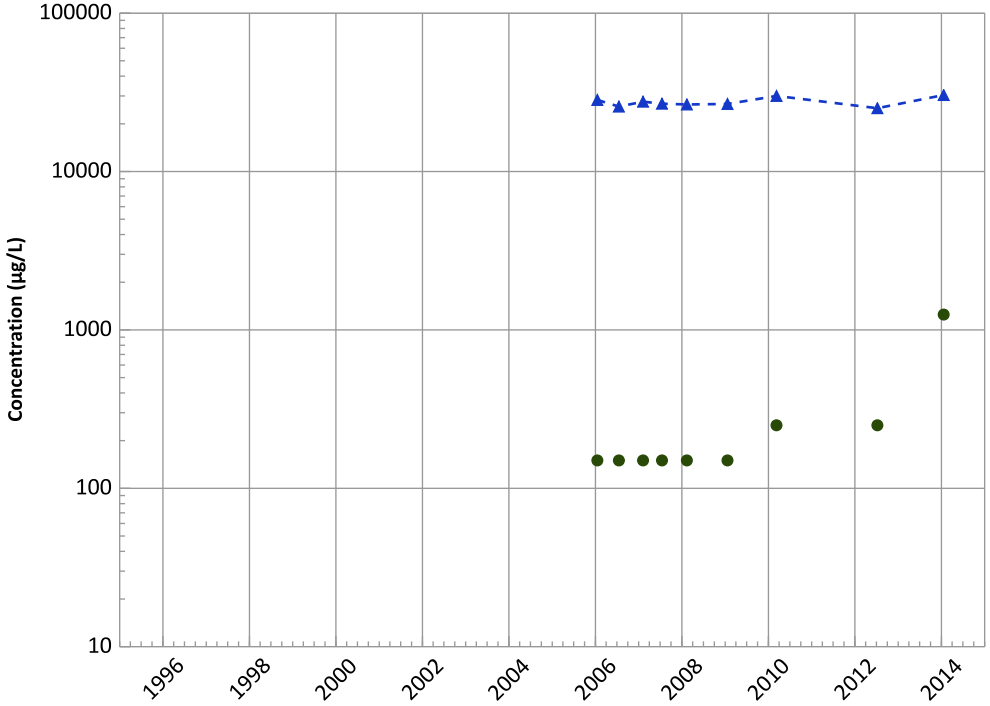


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Sodium Trend



Concentration Trend

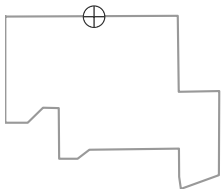
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

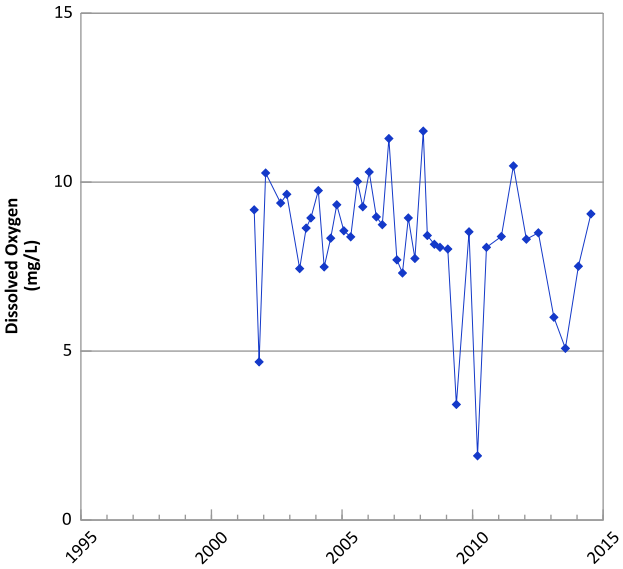
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

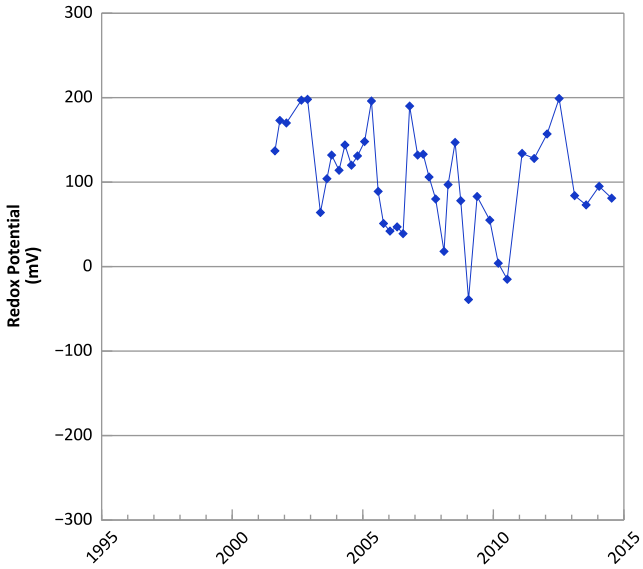
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

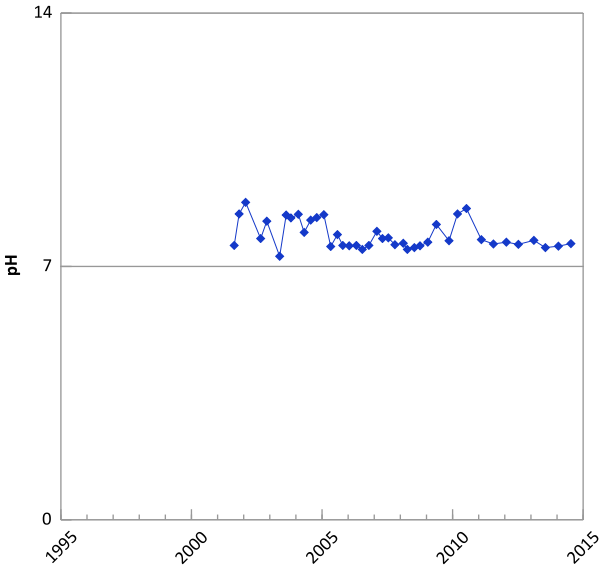
Well Location

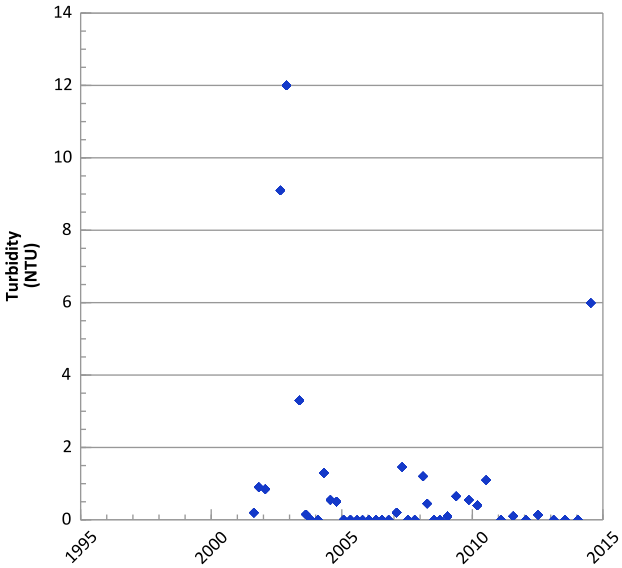


PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



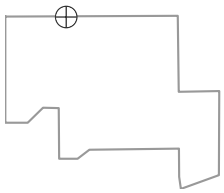






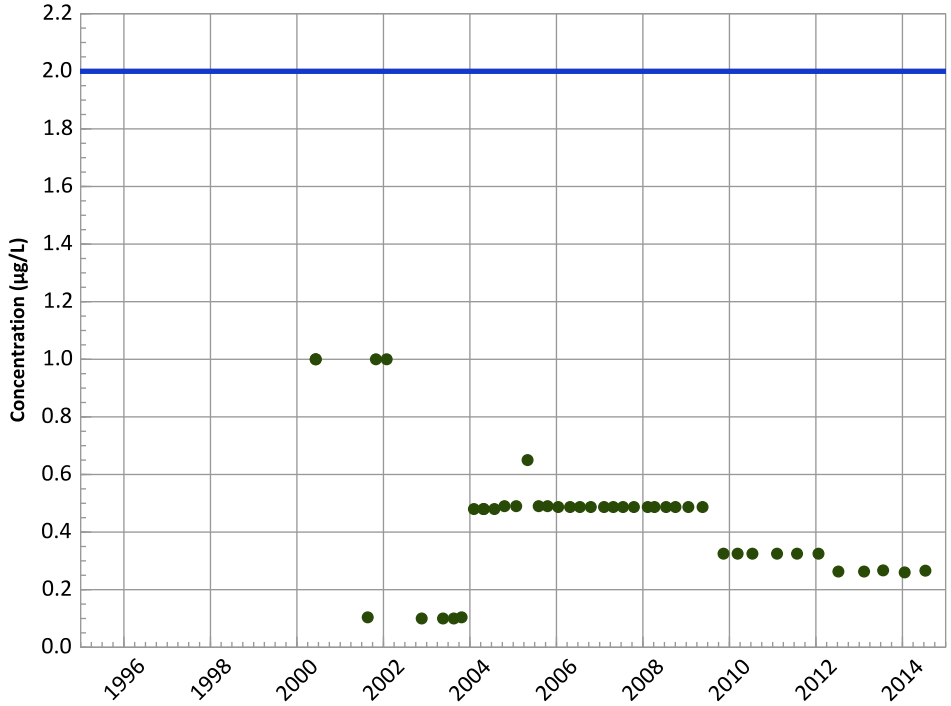
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

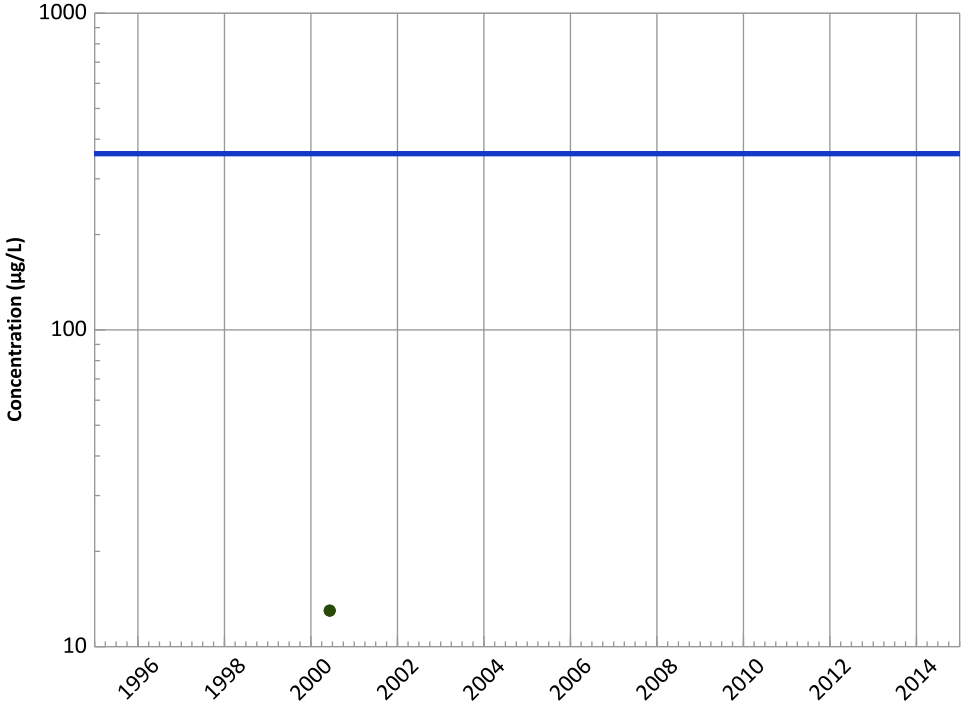


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

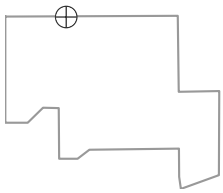
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

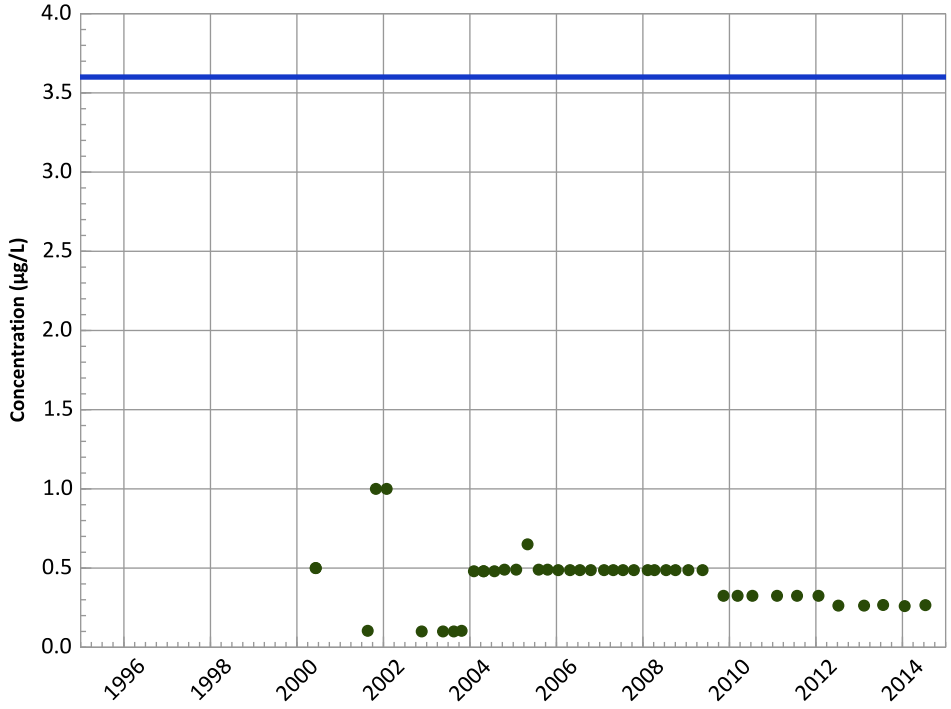
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

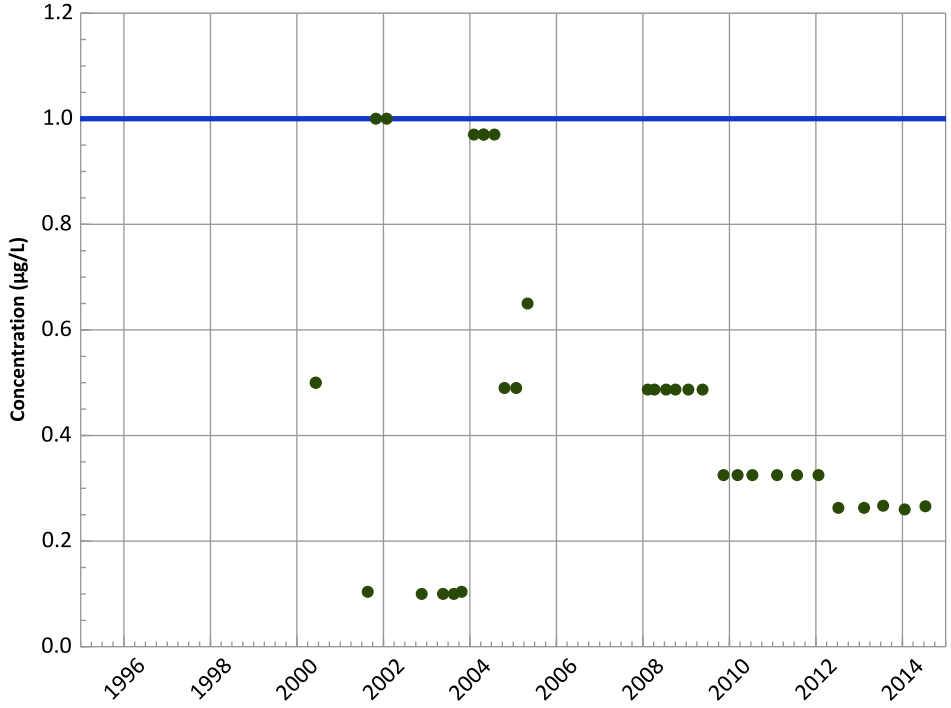


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

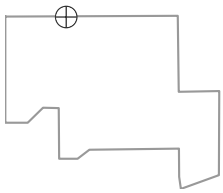
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

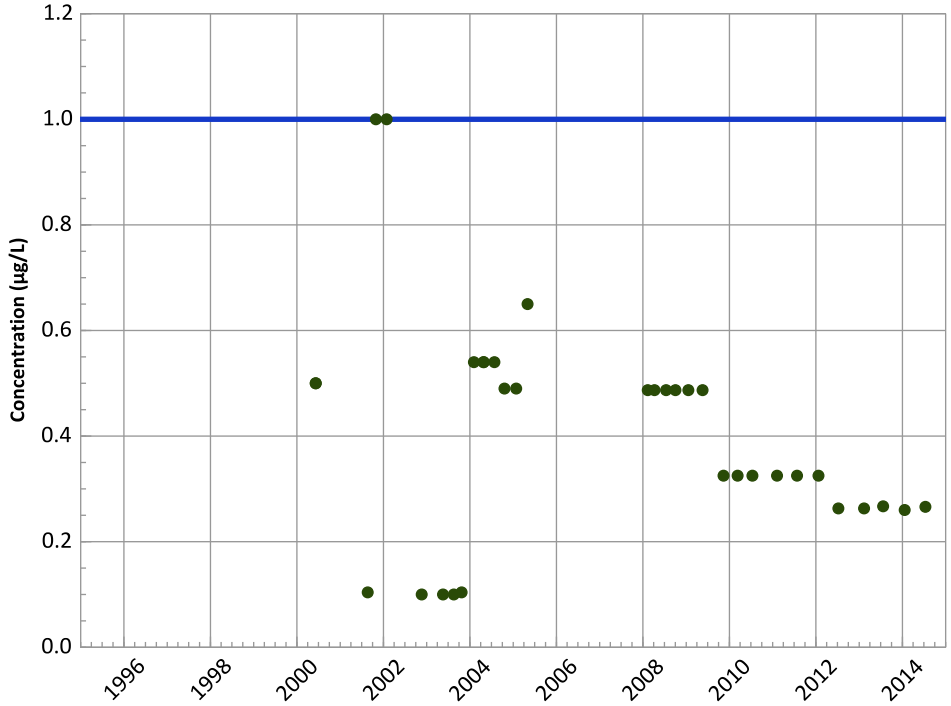
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

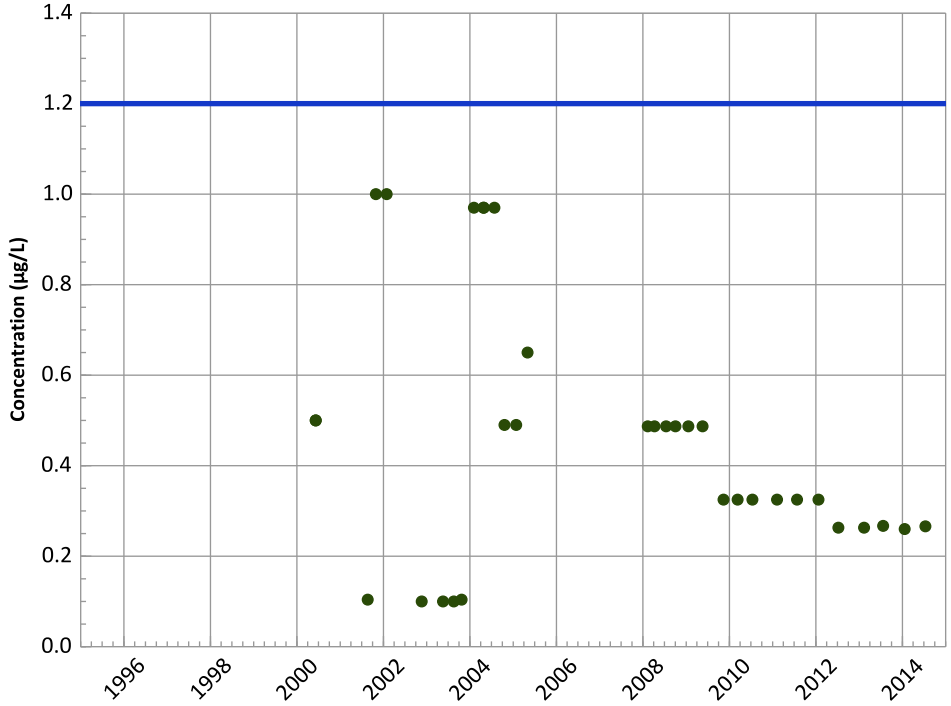


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

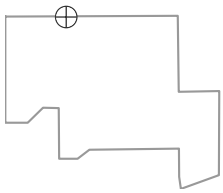
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

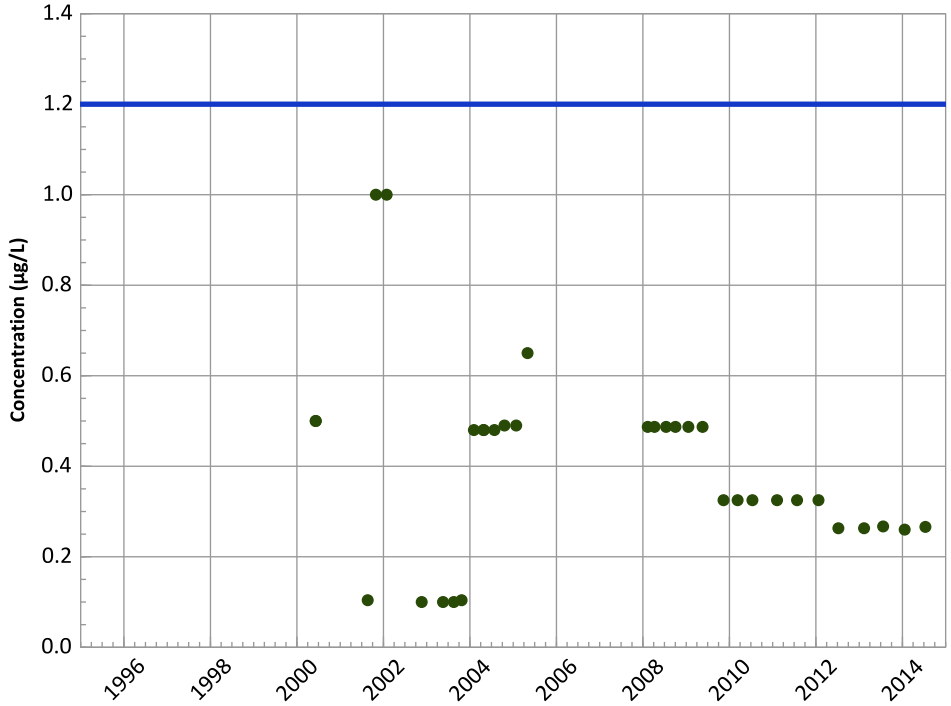
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

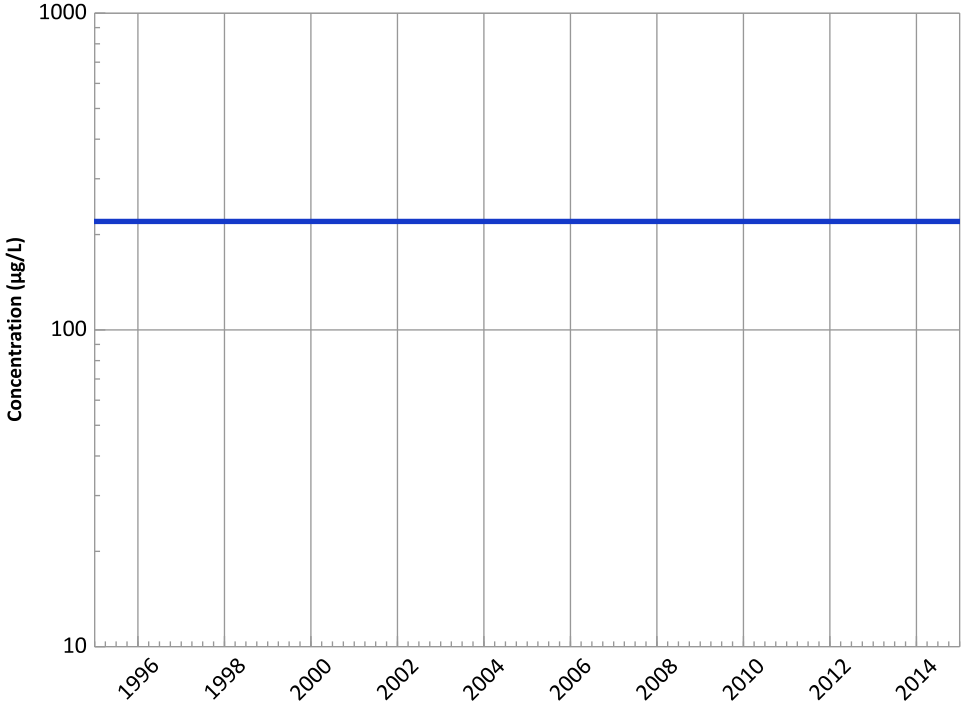


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

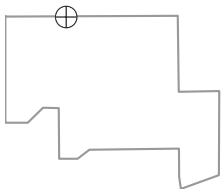


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

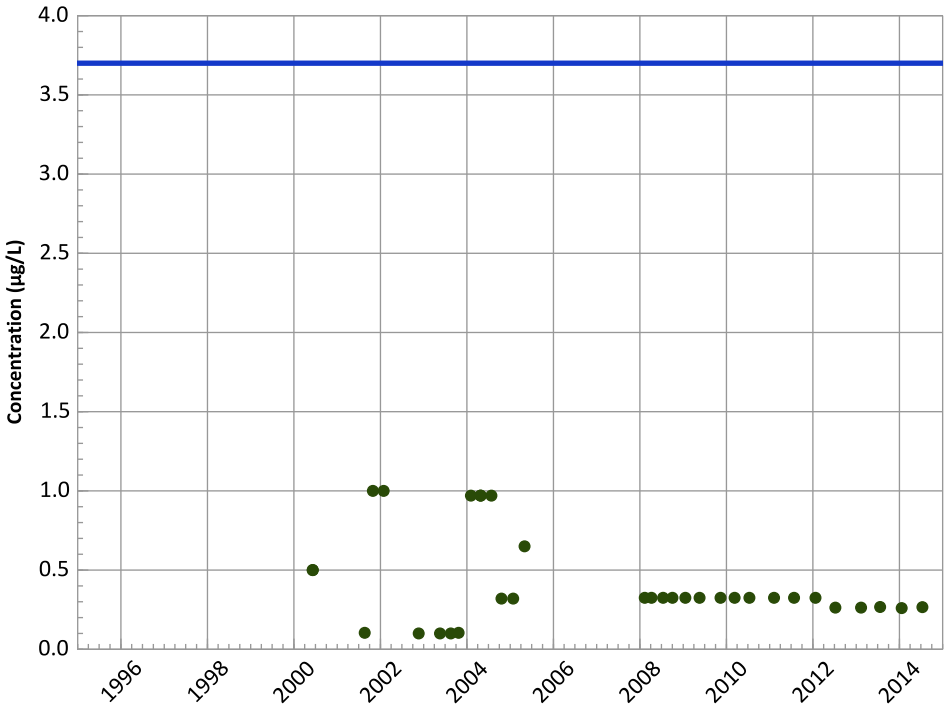


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

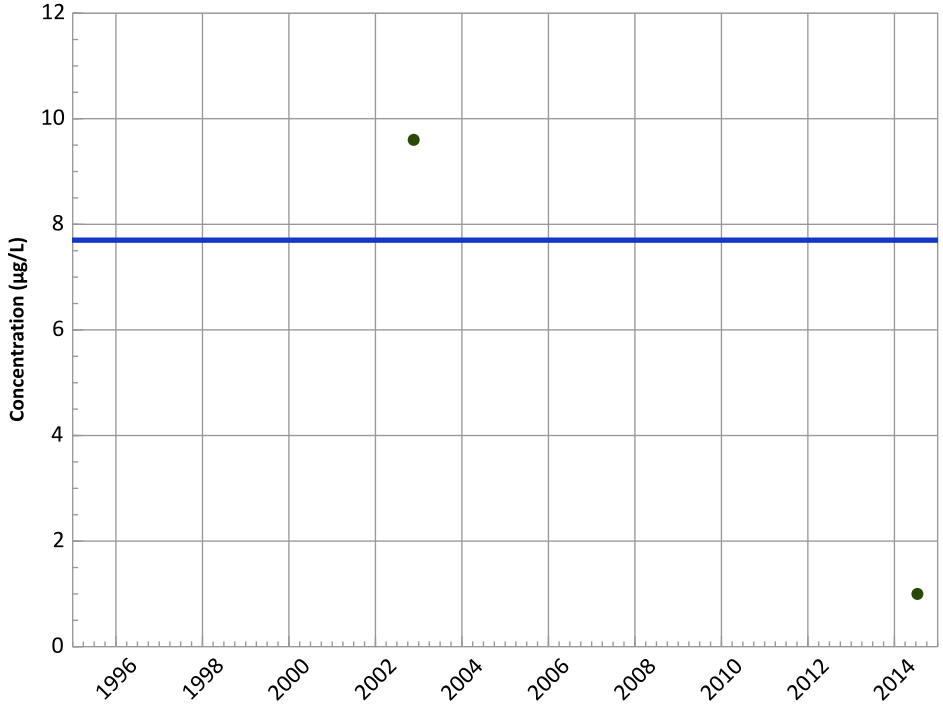


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

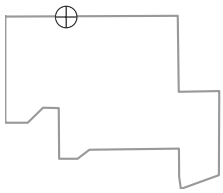
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

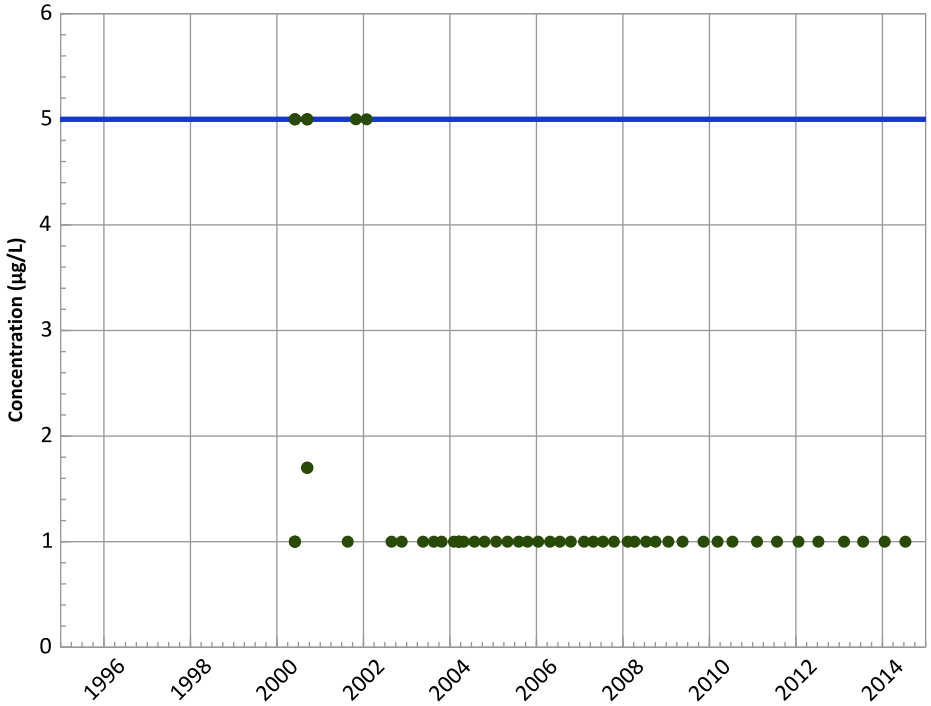
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

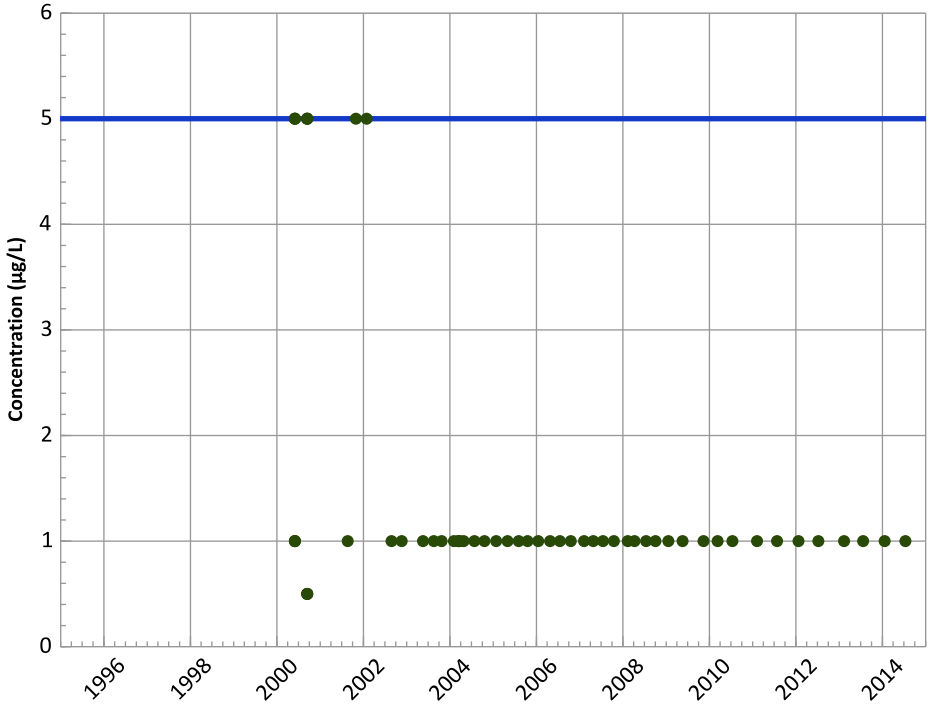


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

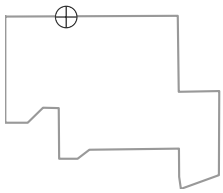
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

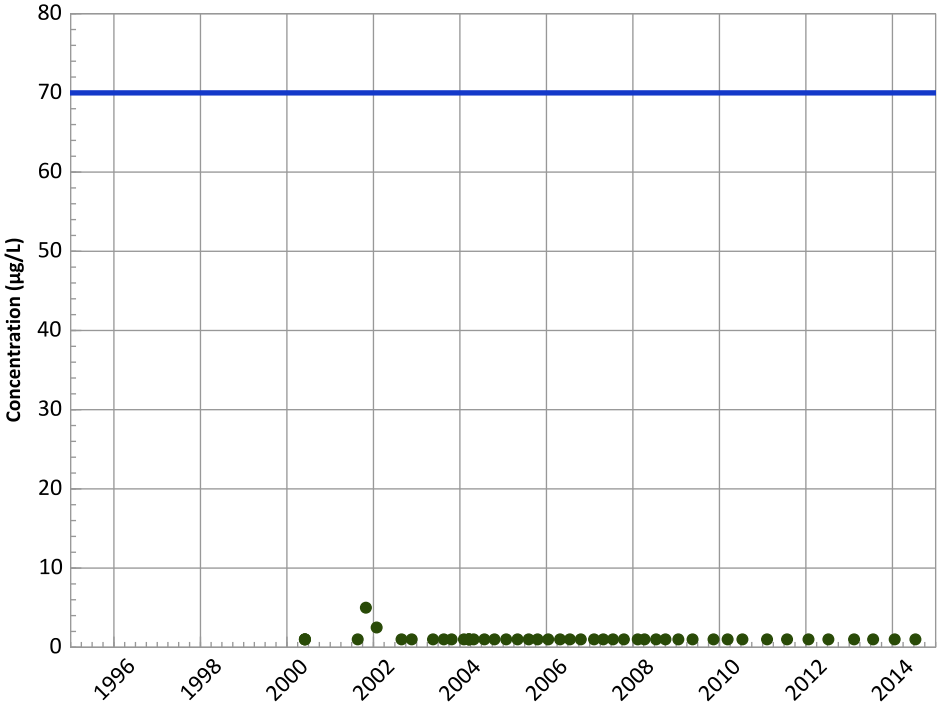
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

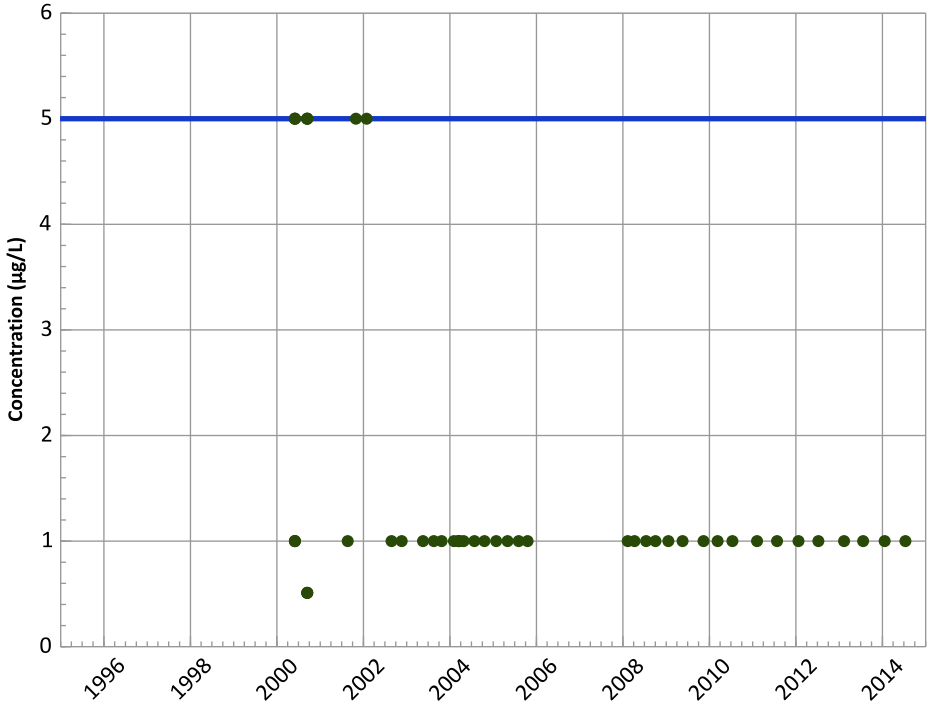


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

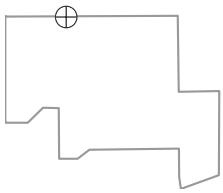
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

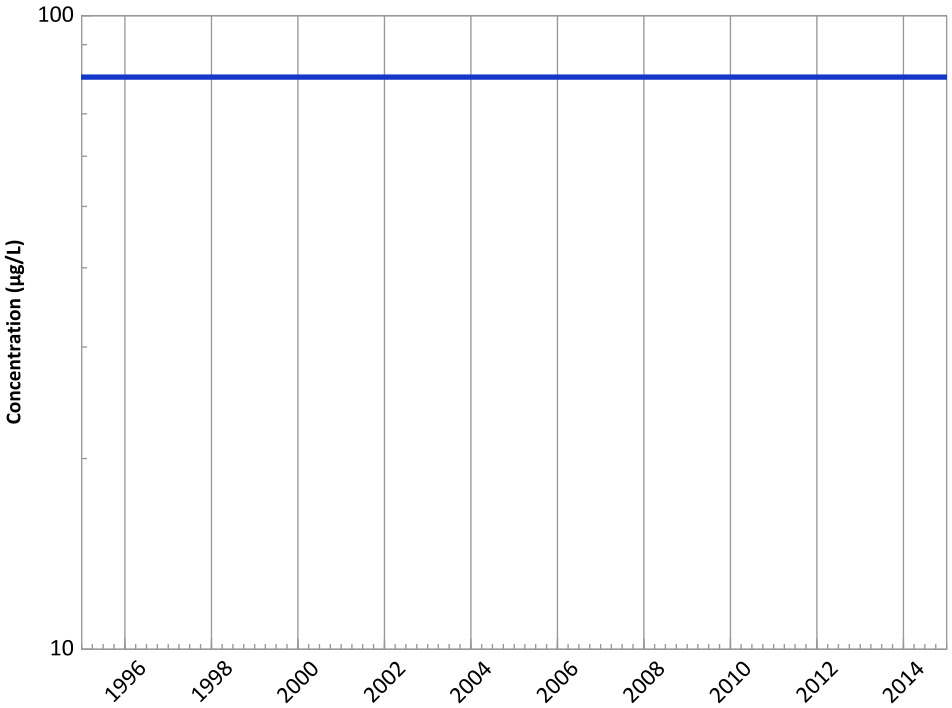
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

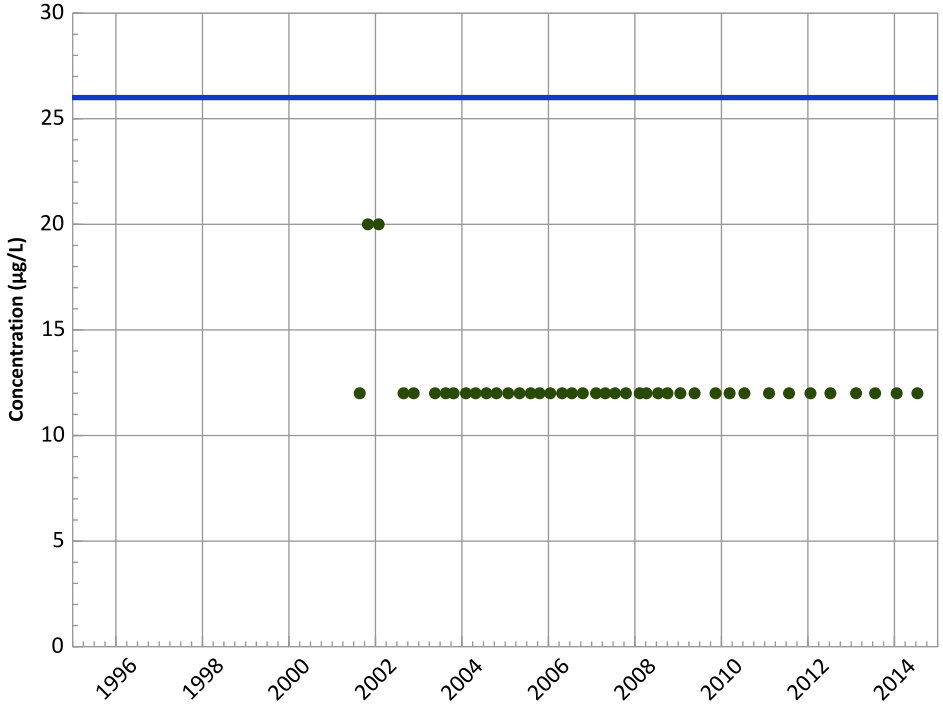


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

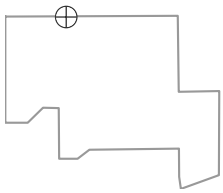
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

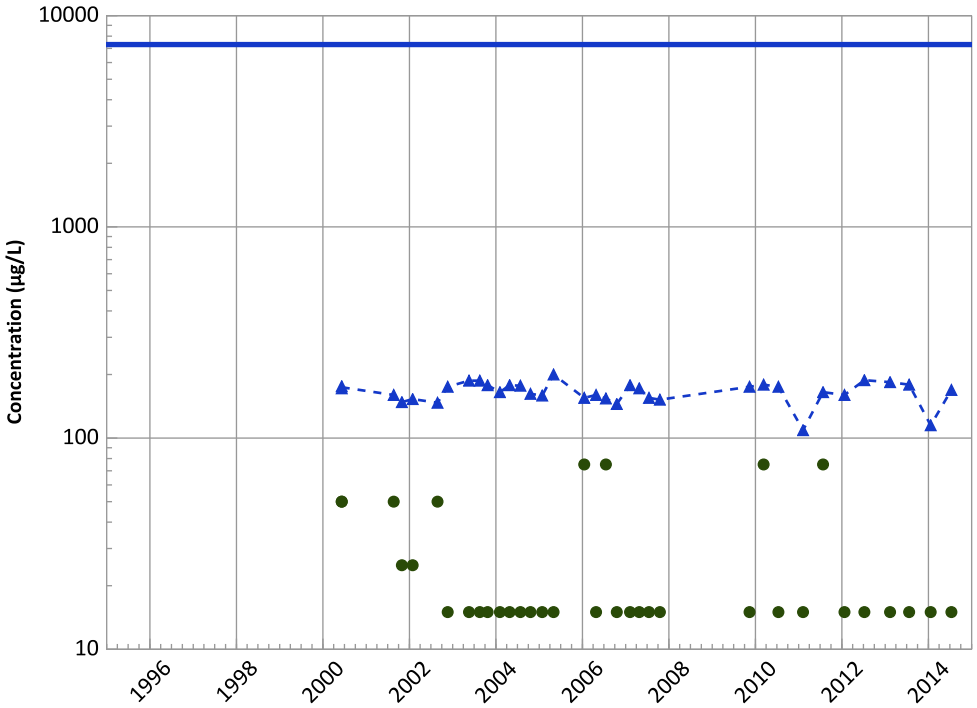
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

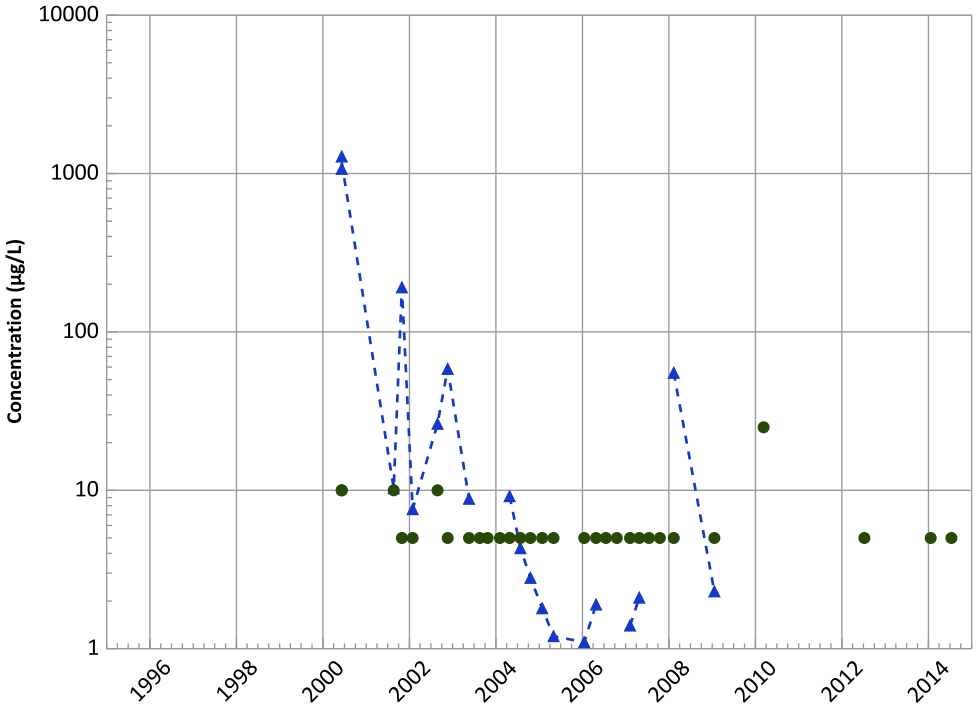


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Manganese Trend



Concentration Trend

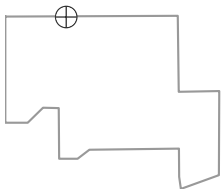
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

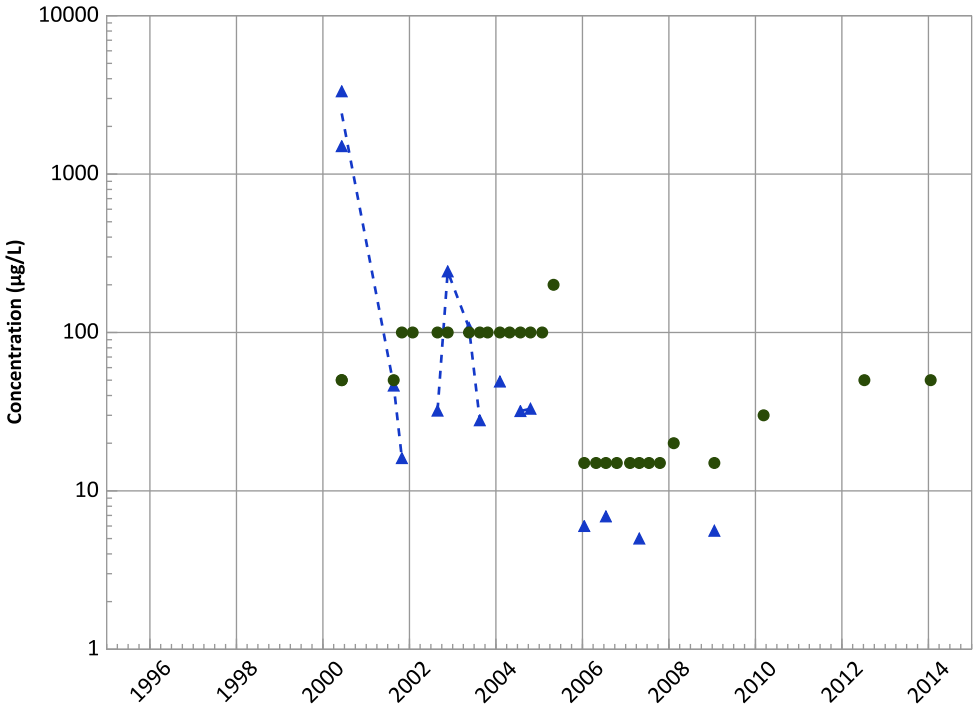
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

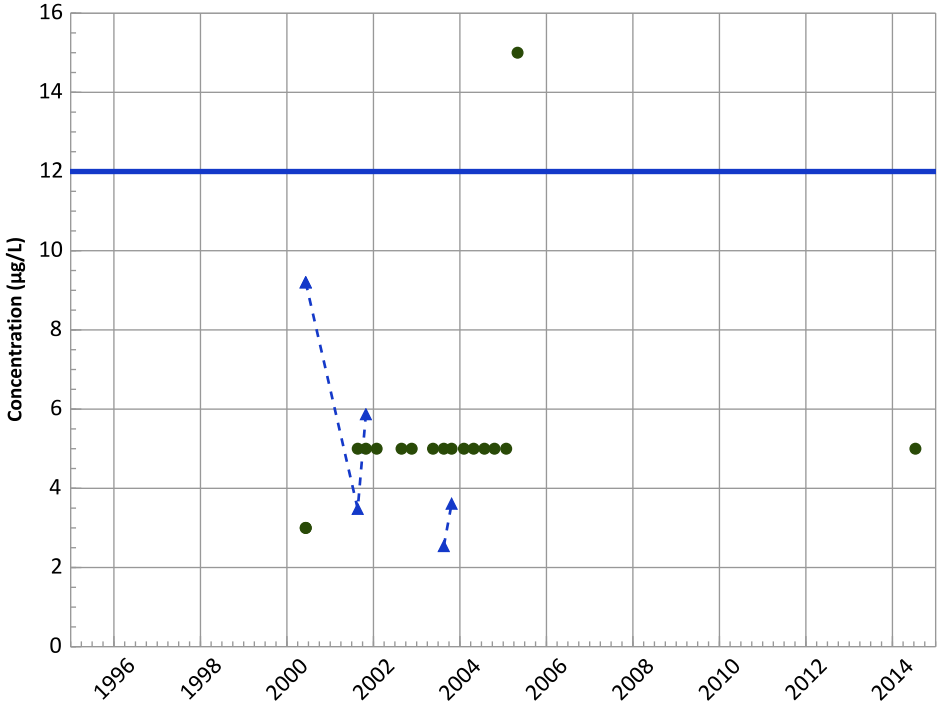


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Arsenic Trend



Concentration Trend

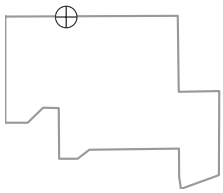
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

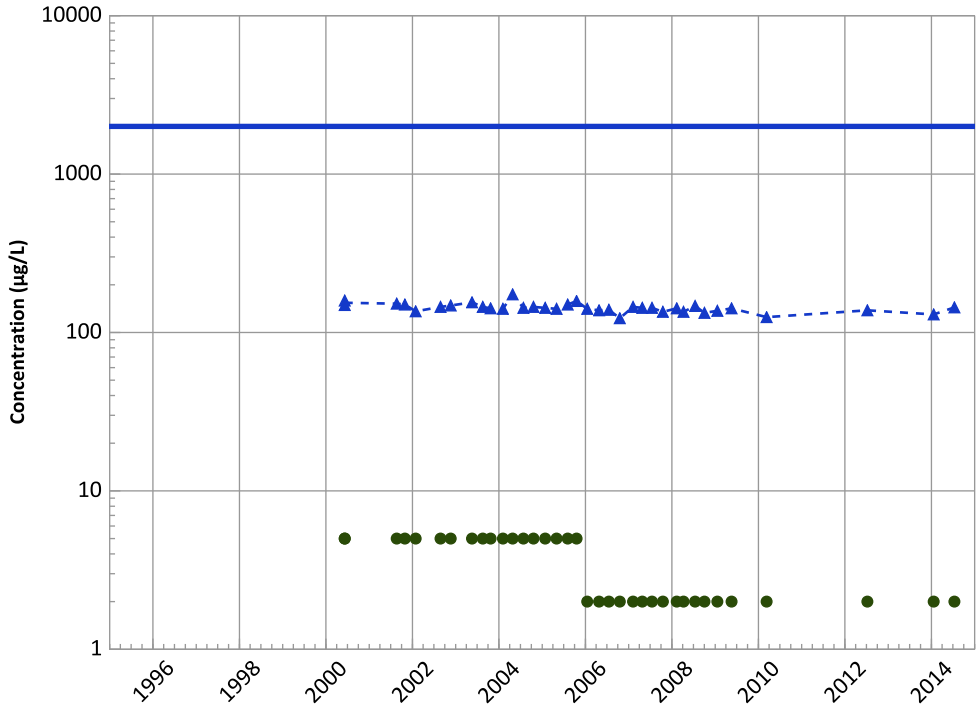
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

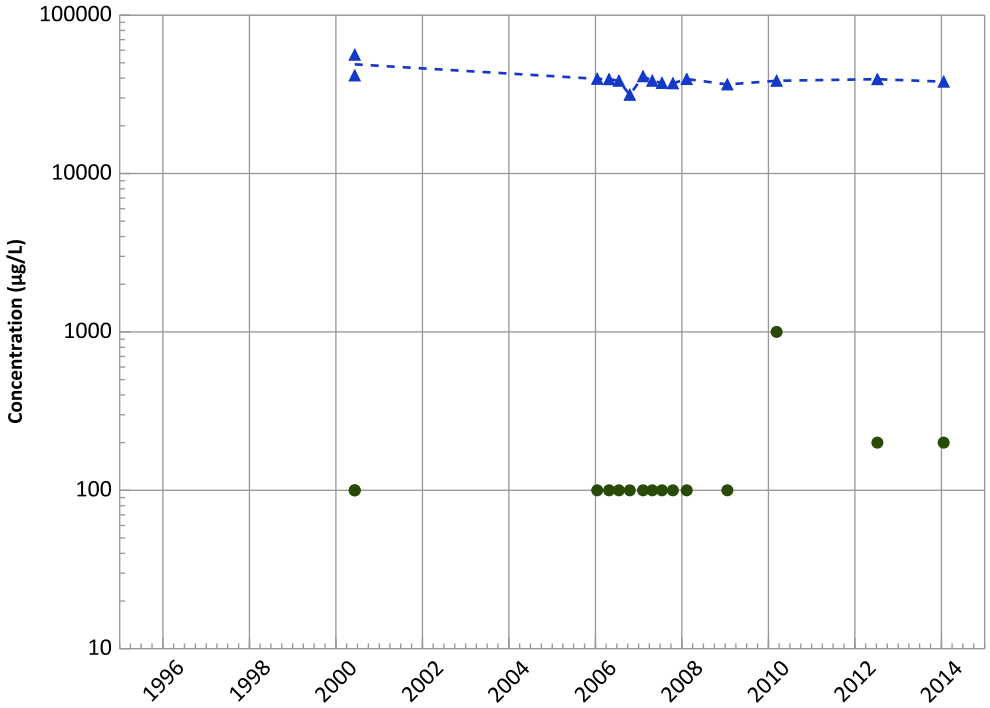


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Calcium Trend



Concentration Trend

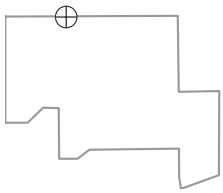
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

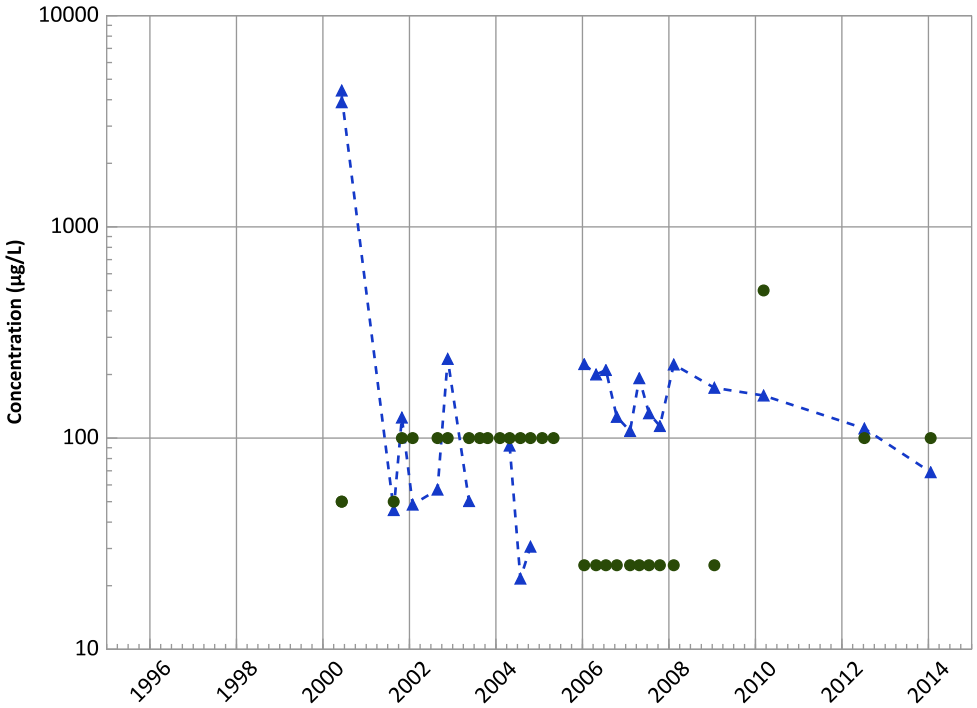
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

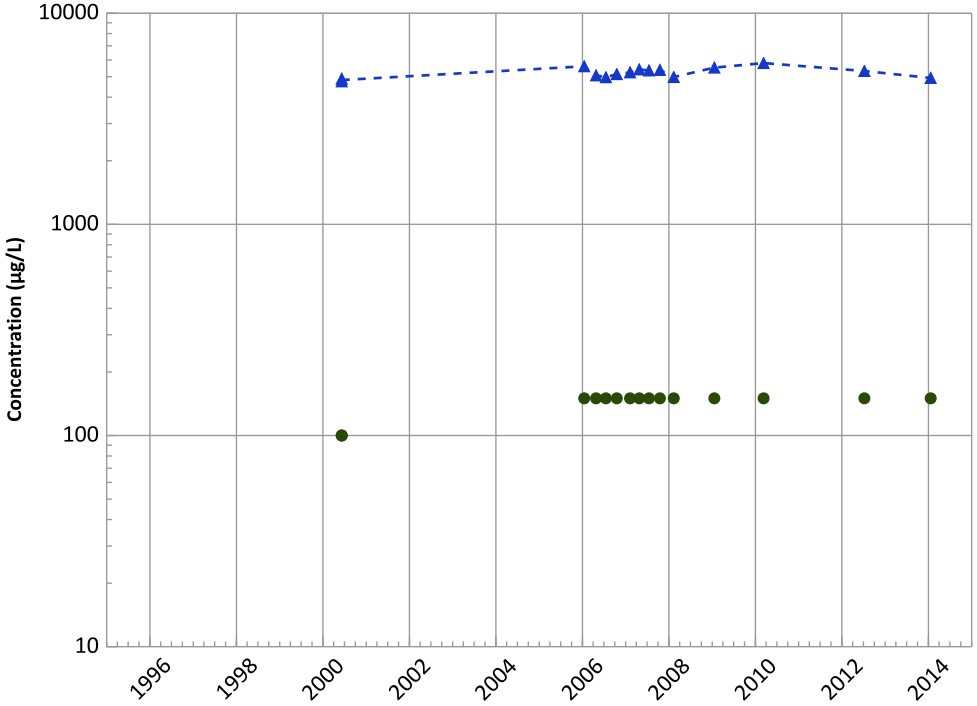


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Potassium Trend



Concentration Trend

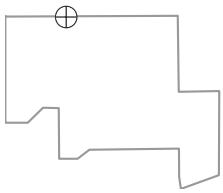
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

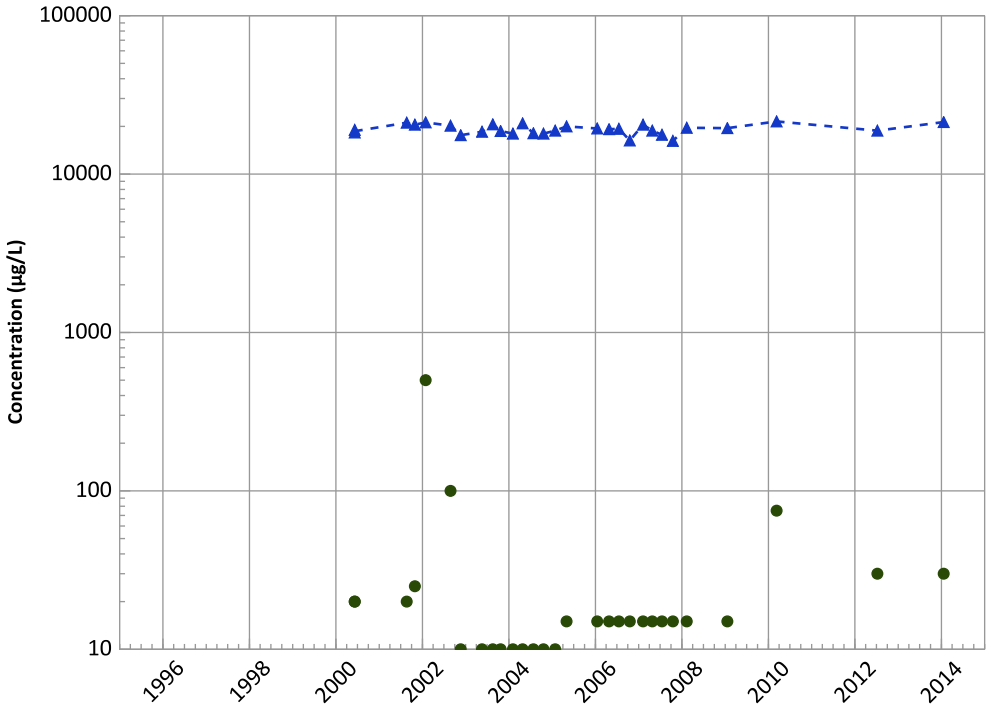
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX01-1013 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

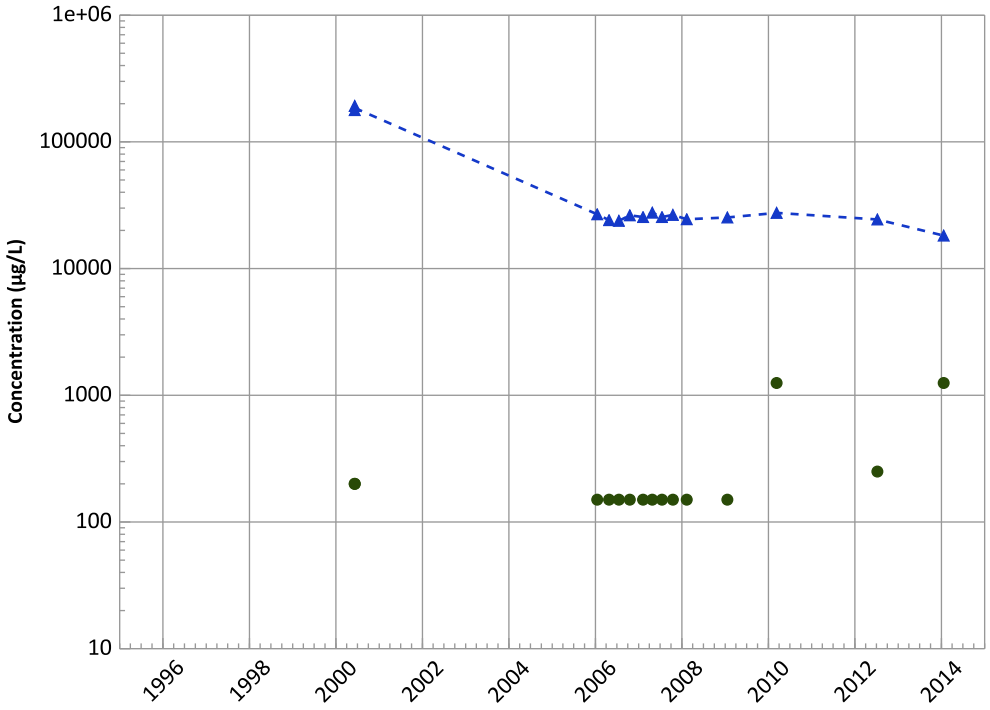


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Sodium Trend



Concentration Trend

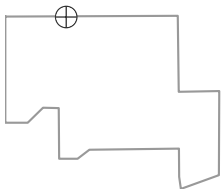
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

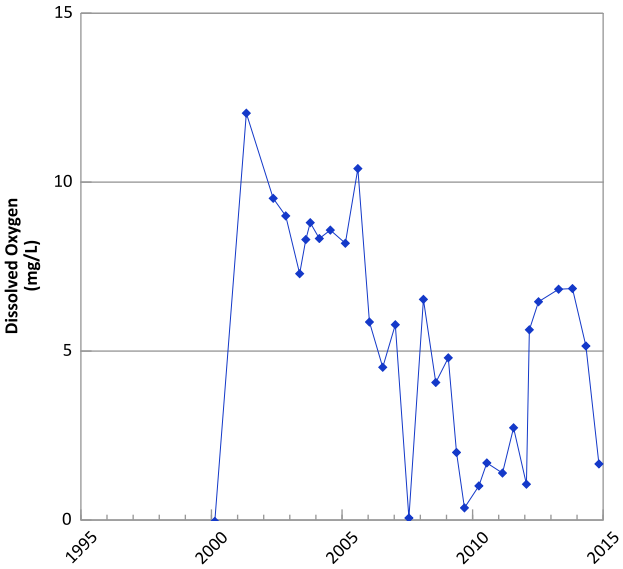
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/01/2000 to 07/14/2014
Analysis Date: 03/19/2015

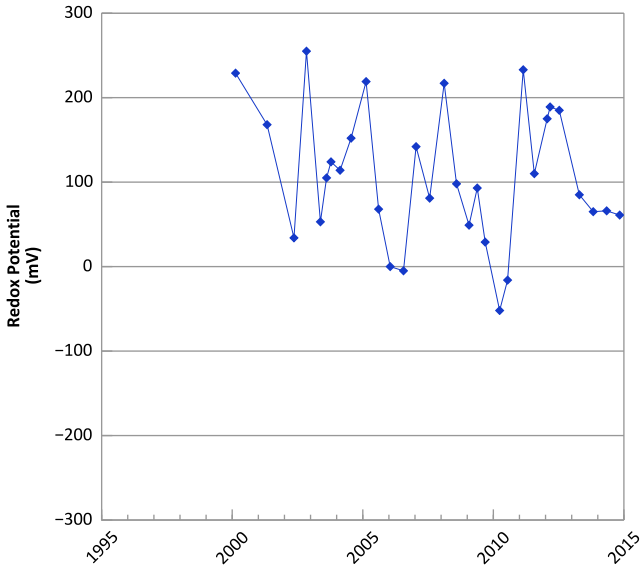
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

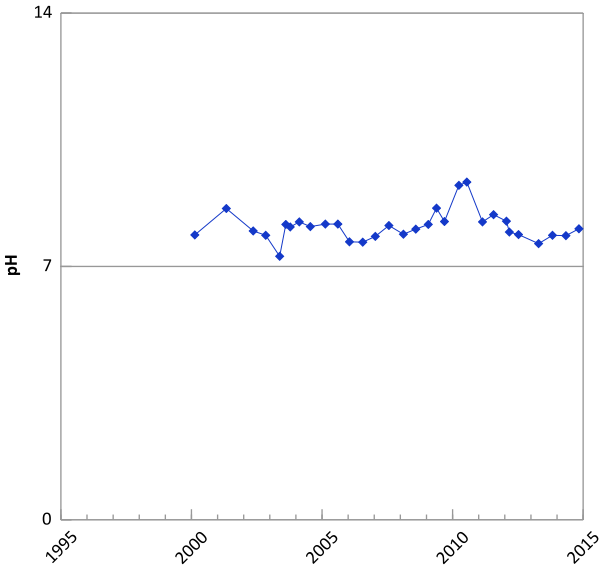
Well Location

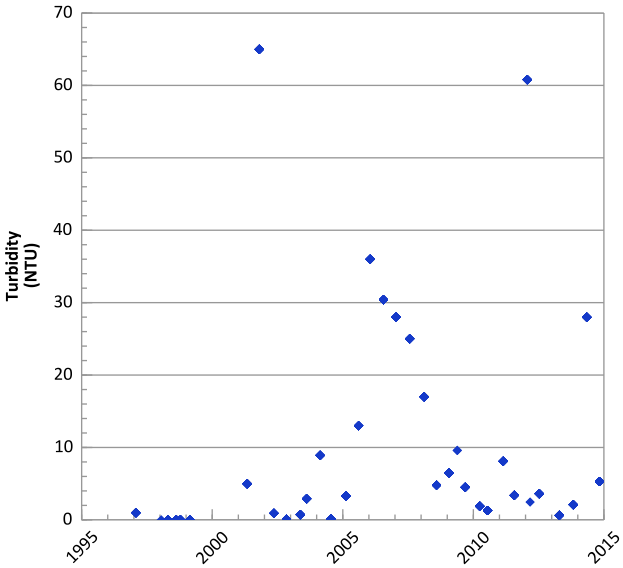


PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



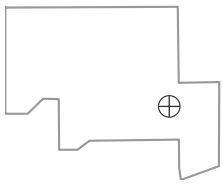






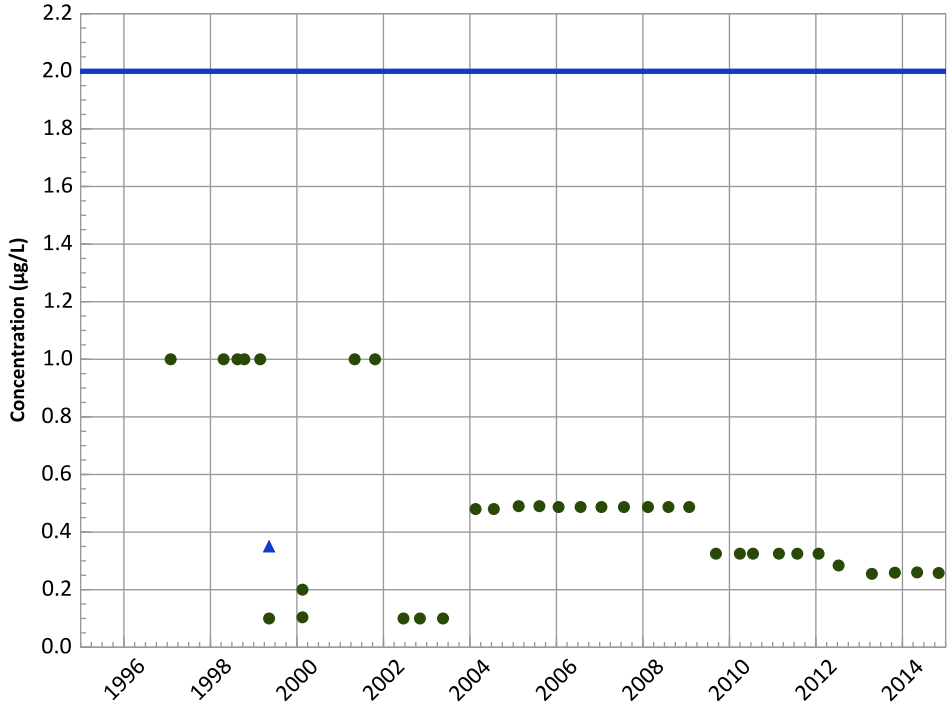
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

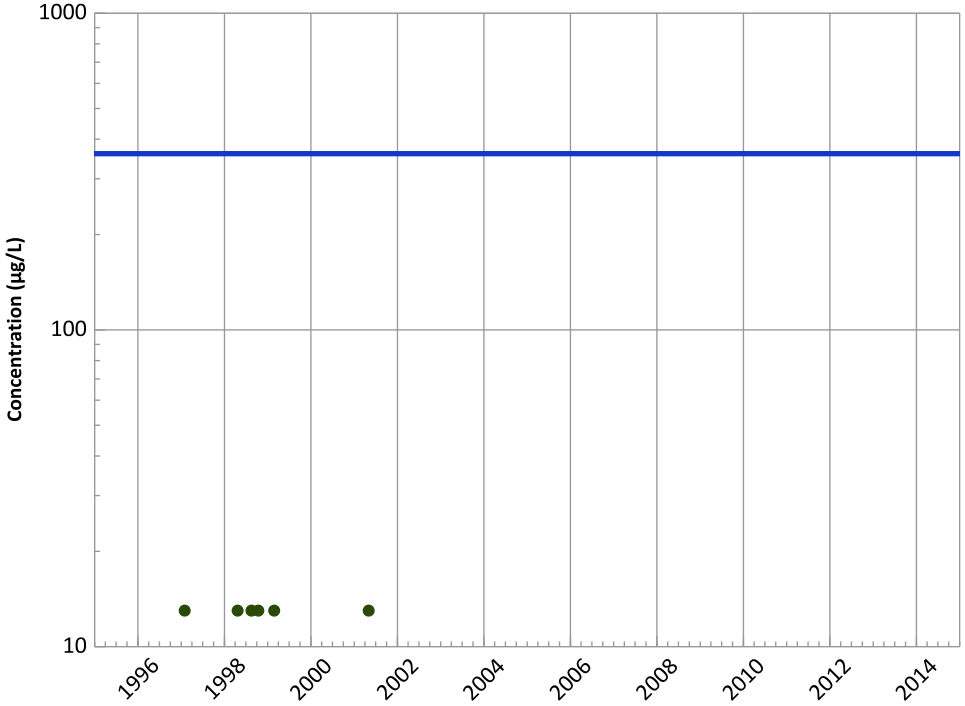


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

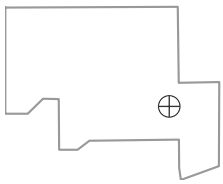
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

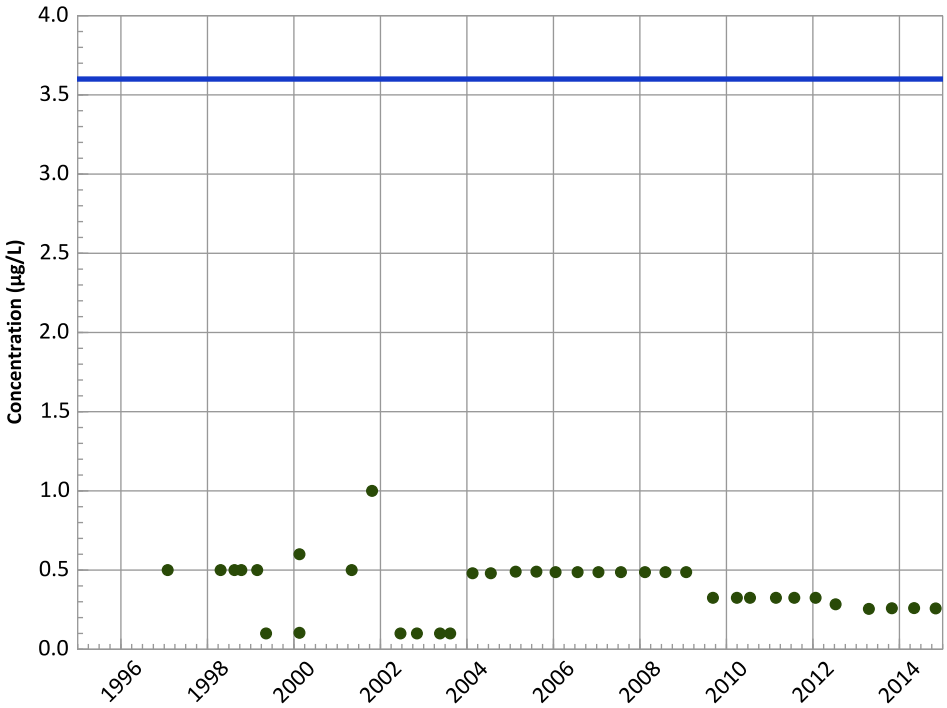
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

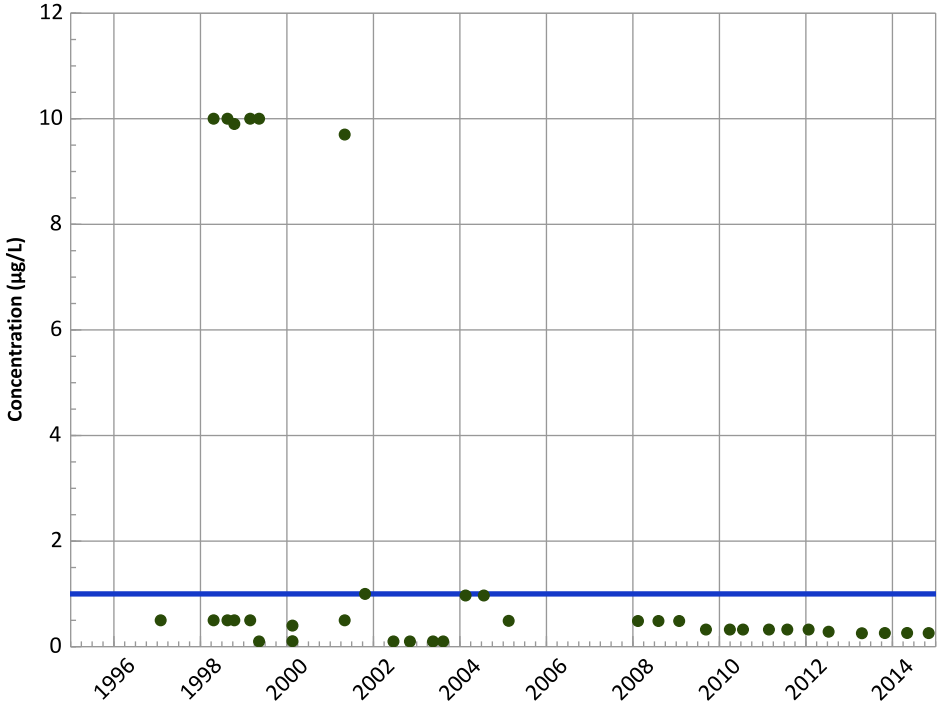


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

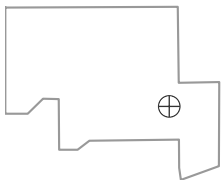
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

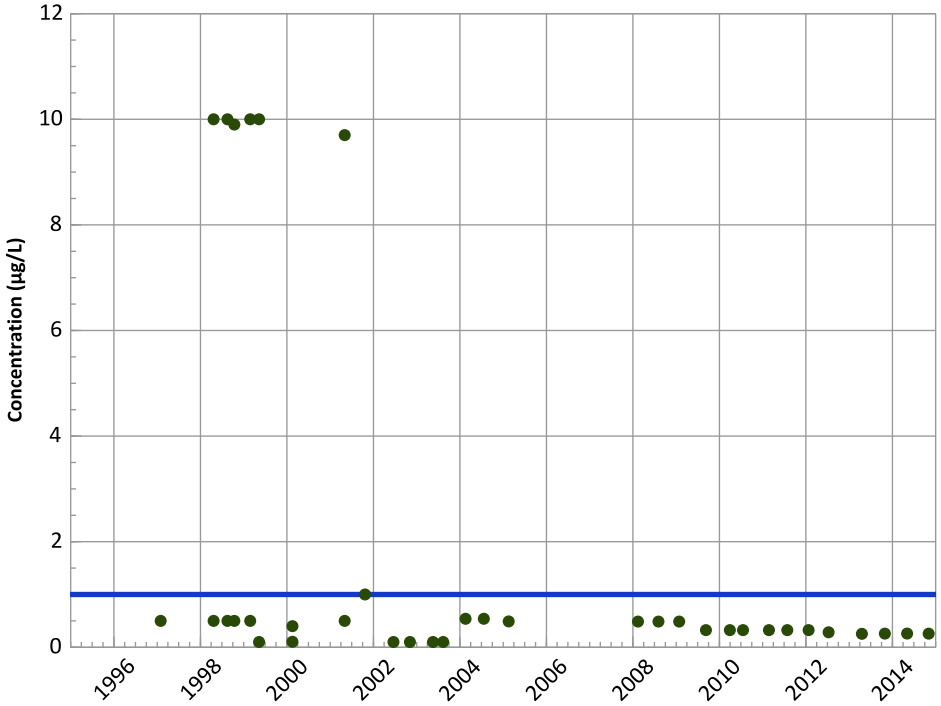
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

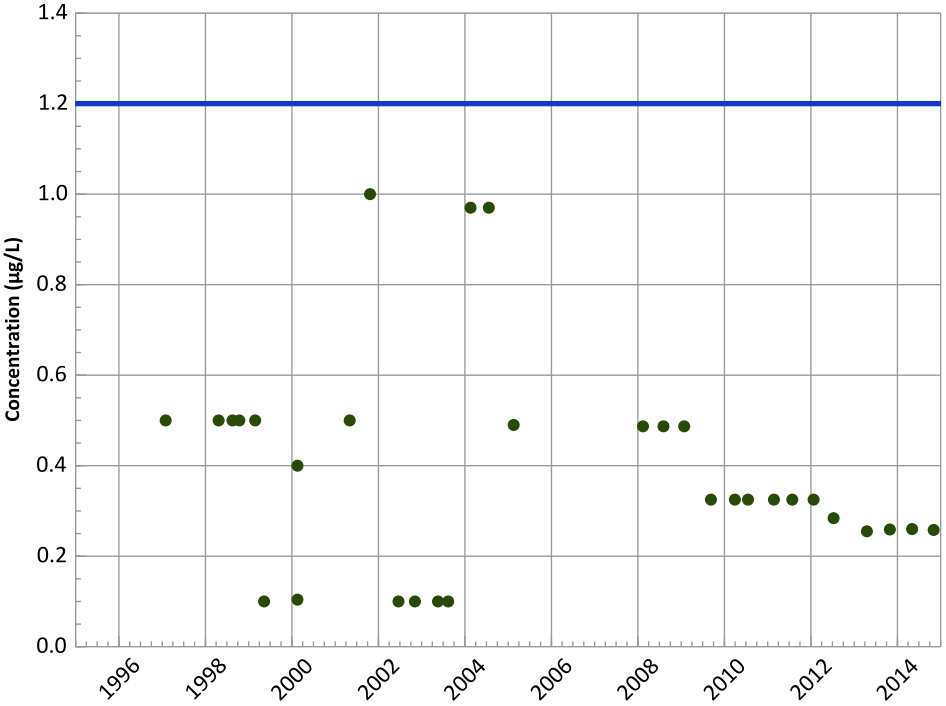


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

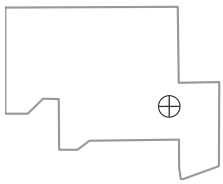
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

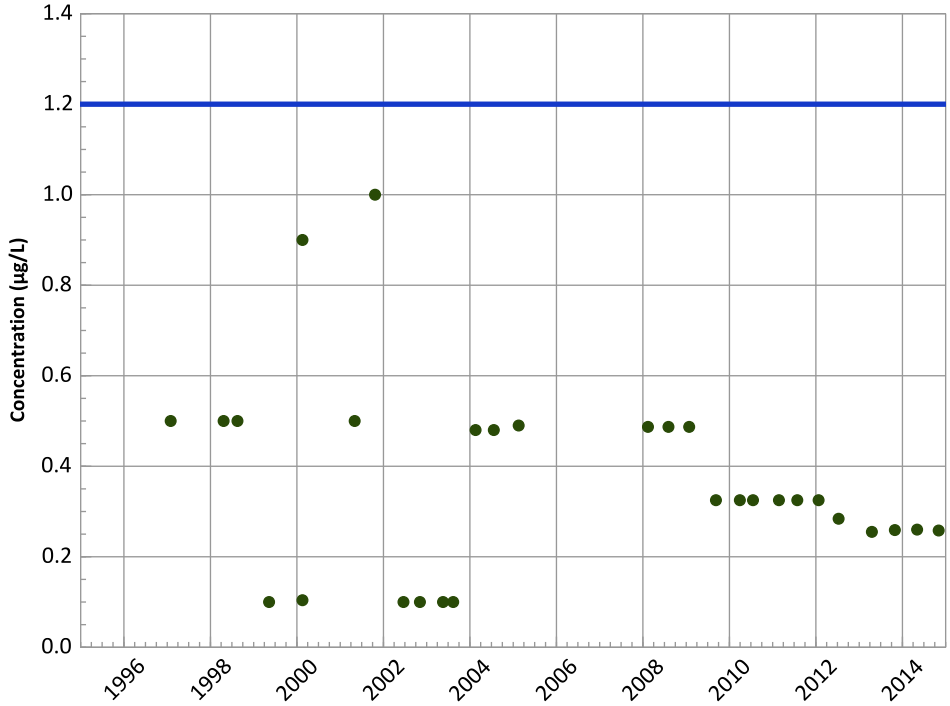
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

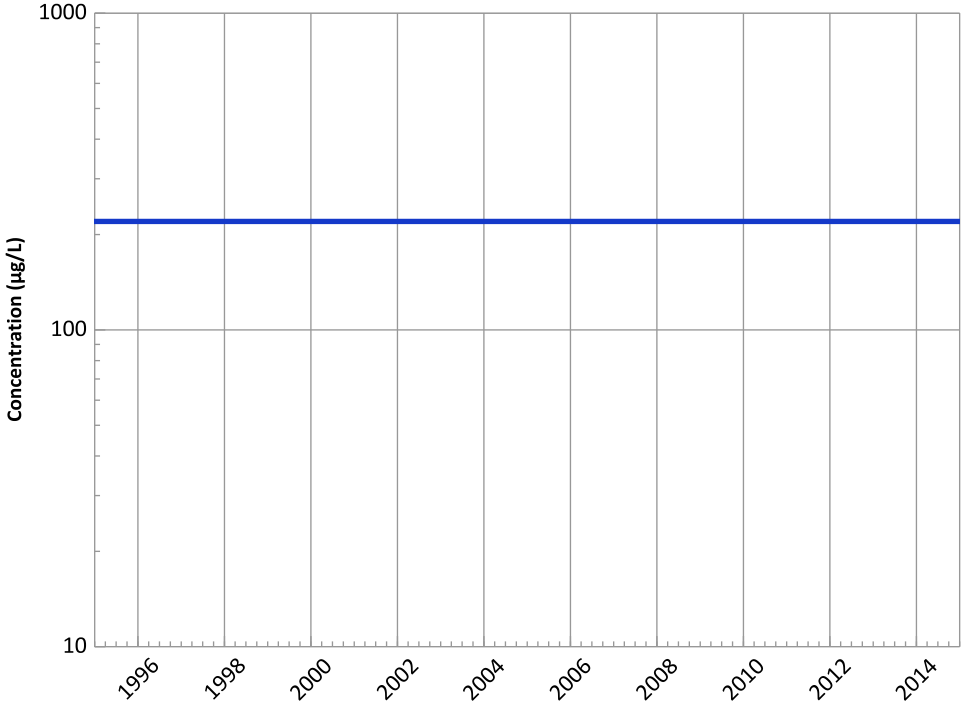


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

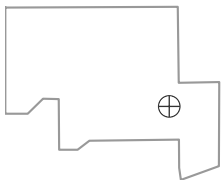
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

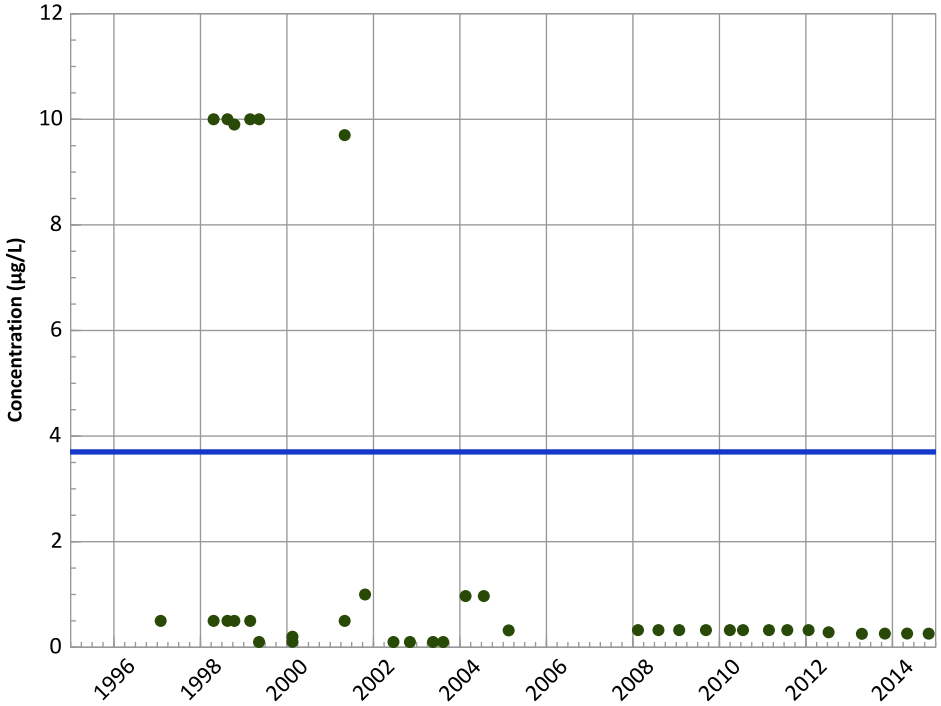
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

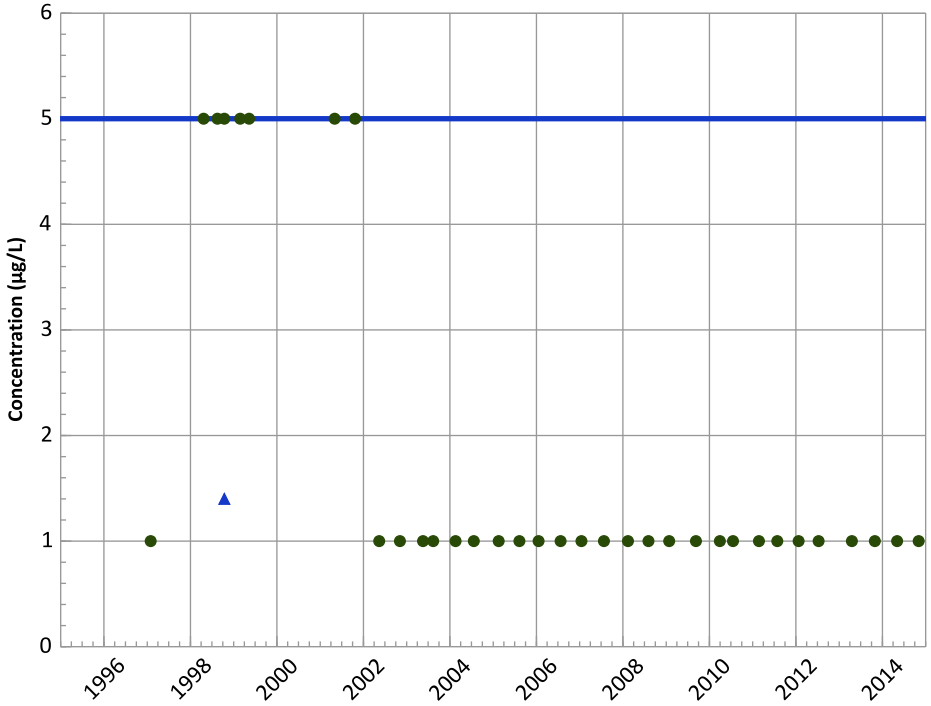


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

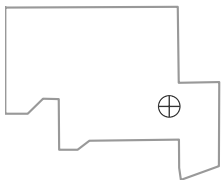
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

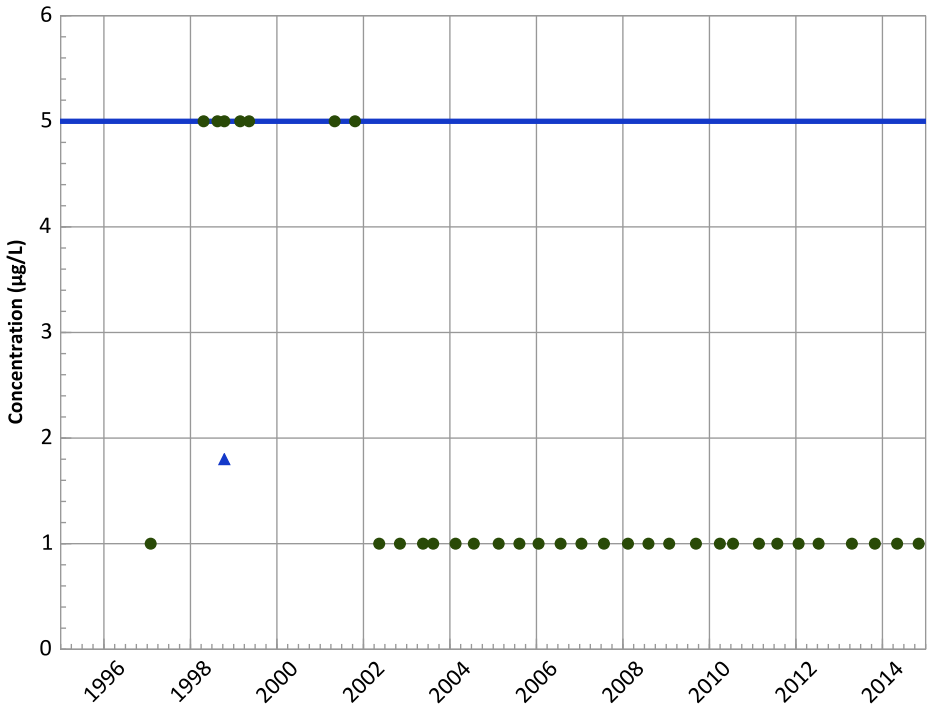
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

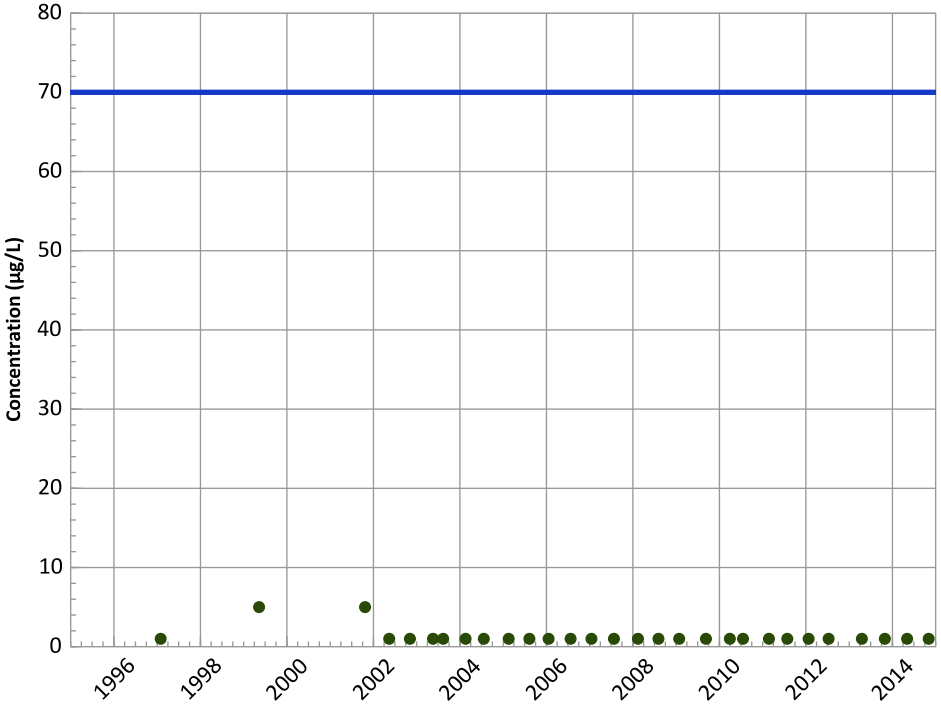


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

cis-1,2-Dichloroethene Trend



Concentration Trend

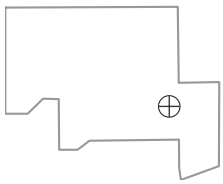
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

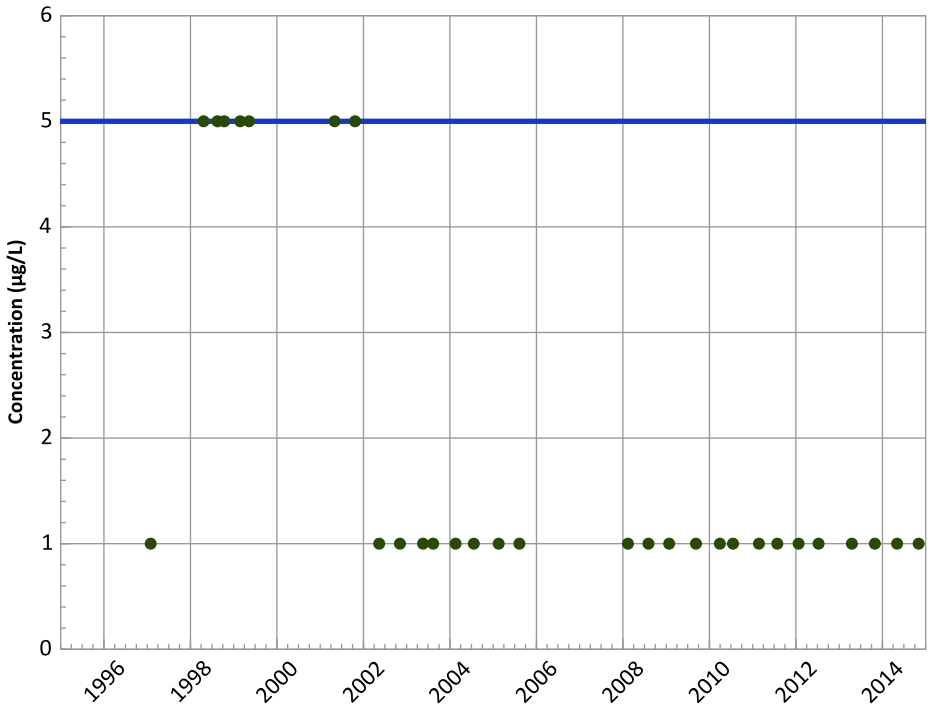
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

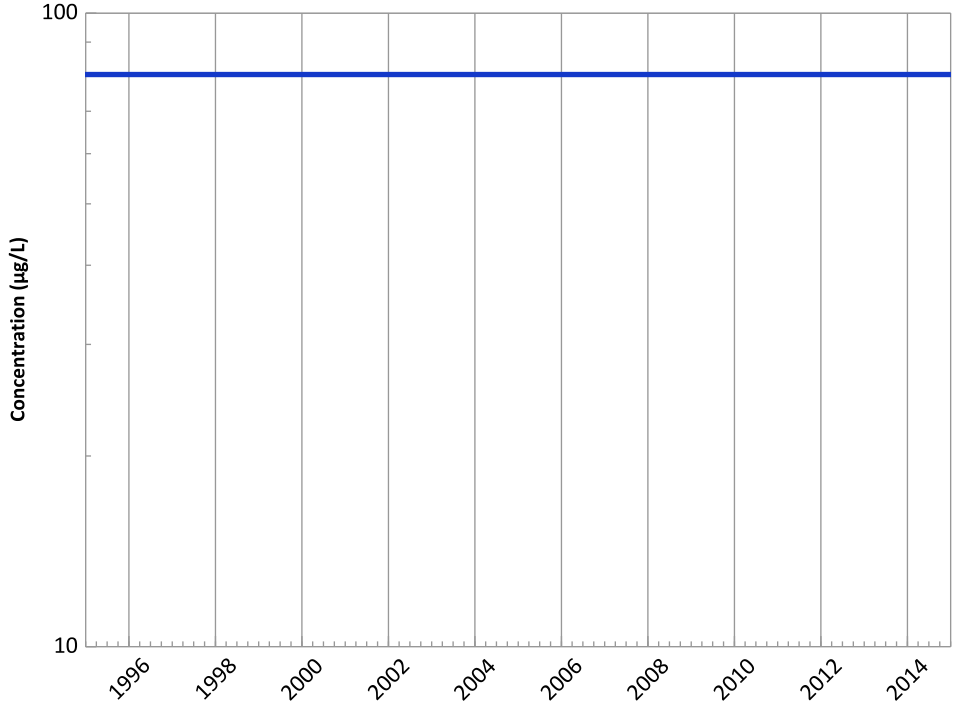


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

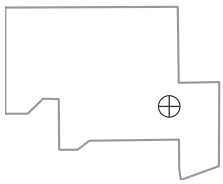
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

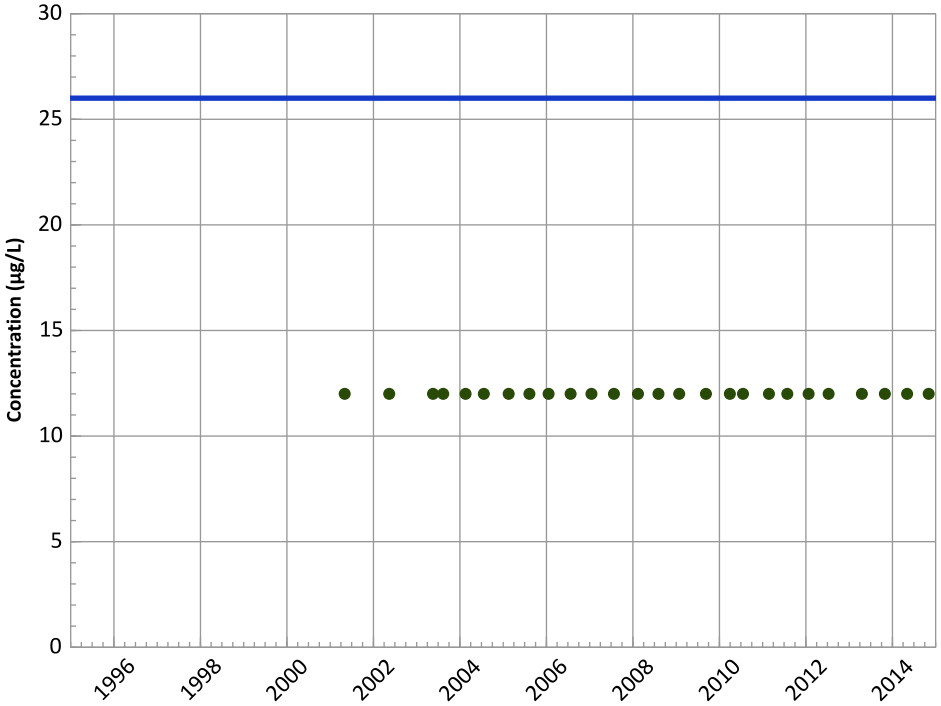
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

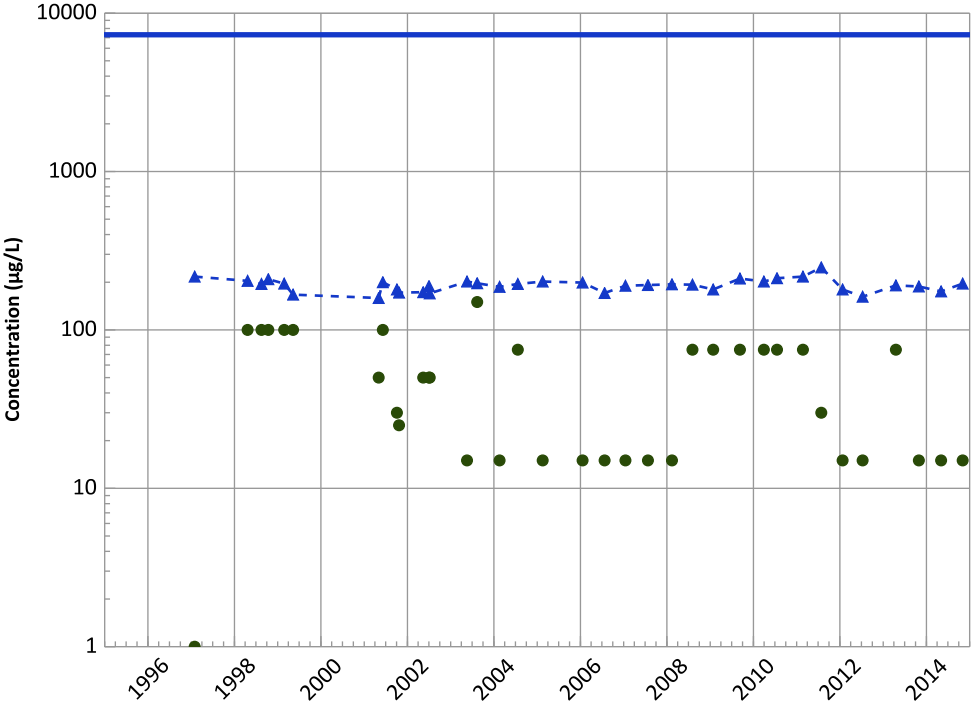


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Boron Trend



Concentration Trend

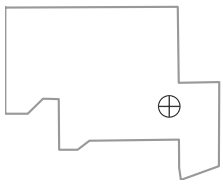
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

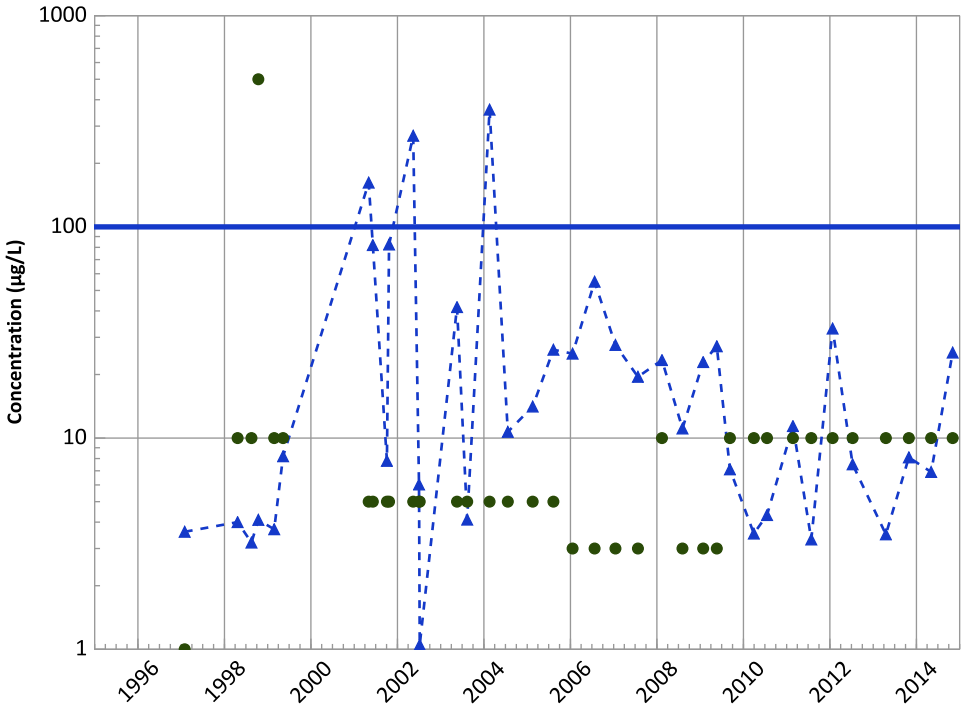
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Total Trend

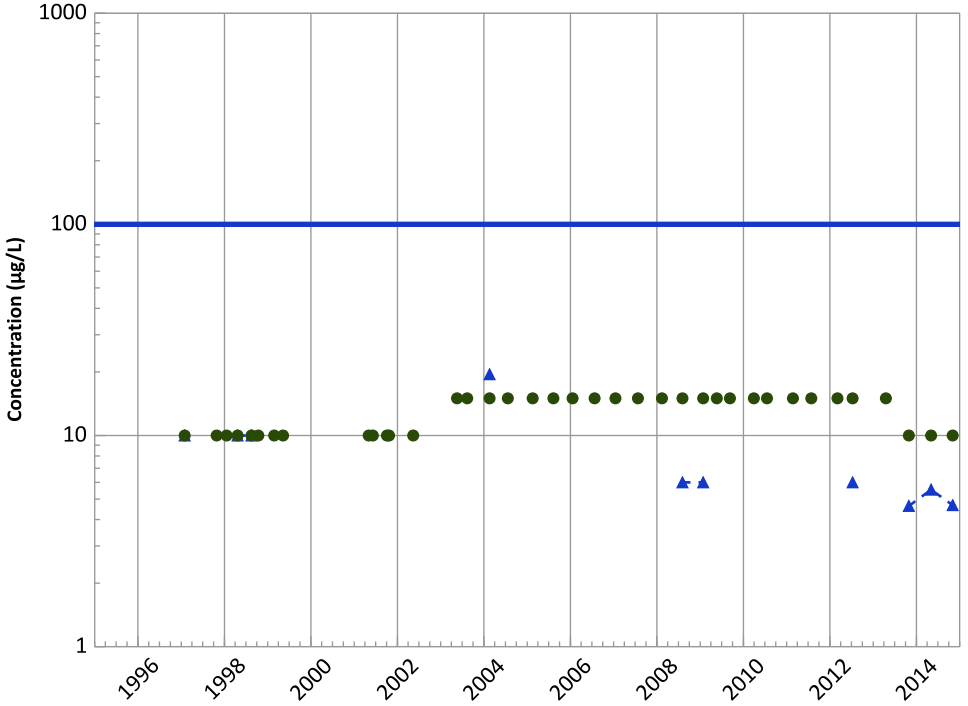


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chromium, Hexavalent Trend



Concentration Trend

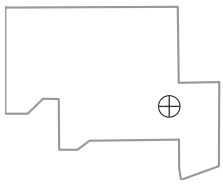
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

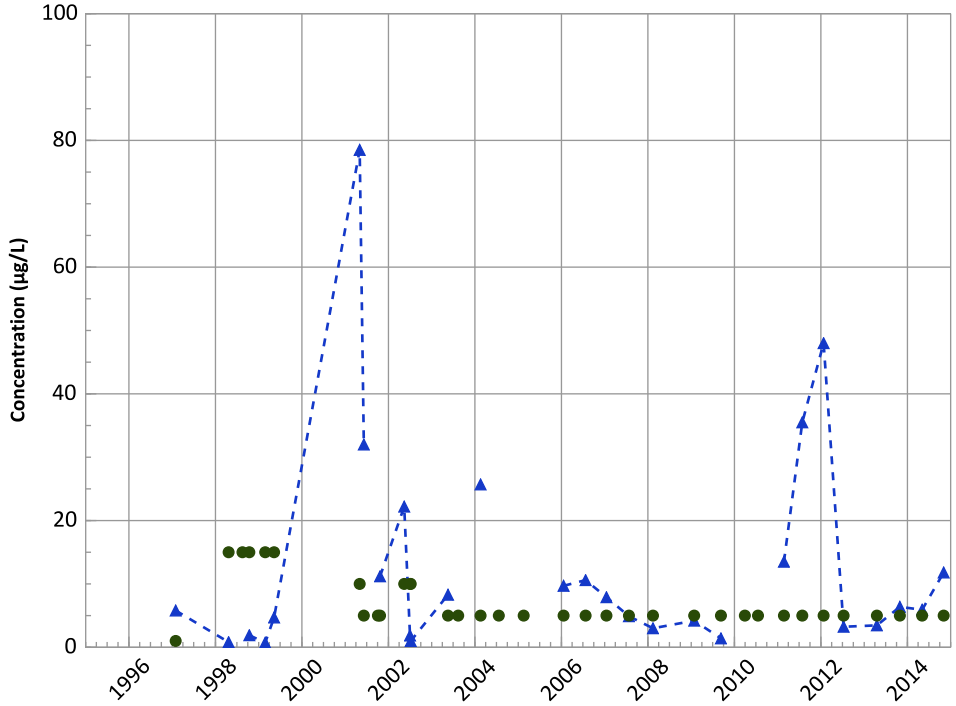
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

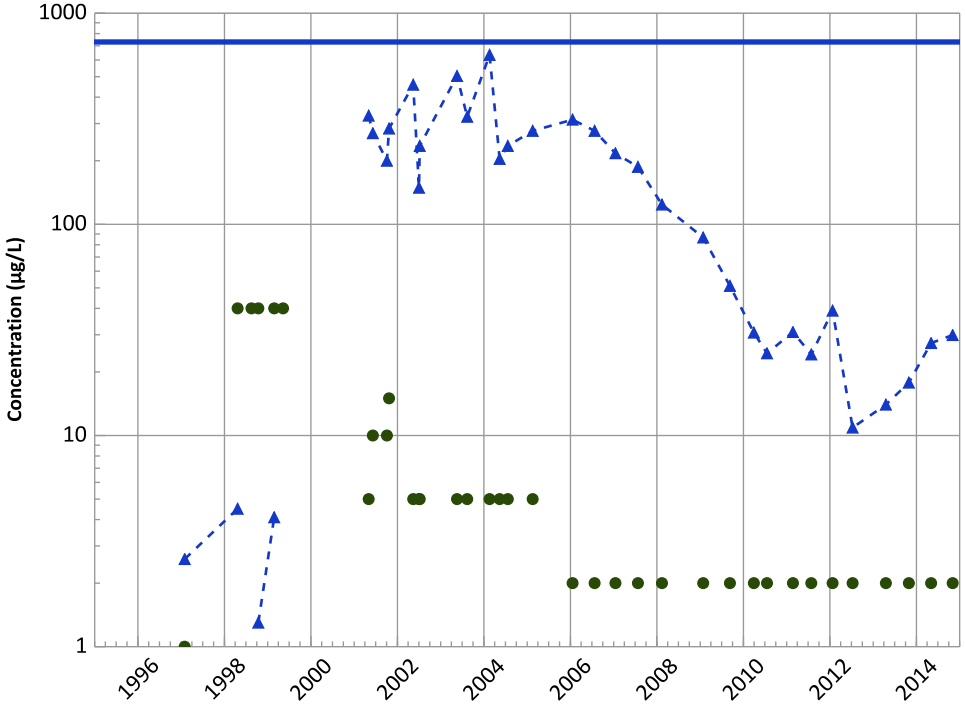


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Nickel Trend



Concentration Trend

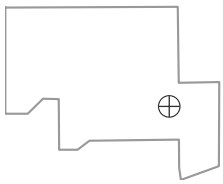
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

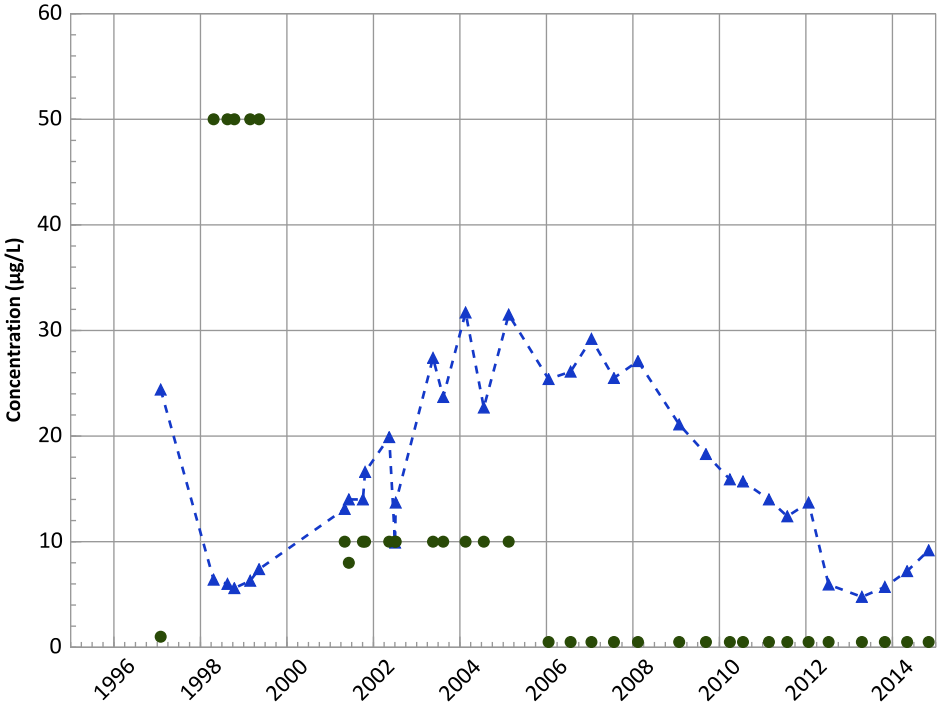
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Molybdenum Trend

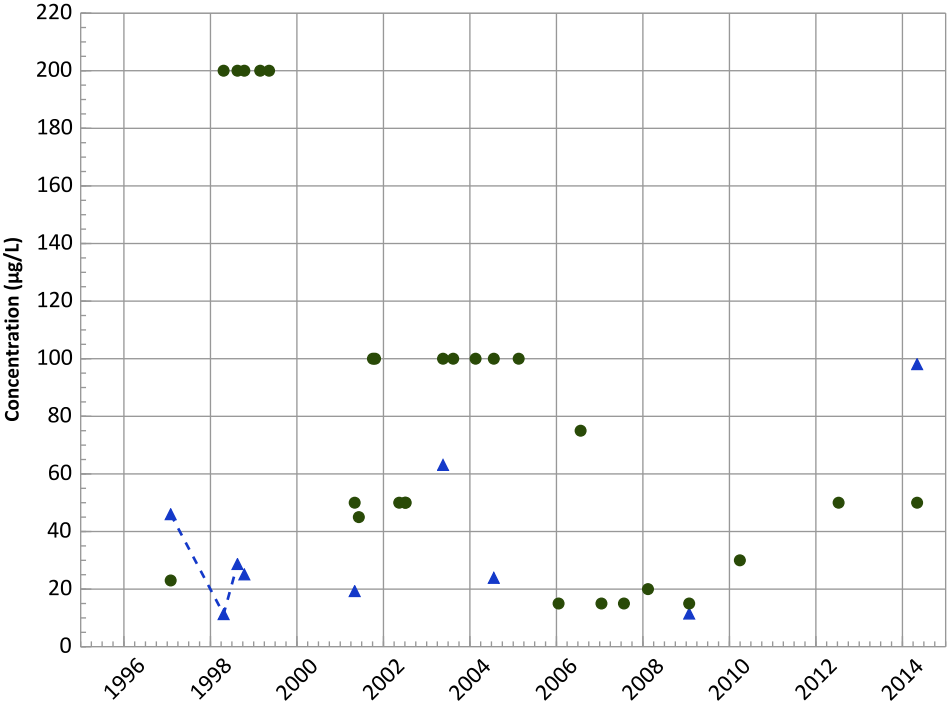


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

Aluminum Trend



Concentration Trend

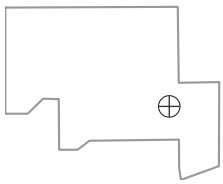
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

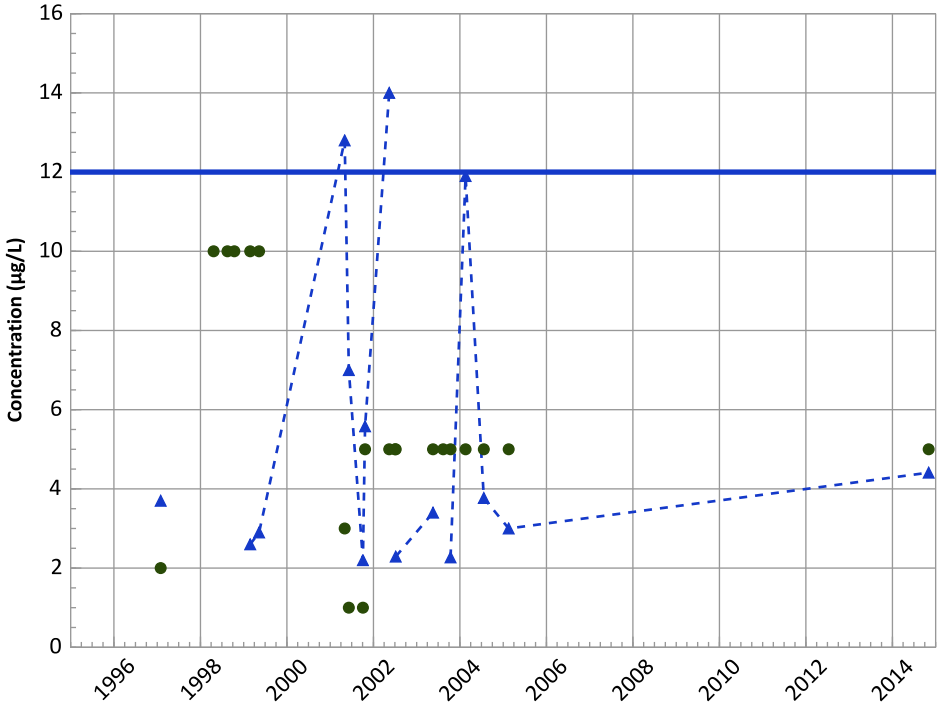
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Arsenic Trend

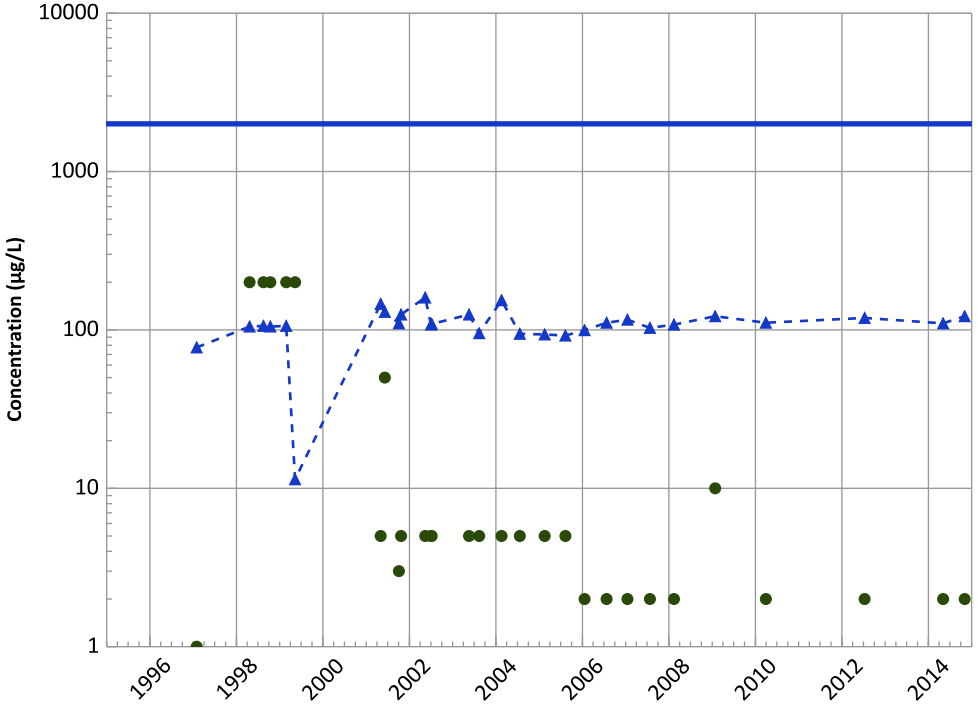


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

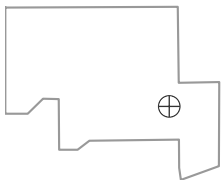
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

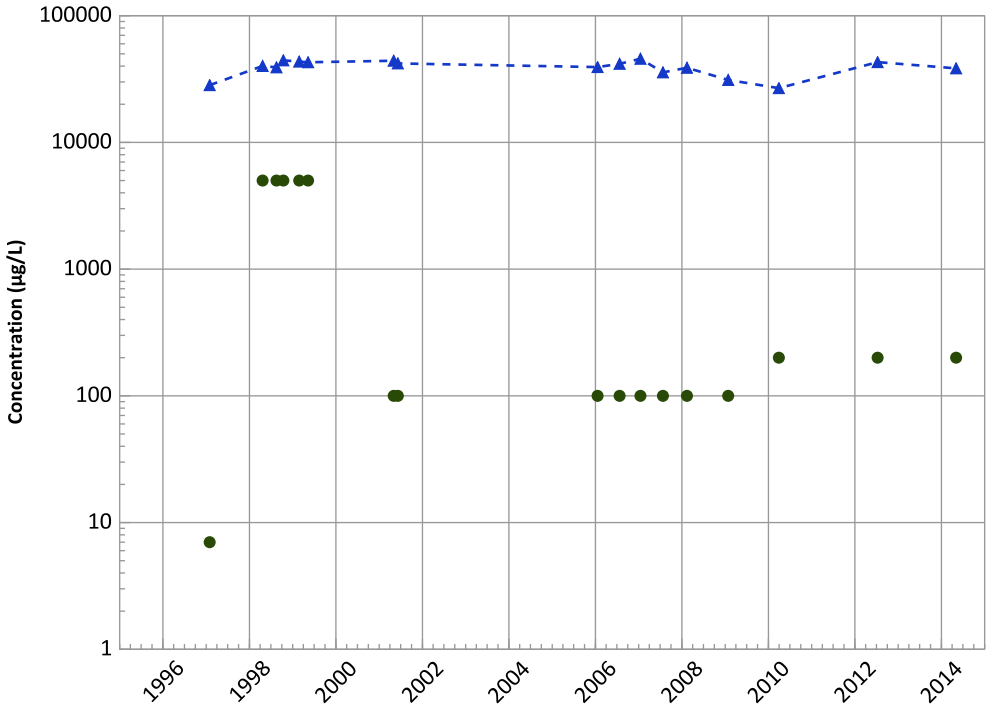
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

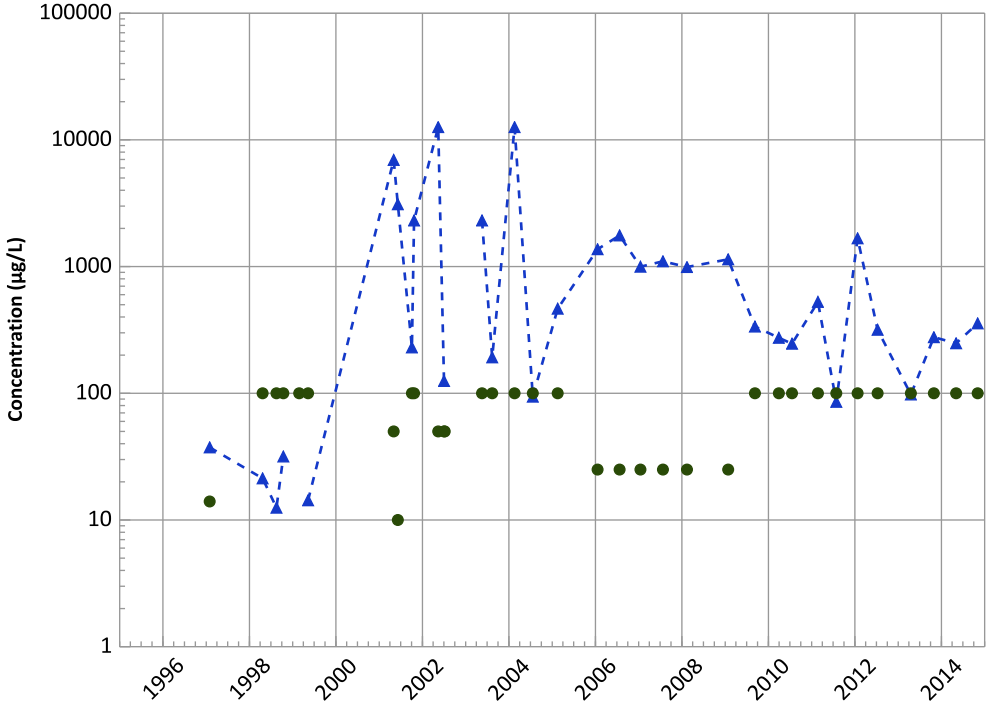


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Iron Trend



Concentration Trend

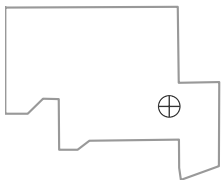
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

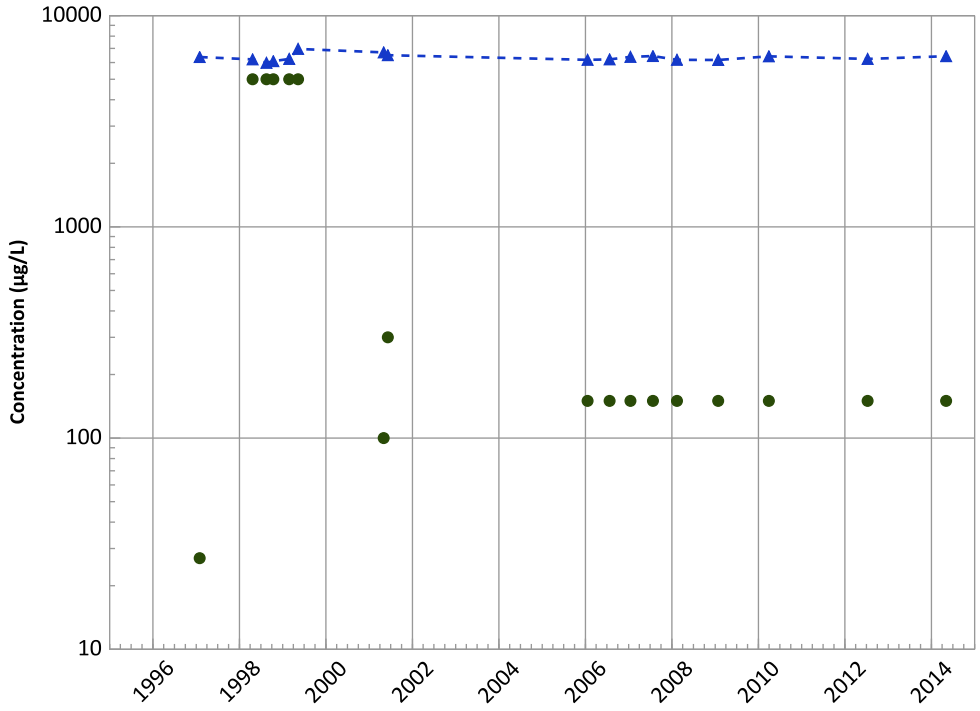
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

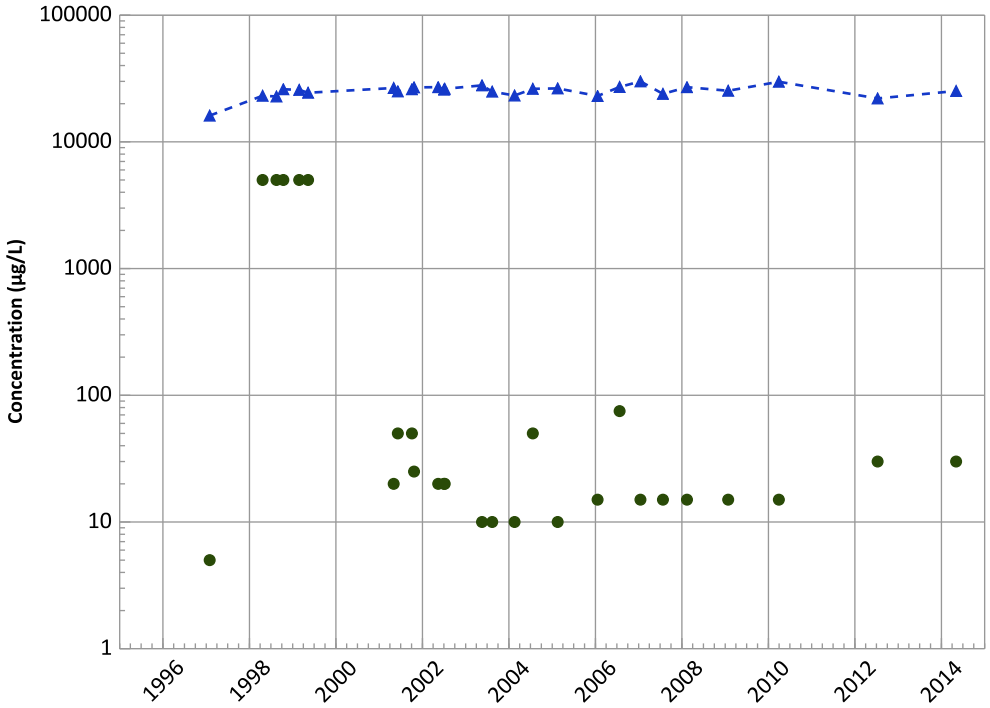


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

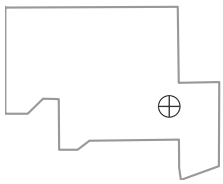
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

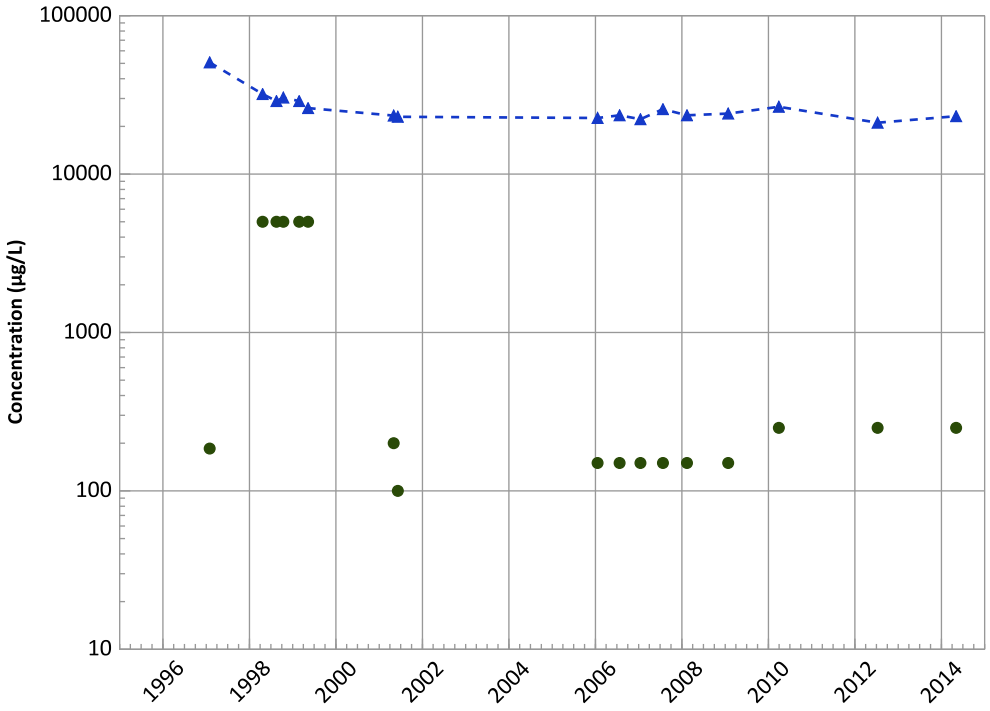
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1033 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

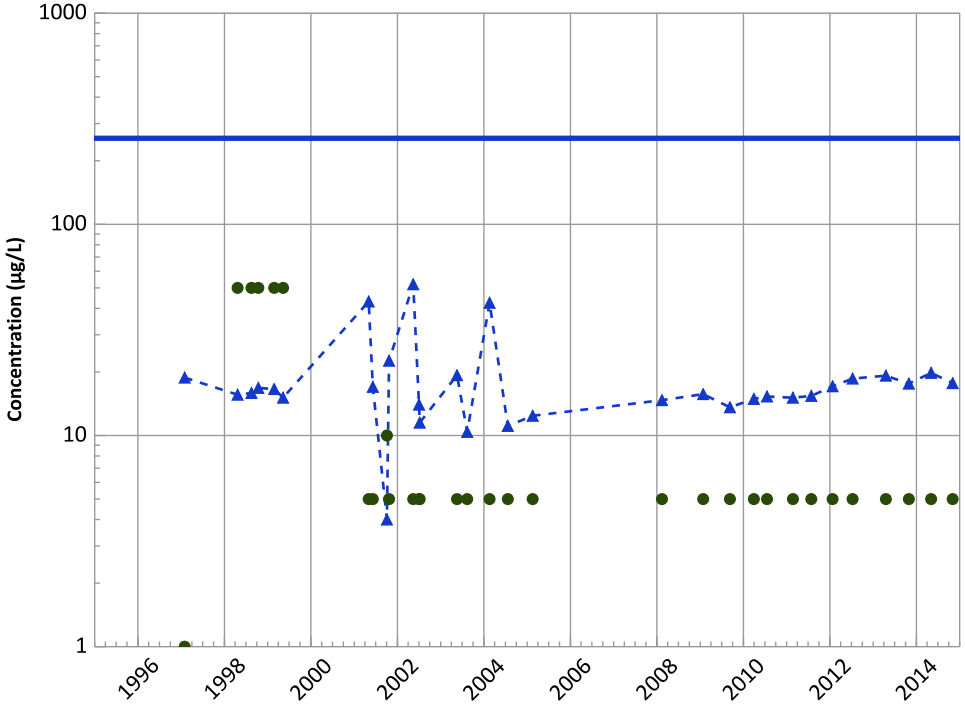


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Vanadium Trend



Concentration Trend

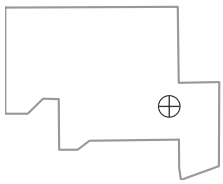
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

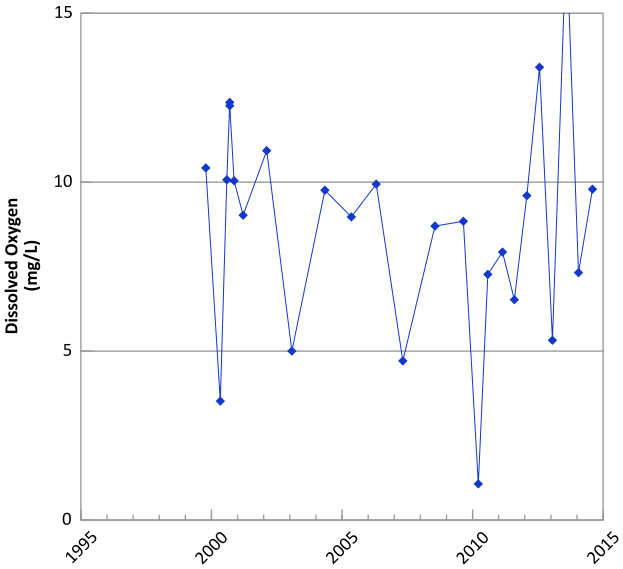
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 01/30/1997 to 11/03/2014
Analysis Date: 03/19/2015

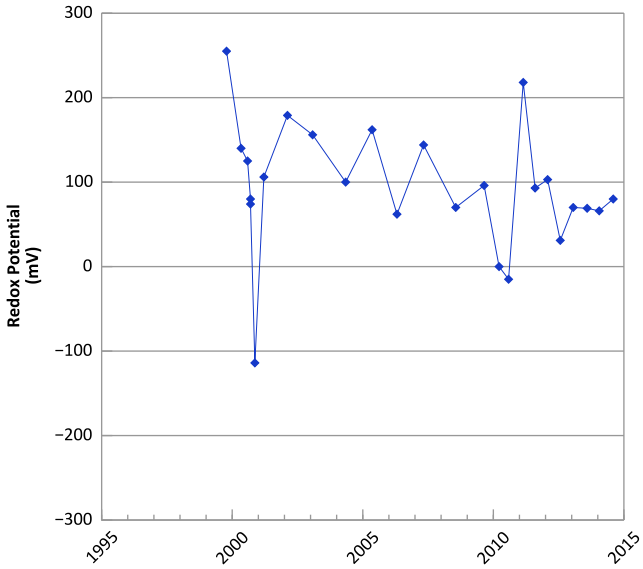
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

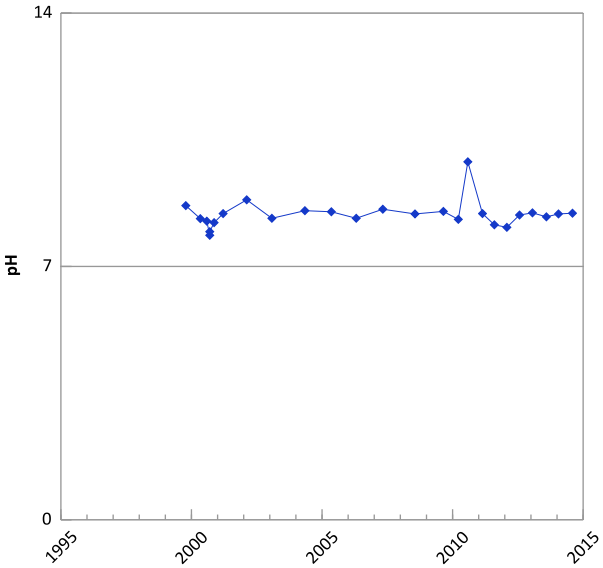
Well Location

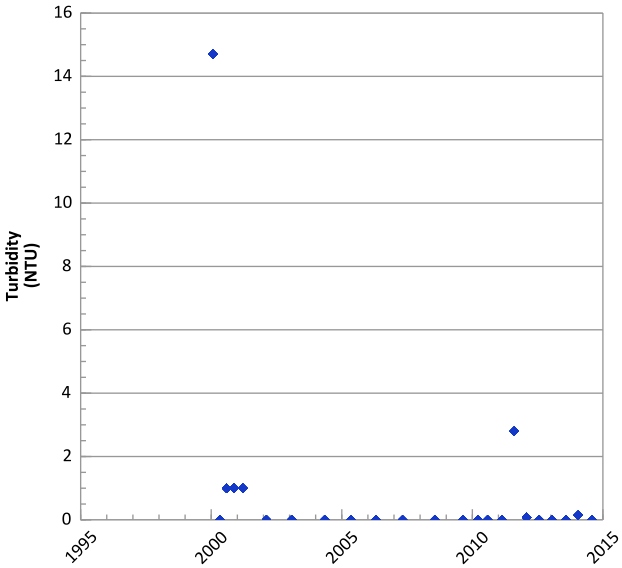


PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



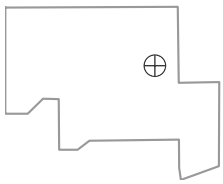






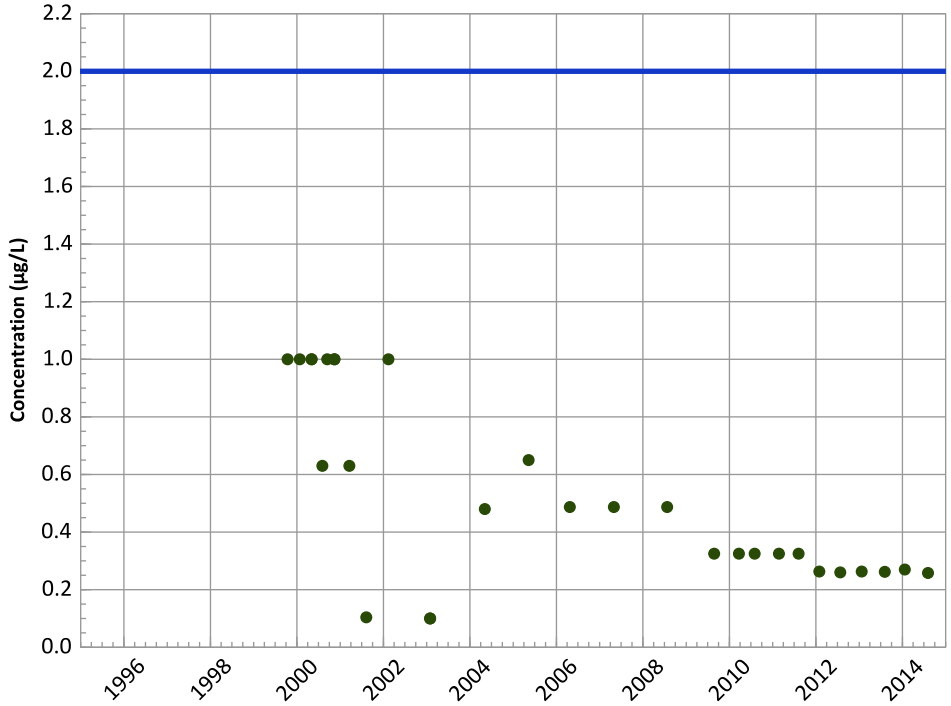
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

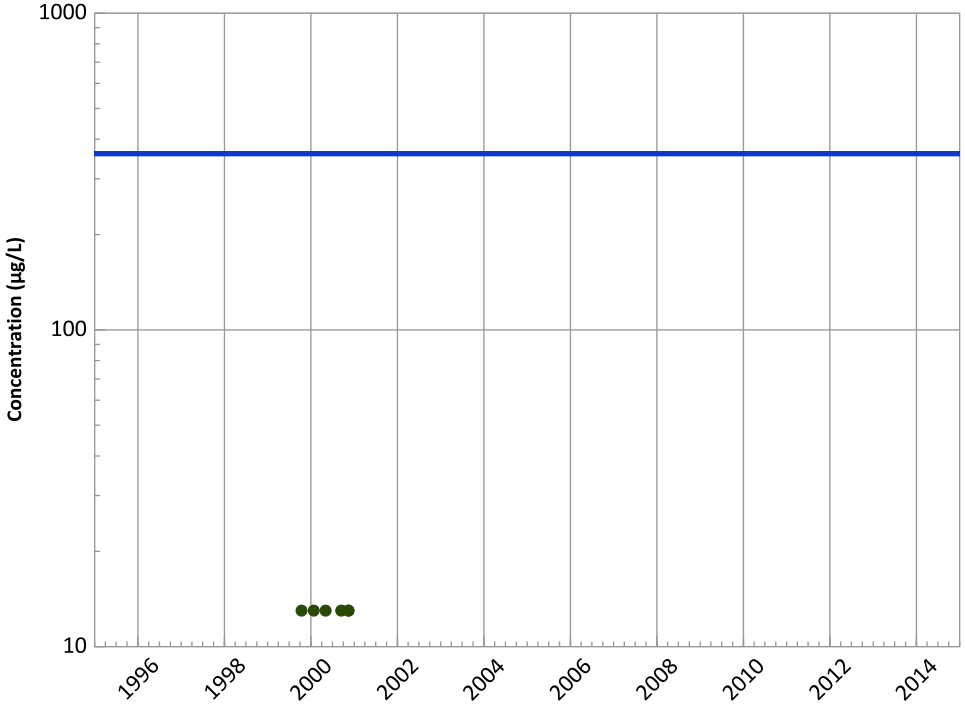


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

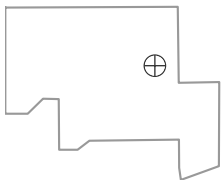
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

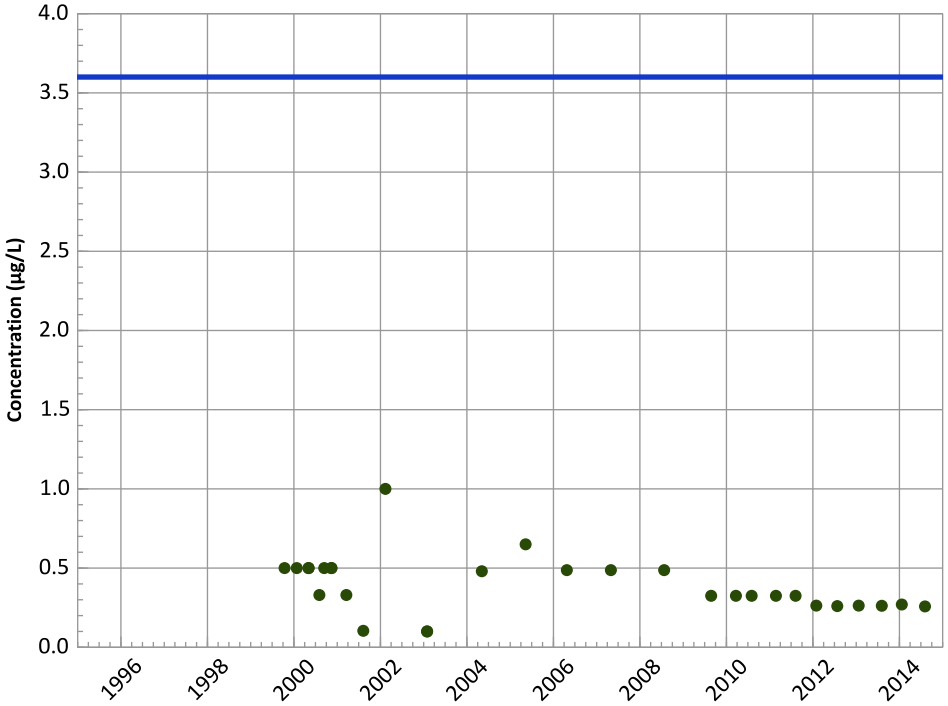
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

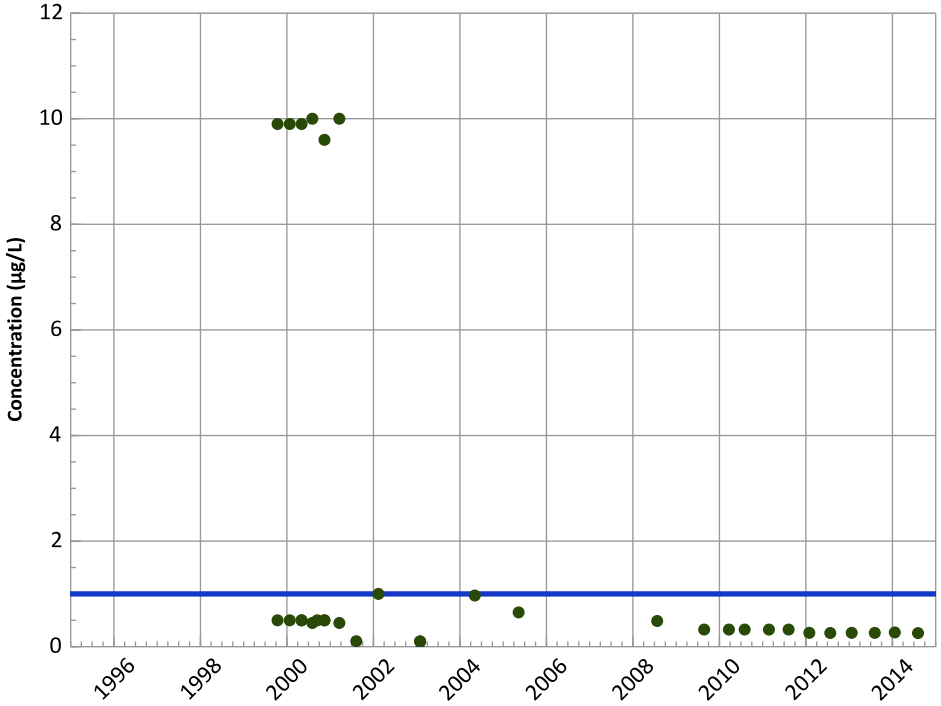


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

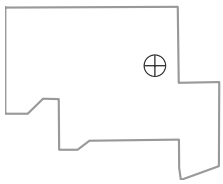
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

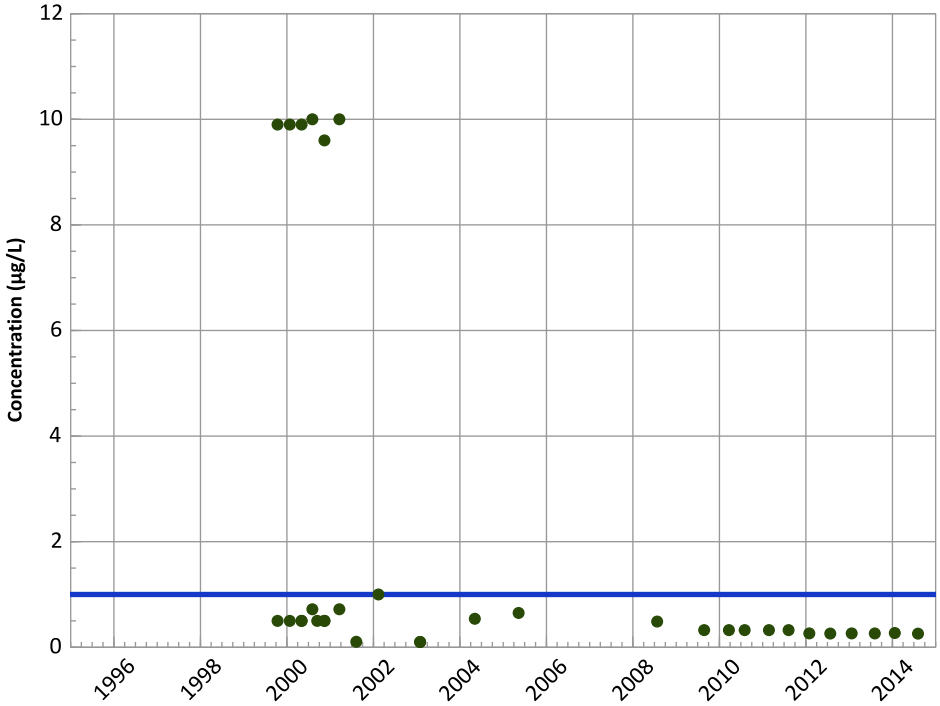
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

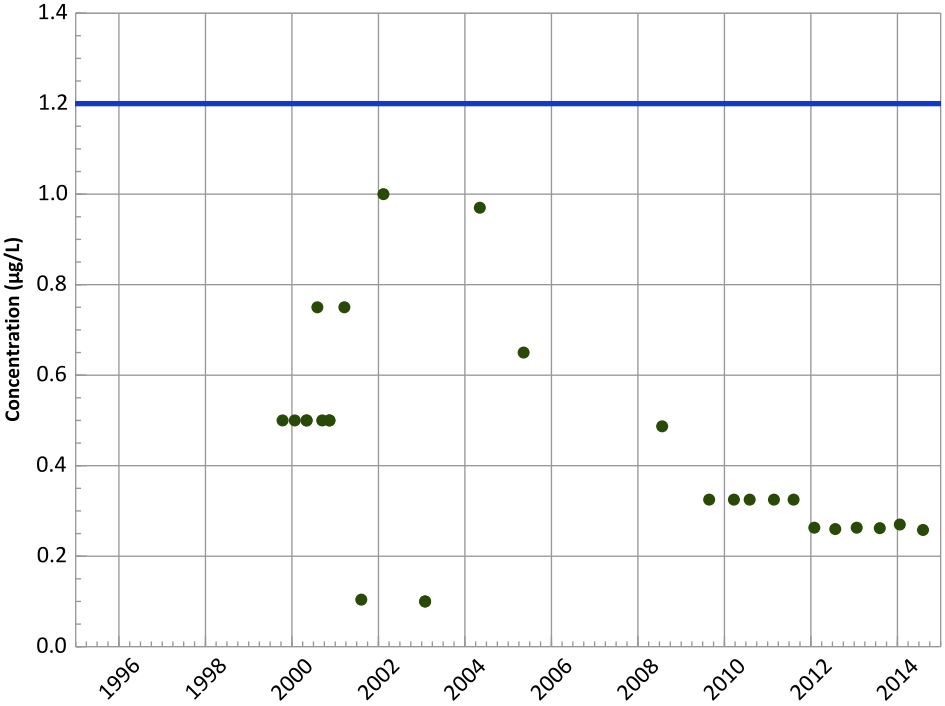


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

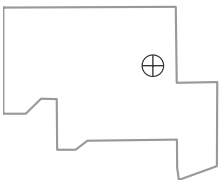
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

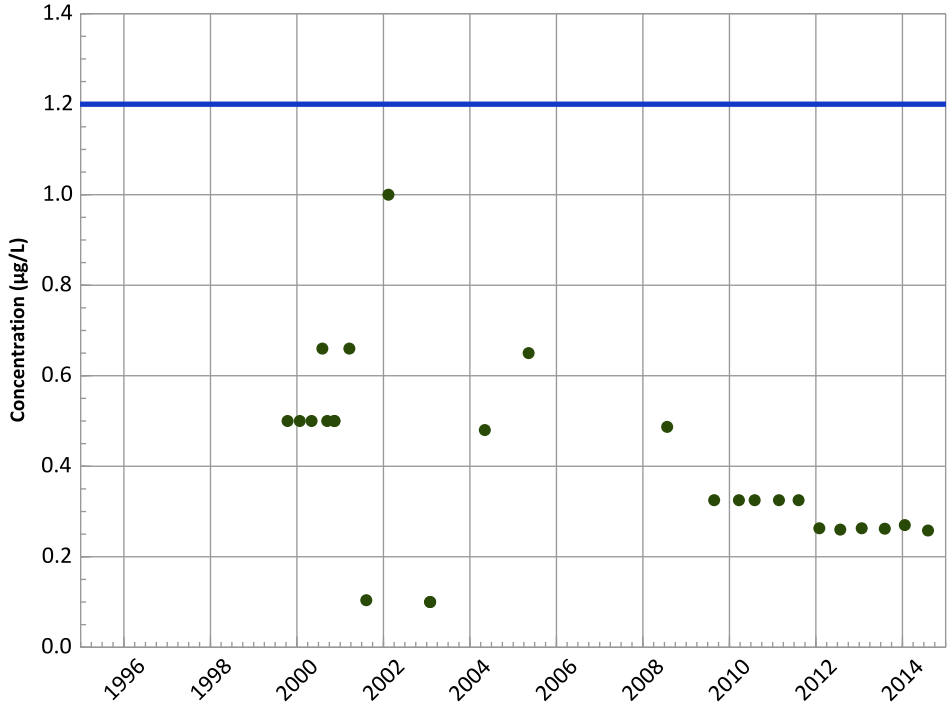
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

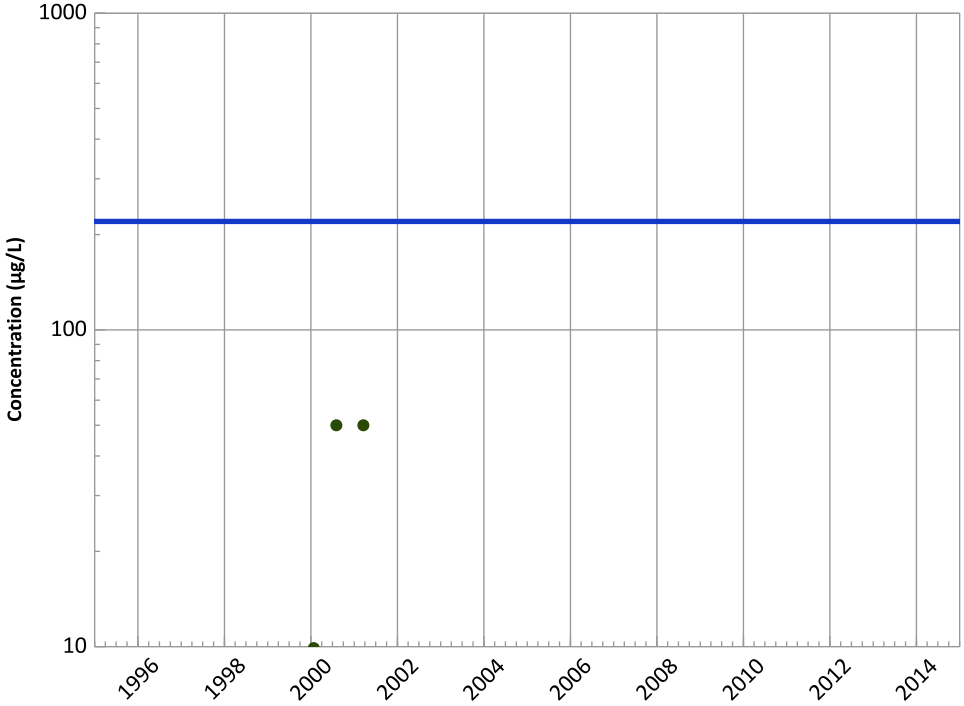


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

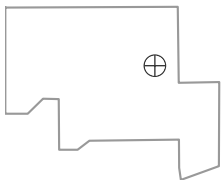


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

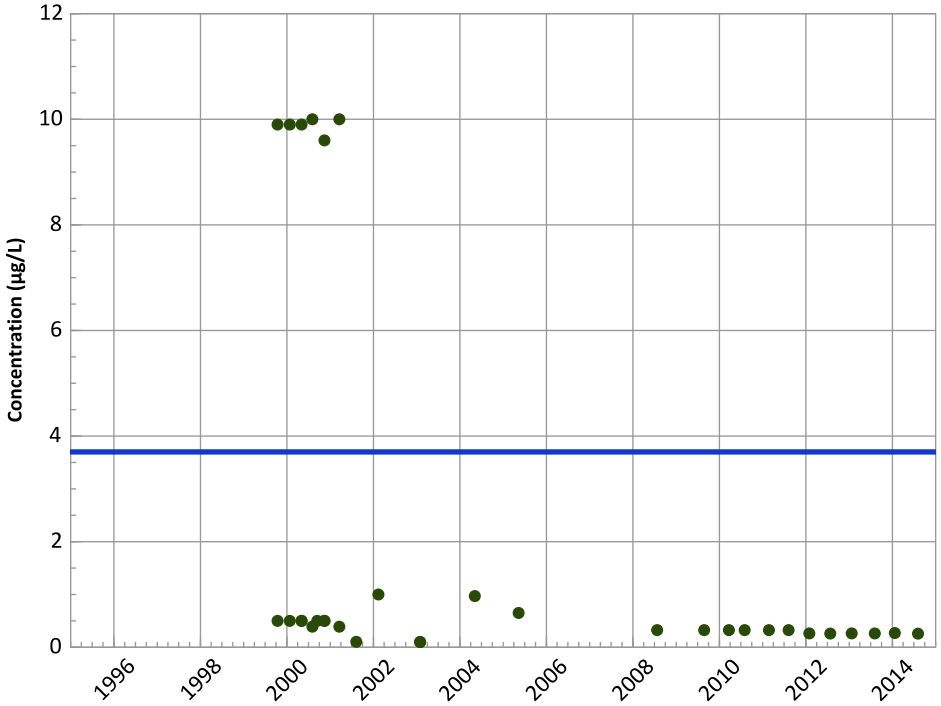


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

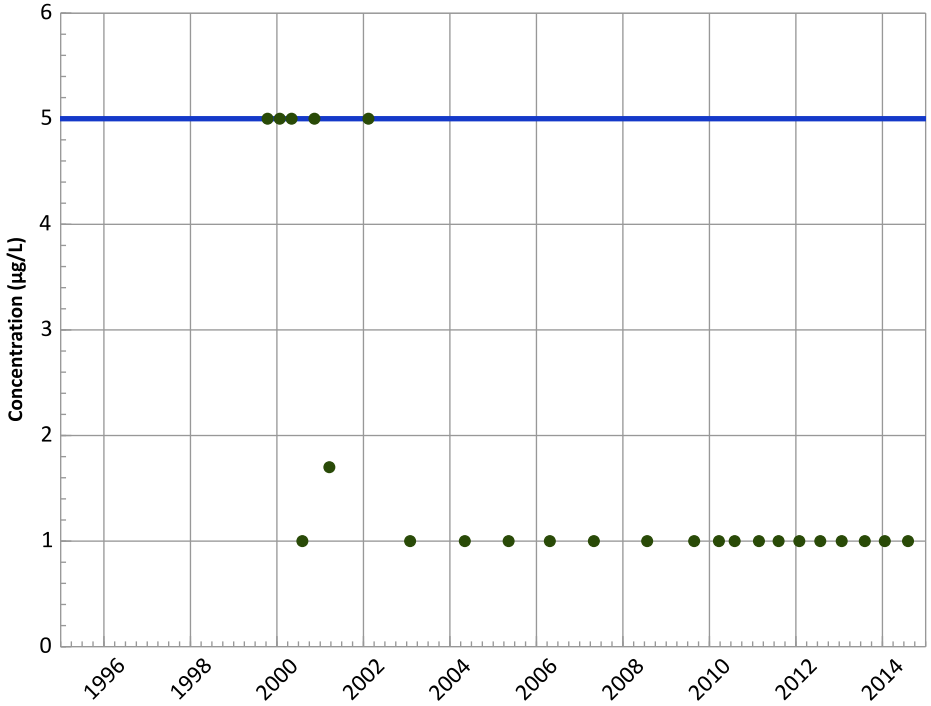


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend

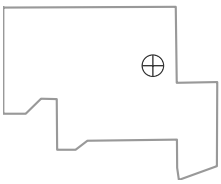


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

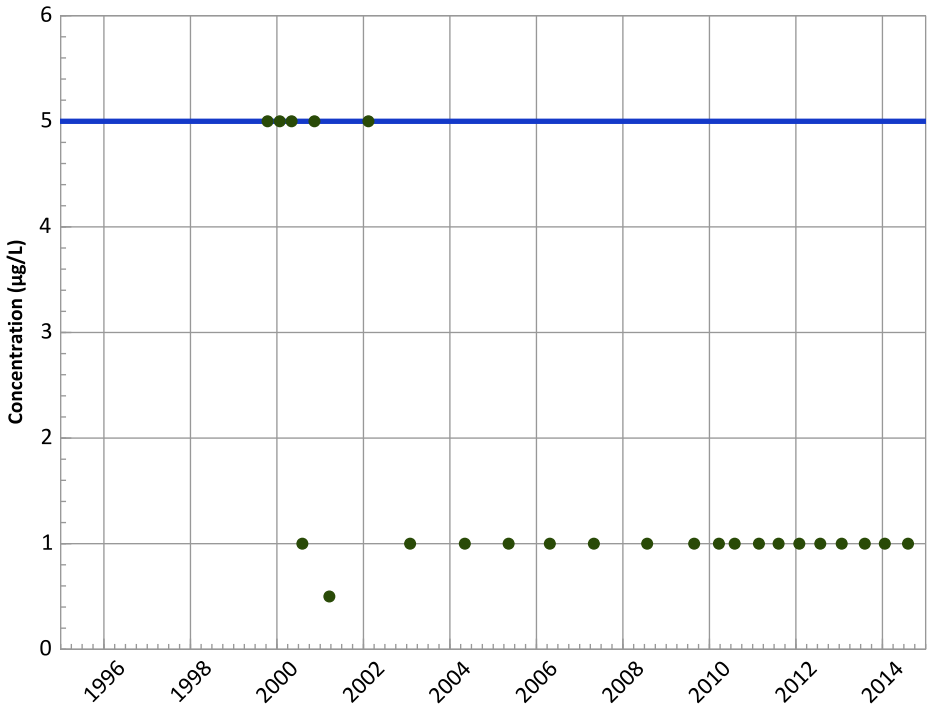


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

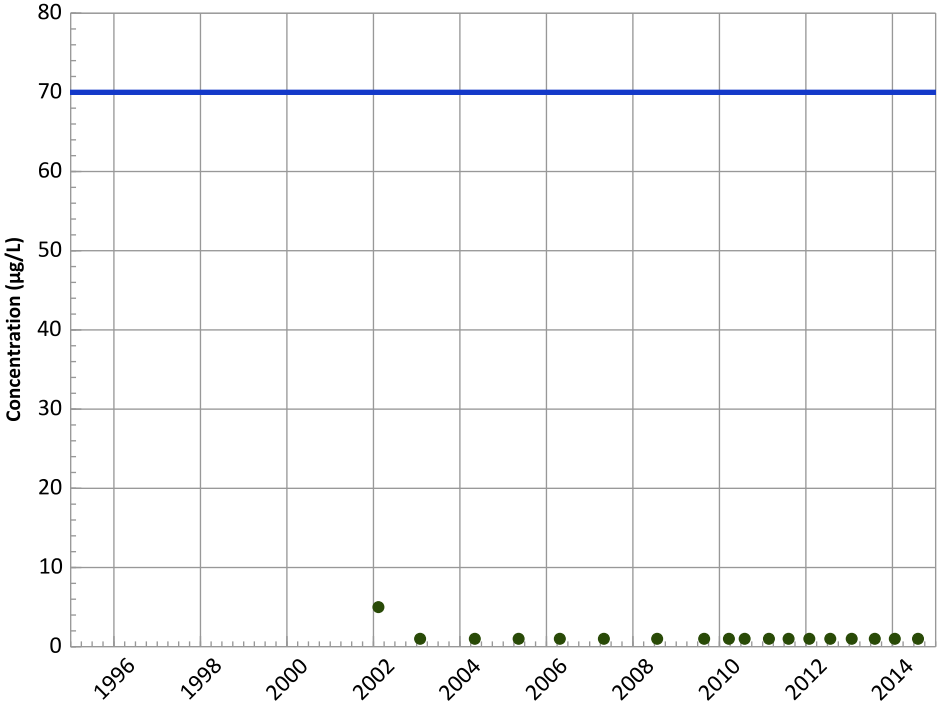


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

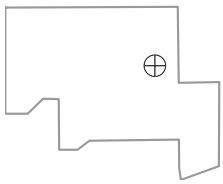
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

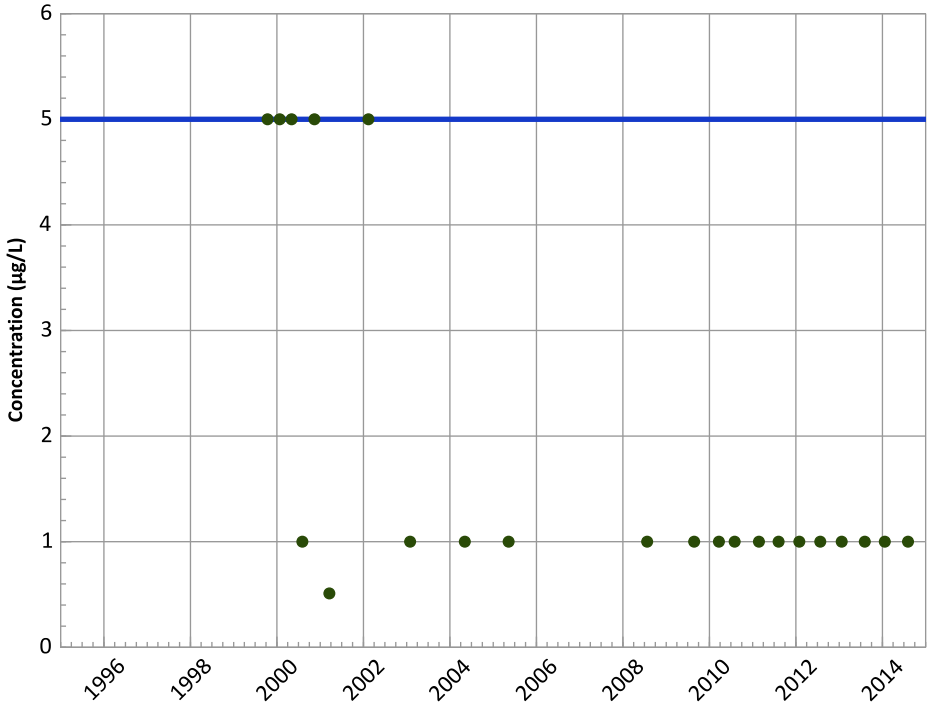
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

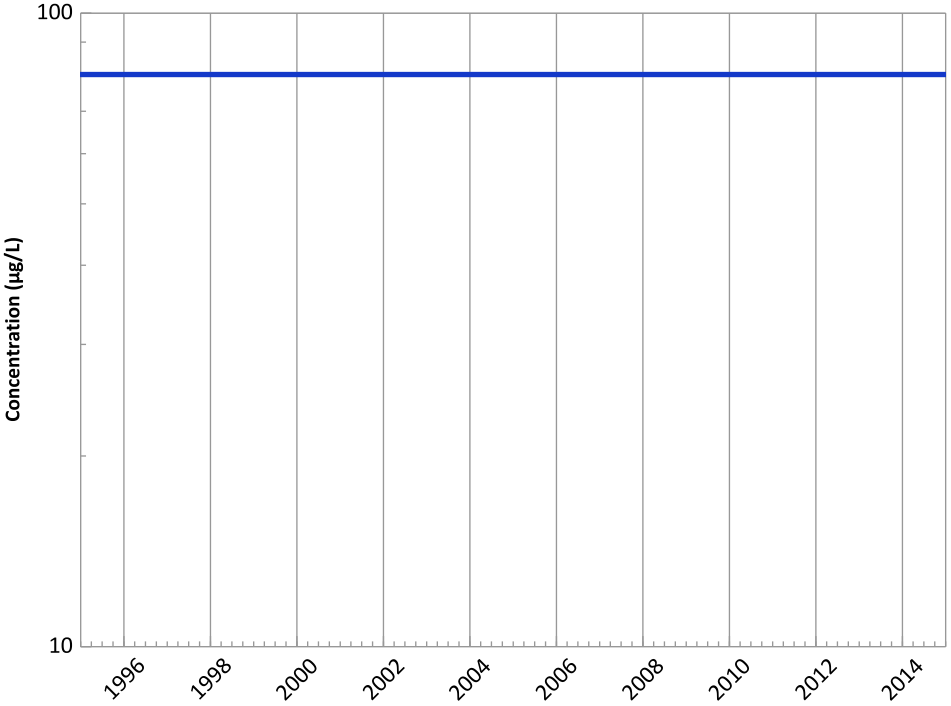


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

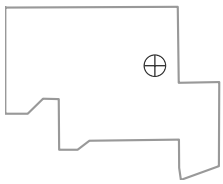
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

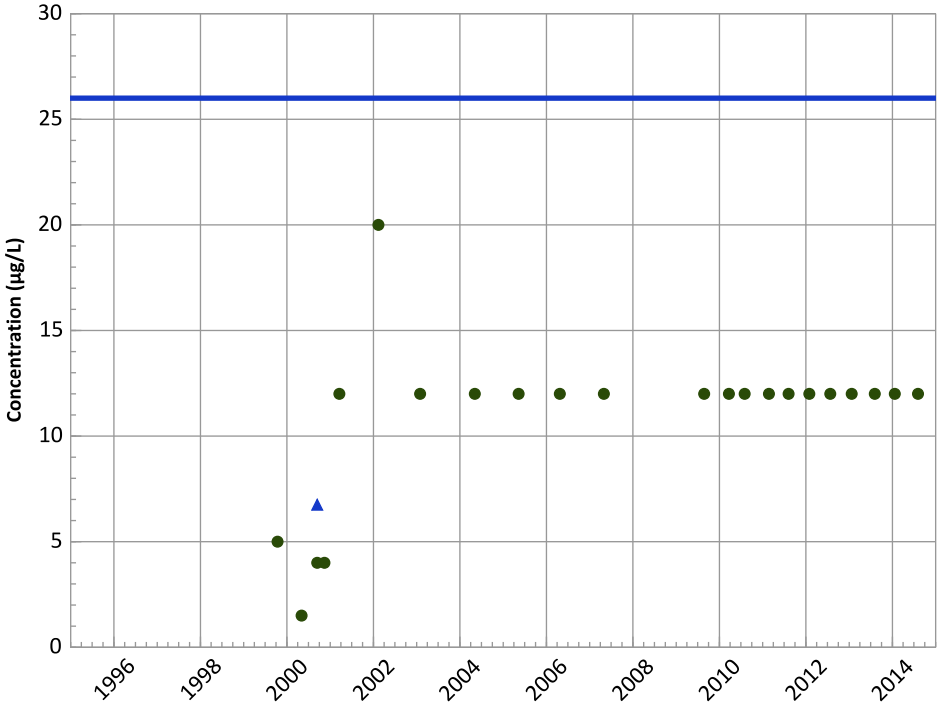
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

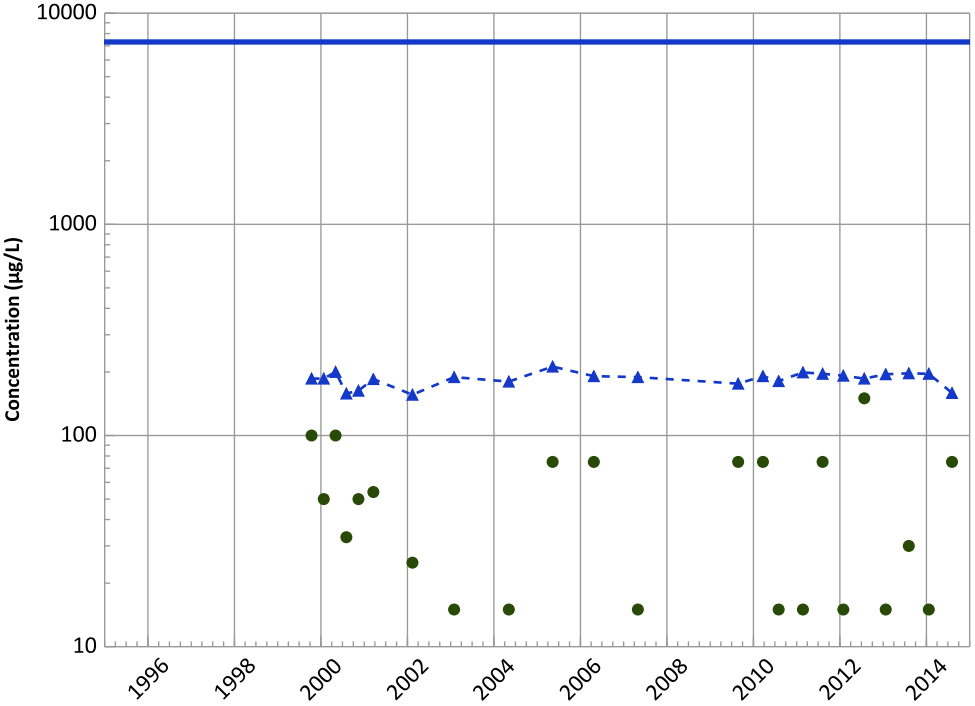


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Boron Trend



Concentration Trend

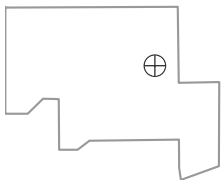
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

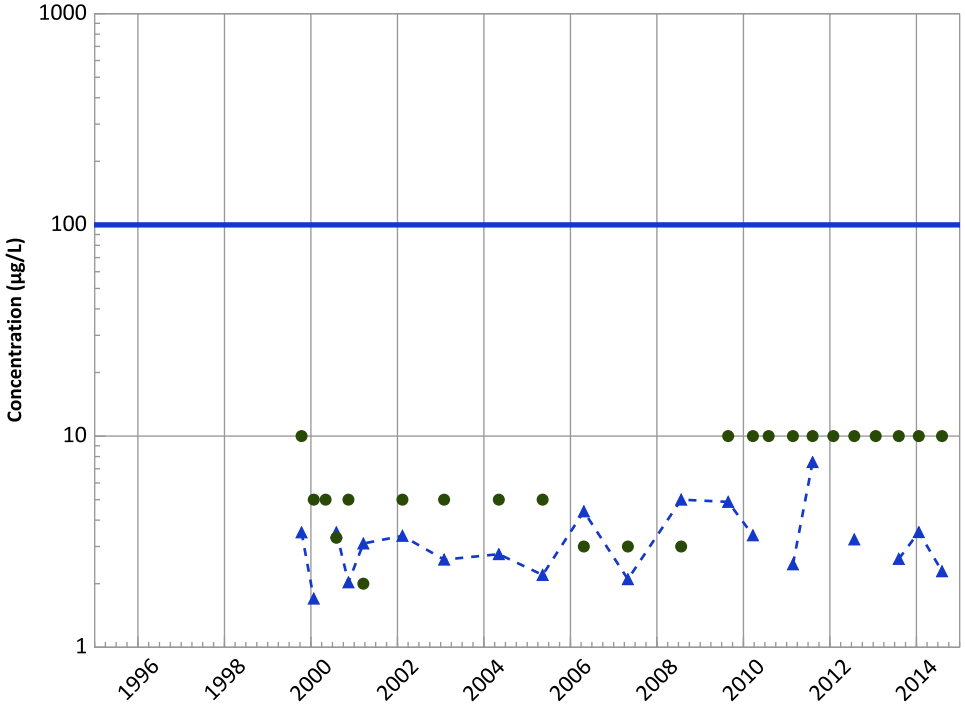
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Total Trend

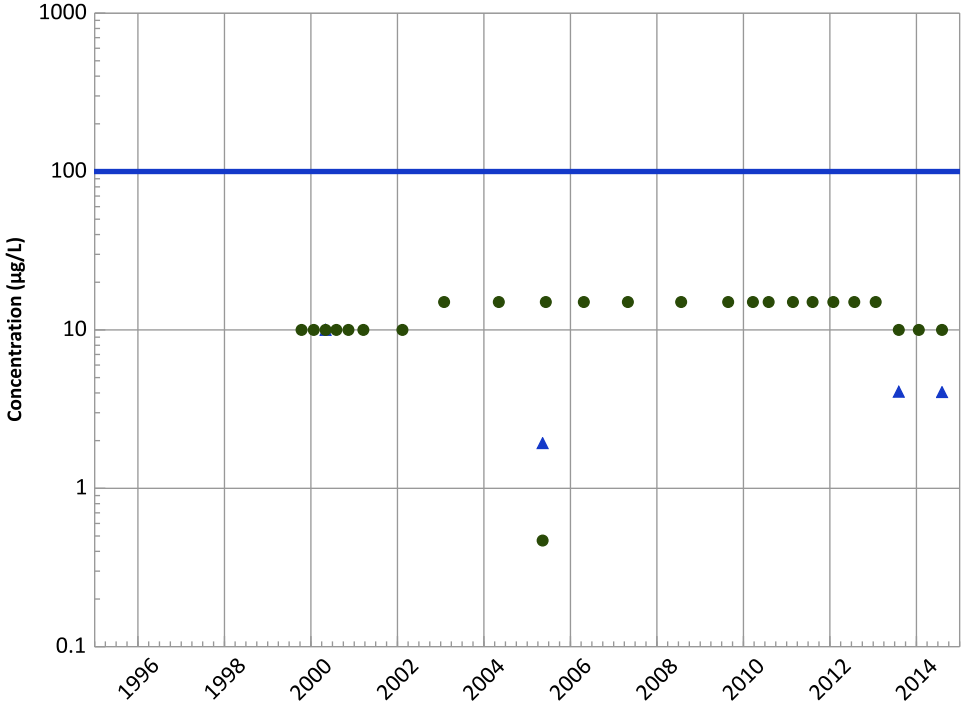


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Chromium, Hexavalent Trend



Concentration Trend

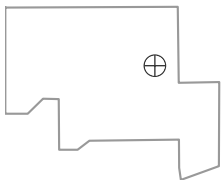
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

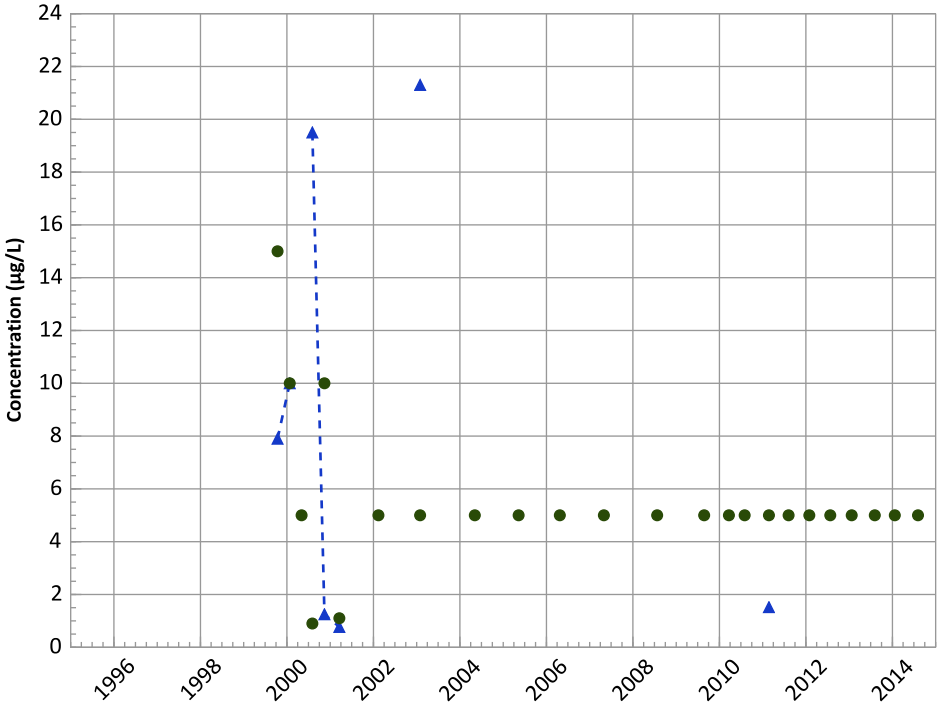
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

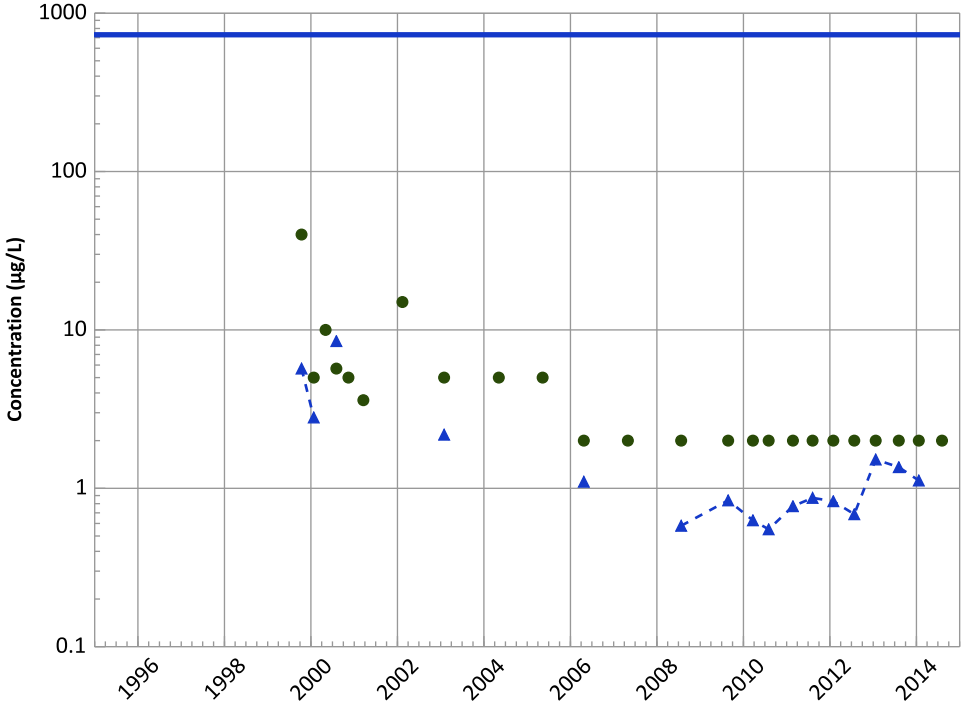


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Nickel Trend



Concentration Trend

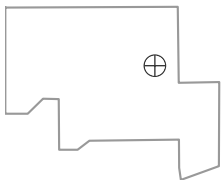
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

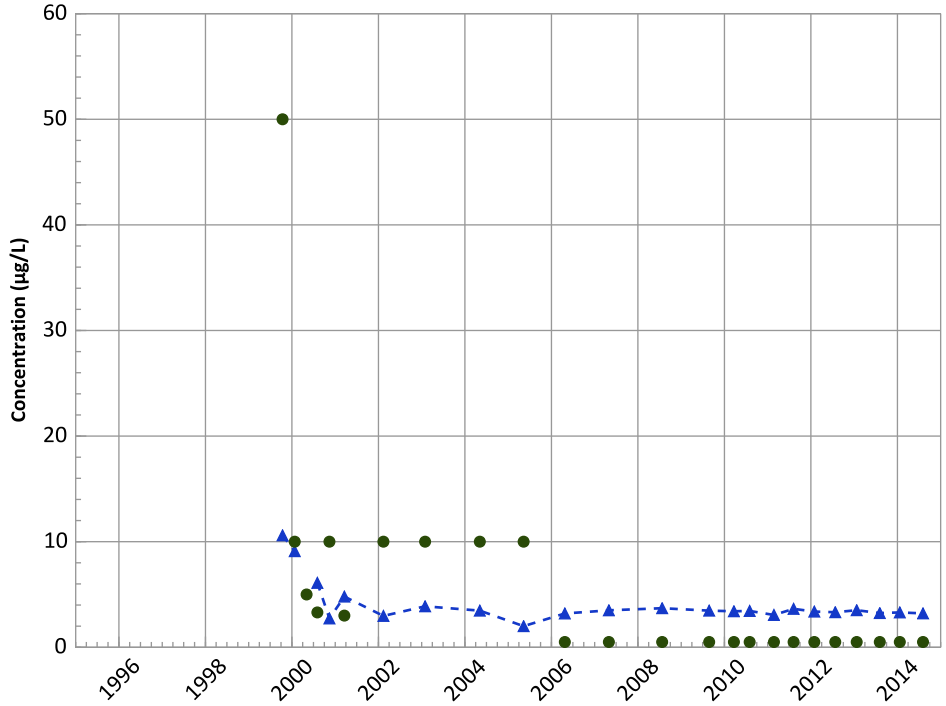
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Molybdenum Trend

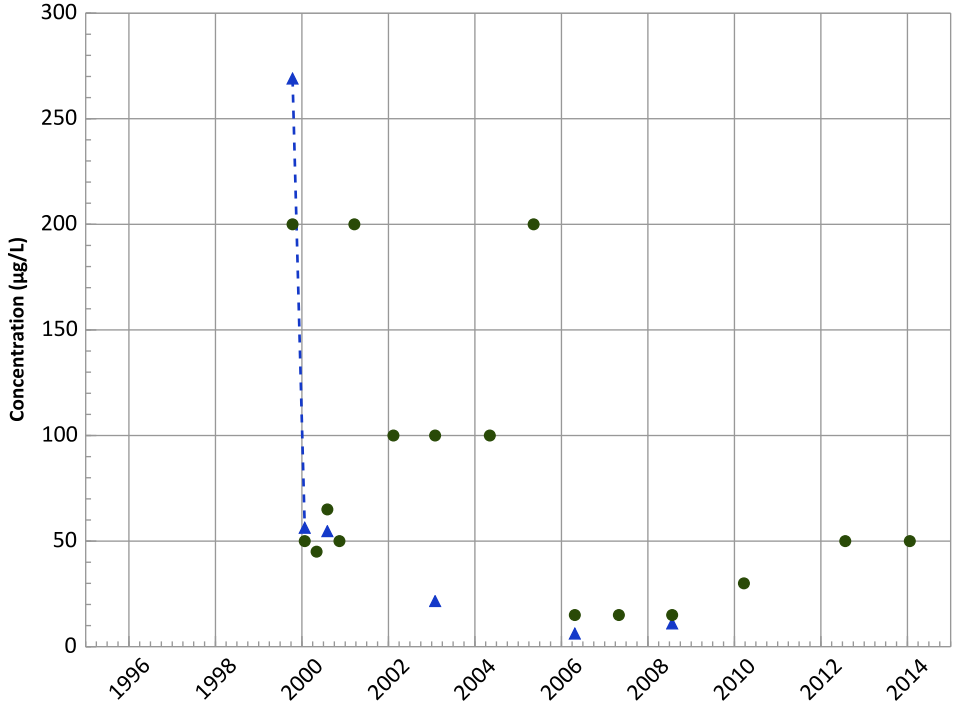


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Aluminum Trend



Concentration Trend

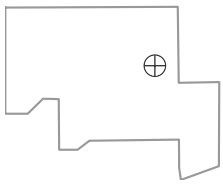
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

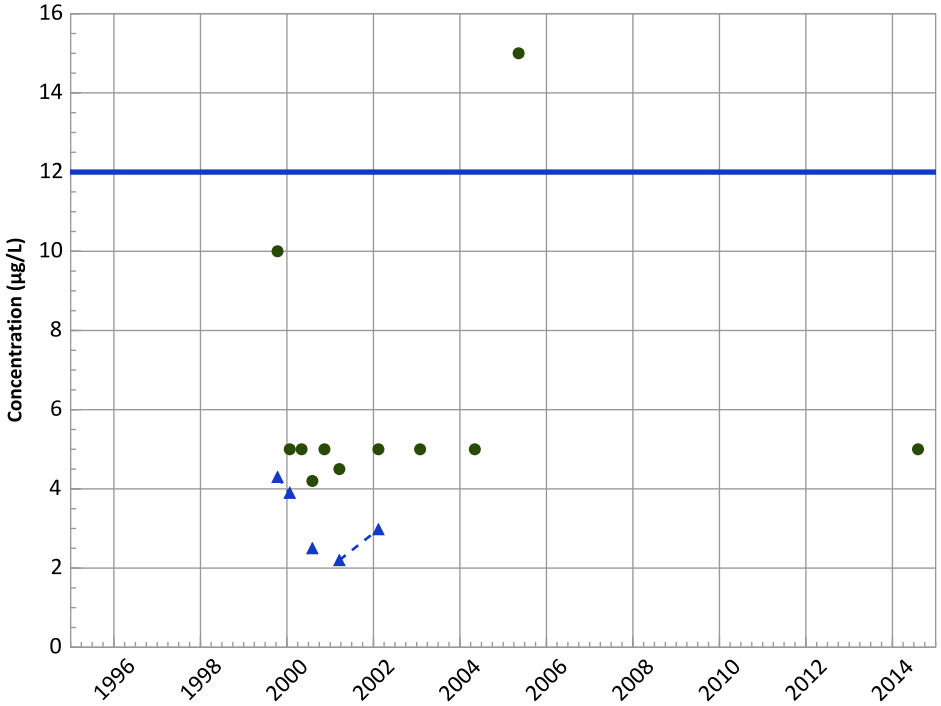
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Arsenic Trend

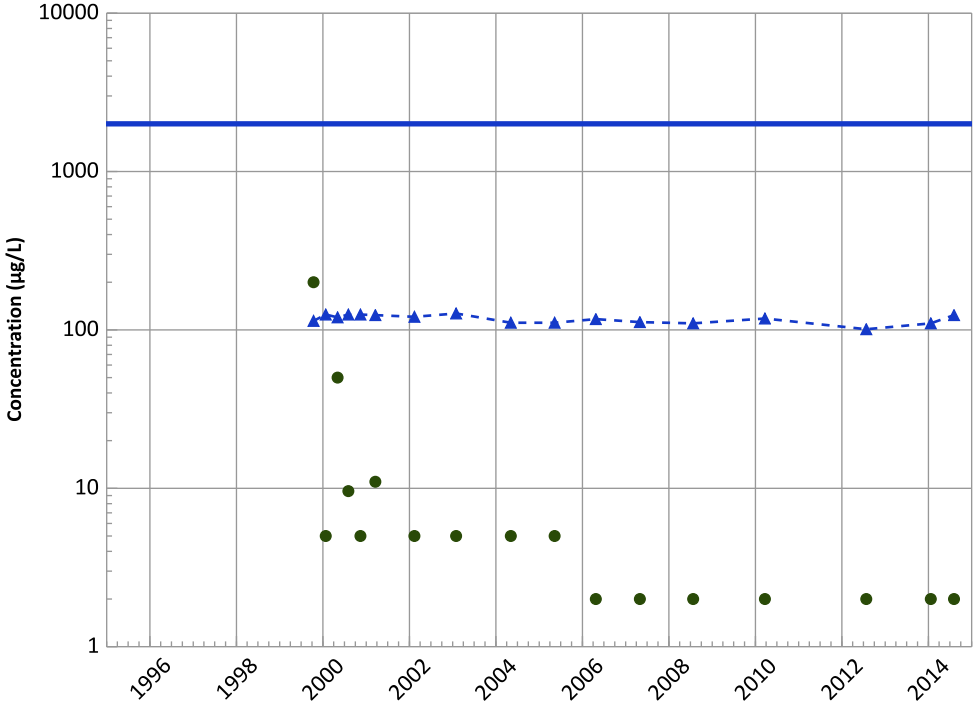


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

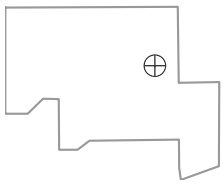
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

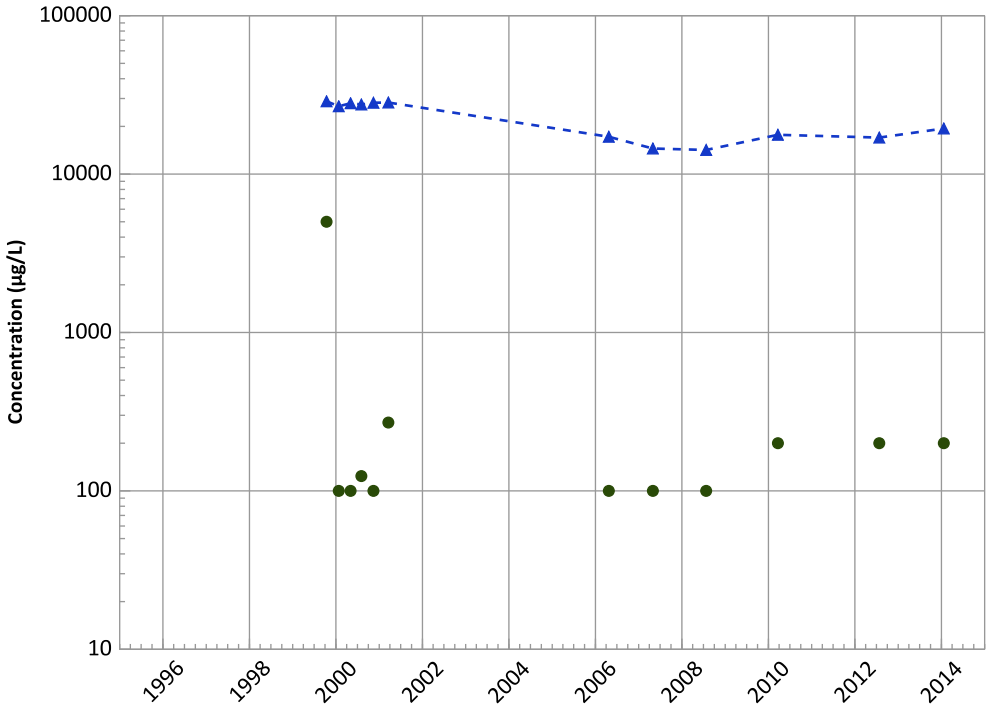
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

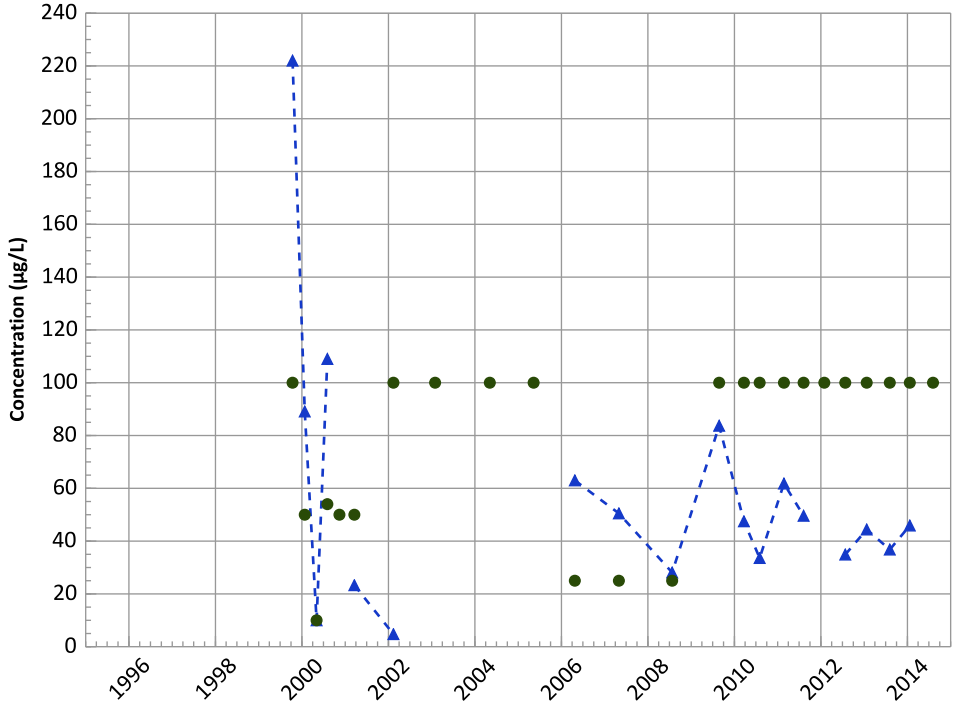


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Iron Trend



Concentration Trend

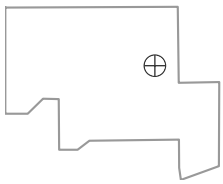
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

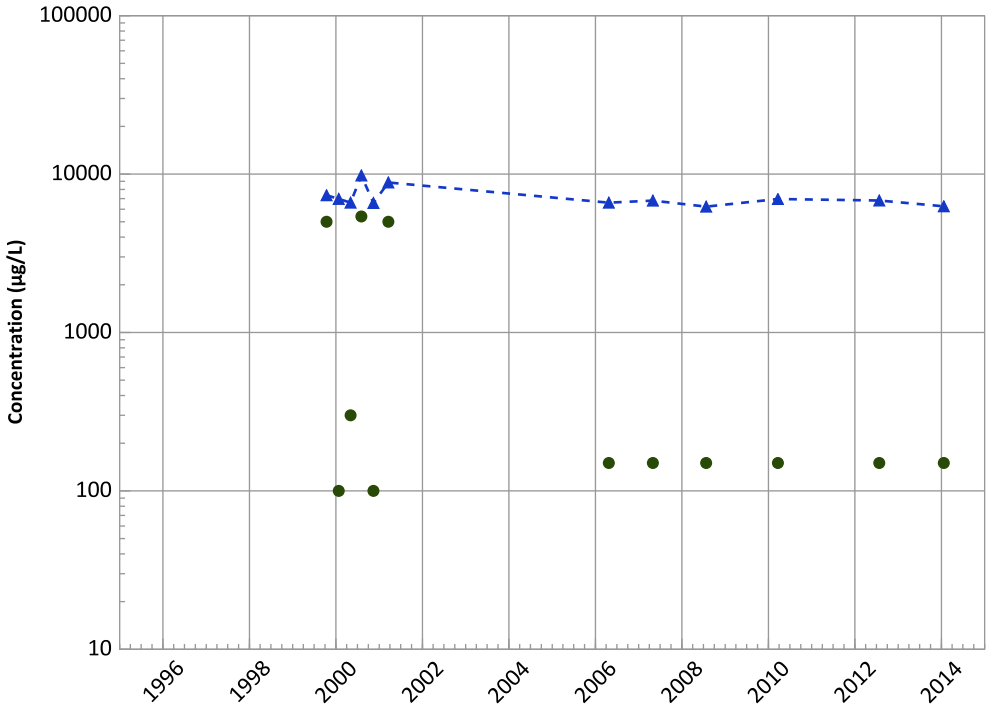
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

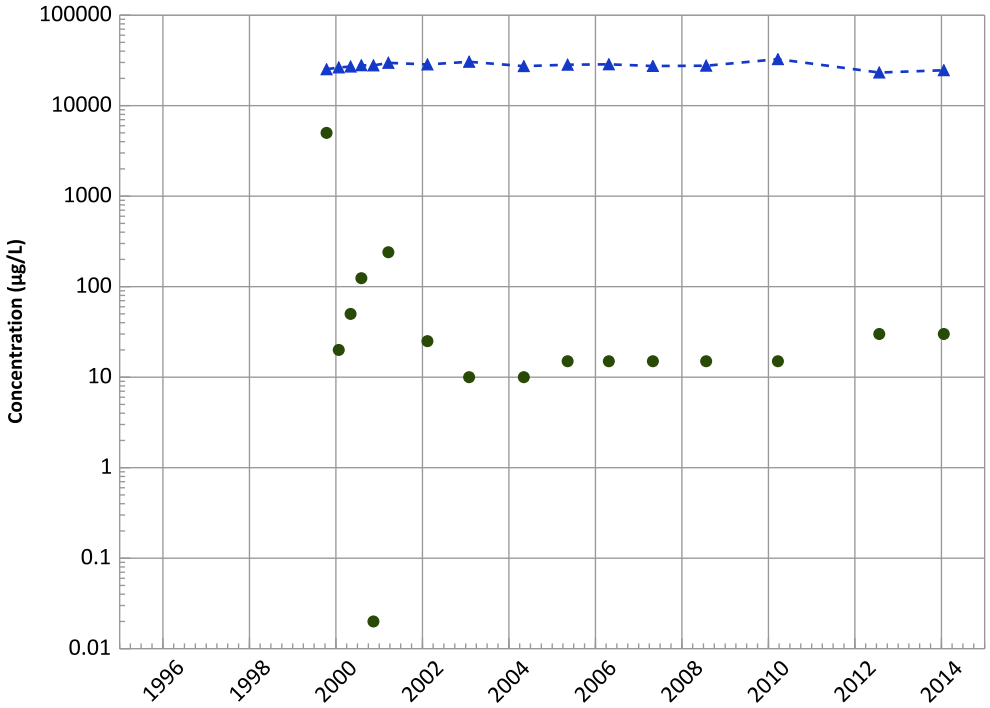


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Magnesium Trend



Concentration Trend

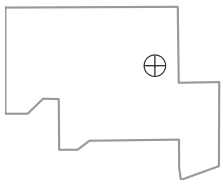
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

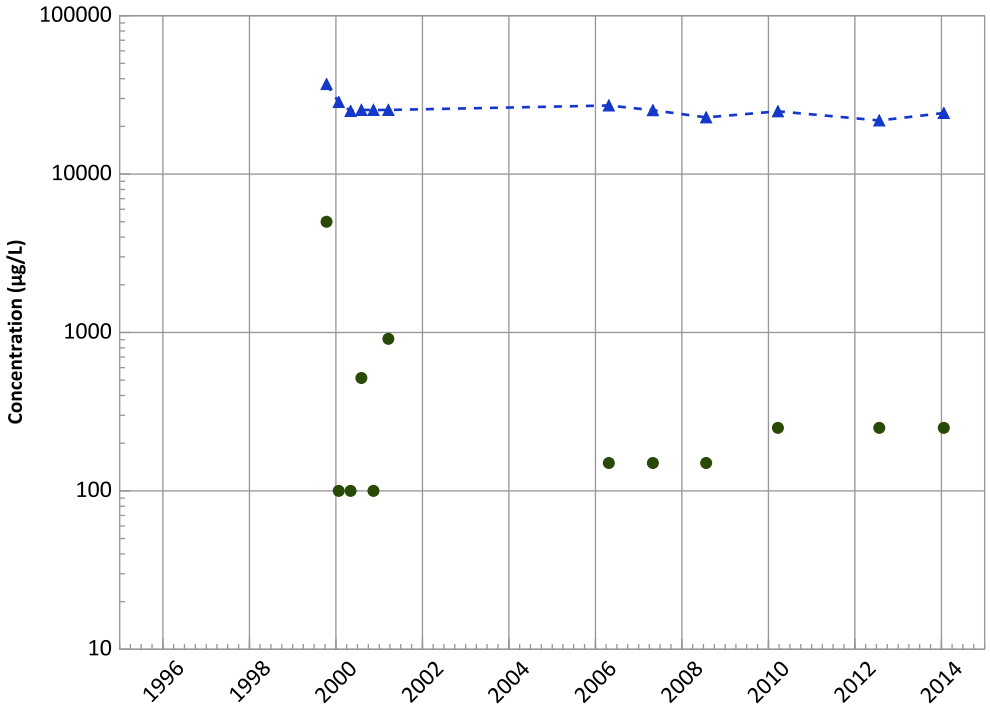
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1043 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

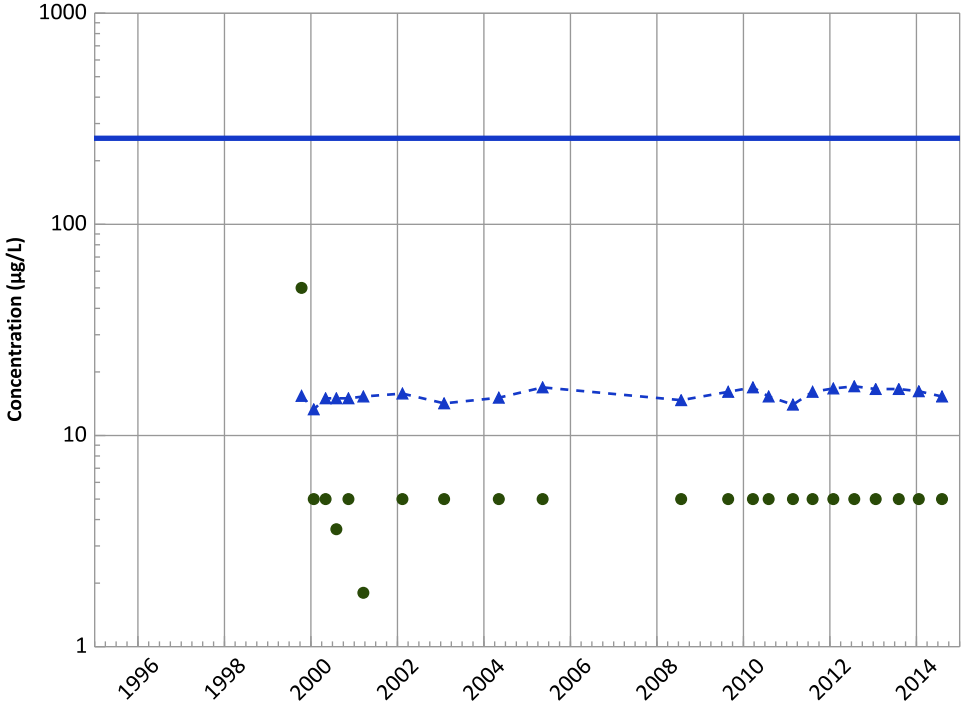


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Vanadium Trend



Concentration Trend

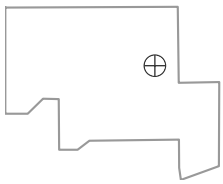
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

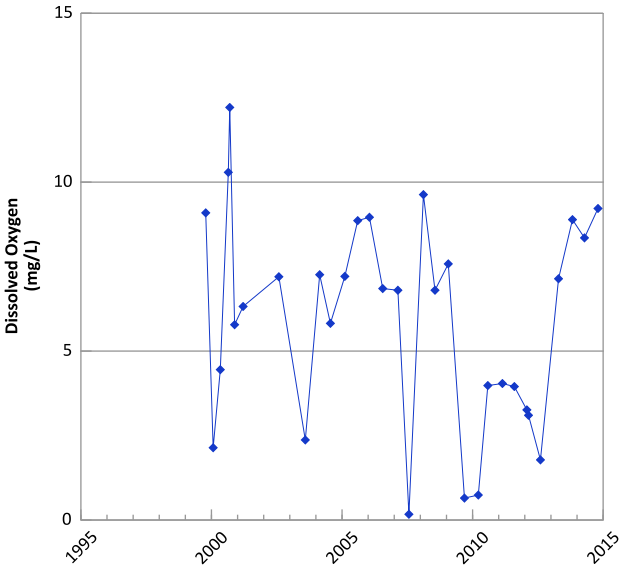
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/1999 to 08/05/2014
Analysis Date: 03/19/2015

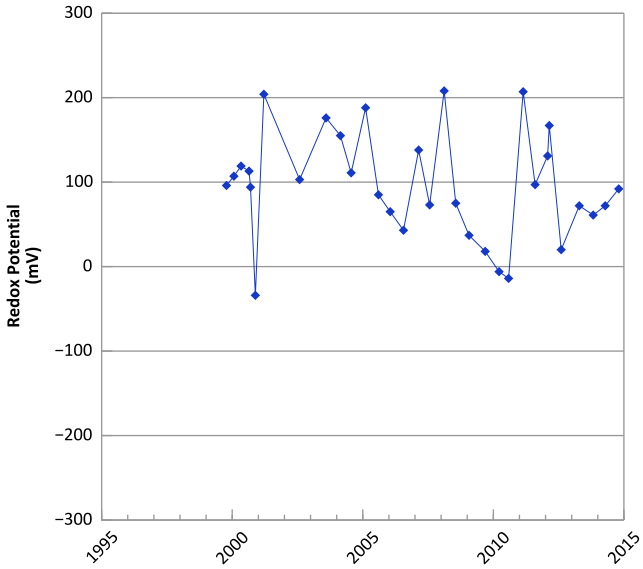
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

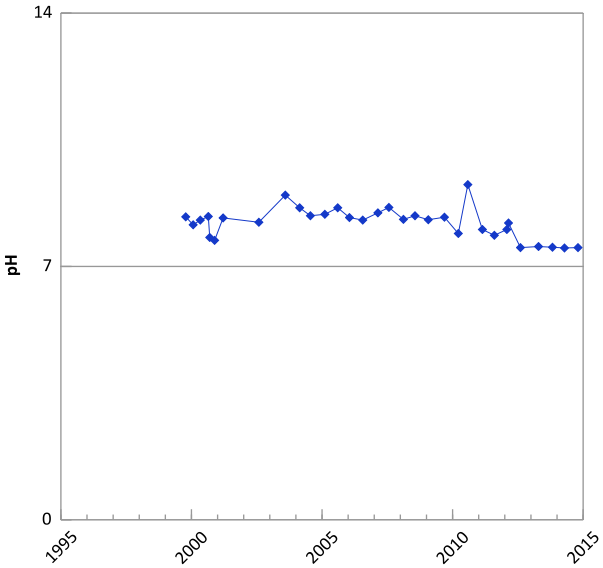
Well Location

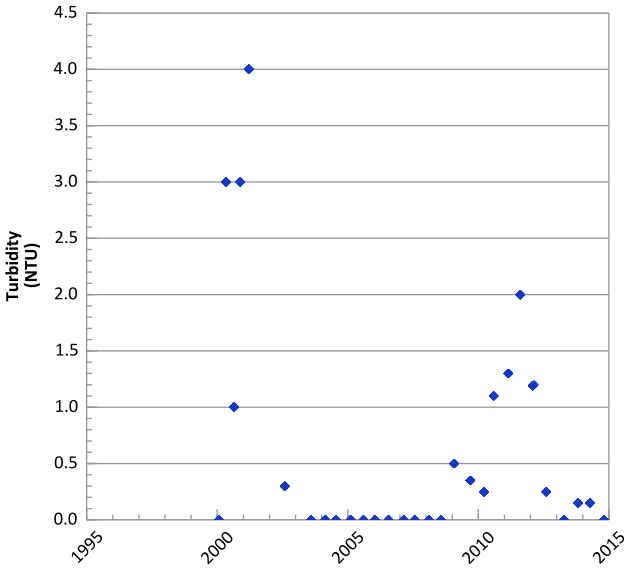


PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



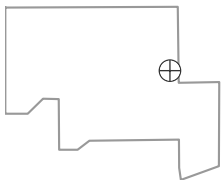






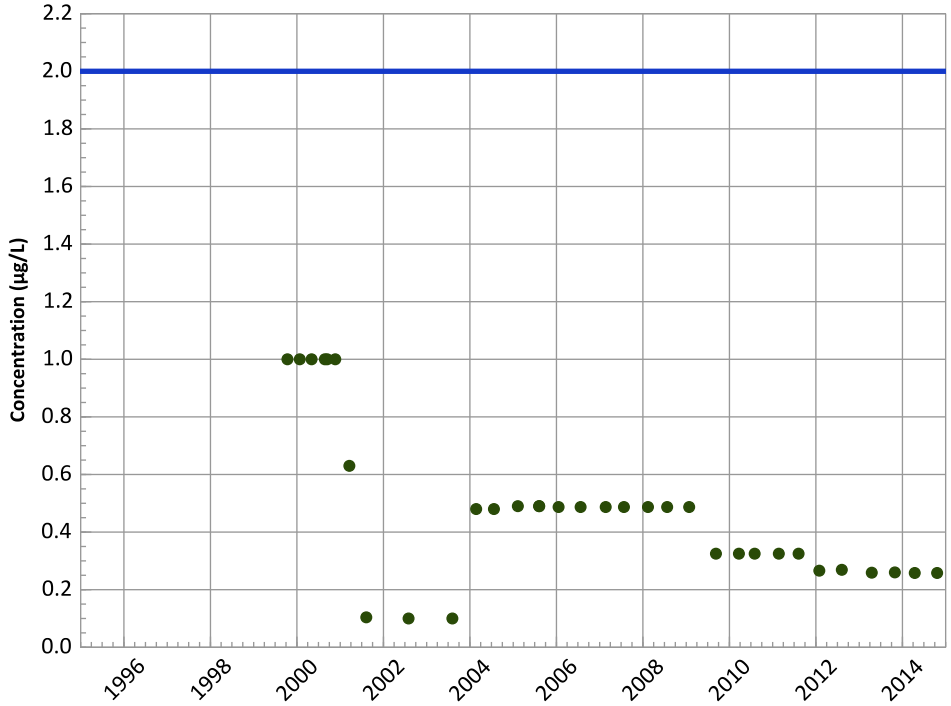
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

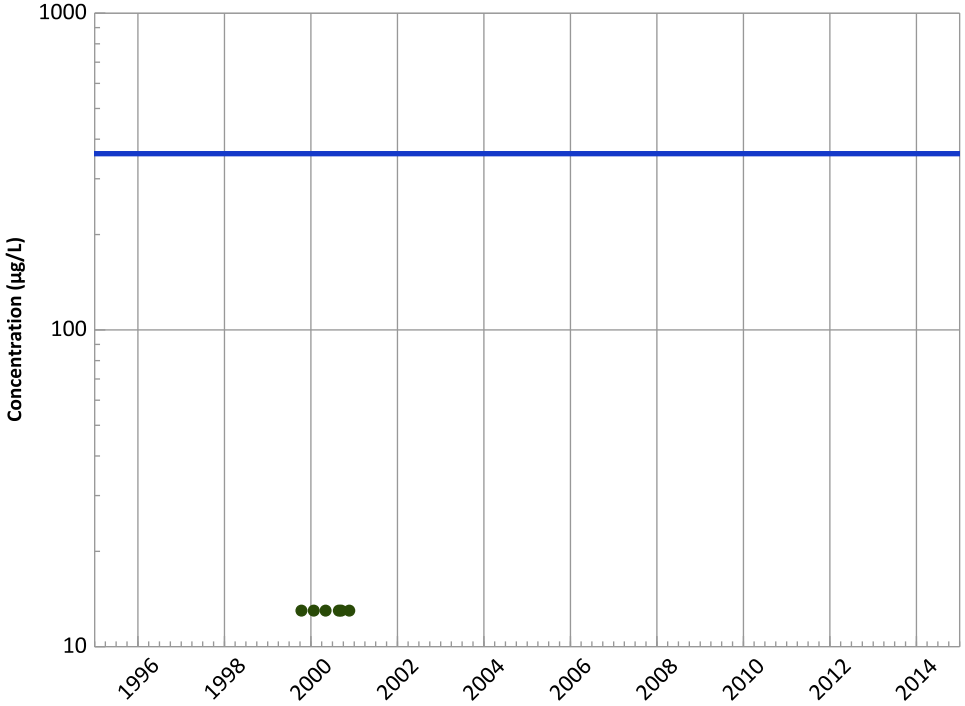


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

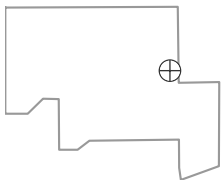
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

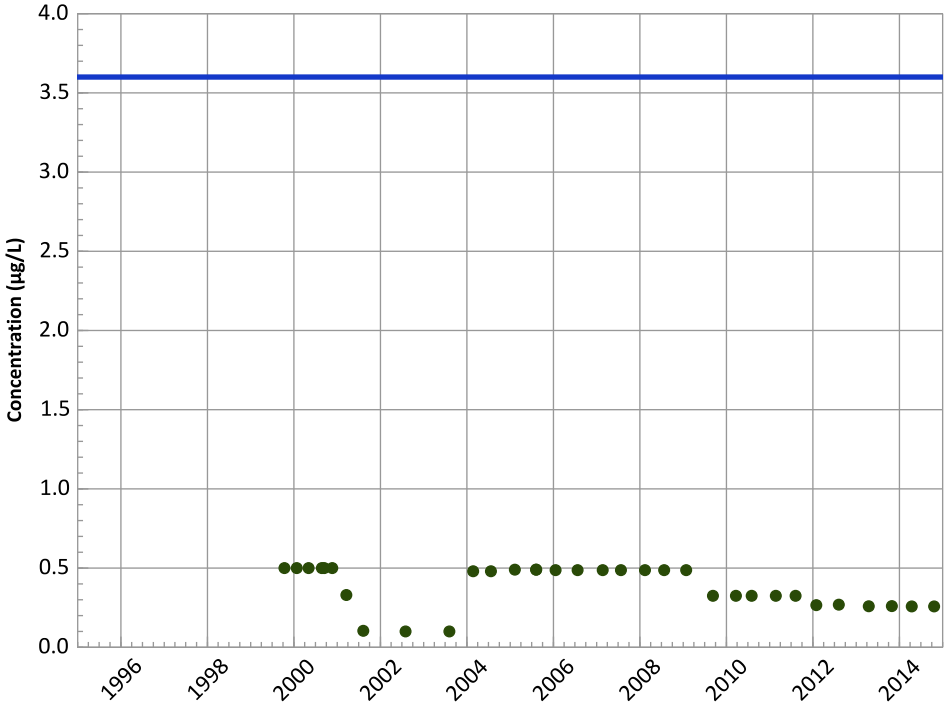
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

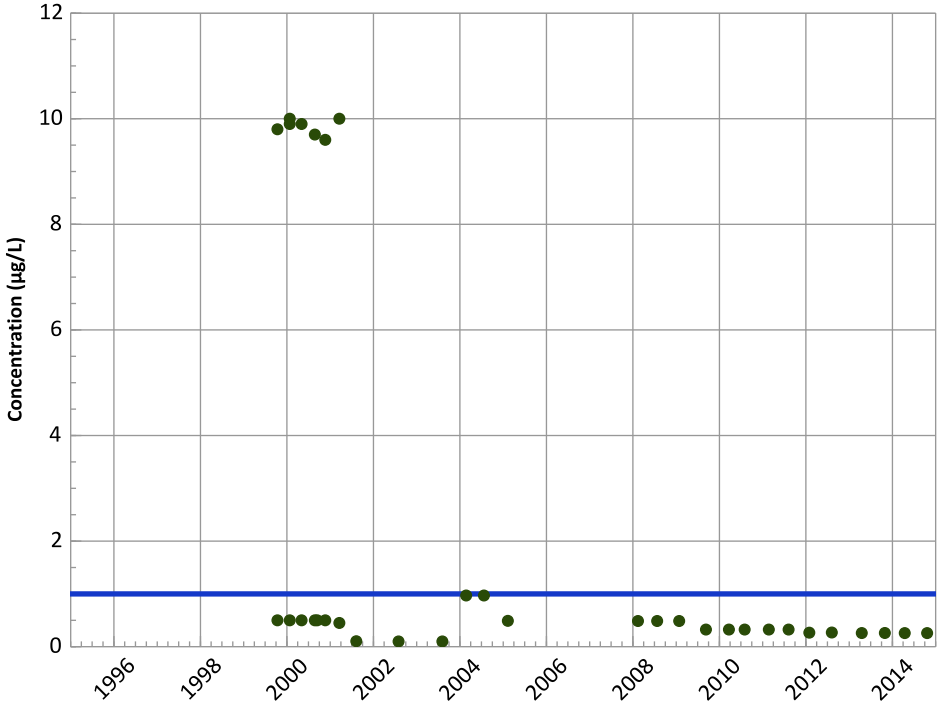


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend

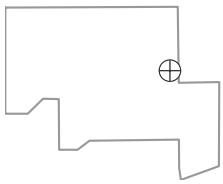


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

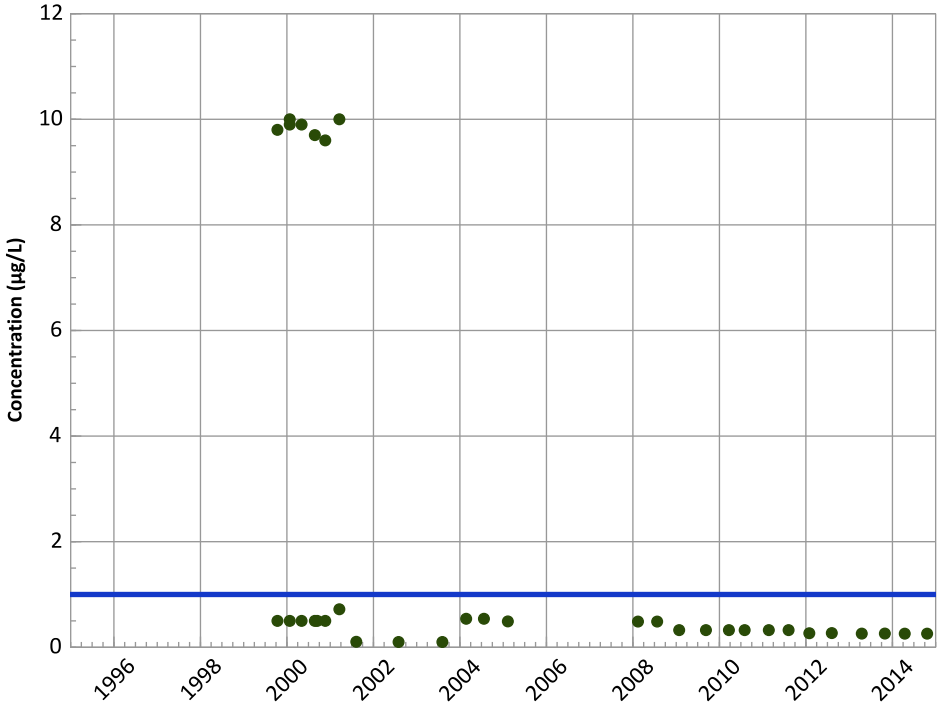


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

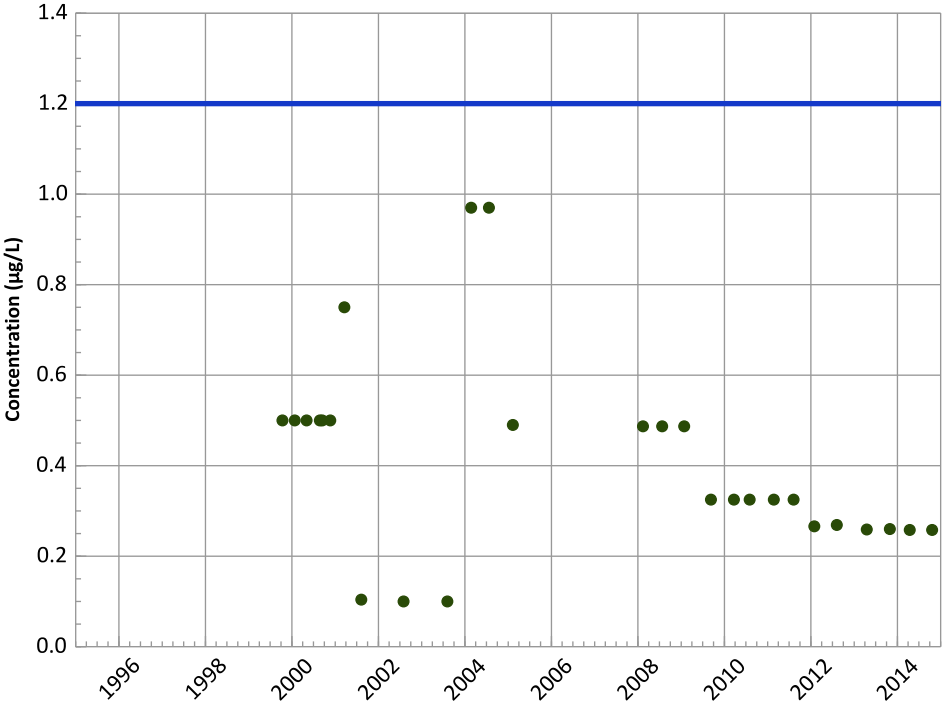


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

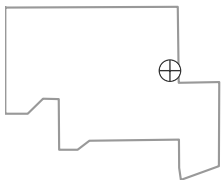
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

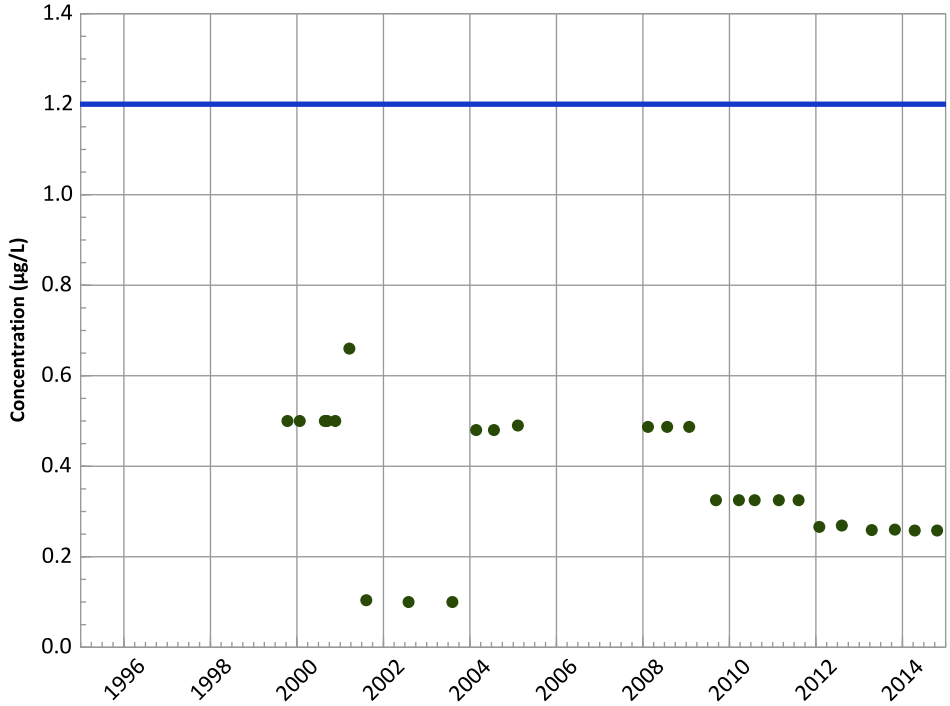
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

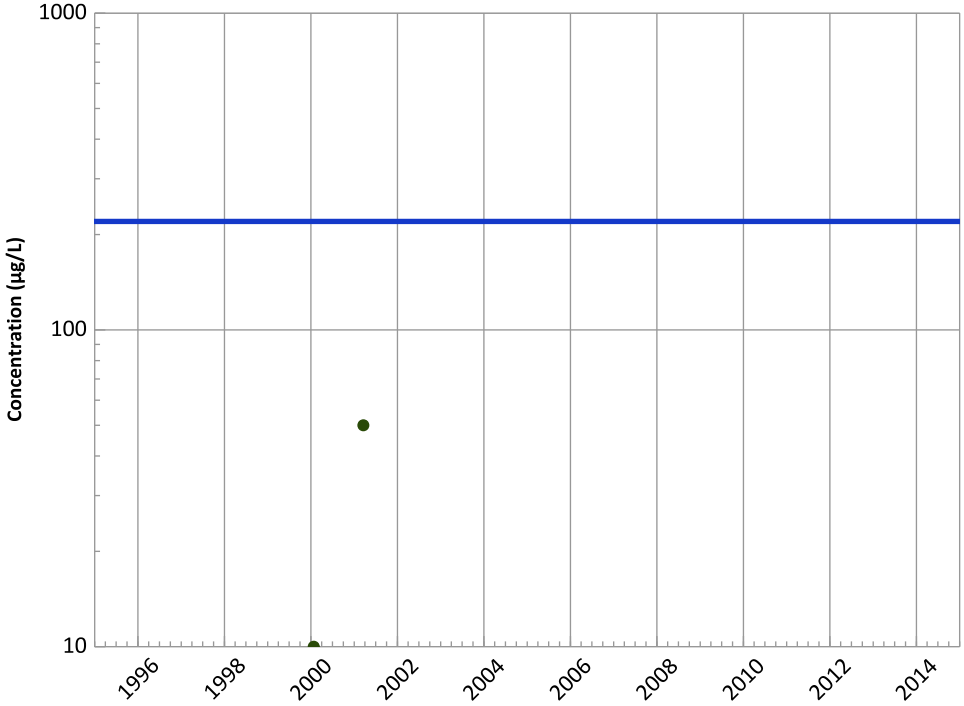


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

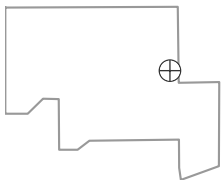


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

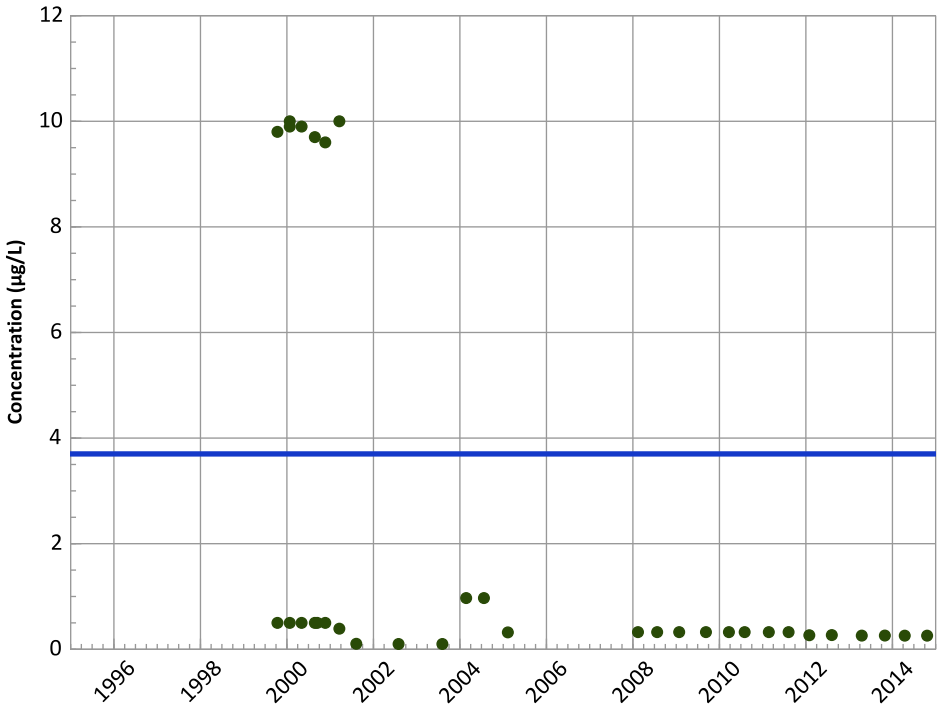


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

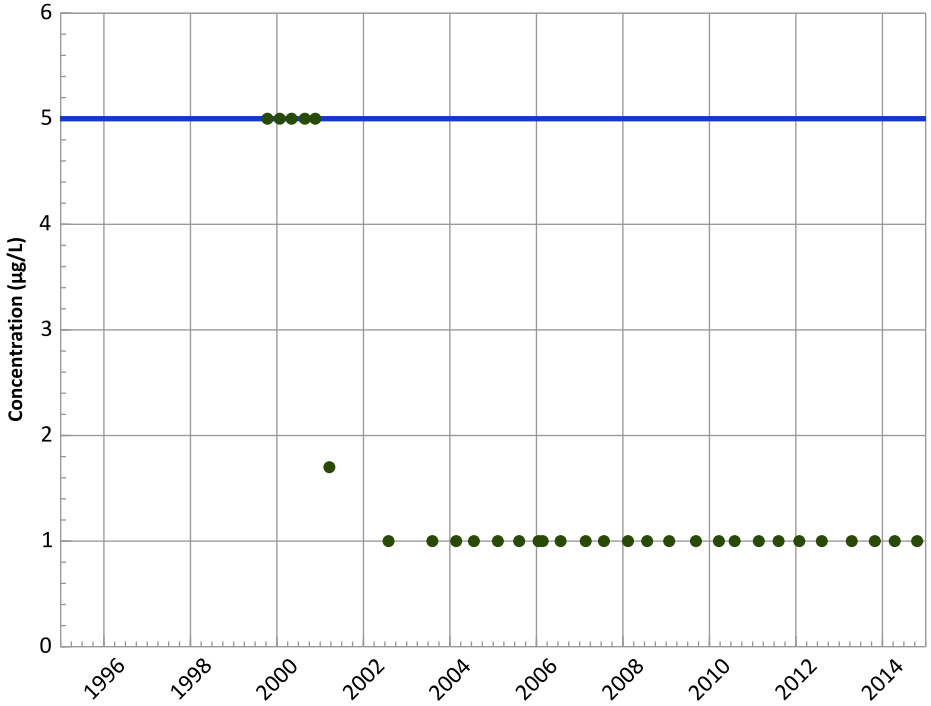


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend

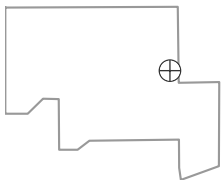


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

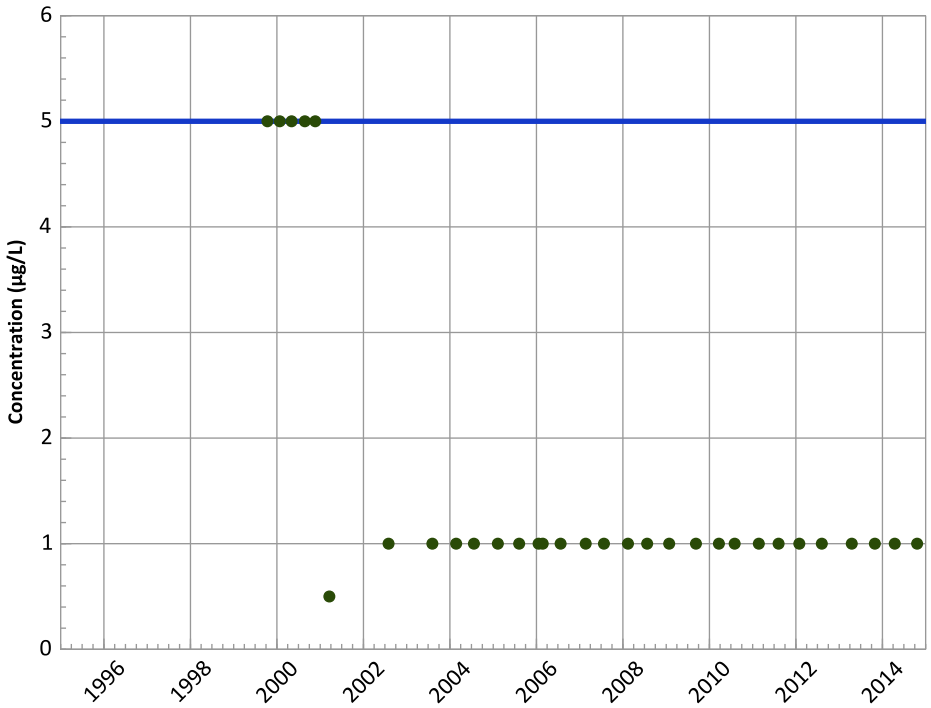


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

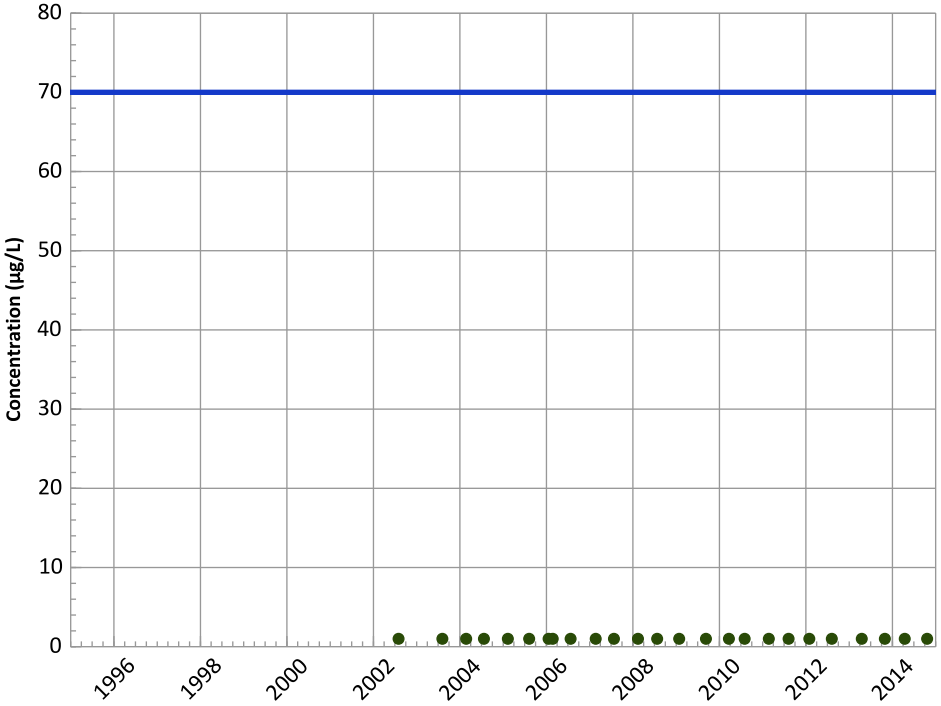


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

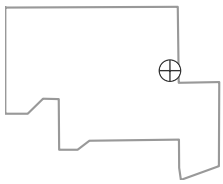
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

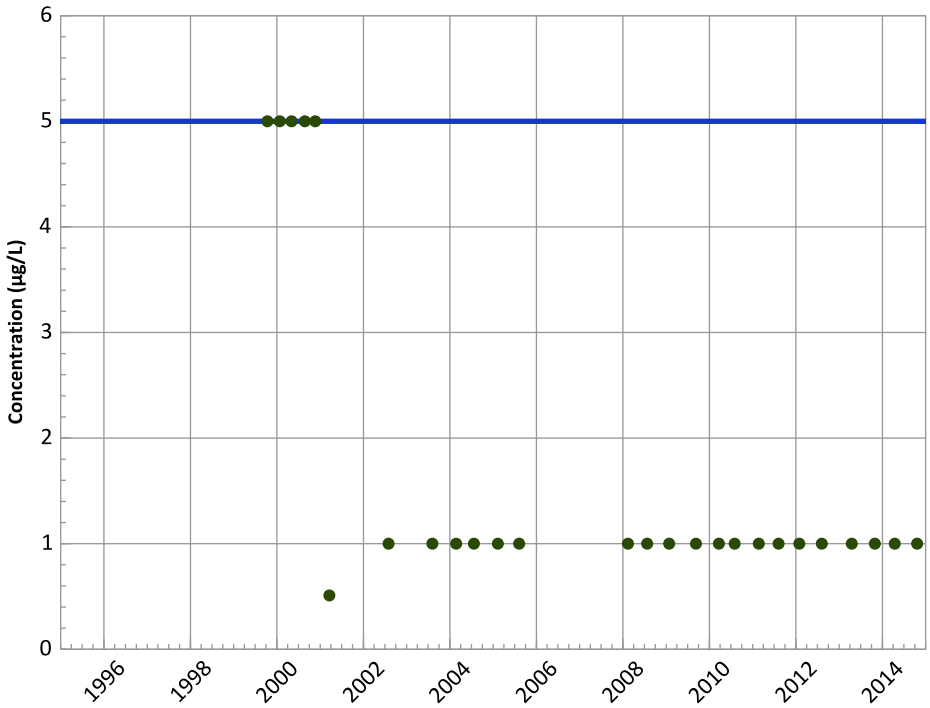
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

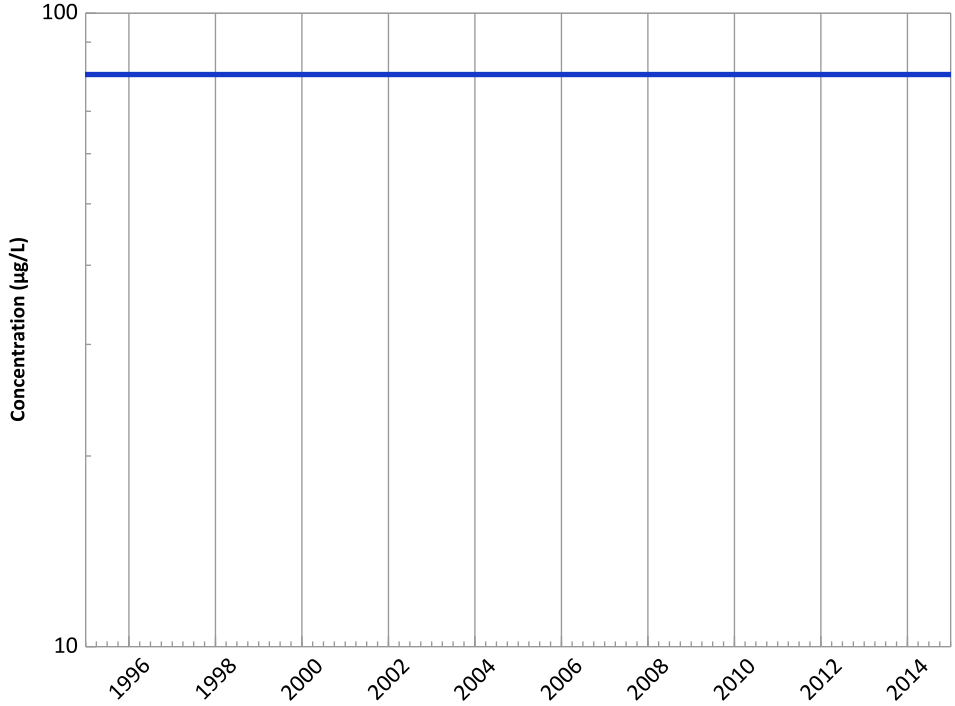


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

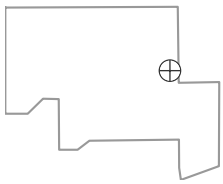
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

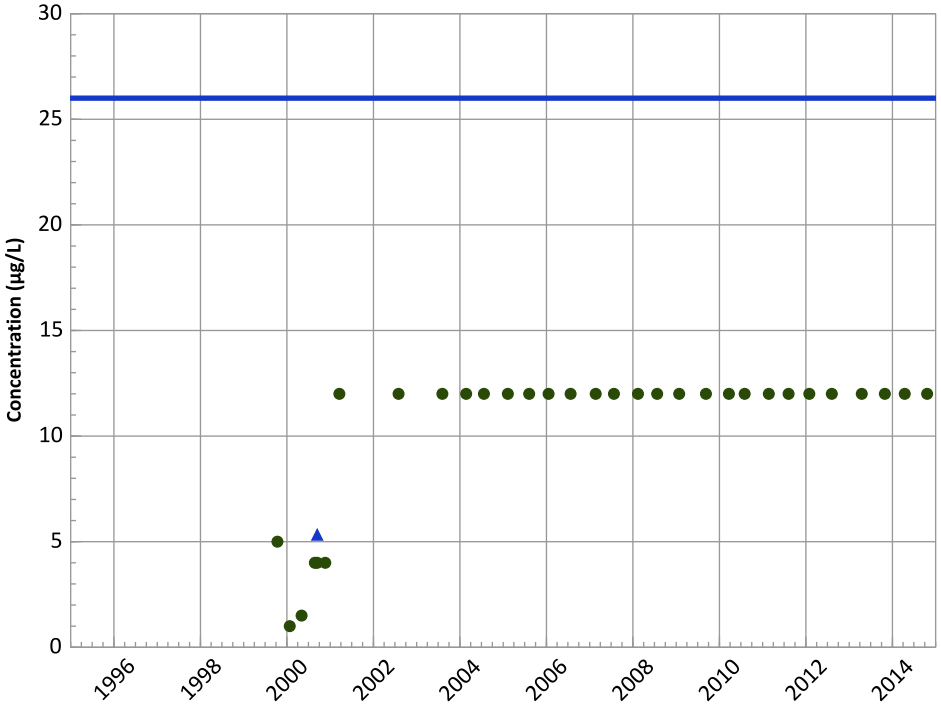
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

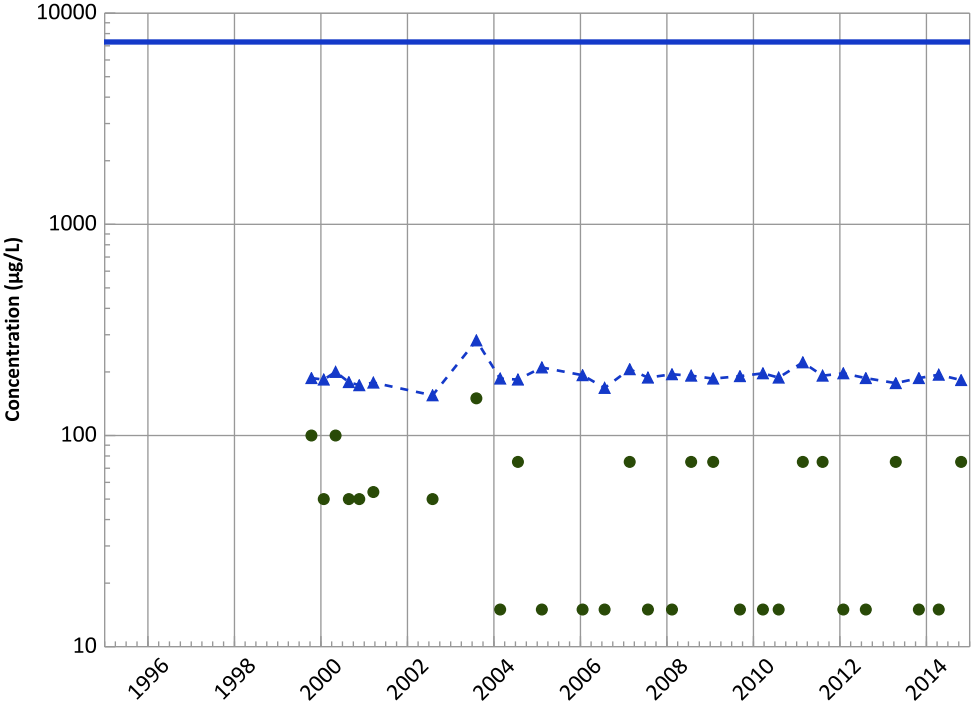


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Boron Trend



Concentration Trend

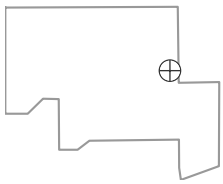
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

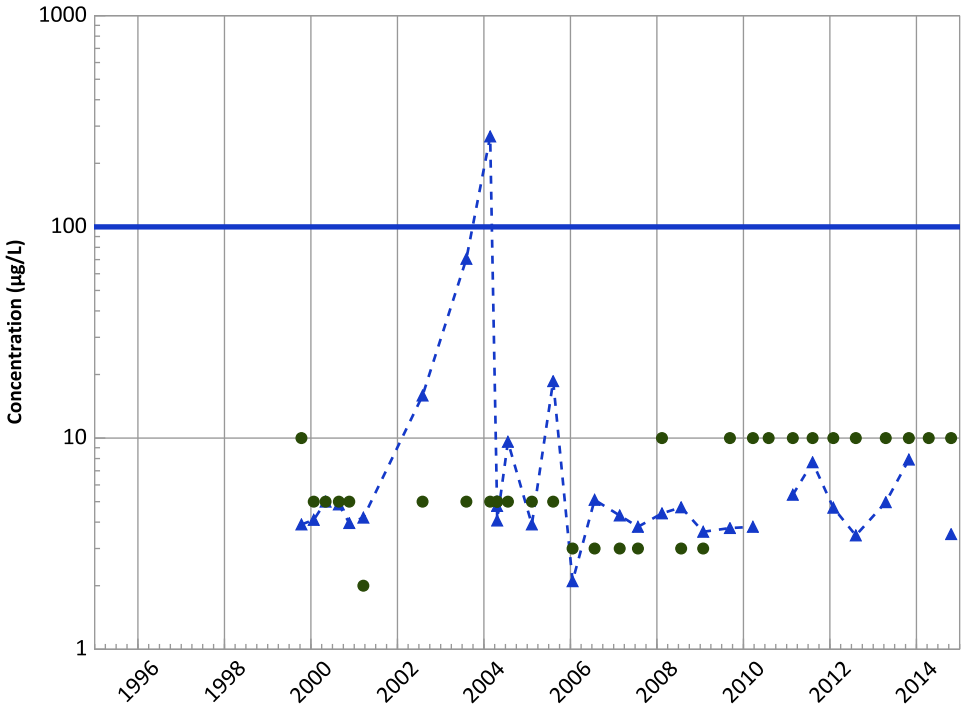
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Total Trend

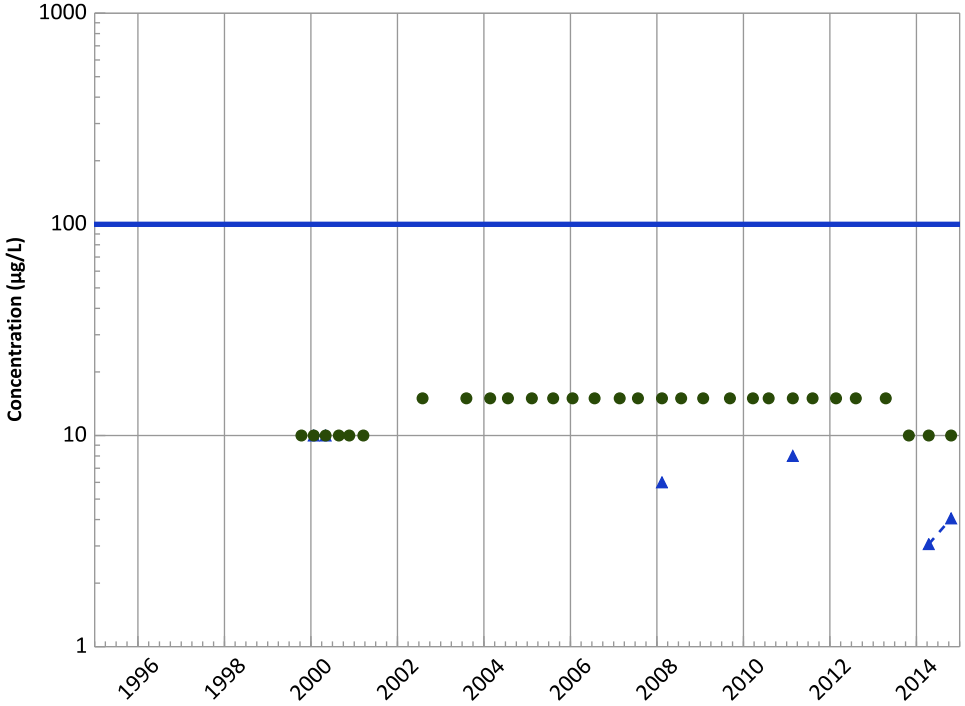


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chromium, Hexavalent Trend

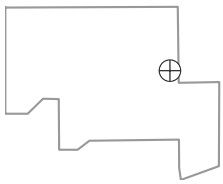


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Well Location

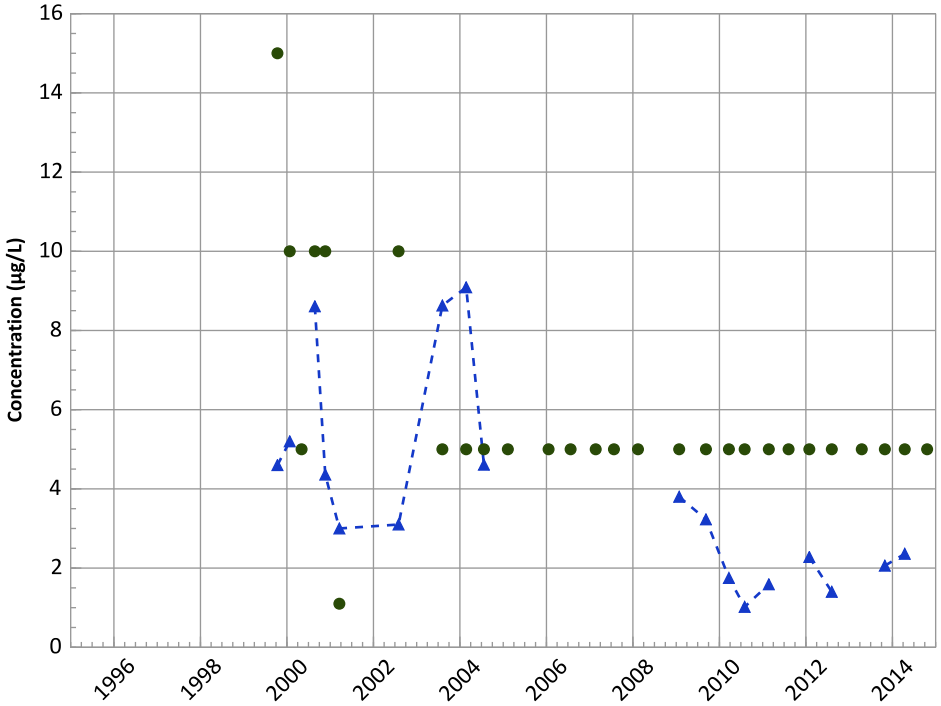


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

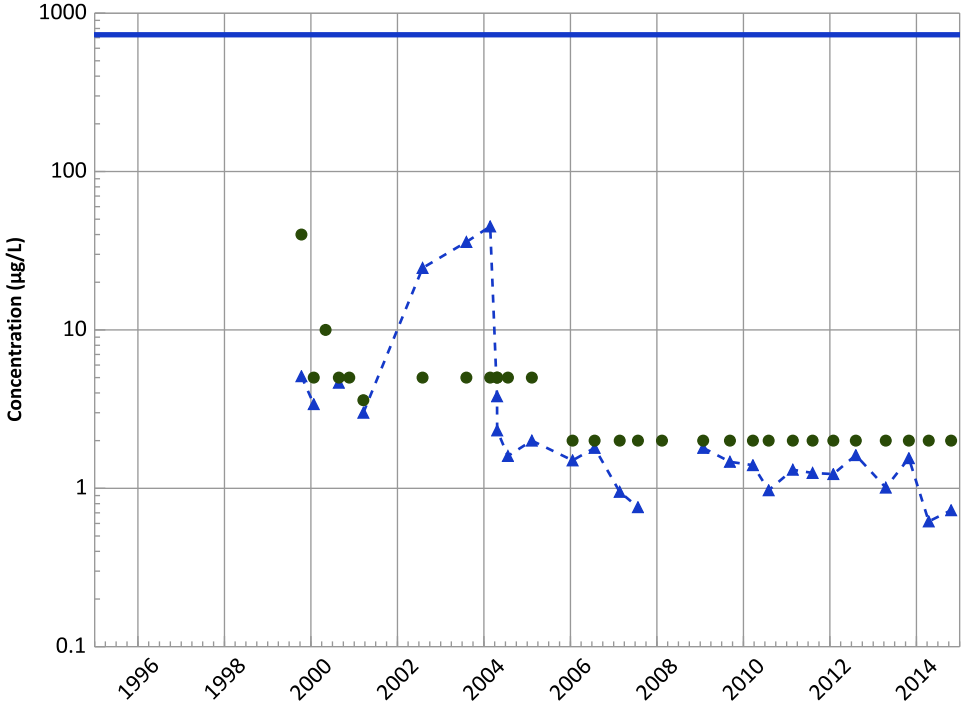


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Nickel Trend



Concentration Trend

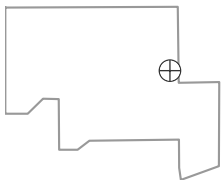
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

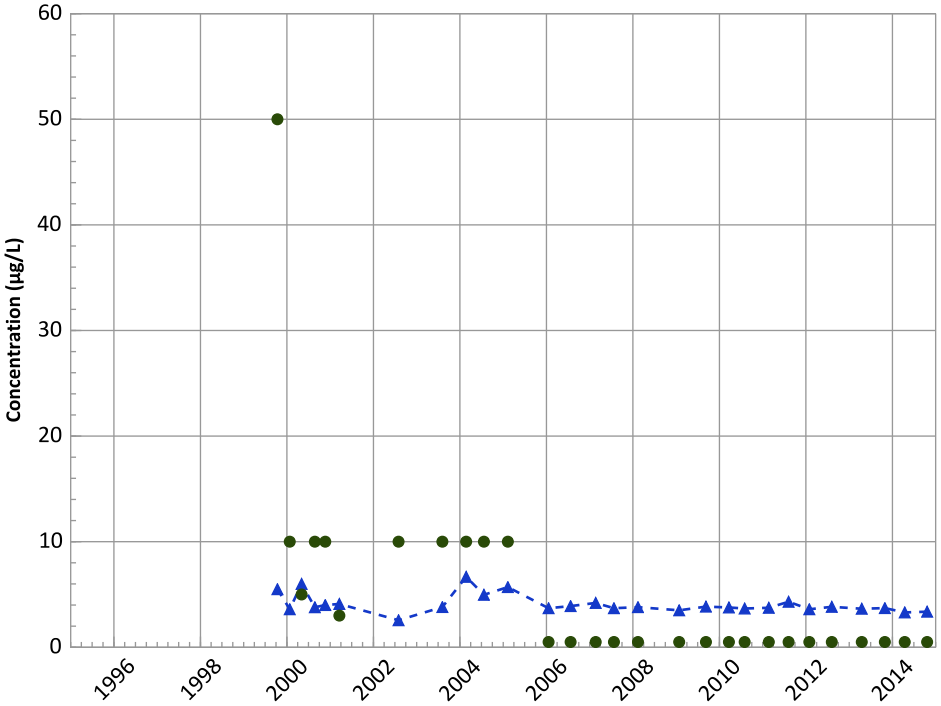
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Molybdenum Trend

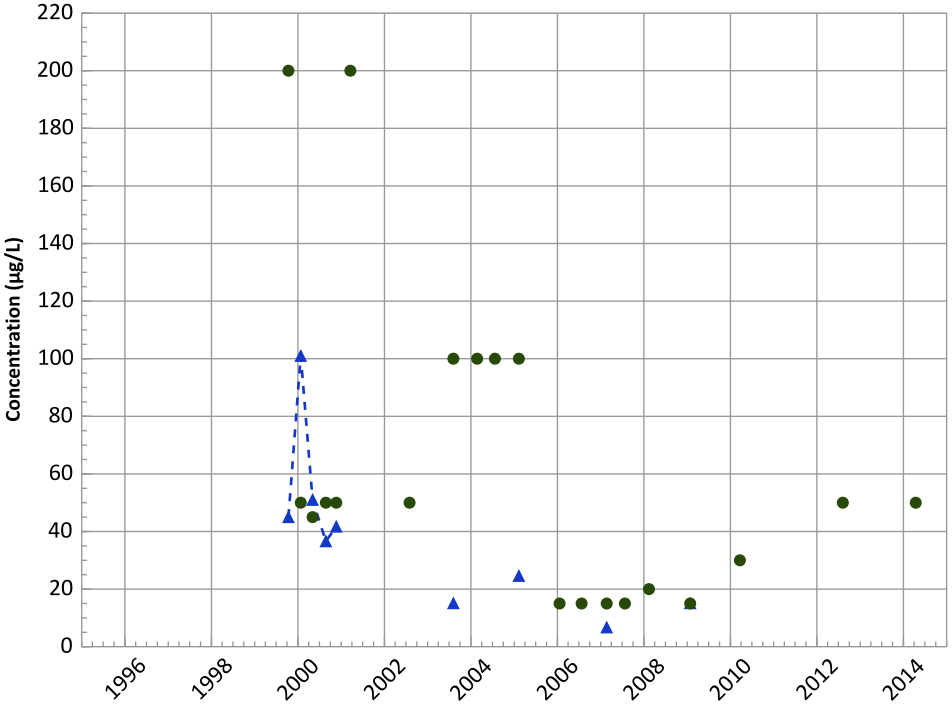


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Aluminum Trend



Concentration Trend

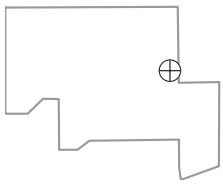
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

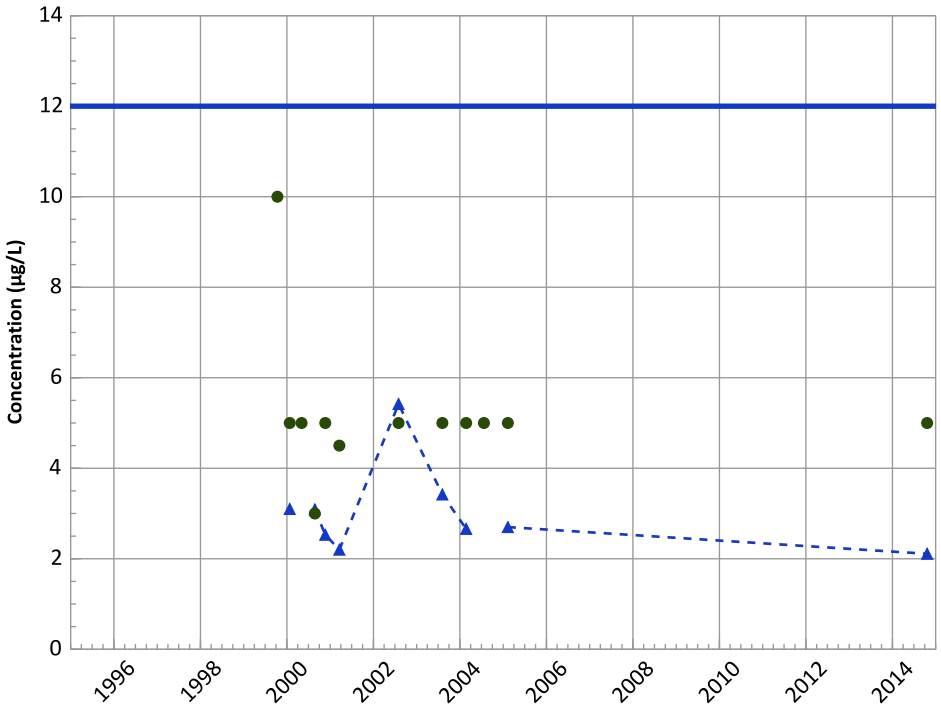
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Arsenic Trend

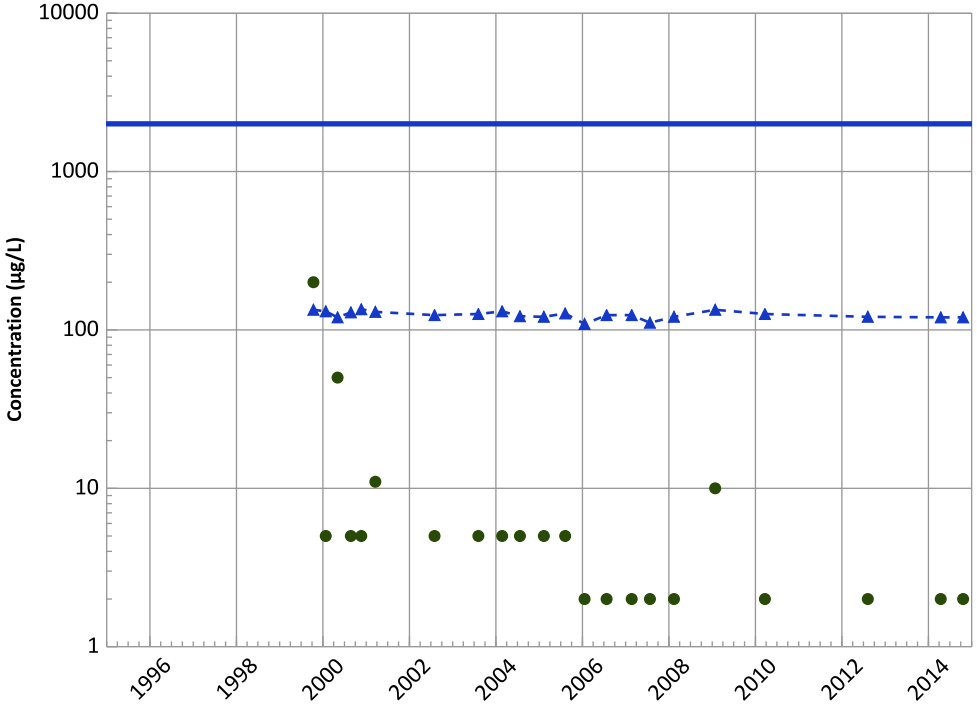


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

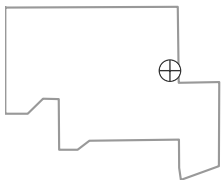
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

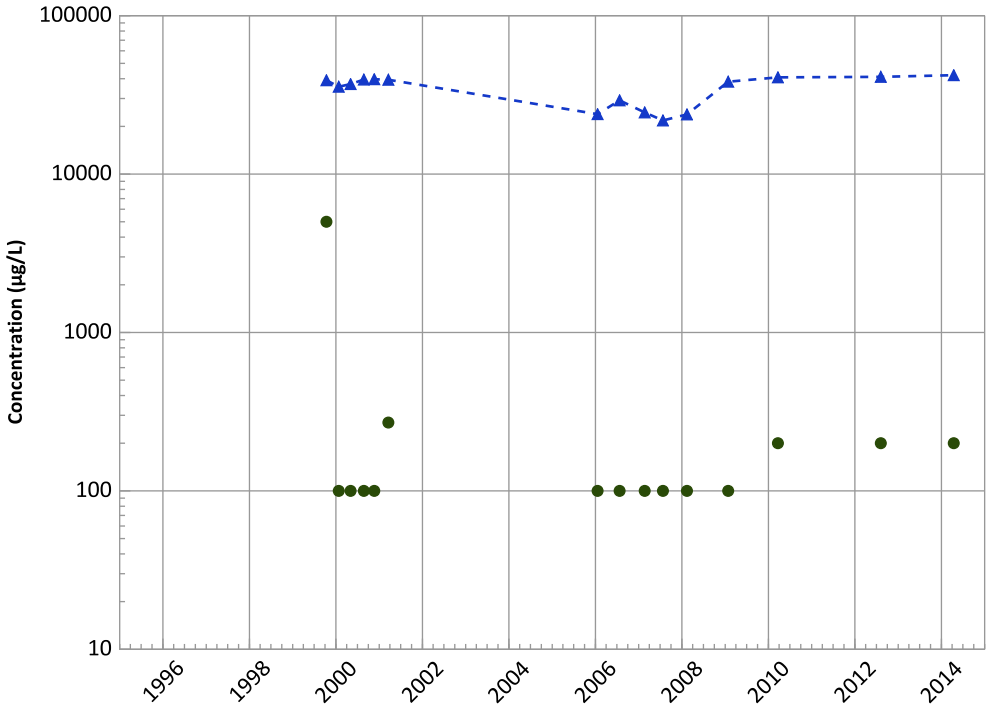
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

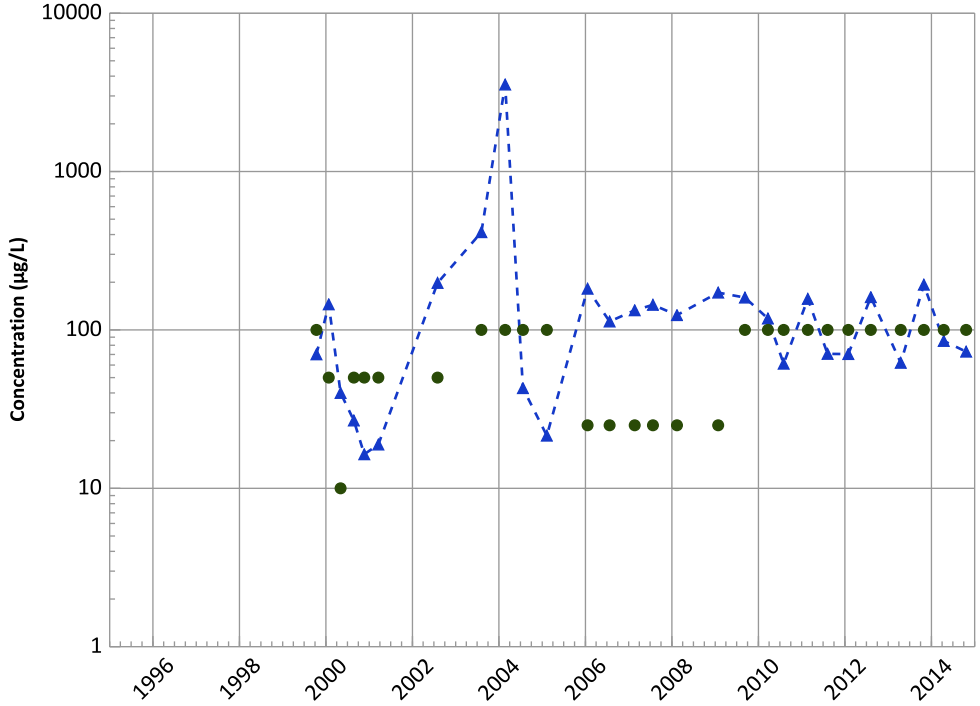


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Iron Trend



Concentration Trend

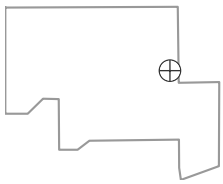
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

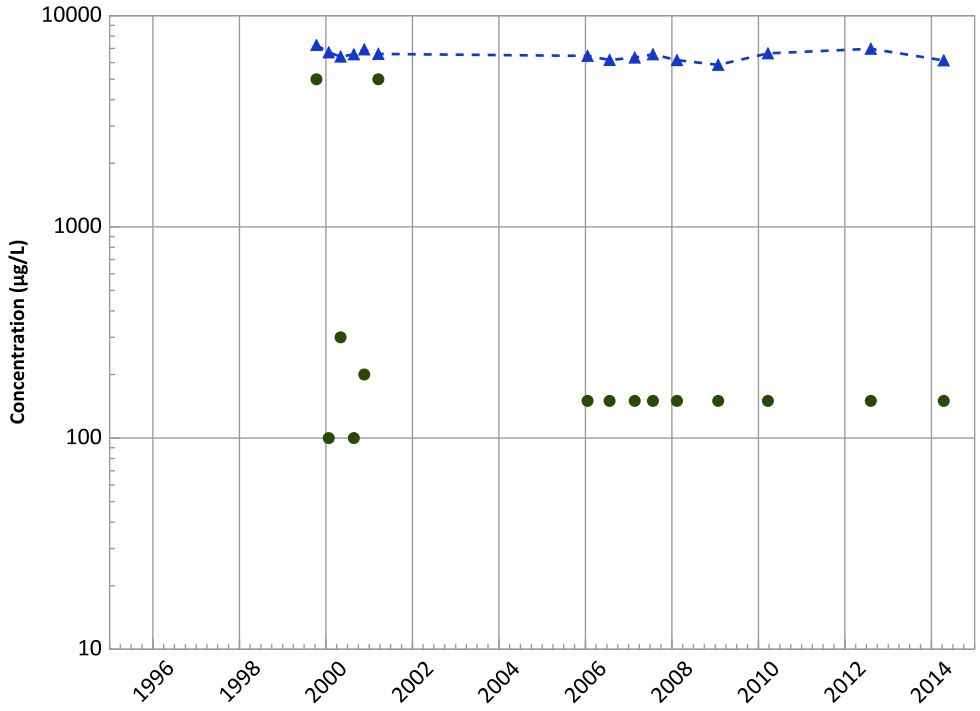
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

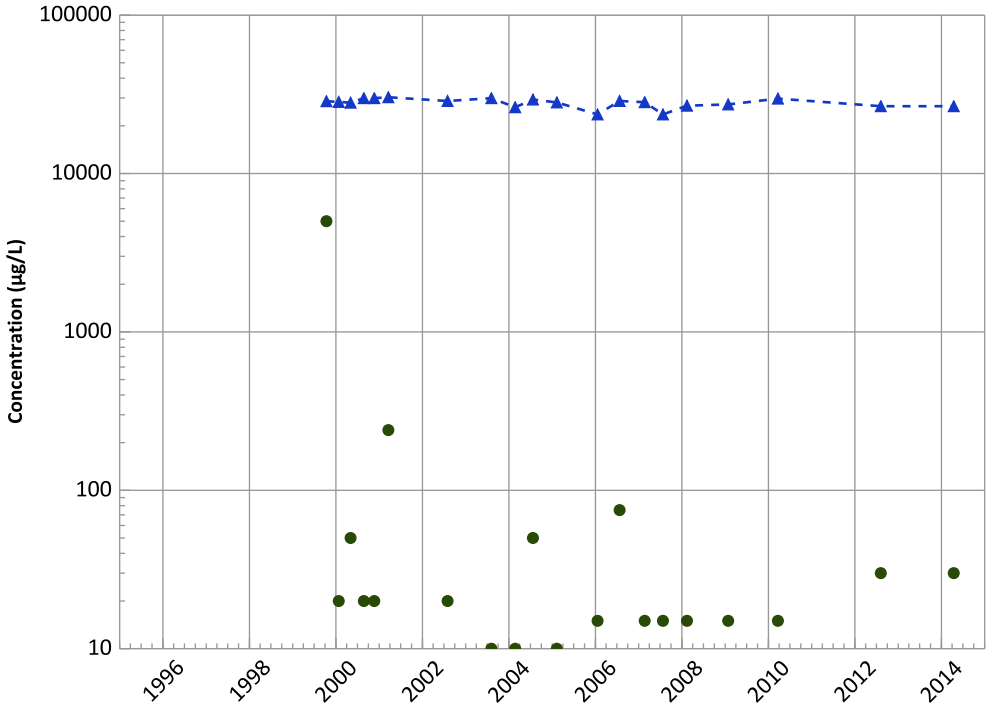


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Magnesium Trend



Concentration Trend

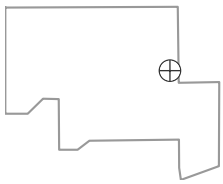
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

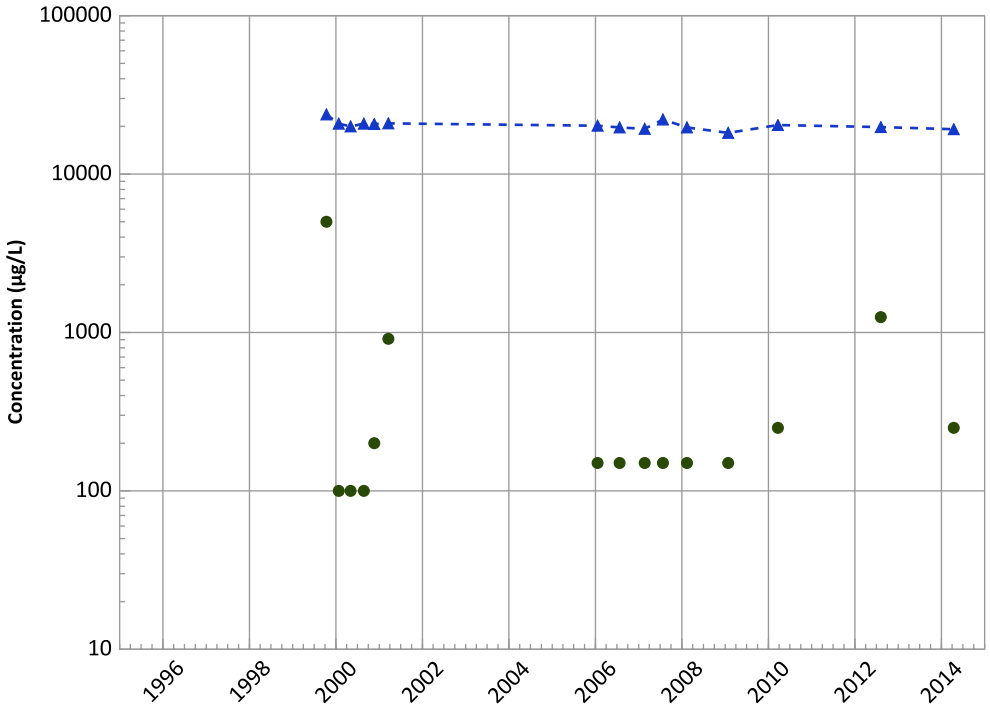
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1044 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

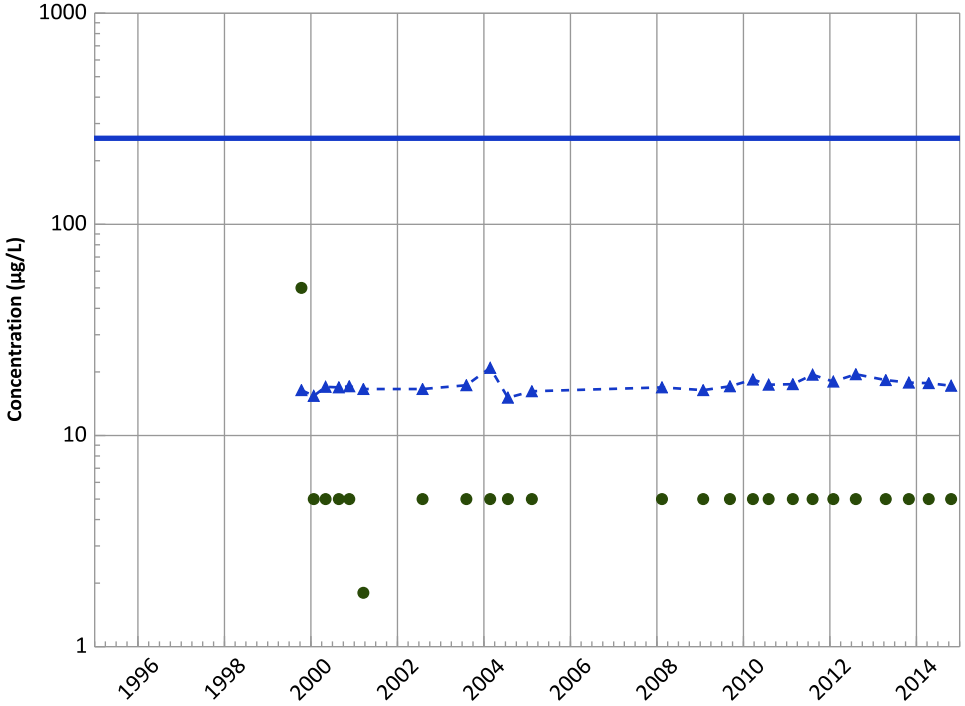


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Vanadium Trend



Concentration Trend

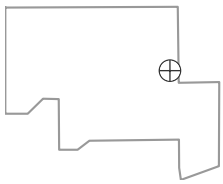
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

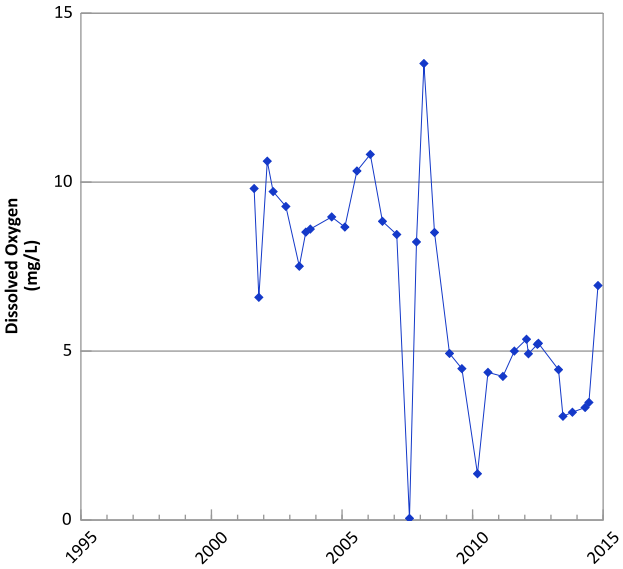
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/13/1999 to 10/21/2014
Analysis Date: 03/19/2015

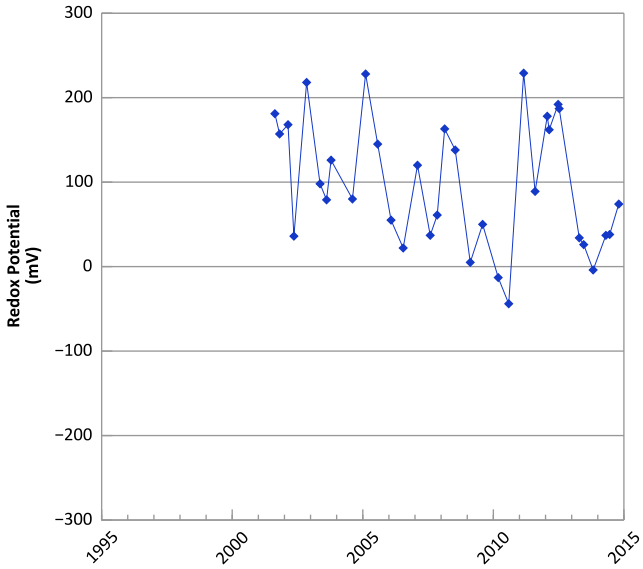
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

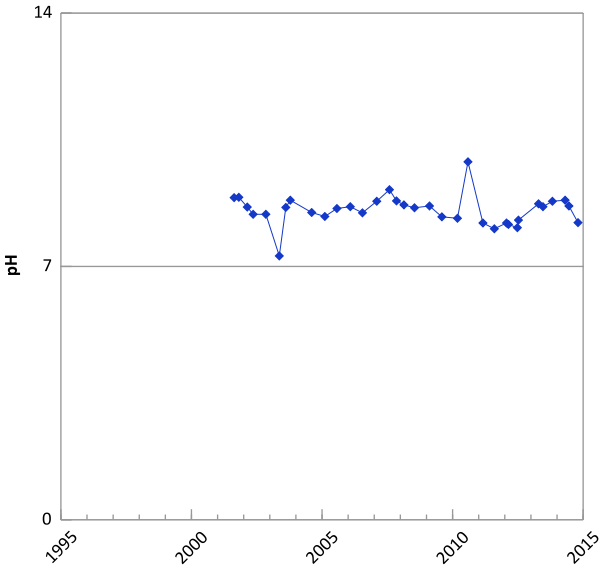
Well Location

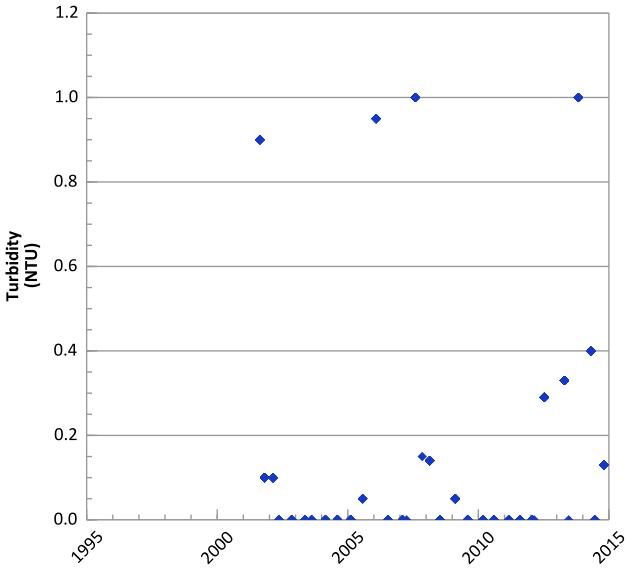


PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



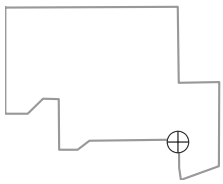






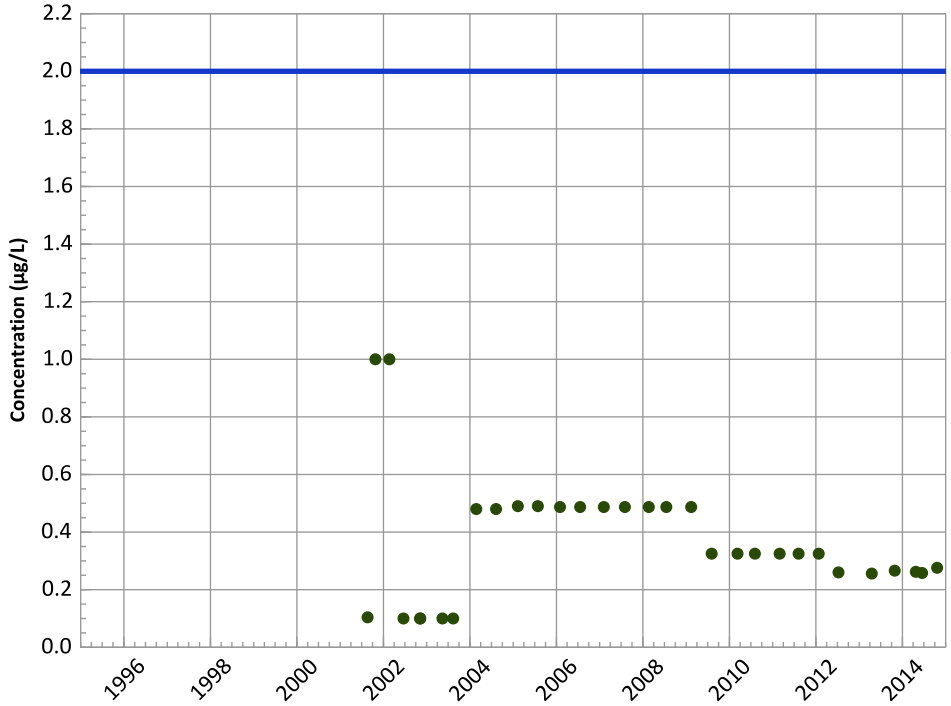
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

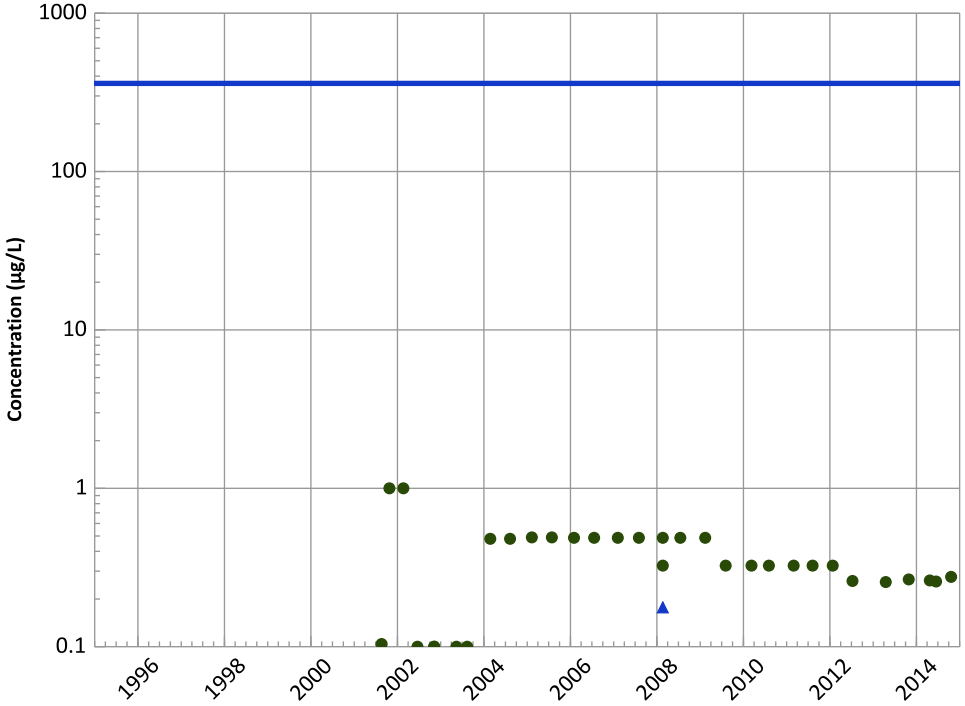


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

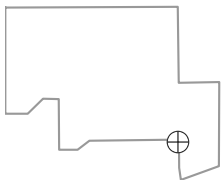
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

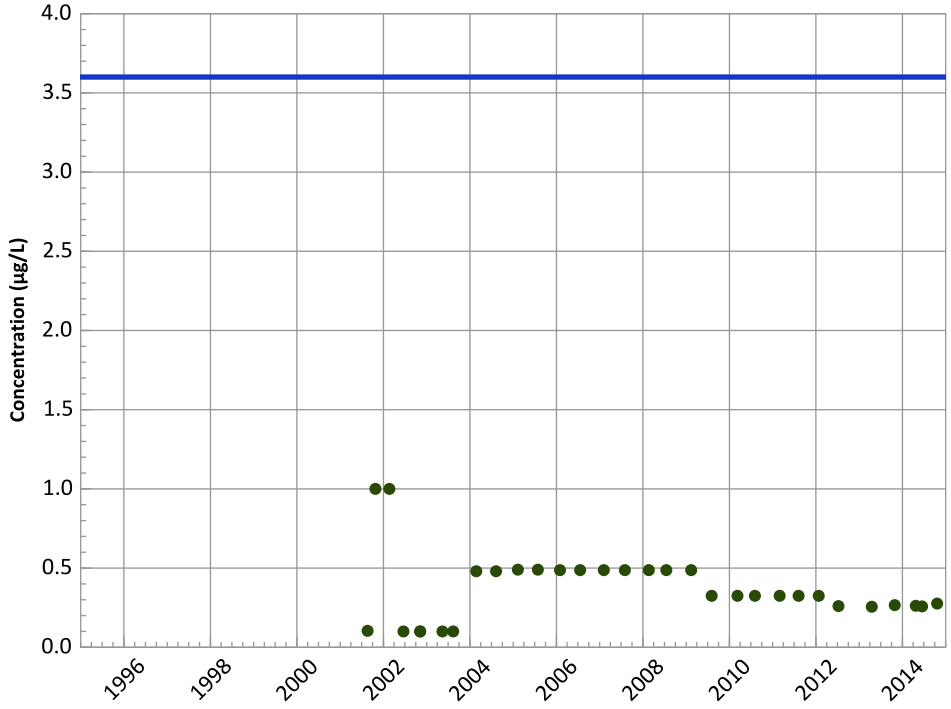
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

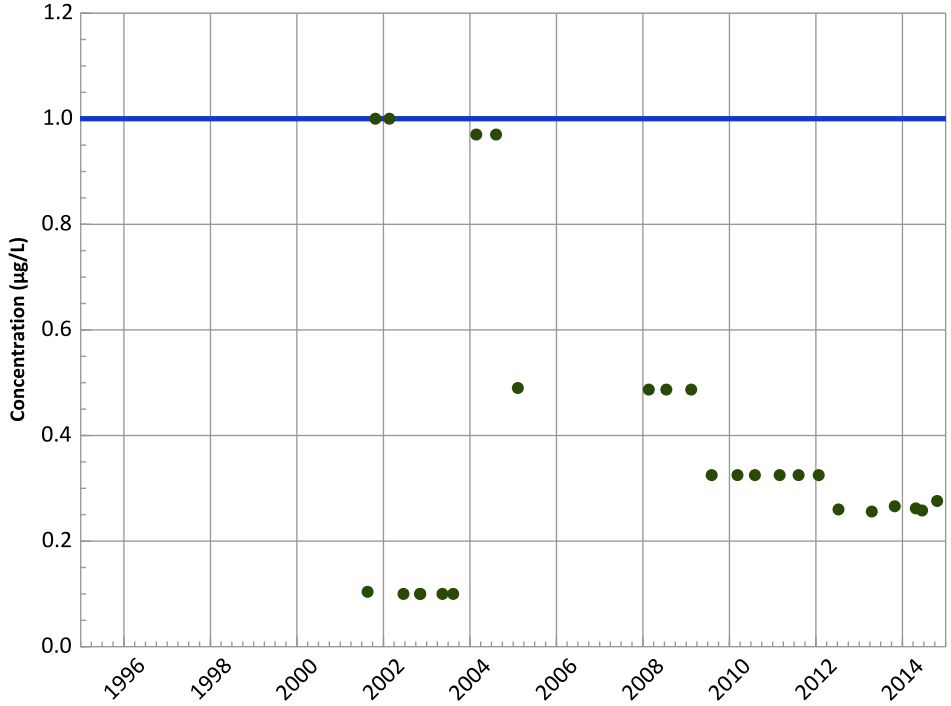


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

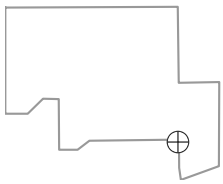
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

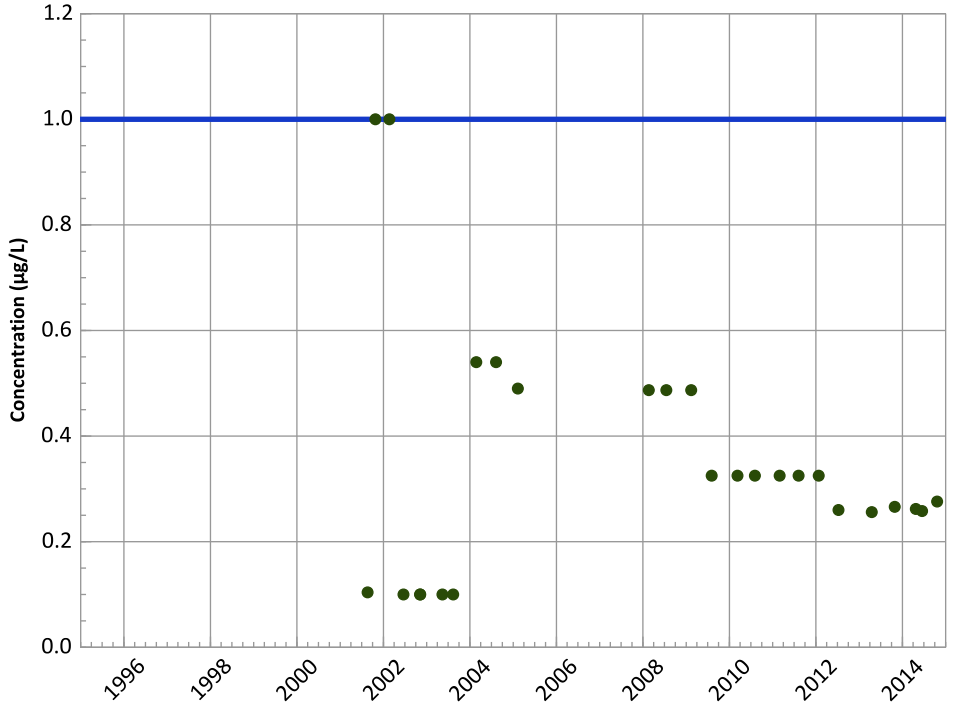
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

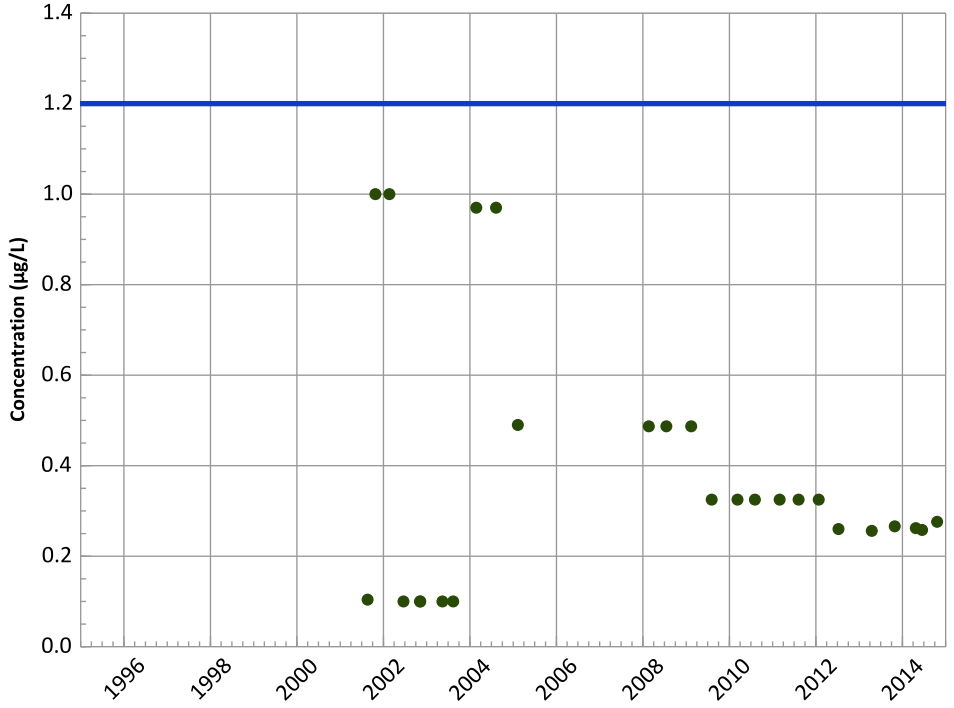


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

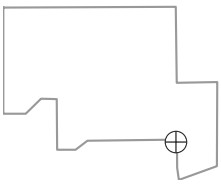
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

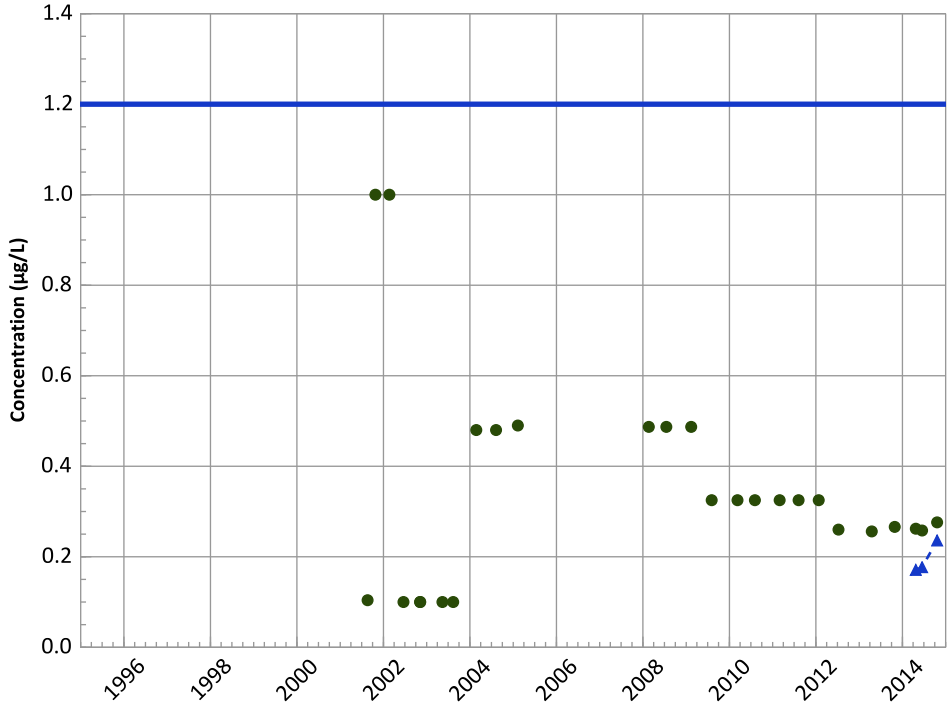
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

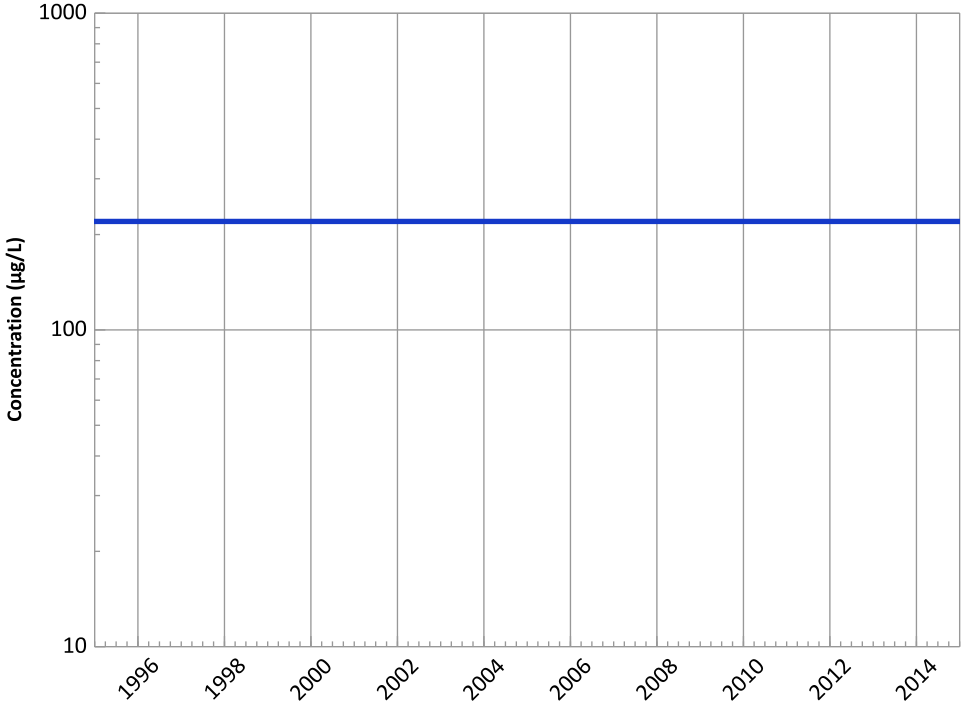


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

1,3,5-Trinitrobenzene Trend



Concentration Trend

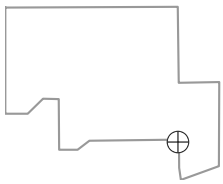
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

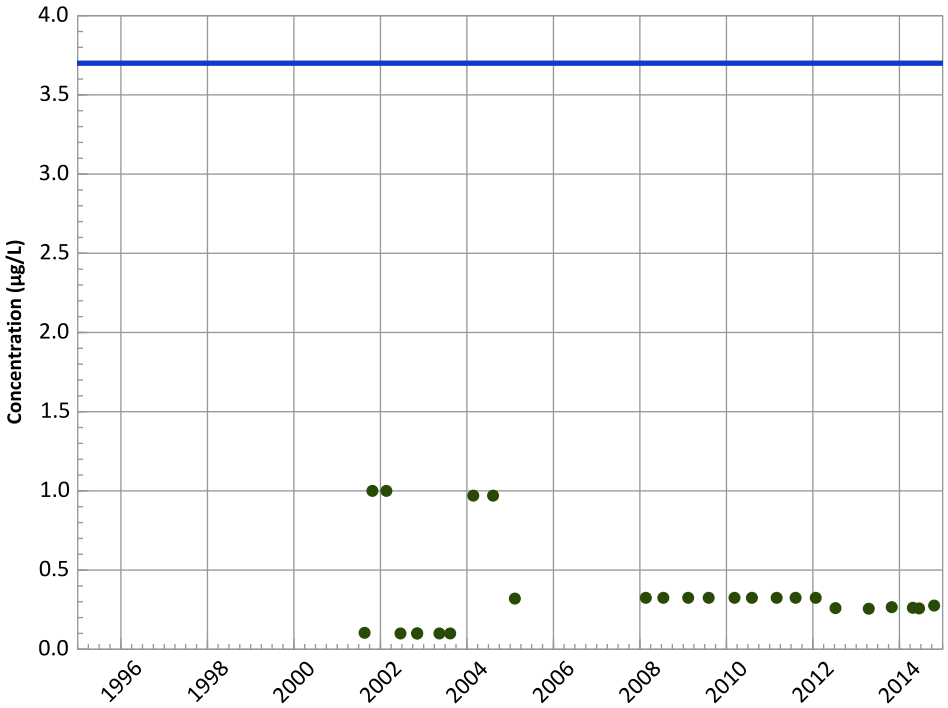
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

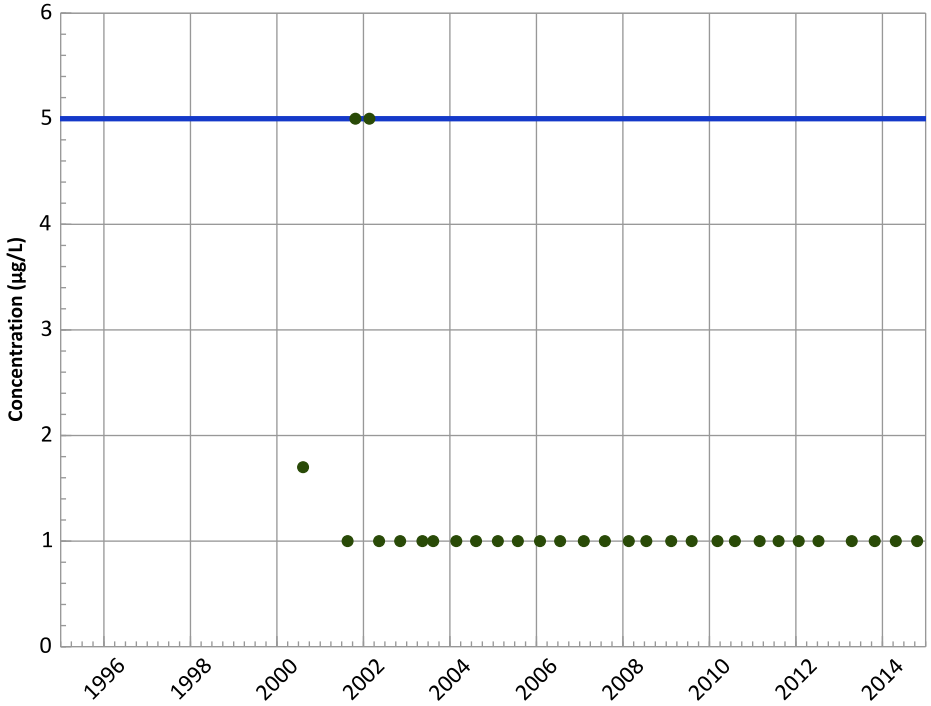


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

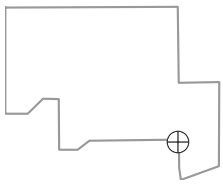
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

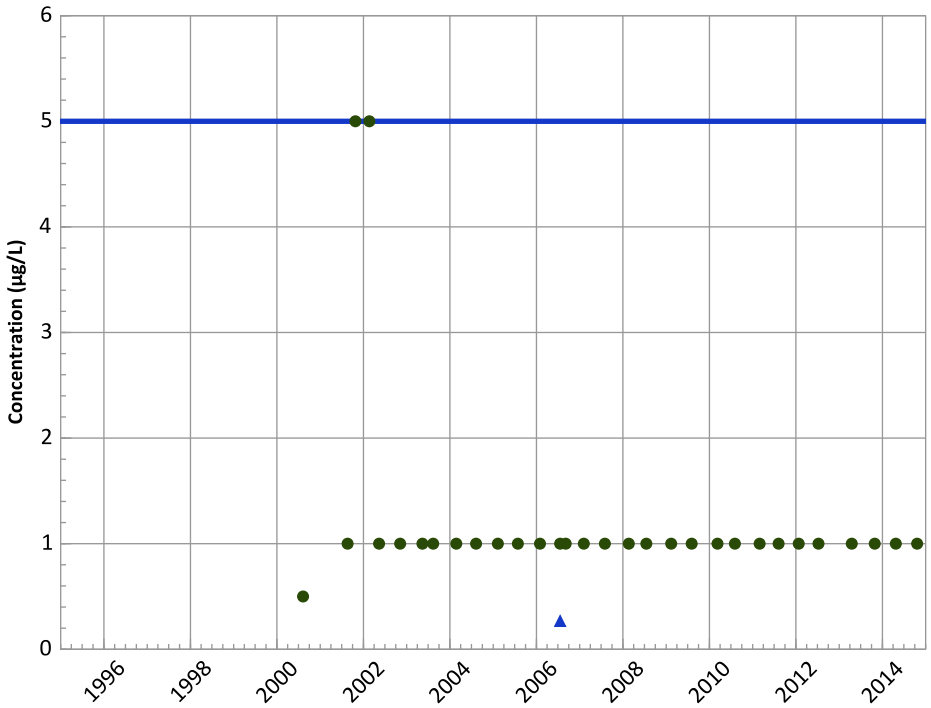
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

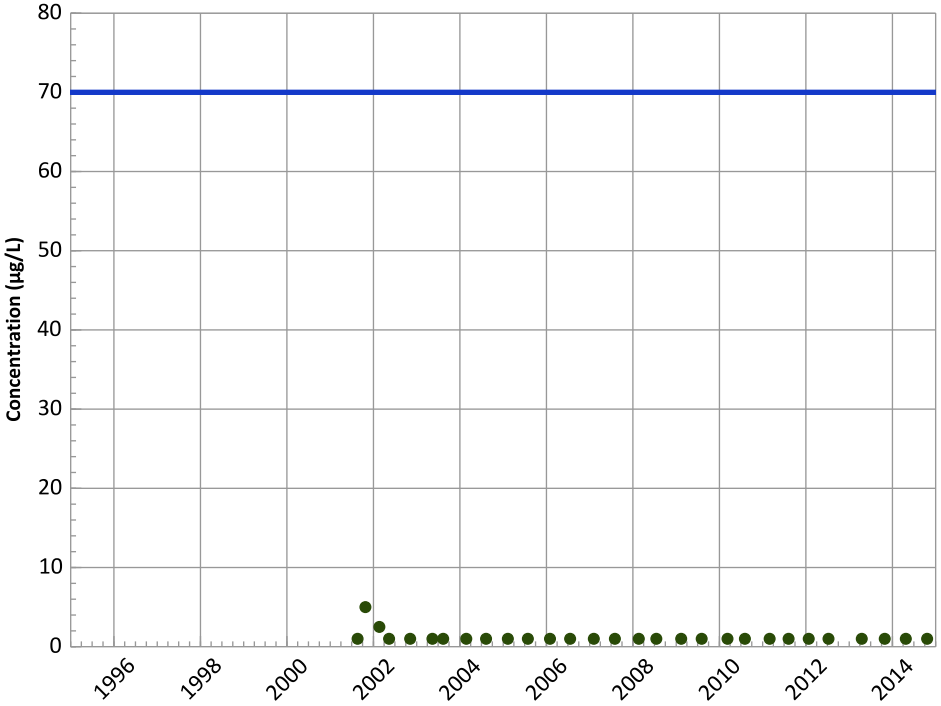


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

cis-1,2-Dichloroethene Trend



Concentration Trend

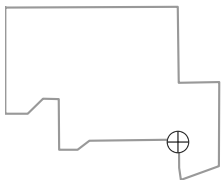
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

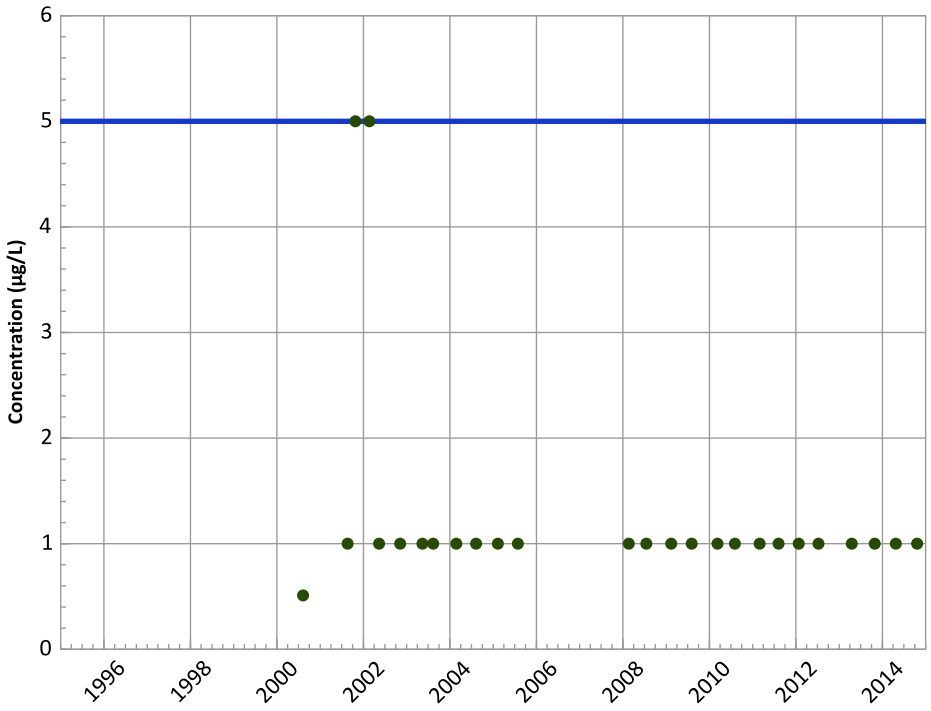
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

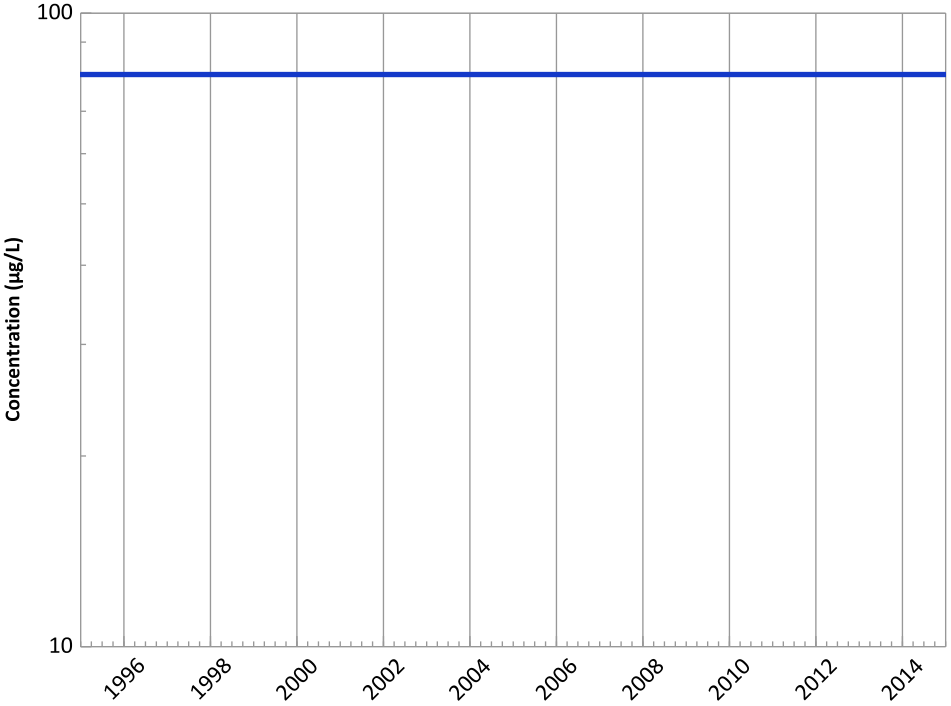


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

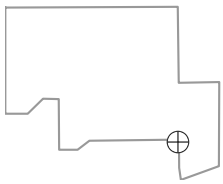
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

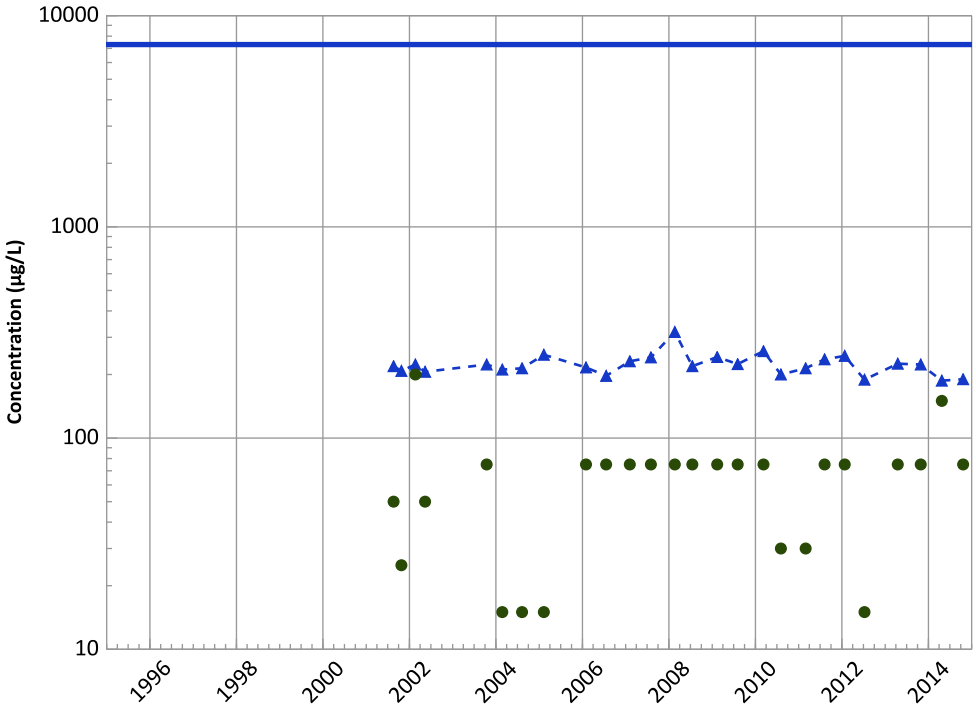
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

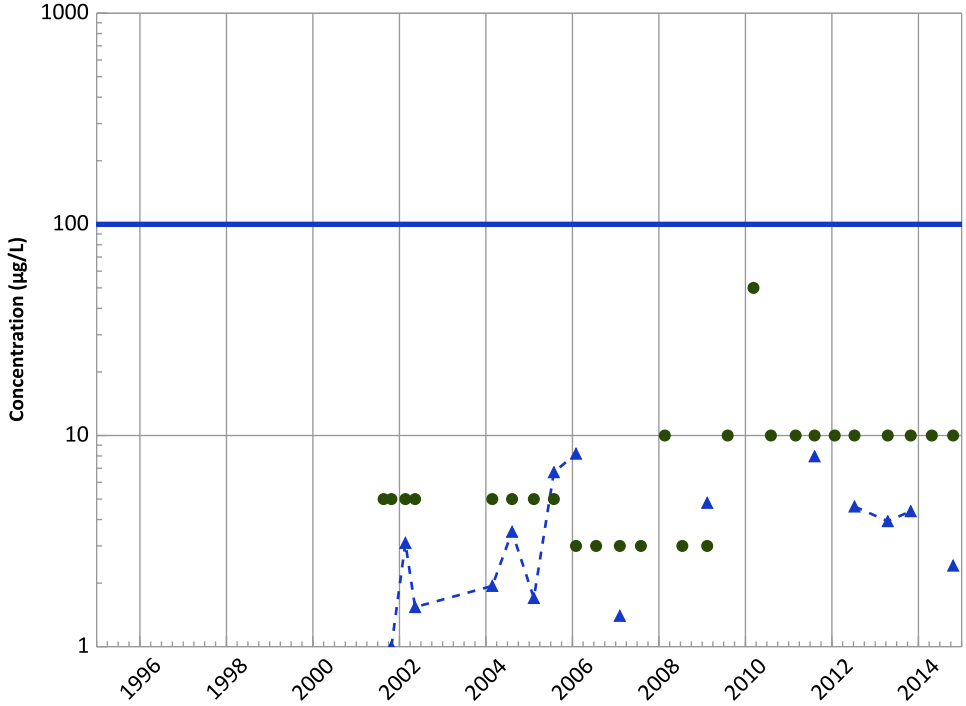


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Chromium, Total Trend



Concentration Trend

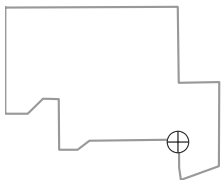
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

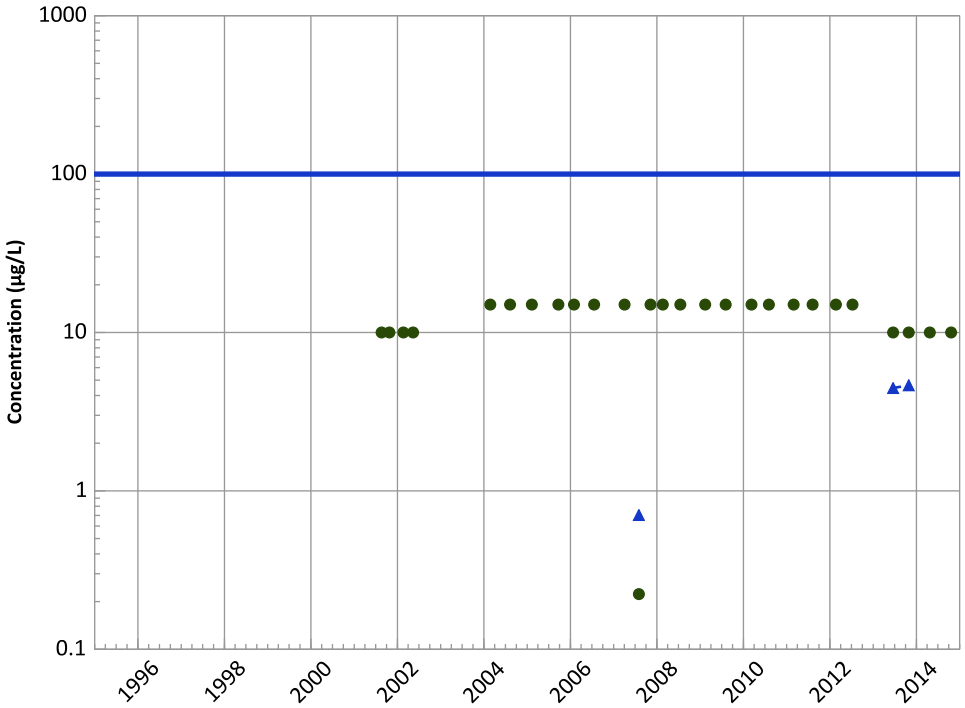
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

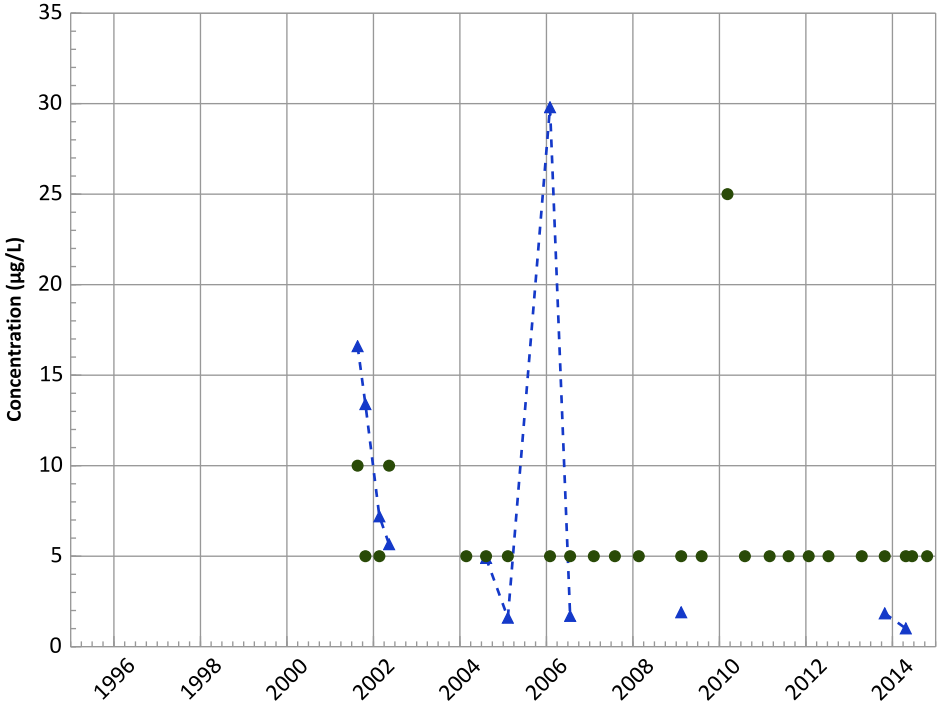


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

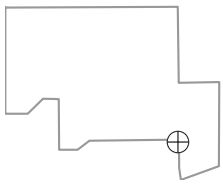
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

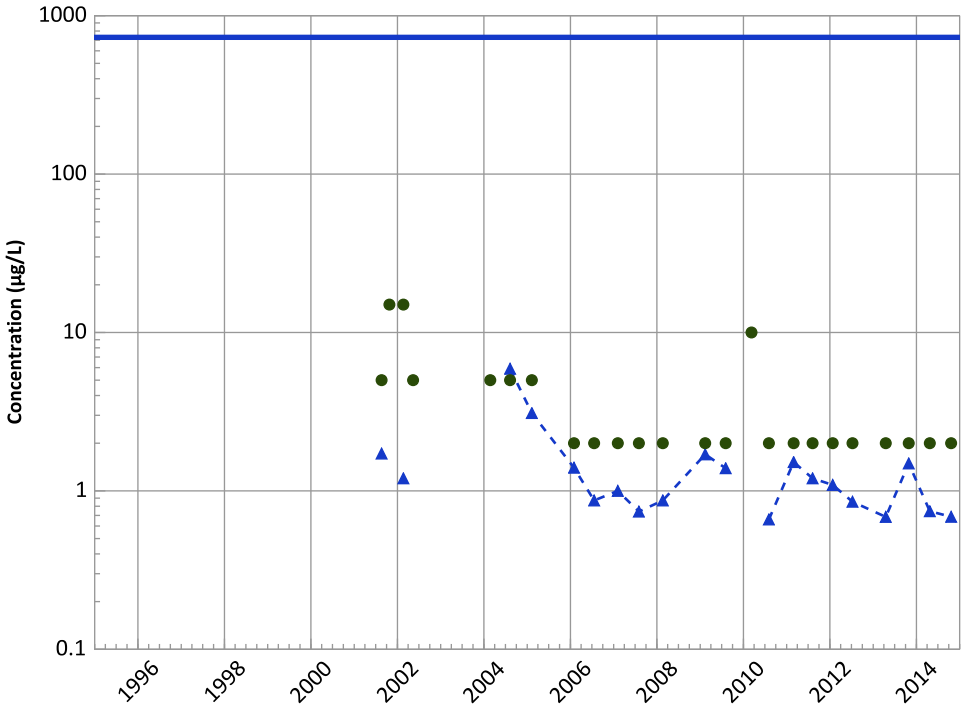
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

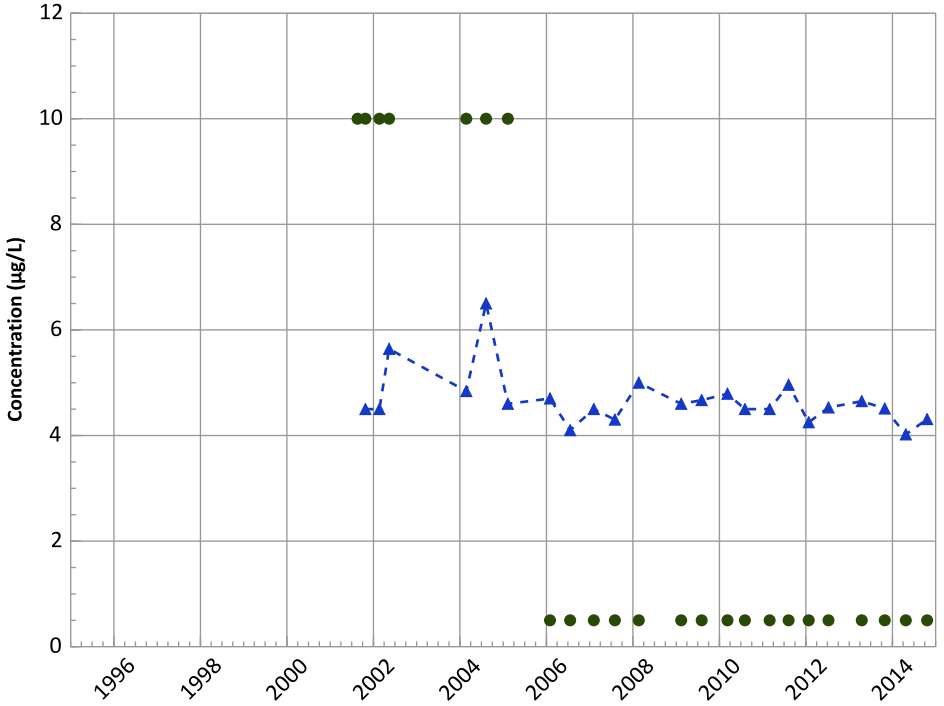


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Molybdenum Trend



Concentration Trend

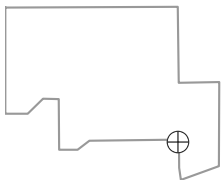
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

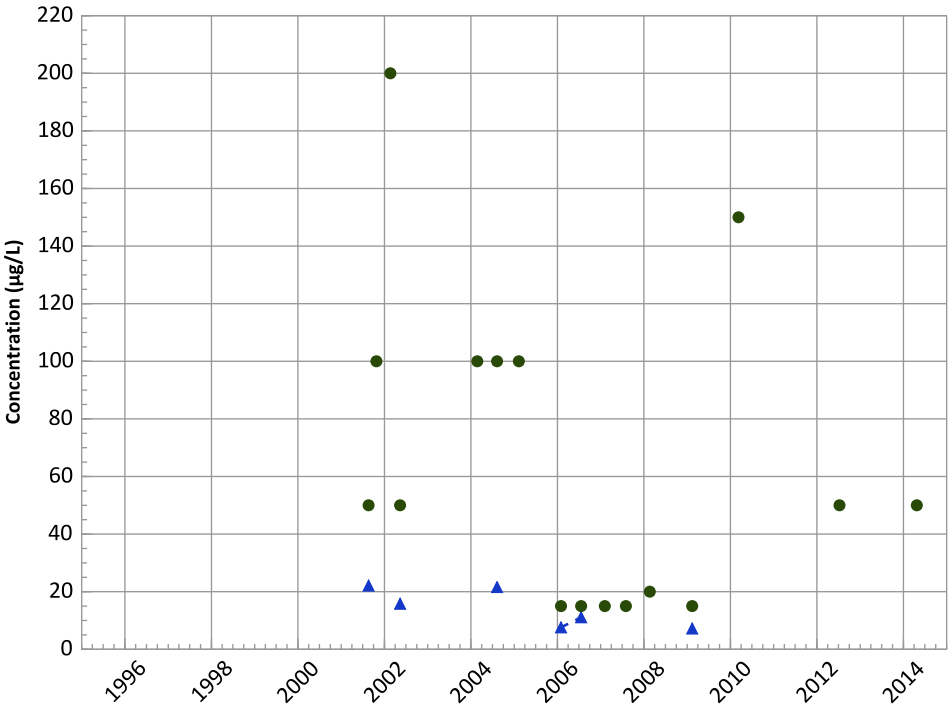
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

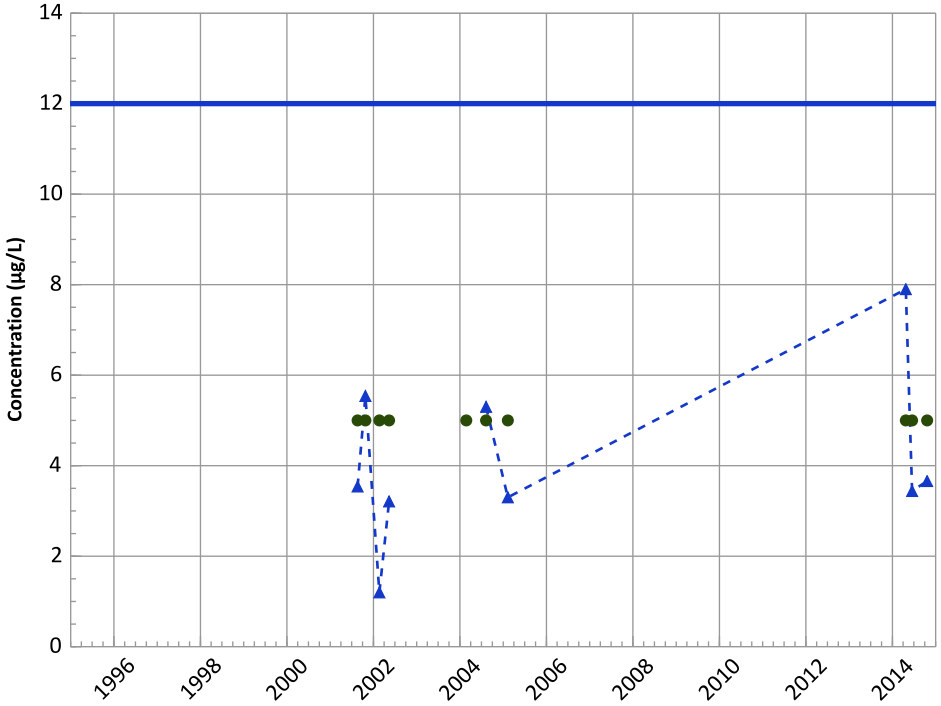


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Arsenic Trend



Concentration Trend

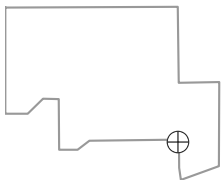
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

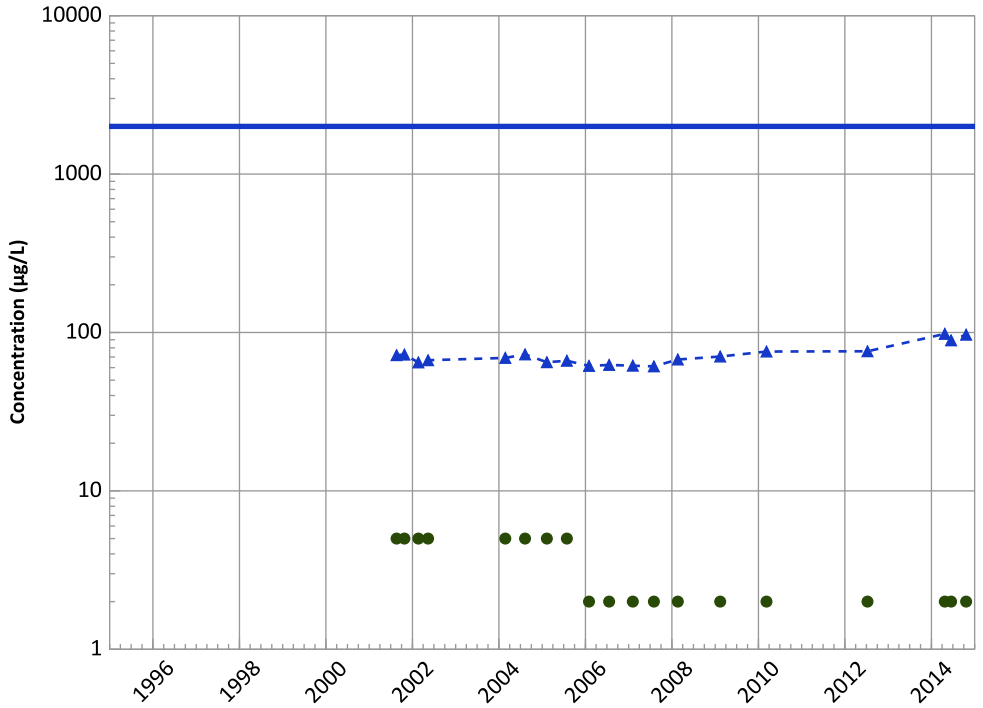
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

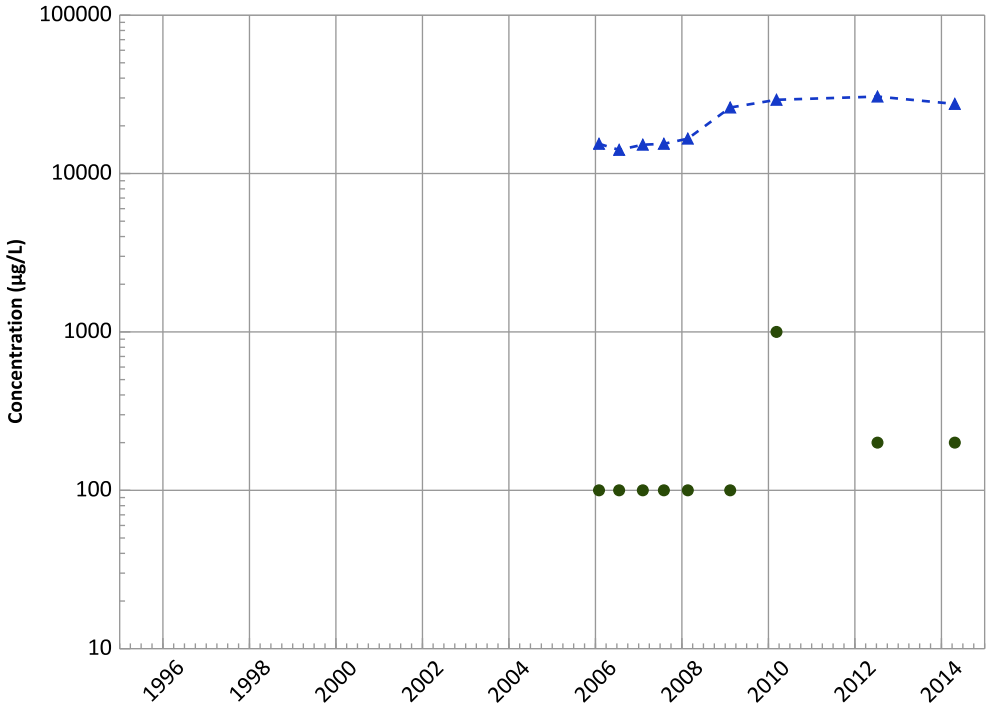


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Calcium Trend



Concentration Trend

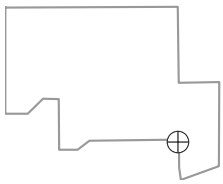
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

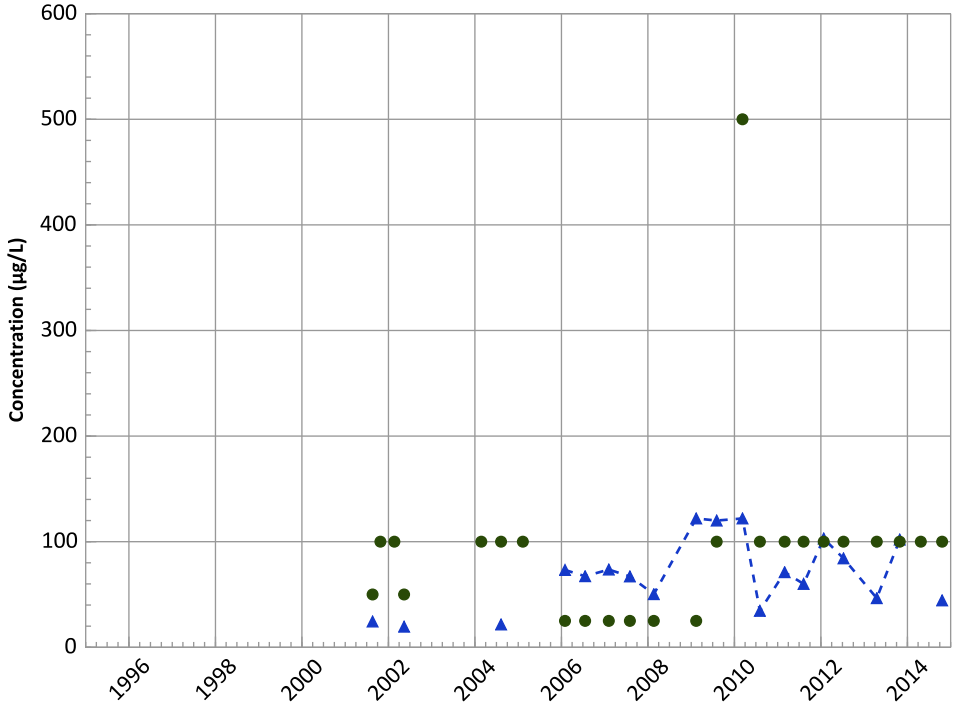
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

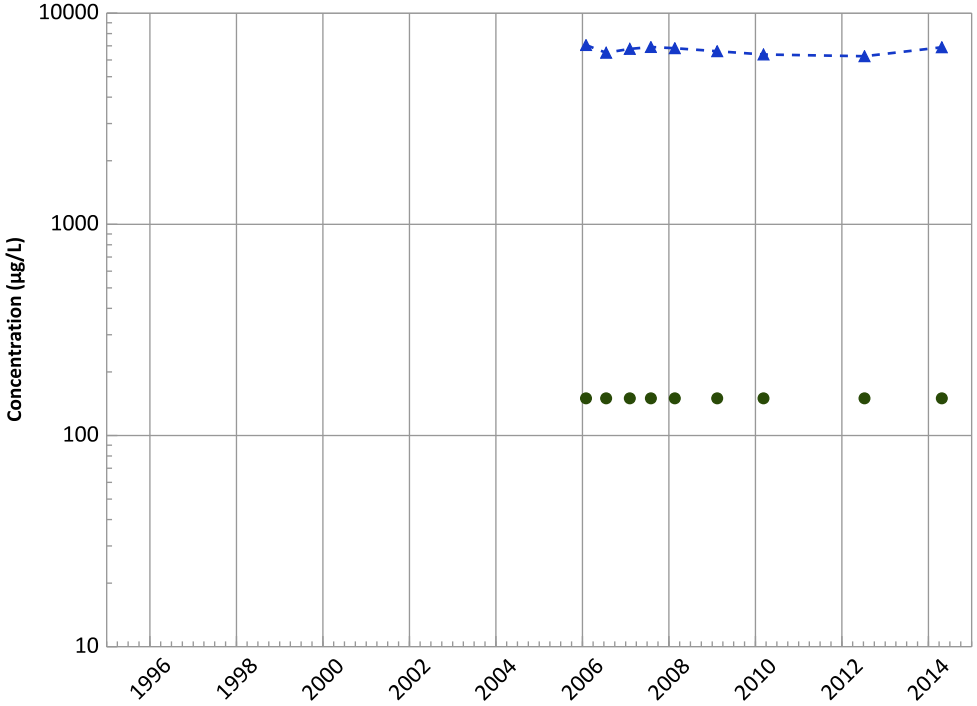


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Potassium Trend



Concentration Trend

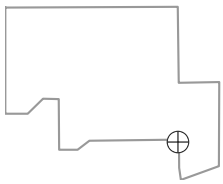
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

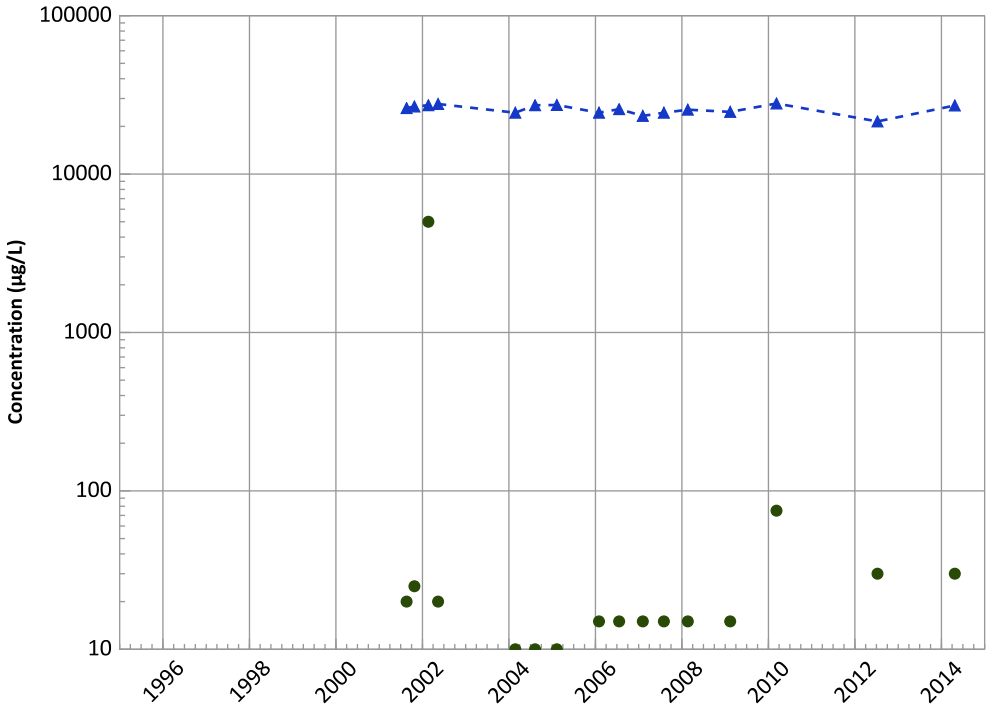
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

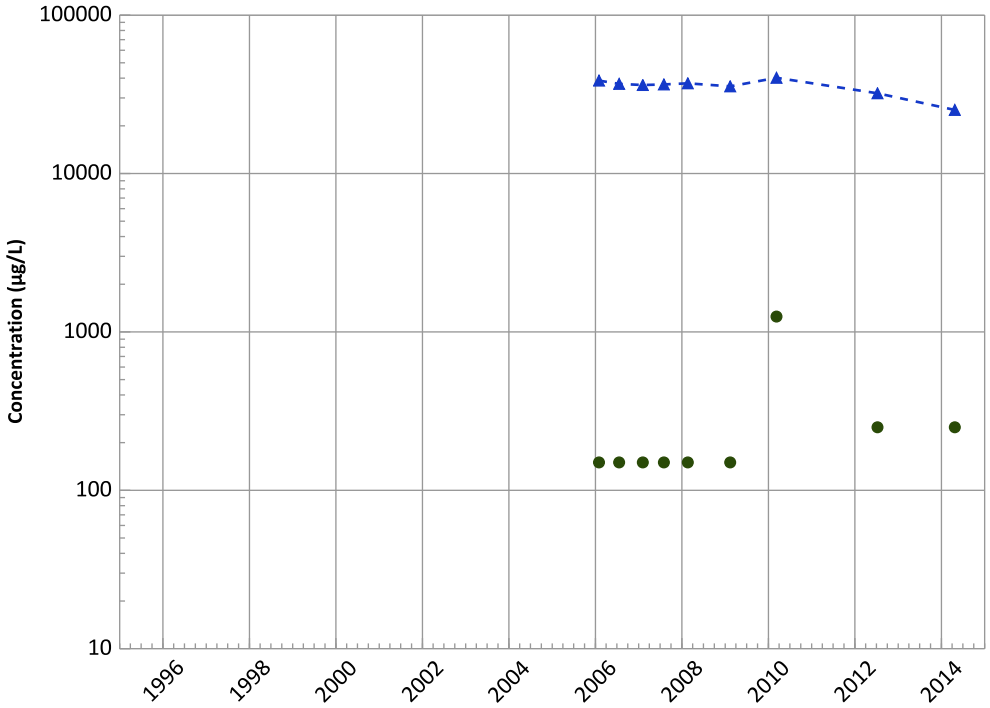


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Sodium Trend



Concentration Trend

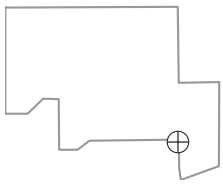
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

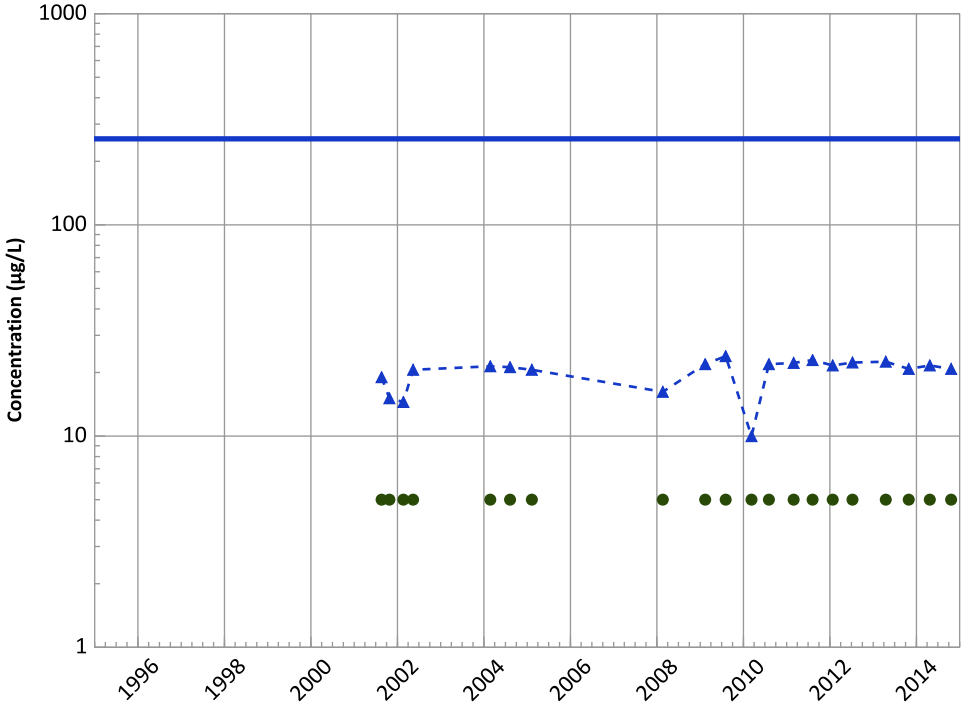
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1056 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Vanadium Trend



Concentration Trend

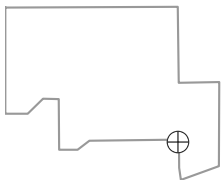
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

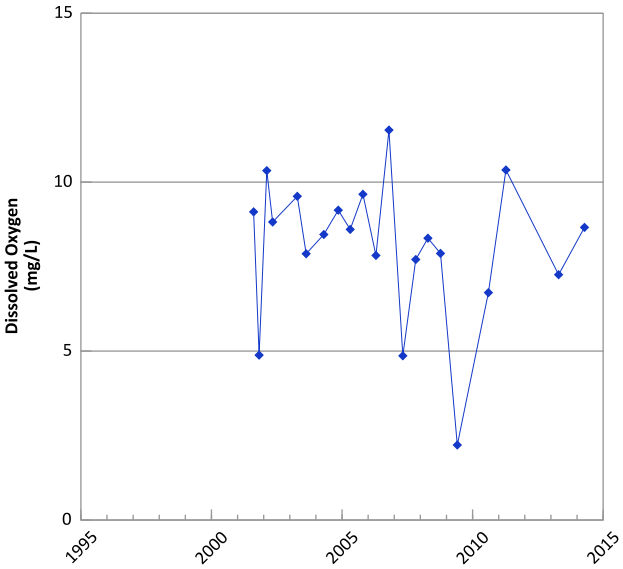
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/09/2000 to 10/21/2014
Analysis Date: 03/19/2015

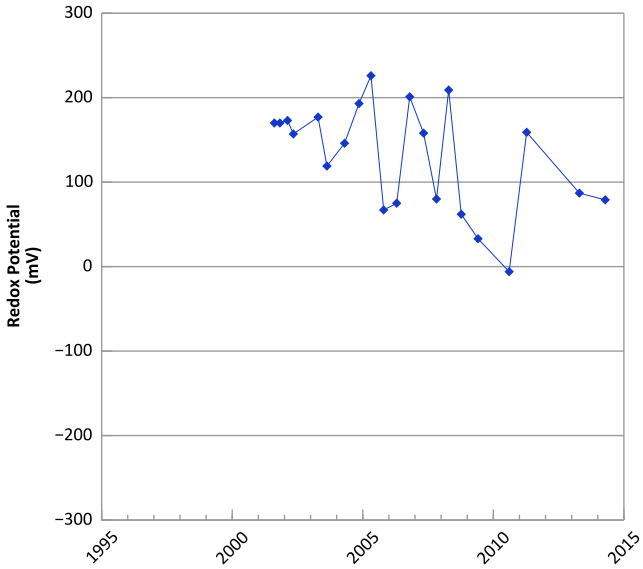
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

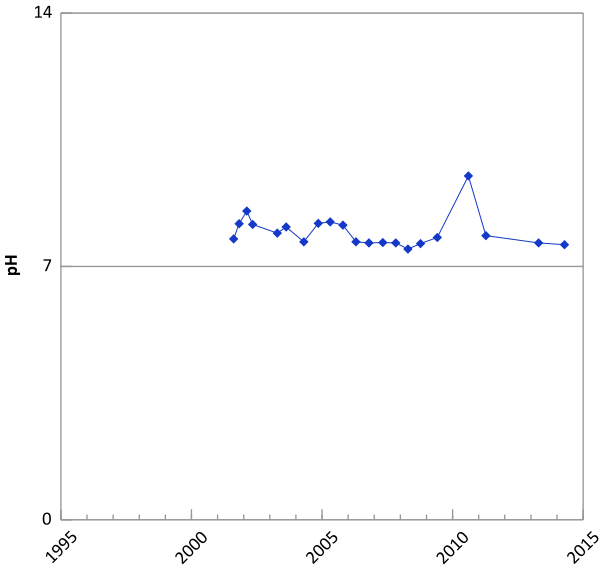
Well Location

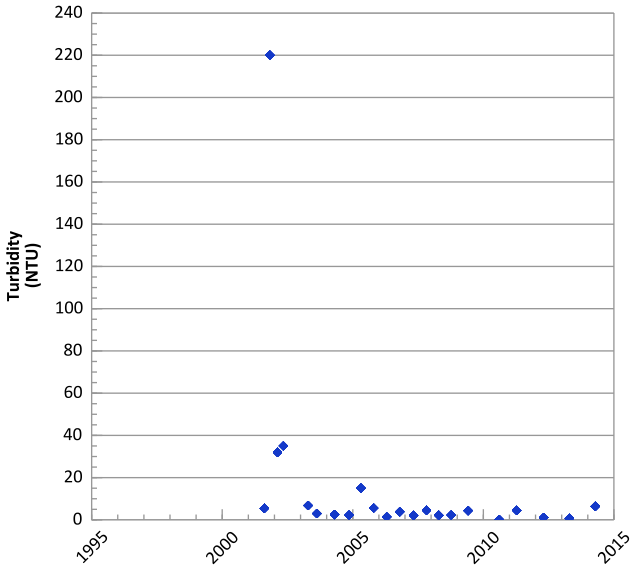


PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



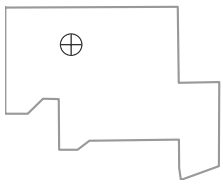






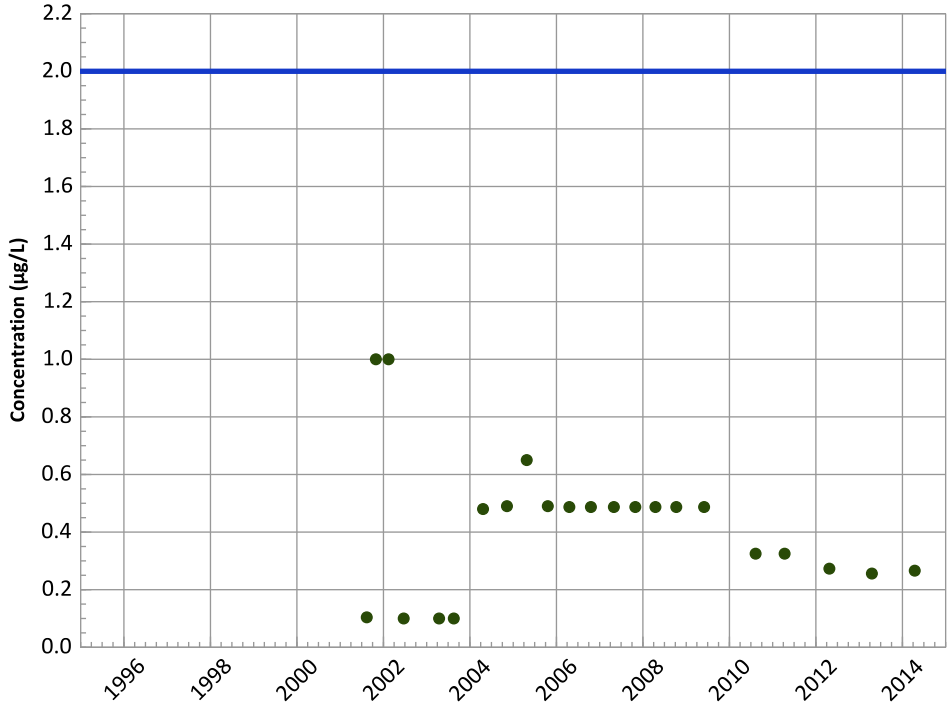
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

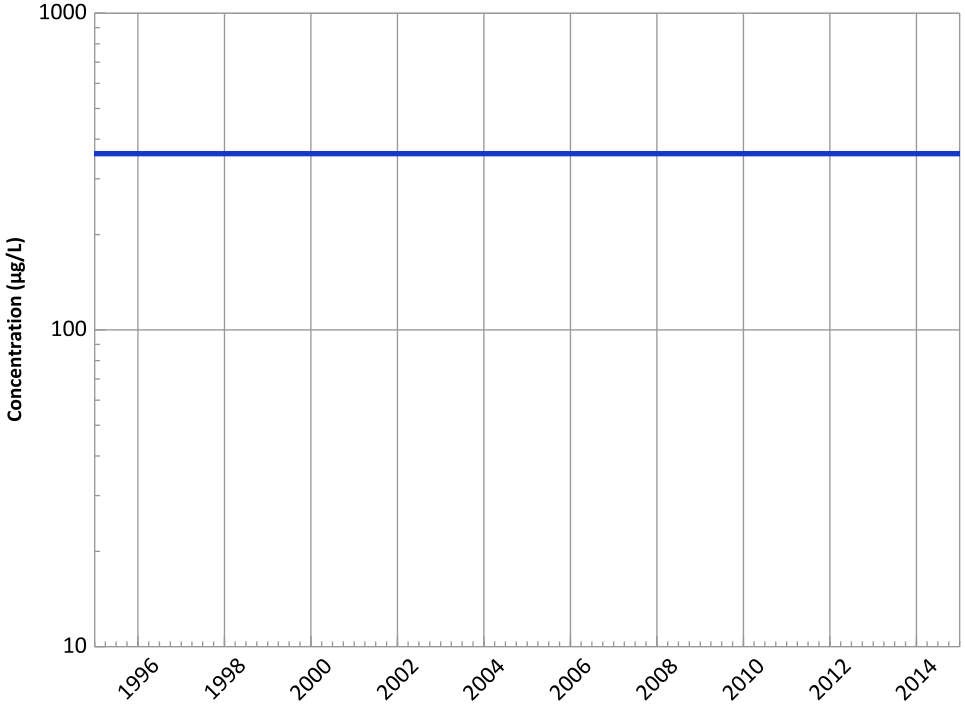


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

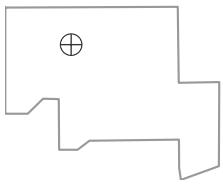
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

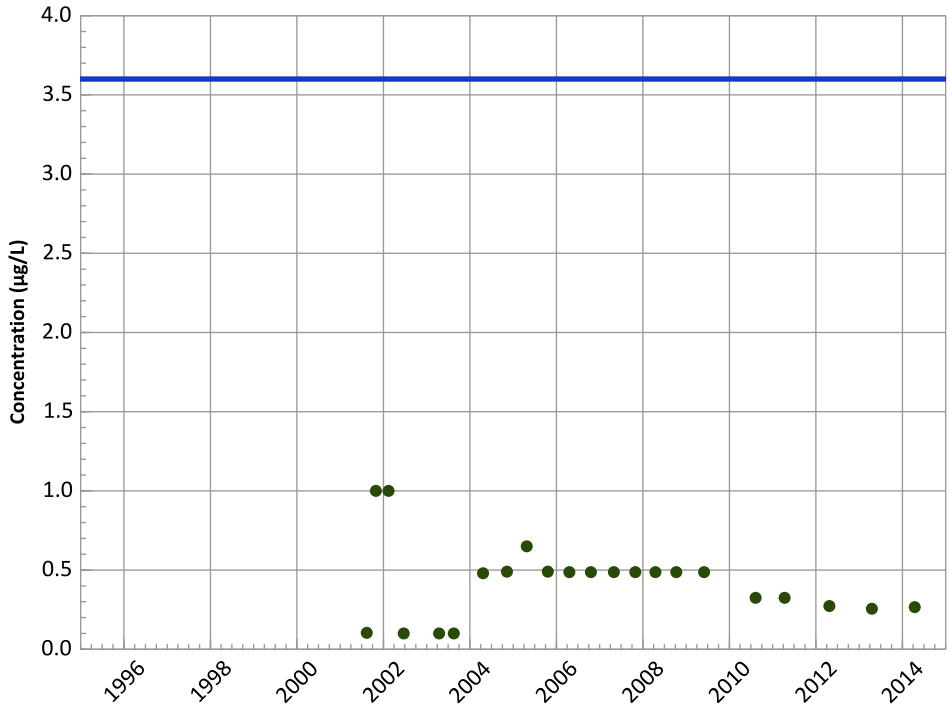
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

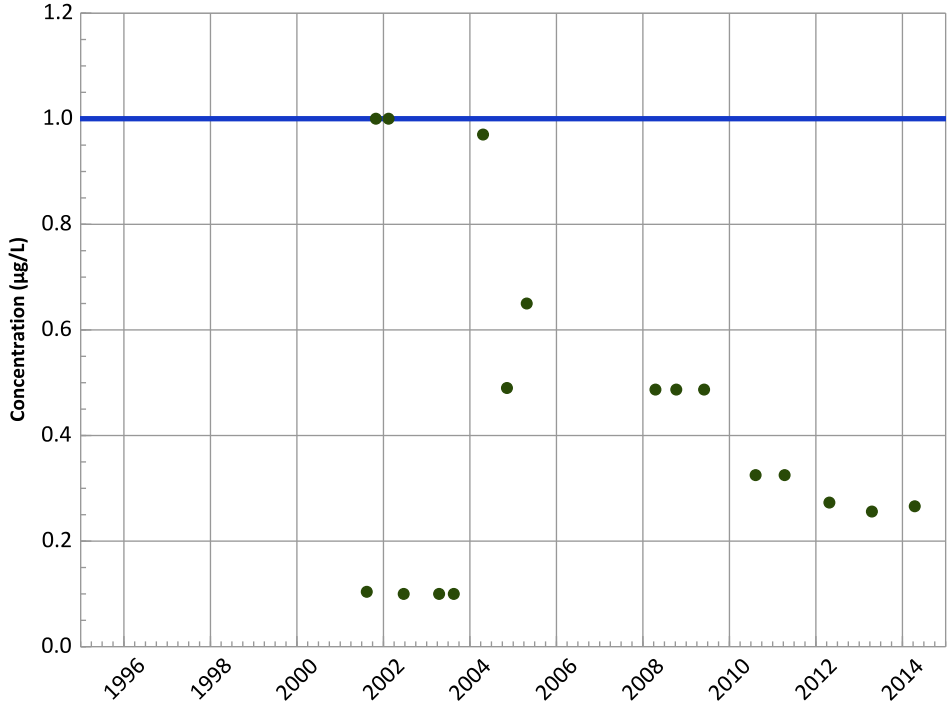


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

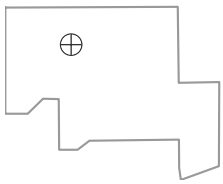
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

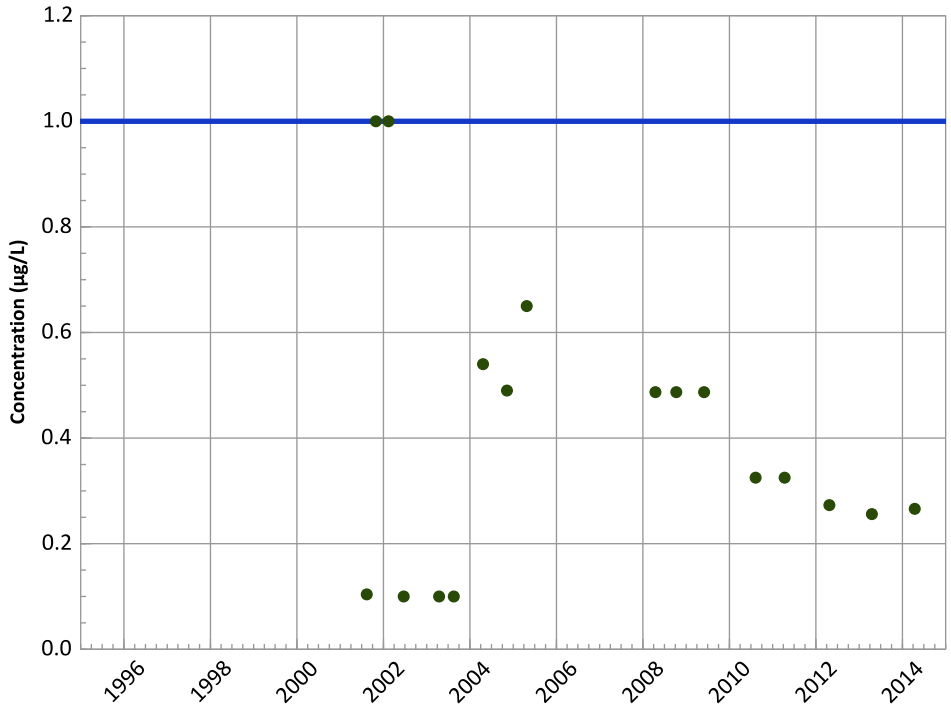
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

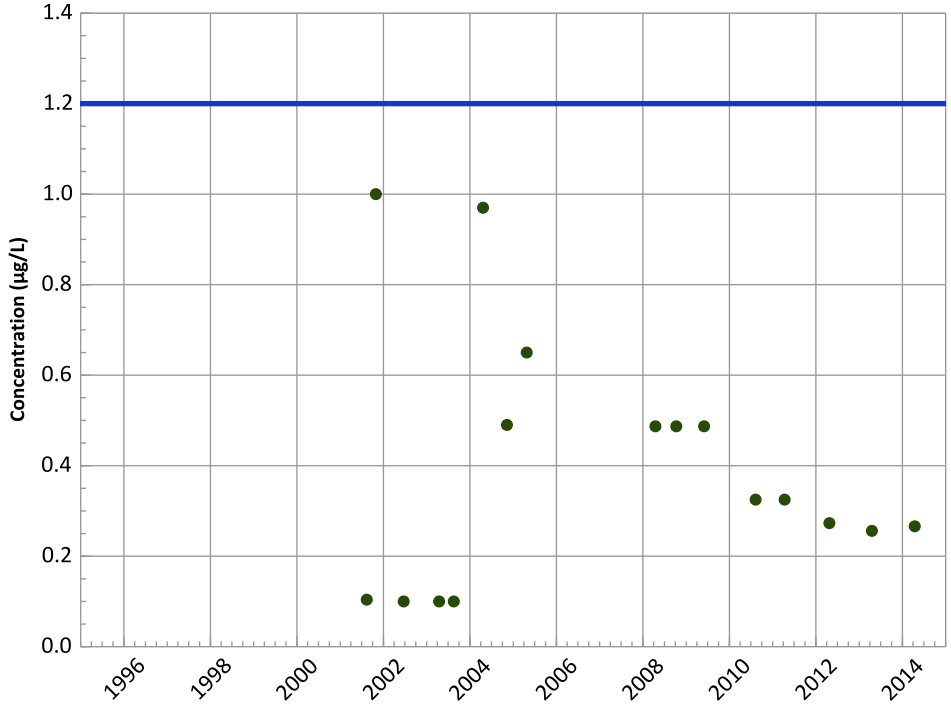


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

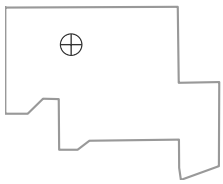
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

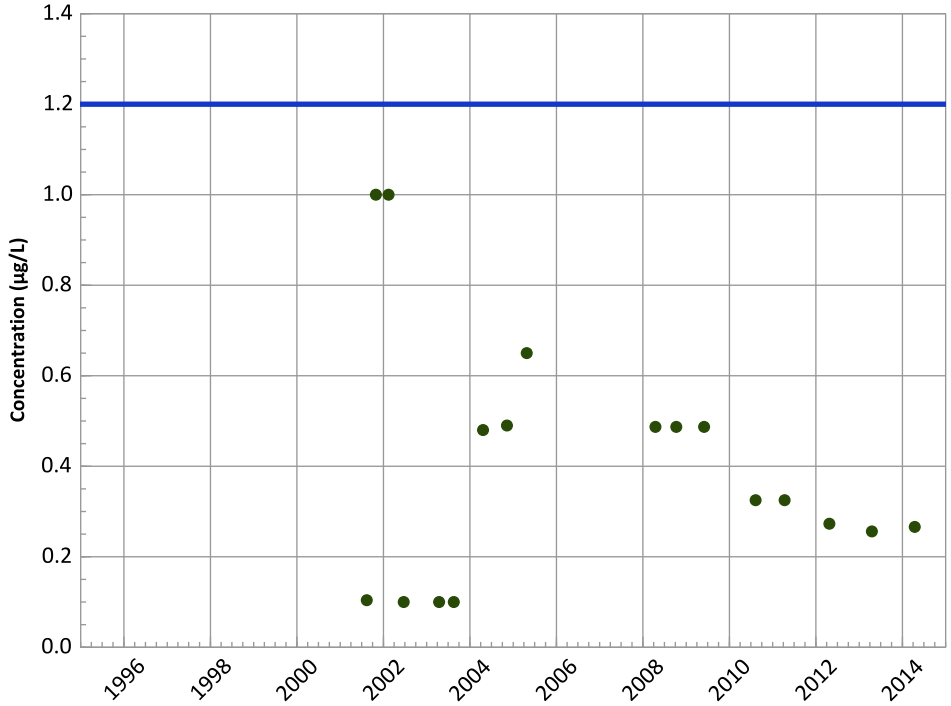
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

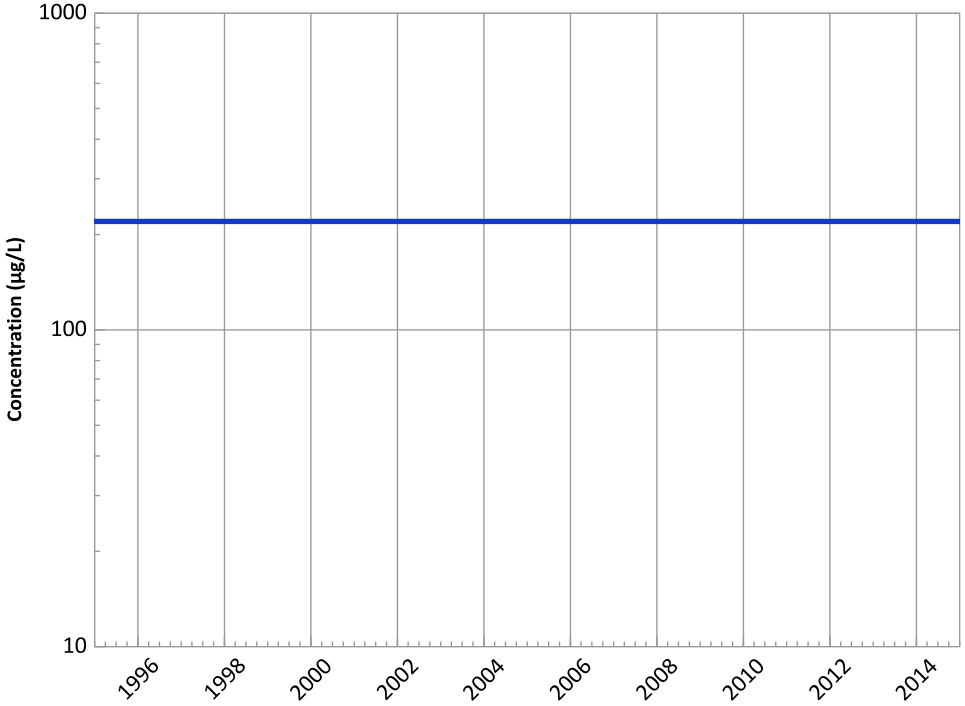


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

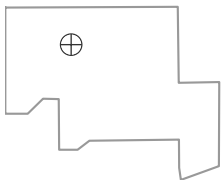


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

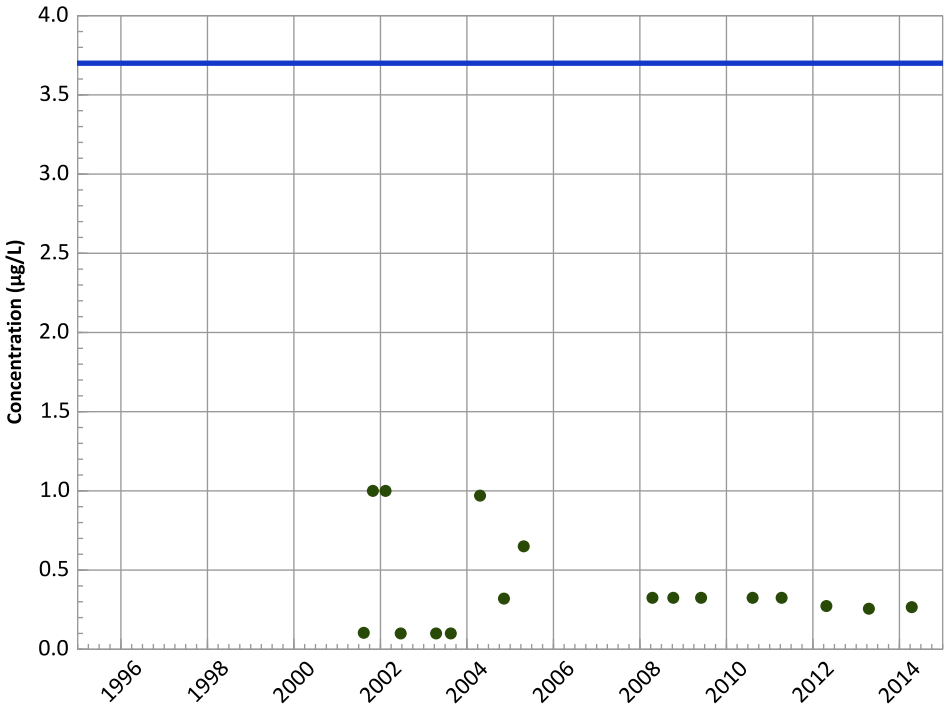


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

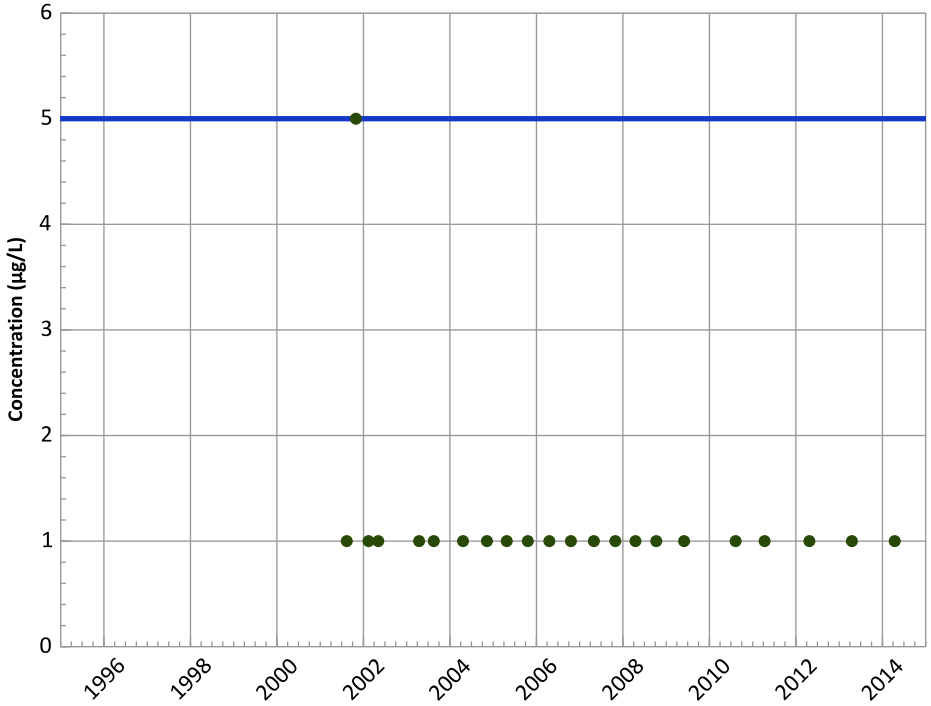


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend

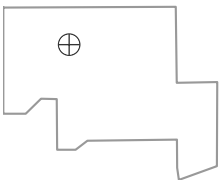


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

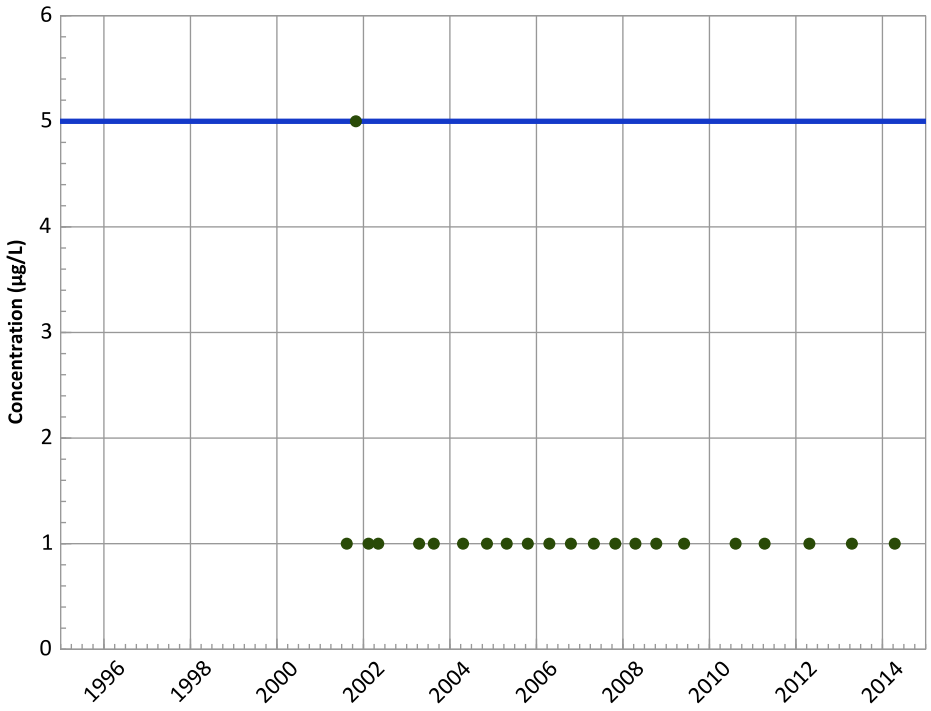


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

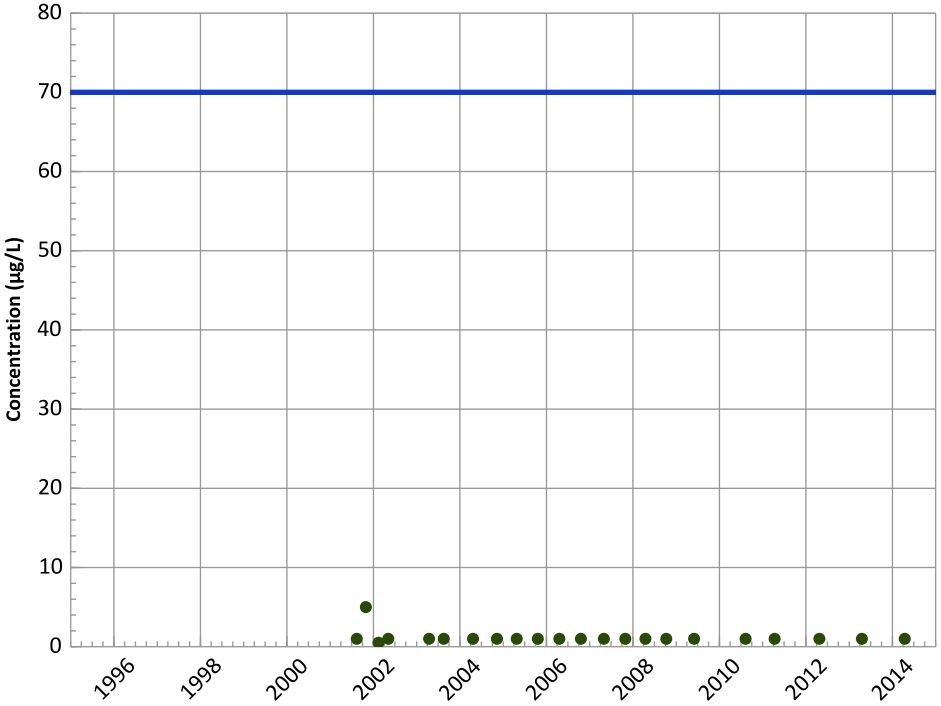


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

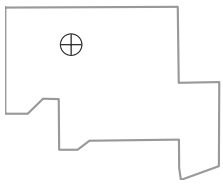
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

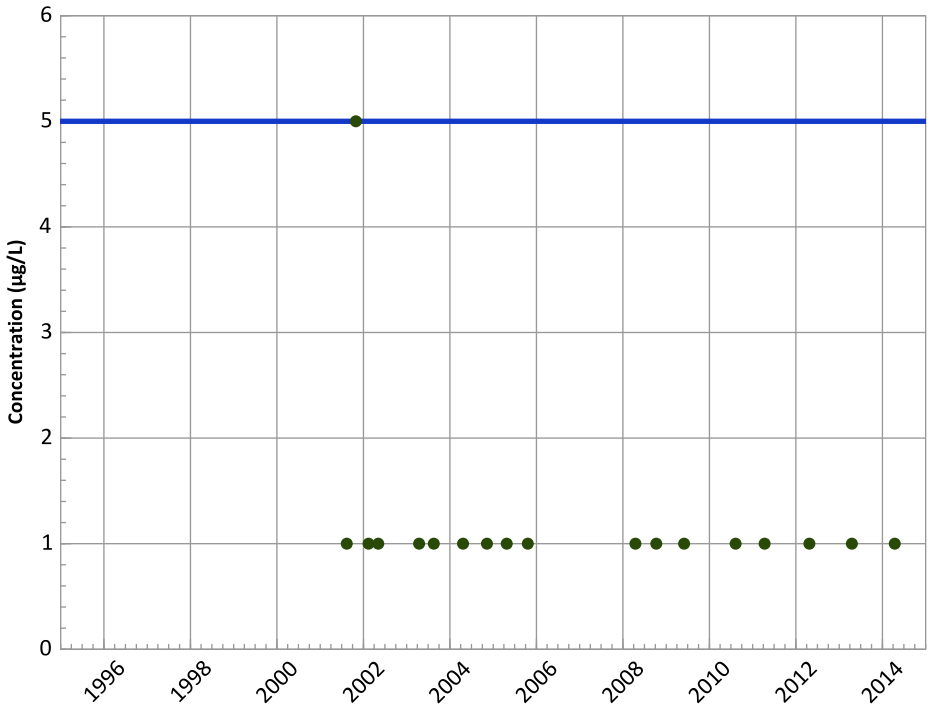
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

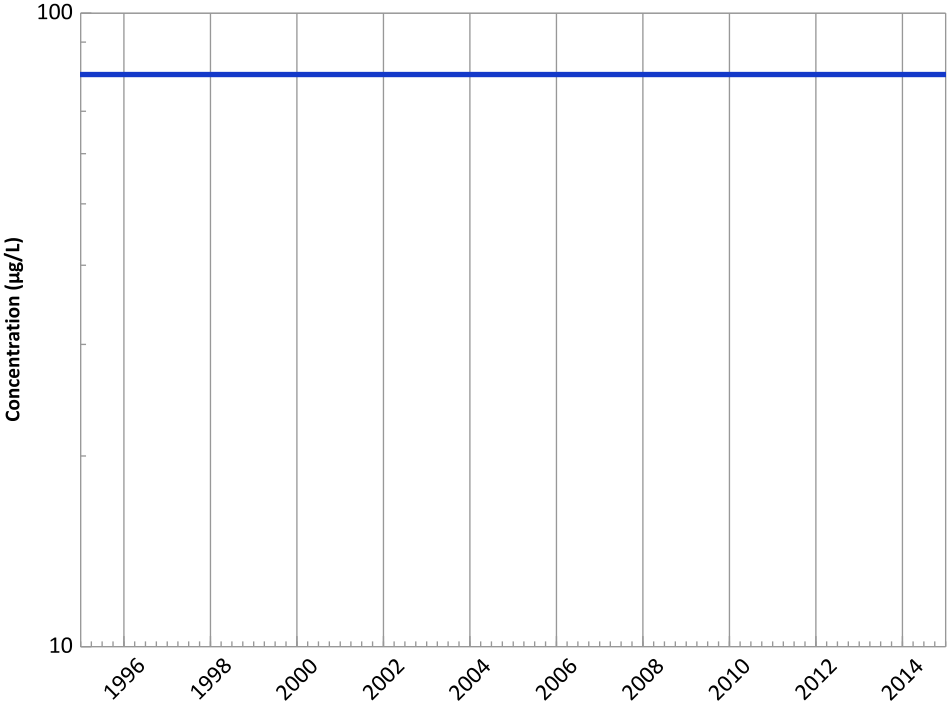


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

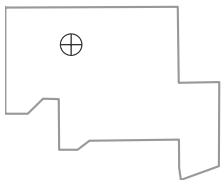
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

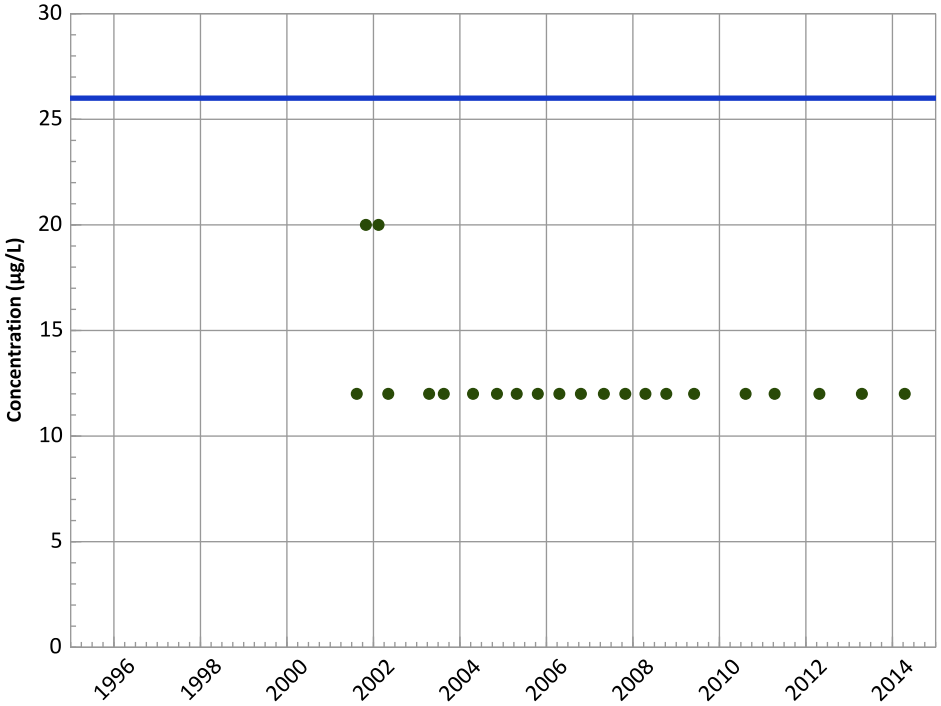
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

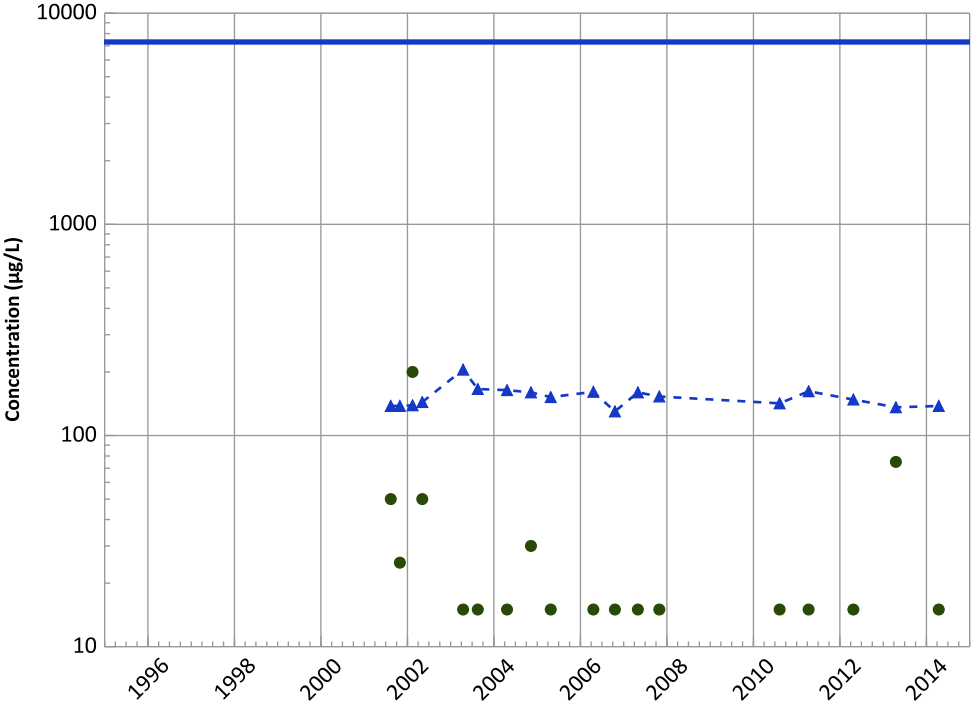


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Boron Trend



Concentration Trend

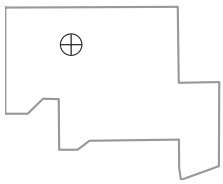
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

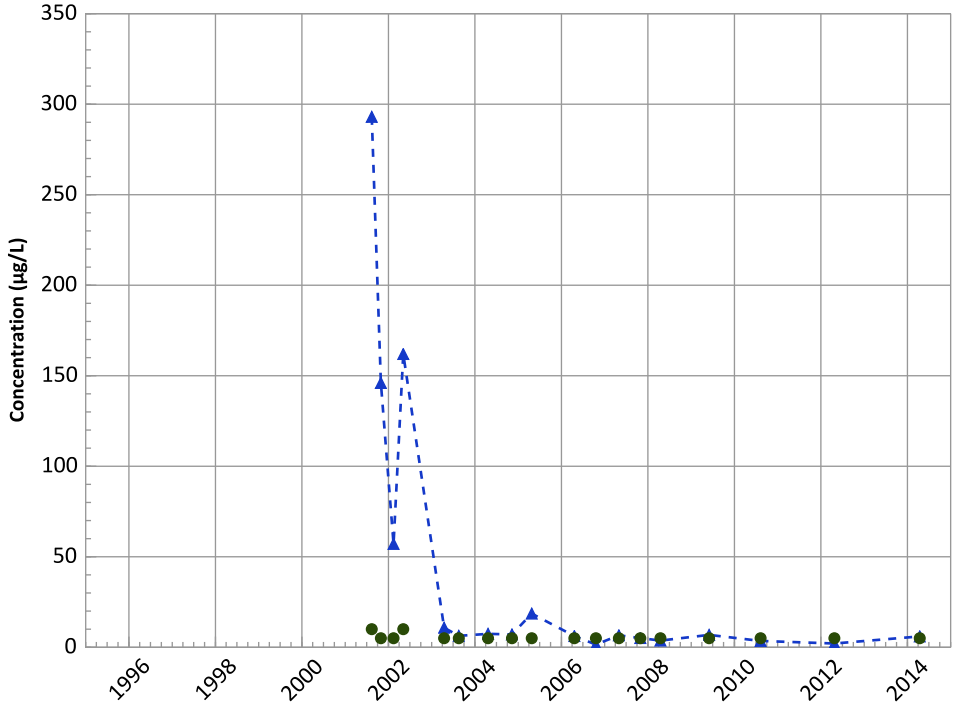
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

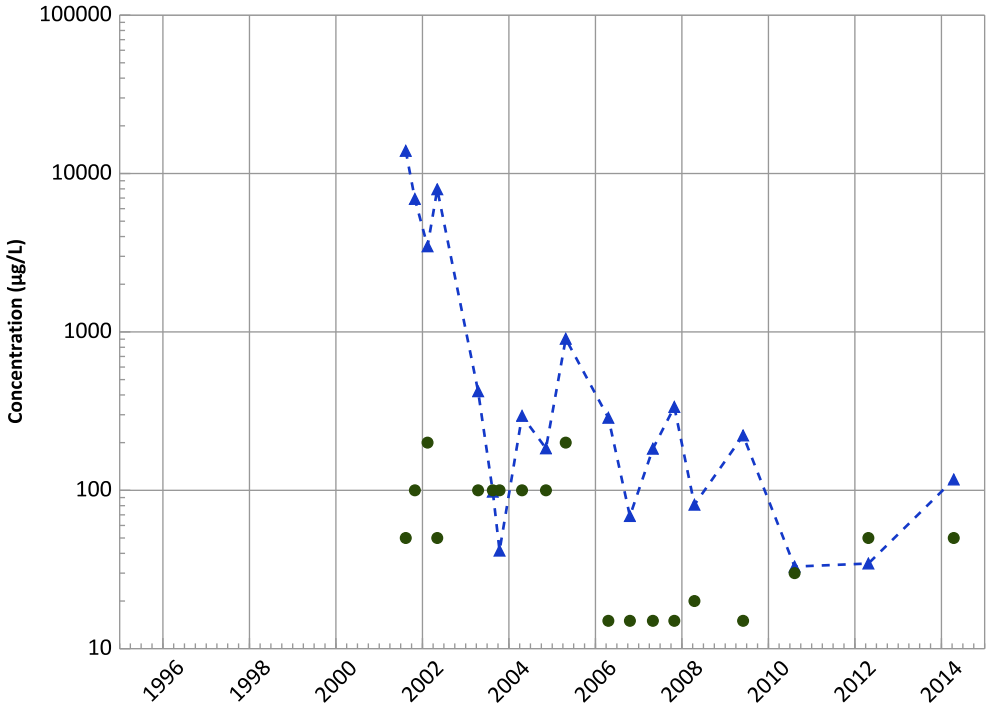


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Aluminum Trend



Concentration Trend

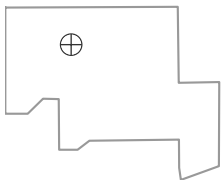
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

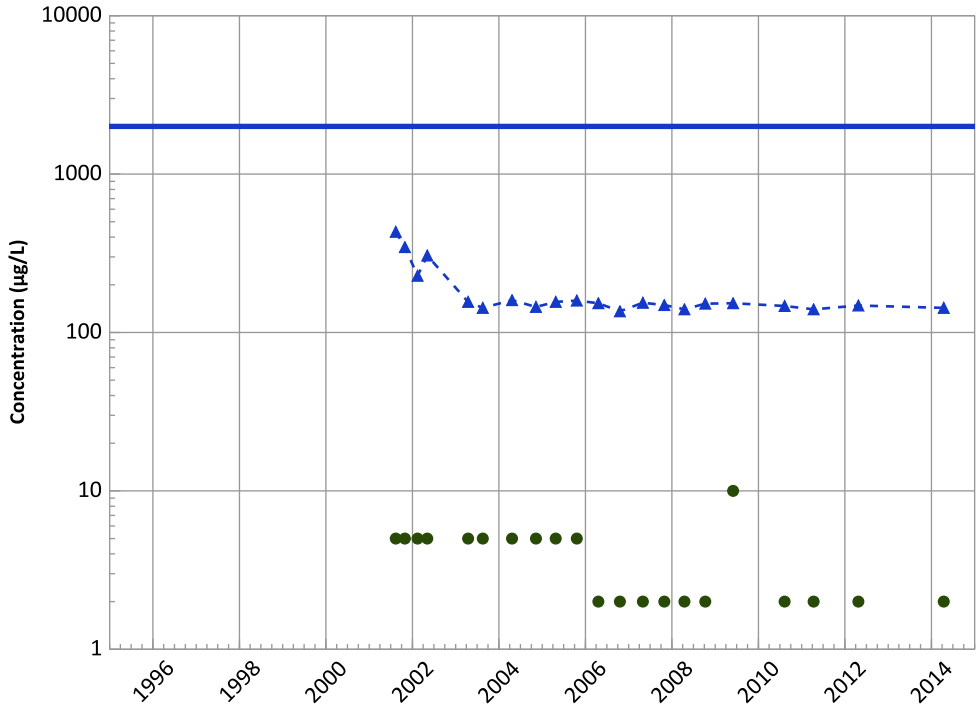
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

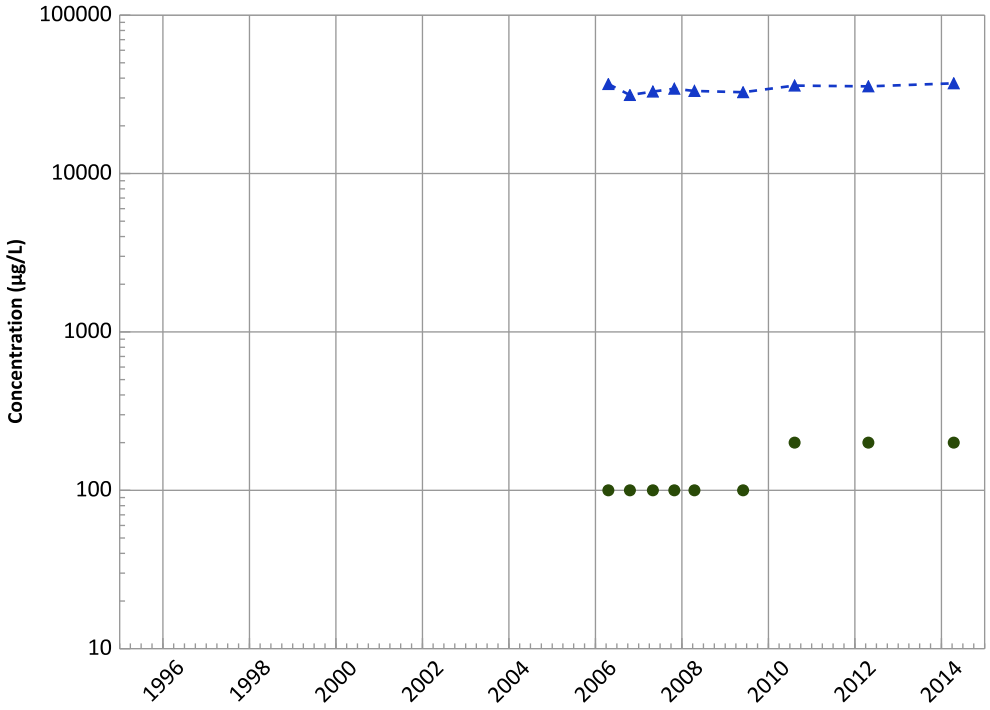


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Calcium Trend



Concentration Trend

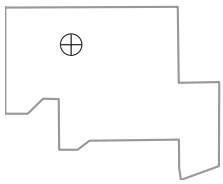
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

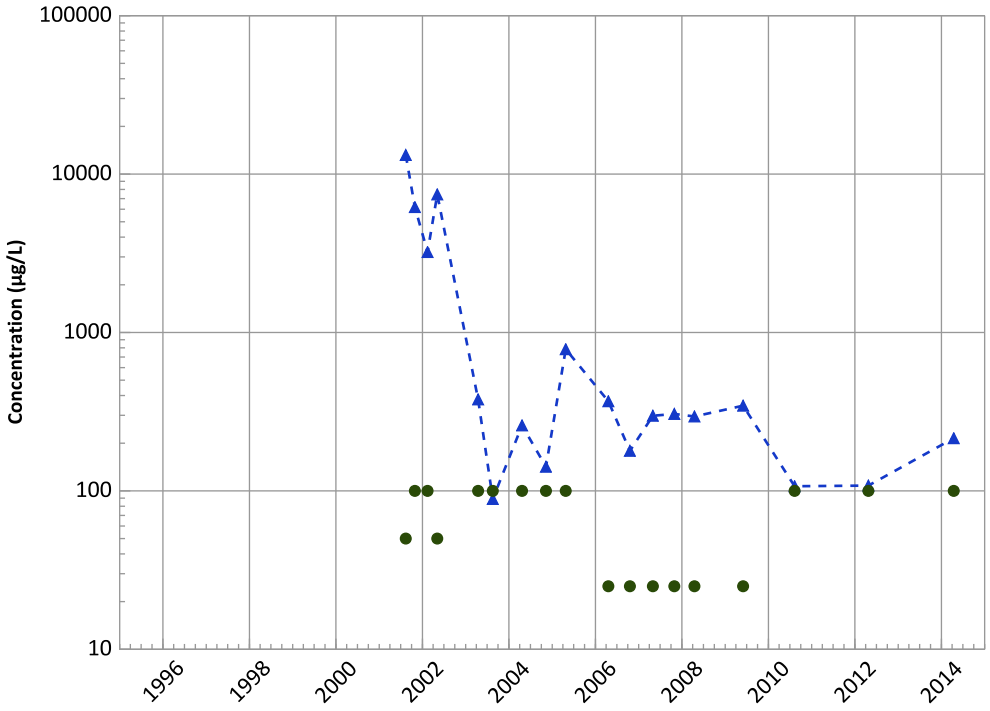
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

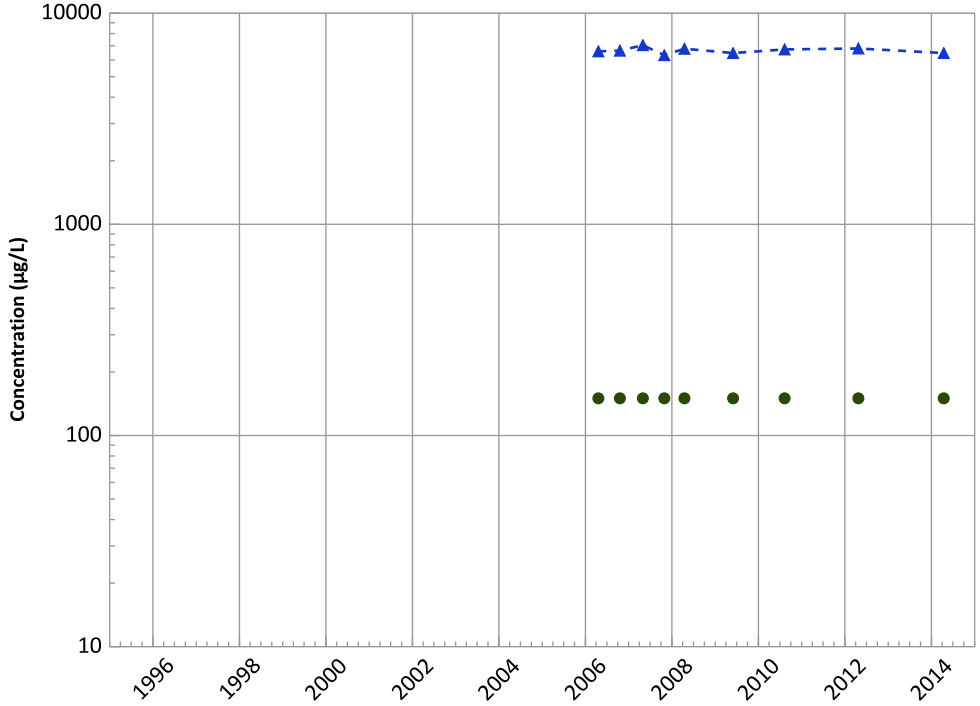


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Potassium Trend



Concentration Trend

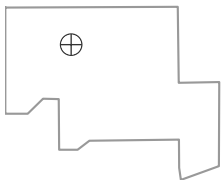
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

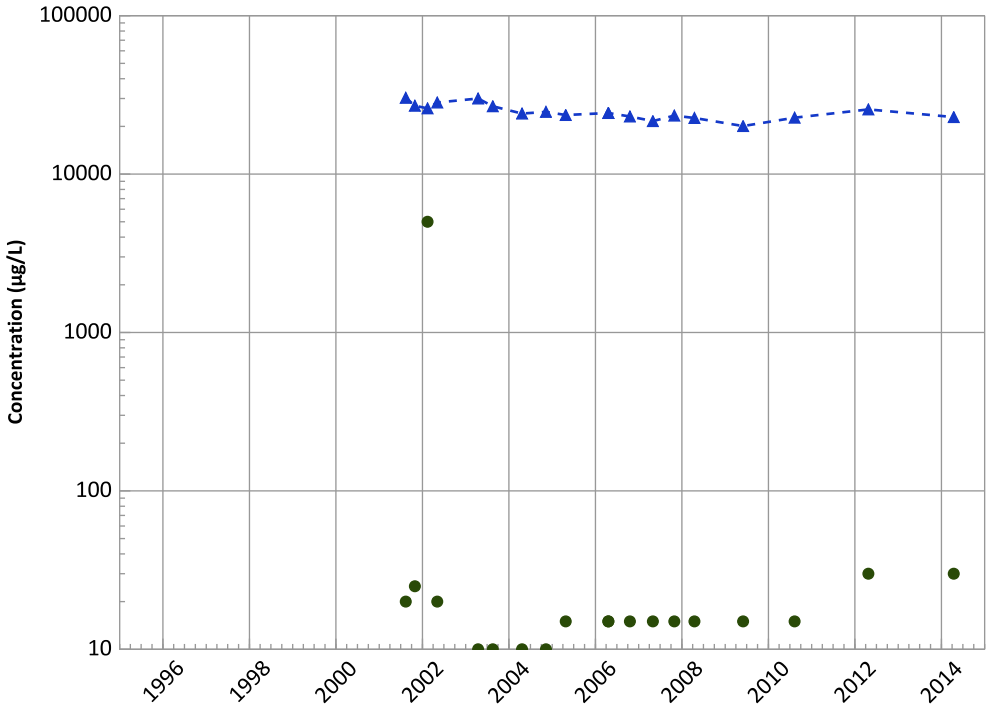
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1057A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

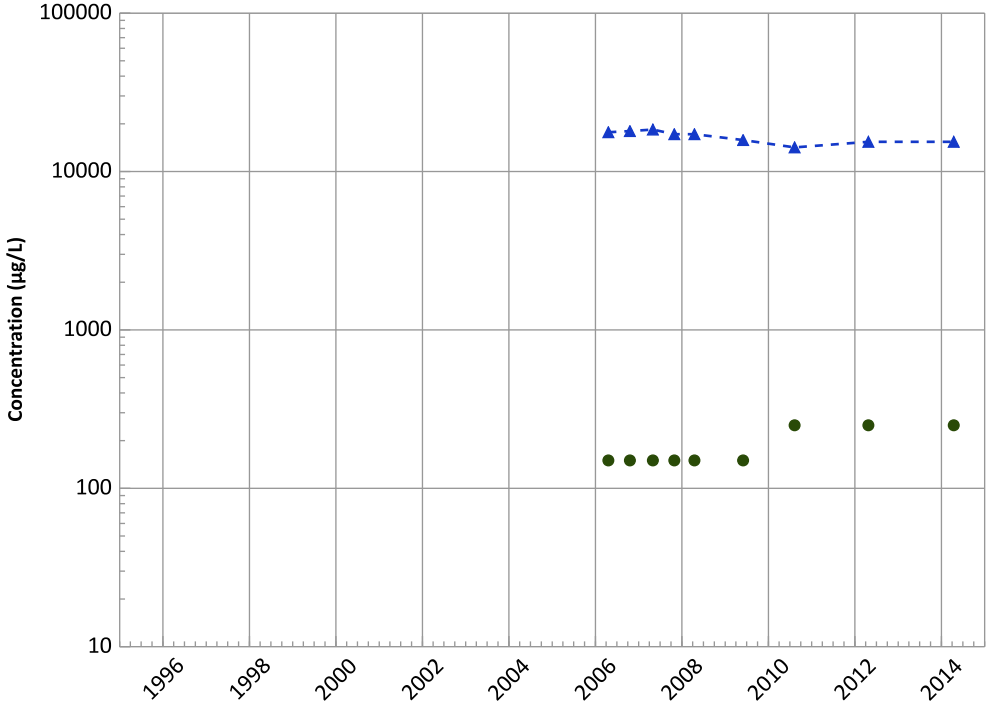


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Sodium Trend



Concentration Trend

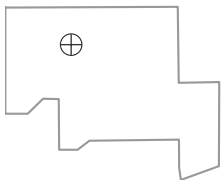
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

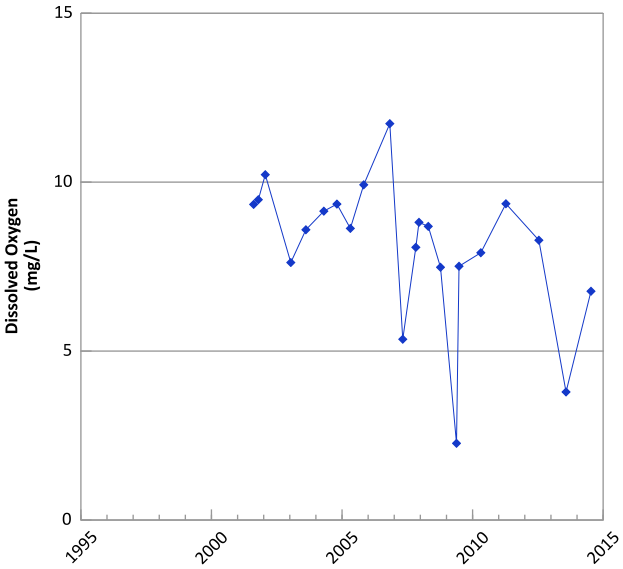
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/13/2001 to 04/15/2014
Analysis Date: 03/19/2015

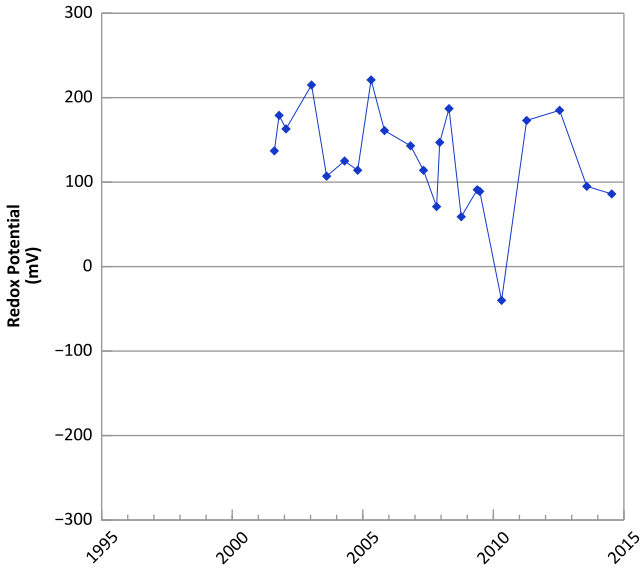
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

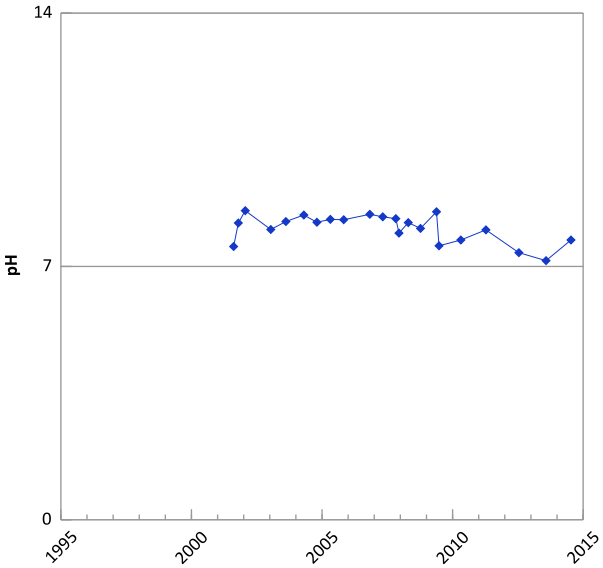
Well Location

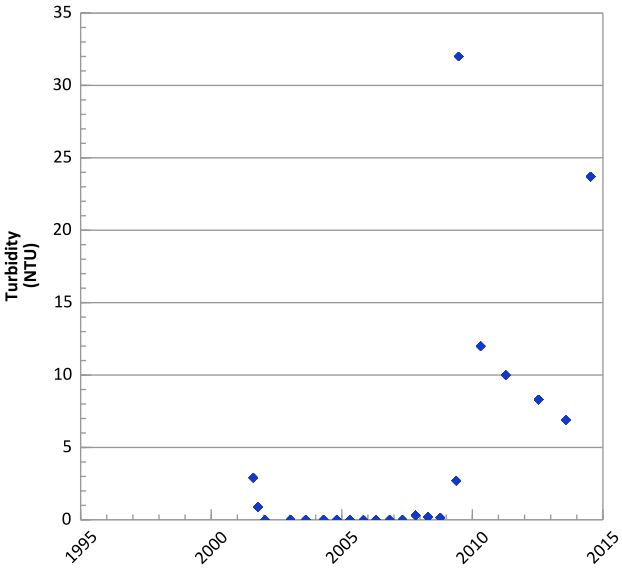


PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



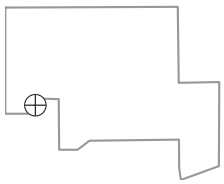






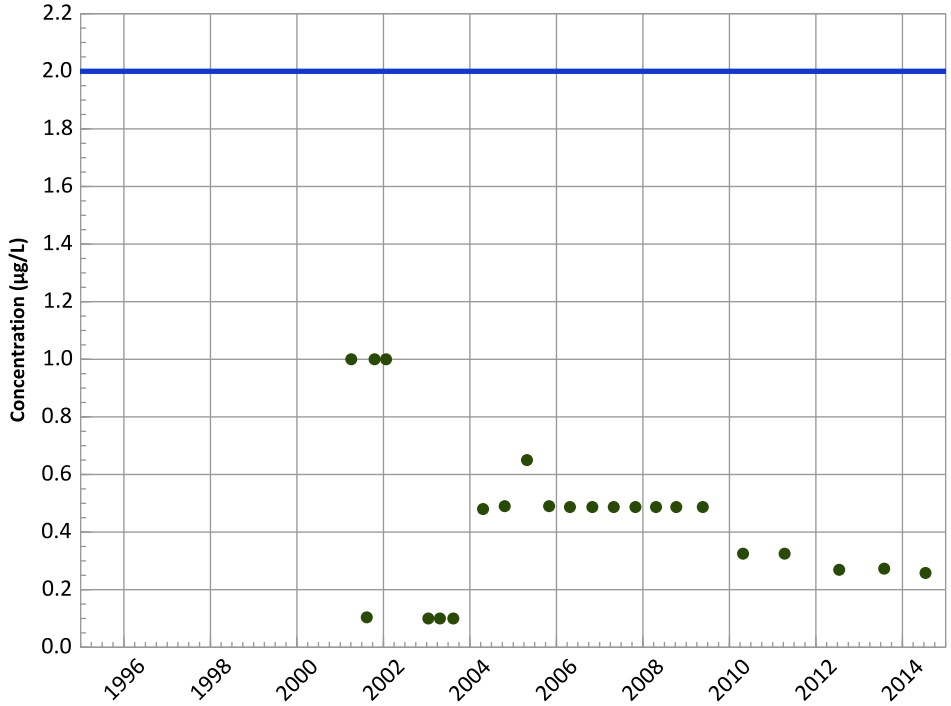
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

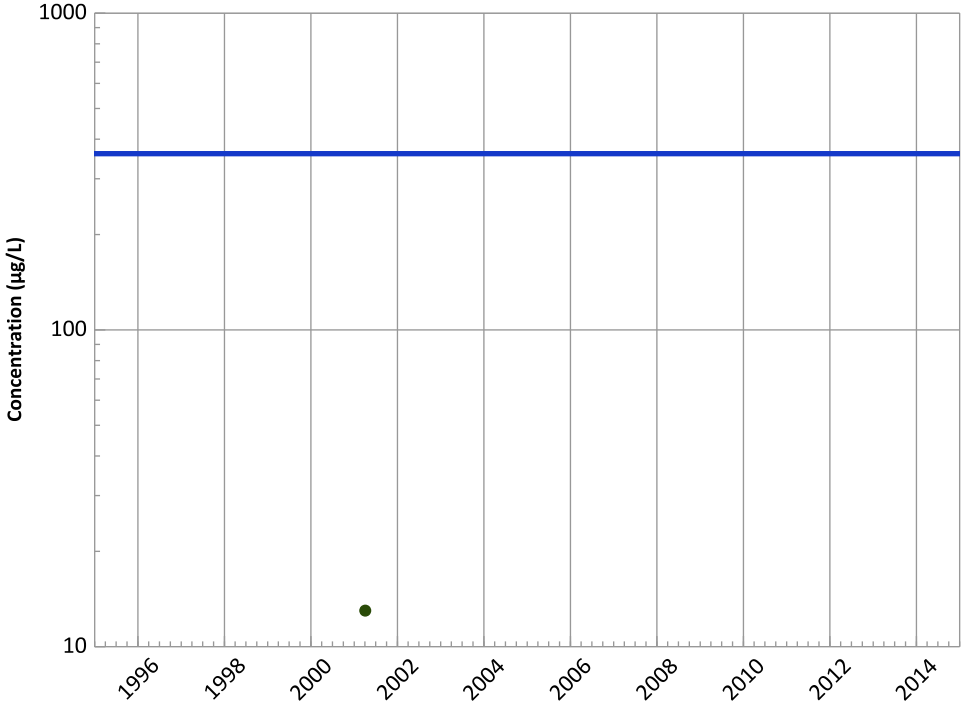


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

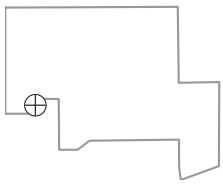
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

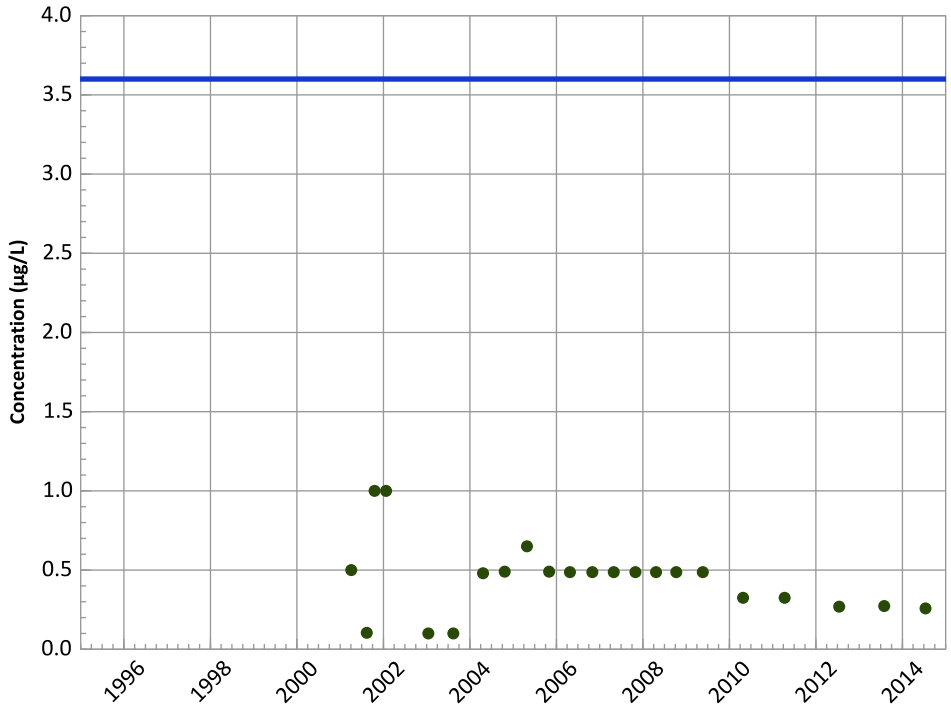
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

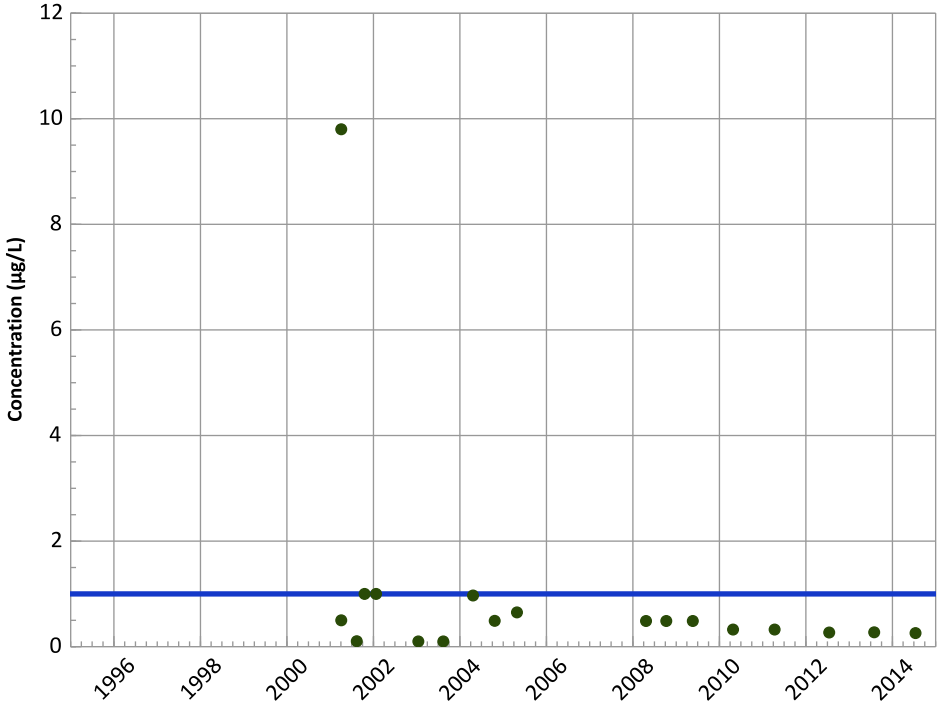


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

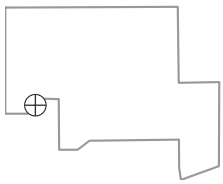
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

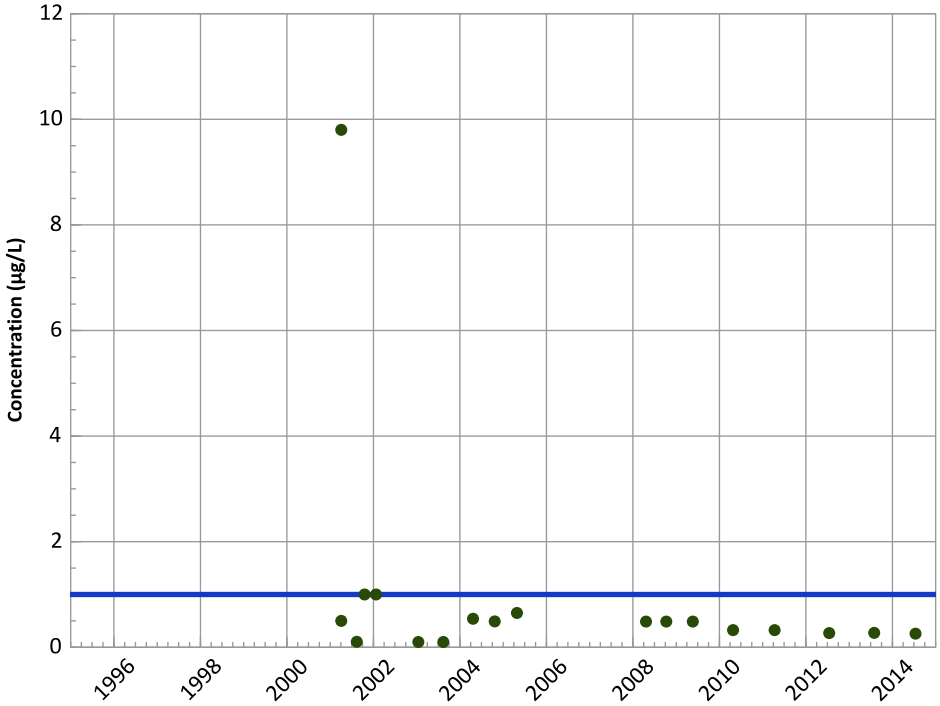
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

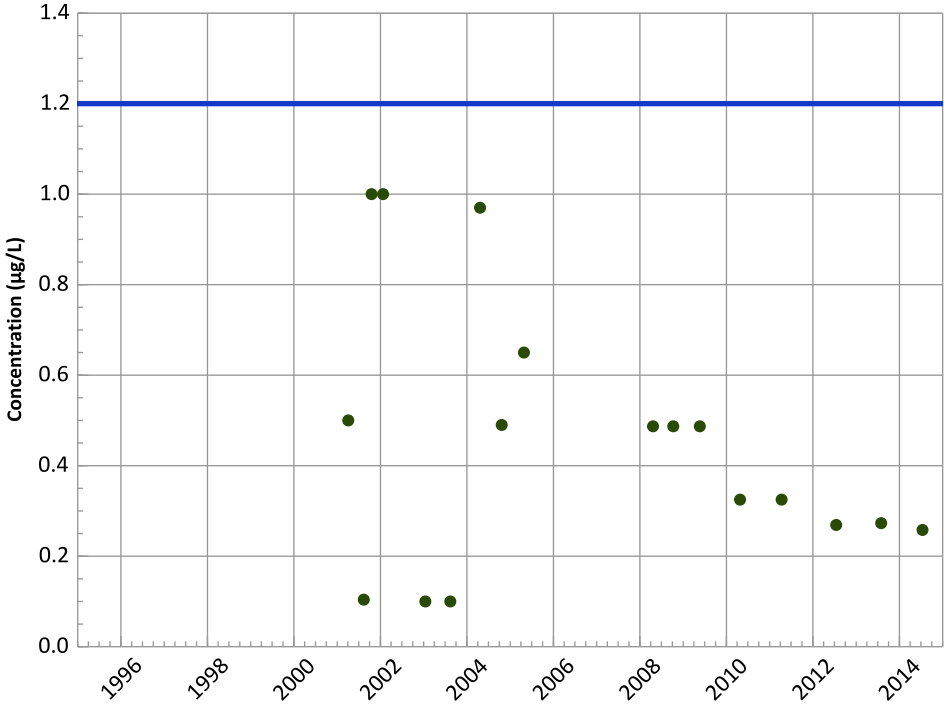


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

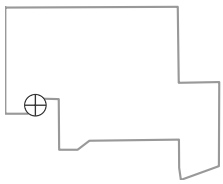
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

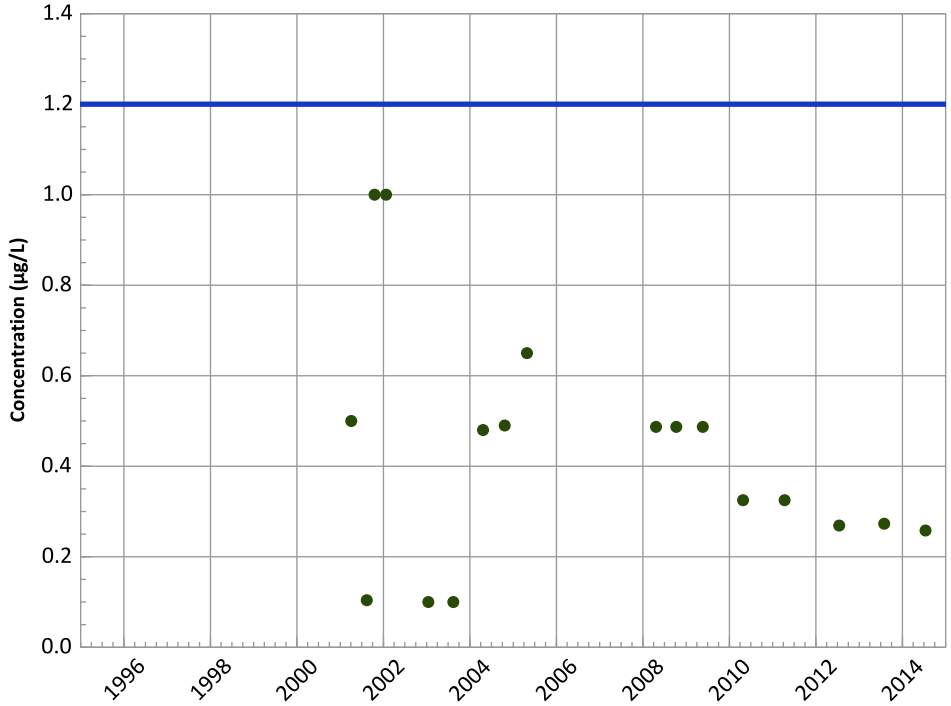
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

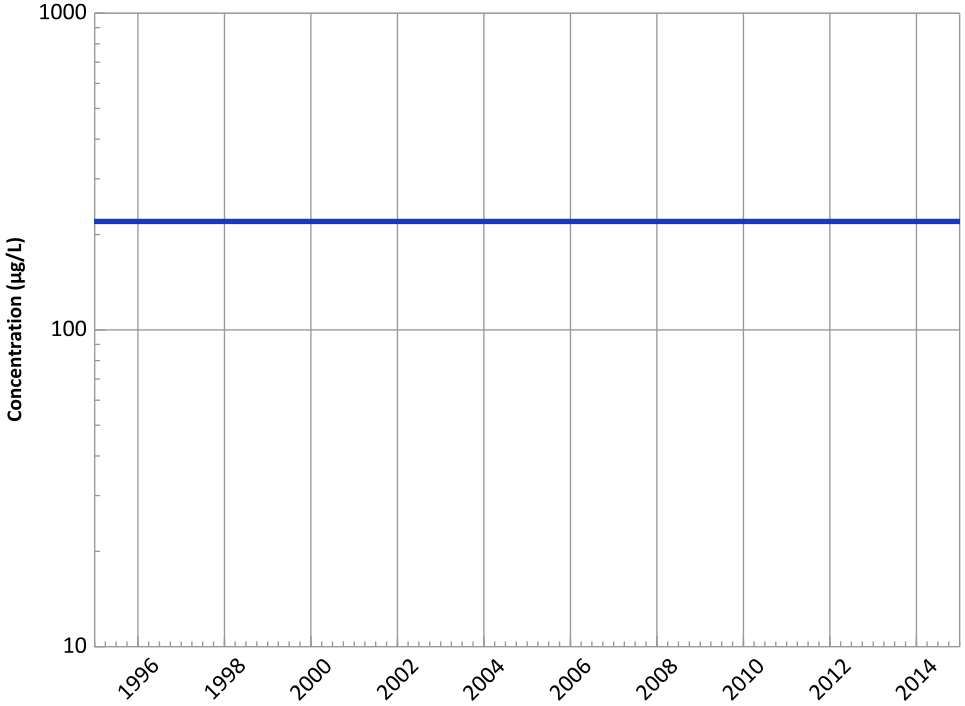


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

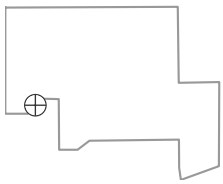
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

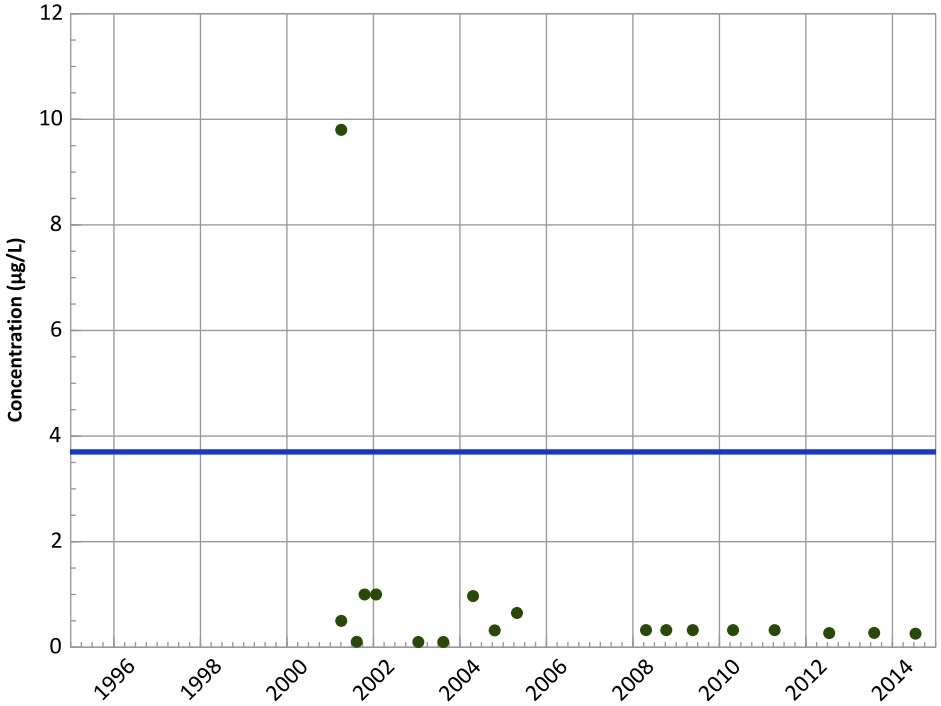
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

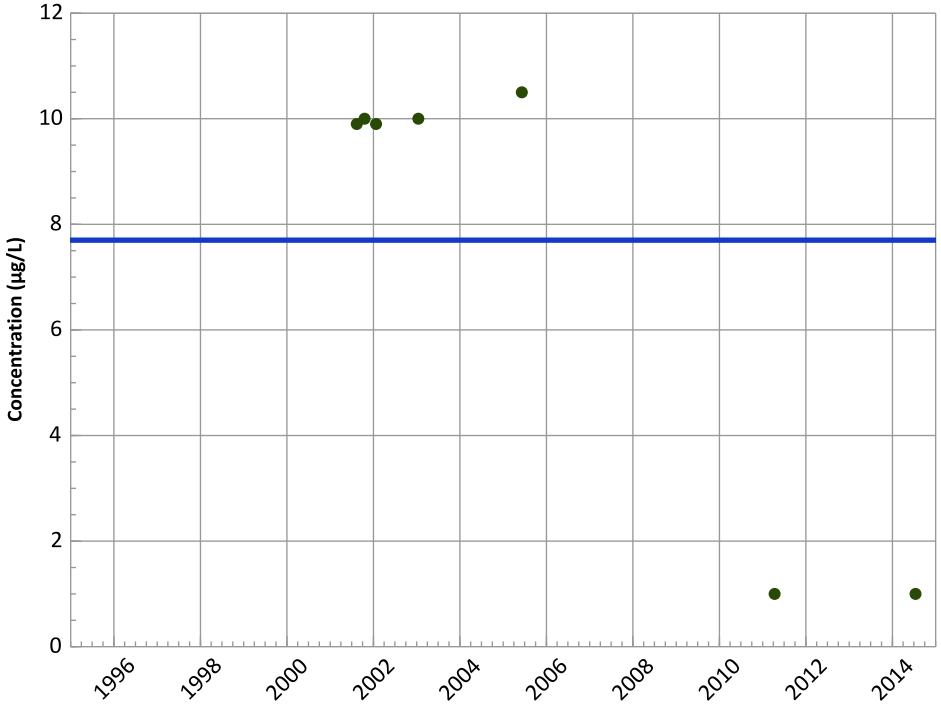


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

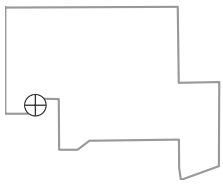
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

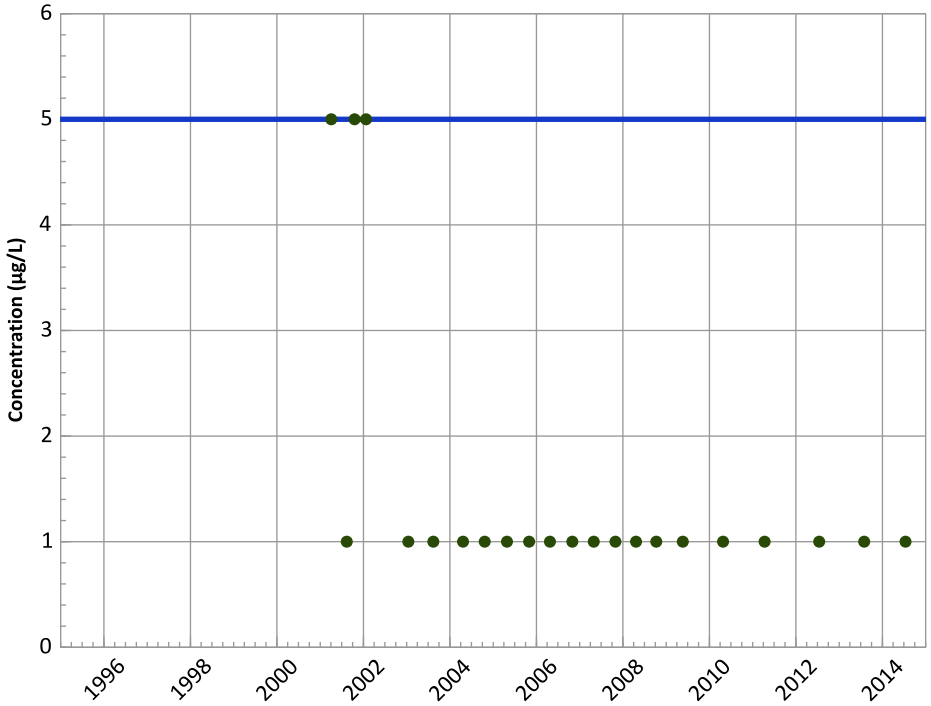
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

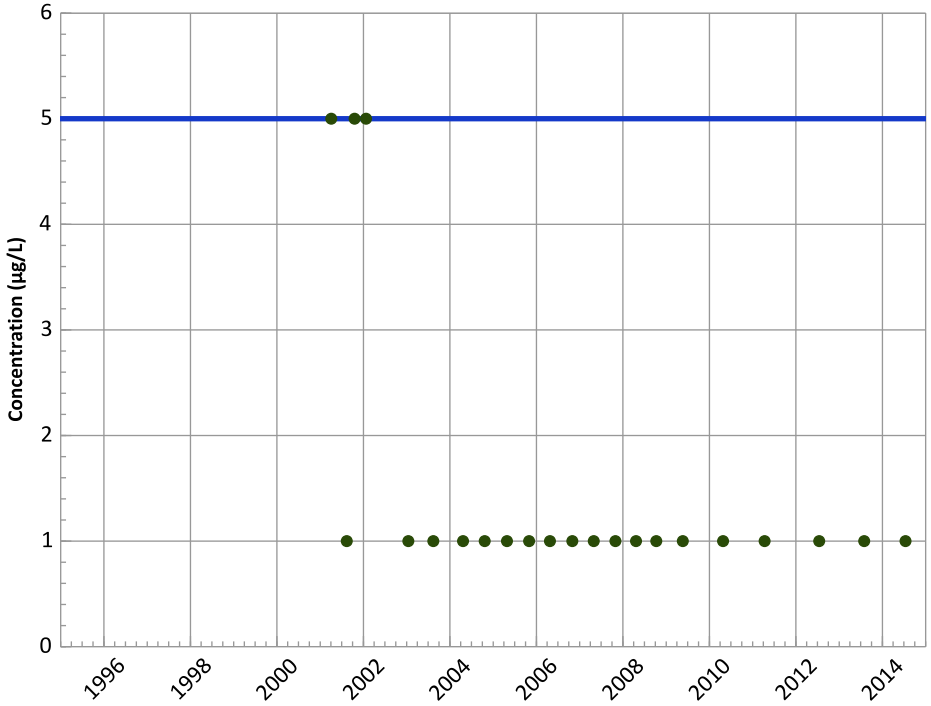


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

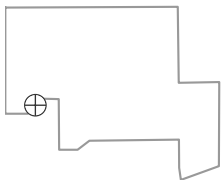
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

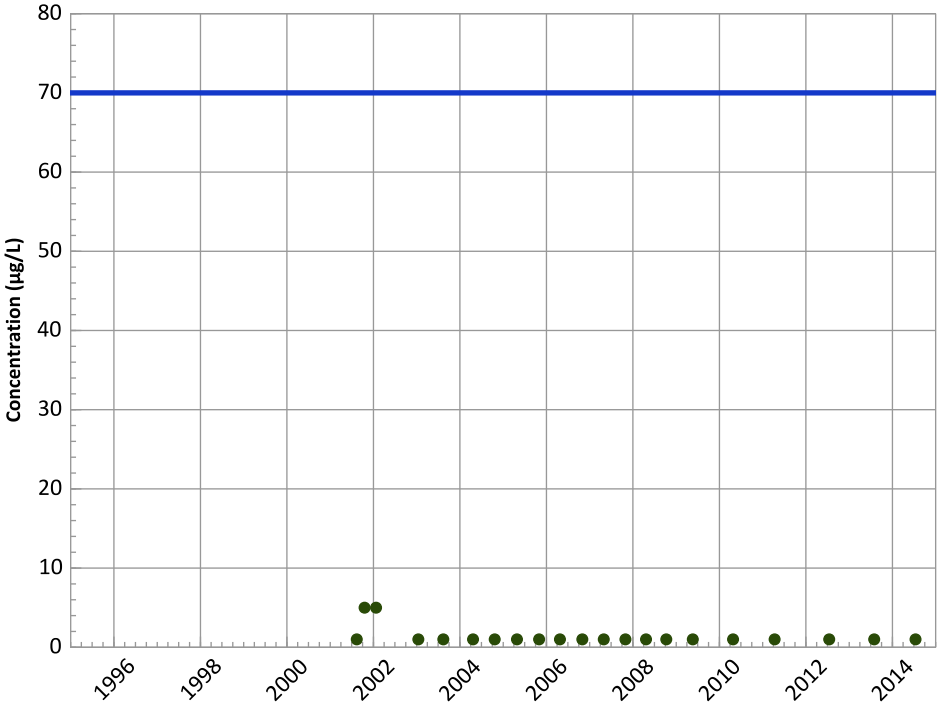
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

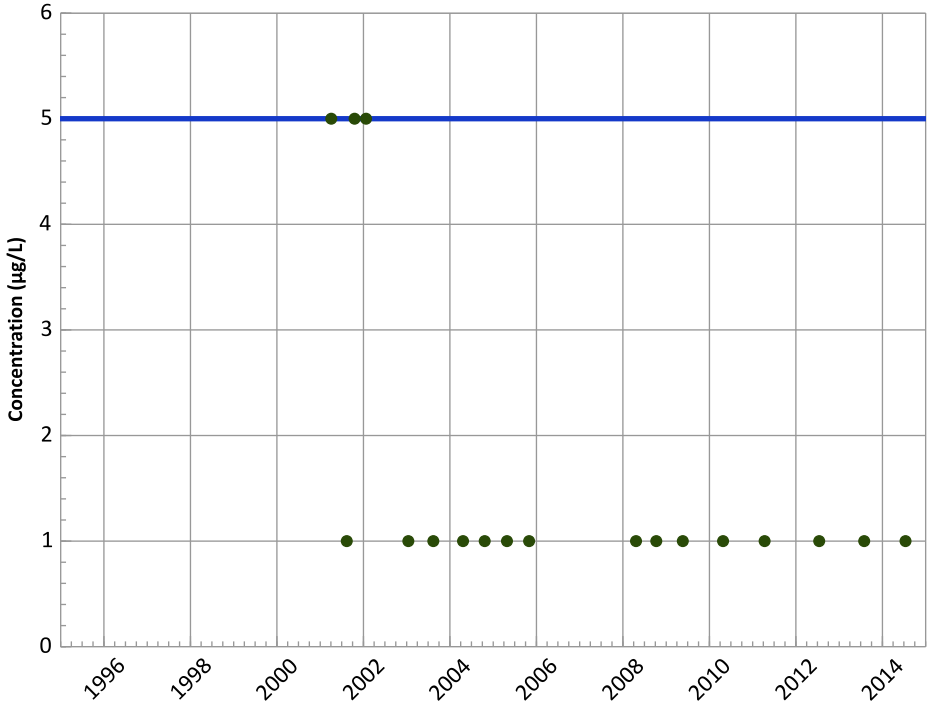


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

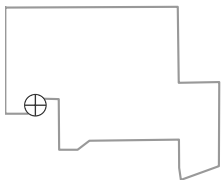
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

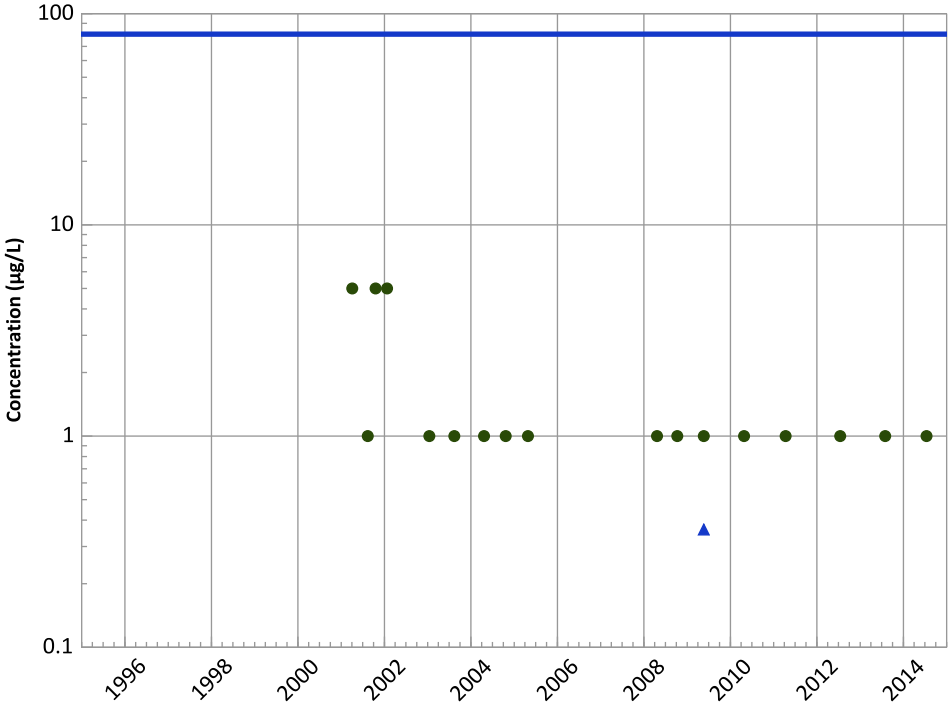
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

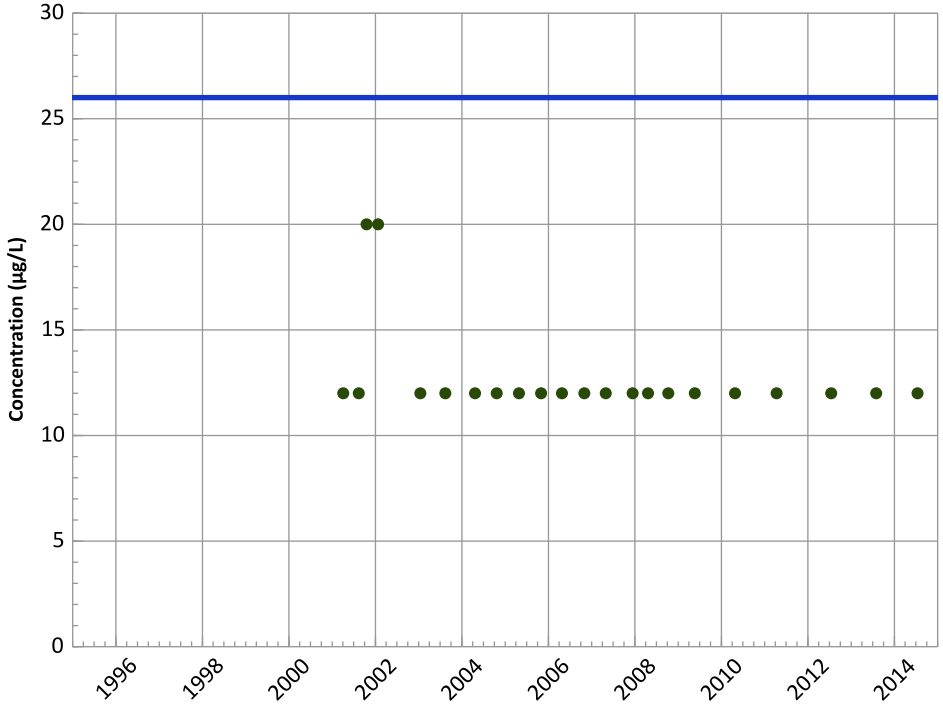


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Perchlorate Trend



Concentration Trend

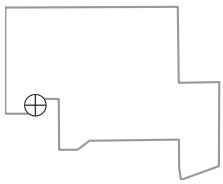
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

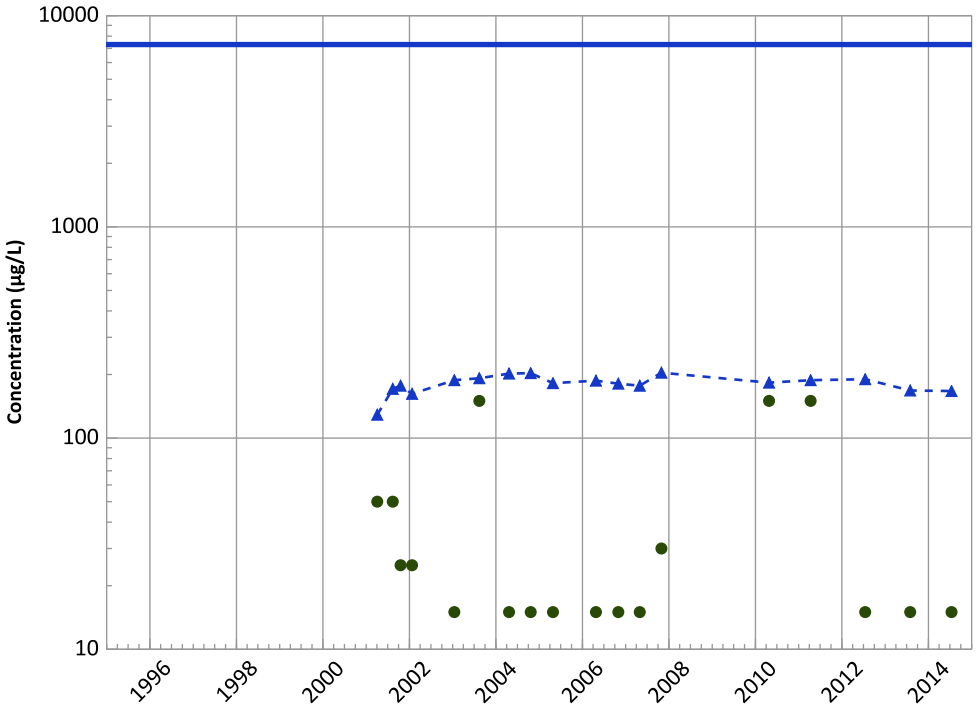
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

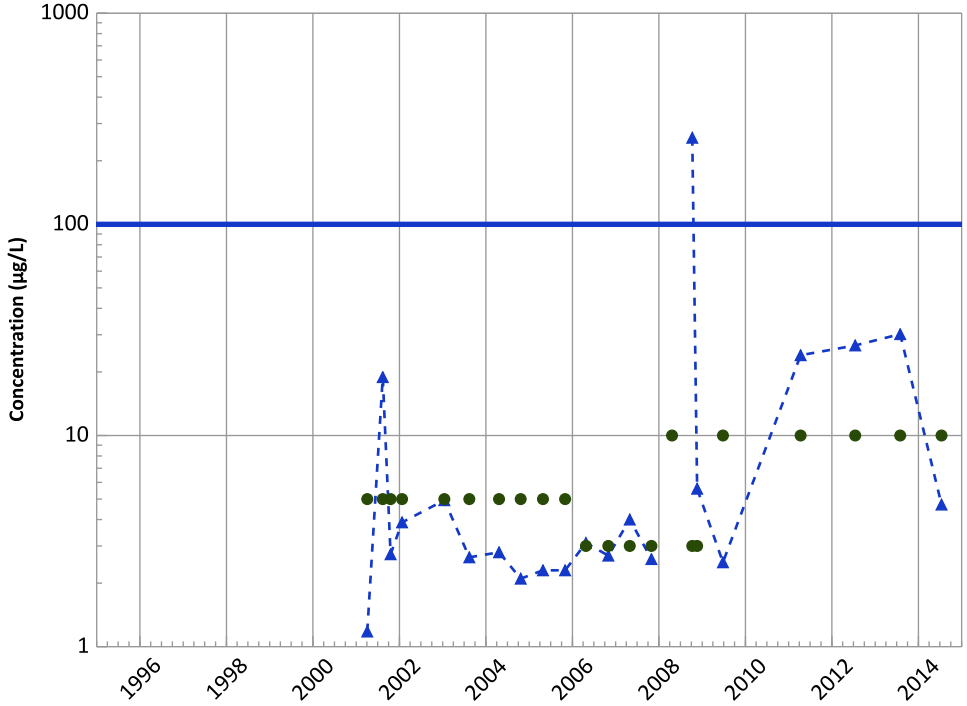


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

Chromium, Total Trend



Concentration Trend

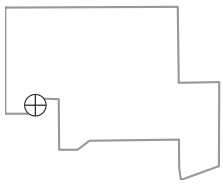
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

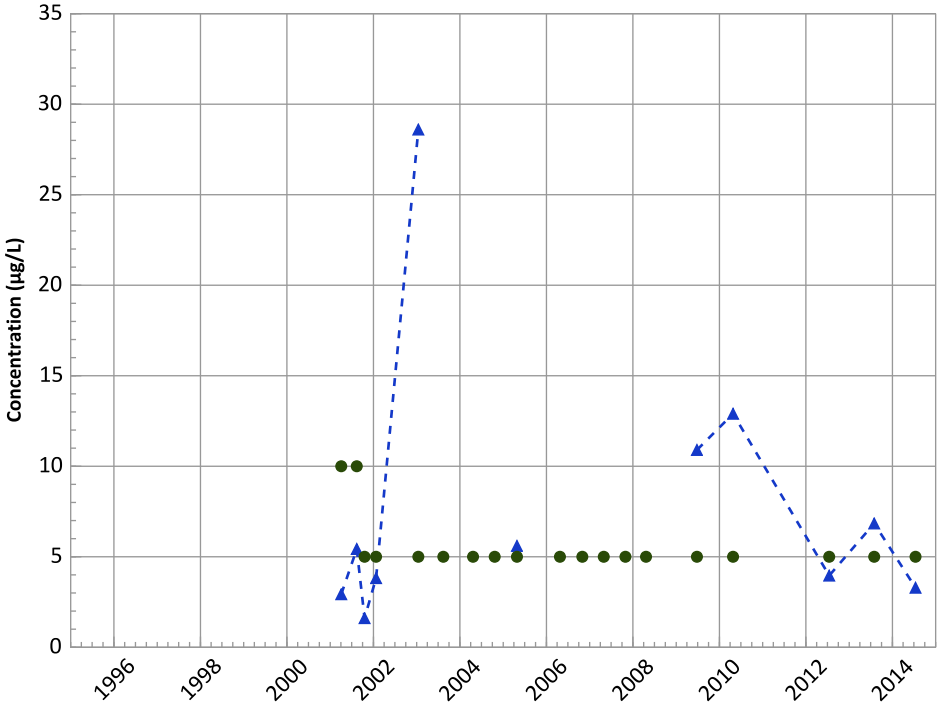
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

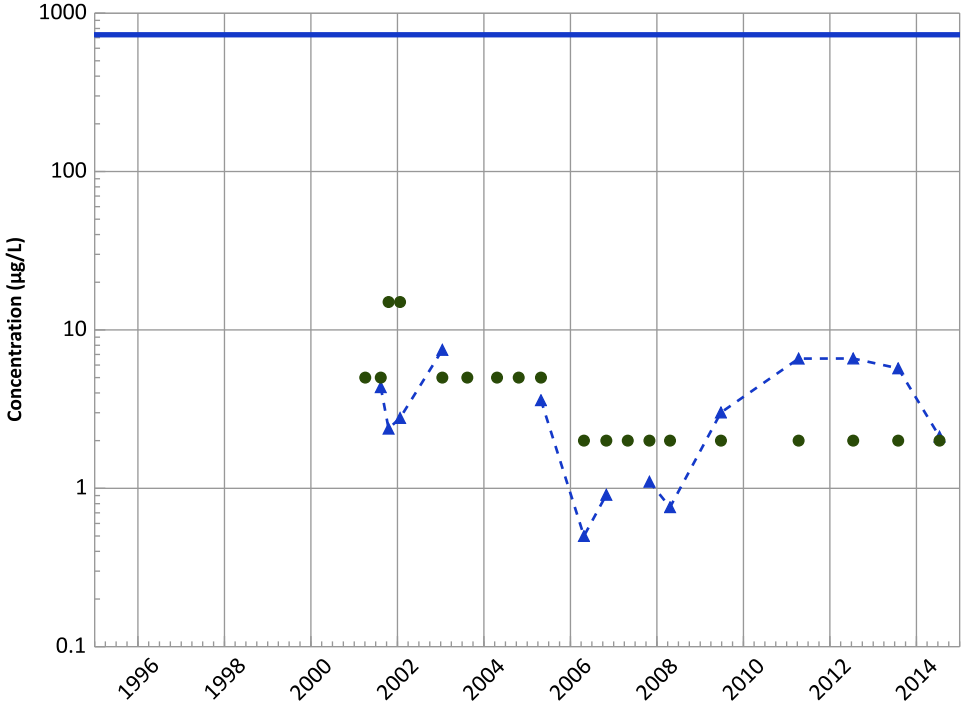


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

Nickel Trend



Concentration Trend

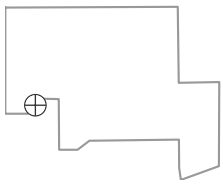
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

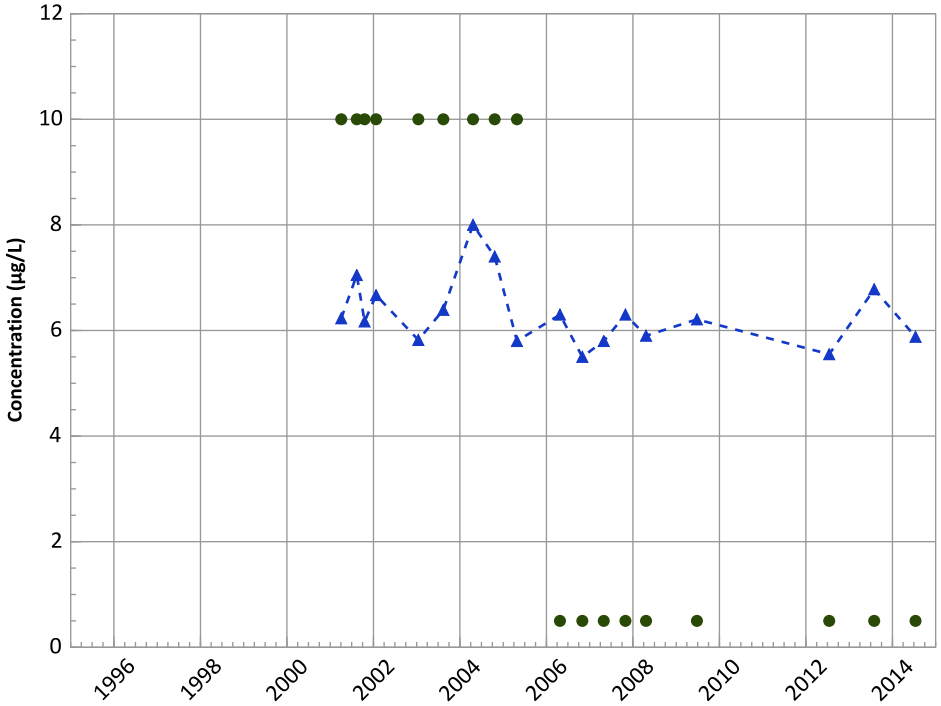
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Molybdenum Trend

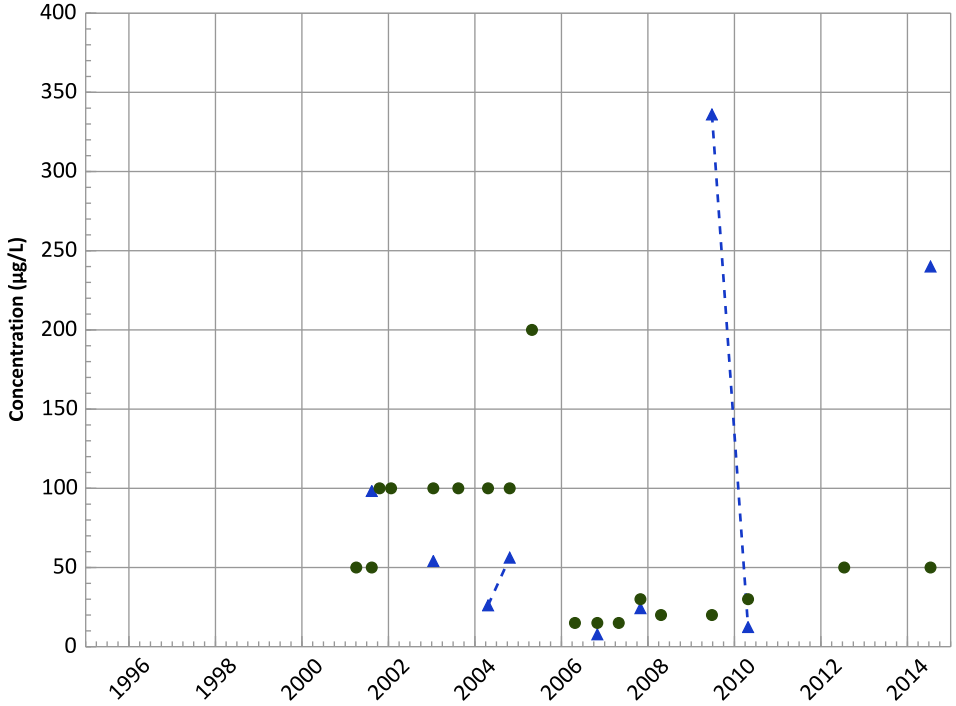


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Aluminum Trend



Concentration Trend

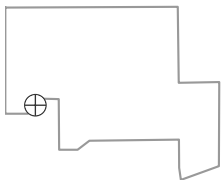
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

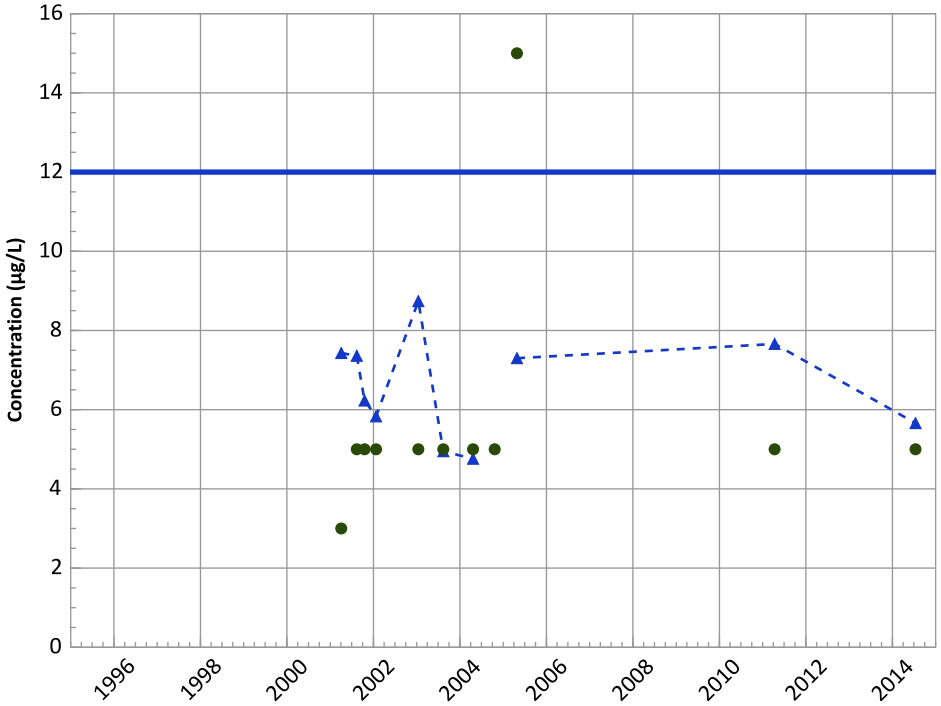
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Arsenic Trend

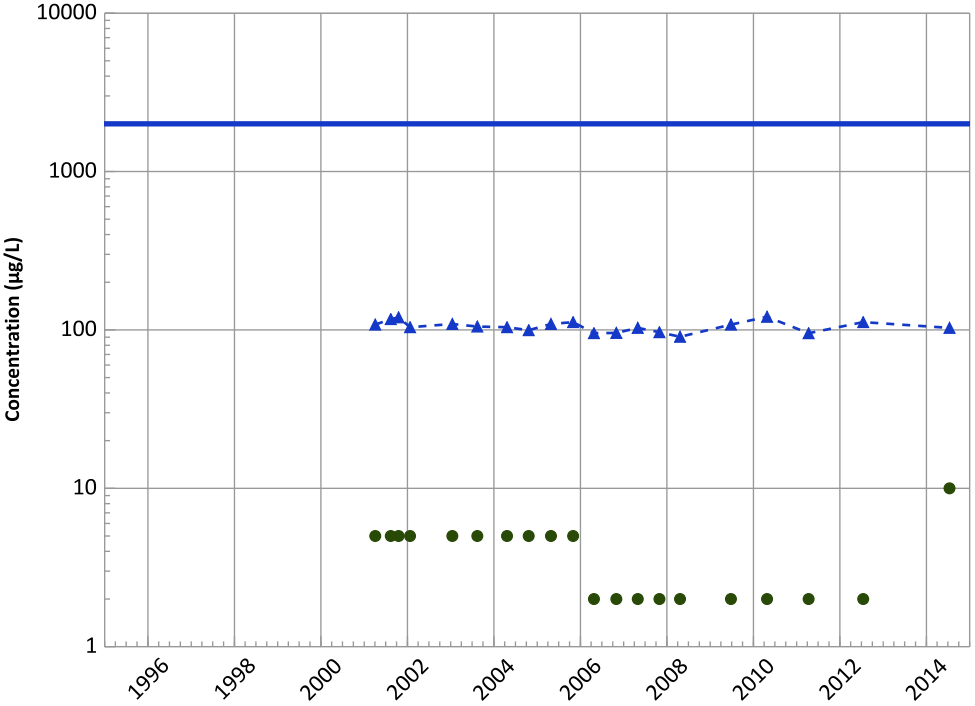


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Barium Trend



Concentration Trend

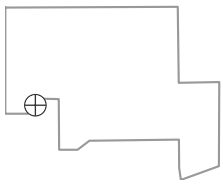
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

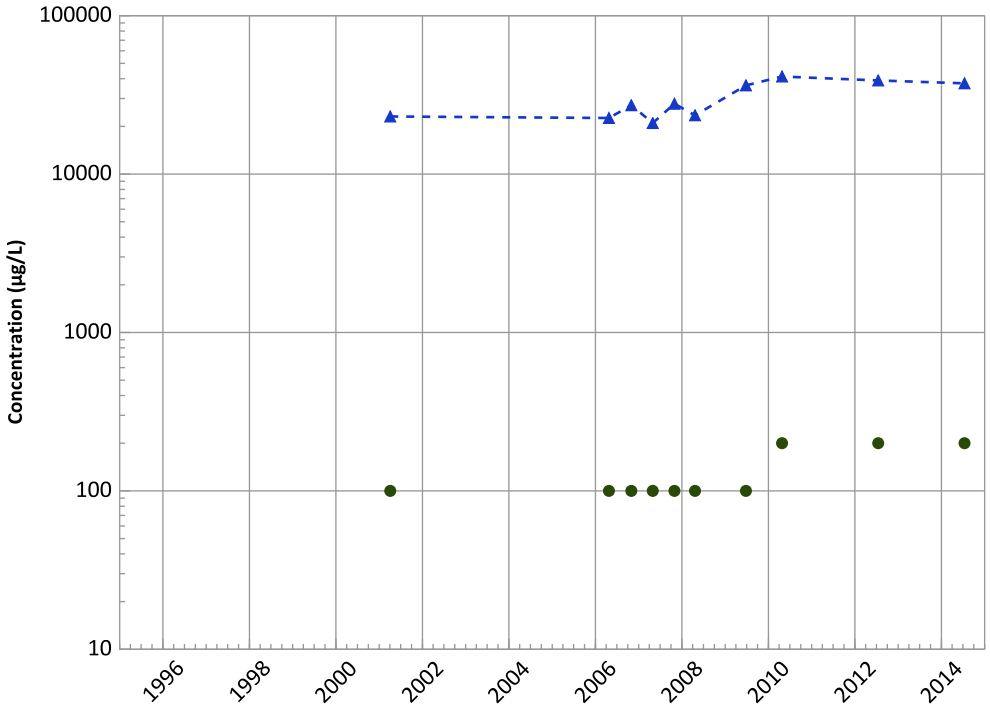
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

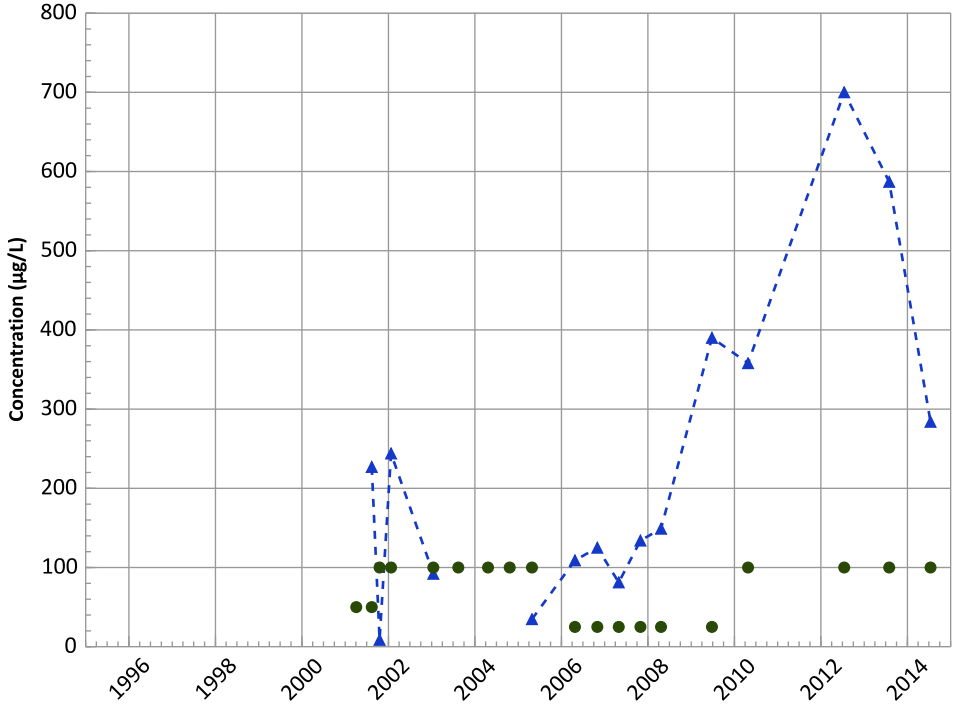


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Iron Trend



Concentration Trend

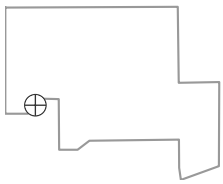
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

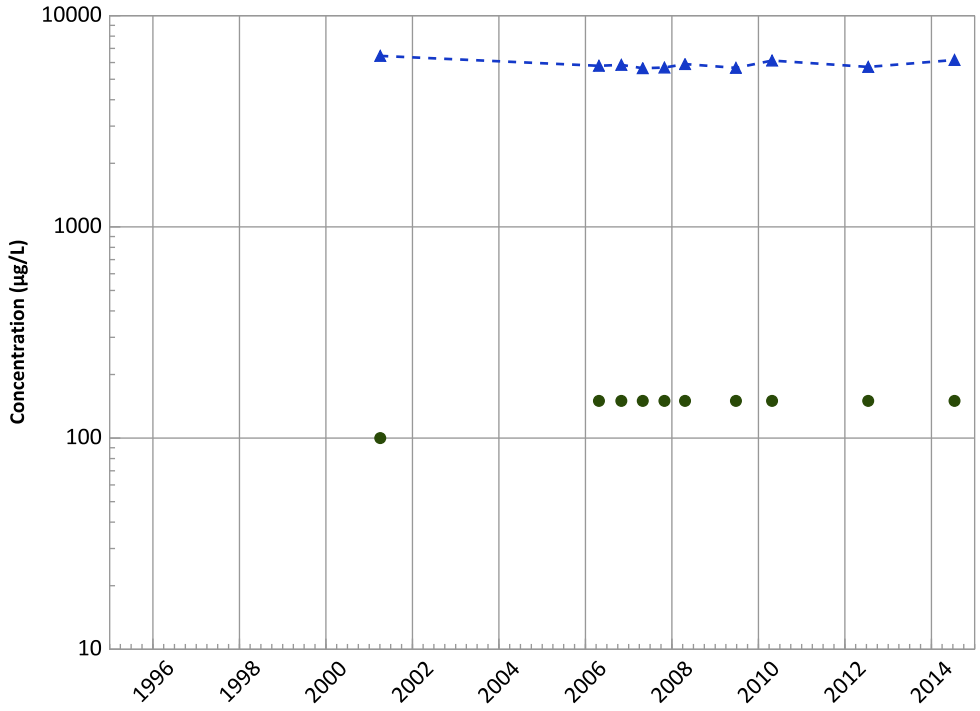
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

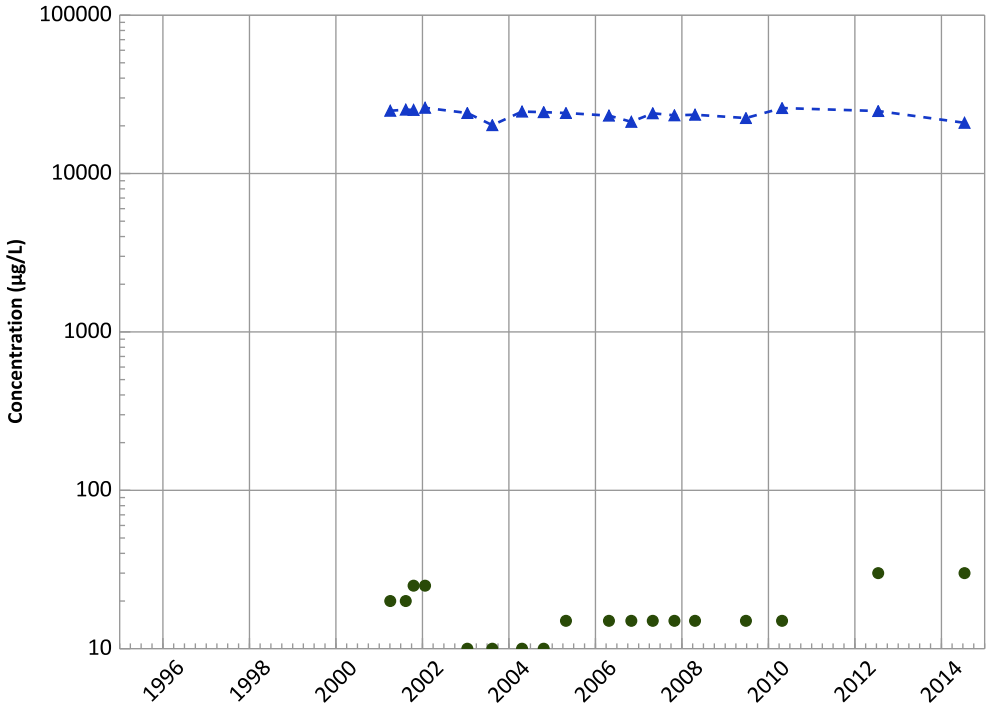


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Magnesium Trend



Concentration Trend

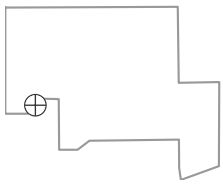
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

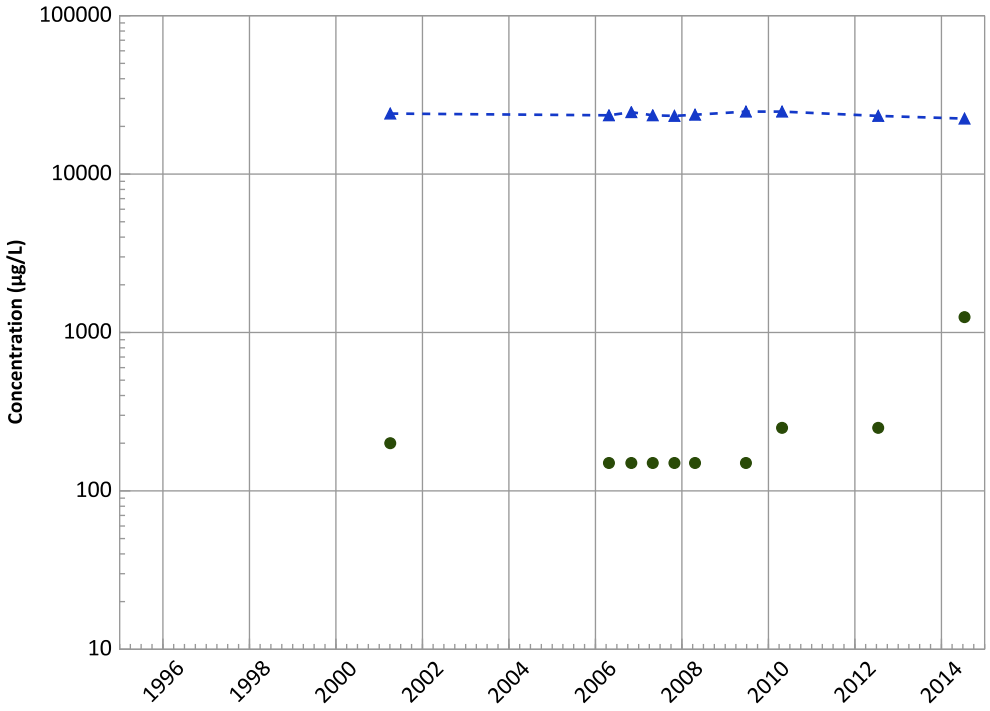
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1058 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

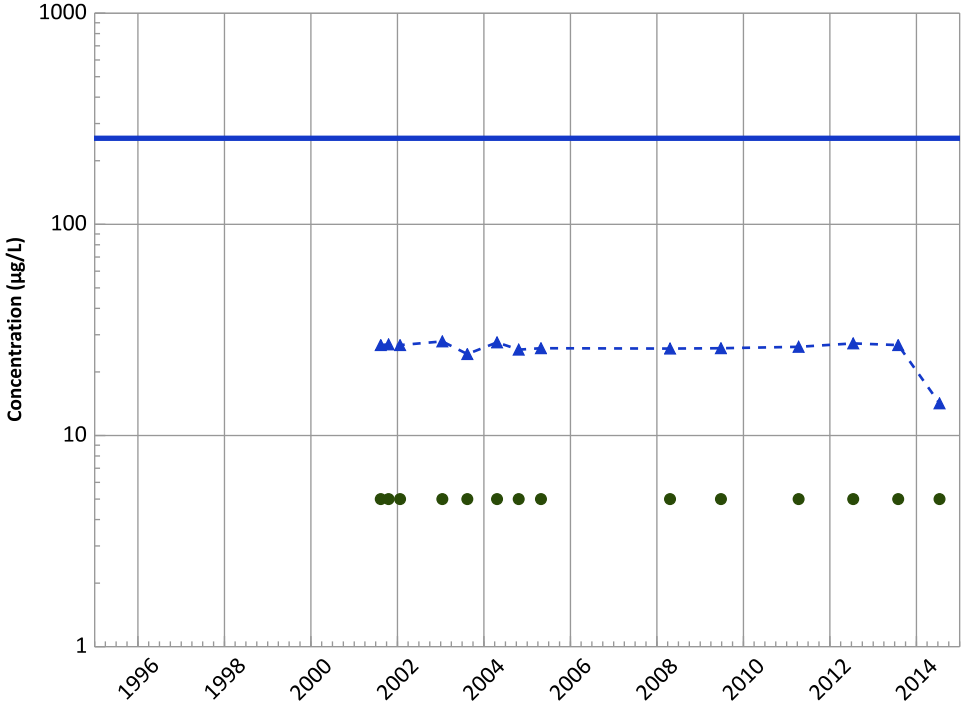


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Vanadium Trend



Concentration Trend

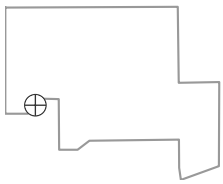
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

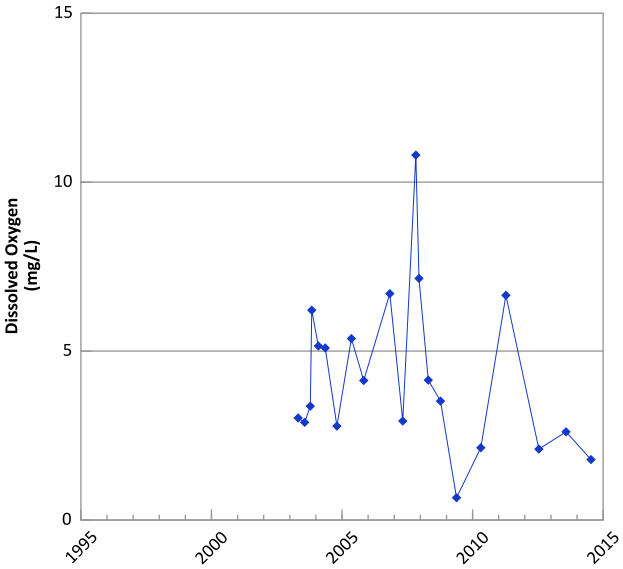
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

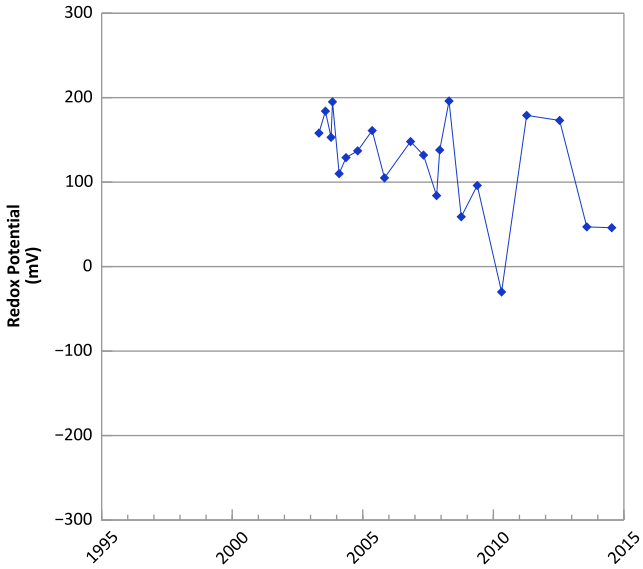
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

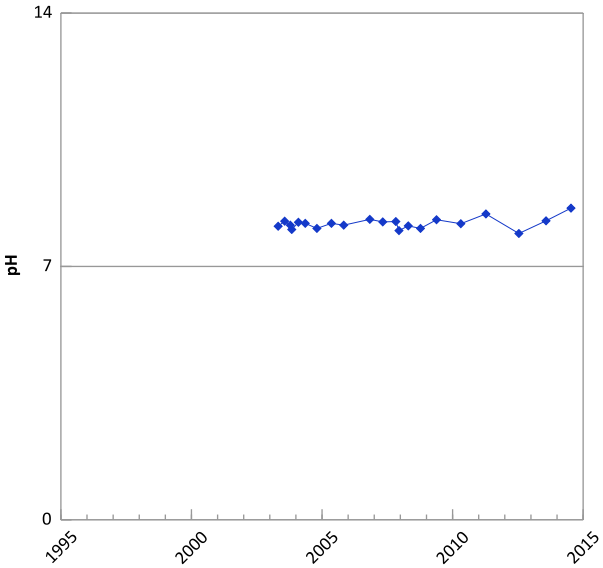
Well Location

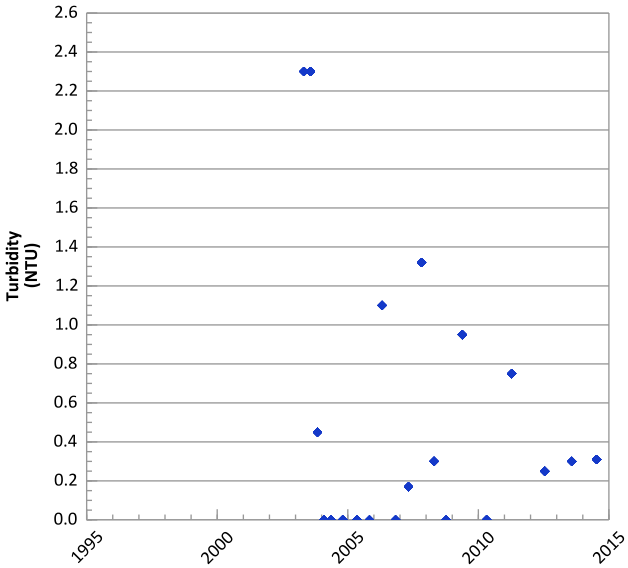


PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



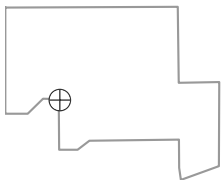






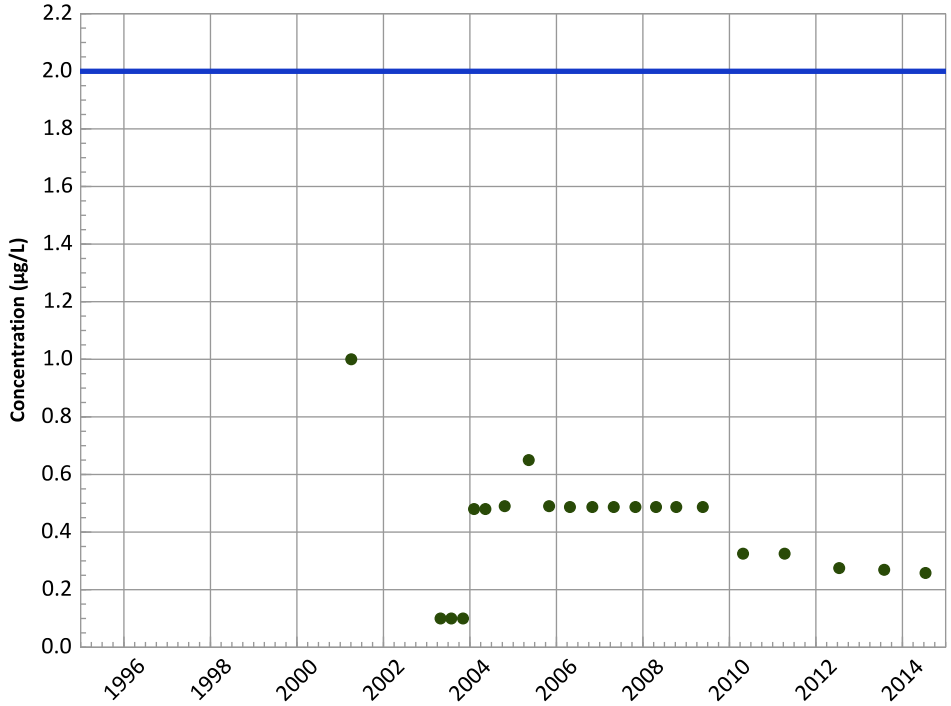
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

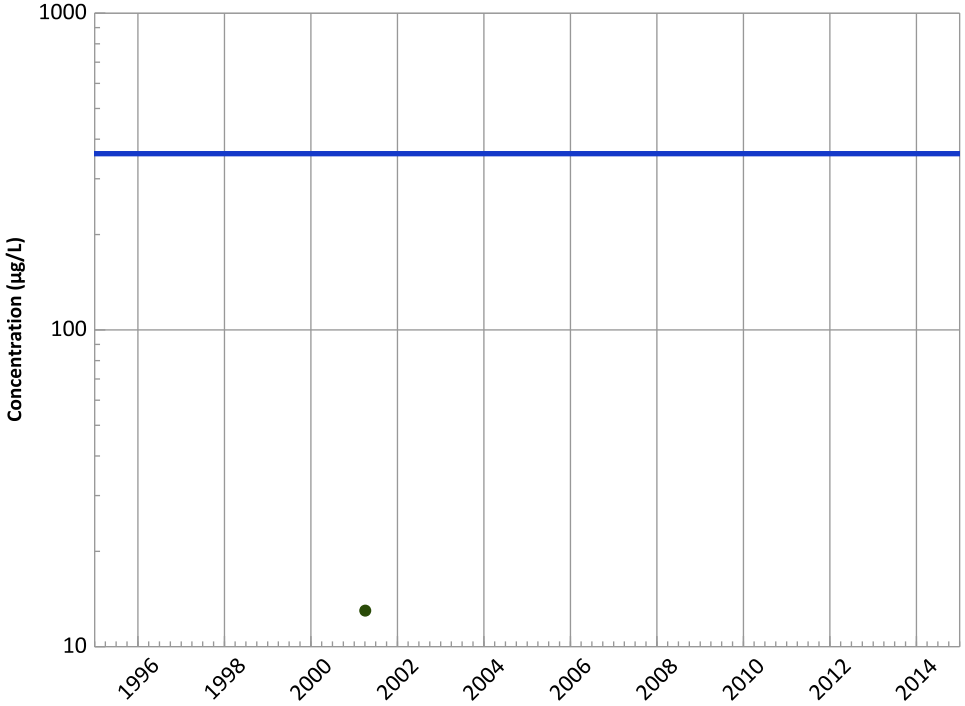


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

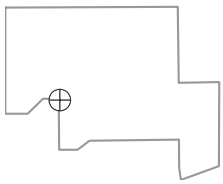
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

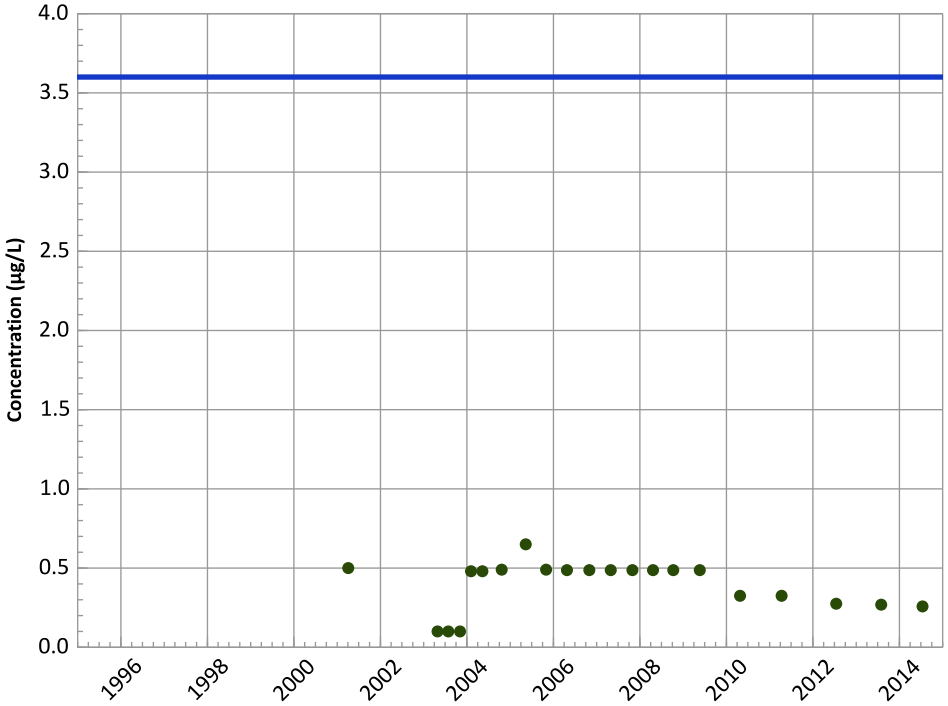
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

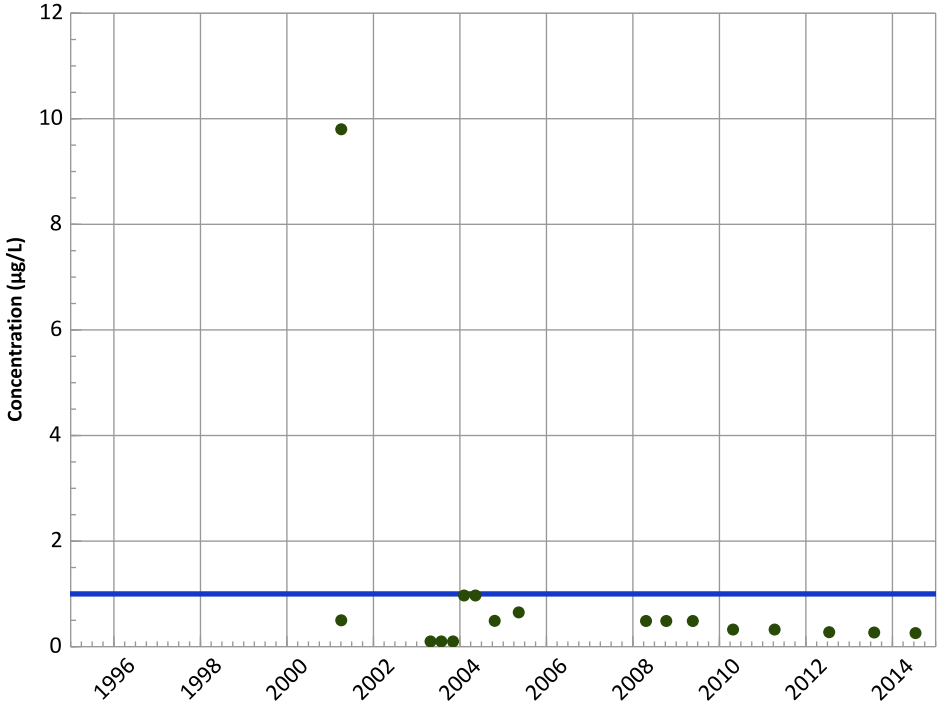


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

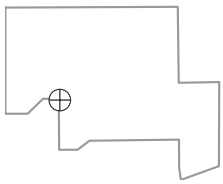
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

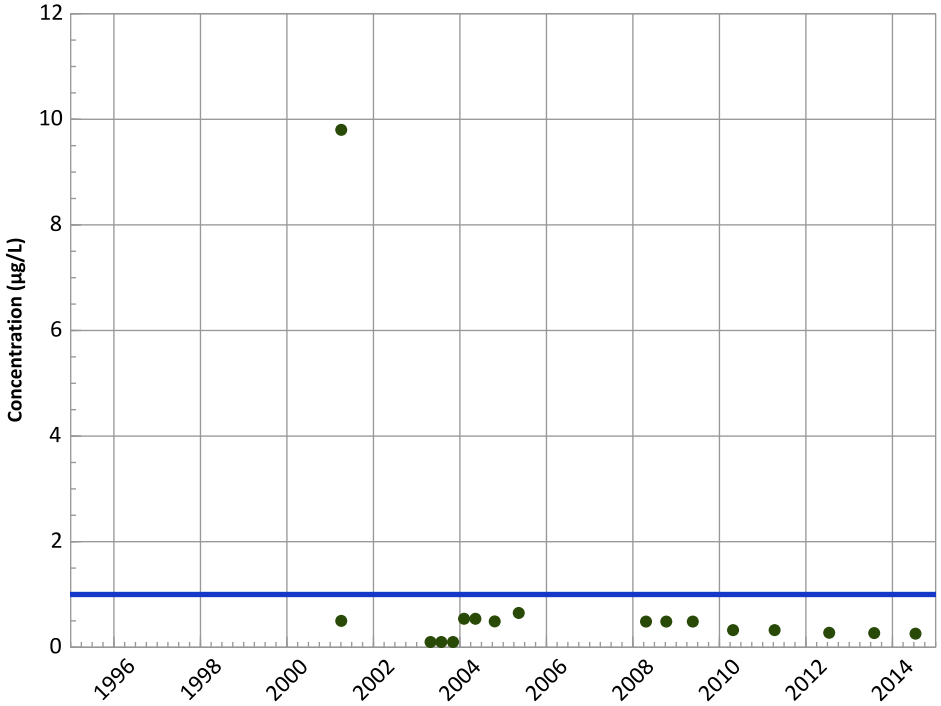
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

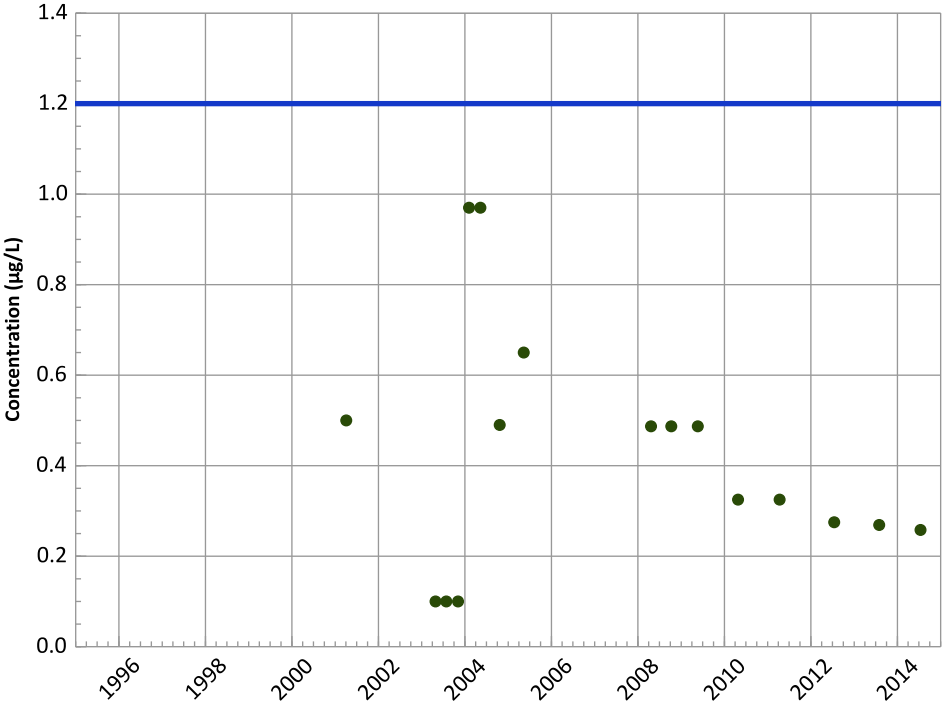


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

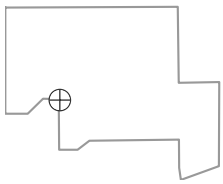
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

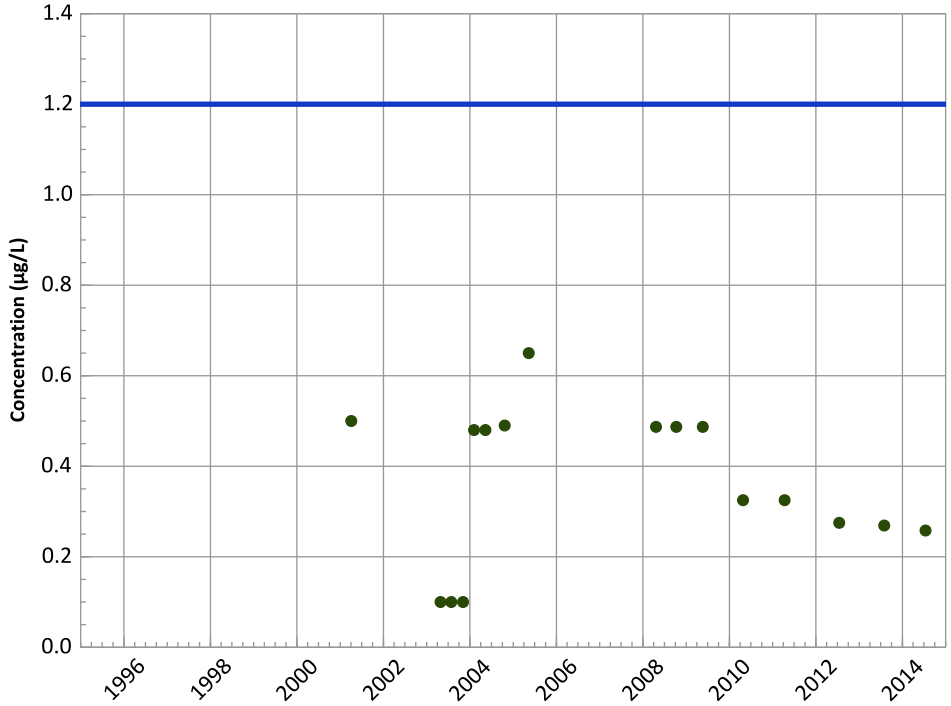
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

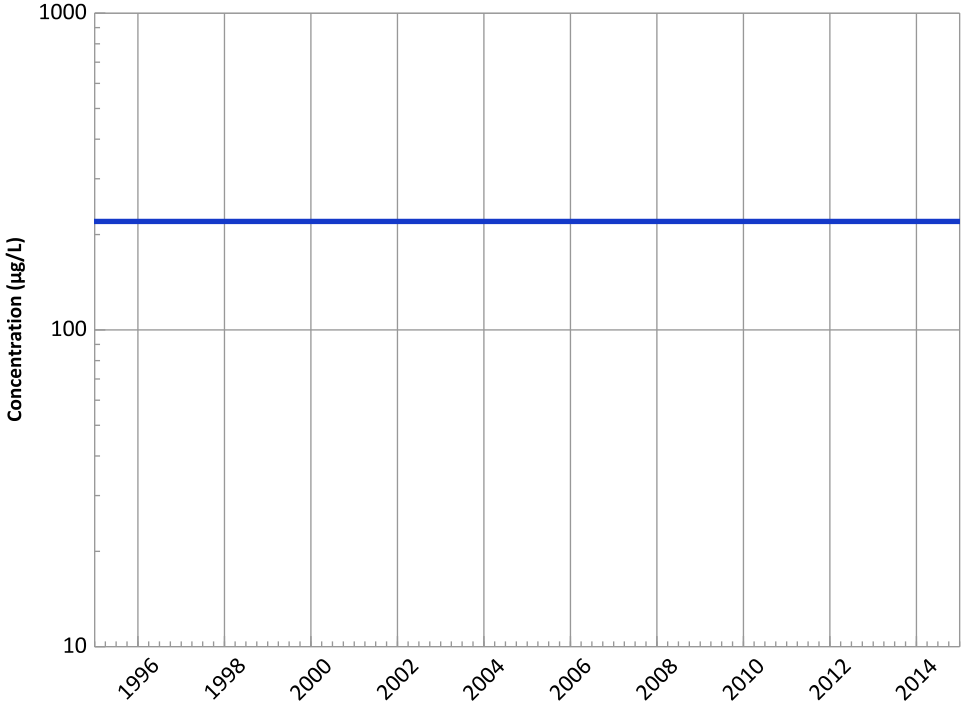


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

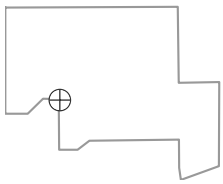
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

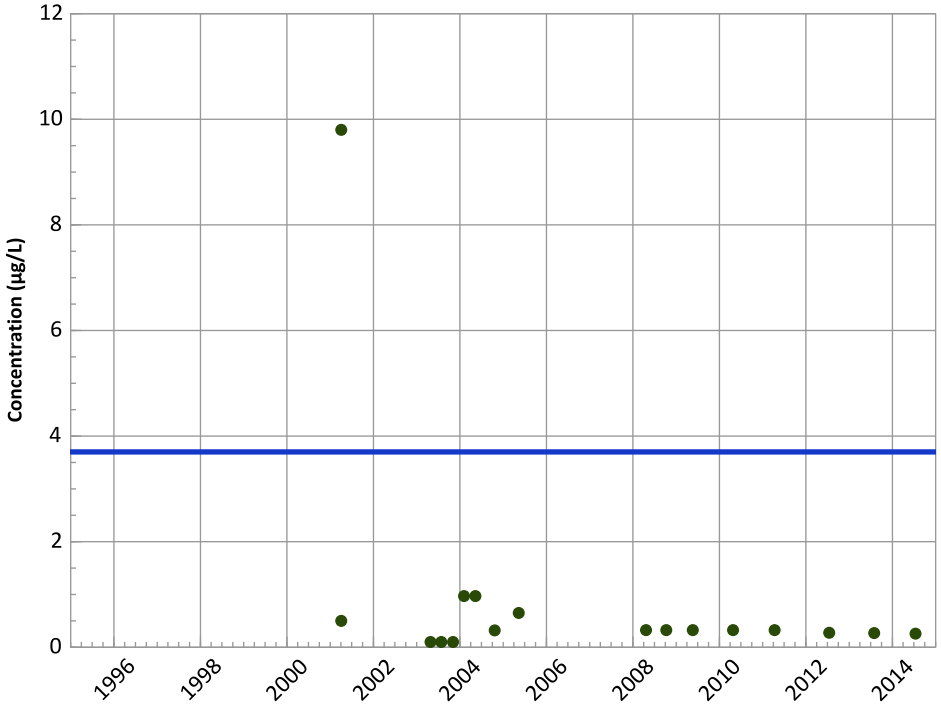
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

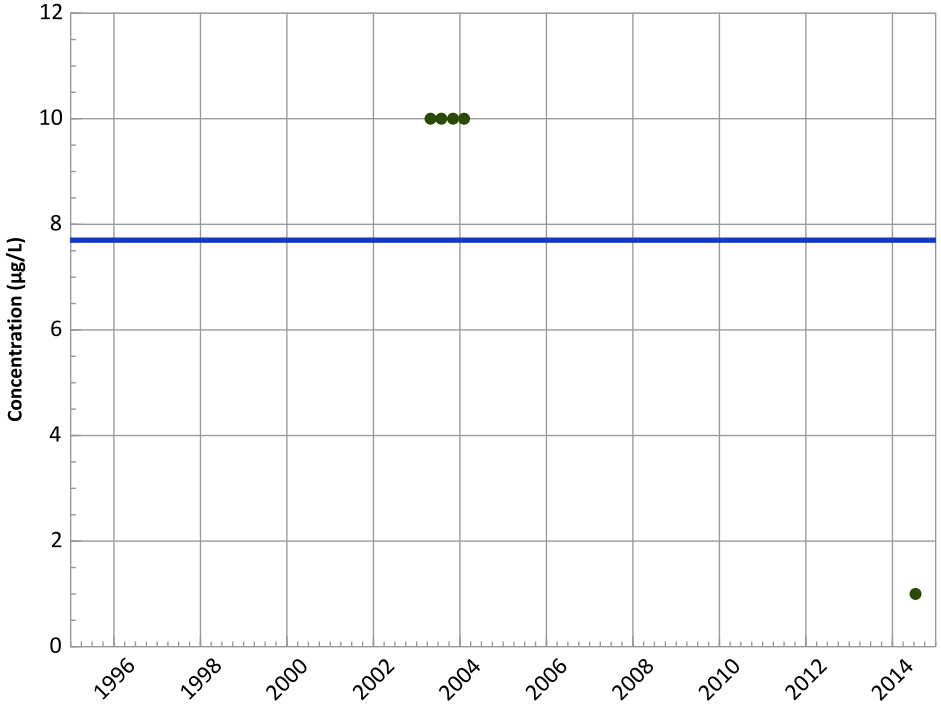


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

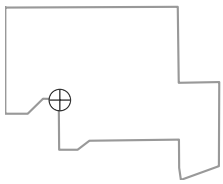
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

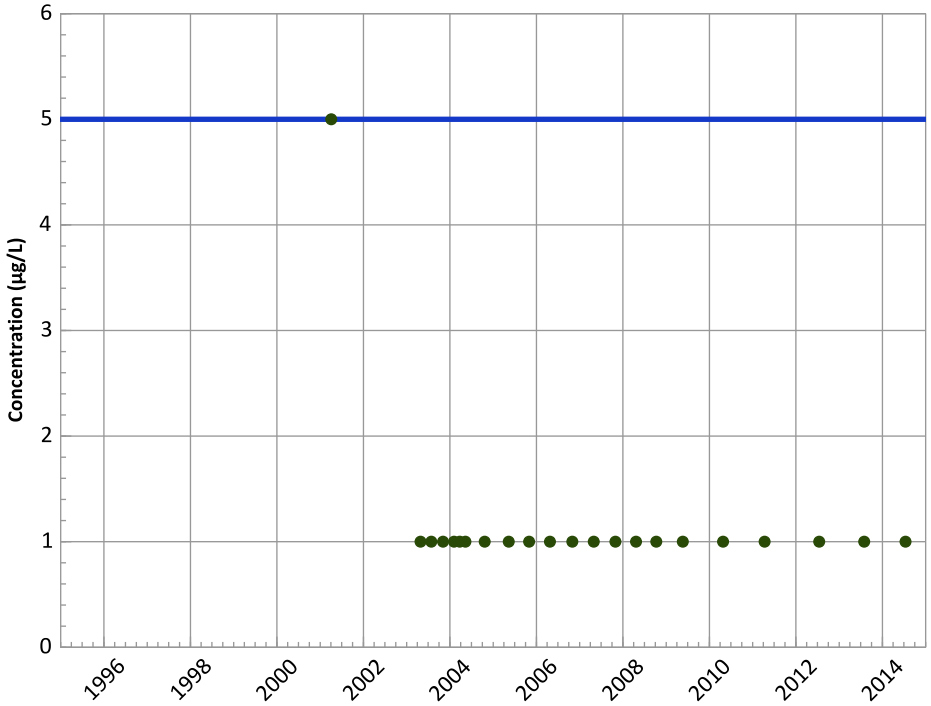
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

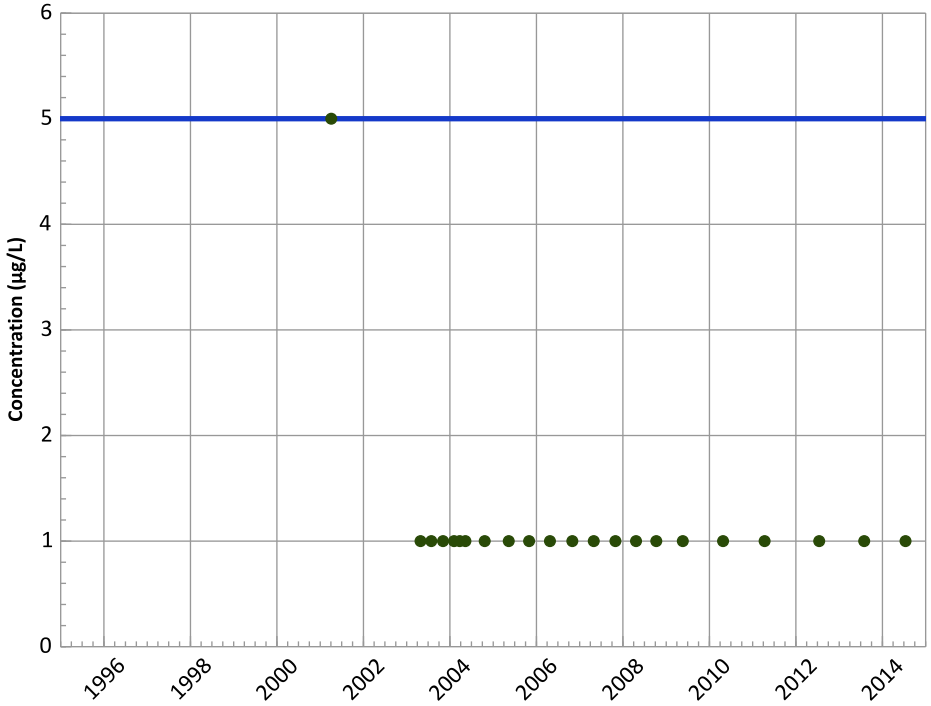


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

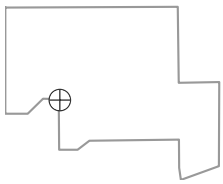
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

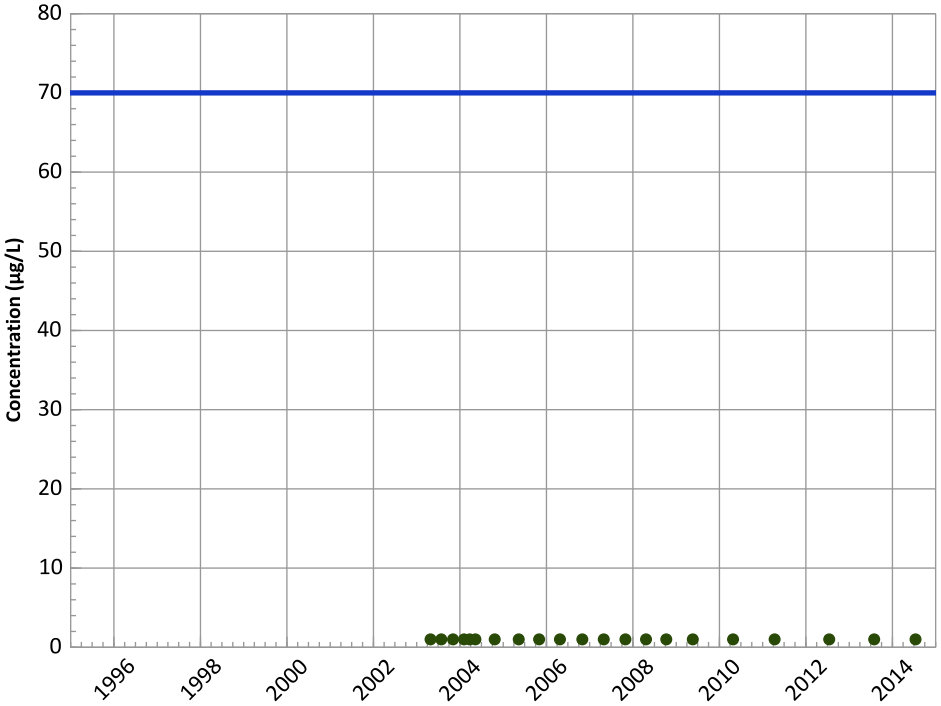
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

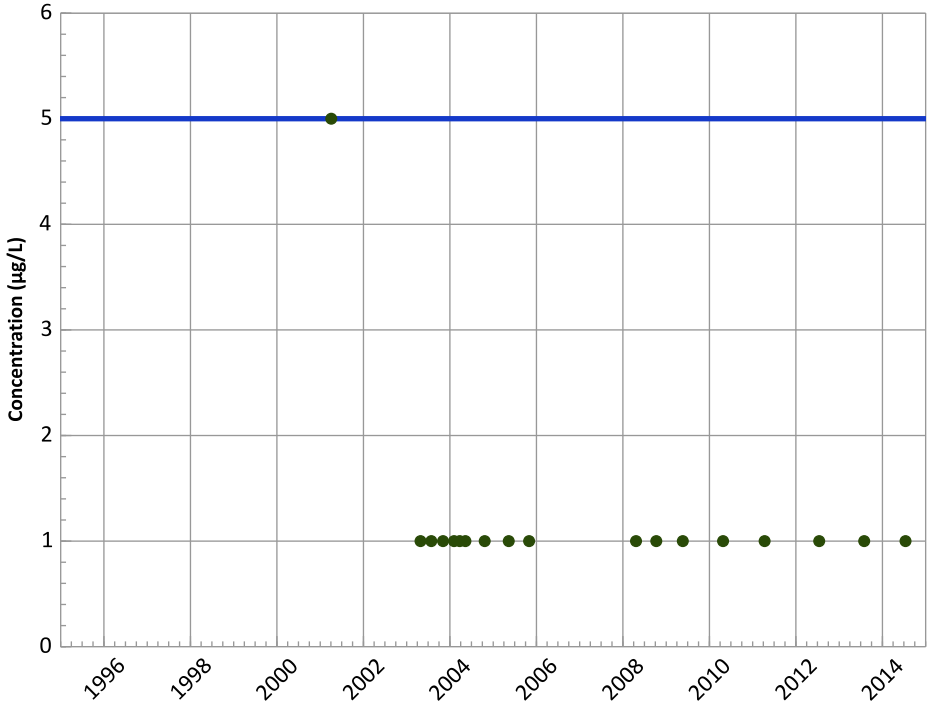


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

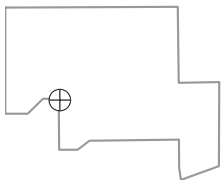
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

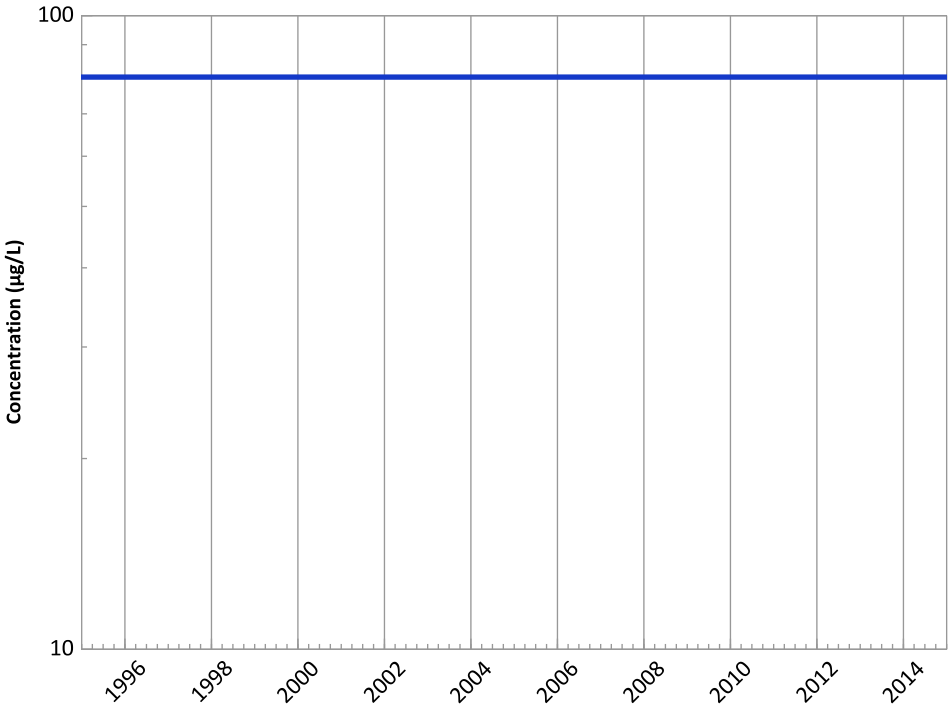
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

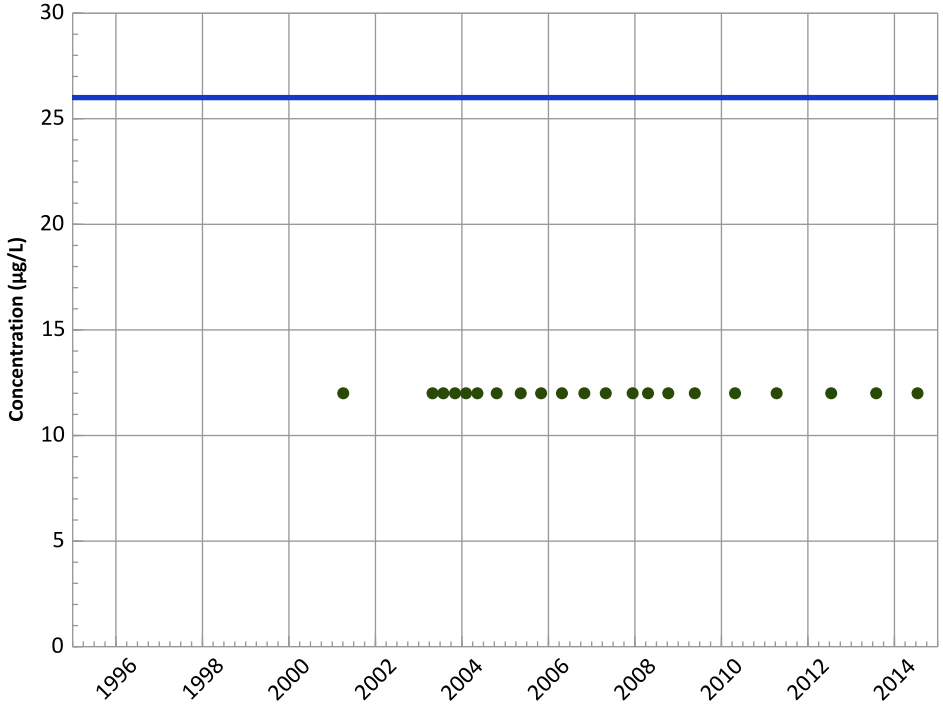


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

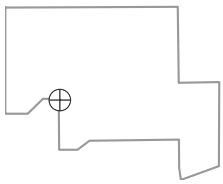
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

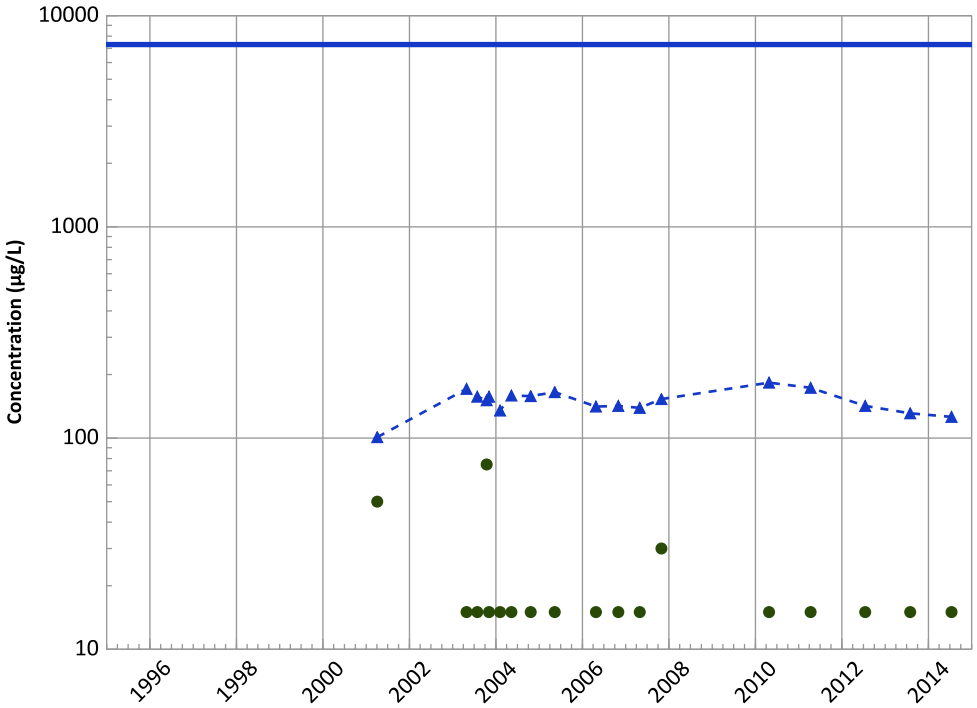
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

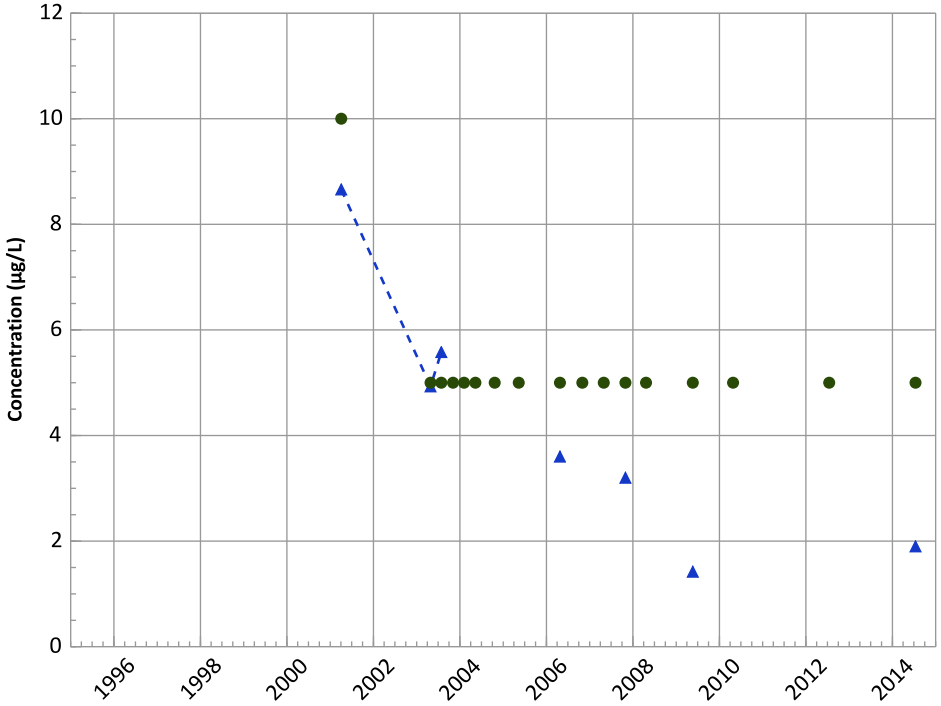


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Manganese Trend



Concentration Trend

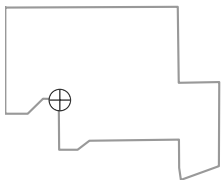
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

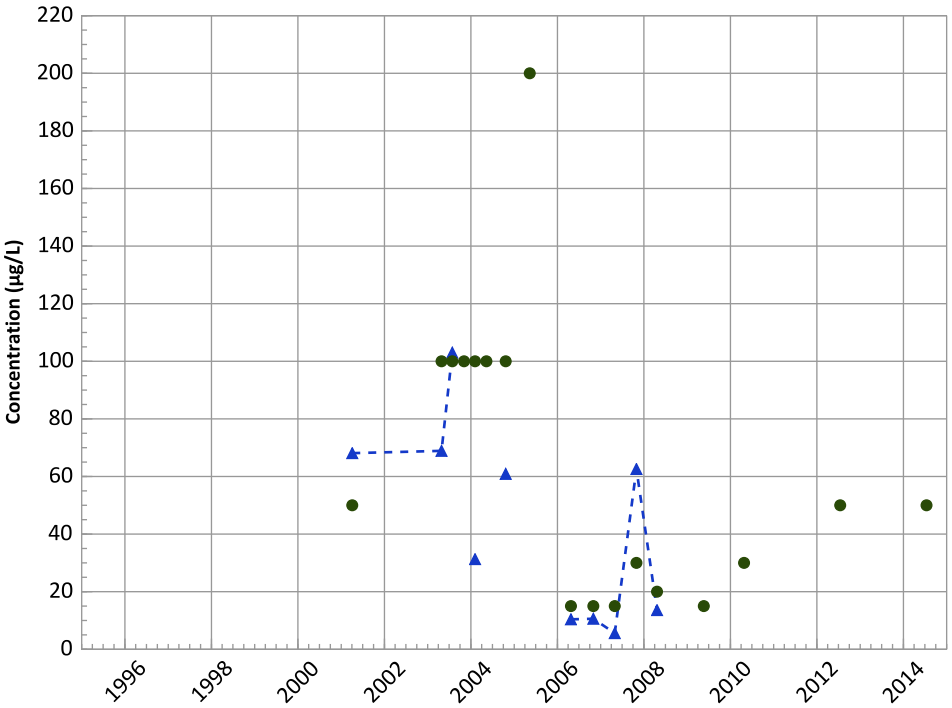
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

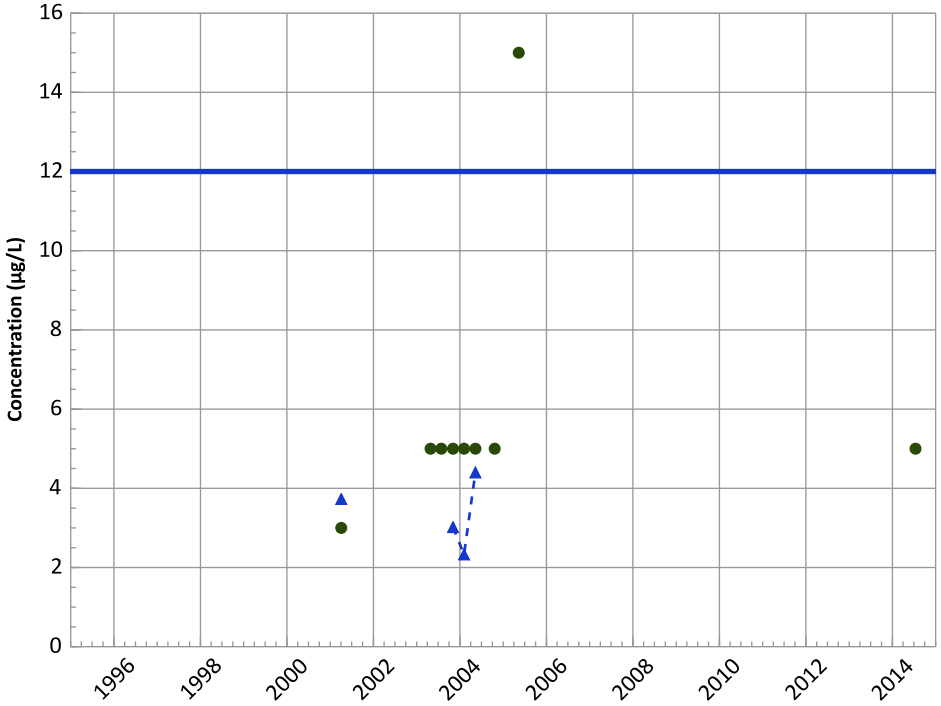


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Arsenic Trend



Concentration Trend

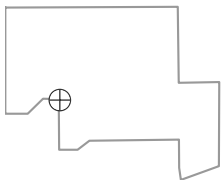
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

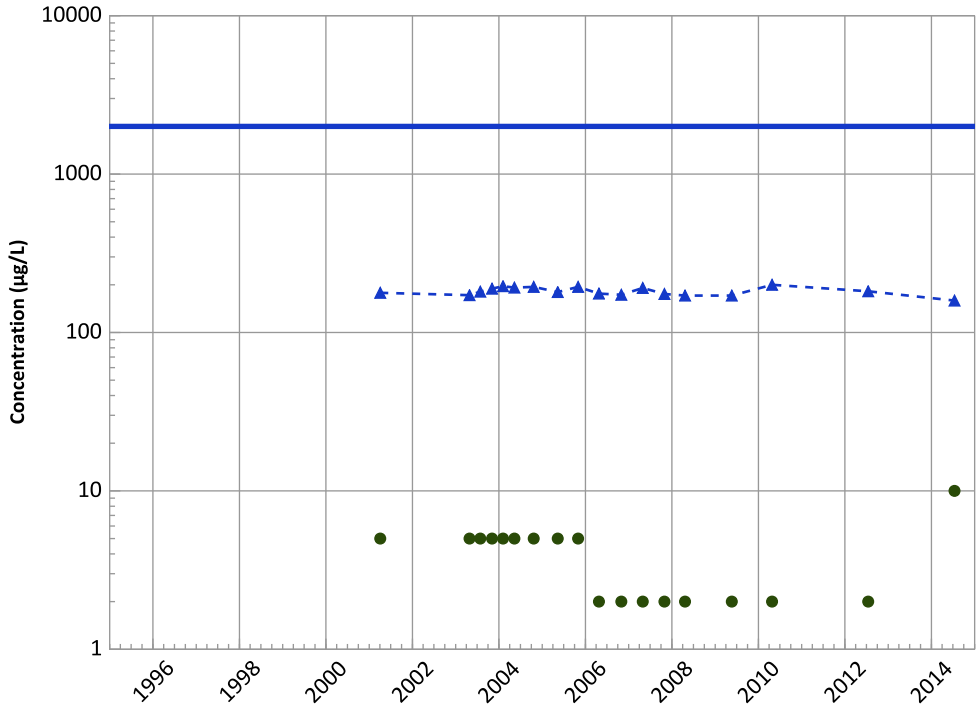
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

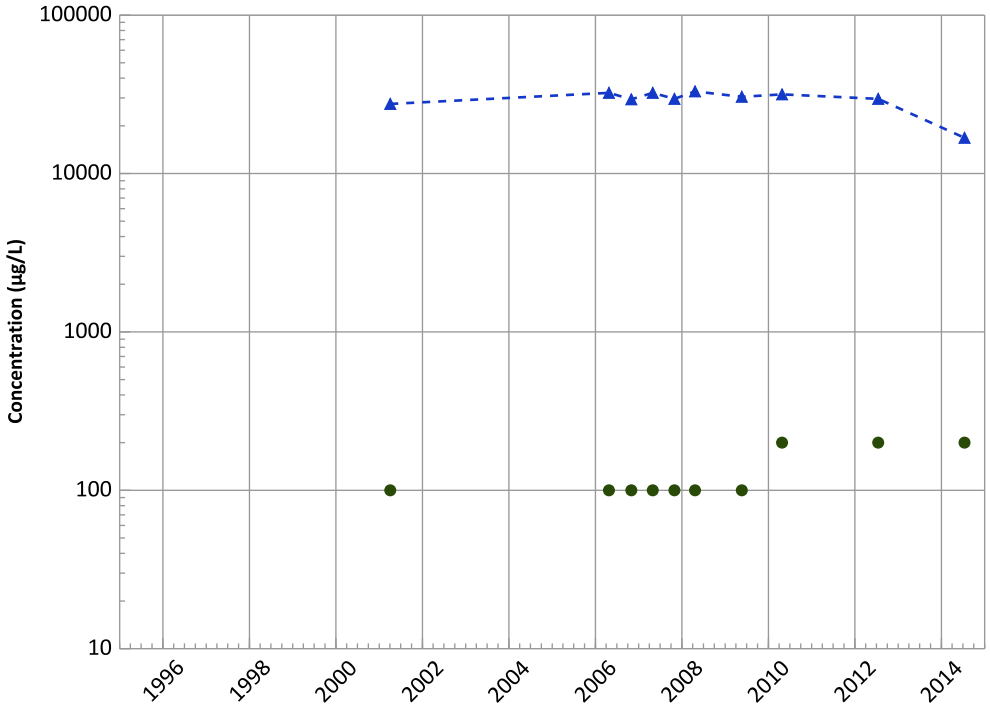


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Calcium Trend



Concentration Trend

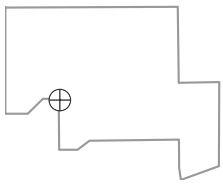
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

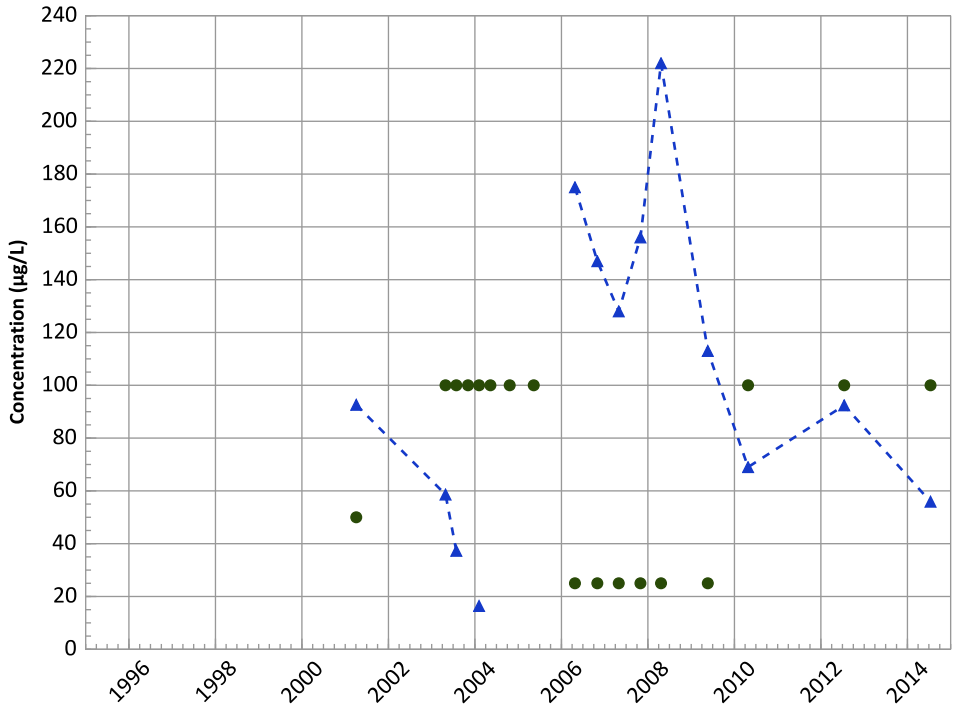
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

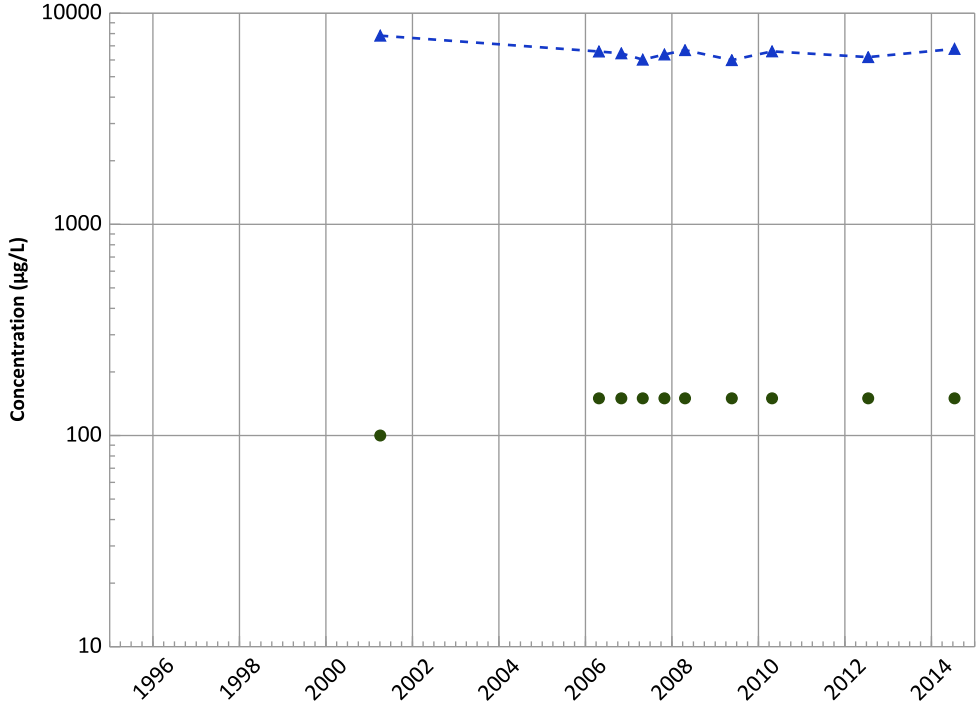


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Potassium Trend



Concentration Trend

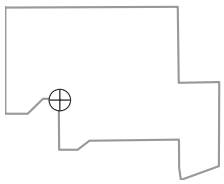
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

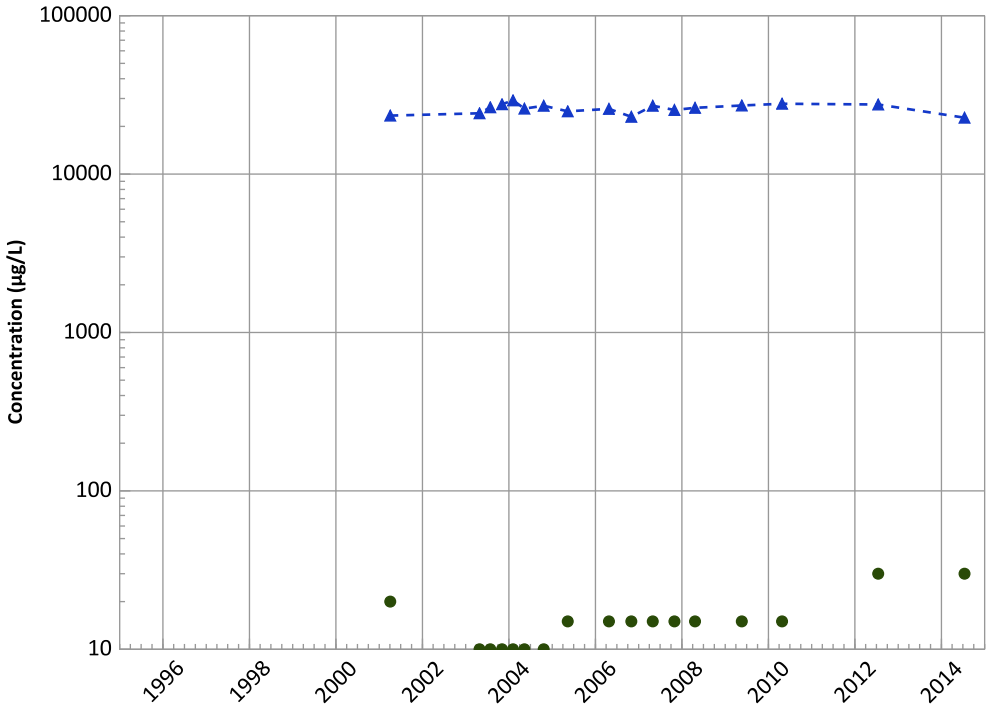
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1059 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

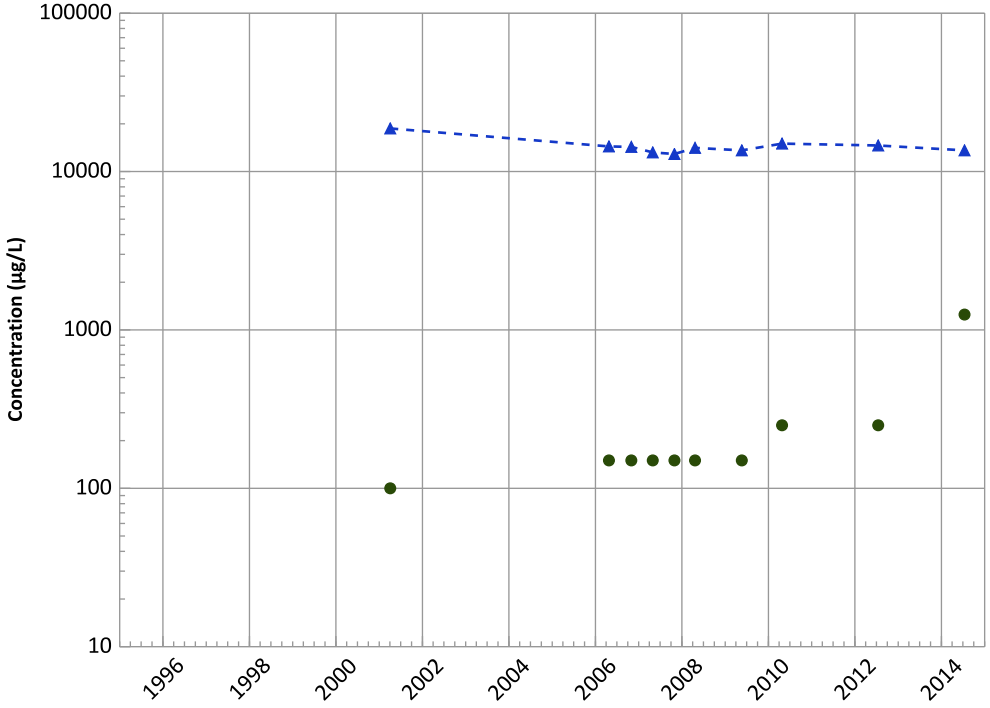


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Sodium Trend



Concentration Trend

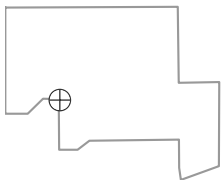
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

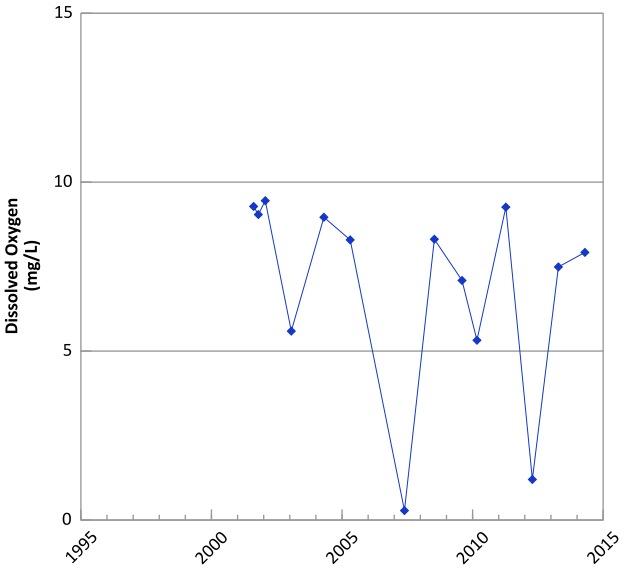
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/04/2001 to 07/15/2014
Analysis Date: 03/19/2015

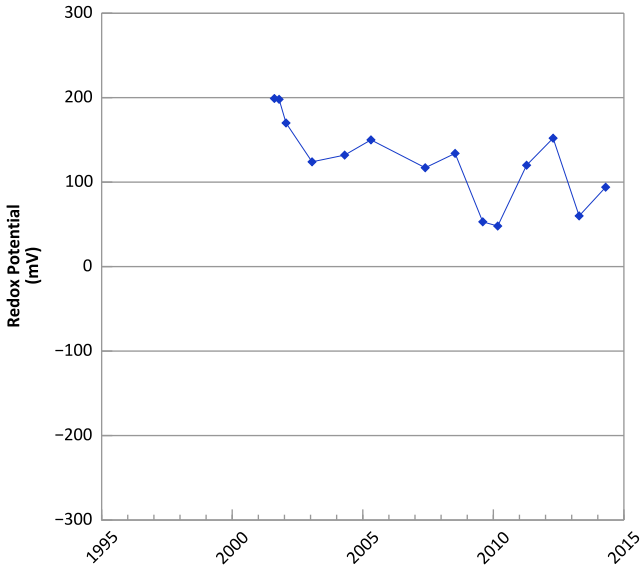
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

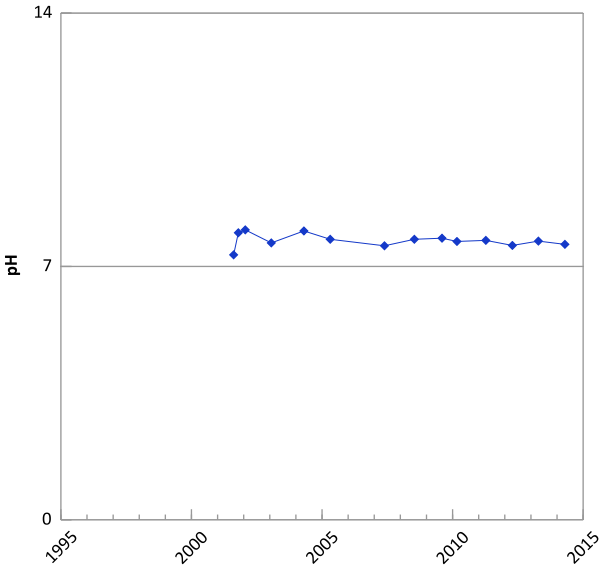
Well Location

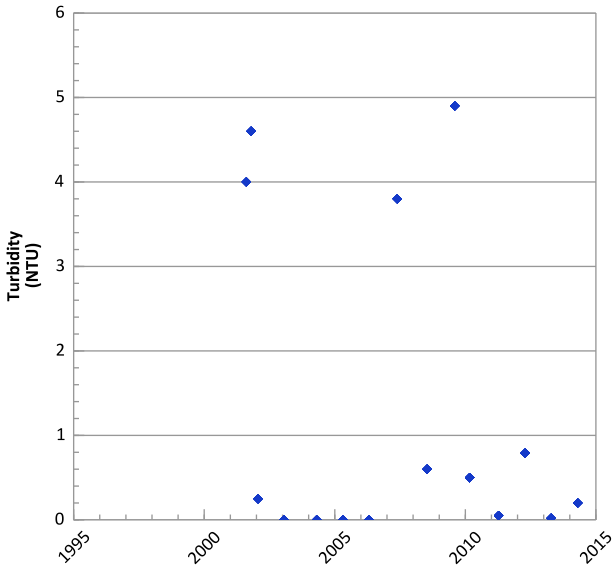


PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



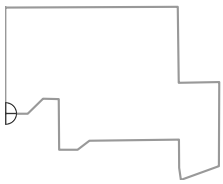






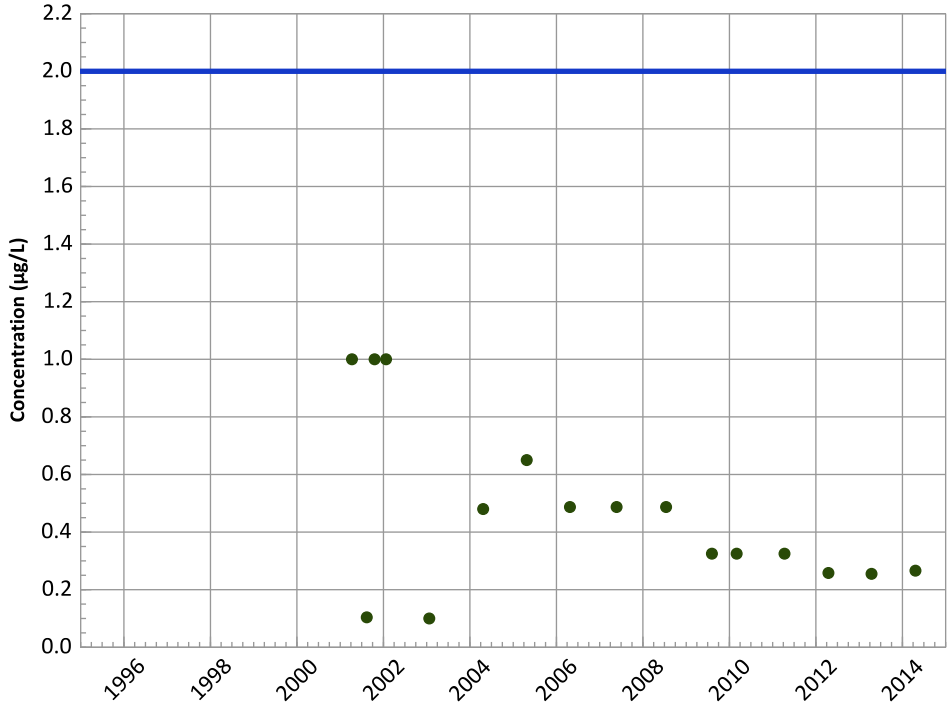
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

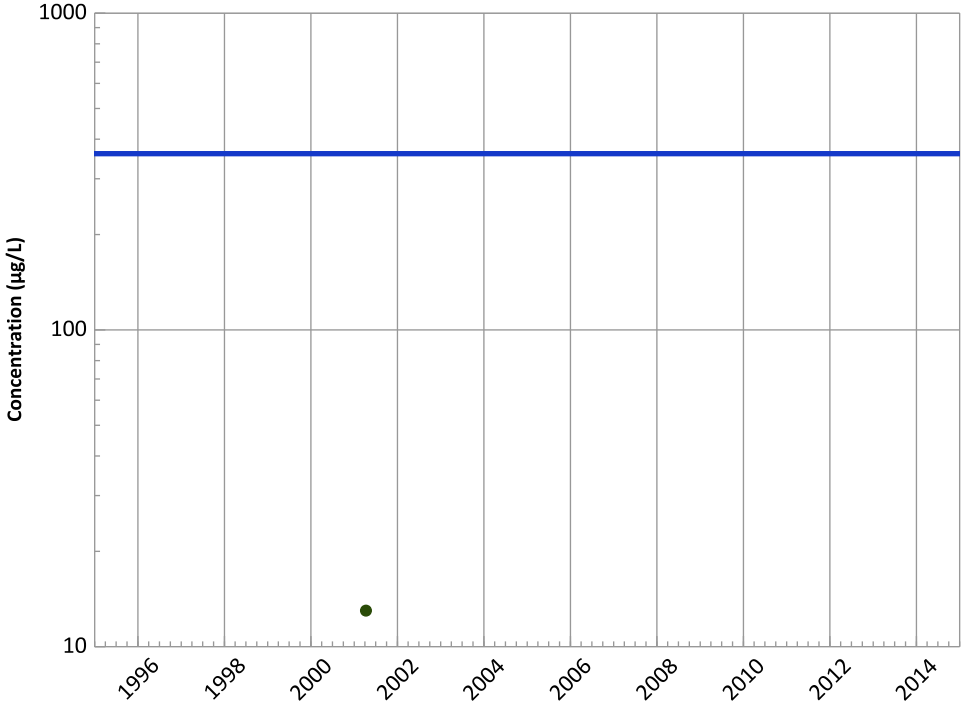


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

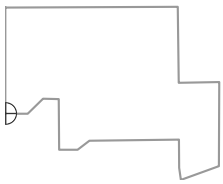
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

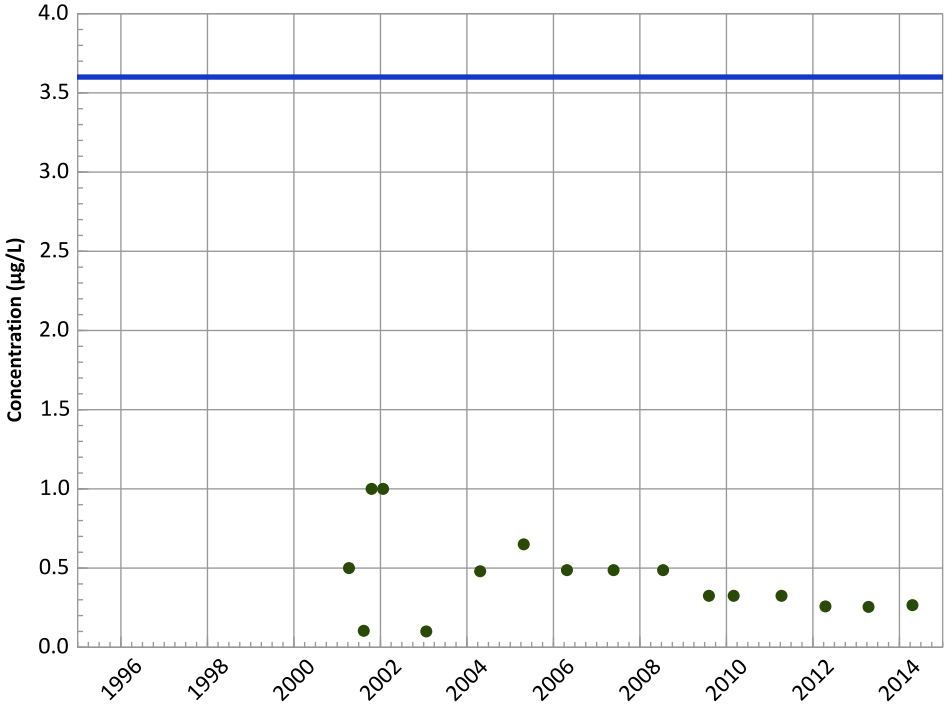
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

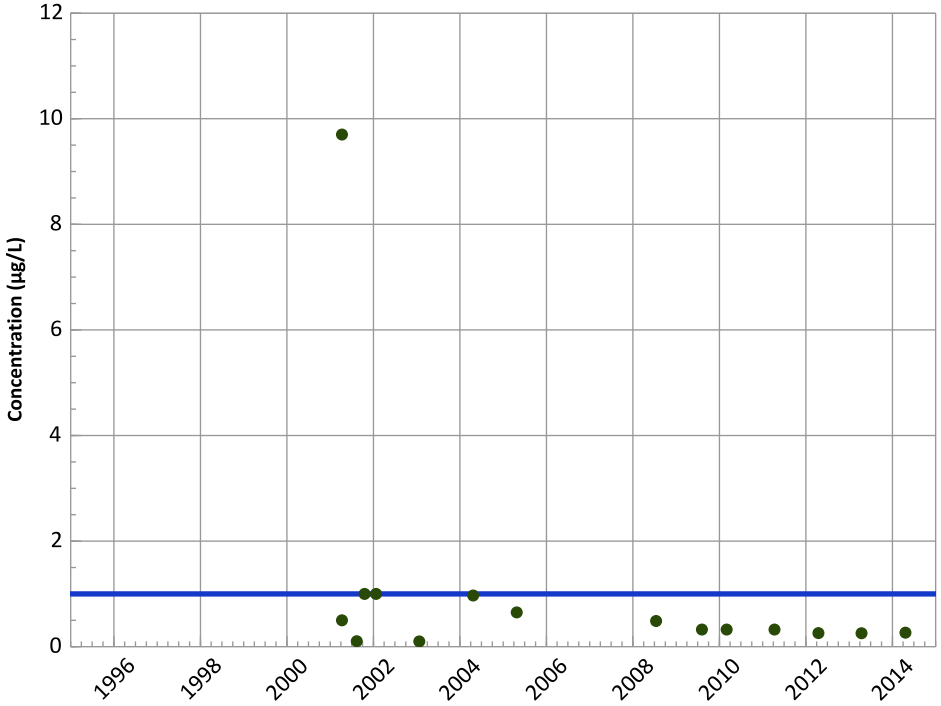


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

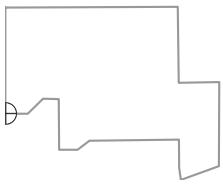
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

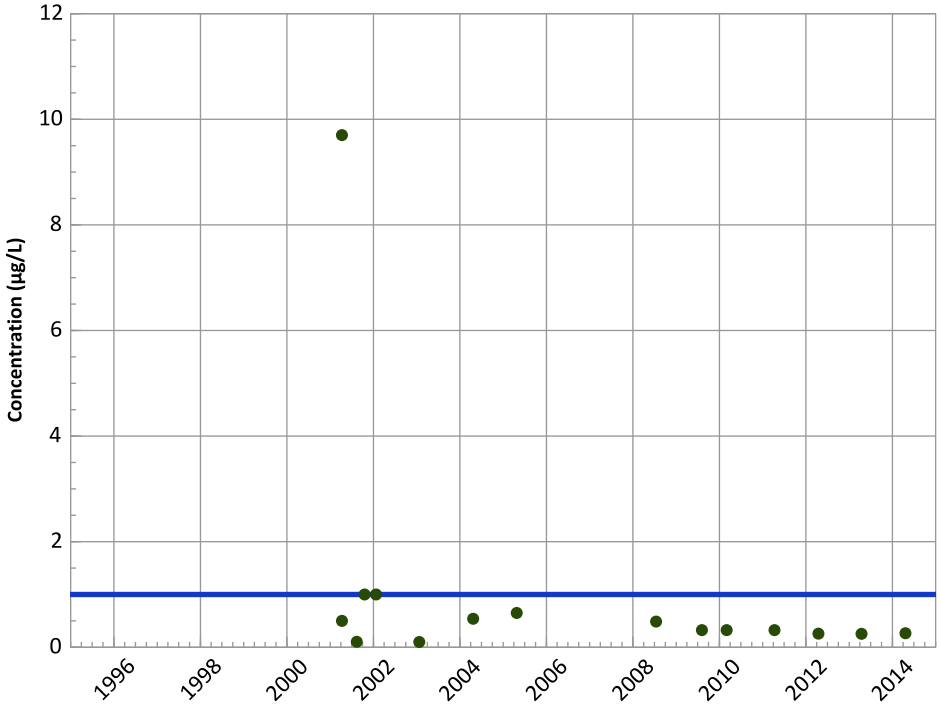
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

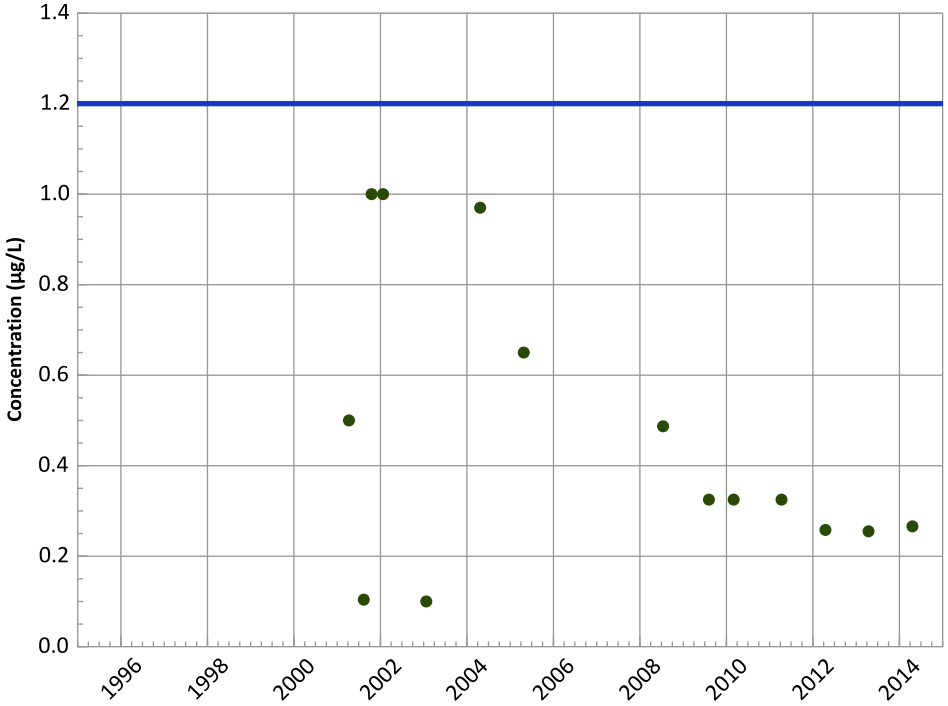


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

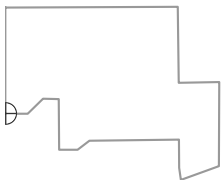
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

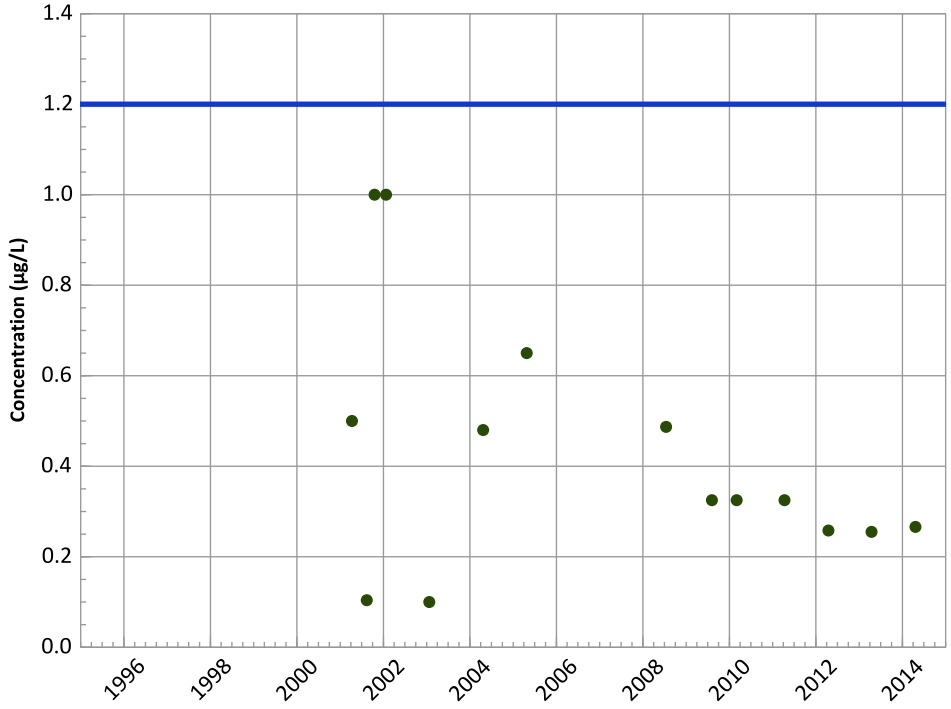
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

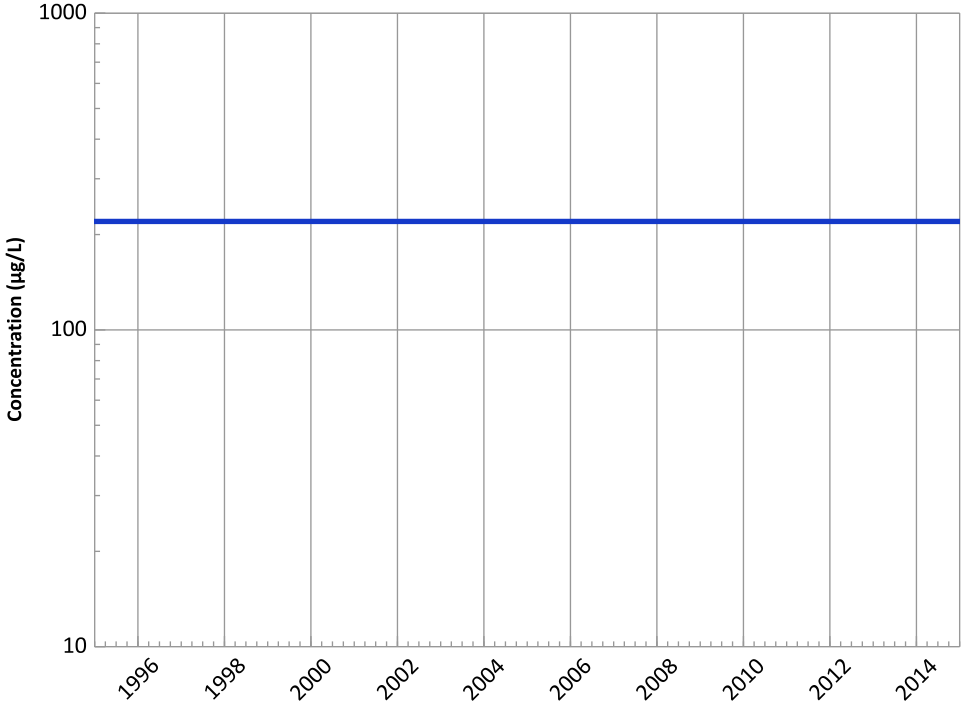


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

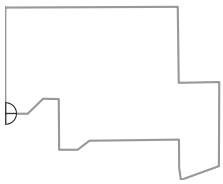
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

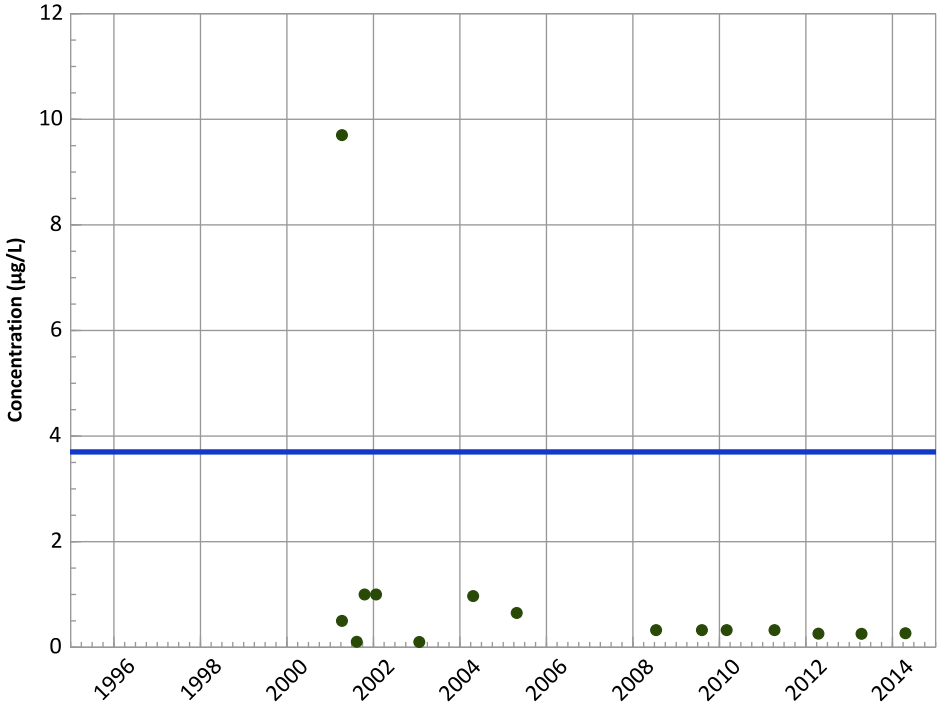
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

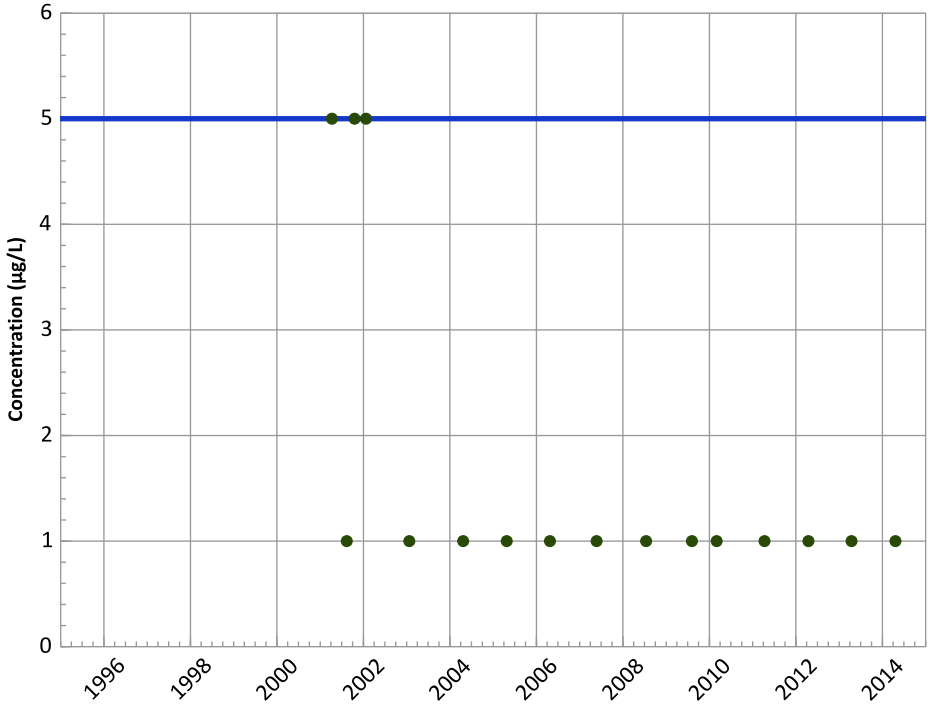


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

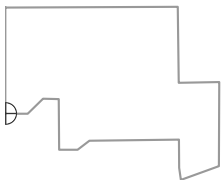
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

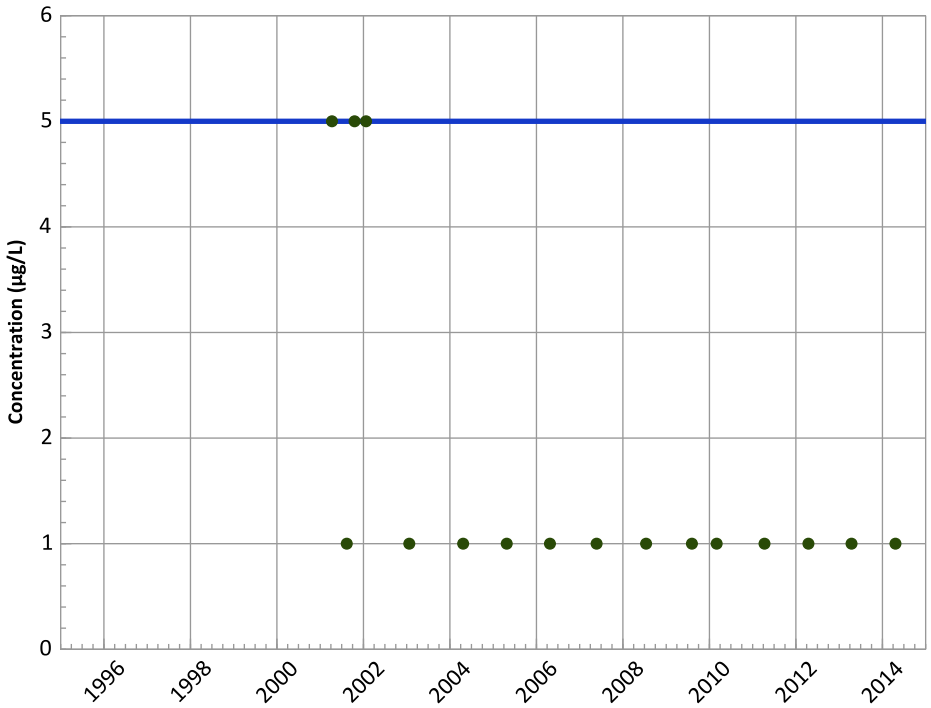
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

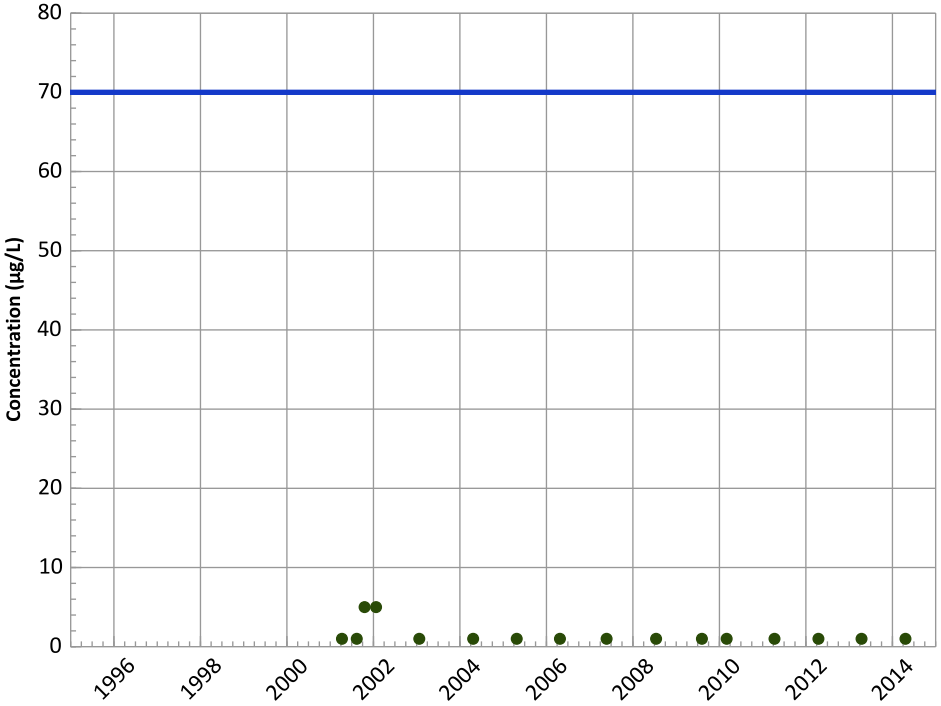


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

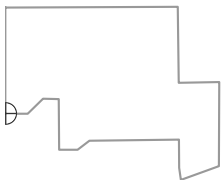
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

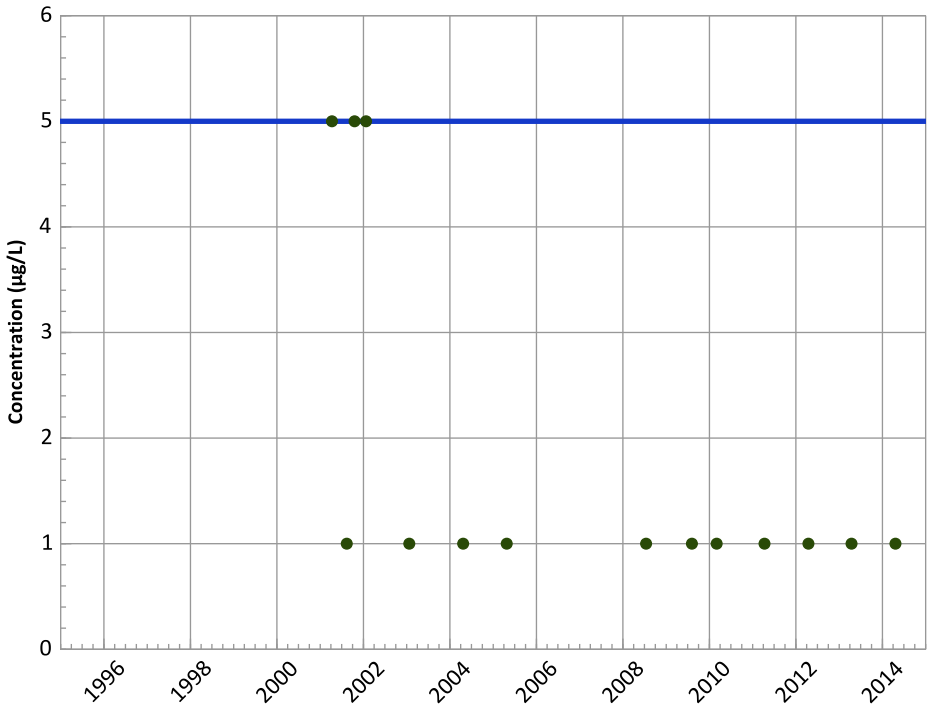
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

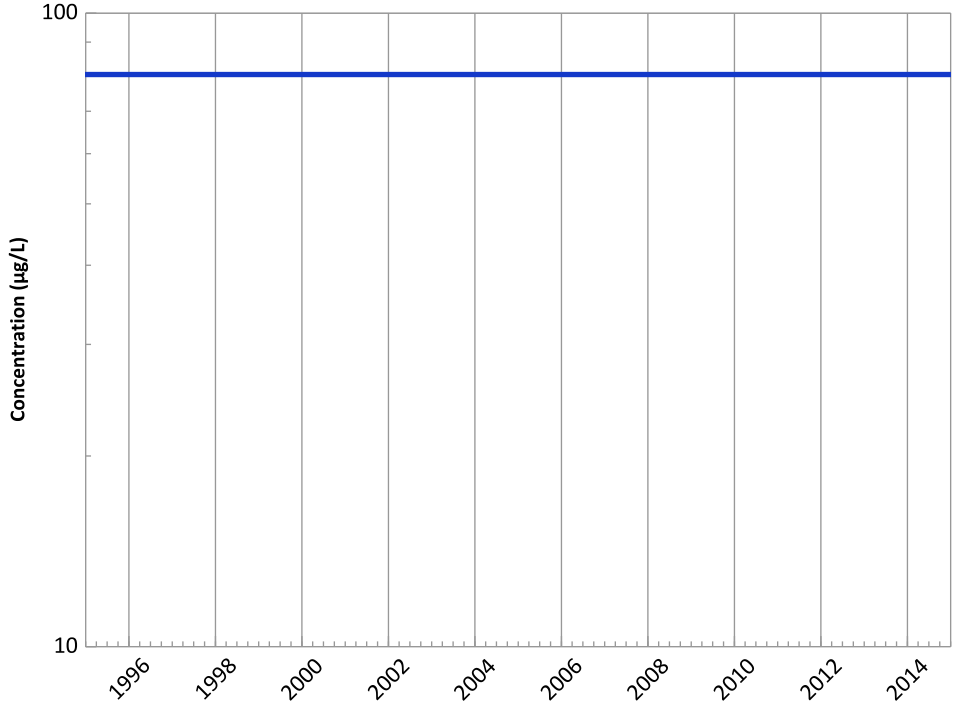


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

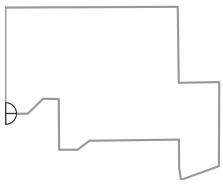
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

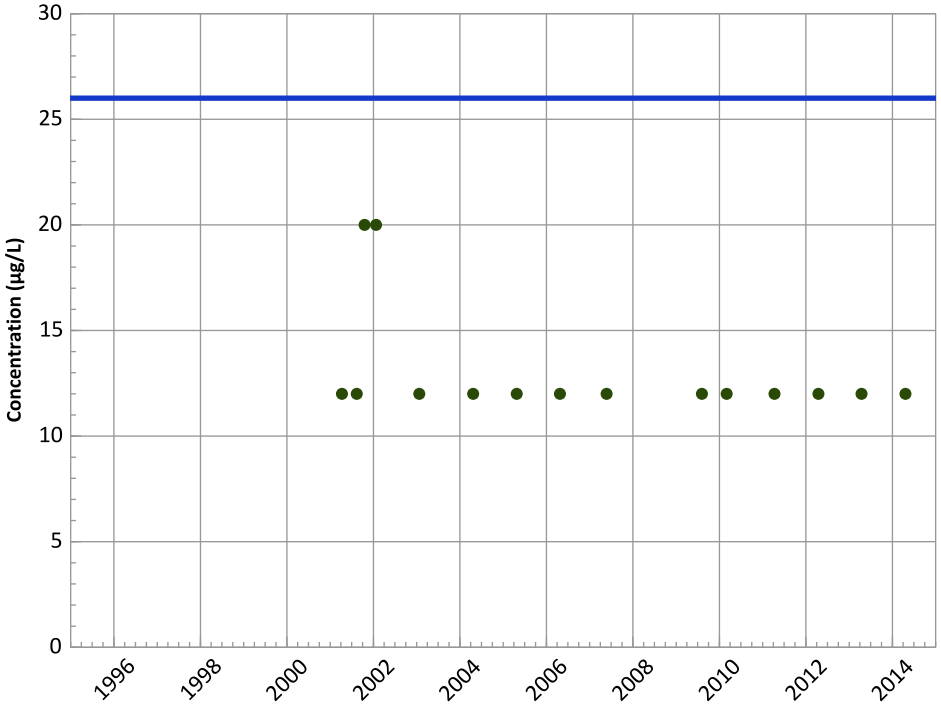
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

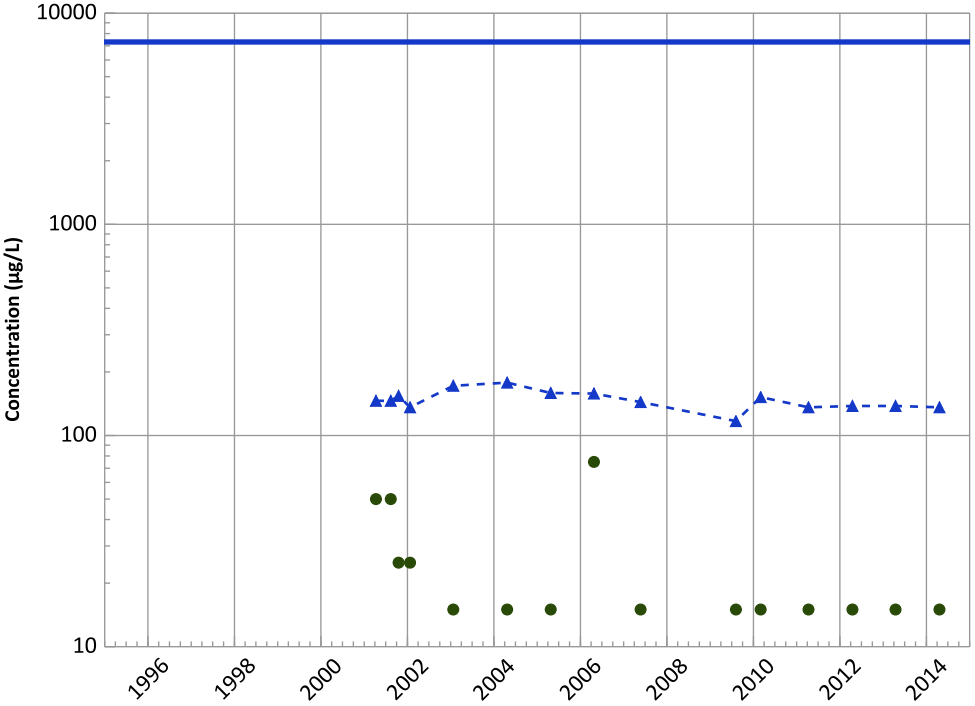


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Boron Trend



Concentration Trend

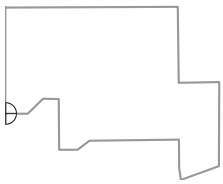
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

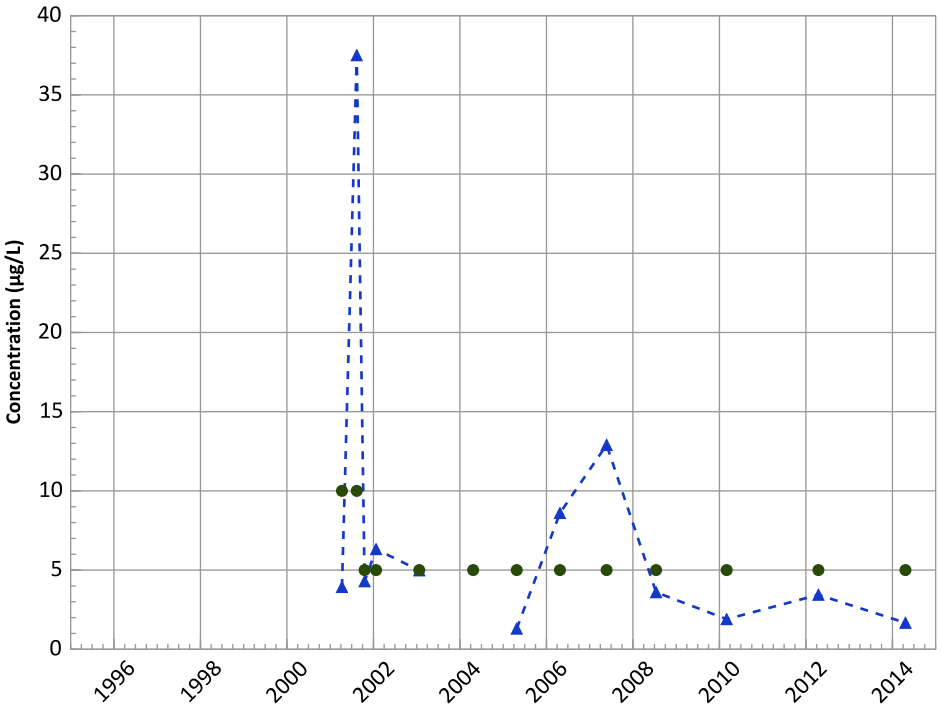
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

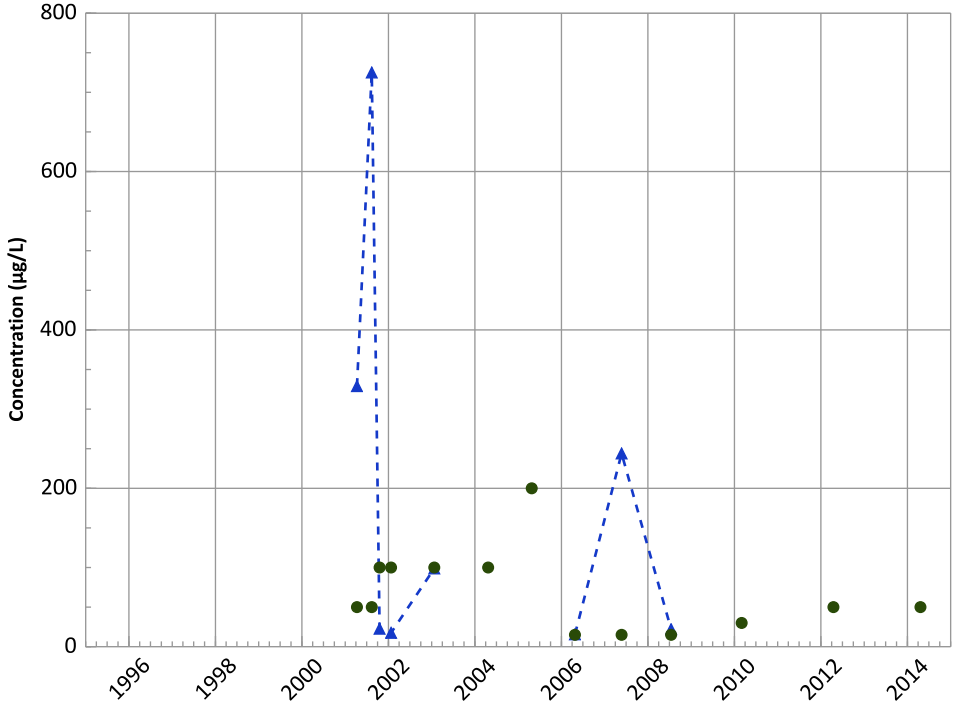


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Aluminum Trend



Concentration Trend

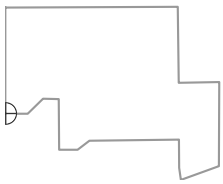
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

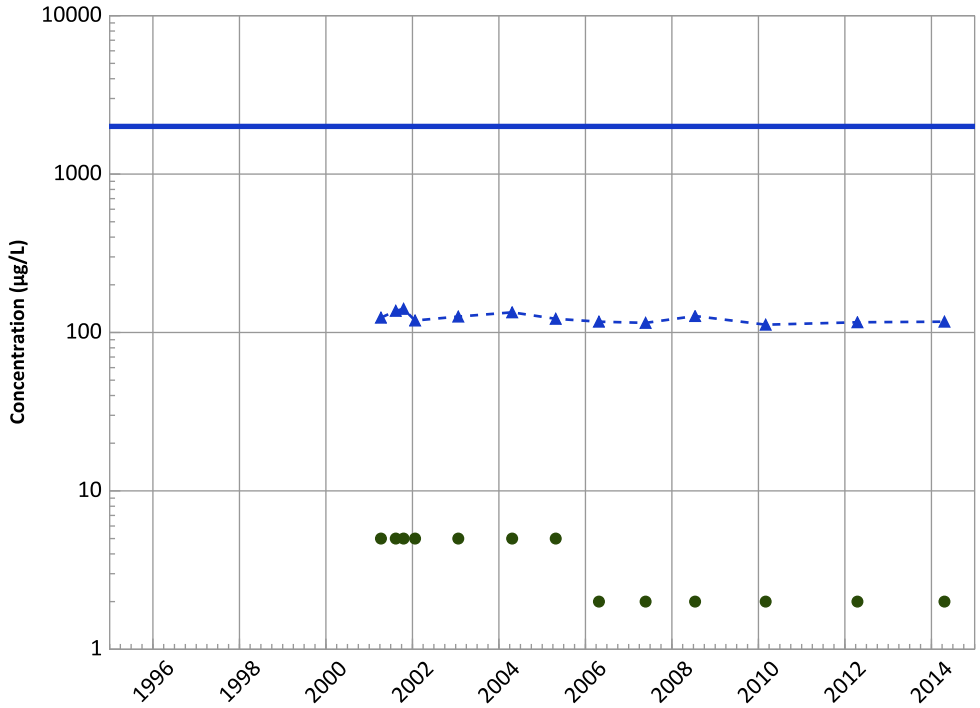
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

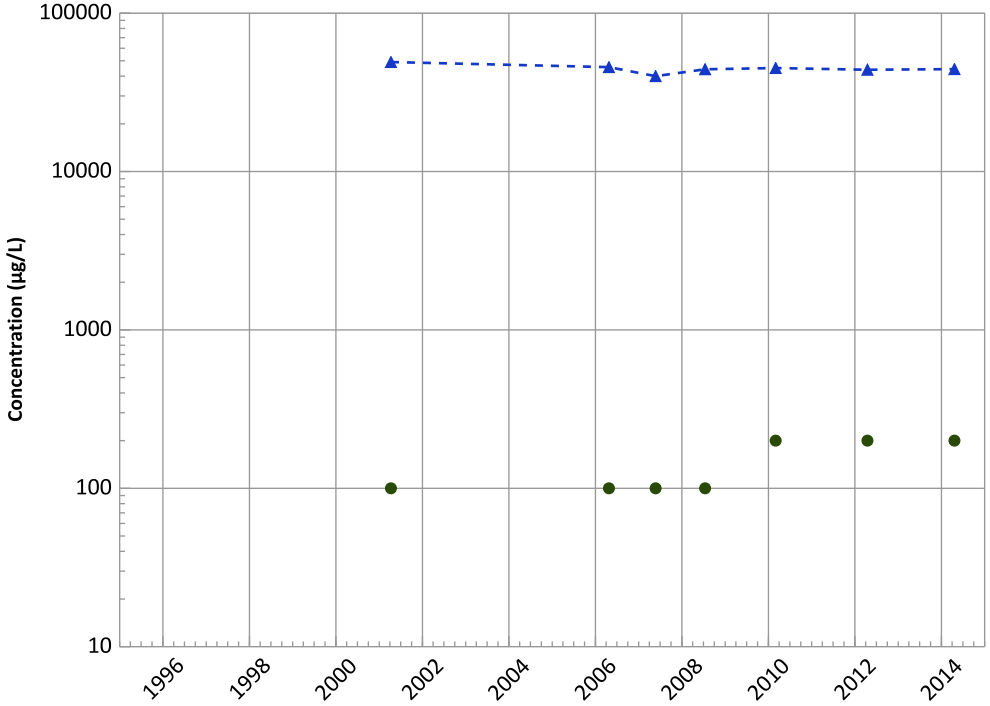


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Calcium Trend



Concentration Trend

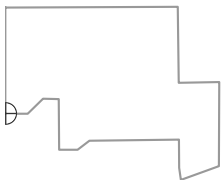
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

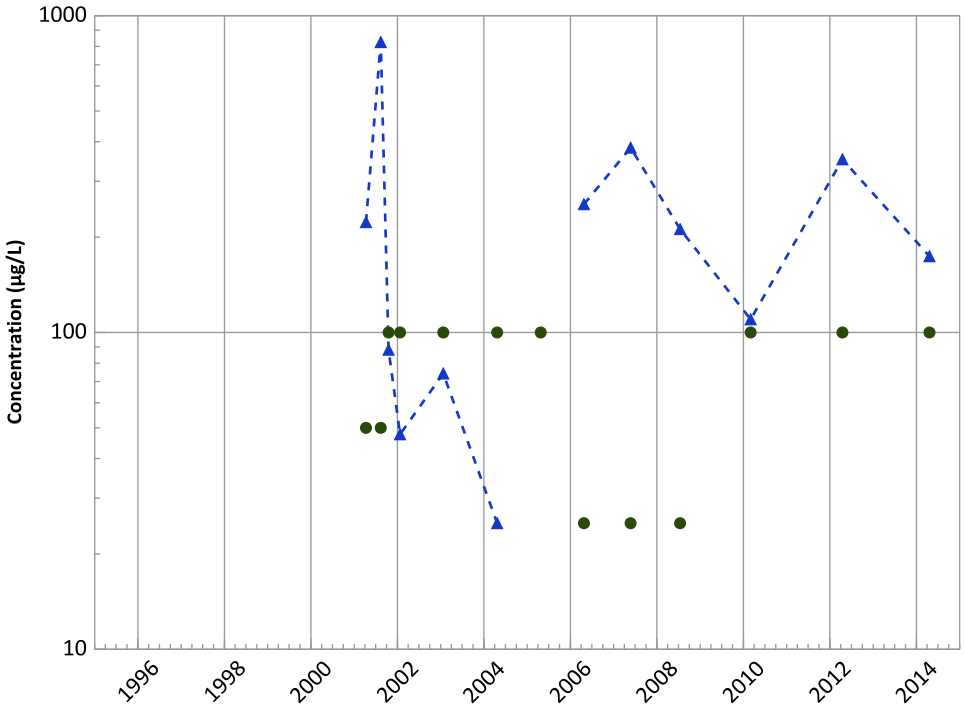
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

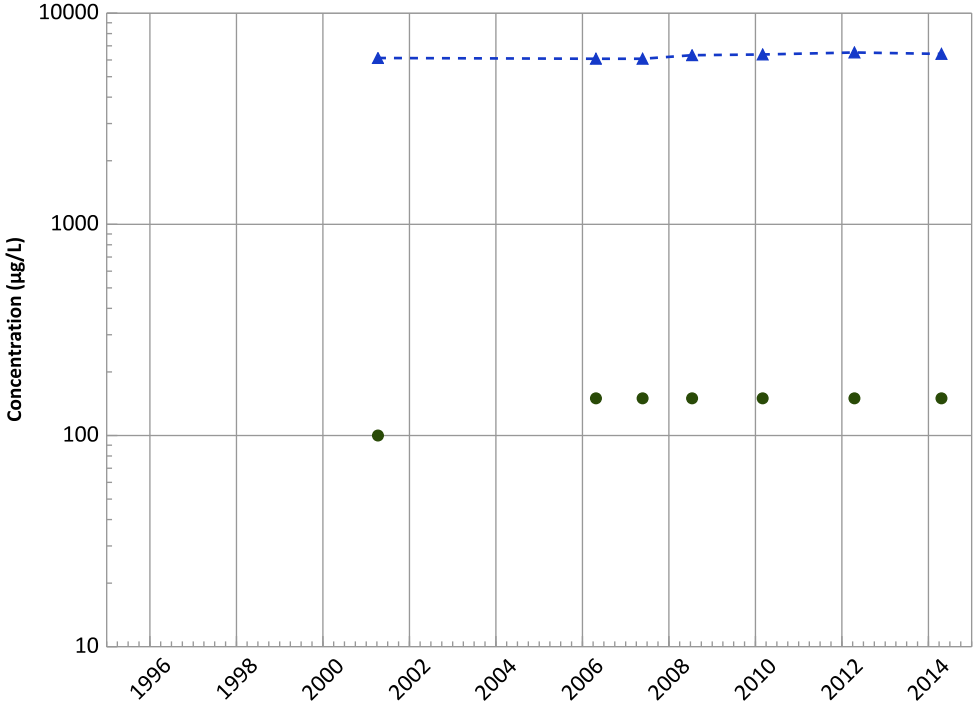


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Potassium Trend



Concentration Trend

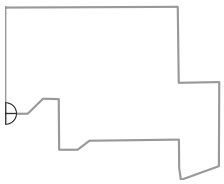
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

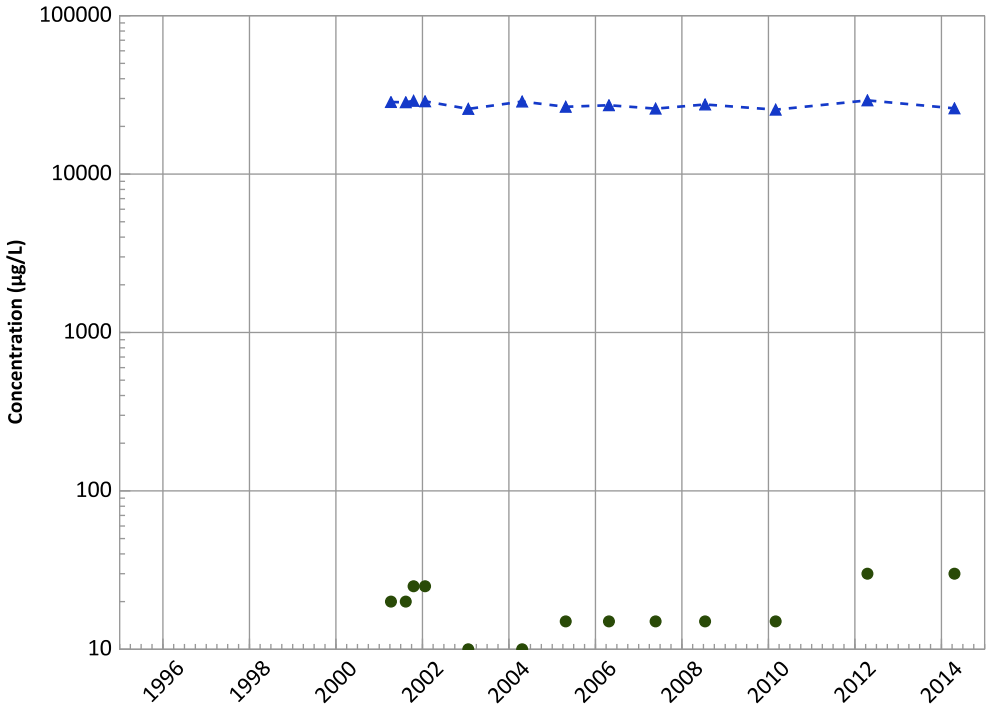
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1060 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

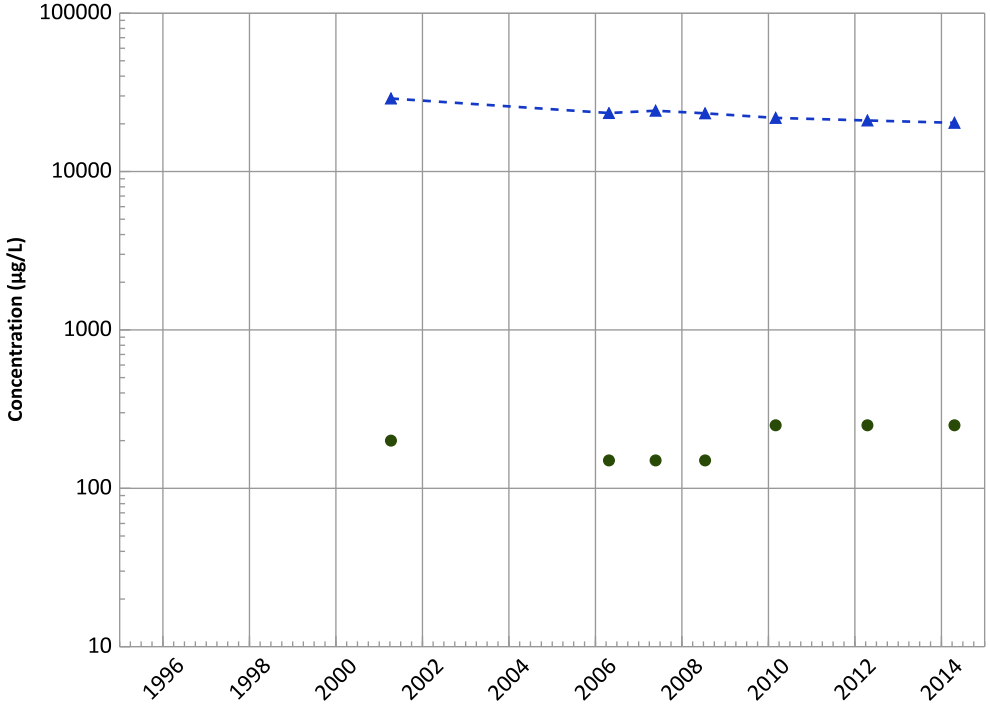


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Sodium Trend



Concentration Trend

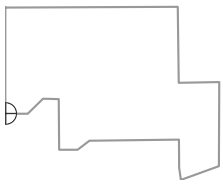
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

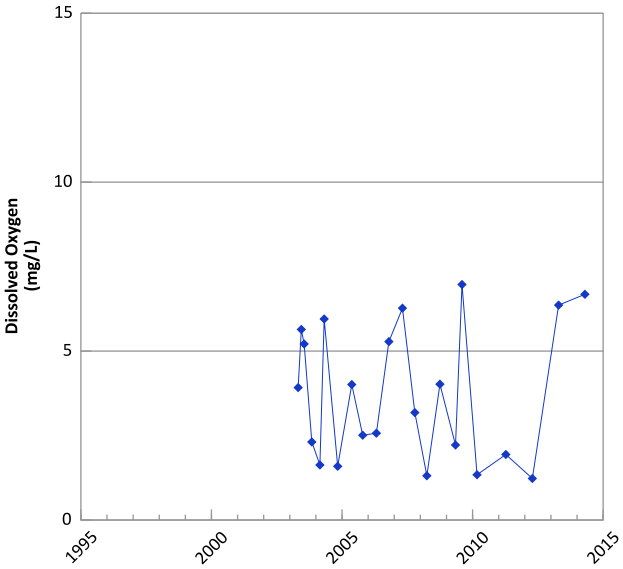
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/10/2001 to 04/21/2014
Analysis Date: 03/19/2015

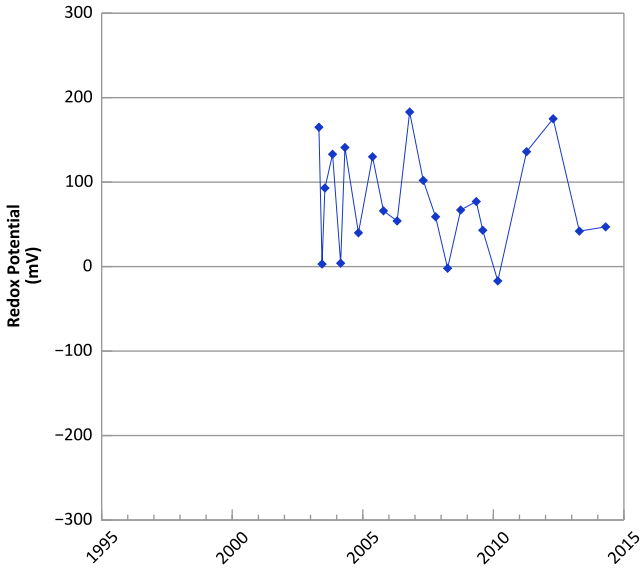
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

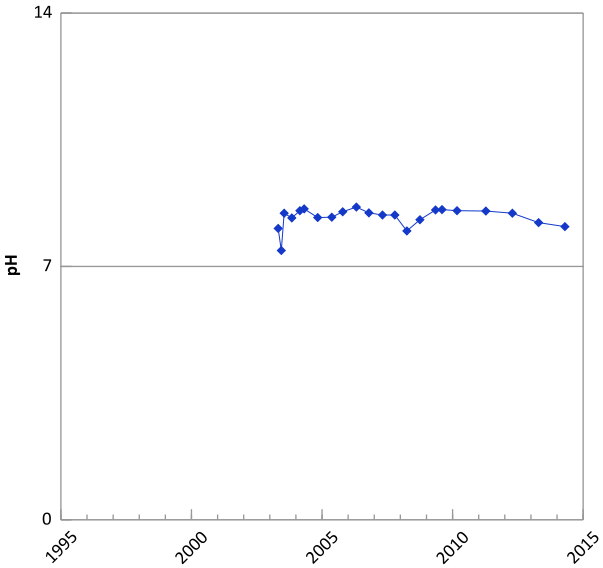
Well Location

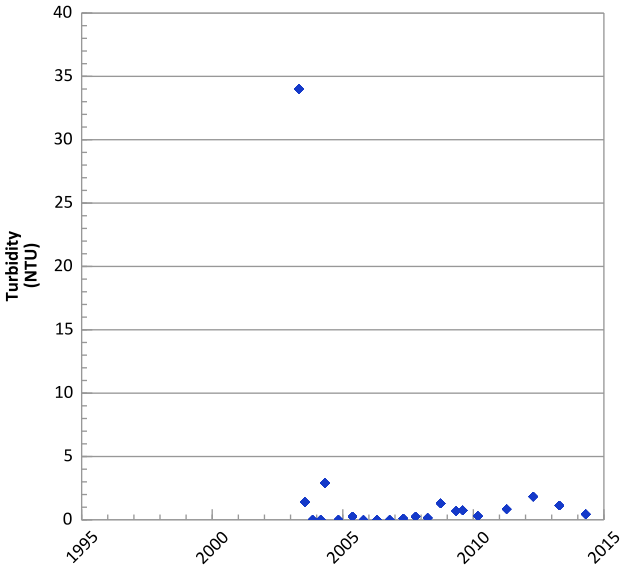


PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



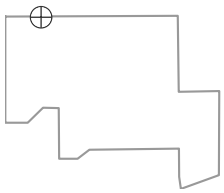






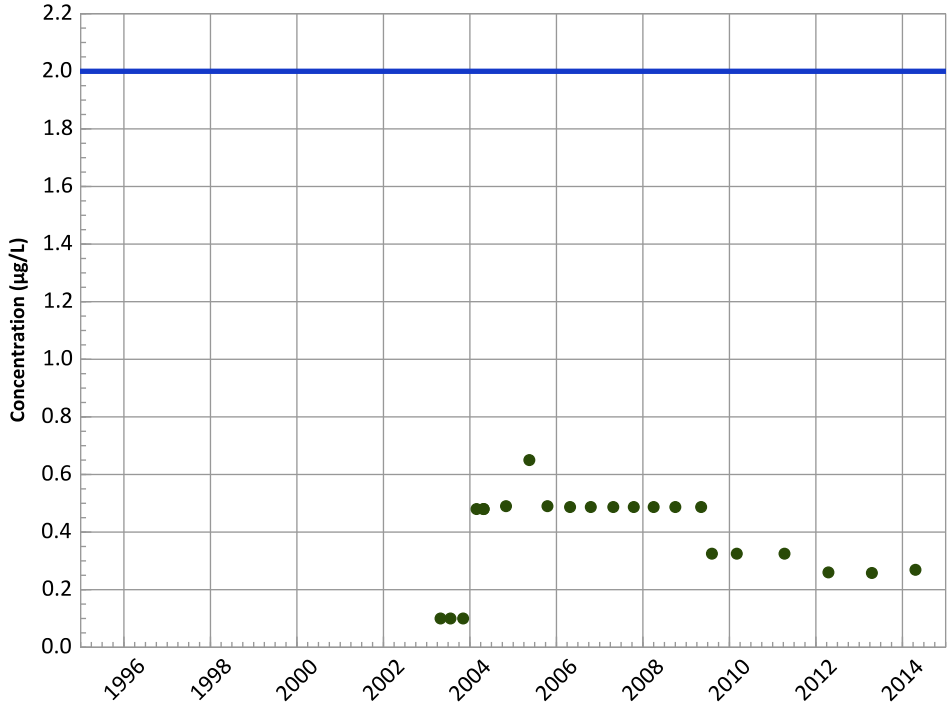
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

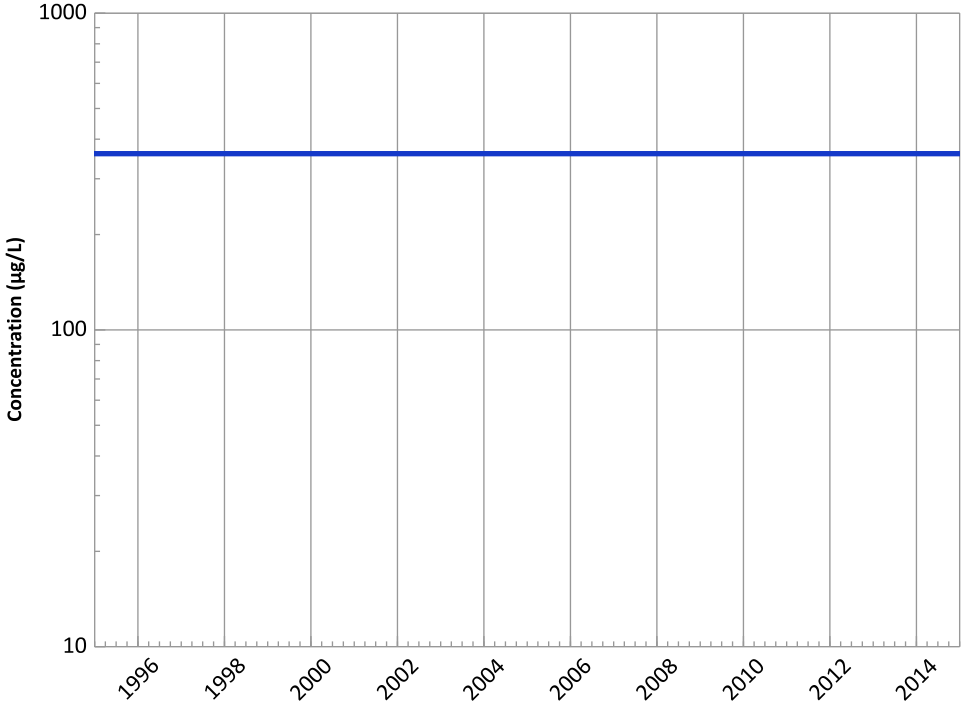


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

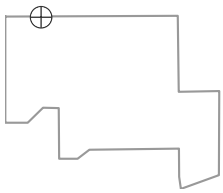
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

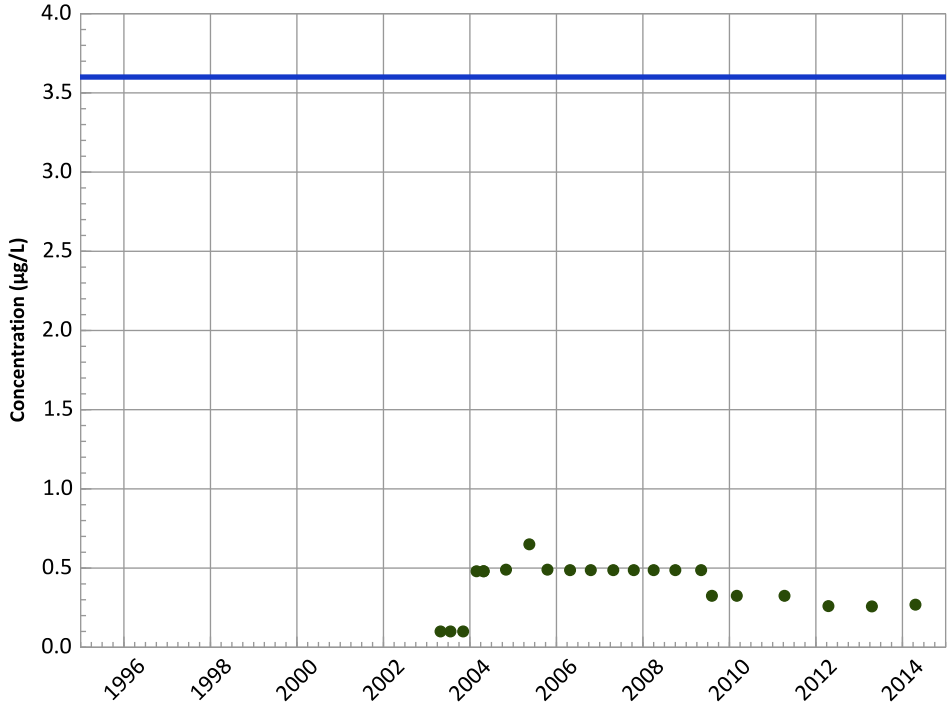
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

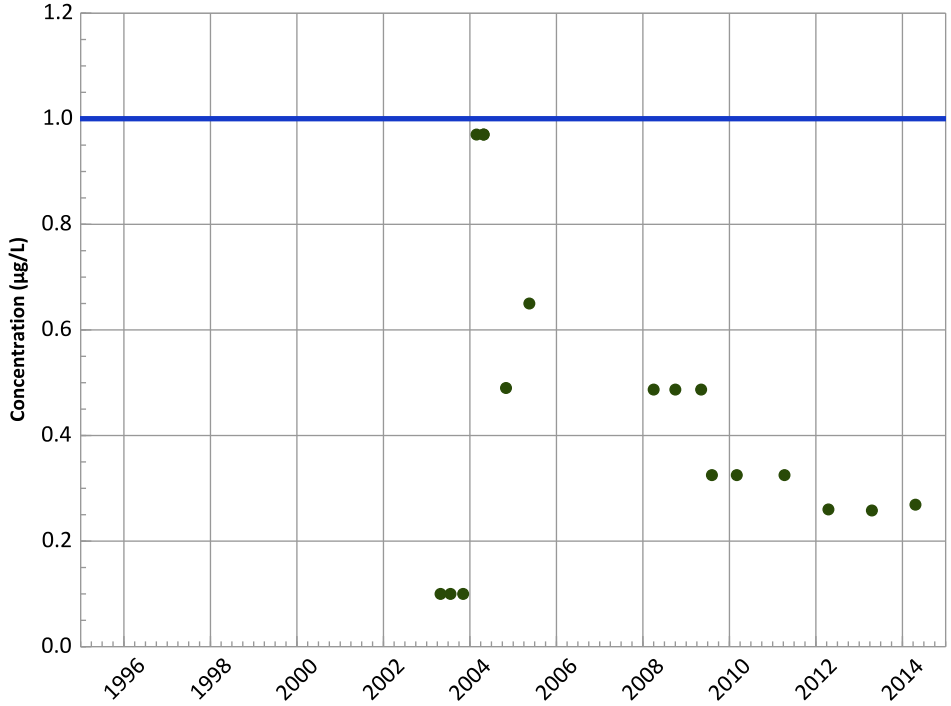


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

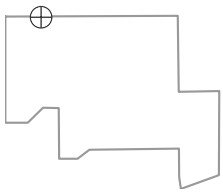
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

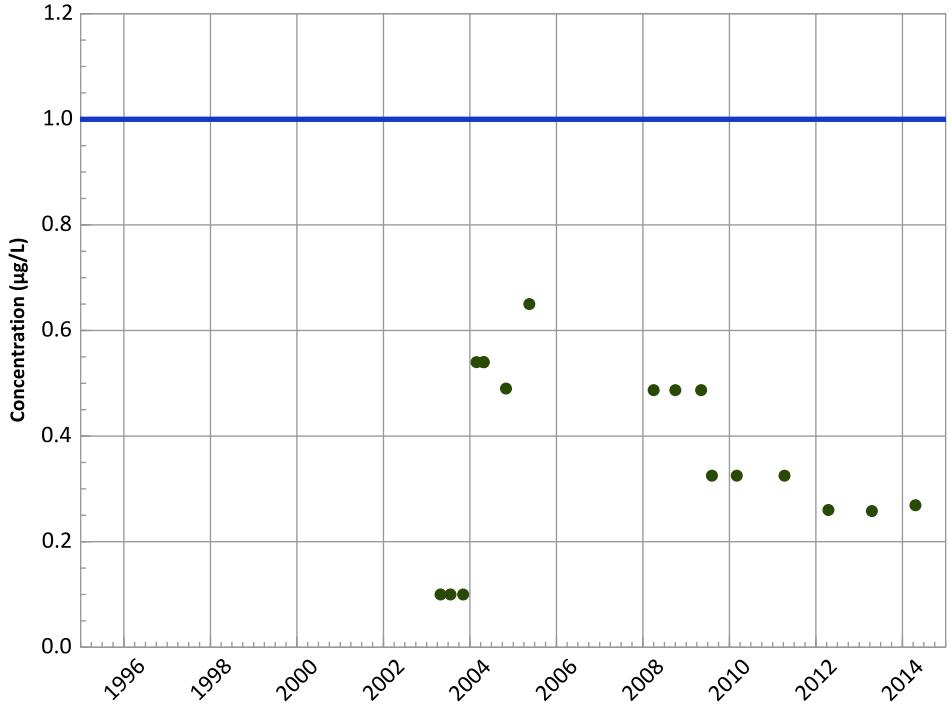
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

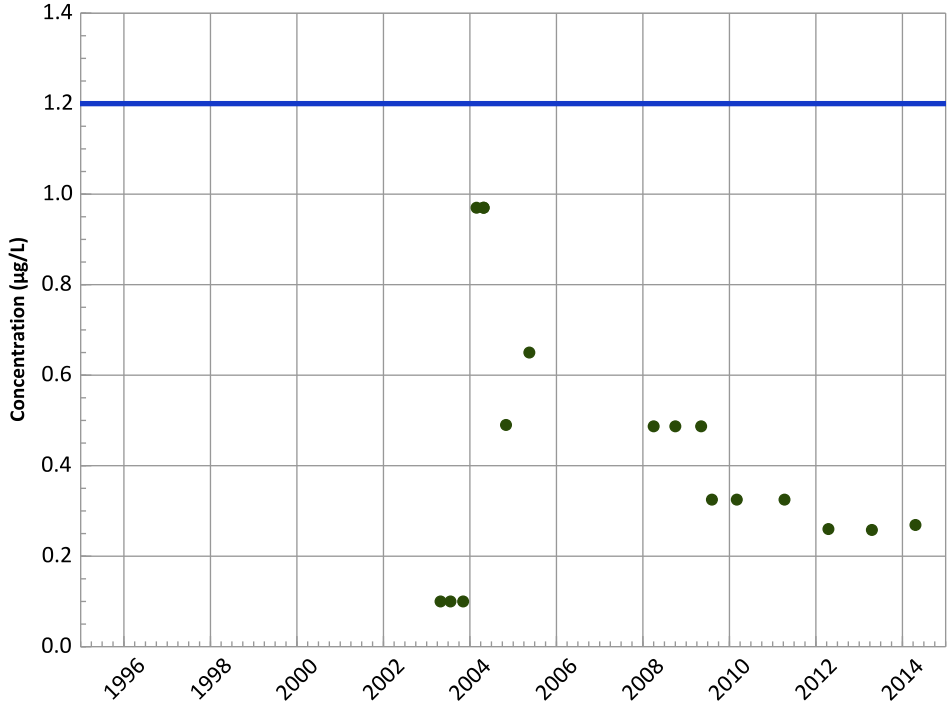


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

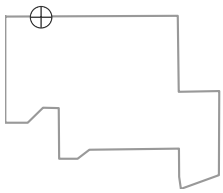
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

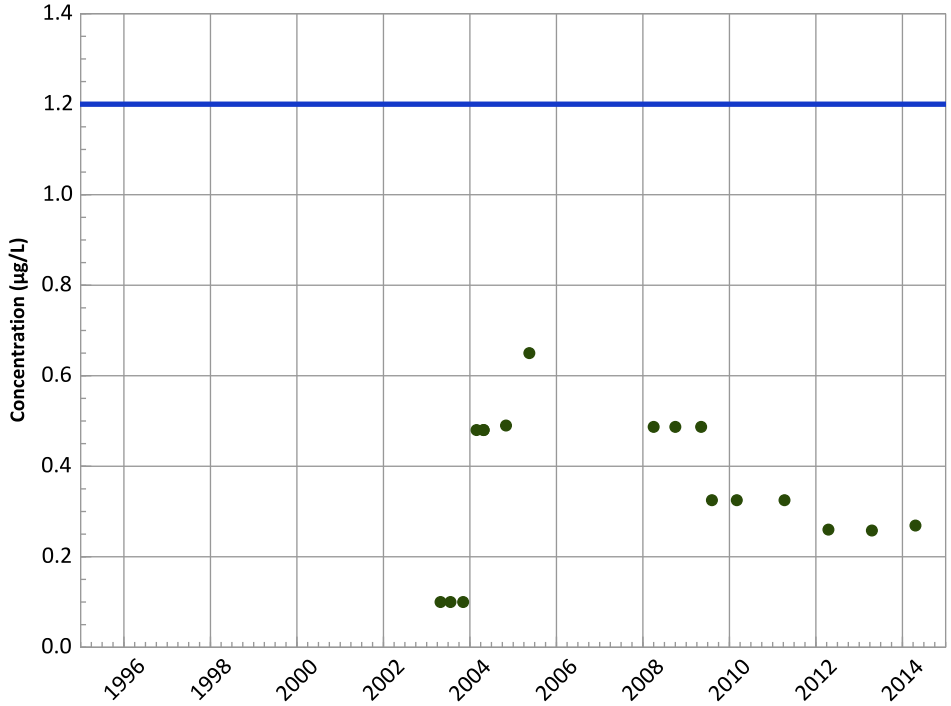
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

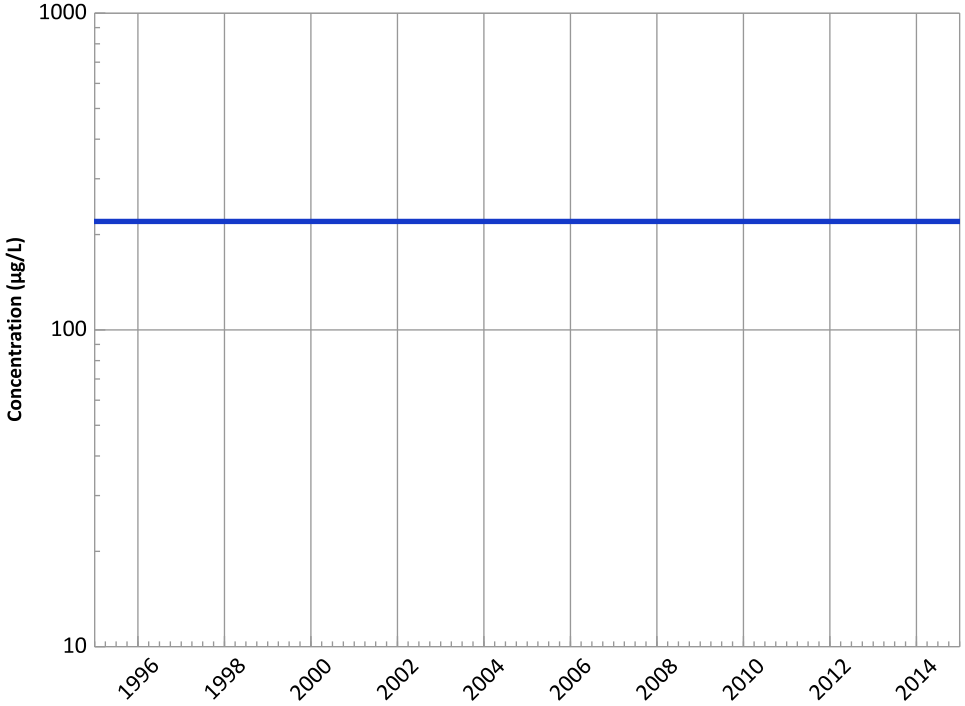


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

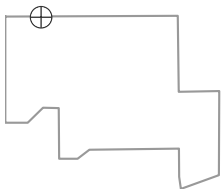
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

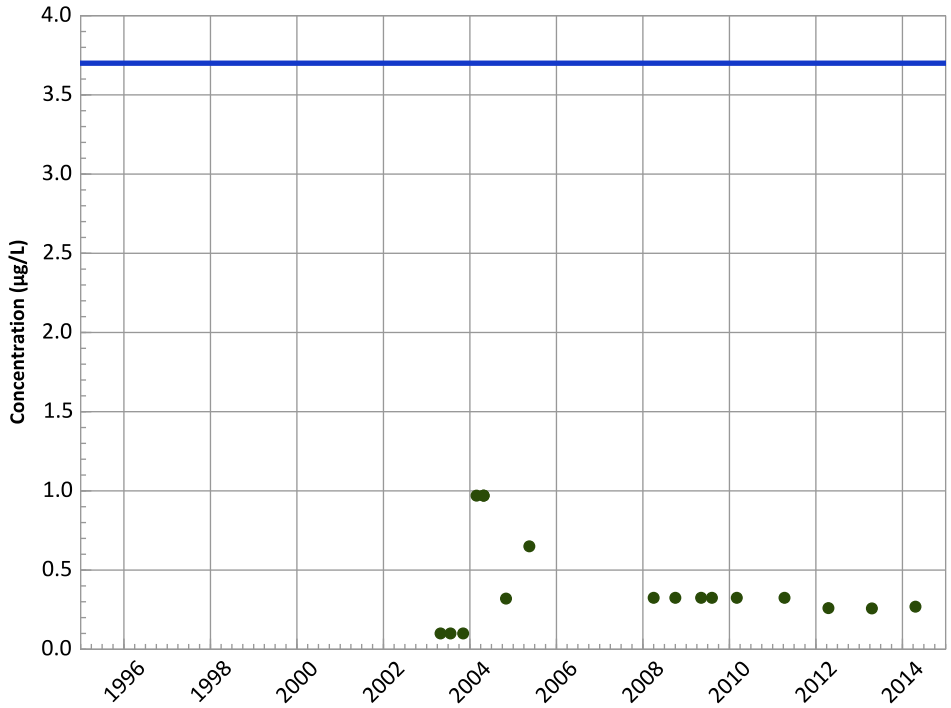
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

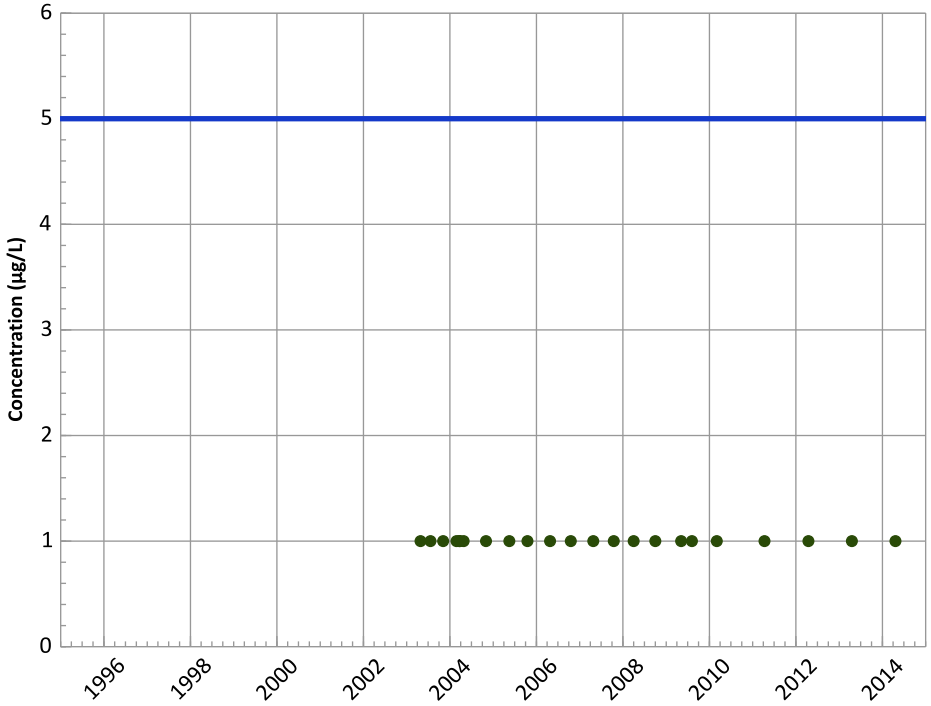


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

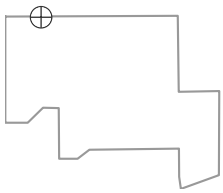
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

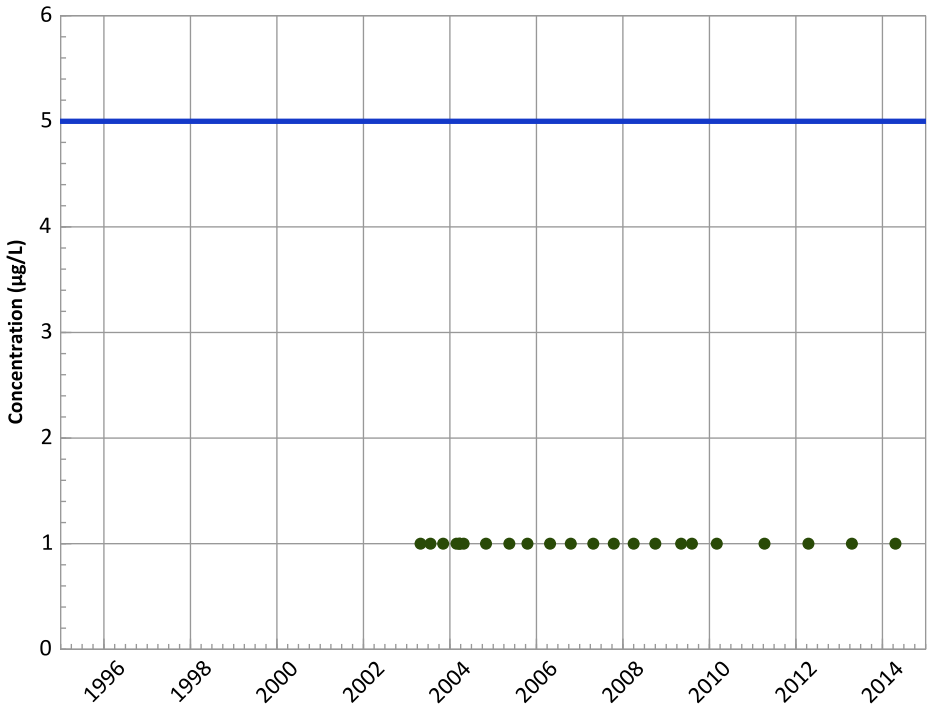
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

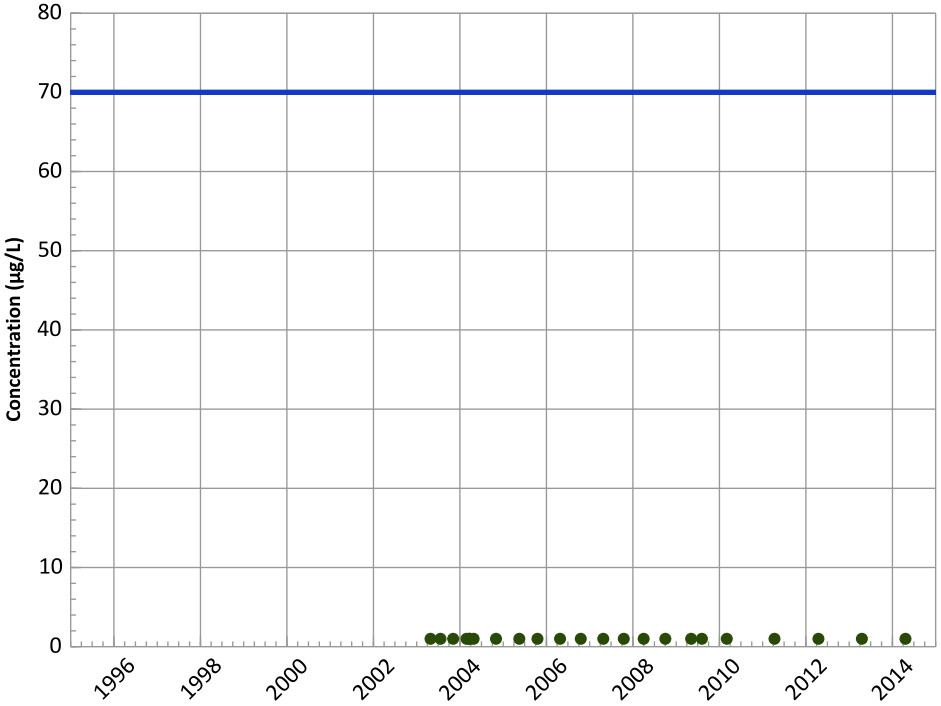


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

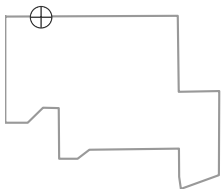
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

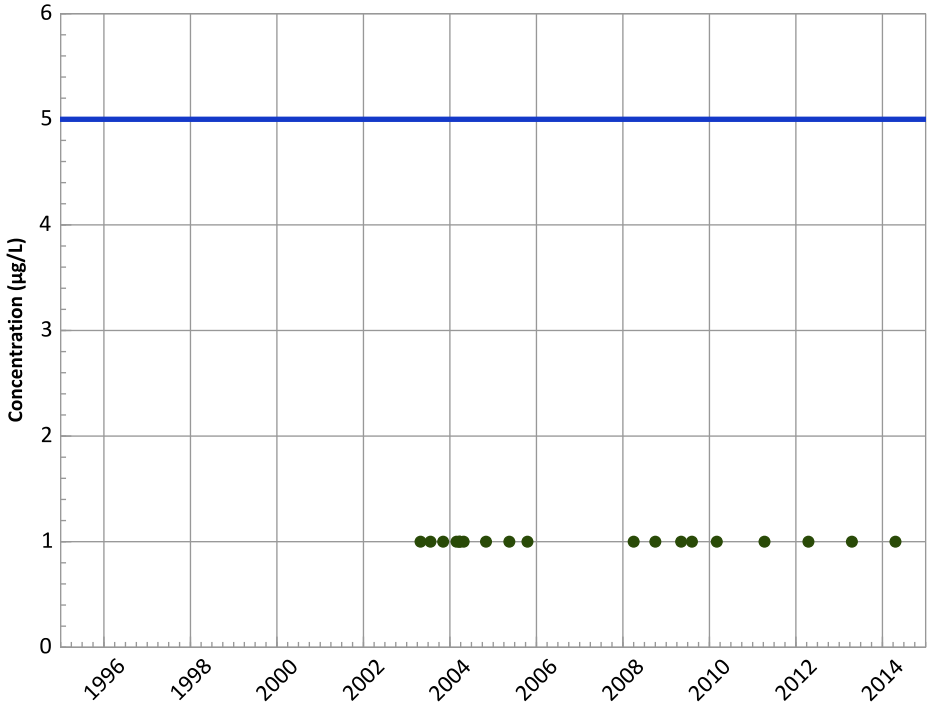
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━ Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

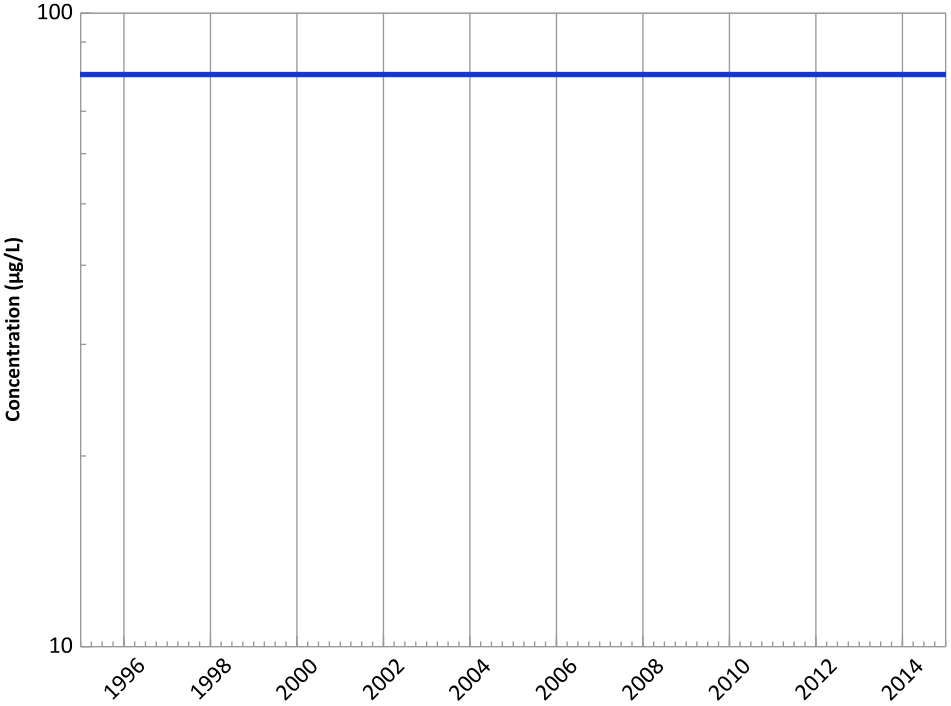


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

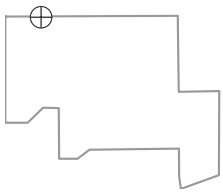
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

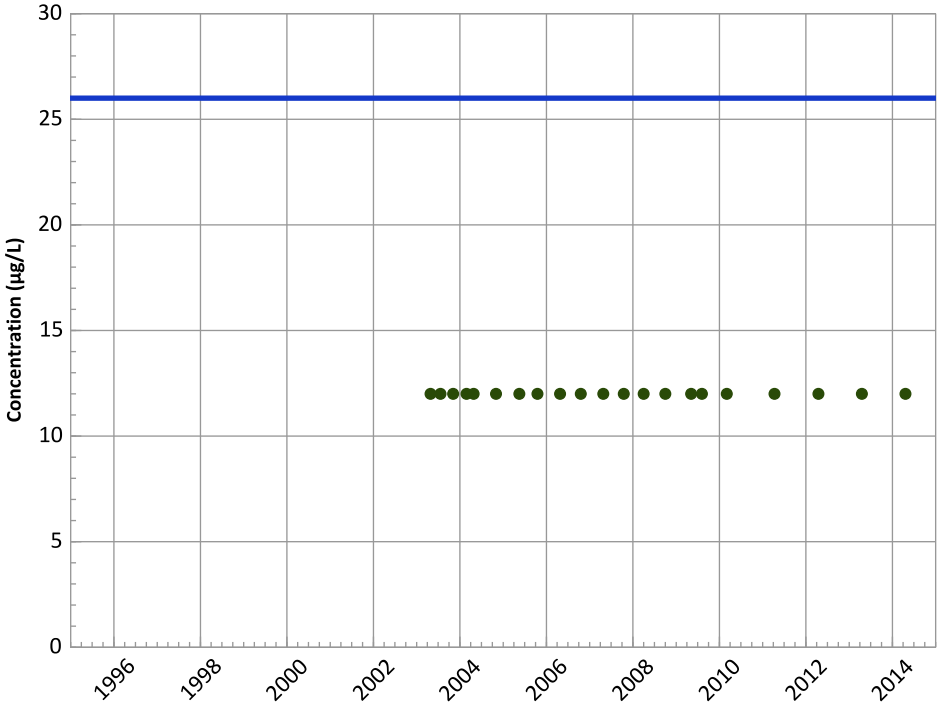
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

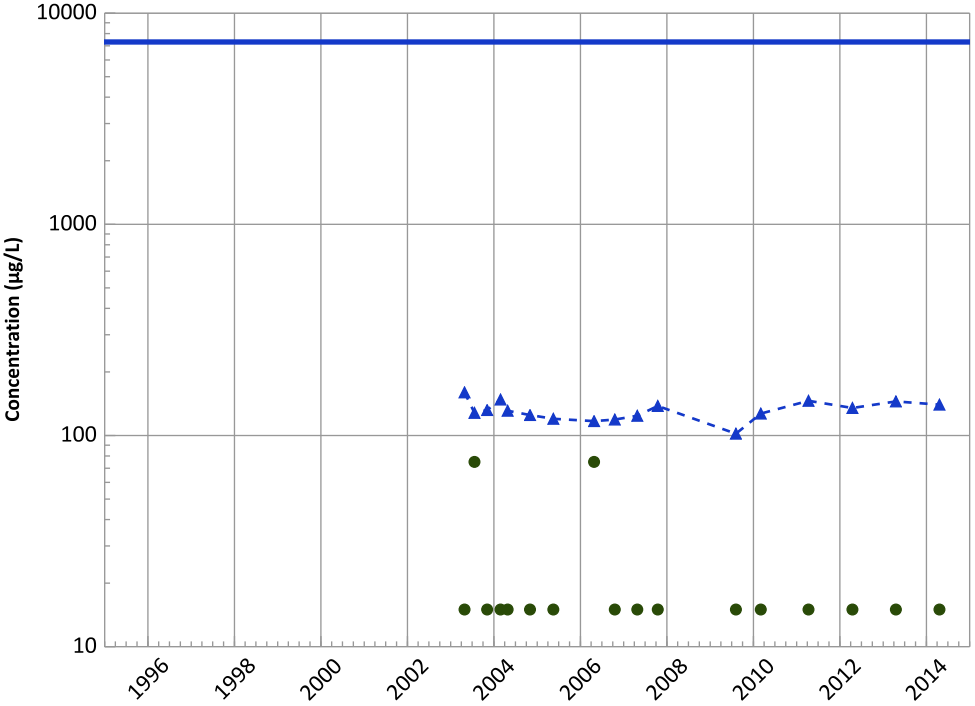


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Boron Trend



Concentration Trend

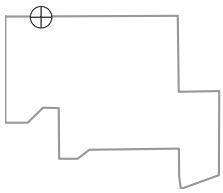
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

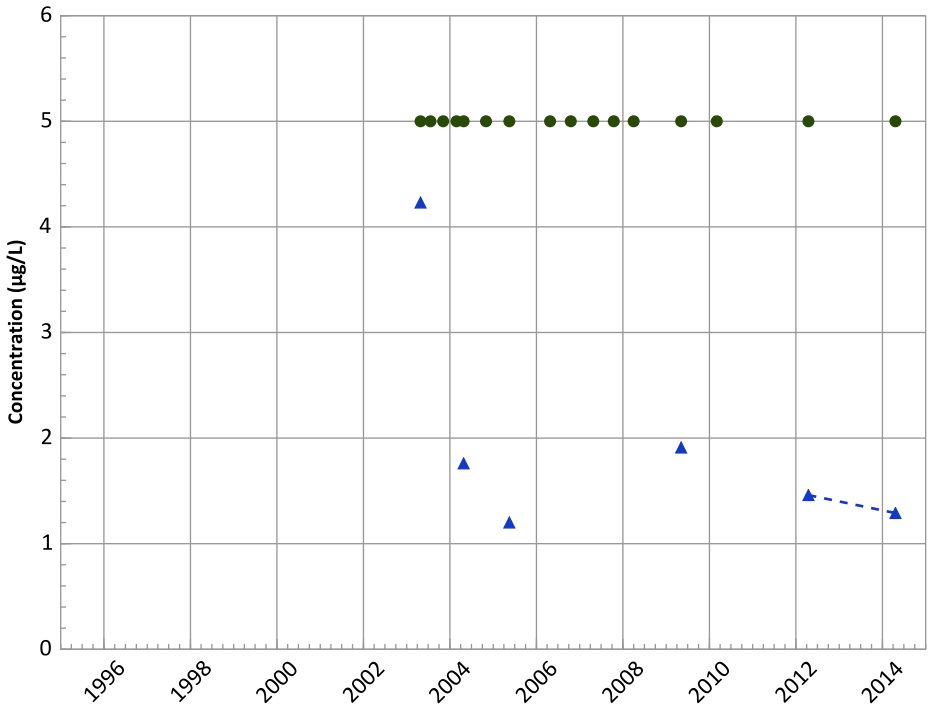
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

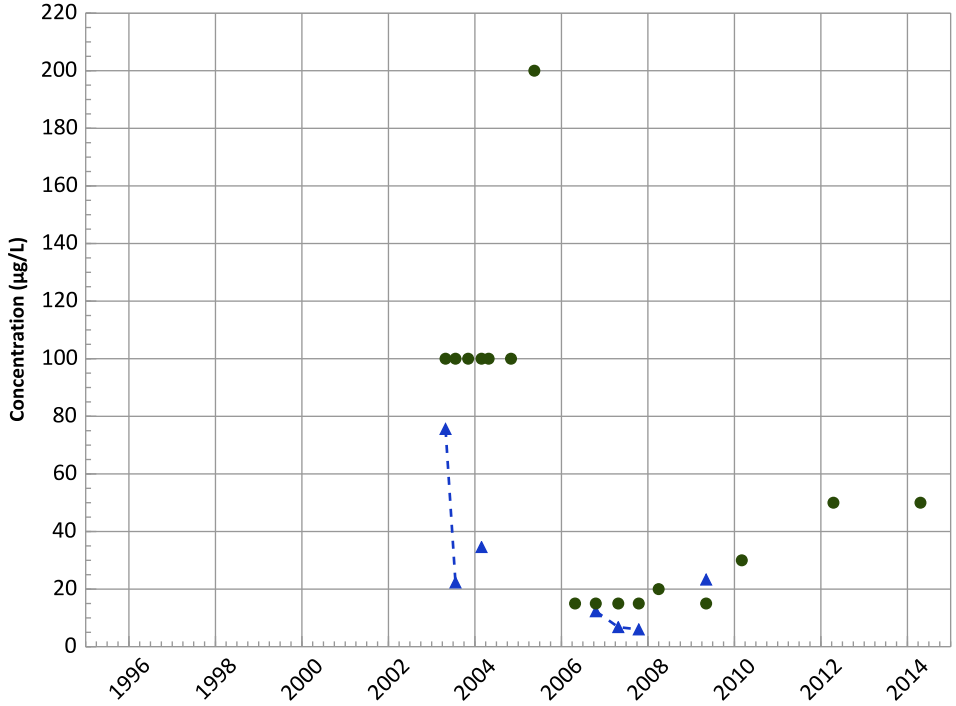


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Aluminum Trend



Concentration Trend

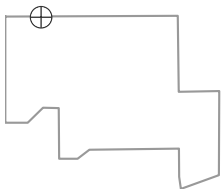
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

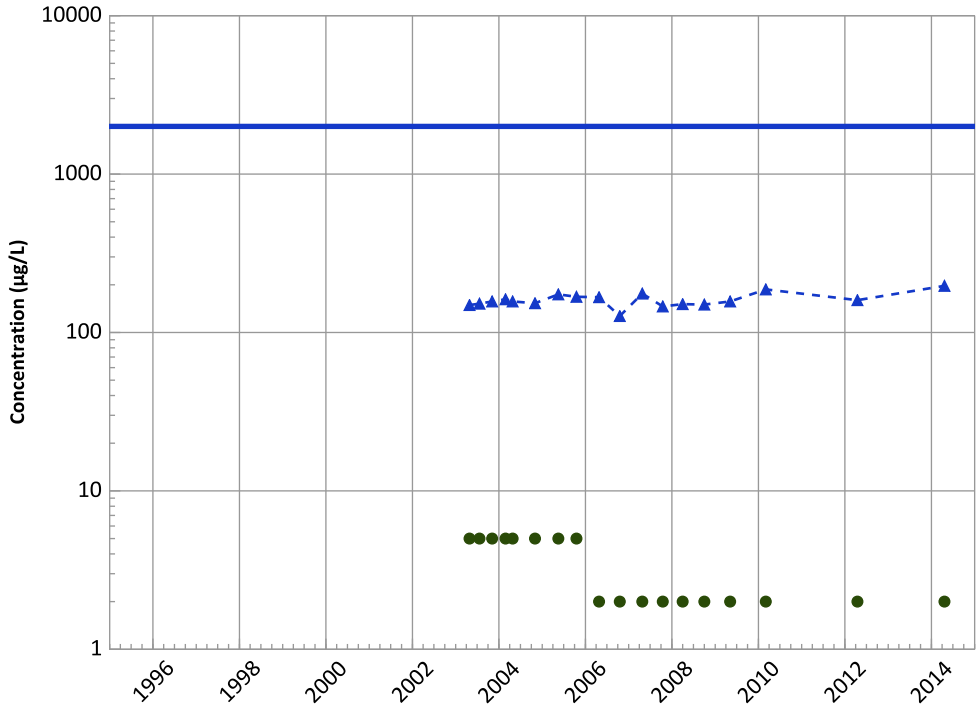
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

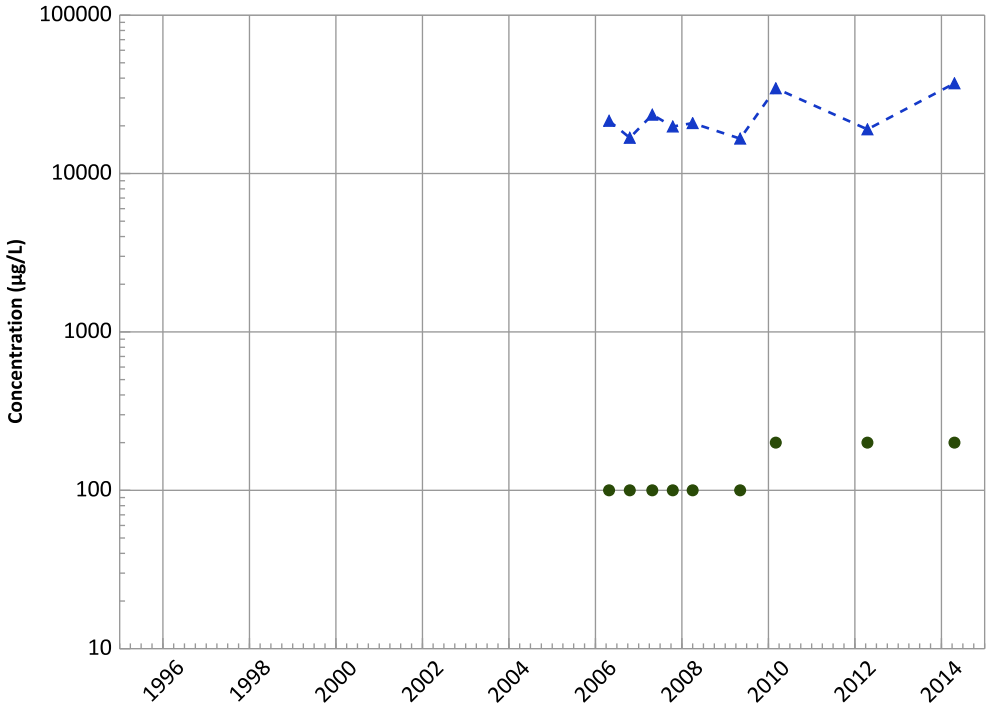


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Calcium Trend



Concentration Trend

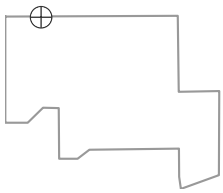
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

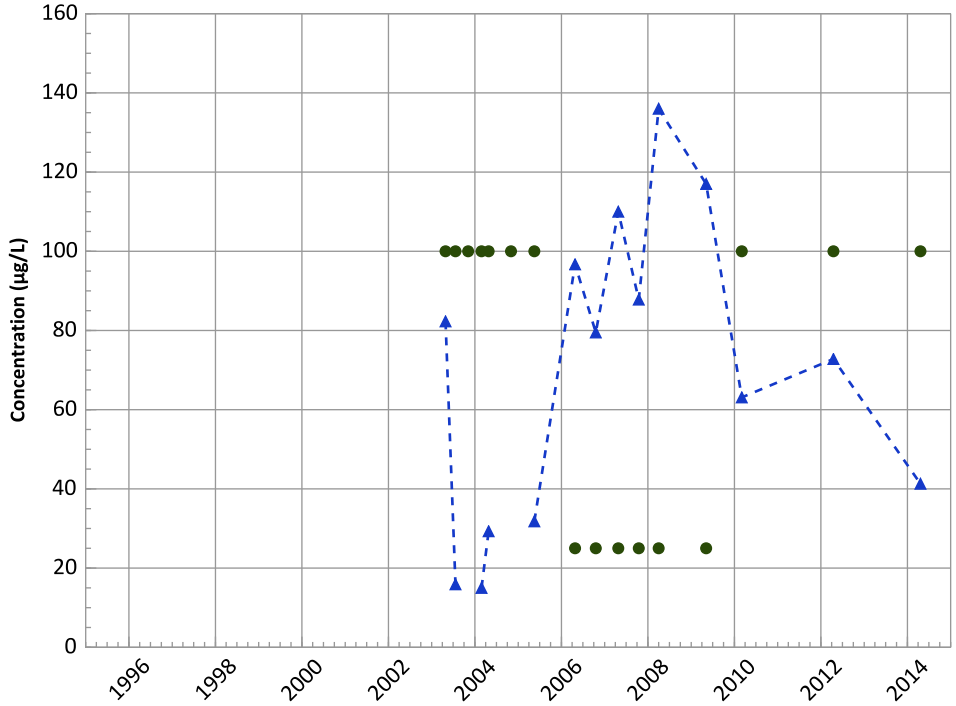
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

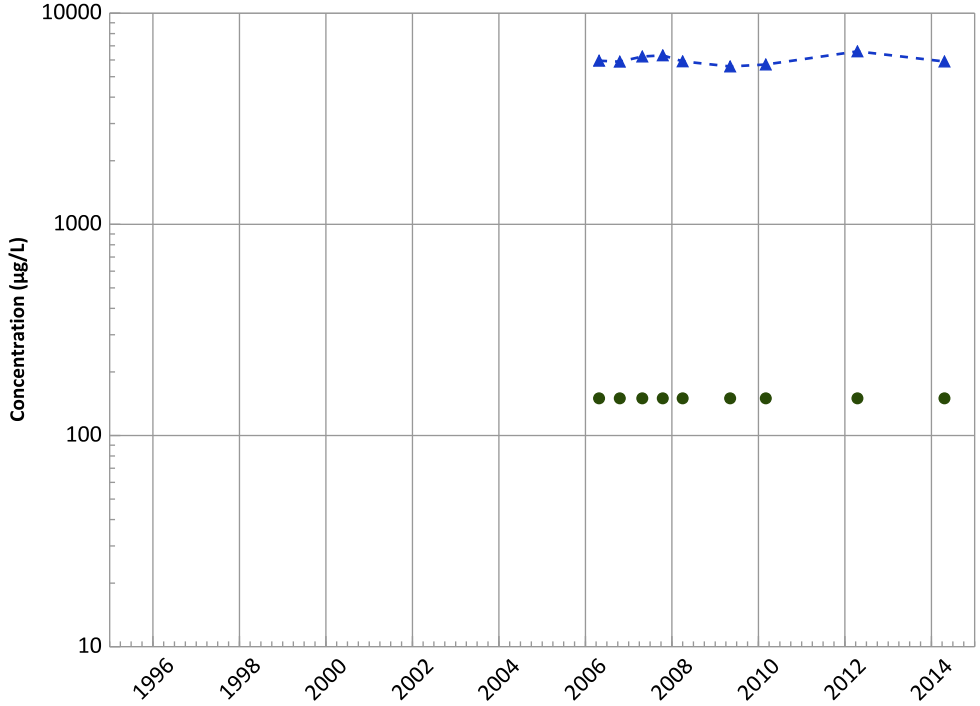


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Increasing

Potassium Trend



Concentration Trend

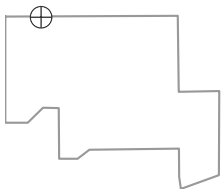
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

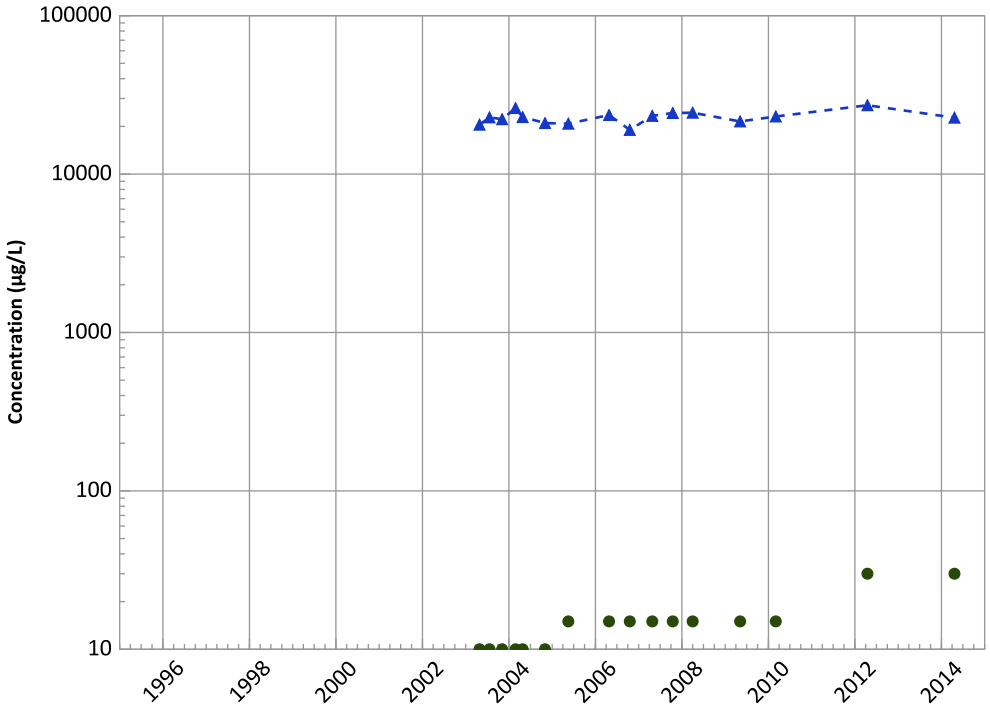
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1061 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

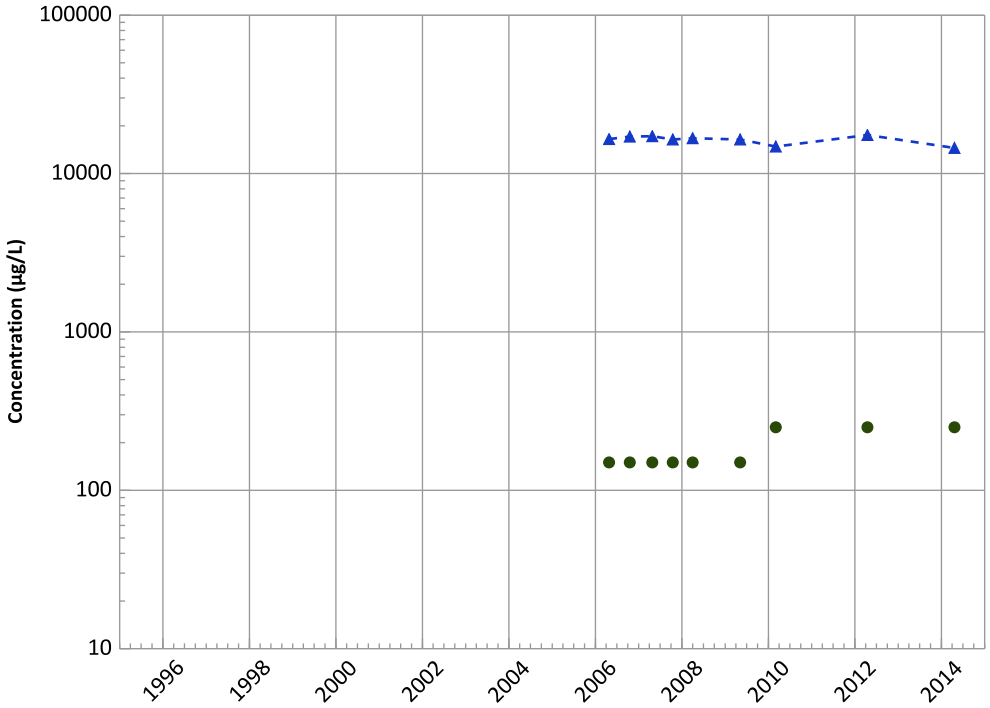


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Sodium Trend



Concentration Trend

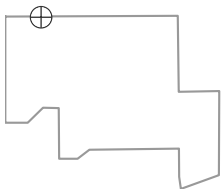
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

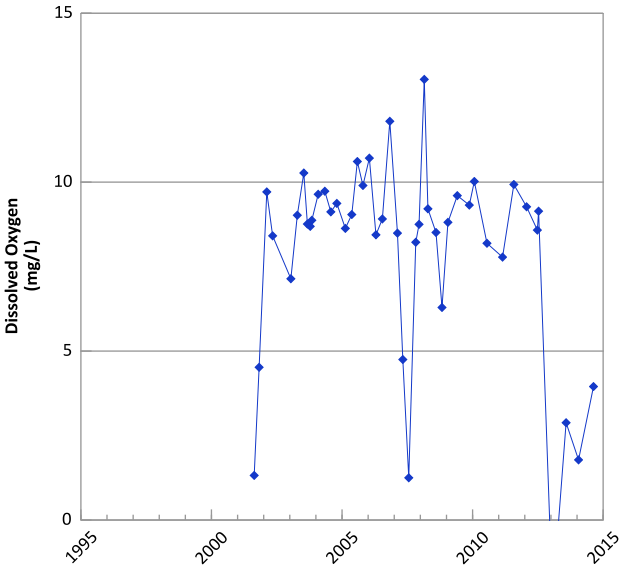
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/28/2003 to 04/21/2014
Analysis Date: 03/19/2015

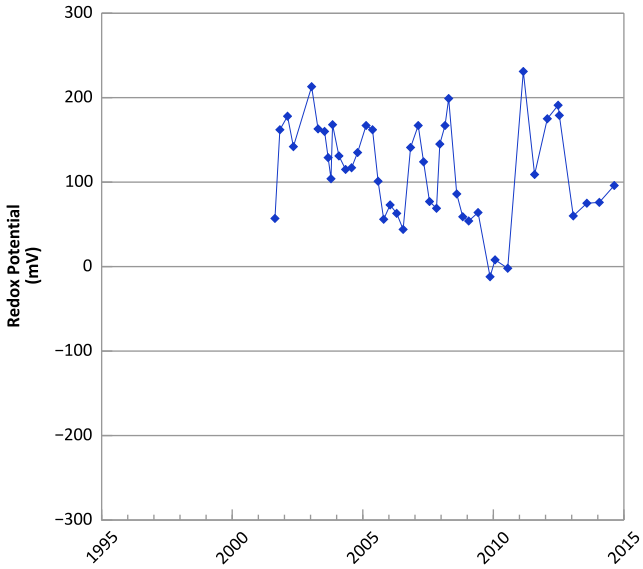
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

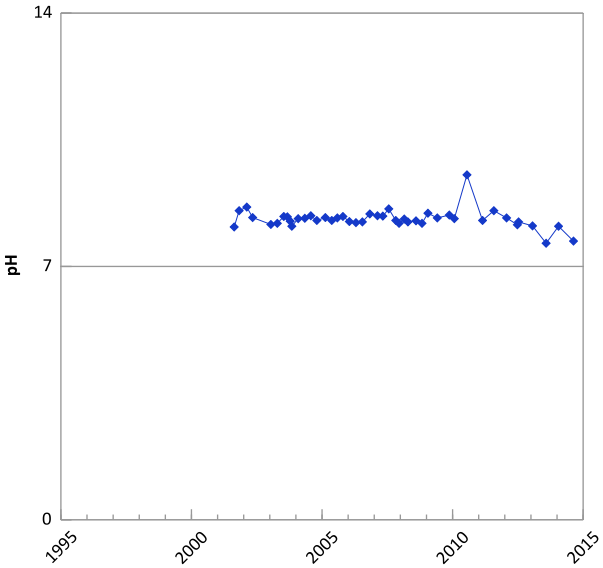
Well Location

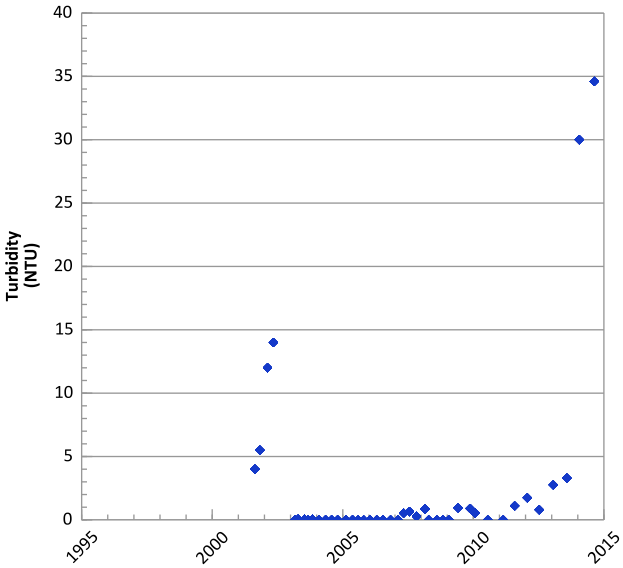


PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



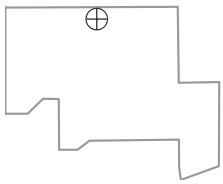






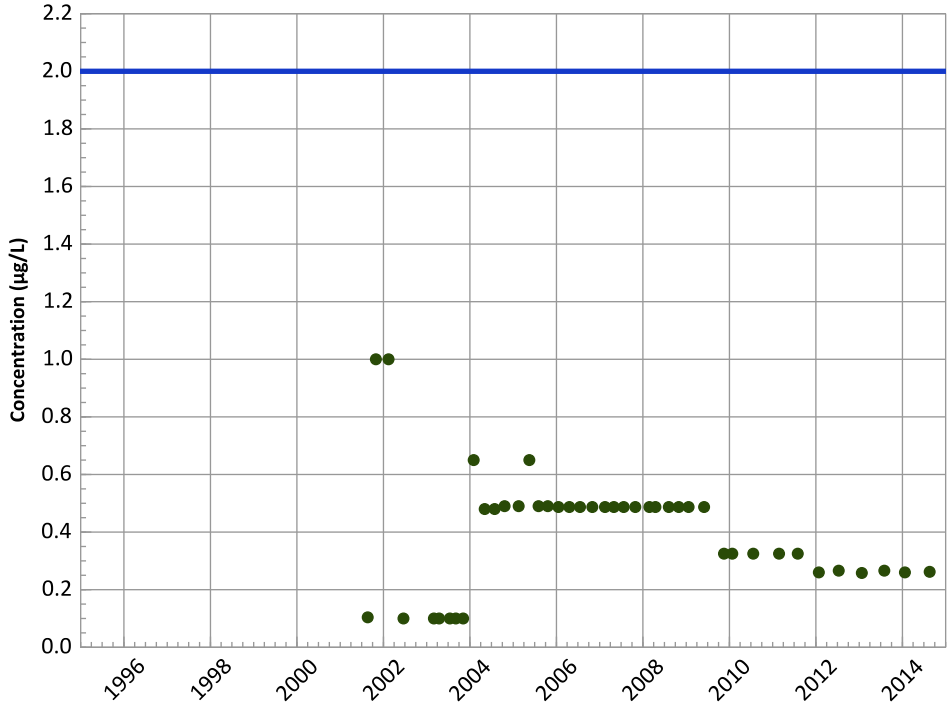
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

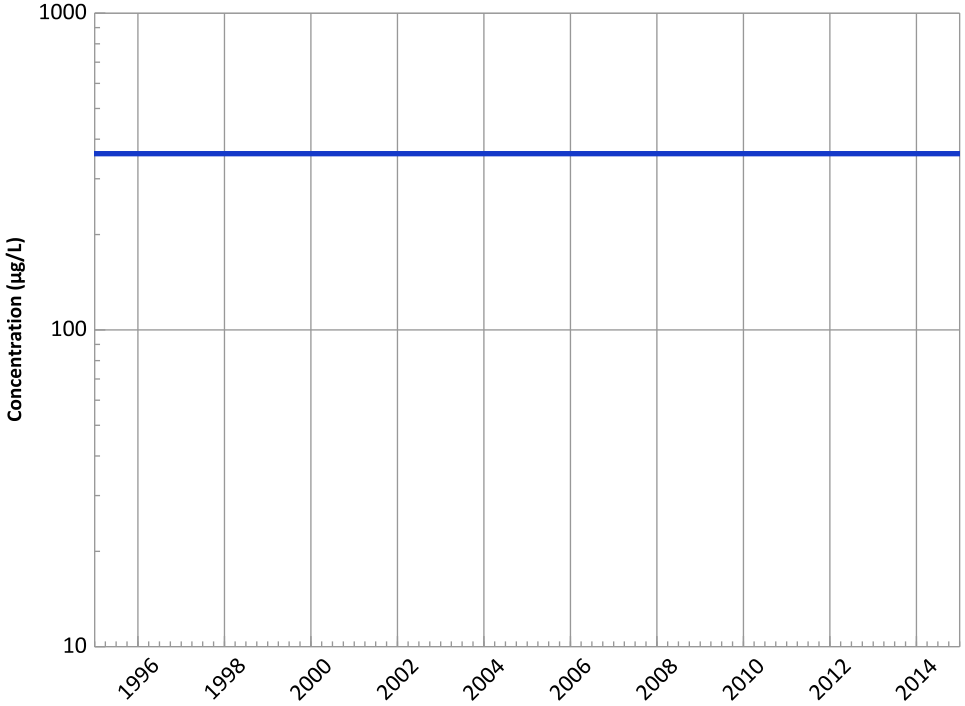


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

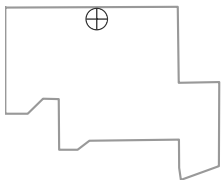
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

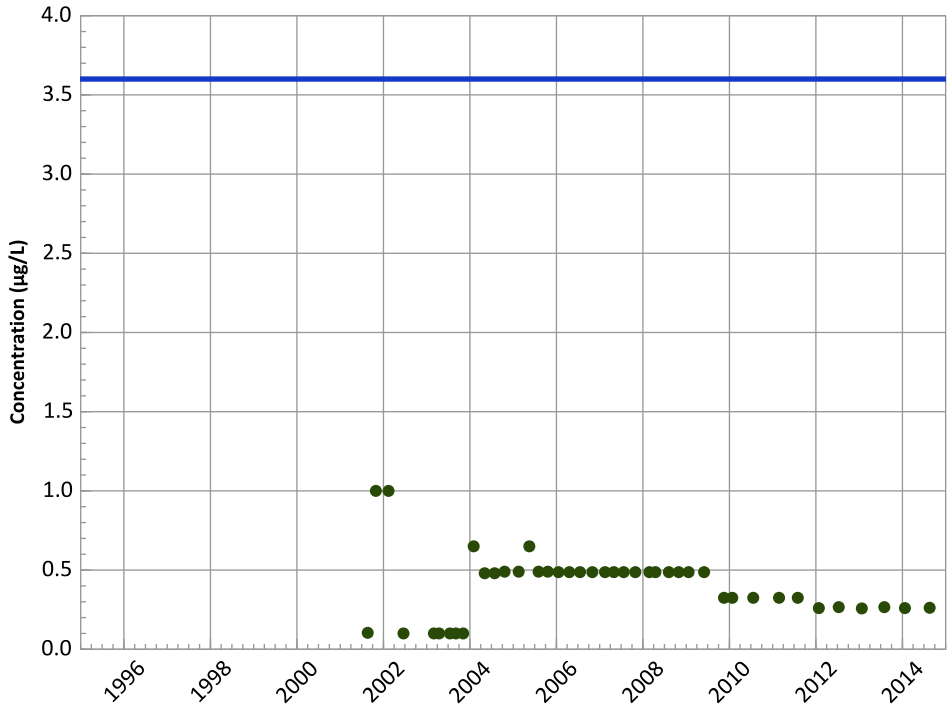
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

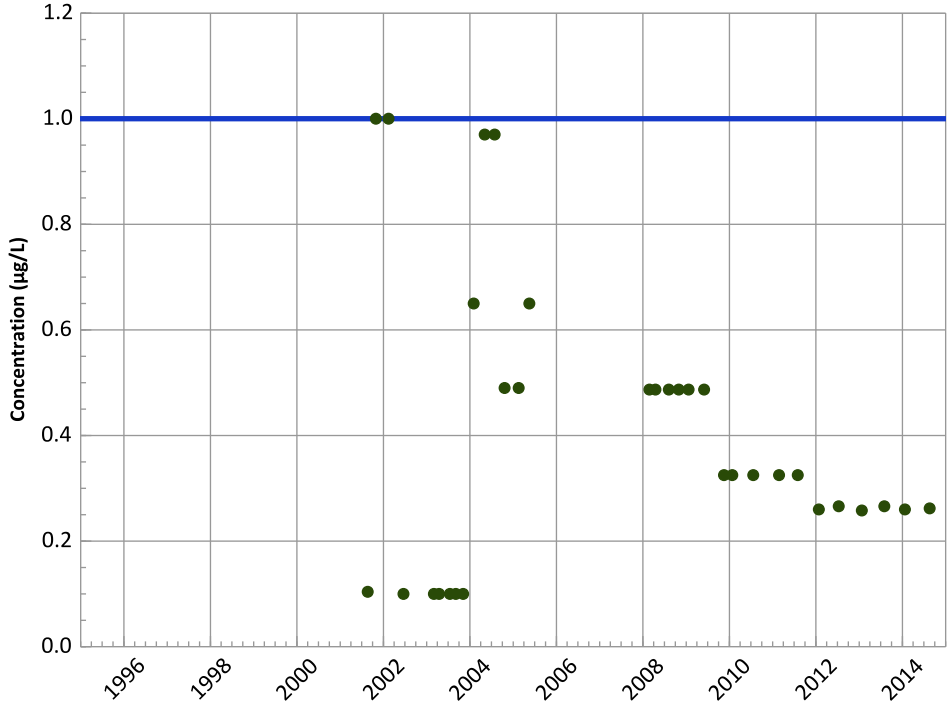


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

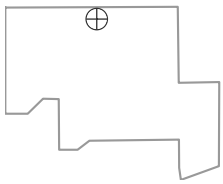
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

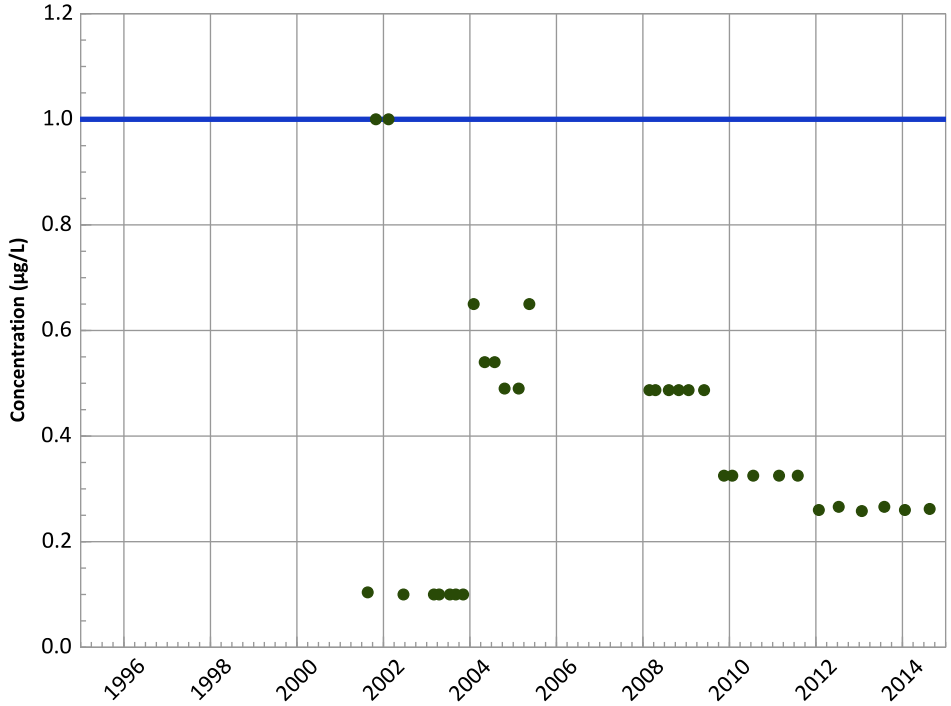
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

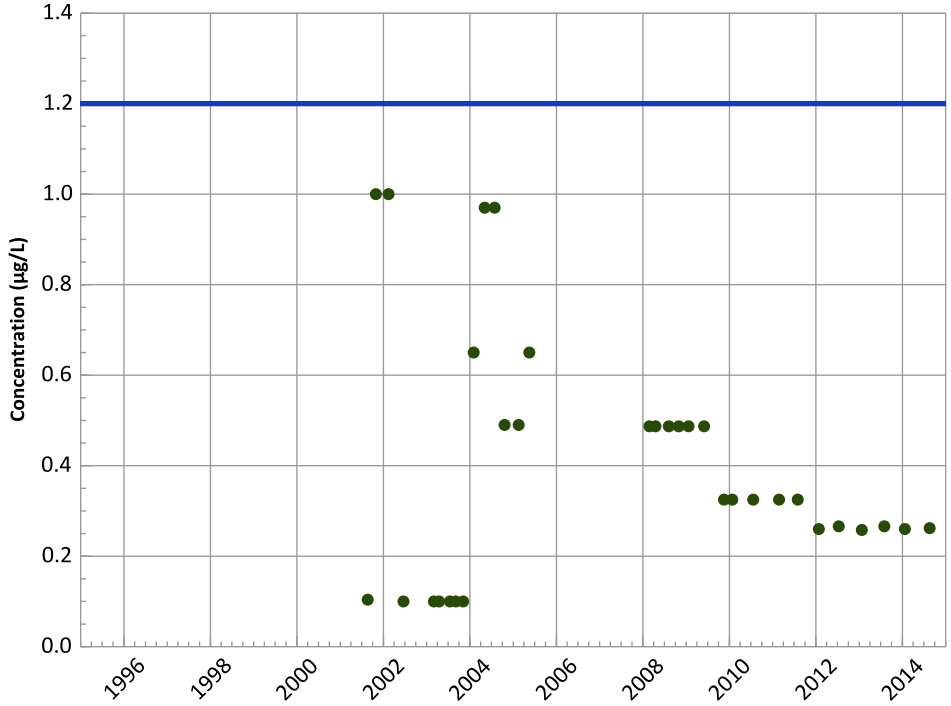


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

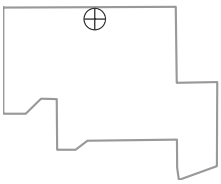
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

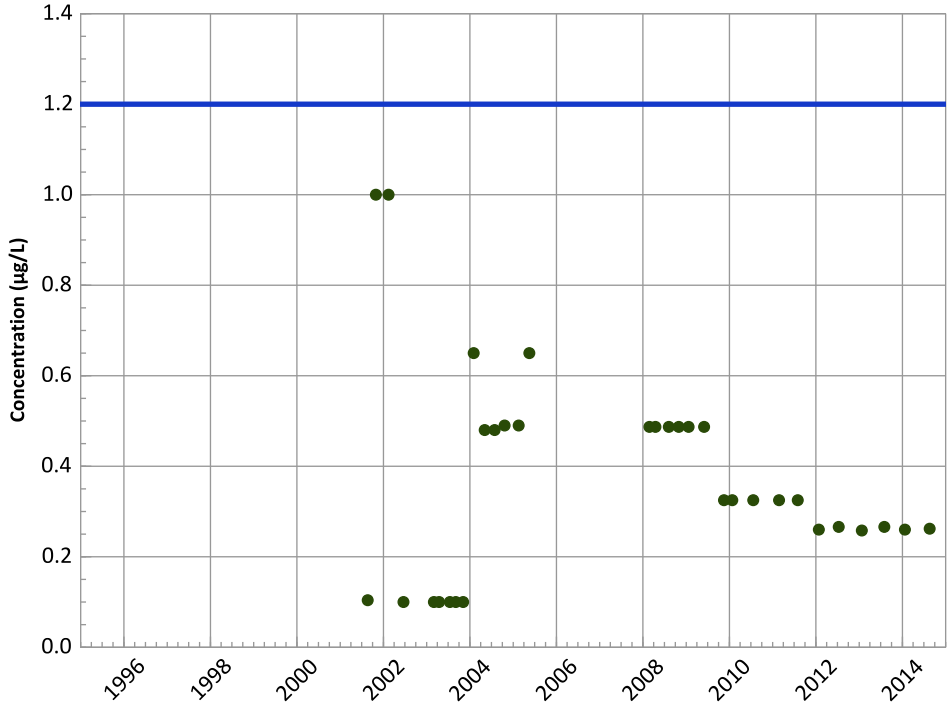
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

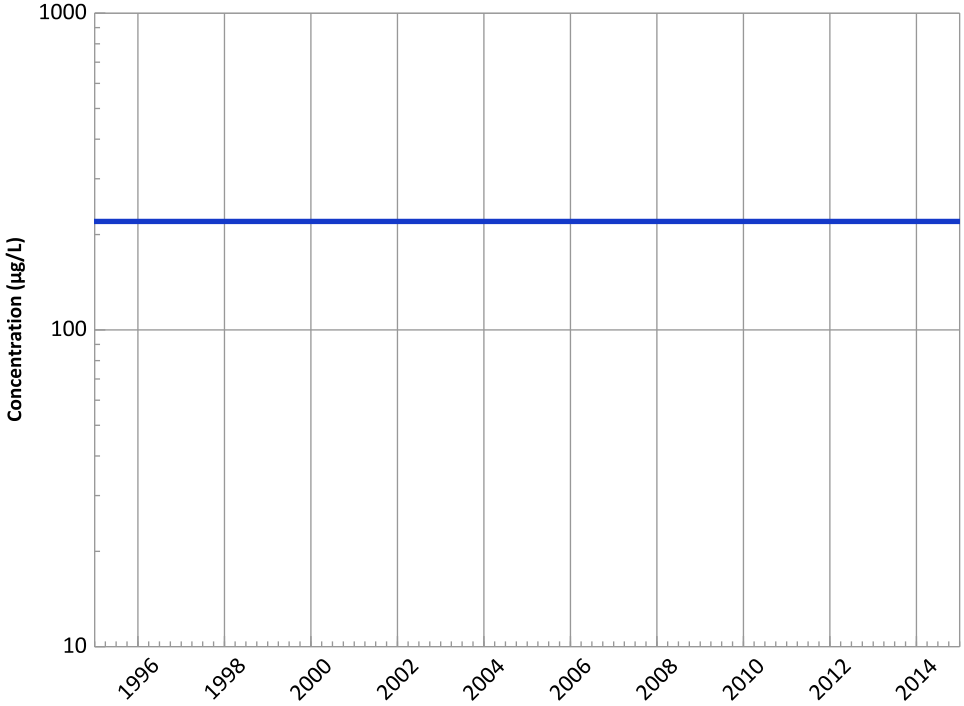


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

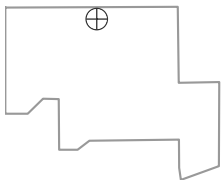
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

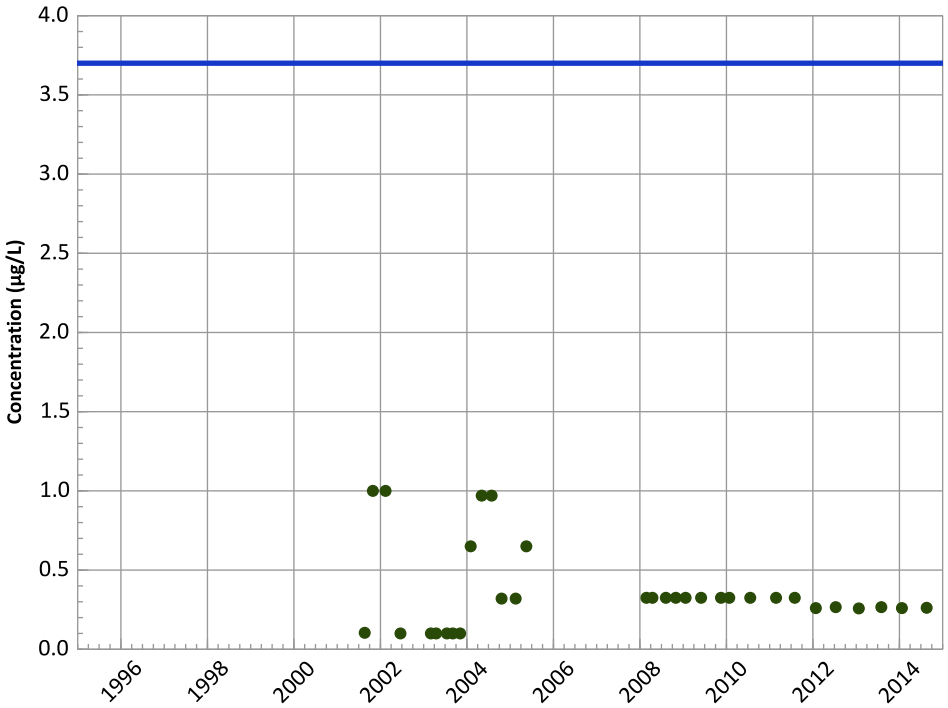
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

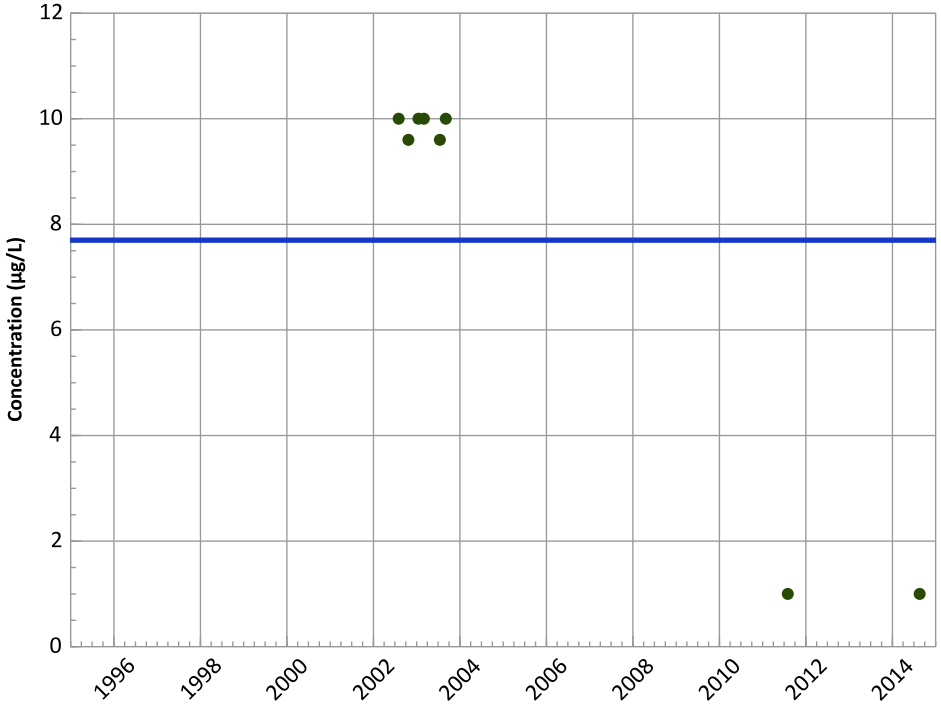


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

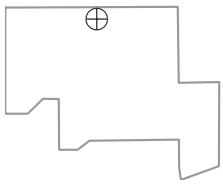
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

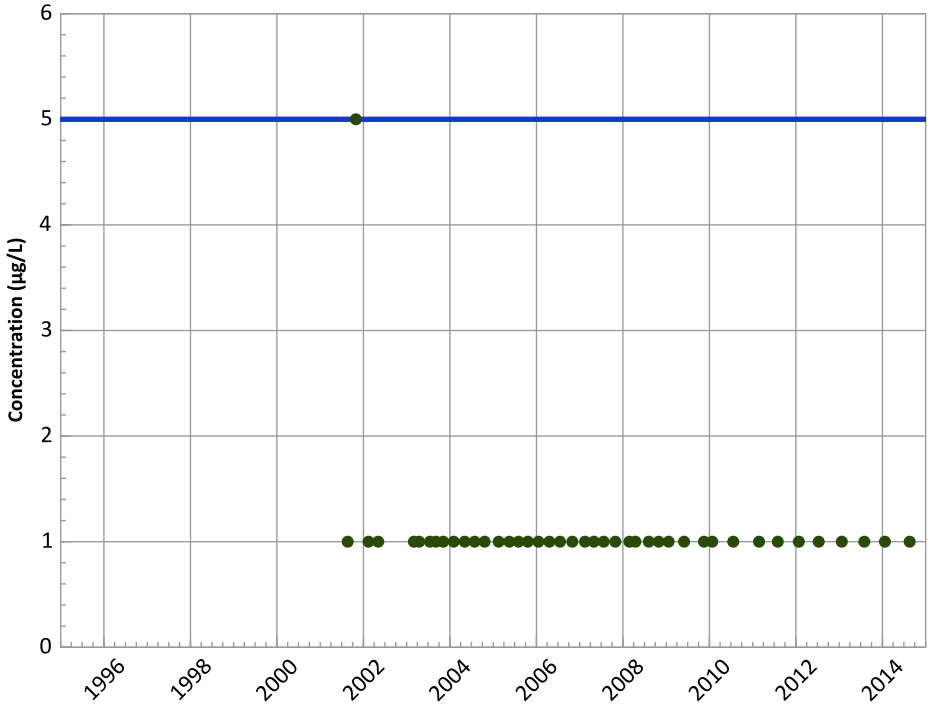
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

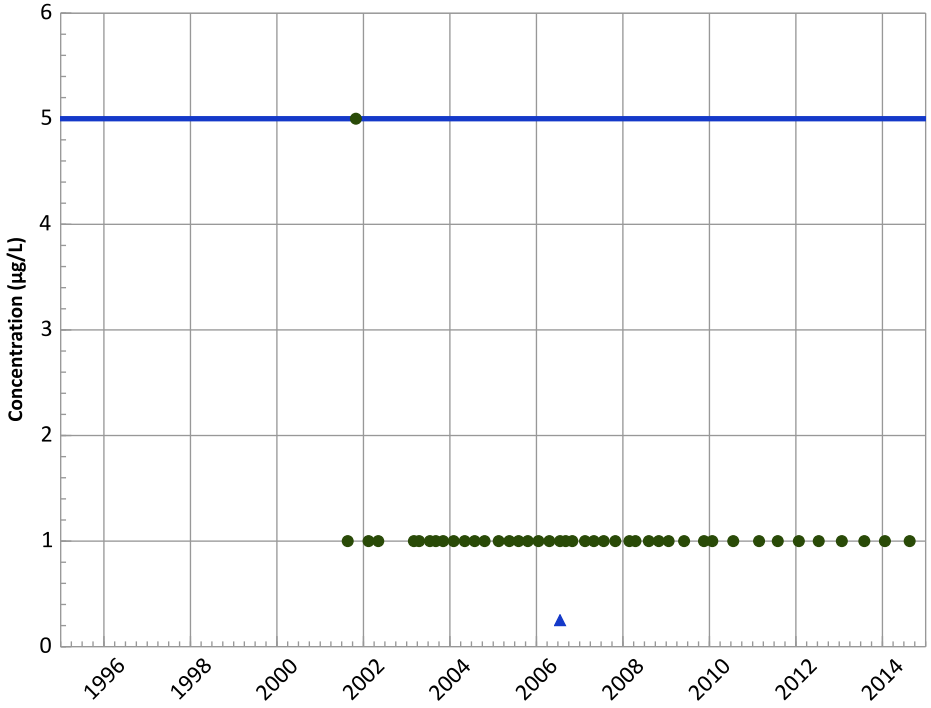


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

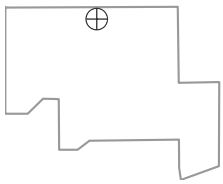
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

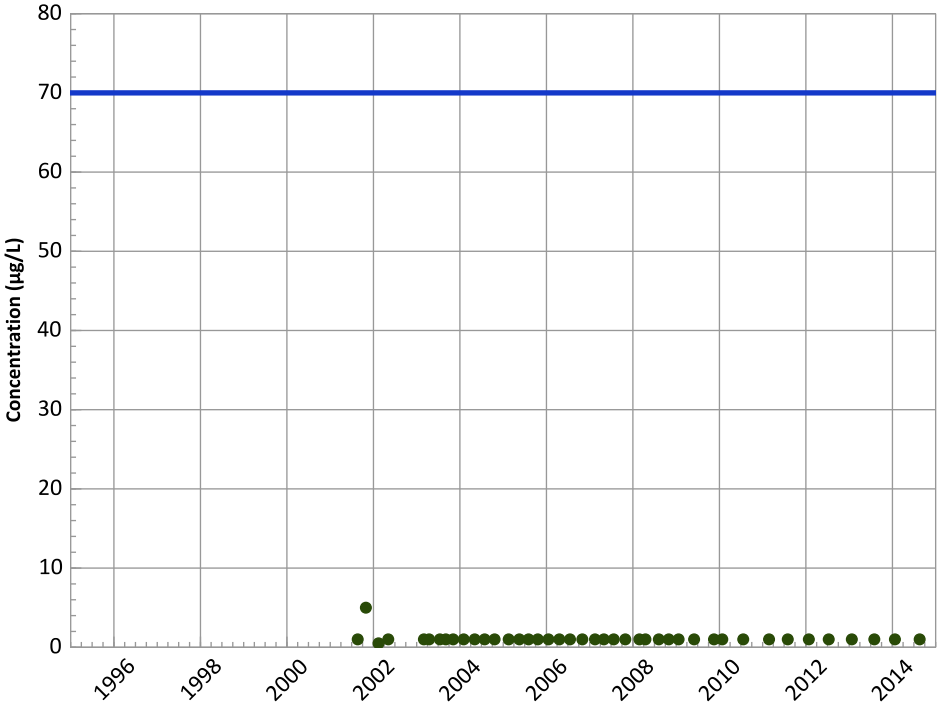
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

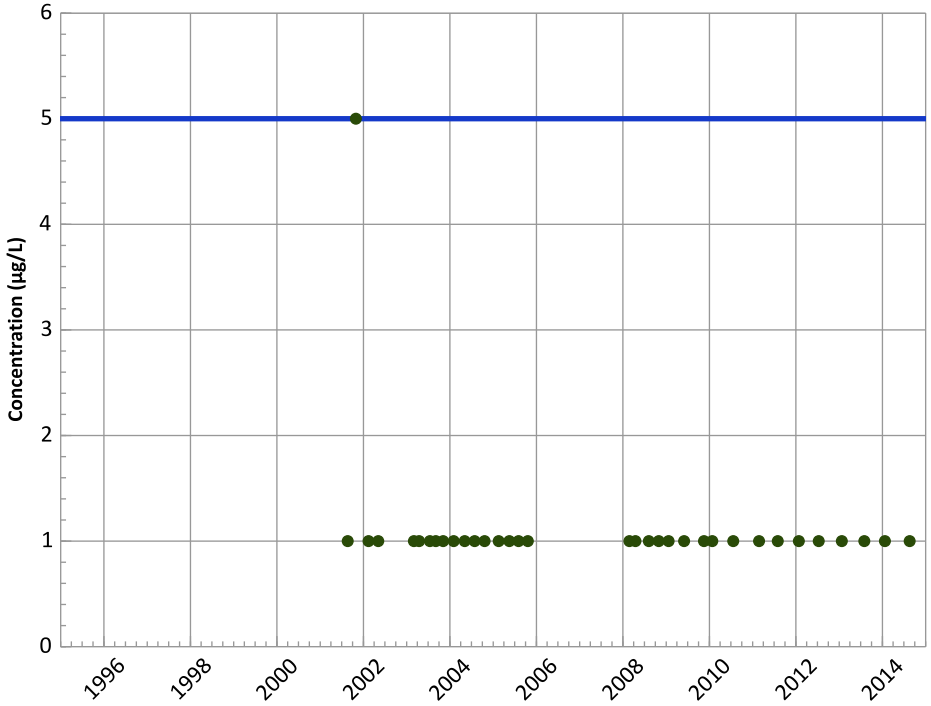


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

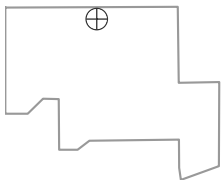
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

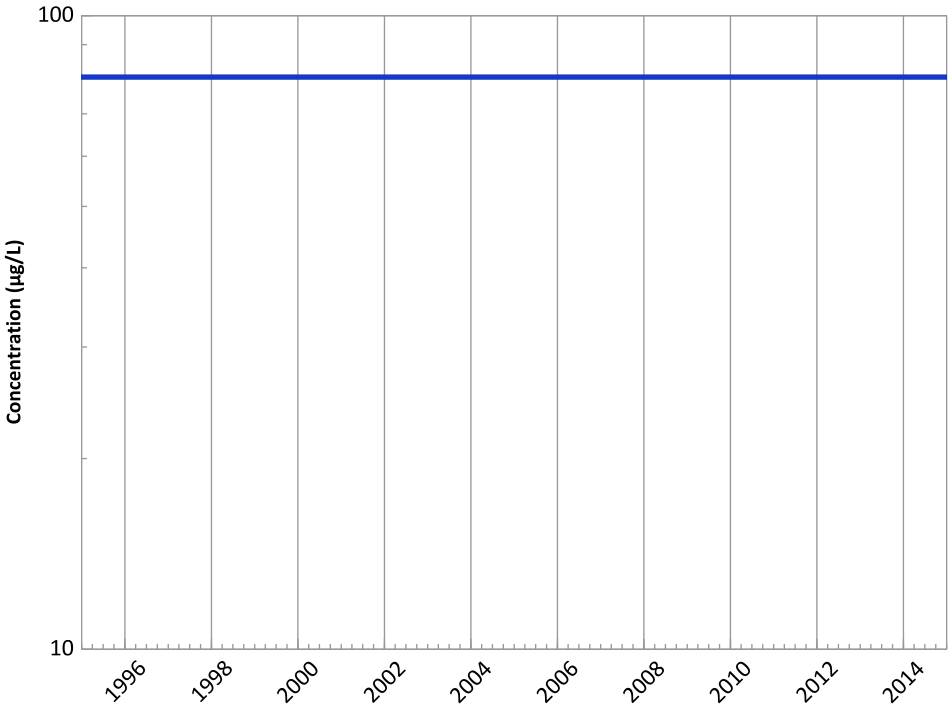
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

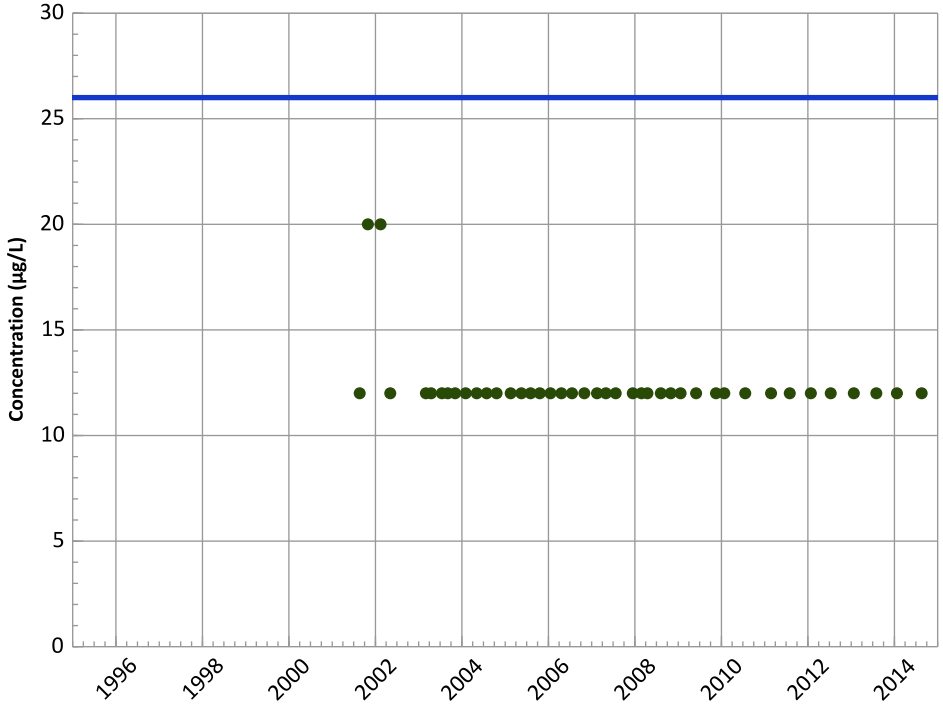


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

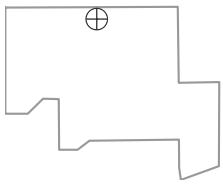
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

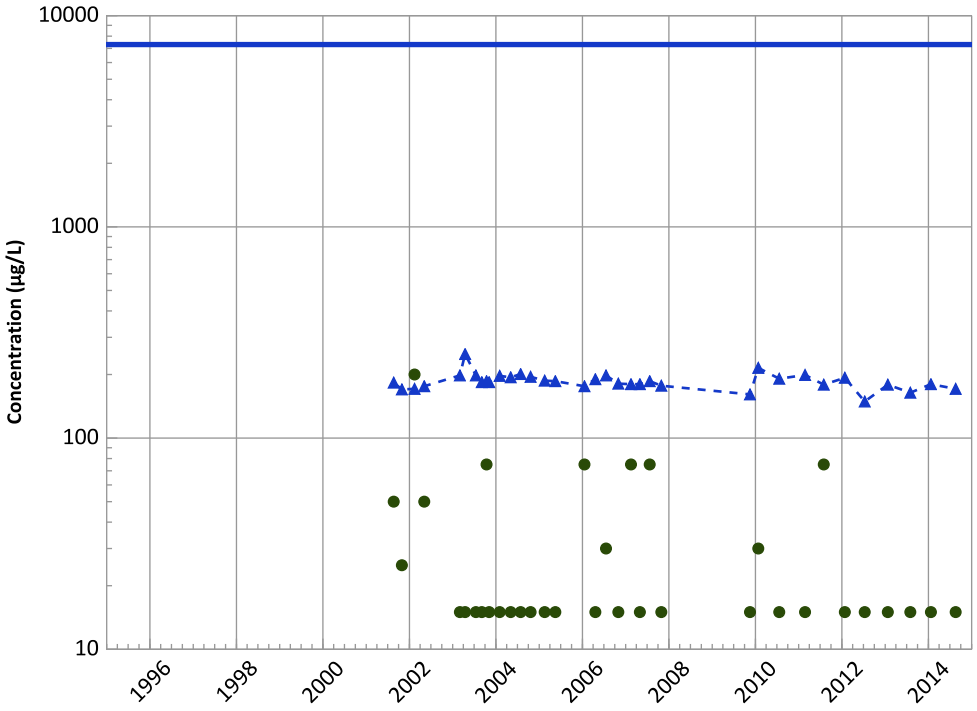
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

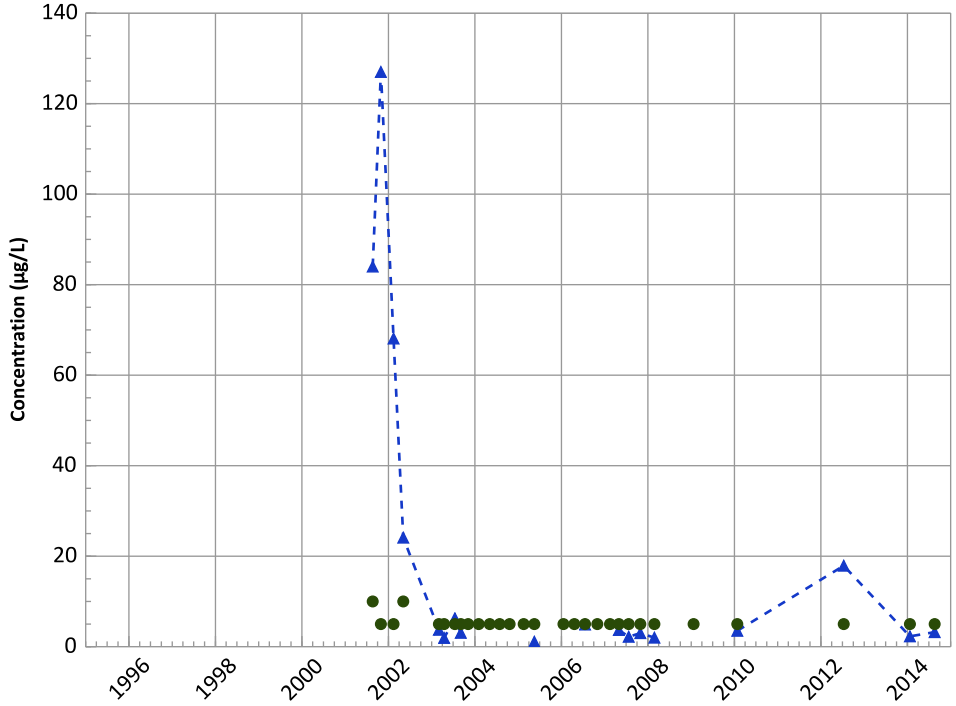


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Manganese Trend



Concentration Trend

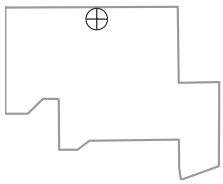
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

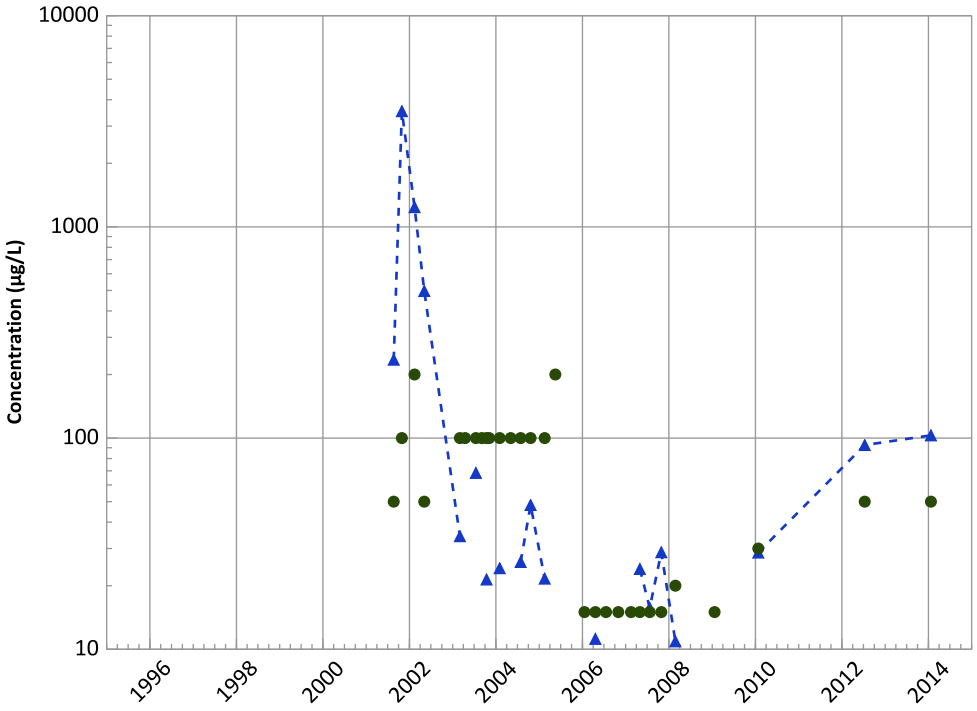
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

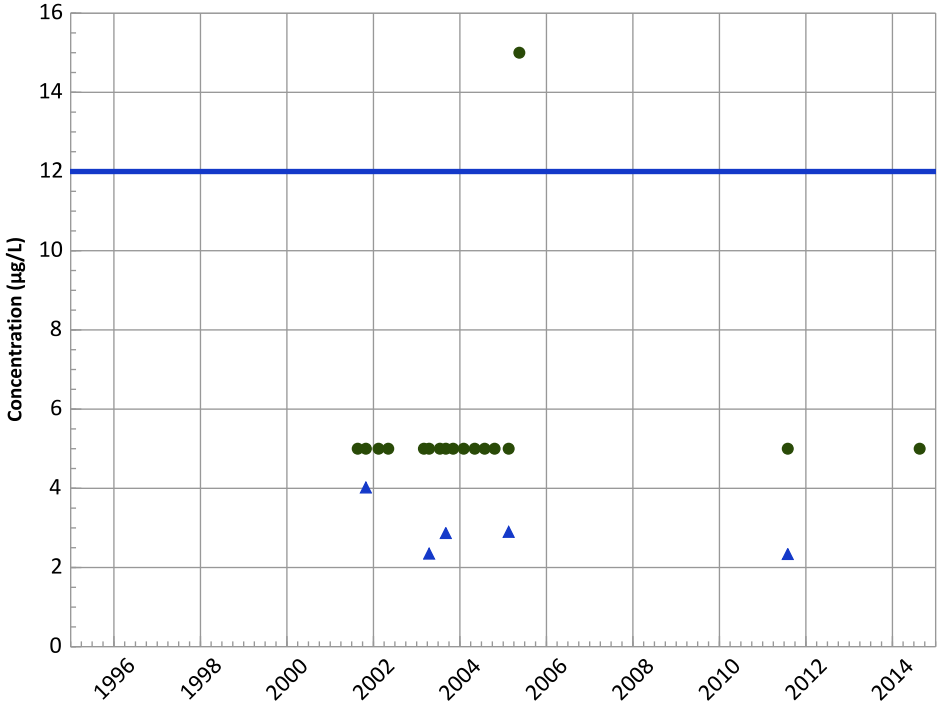


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Arsenic Trend



Concentration Trend

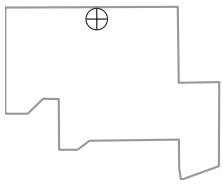
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

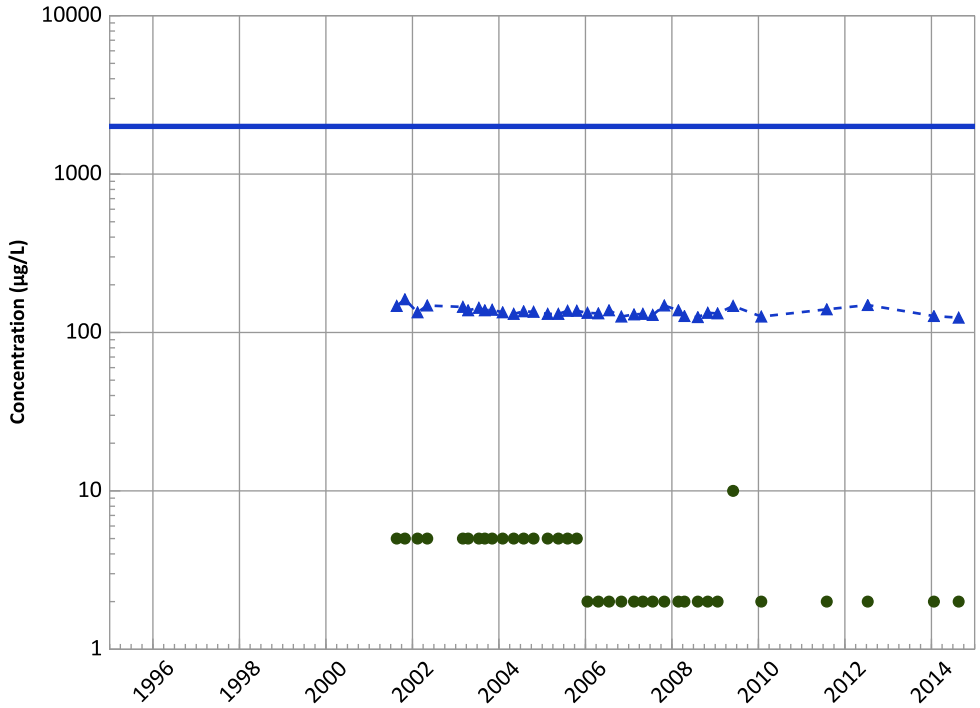
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

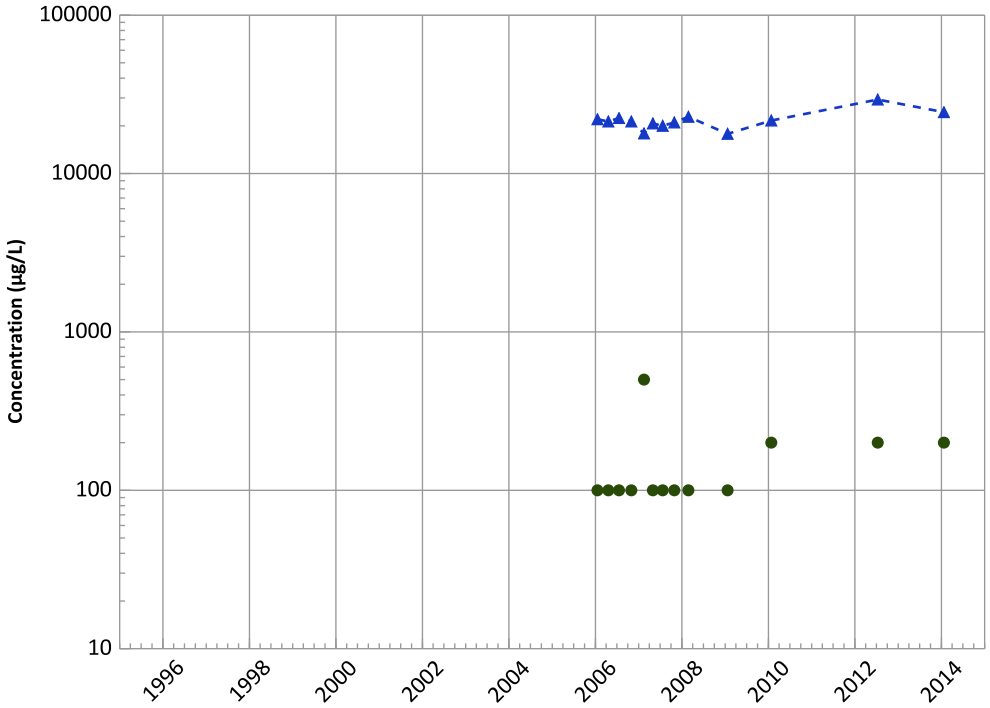


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Calcium Trend



Concentration Trend

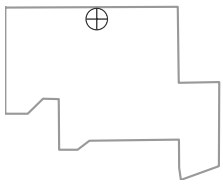
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

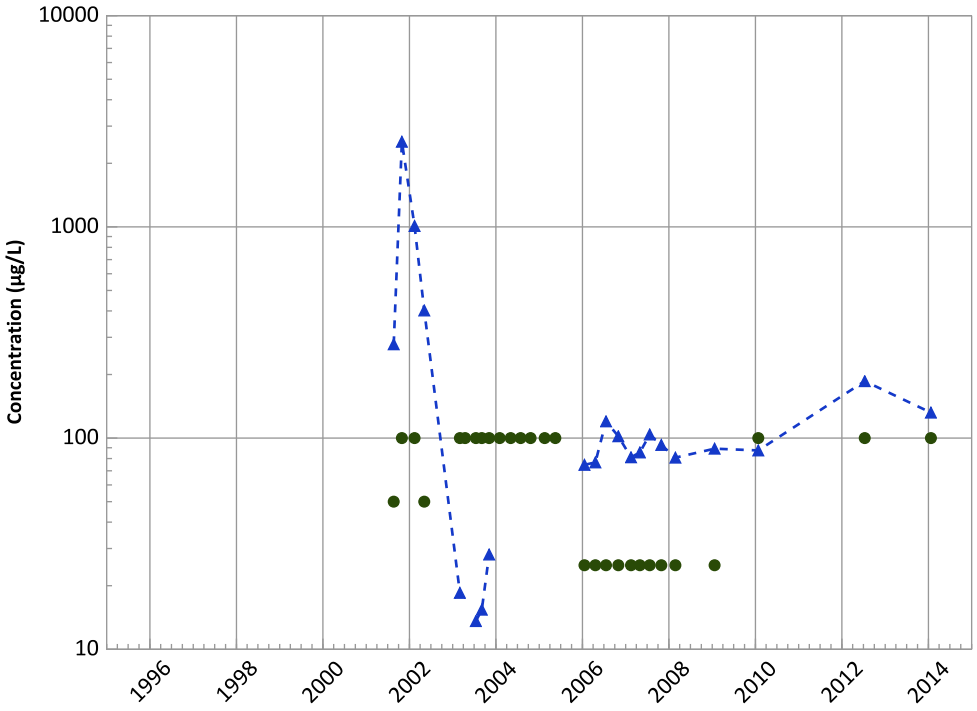
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

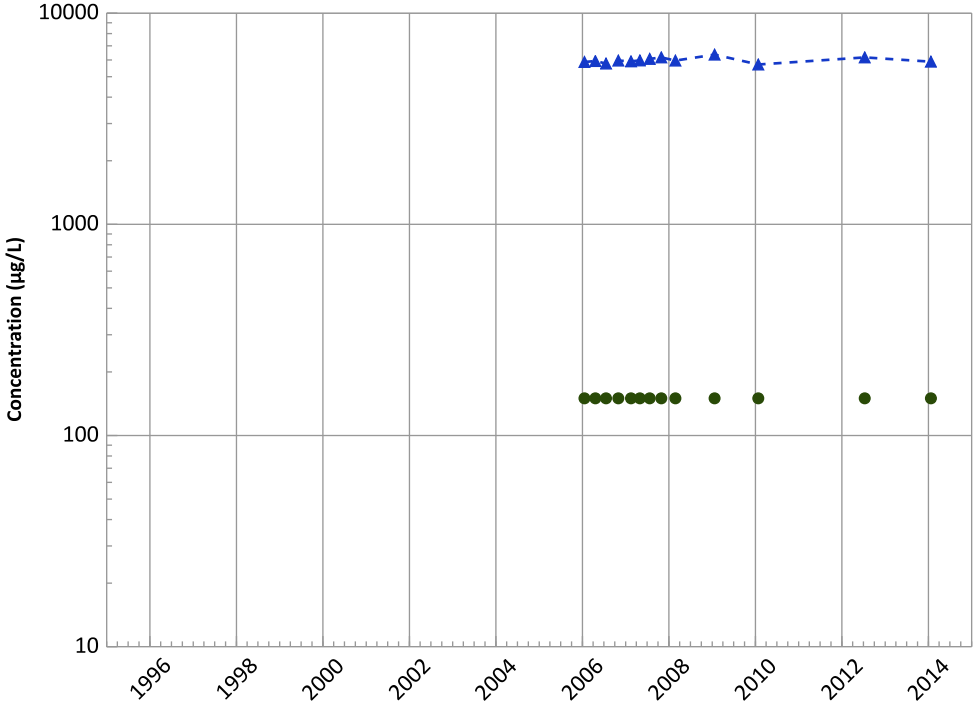


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Potassium Trend



Concentration Trend

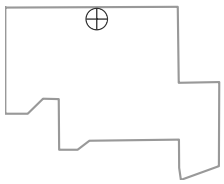
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

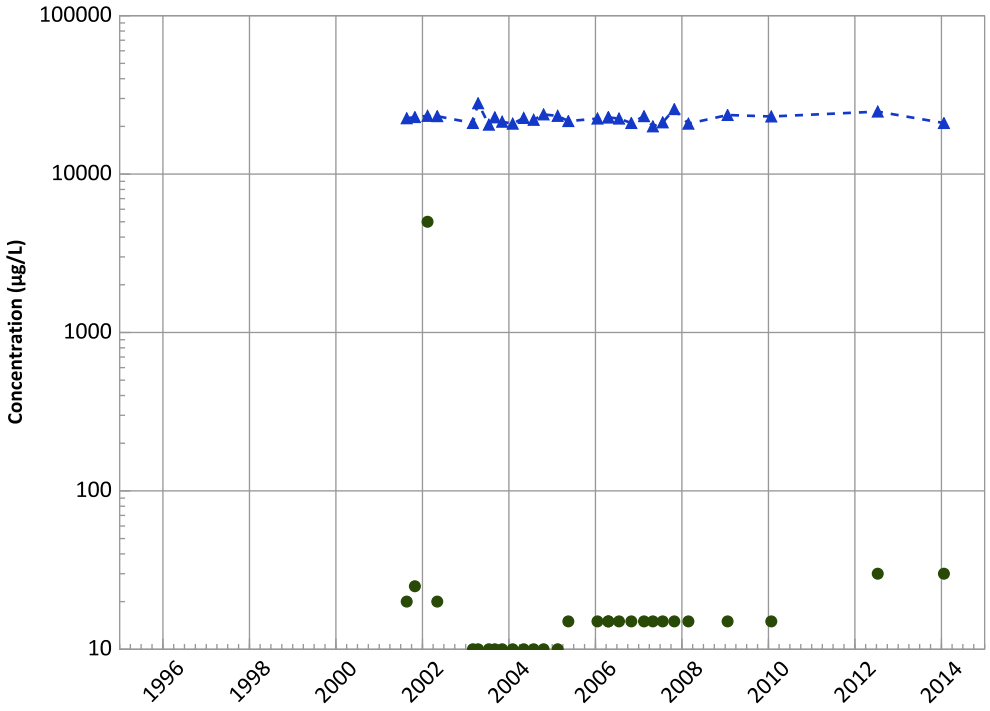
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1062A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

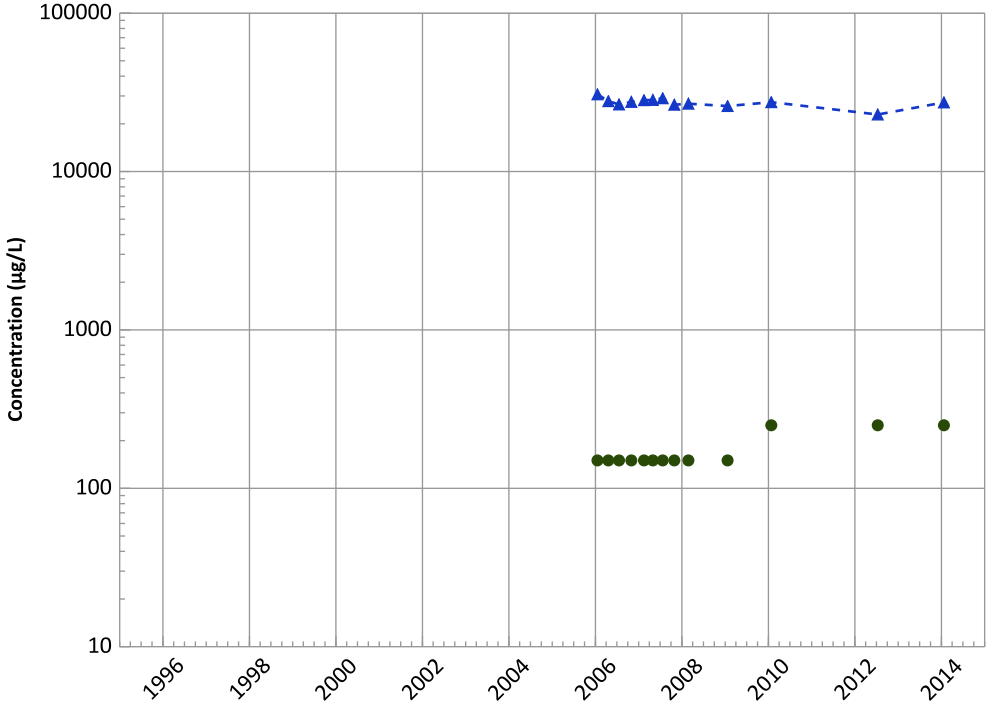


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Sodium Trend



Concentration Trend

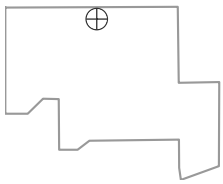
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

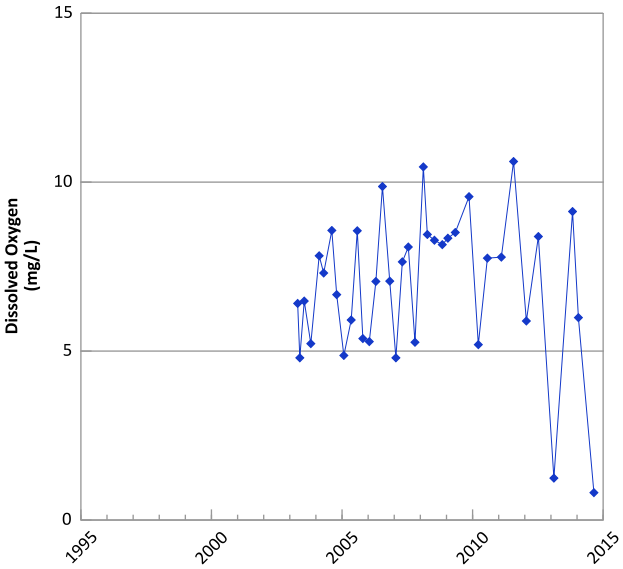
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/21/2001 to 08/19/2014
Analysis Date: 03/19/2015

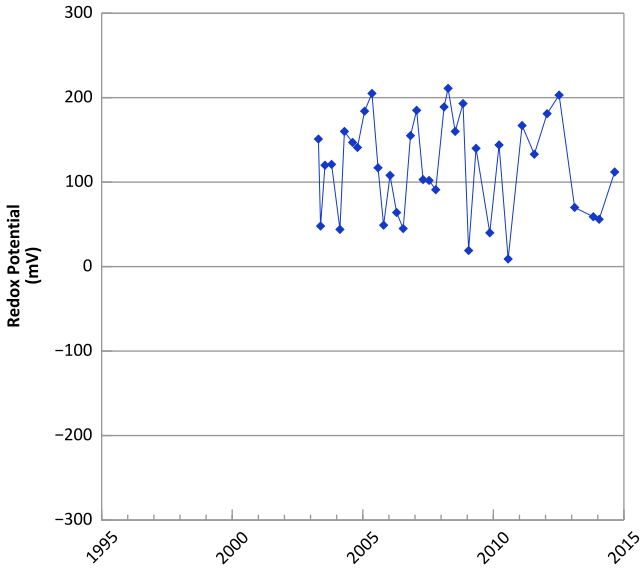
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

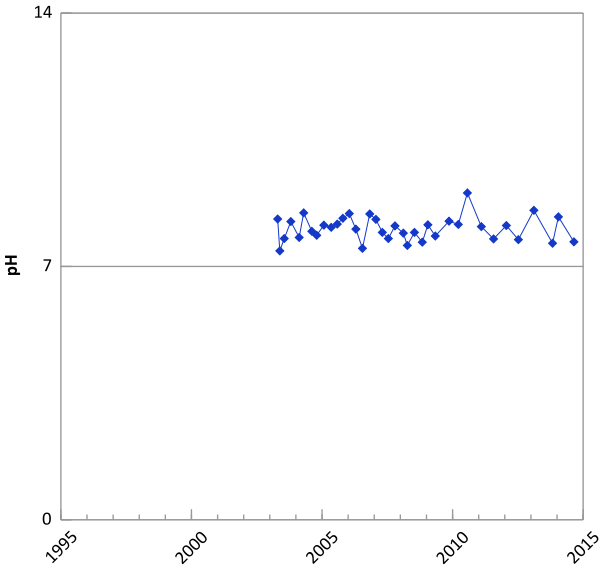
Well Location

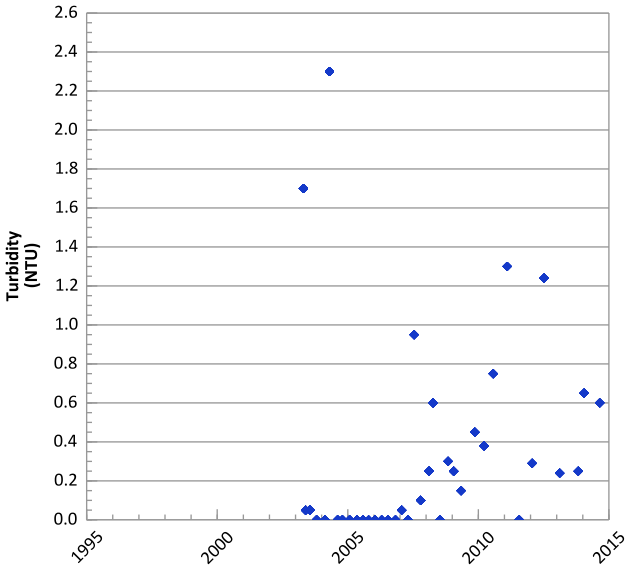


PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



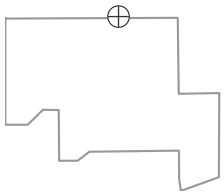






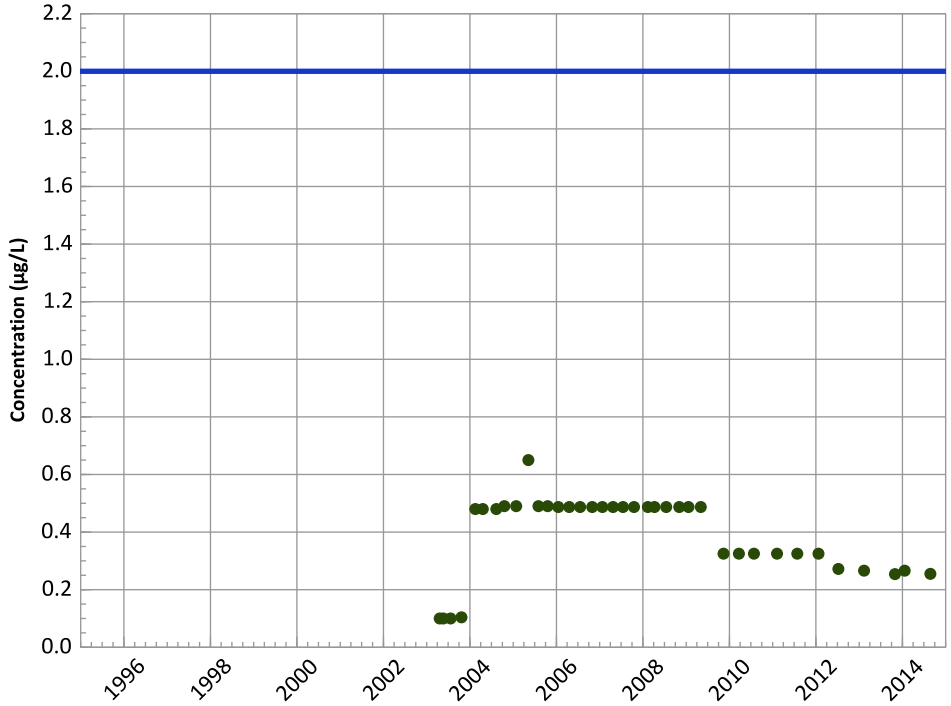
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

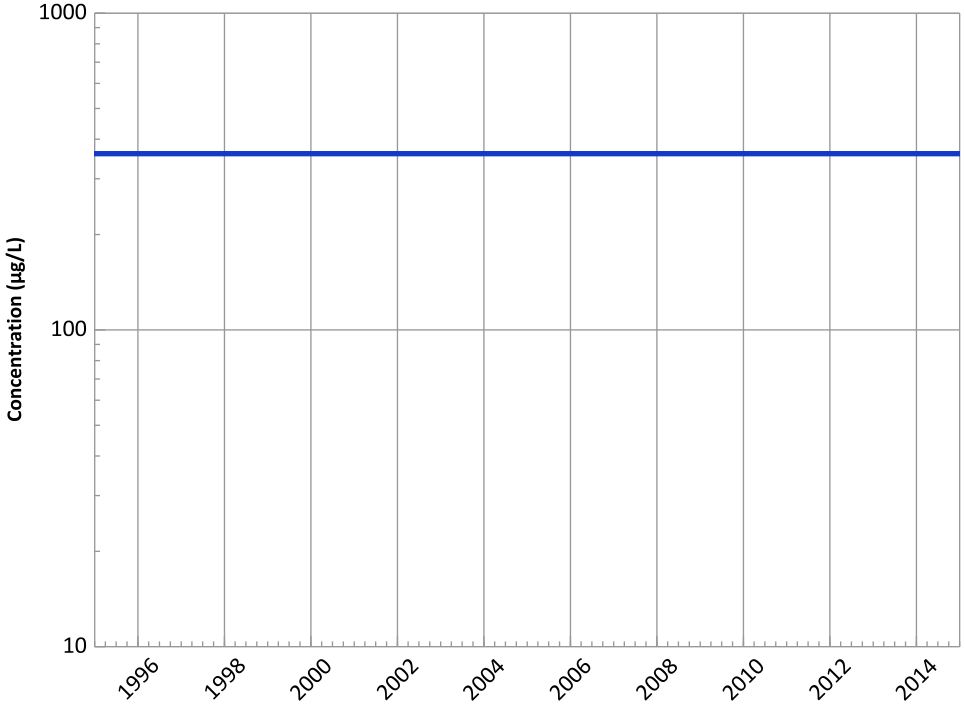


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

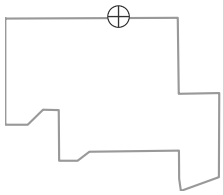
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

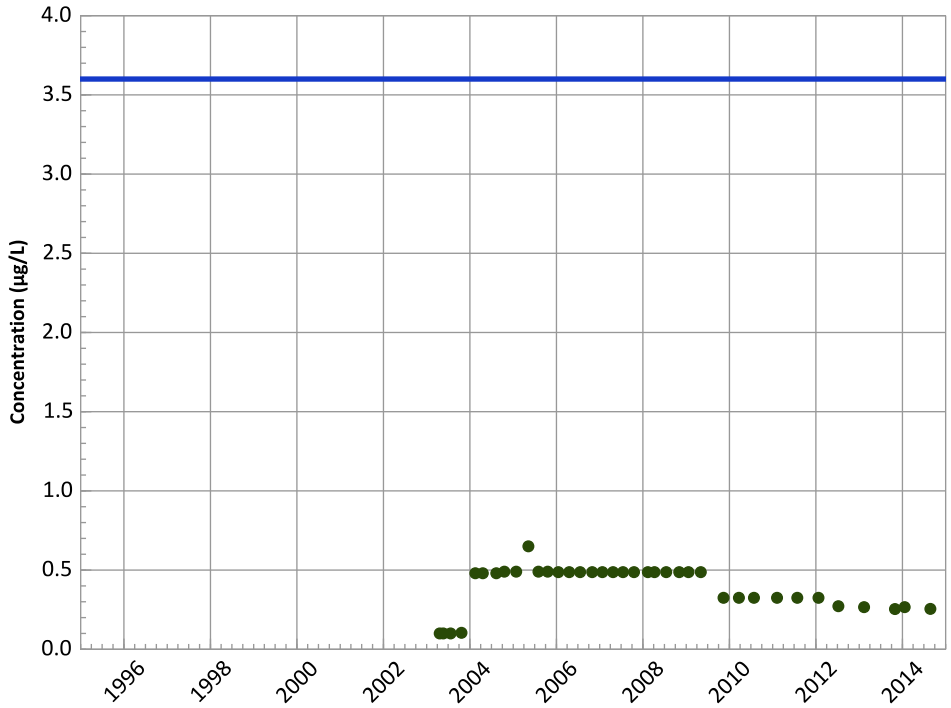
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

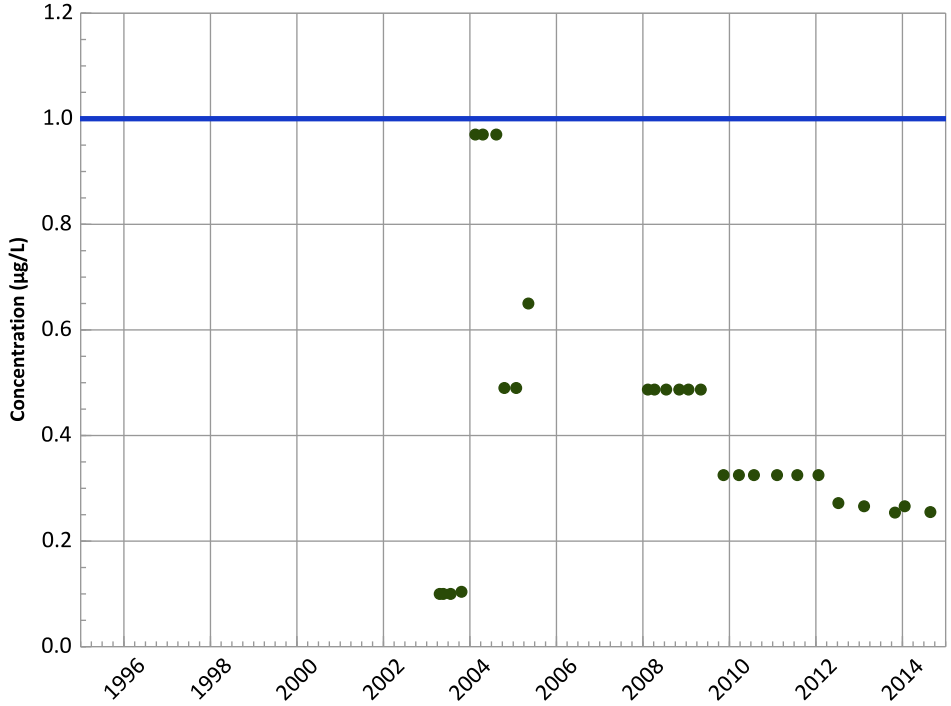


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

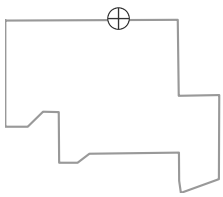
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

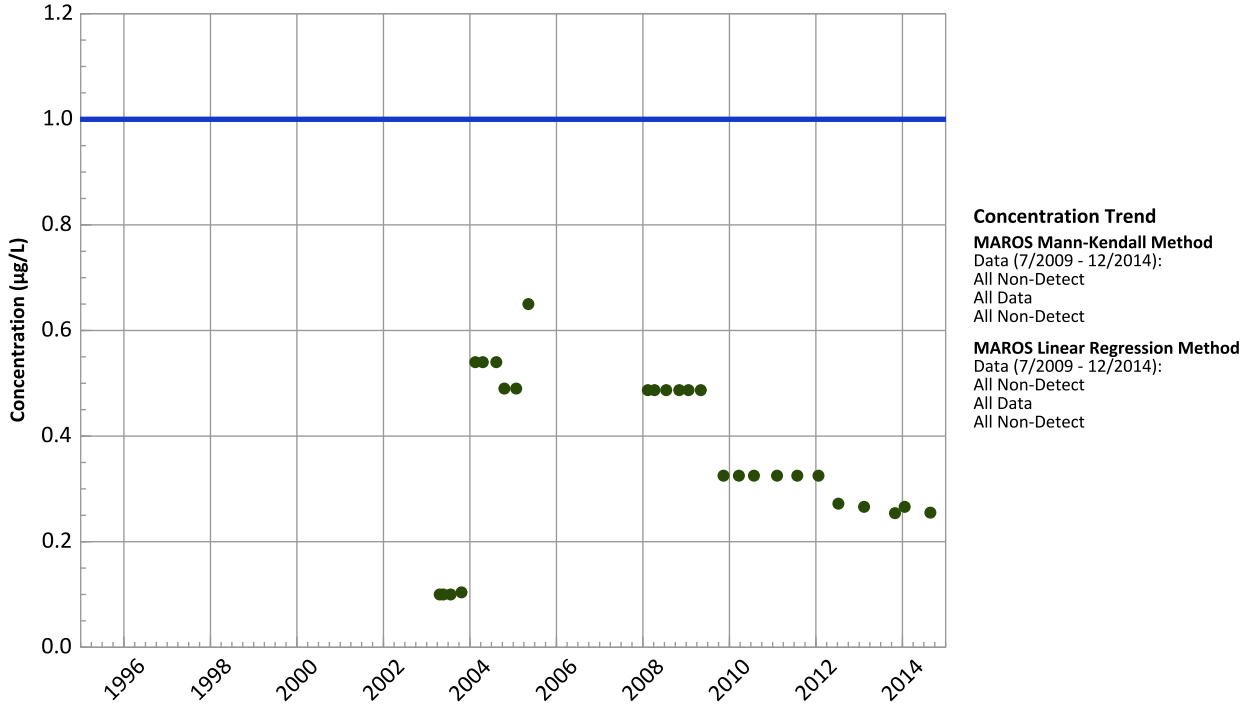
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

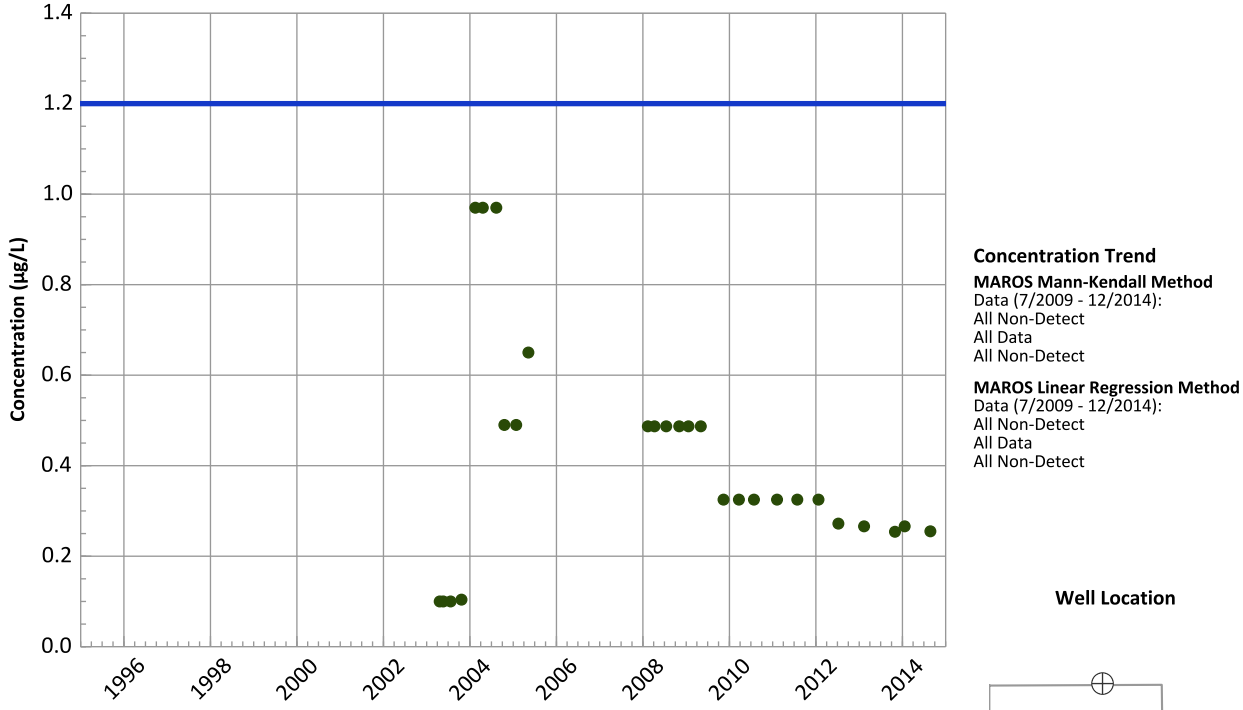


PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend



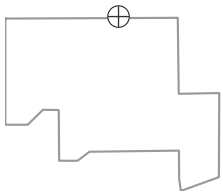
2-Amino-4,6-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

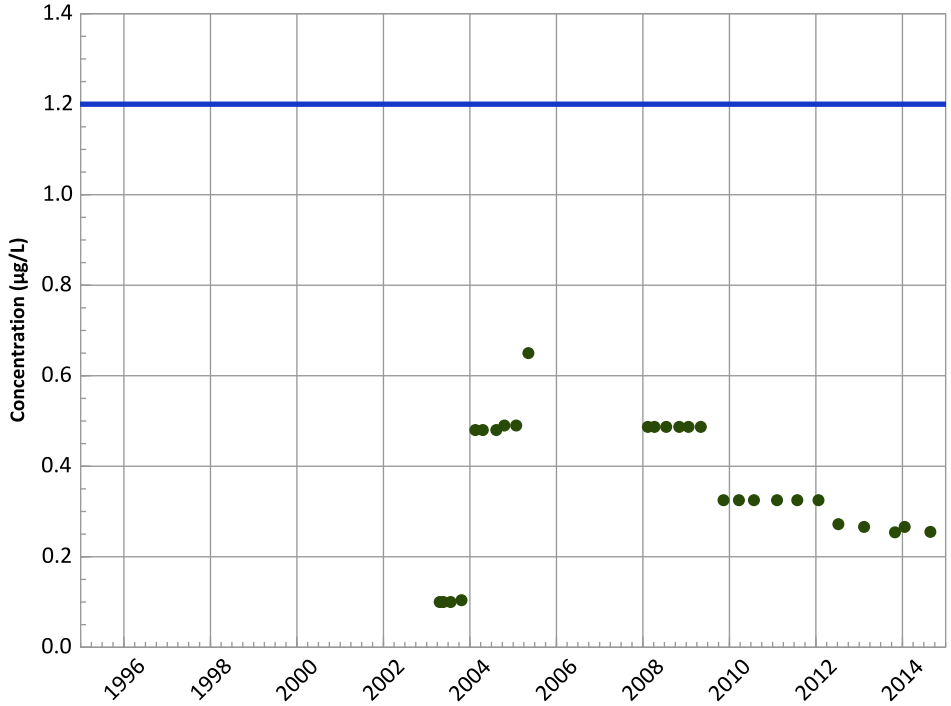
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

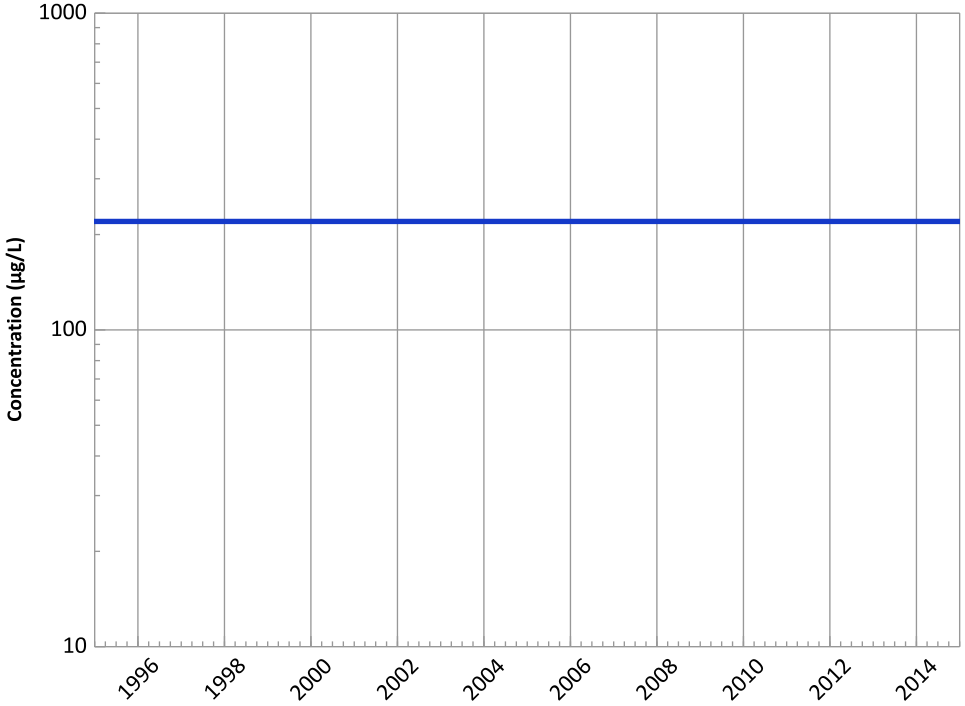


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

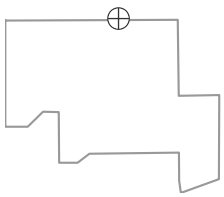


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

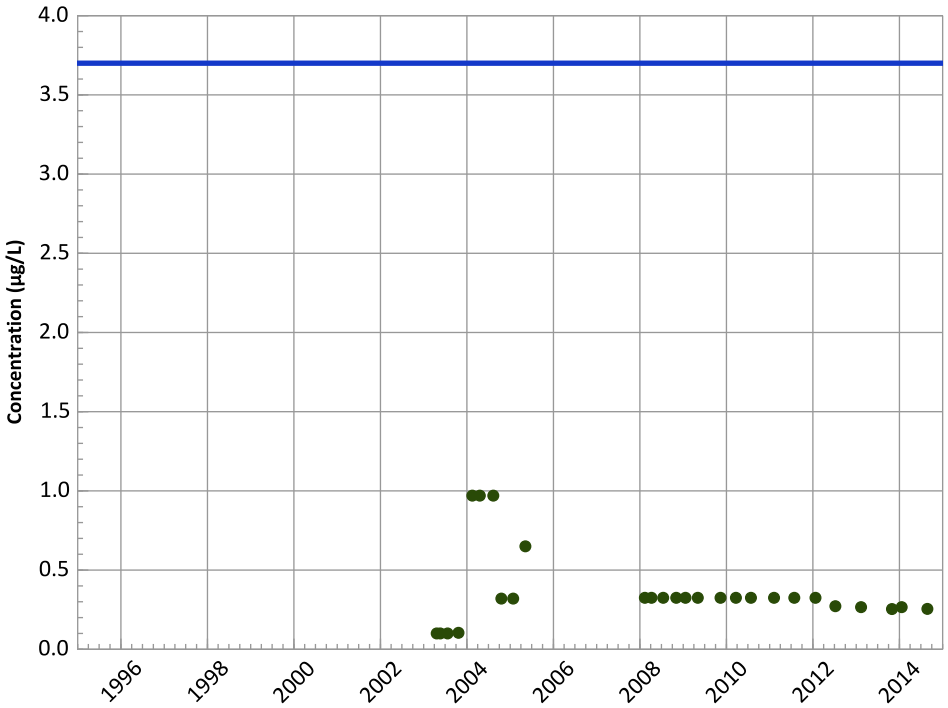


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

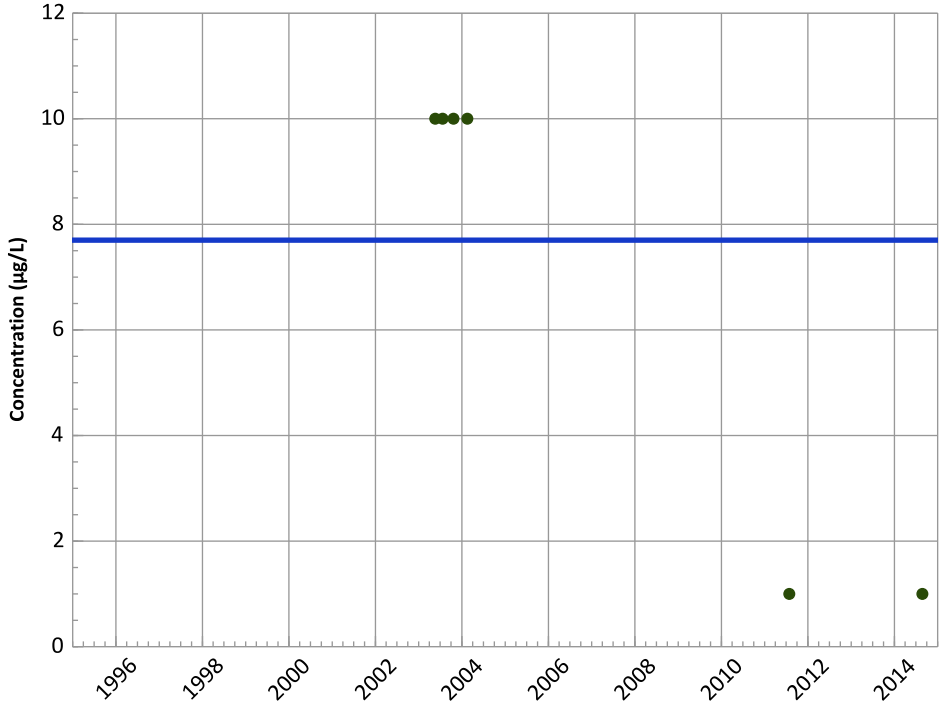


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

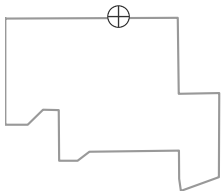
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

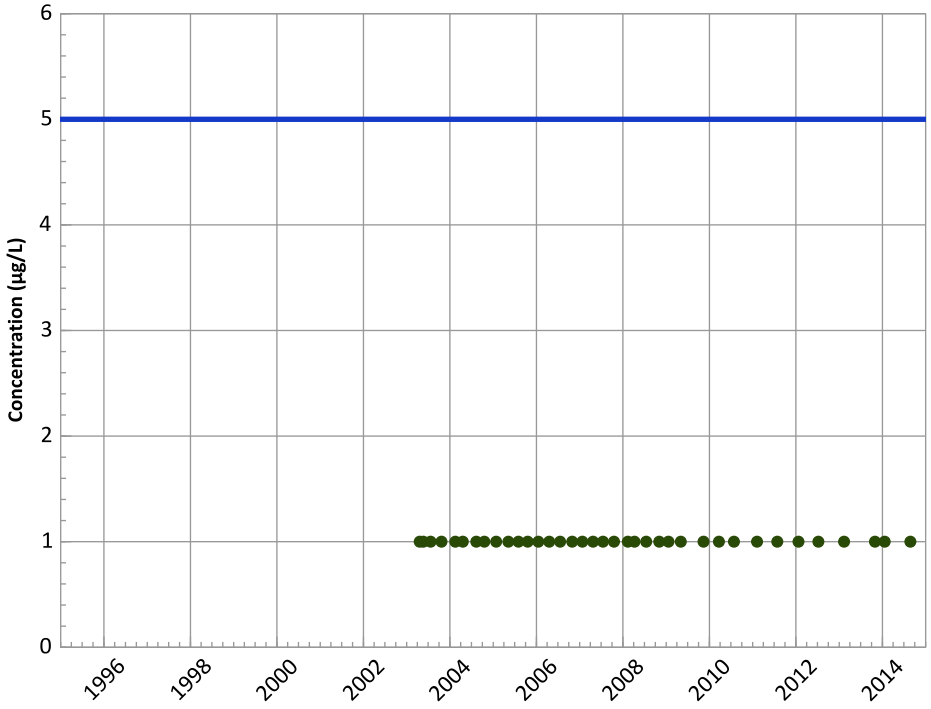
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

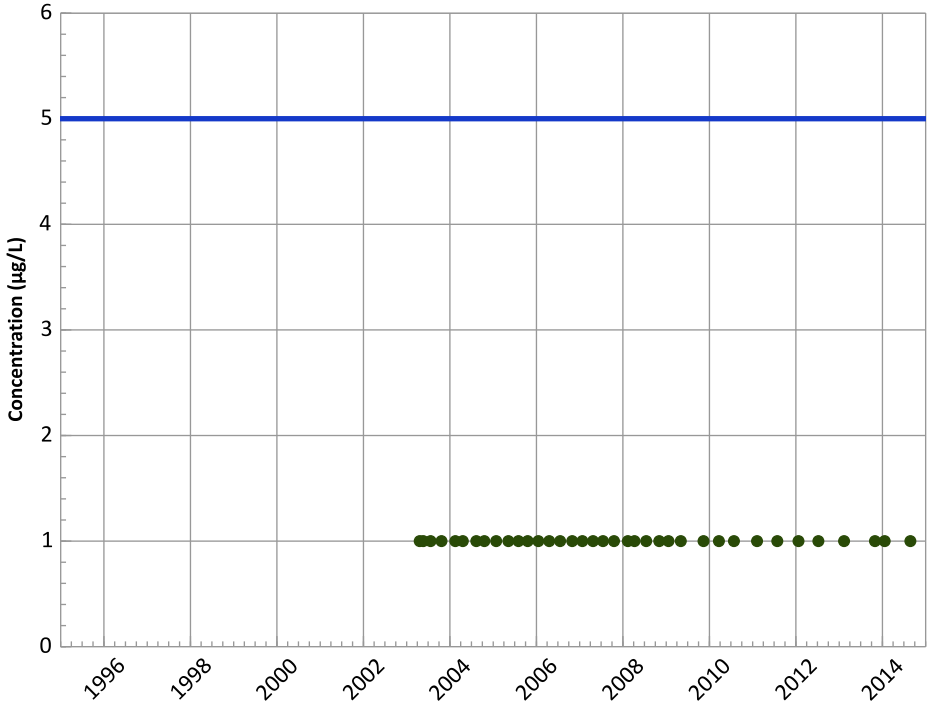


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

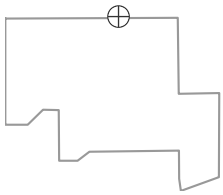
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

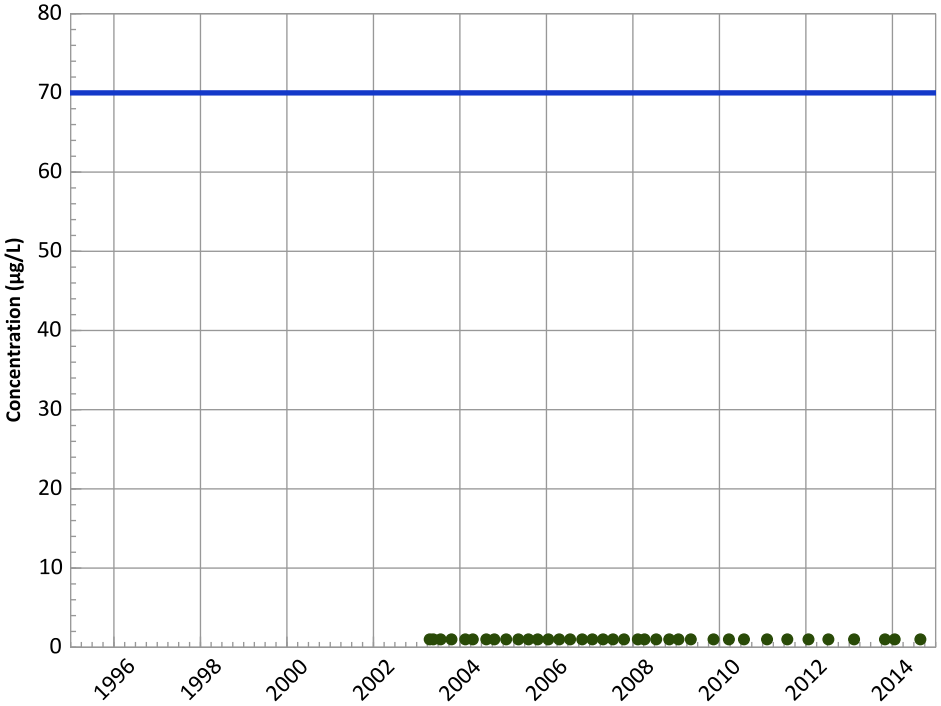
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

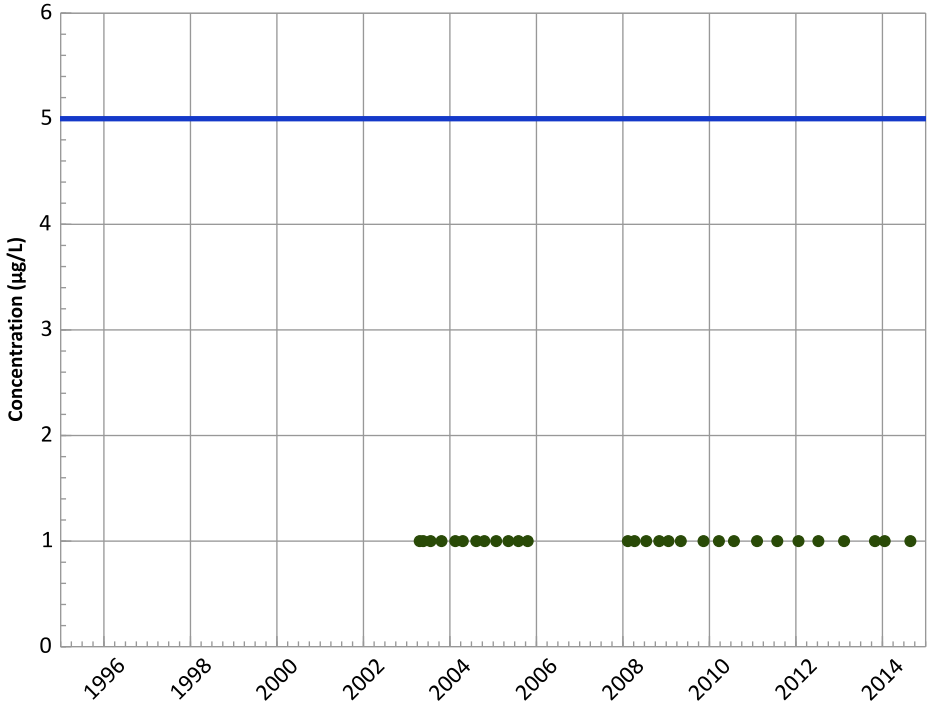


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

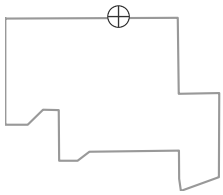
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

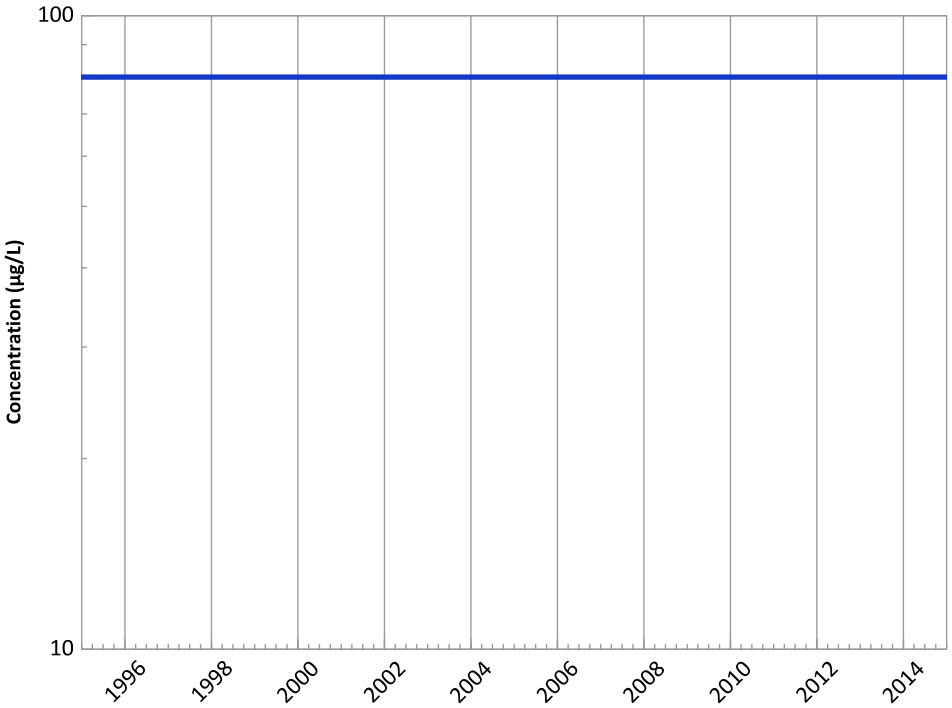
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

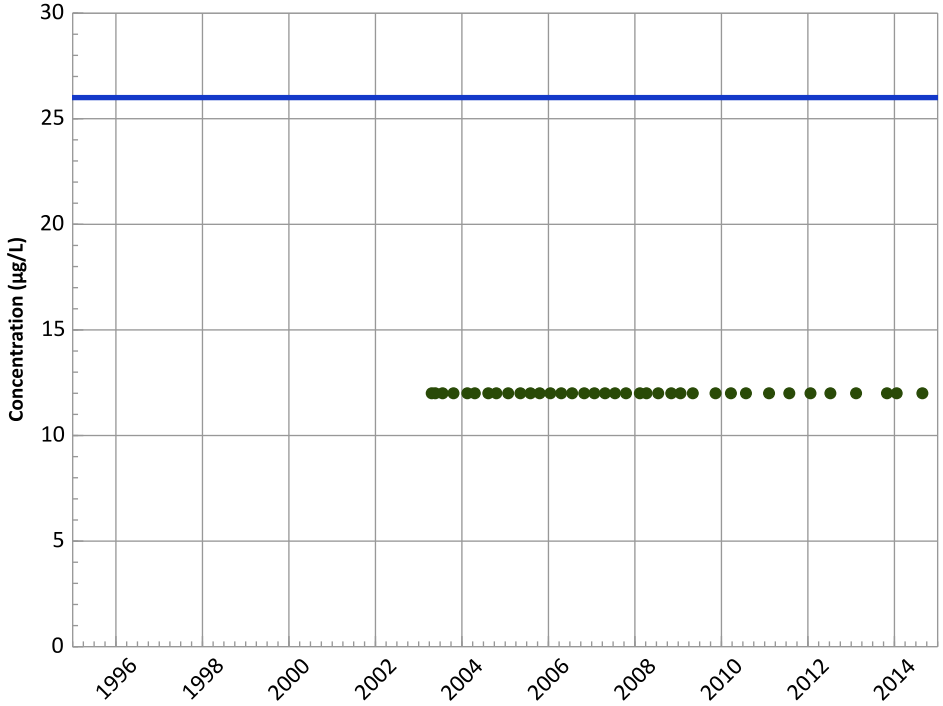


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

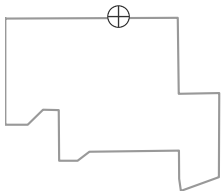
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

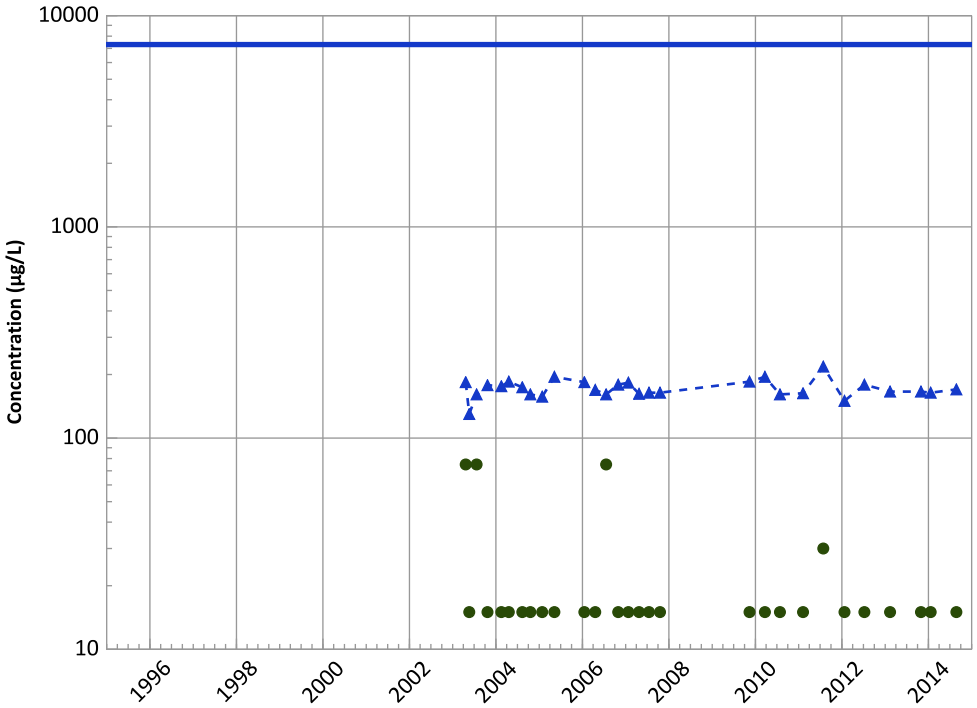
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

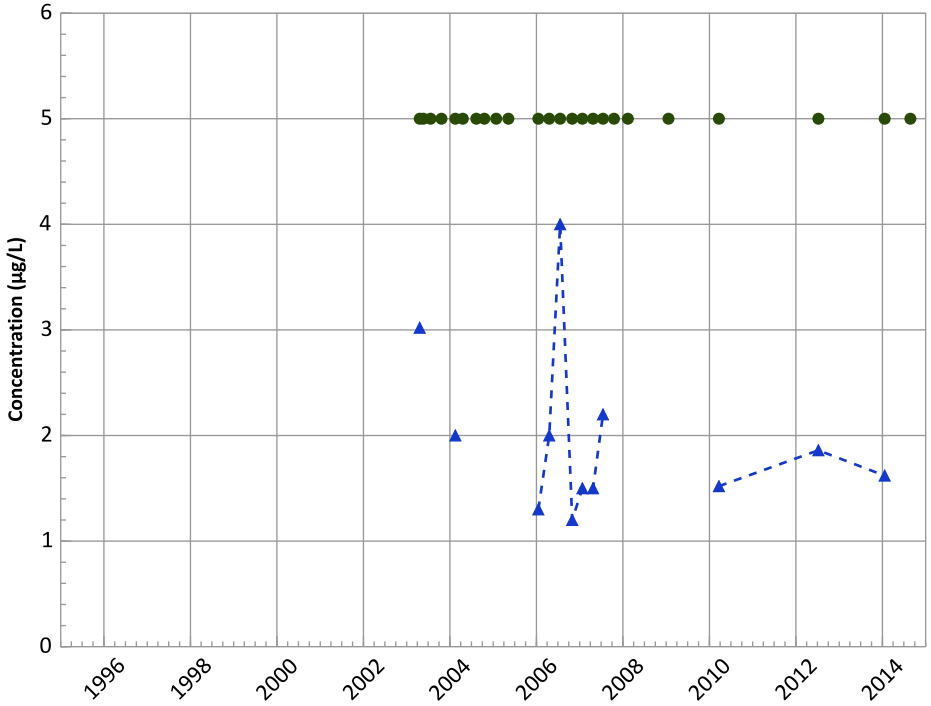


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Manganese Trend



Concentration Trend

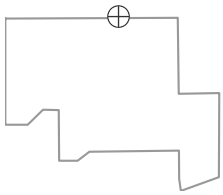
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

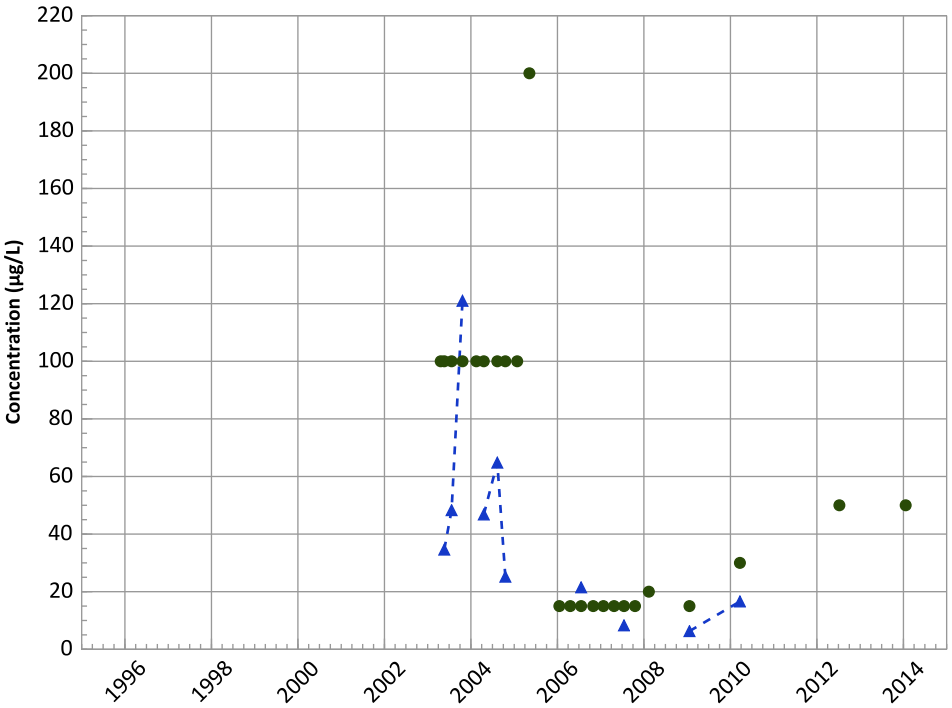
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

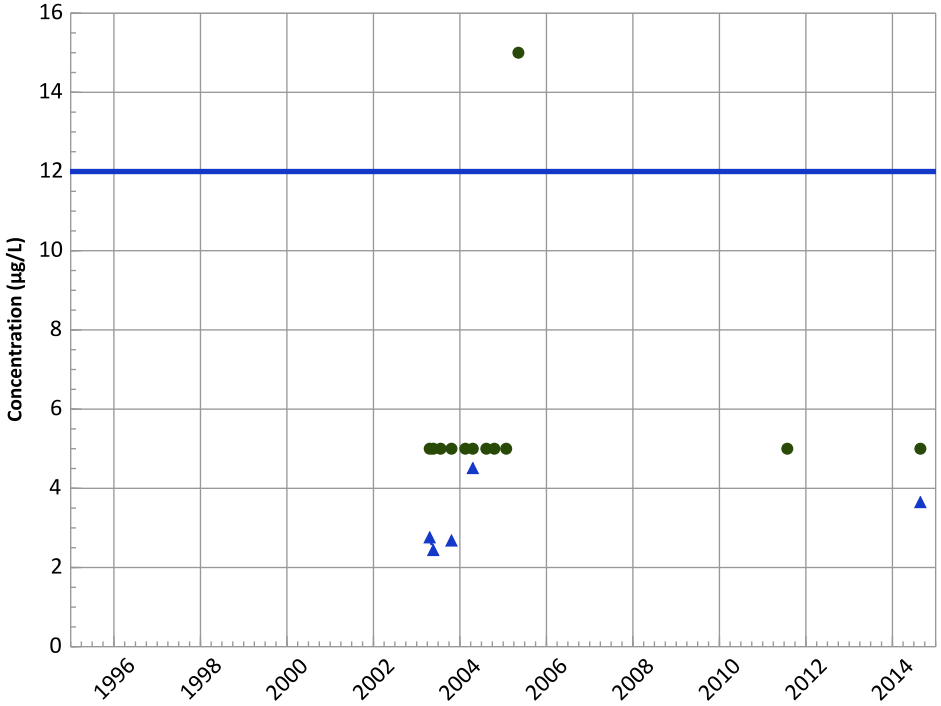


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Arsenic Trend



Concentration Trend

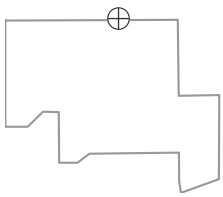
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

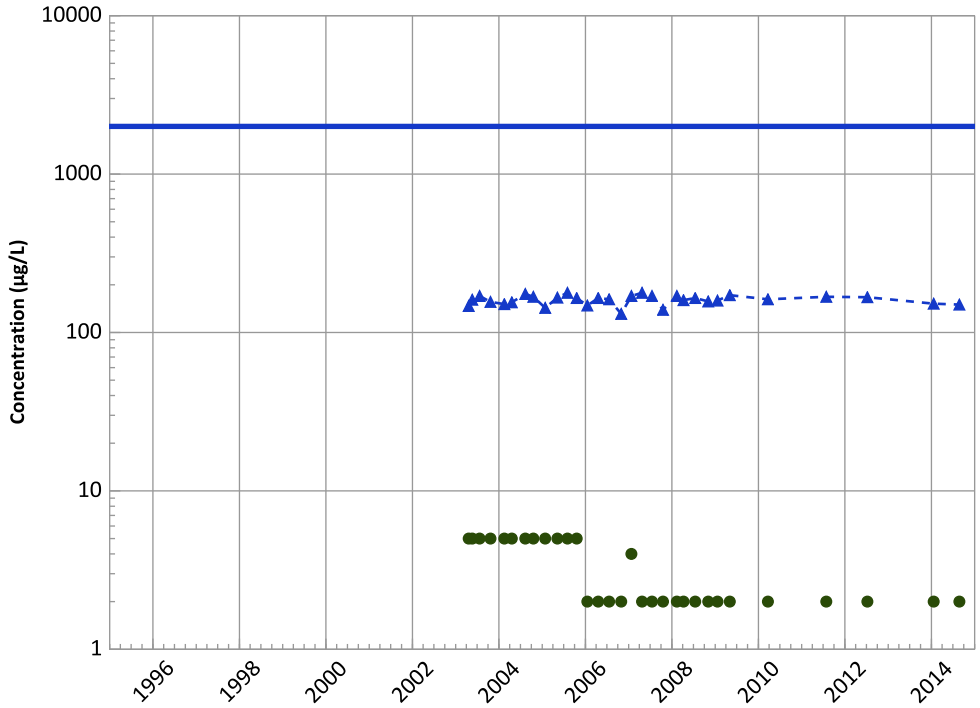
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

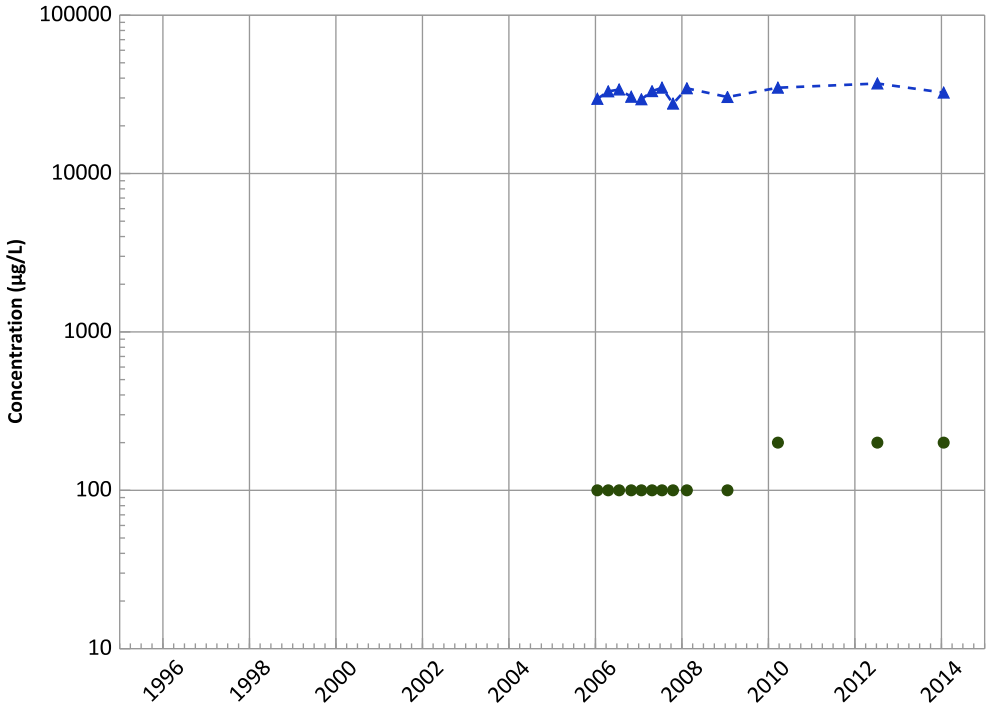


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Calcium Trend



Concentration Trend

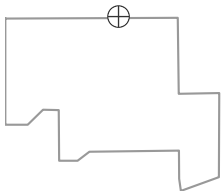
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

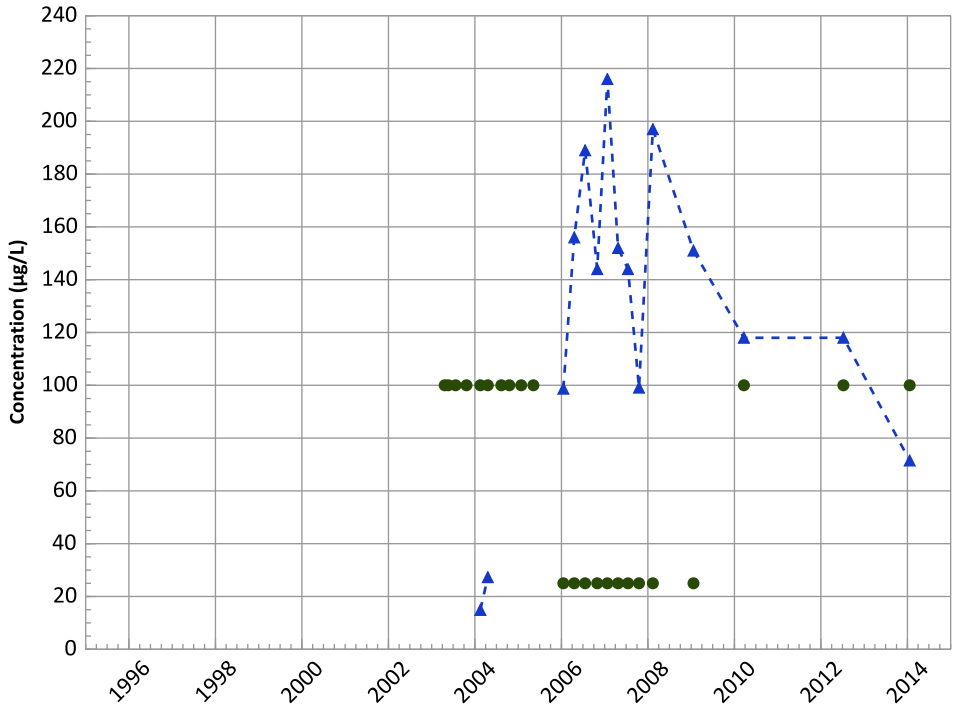
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

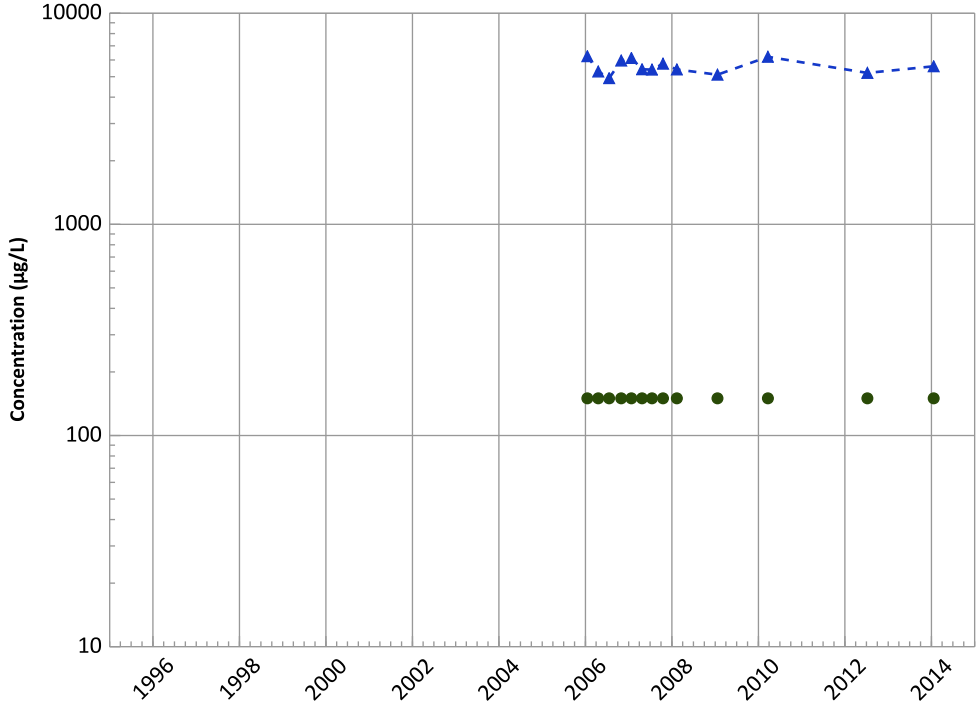


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Potassium Trend



Concentration Trend

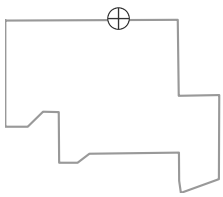
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

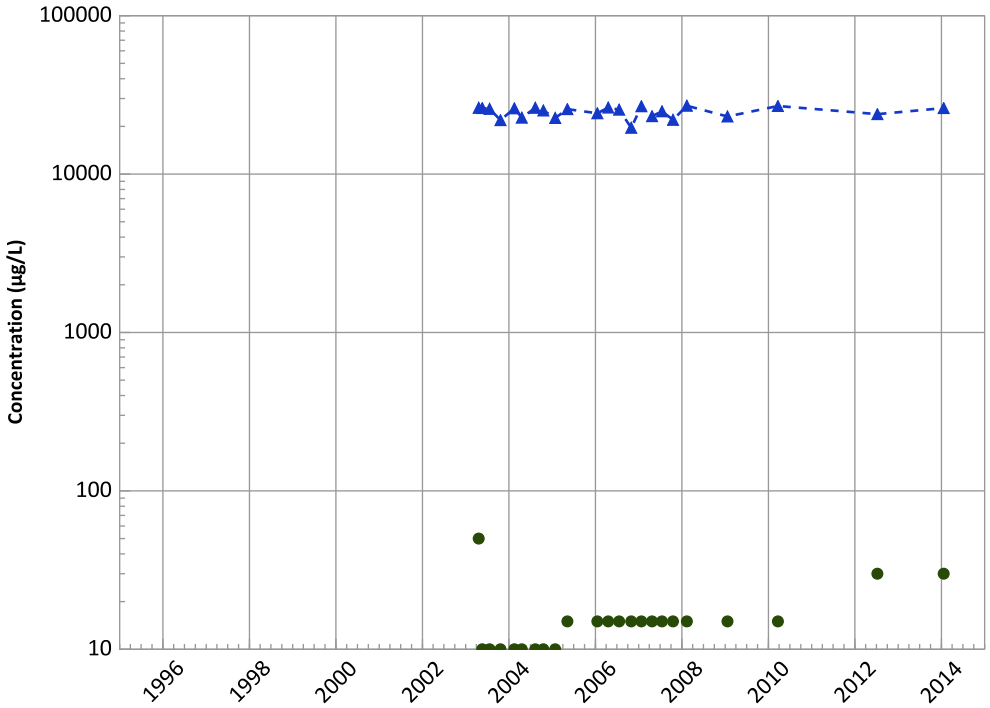
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1064 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

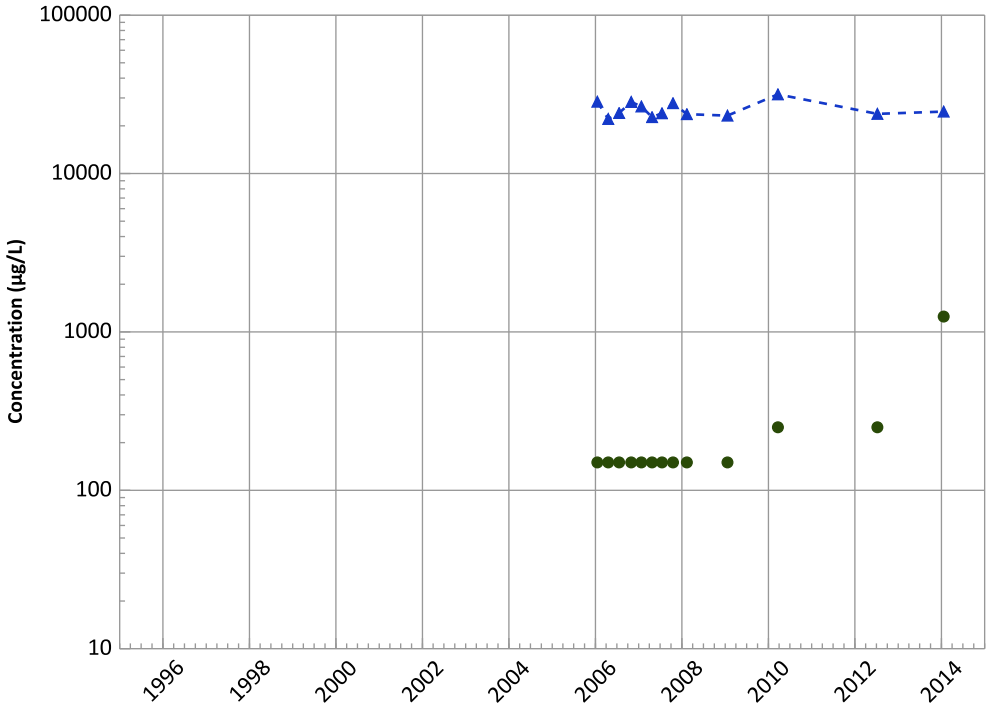


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Sodium Trend



Concentration Trend

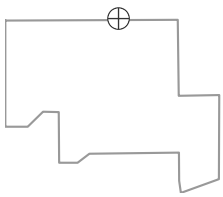
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

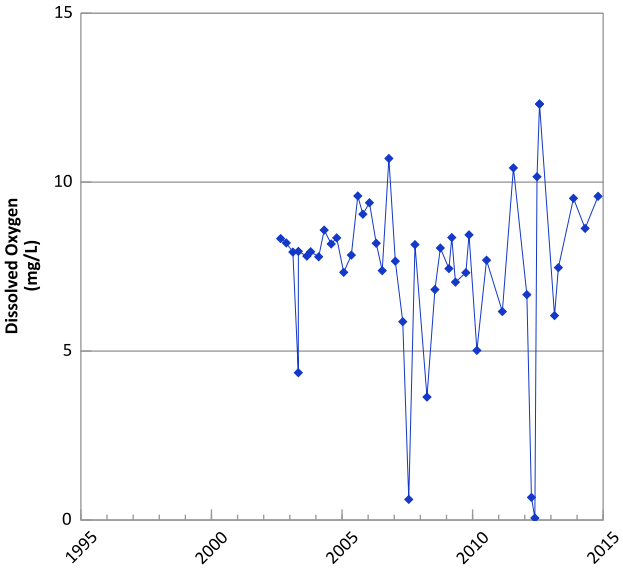
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 04/21/2003 to 08/25/2014
Analysis Date: 03/19/2015

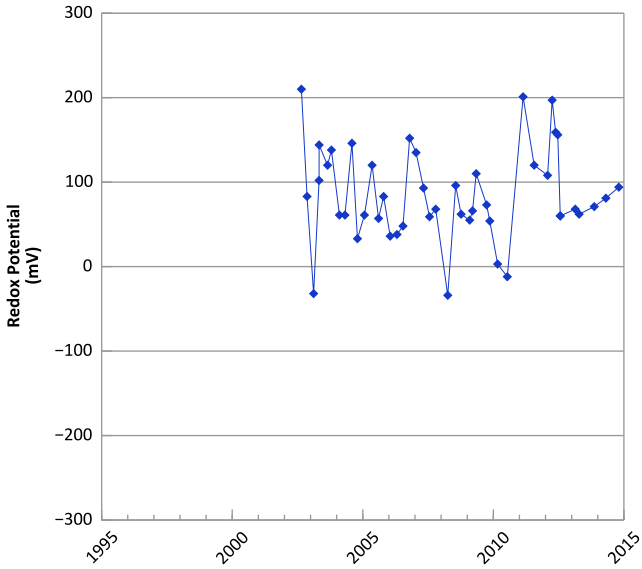
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

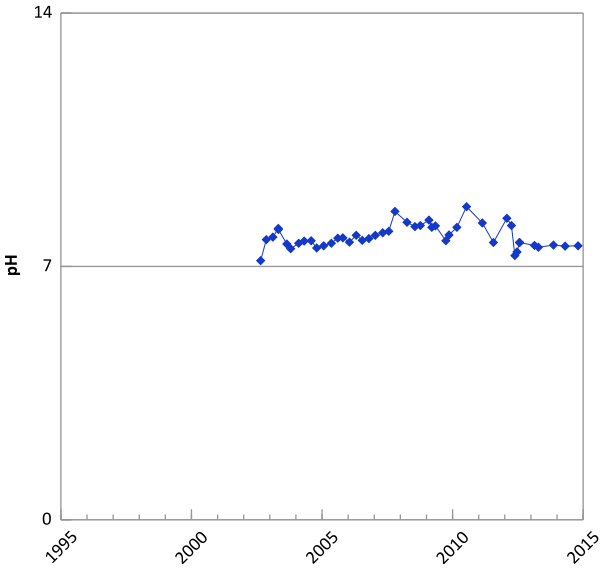
Well Location

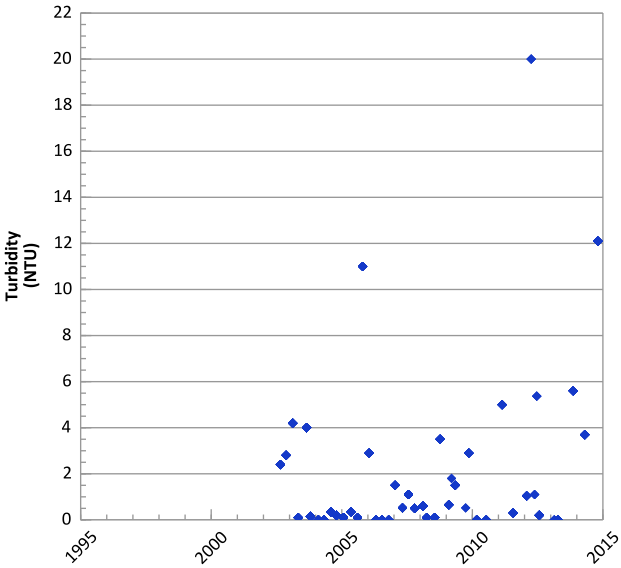


PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



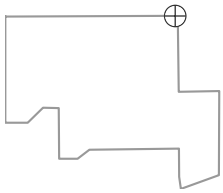






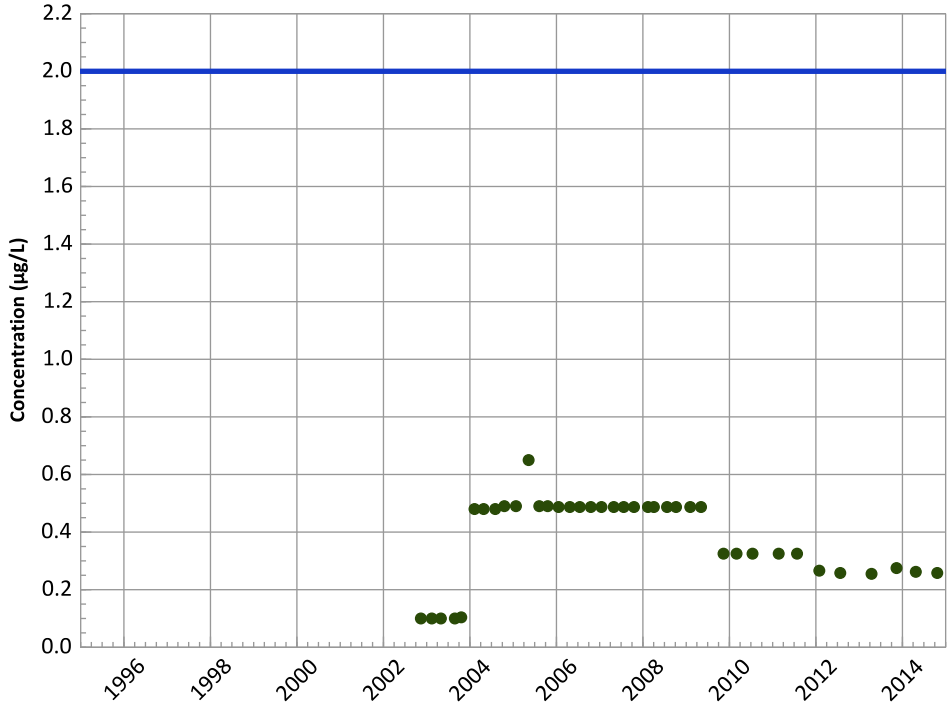
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

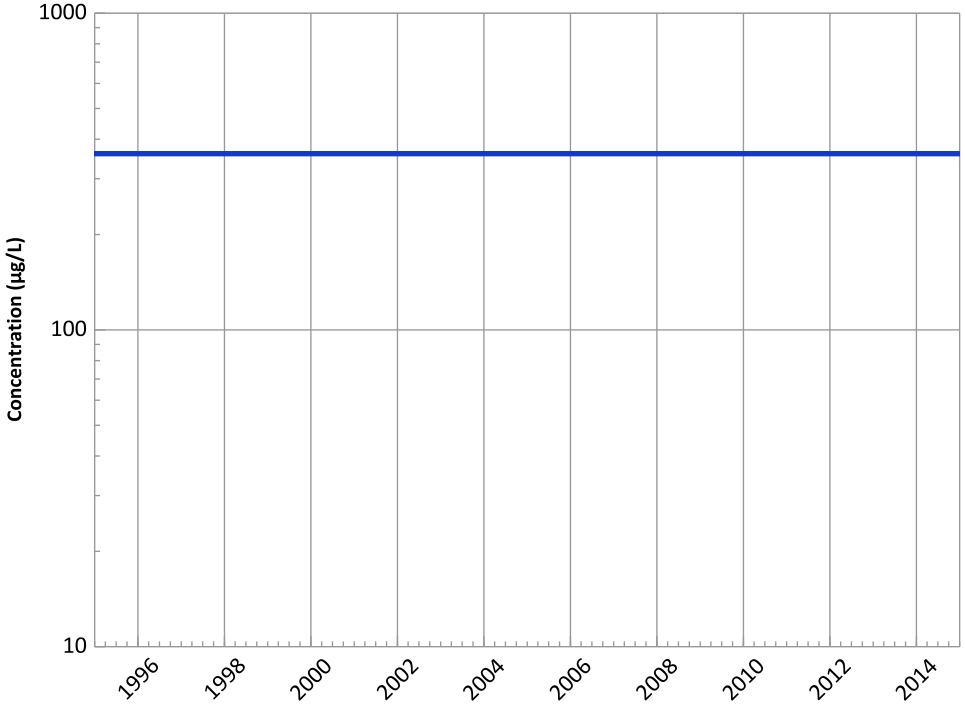


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

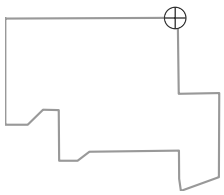
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

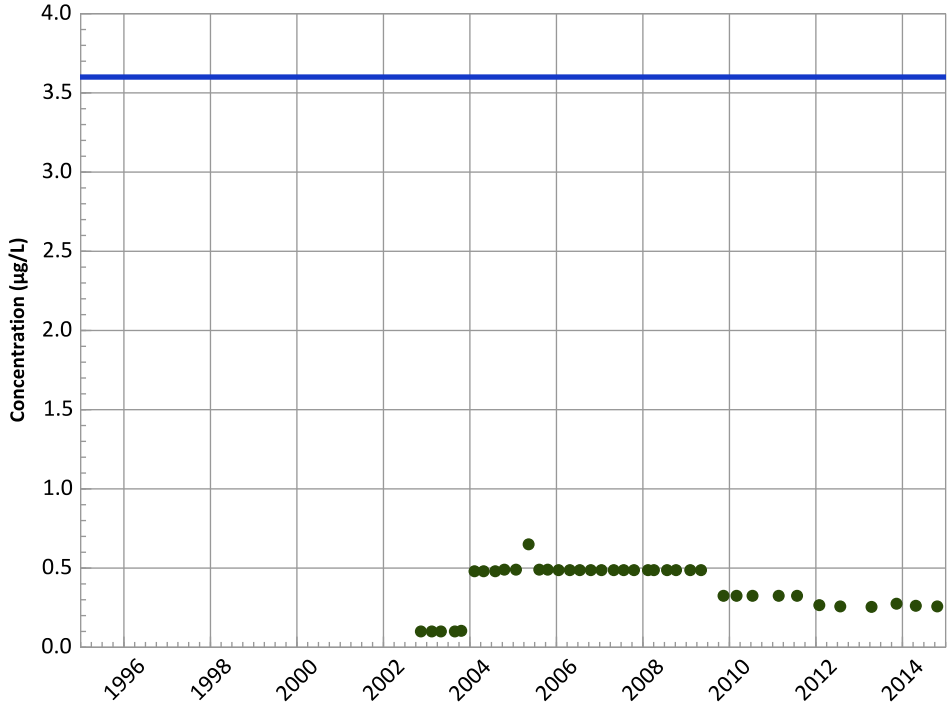
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

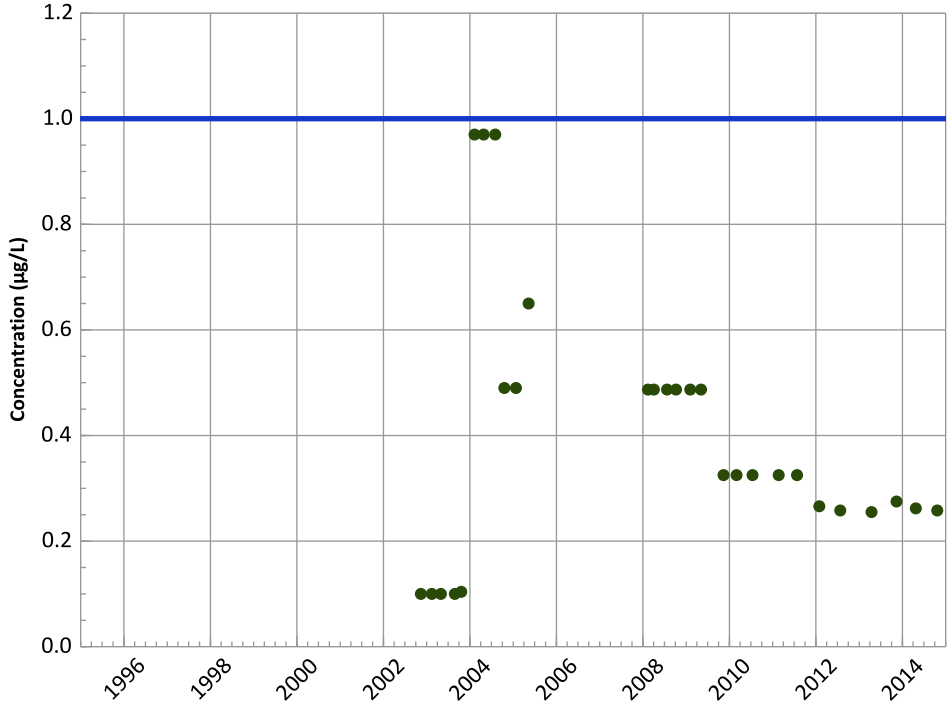


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

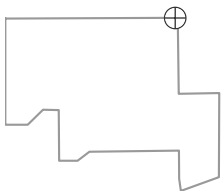
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

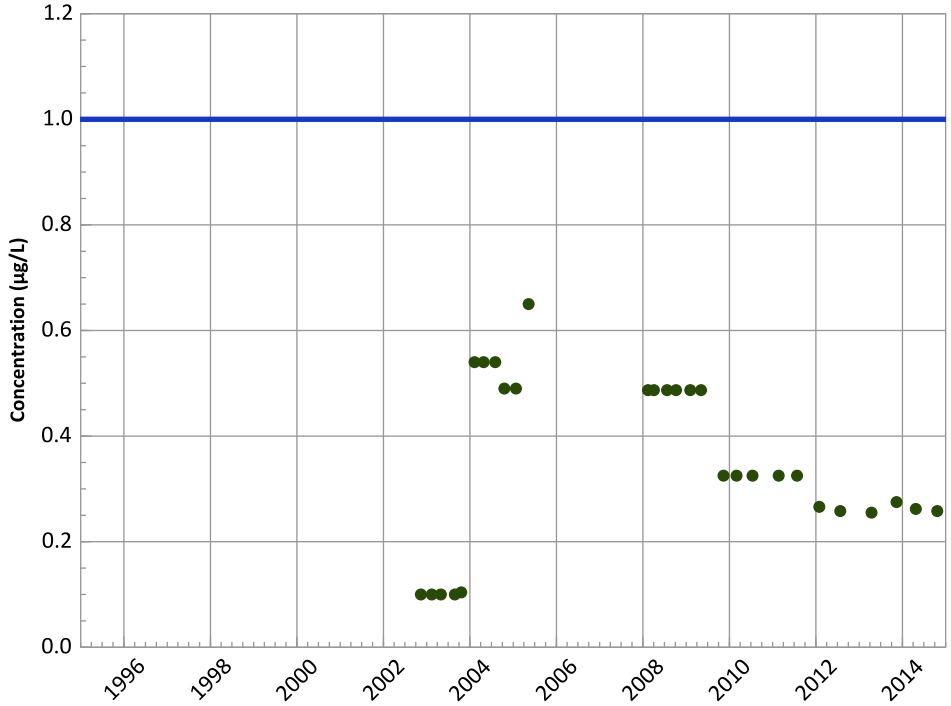
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

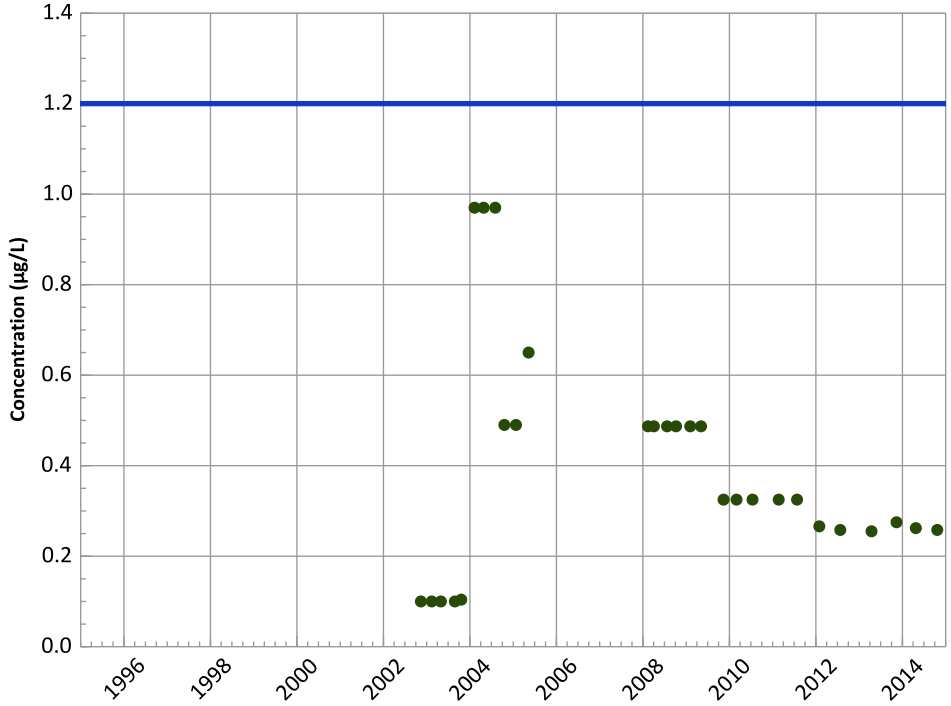


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

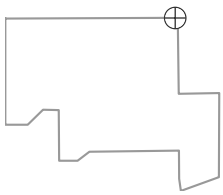
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

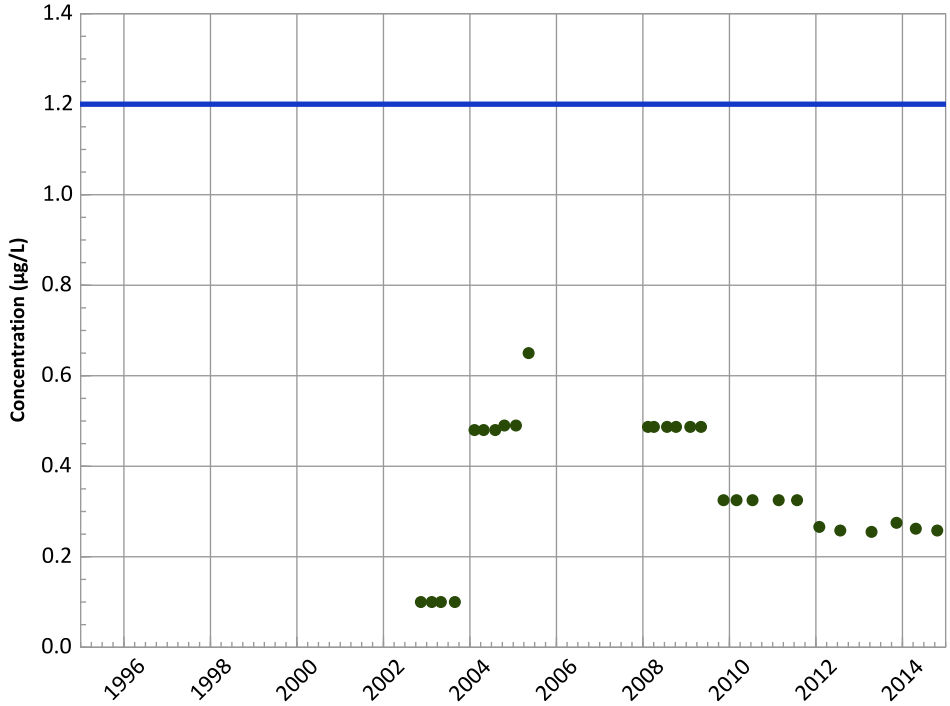
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

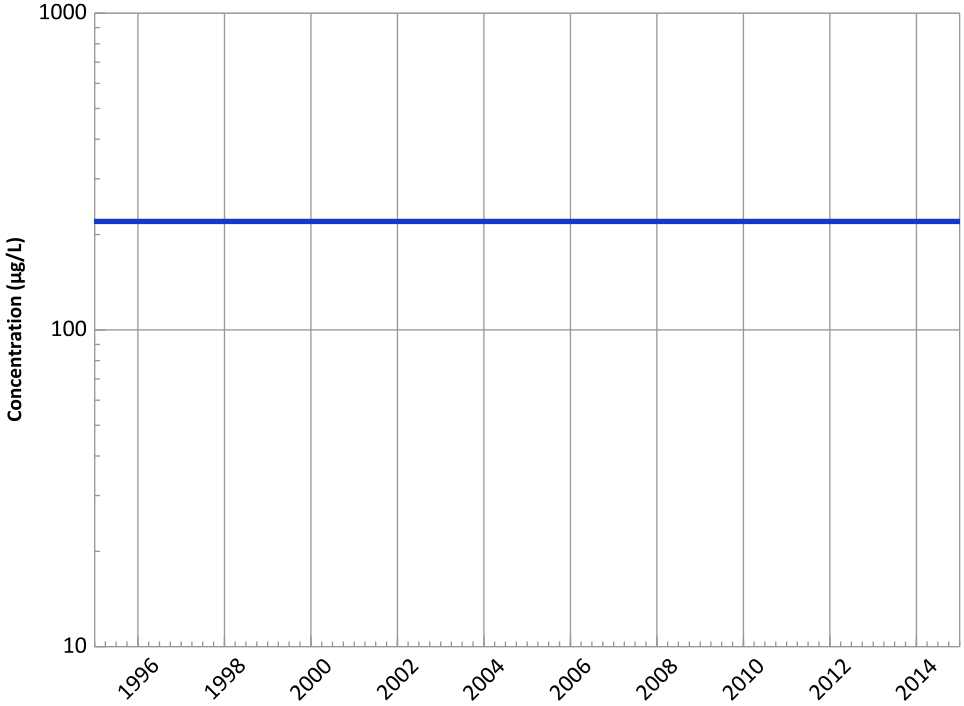


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

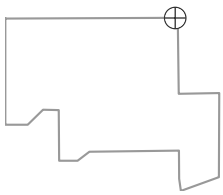
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

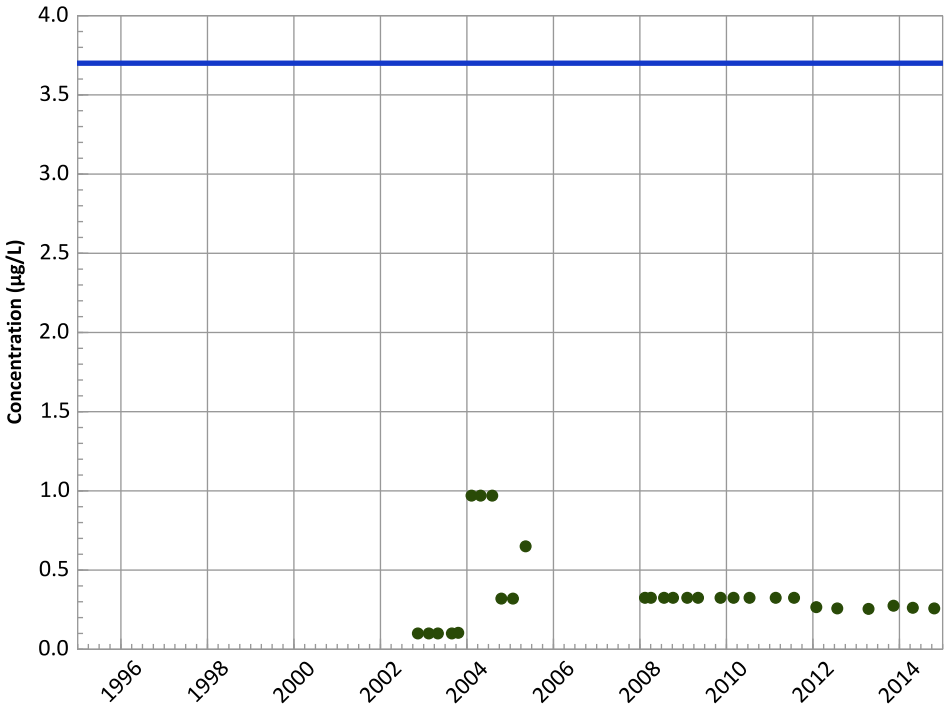
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

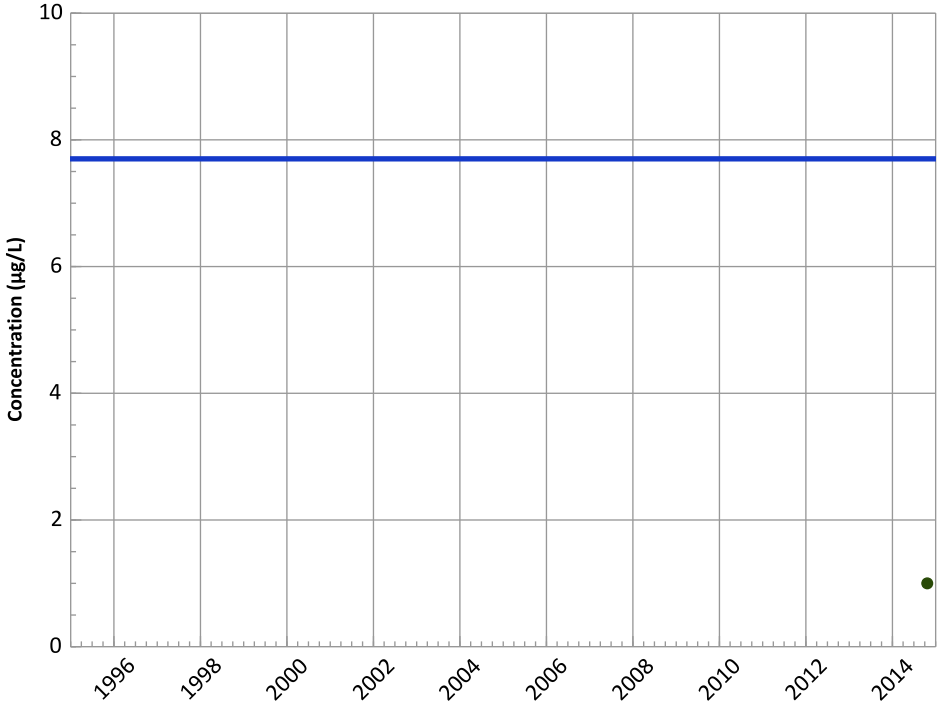


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

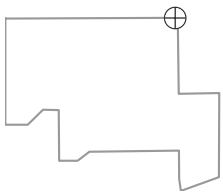
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

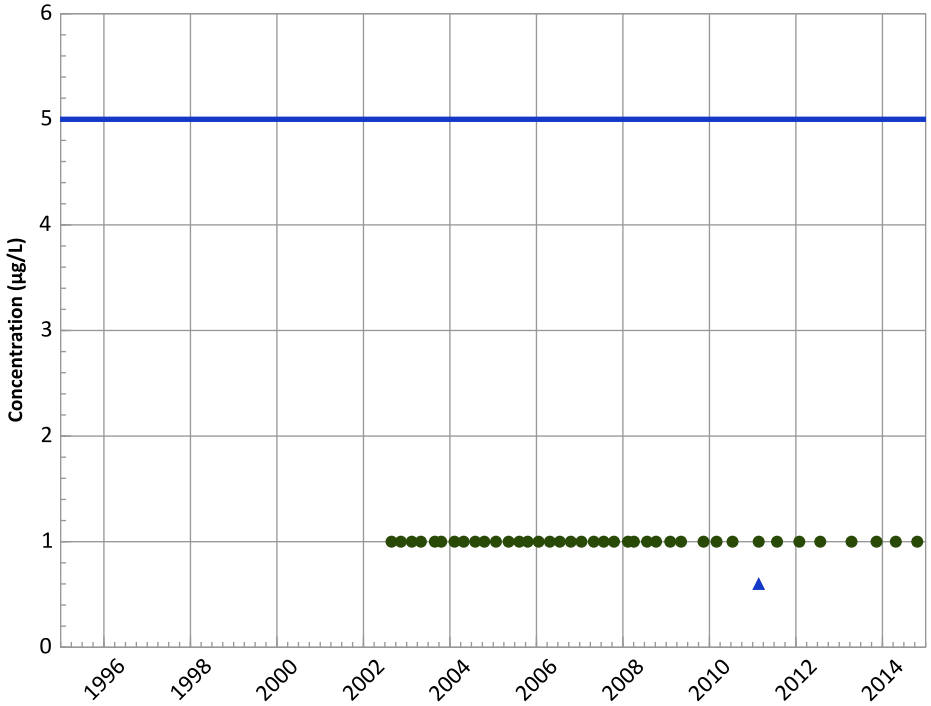
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

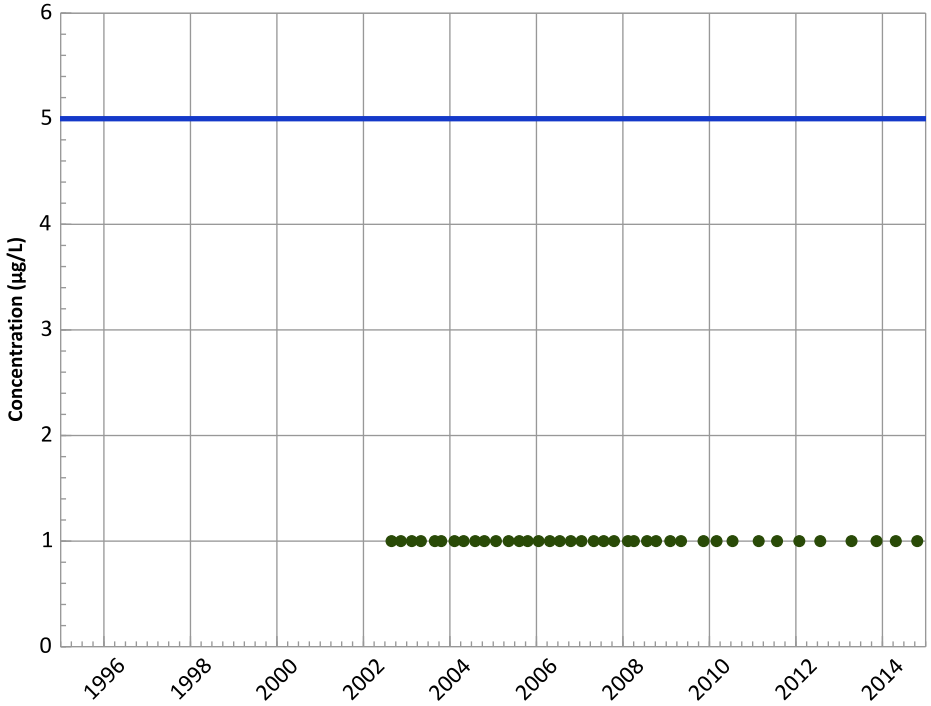


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Trichloroethene Trend

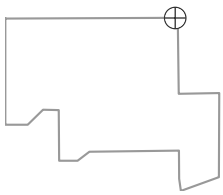


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

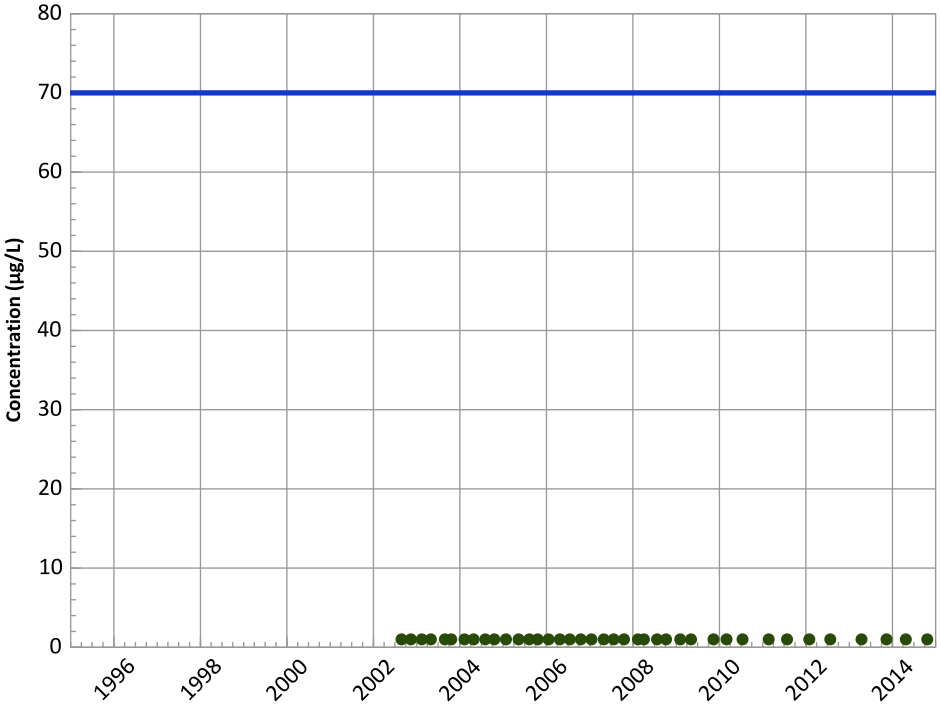


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

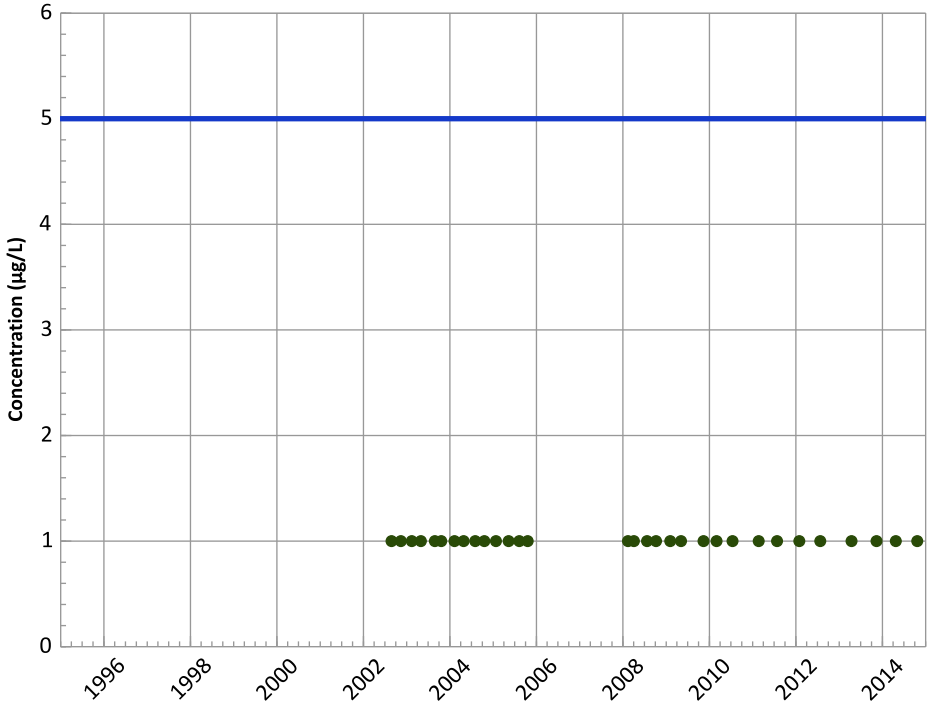


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

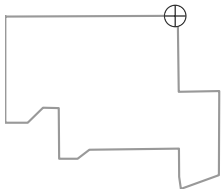
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

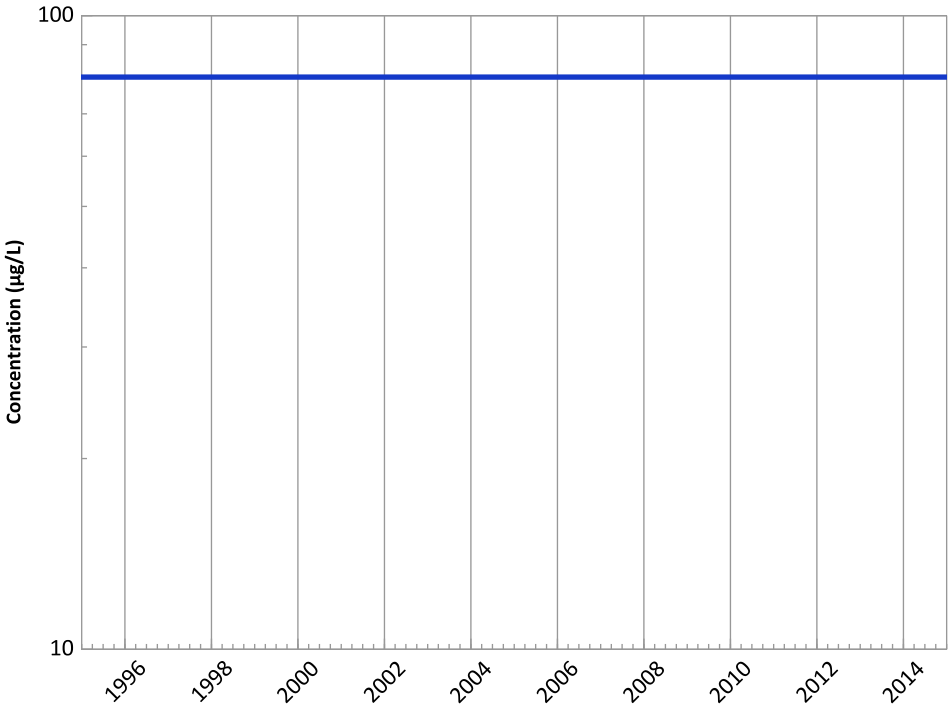
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

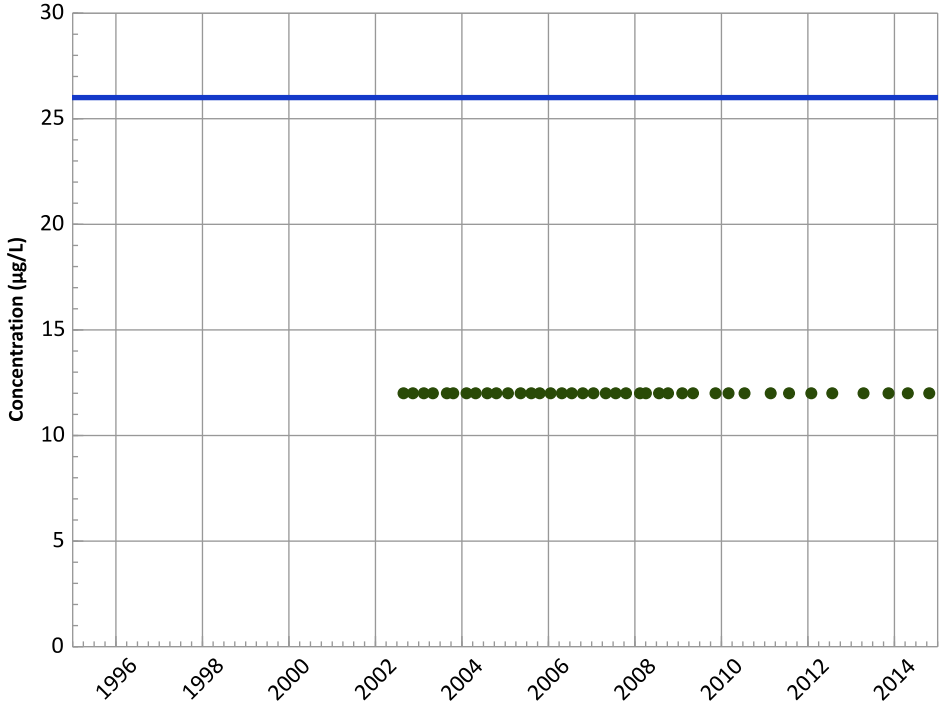


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

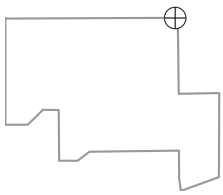
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

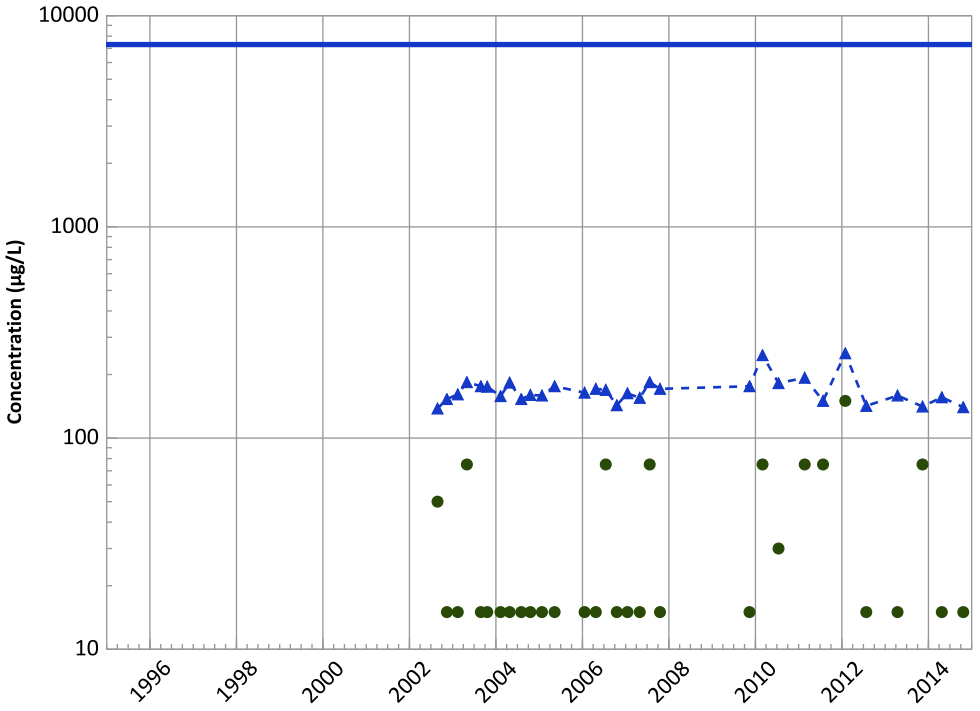
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

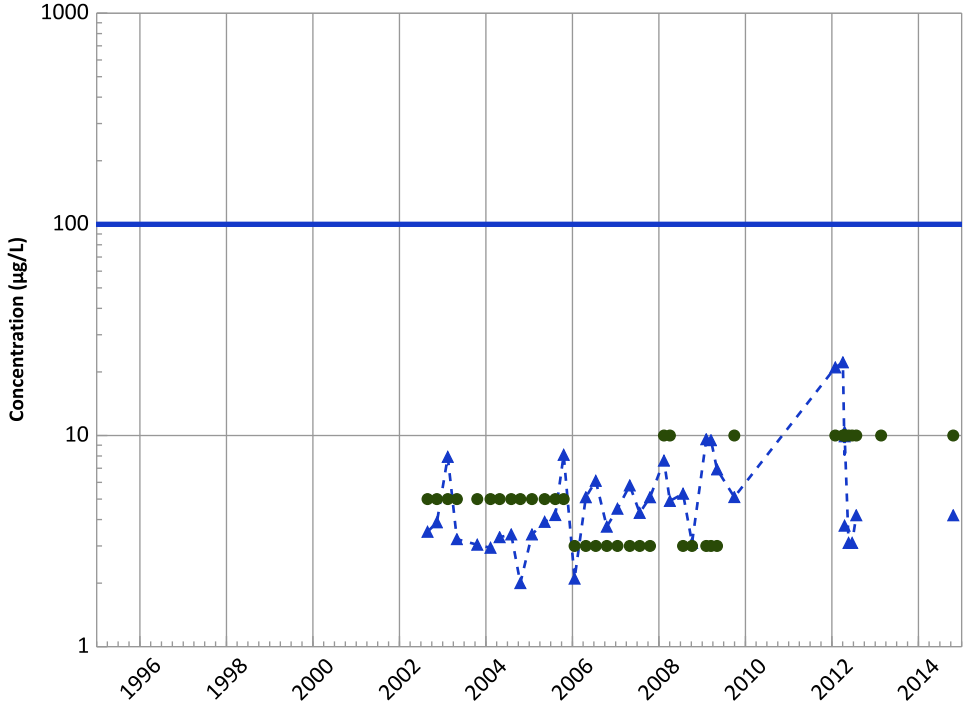


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

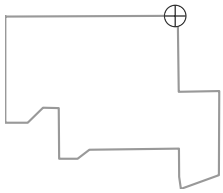
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

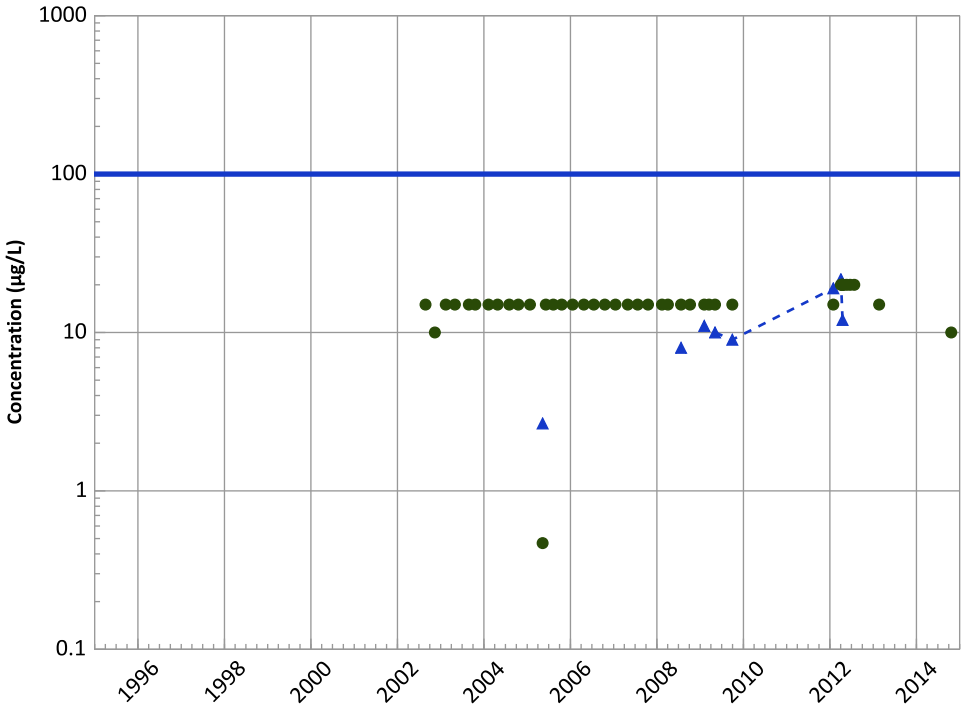
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

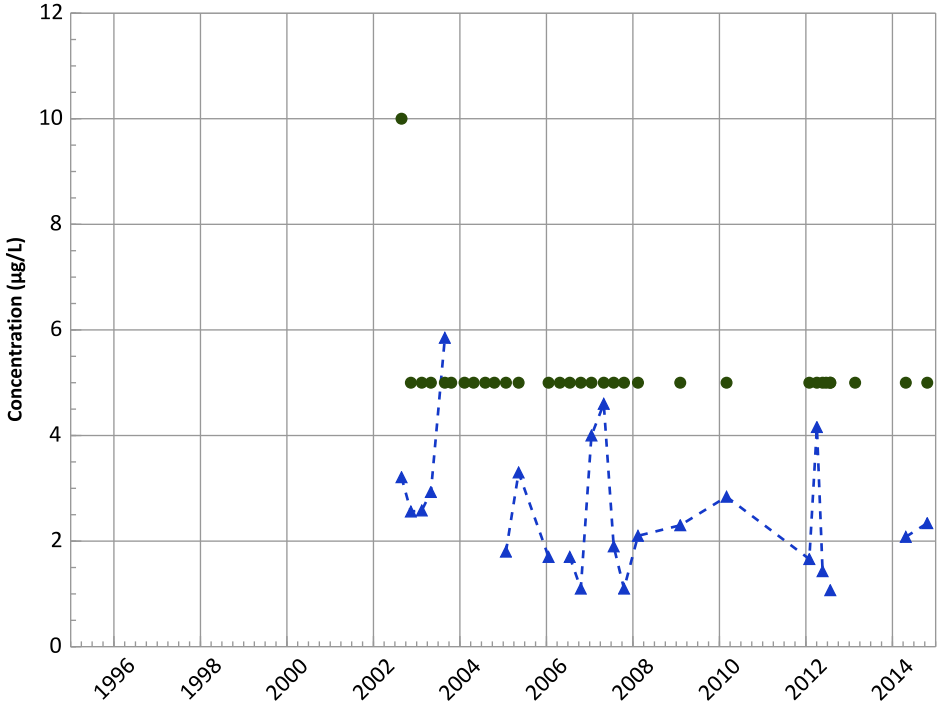


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Increasing

Manganese Trend



Concentration Trend

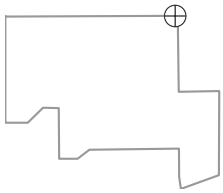
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

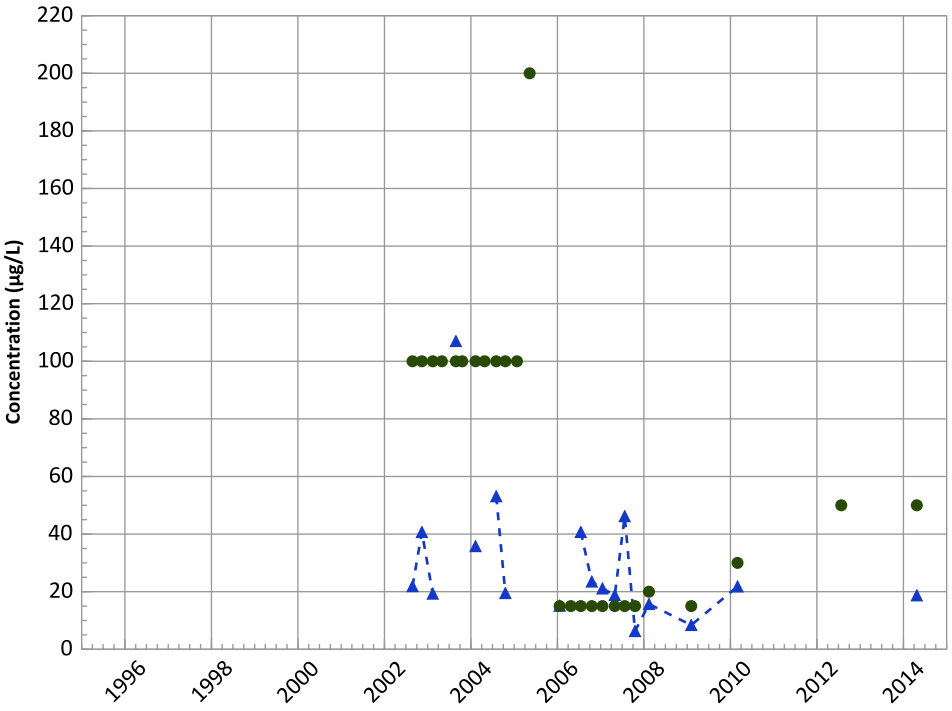
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

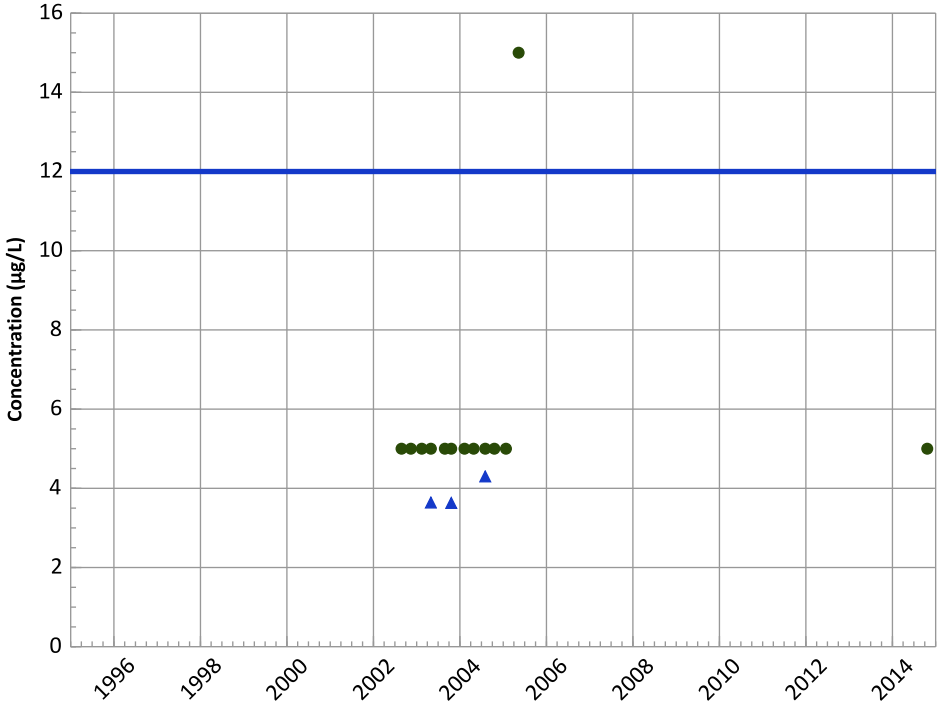


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Arsenic Trend



Concentration Trend

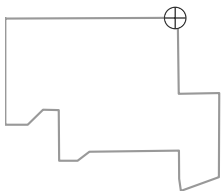
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

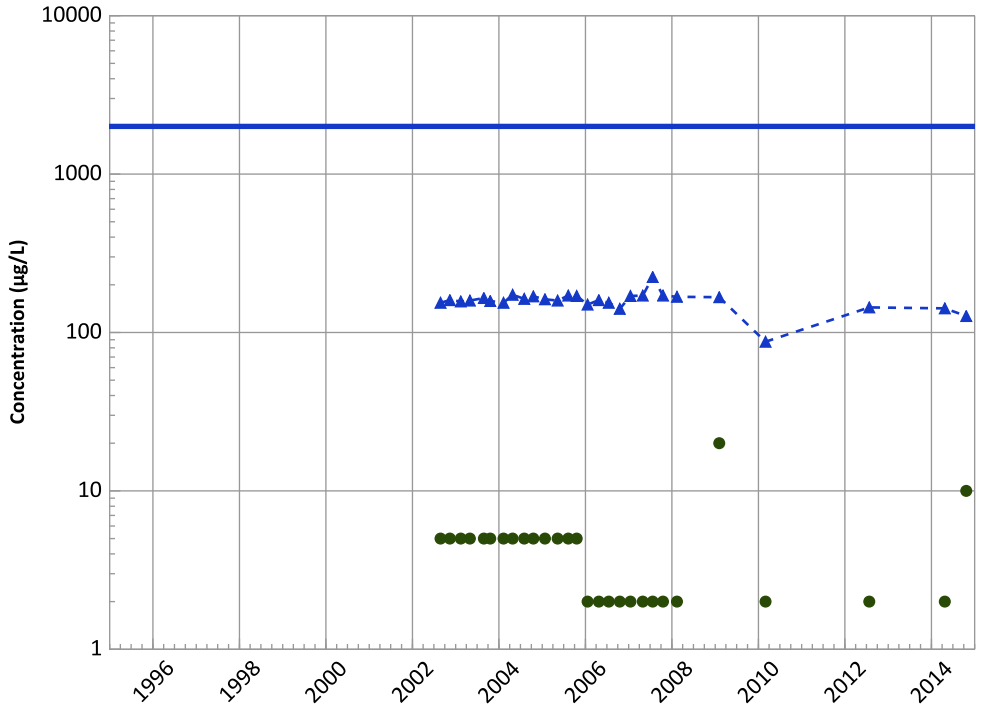
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

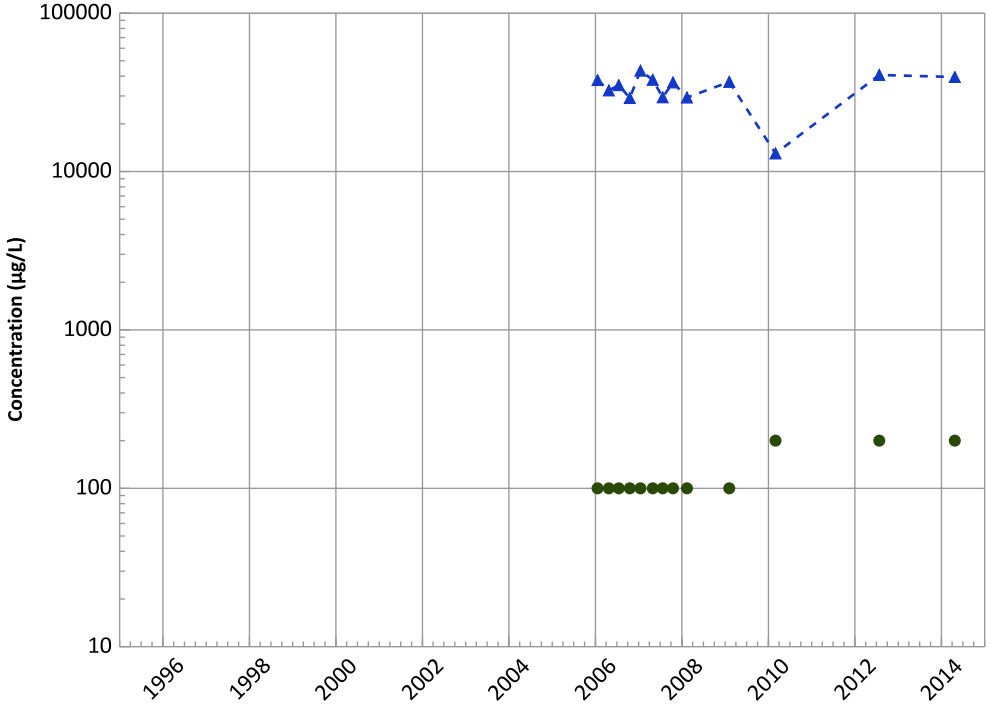


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Calcium Trend



Concentration Trend

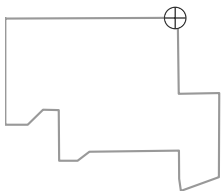
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

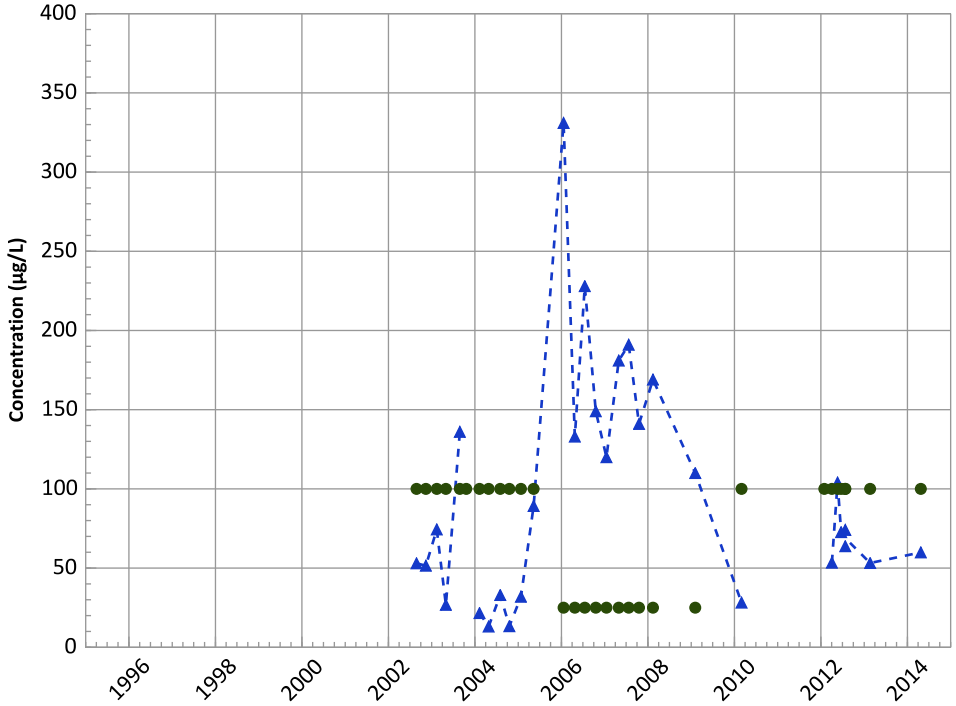
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

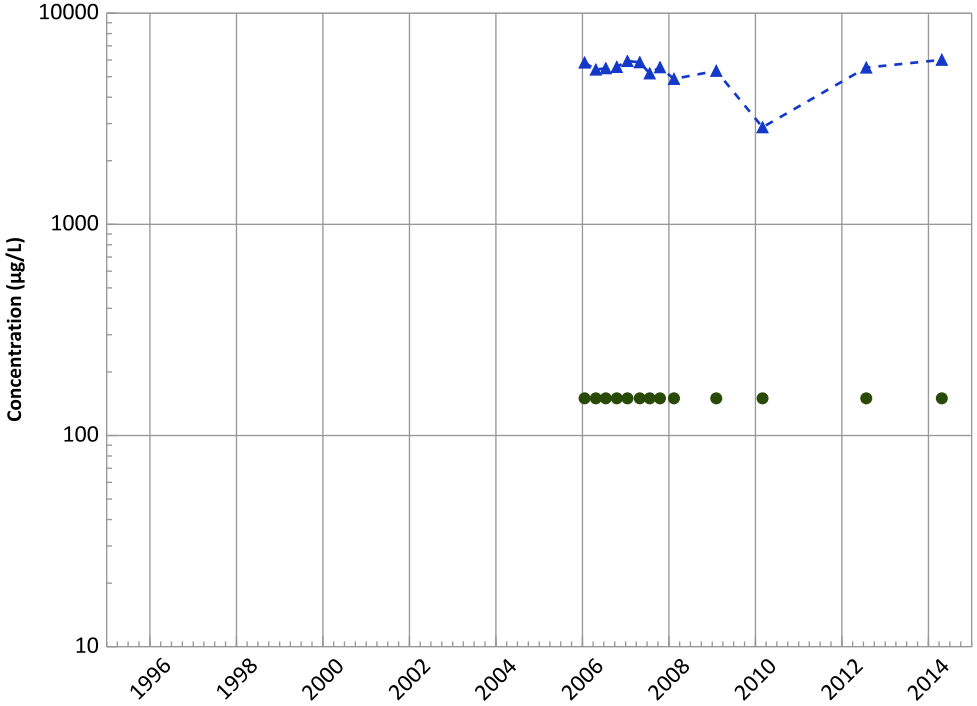


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
No Trend

Potassium Trend



Concentration Trend

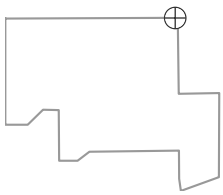
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

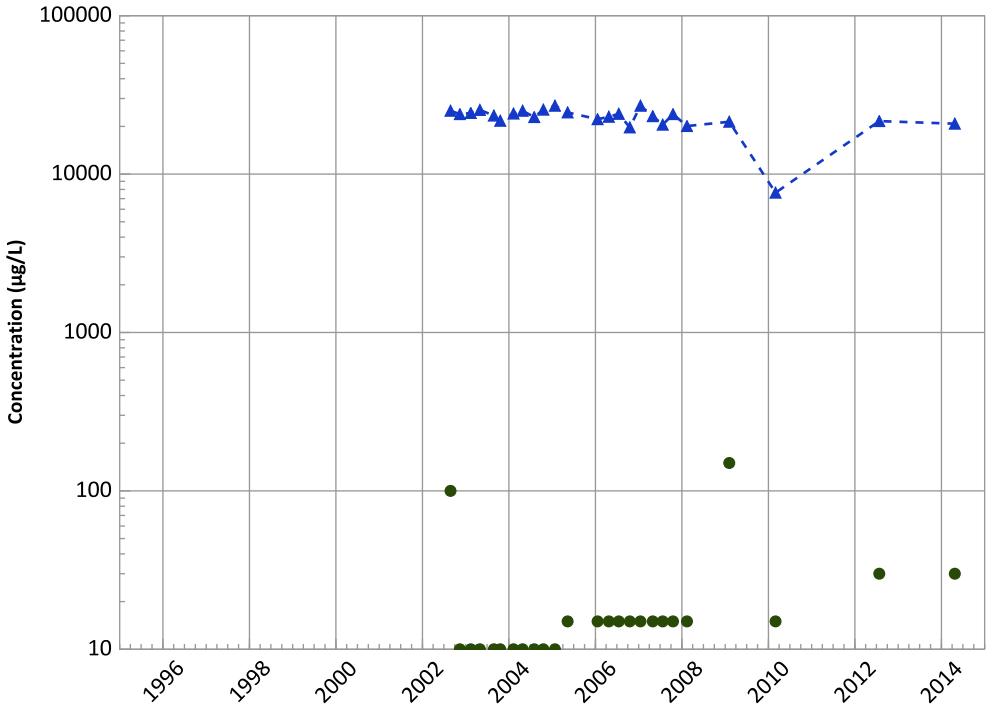
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1068 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

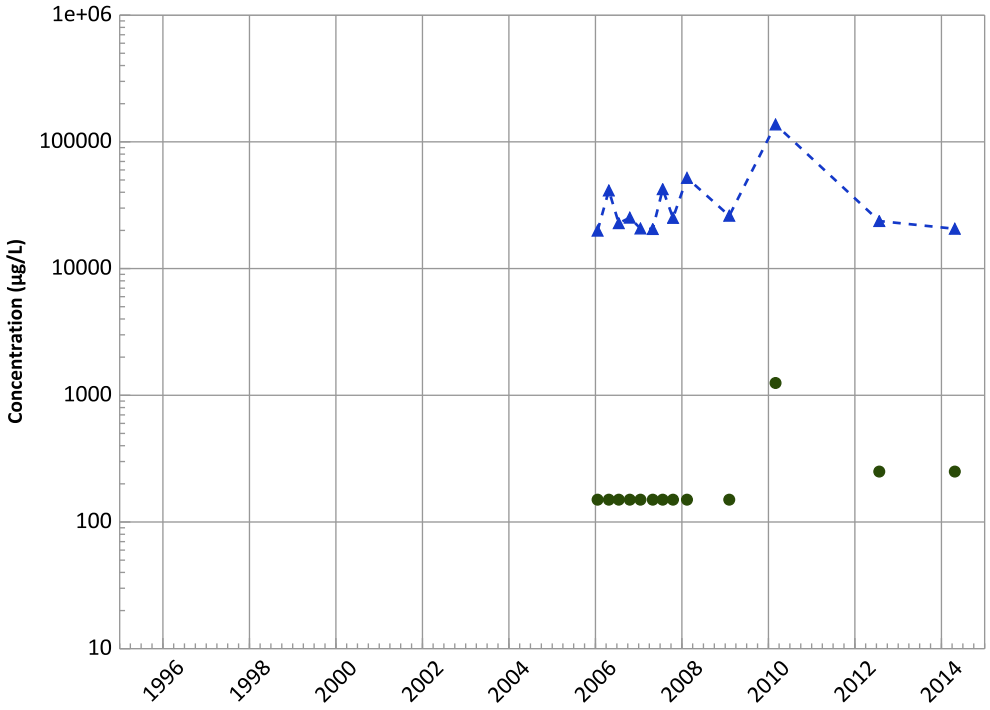


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Sodium Trend



Concentration Trend

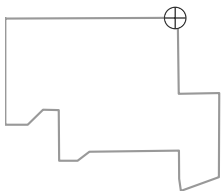
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

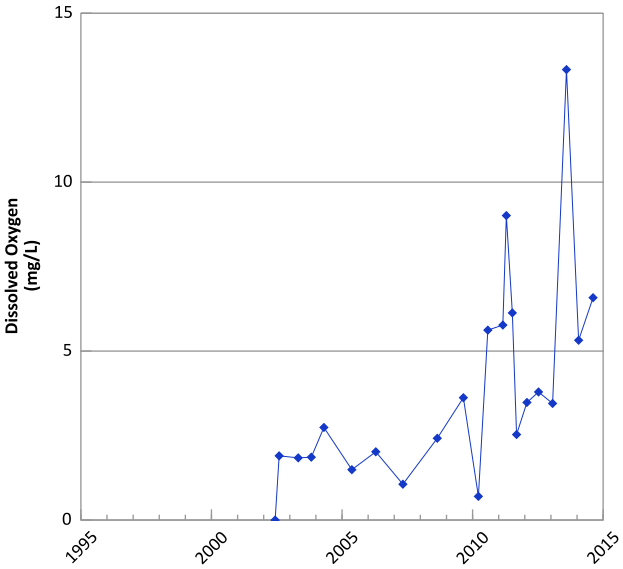
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 08/26/2002 to 10/22/2014
Analysis Date: 03/19/2015

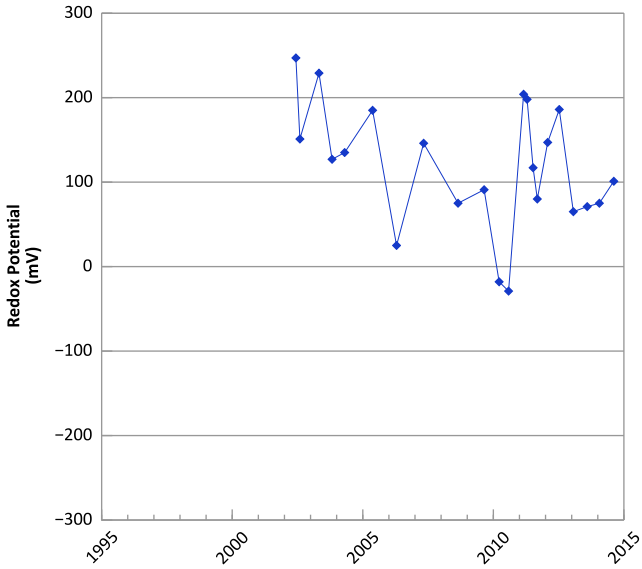
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

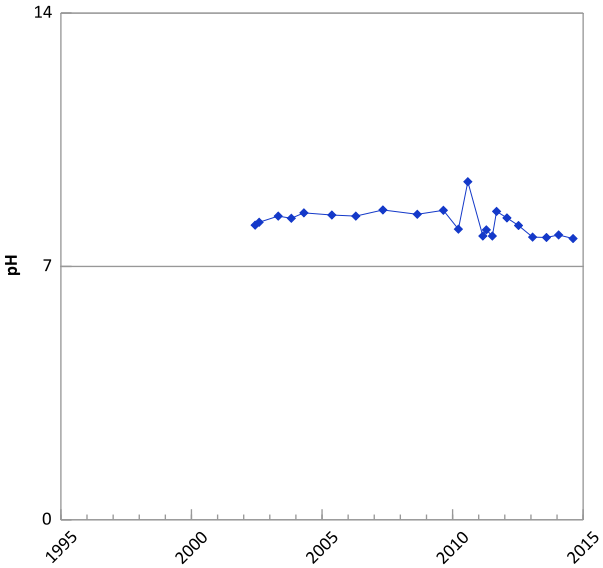
Well Location

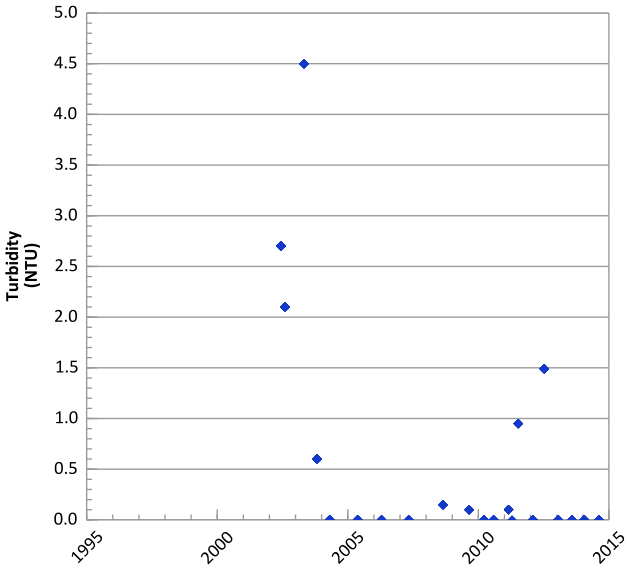


PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



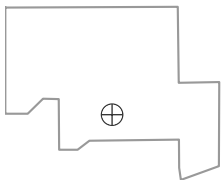






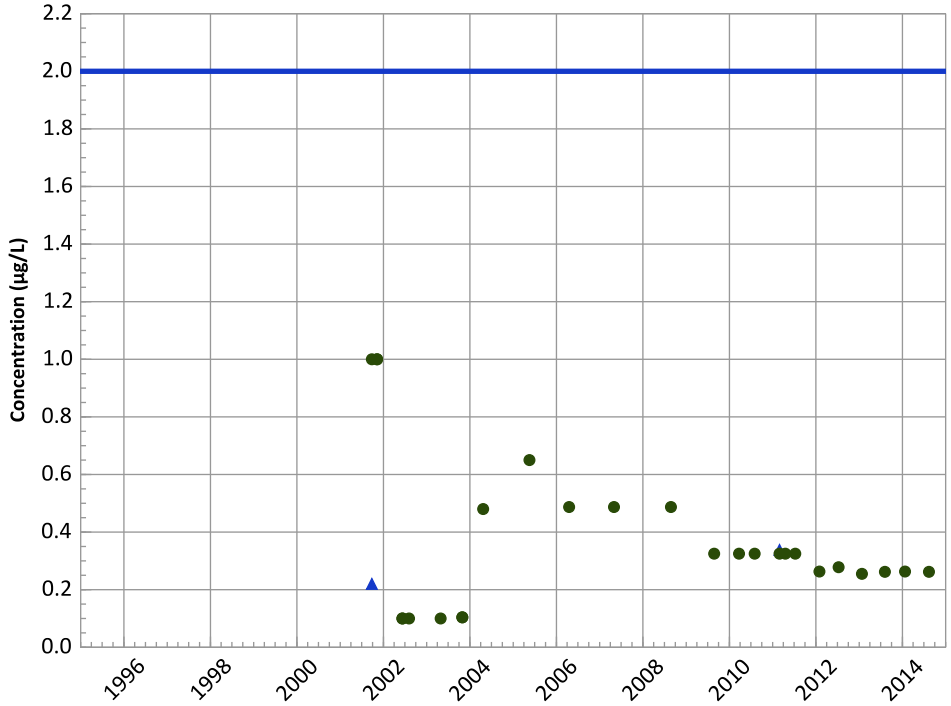
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

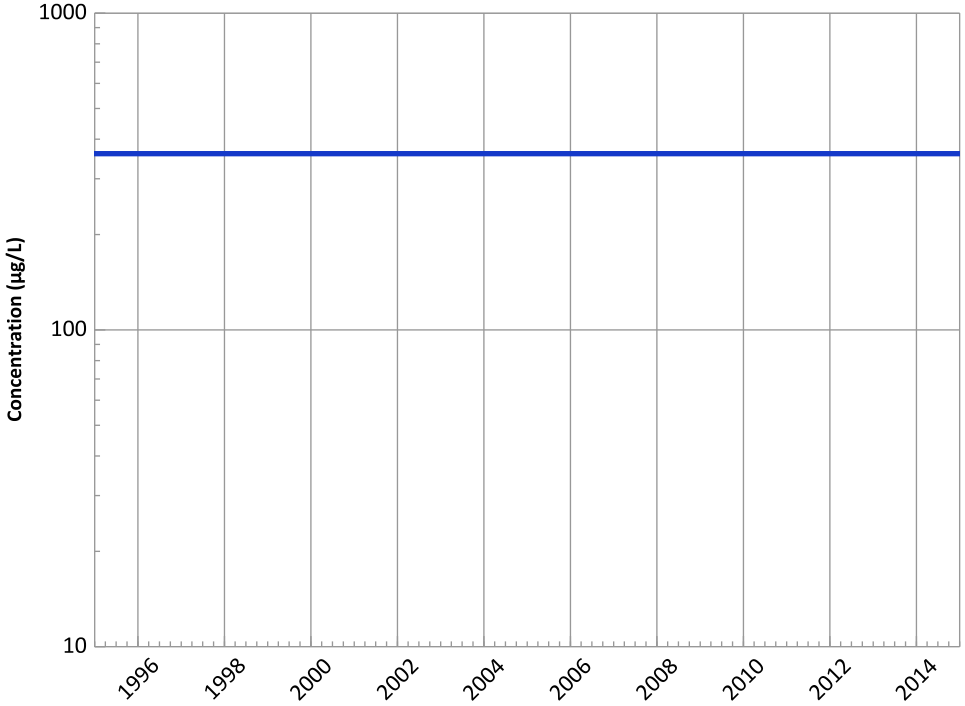


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

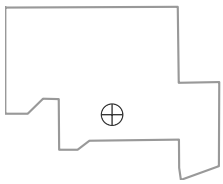
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

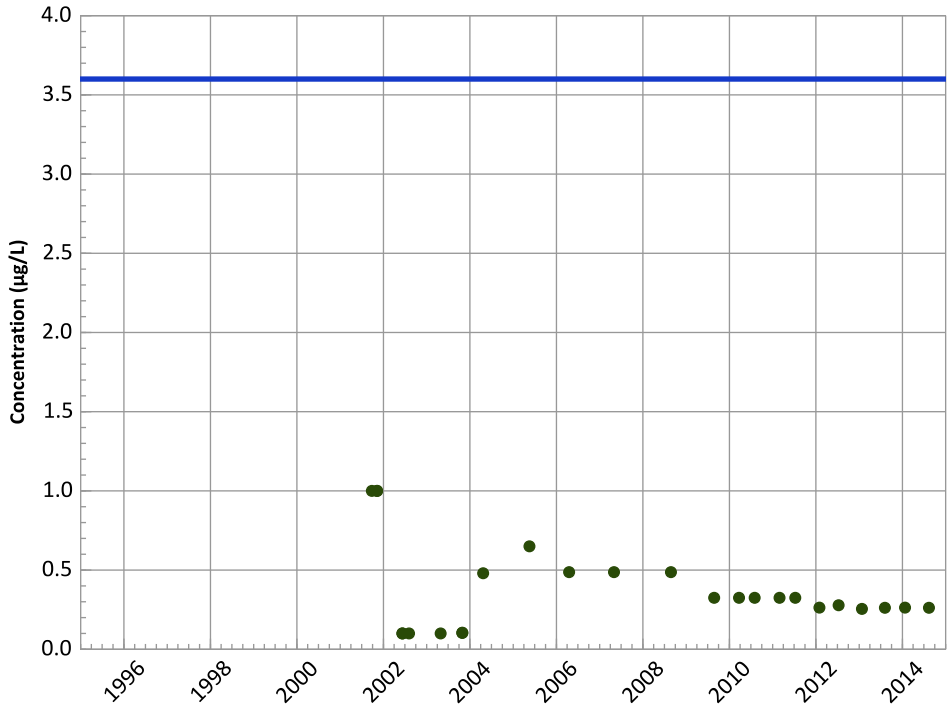
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

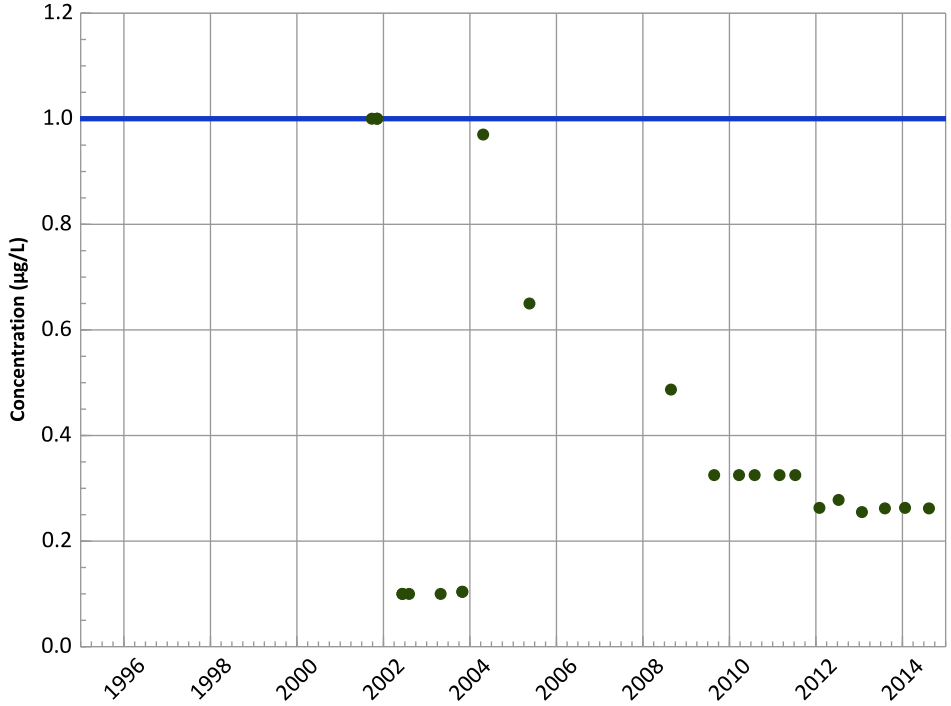


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

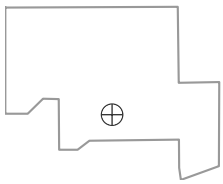
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

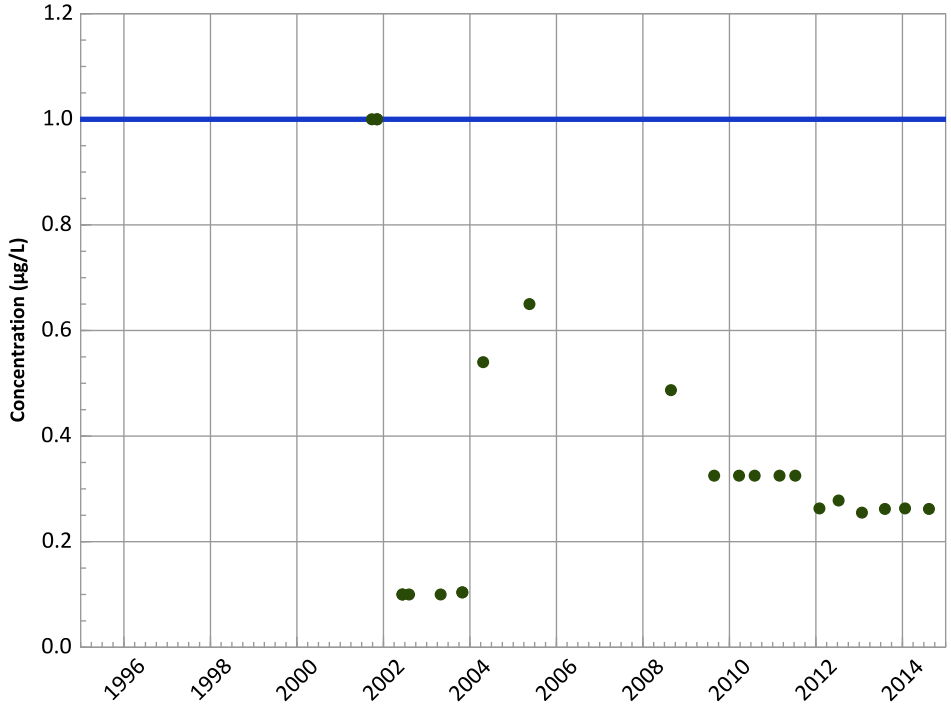
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

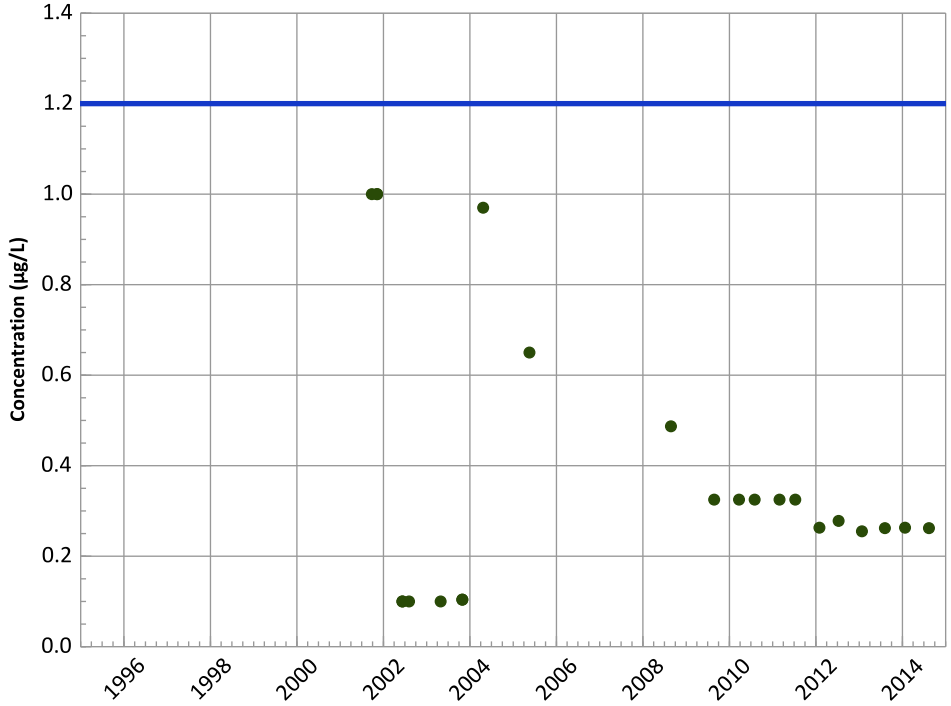


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

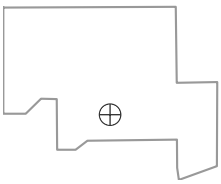
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

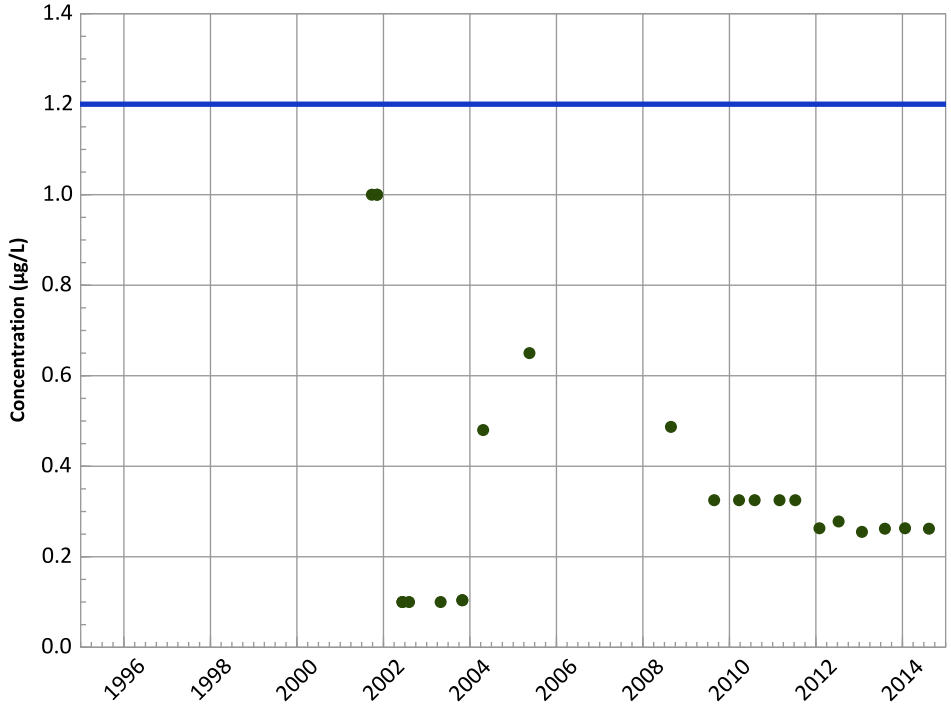
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

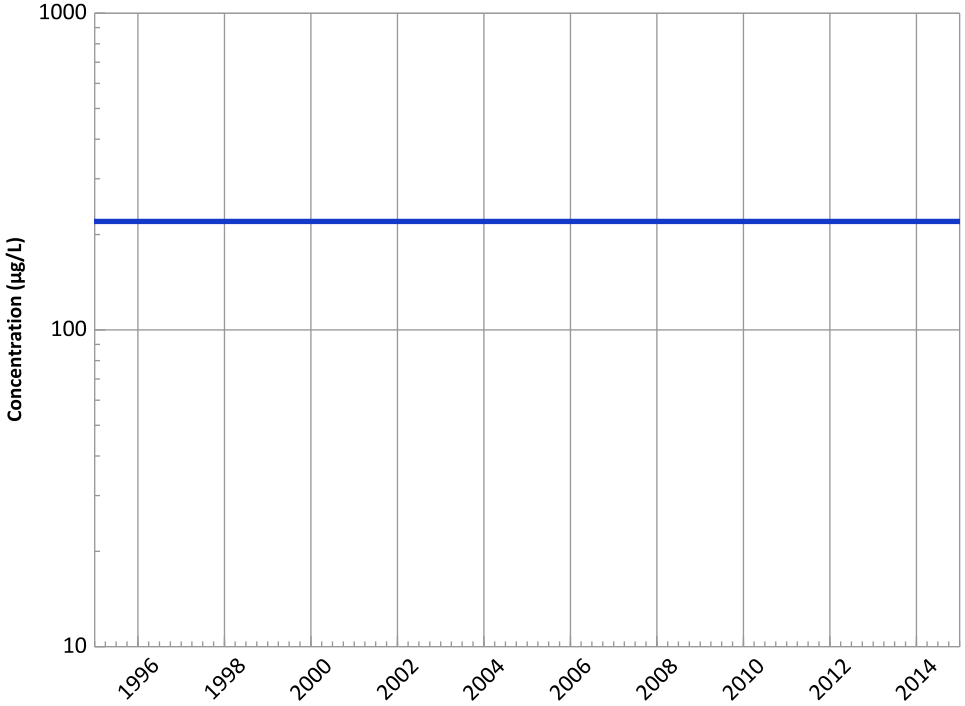


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

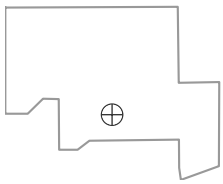
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

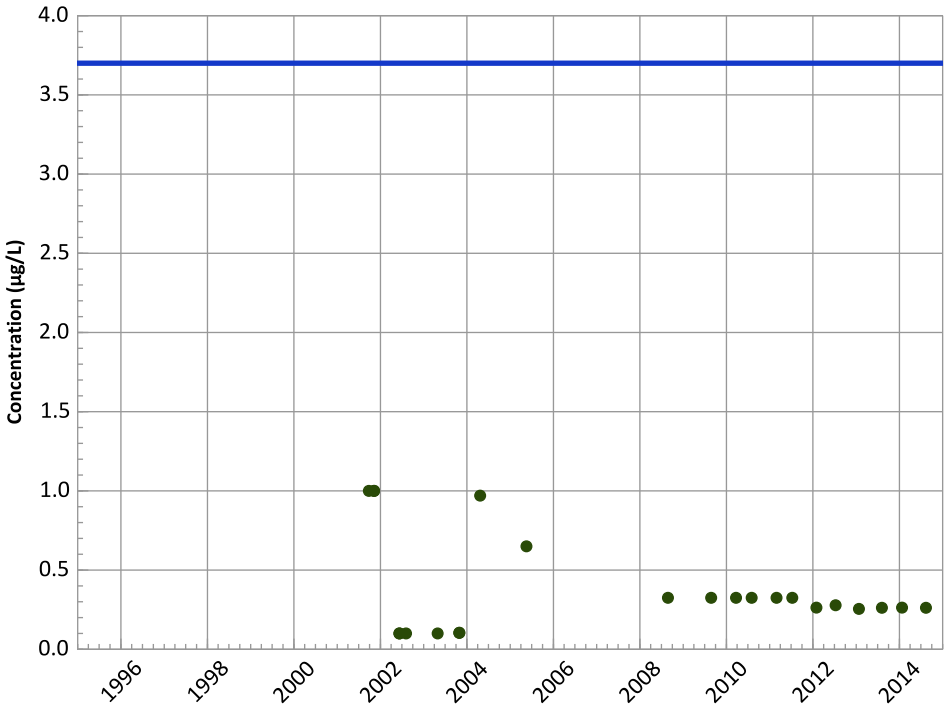
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

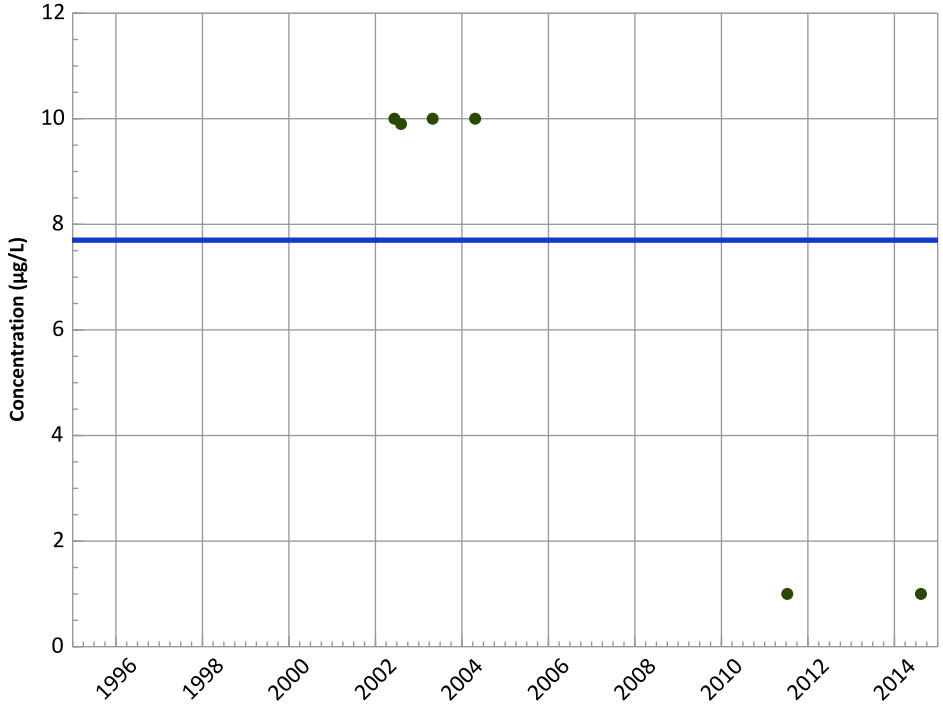


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

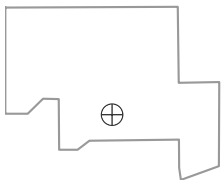
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

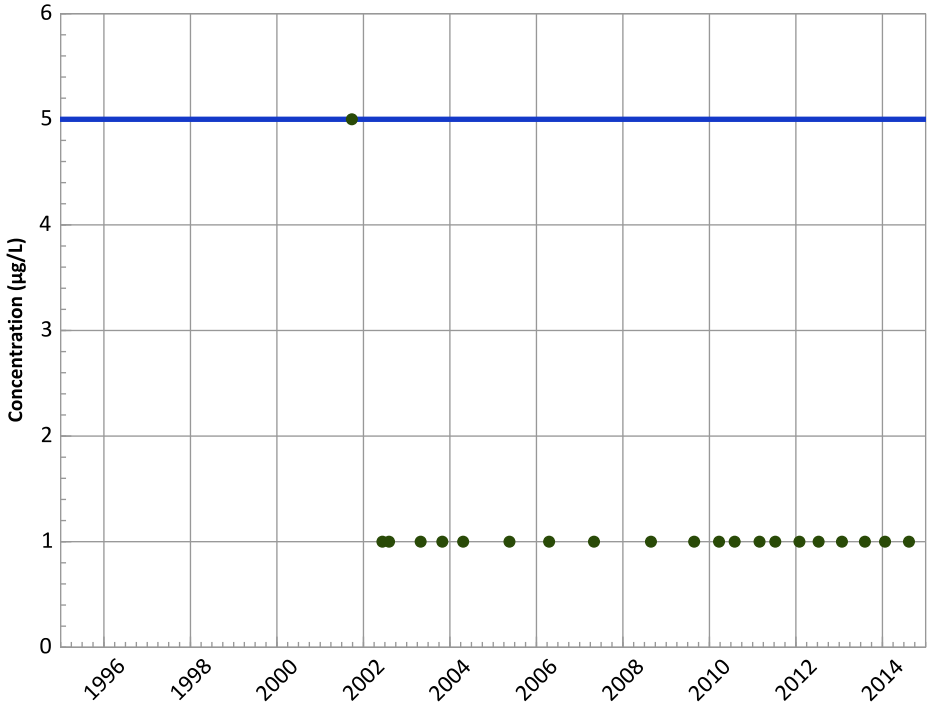
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

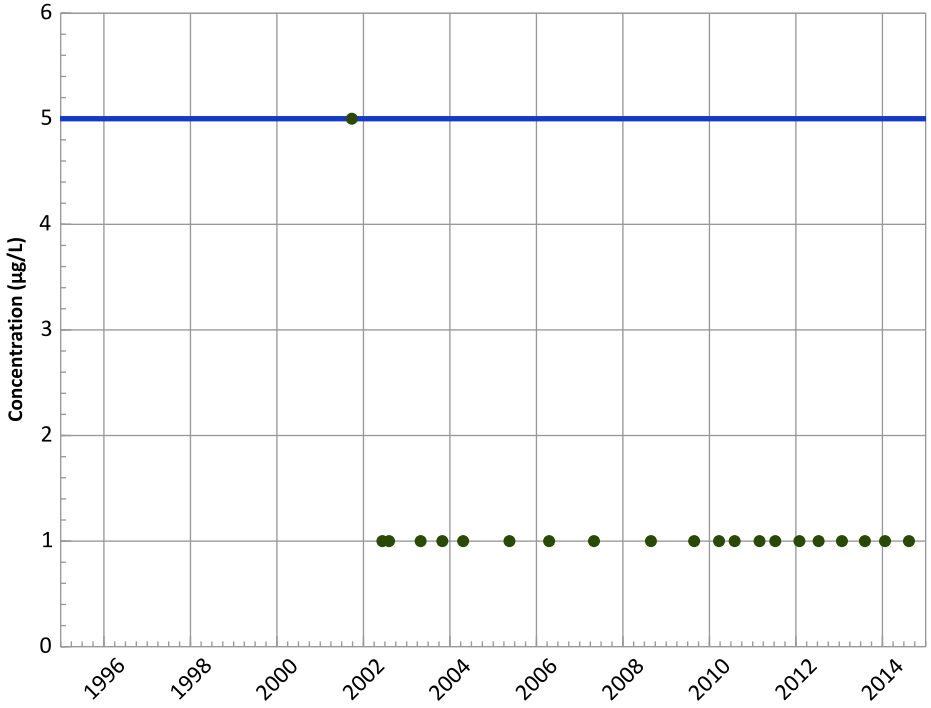


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

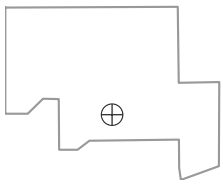
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

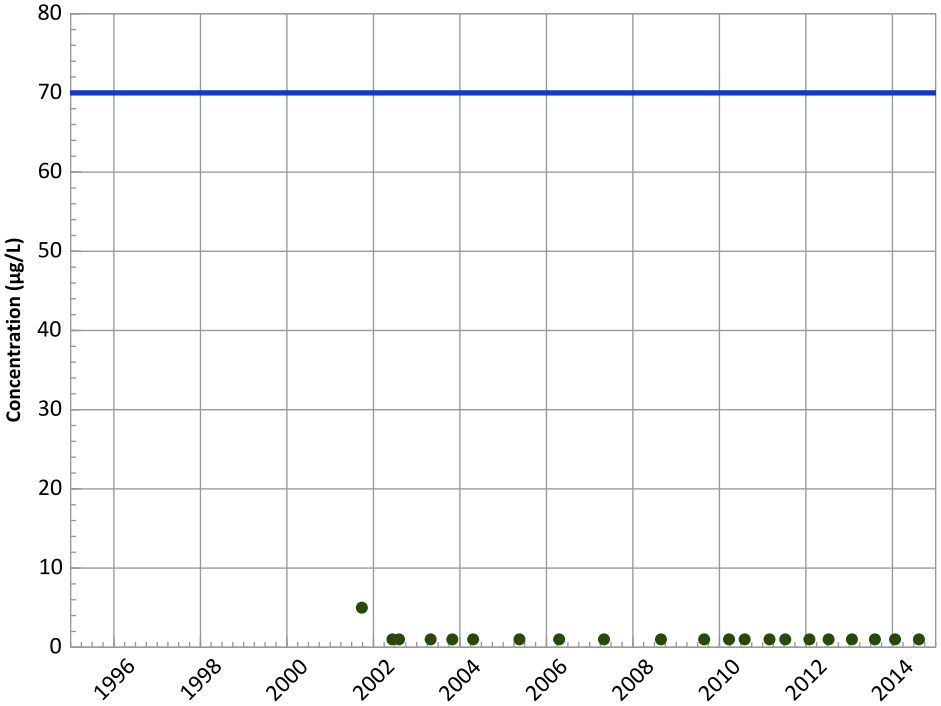
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

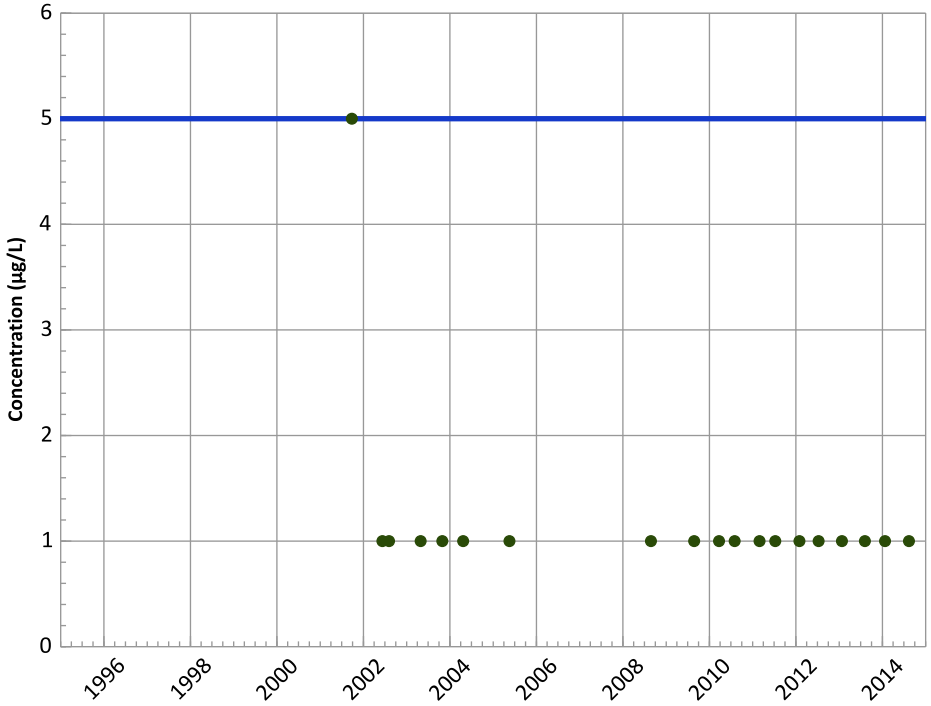


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend

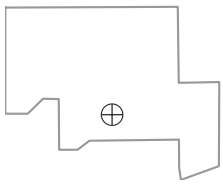


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

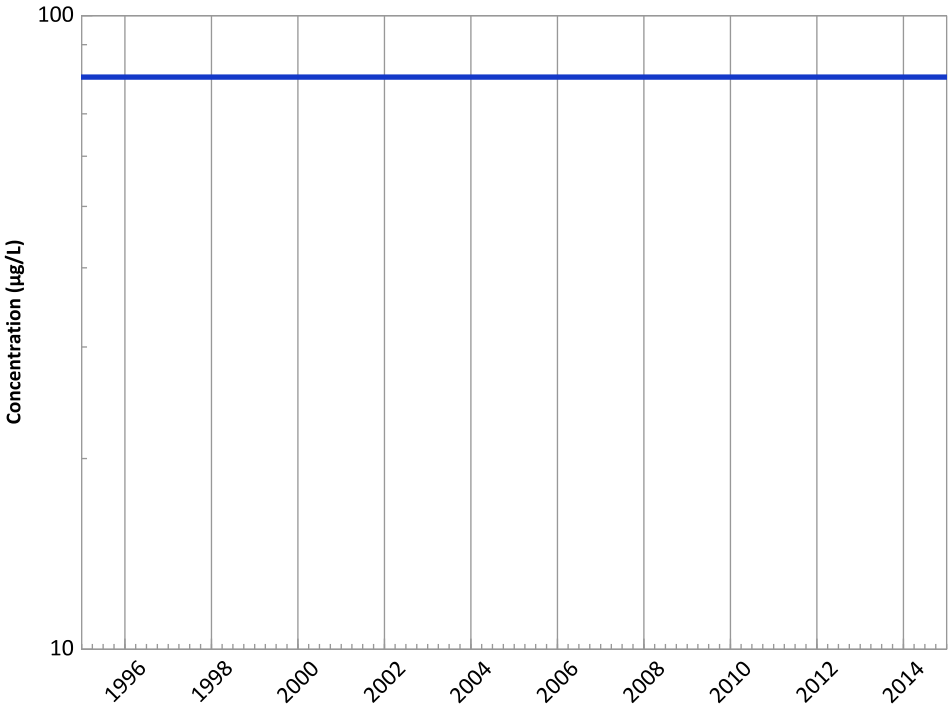


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

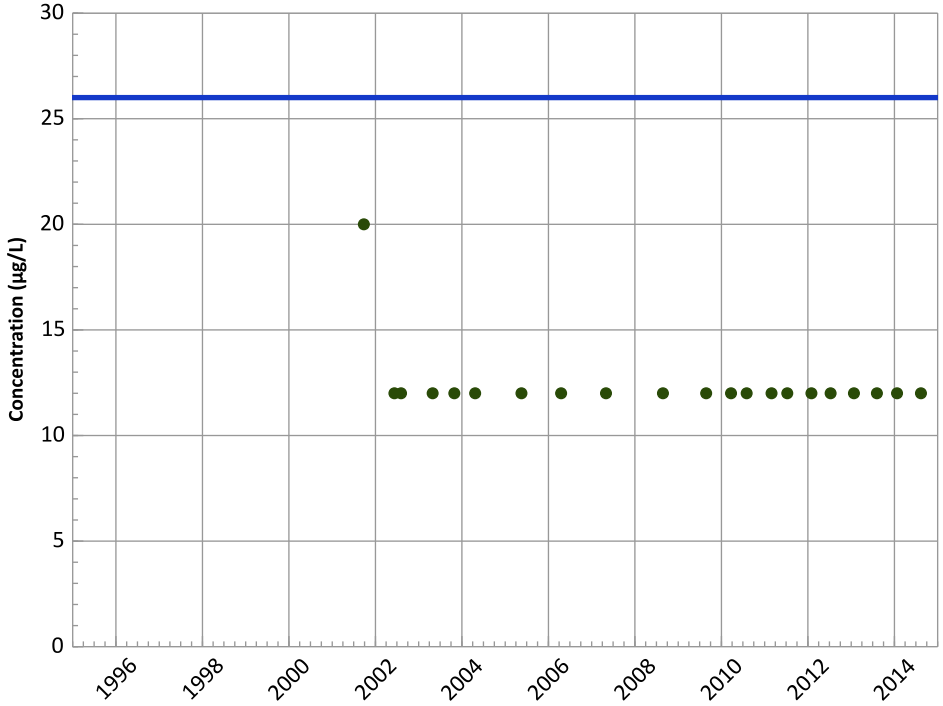


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

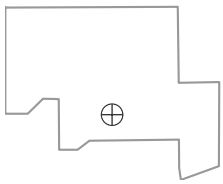
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

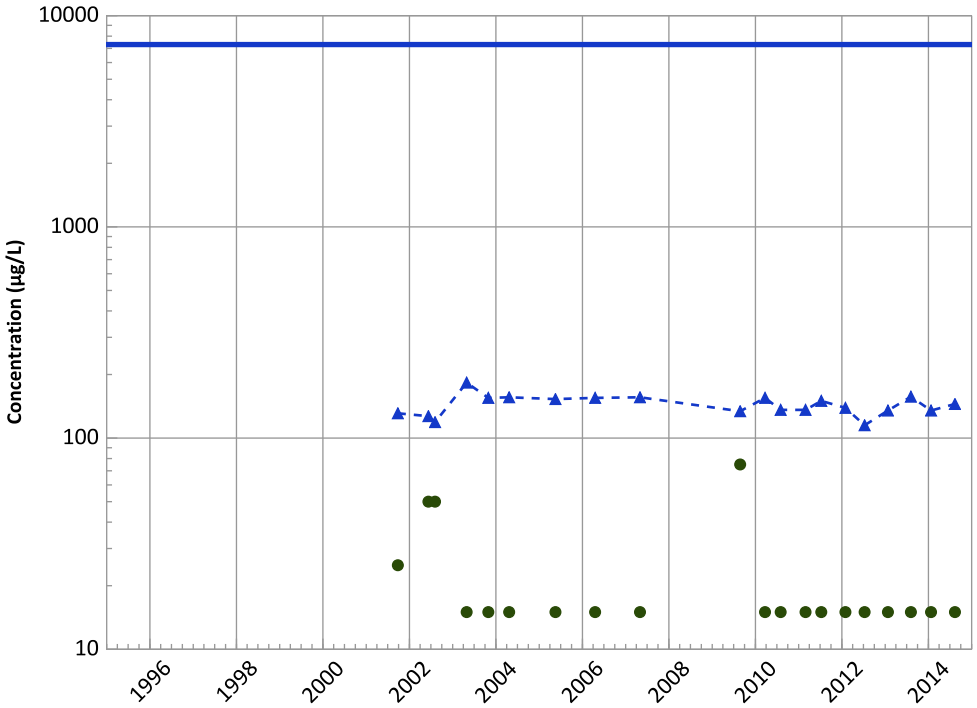
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

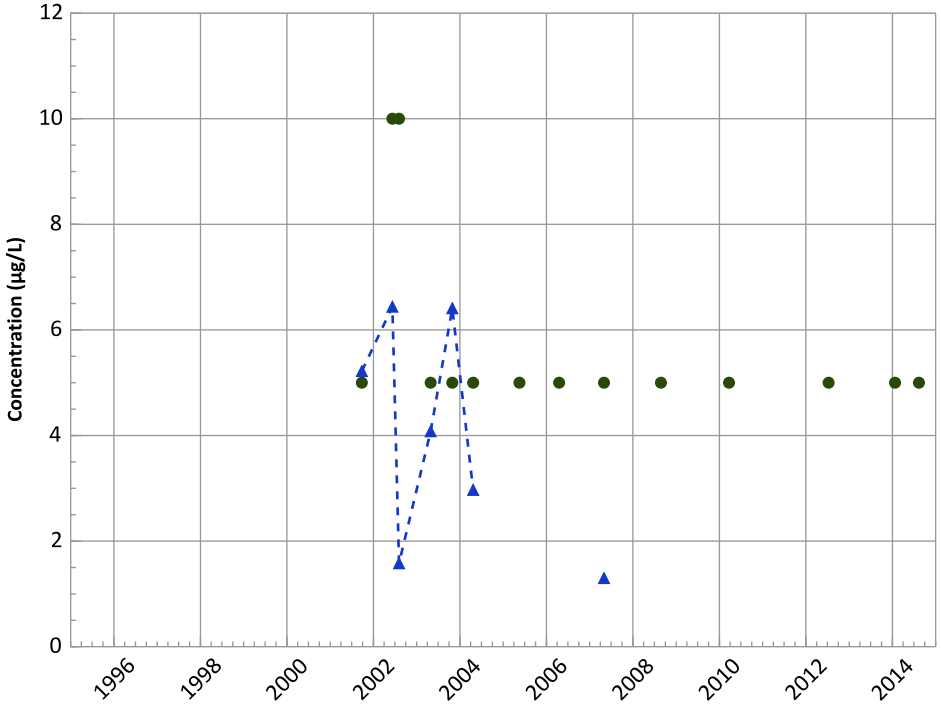


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Manganese Trend



Concentration Trend

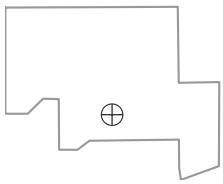
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

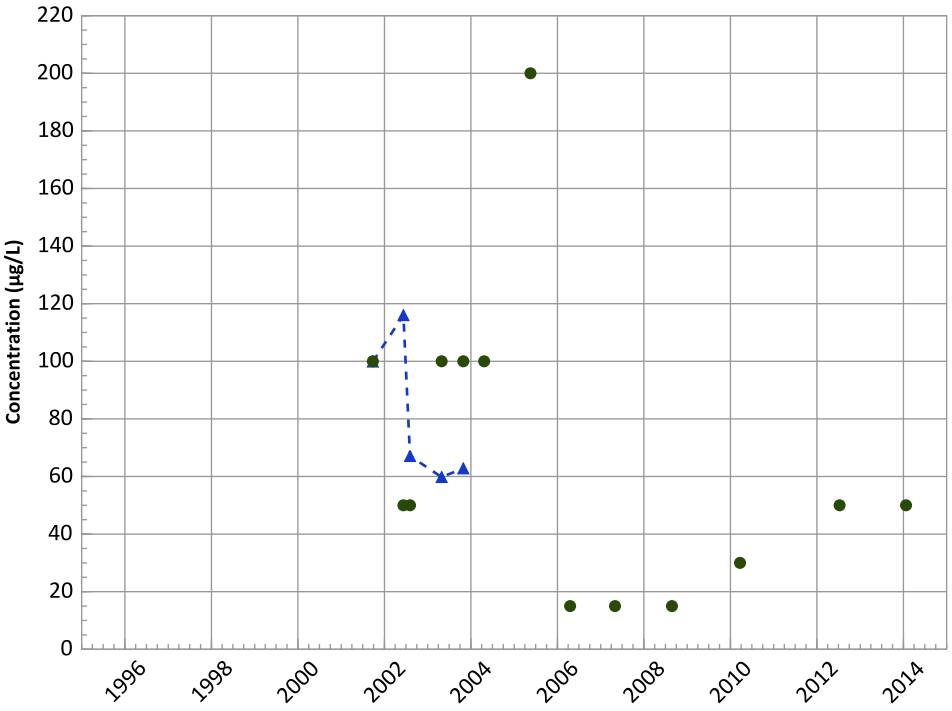
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

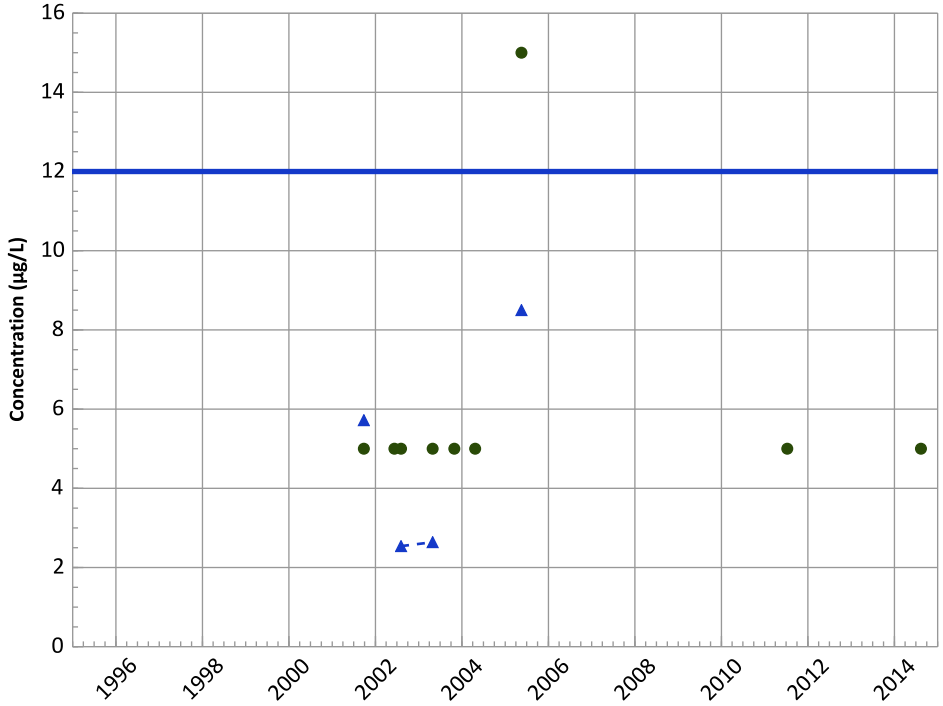


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Decreasing

Arsenic Trend



Concentration Trend

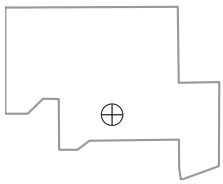
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

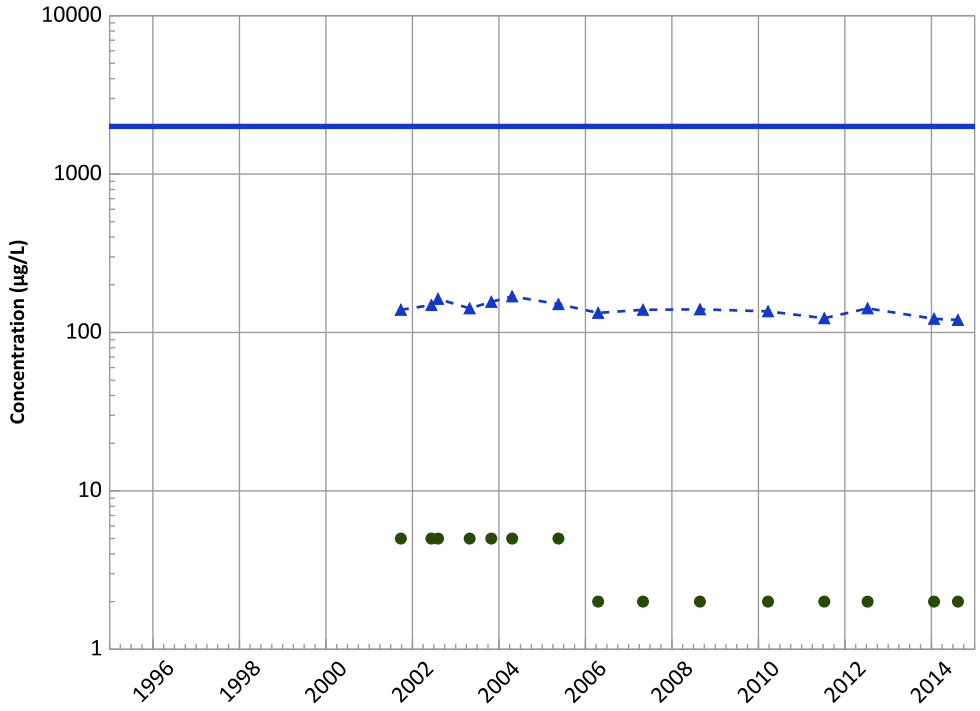
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

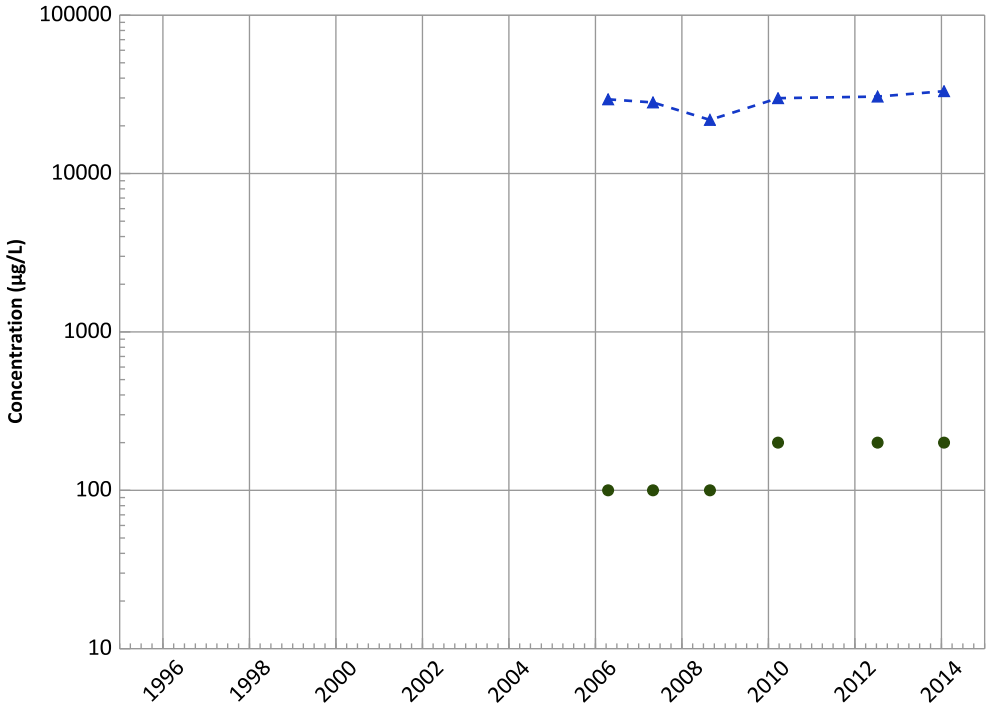


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Calcium Trend



Concentration Trend

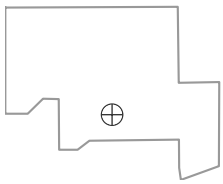
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

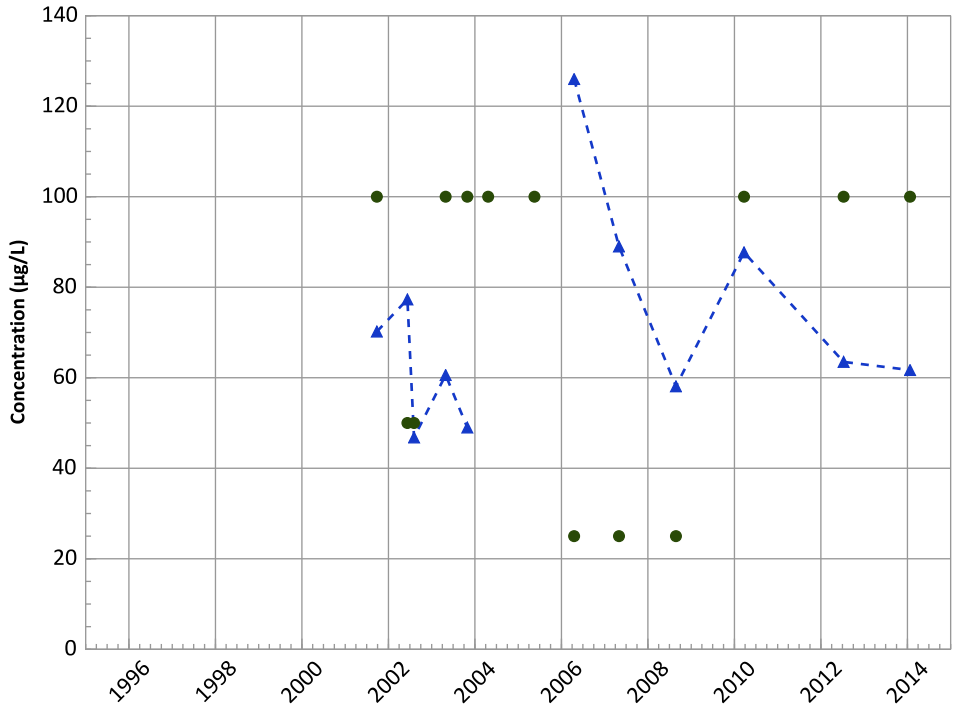
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

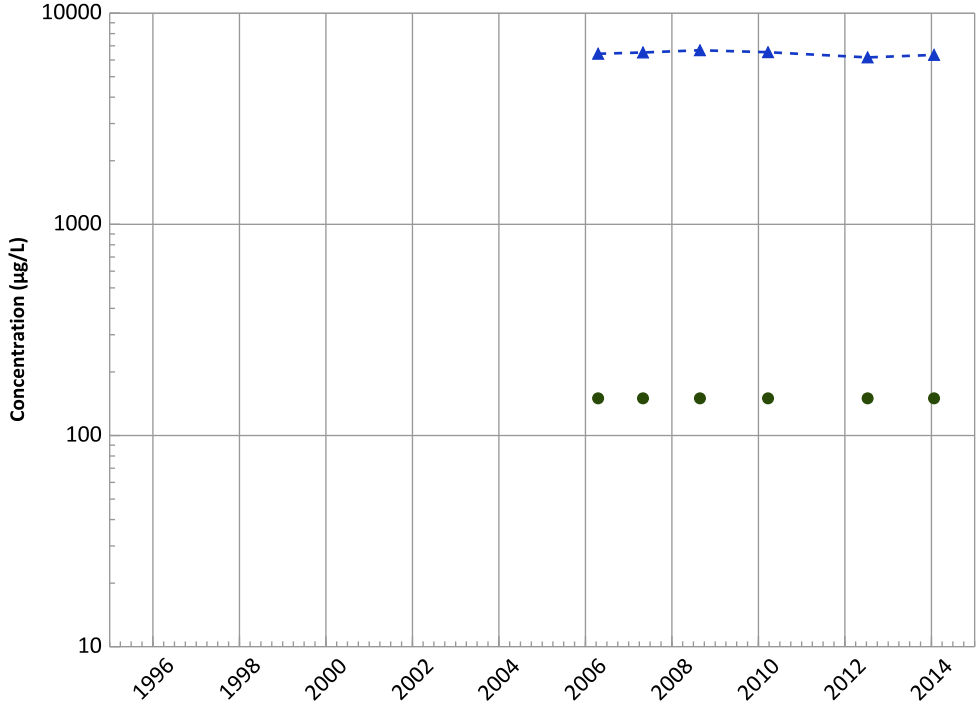


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Potassium Trend



Concentration Trend

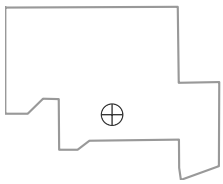
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

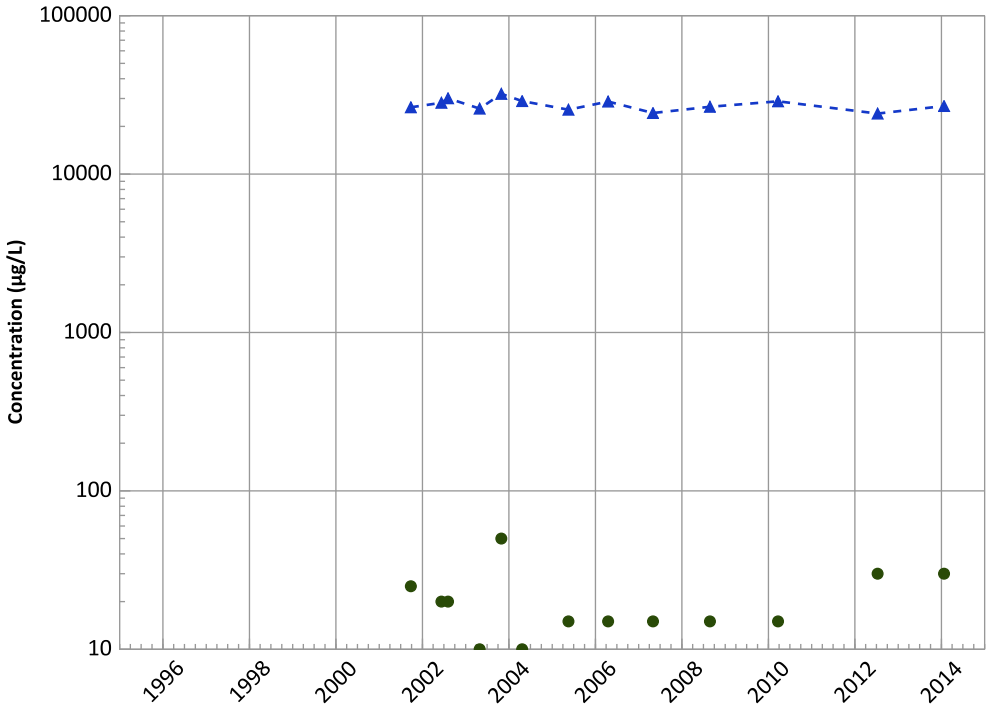
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1072 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

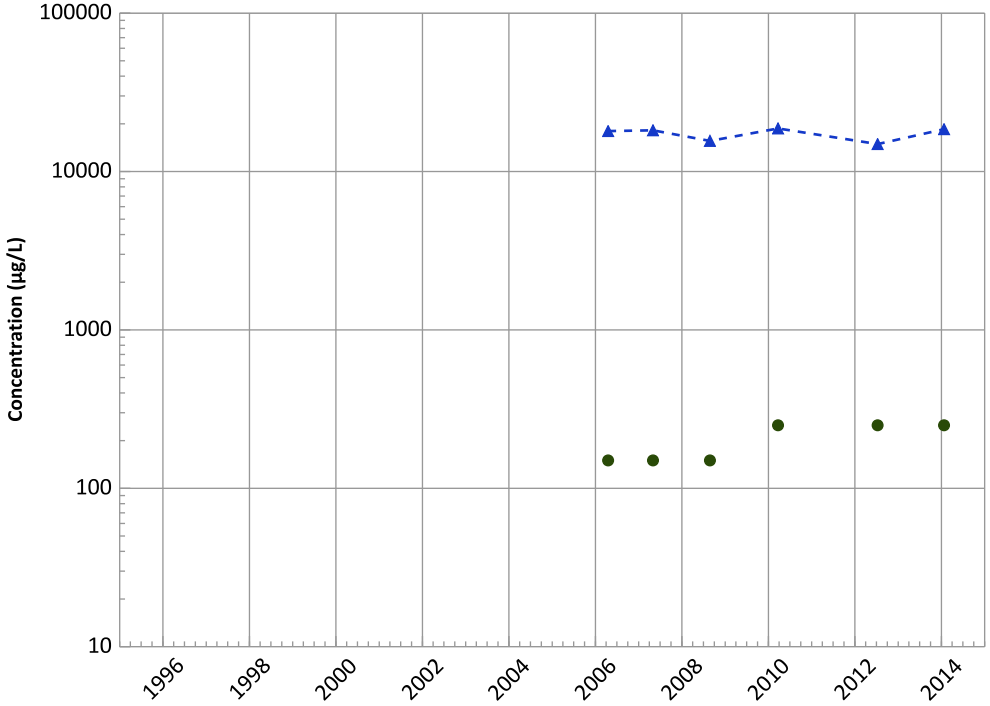


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Sodium Trend



Concentration Trend

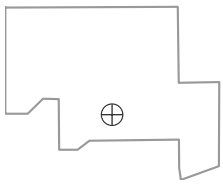
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

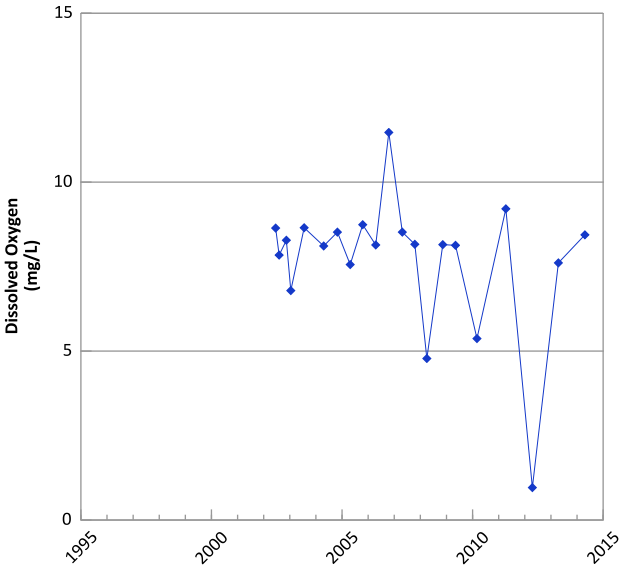
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/25/2001 to 08/13/2014
Analysis Date: 03/19/2015

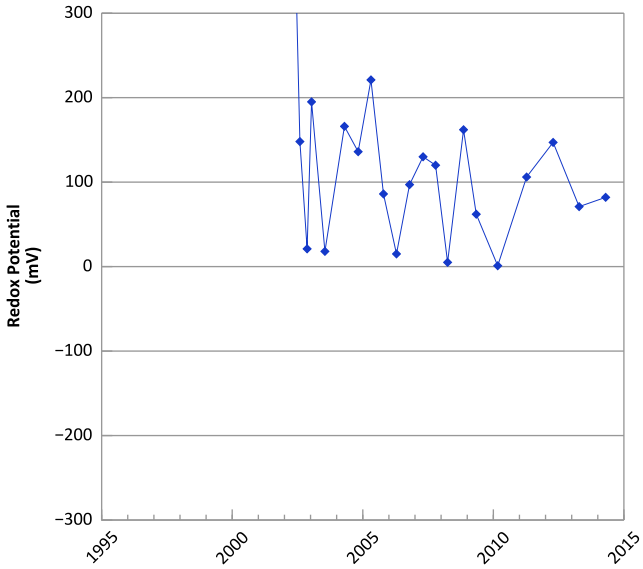
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

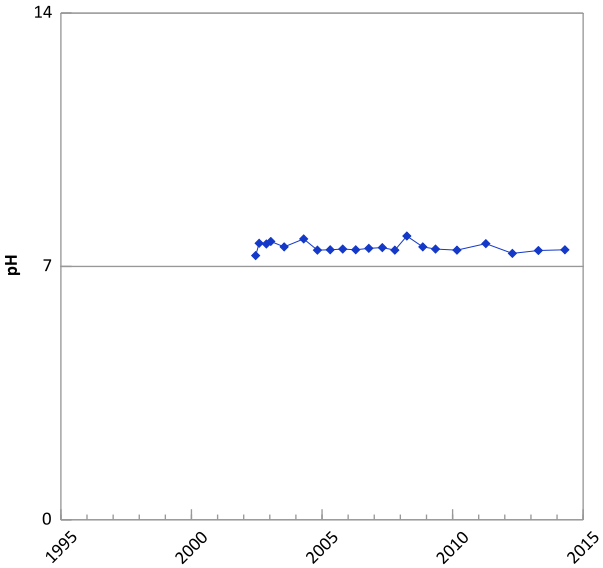
Well Location

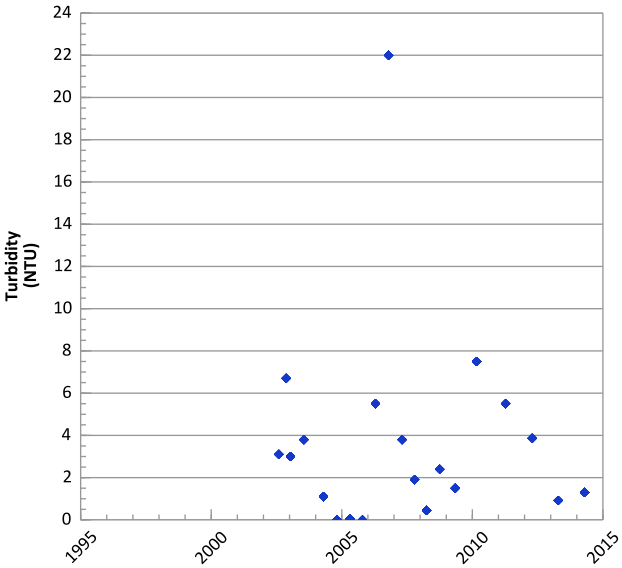


PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



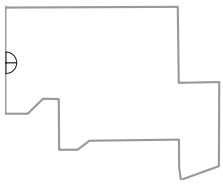






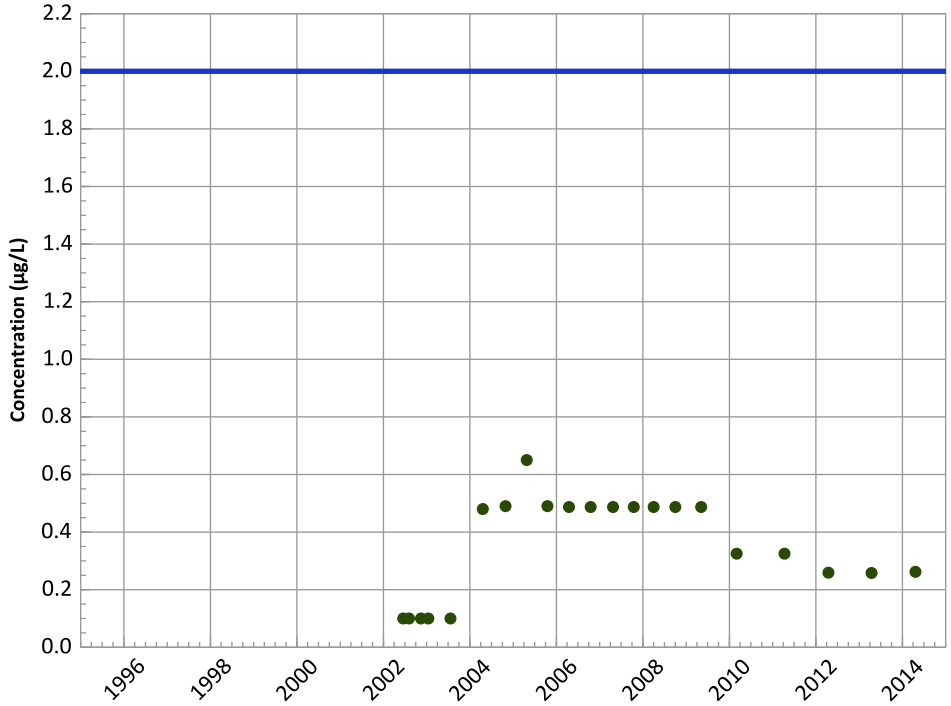
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

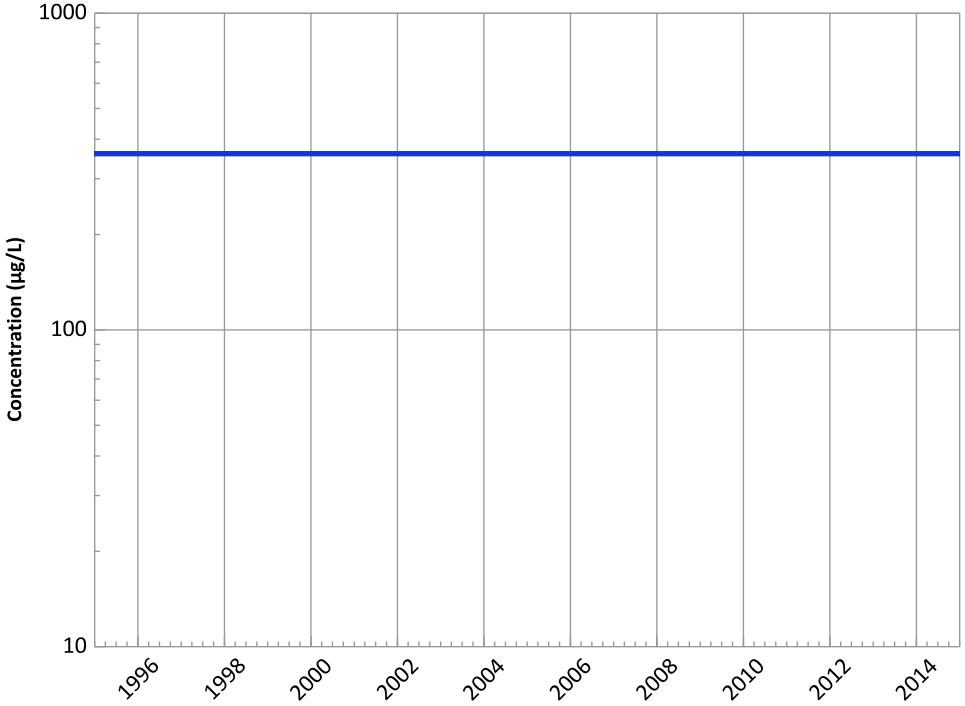


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

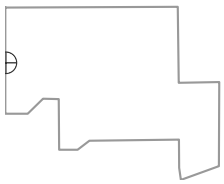
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

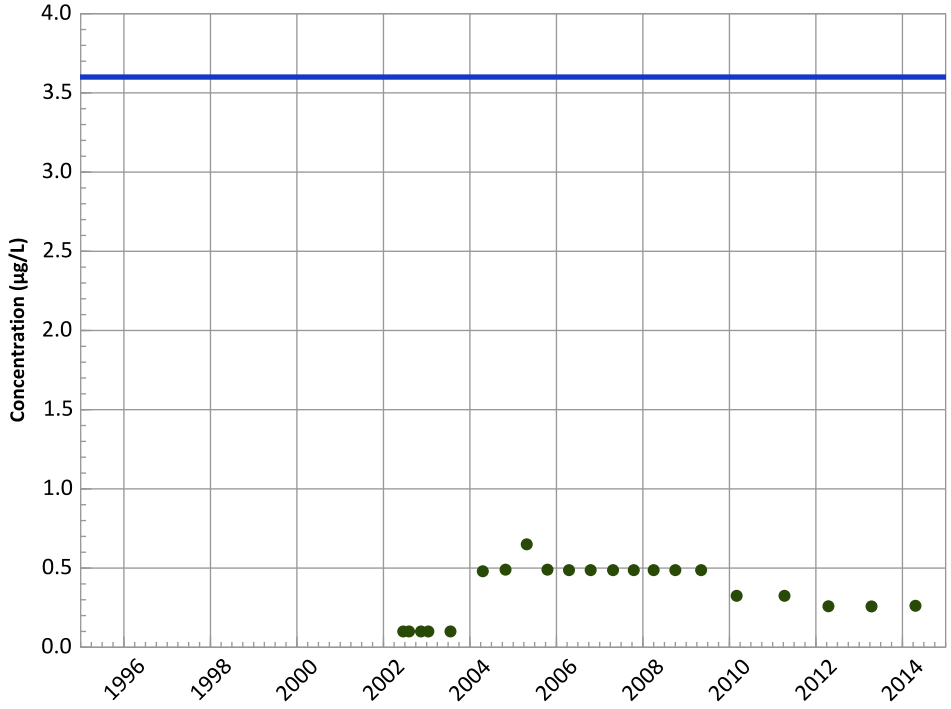
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

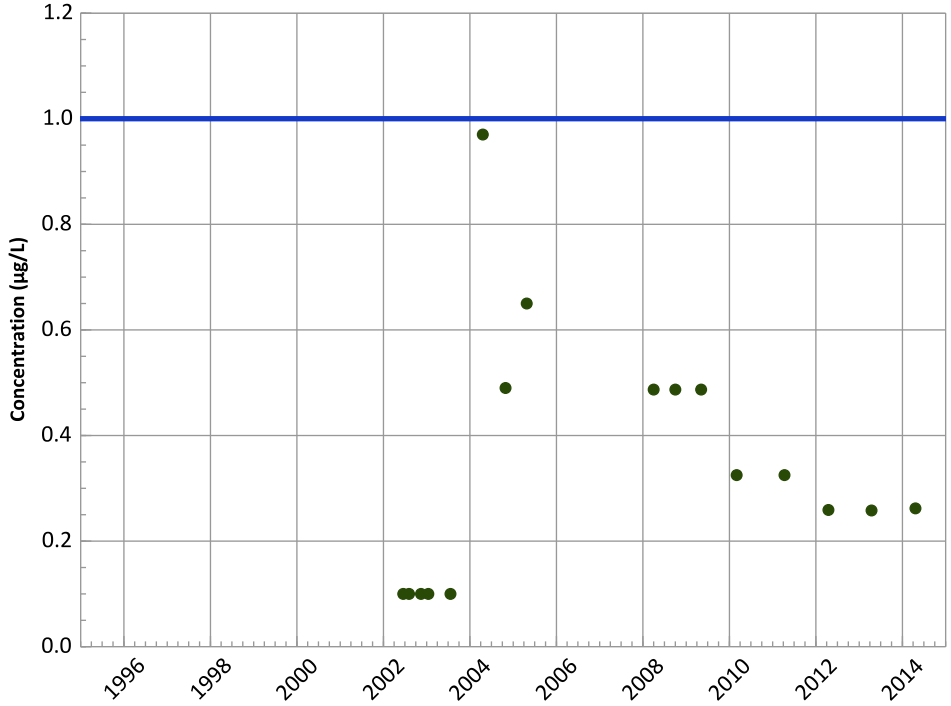


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

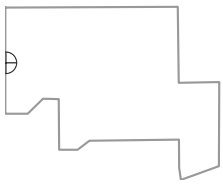
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

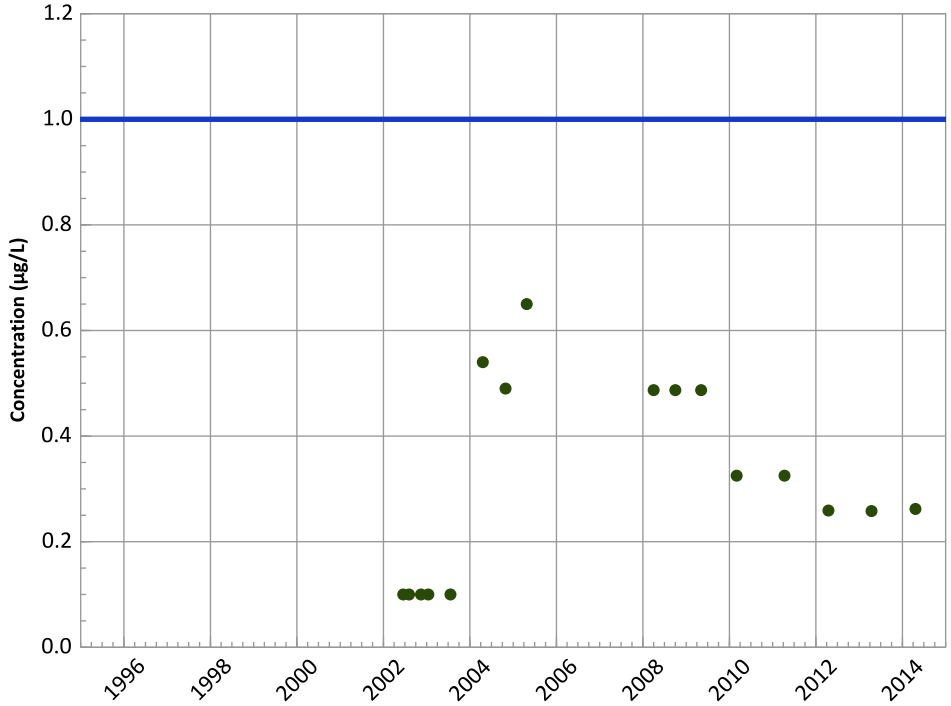
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

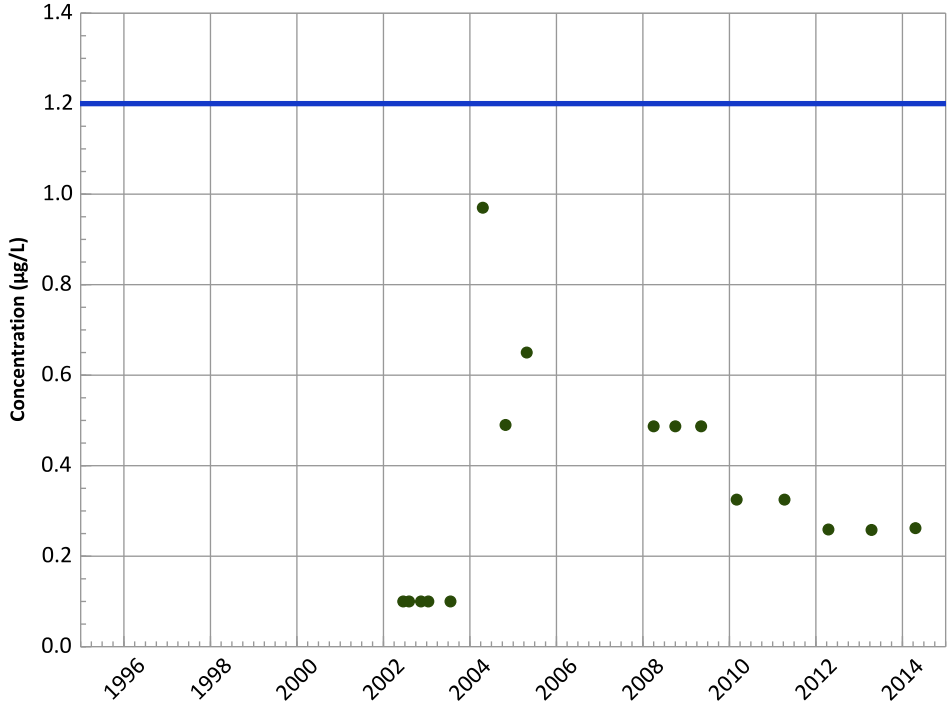


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

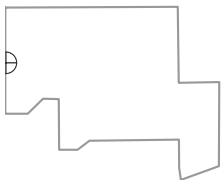
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

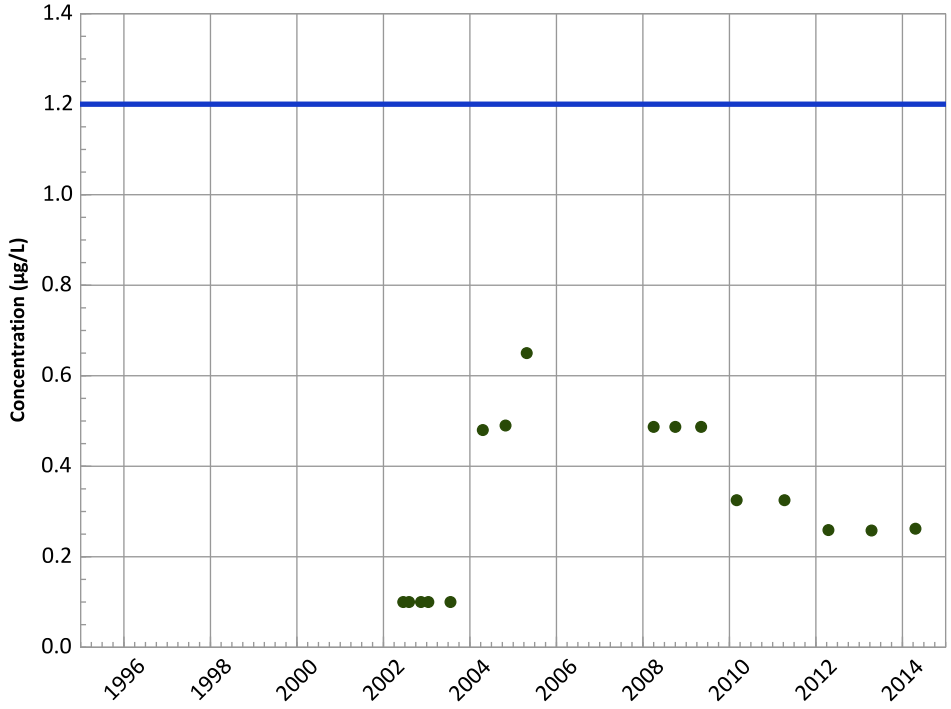
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

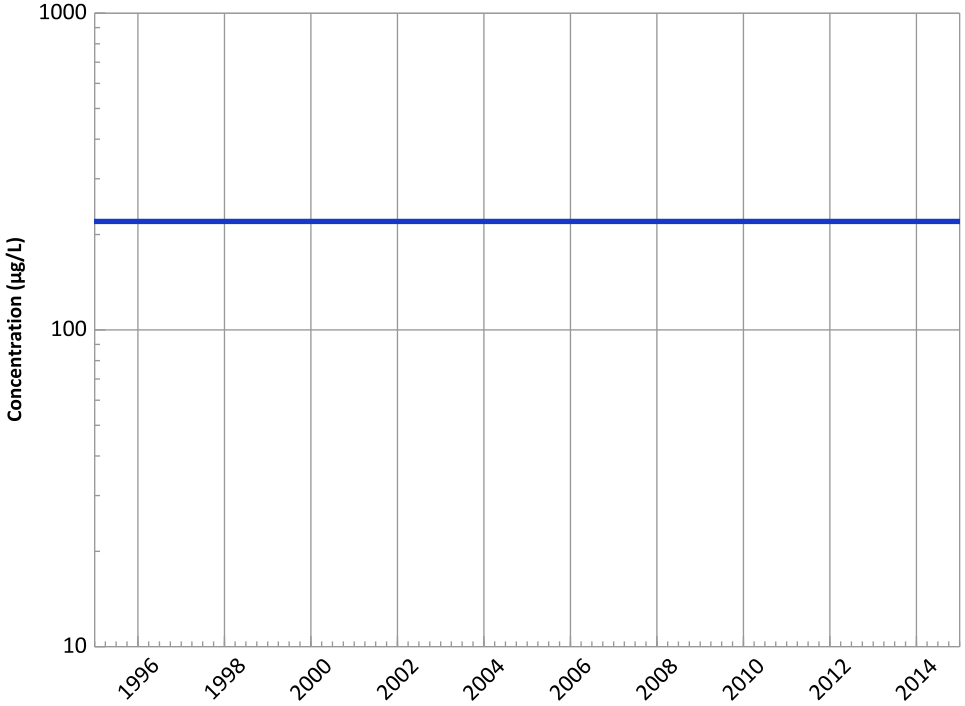


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

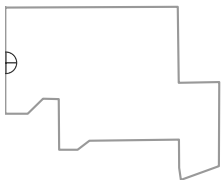


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

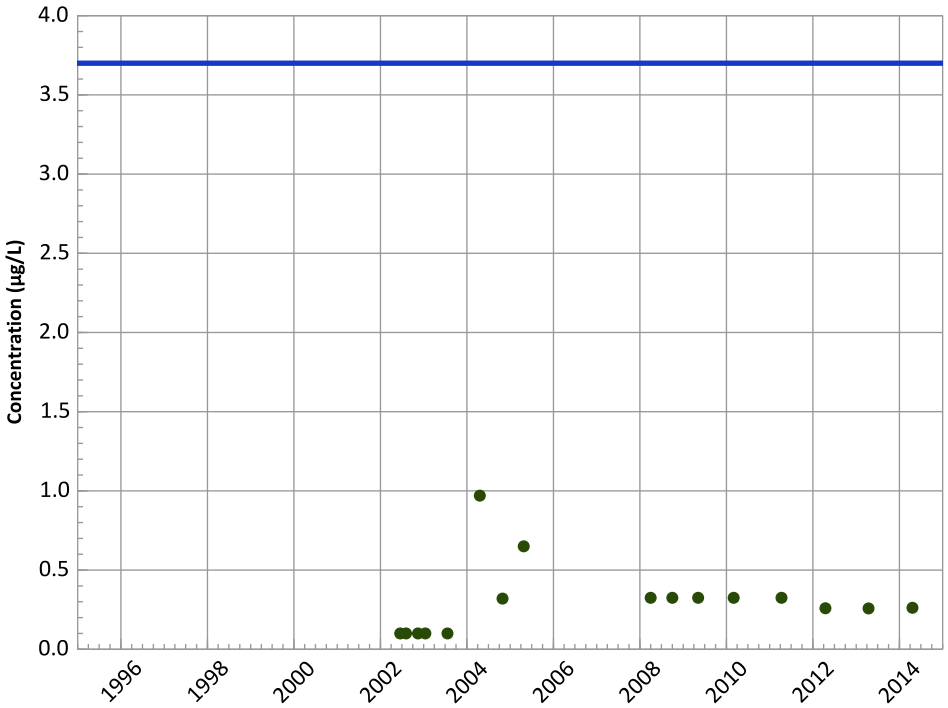


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

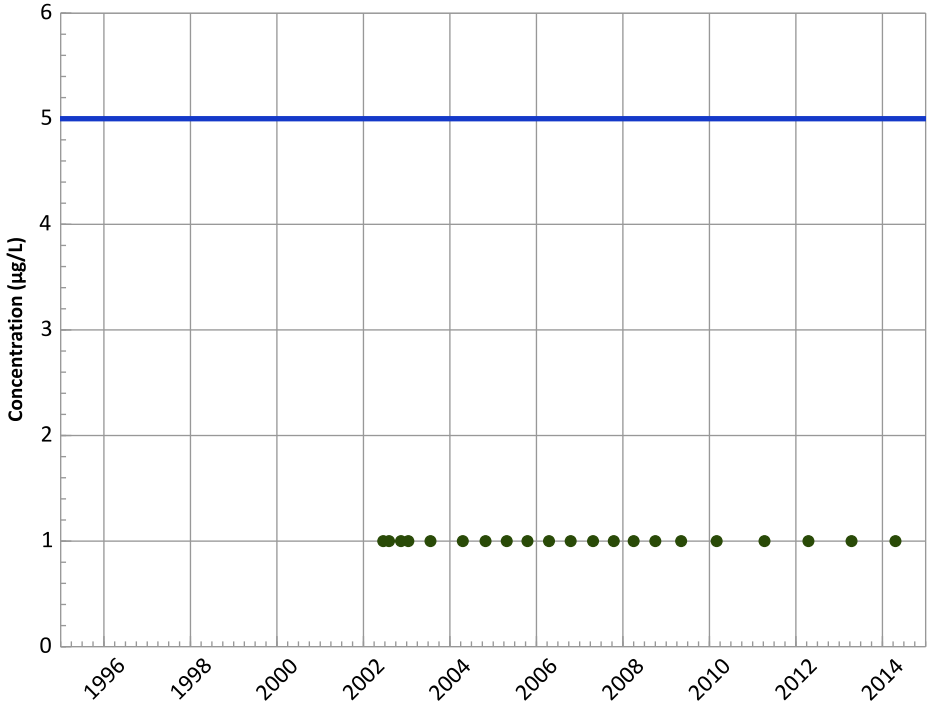


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

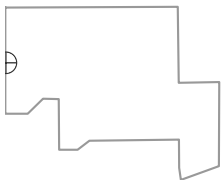
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

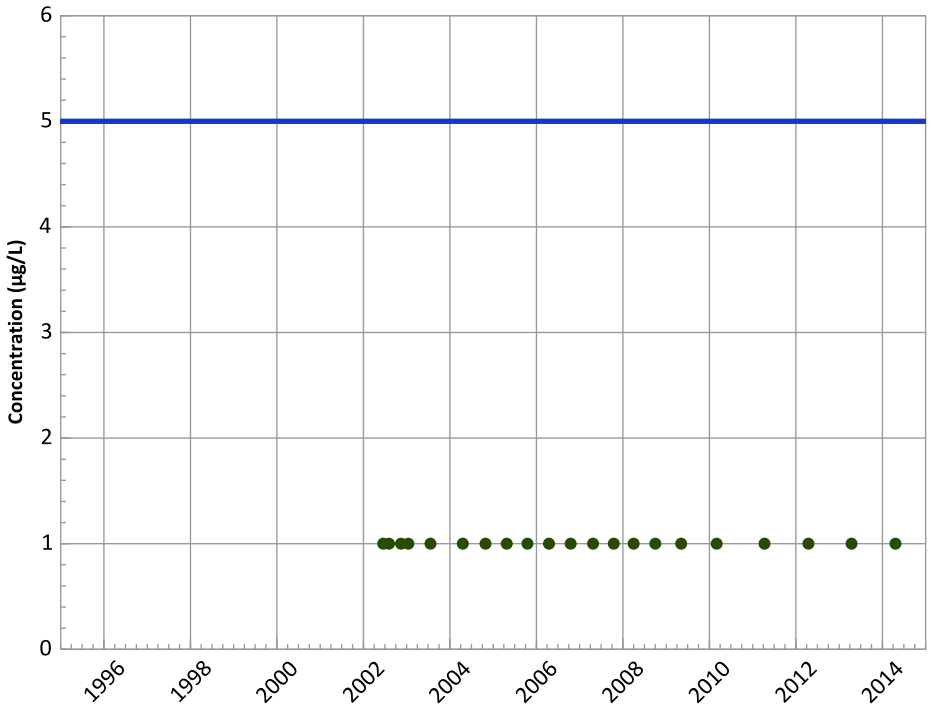
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

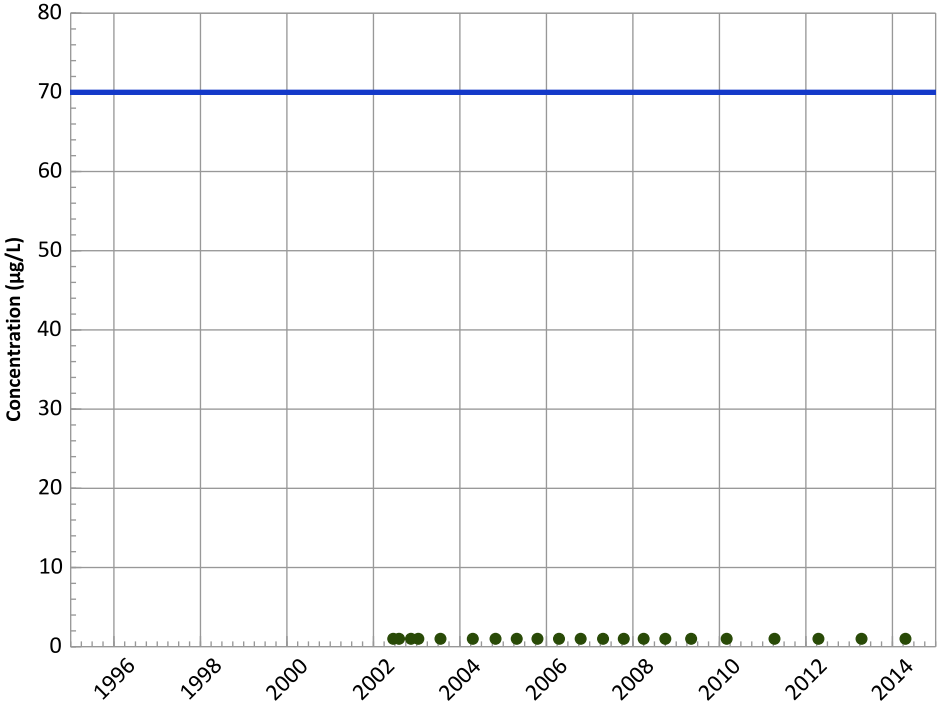


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

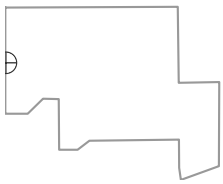
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

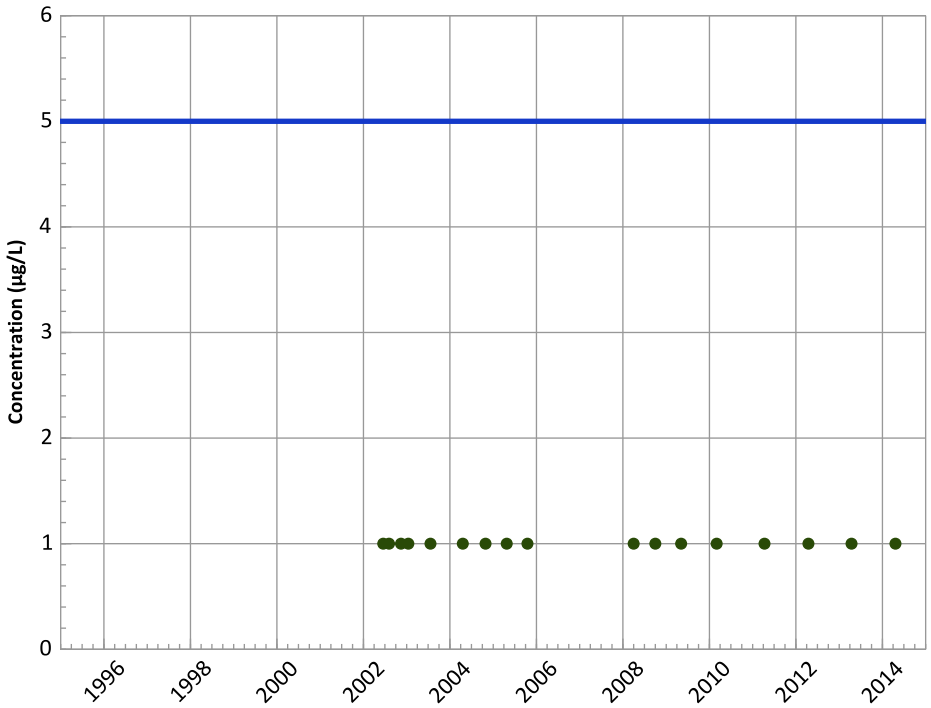
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

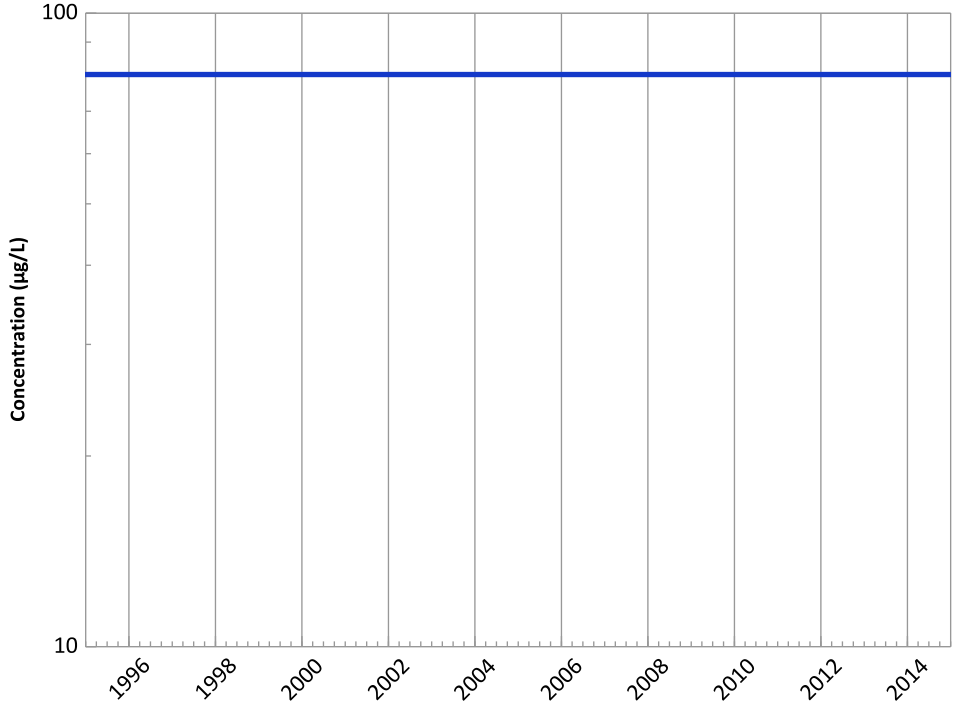


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

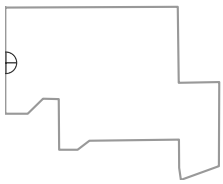
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

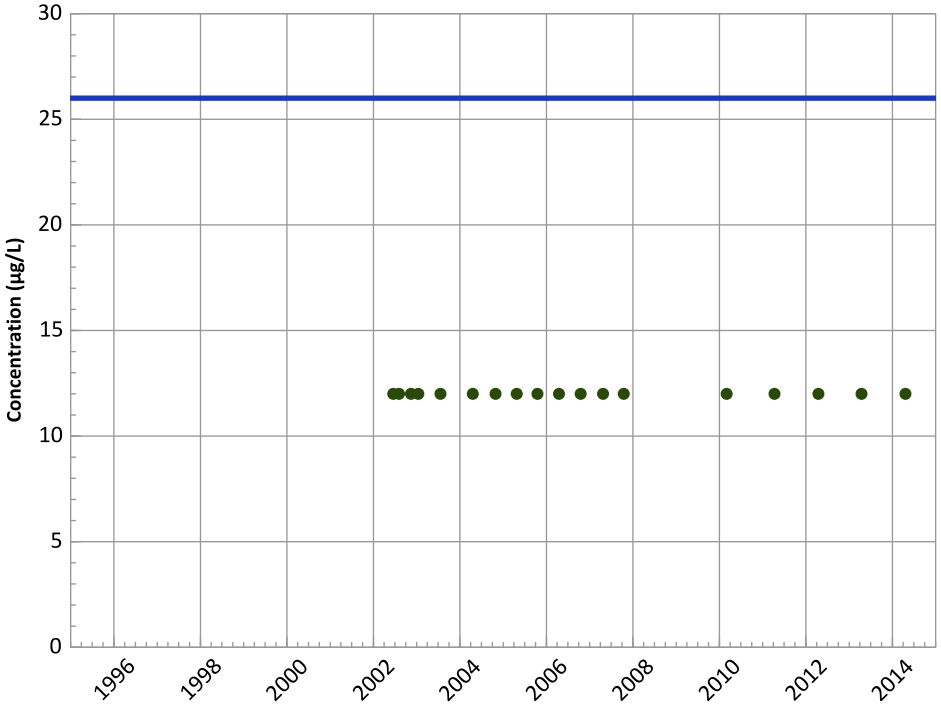
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

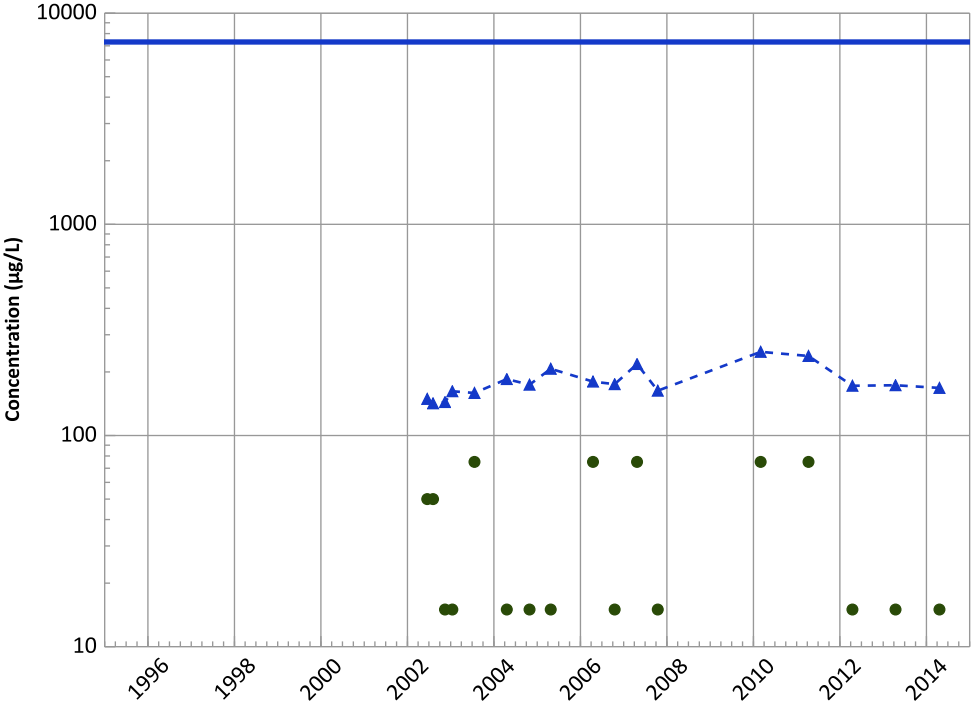


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Boron Trend



Concentration Trend

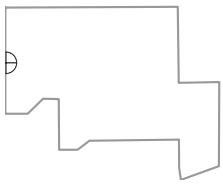
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

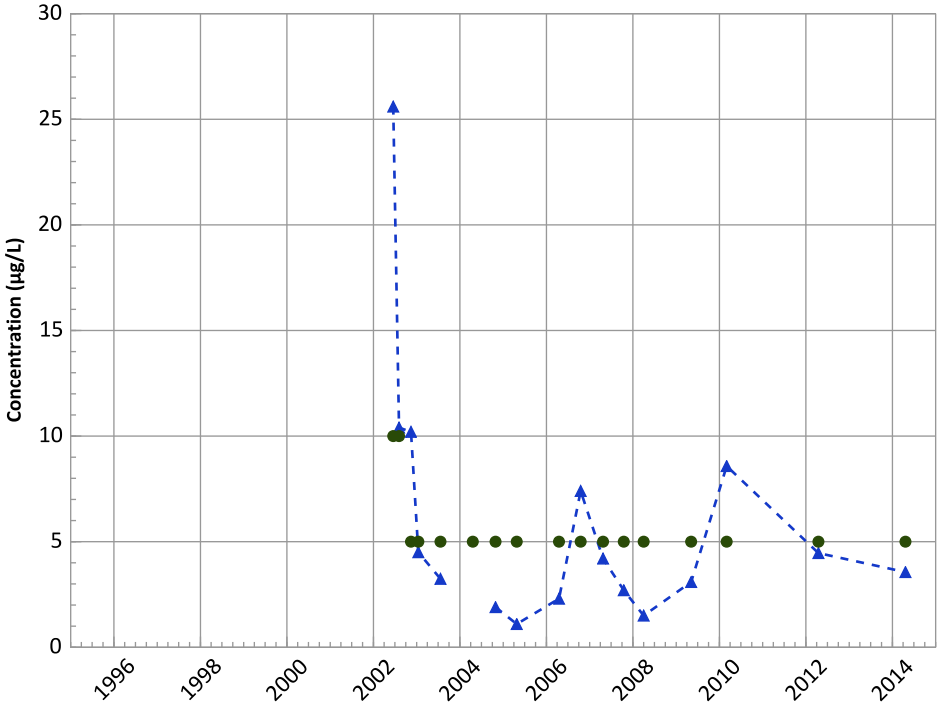
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

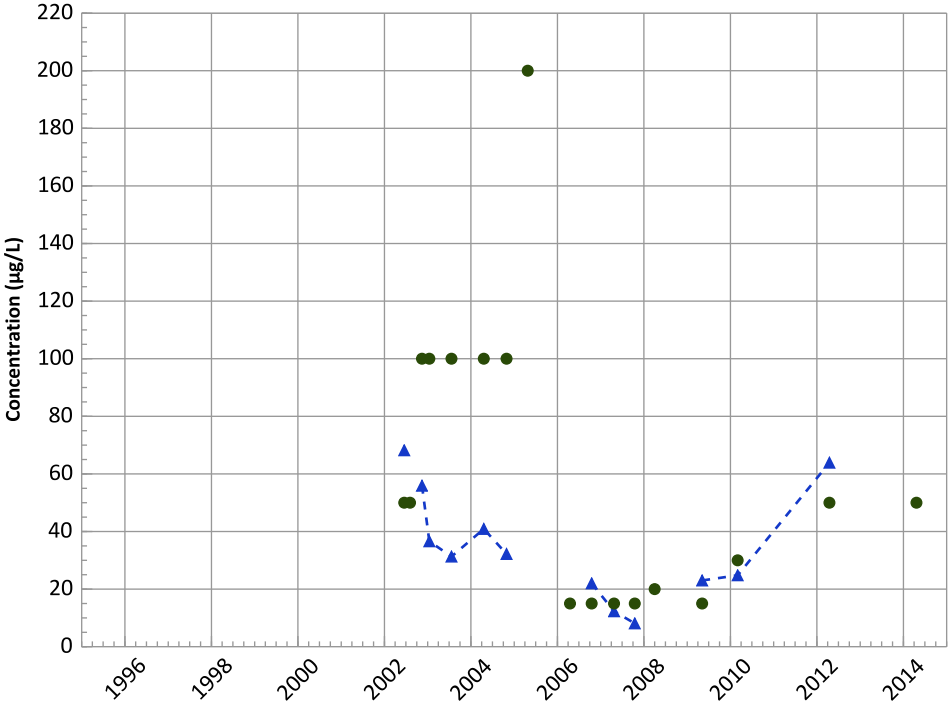


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Aluminum Trend



Concentration Trend

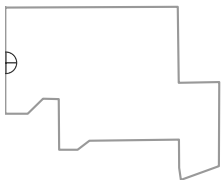
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

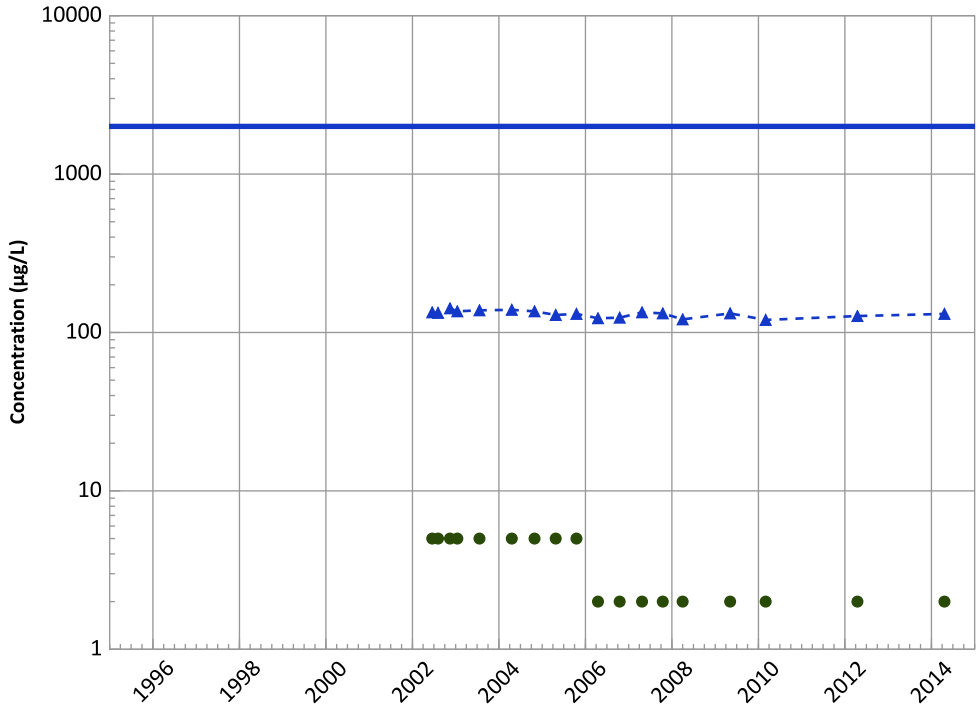
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

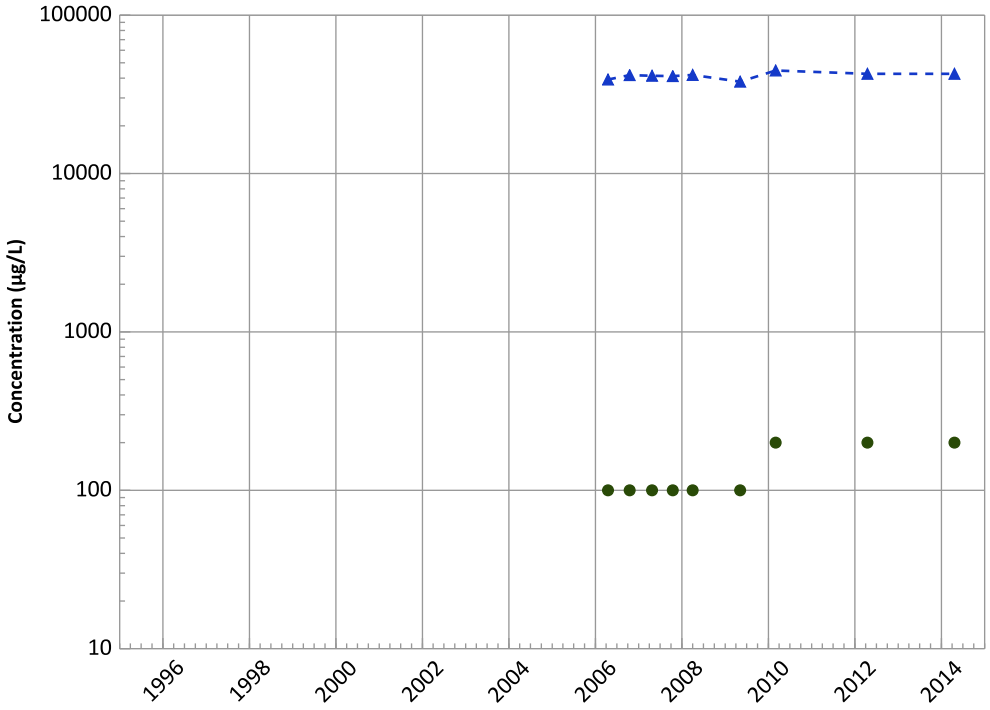


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Calcium Trend



Concentration Trend

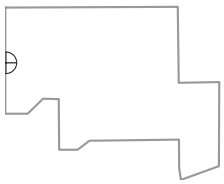
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

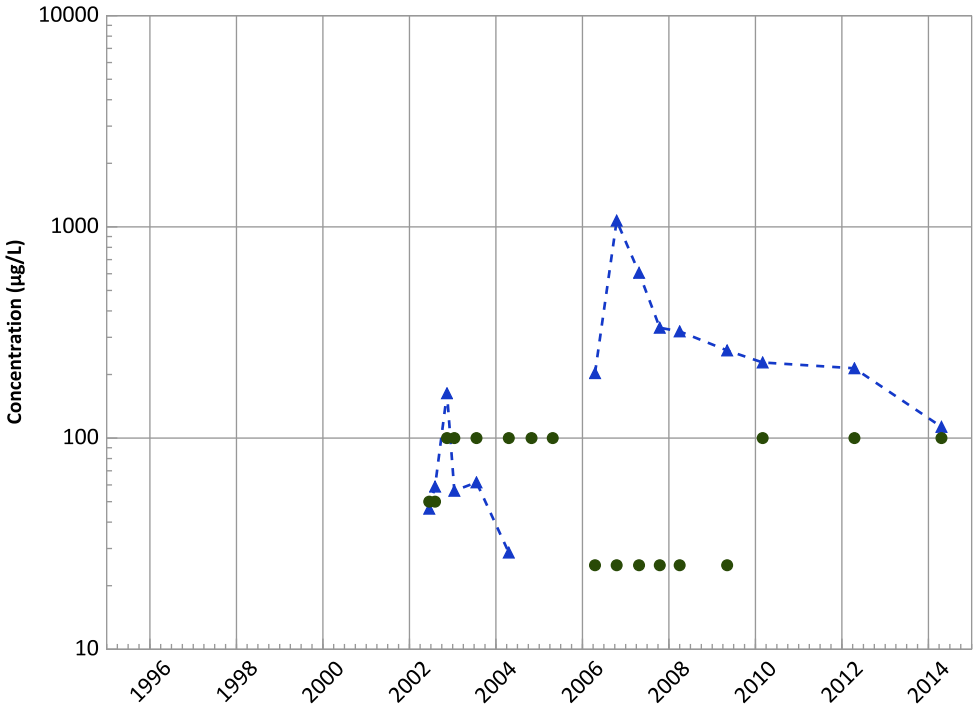
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

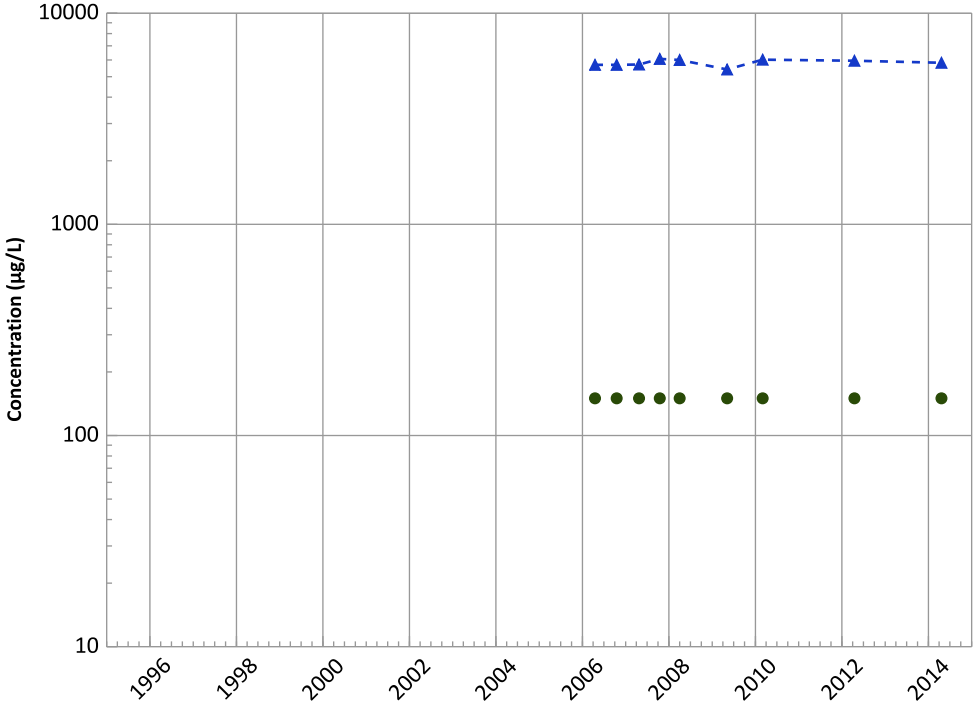


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Potassium Trend



Concentration Trend

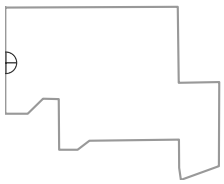
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

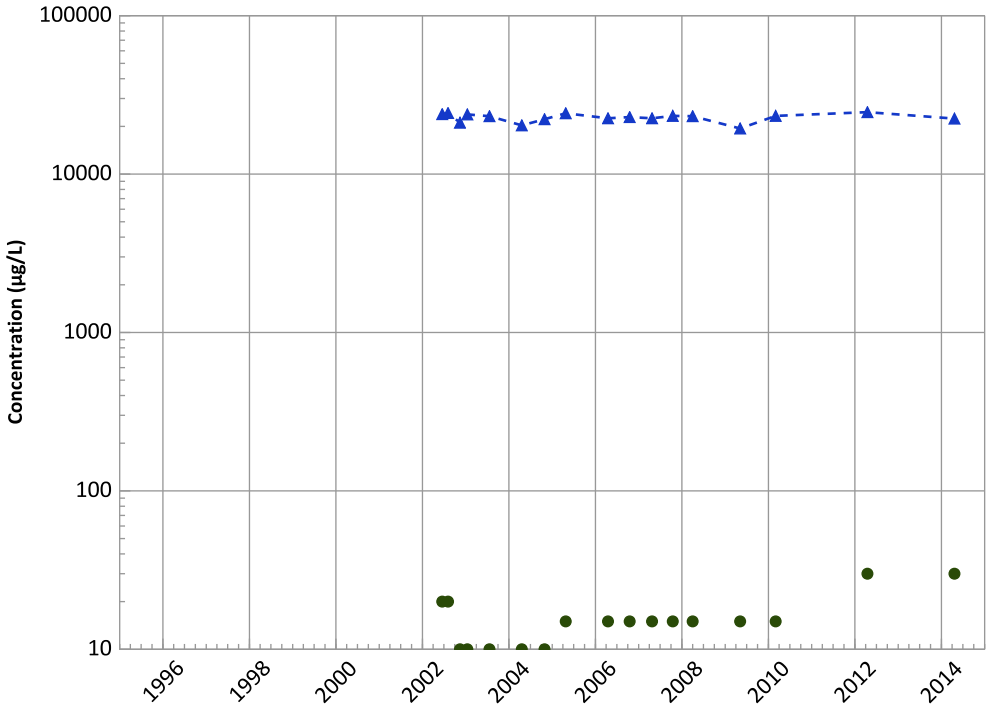
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1074 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

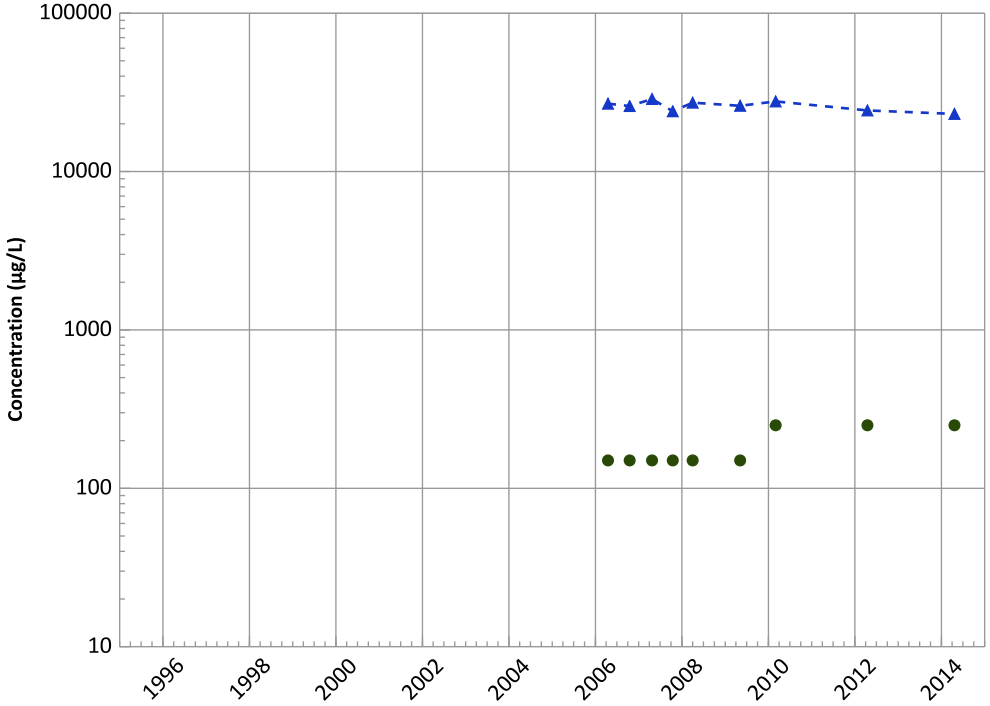


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Sodium Trend



Concentration Trend

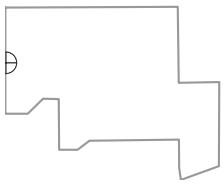
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

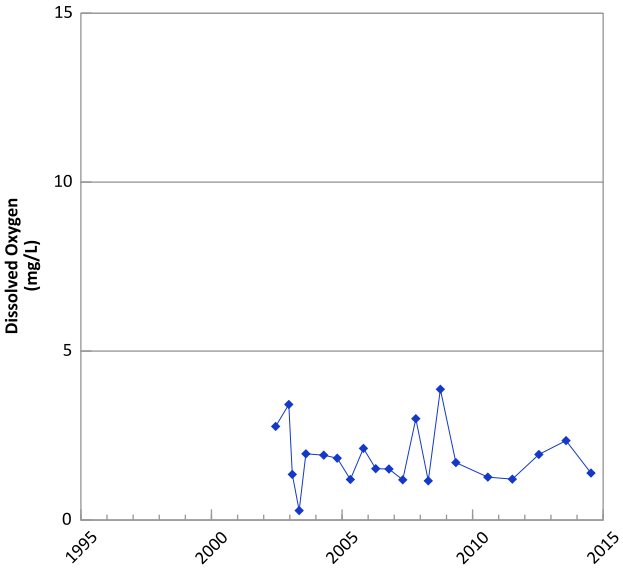
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 04/21/2014
Analysis Date: 03/19/2015

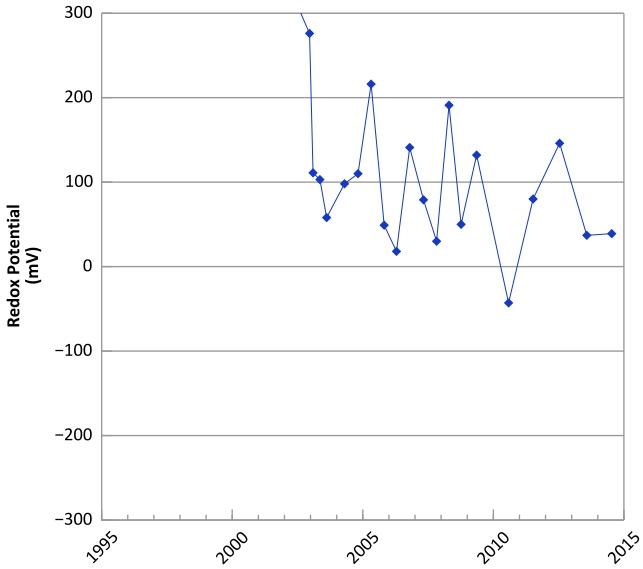
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

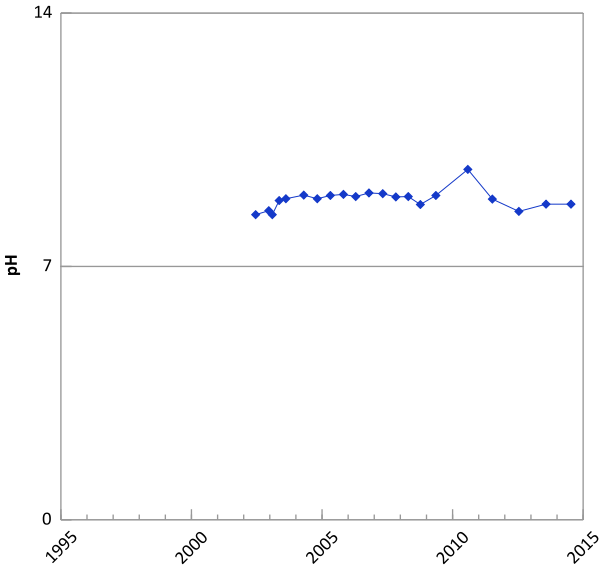
Well Location

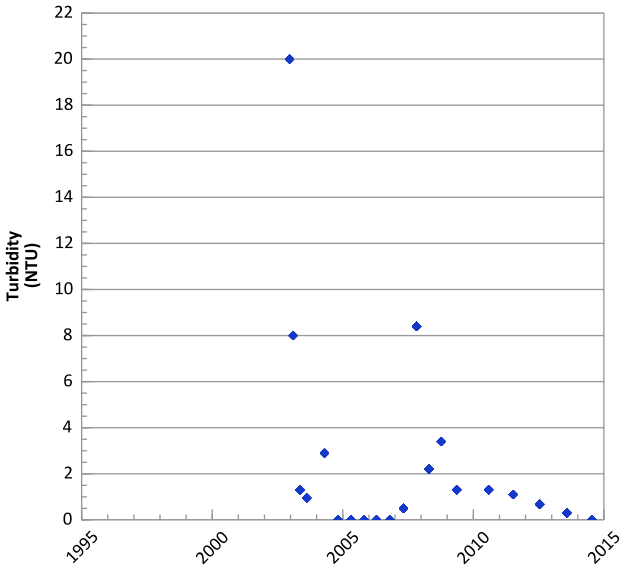


PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



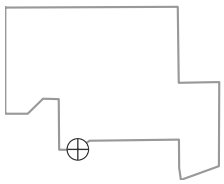






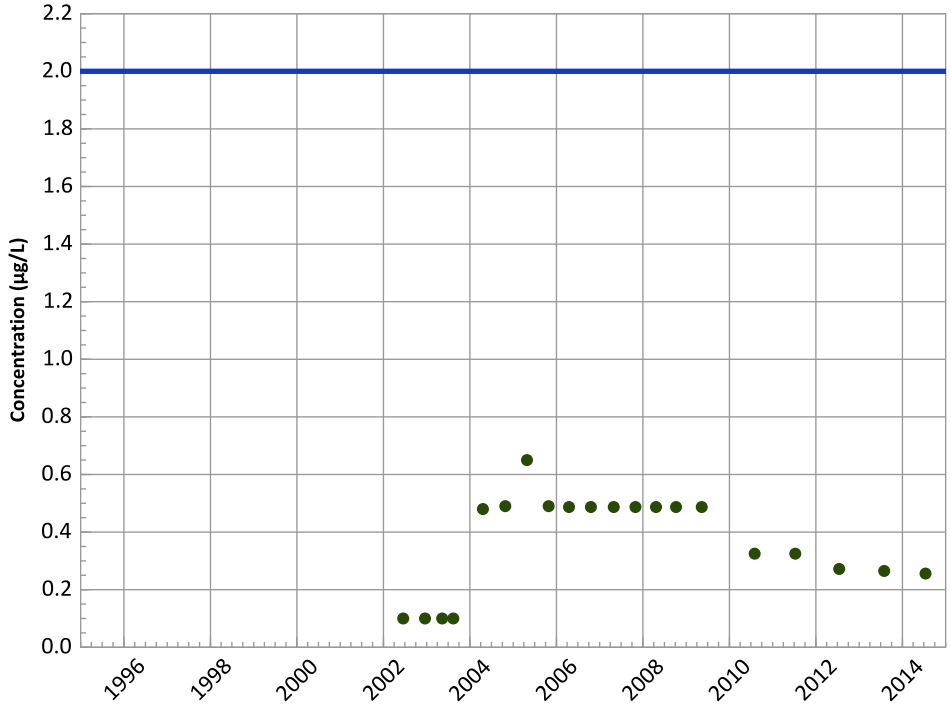
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

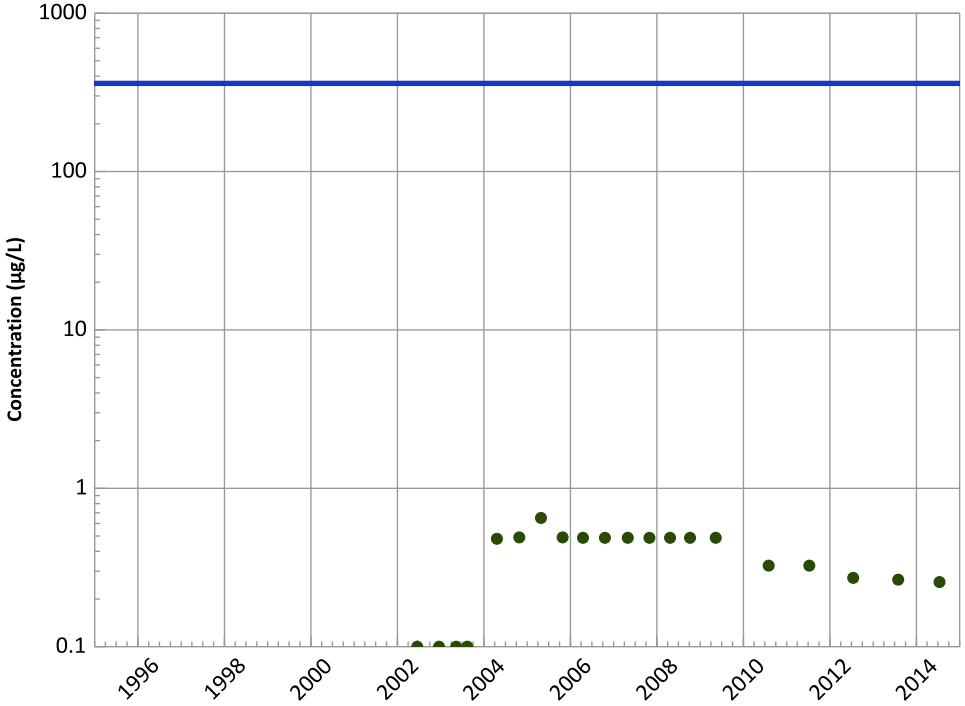


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

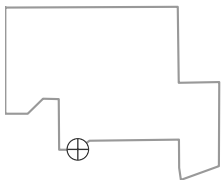
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

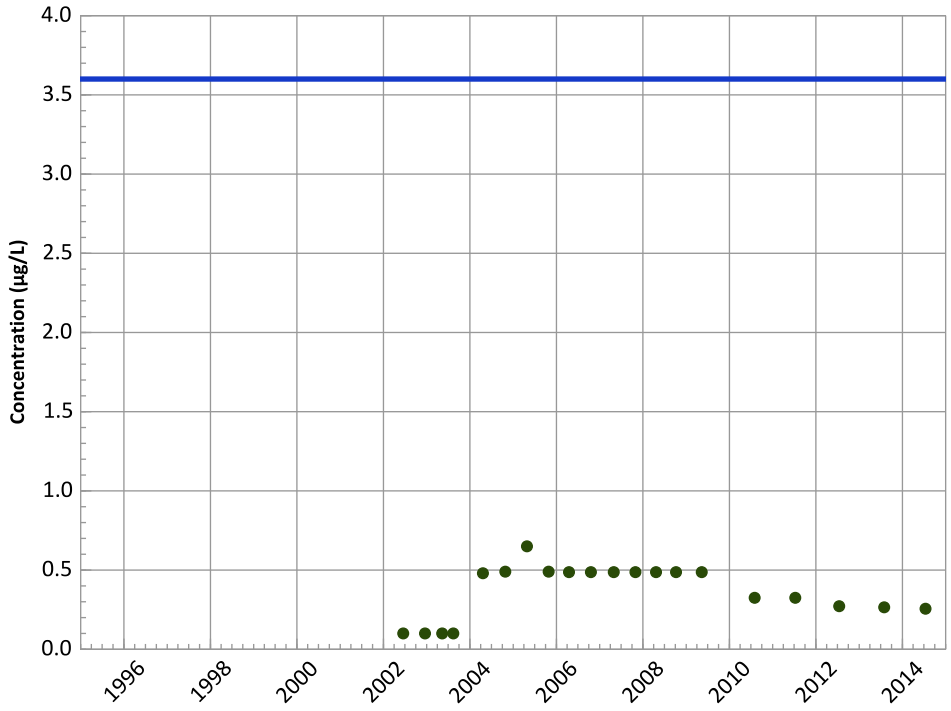
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

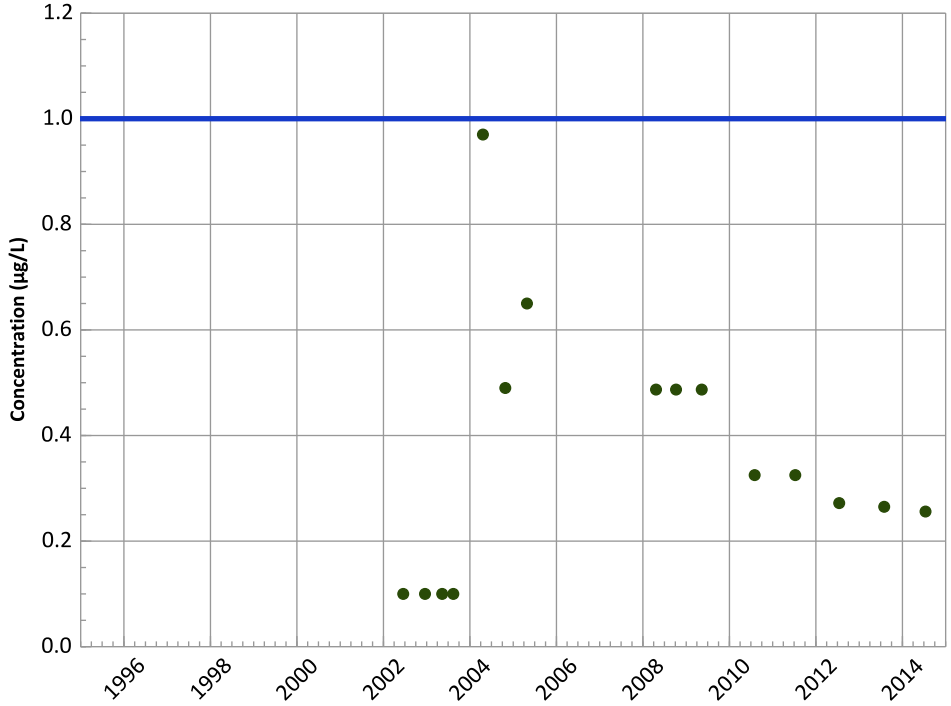


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

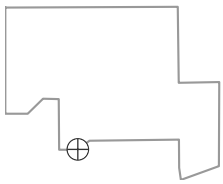
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

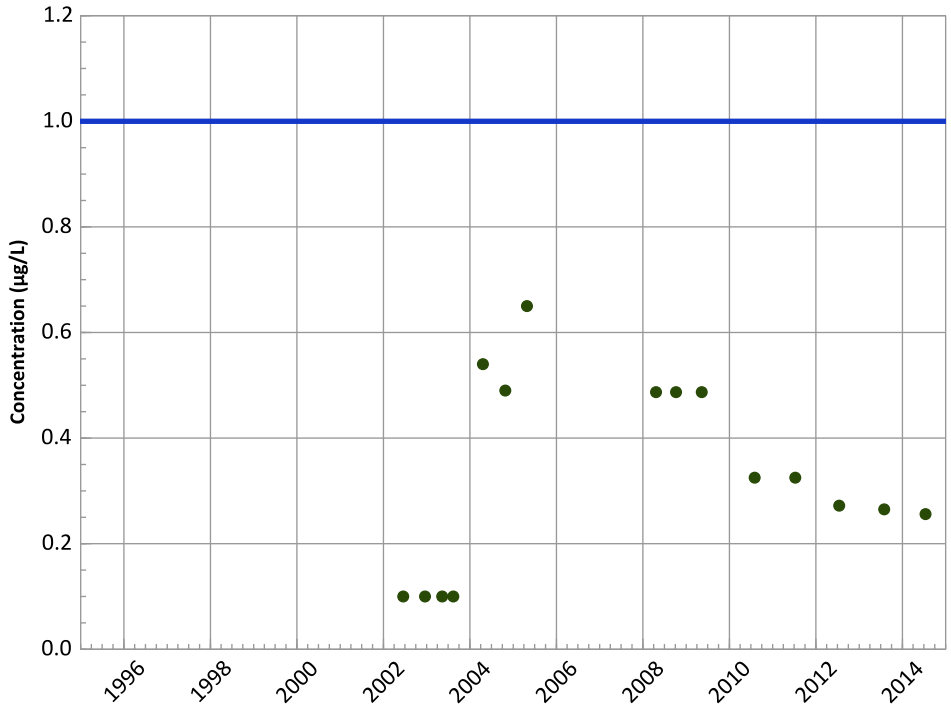
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

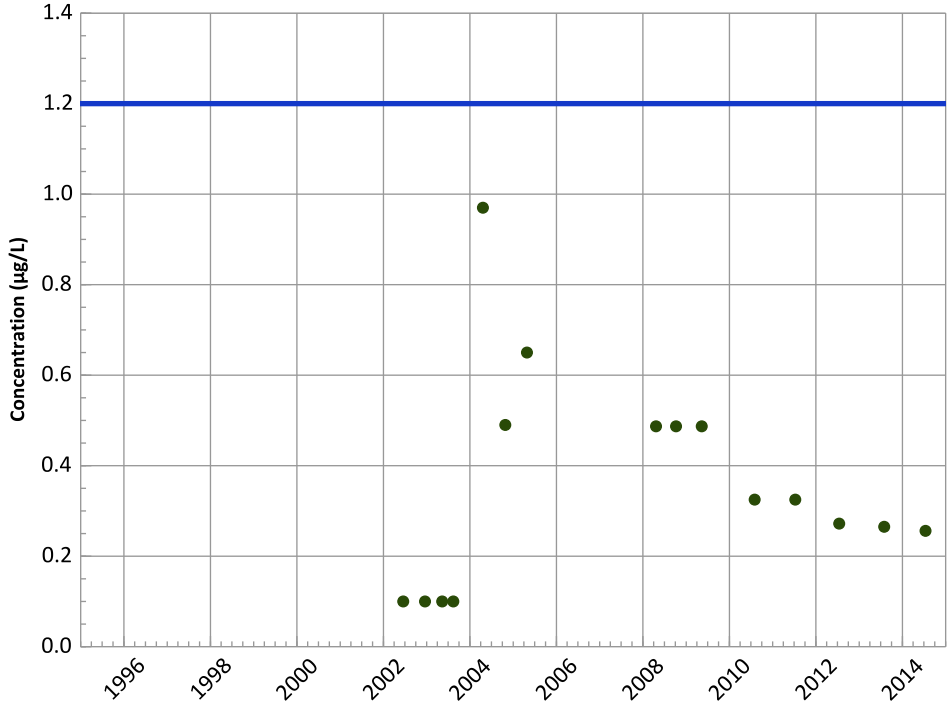


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

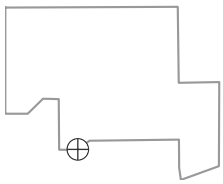
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

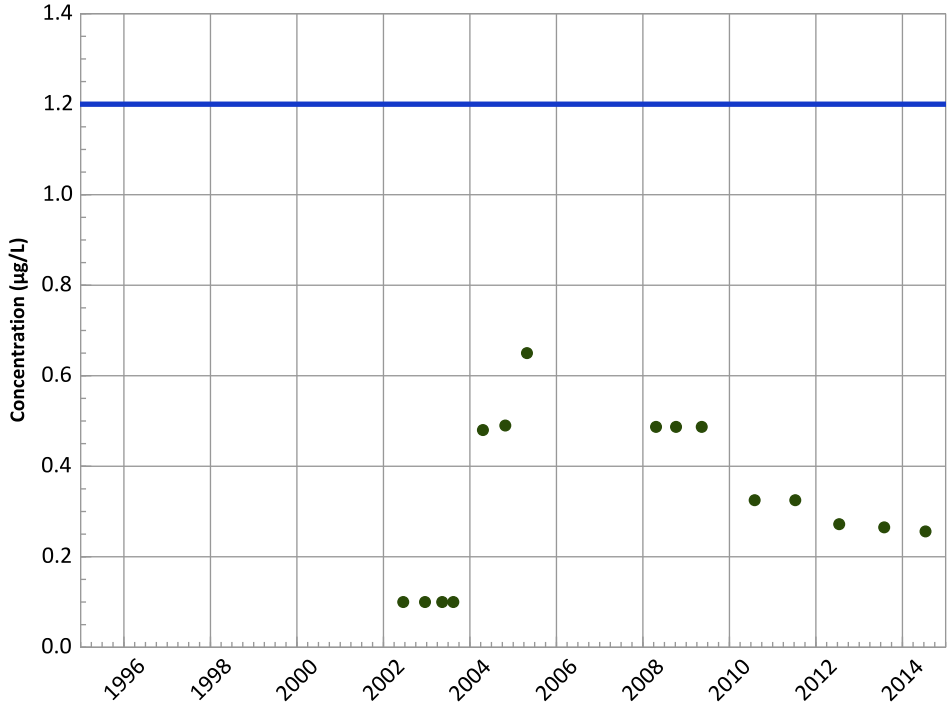
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

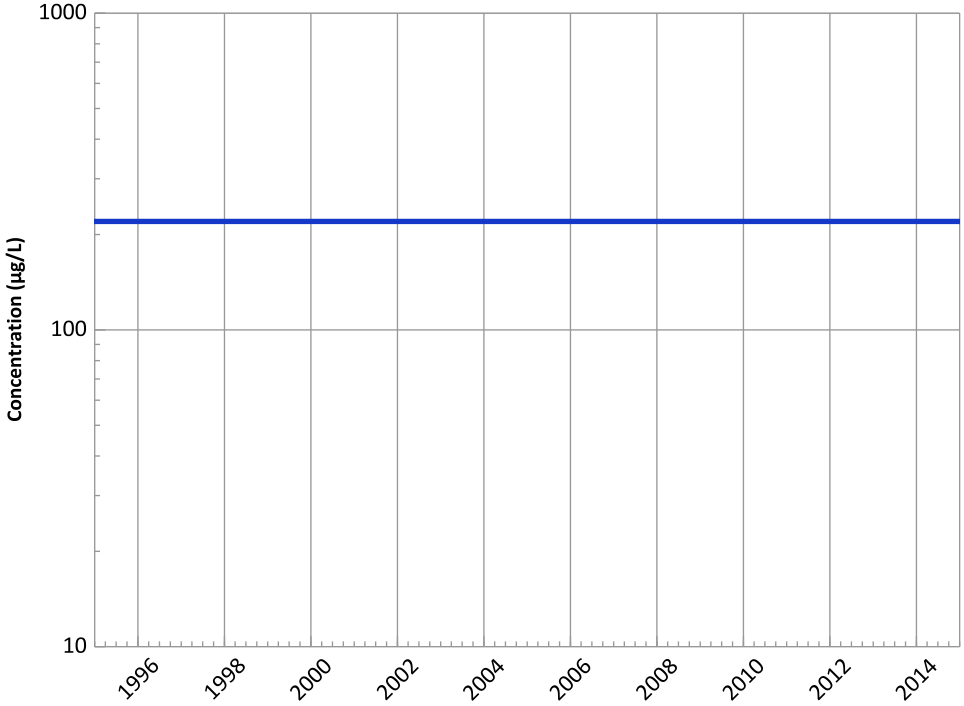


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

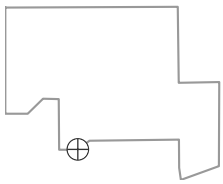
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

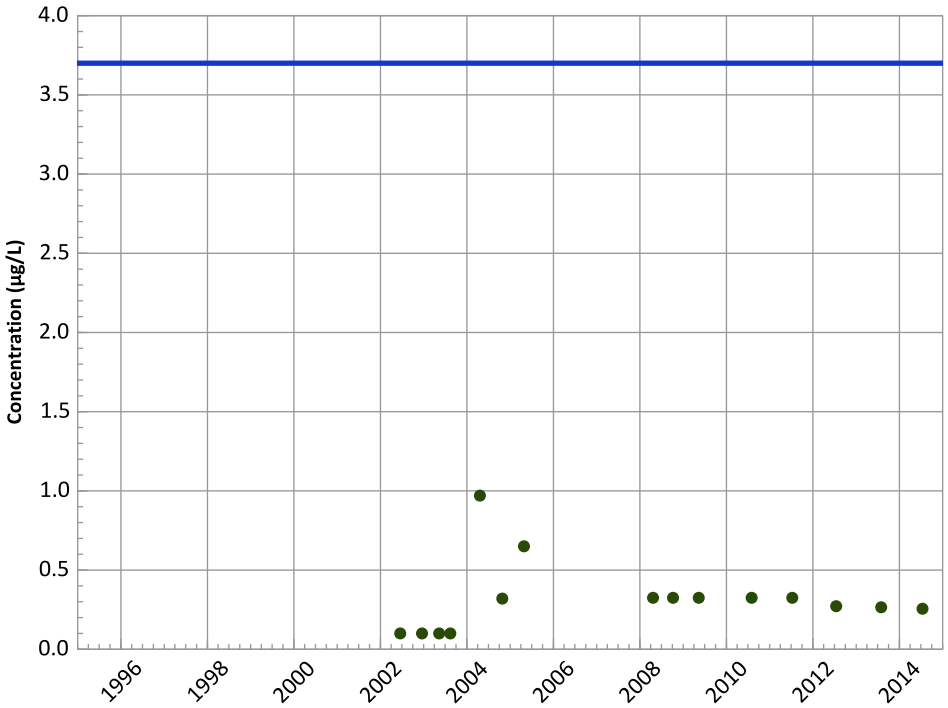
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

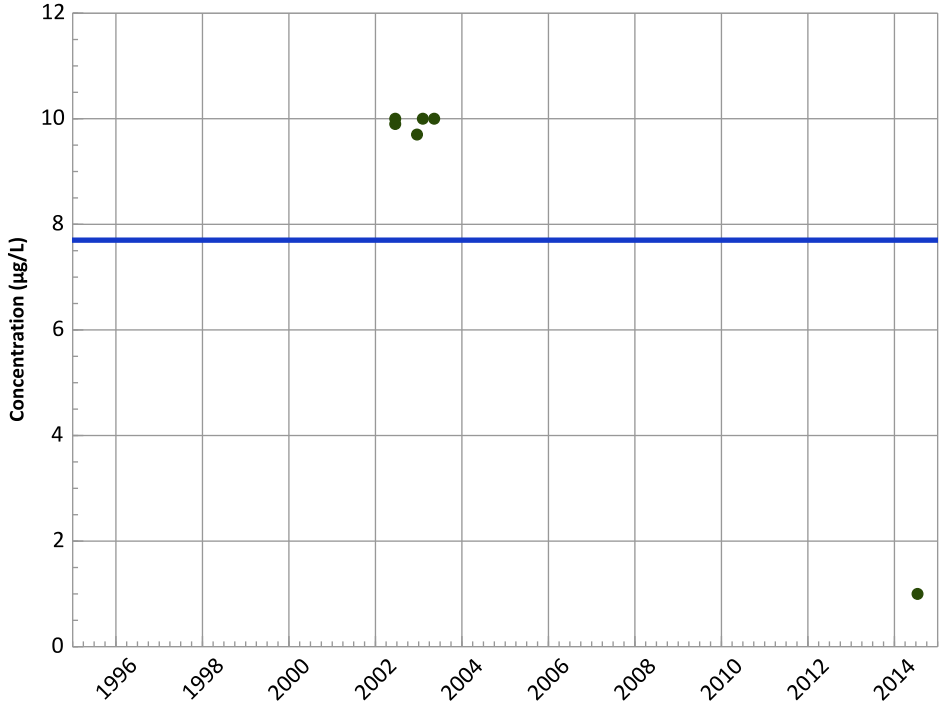


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

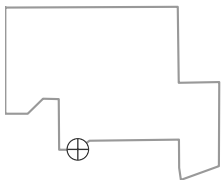
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

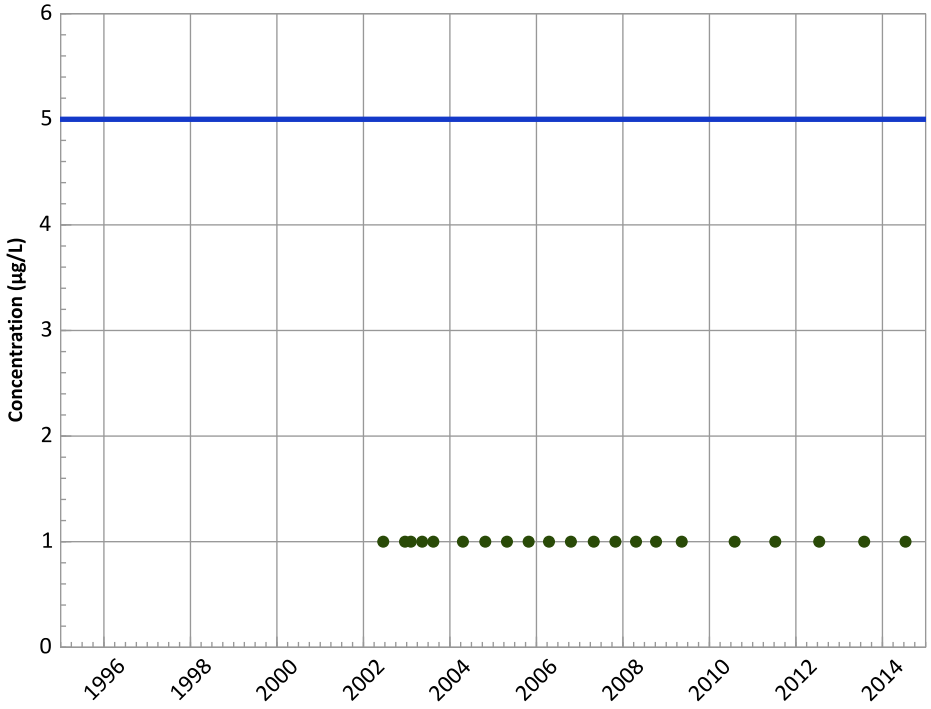
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

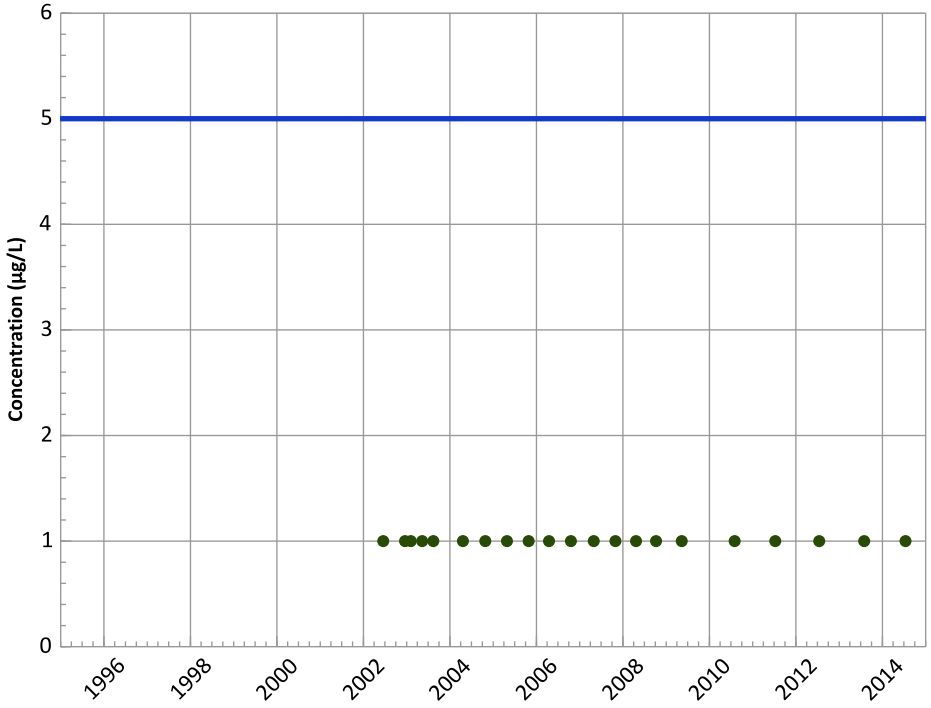


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

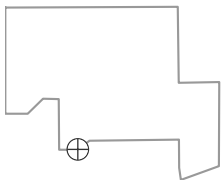
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

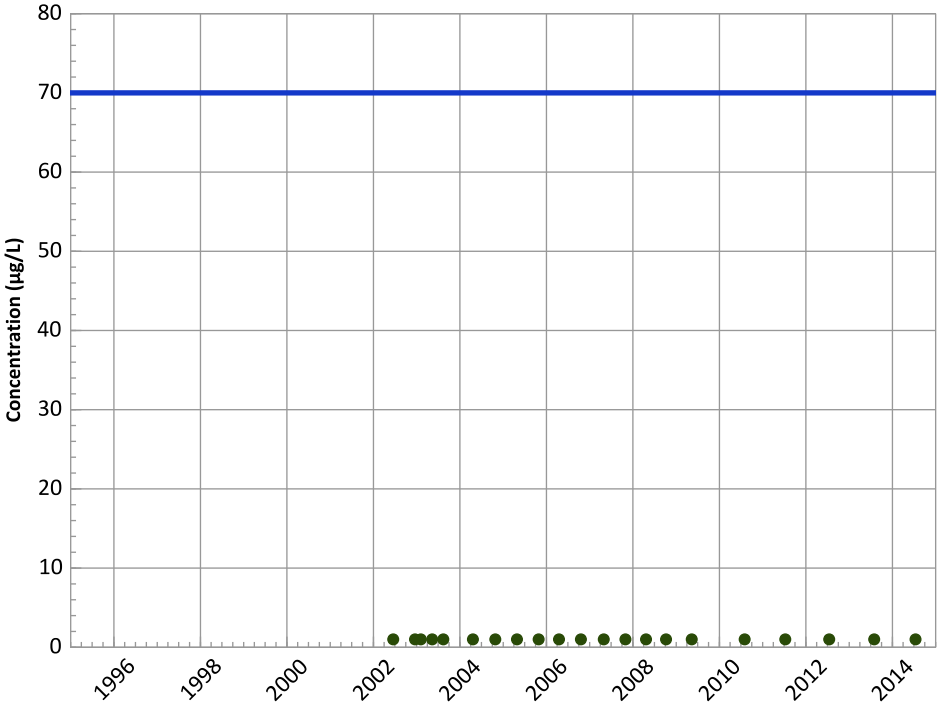
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

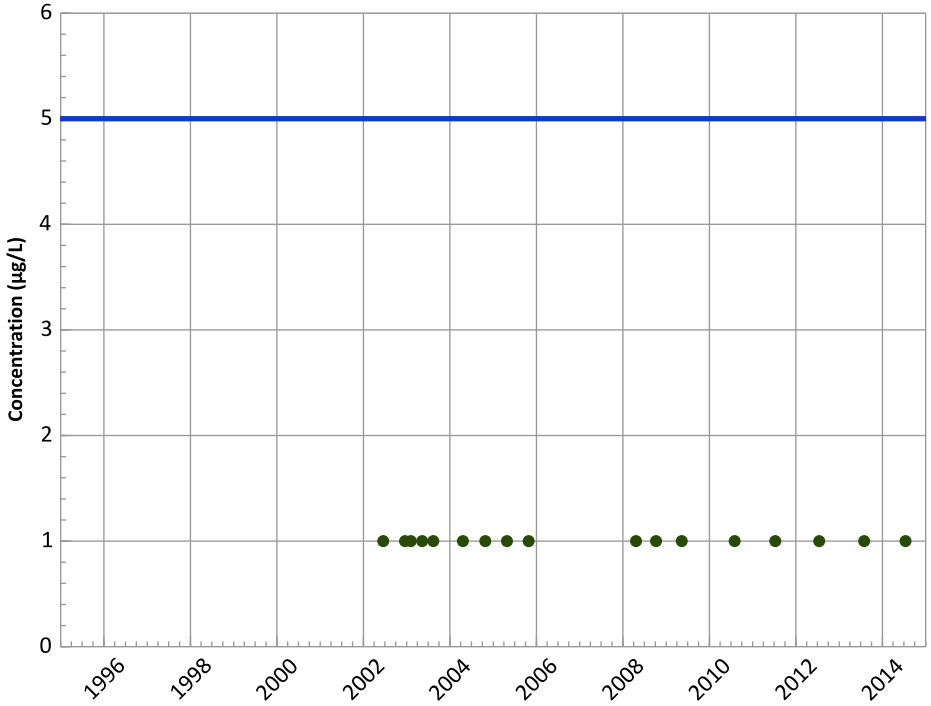


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

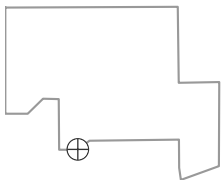
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

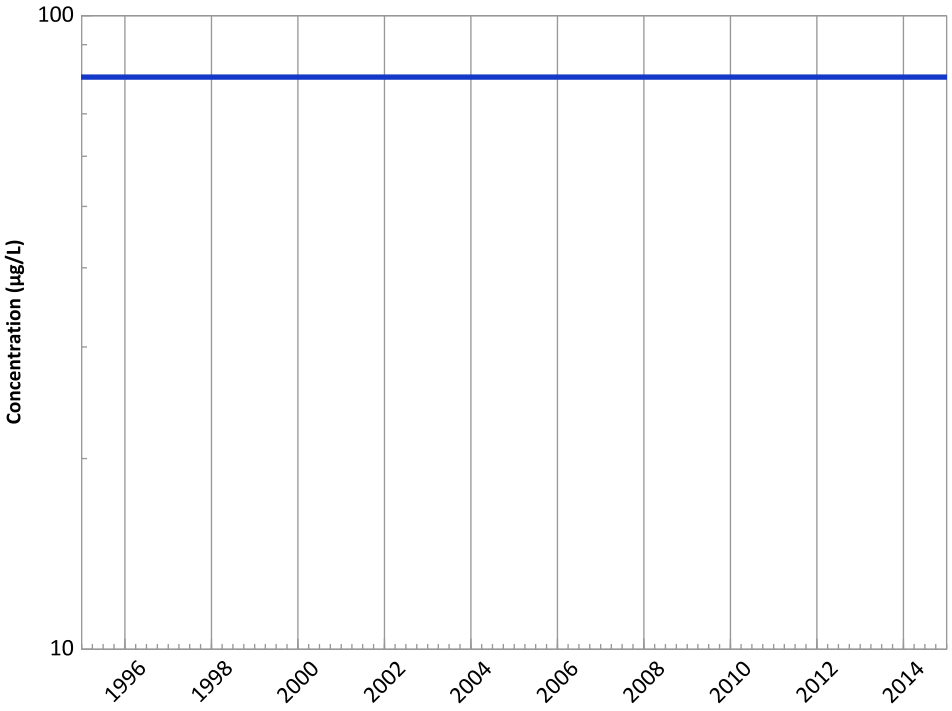
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

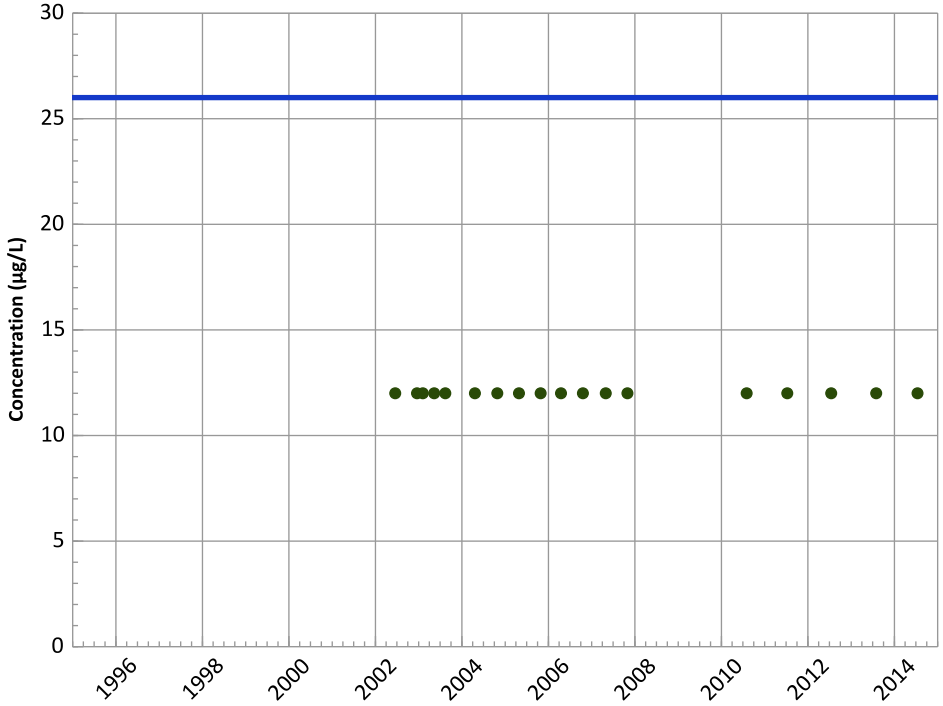


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

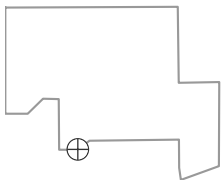
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

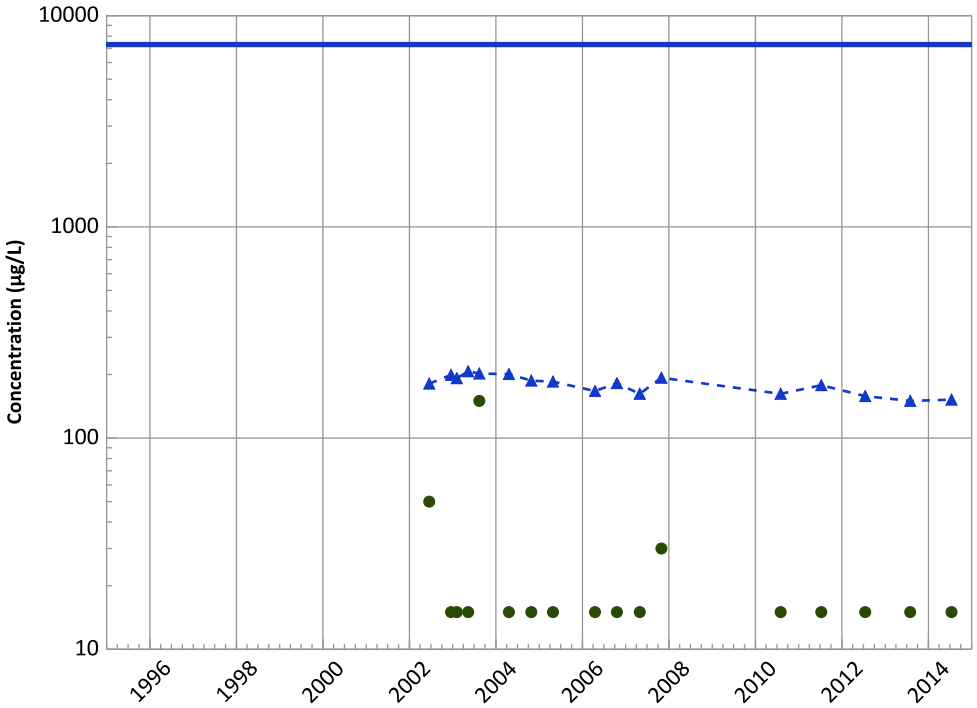
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ——— Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

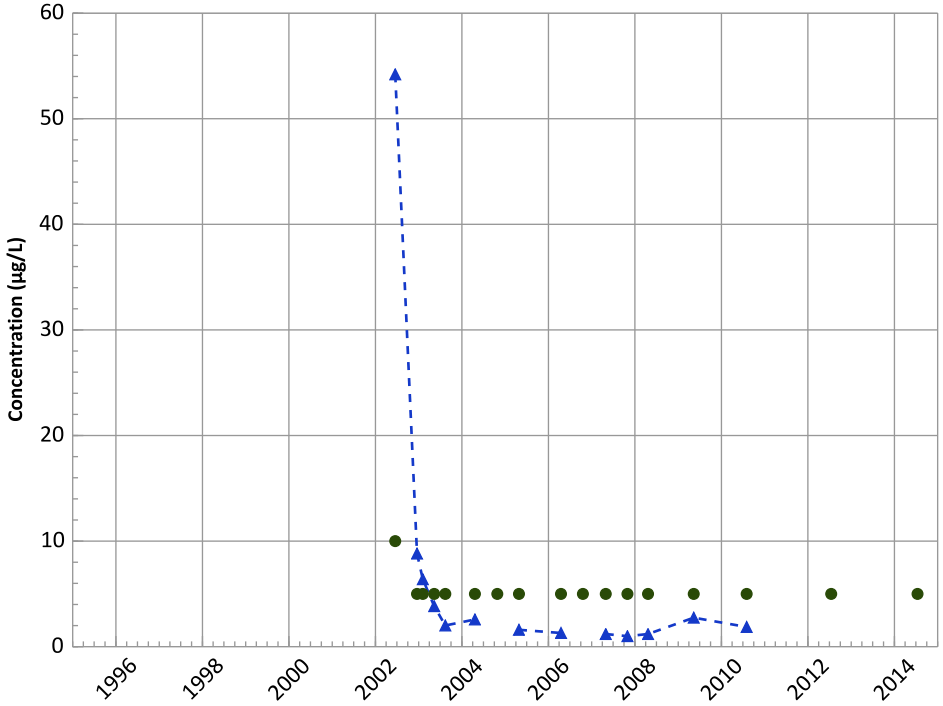


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Decreasing

Manganese Trend



Concentration Trend

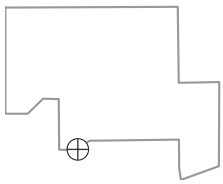
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

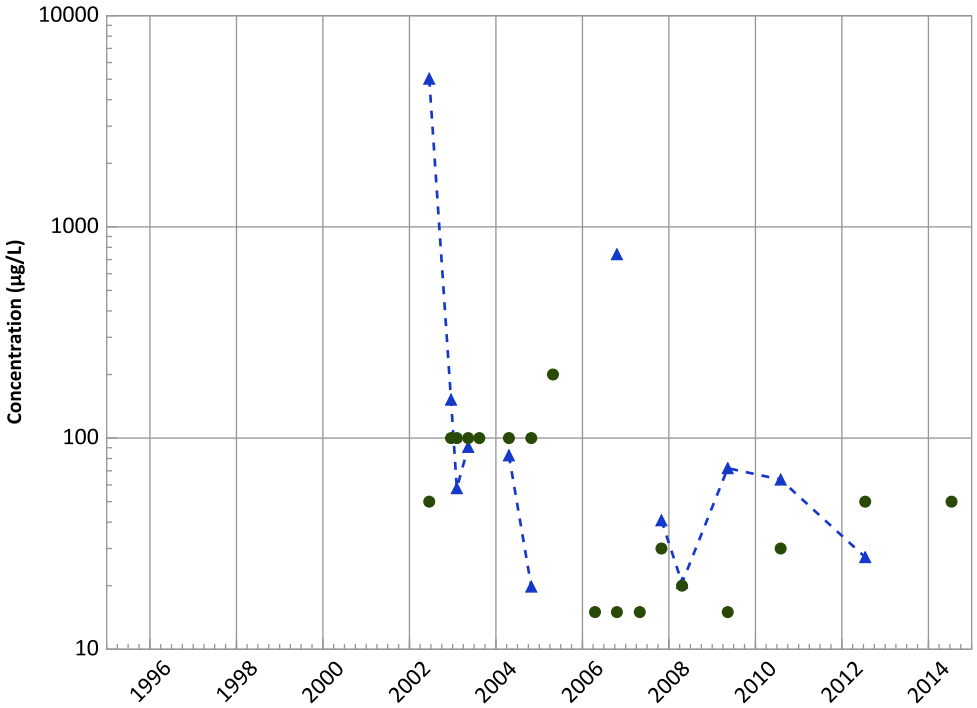
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

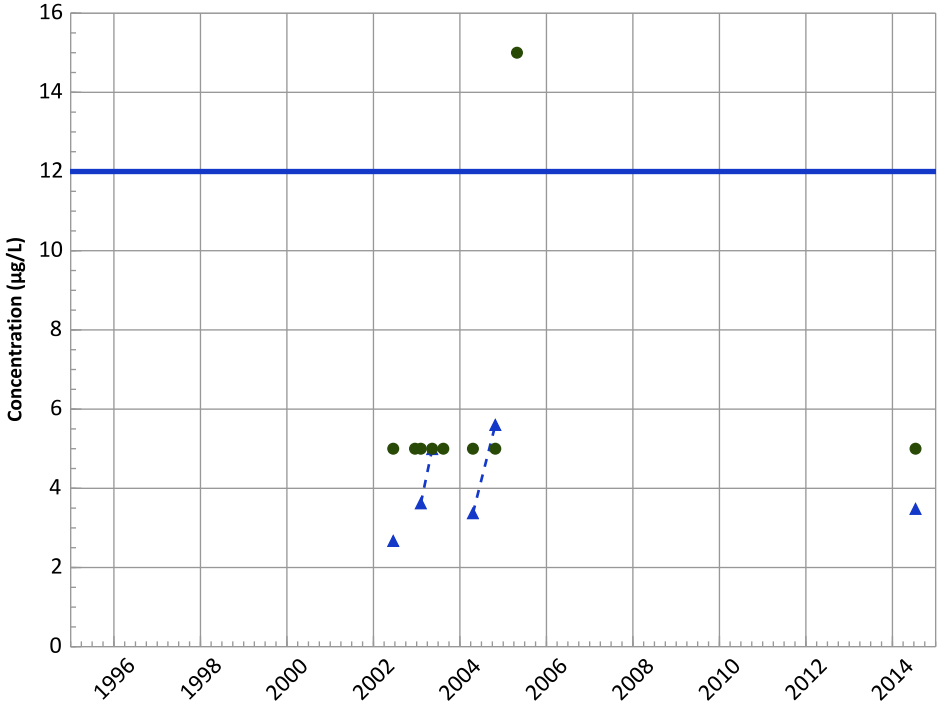


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Probably Decreasing

Arsenic Trend



Concentration Trend

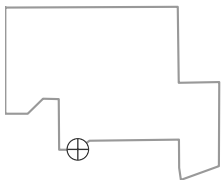
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

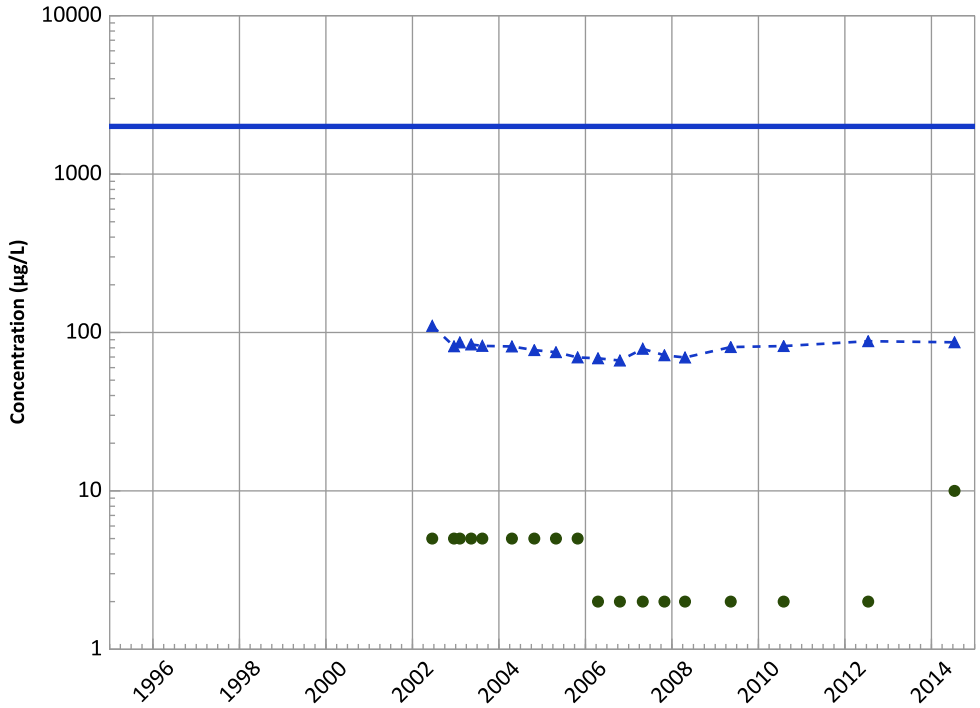
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

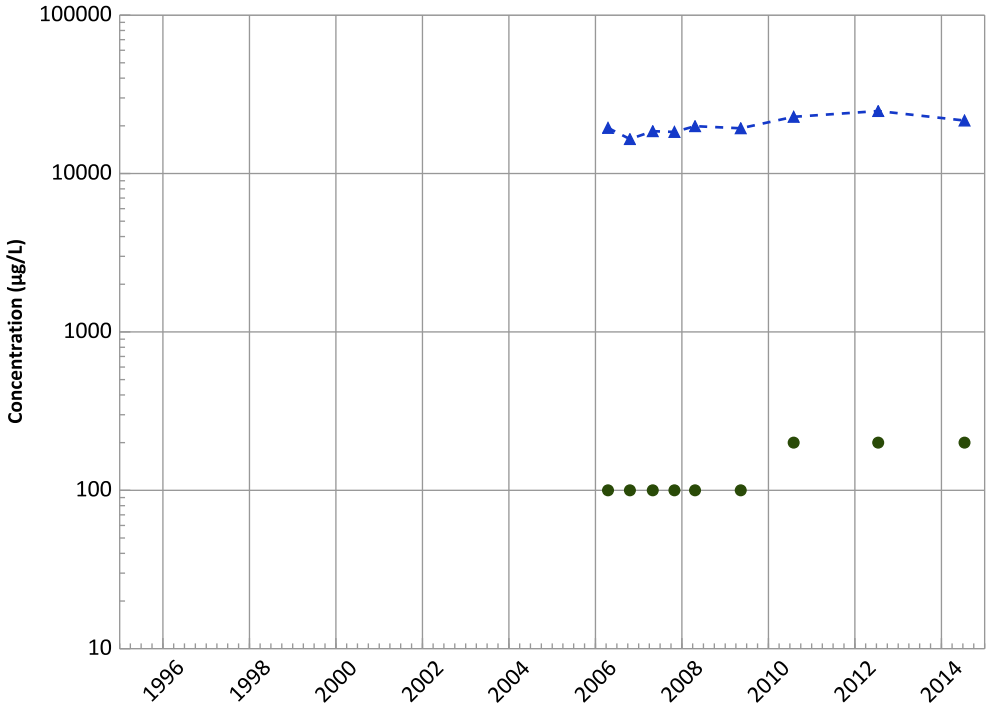


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Calcium Trend



Concentration Trend

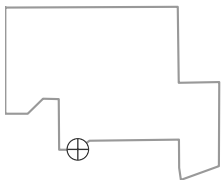
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

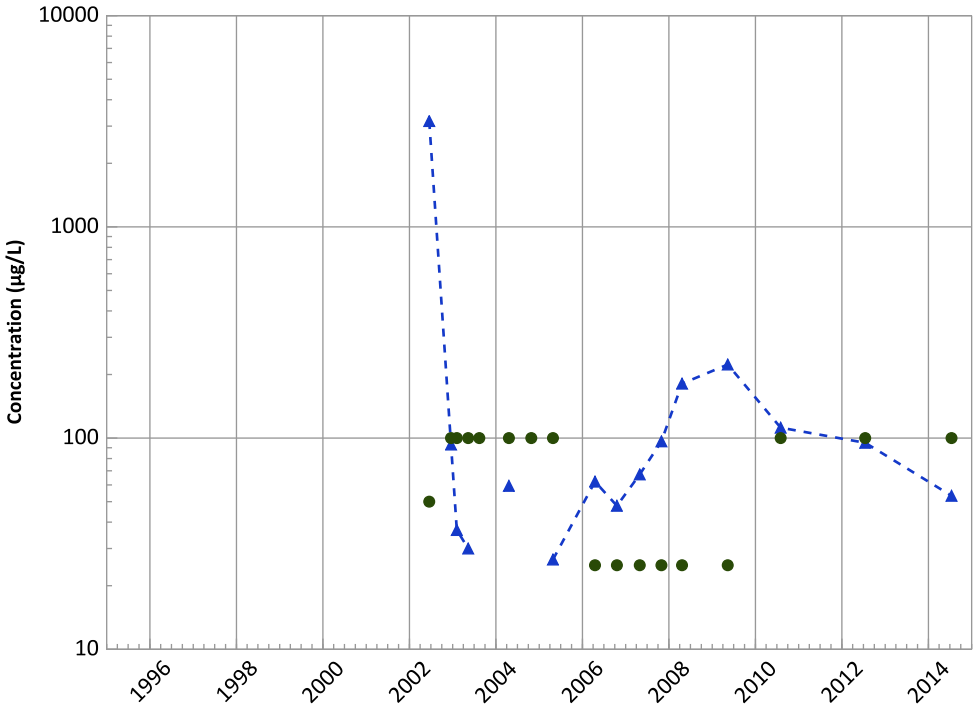
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

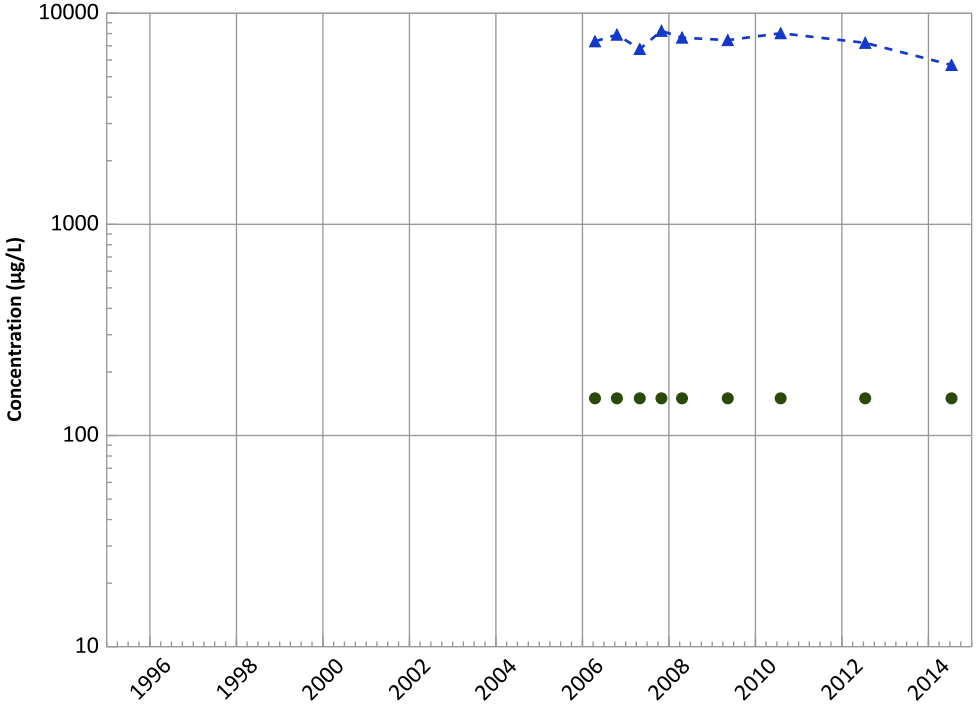


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Potassium Trend



Concentration Trend

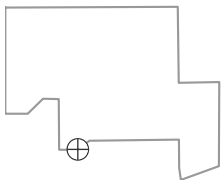
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

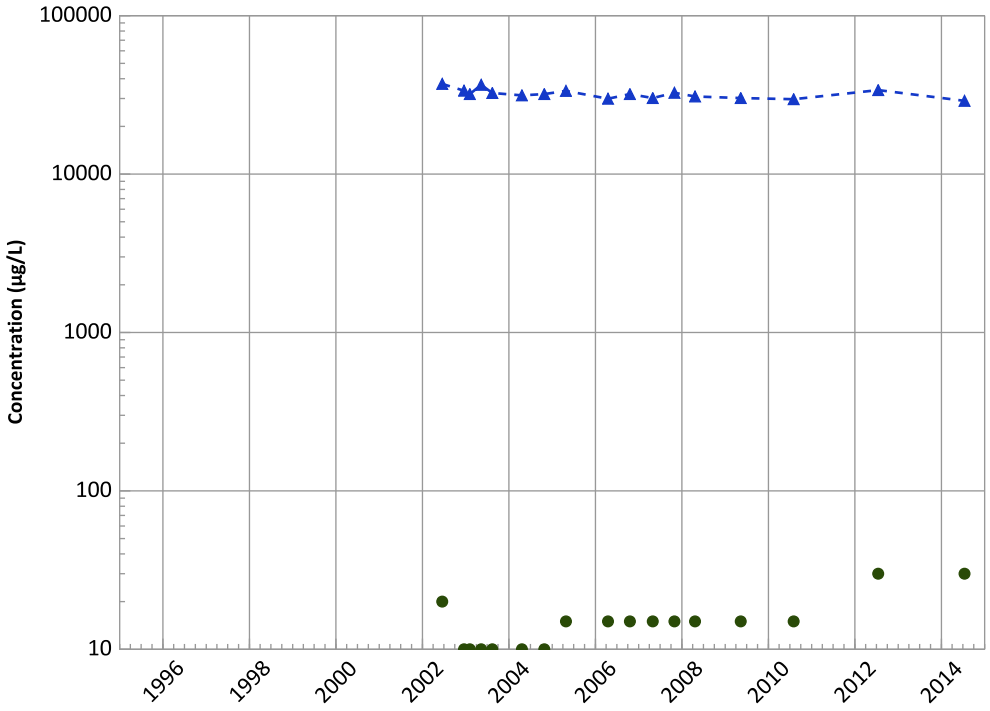
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1075 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

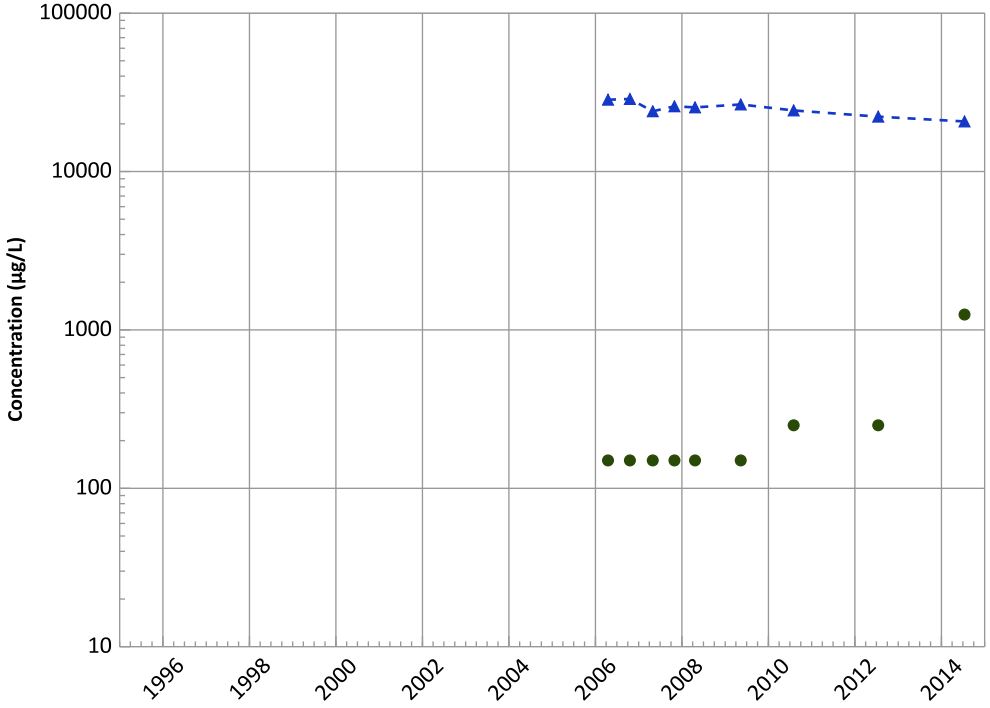


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Sodium Trend



Concentration Trend

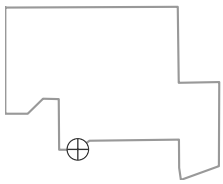
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

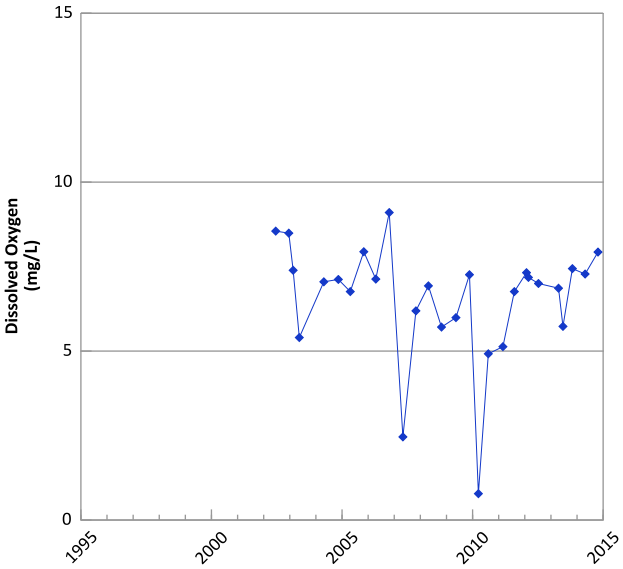
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/17/2002 to 07/15/2014
Analysis Date: 03/19/2015

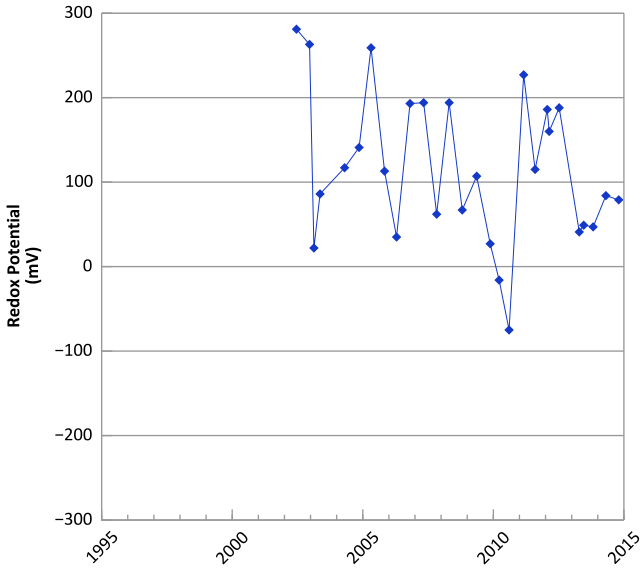
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

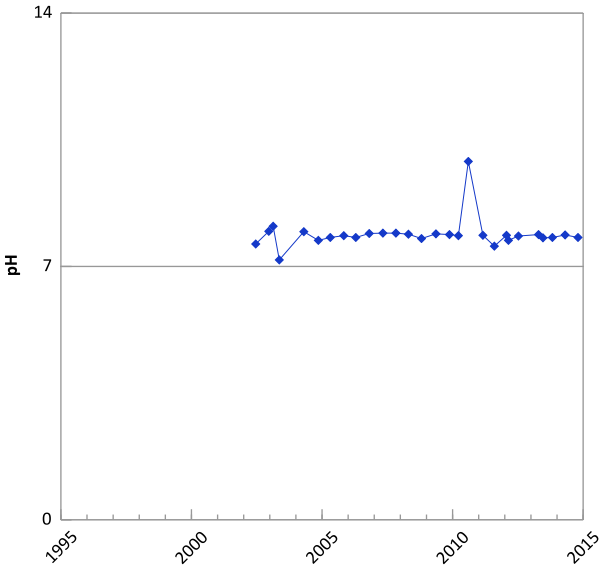
Well Location

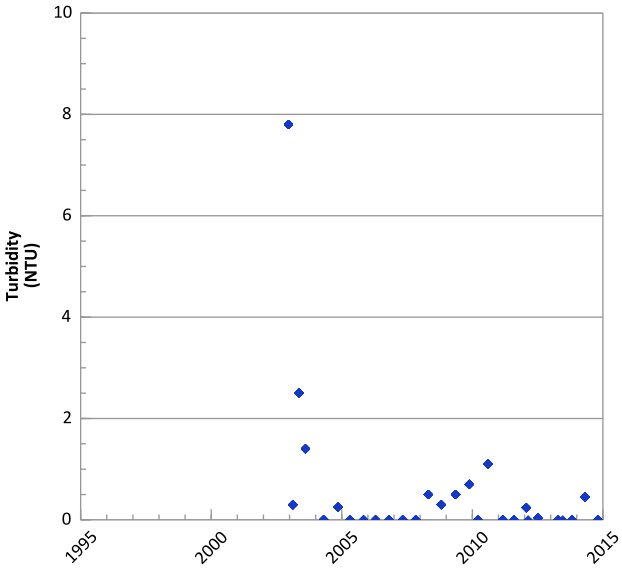


PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



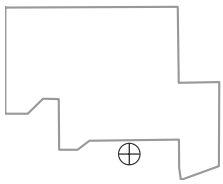






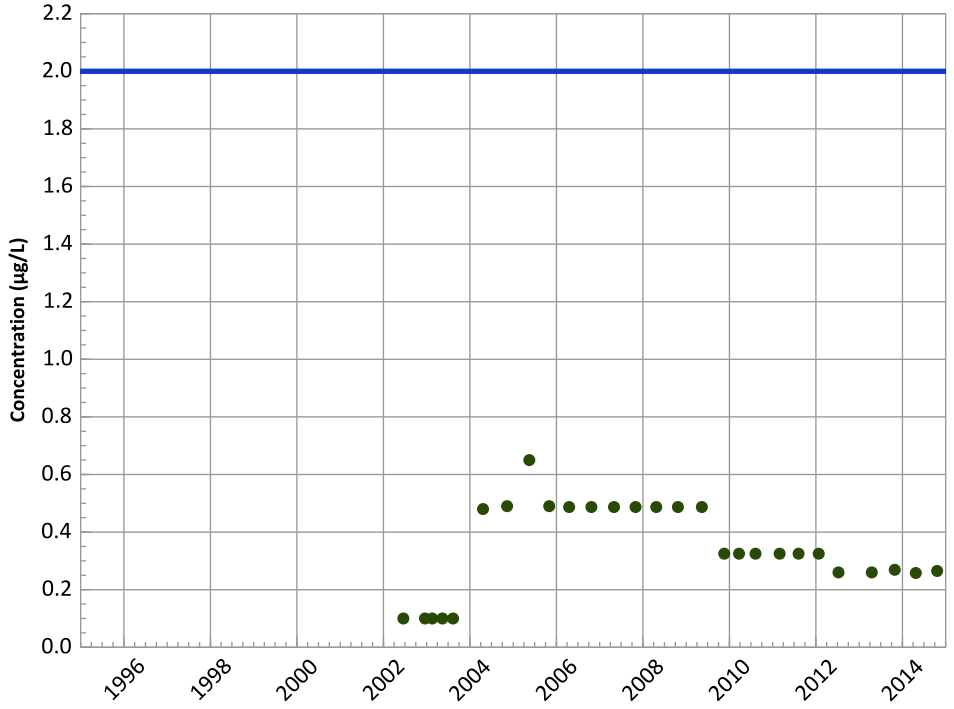
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

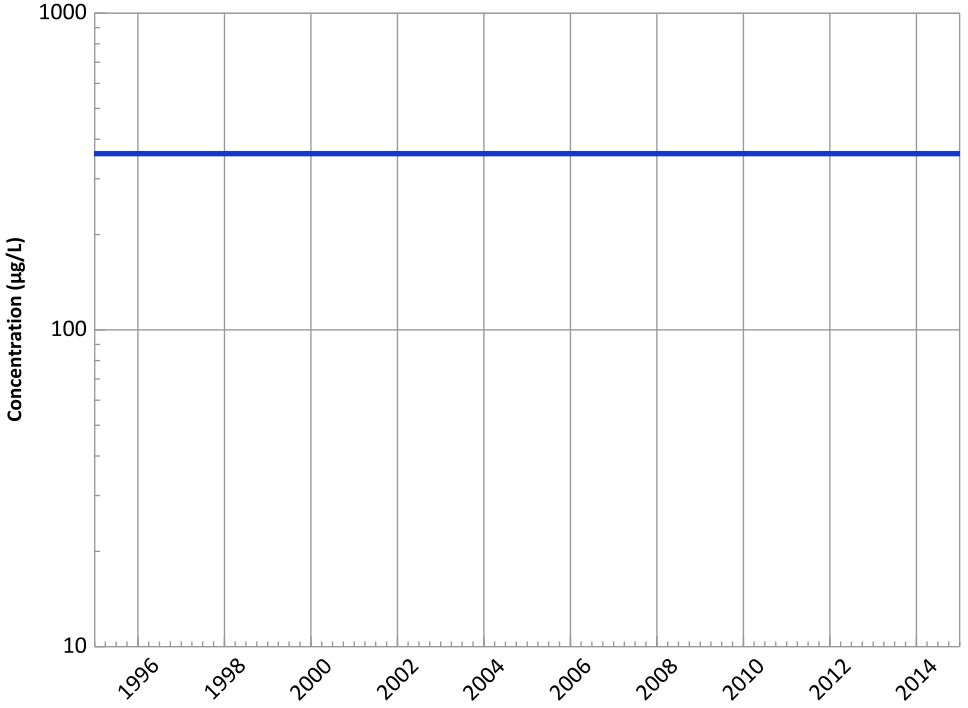


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

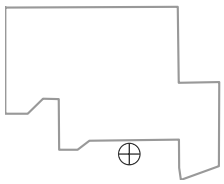
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

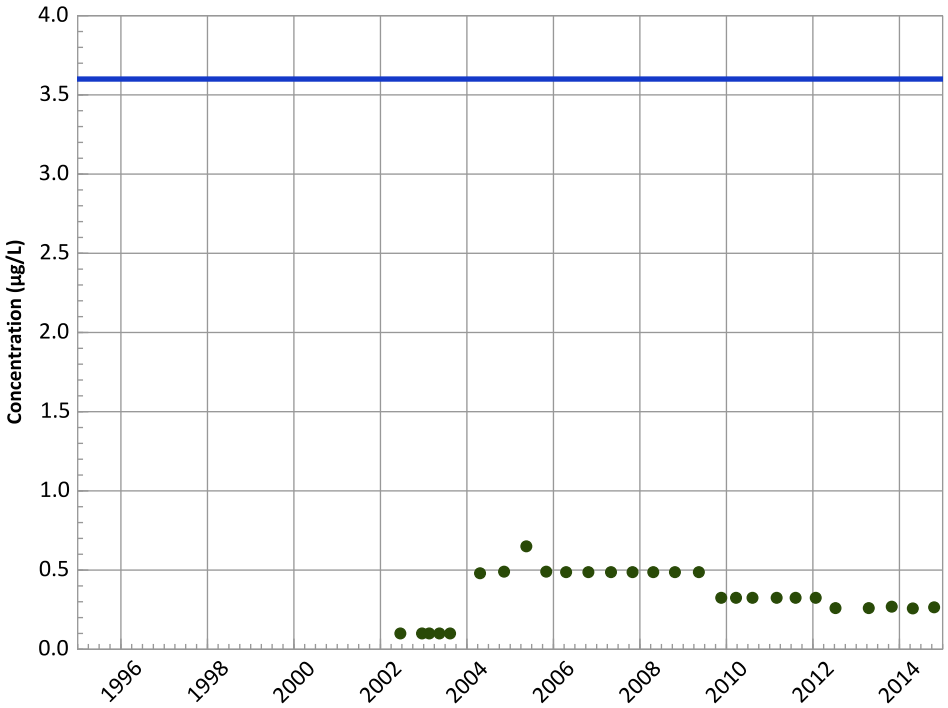
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

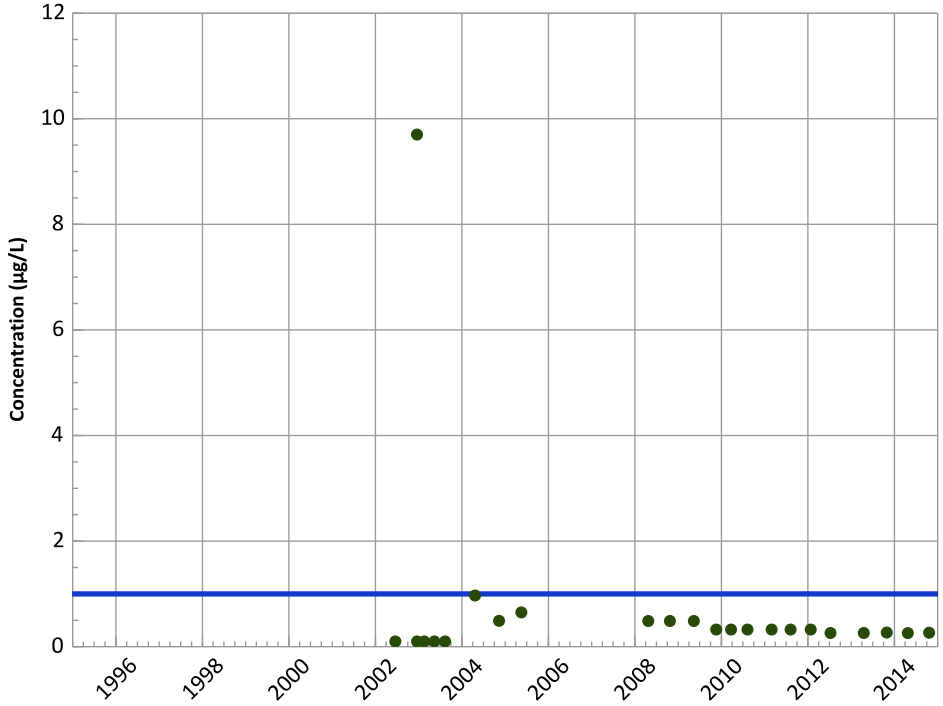


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

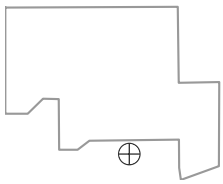
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

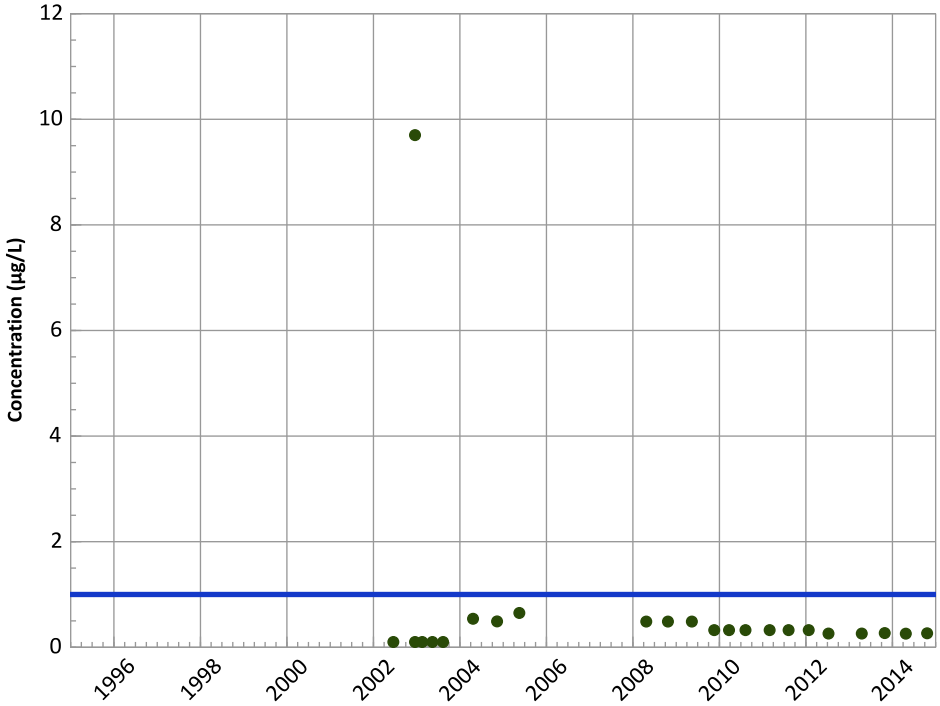
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

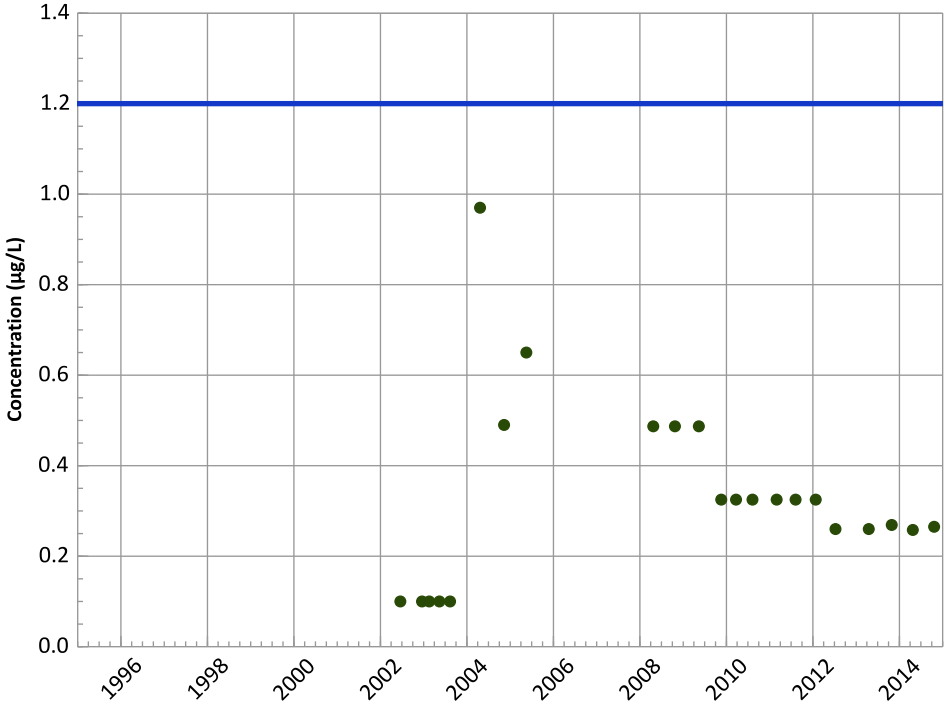


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

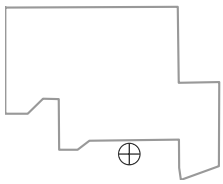
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

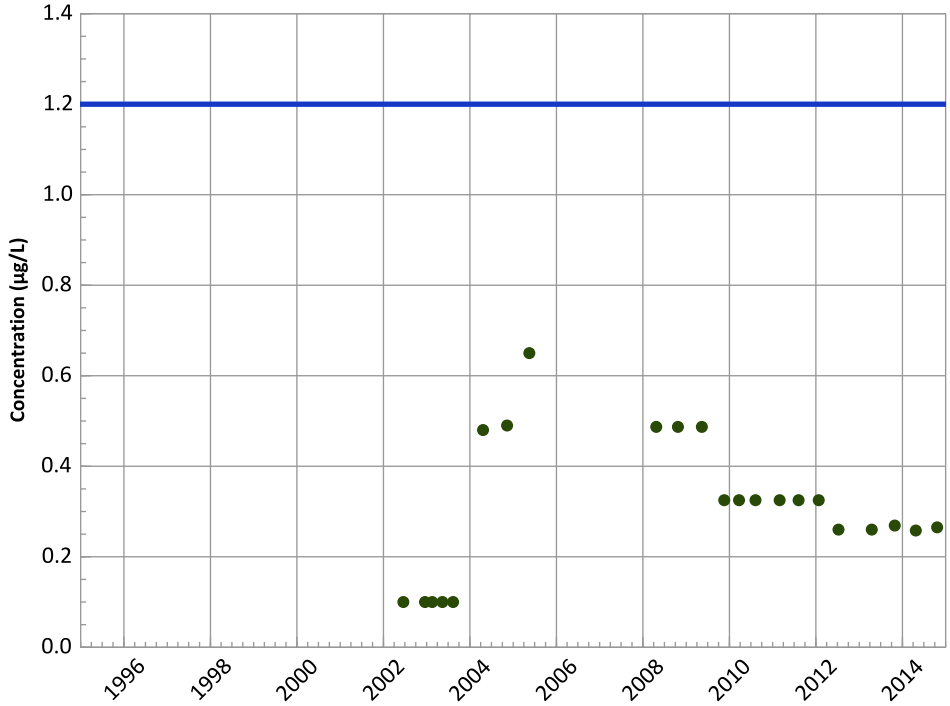
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

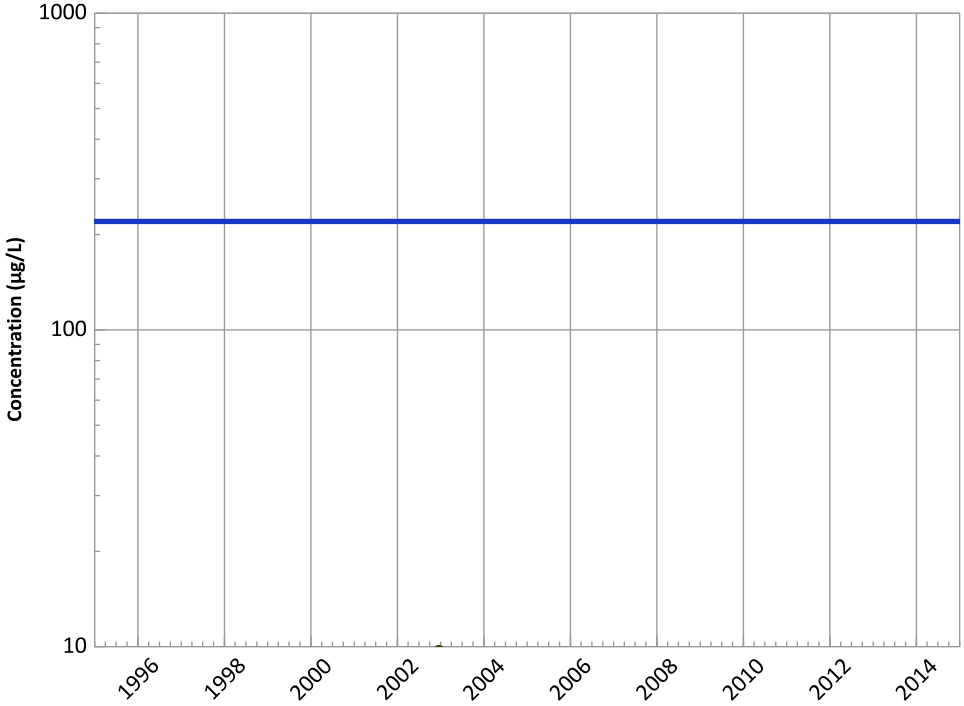


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

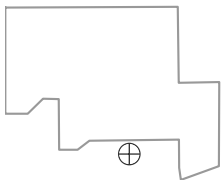
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

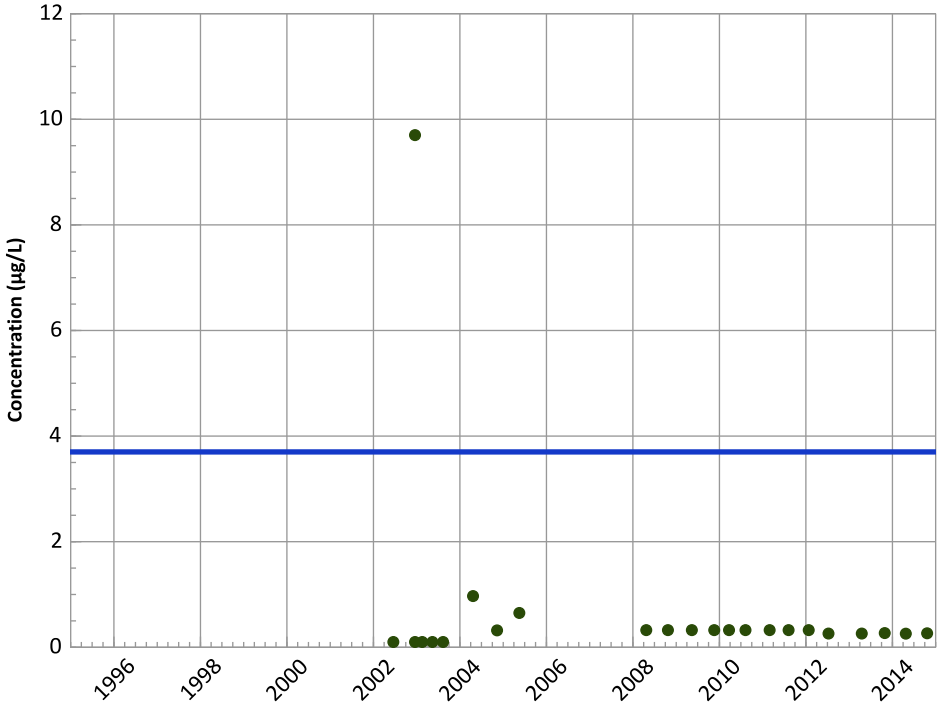
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

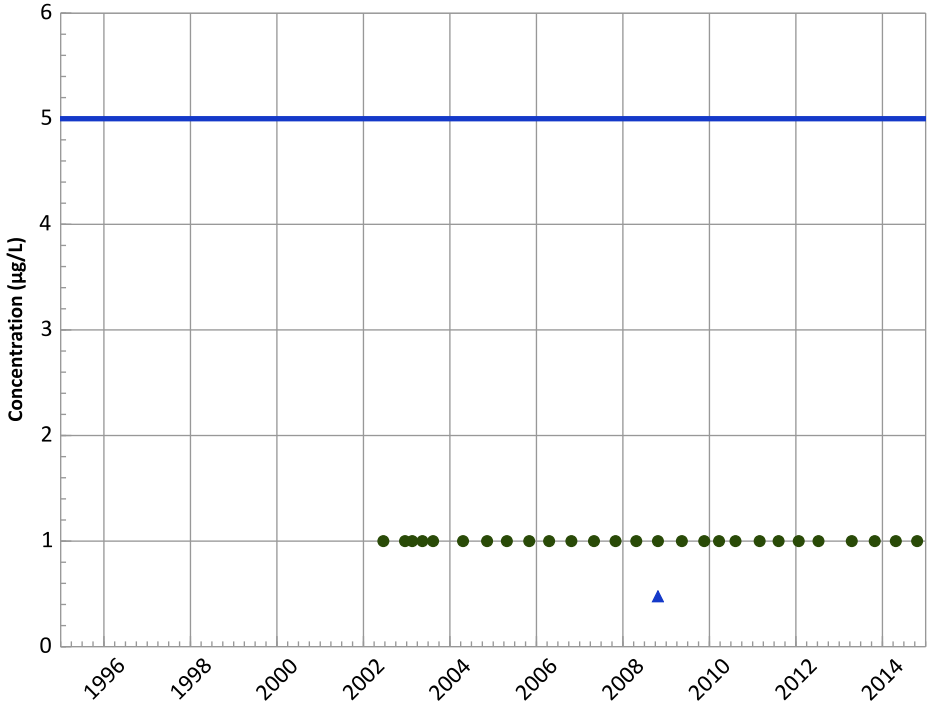


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

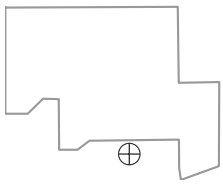
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

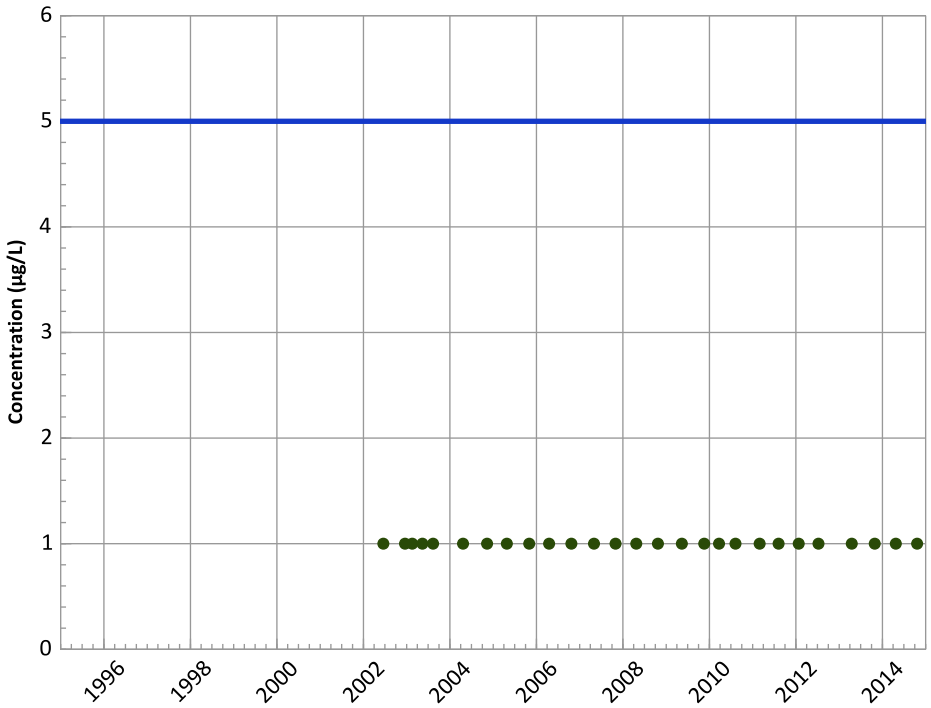
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

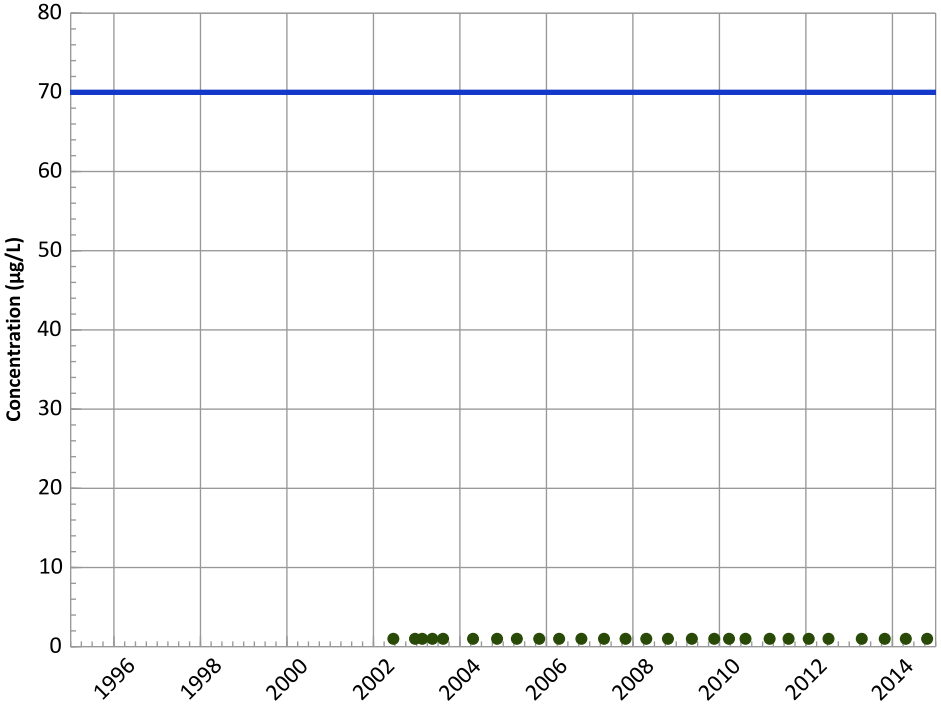


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

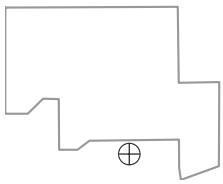
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

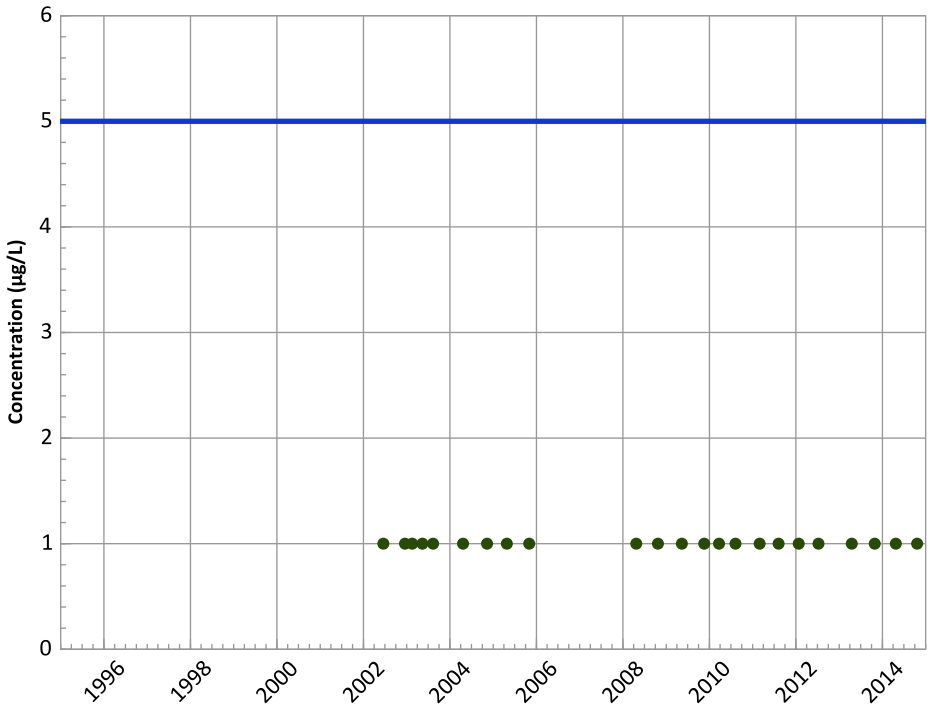
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

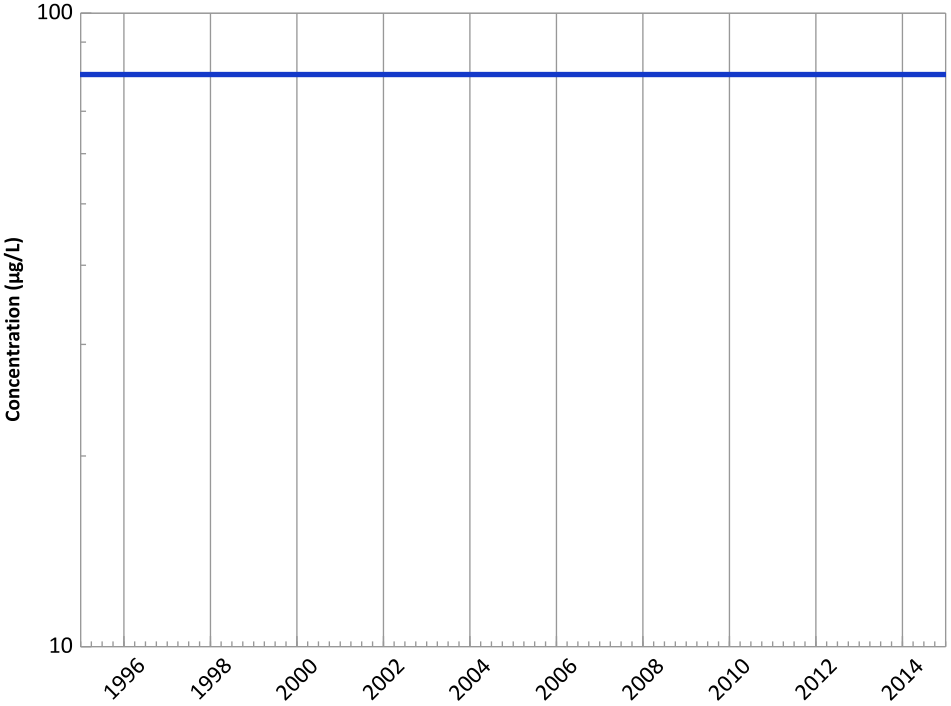


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

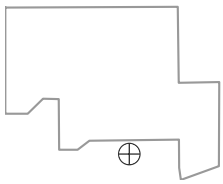
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

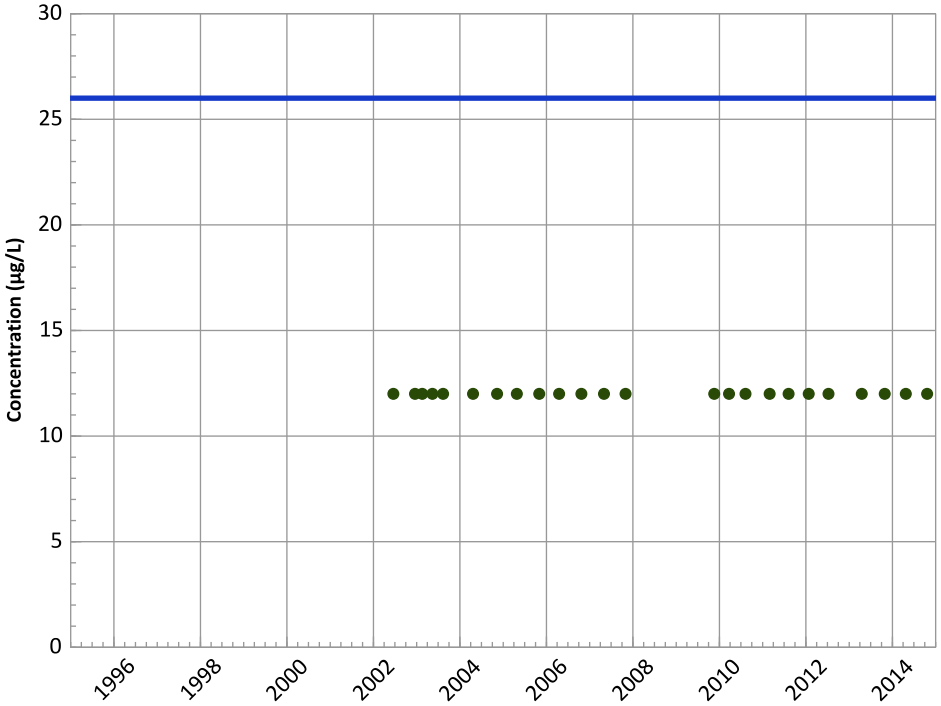
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Perchlorate Trend

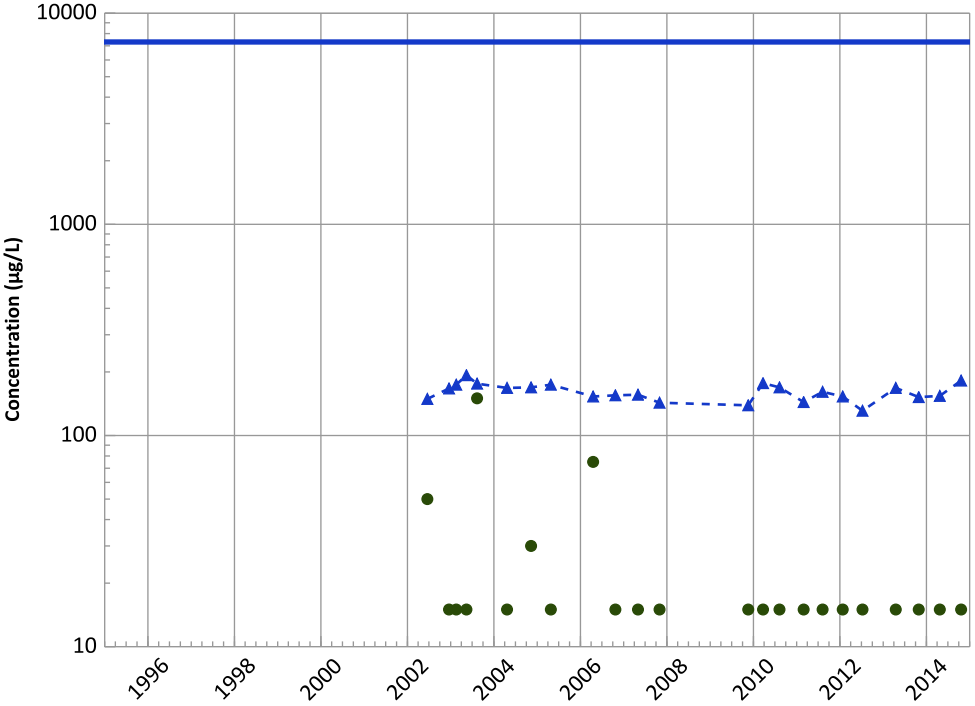


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Boron Trend



Concentration Trend

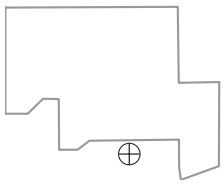
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

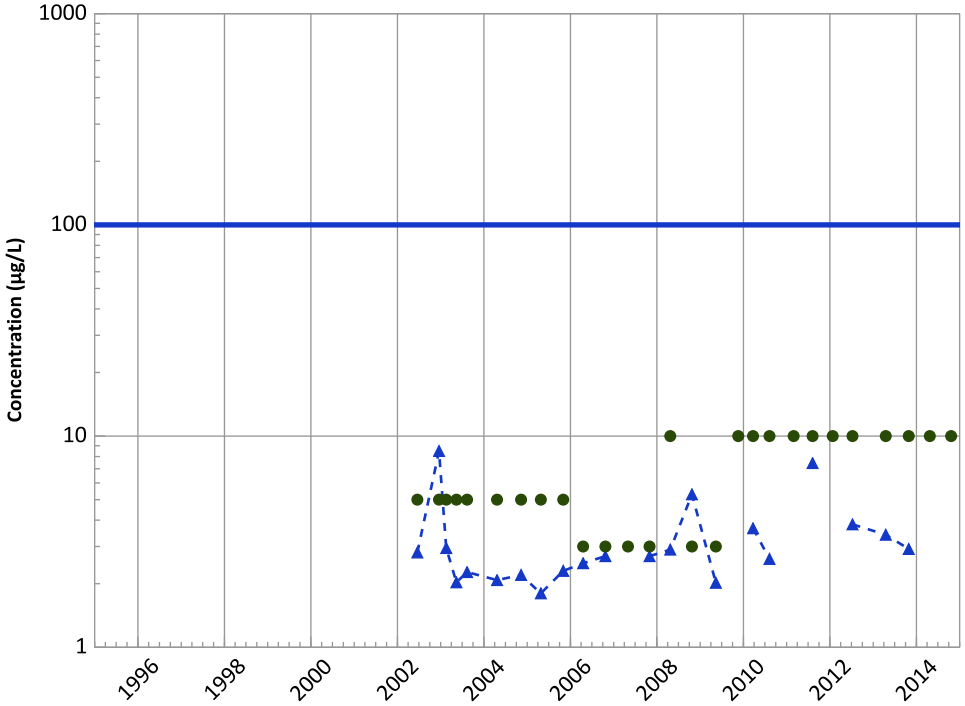
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Total Trend

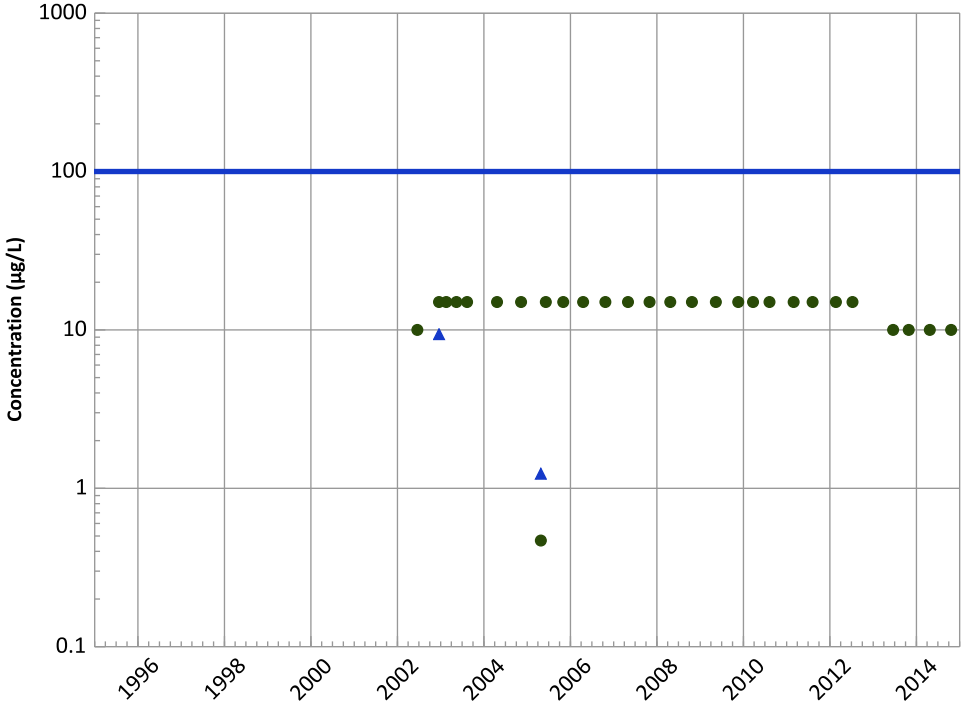


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
No Trend

Chromium, Hexavalent Trend



Concentration Trend

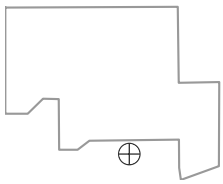
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

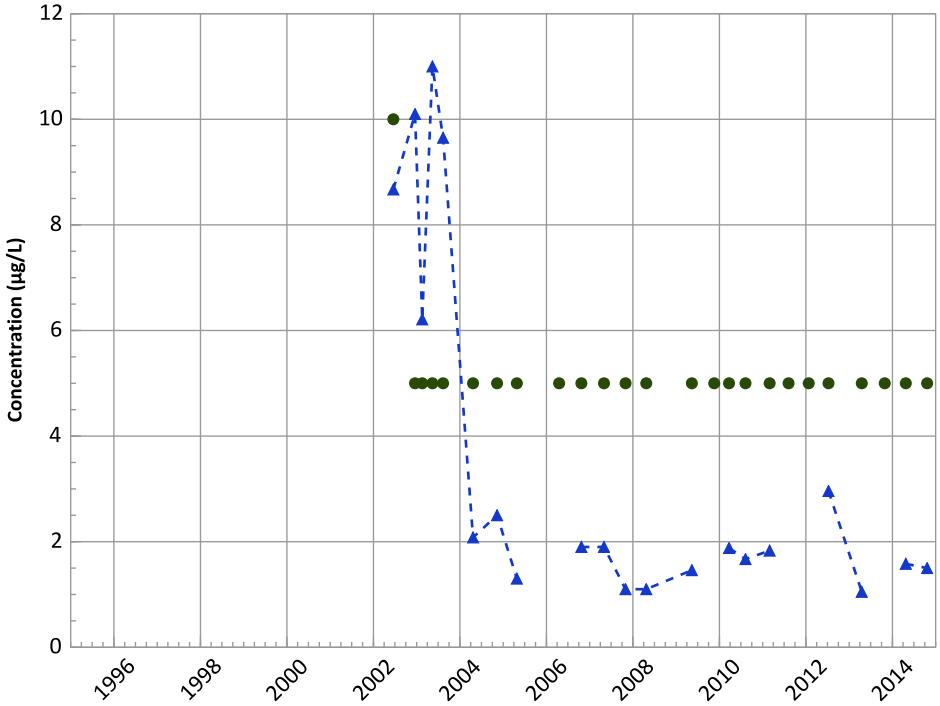
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Manganese Trend

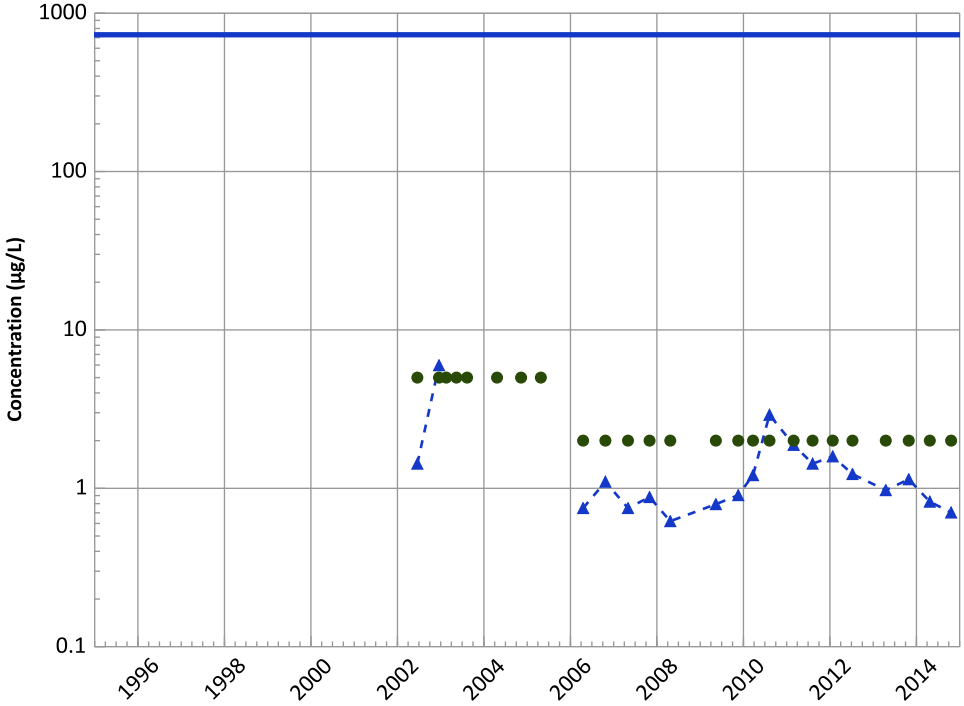


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Nickel Trend



Concentration Trend

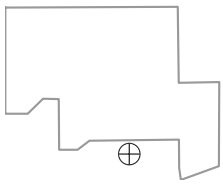
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

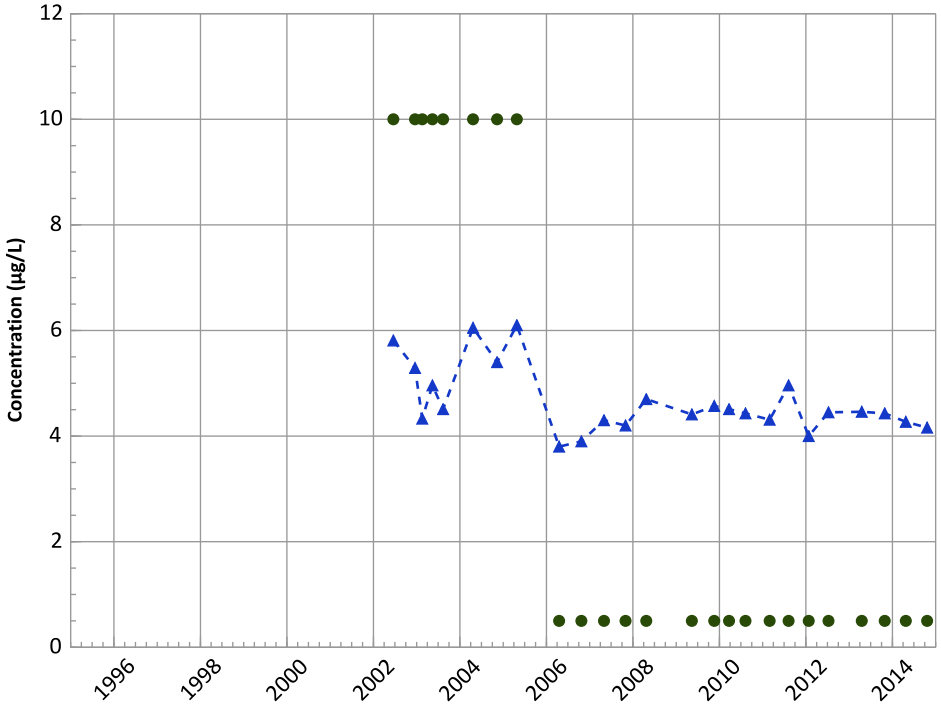
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Molybdenum Trend

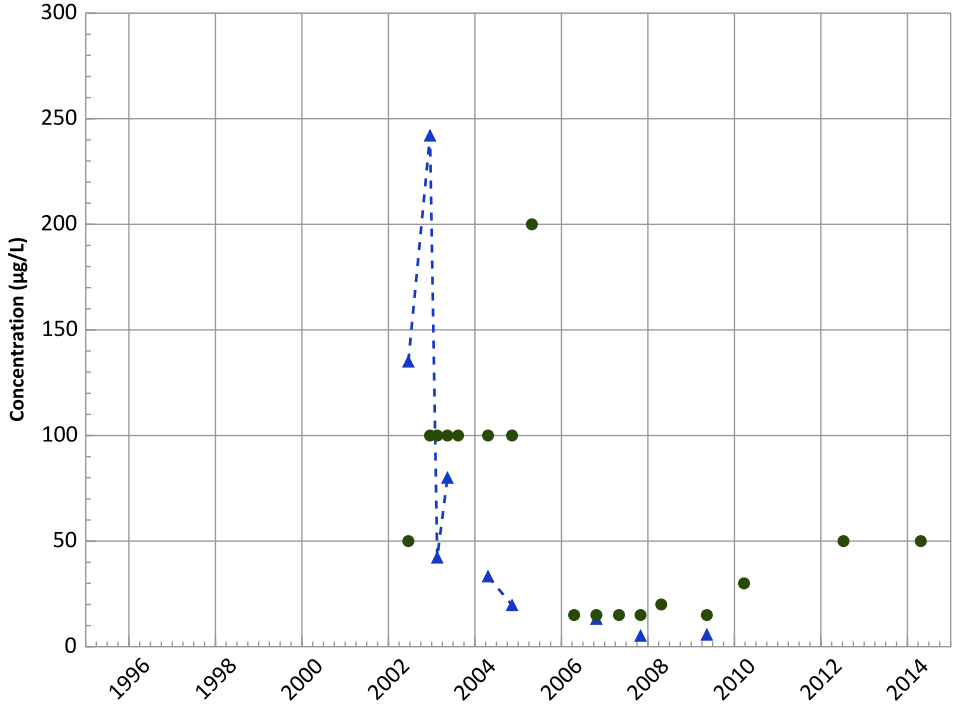


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Aluminum Trend



Concentration Trend

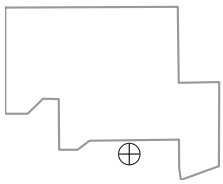
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

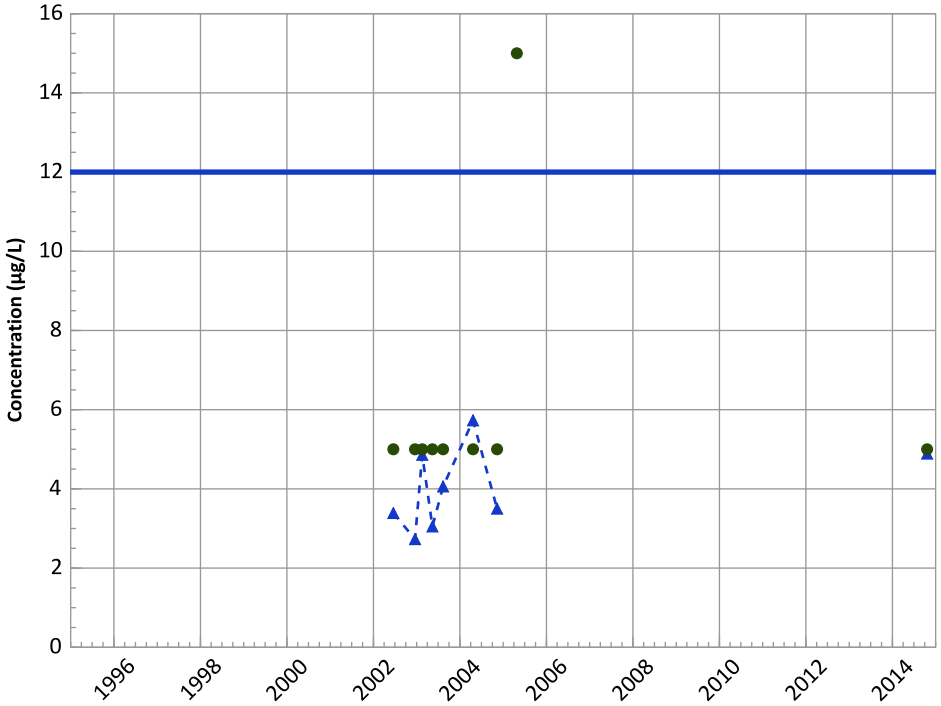
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Arsenic Trend

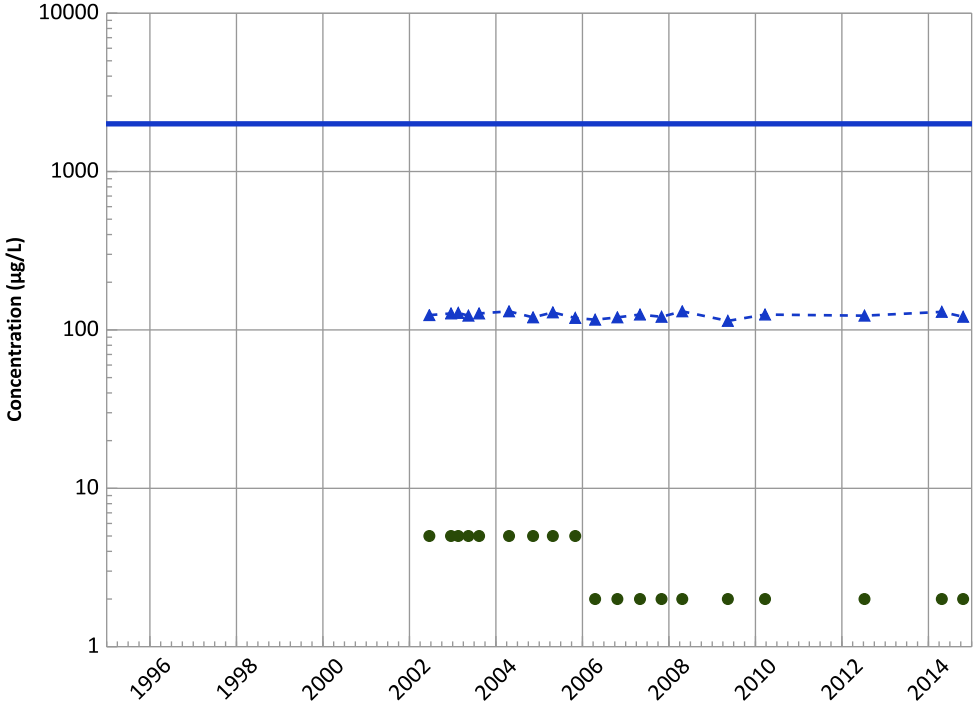


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Barium Trend



Concentration Trend

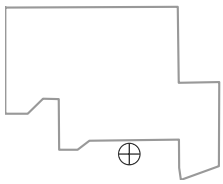
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

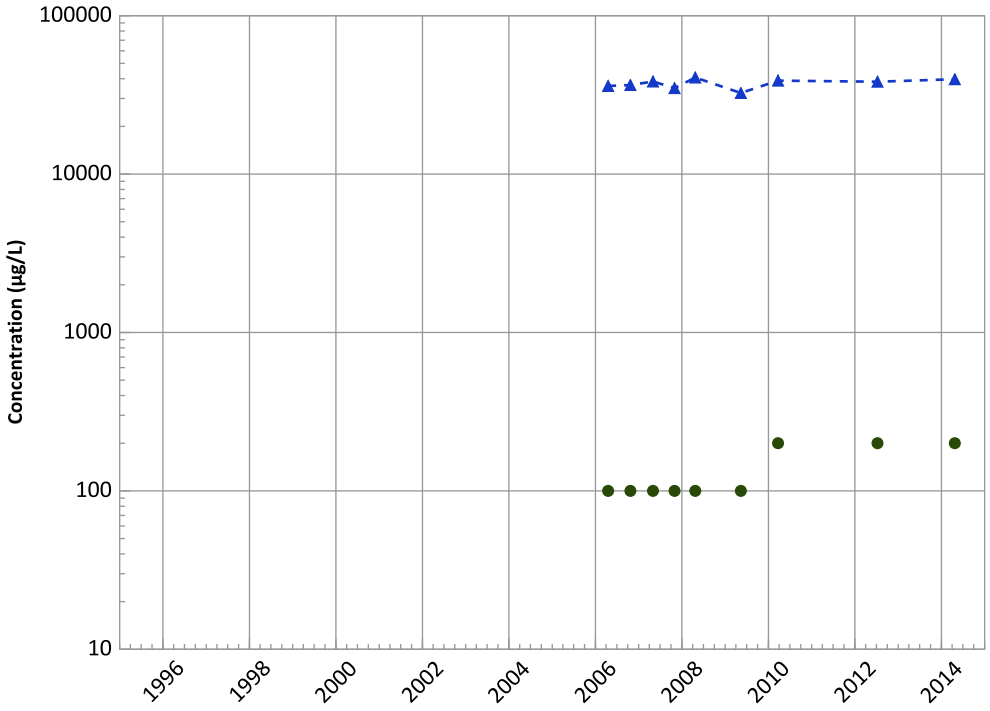
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Calcium Trend

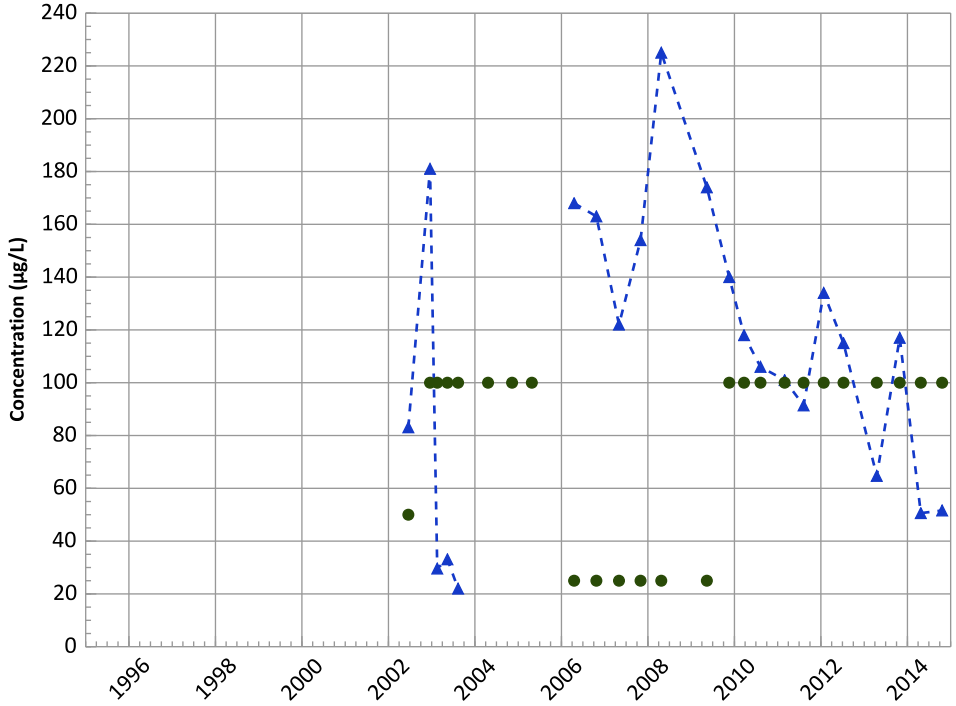


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Iron Trend



Concentration Trend

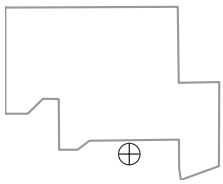
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

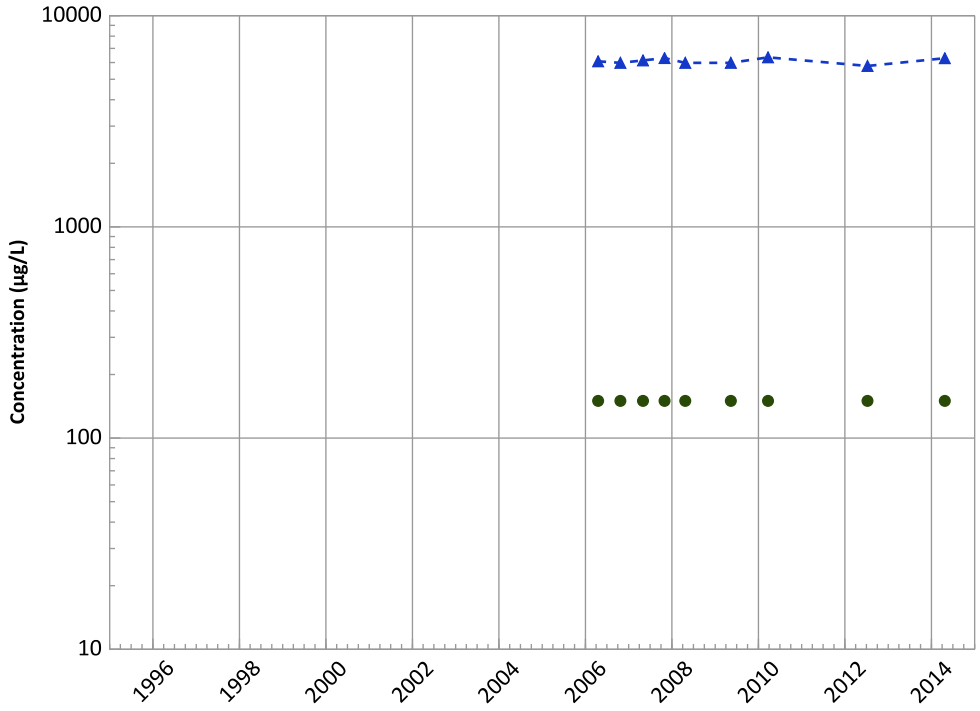
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Potassium Trend

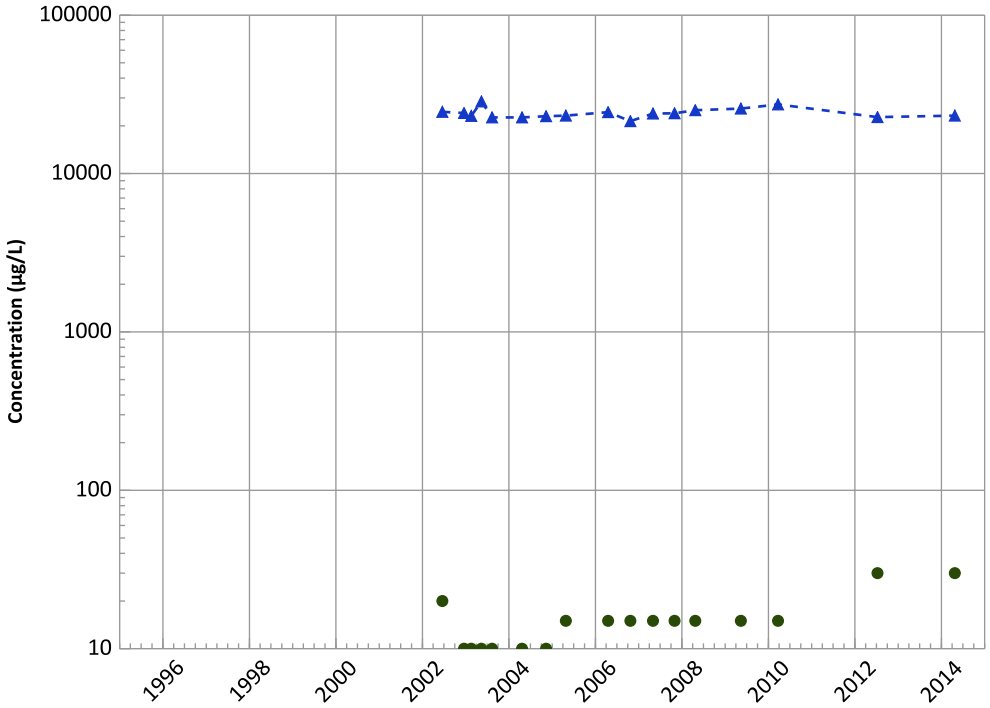


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Magnesium Trend



Concentration Trend

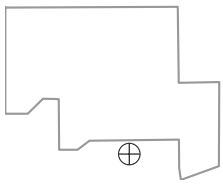
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

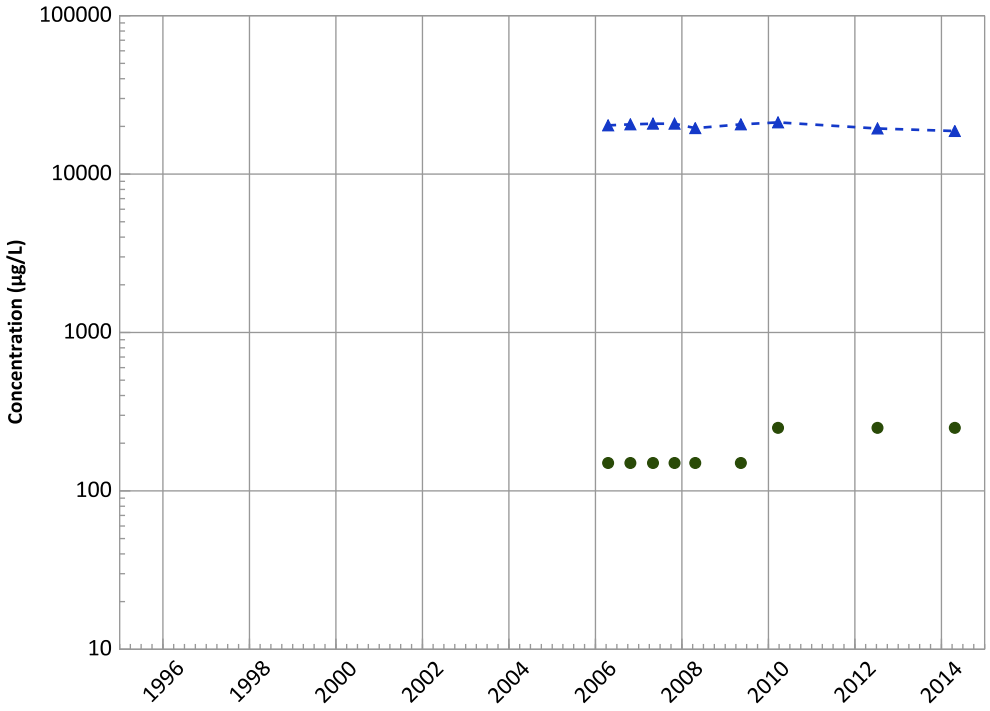
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1076 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Sodium Trend

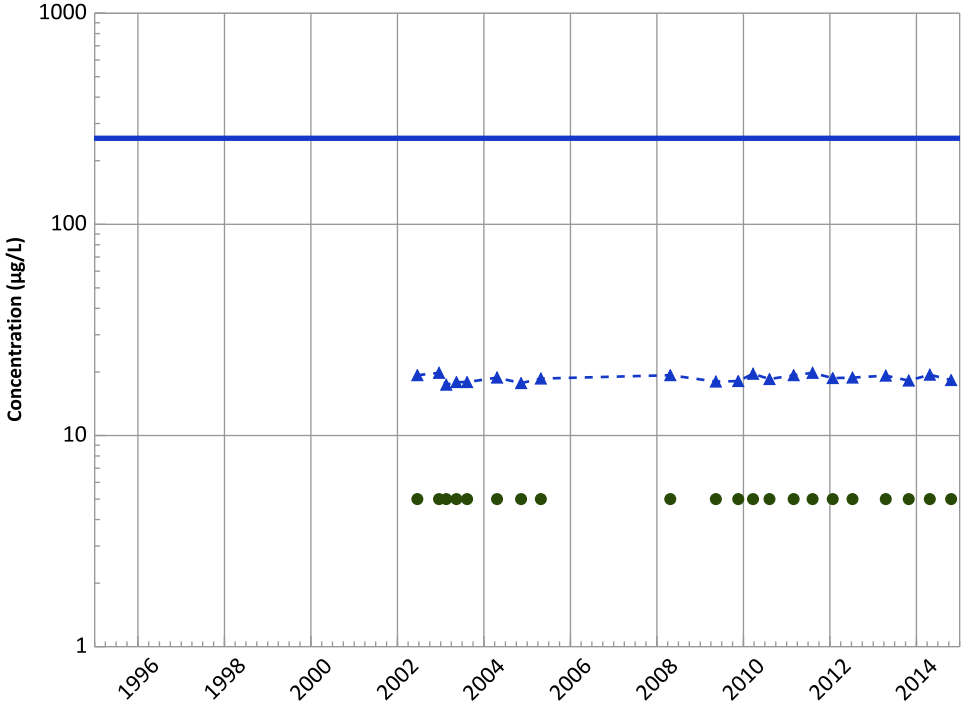


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Vanadium Trend



Concentration Trend

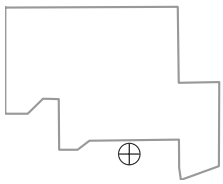
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Increasing

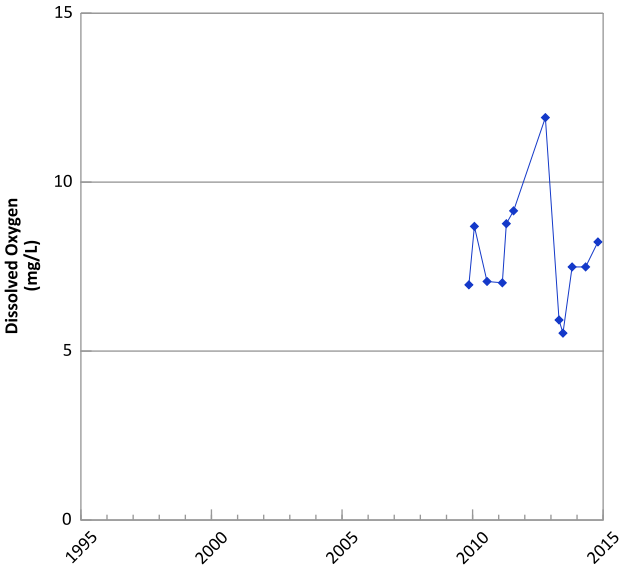
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/18/2002 to 10/21/2014
Analysis Date: 03/19/2015

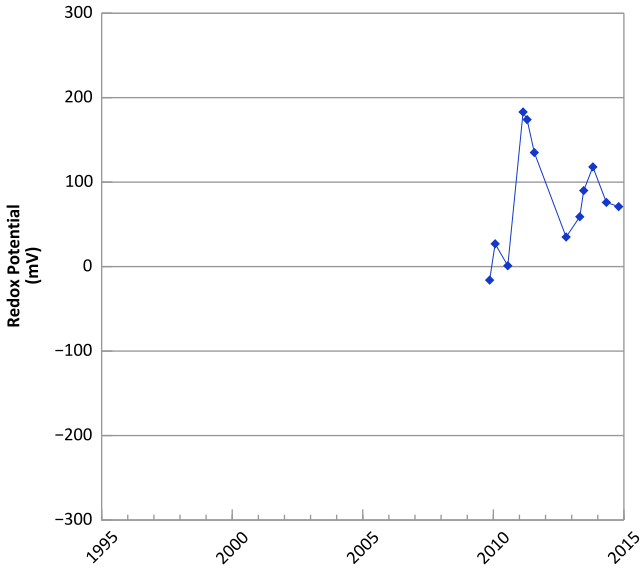
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

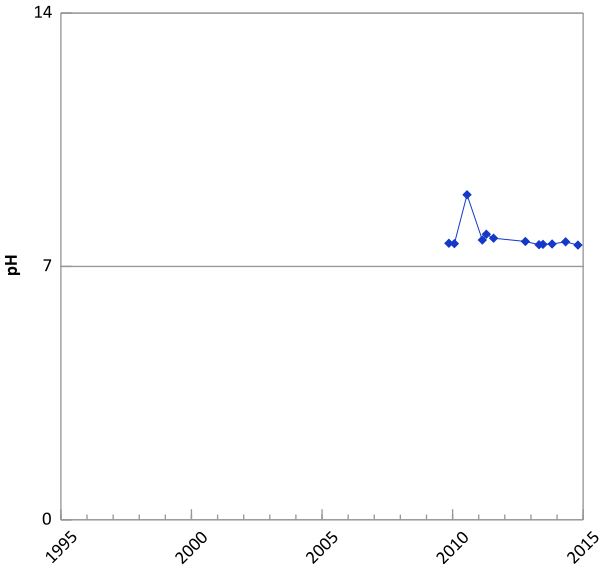
Well Location

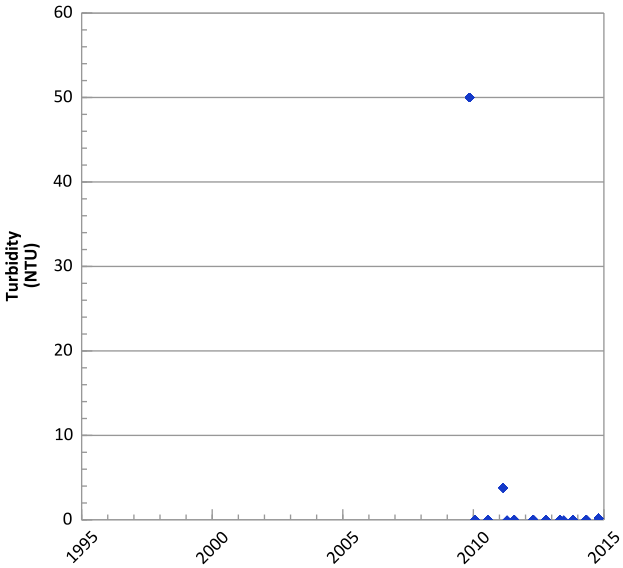


PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



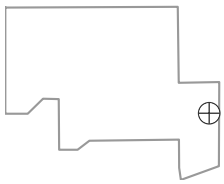






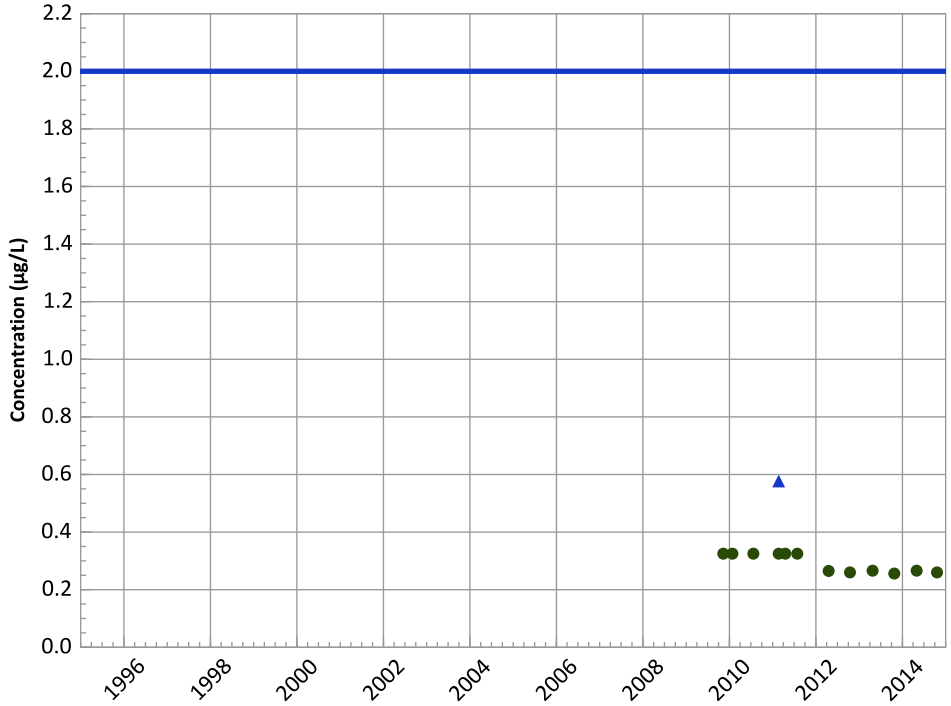
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

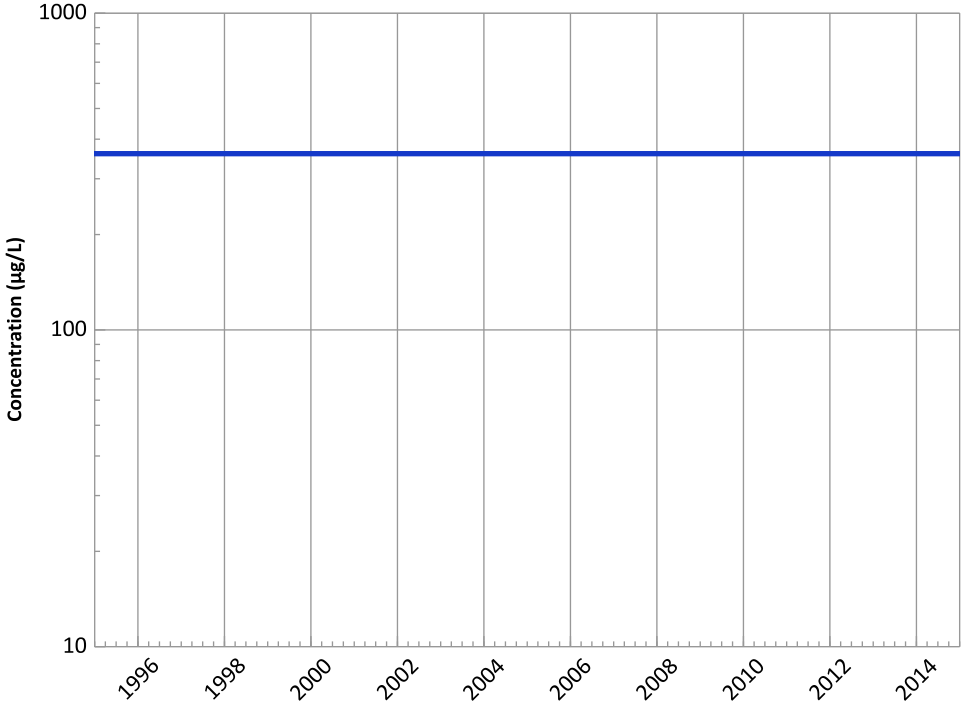


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

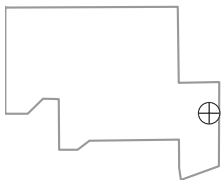
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

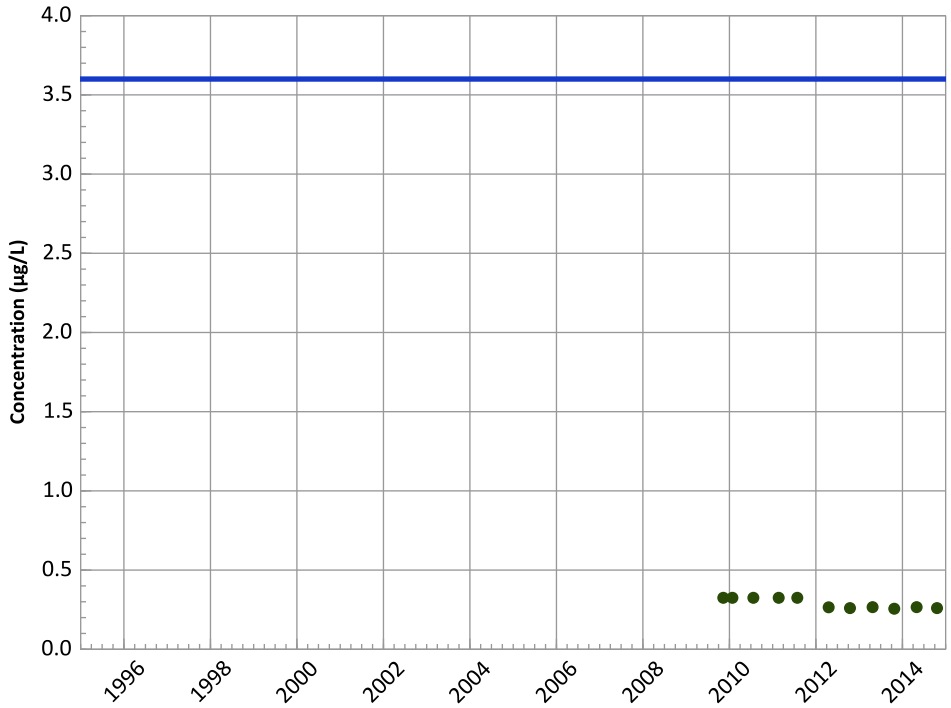
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

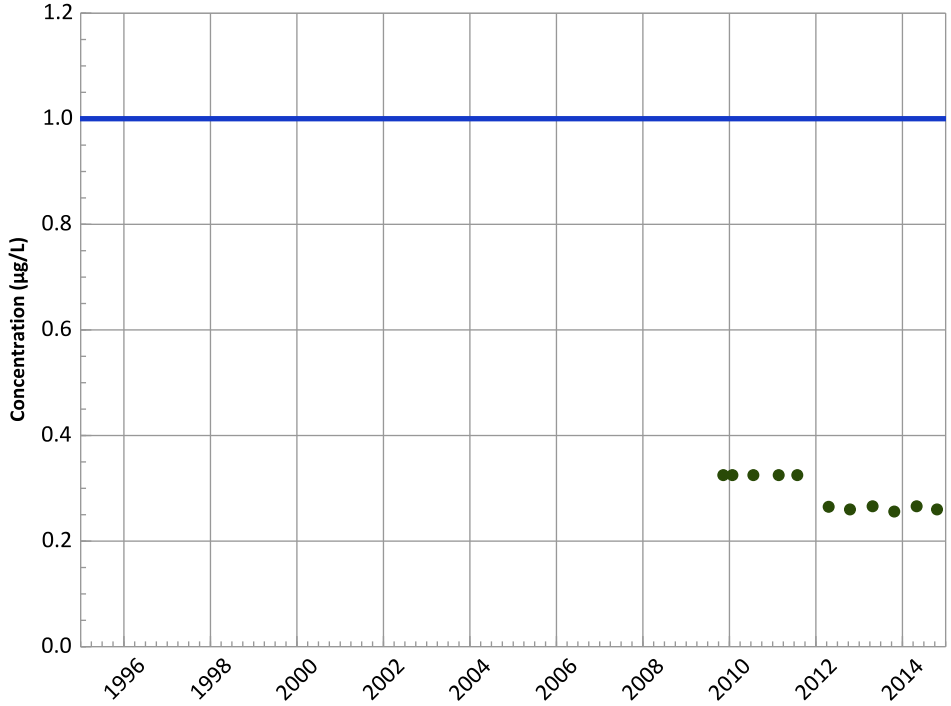


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

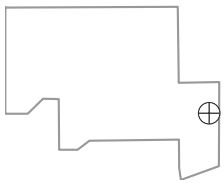
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

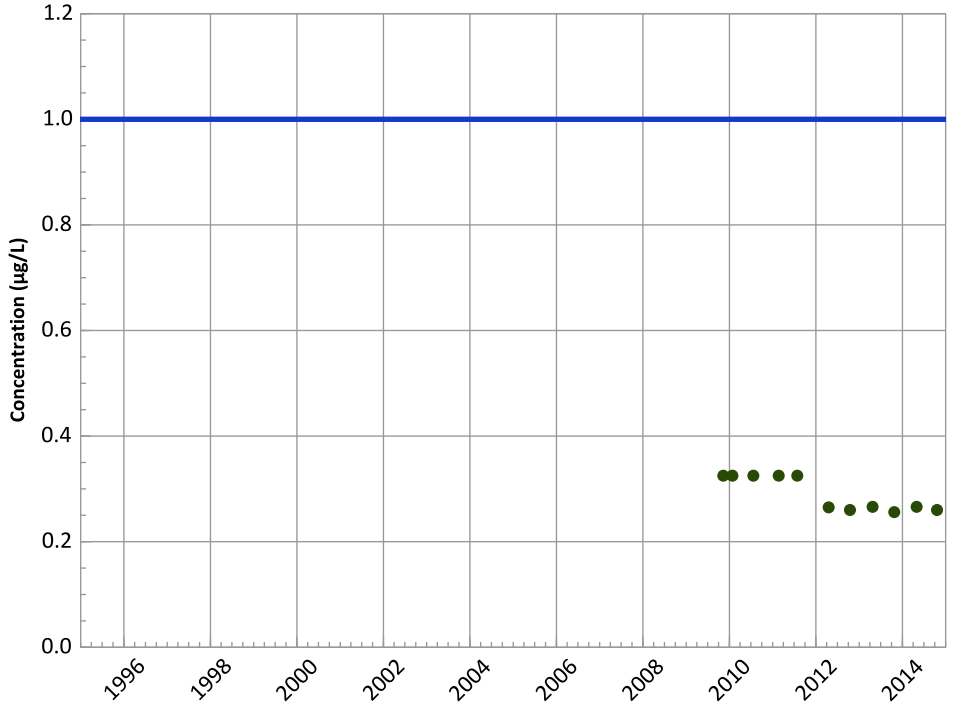
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

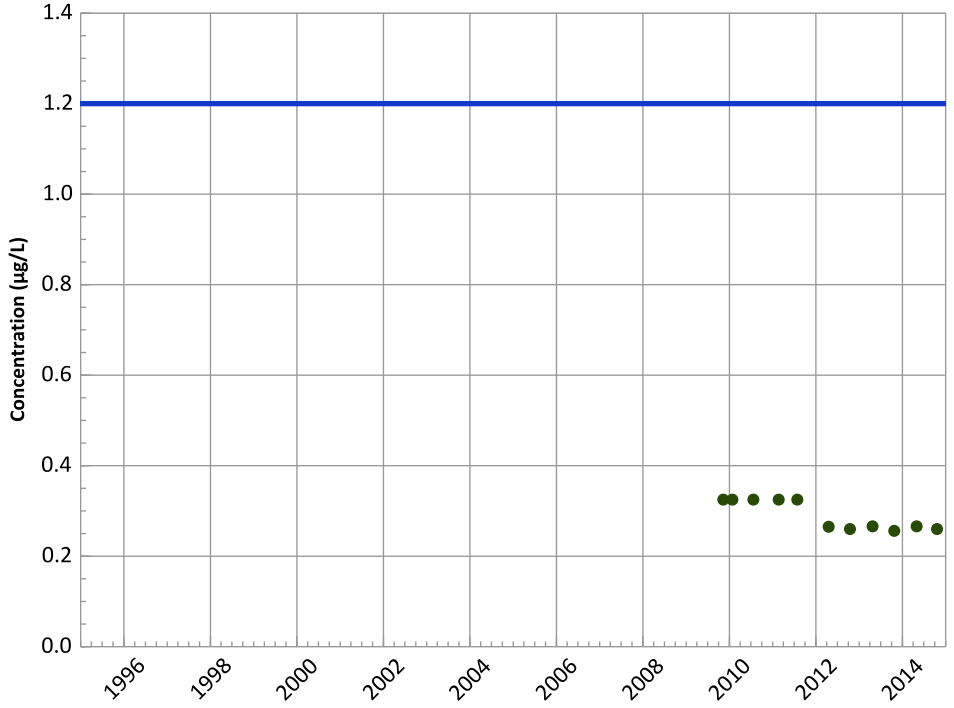


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

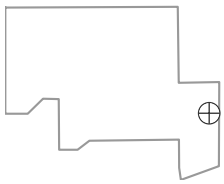
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

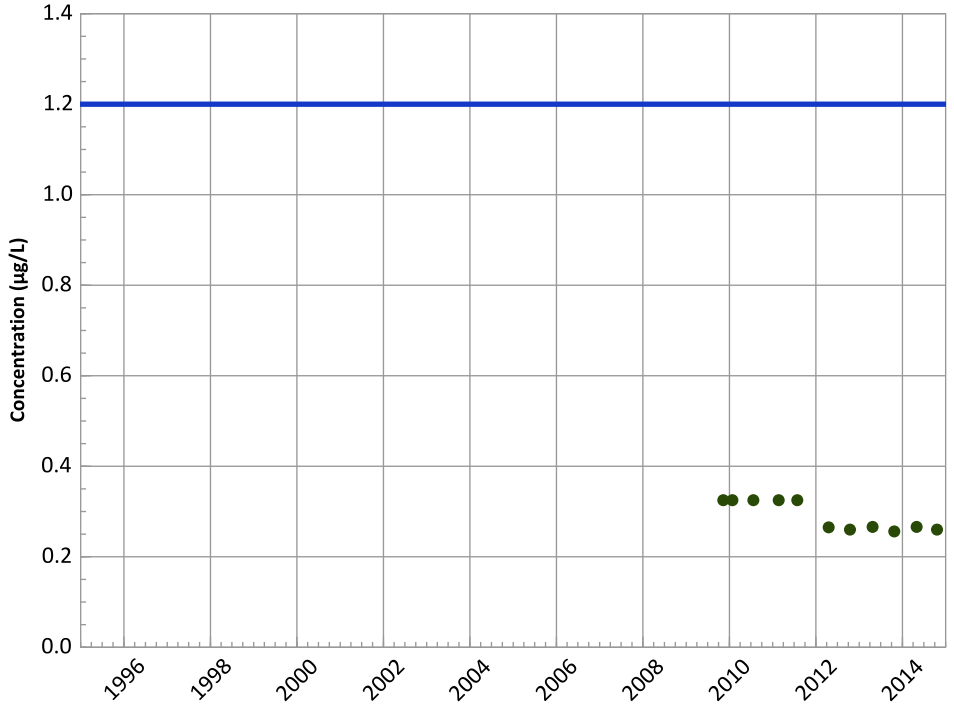
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

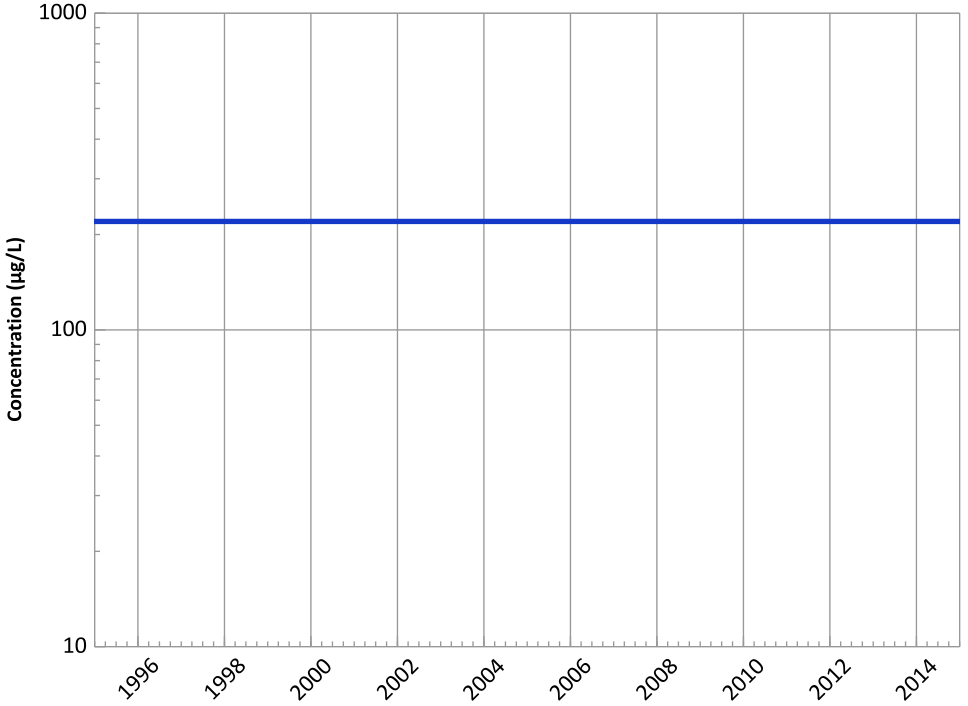


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

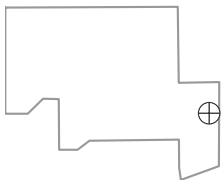


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

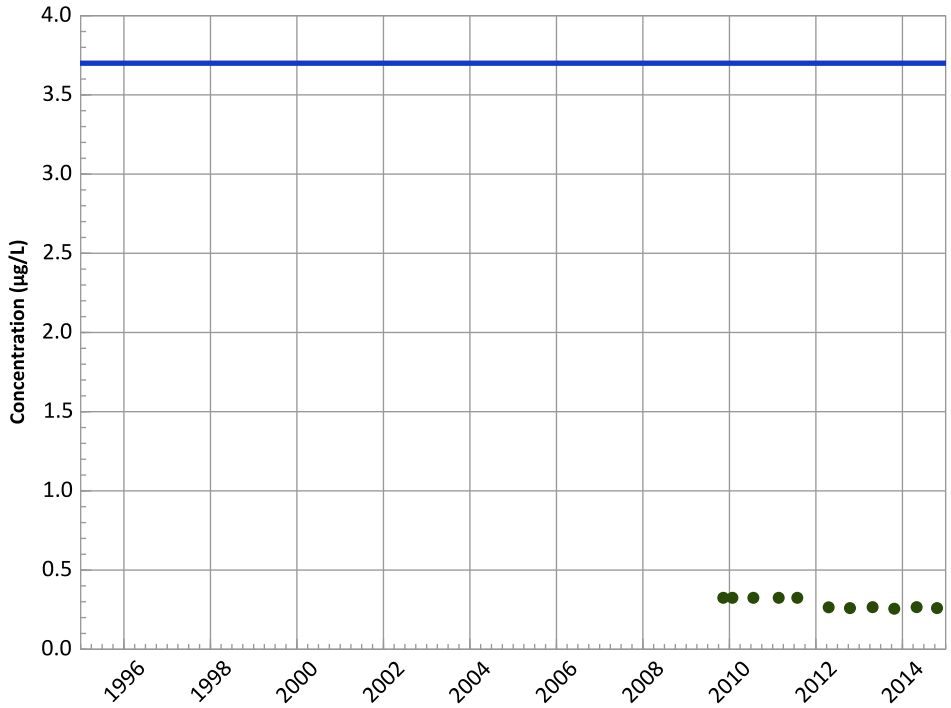


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━ Groundwater Protection Standard

PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

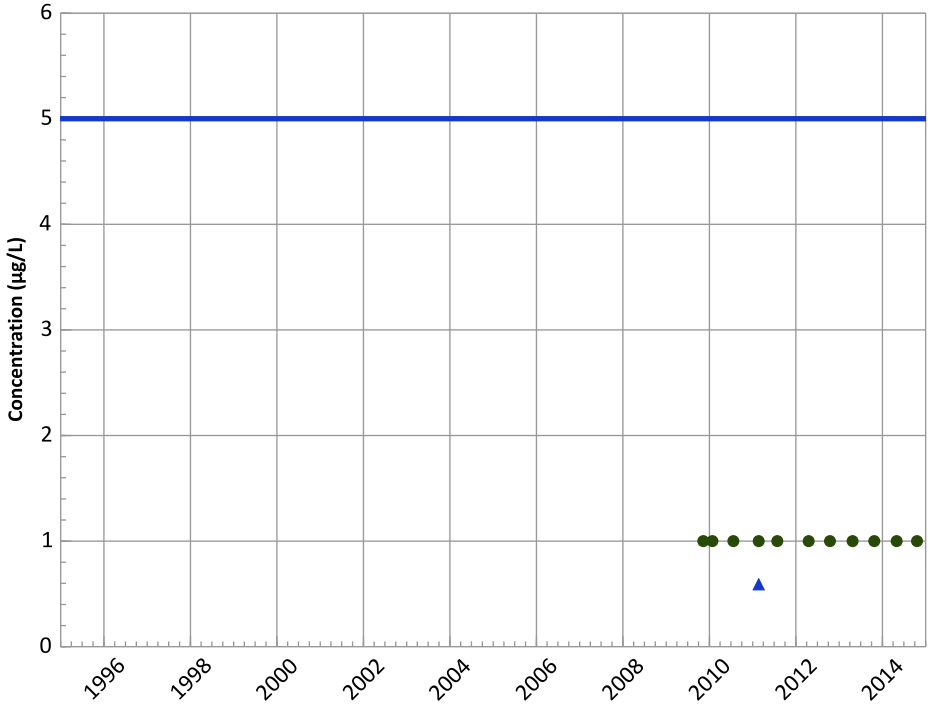


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

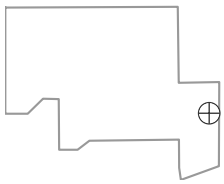
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

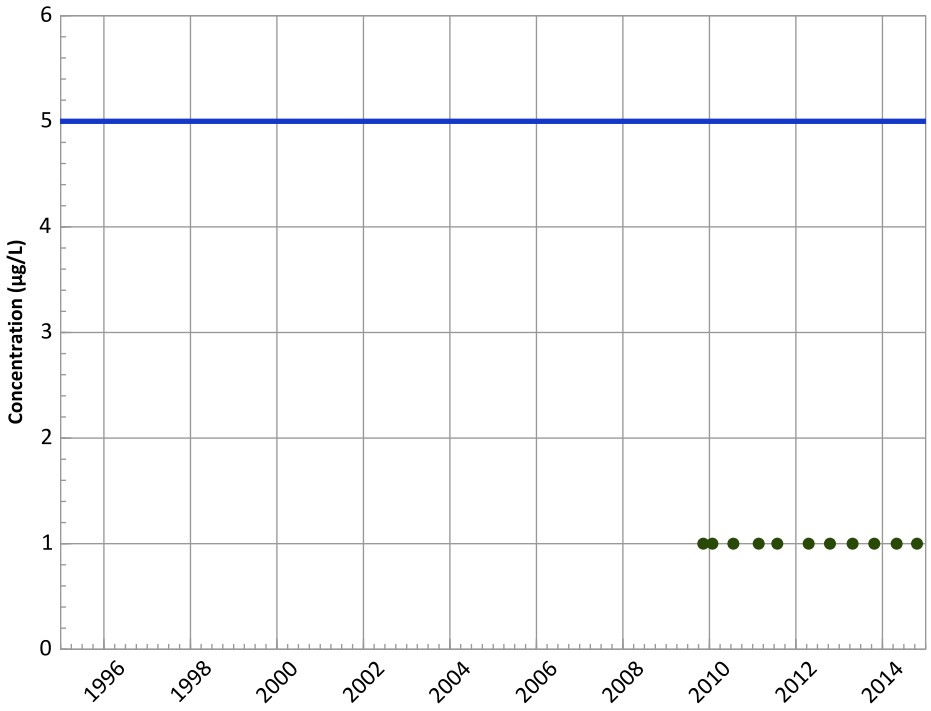
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

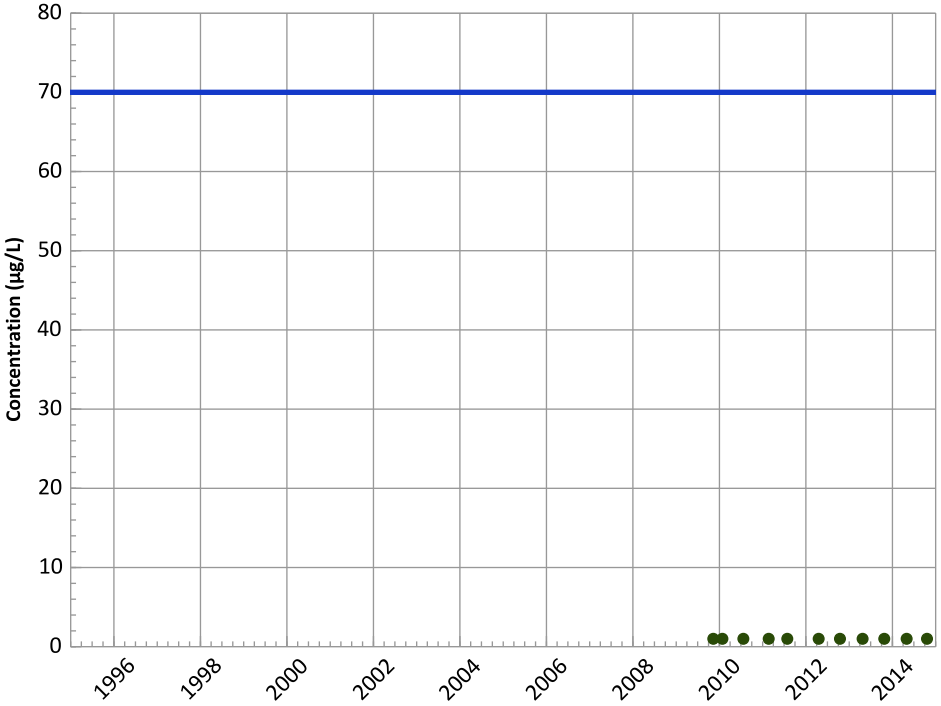


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

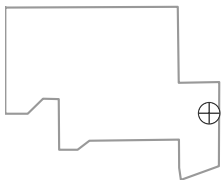
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

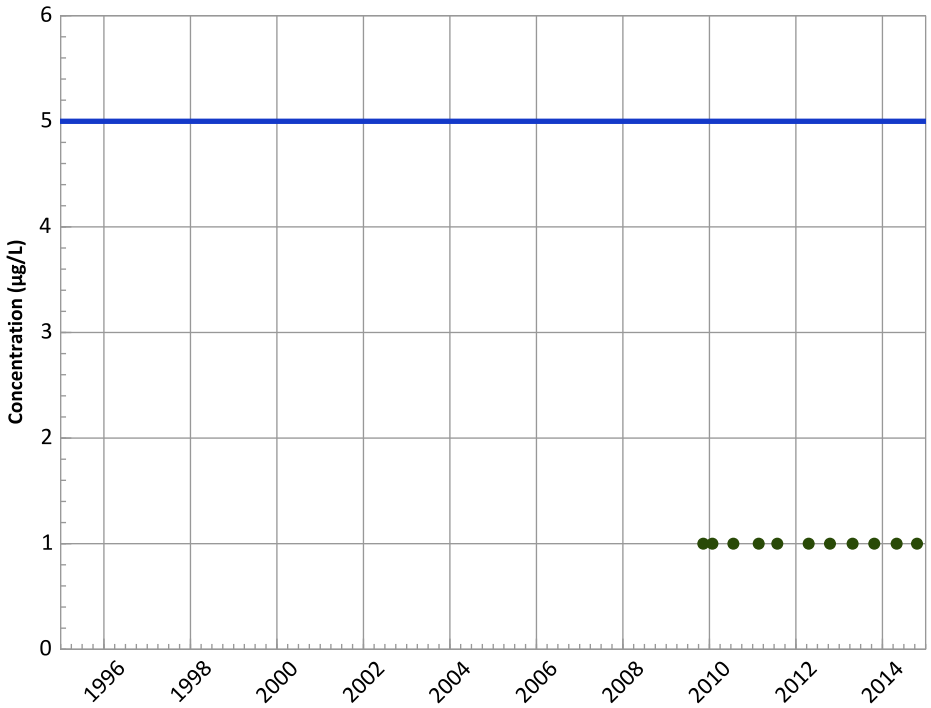
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

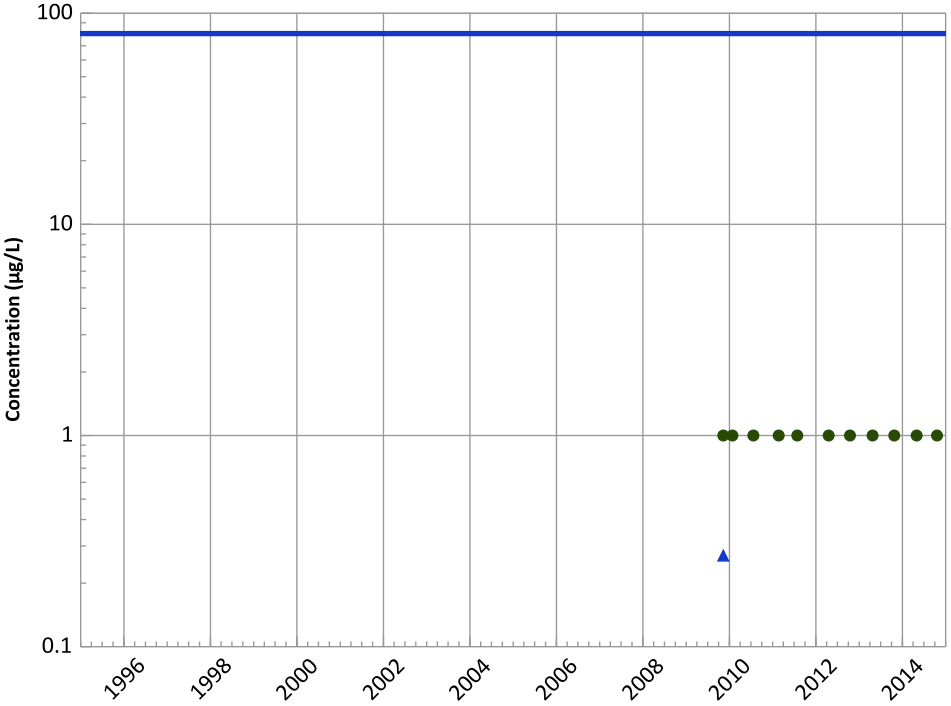


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

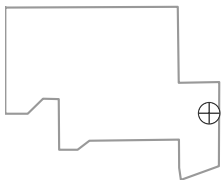
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

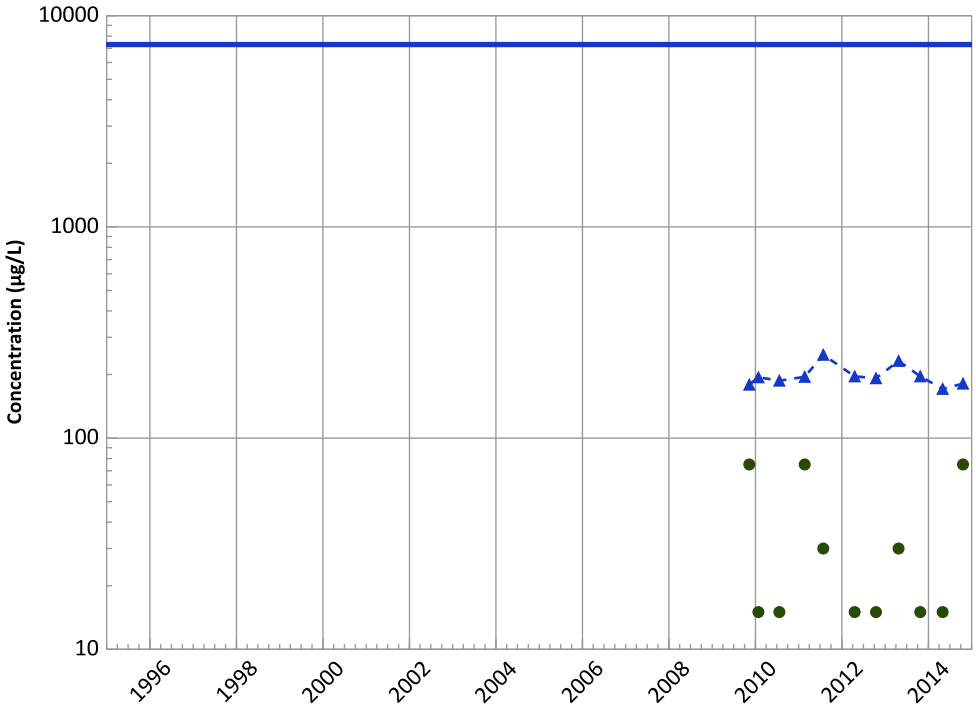
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

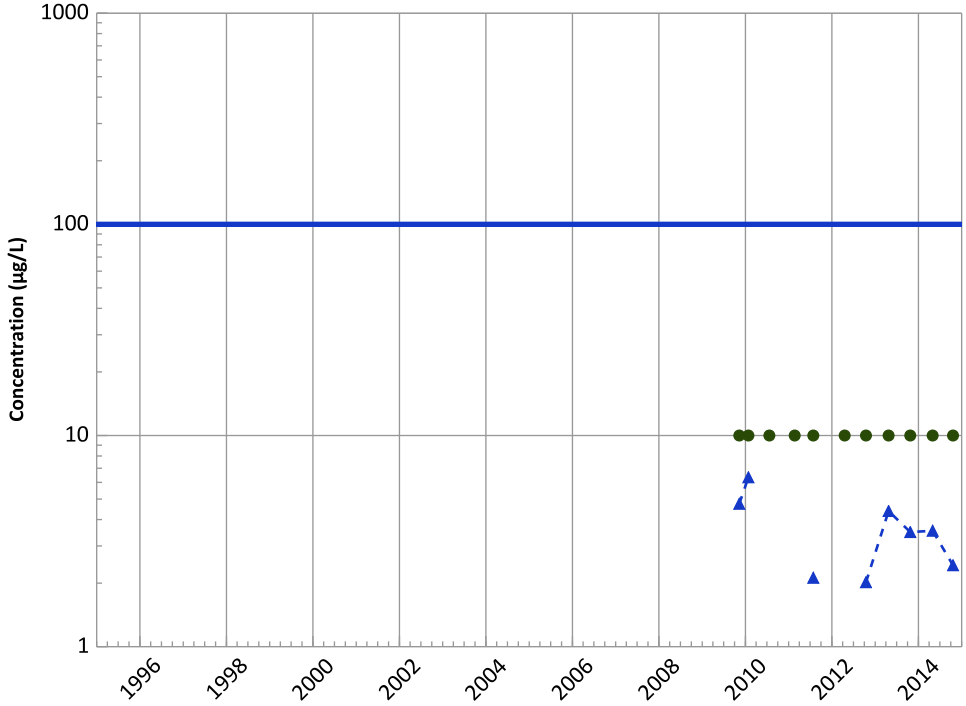


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Chromium, Total Trend

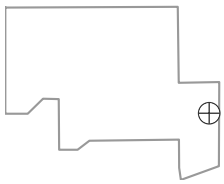


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Well Location

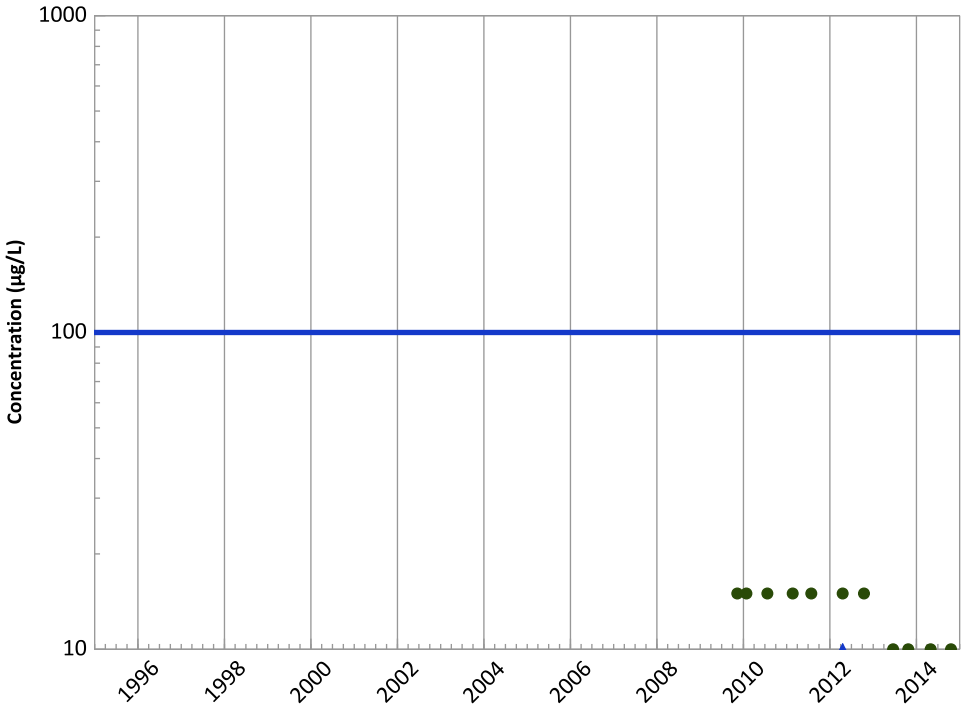


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

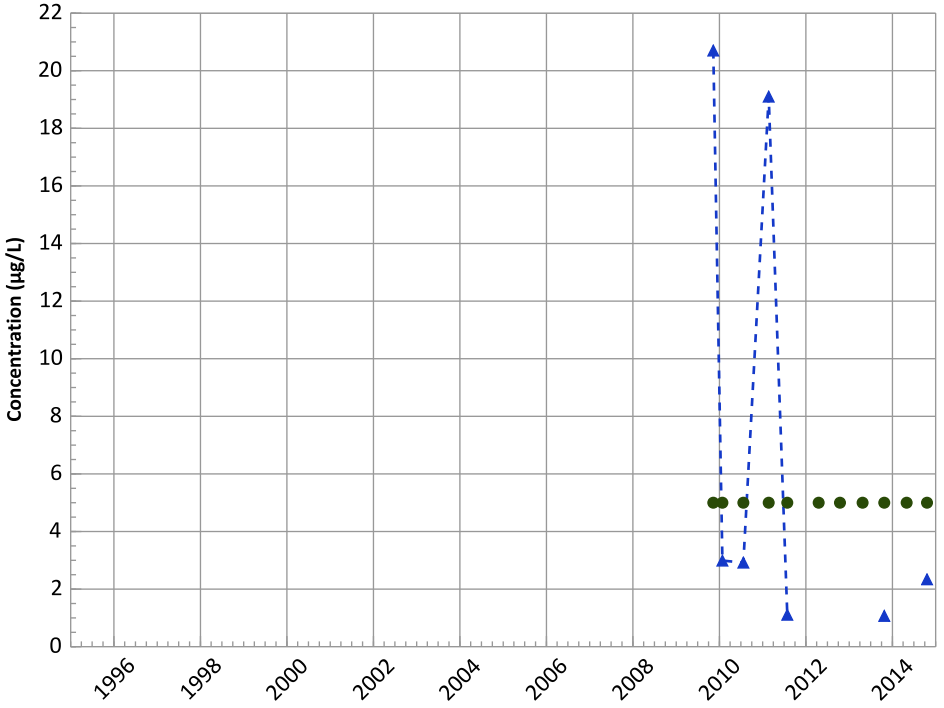


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

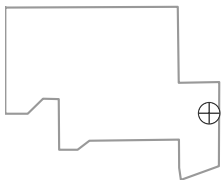
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

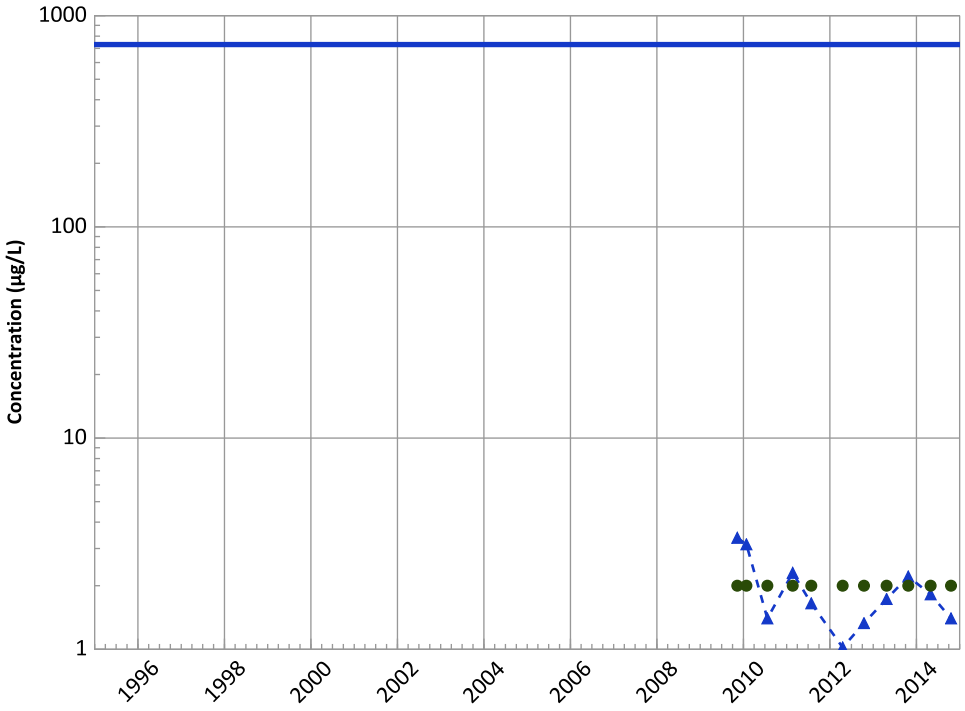
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

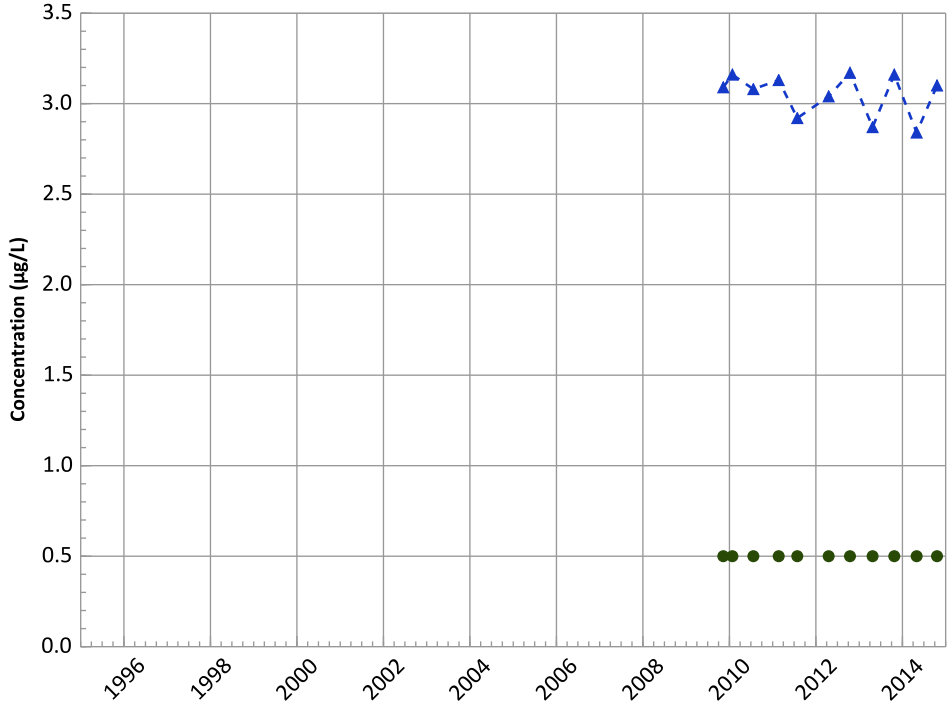


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Molybdenum Trend



Concentration Trend

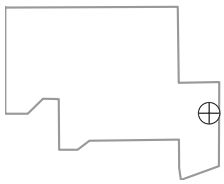
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

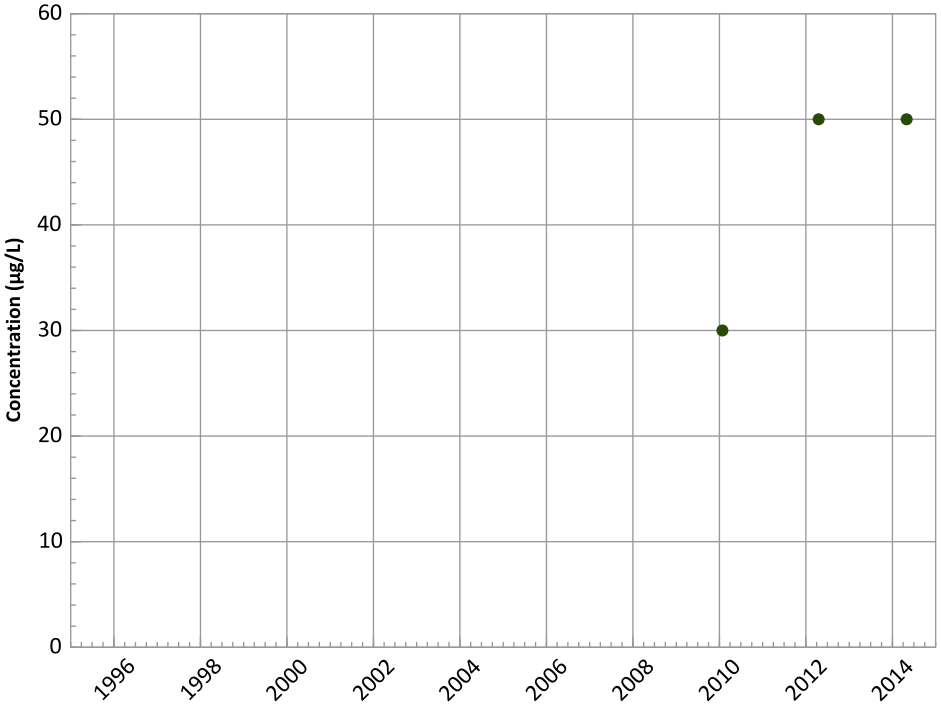
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

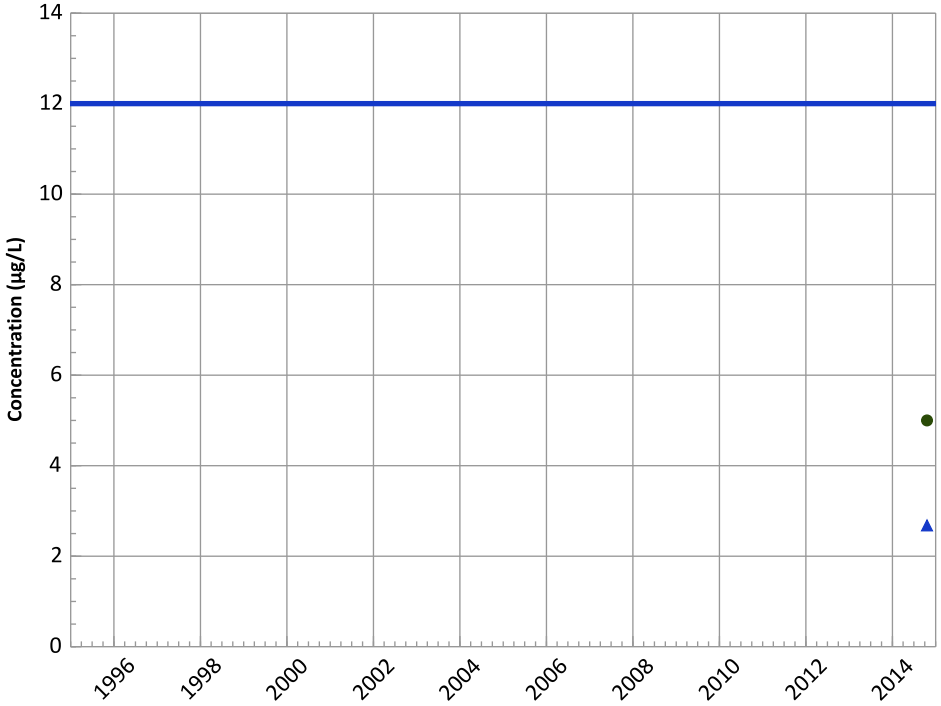


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Arsenic Trend



Concentration Trend

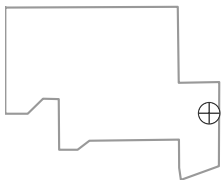
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

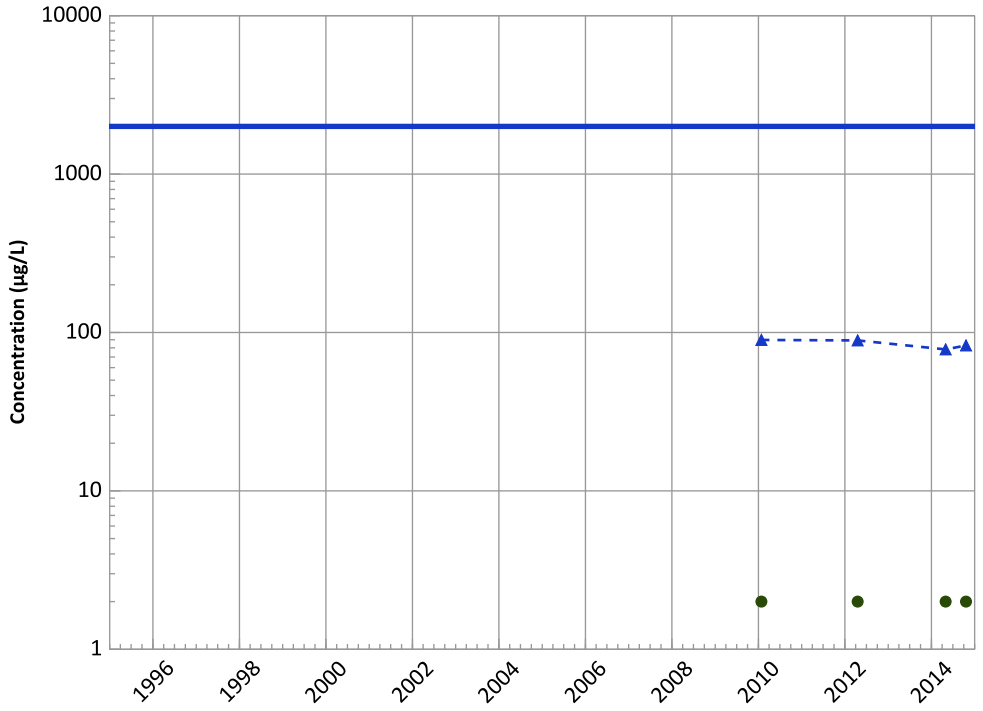
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

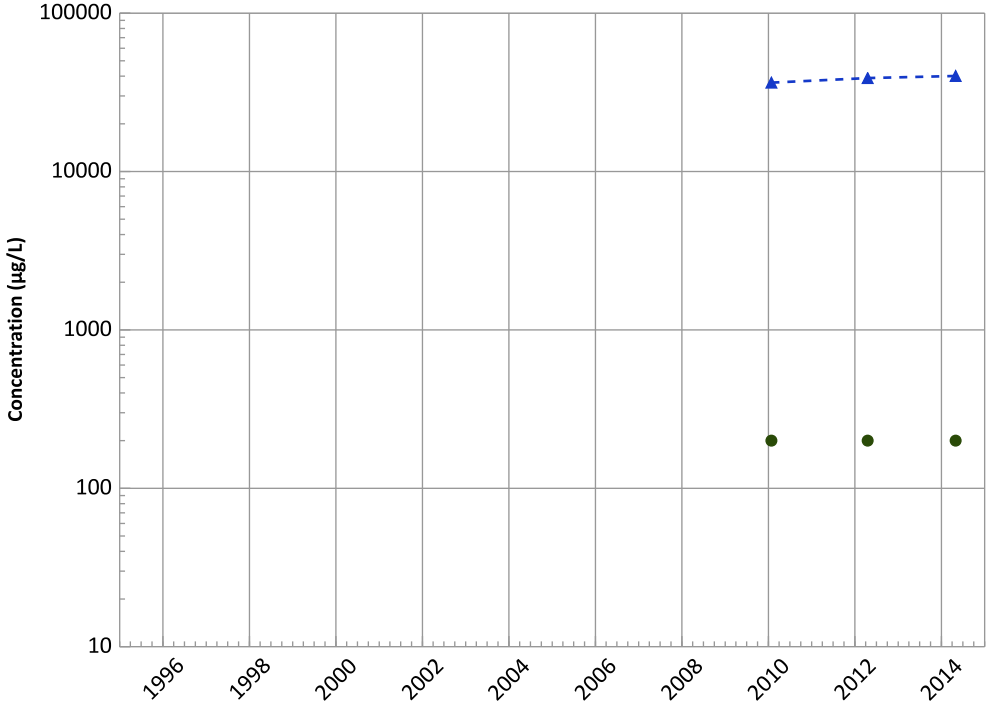


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Calcium Trend



Concentration Trend

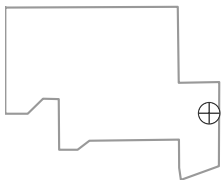
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

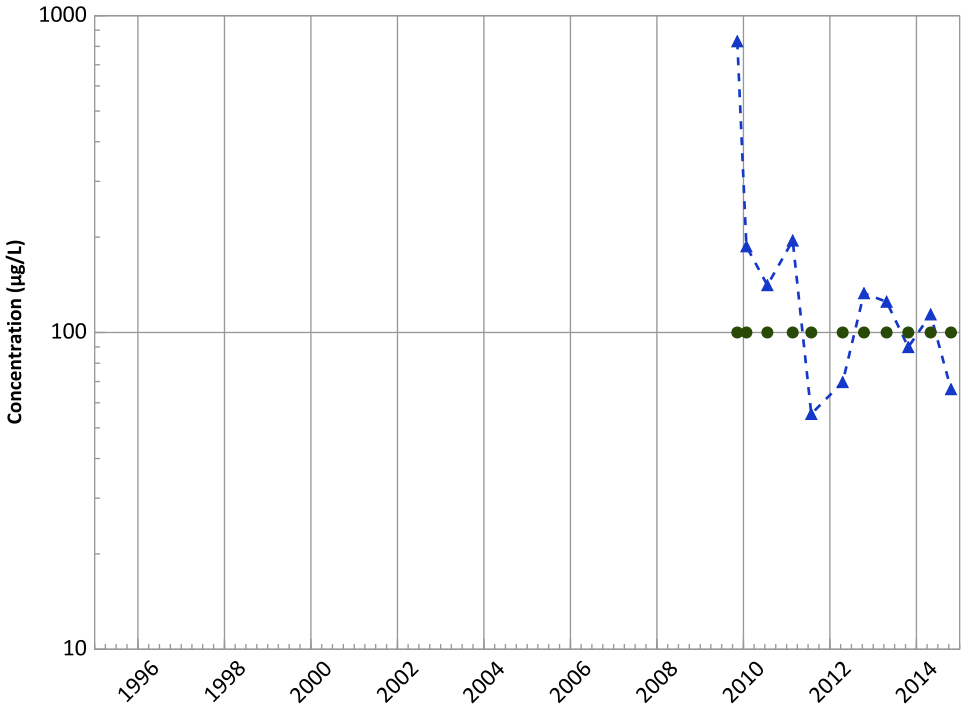
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

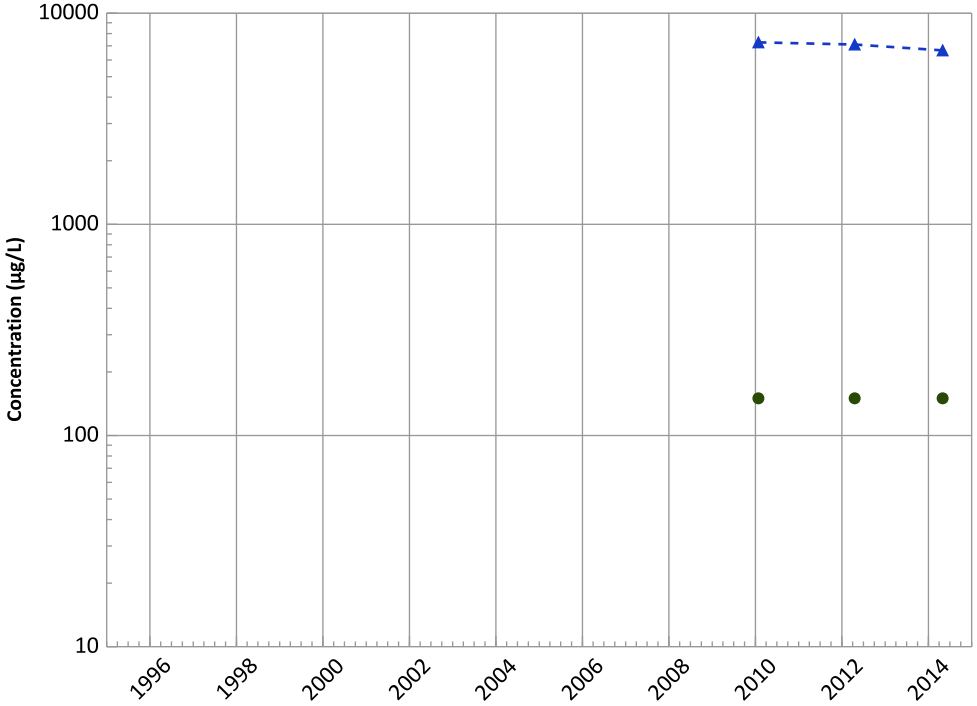


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Potassium Trend



Concentration Trend

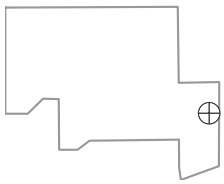
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

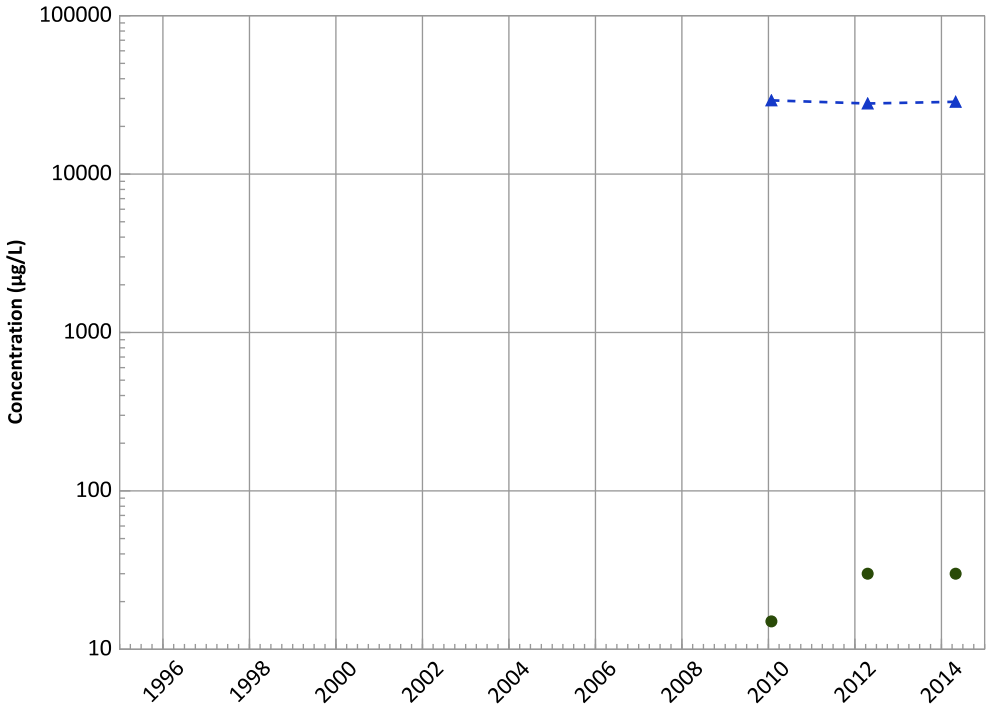
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

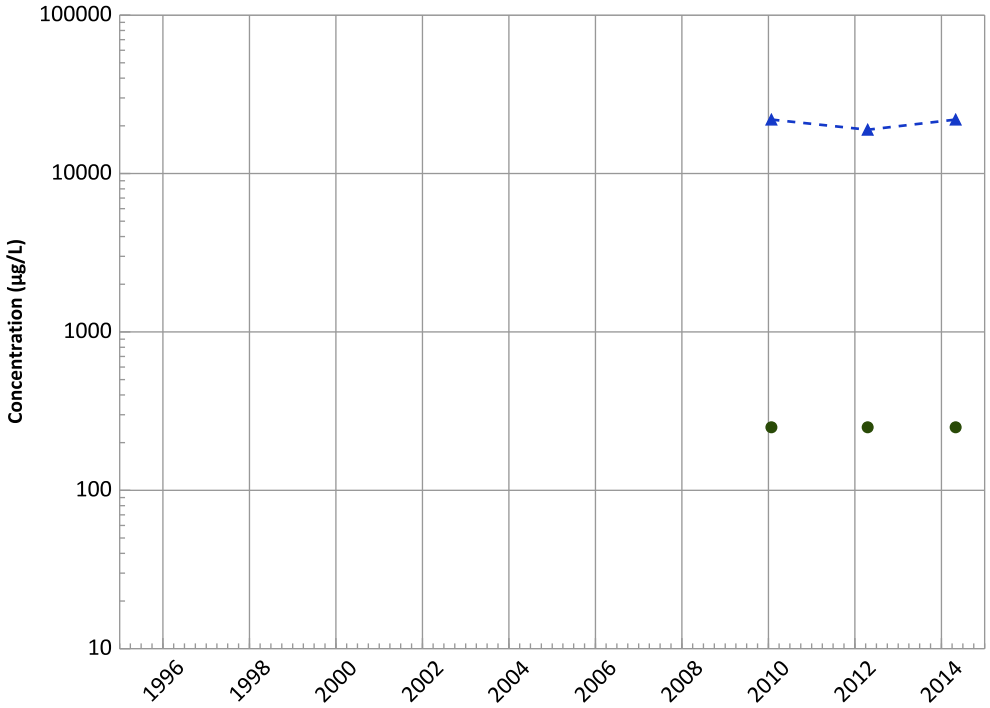


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Sodium Trend



Concentration Trend

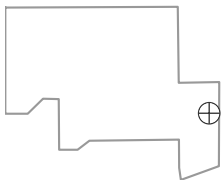
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

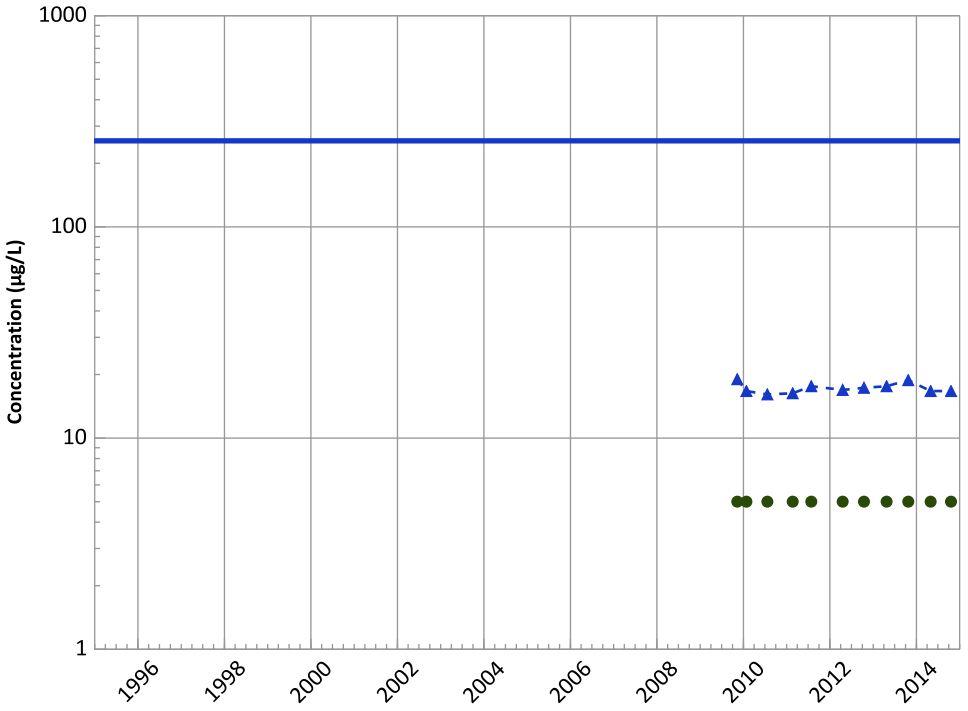
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1137A in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Vanadium Trend



Concentration Trend

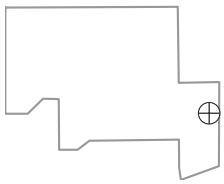
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

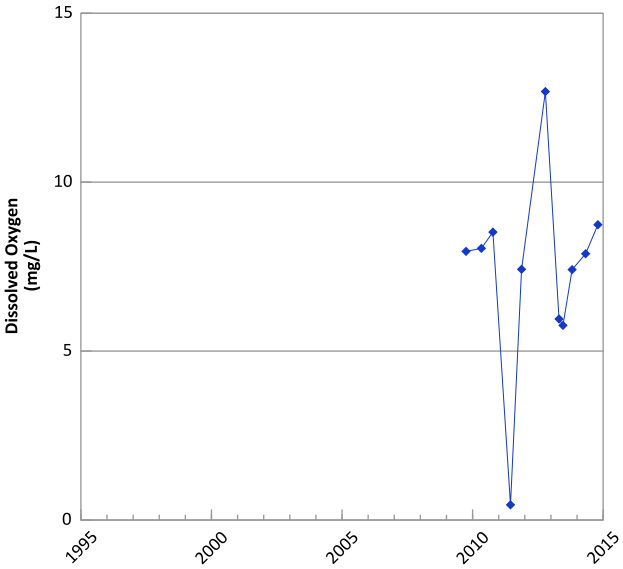
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/10/2009 to 10/20/2014
Analysis Date: 03/19/2015

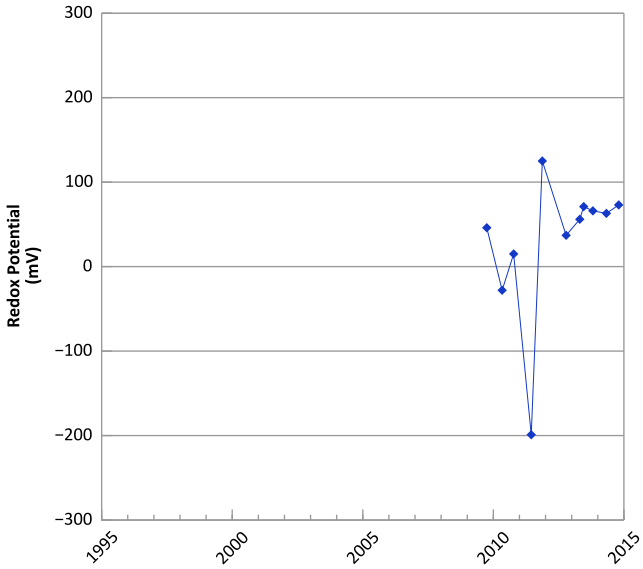
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

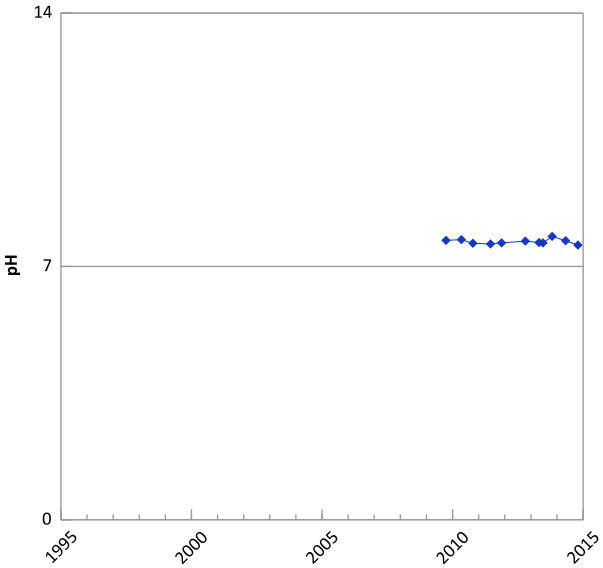
Well Location

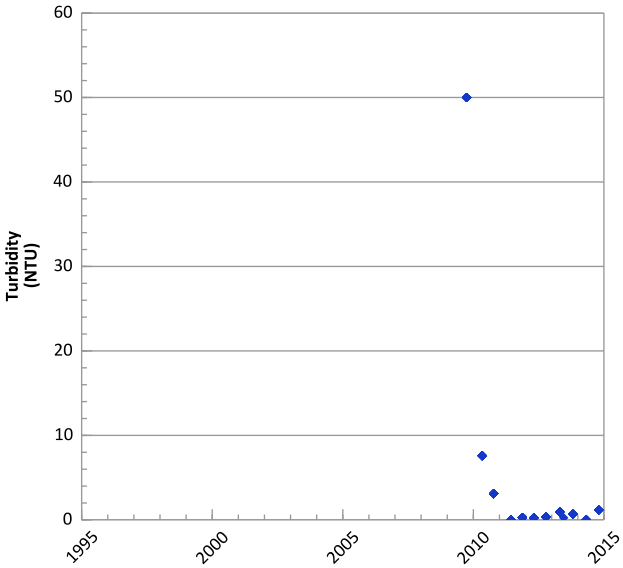


PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



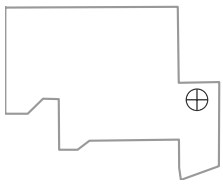






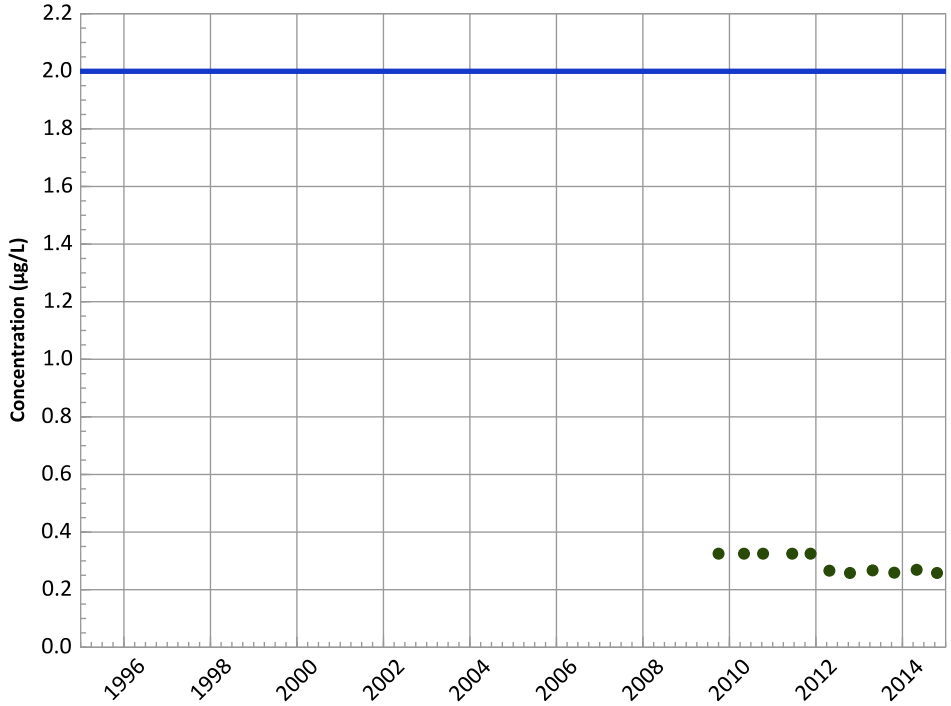
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

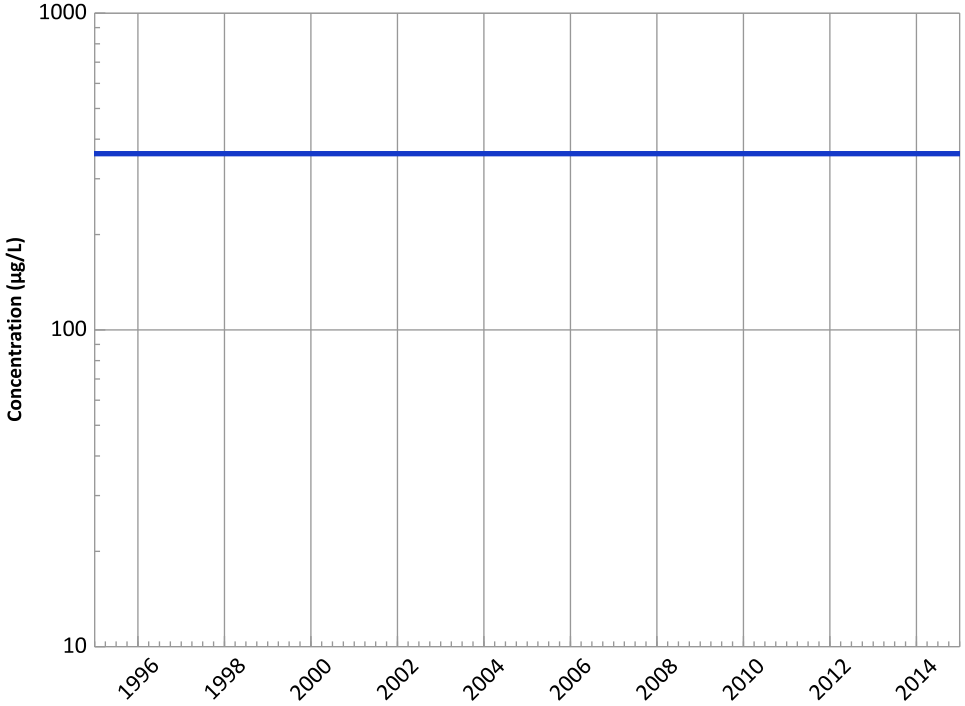


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

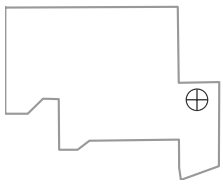
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

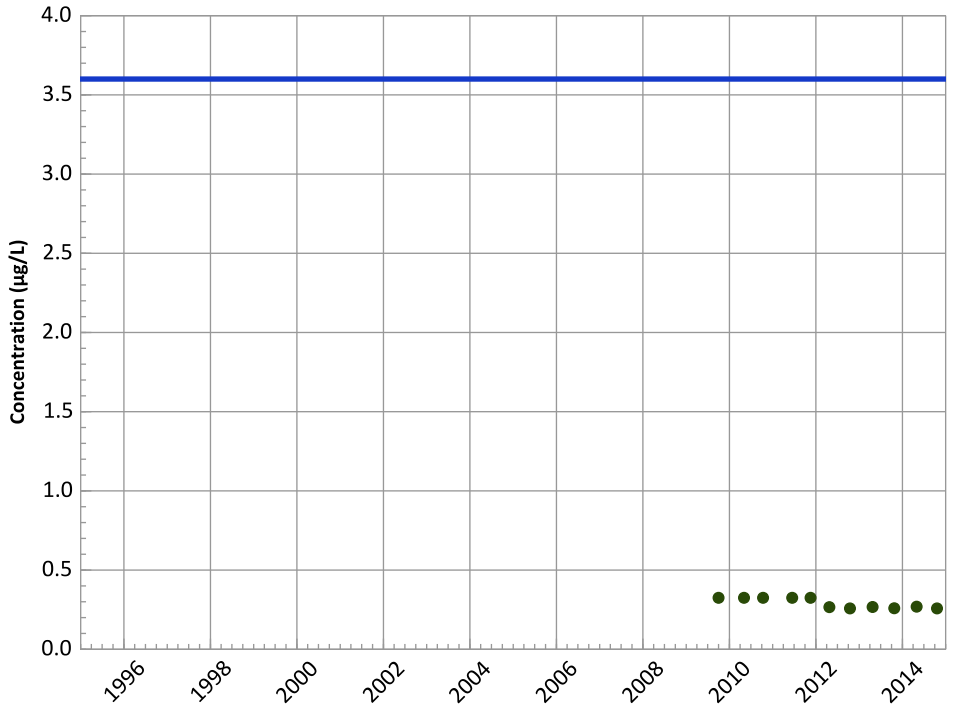
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

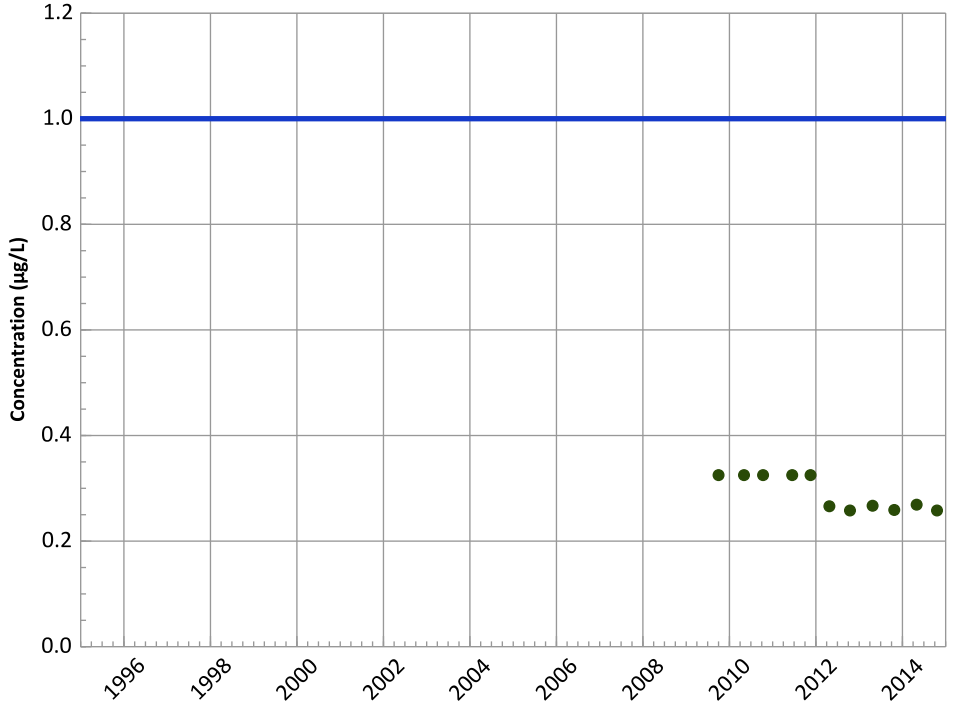


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

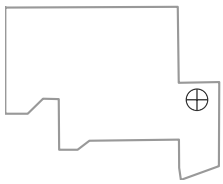
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

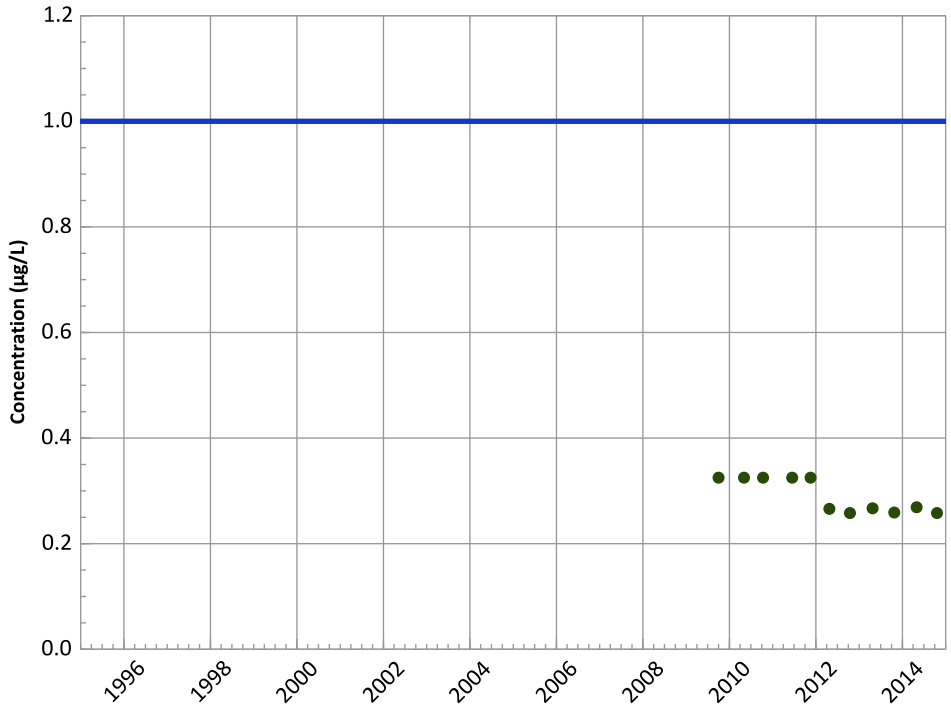
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

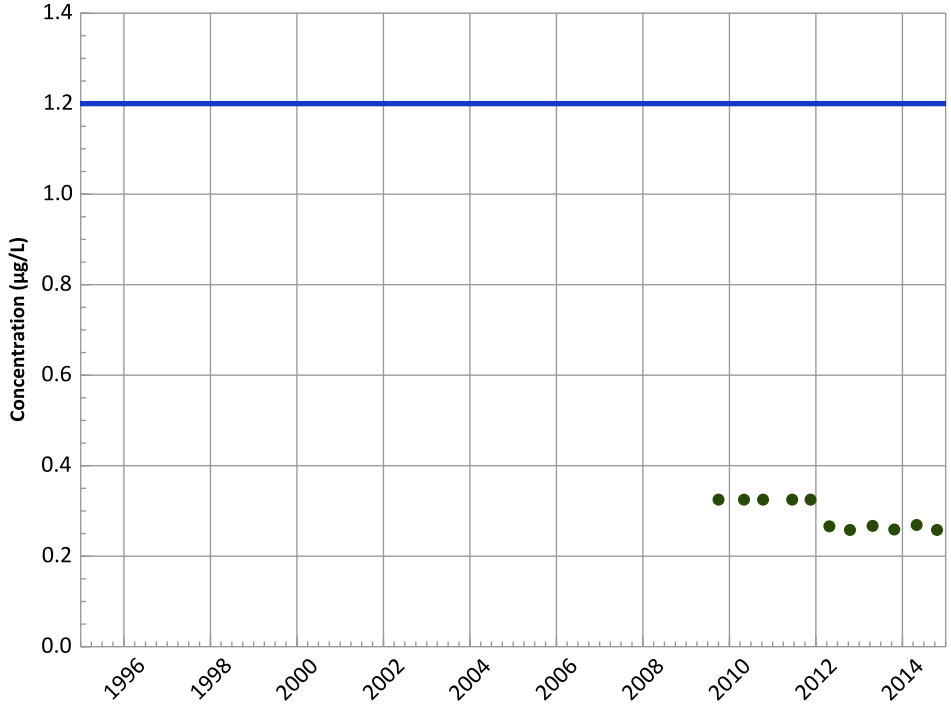


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

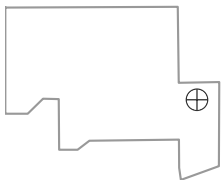
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

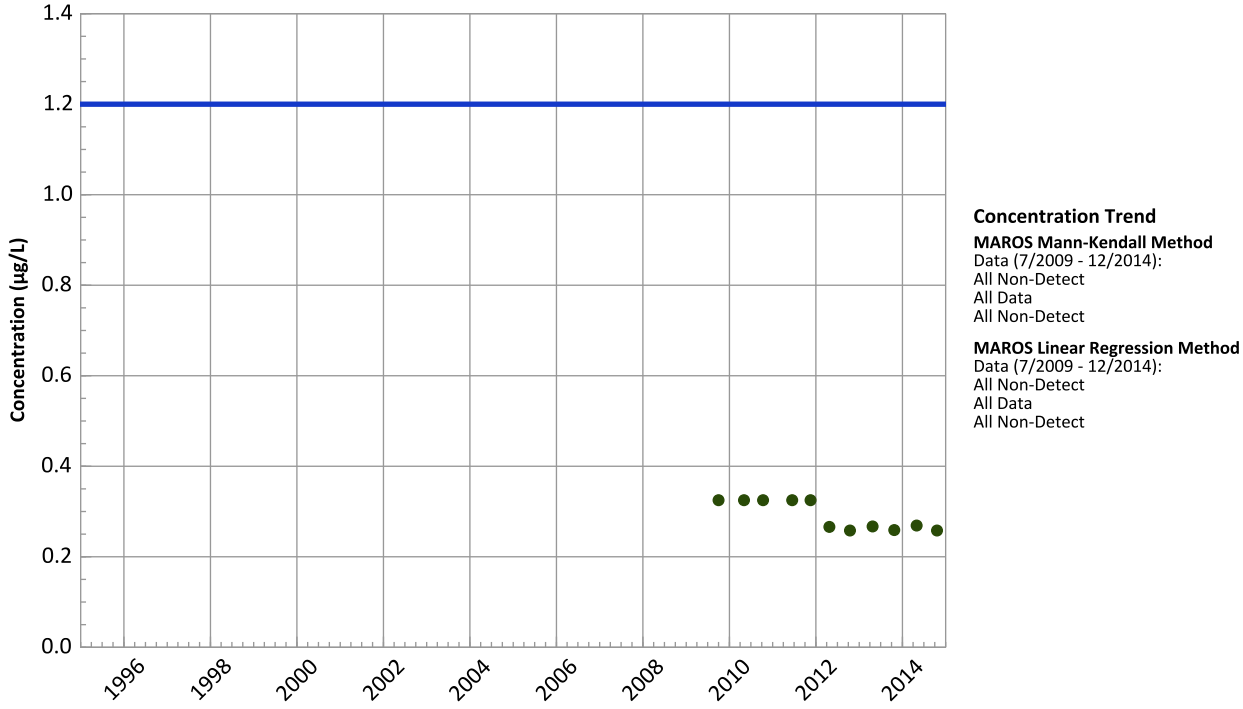
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location

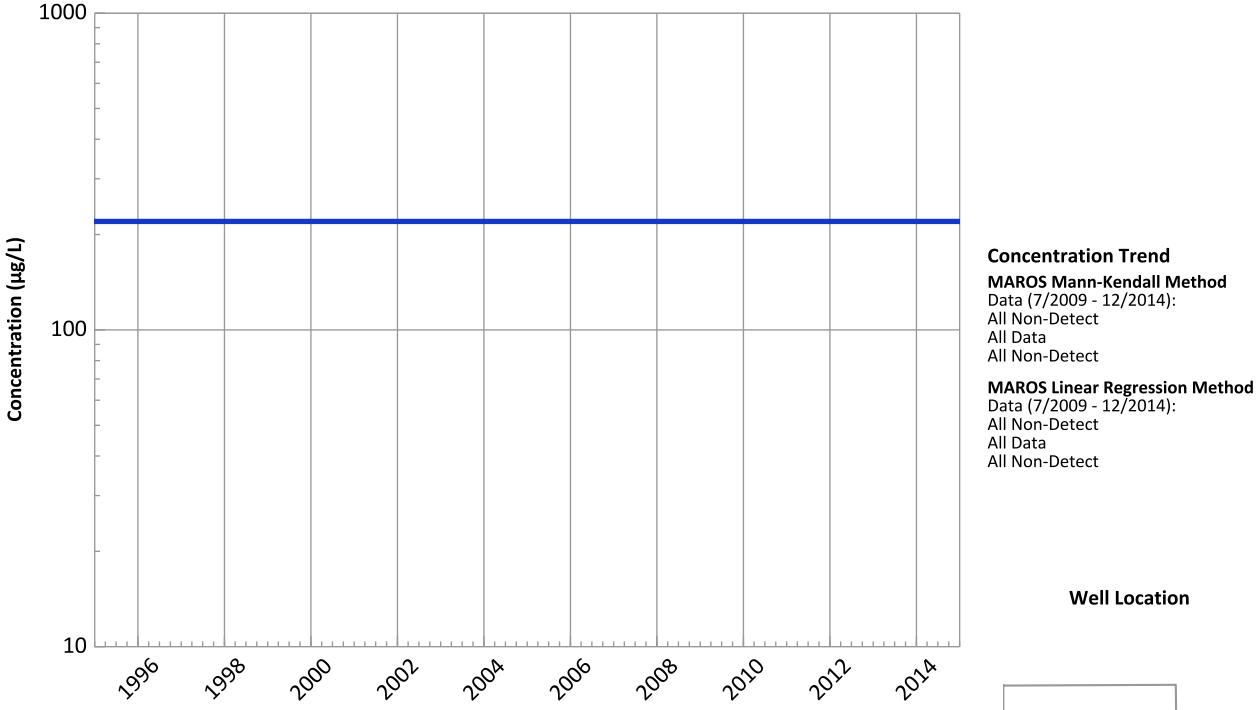


PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend



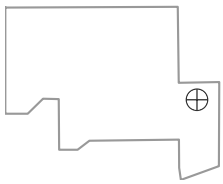
1,3,5-Trinitrobenzene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

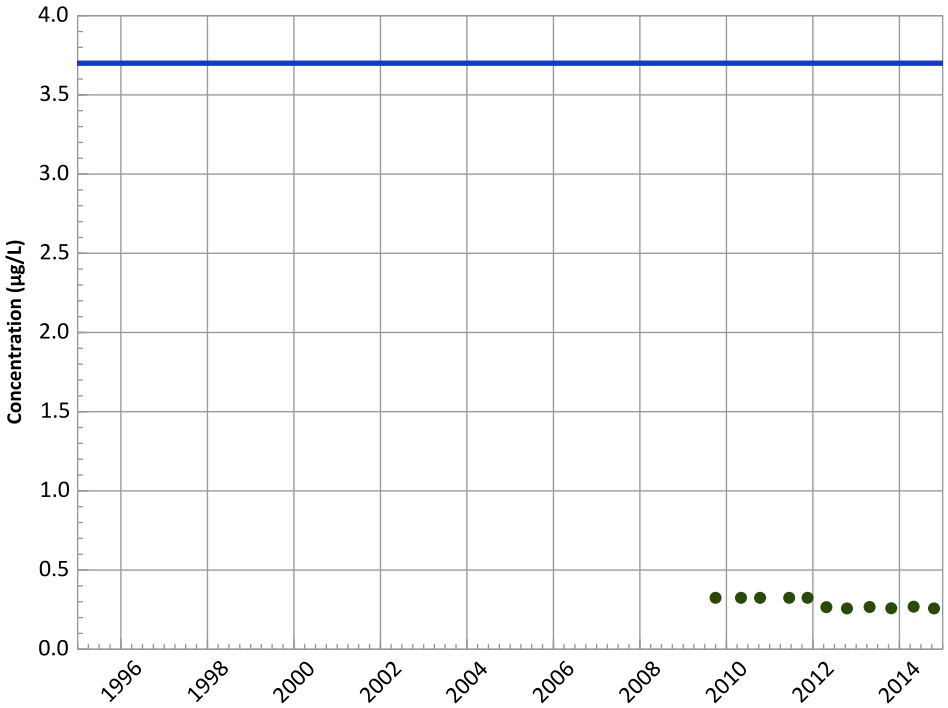
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

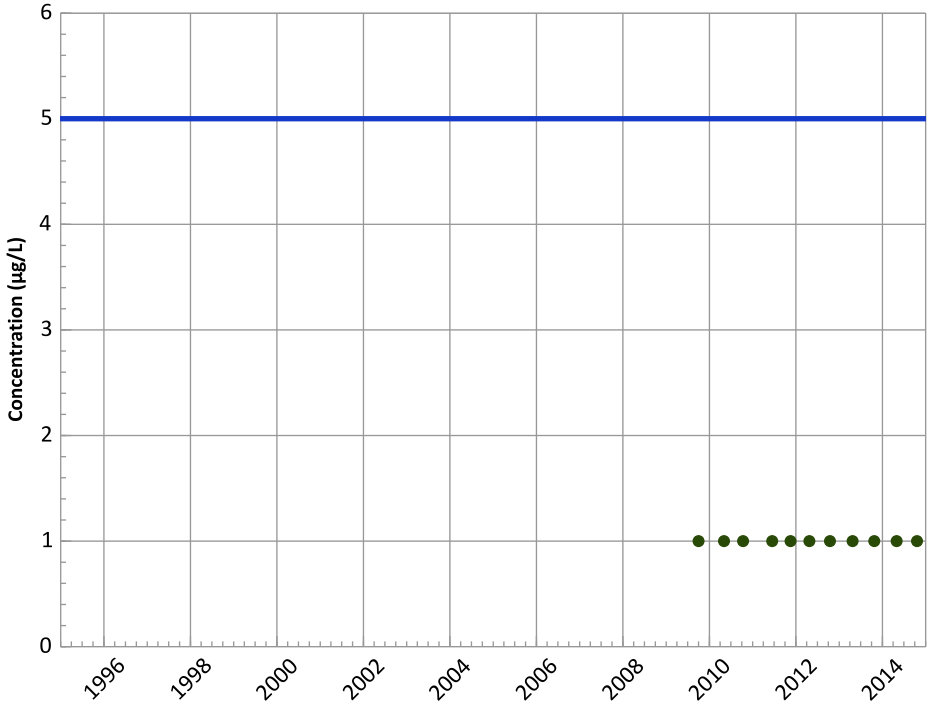


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

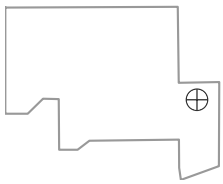
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

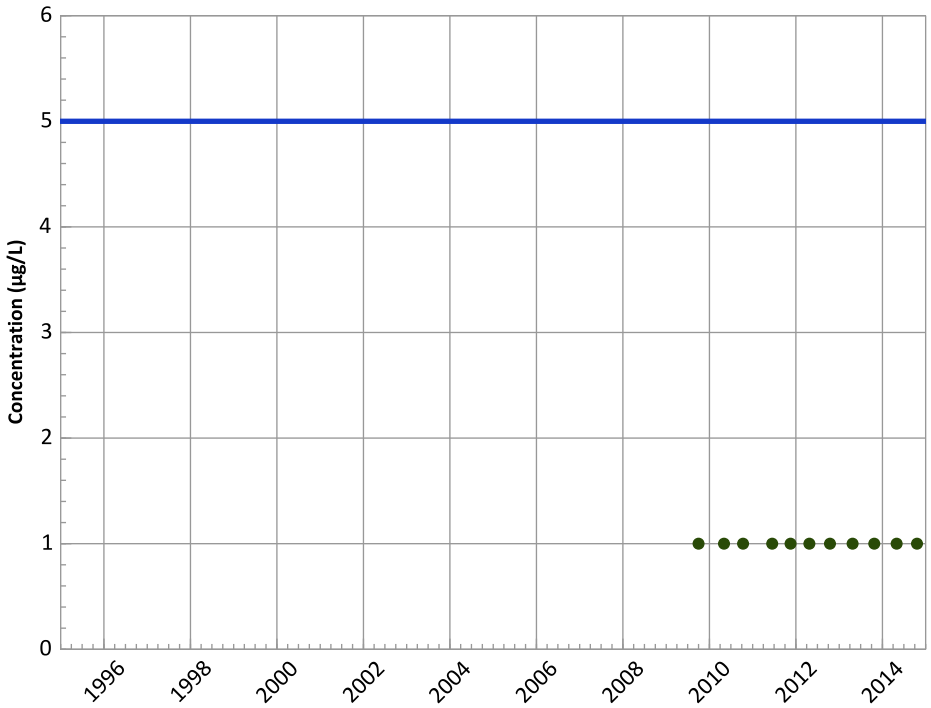
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

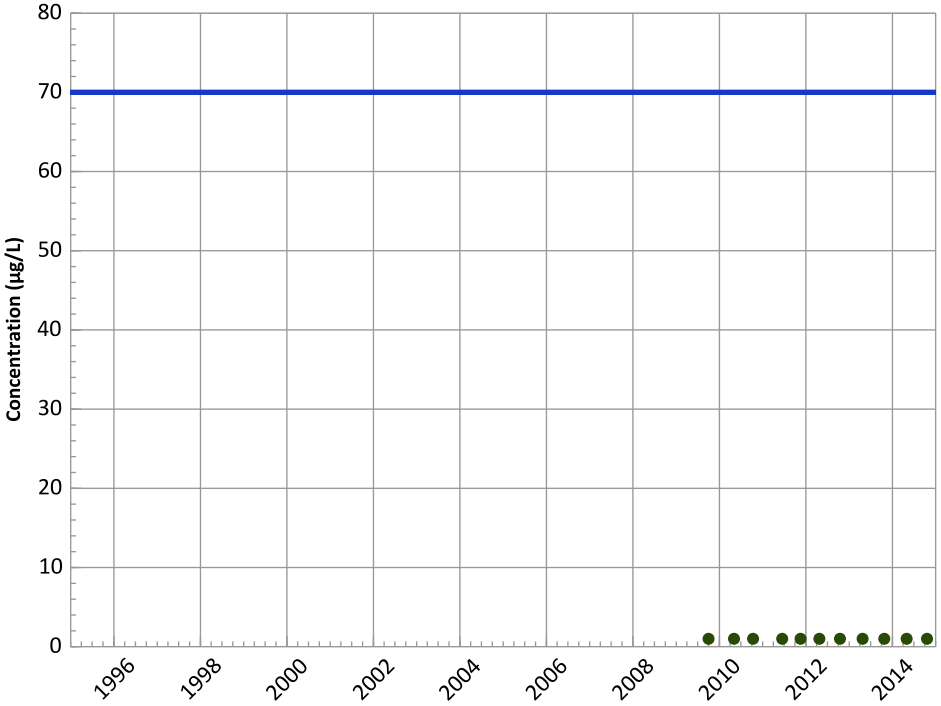


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

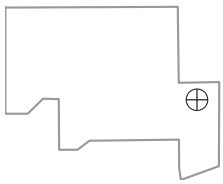
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

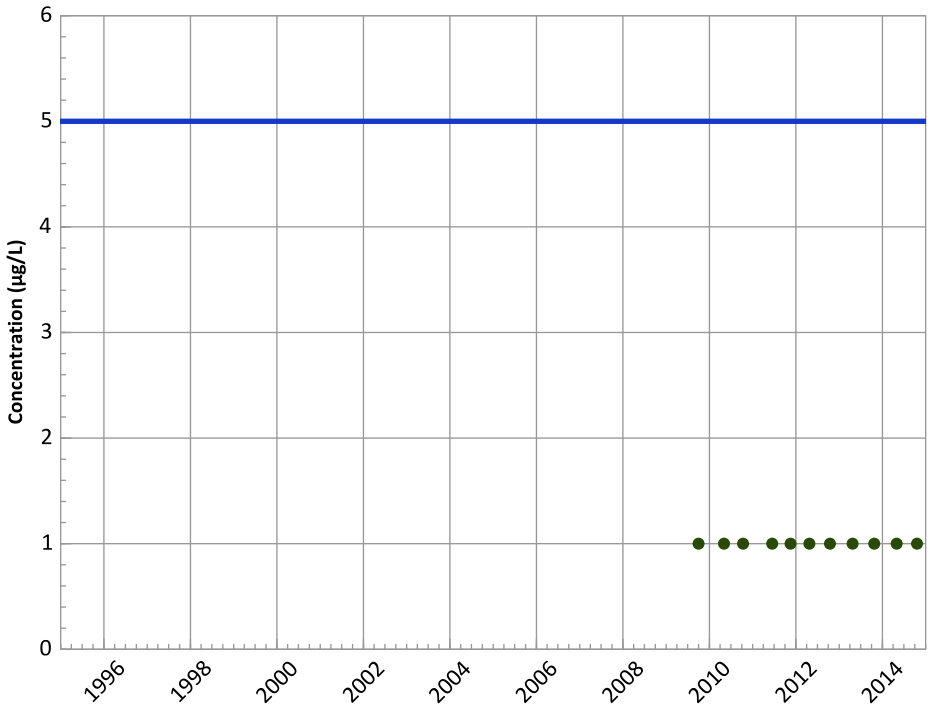
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

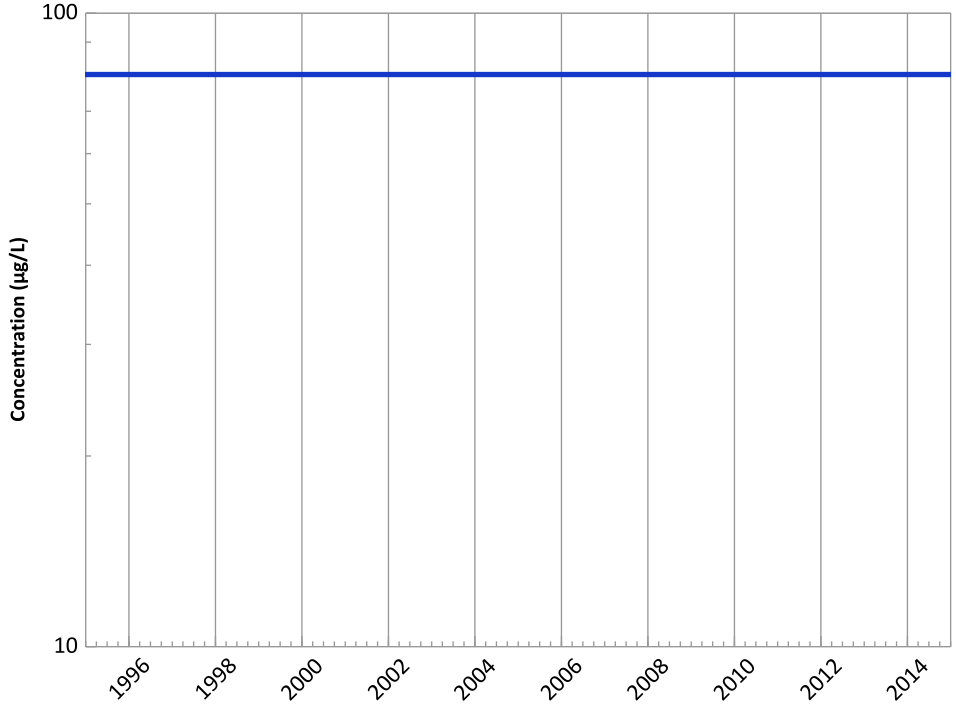


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

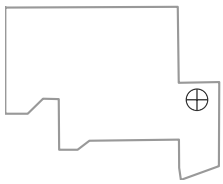
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

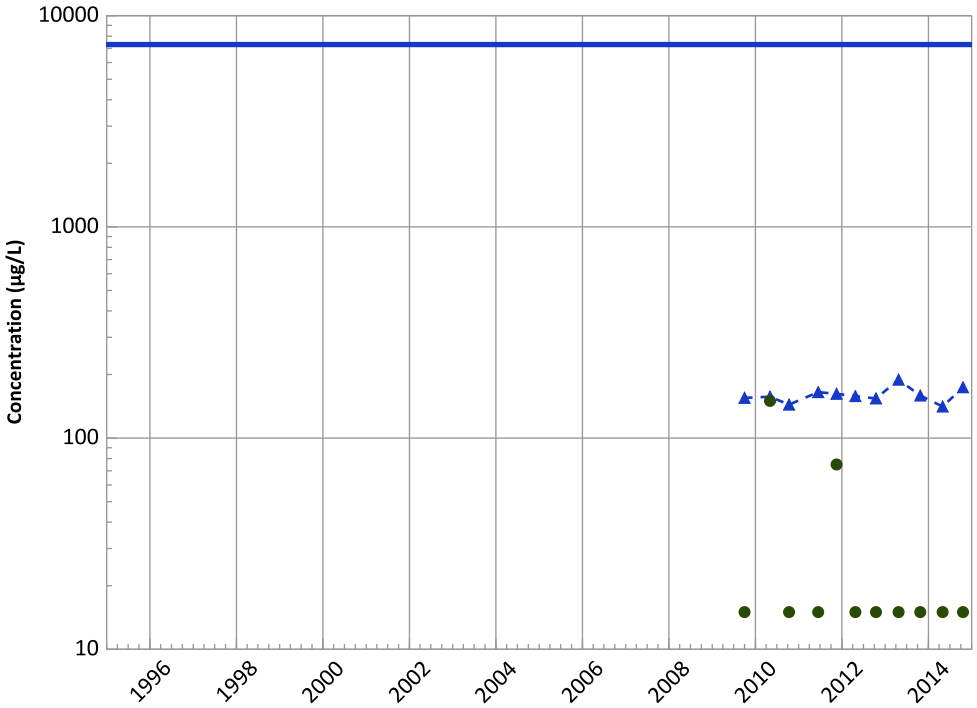
▲ Measured Value
● Sample Detection Limit
- - - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

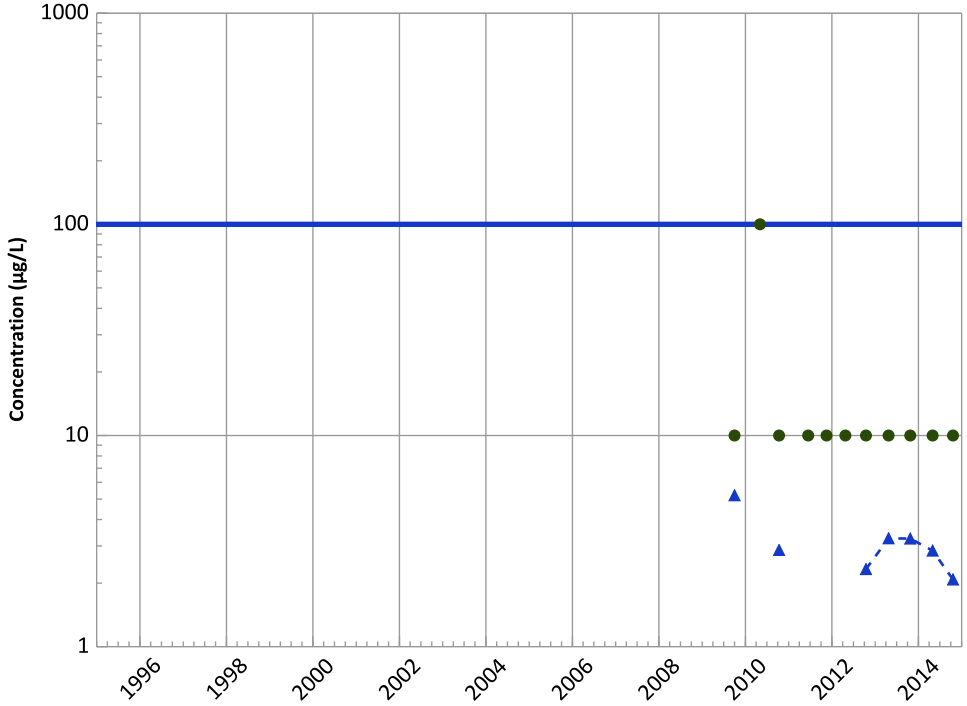


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chromium, Total Trend



Concentration Trend

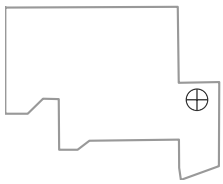
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

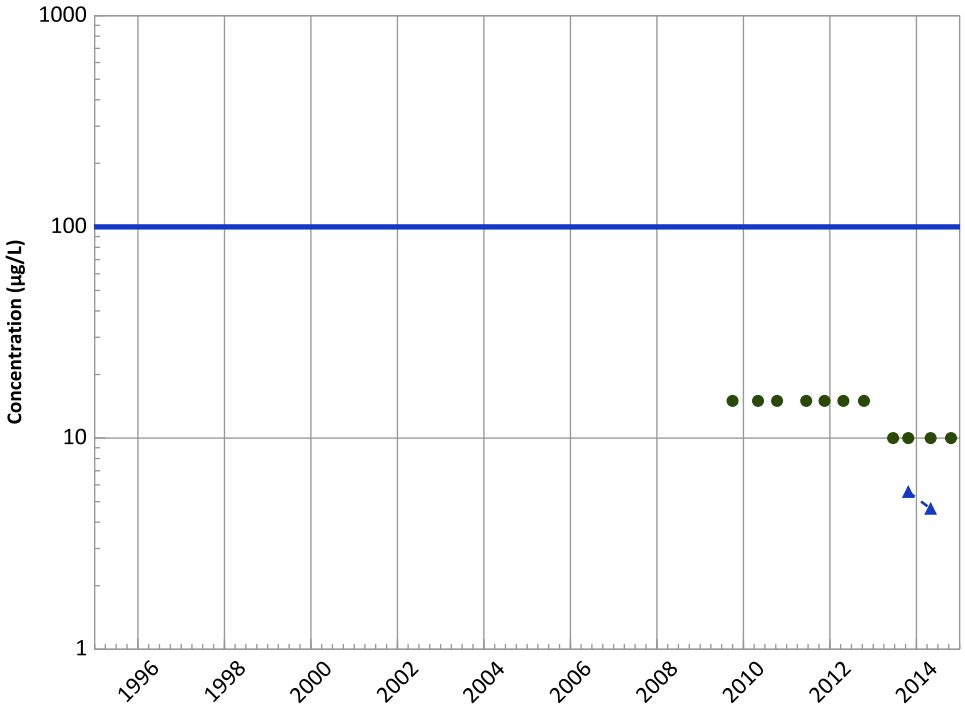
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

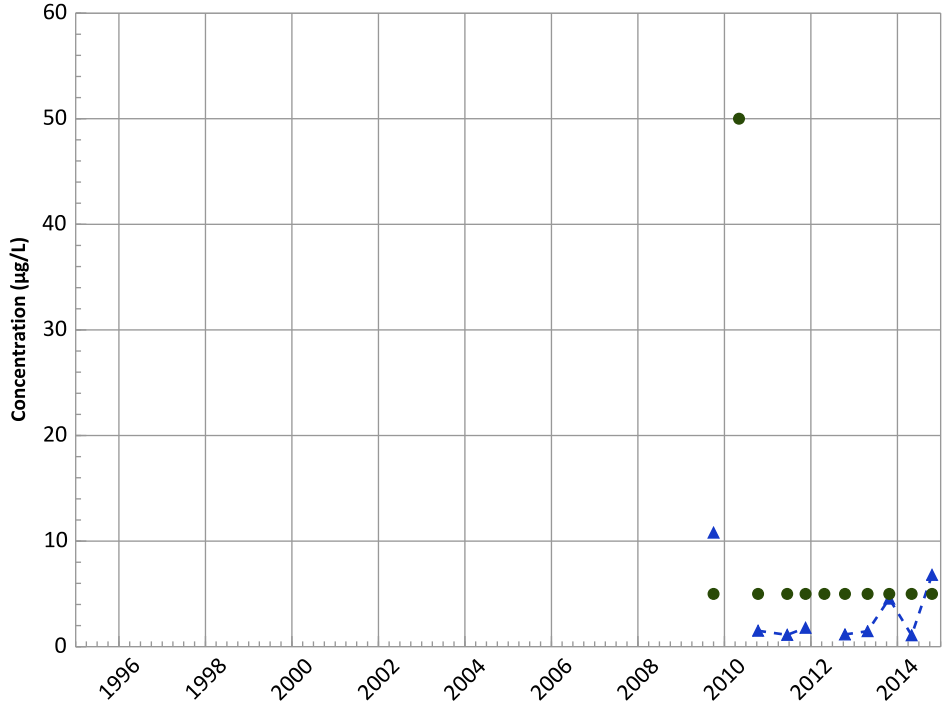


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

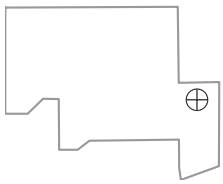
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

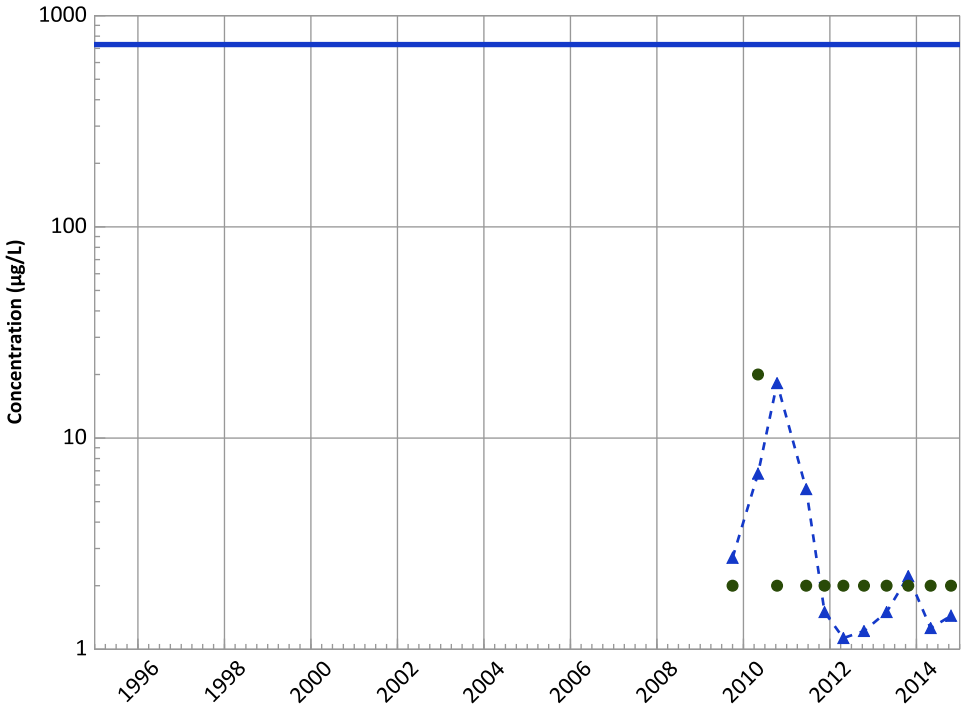
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

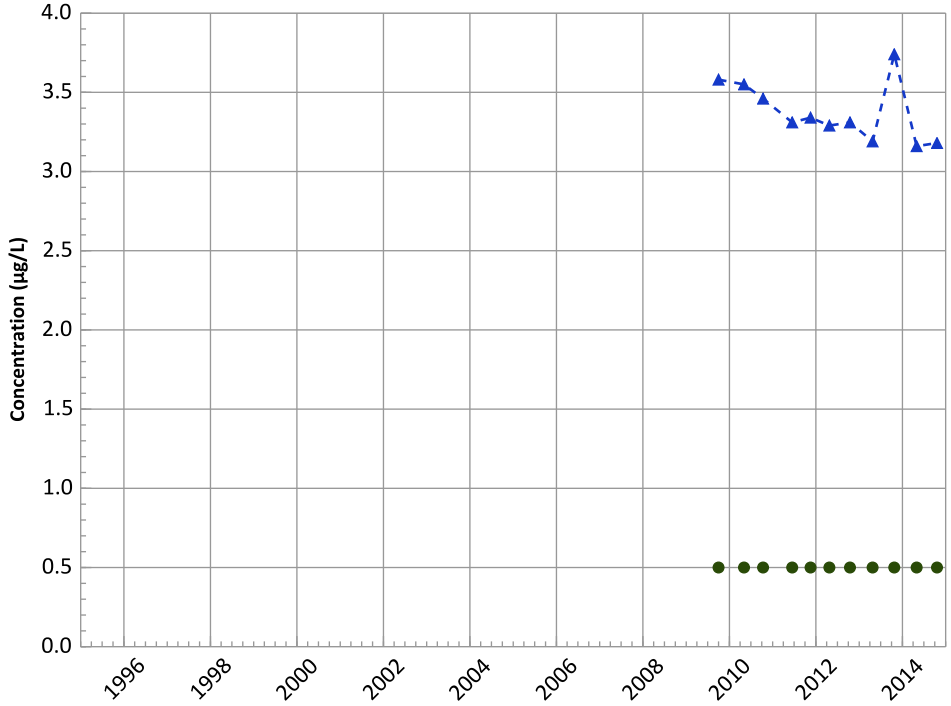


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Molybdenum Trend



Concentration Trend

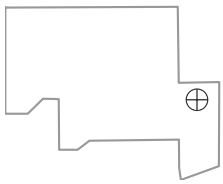
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

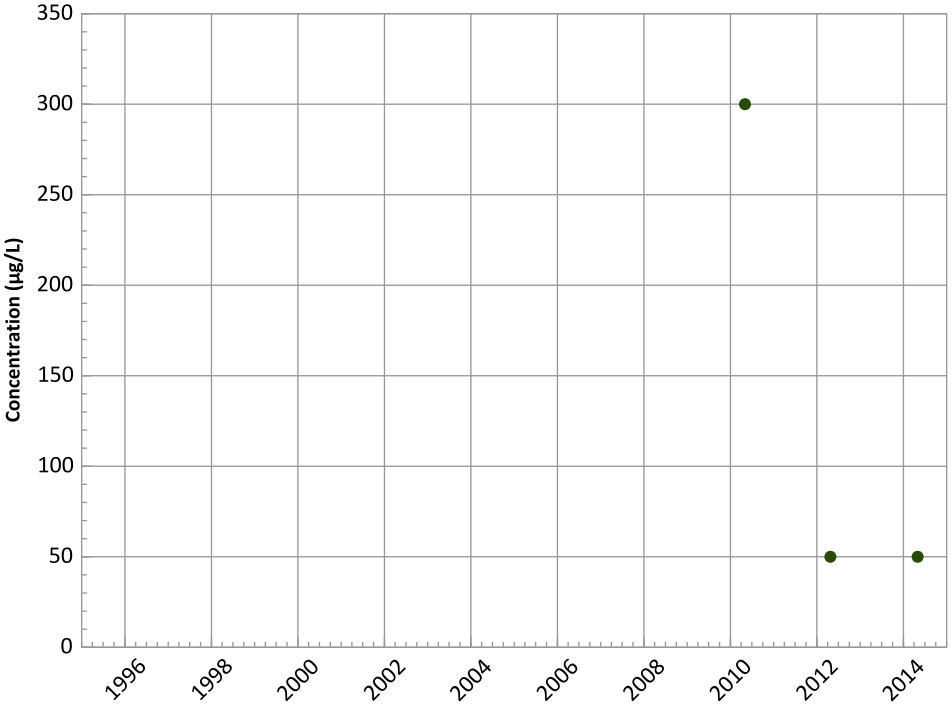
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

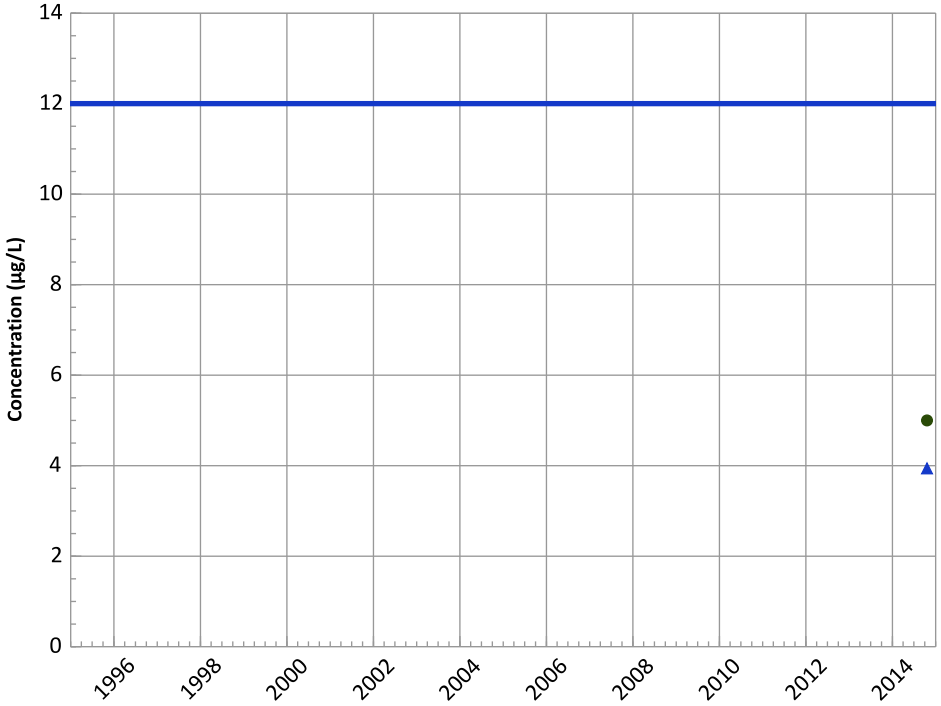


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Arsenic Trend



Concentration Trend

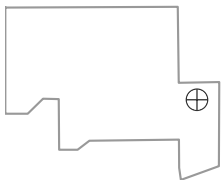
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

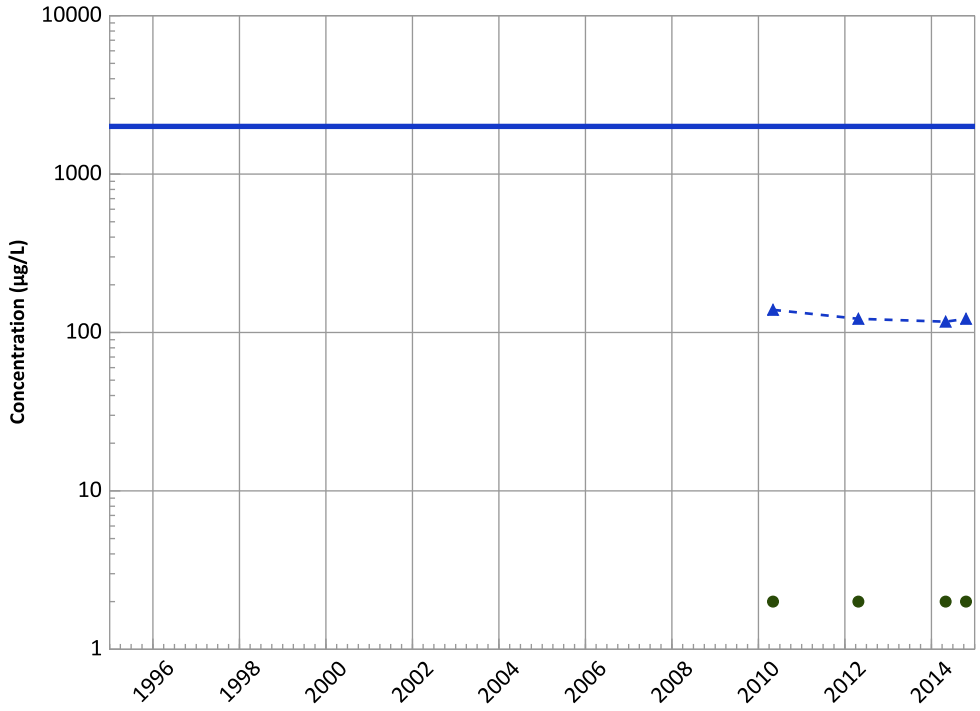
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

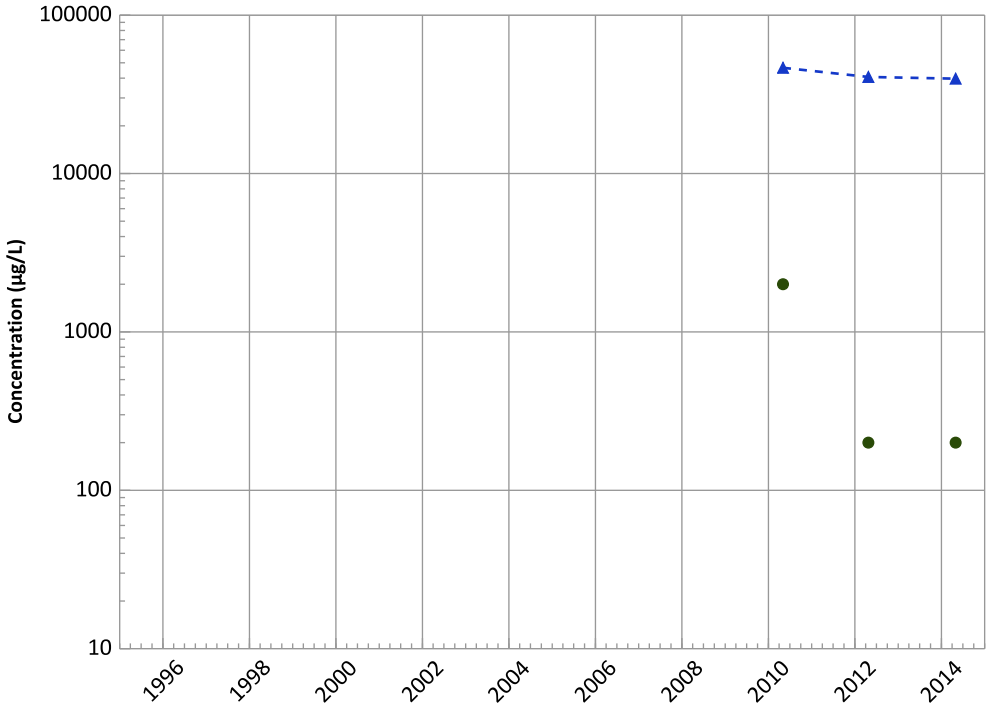


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Calcium Trend



Concentration Trend

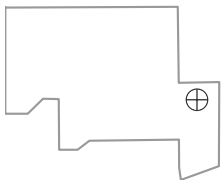
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

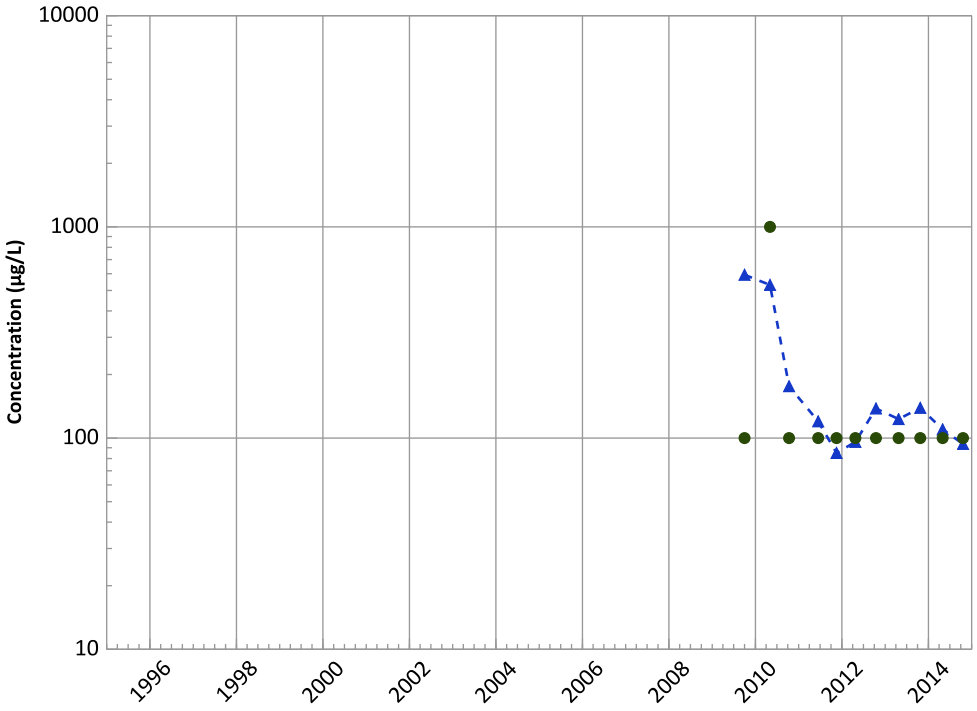
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

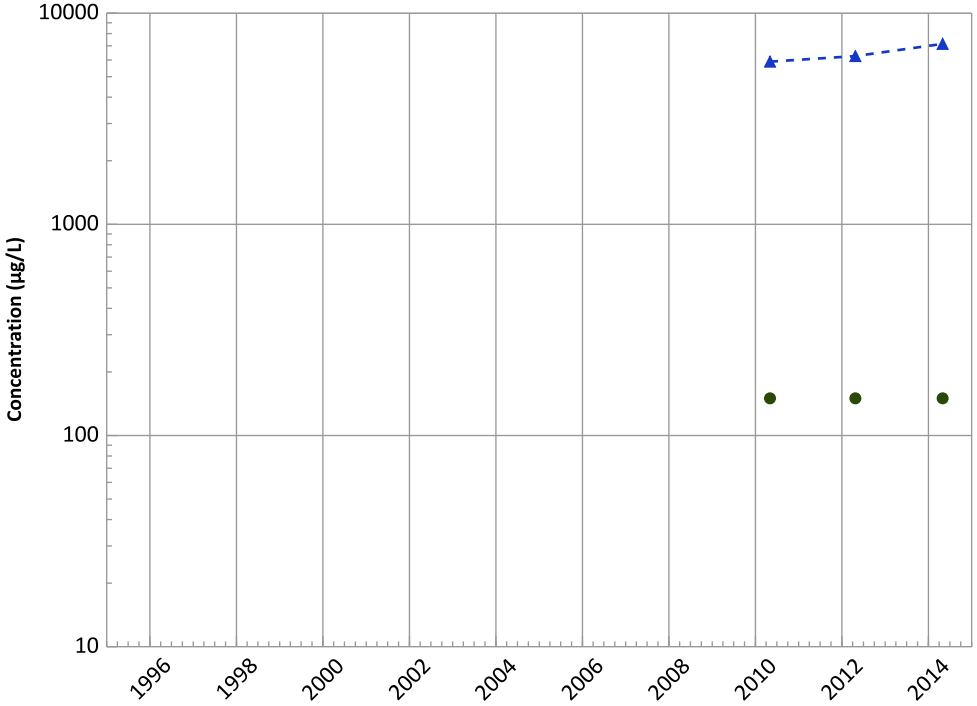


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Potassium Trend



Concentration Trend

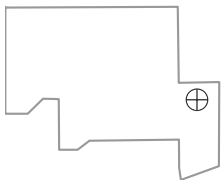
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

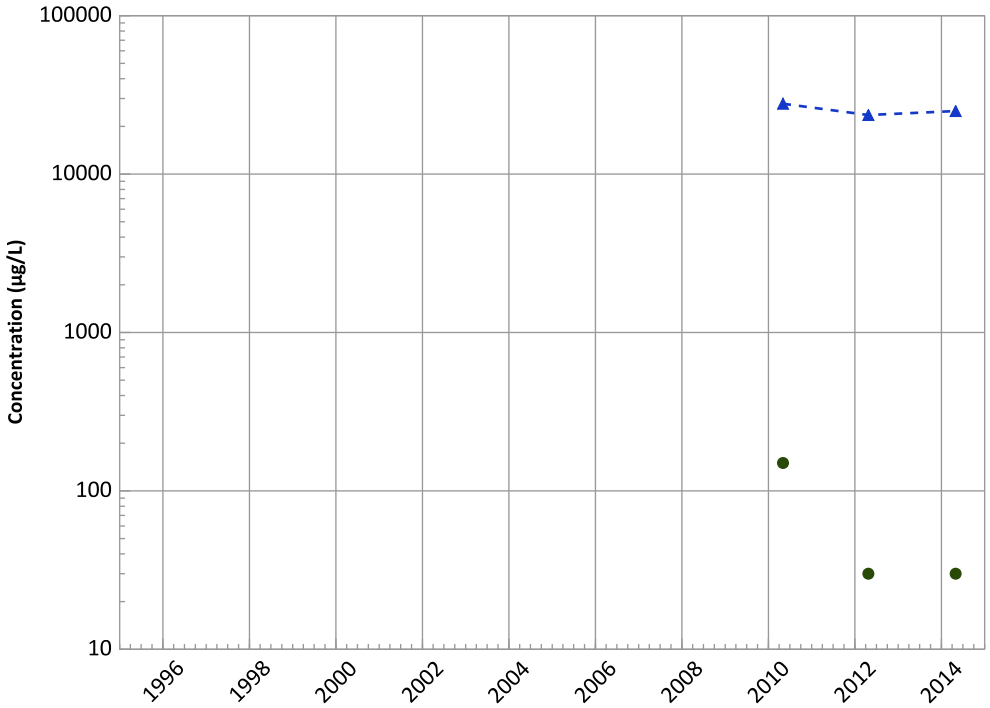
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

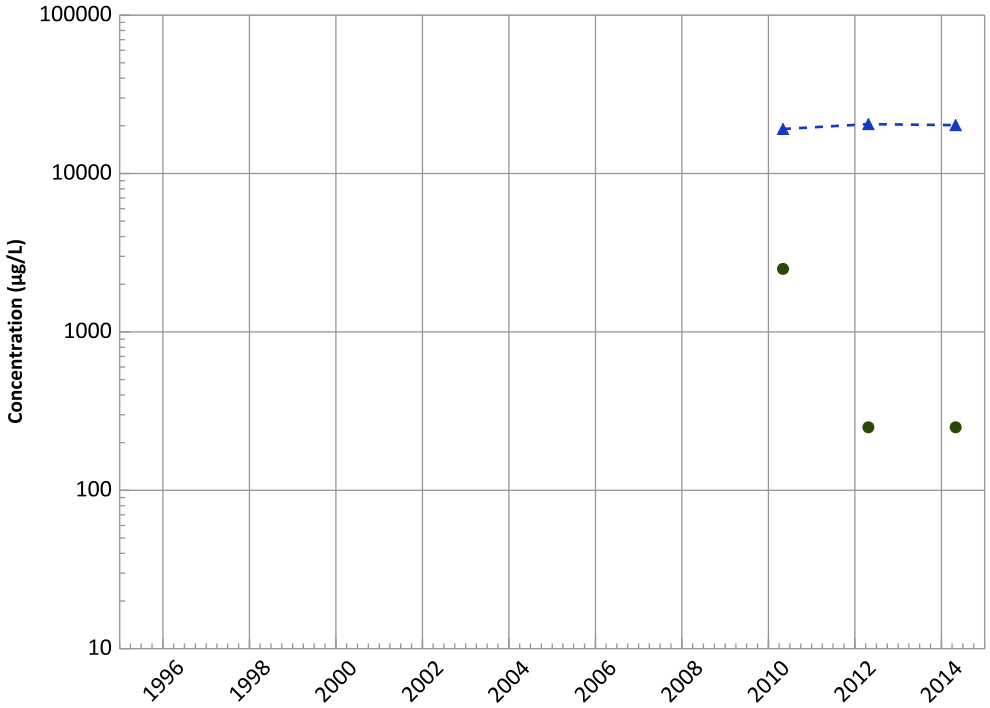


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Sodium Trend



Concentration Trend

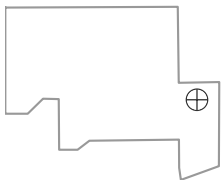
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

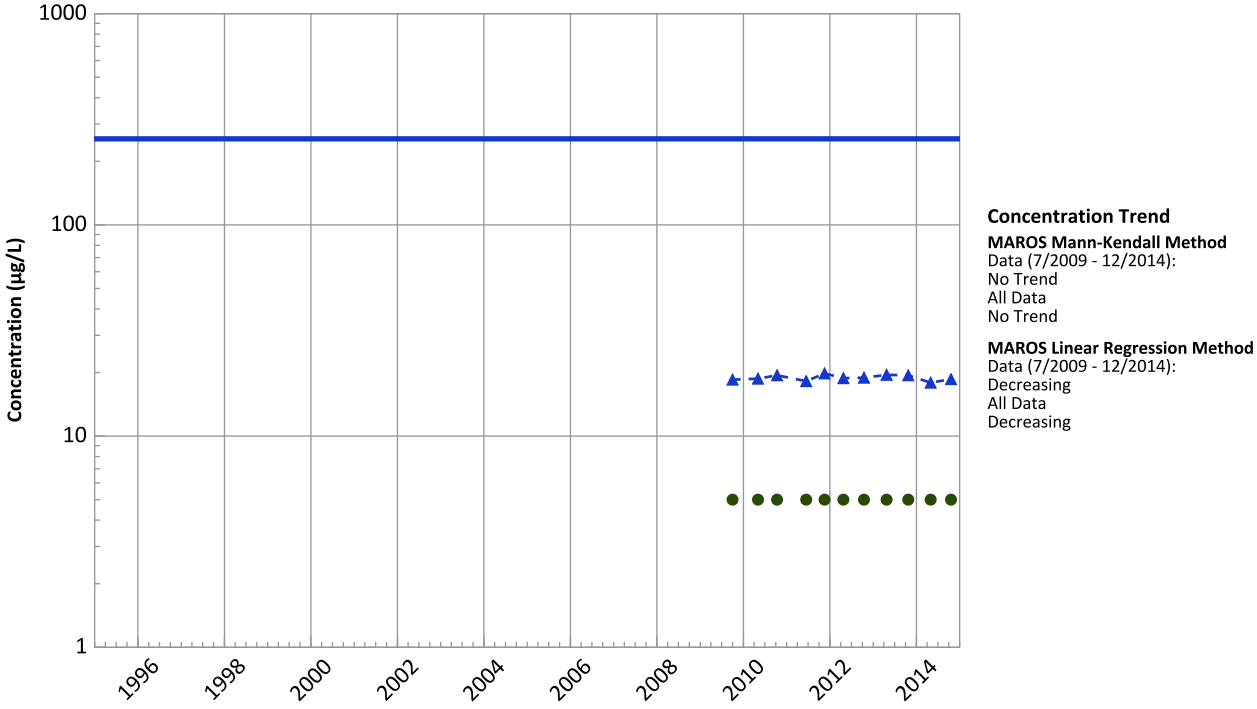
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1138 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

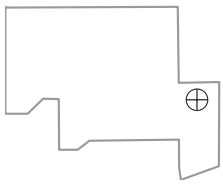
Vanadium Trend



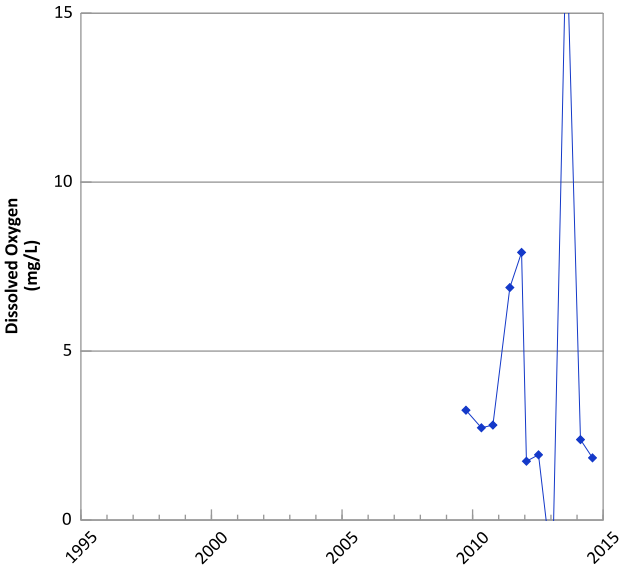
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/01/2009 to 10/20/2014
Analysis Date: 03/19/2015

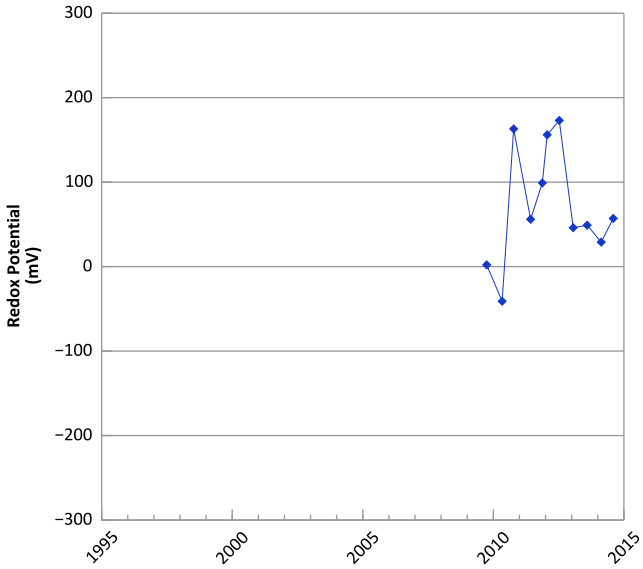
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

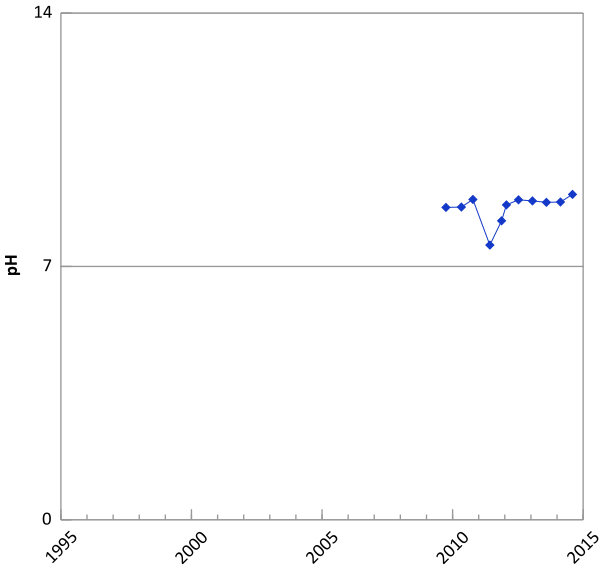
Well Location

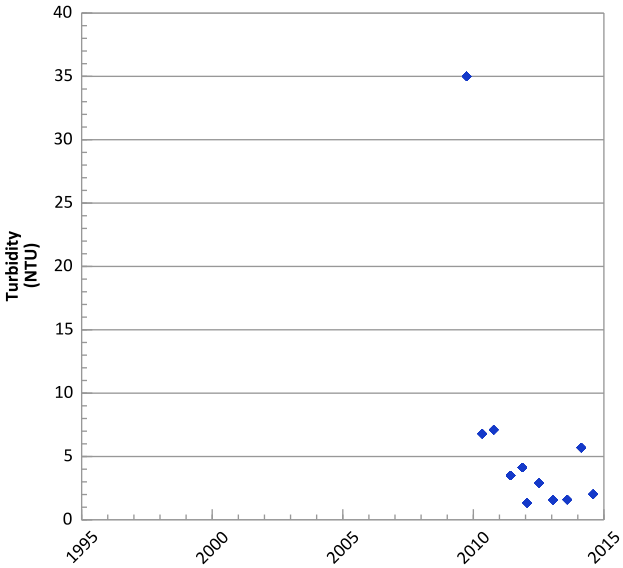


PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



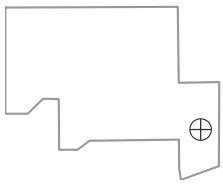






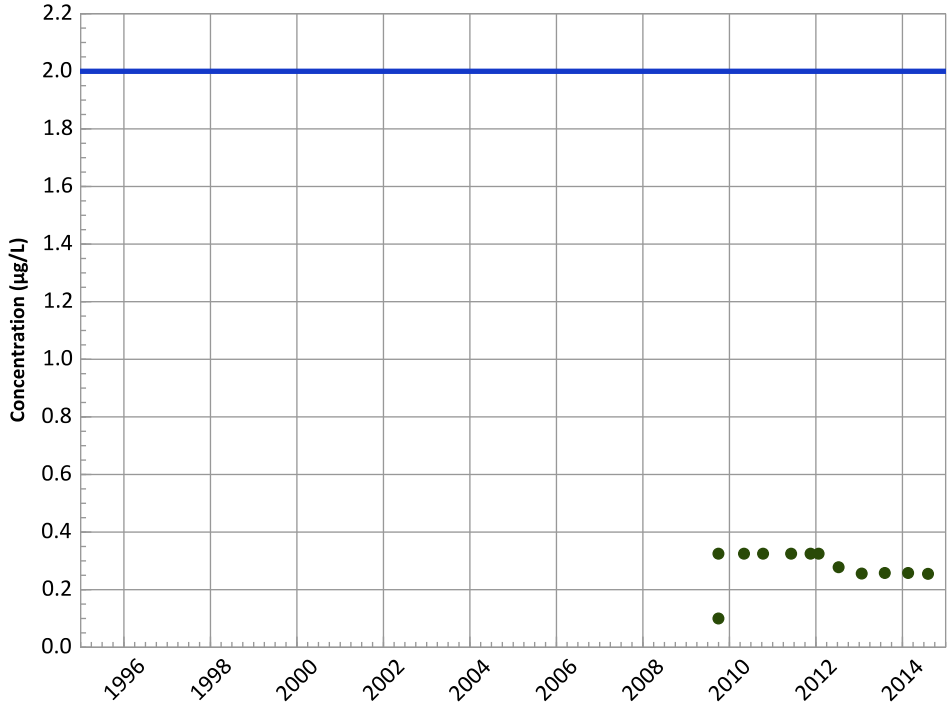
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

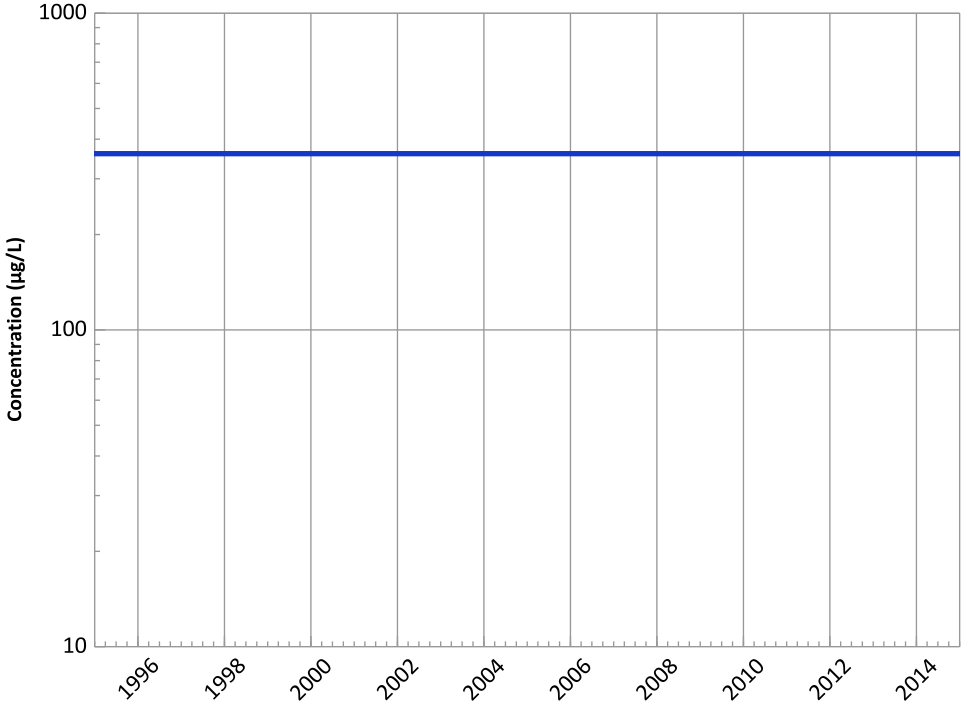


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

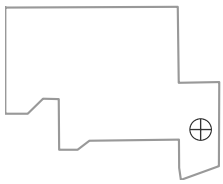
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

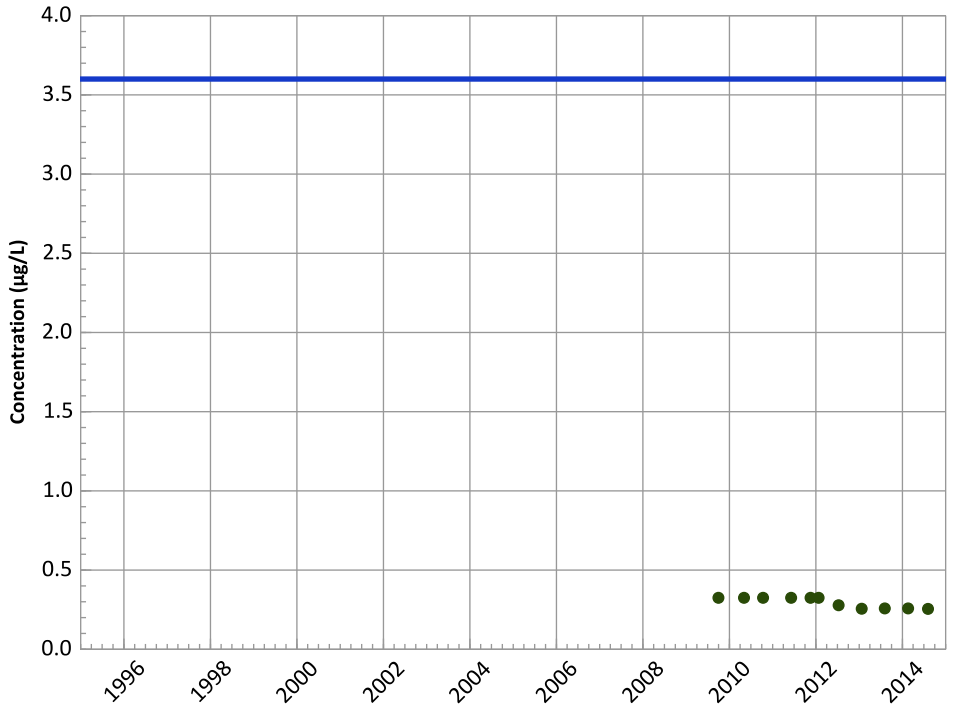
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

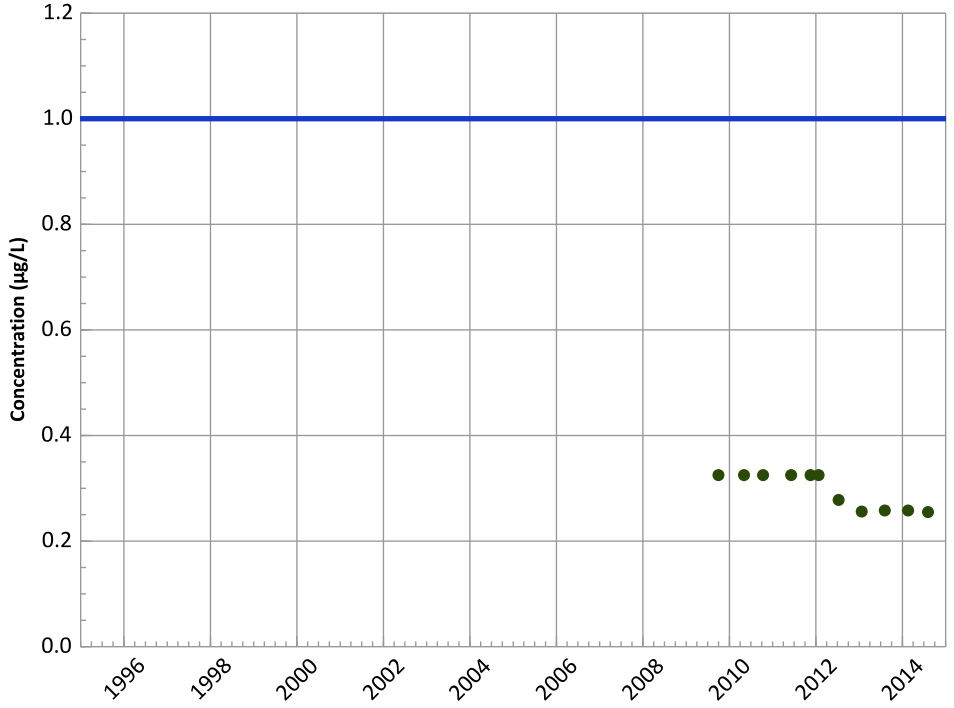


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

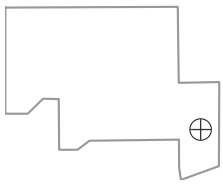
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

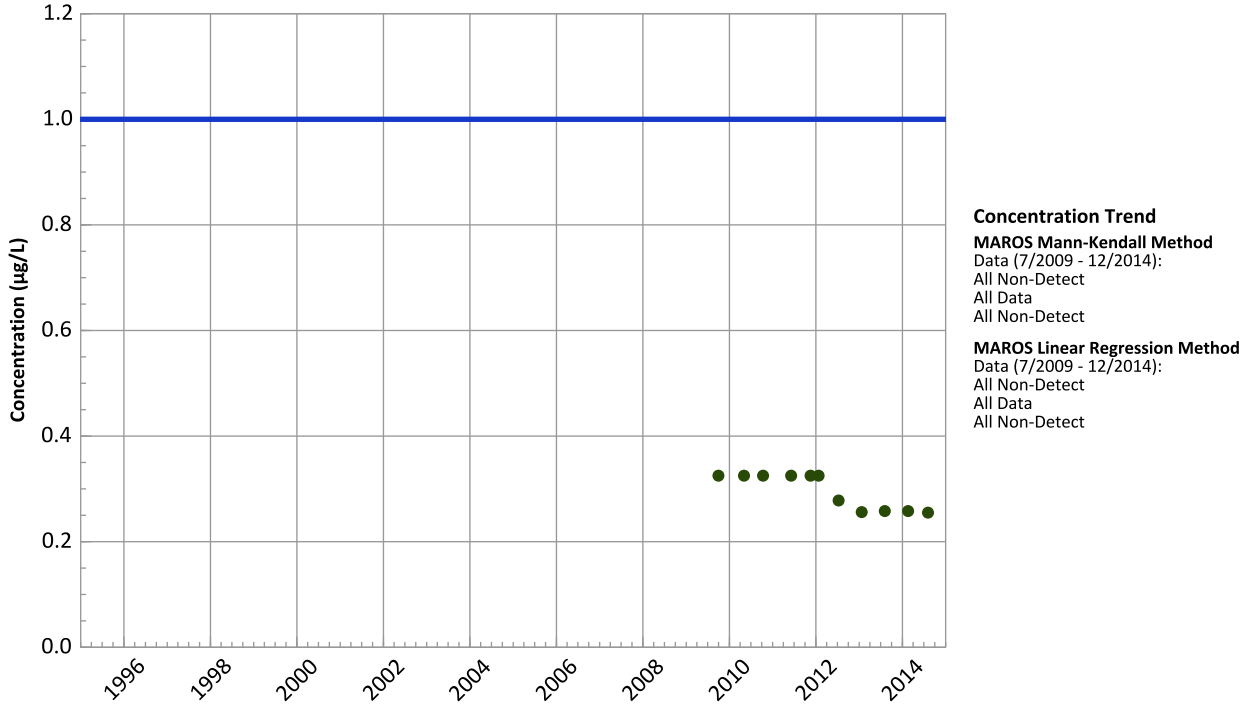
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location

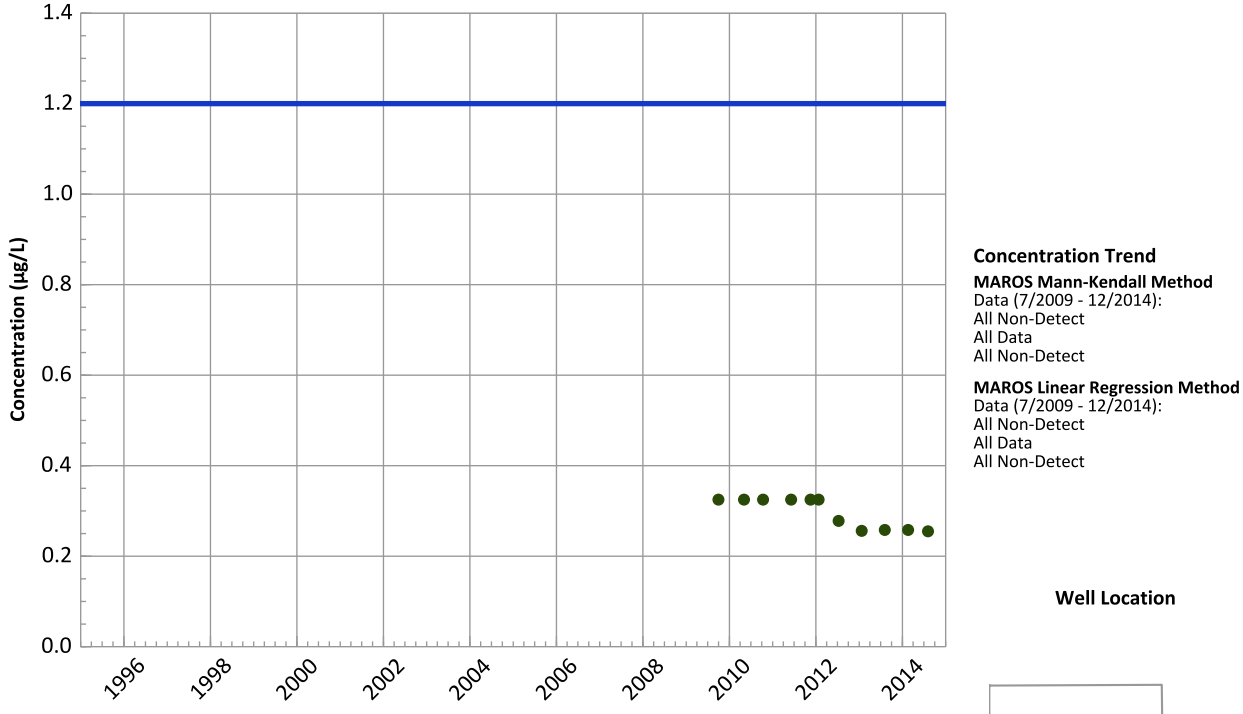


PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend



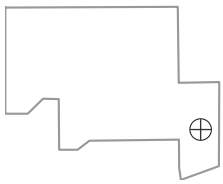
2-Amino-4,6-Dinitrotoluene Trend



Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

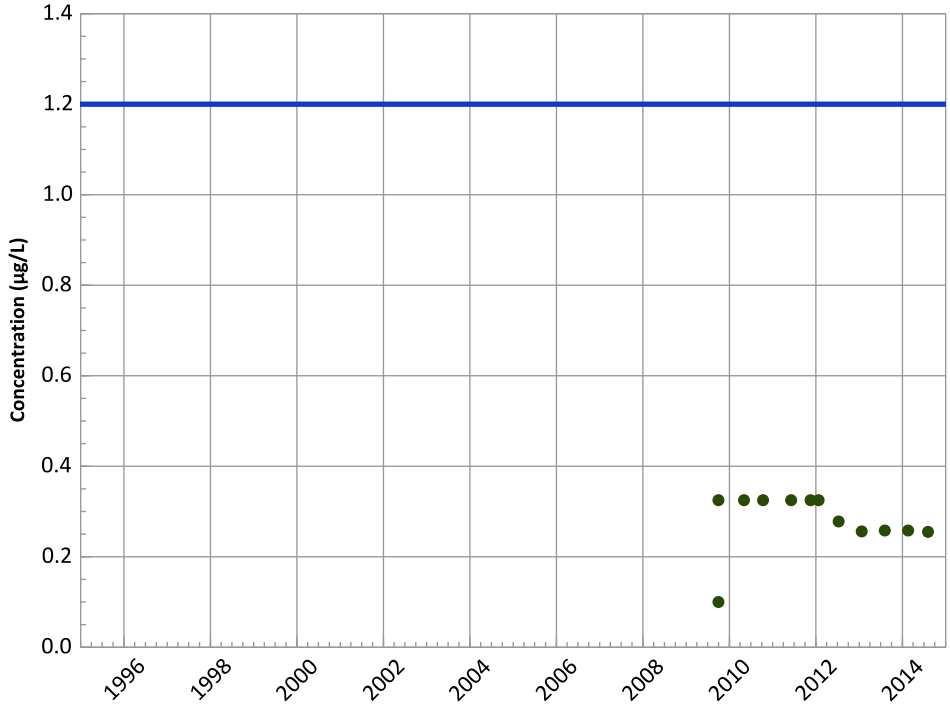
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

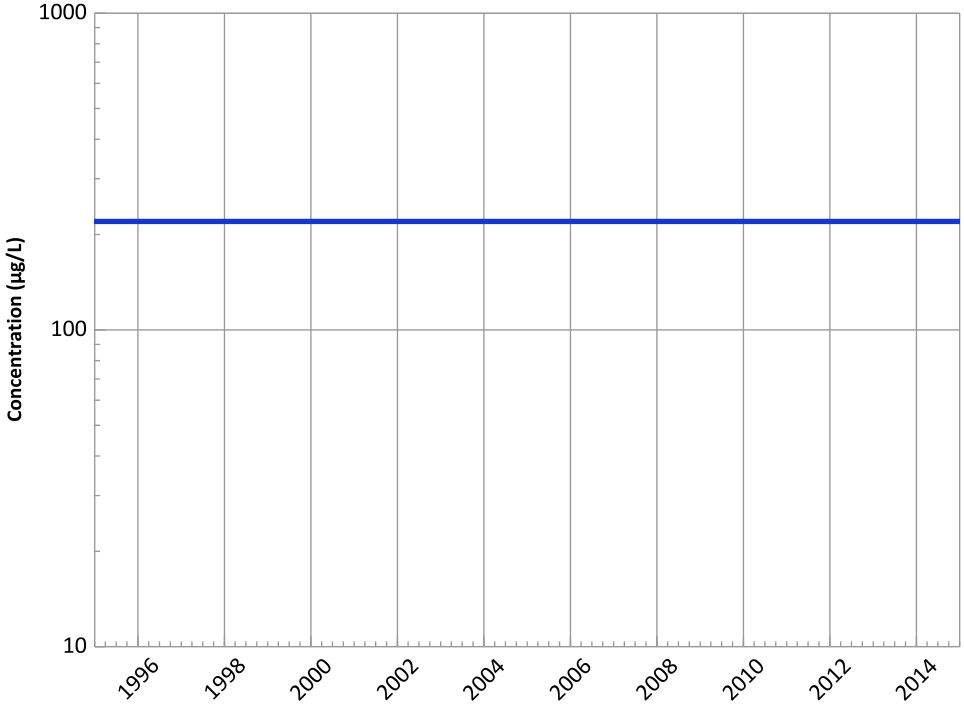


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

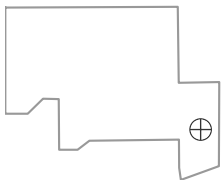
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

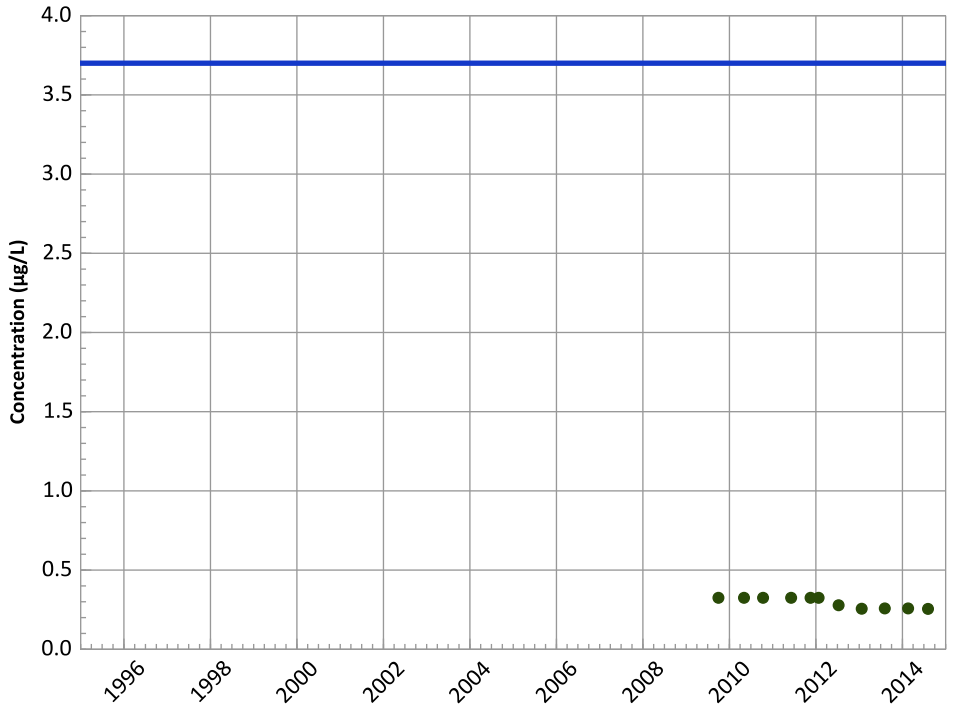
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

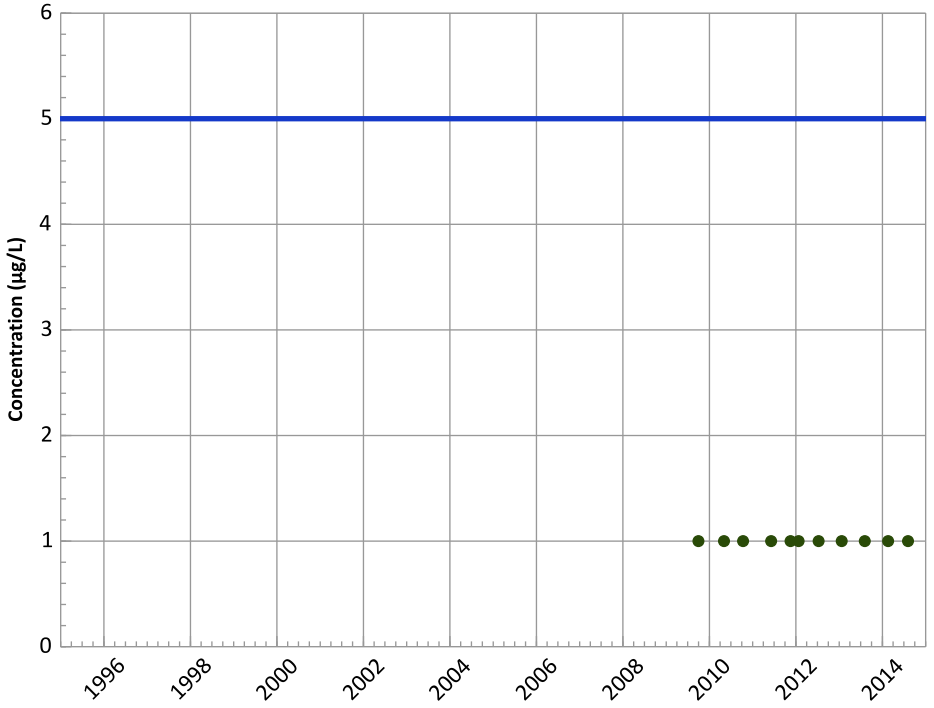


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

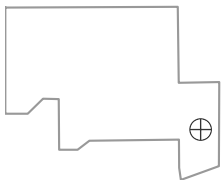
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

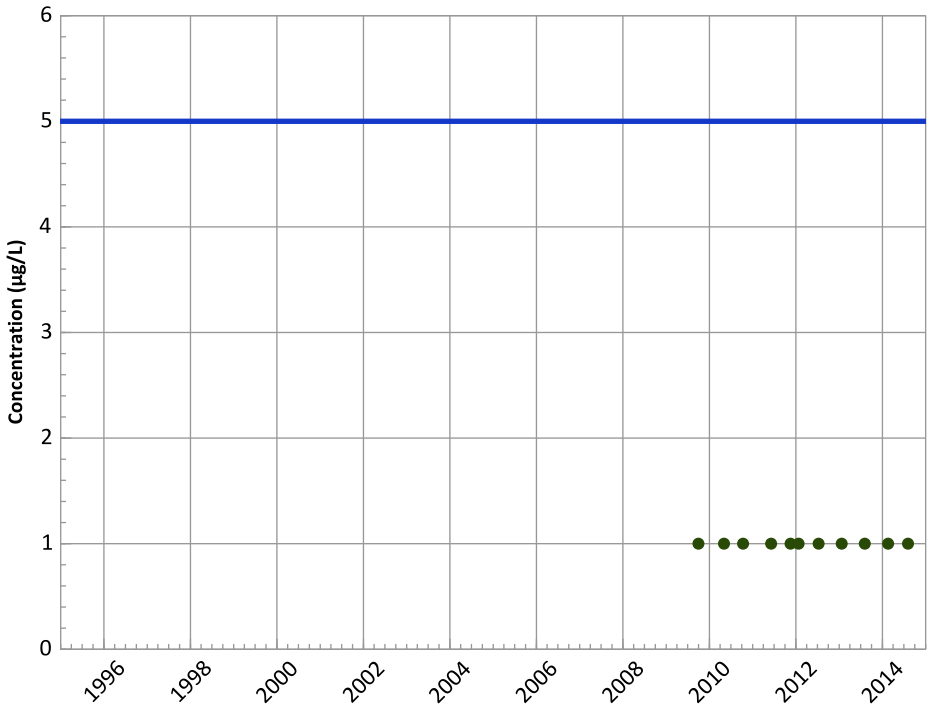
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

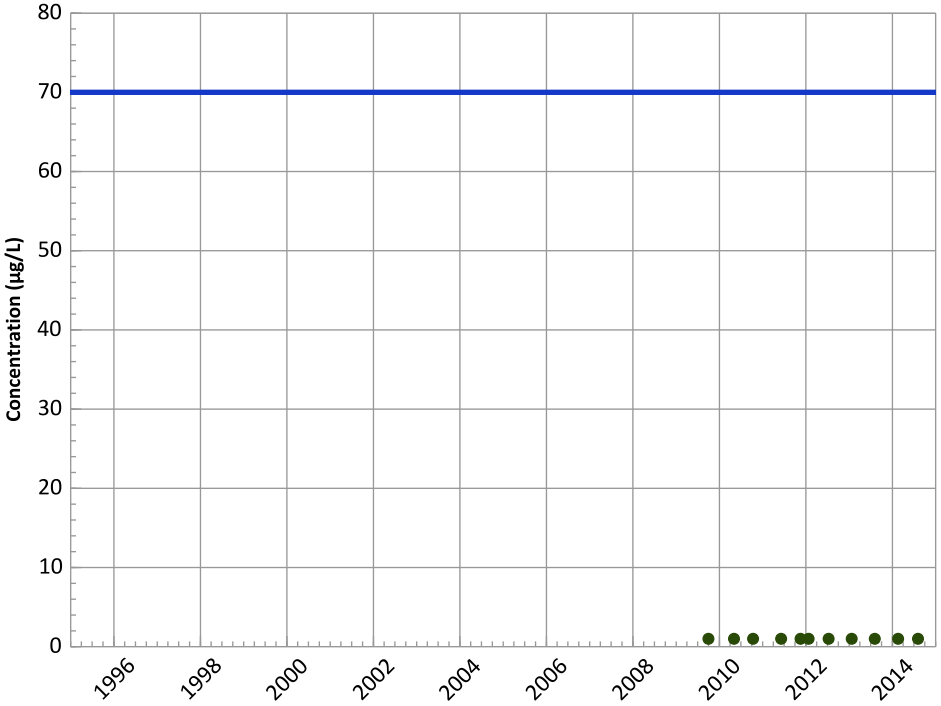


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

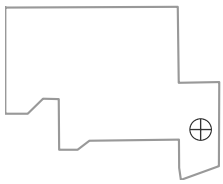
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

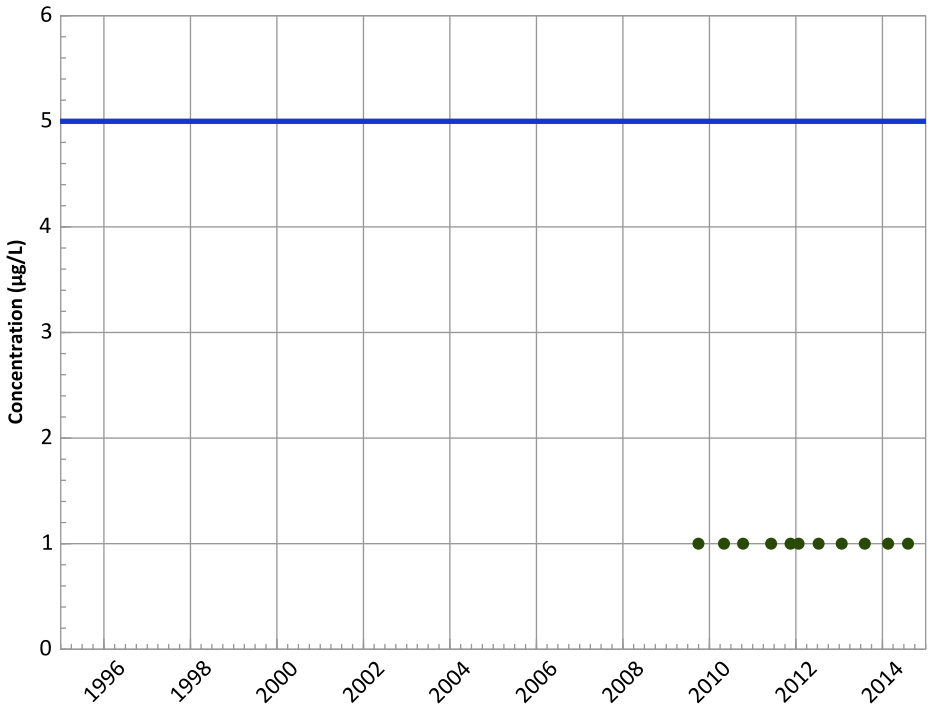
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

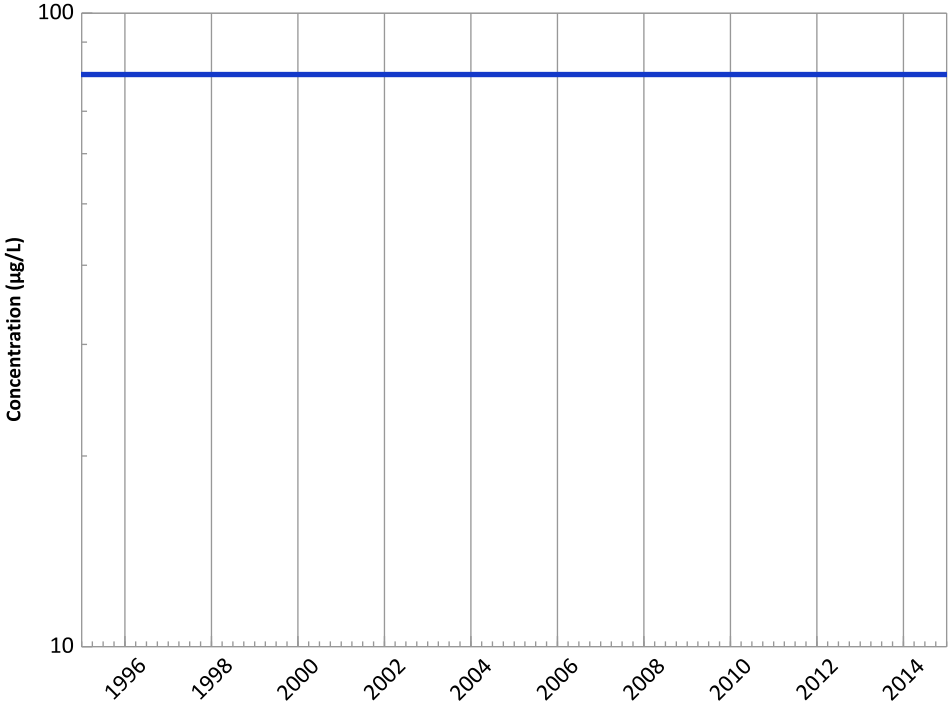


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

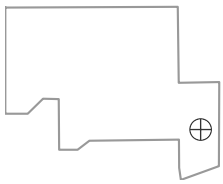
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

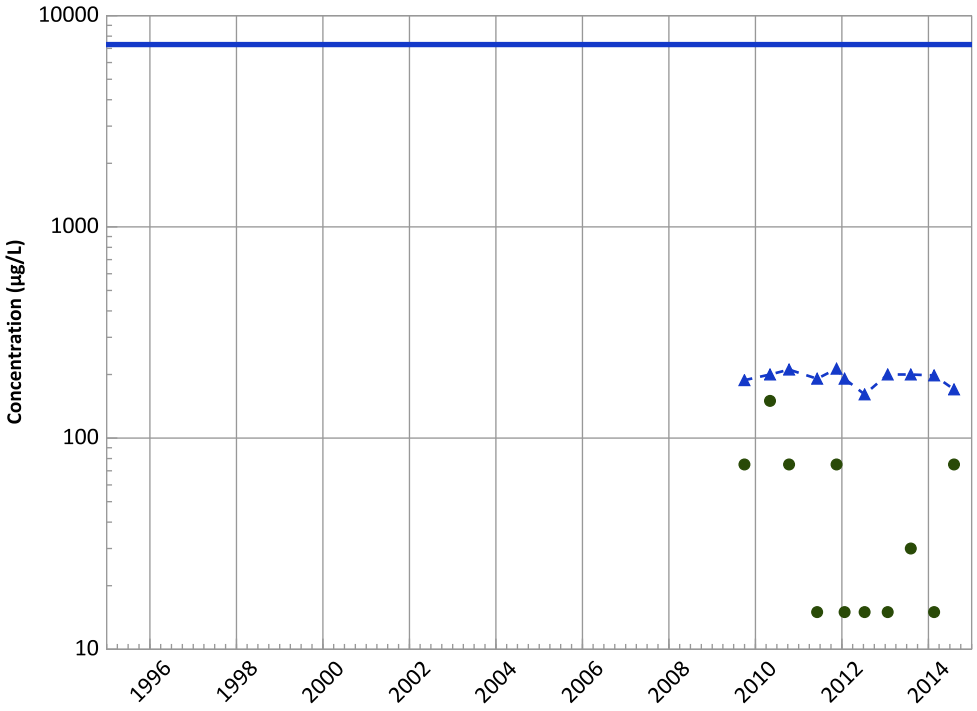
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

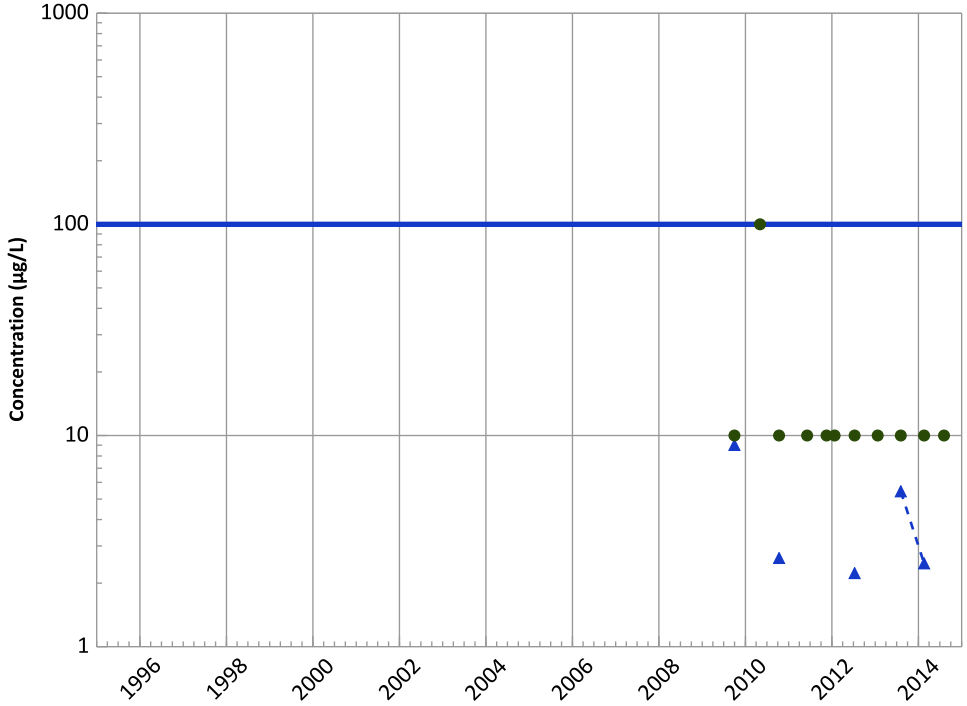


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Chromium, Total Trend



Concentration Trend

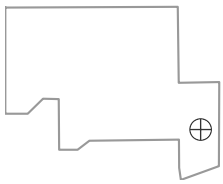
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

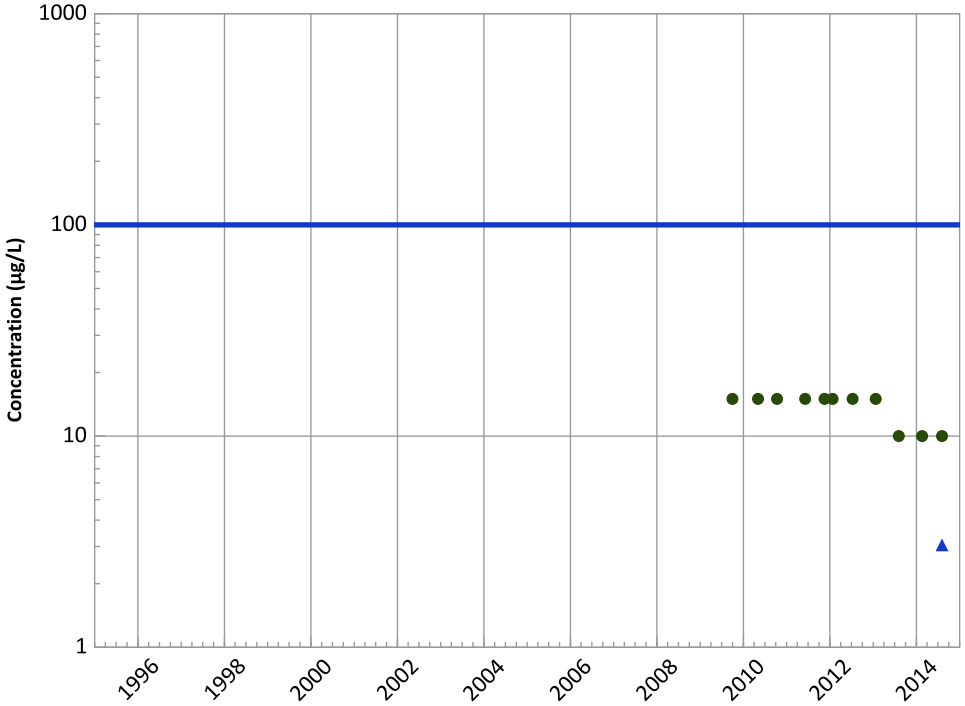
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

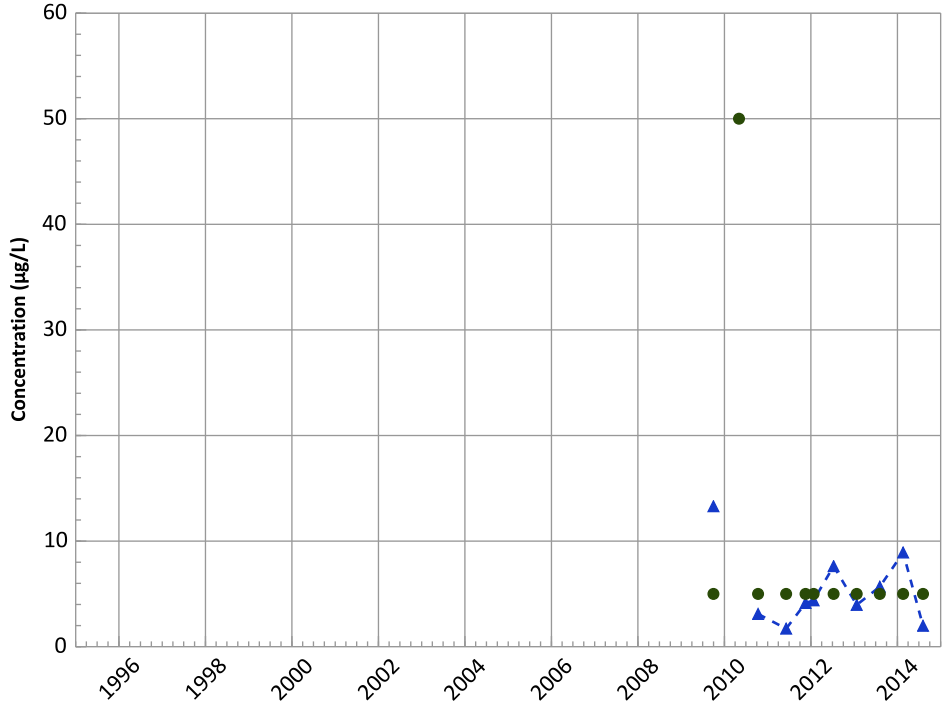


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

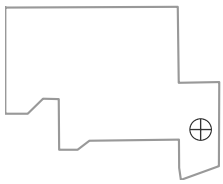
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

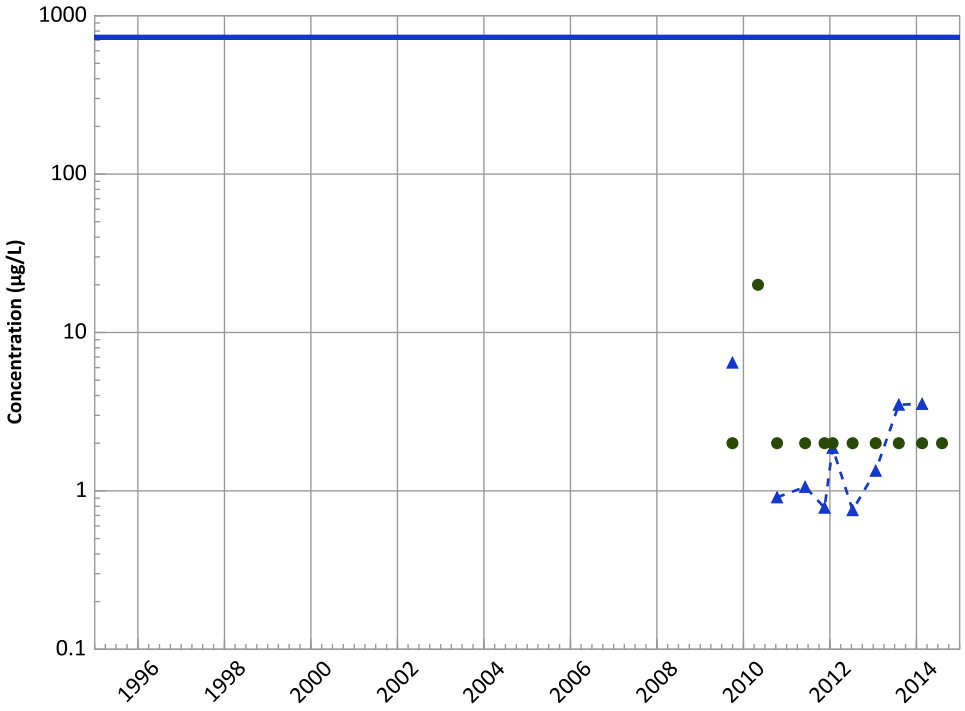
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

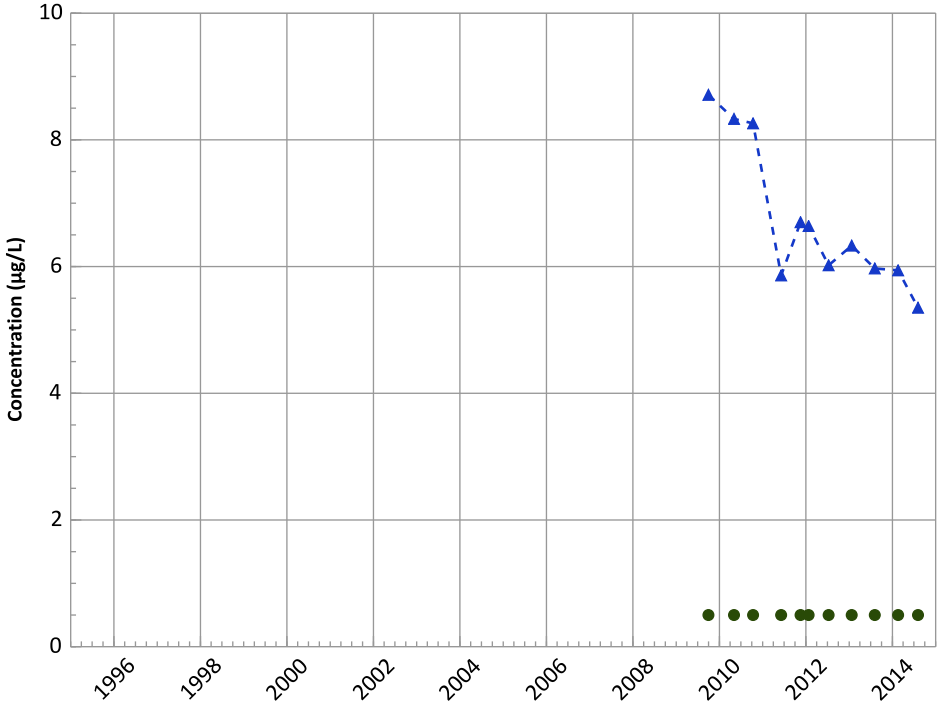


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Molybdenum Trend



Concentration Trend

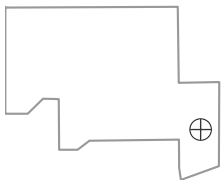
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

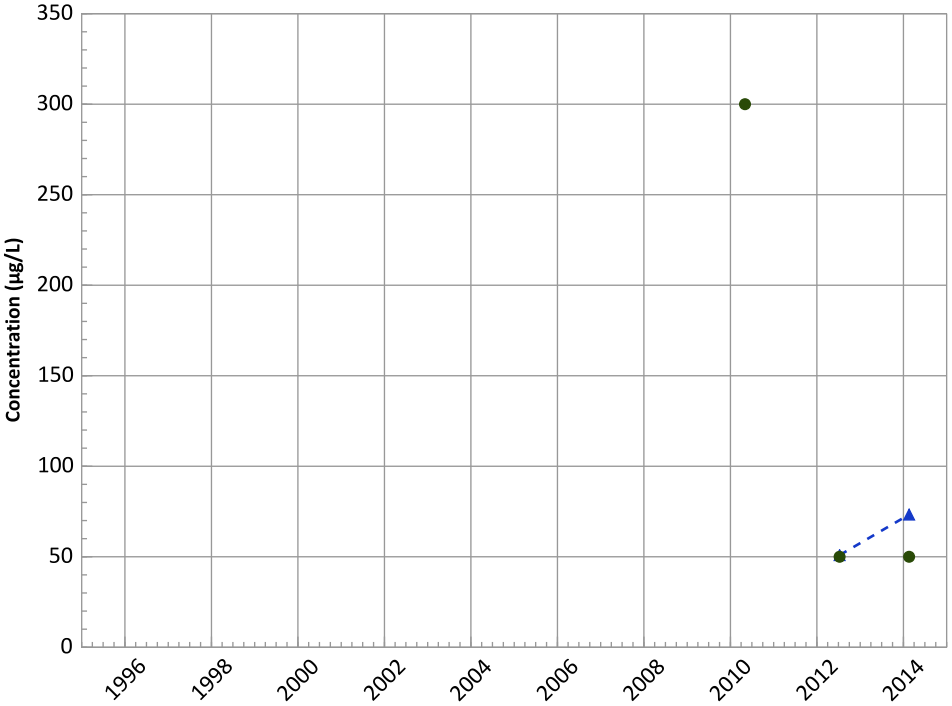
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

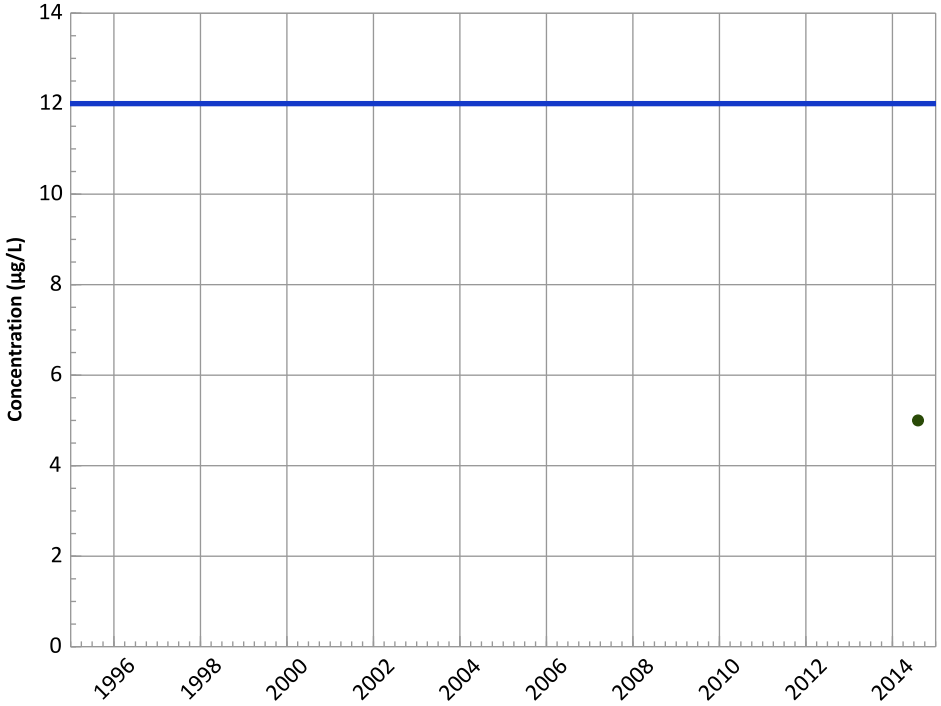


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Arsenic Trend



Concentration Trend

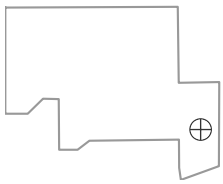
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

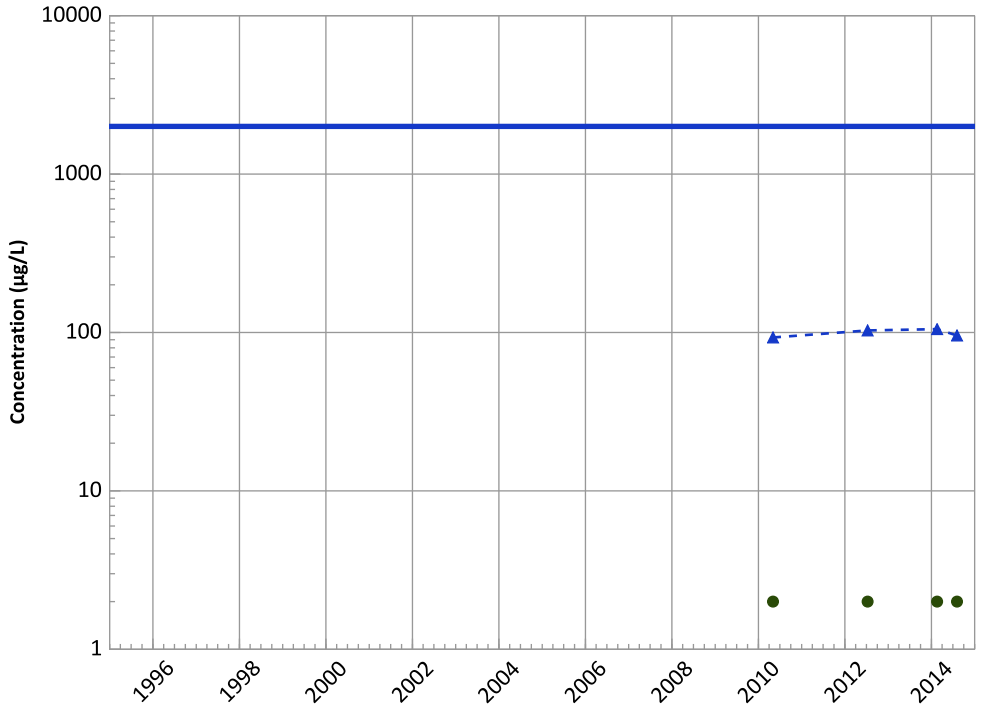
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

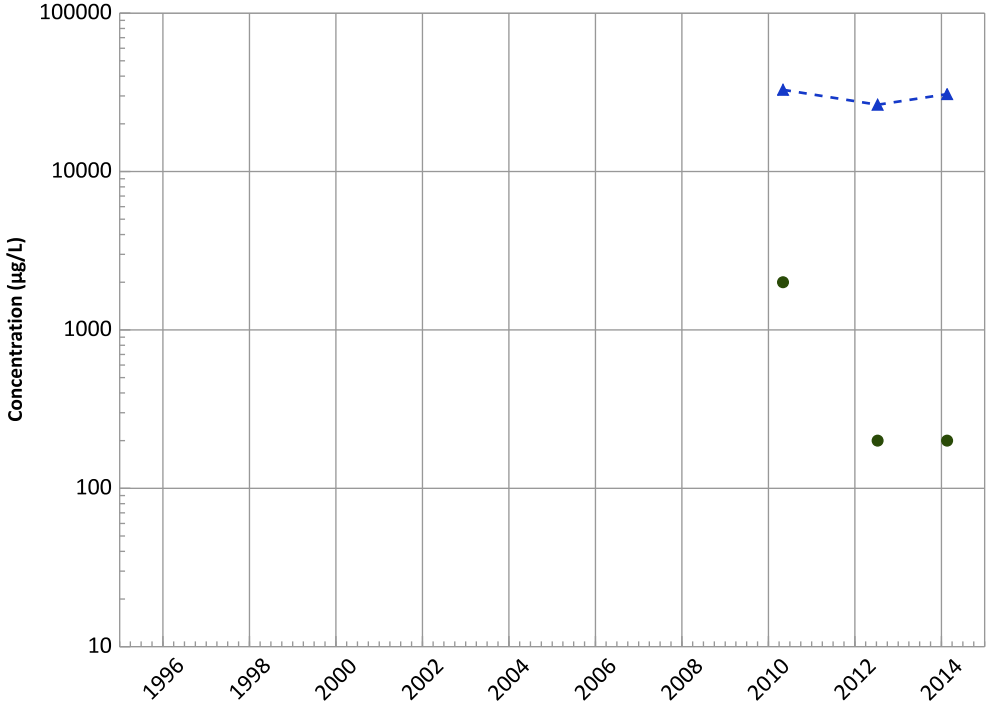


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Calcium Trend



Concentration Trend

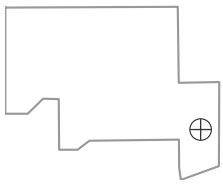
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

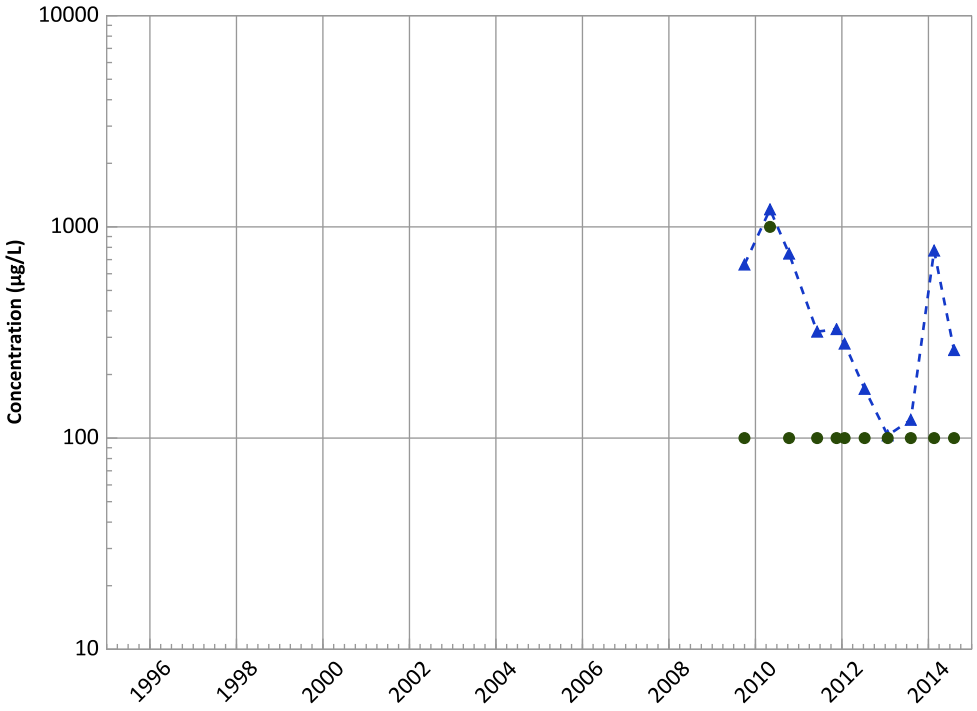
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

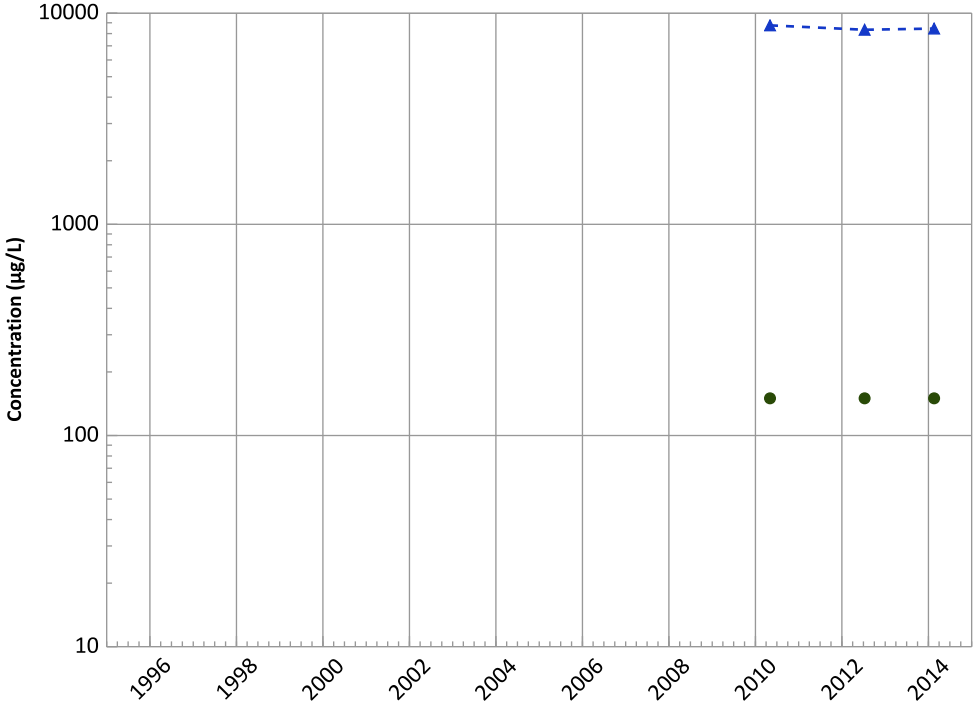


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Potassium Trend



Concentration Trend

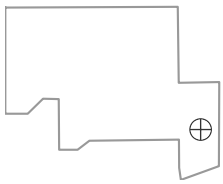
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

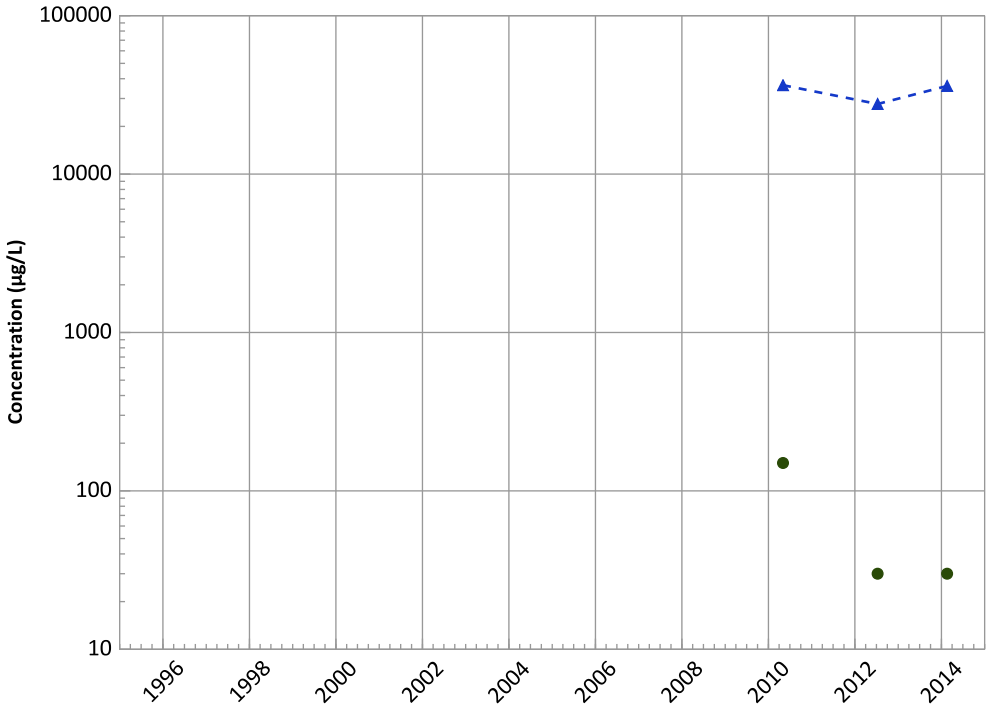
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

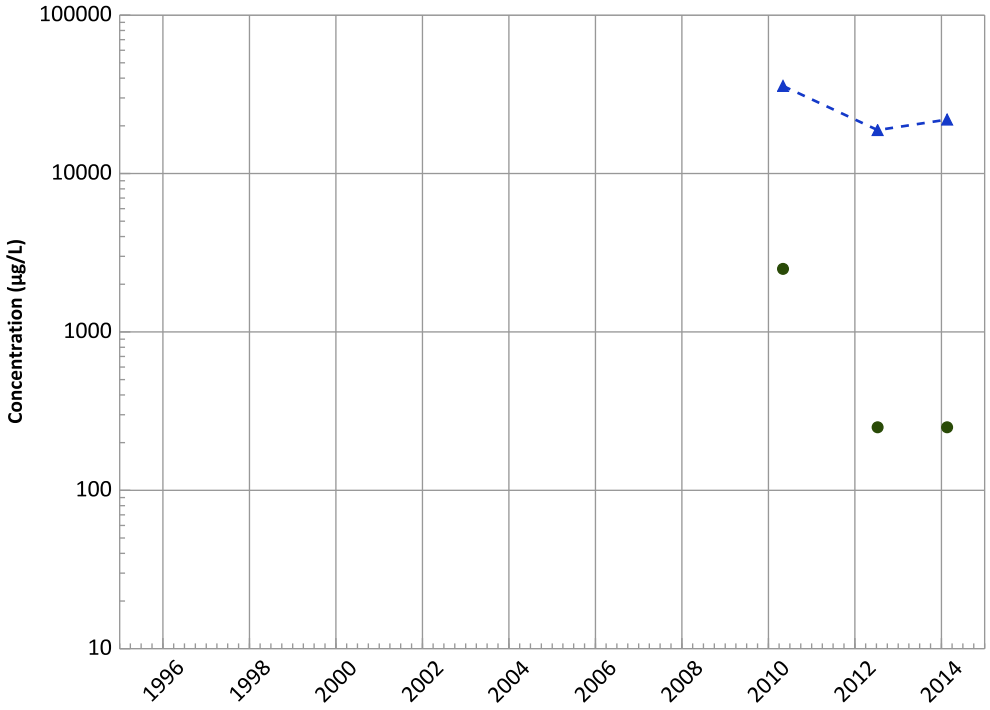


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Sodium Trend



Concentration Trend

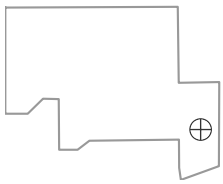
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

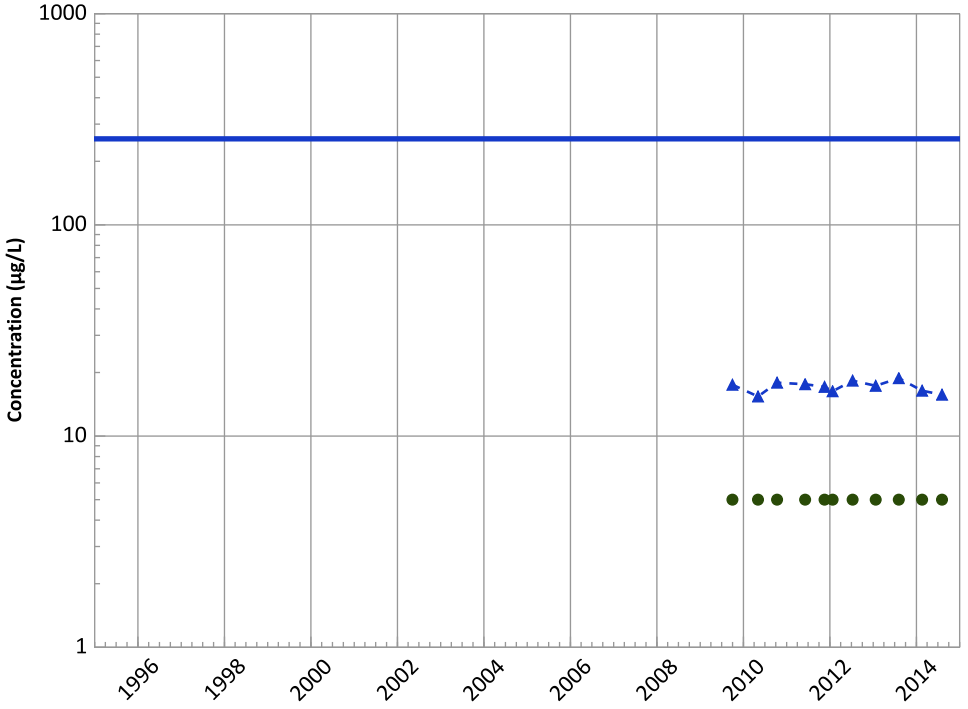
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1139 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Vanadium Trend



Concentration Trend

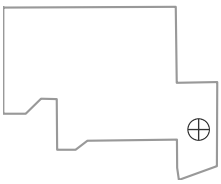
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

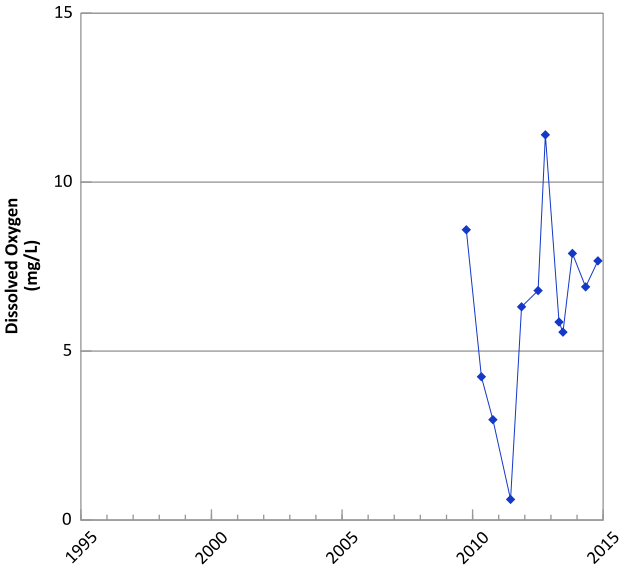
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 09/30/2009 to 08/05/2014
Analysis Date: 03/19/2015

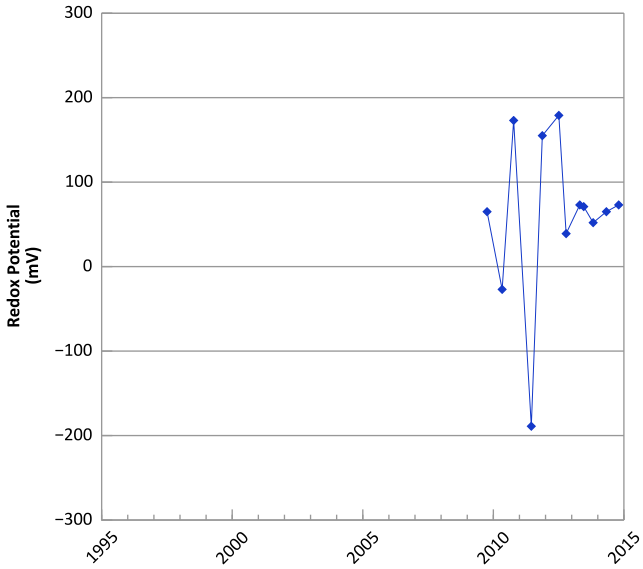
- ▲ Measured Value
- ● Sample Detection Limit
- - - - - Concentration Trend
- ━━━ Groundwater Protection Standard

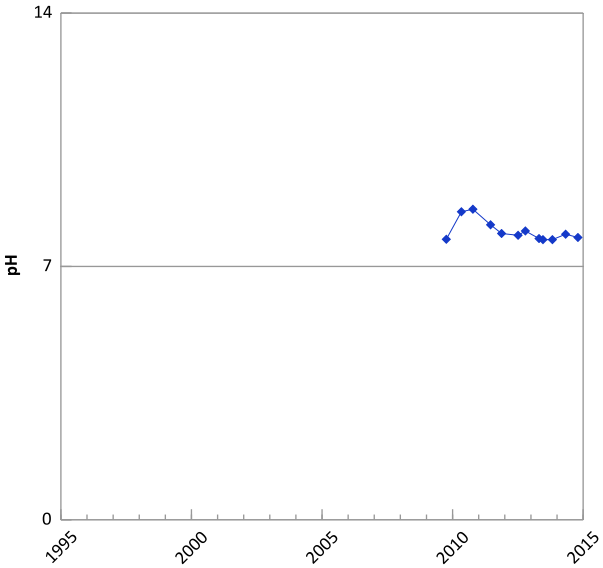
Well Location

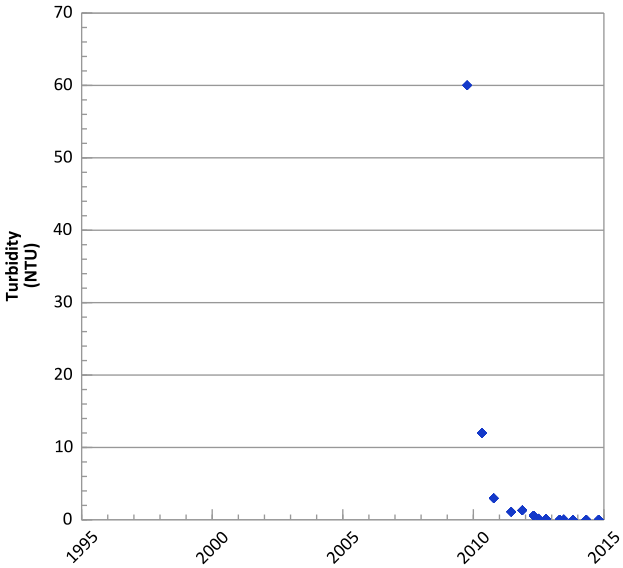


PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



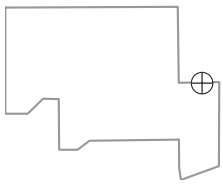






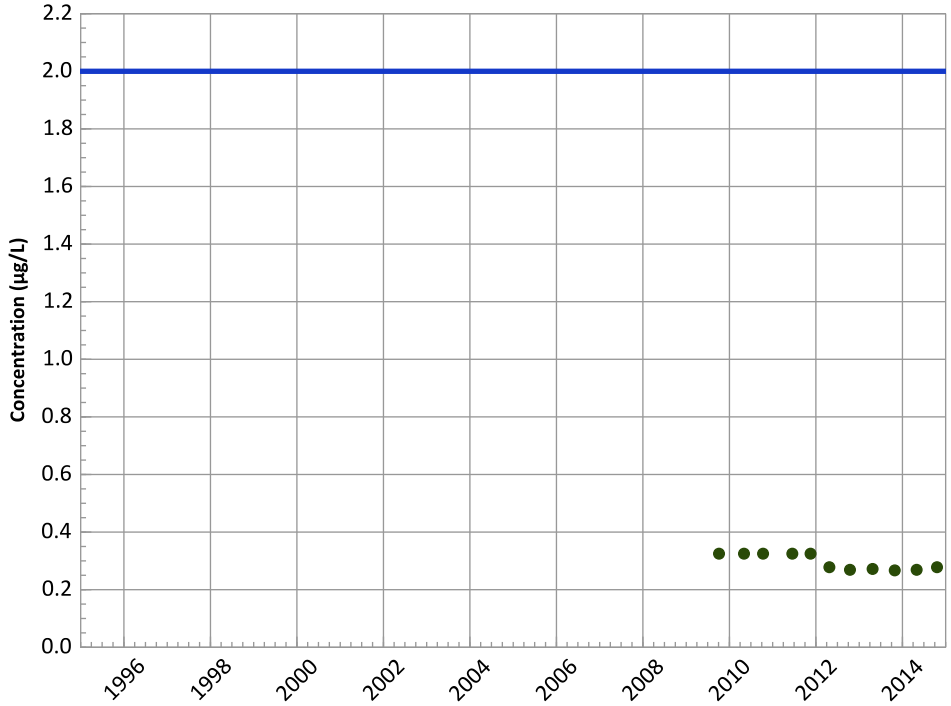
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

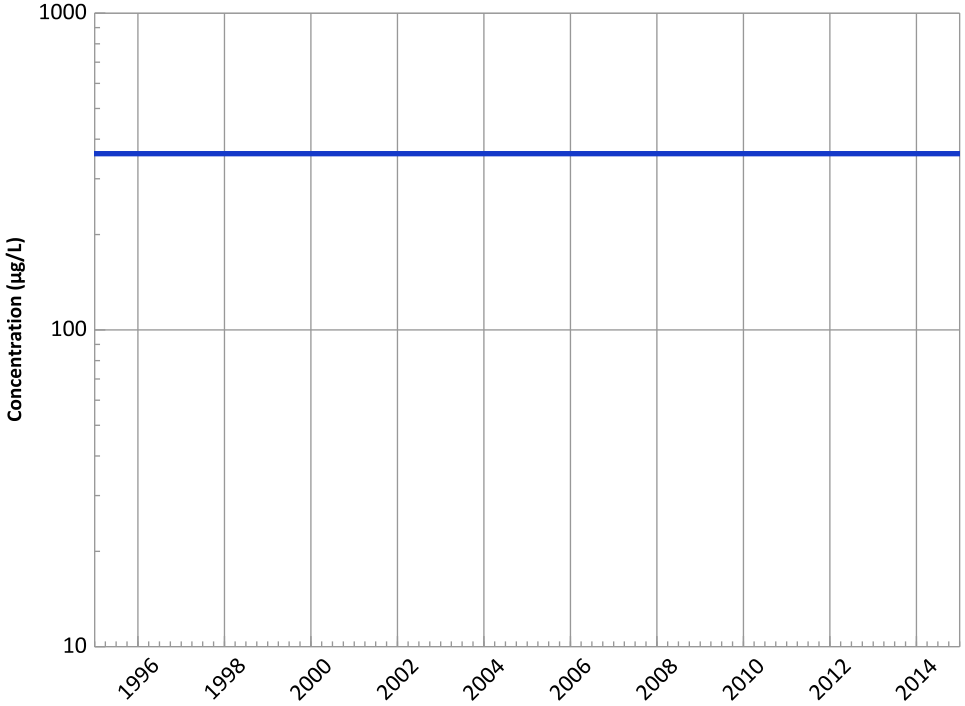


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

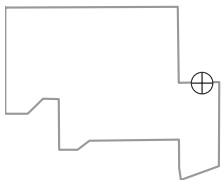
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

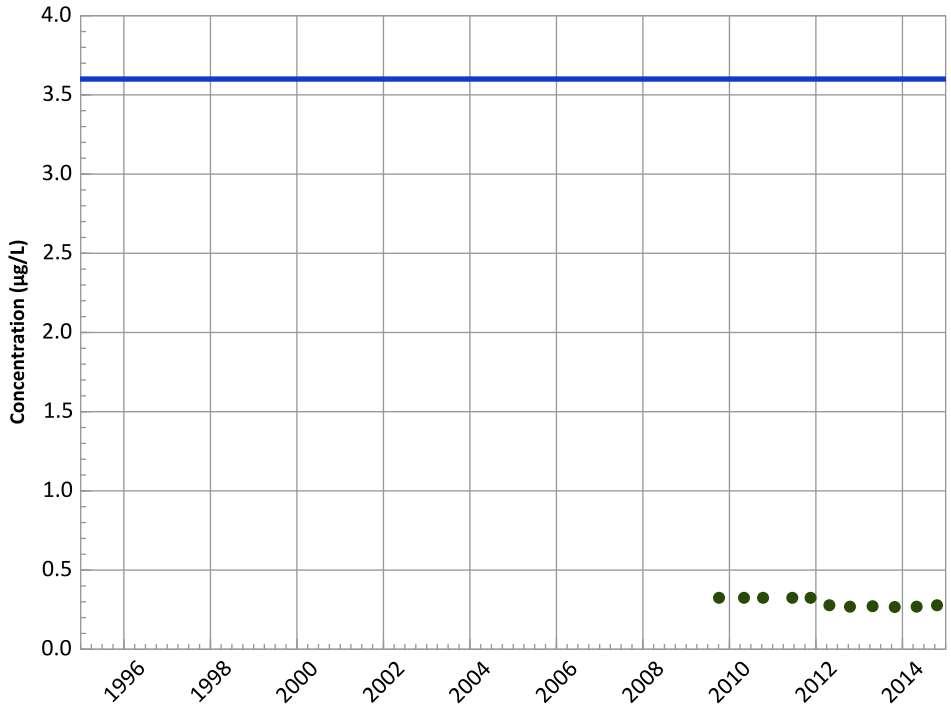
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

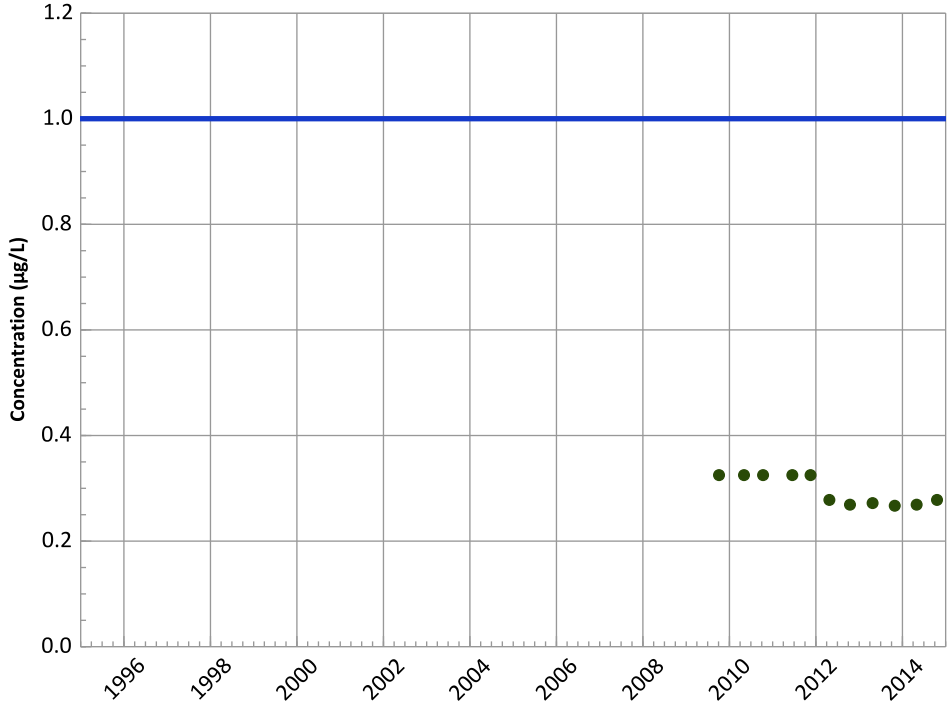


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

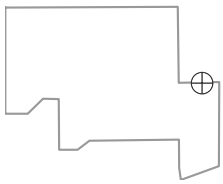
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

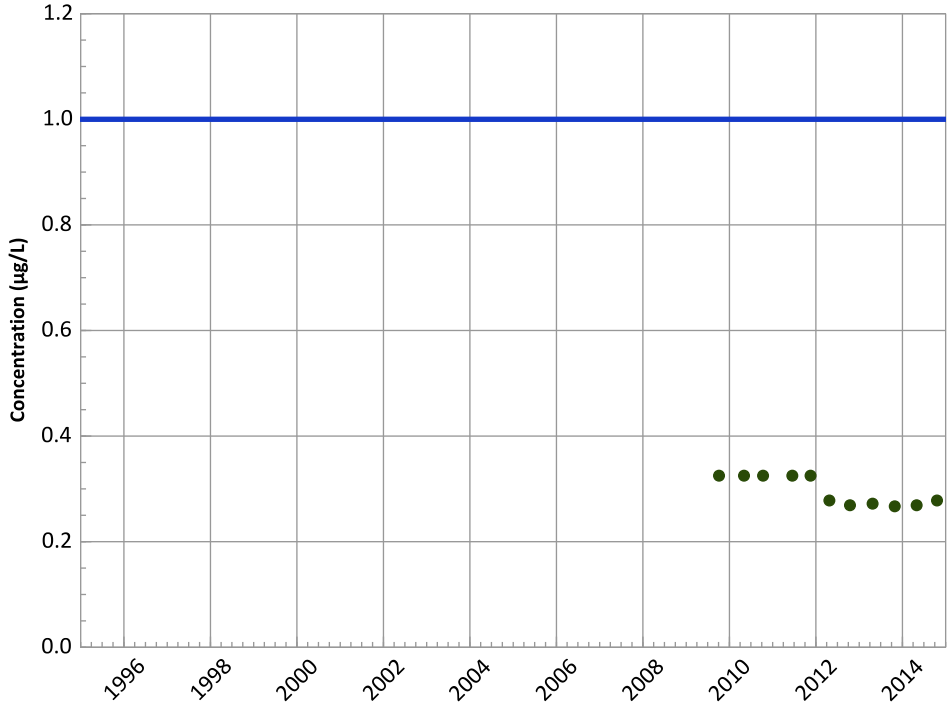
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

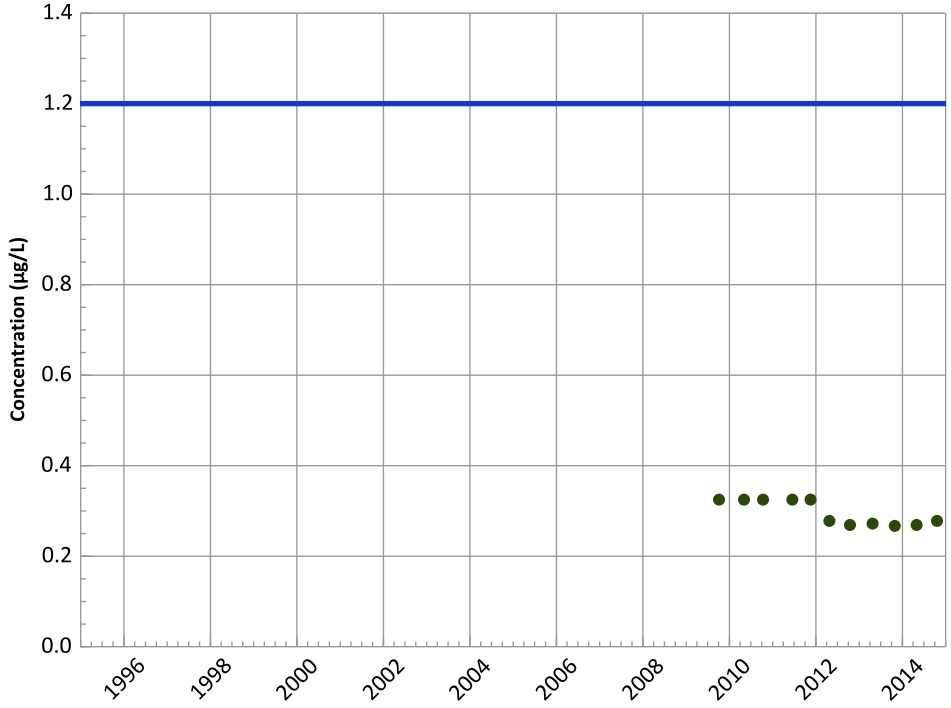


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

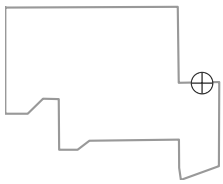
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

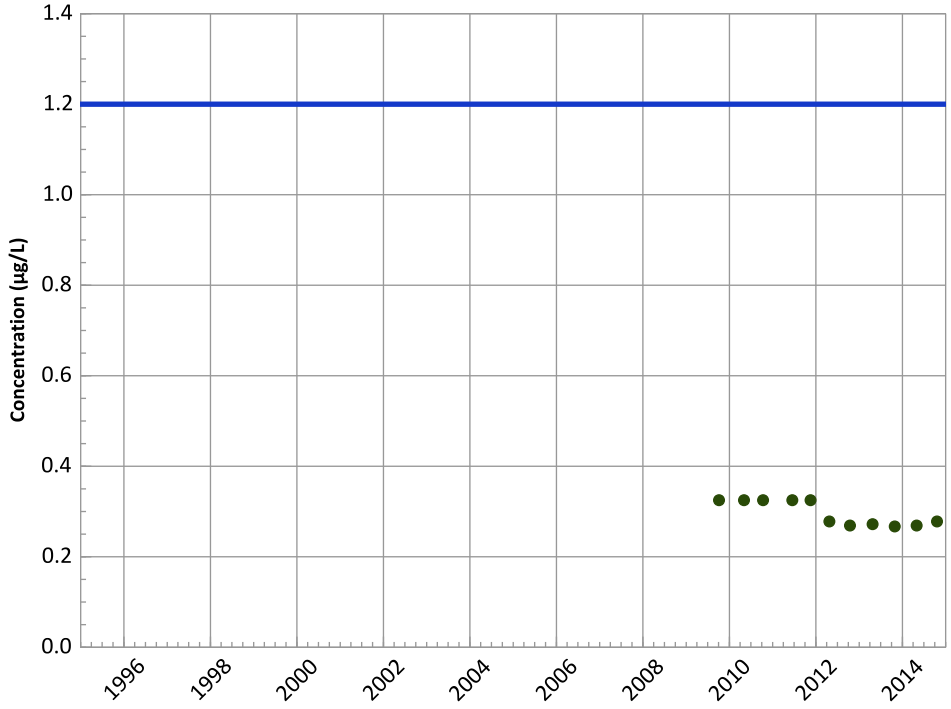
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

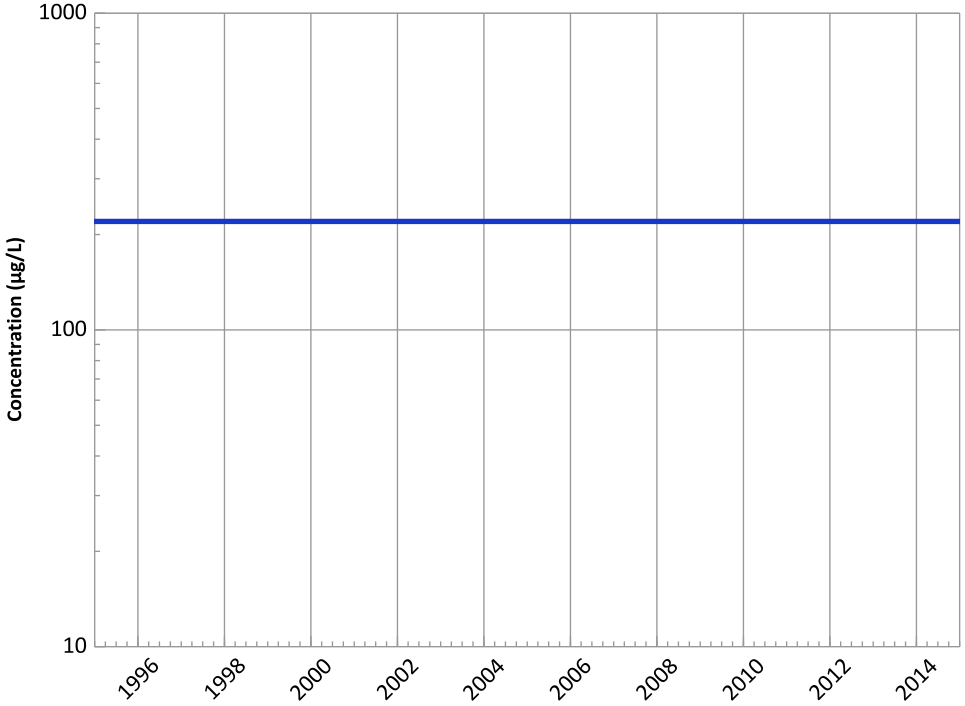


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

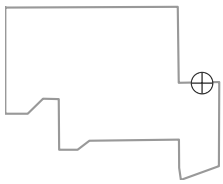


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

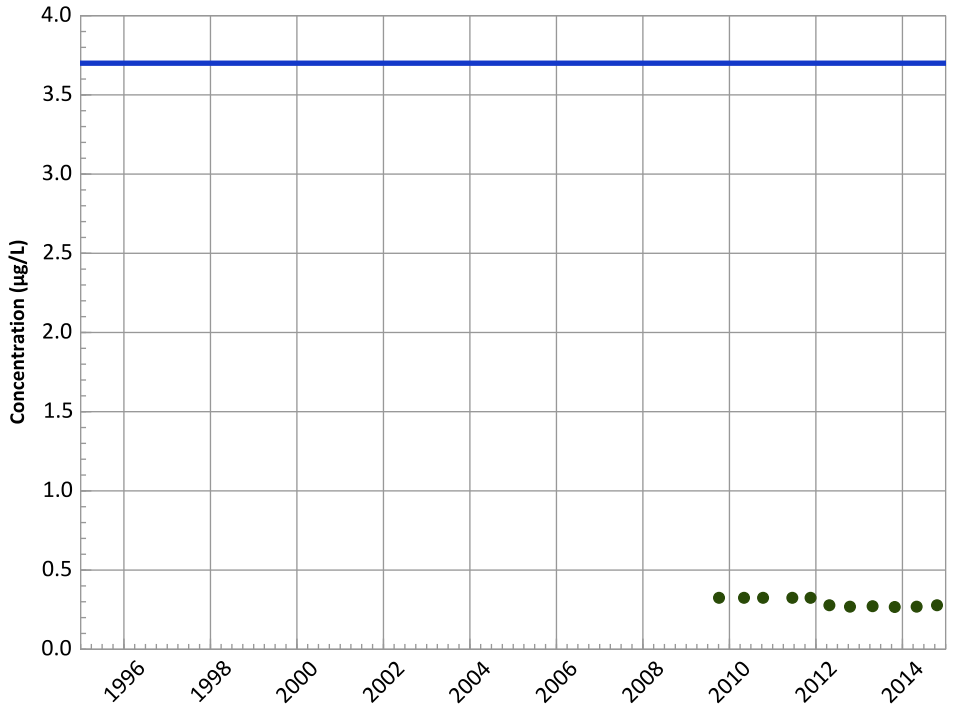


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

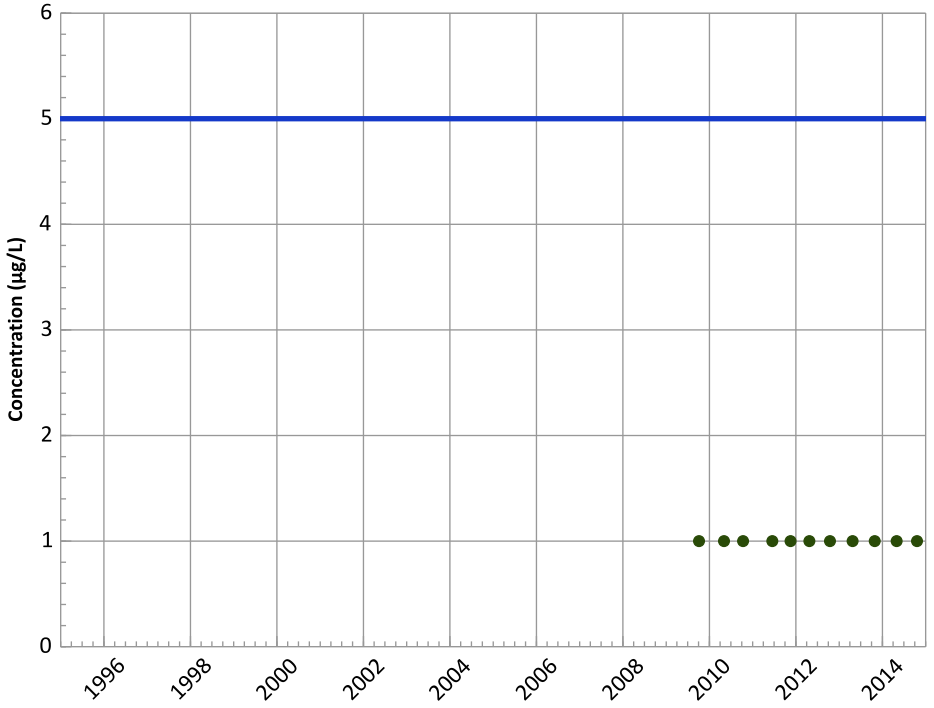


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

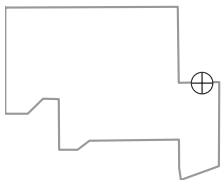
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

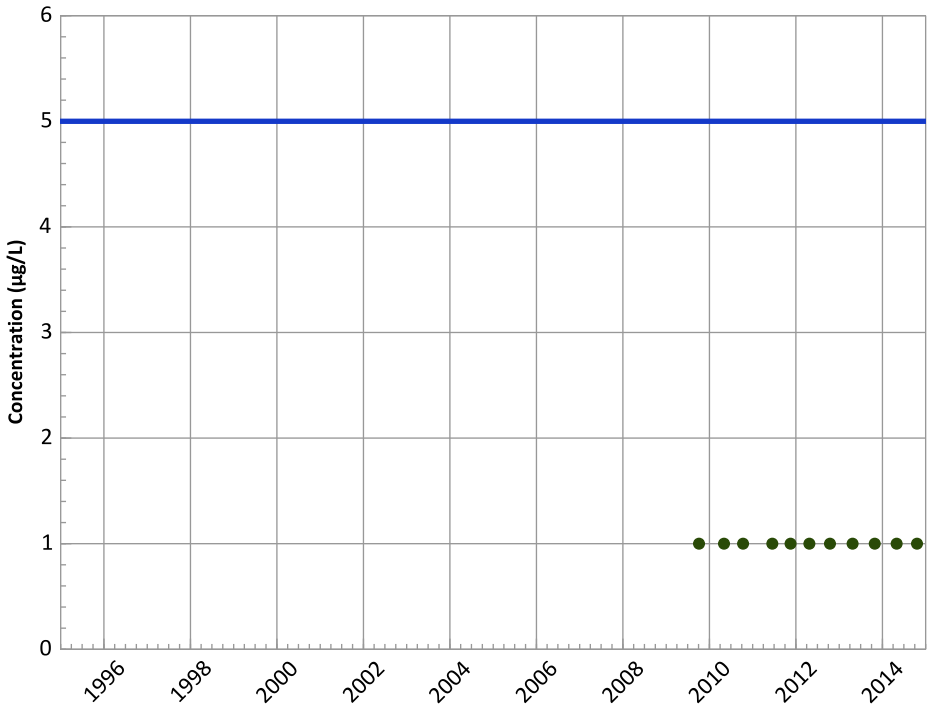
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

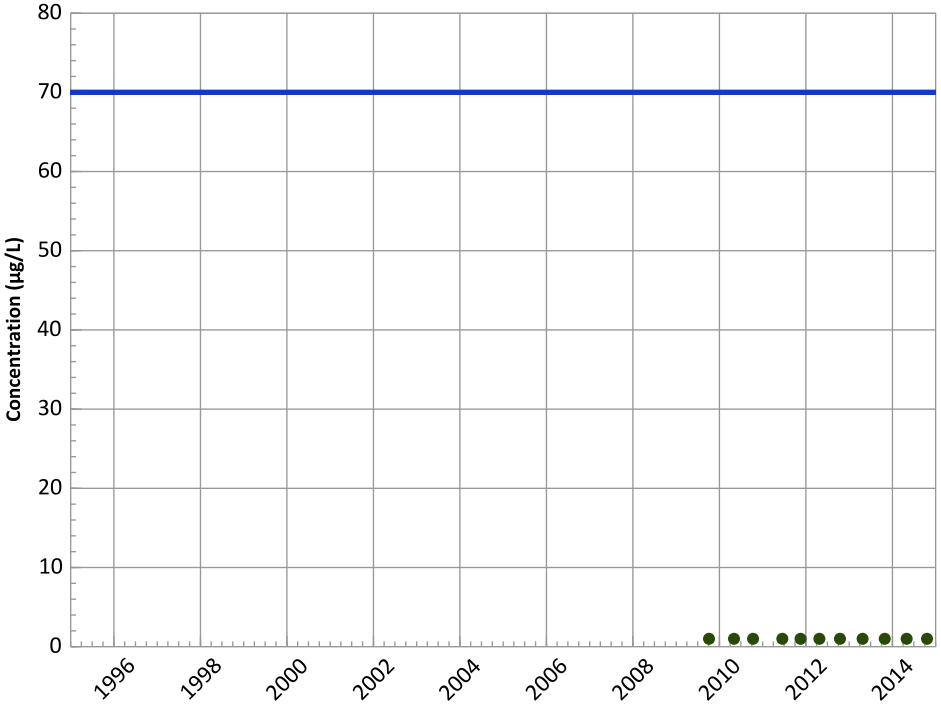


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

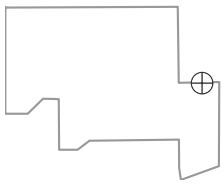
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

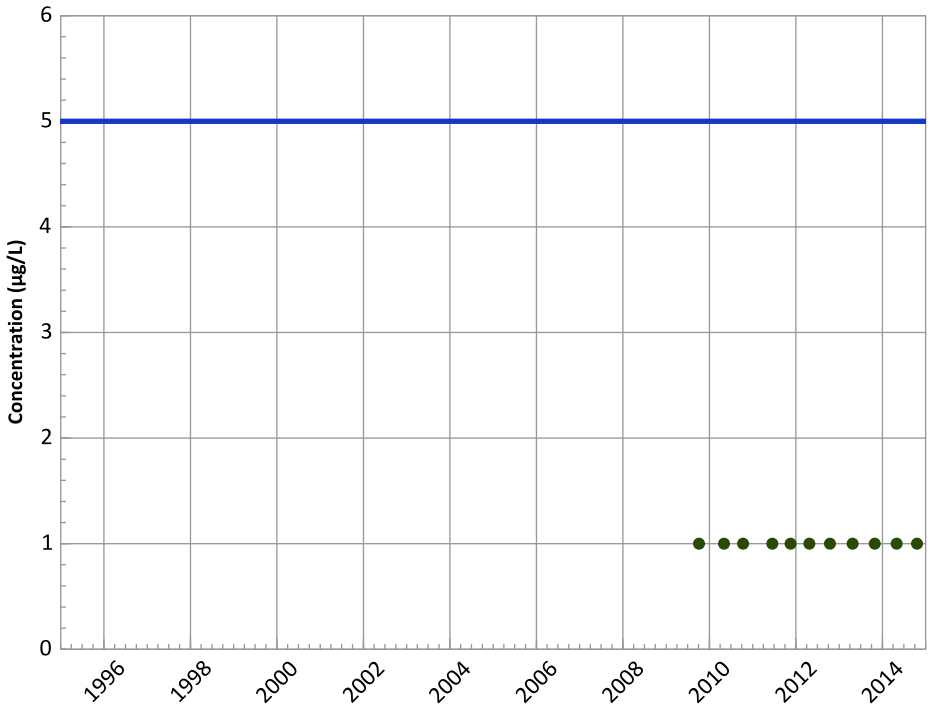
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

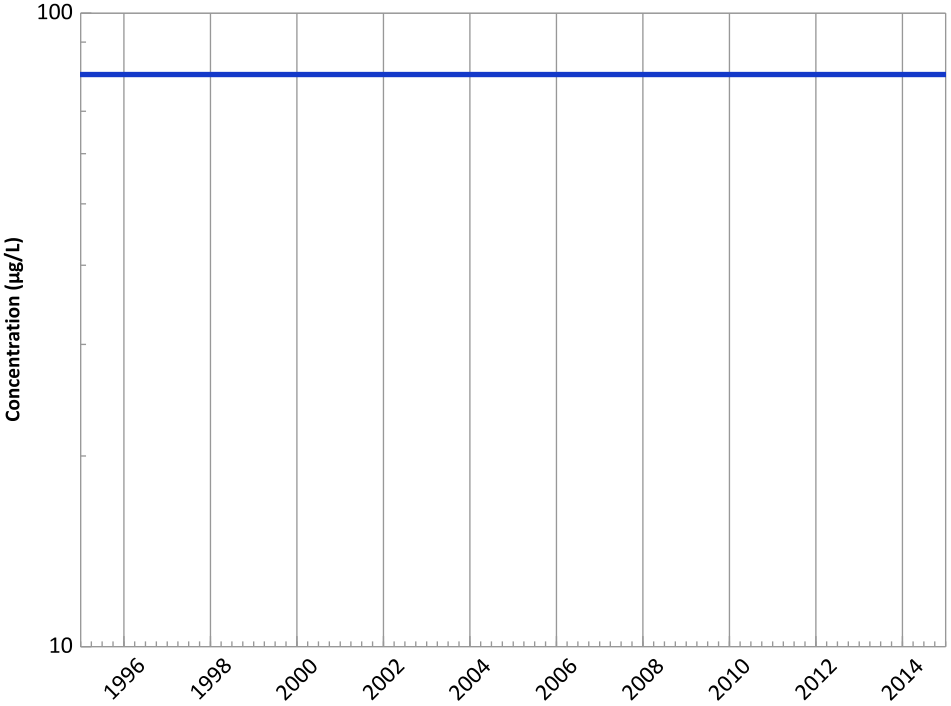


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

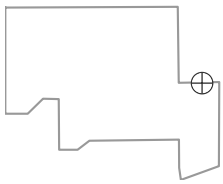
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

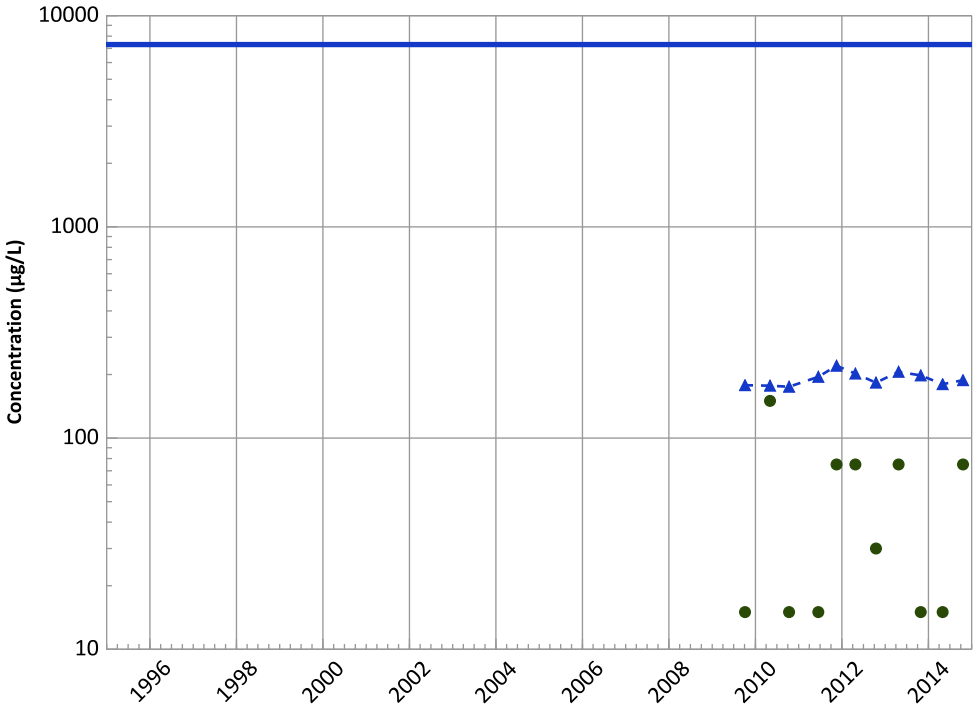
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

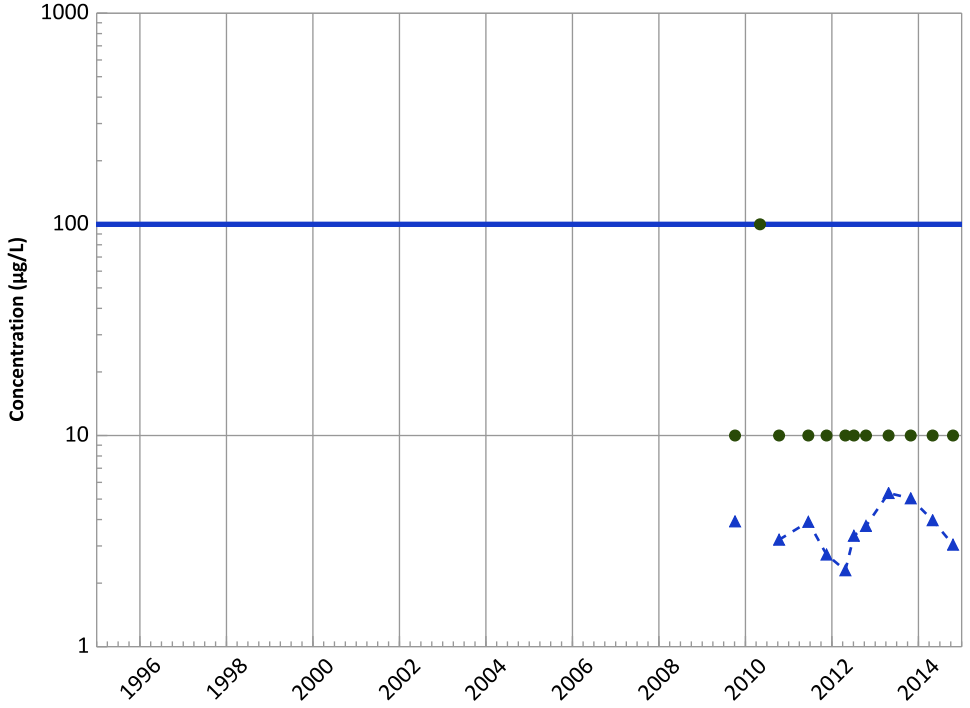


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Chromium, Total Trend



Concentration Trend

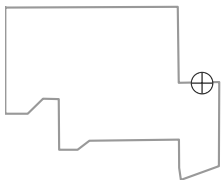
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

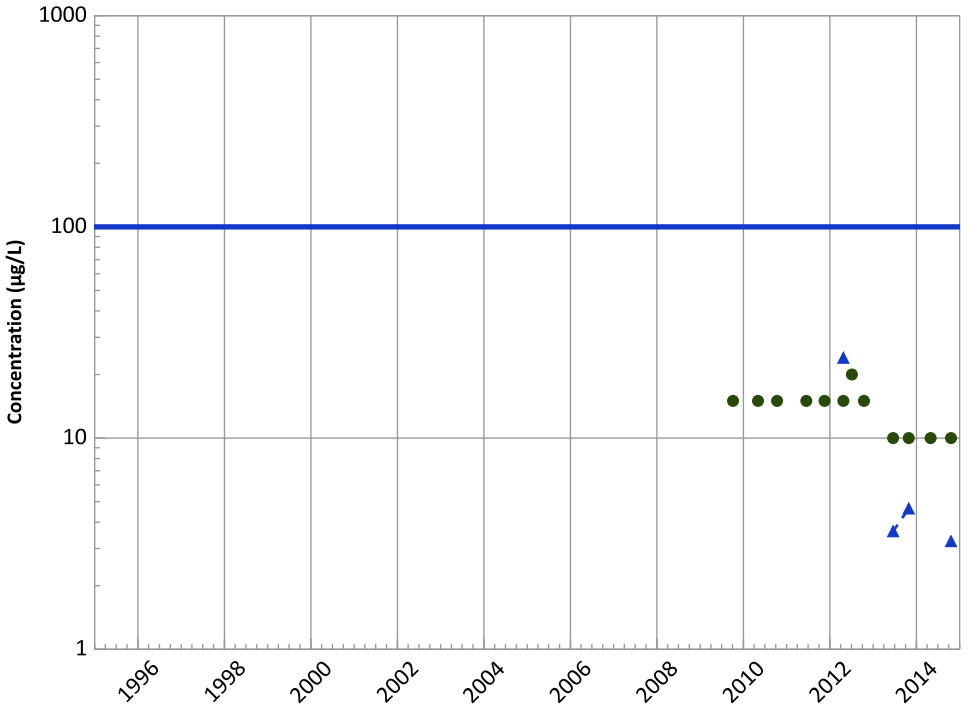
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

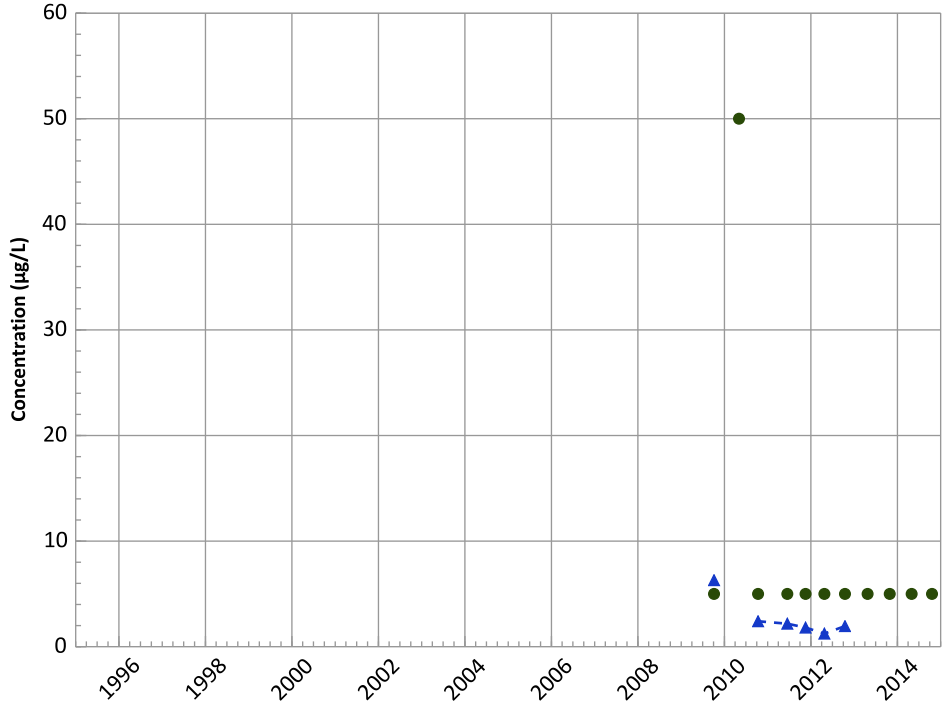


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Manganese Trend

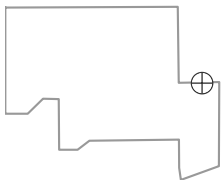


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Well Location

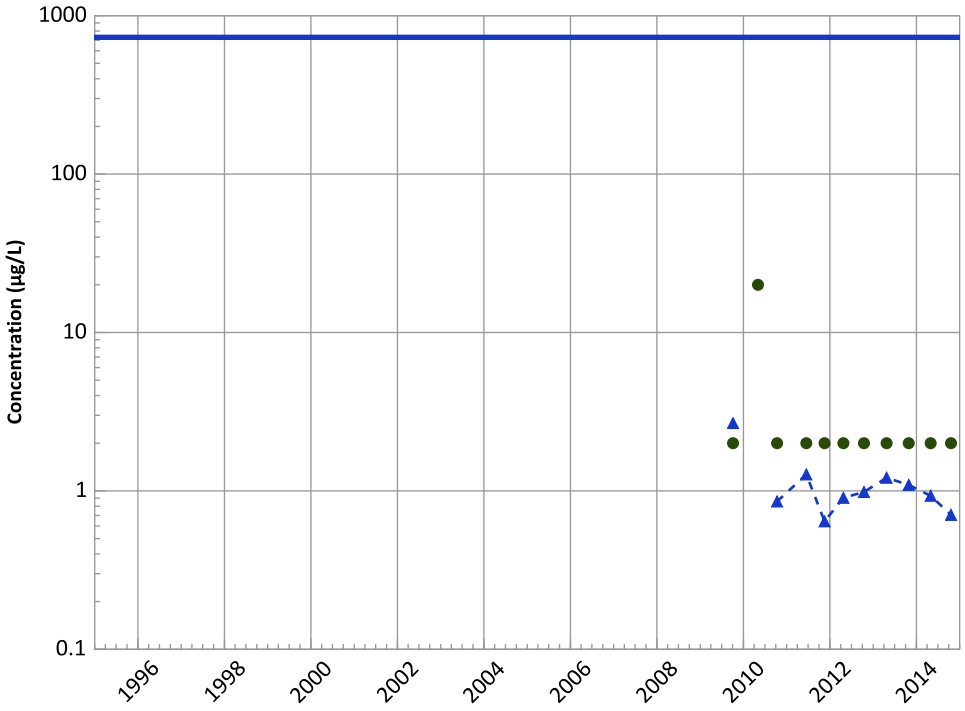


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

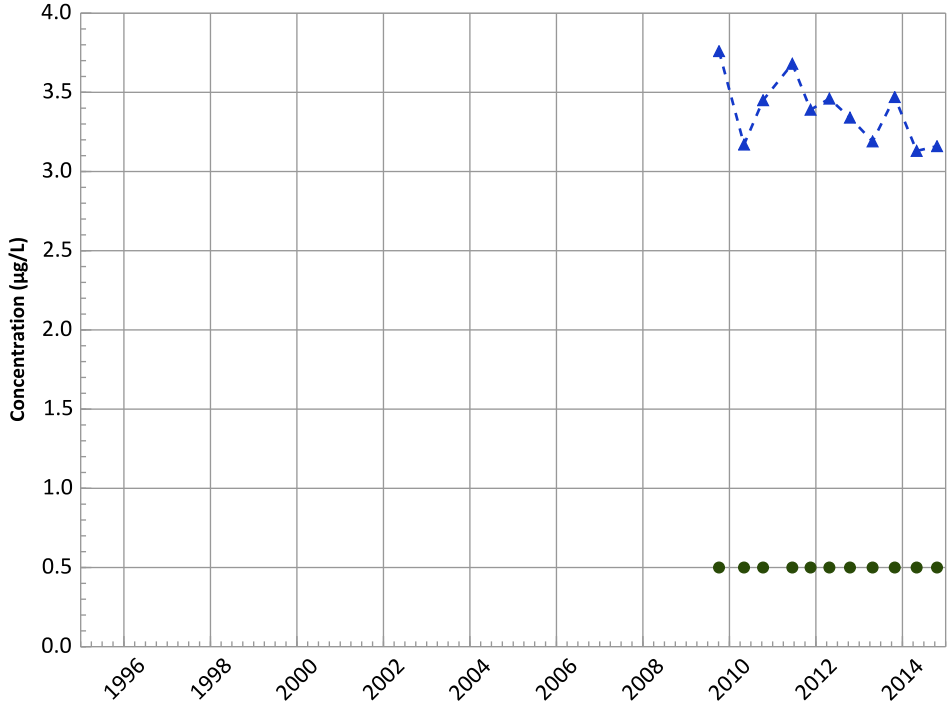


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Molybdenum Trend



Concentration Trend

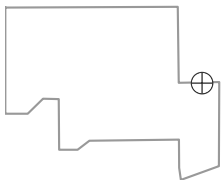
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

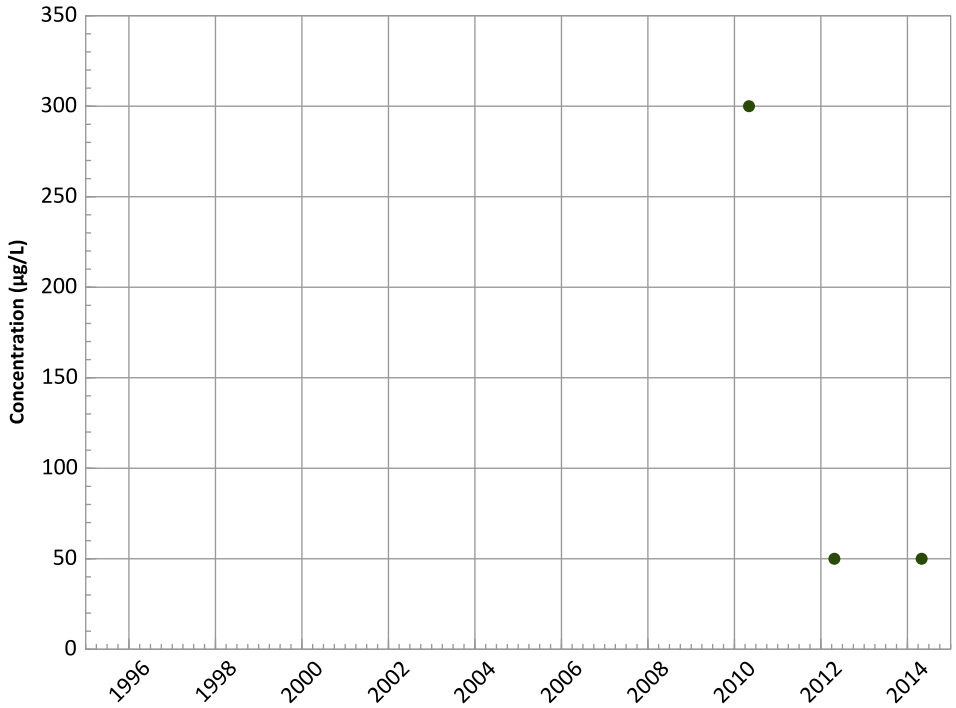
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

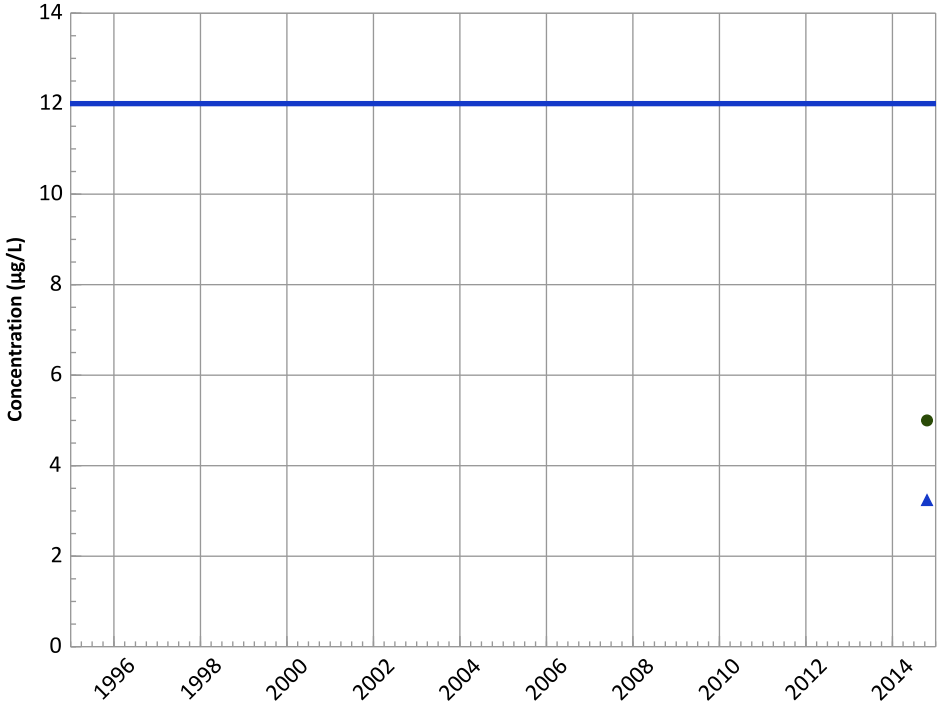


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Arsenic Trend



Concentration Trend

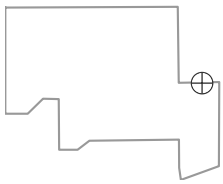
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

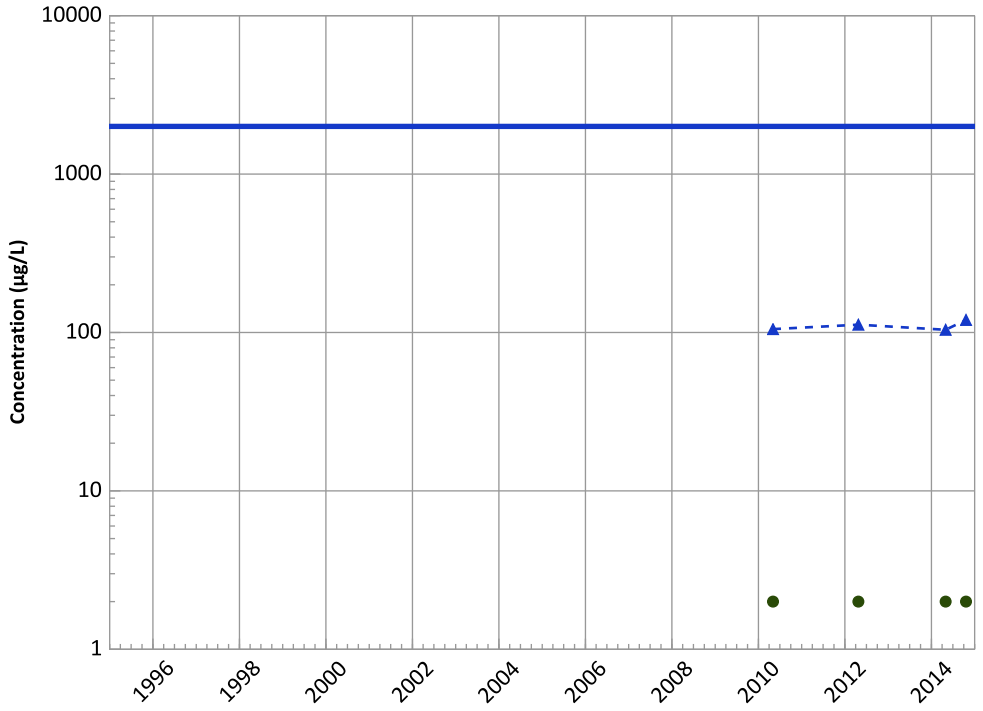
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

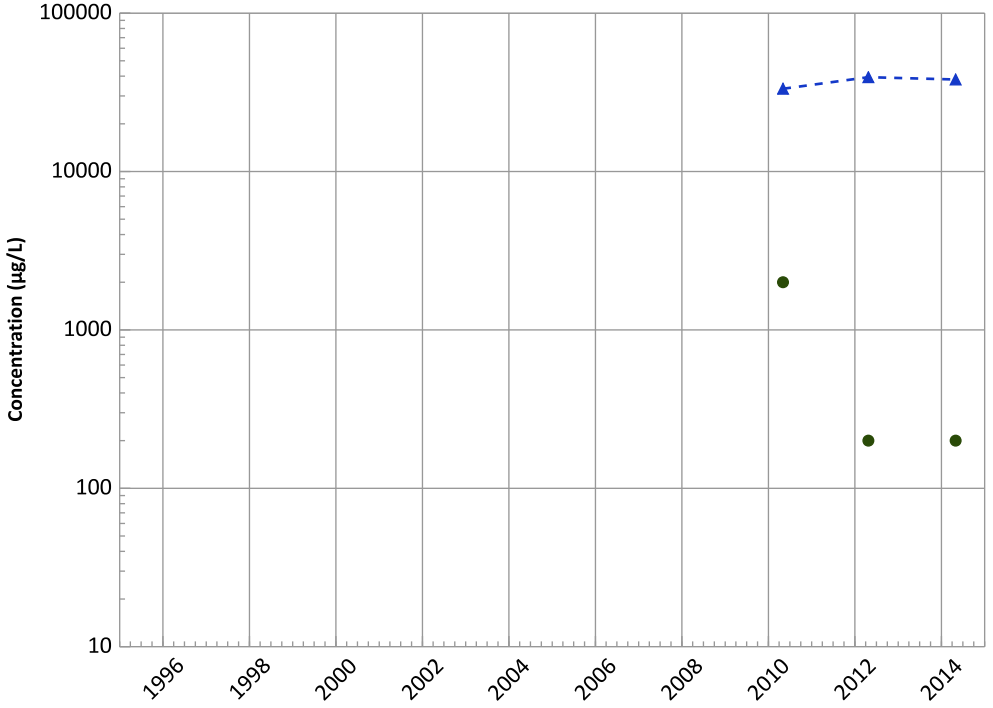


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Calcium Trend



Concentration Trend

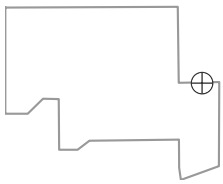
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

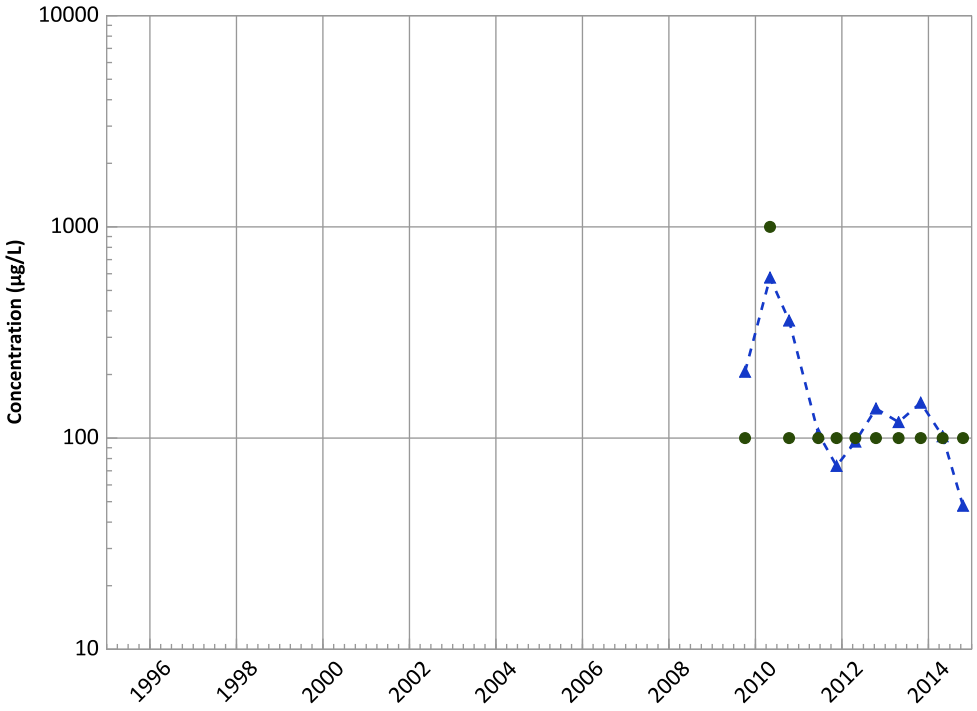
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

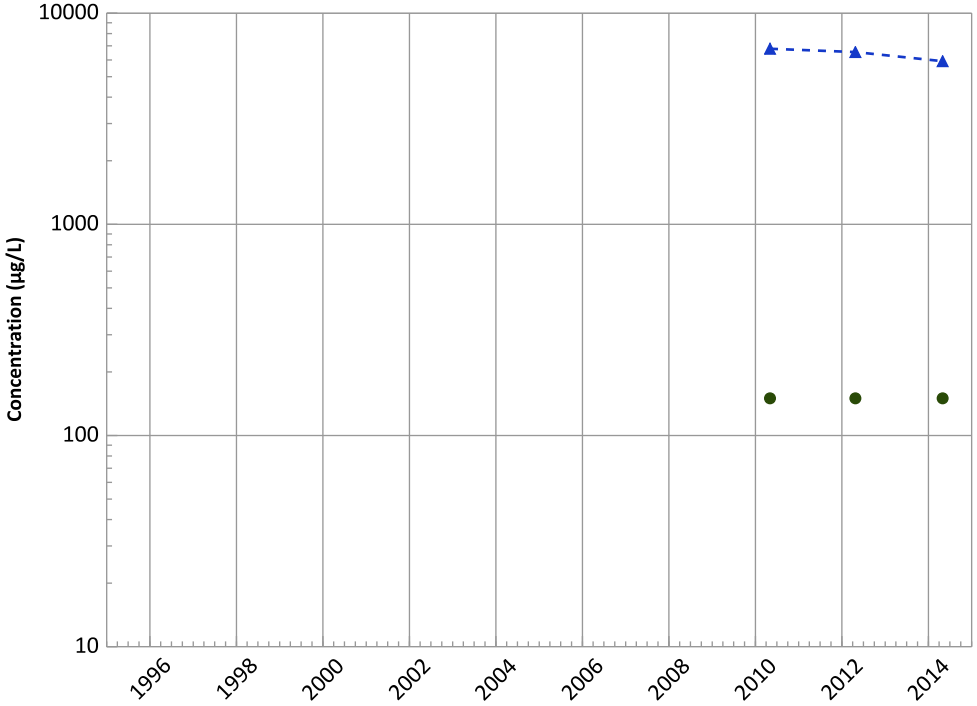


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Potassium Trend



Concentration Trend

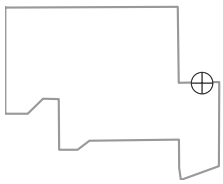
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

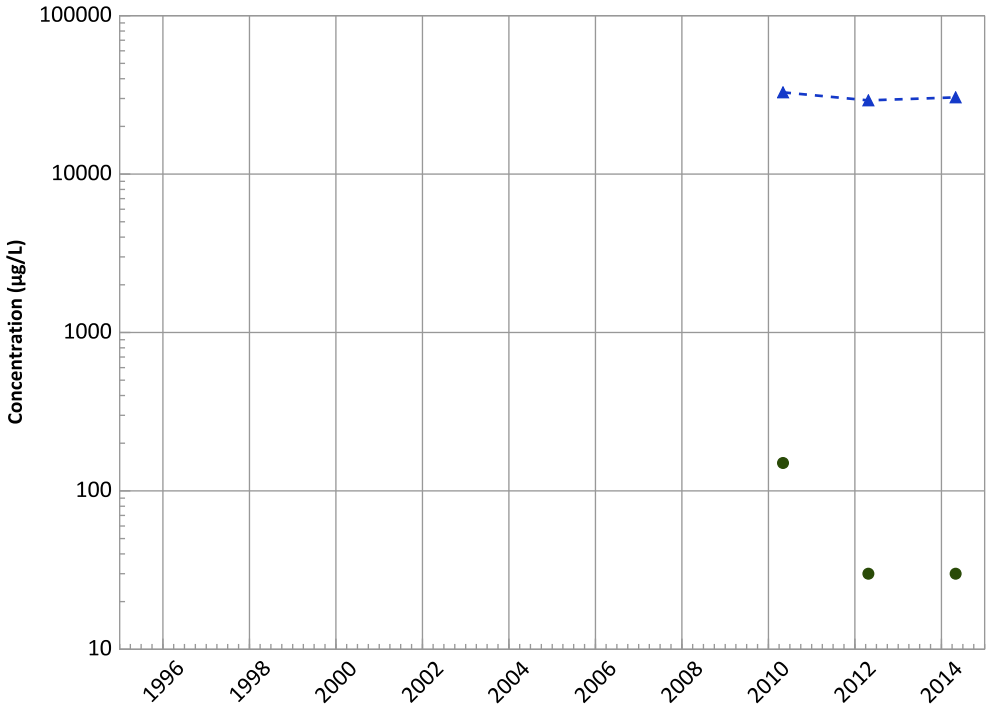
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

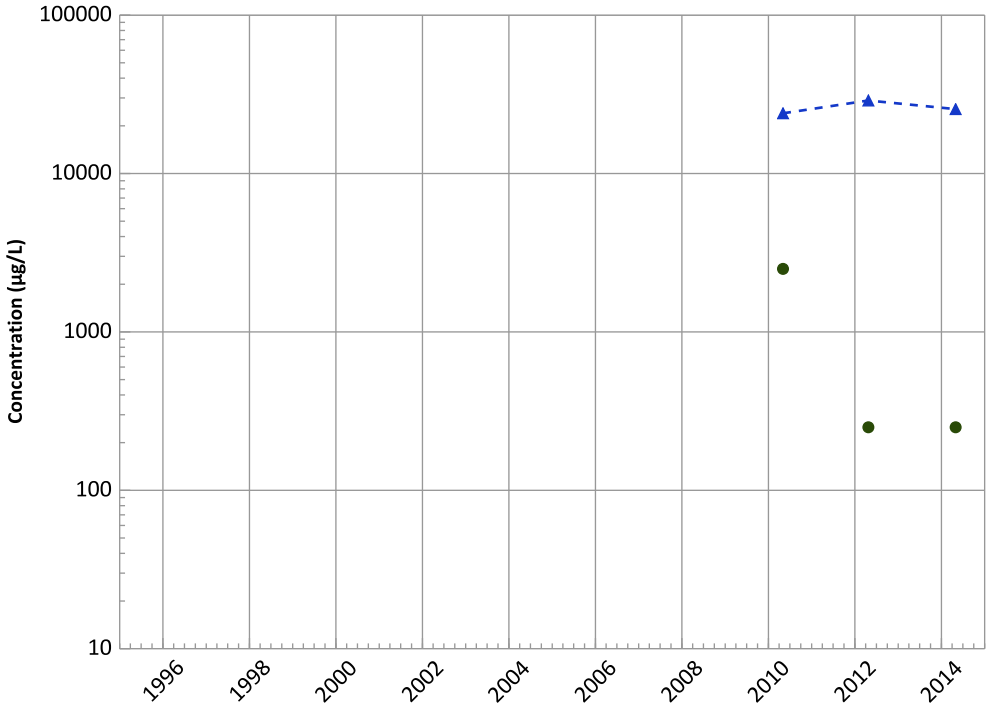


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Sodium Trend



Concentration Trend

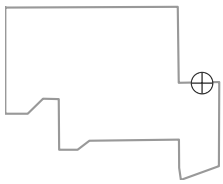
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

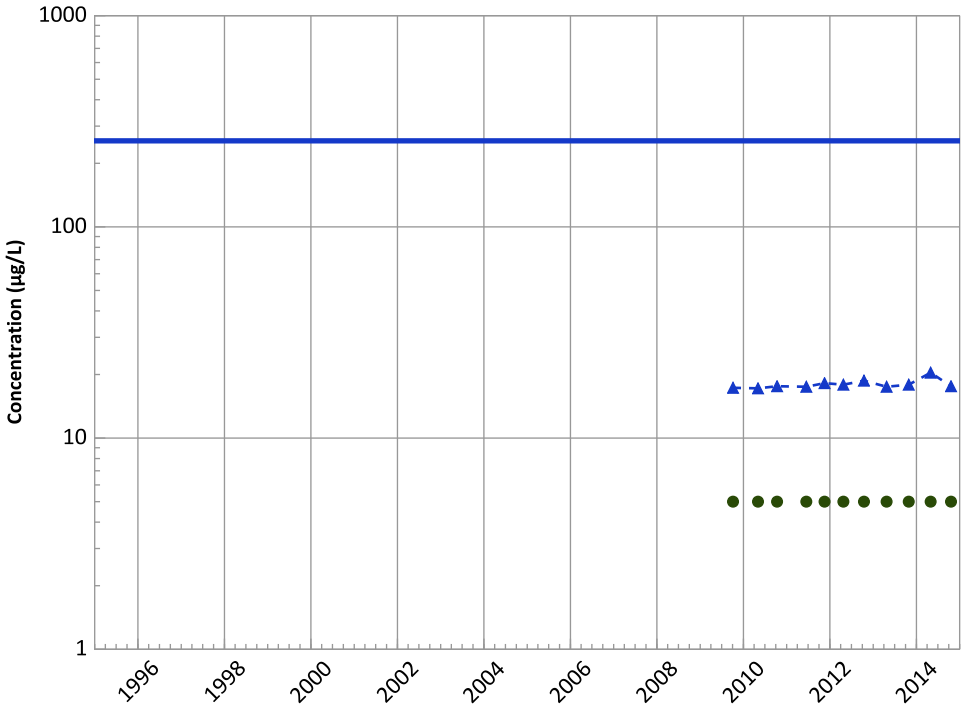
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1140 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Vanadium Trend



Concentration Trend

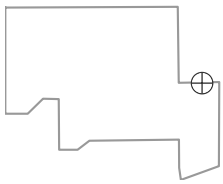
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

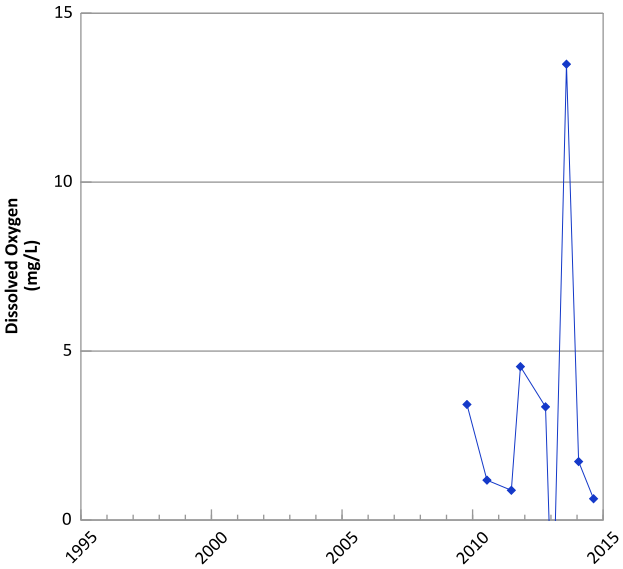
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/05/2009 to 10/20/2014
Analysis Date: 03/19/2015

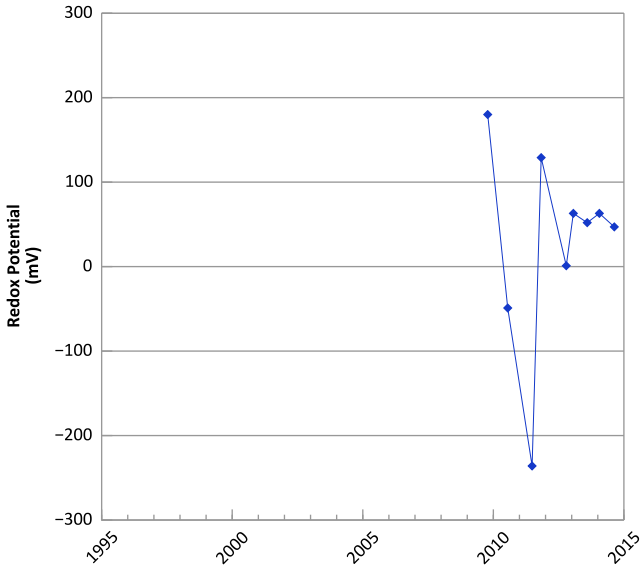
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

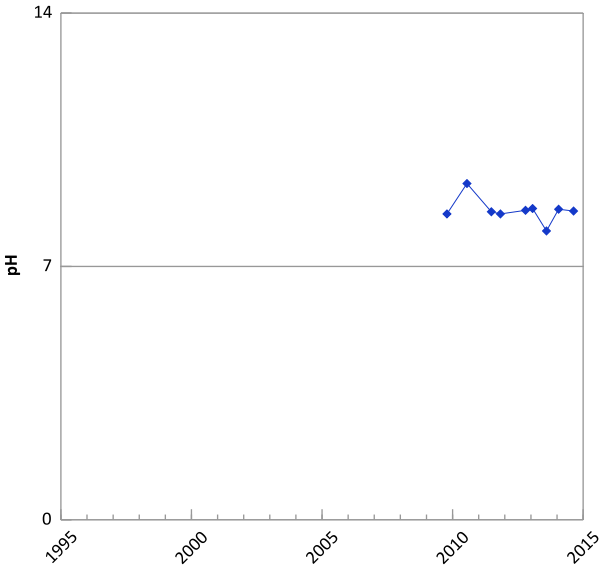
Well Location

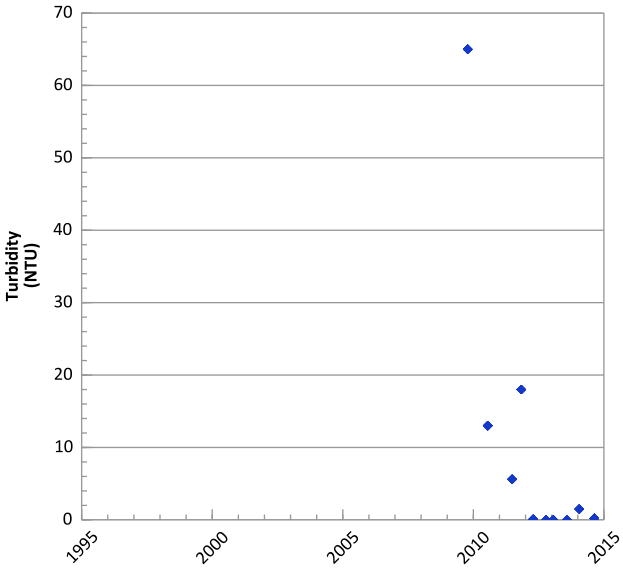


PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



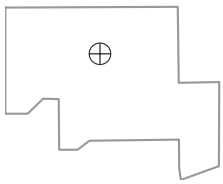






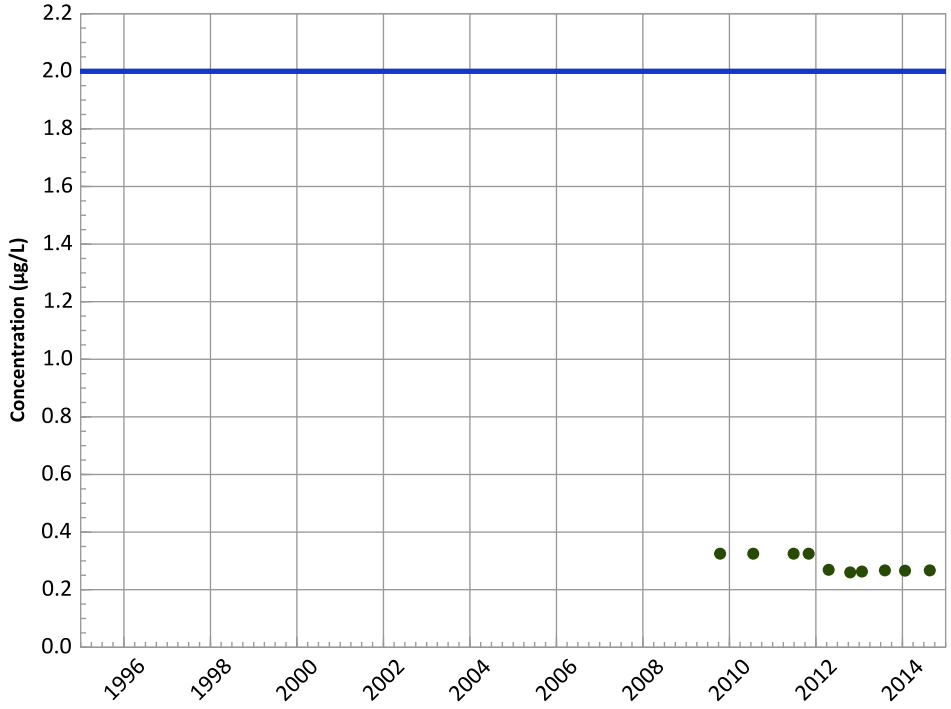
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

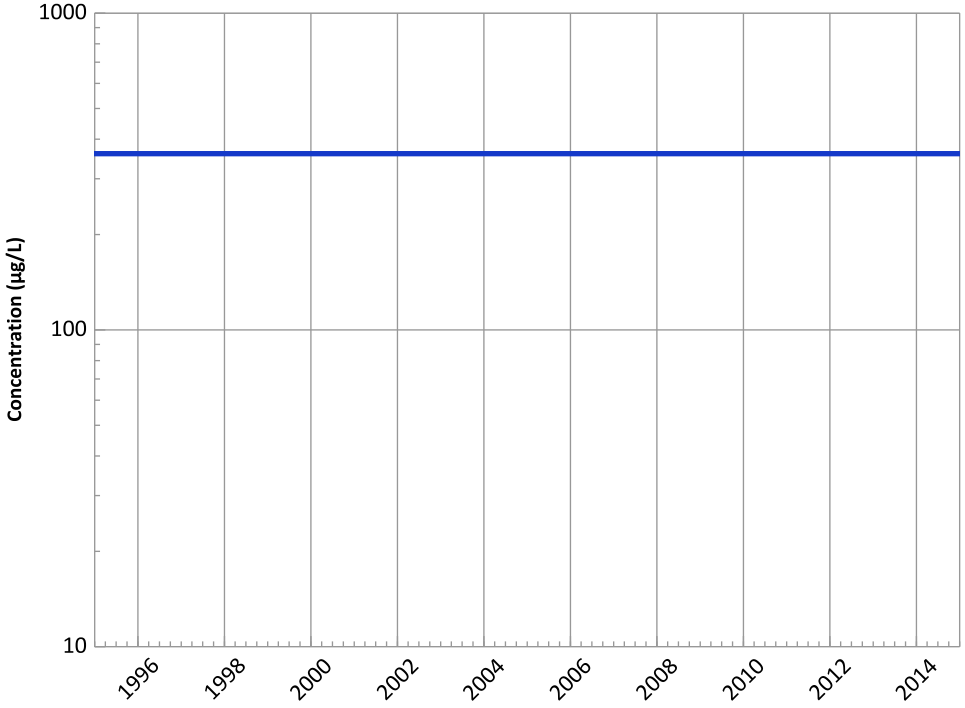


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

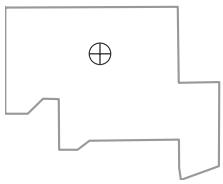
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

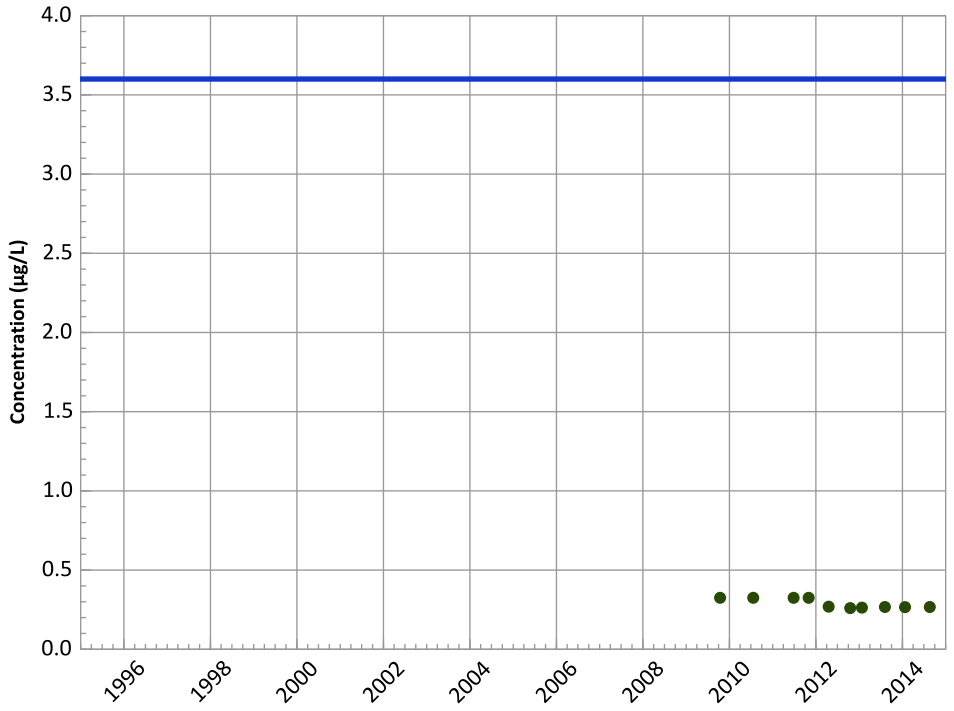
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

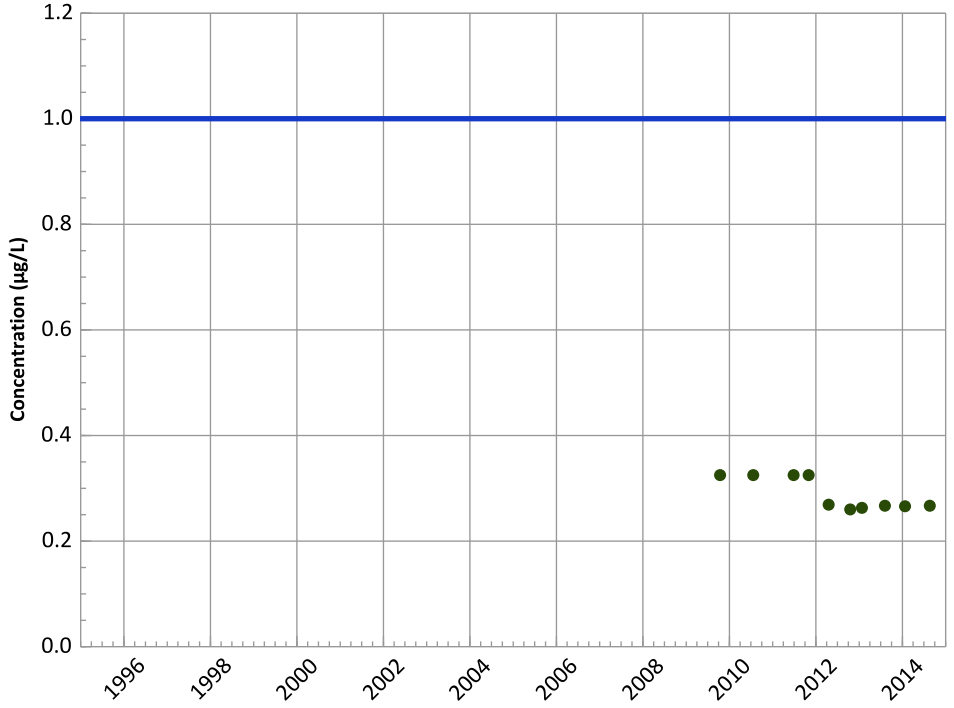


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

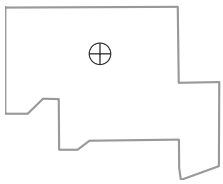
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

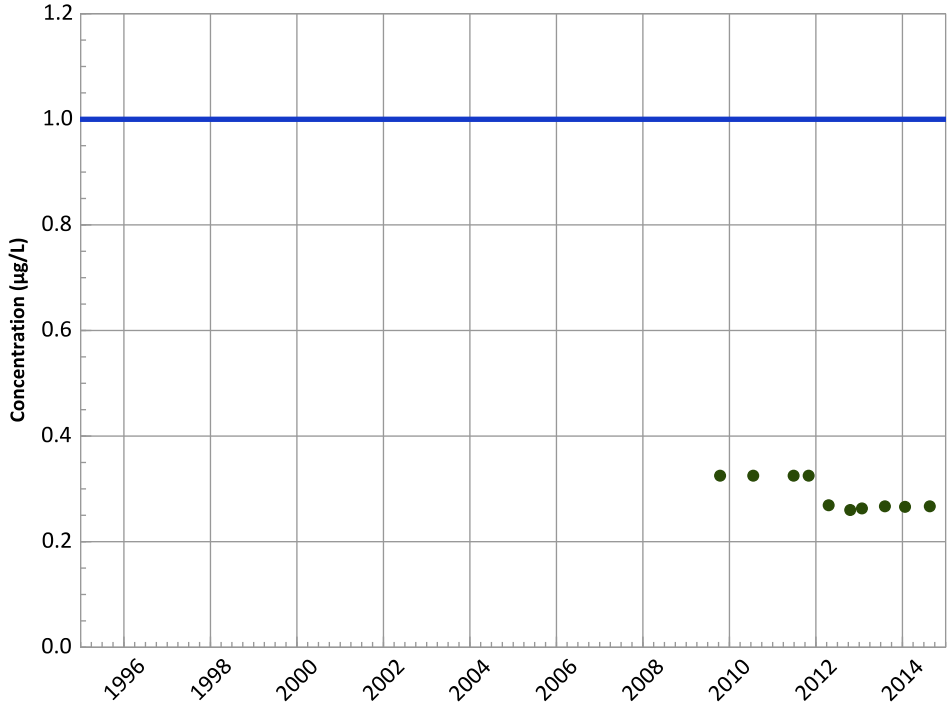
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

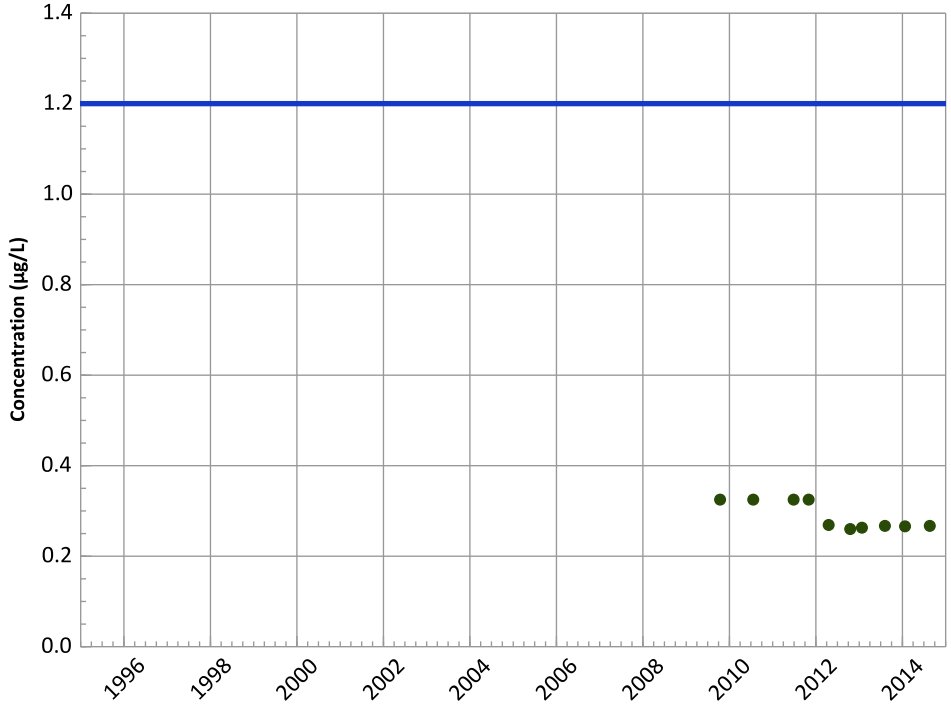


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

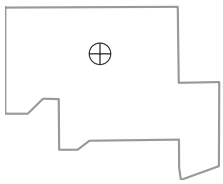
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

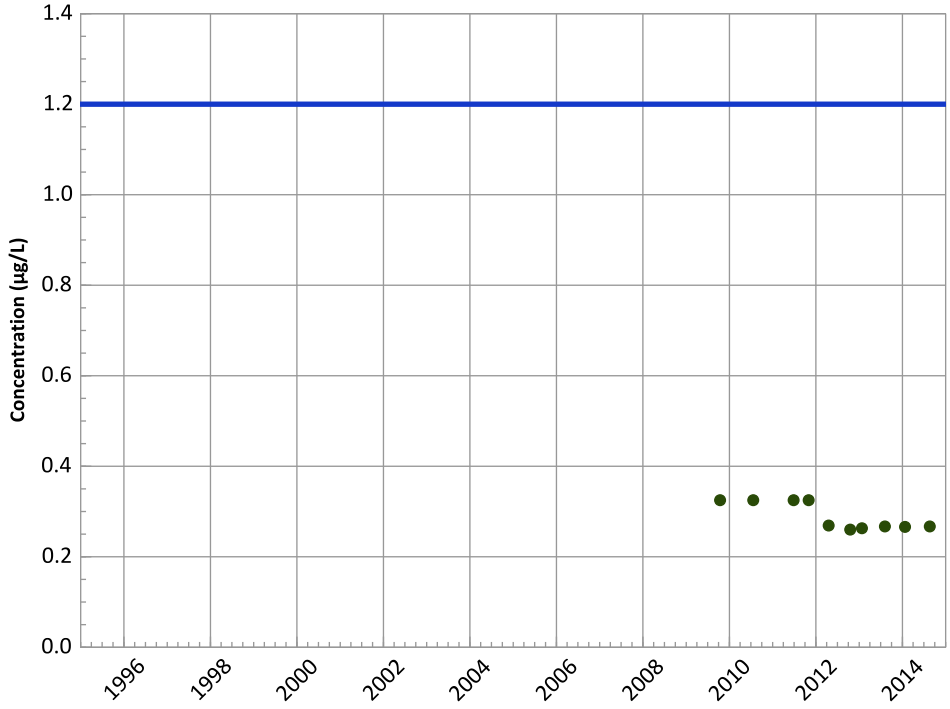
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

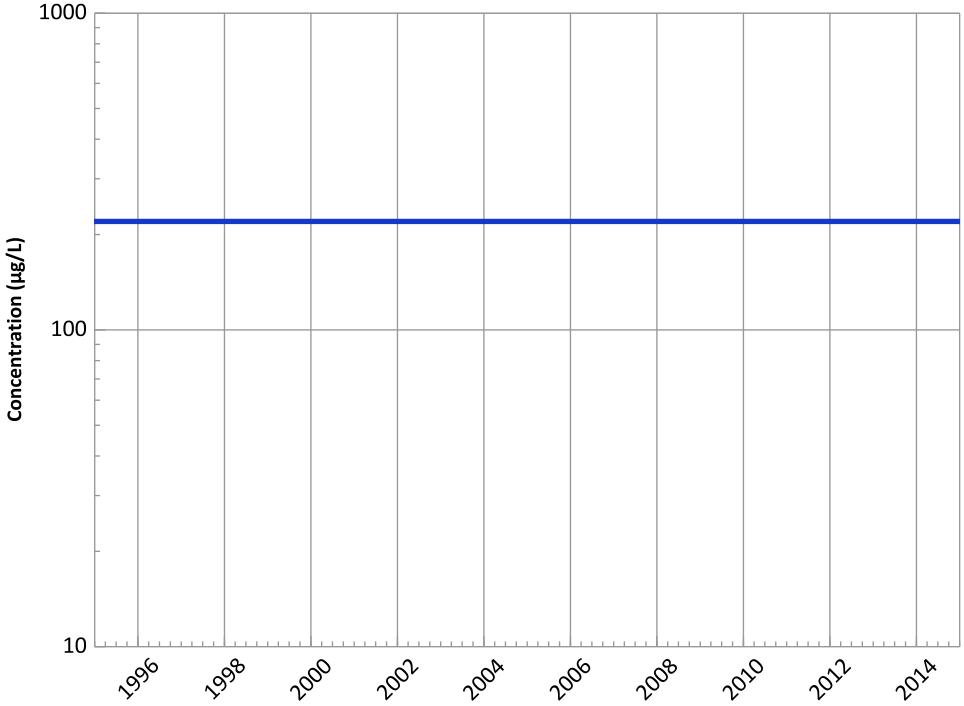


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

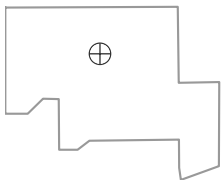


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

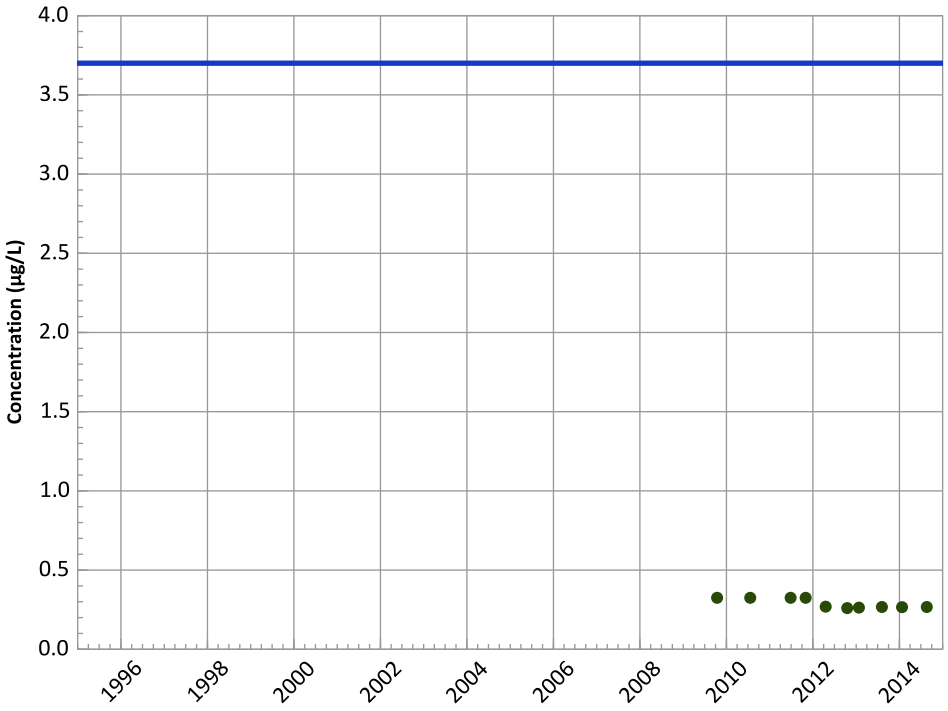


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

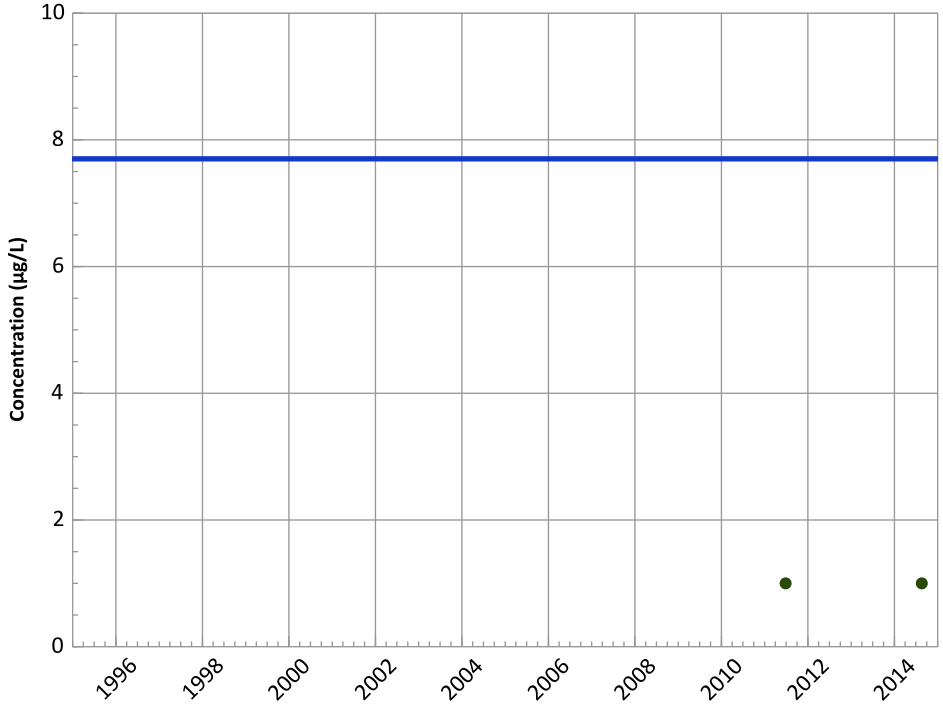


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend

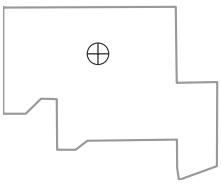


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Well Location

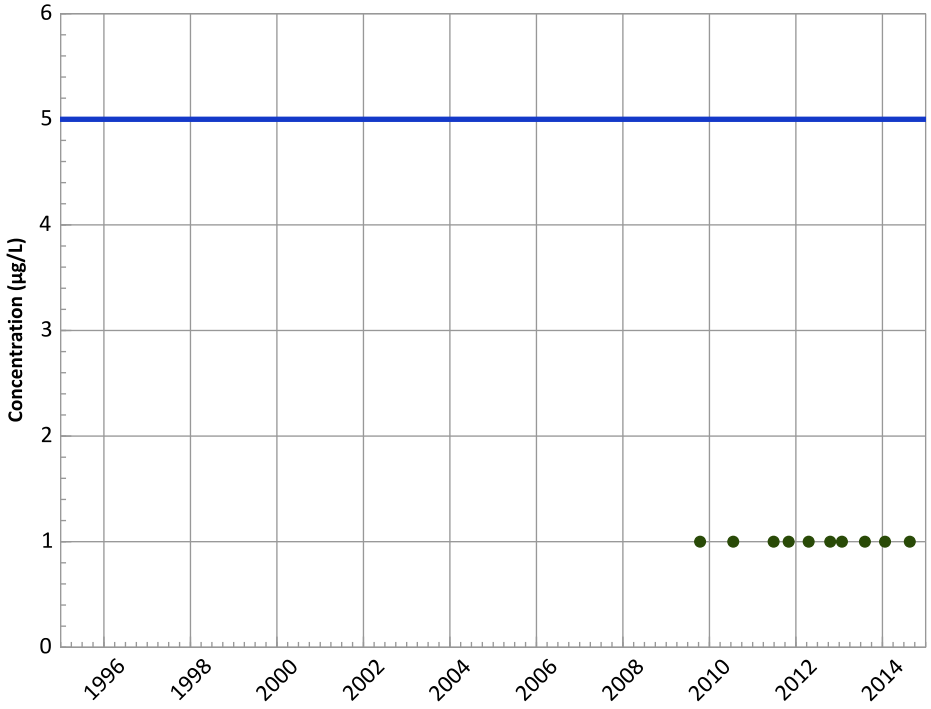


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

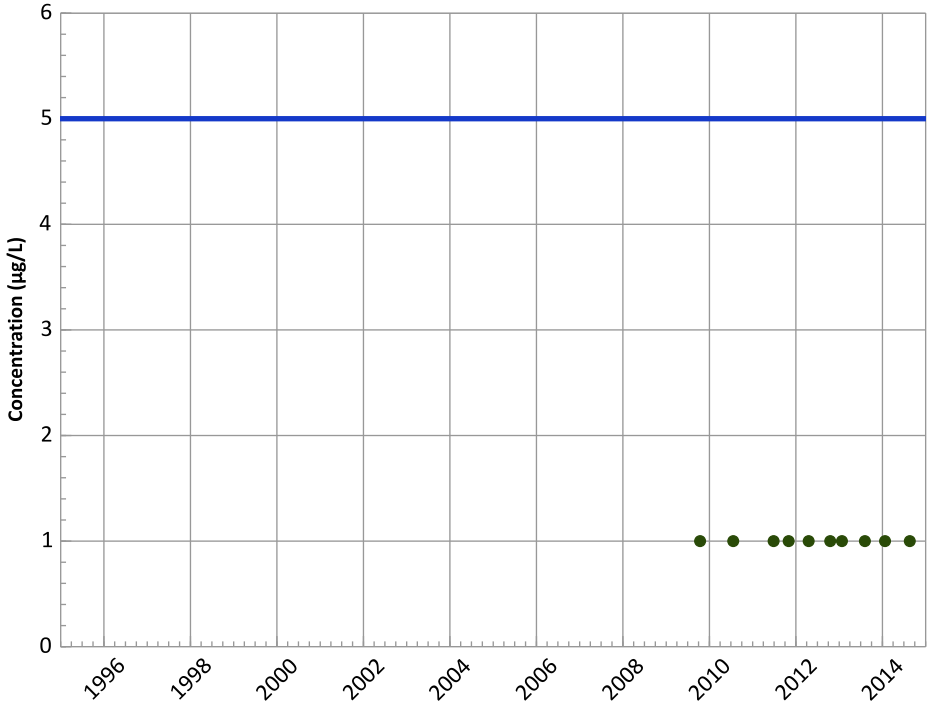


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

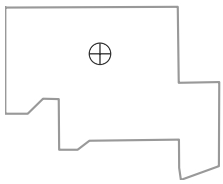
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

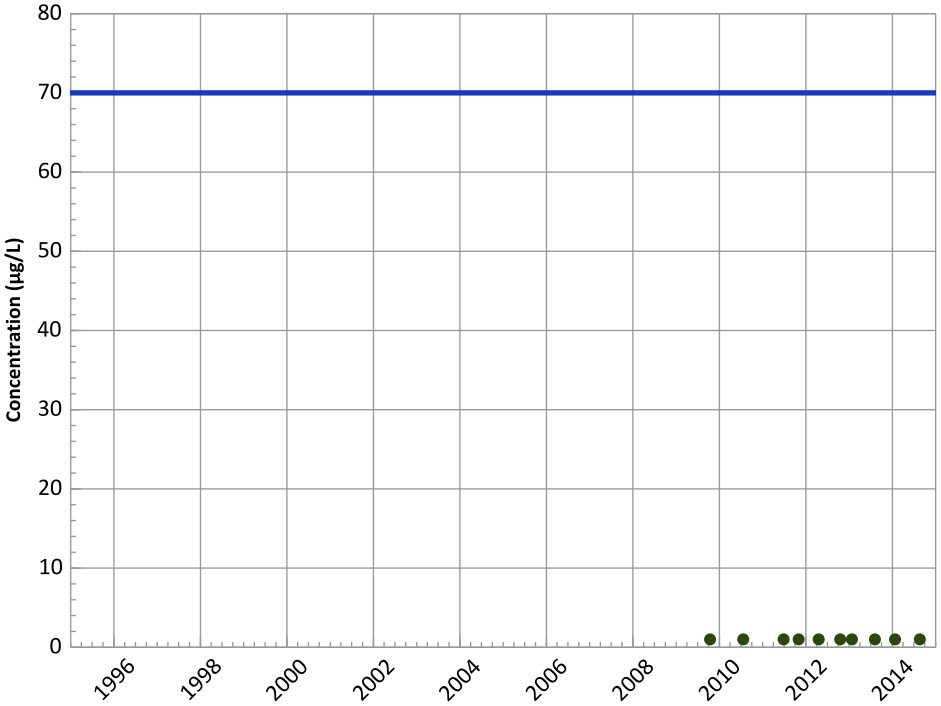
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

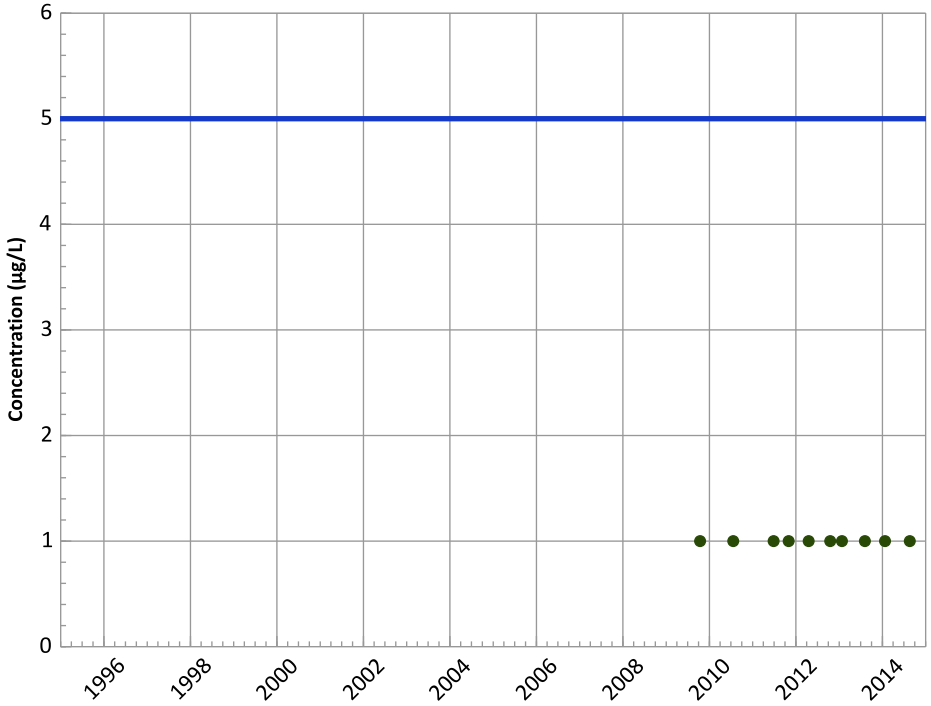


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend



Concentration Trend

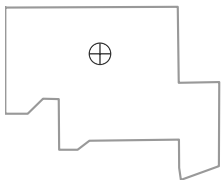
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

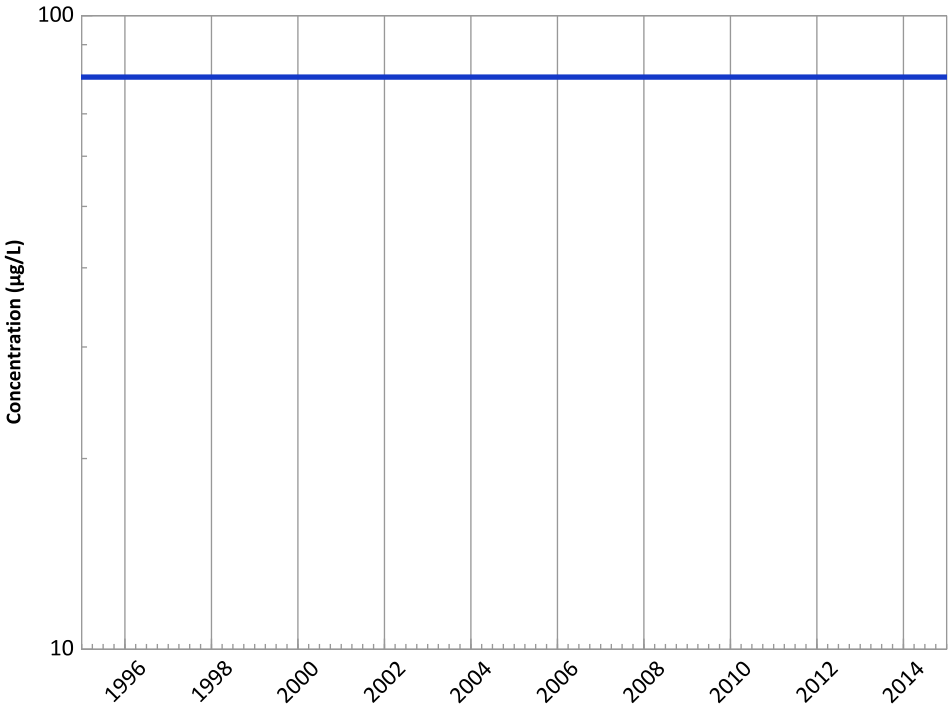
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

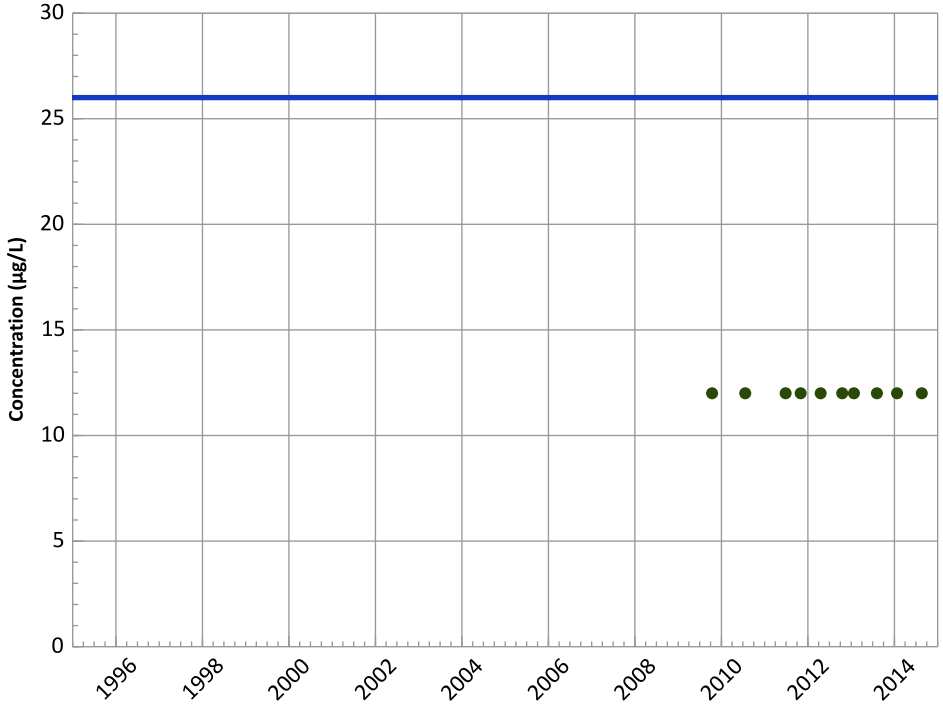


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

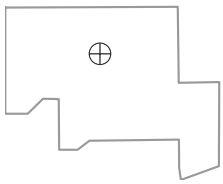
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

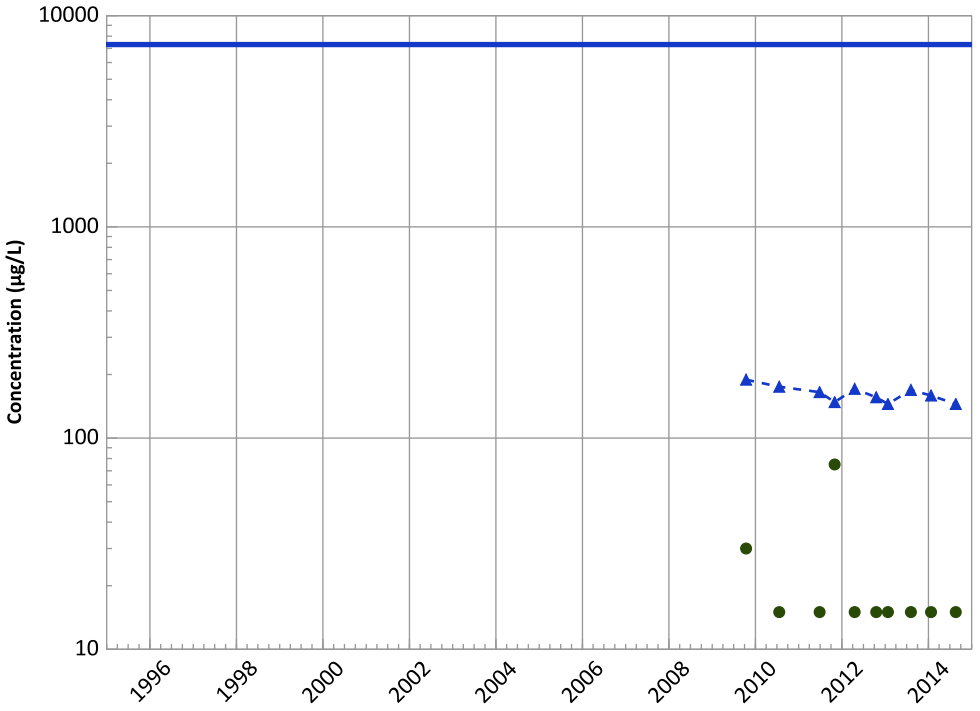
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

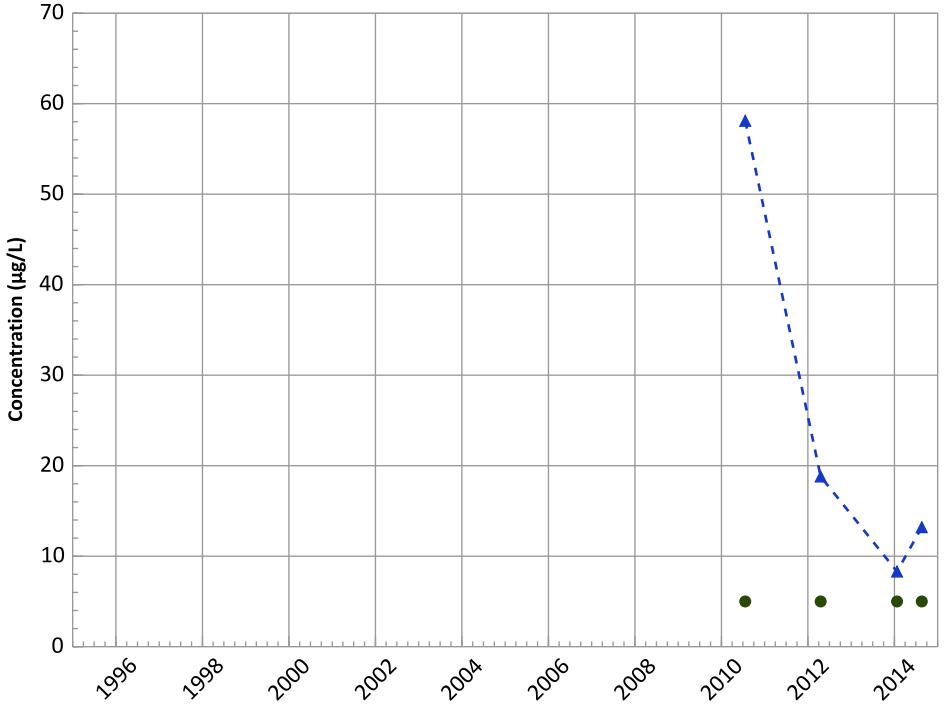


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Manganese Trend



Concentration Trend

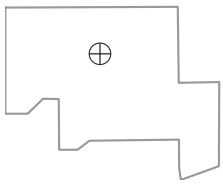
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

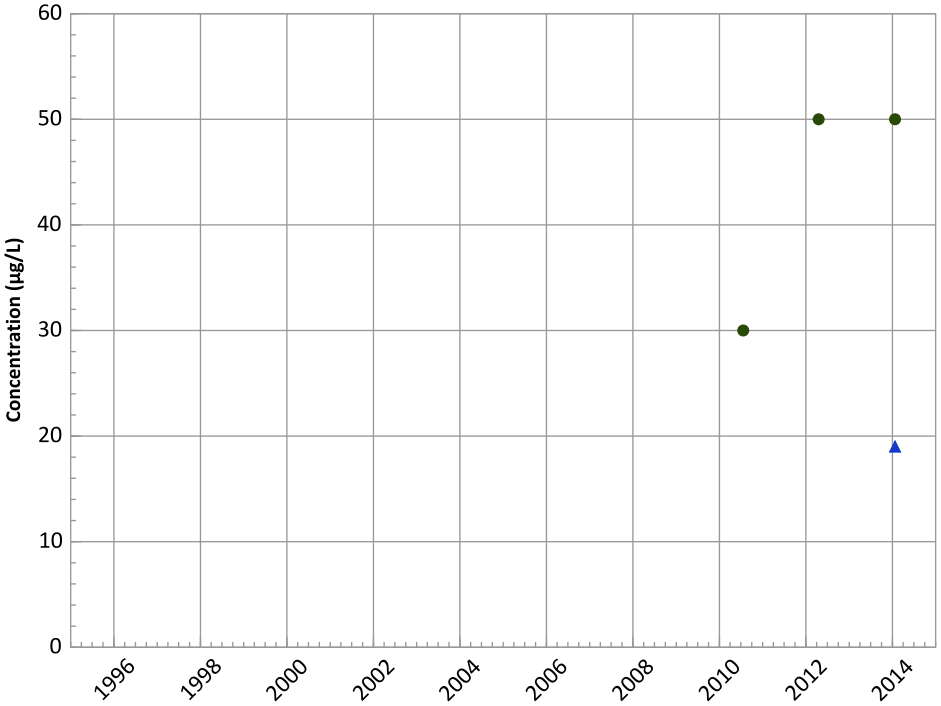
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

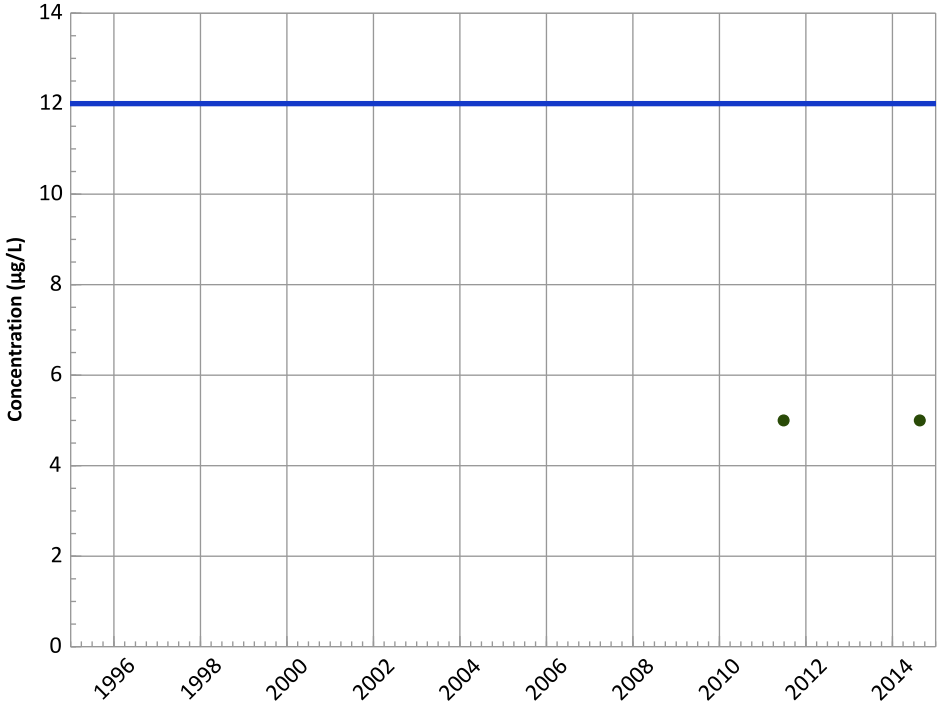


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Arsenic Trend



Concentration Trend

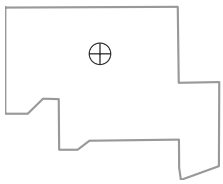
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

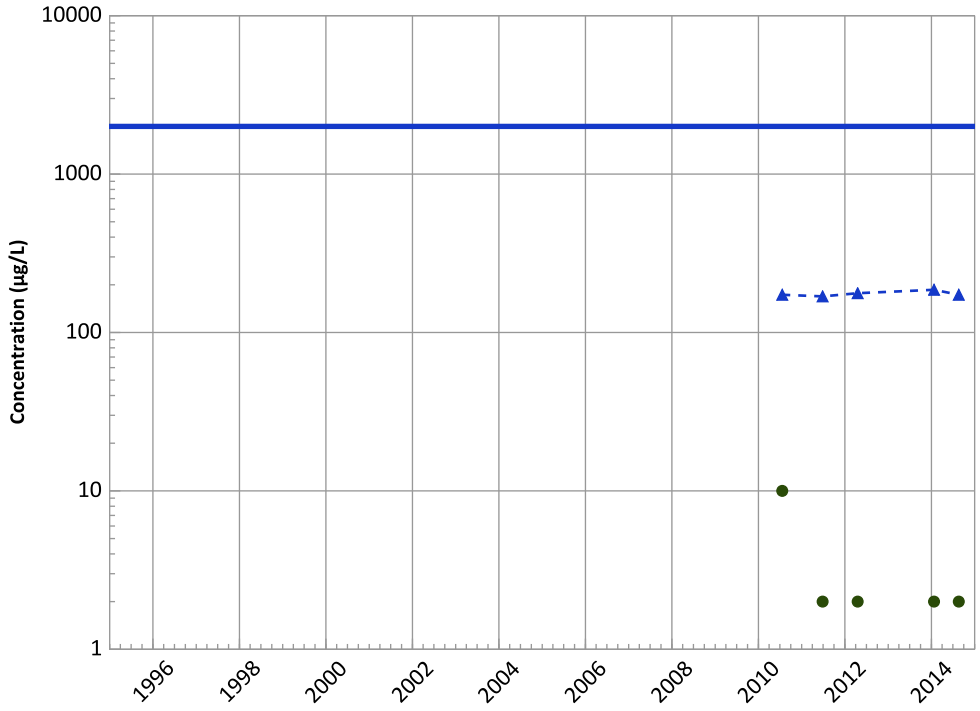
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

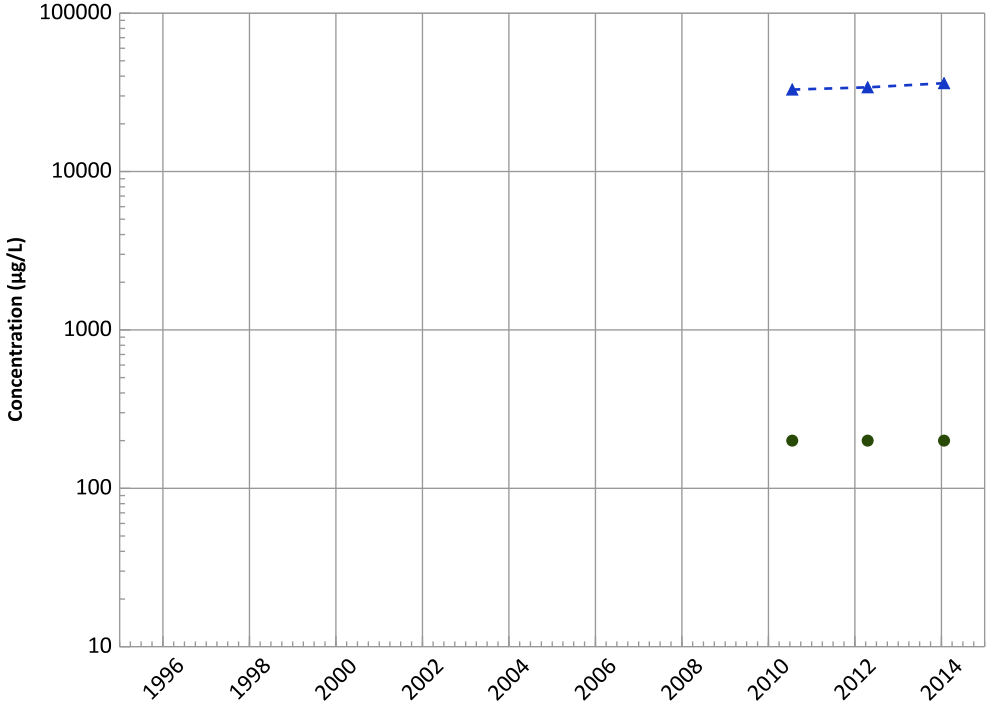


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Calcium Trend



Concentration Trend

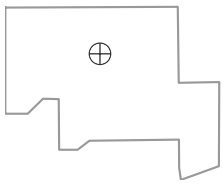
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

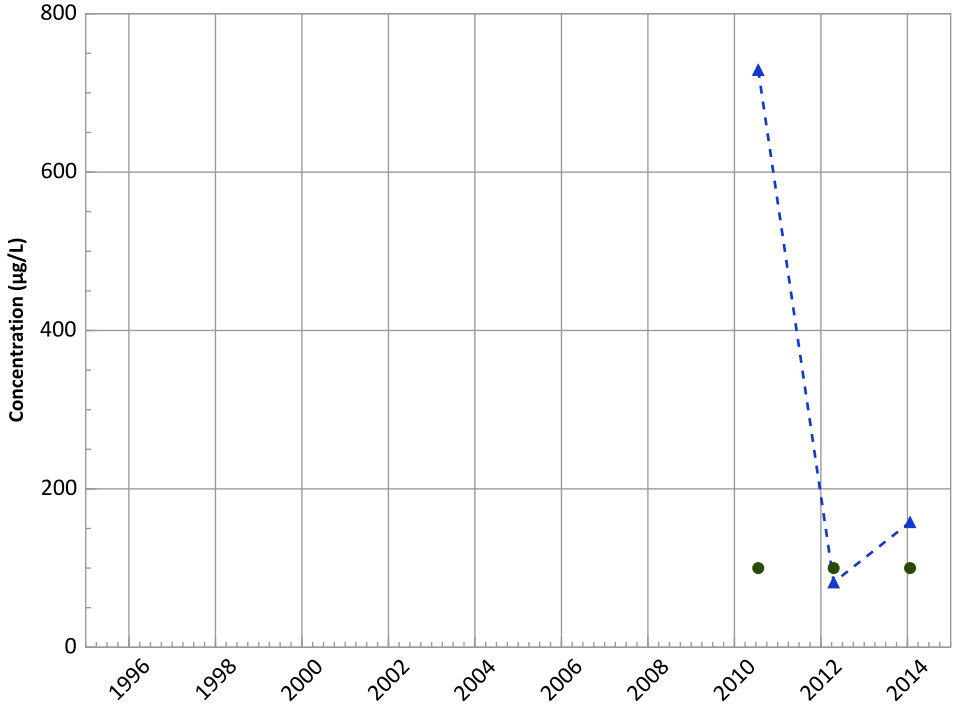
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

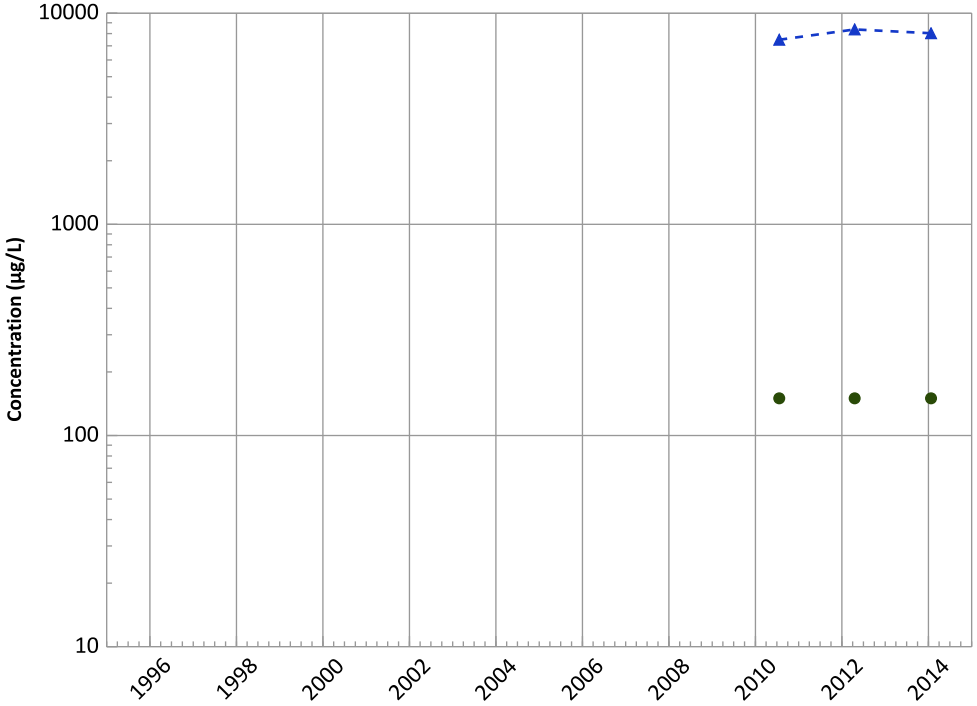


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Potassium Trend



Concentration Trend

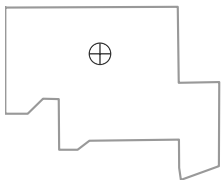
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

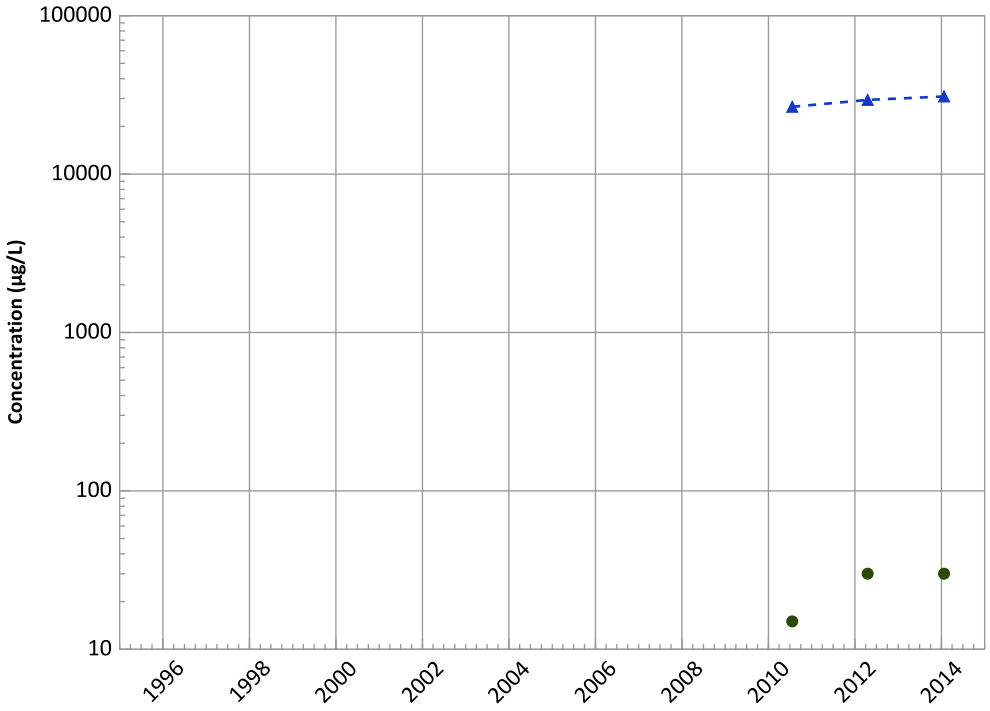
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1141 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

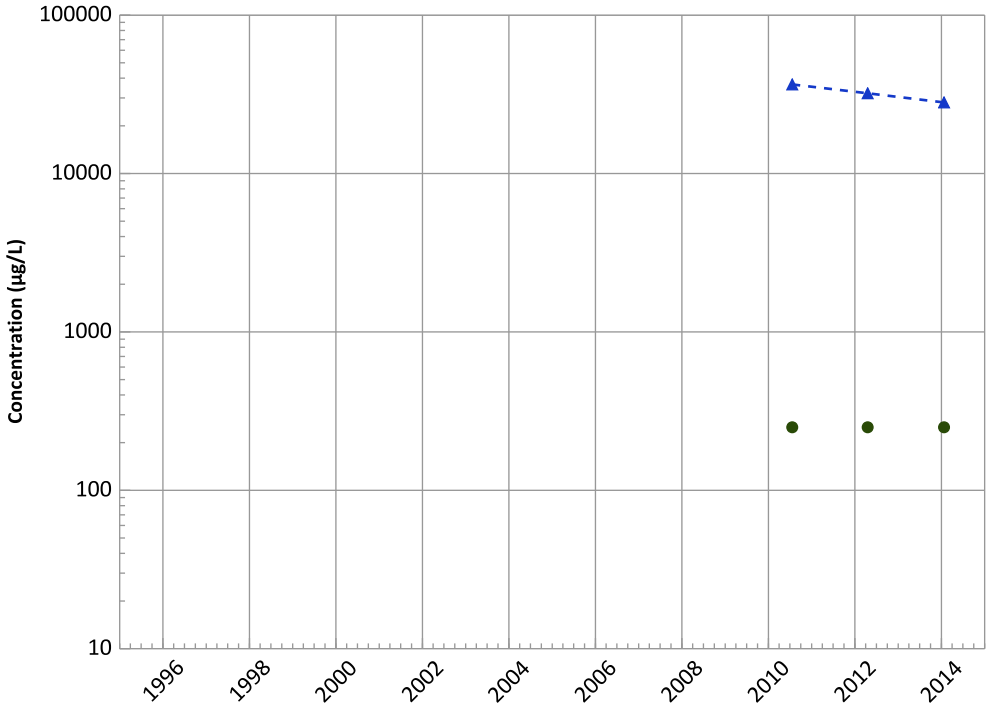


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Sodium Trend



Concentration Trend

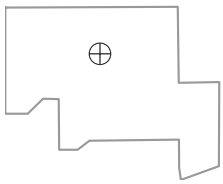
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

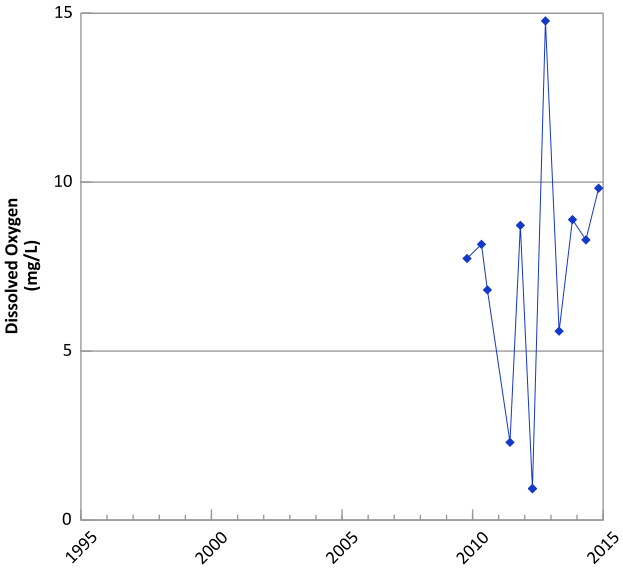
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/14/2009 to 08/20/2014
Analysis Date: 03/19/2015

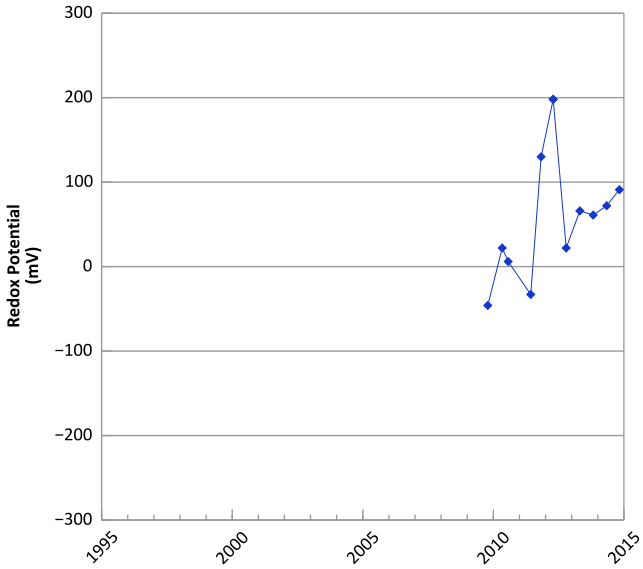
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

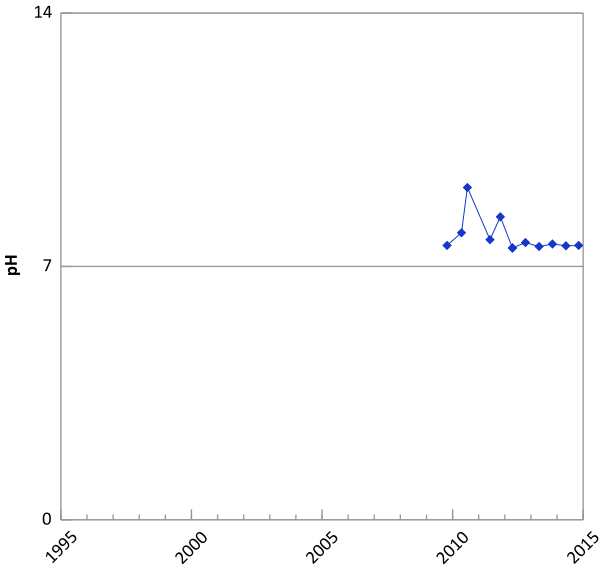
Well Location

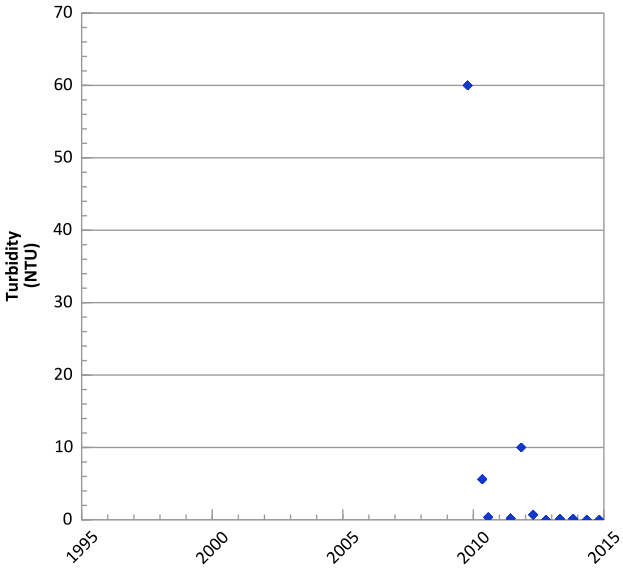


PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



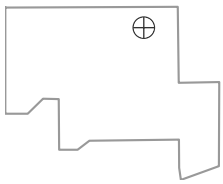






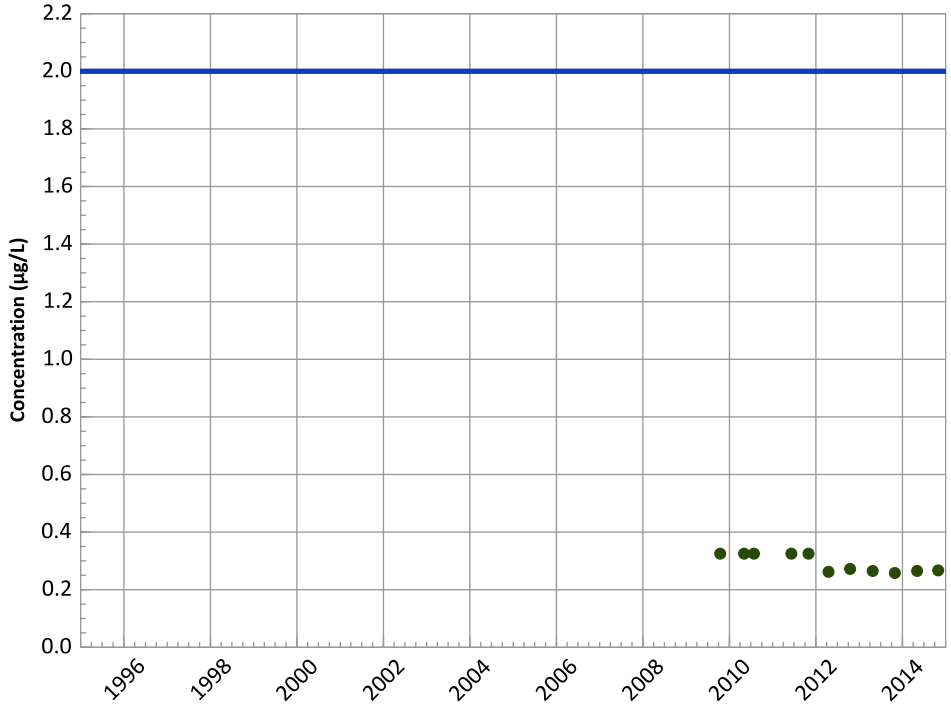
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

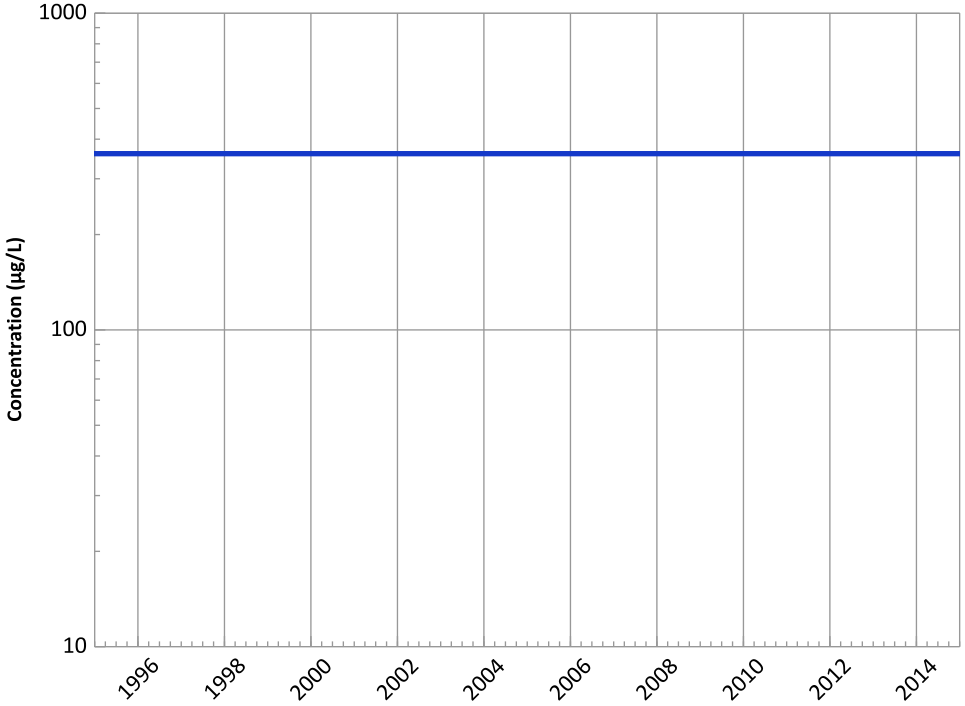


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

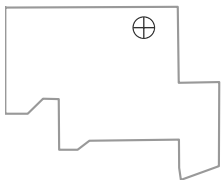
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

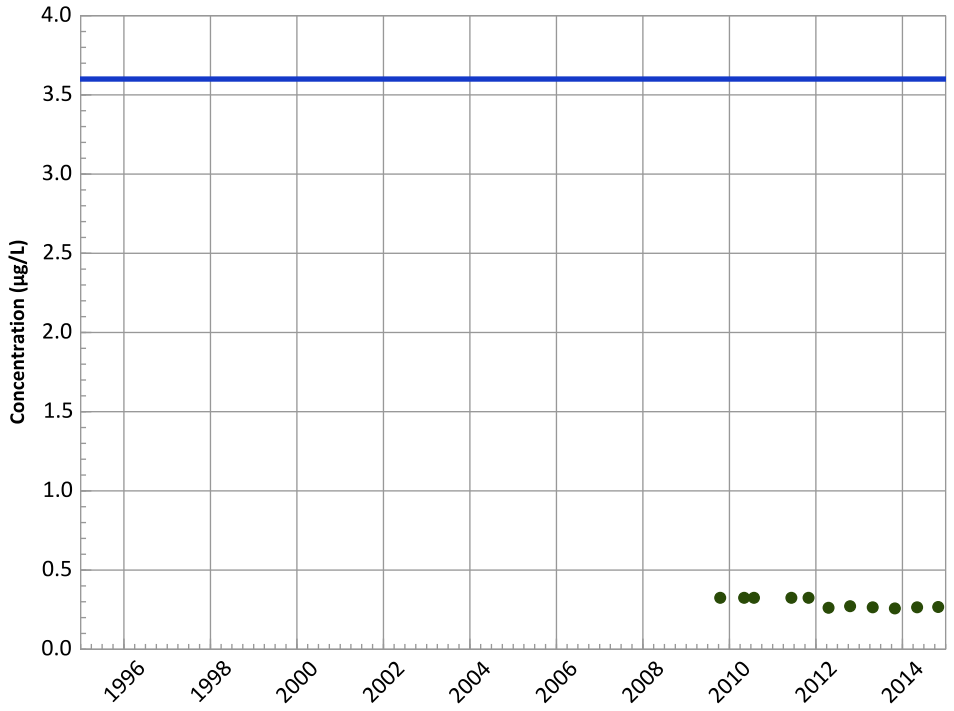
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

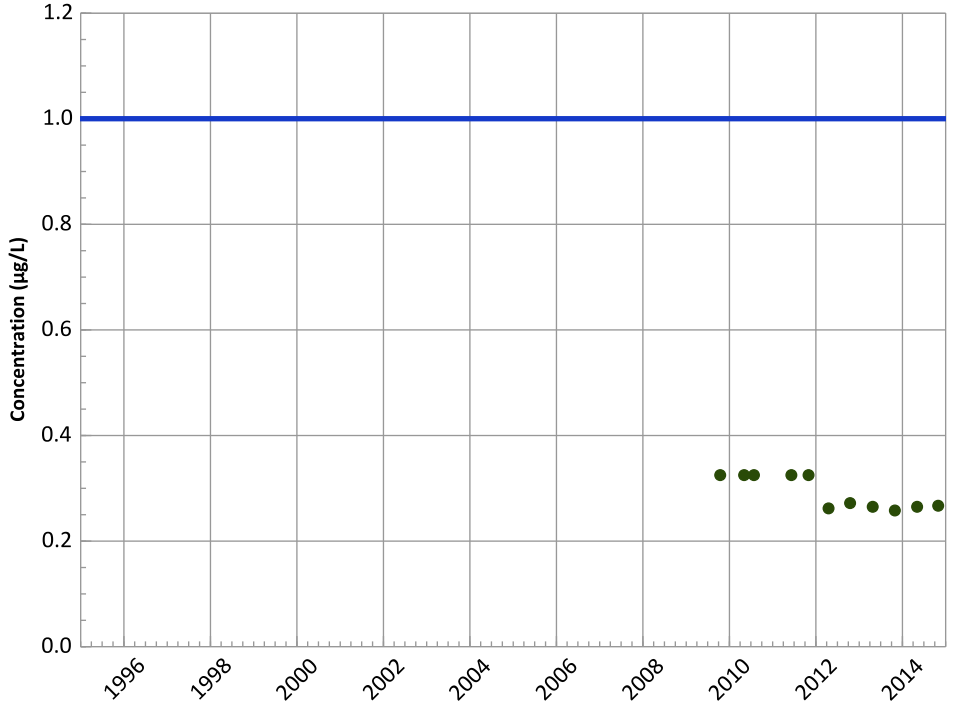


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

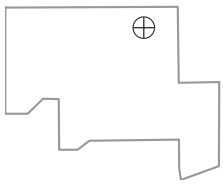
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

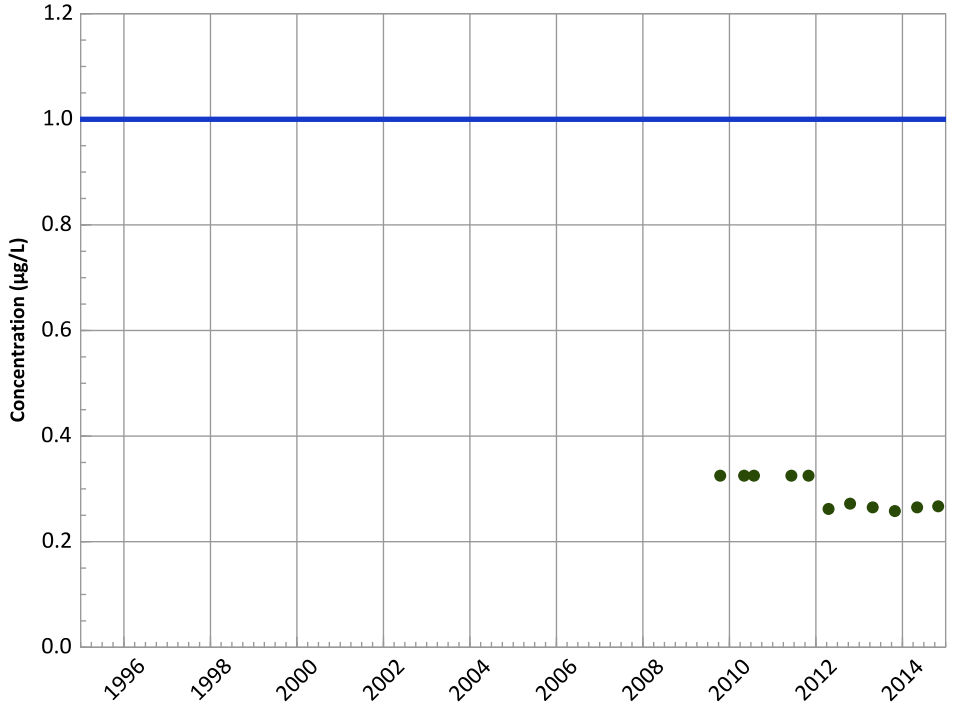
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

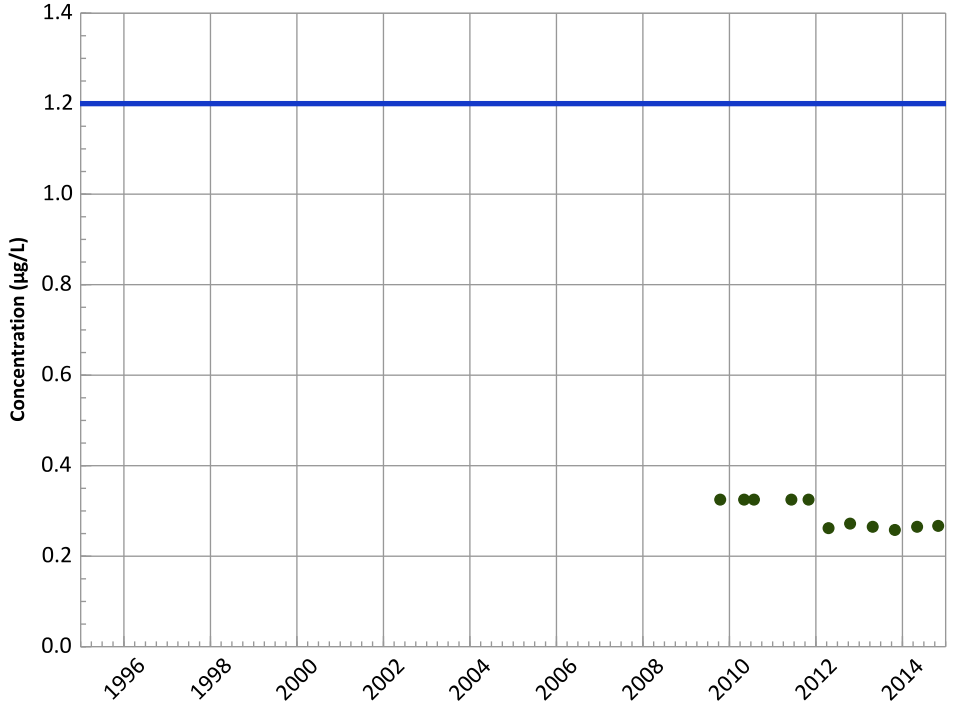


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend

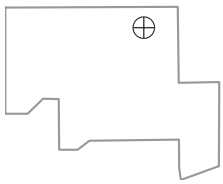


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

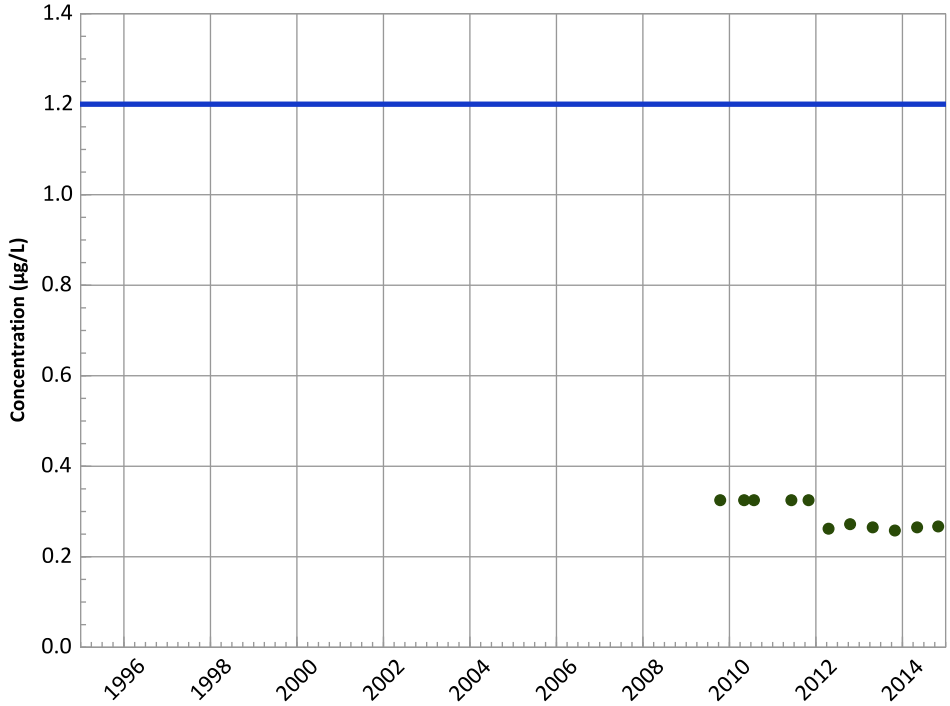


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

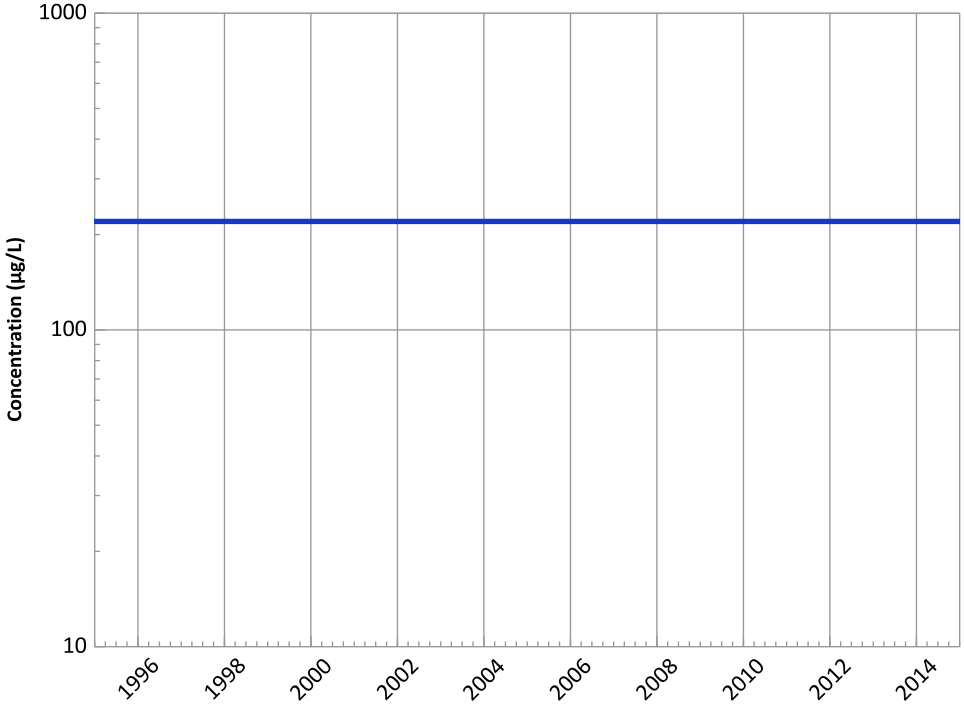


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

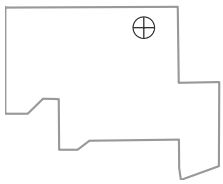


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

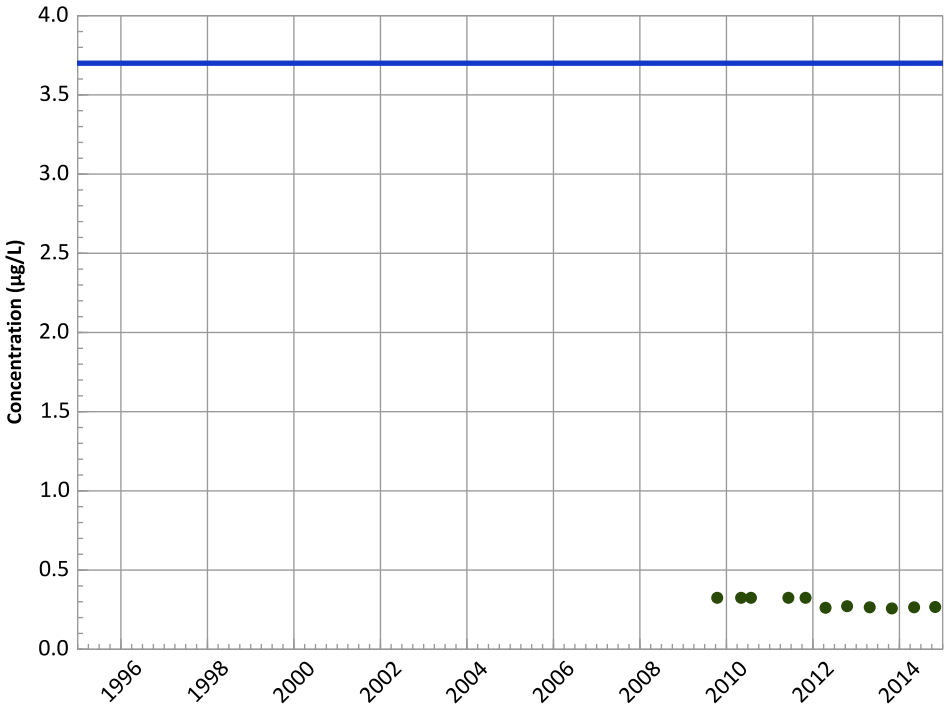


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━ Groundwater Protection Standard

PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

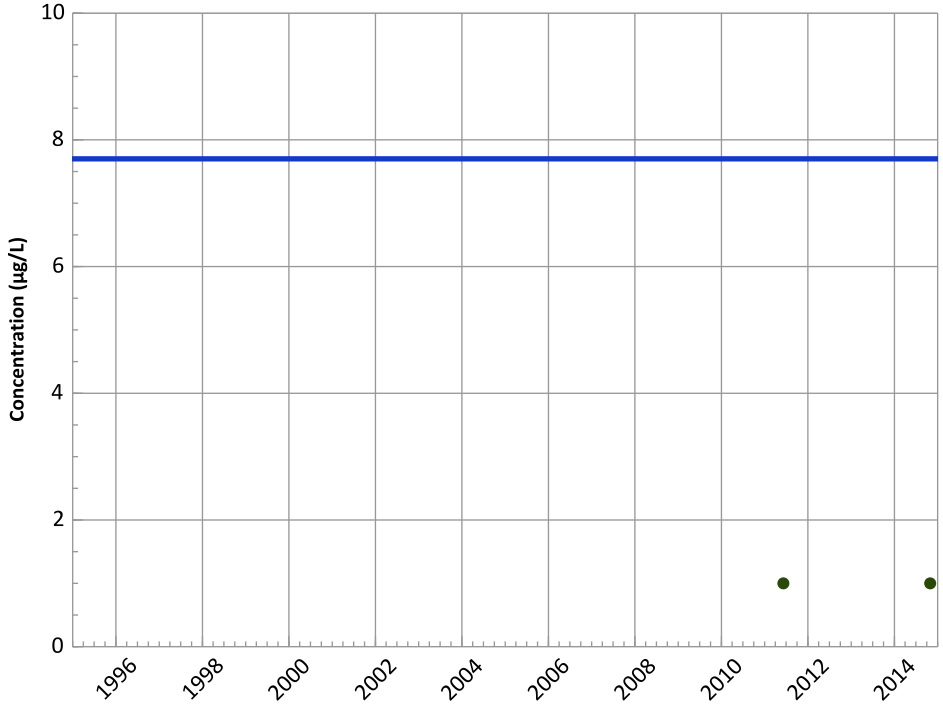


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend

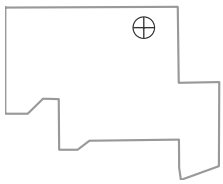


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Well Location

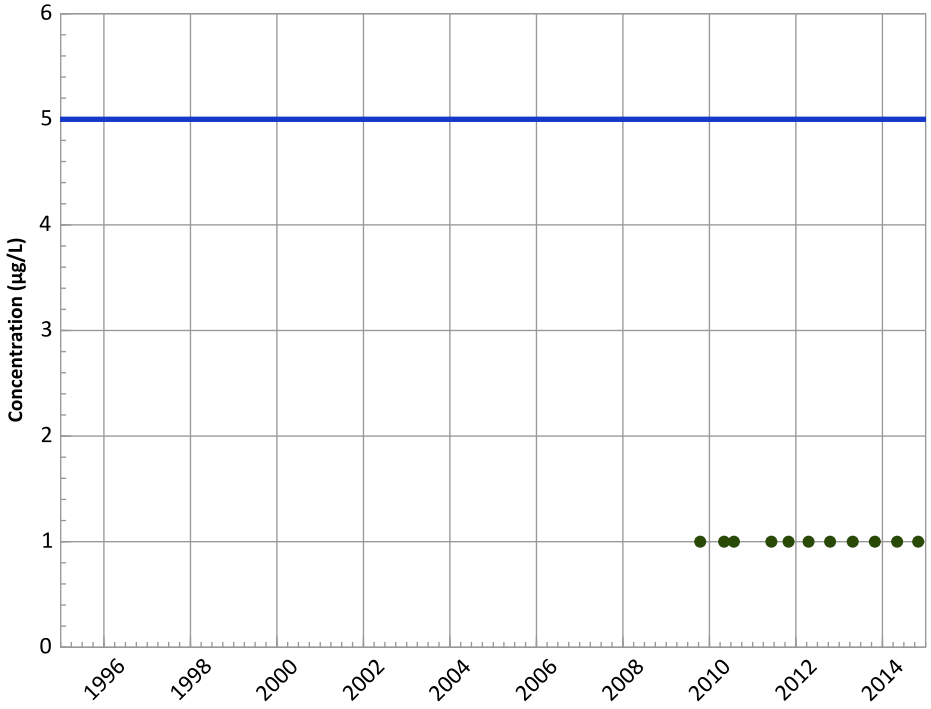


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

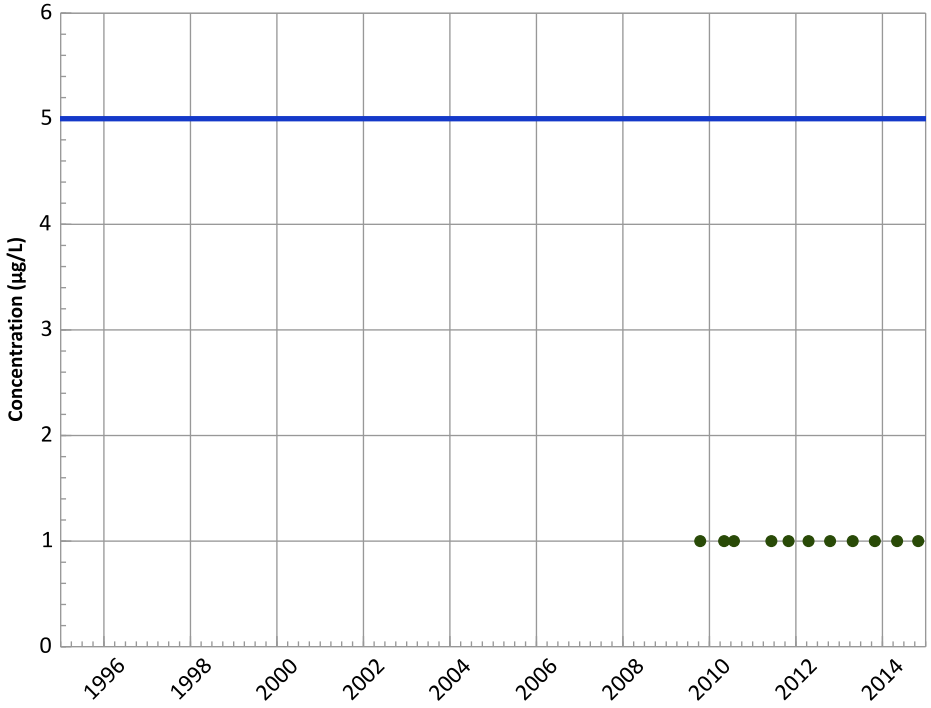


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend



Concentration Trend

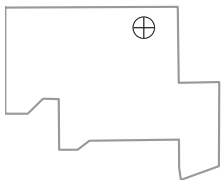
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

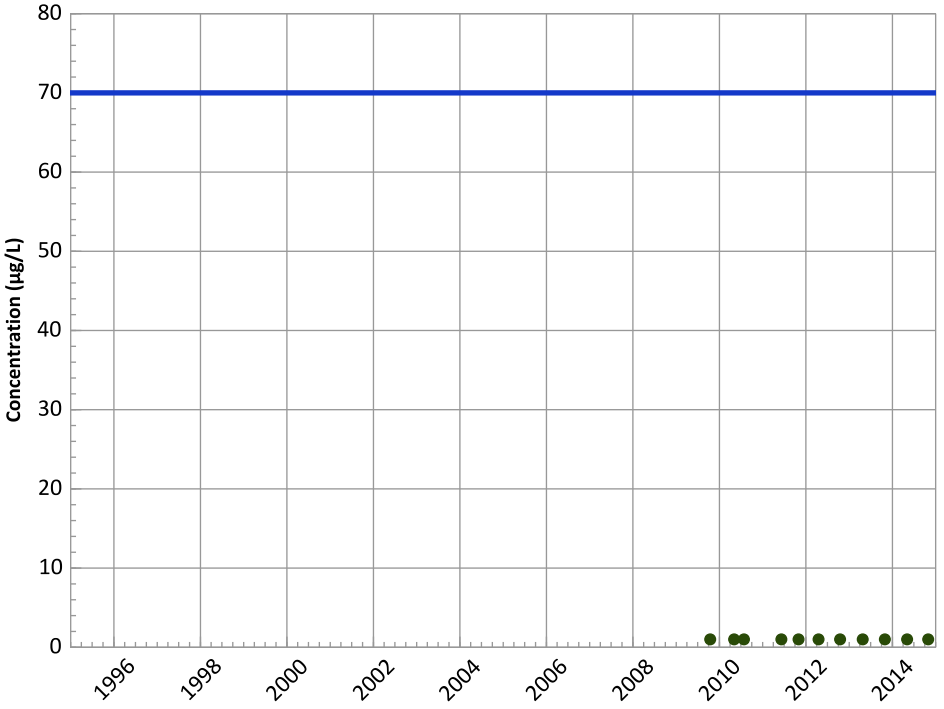
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

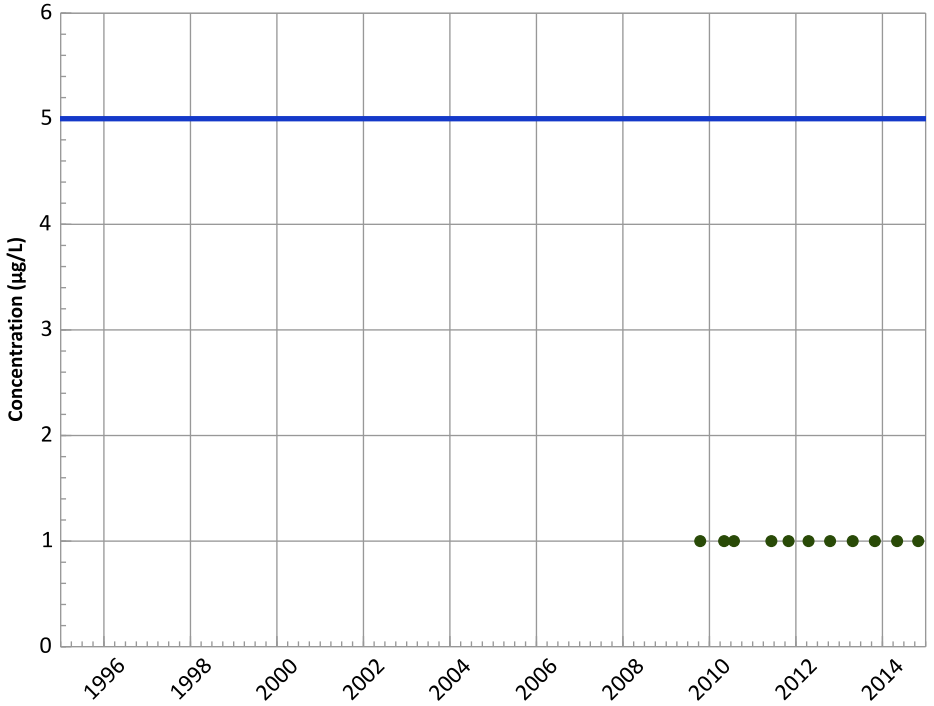


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend

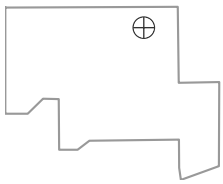


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

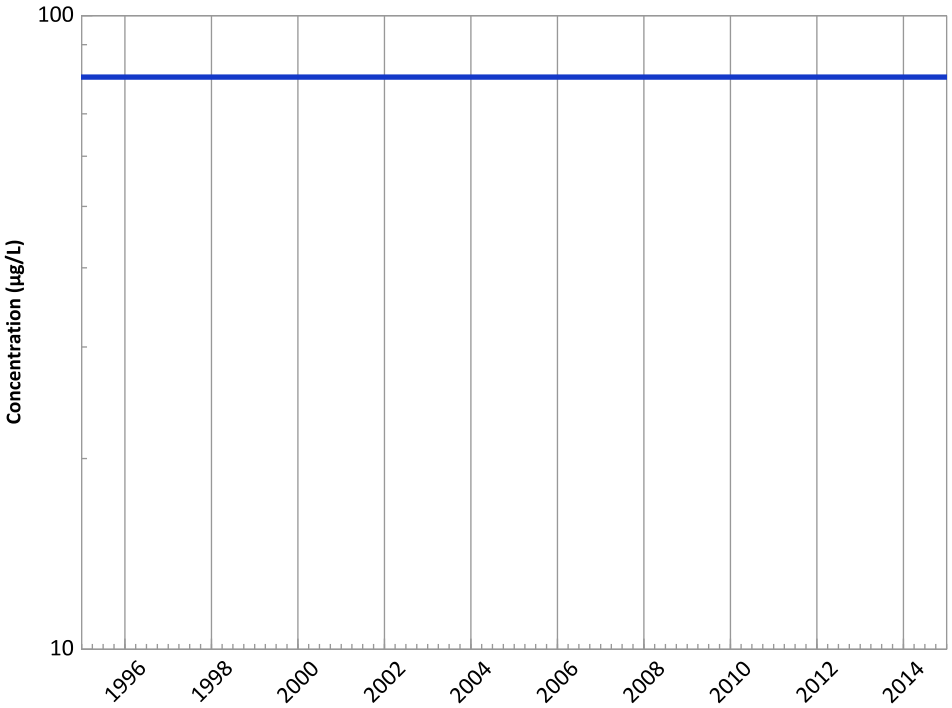


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━ Groundwater Protection Standard

PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

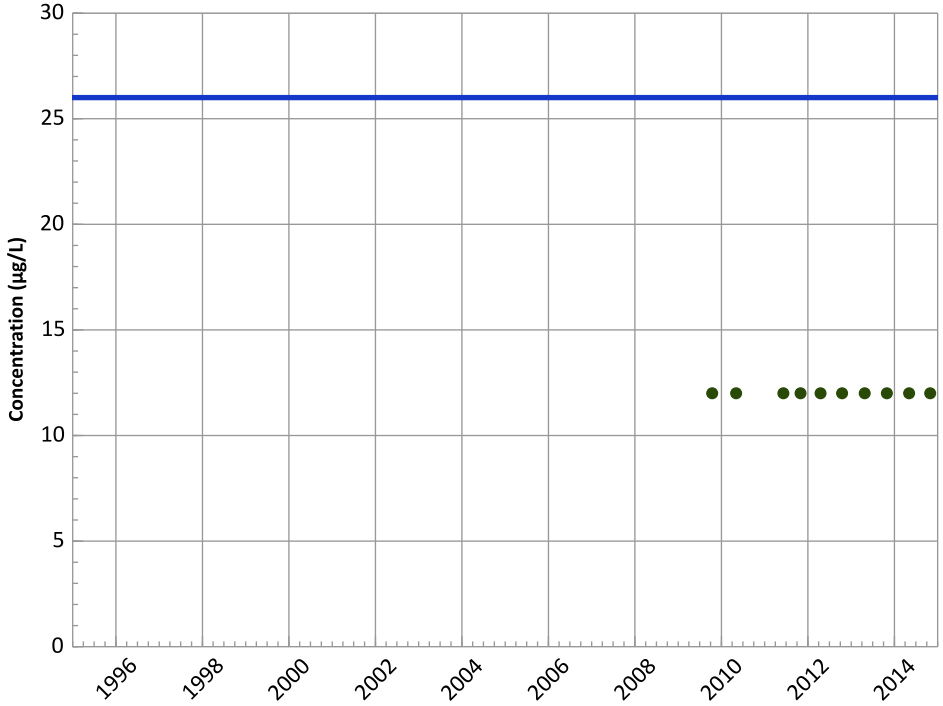


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

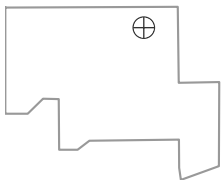
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

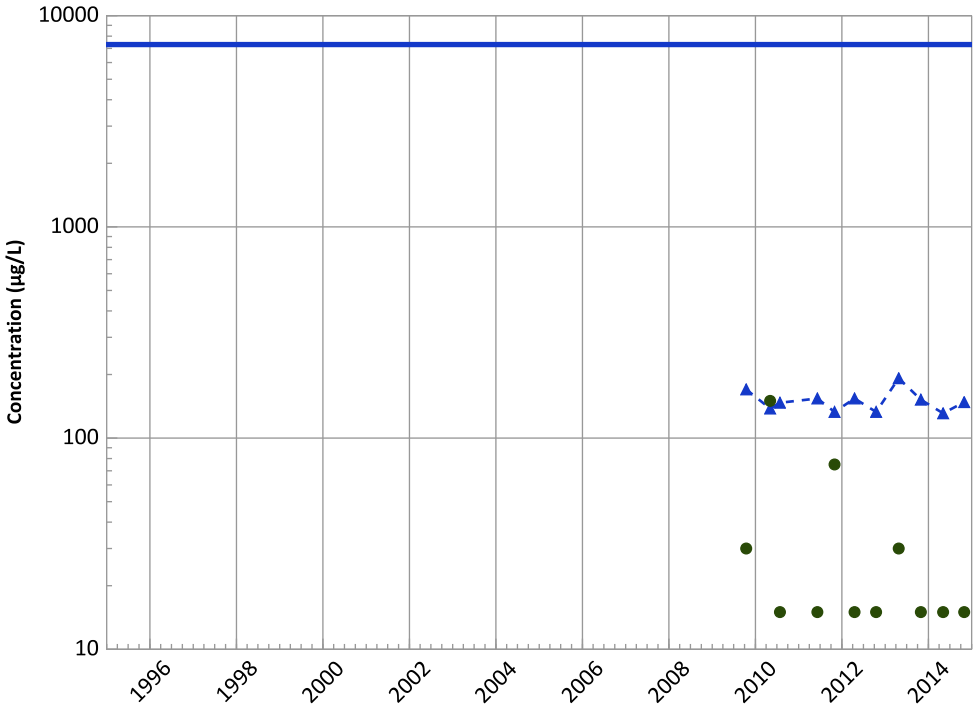
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

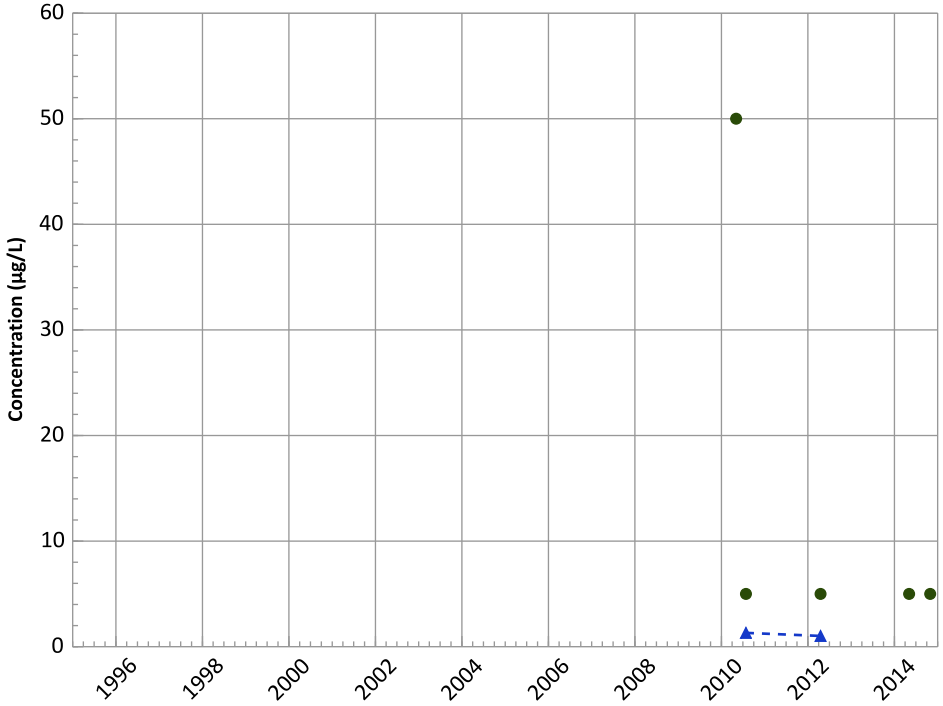


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Manganese Trend



Concentration Trend

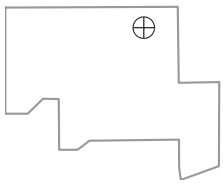
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

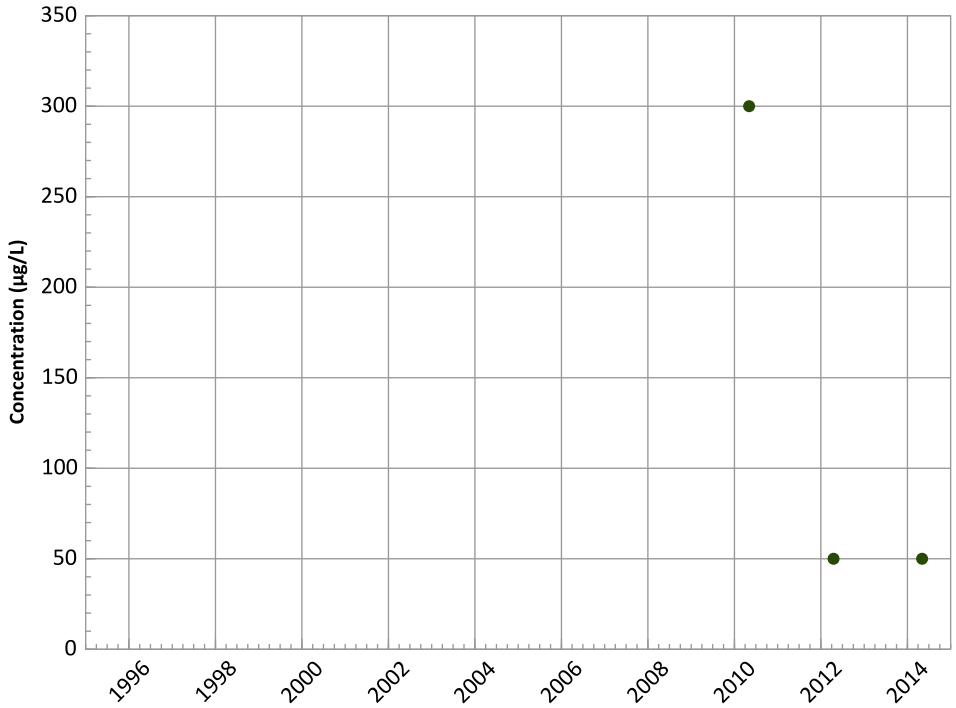
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

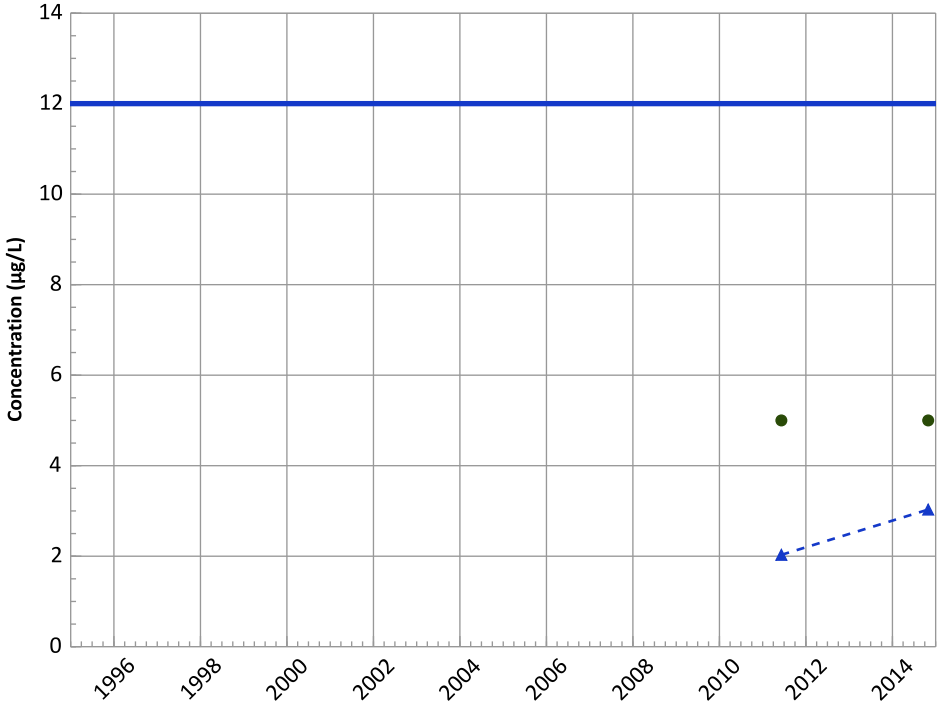


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Arsenic Trend



Concentration Trend

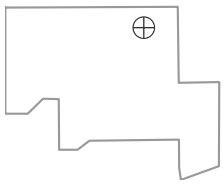
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

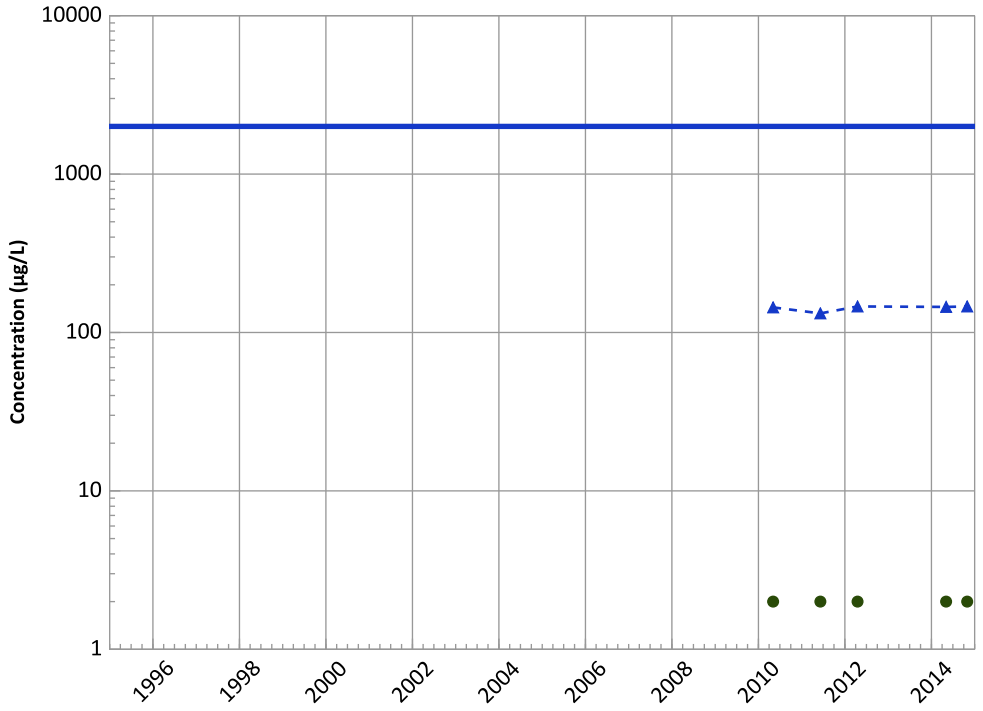
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

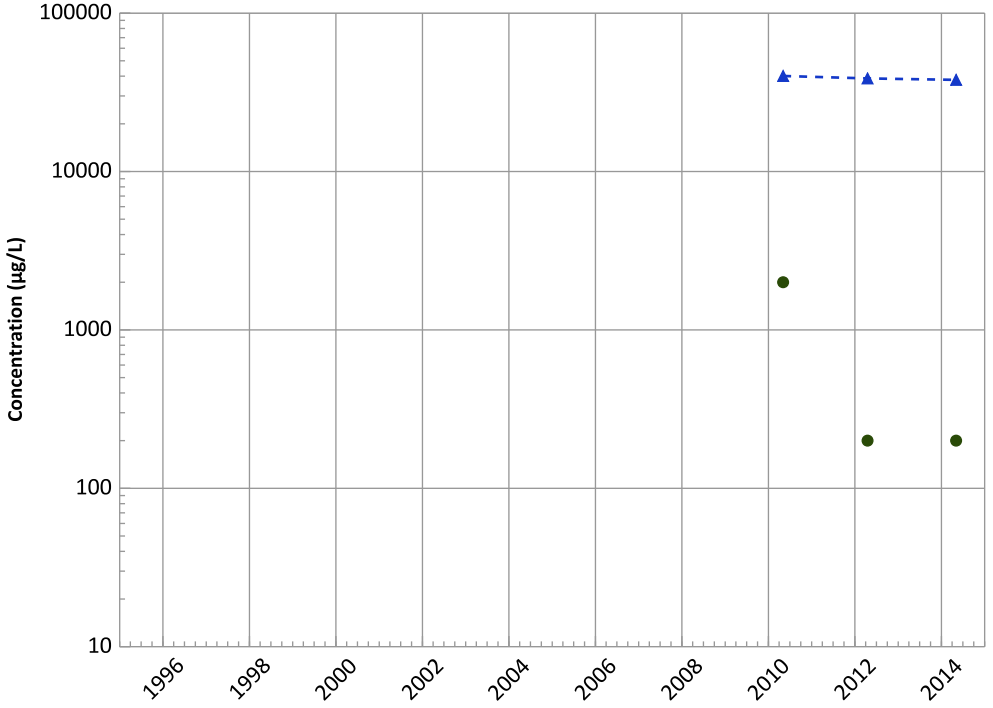


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Calcium Trend



Concentration Trend

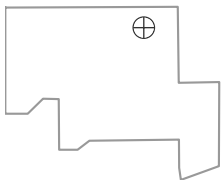
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

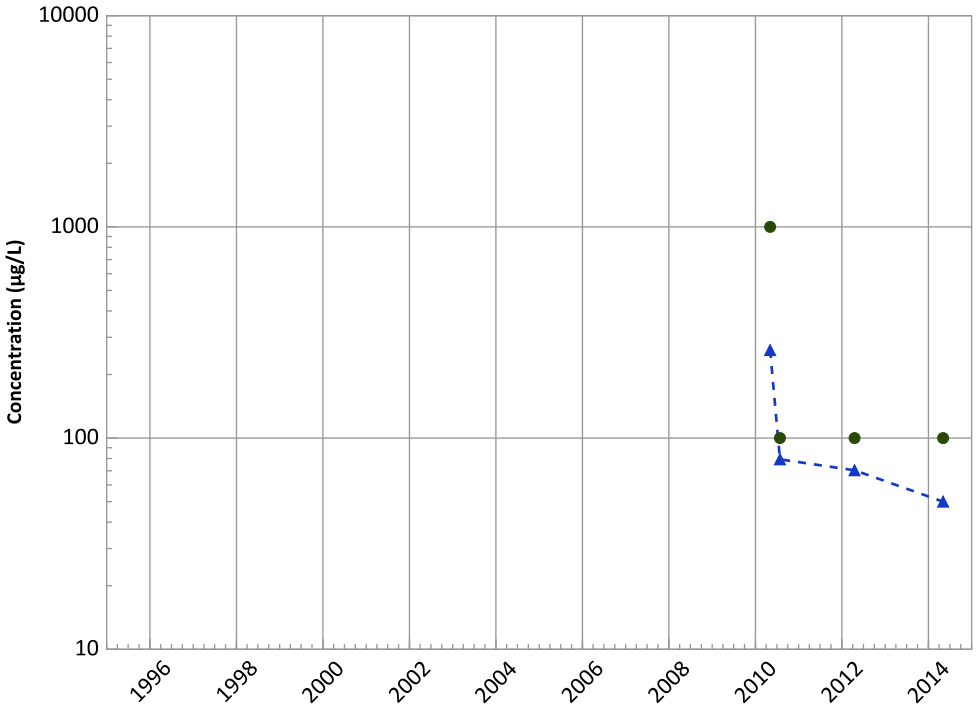
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

Well Location



PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

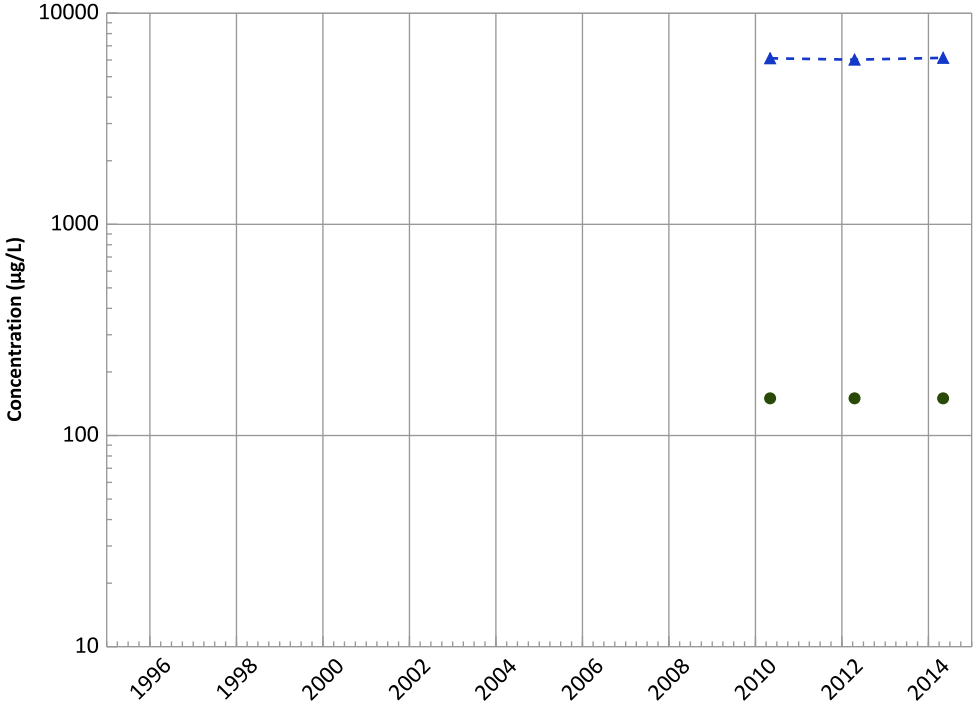


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Potassium Trend



Concentration Trend

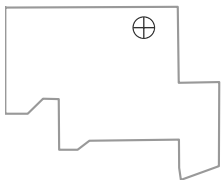
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

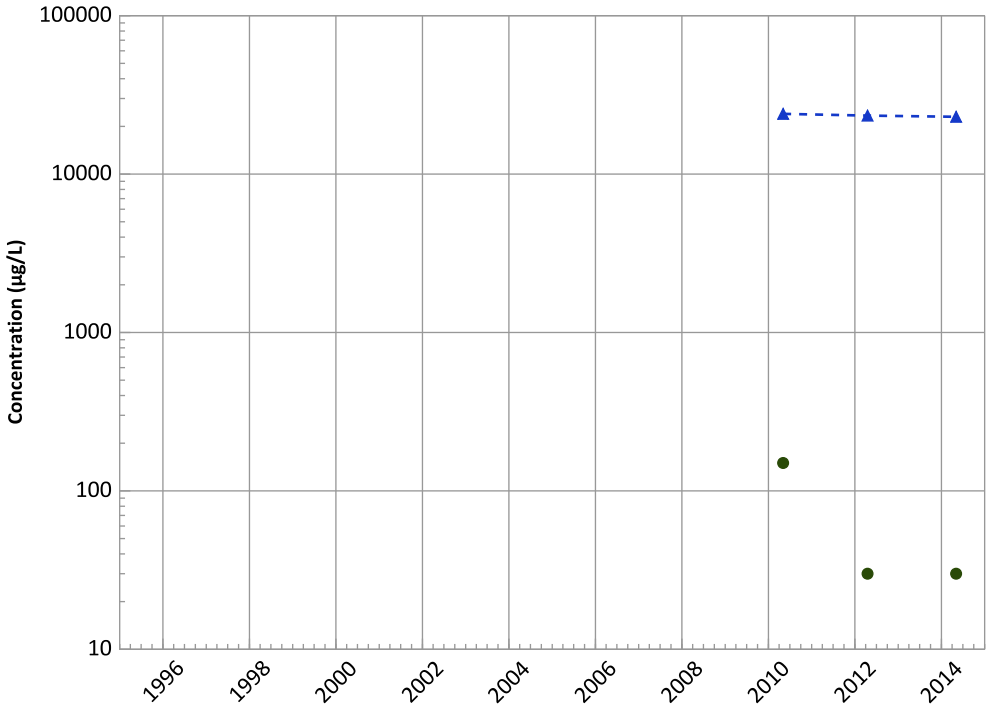
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1143 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

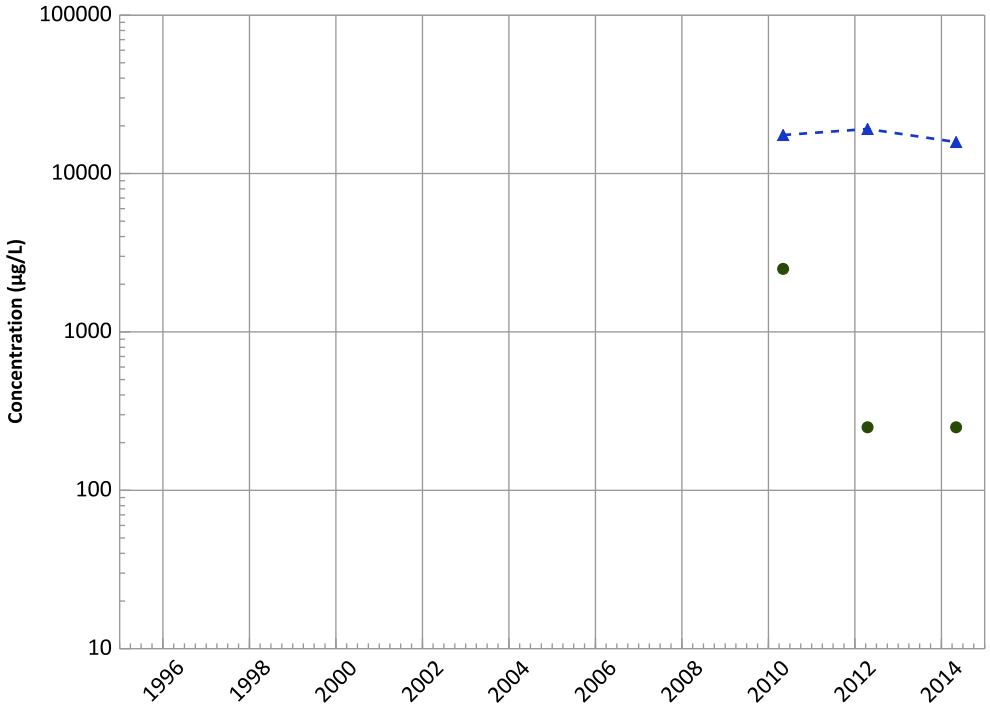


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Sodium Trend



Concentration Trend

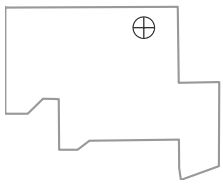
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

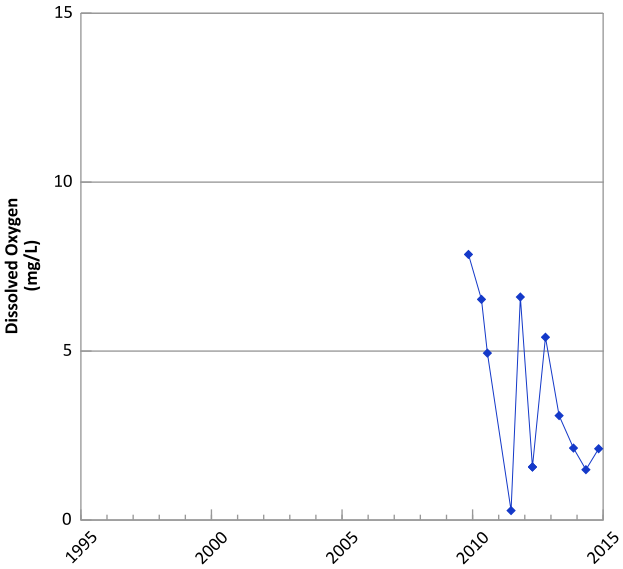
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 10/15/2009 to 10/30/2014
Analysis Date: 03/19/2015

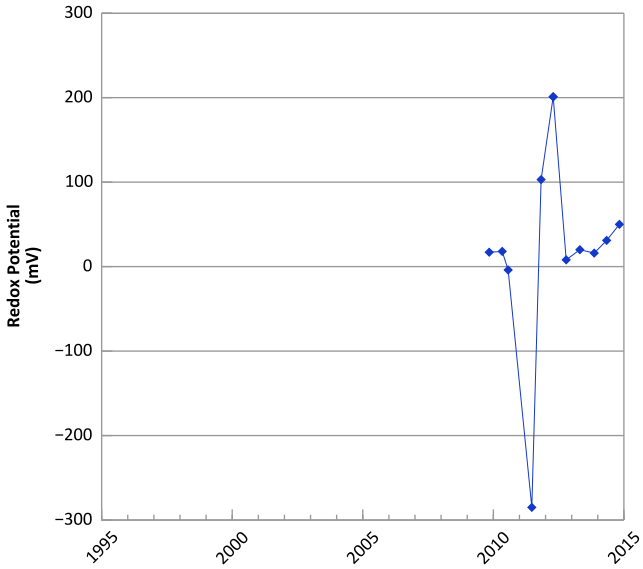
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

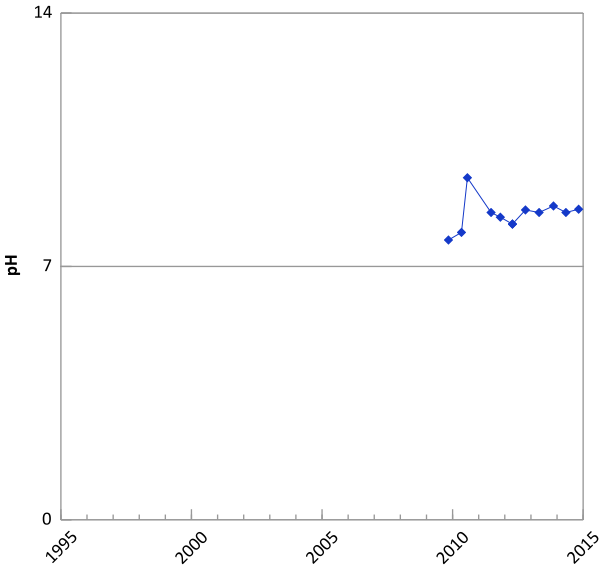
Well Location

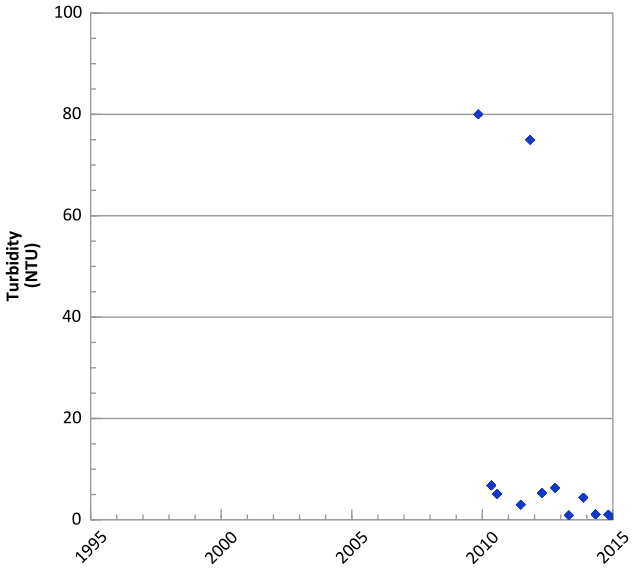


PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



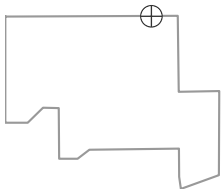






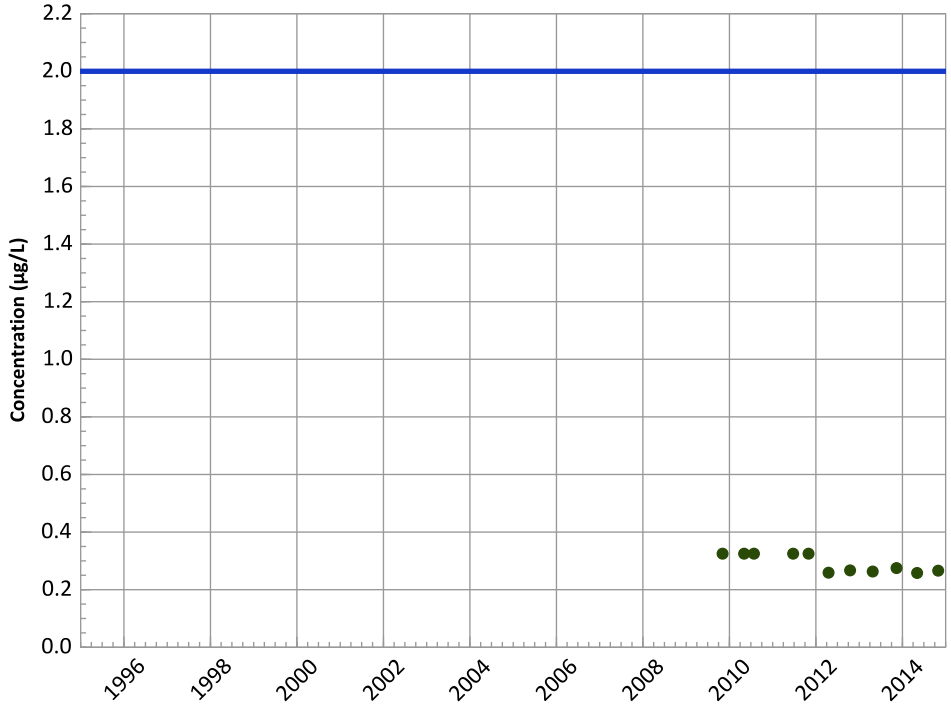
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

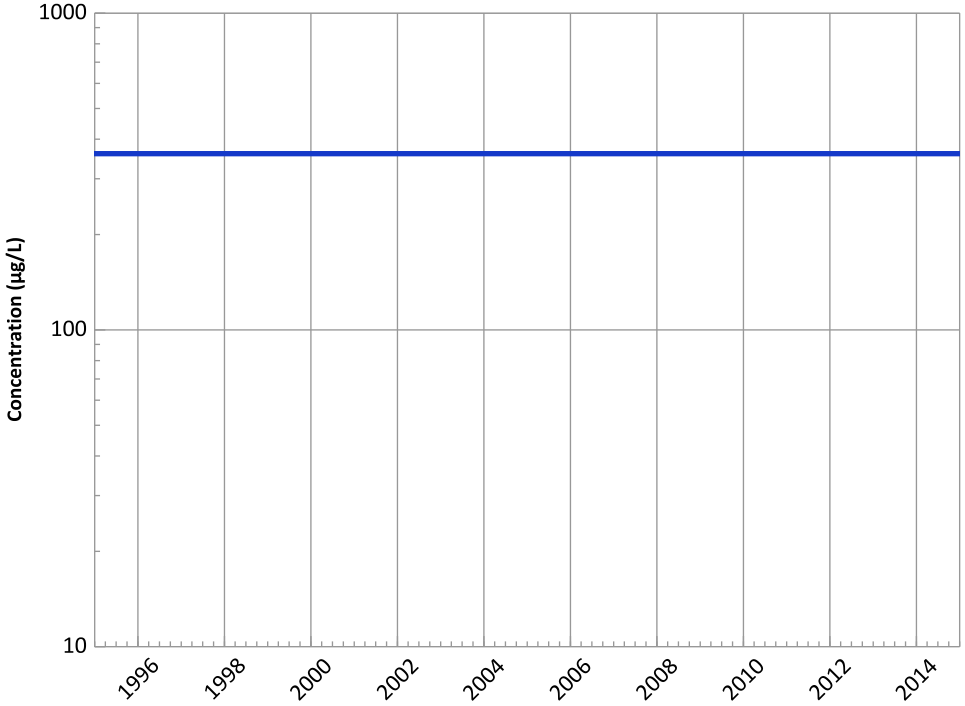


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

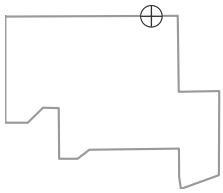
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

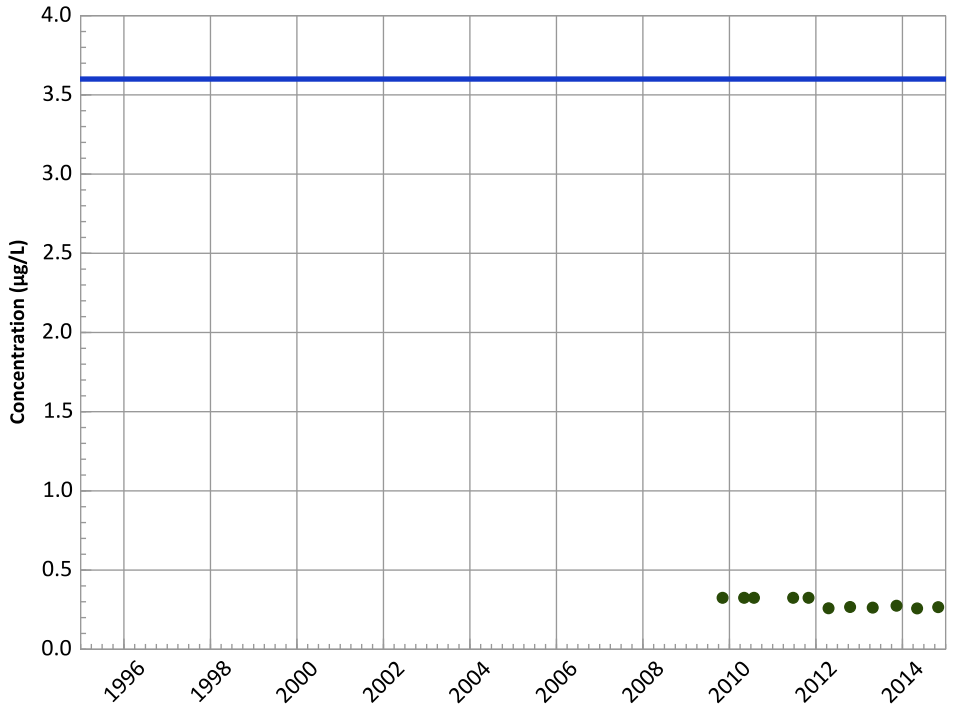
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

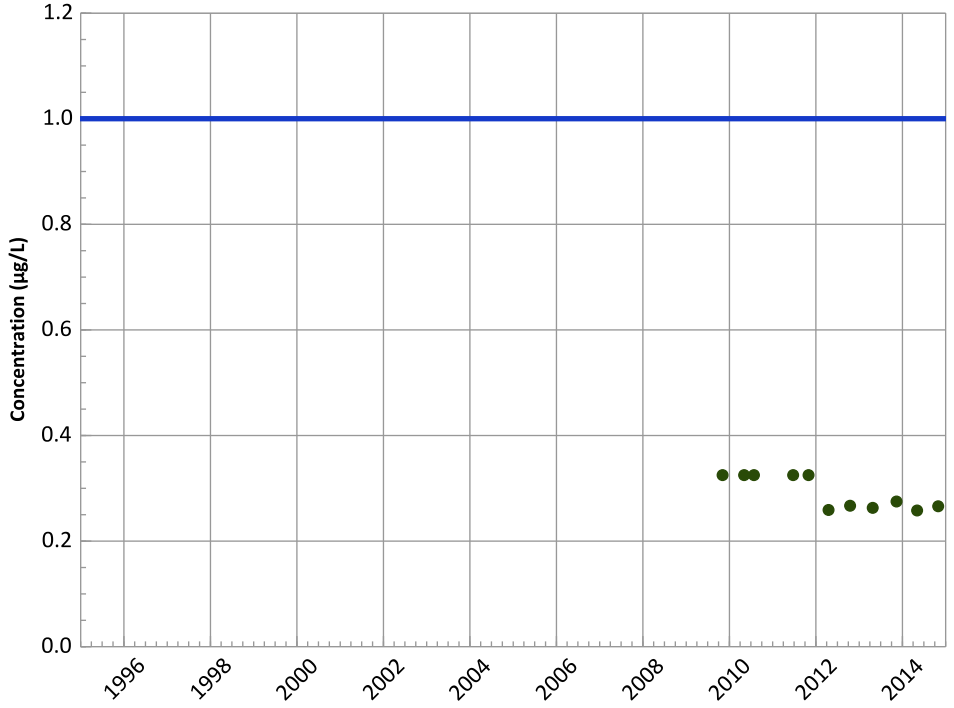


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

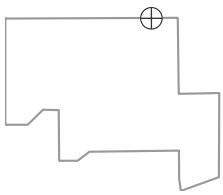
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

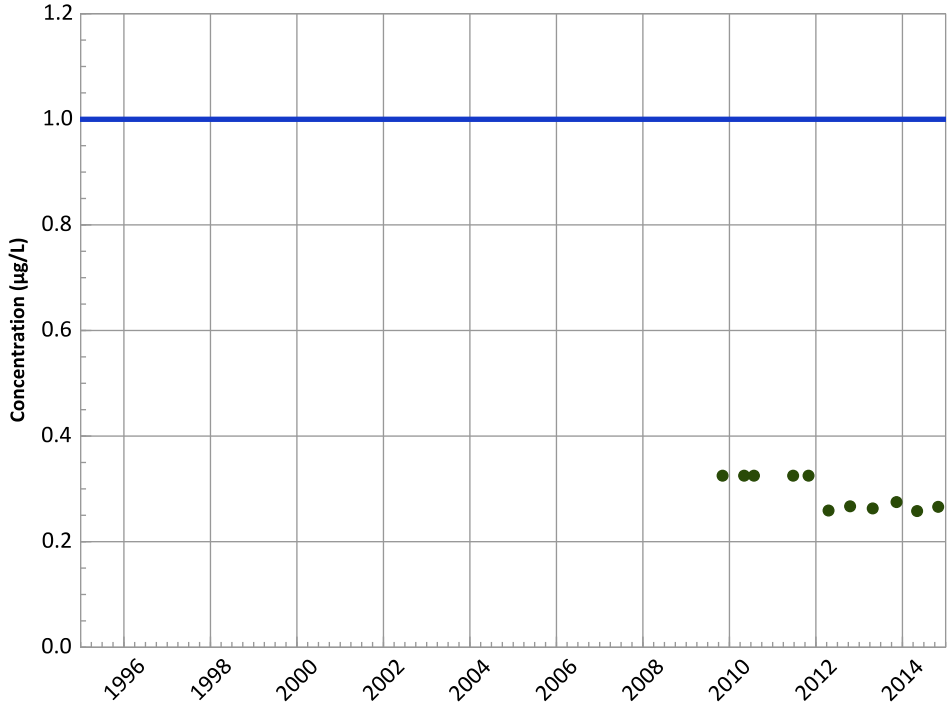
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

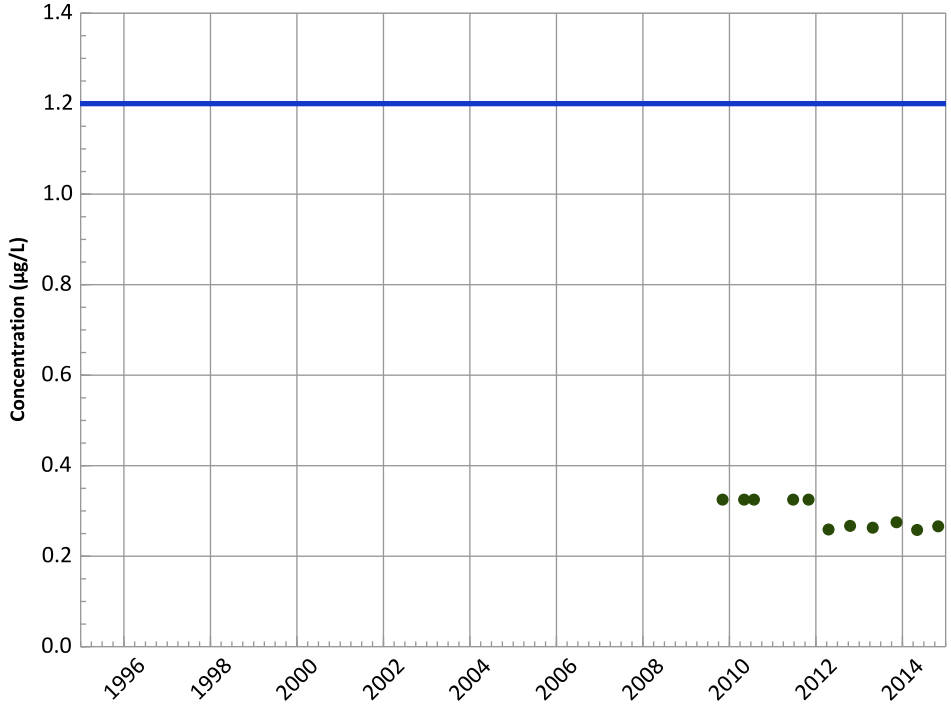


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

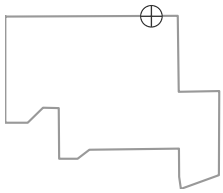
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

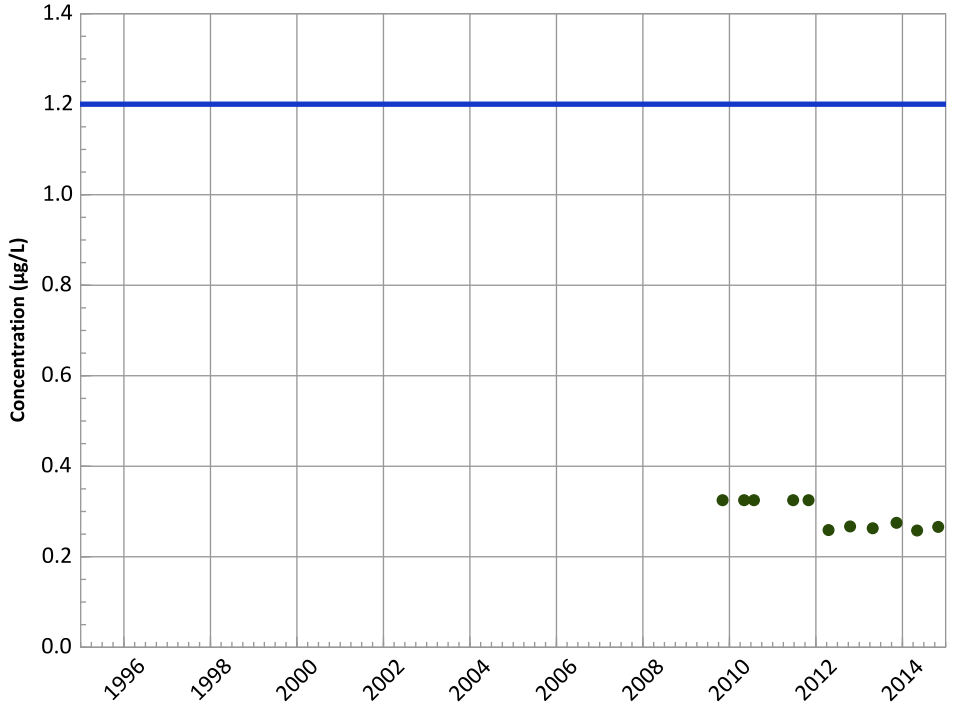
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

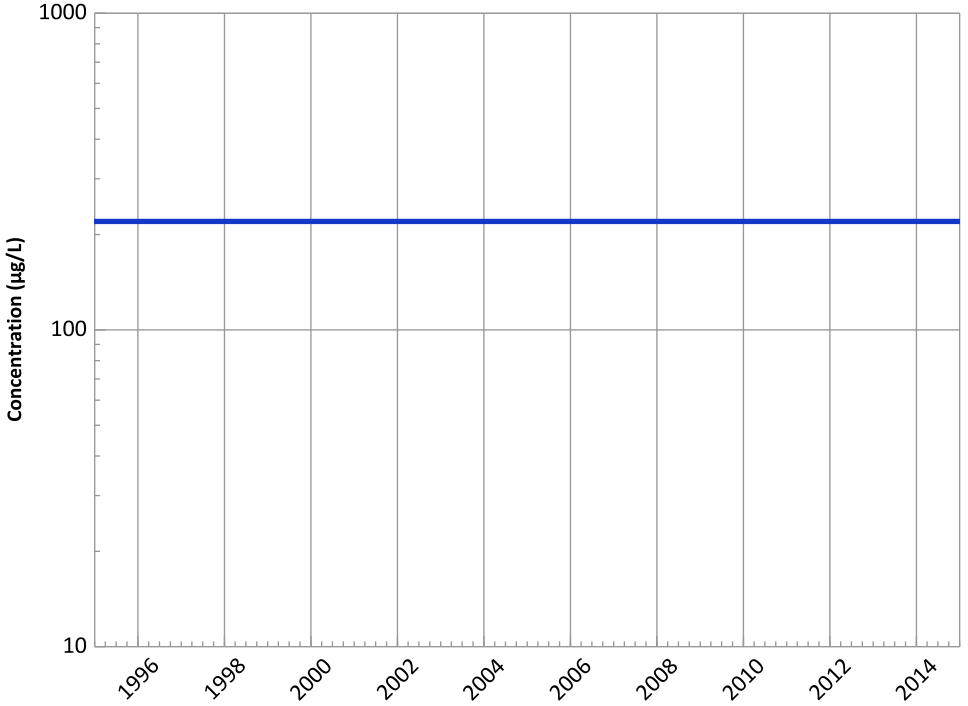


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

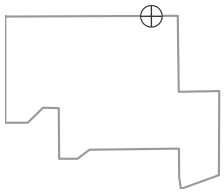


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

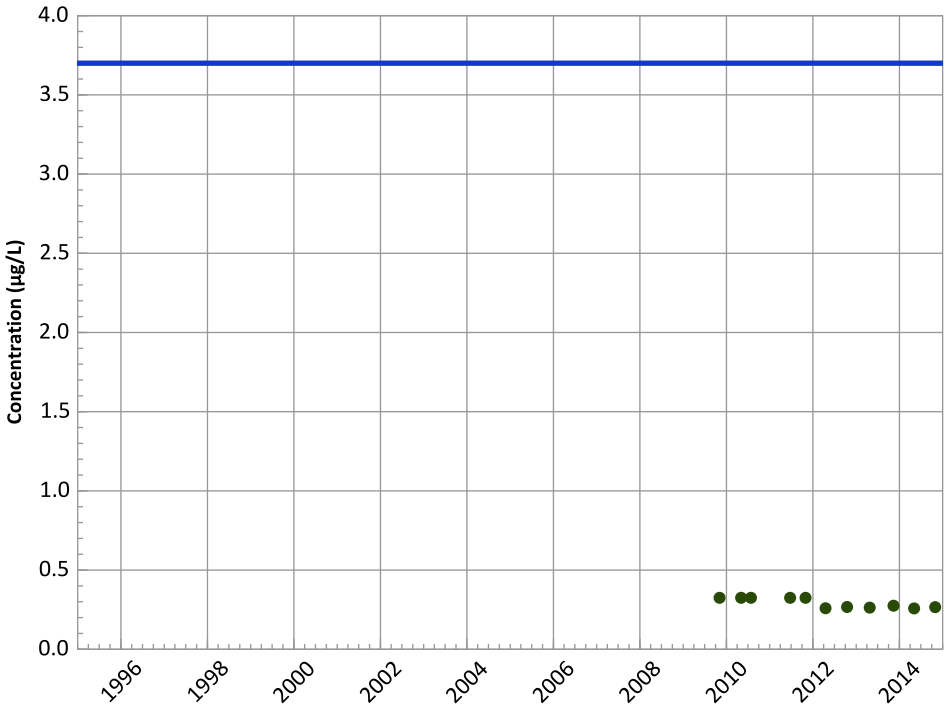


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

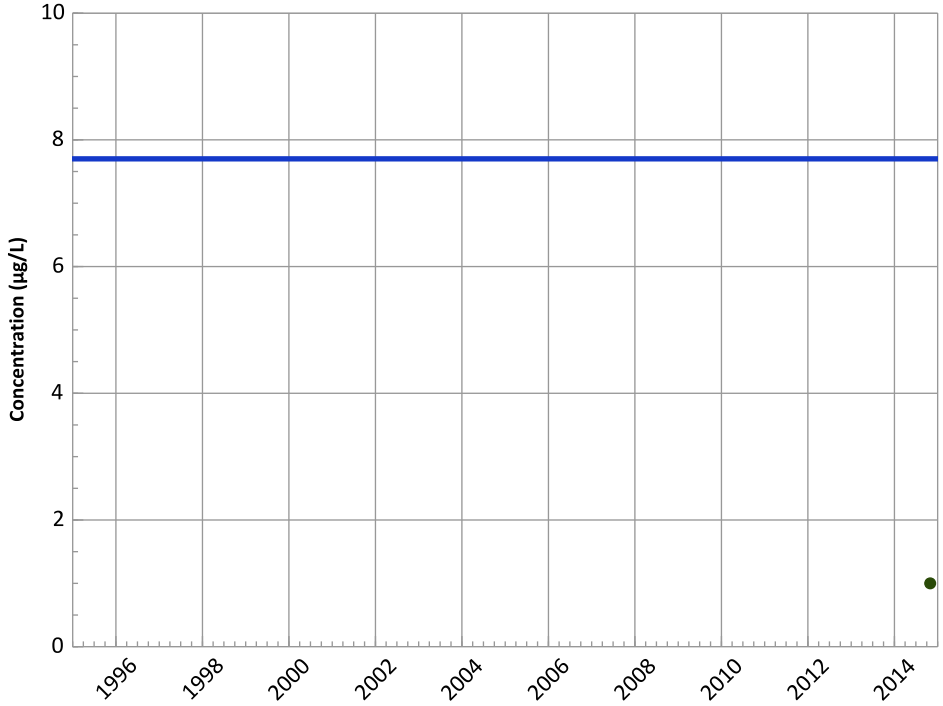


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

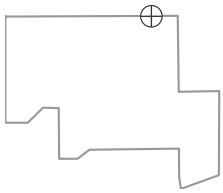
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

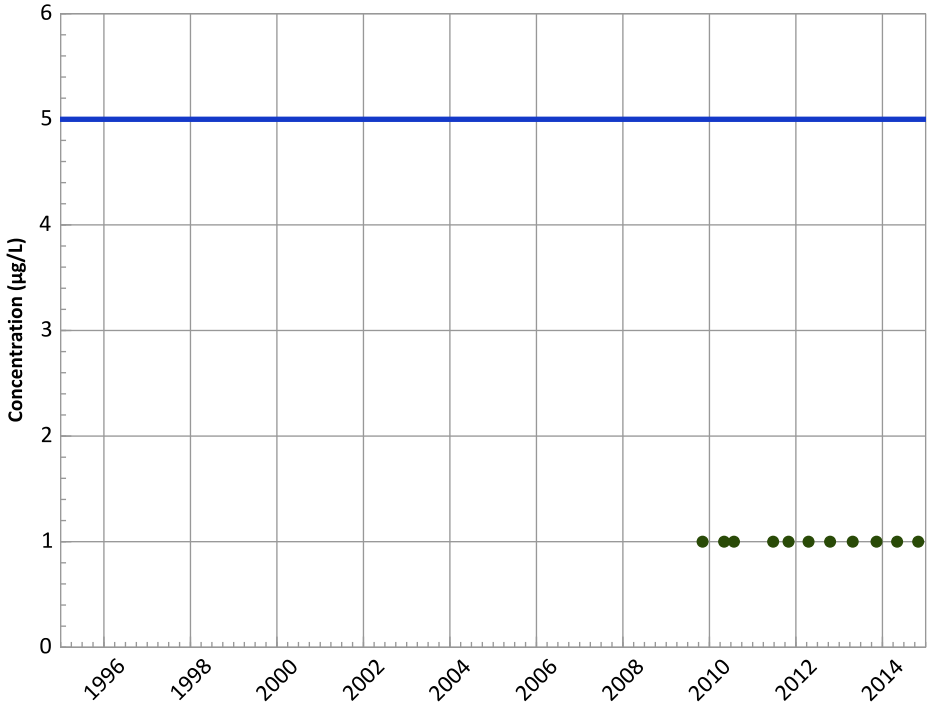
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

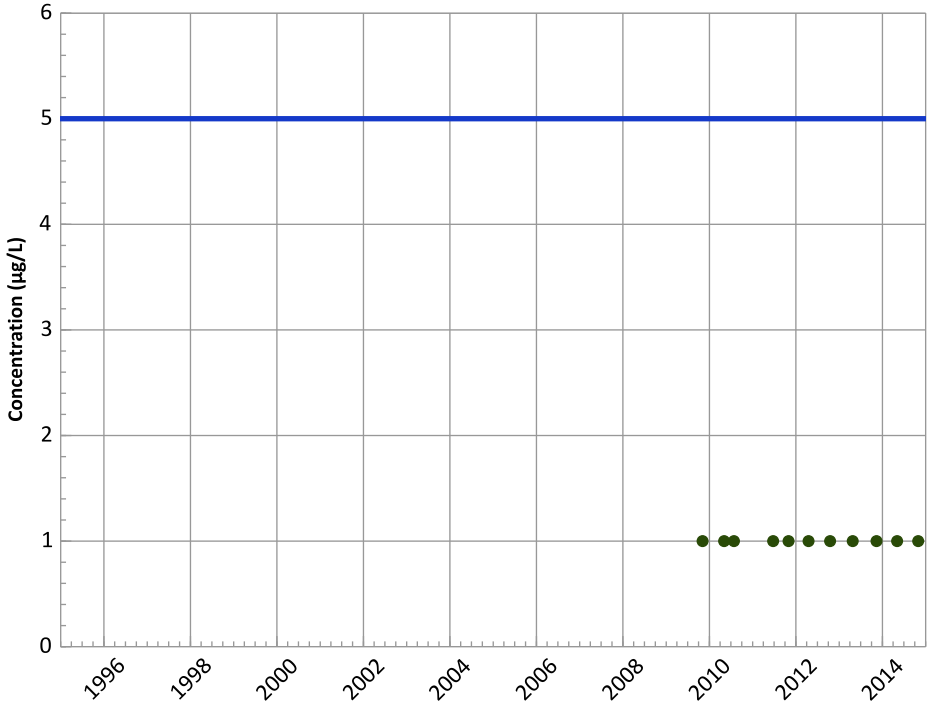


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend

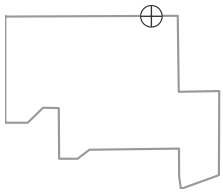


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

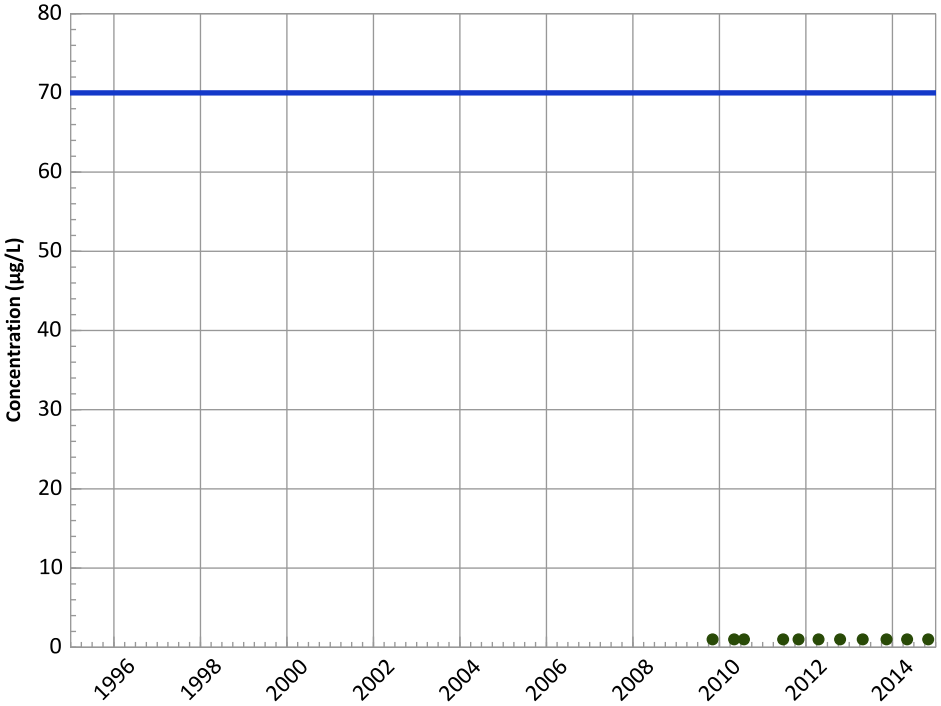


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

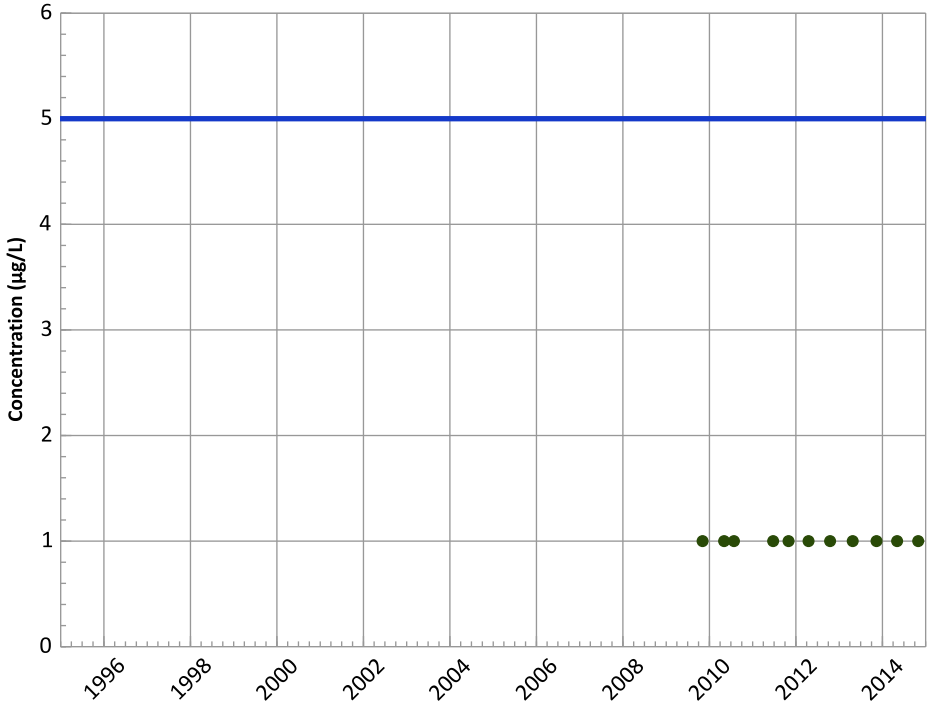


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend

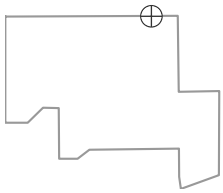


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

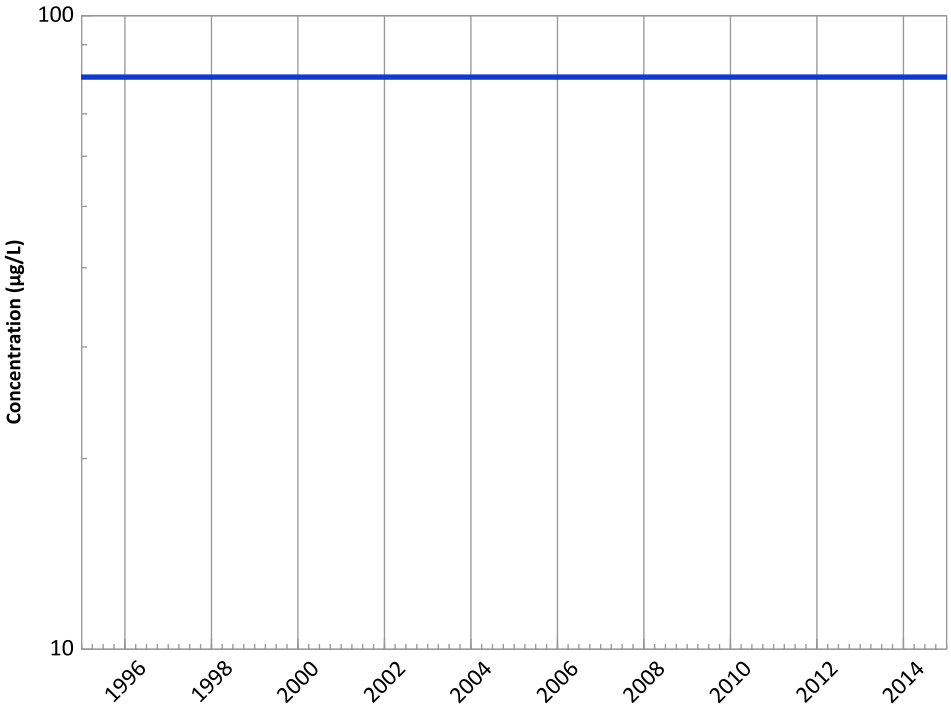


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

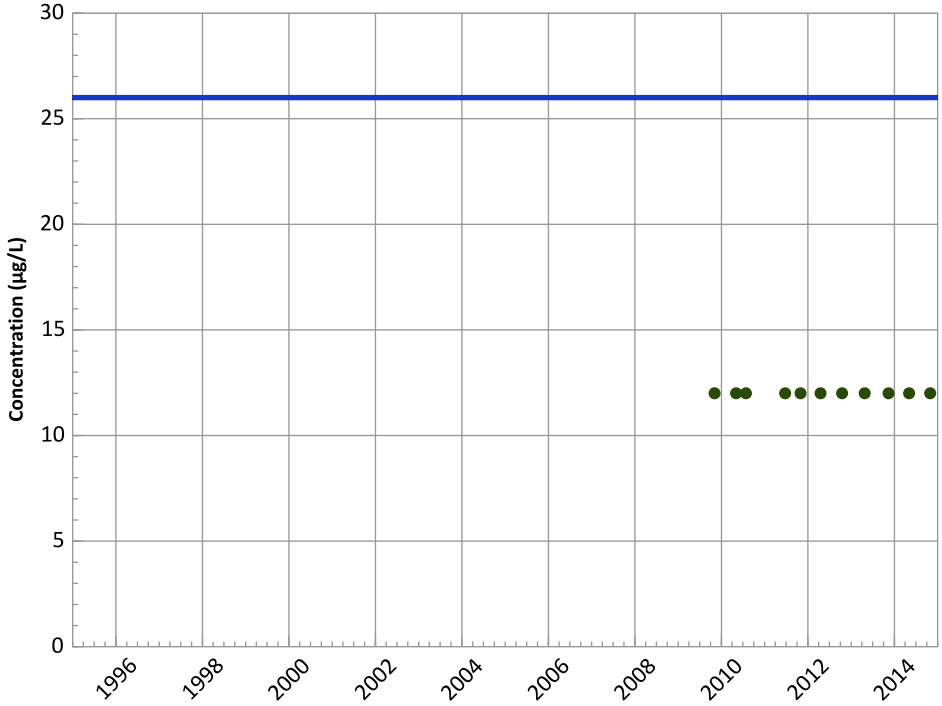


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

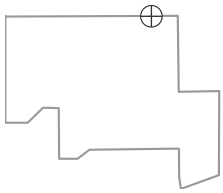
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

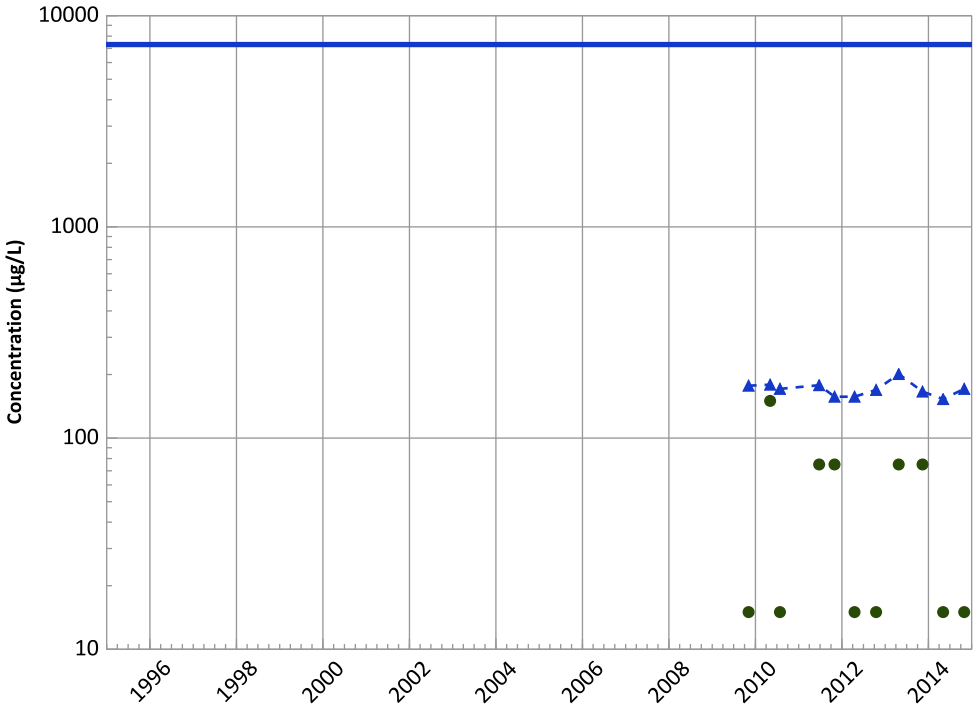
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

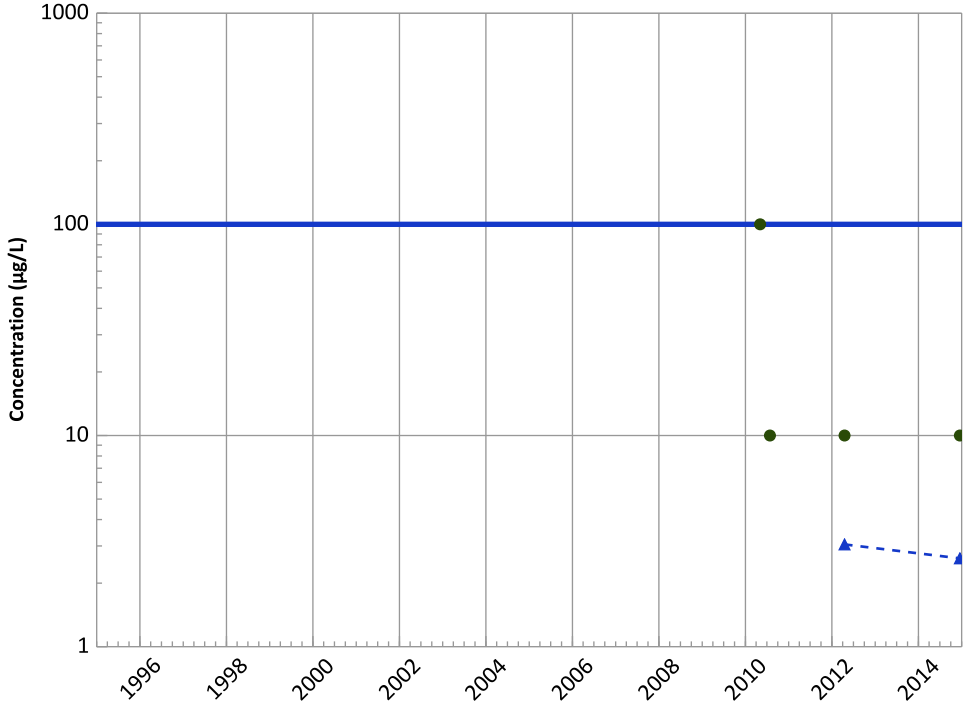


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Chromium, Total Trend

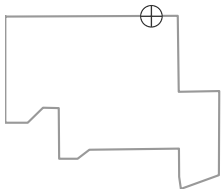


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Well Location

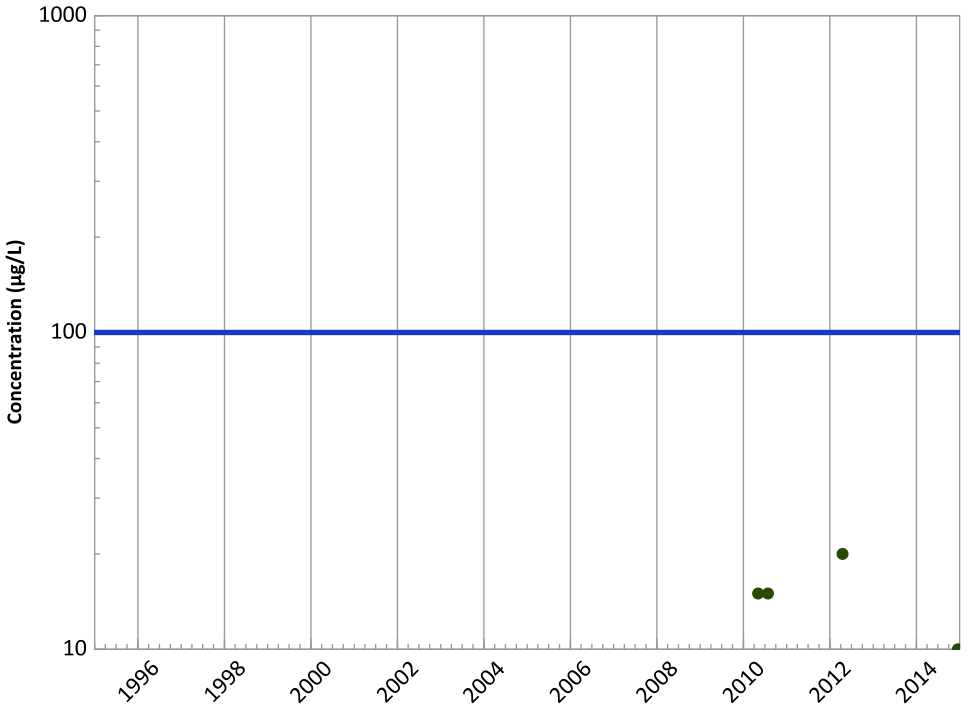


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

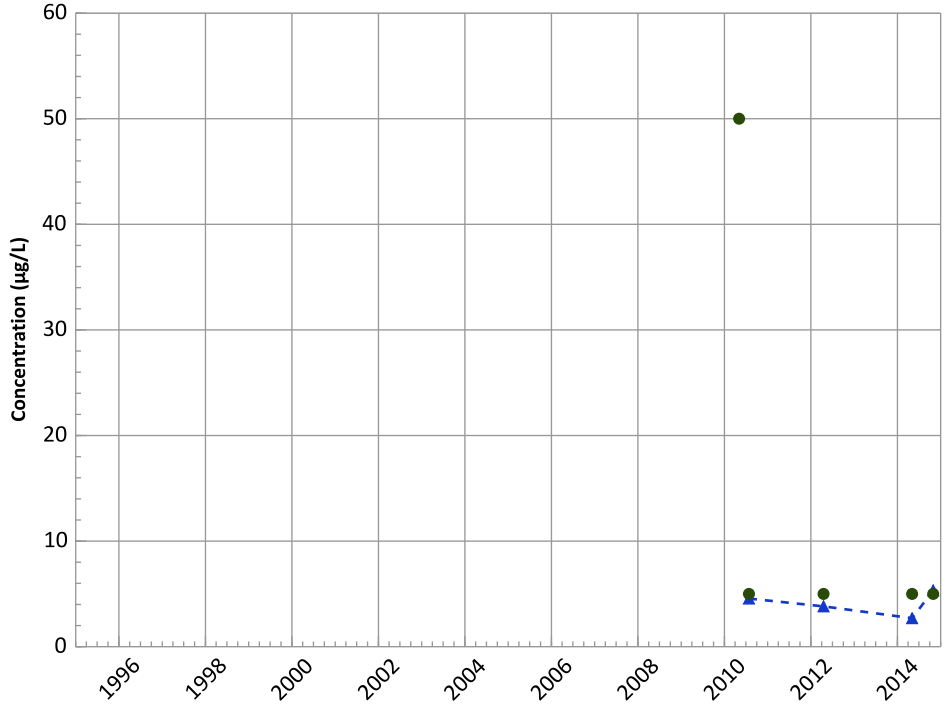


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Manganese Trend

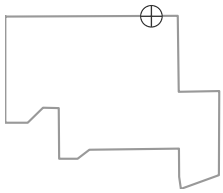


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Well Location

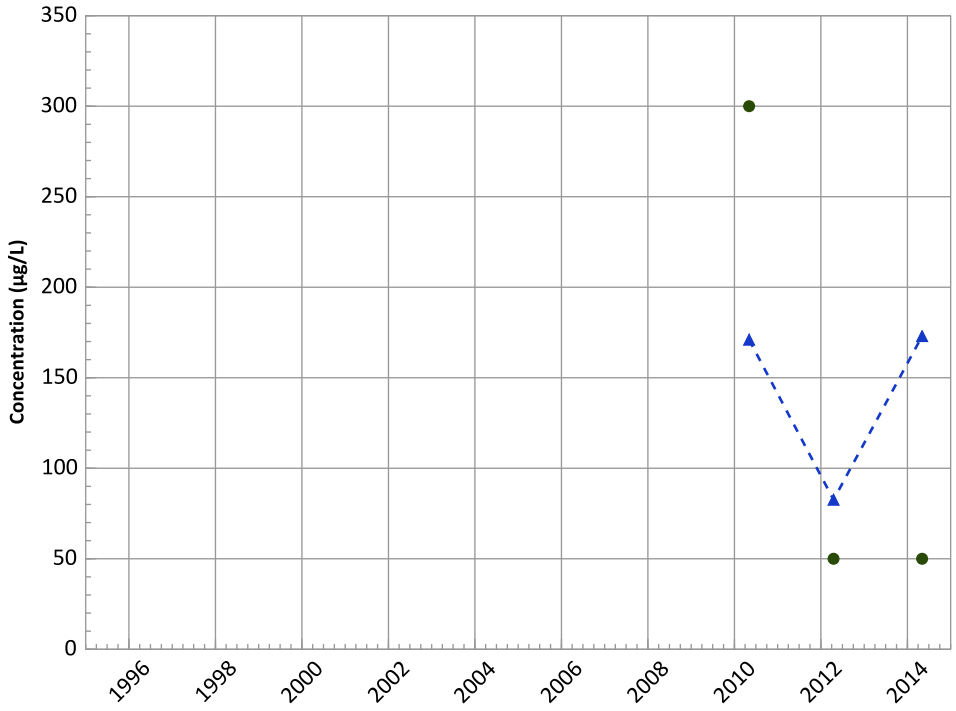


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

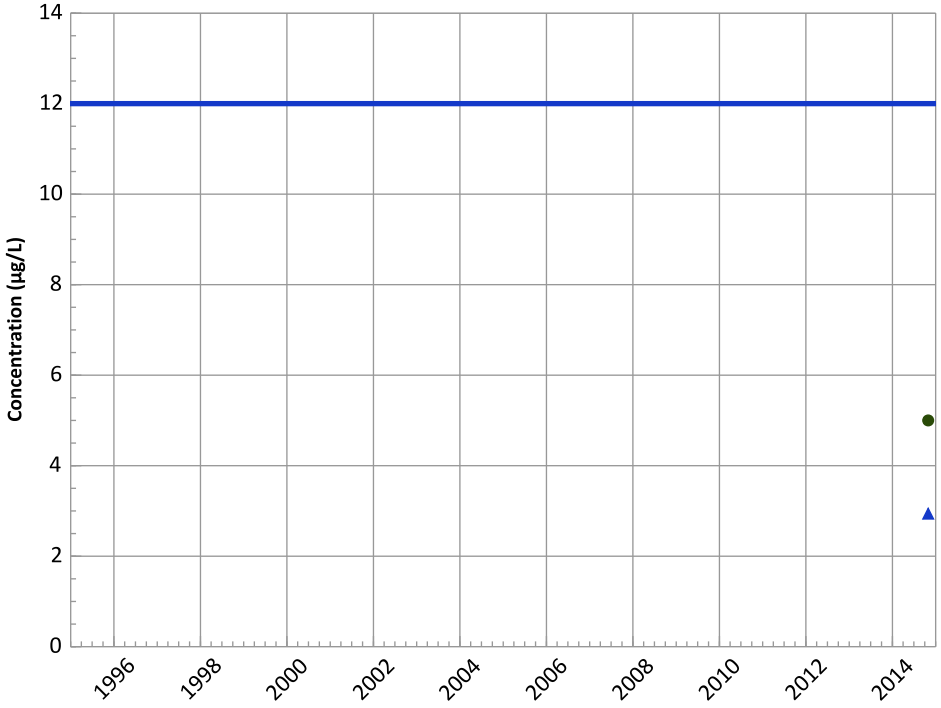


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Arsenic Trend



Concentration Trend

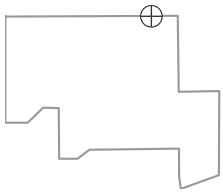
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

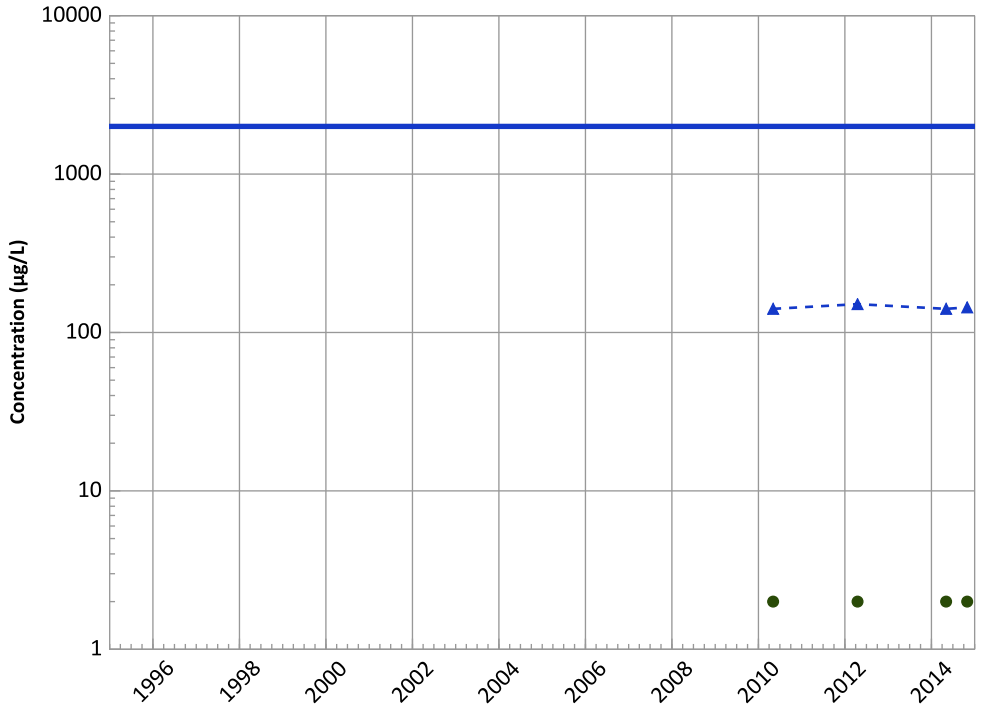
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

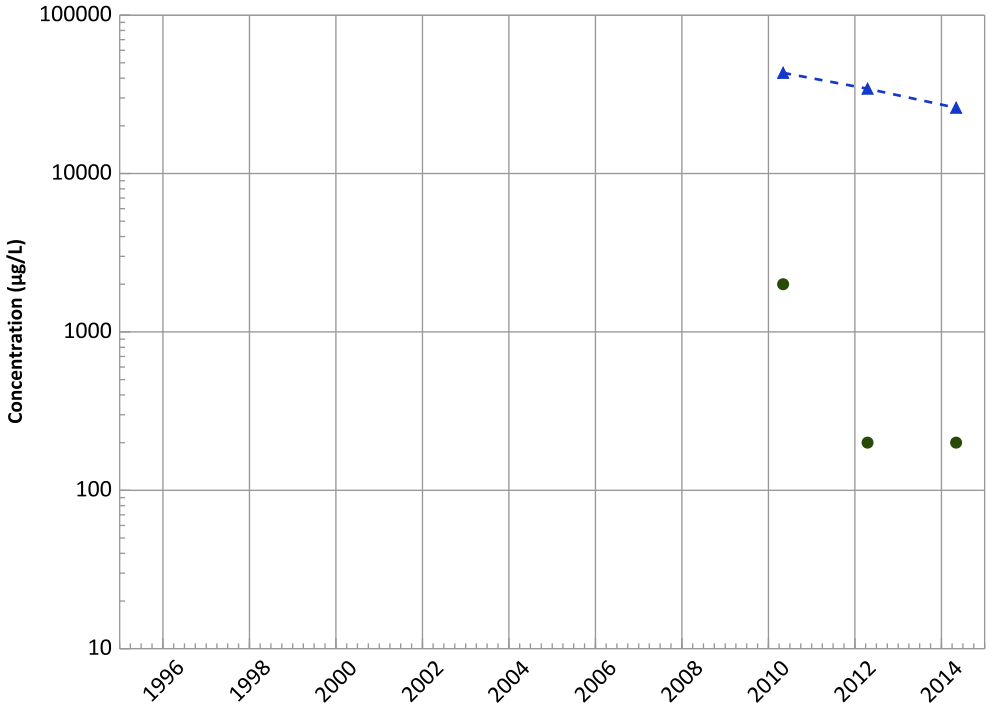


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Calcium Trend



Concentration Trend

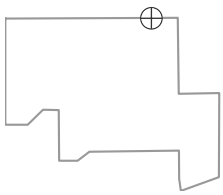
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

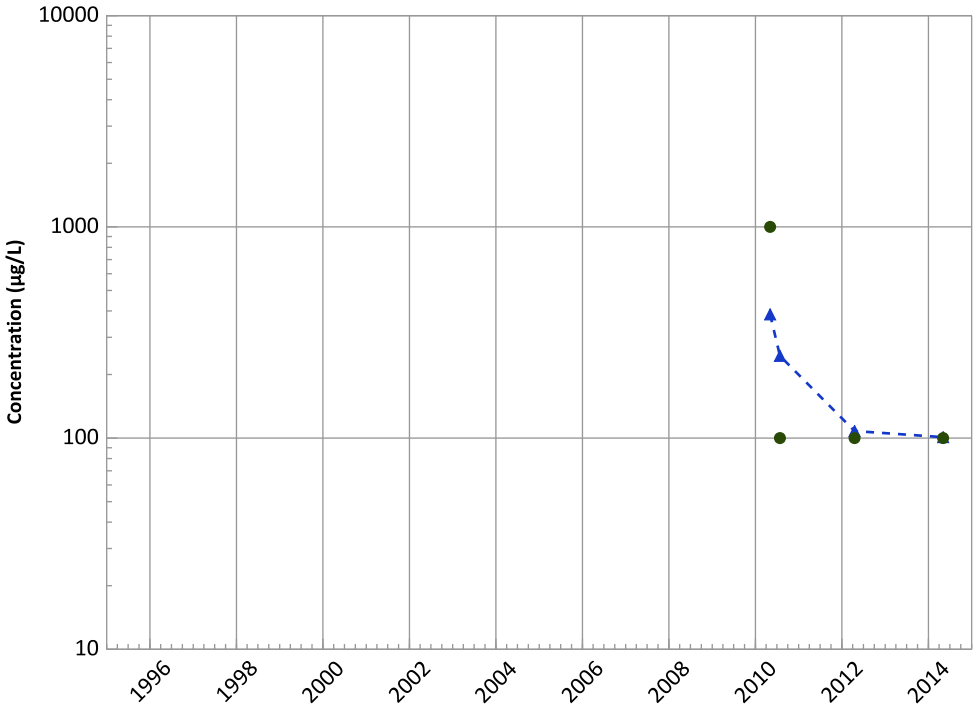
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

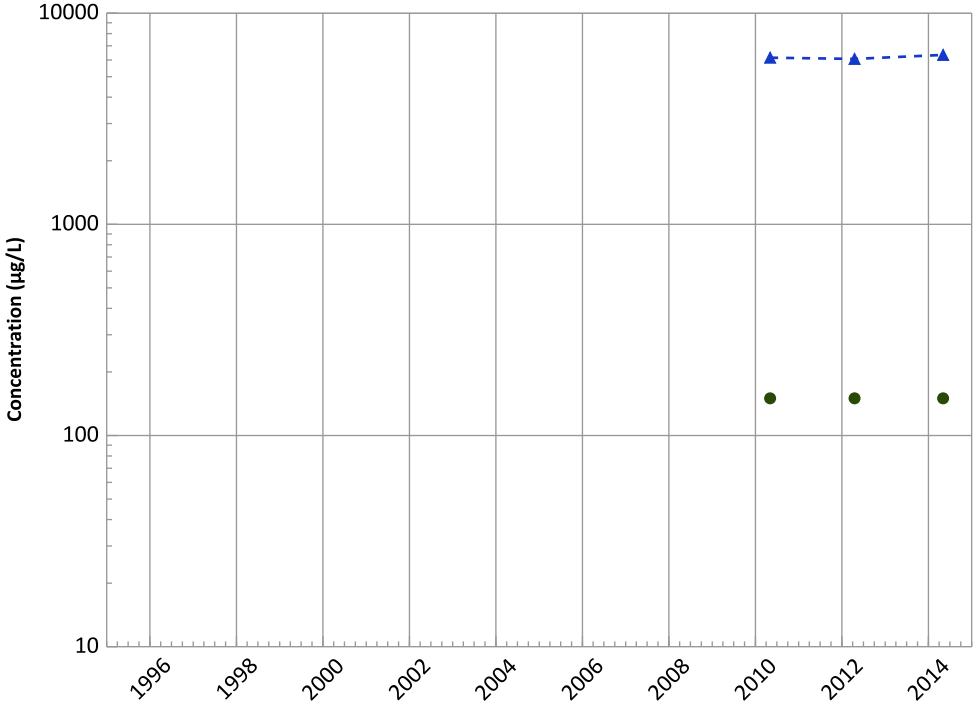


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Potassium Trend



Concentration Trend

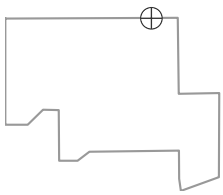
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

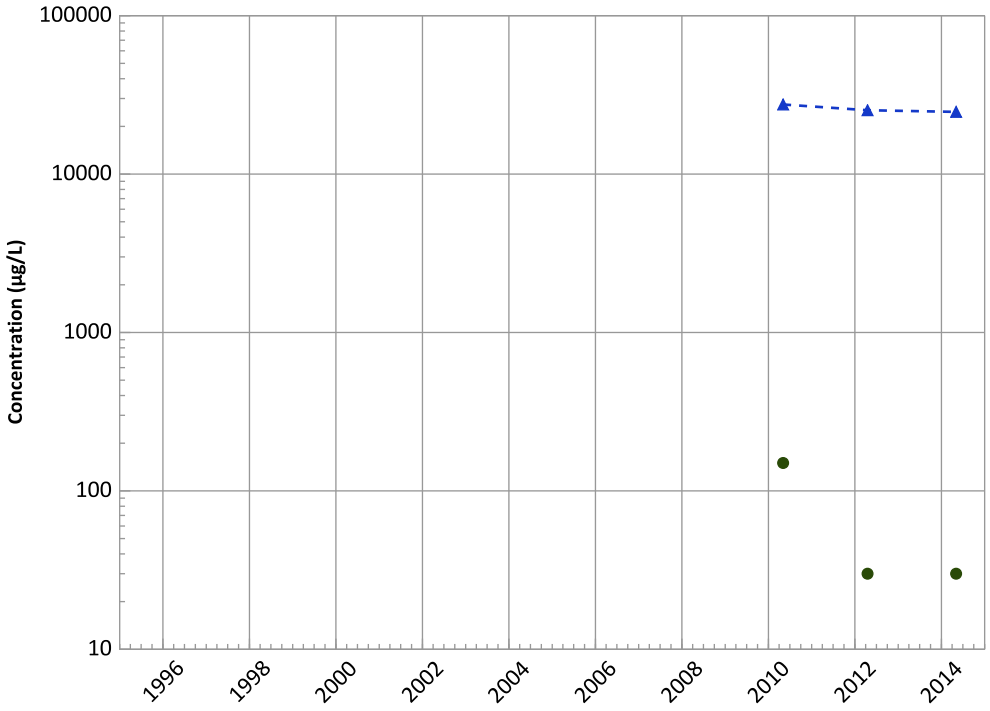
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1144 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

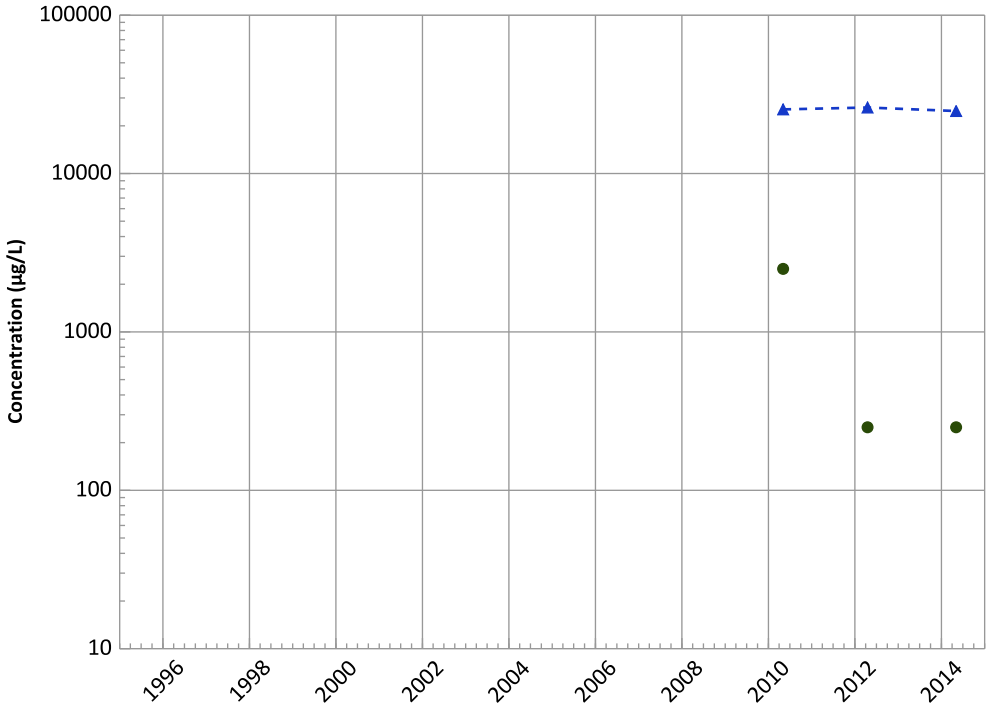


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Sodium Trend



Concentration Trend

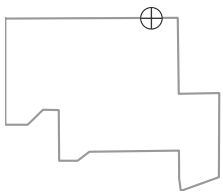
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

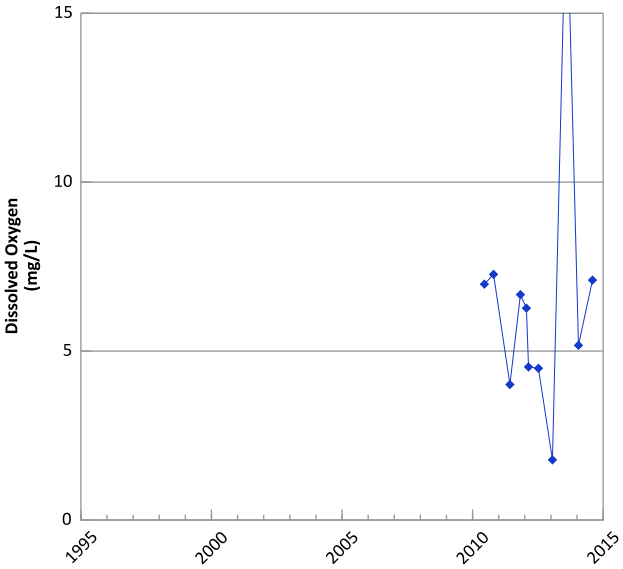
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 11/04/2009 to 12/17/2014
Analysis Date: 03/19/2015

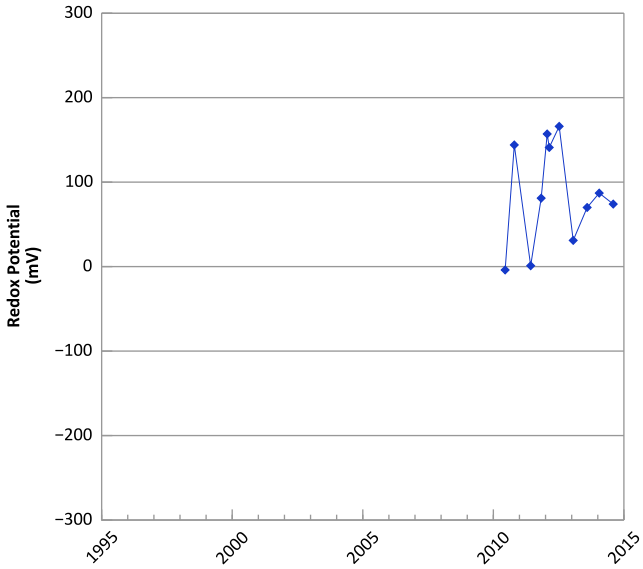
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
▬ Groundwater Protection Standard

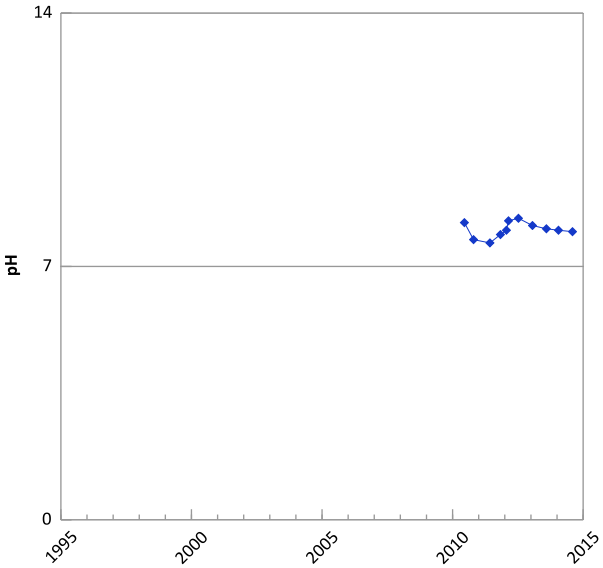
Well Location

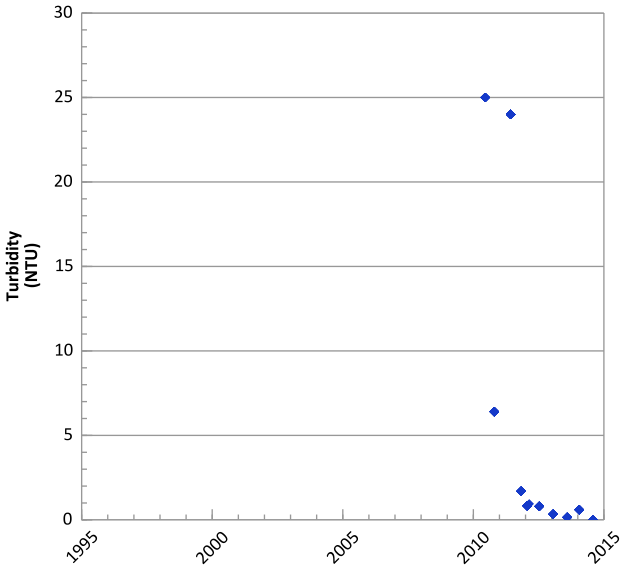


PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



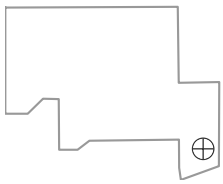






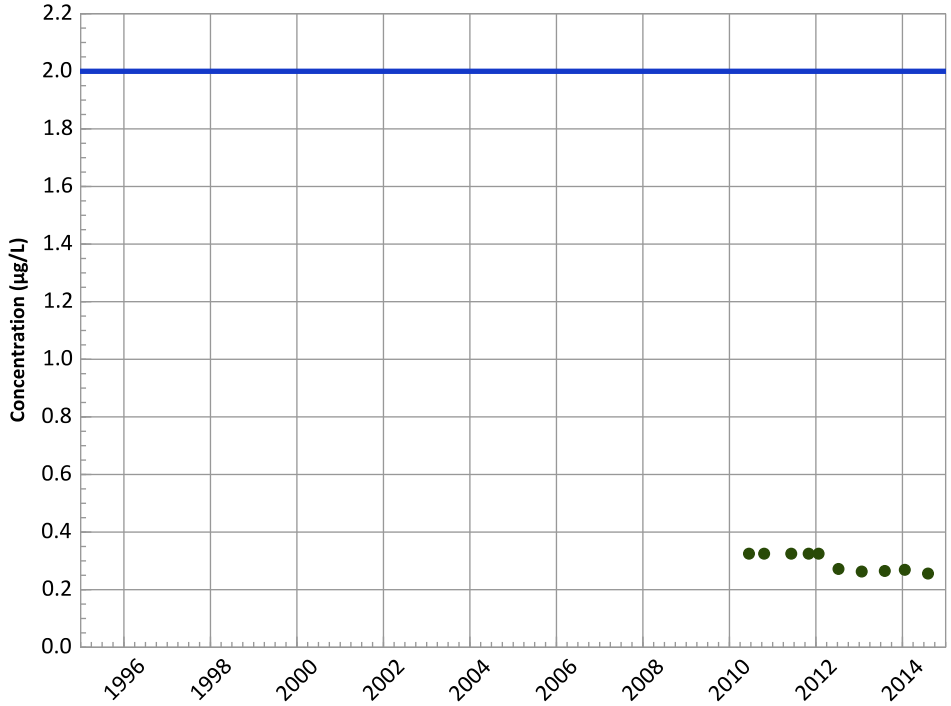
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

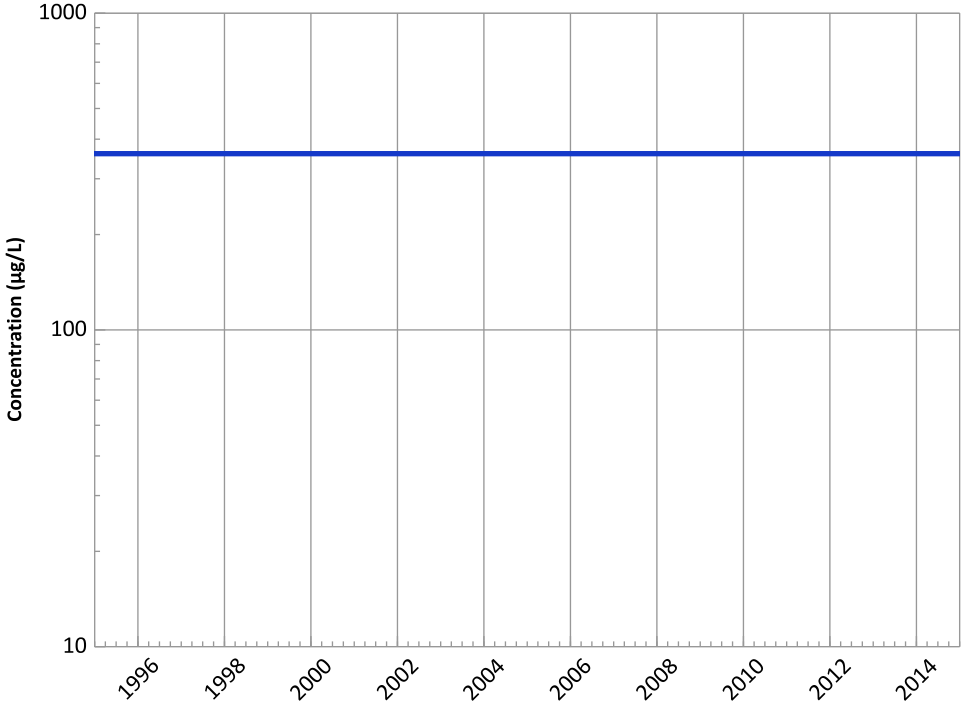


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

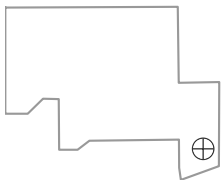
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

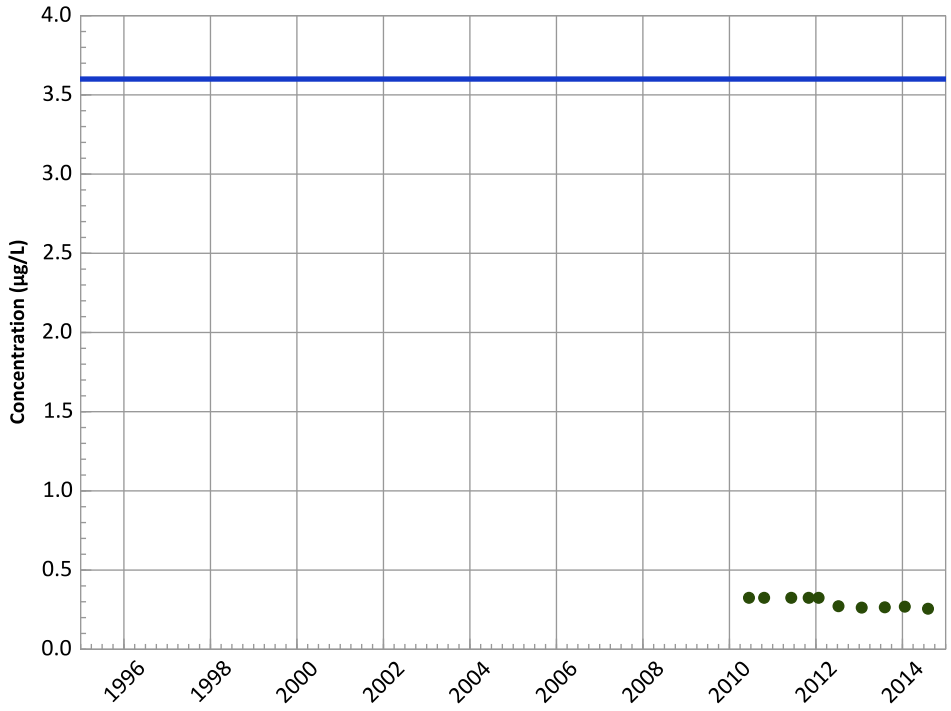
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

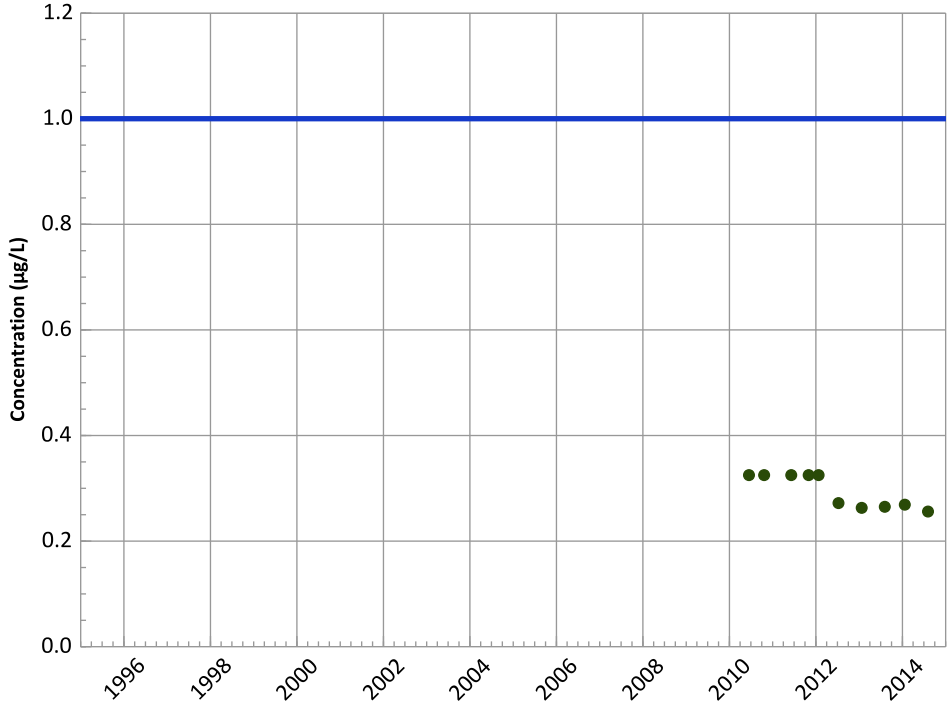


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

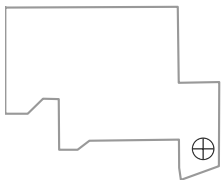
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

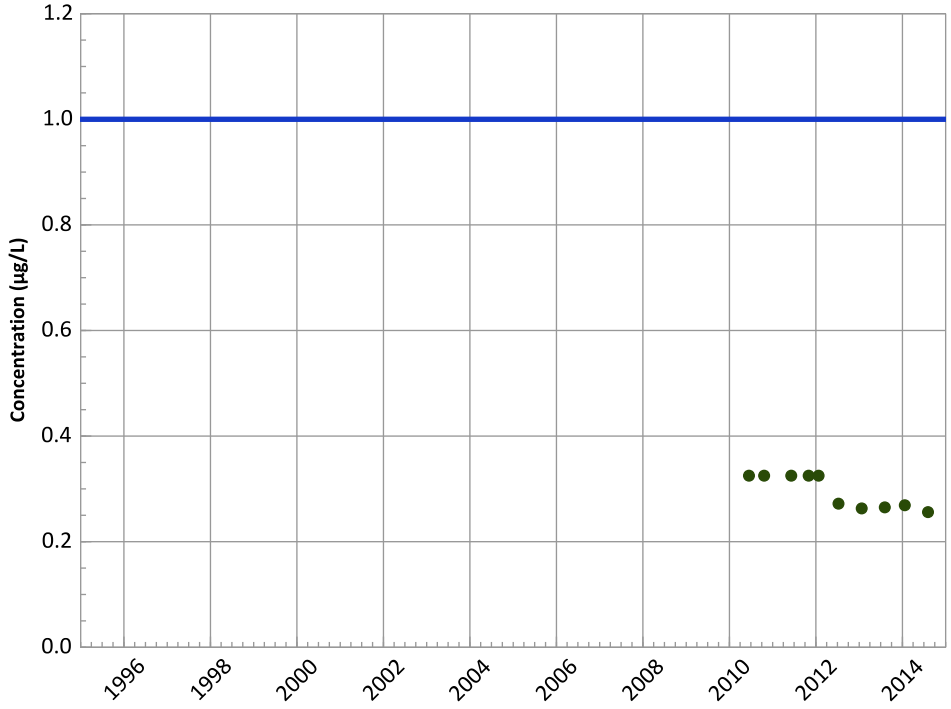
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

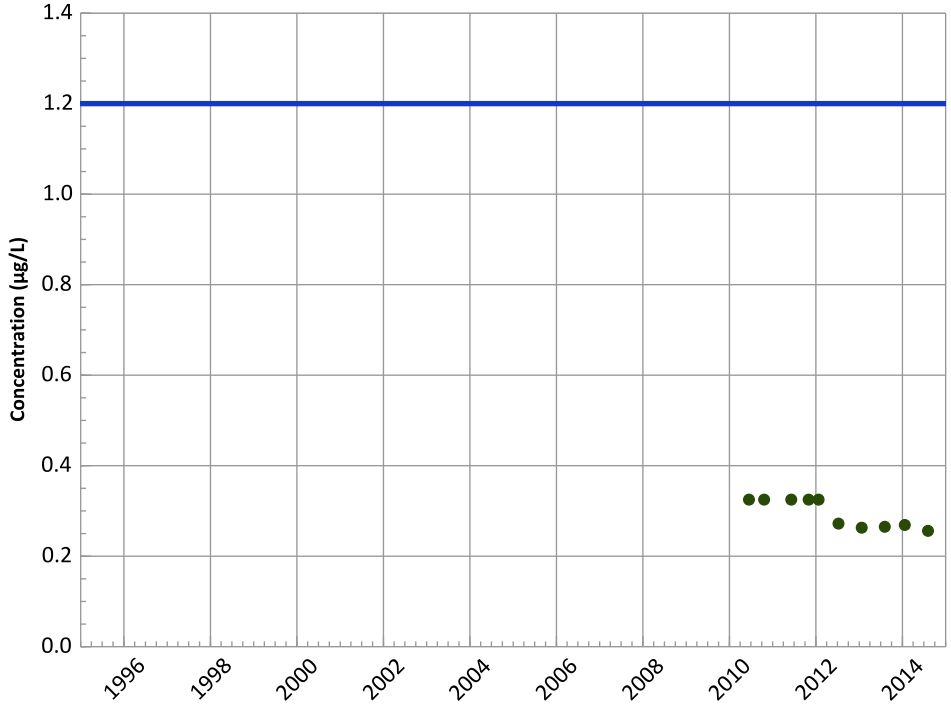


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

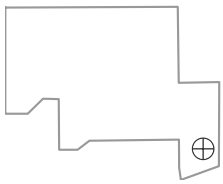
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

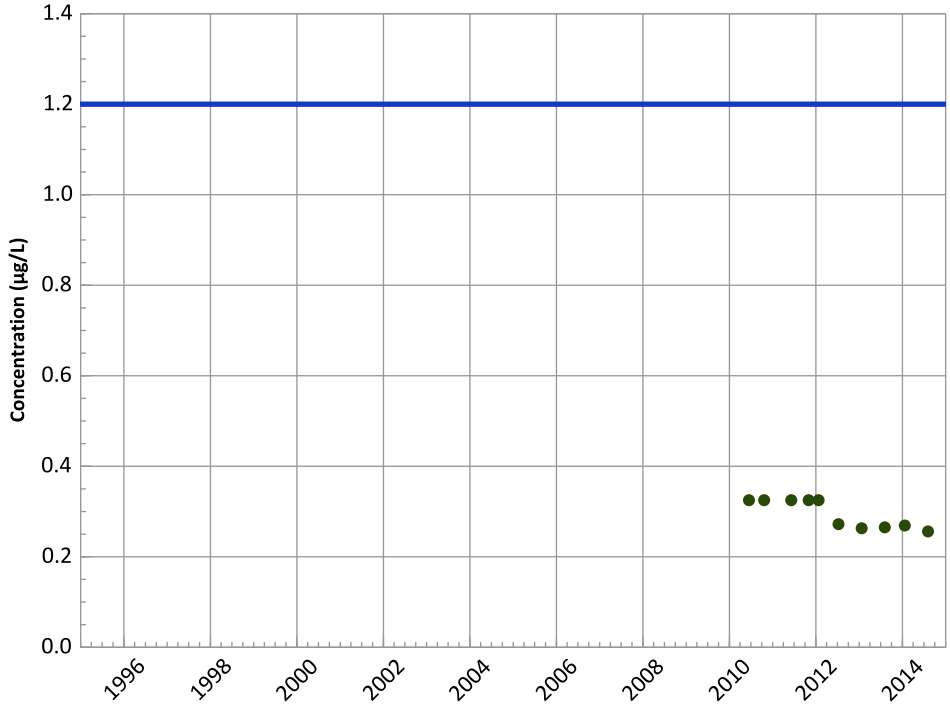
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

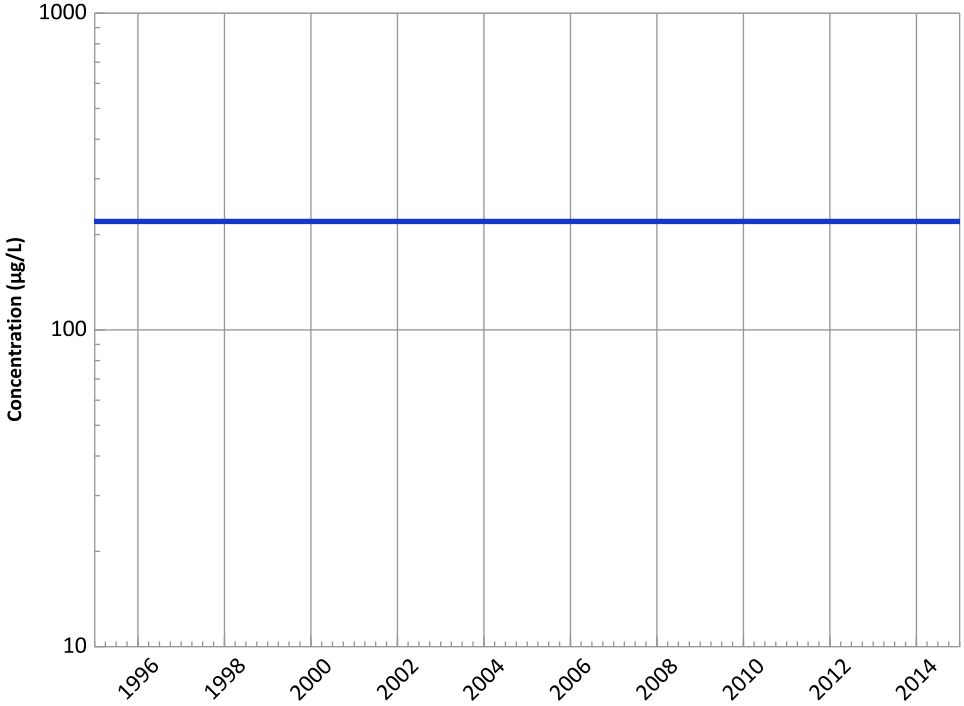


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

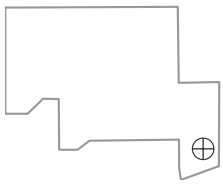
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

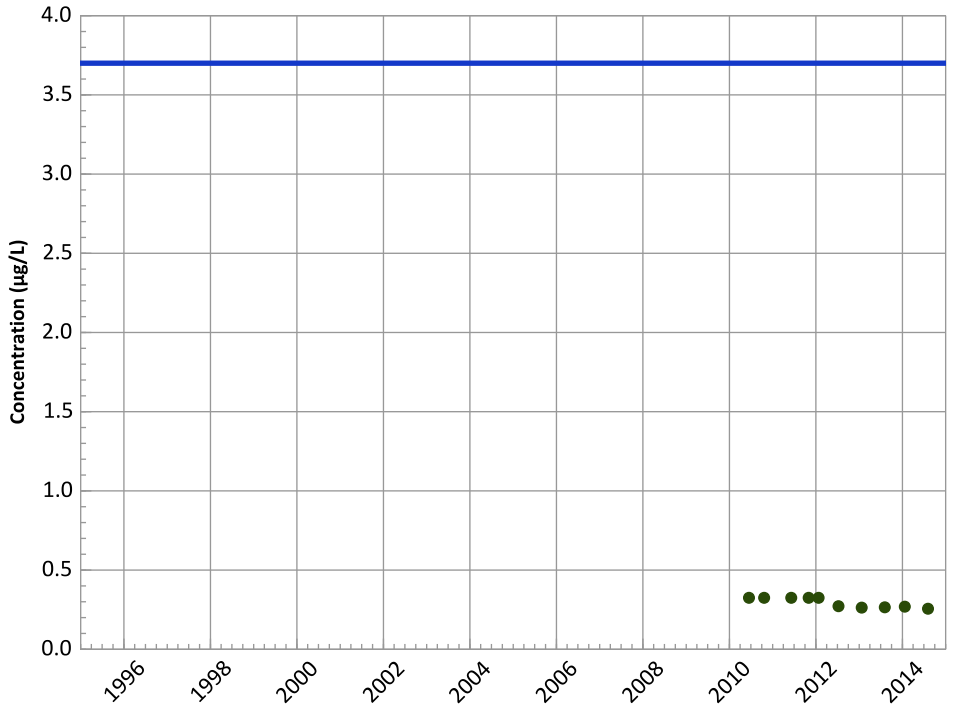
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

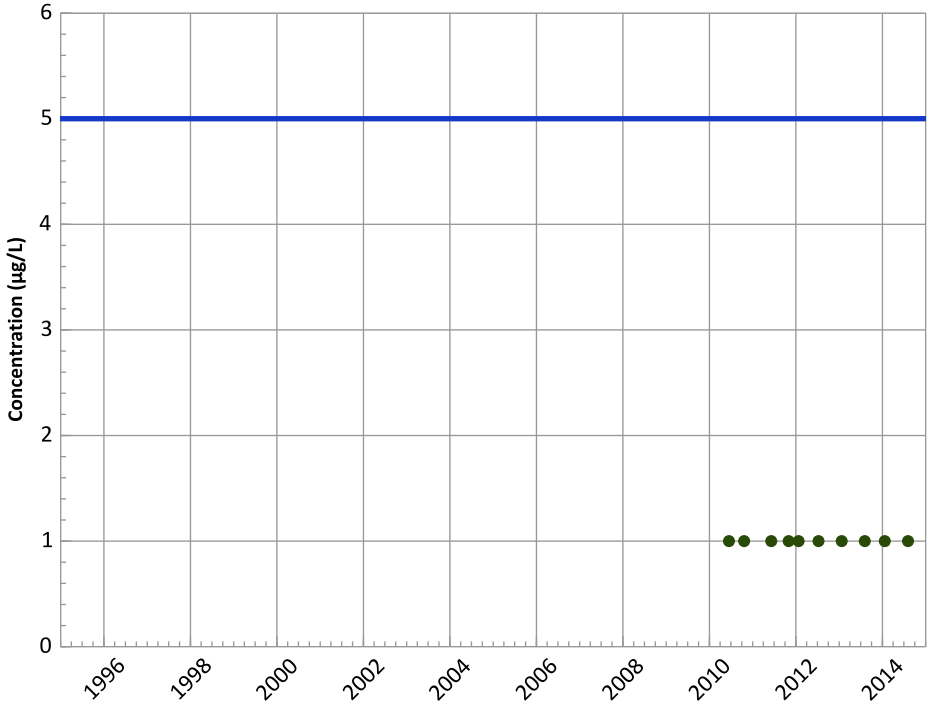


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Tetrachloroethylene (PCE) Trend



Concentration Trend

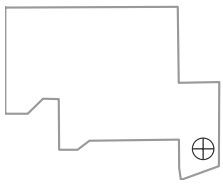
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

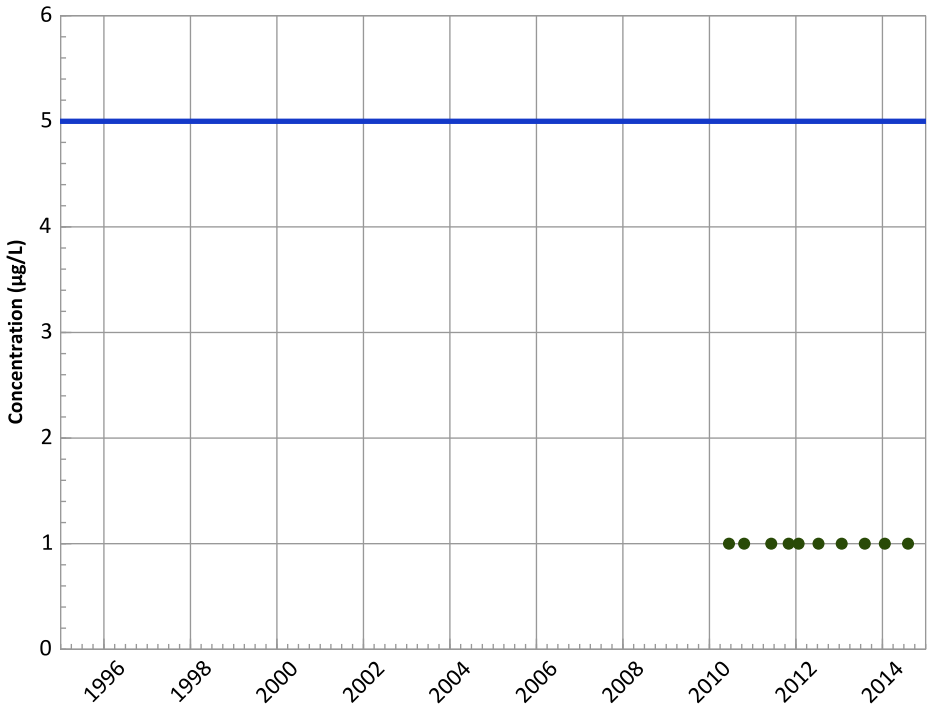
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Trichloroethene Trend

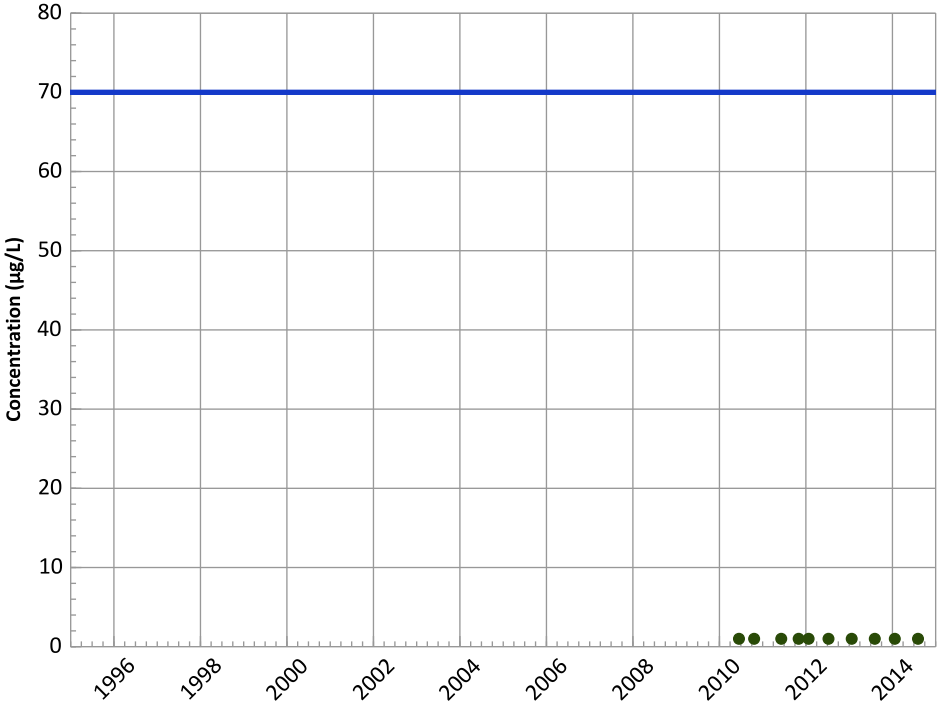


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

cis-1,2-Dichloroethene Trend



Concentration Trend

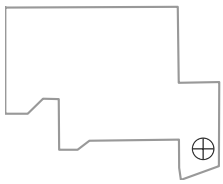
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

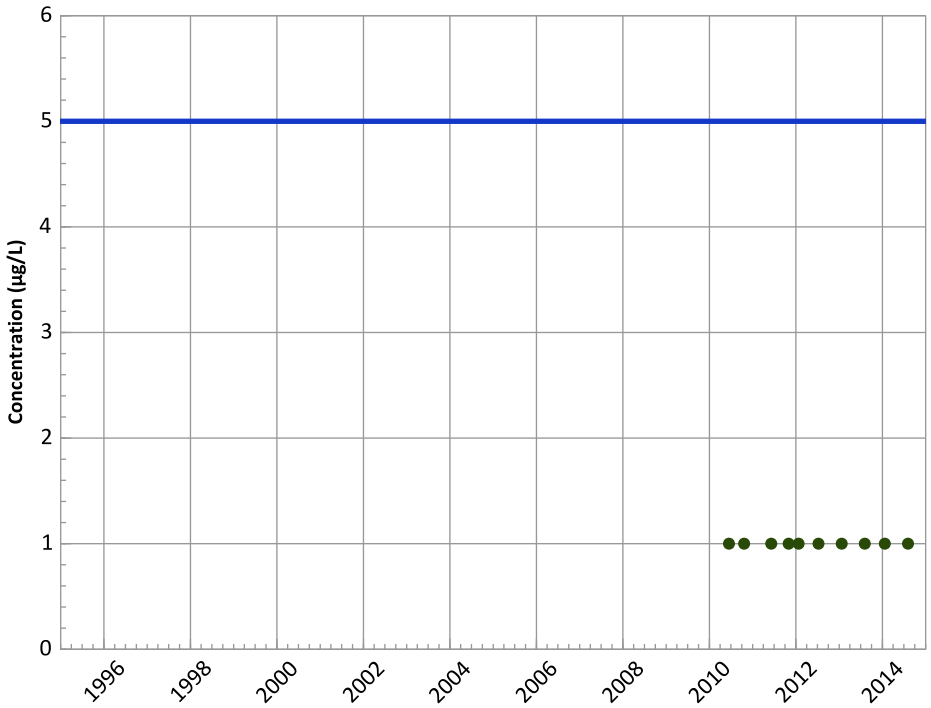
- ▲ Measured Value
- ● Sample Detection Limit
- - - - Concentration Trend
- ━━ Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,2-Dichloroethane Trend

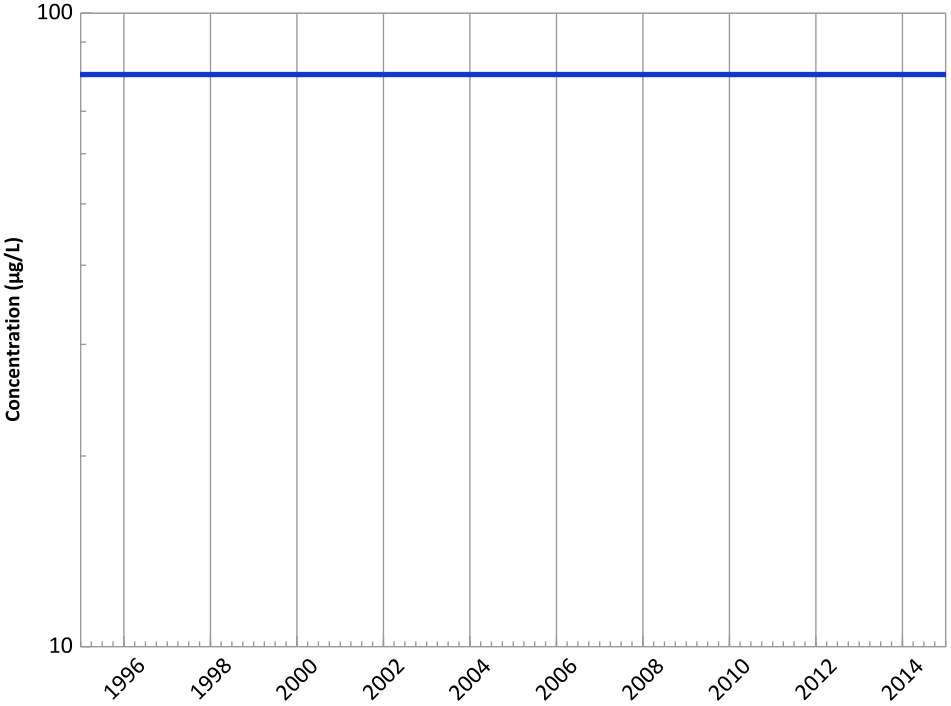


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Chloroform Trend



Concentration Trend

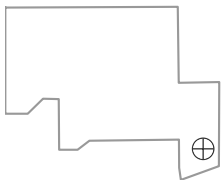
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

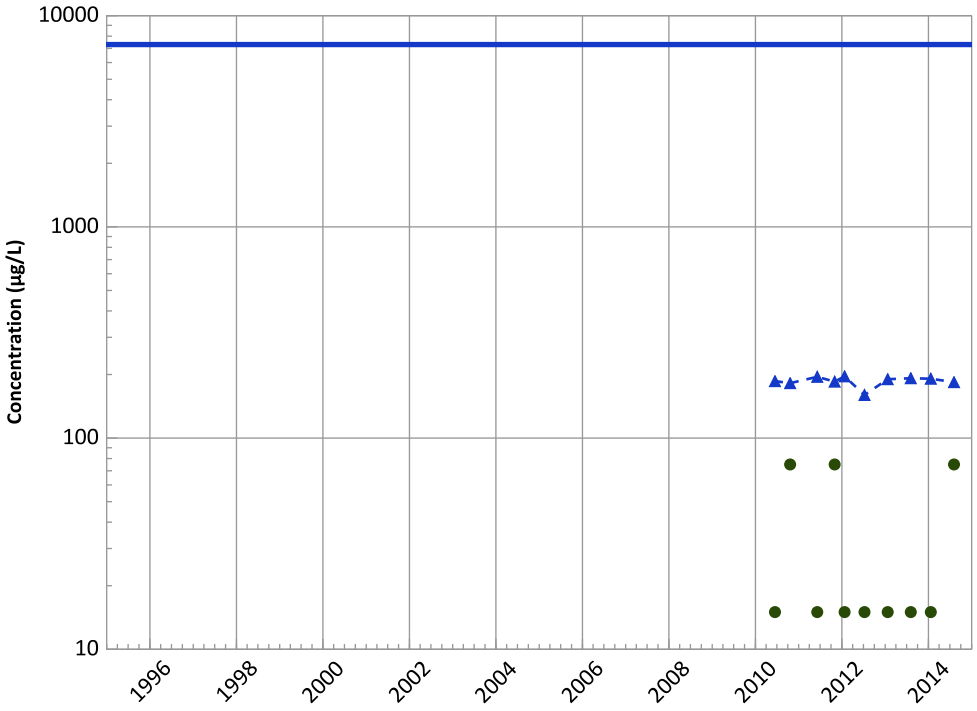
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

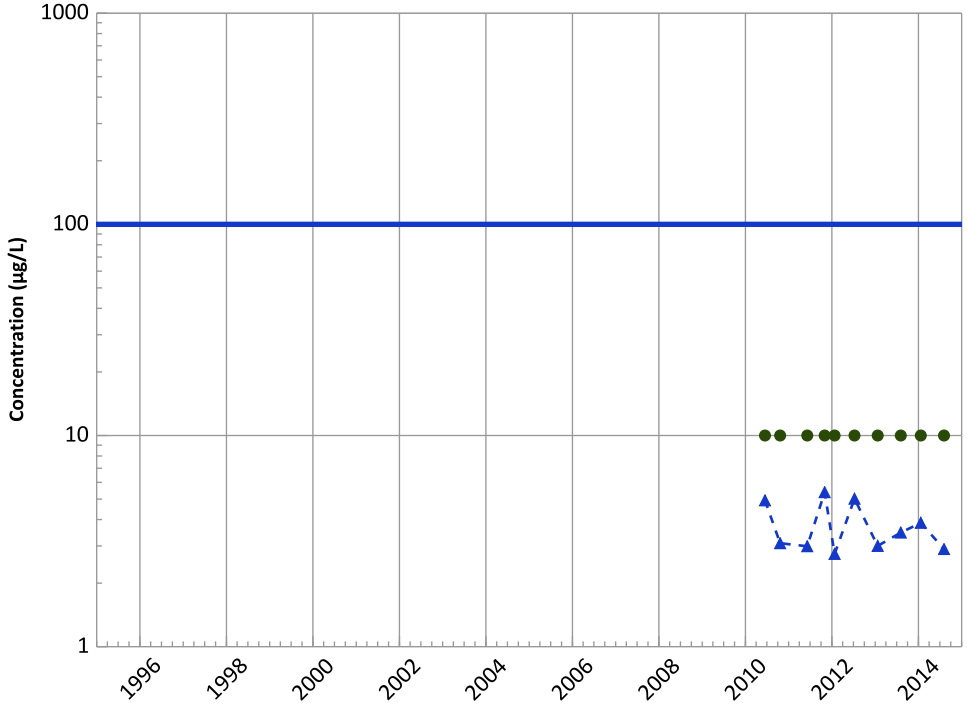


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Increasing
All Data
Increasing

Chromium, Total Trend



Concentration Trend

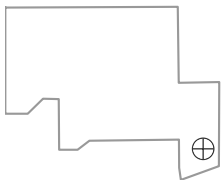
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

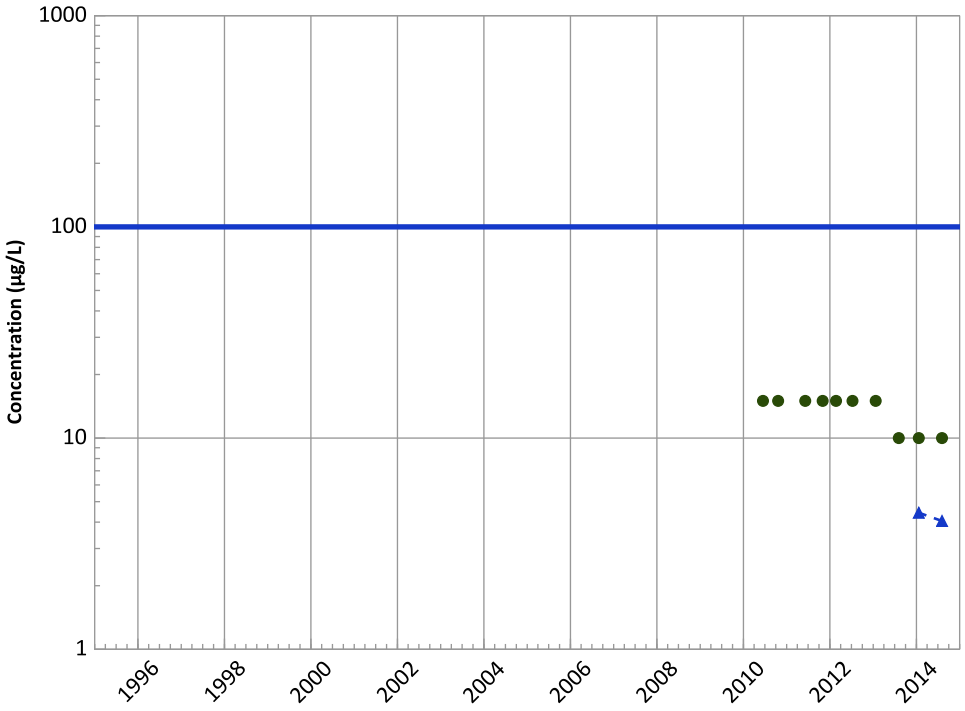
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chromium, Hexavalent Trend

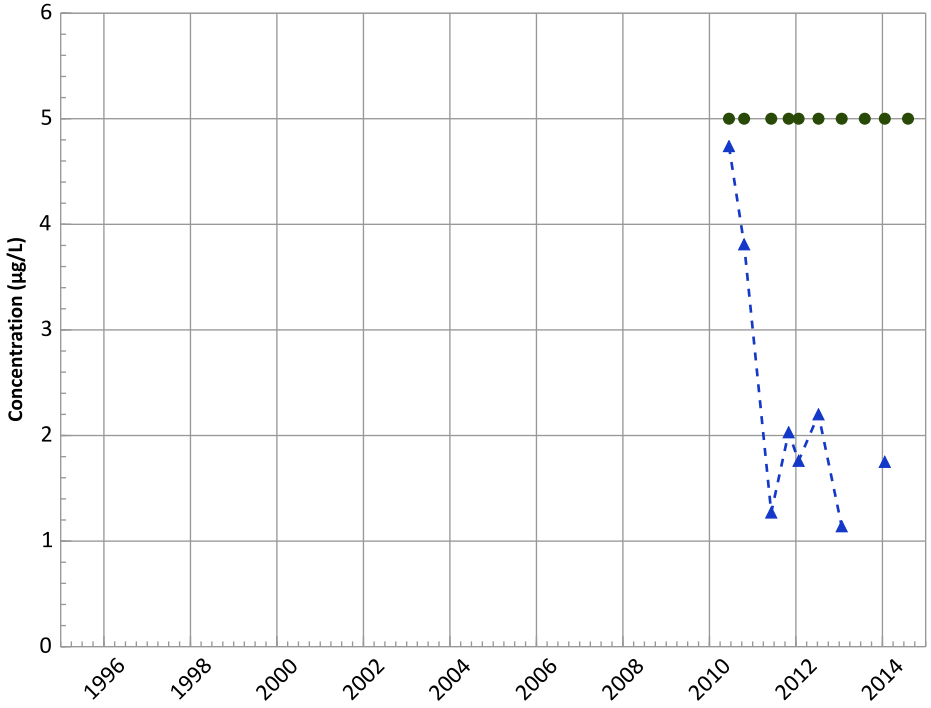


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Manganese Trend



Concentration Trend

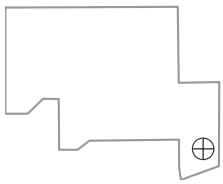
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

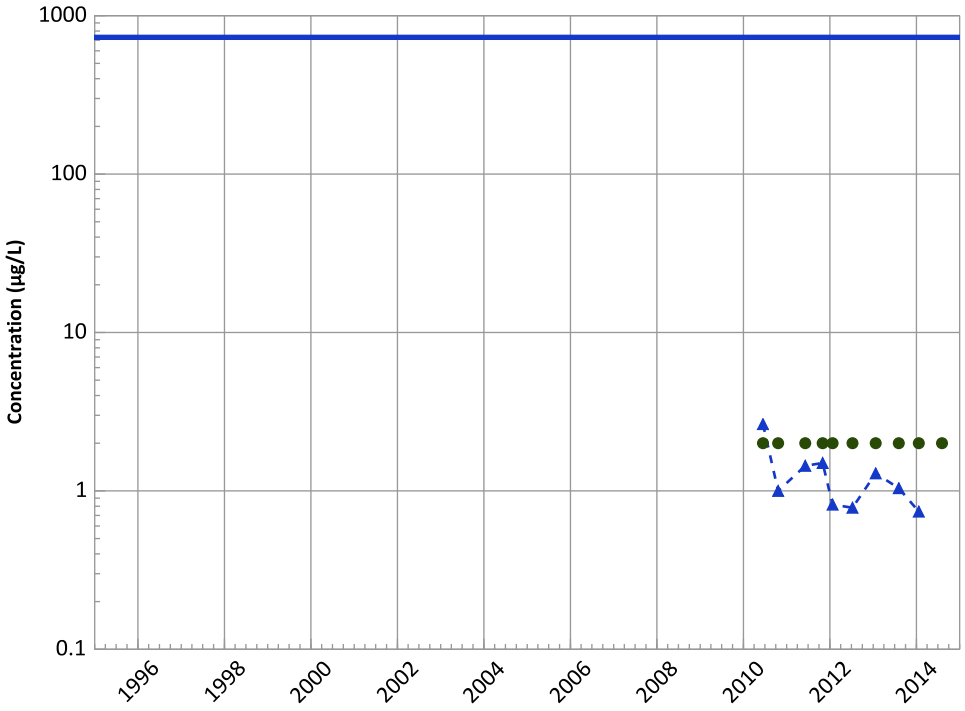
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Nickel Trend

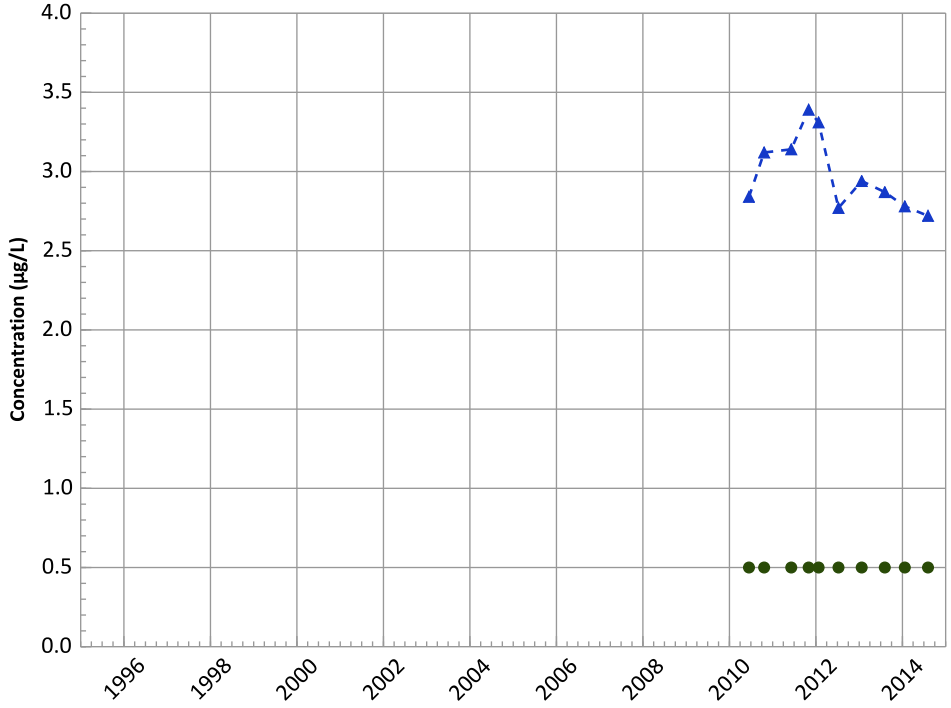


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Molybdenum Trend



Concentration Trend

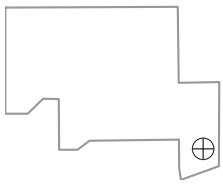
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Decreasing
All Data
Probably Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

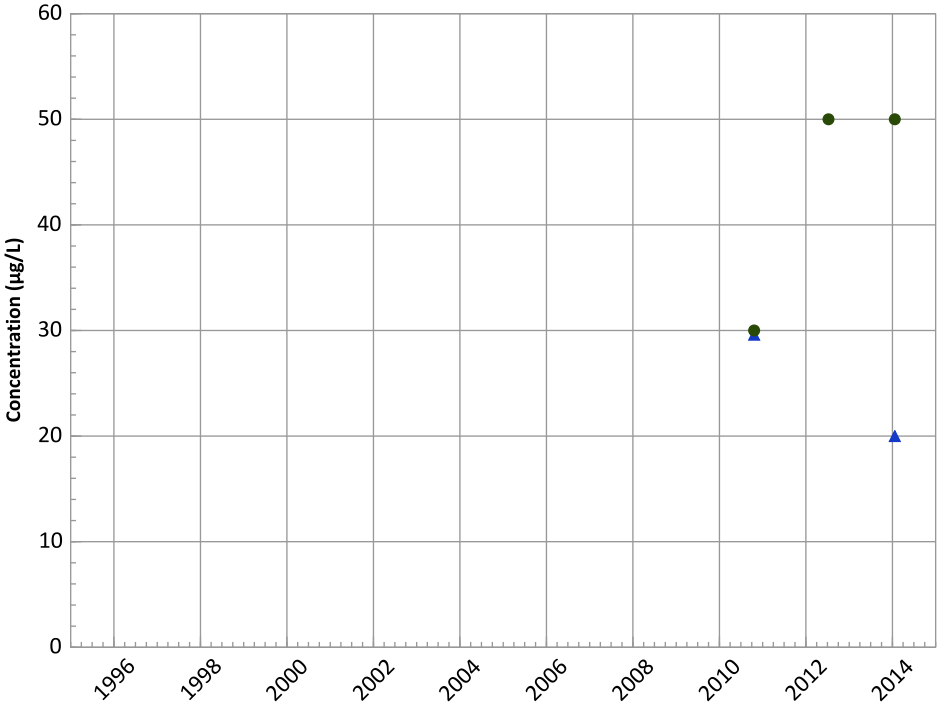
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

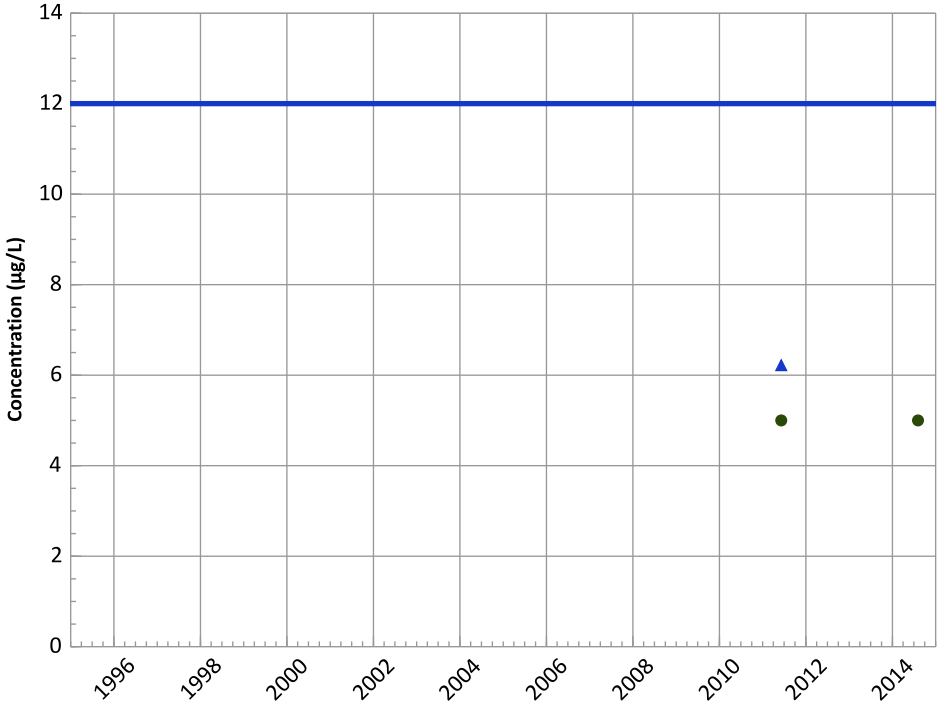


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Arsenic Trend



Concentration Trend

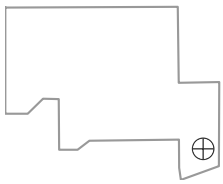
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

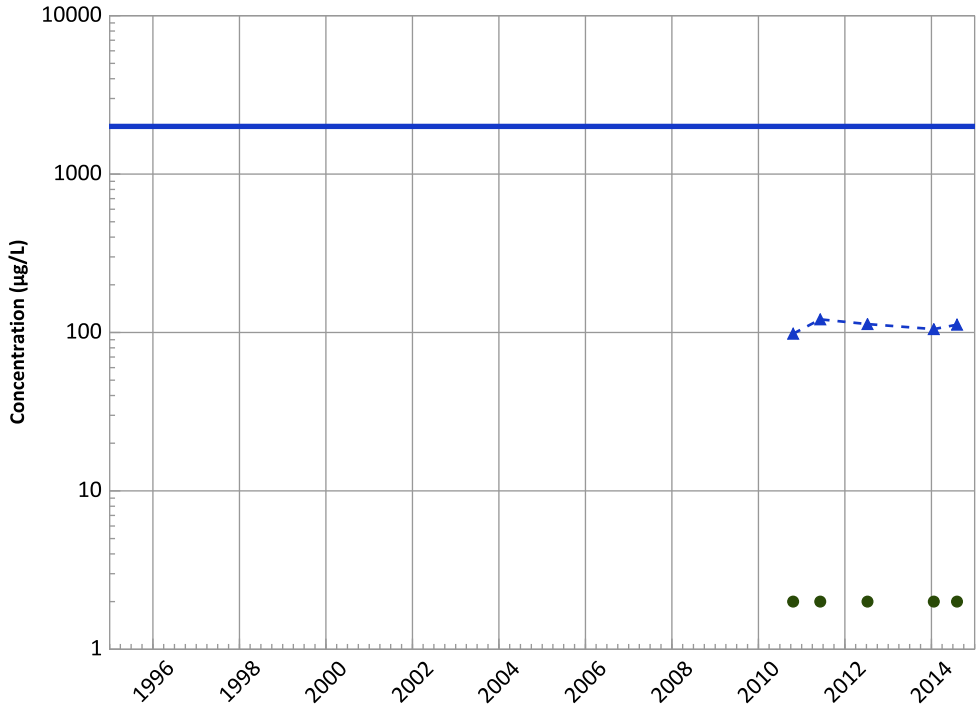
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

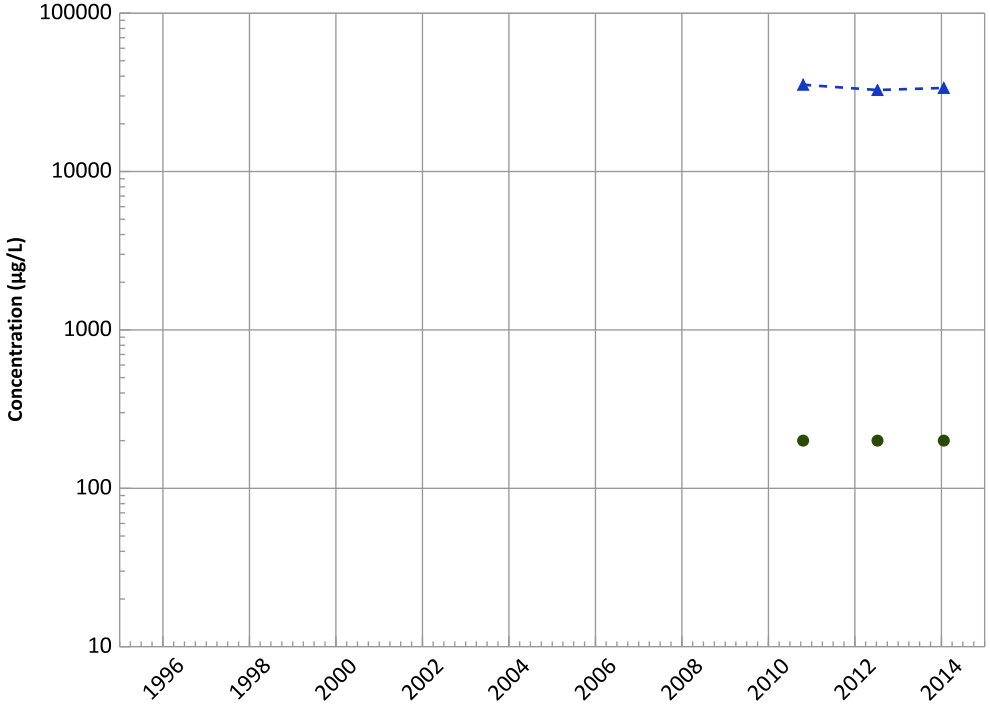


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
No Trend

Calcium Trend



Concentration Trend

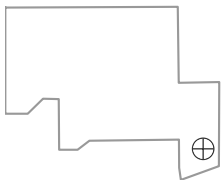
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

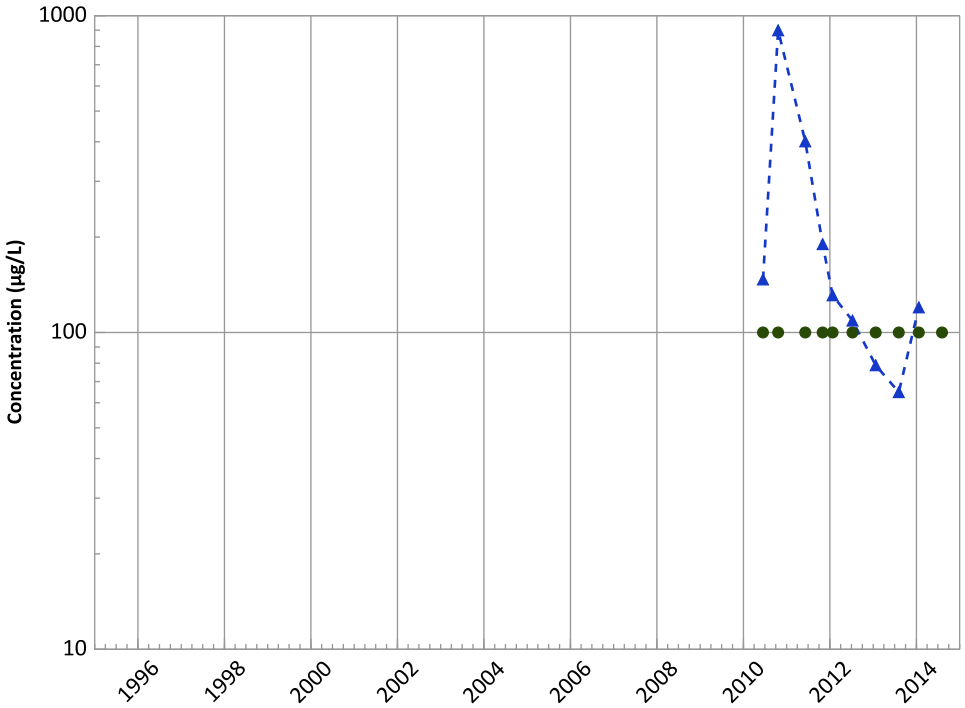
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

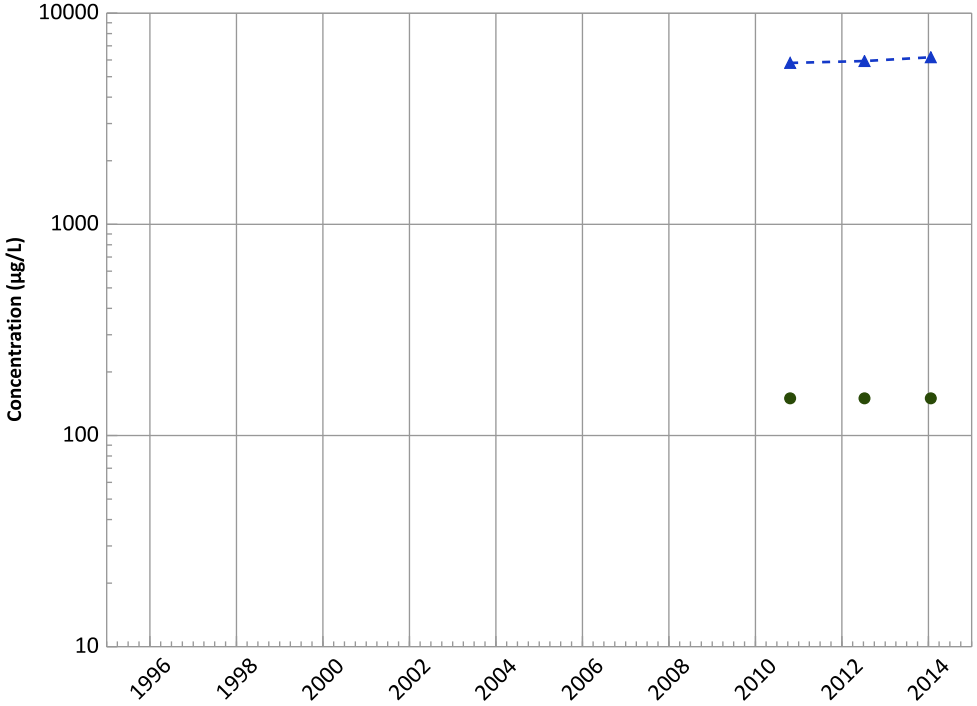


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

Potassium Trend



Concentration Trend

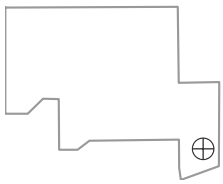
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

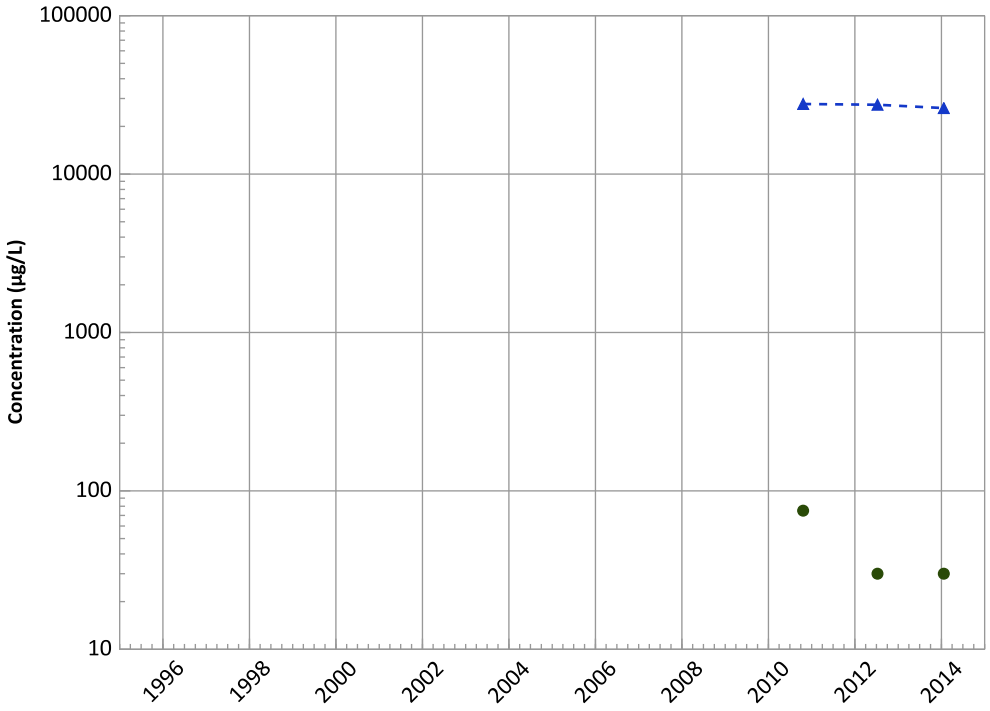
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

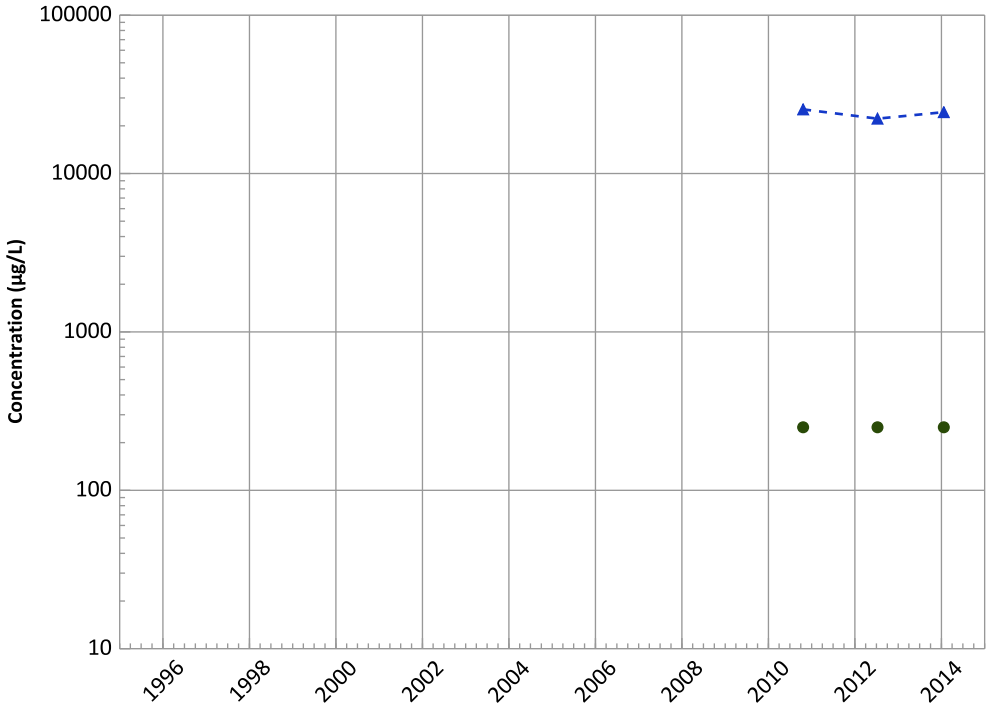


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Sodium Trend



Concentration Trend

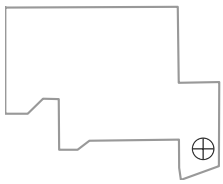
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

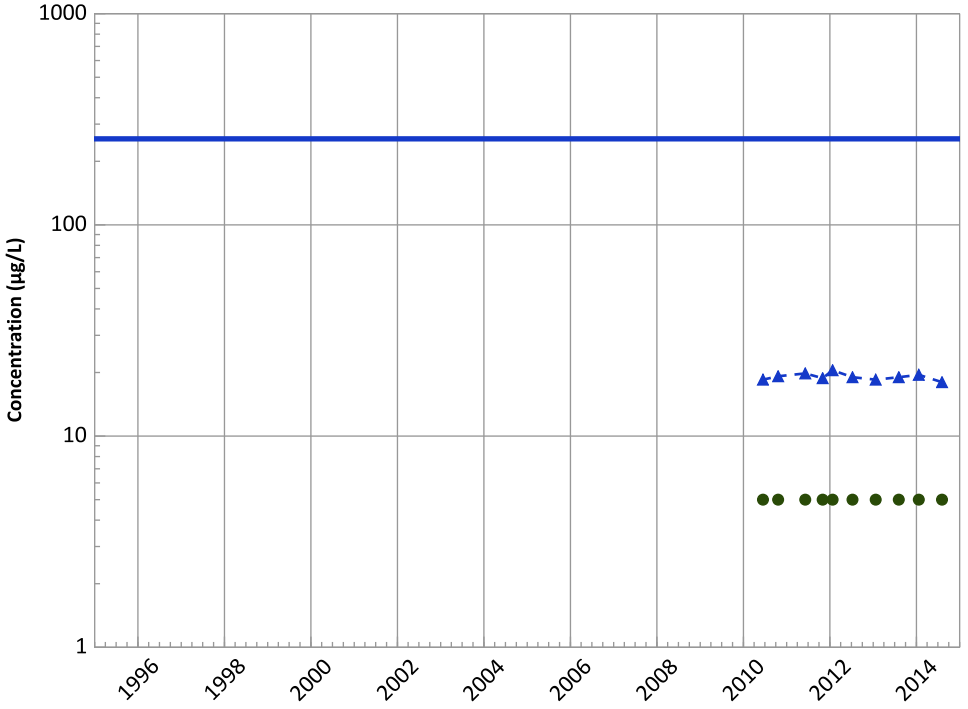
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX06-1157 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Vanadium Trend



Concentration Trend

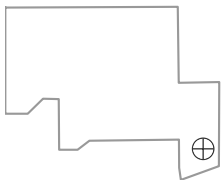
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Stable

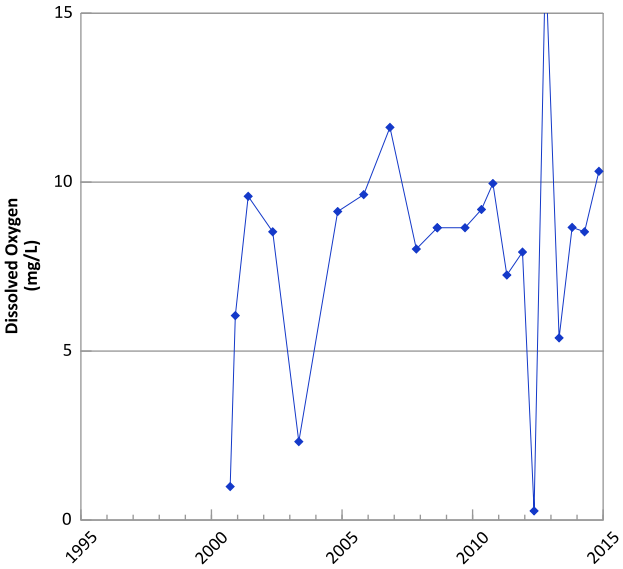
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 06/15/2010 to 08/05/2014
Analysis Date: 03/19/2015

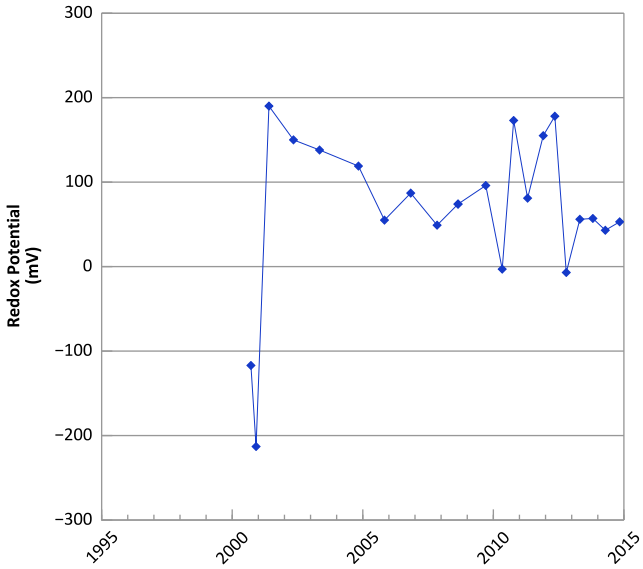
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

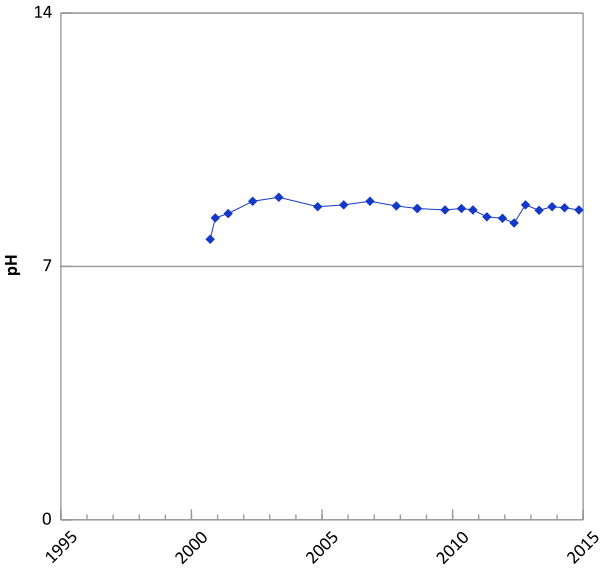
Well Location

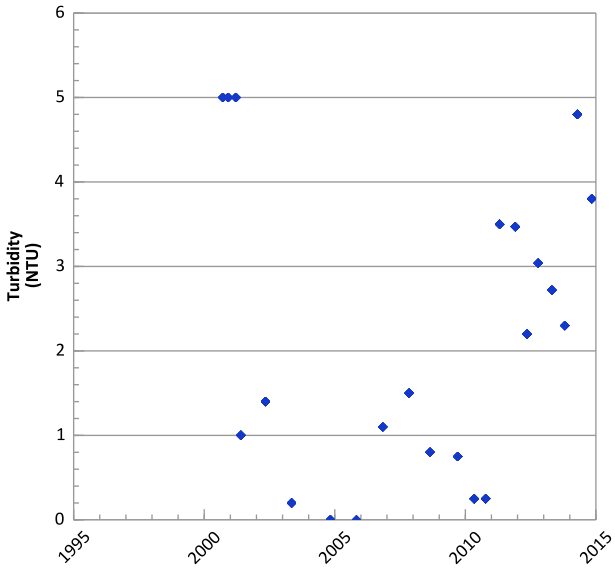


PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



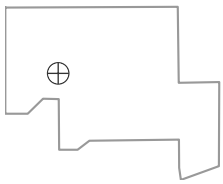






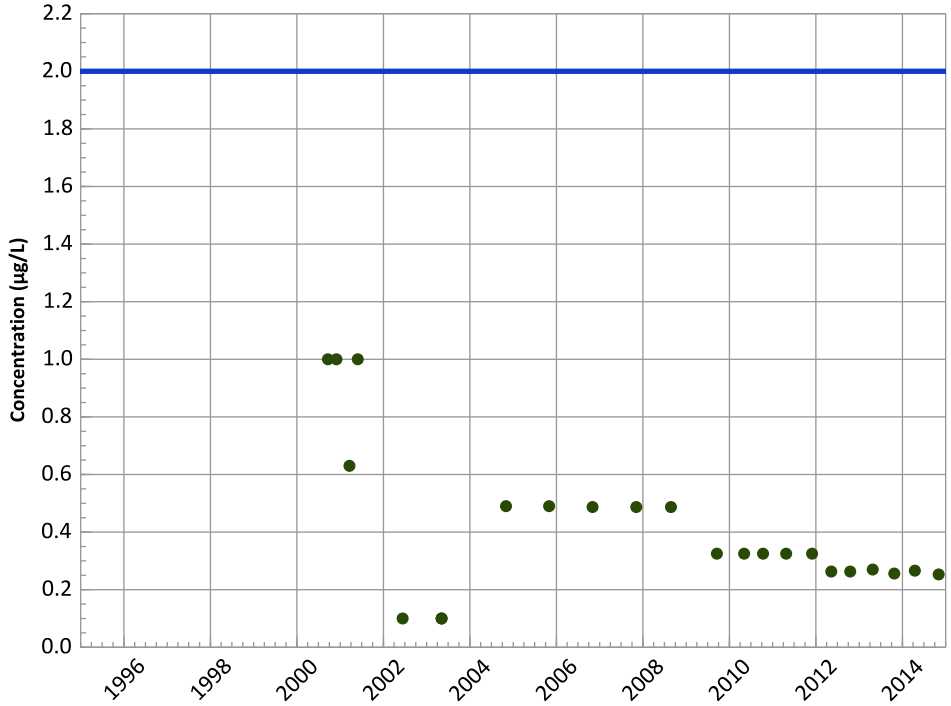
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

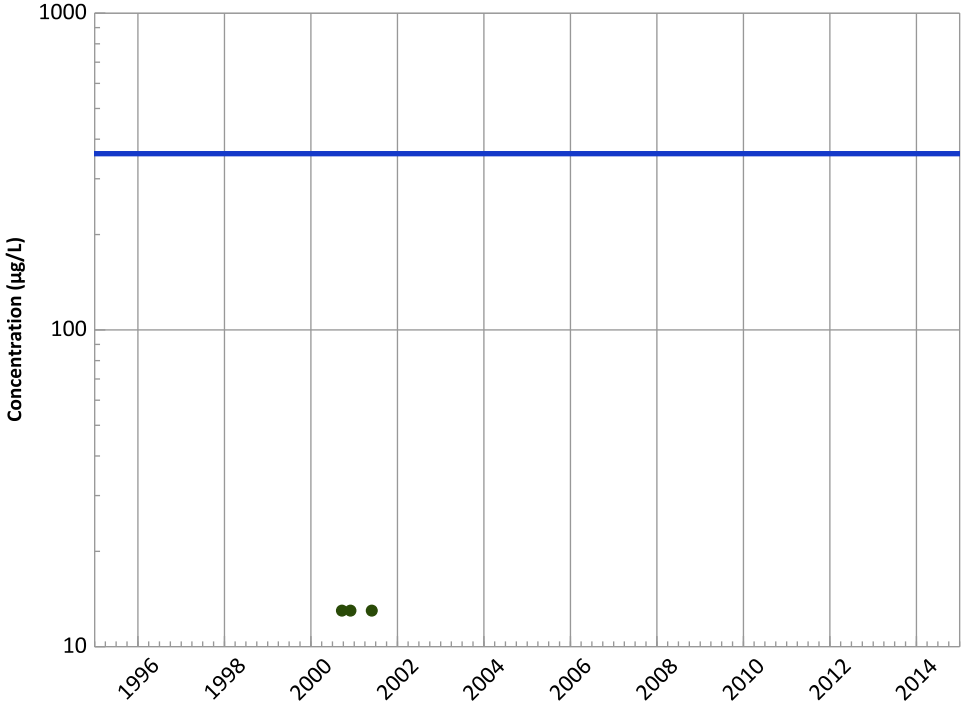


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

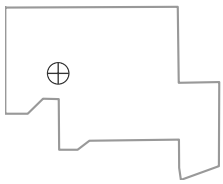
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

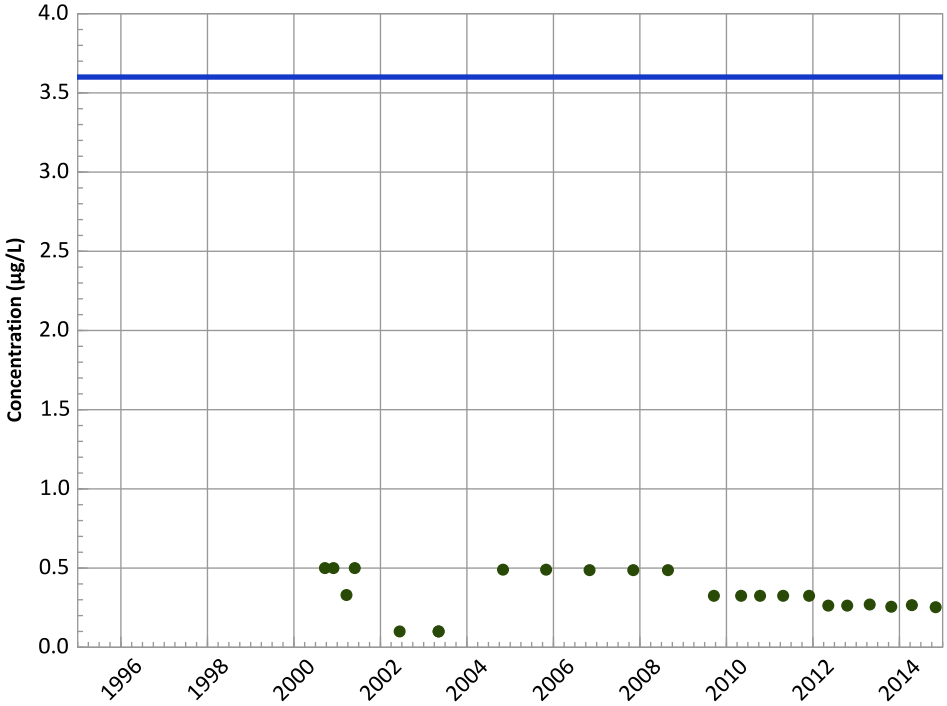
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

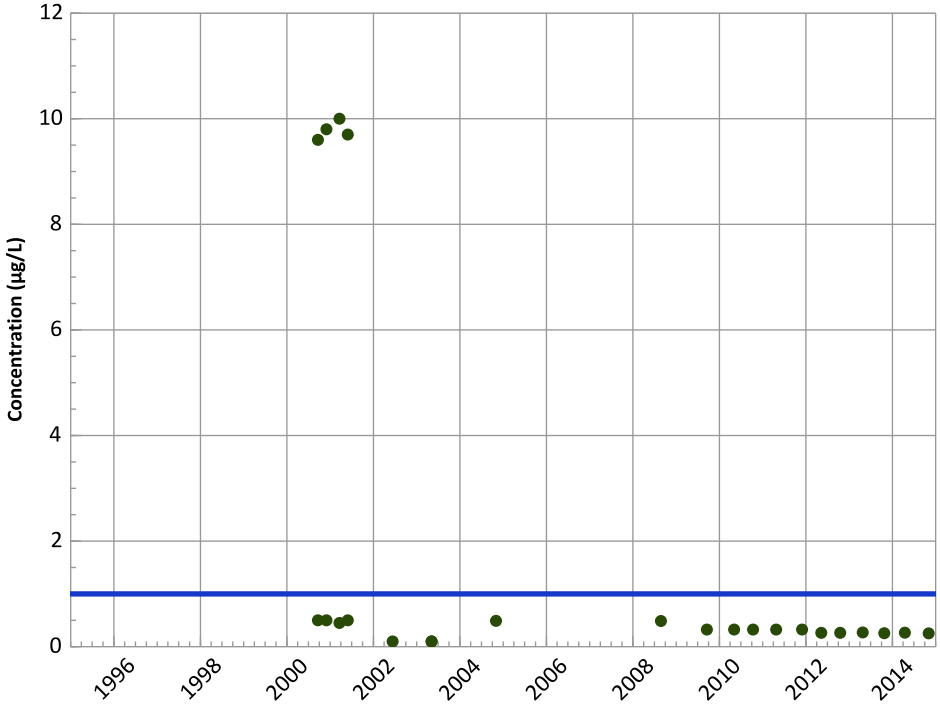


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

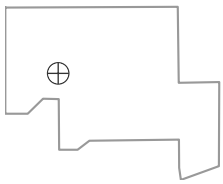
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

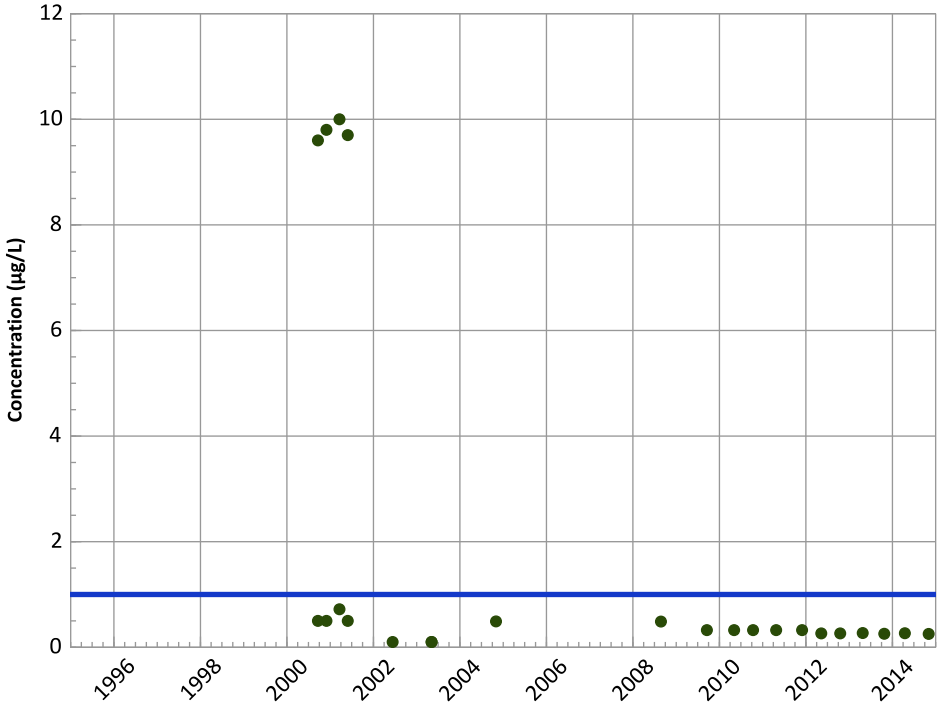
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

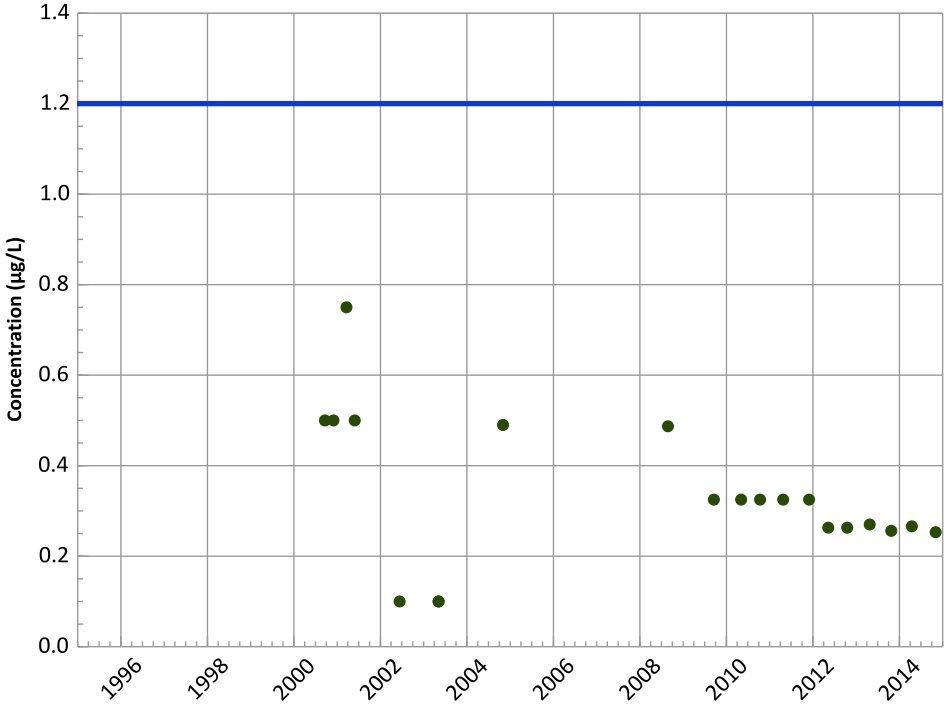


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

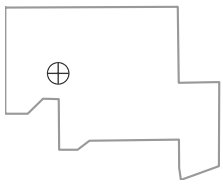
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

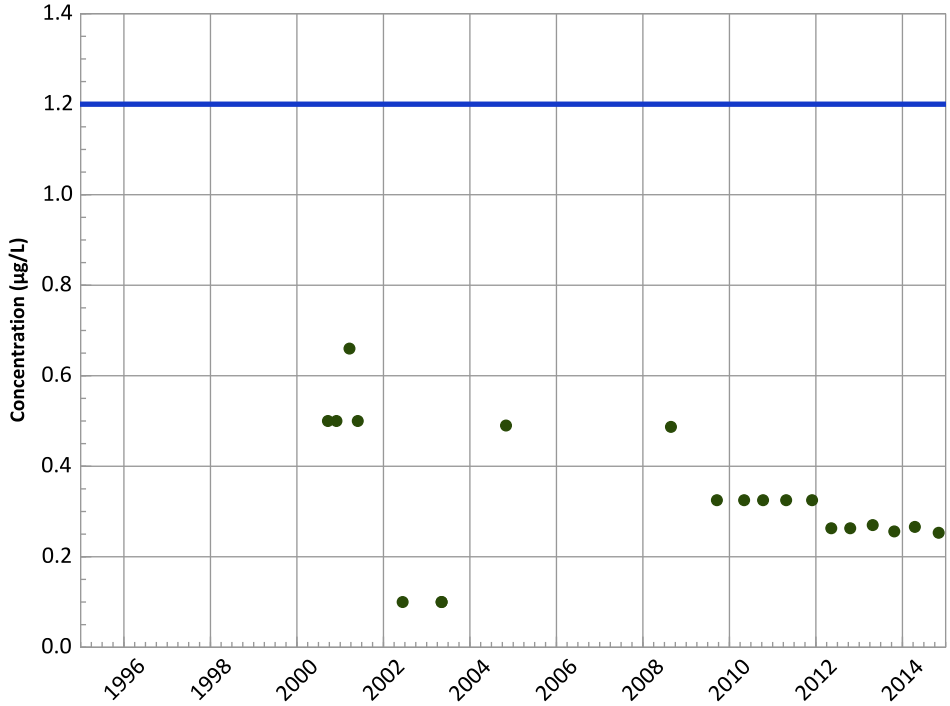
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

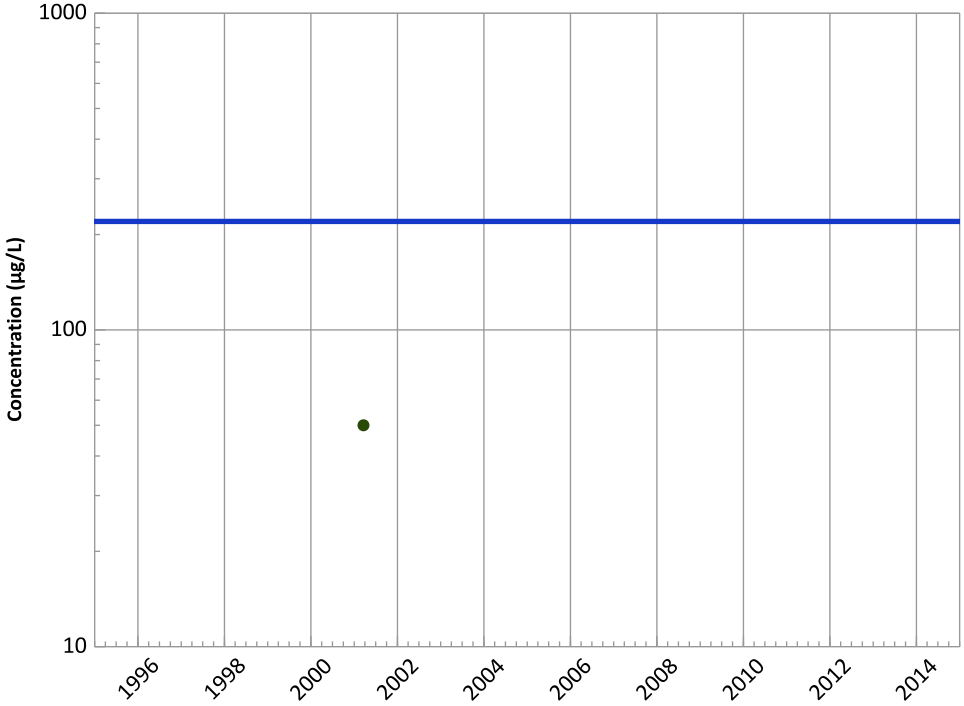


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend



Concentration Trend

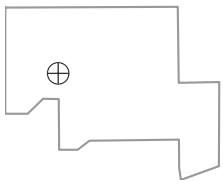
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

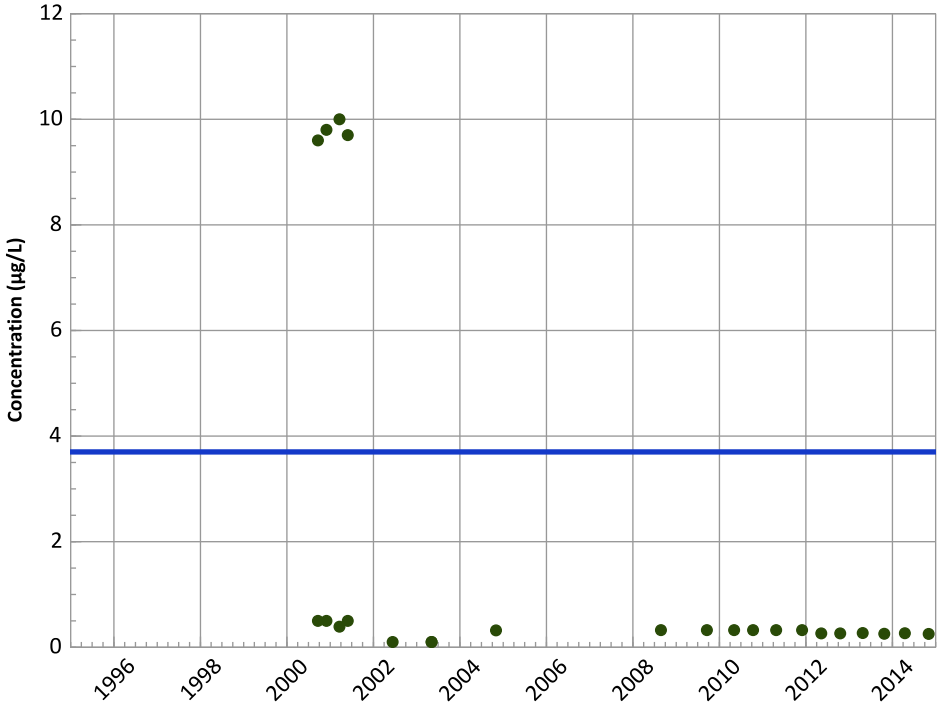
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

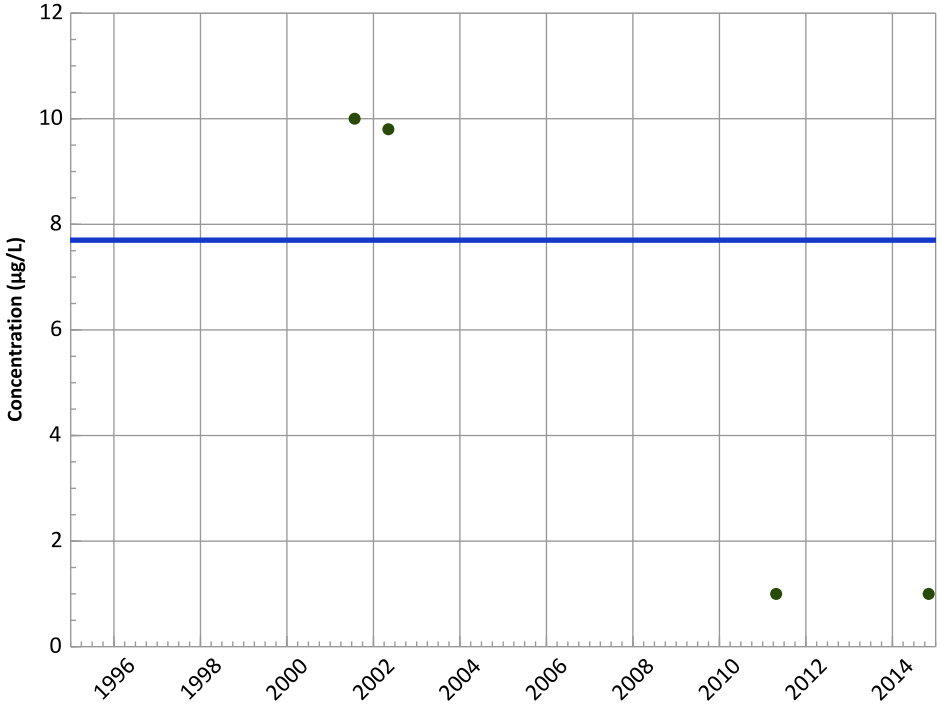


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

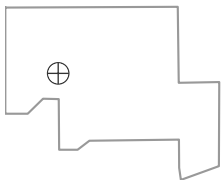
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

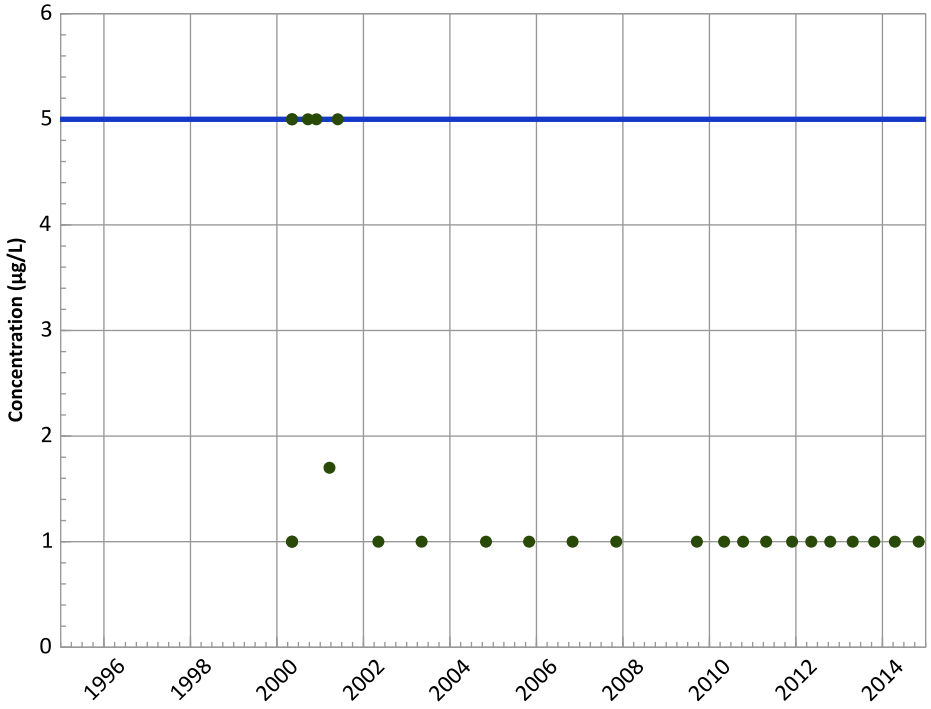
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

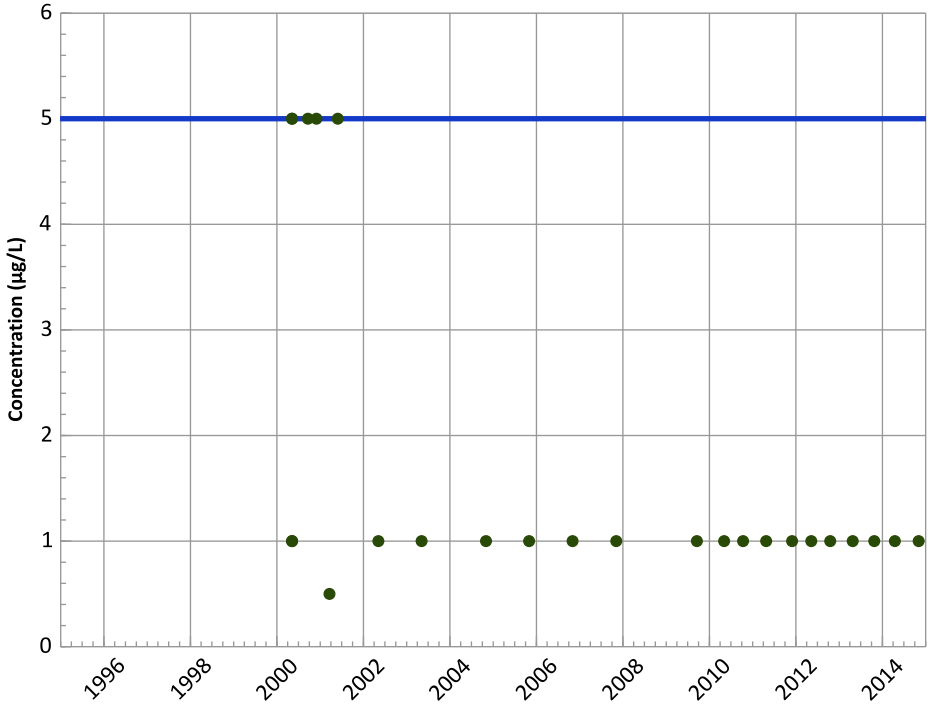


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend

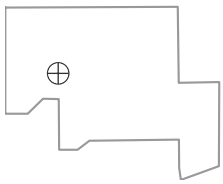


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

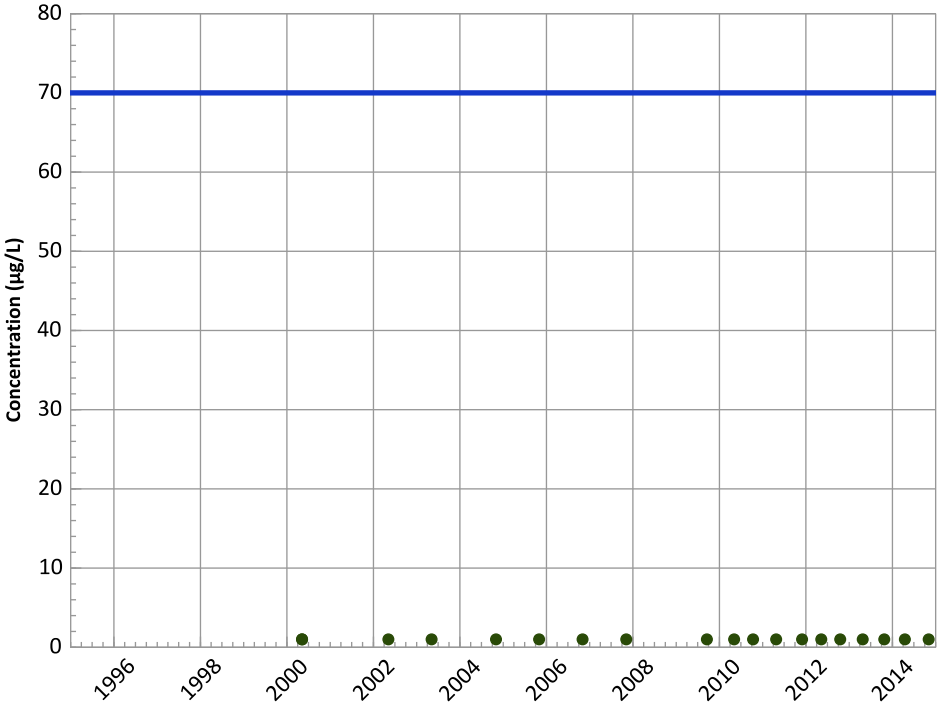


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

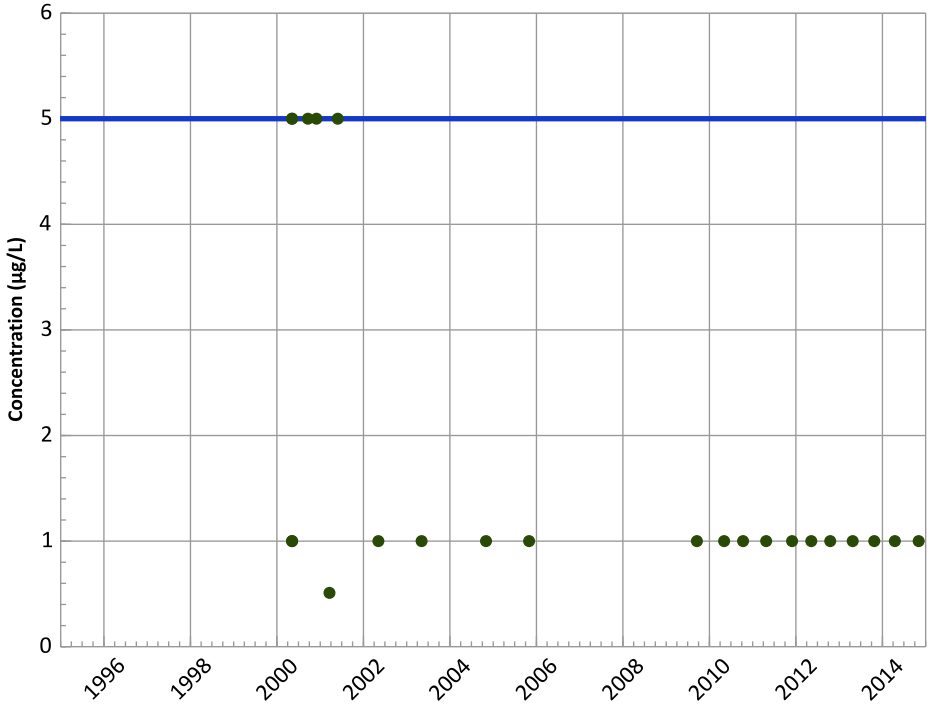


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend

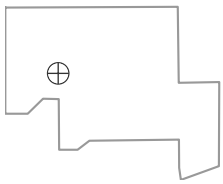


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

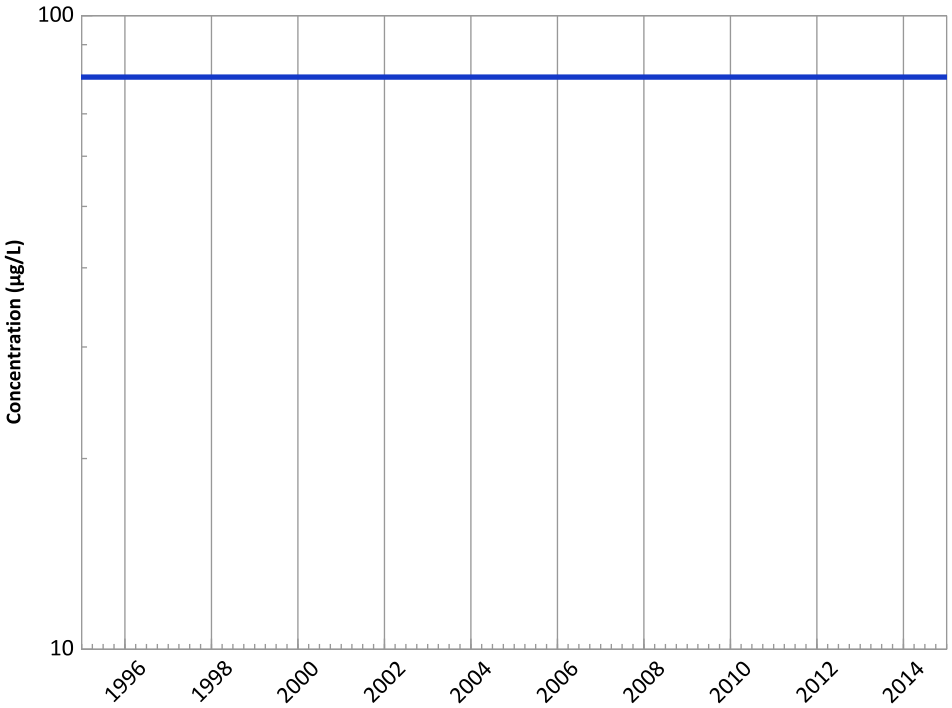


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

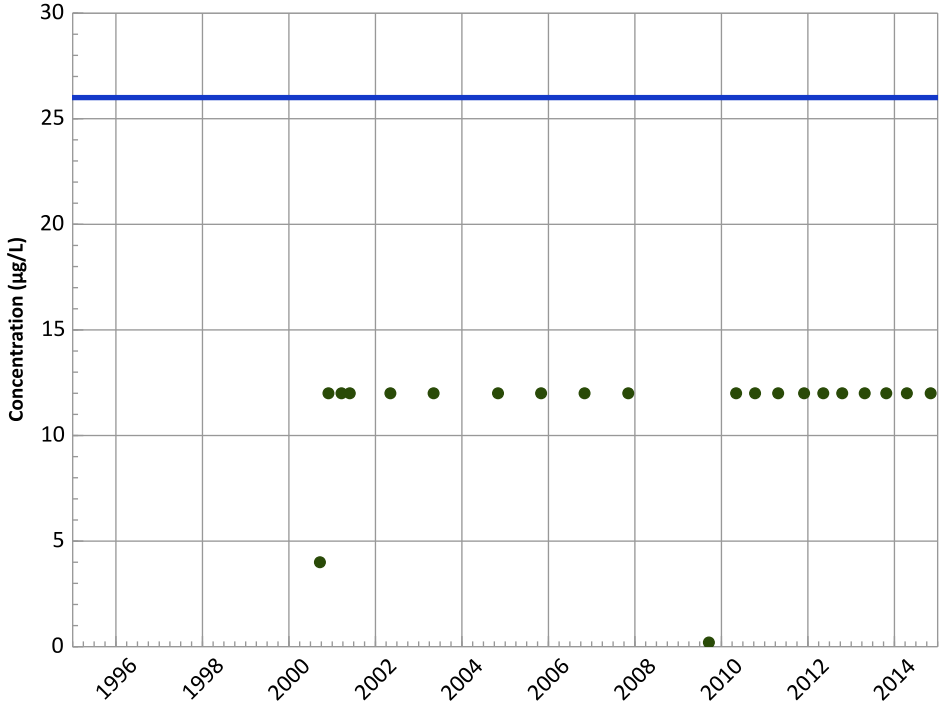


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

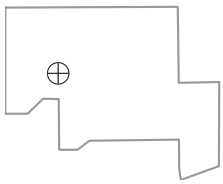
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
N/A (<4 Detections in Dataset)

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

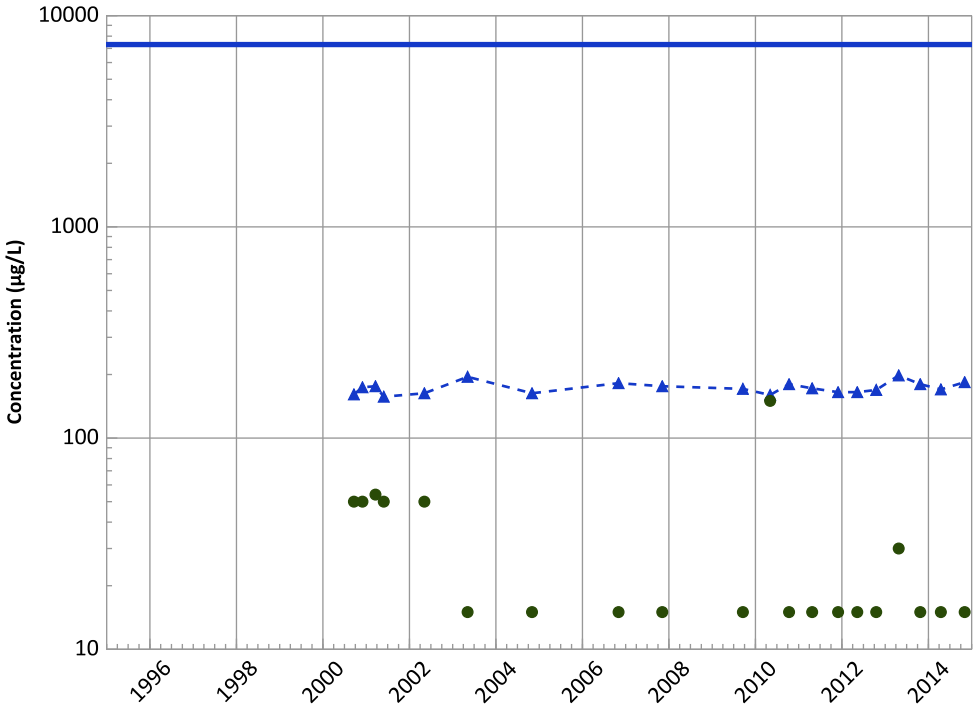
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

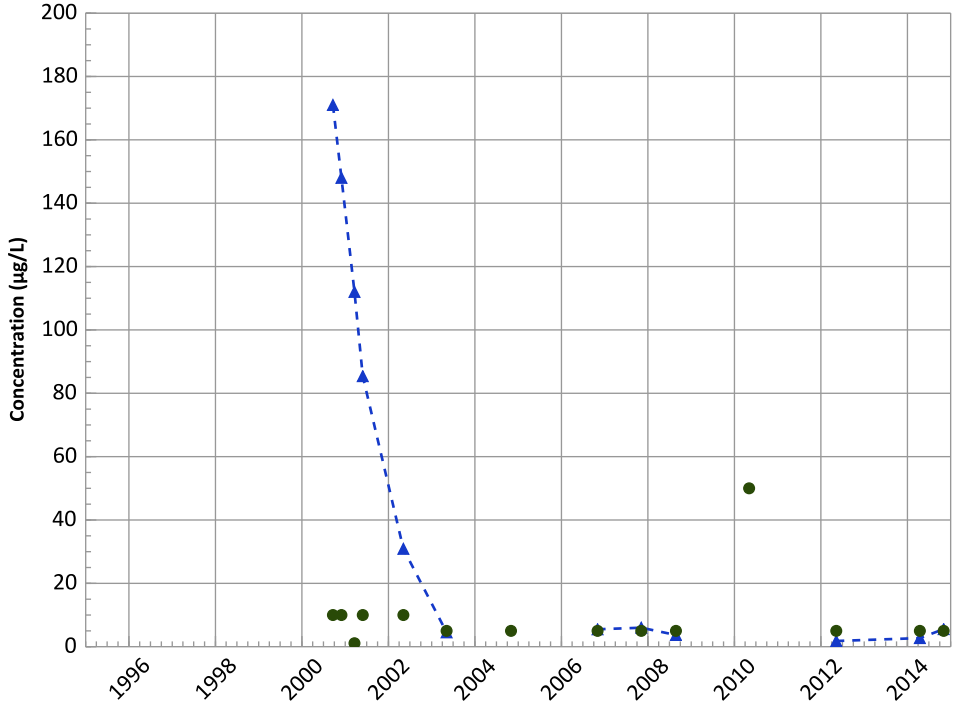


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
No Trend
All Data
Probably Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Probably Increasing
All Data
Increasing

Manganese Trend



Concentration Trend

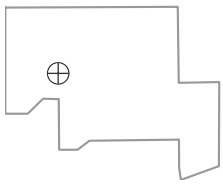
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

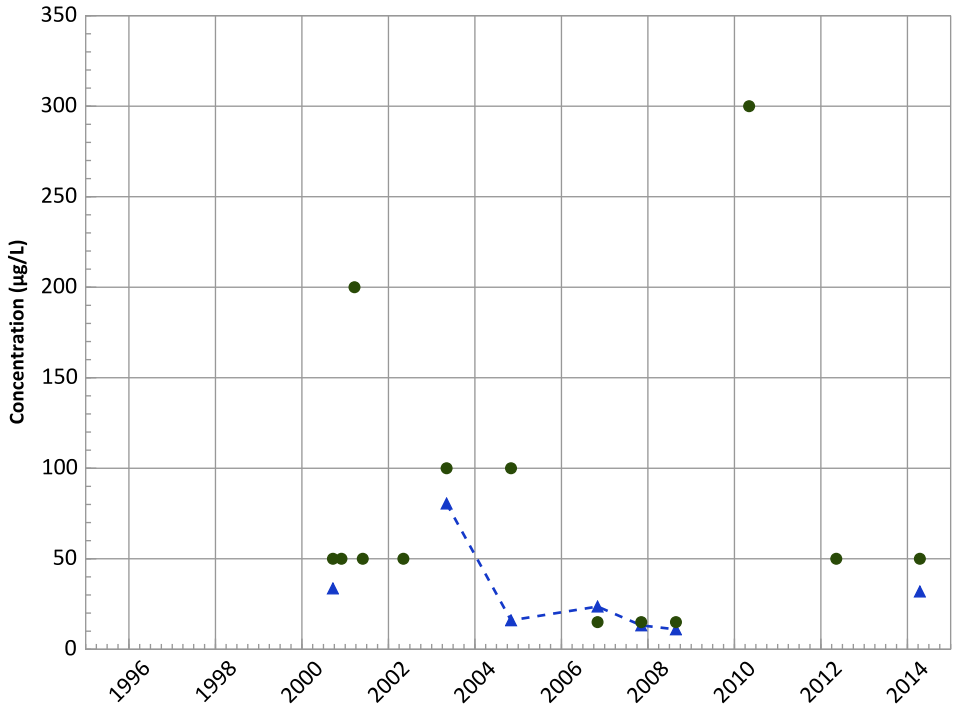
Measured Value
Sample Detection Limit
Concentration Trend
Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

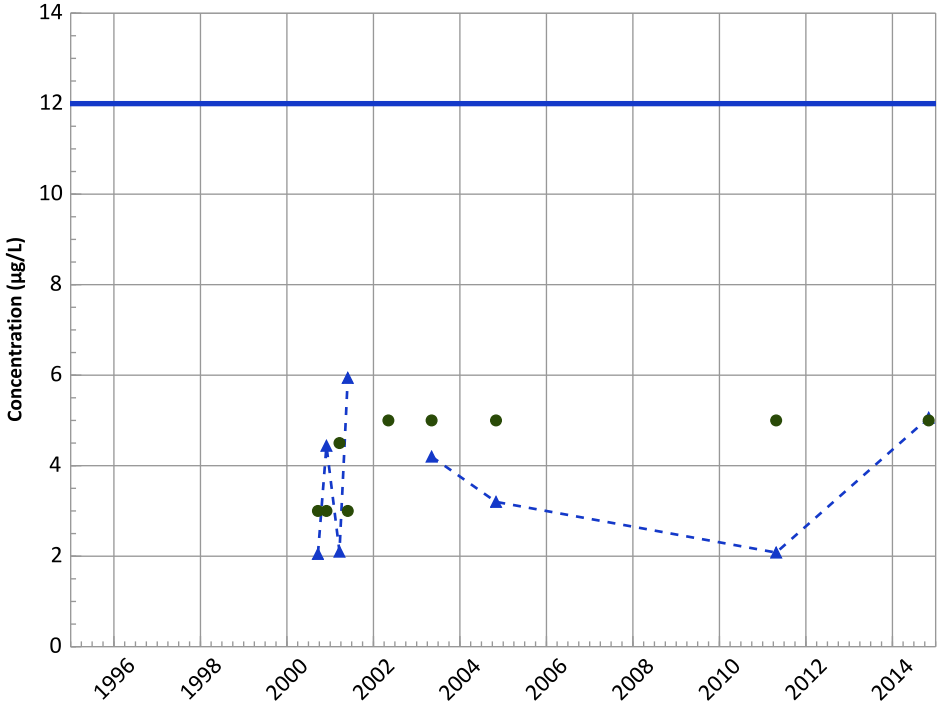


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Arsenic Trend



Concentration Trend

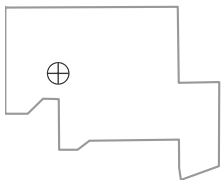
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

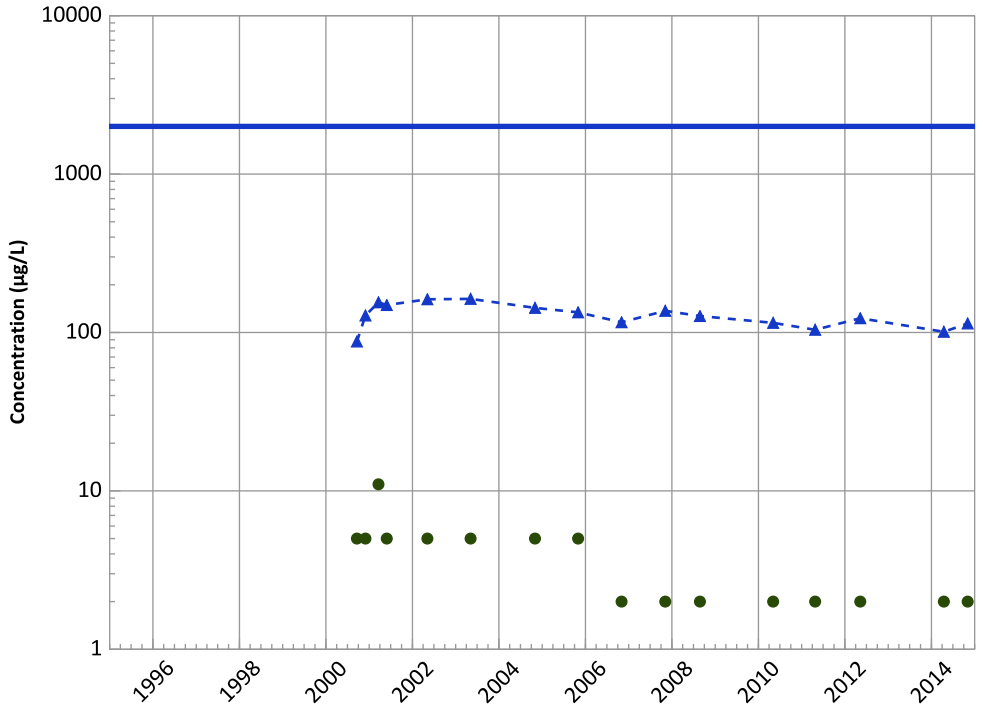
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

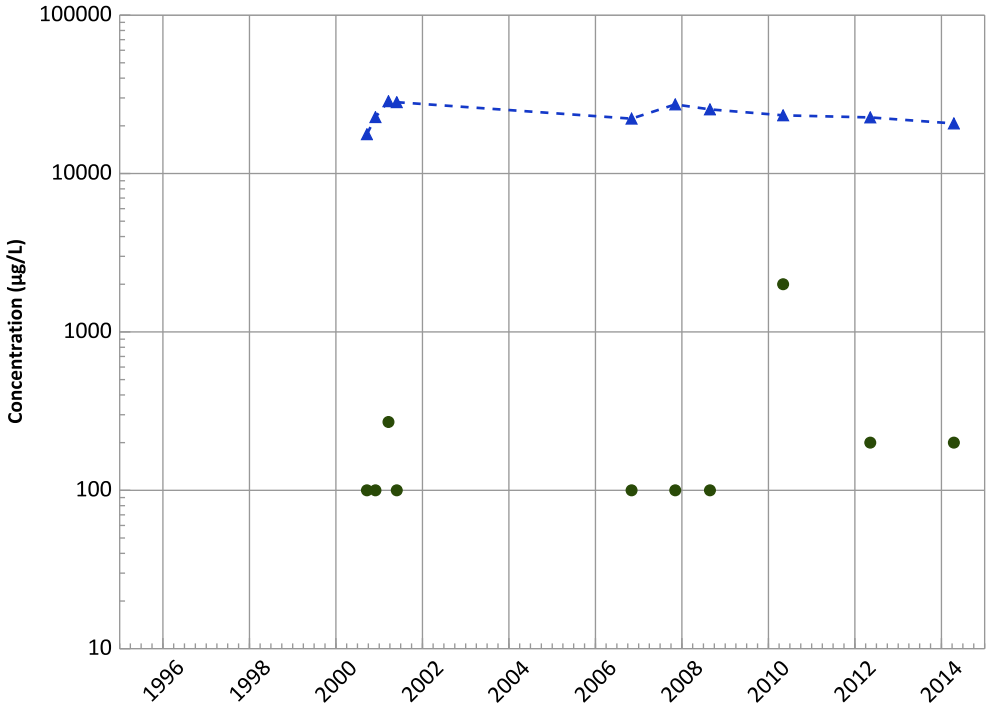


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

Calcium Trend



Concentration Trend

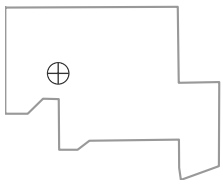
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

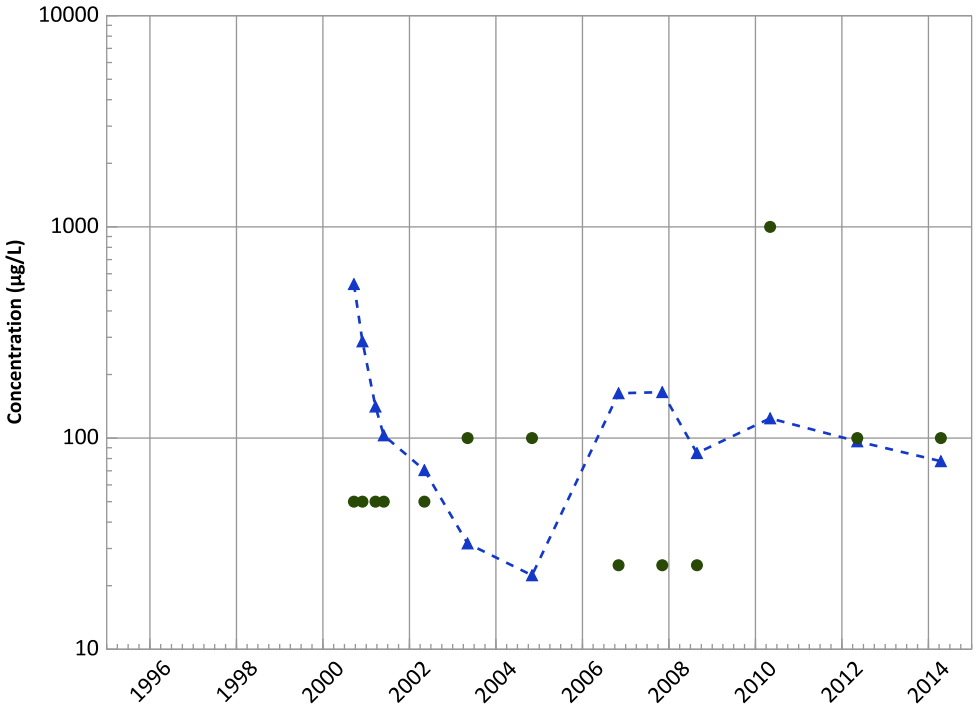
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

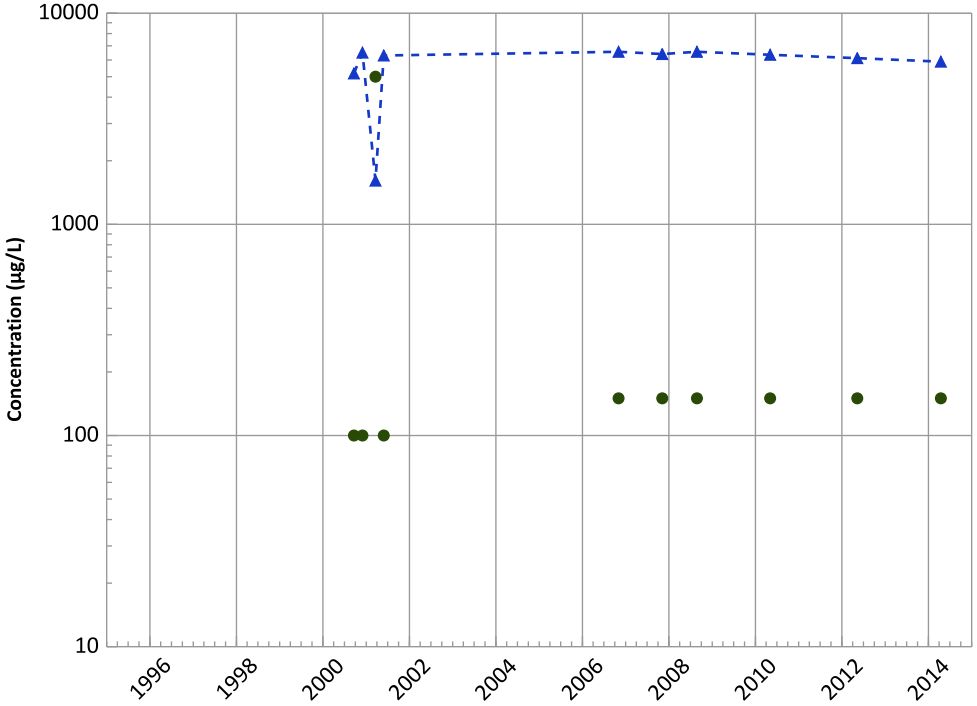


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Potassium Trend



Concentration Trend

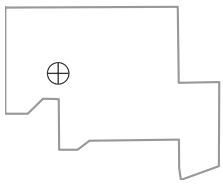
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

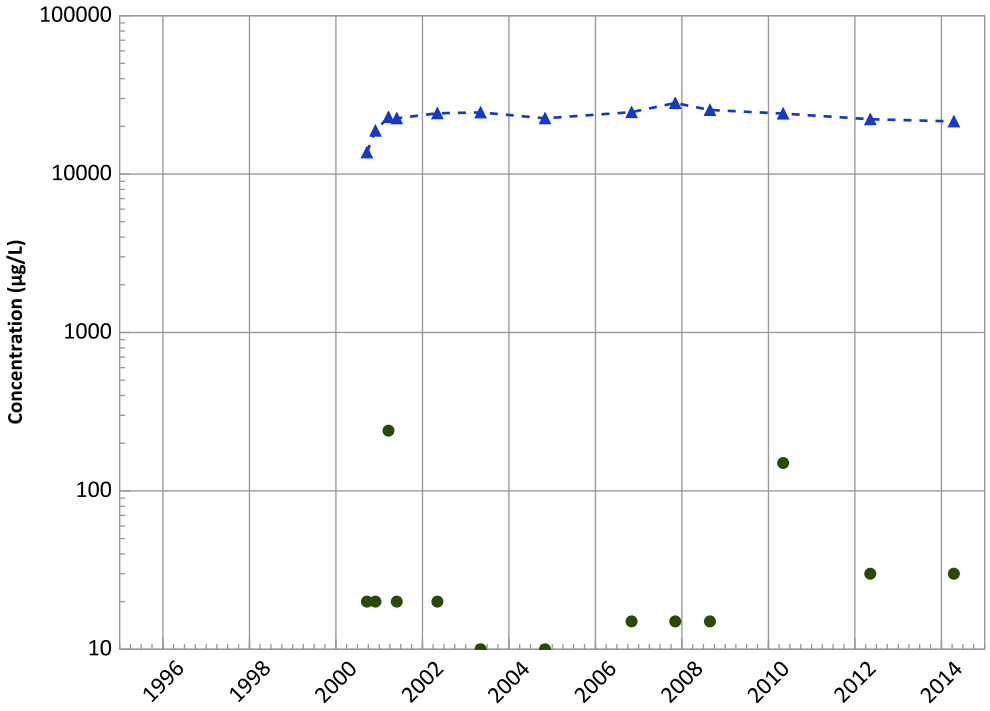
- ▲ Measured Value
- ● Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX07-1R01 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

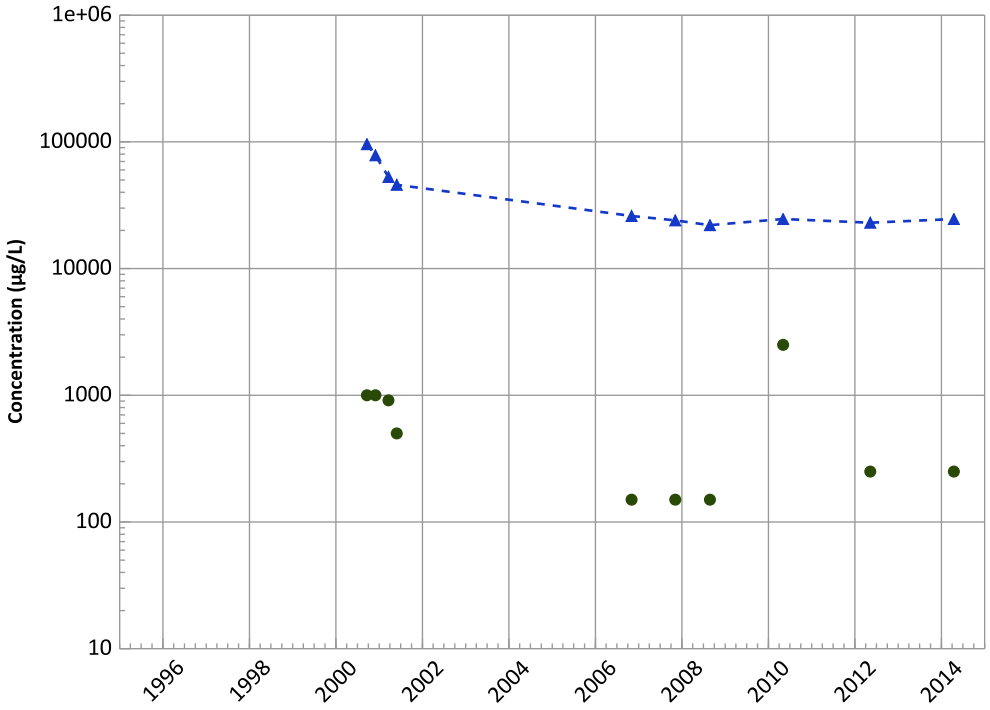


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Sodium Trend



Concentration Trend

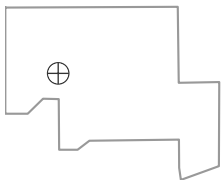
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

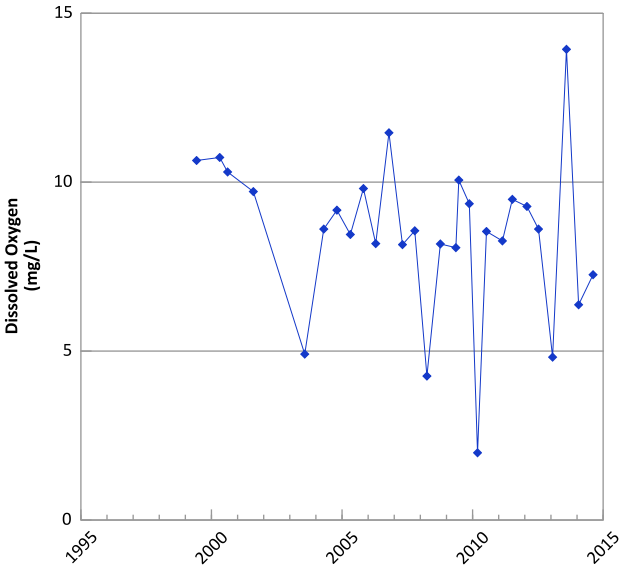
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 05/08/2000 to 11/03/2014
Analysis Date: 03/19/2015

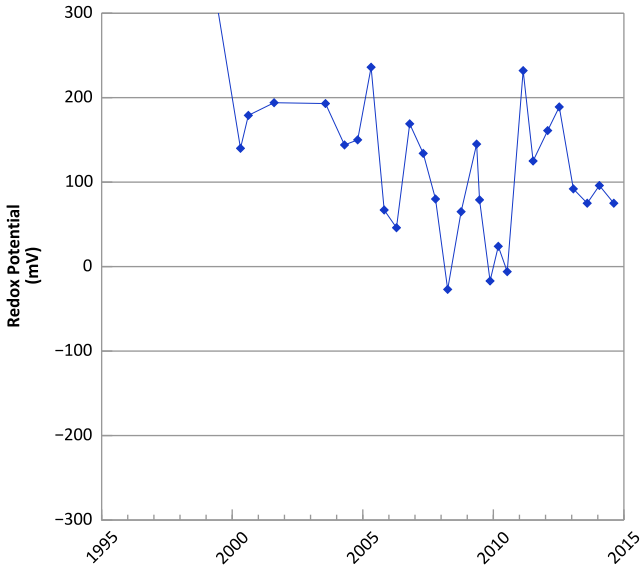
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

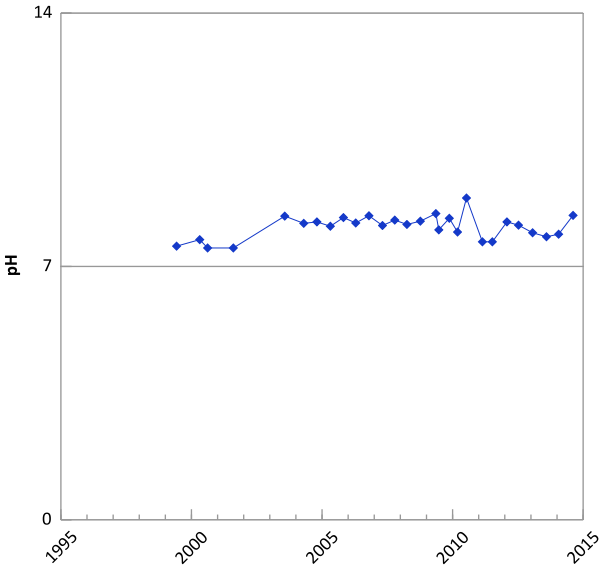
Well Location

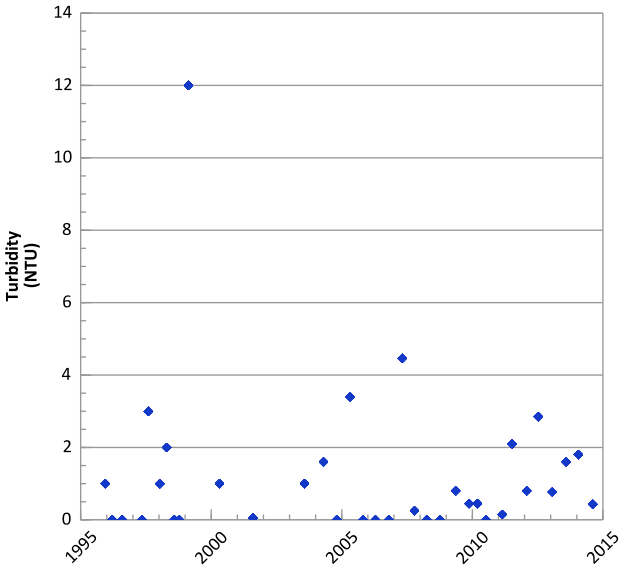


PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant
Field Parameters



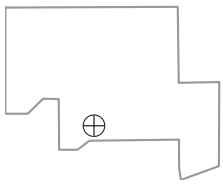






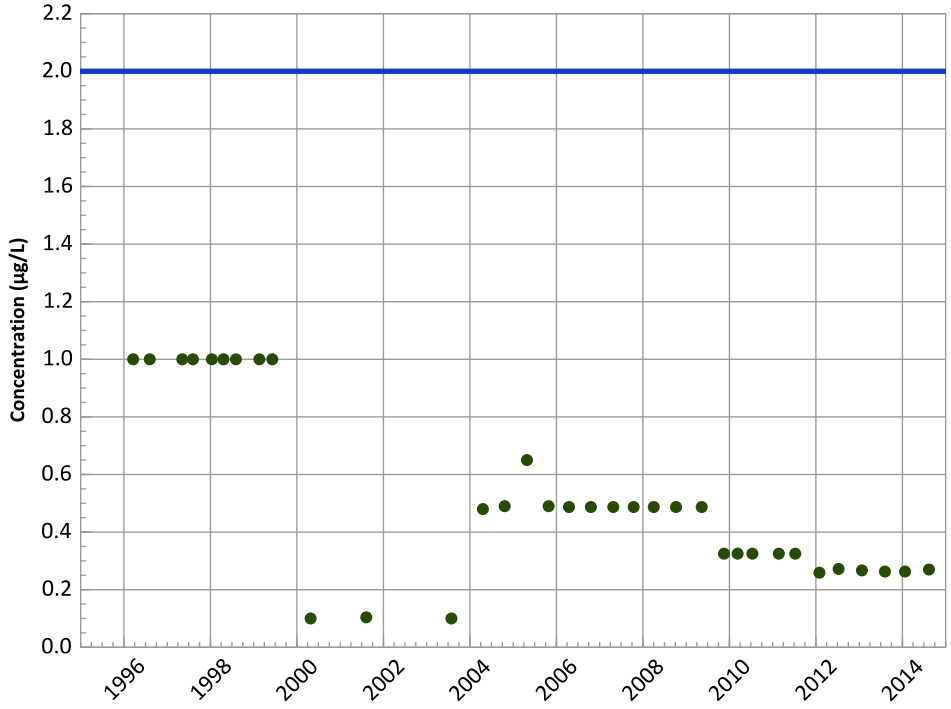
Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

RDX (Hexahydro-1,3,5-Trinitro-1,3,5-Triazine) Trend

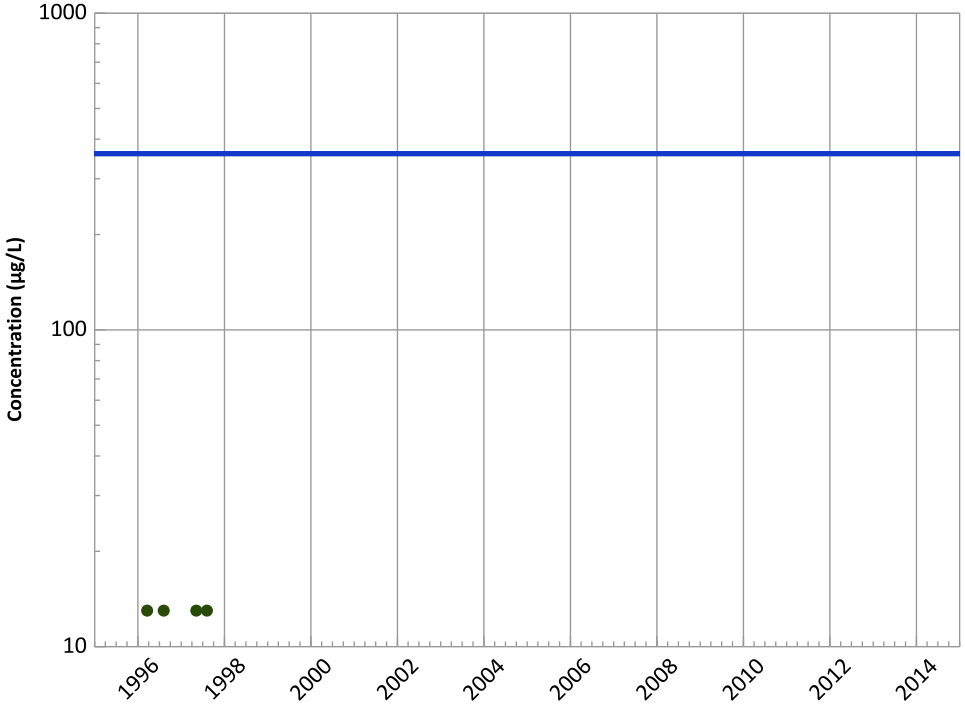


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

HMX (Octahydro-1,3,5,7-Tetranitro-1,3,5,7-Tetrazocine) Trend



Concentration Trend

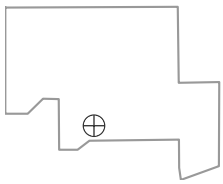
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

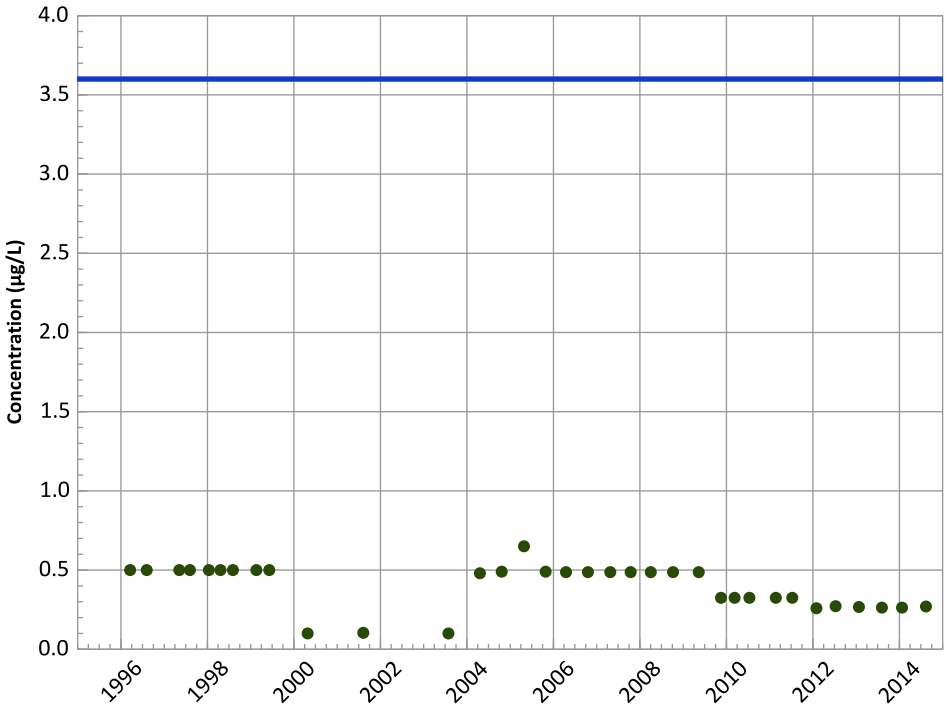
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

TNT (2,4,6-Trinitrotoluene) Trend

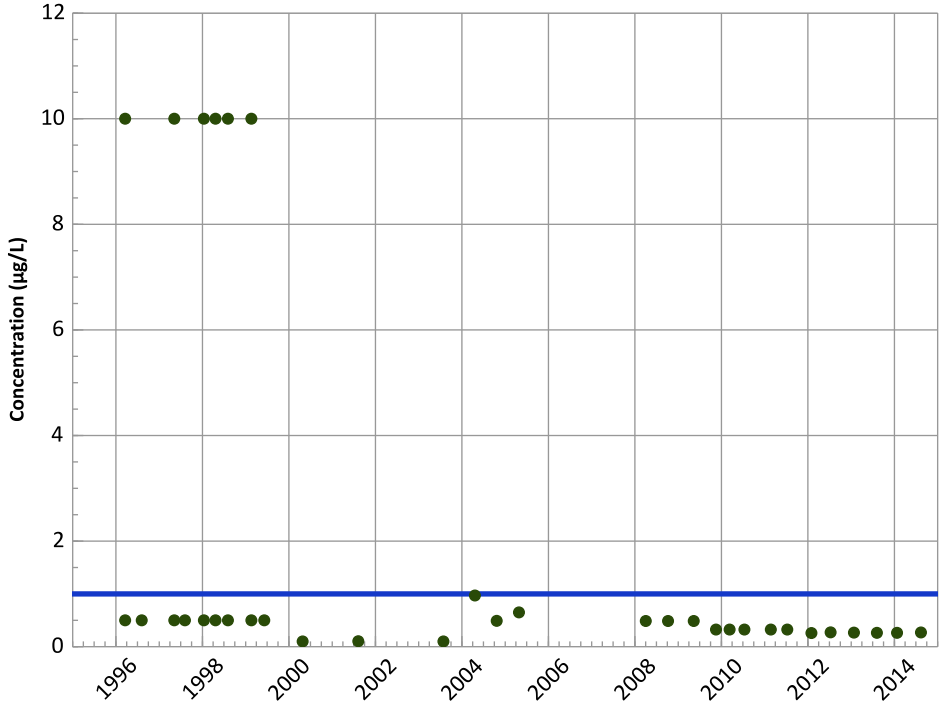


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2,4-Dinitrotoluene Trend



Concentration Trend

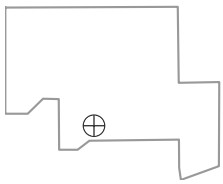
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

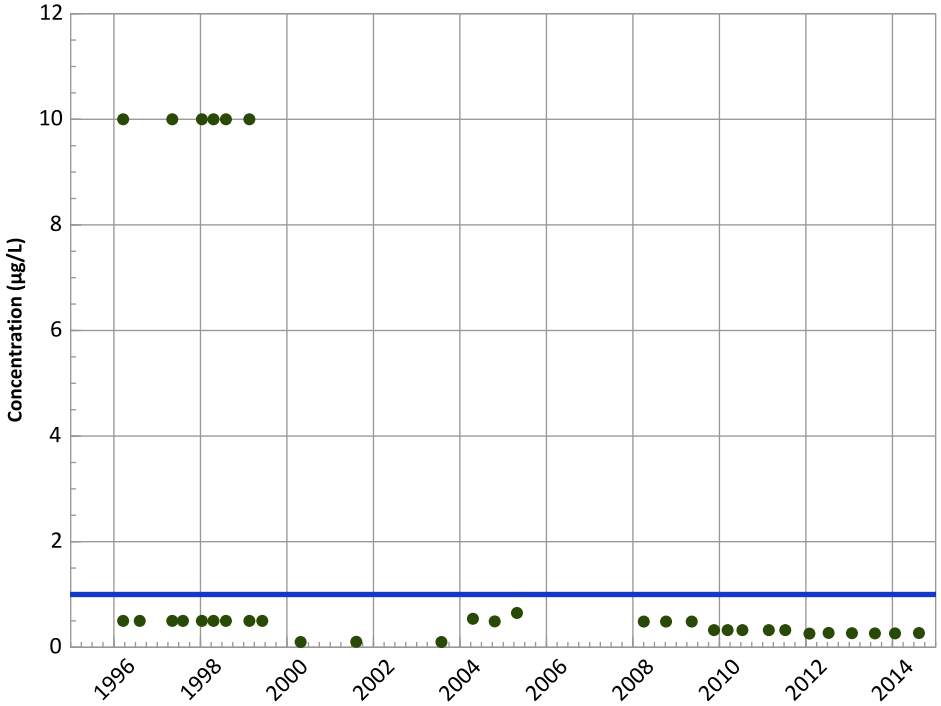
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

2,6-Dinitrotoluene Trend

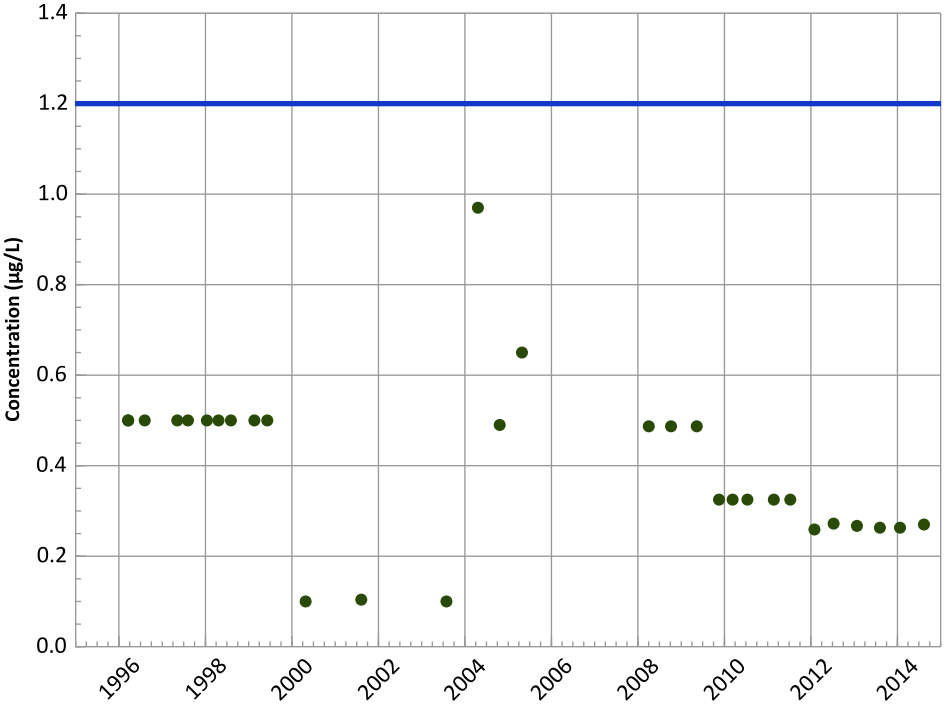


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

2-Amino-4,6-Dinitrotoluene Trend



Concentration Trend

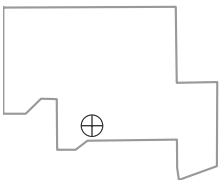
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

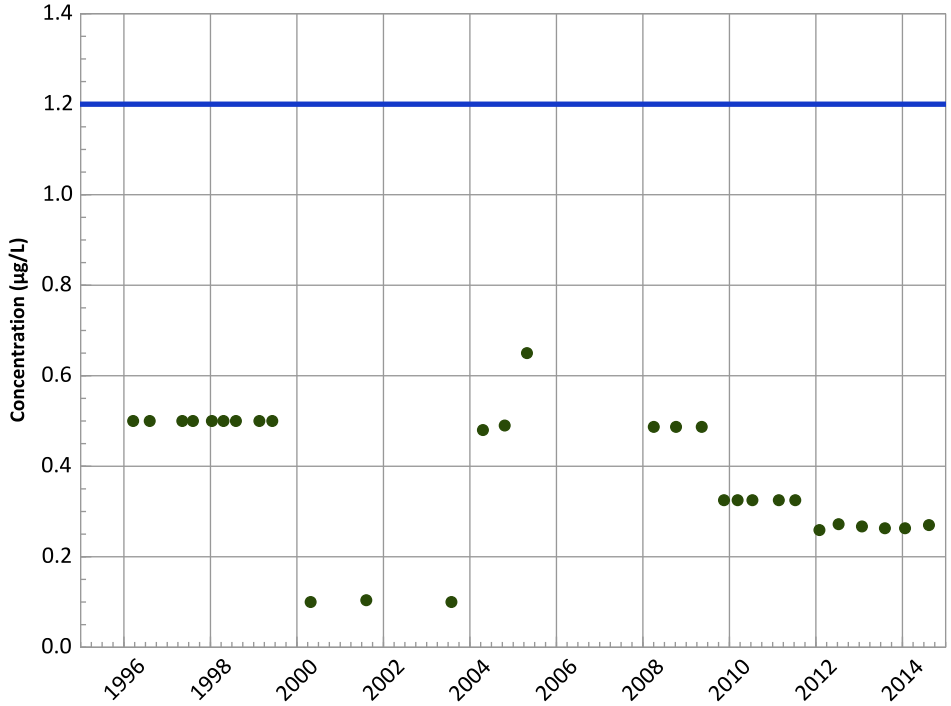
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

4-Amino-2,6-Dinitrotoluene Trend

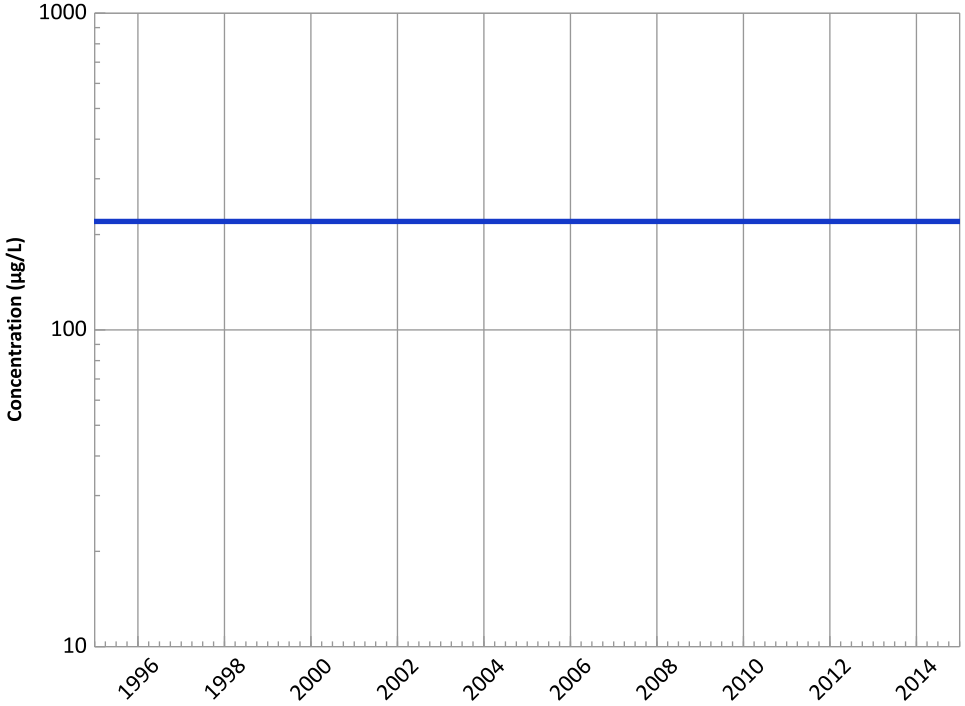


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,3,5-Trinitrobenzene Trend

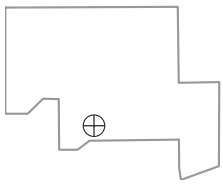


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

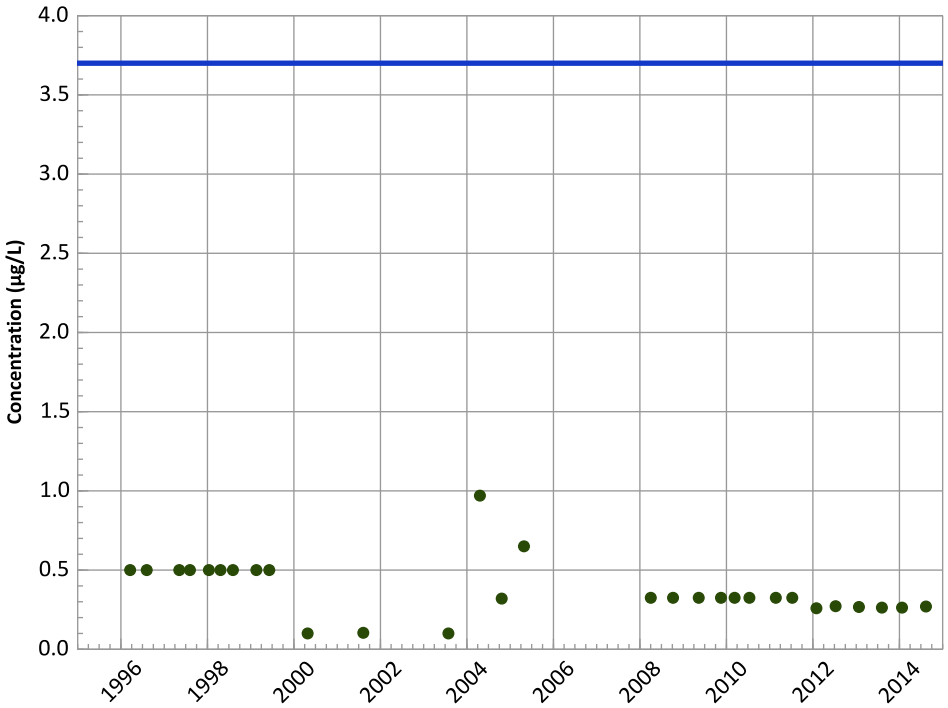


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

1,3-Dinitrobenzene Trend

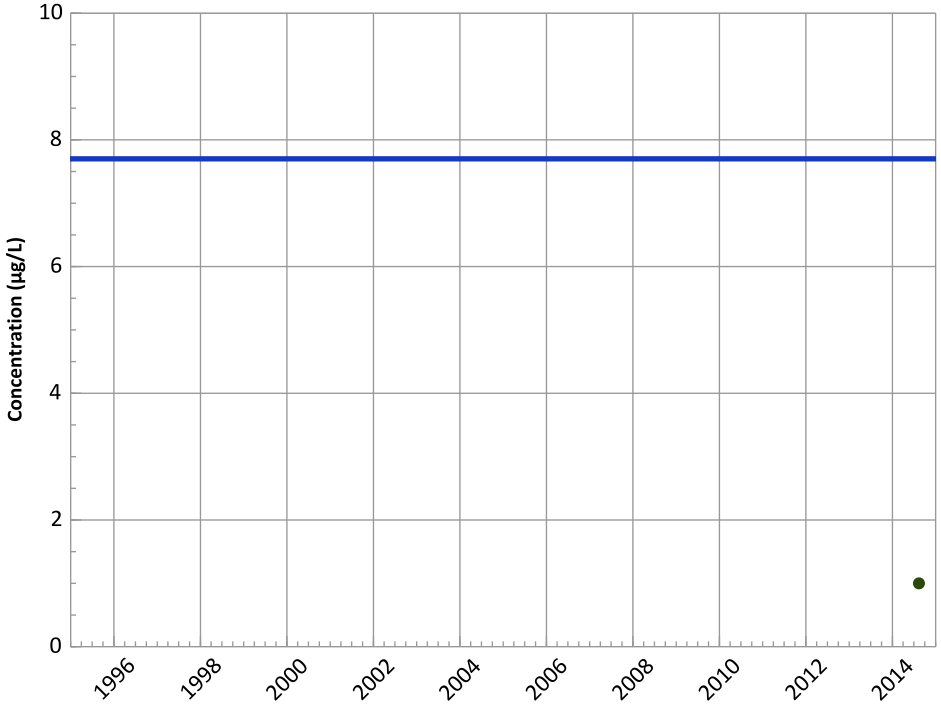


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,4-Dioxane (p-Dioxane) Trend



Concentration Trend

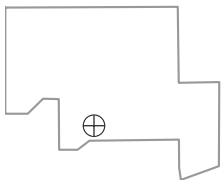
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
N/A (<4 Samples in Dataset)

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

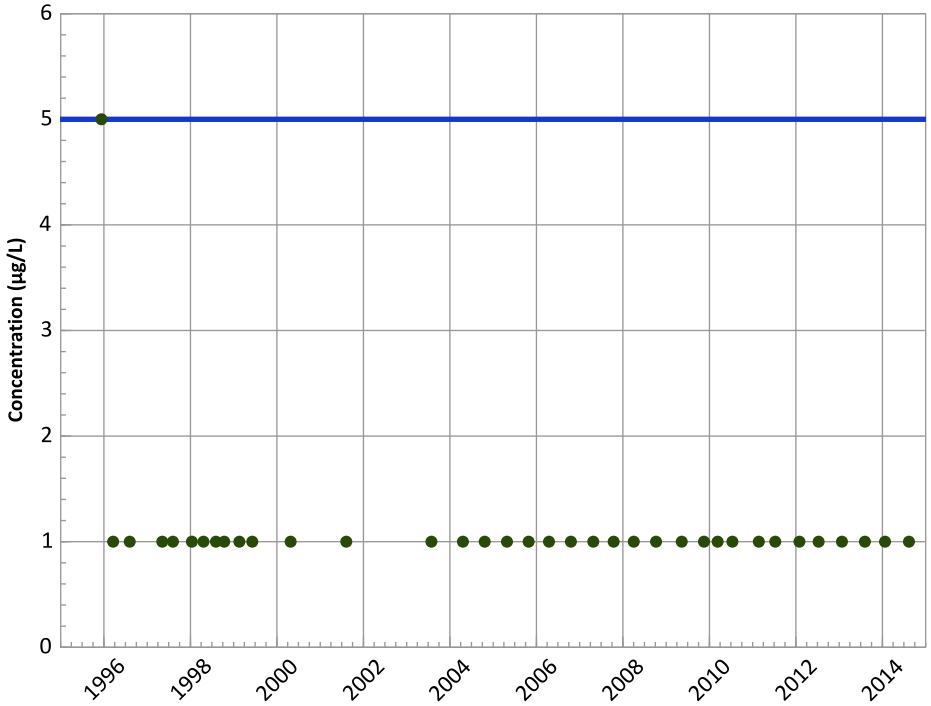
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Tetrachloroethylene (PCE) Trend

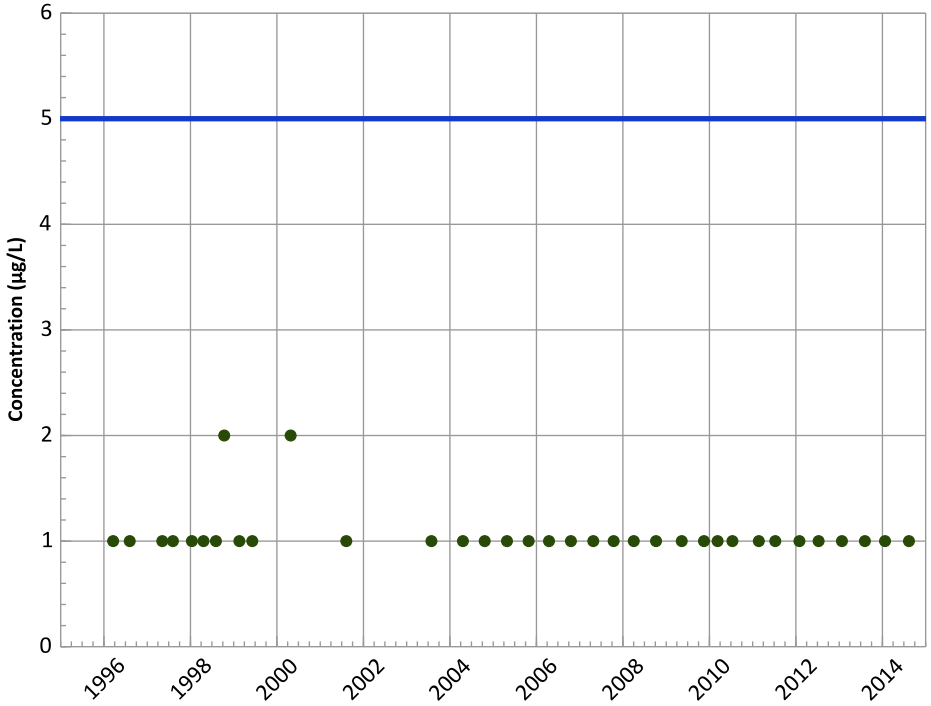


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Trichloroethene Trend

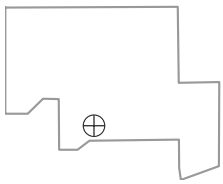


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

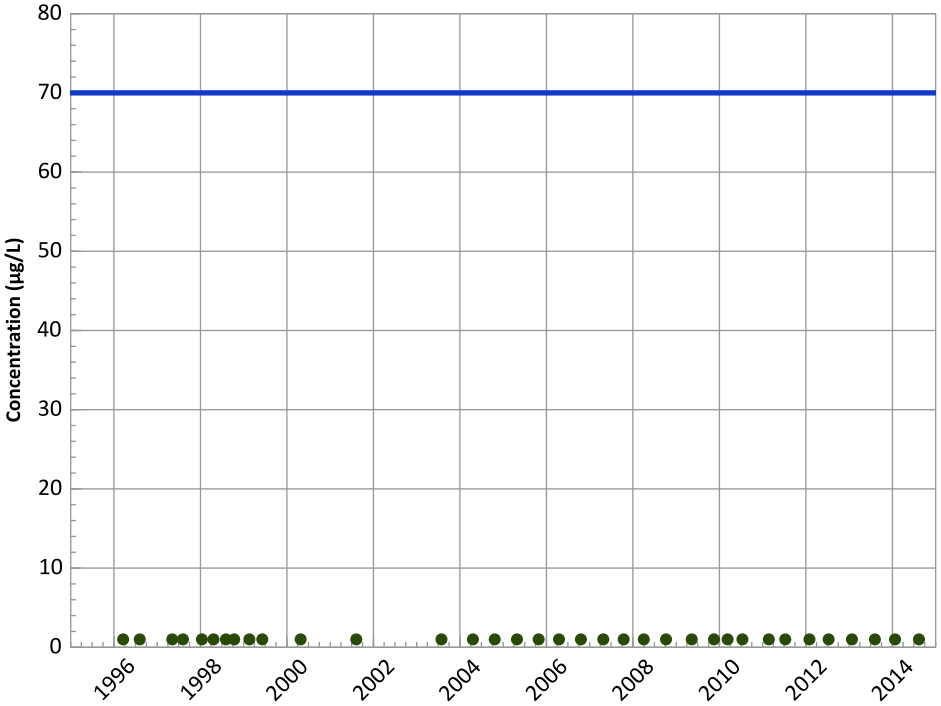


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

cis-1,2-Dichloroethene Trend

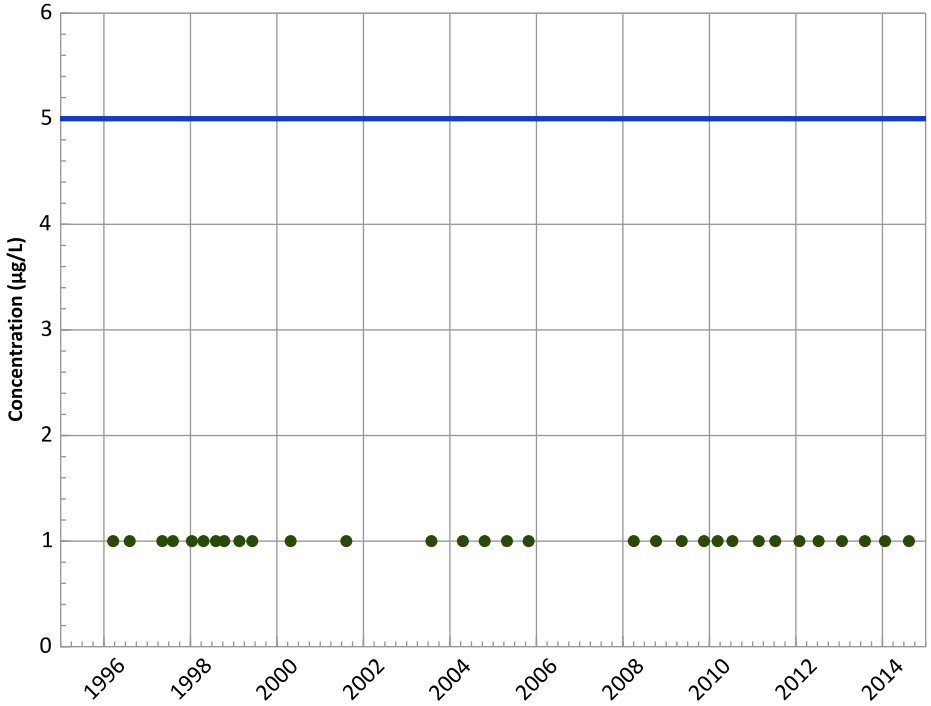


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

1,2-Dichloroethane Trend

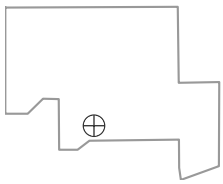


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Well Location

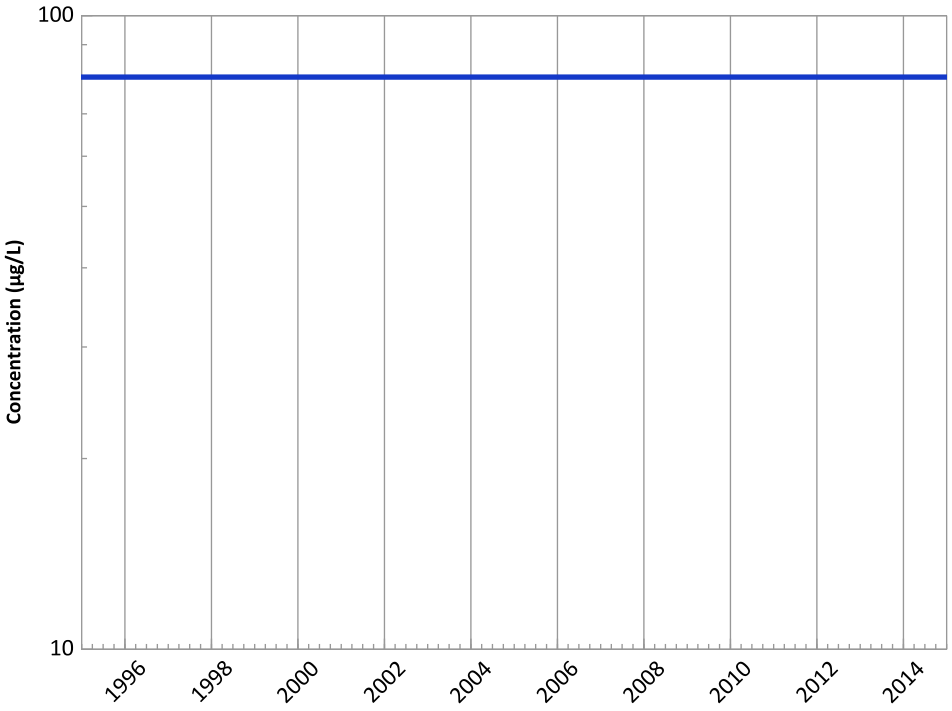


Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Chloroform Trend

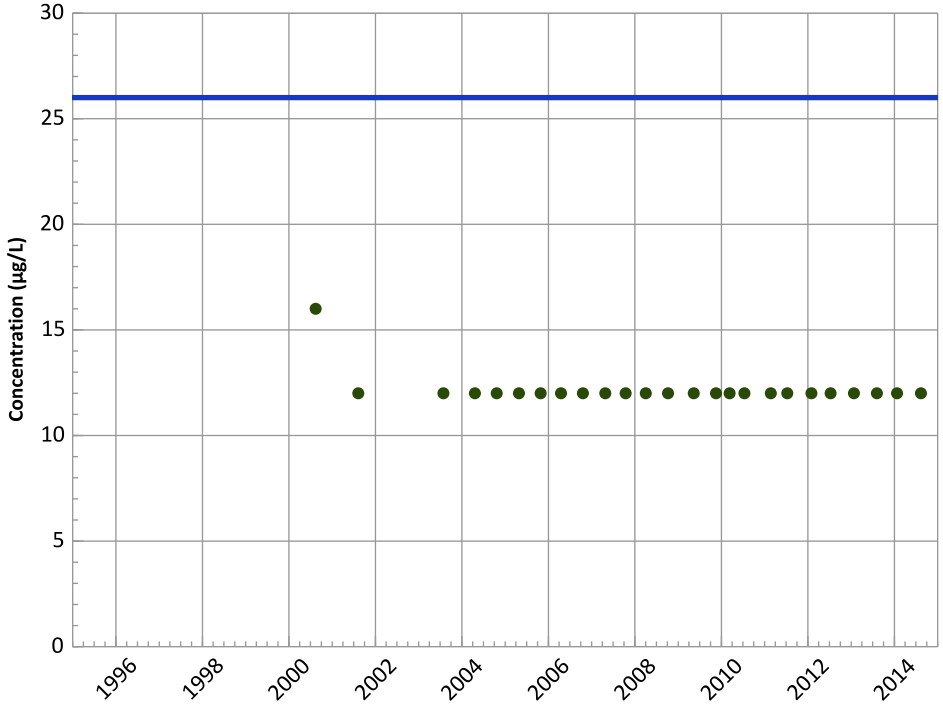


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Perchlorate Trend



Concentration Trend

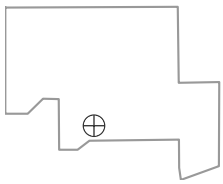
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
All Non-Detect
All Data
All Non-Detect

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

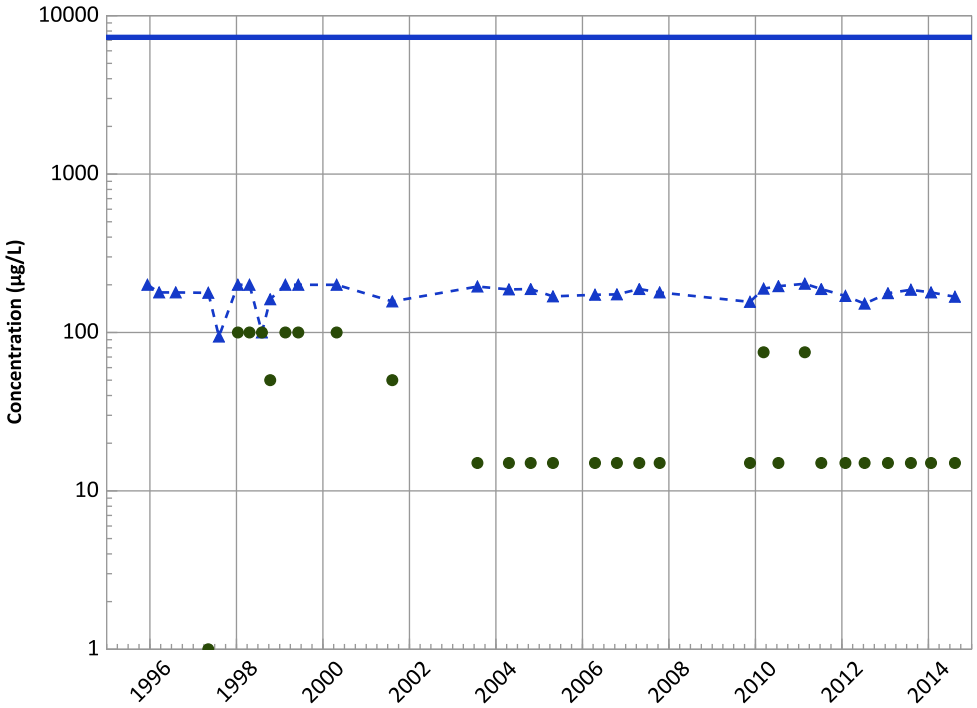
▲ Measured Value
● Sample Detection Limit
- - - Concentration Trend
═══ Groundwater Protection Standard

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Boron Trend

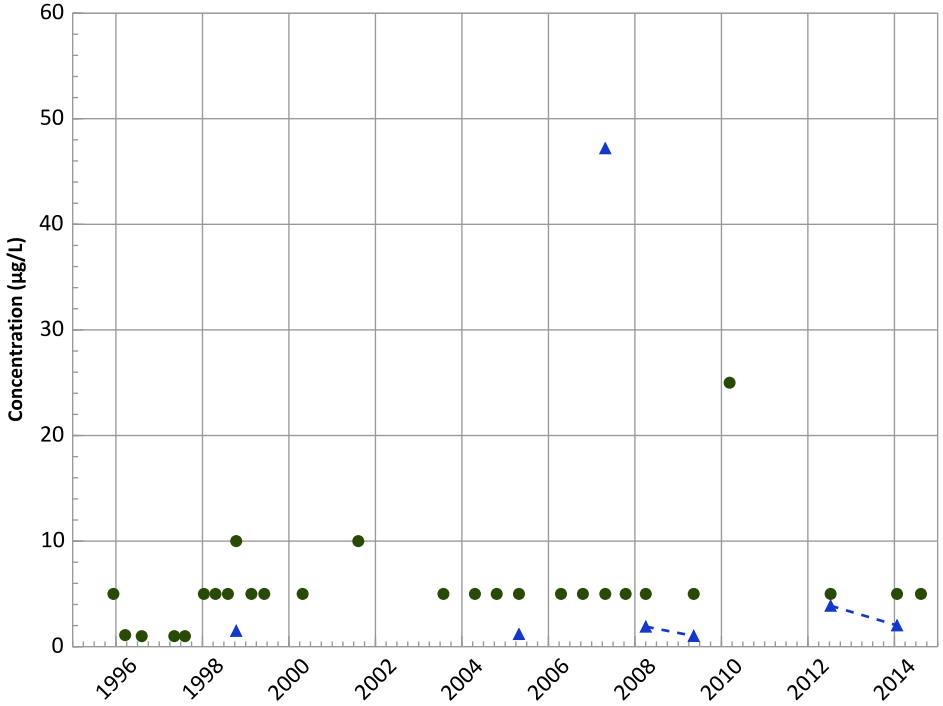


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Decreasing
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
Stable
All Data
Increasing

Manganese Trend



Concentration Trend

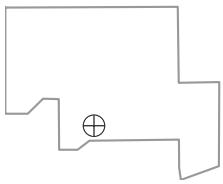
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

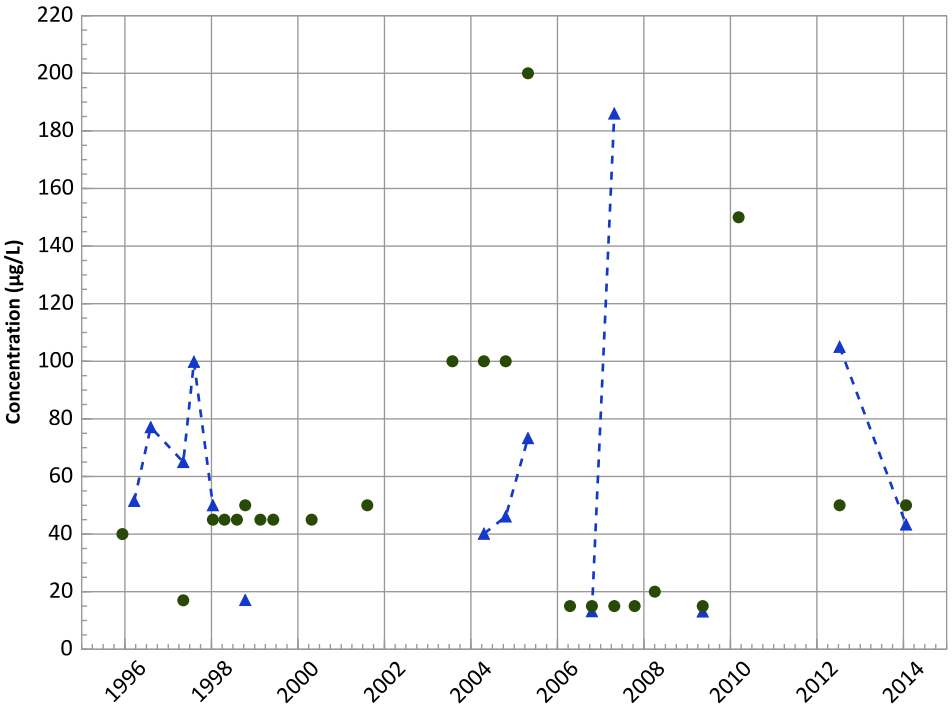
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Aluminum Trend

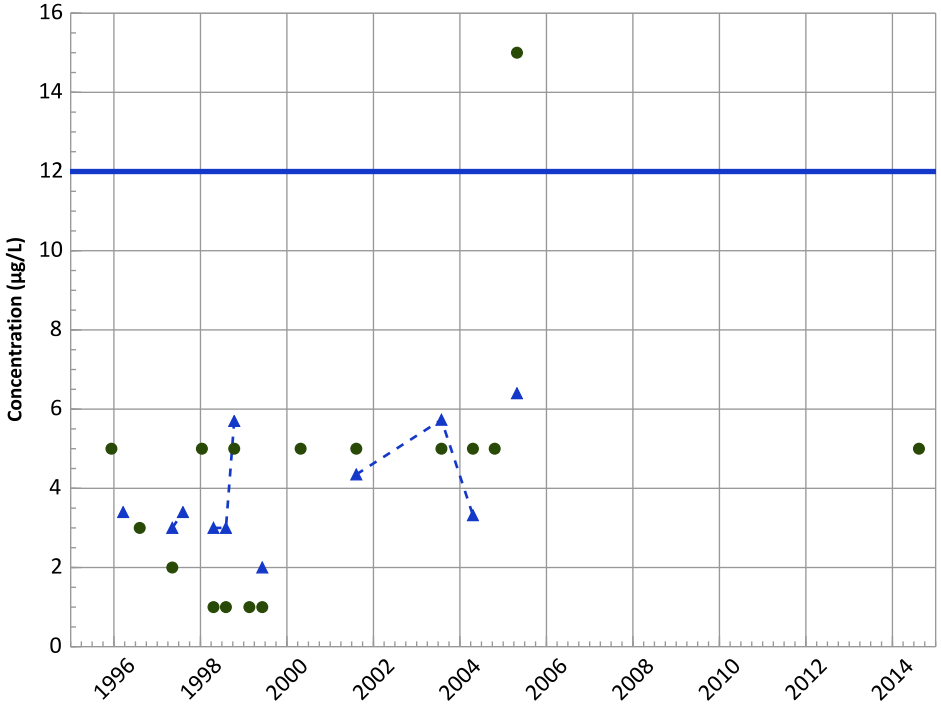


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Stable

Arsenic Trend



Concentration Trend

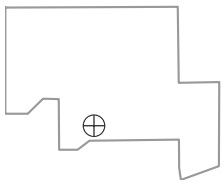
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

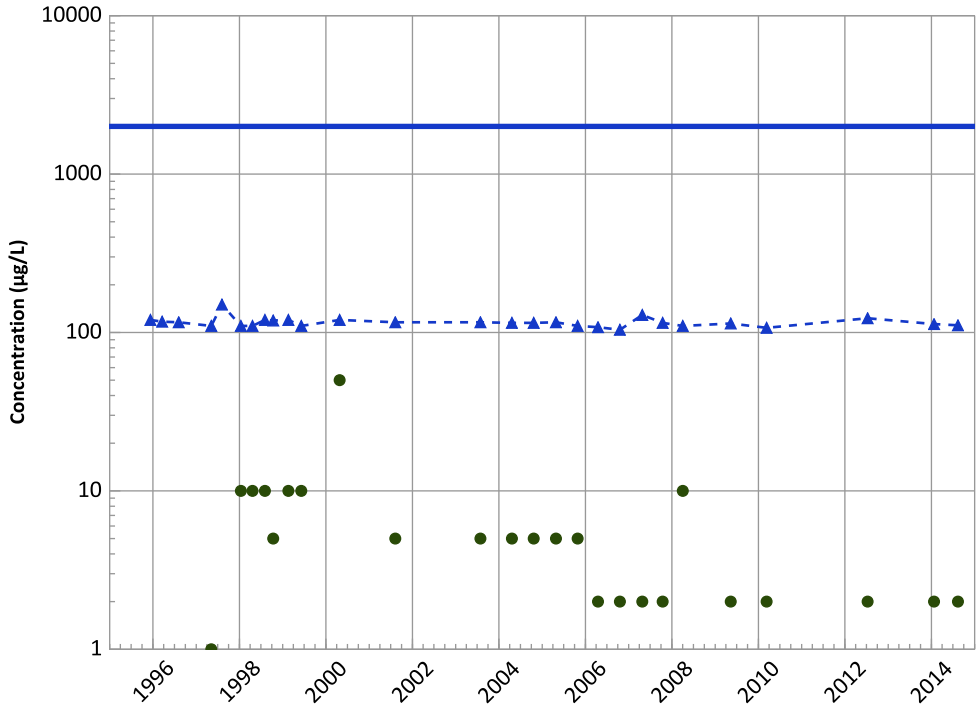
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Barium Trend

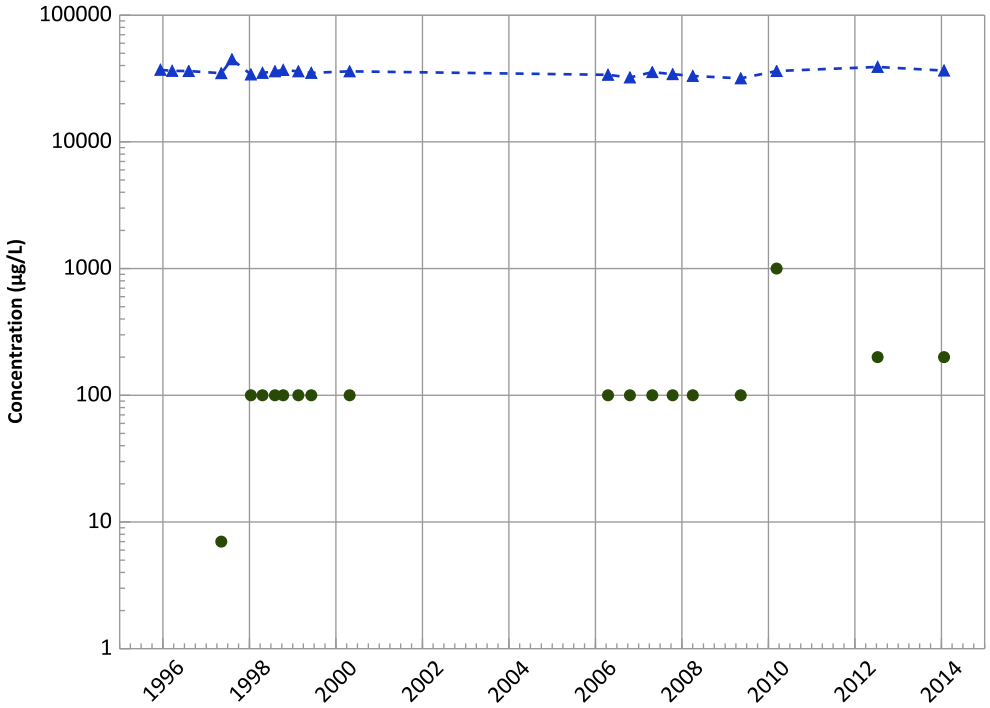


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
Stable
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
No Trend
All Data
Decreasing

Calcium Trend



Concentration Trend

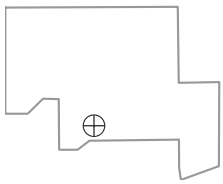
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Decreasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

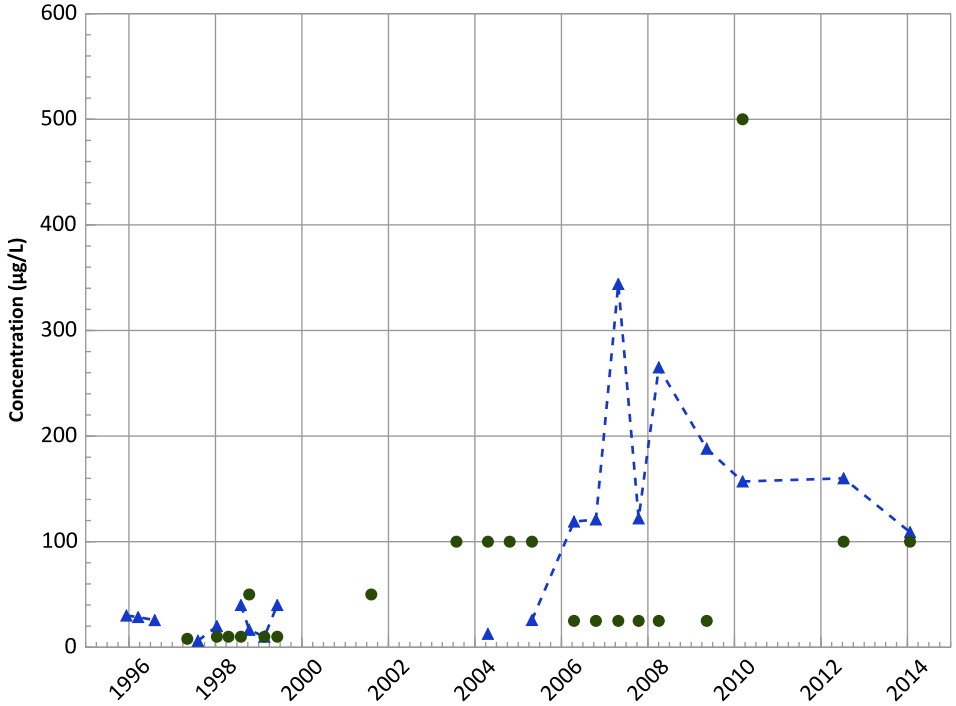
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Iron Trend

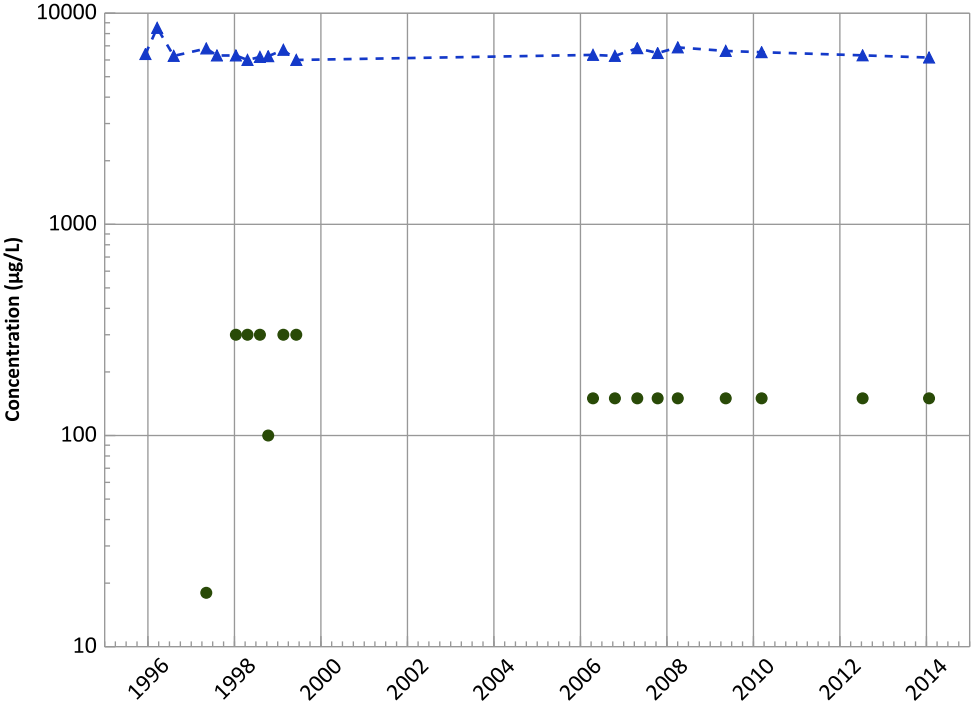


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Potassium Trend



Concentration Trend

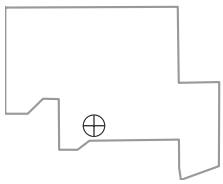
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Decreasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

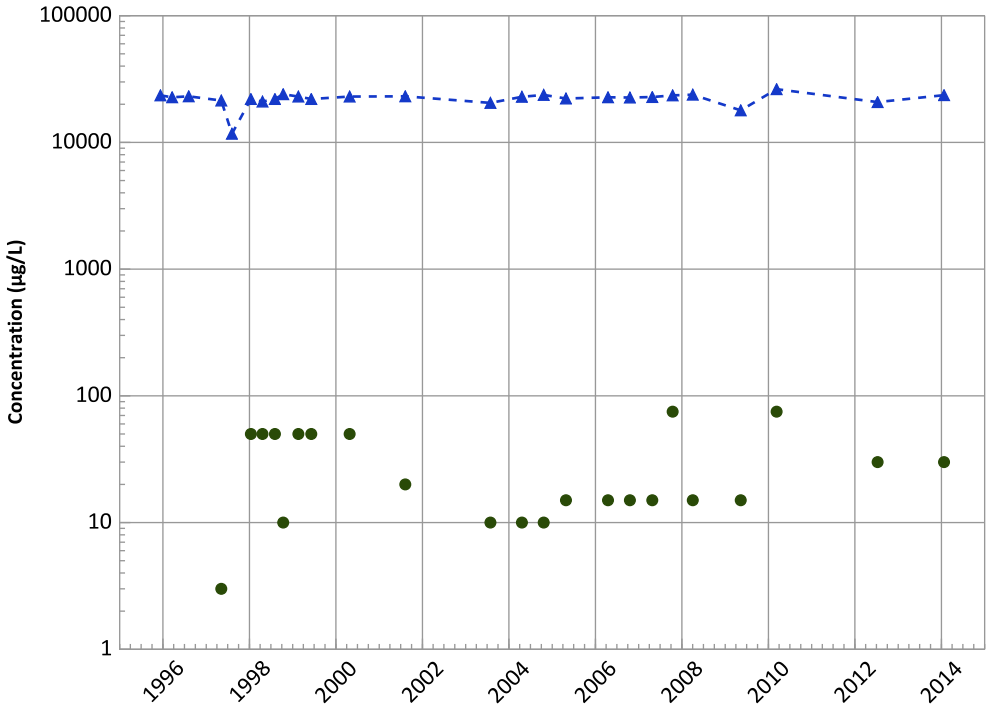
- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



PTX-BEG2 in Ogallala Aquifer
USDOE/NNSA Pantex Plant

Magnesium Trend

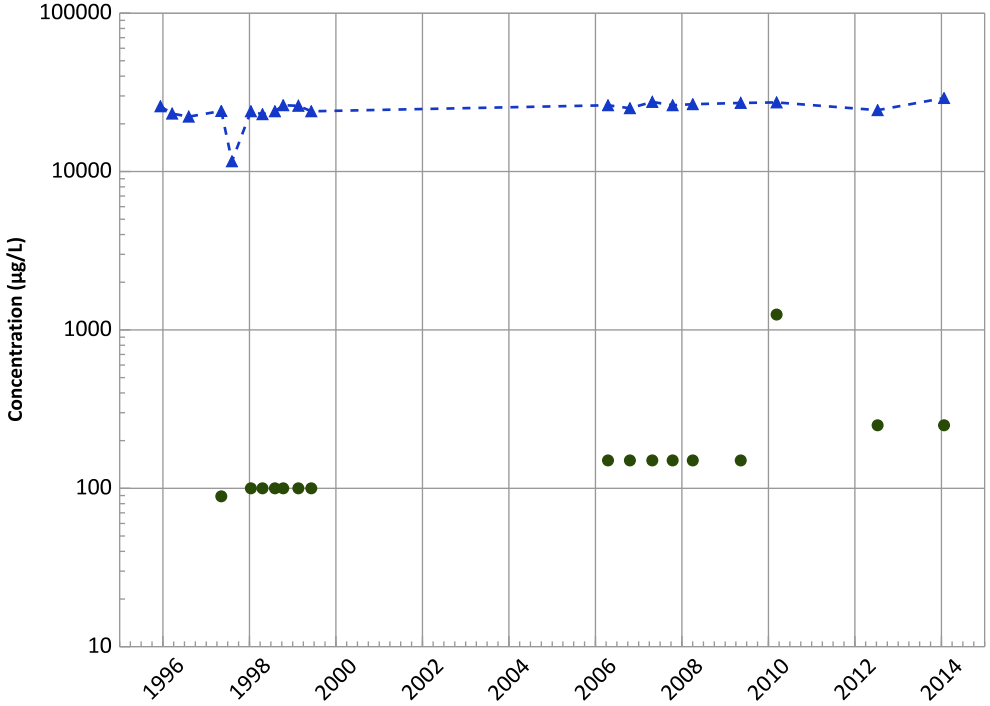


Concentration Trend

MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
No Trend

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
No Trend

Sodium Trend



Concentration Trend

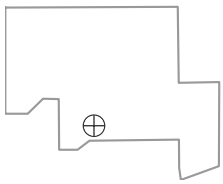
MAROS Mann-Kendall Method
Data (7/2009 - 12/2014):
N/A (<4 Samples in Dataset)
All Data
Increasing

MAROS Linear Regression Method
Data (7/2009 - 12/2014):
N/A (<4 Detections in Dataset)
All Data
Increasing

Query Date Range: 01/01/1992 to 12/31/2014
Data Date Range: 12/11/1995 to 08/13/2014
Analysis Date: 03/19/2015

- Measured Value
- Sample Detection Limit
- Concentration Trend
- Groundwater Protection Standard

Well Location



Appendix E
Water Level Expected Conditions and Well Hydrographs

Perched Aquifer
Water Level Expected Conditions Evaluation
and Hydrographs

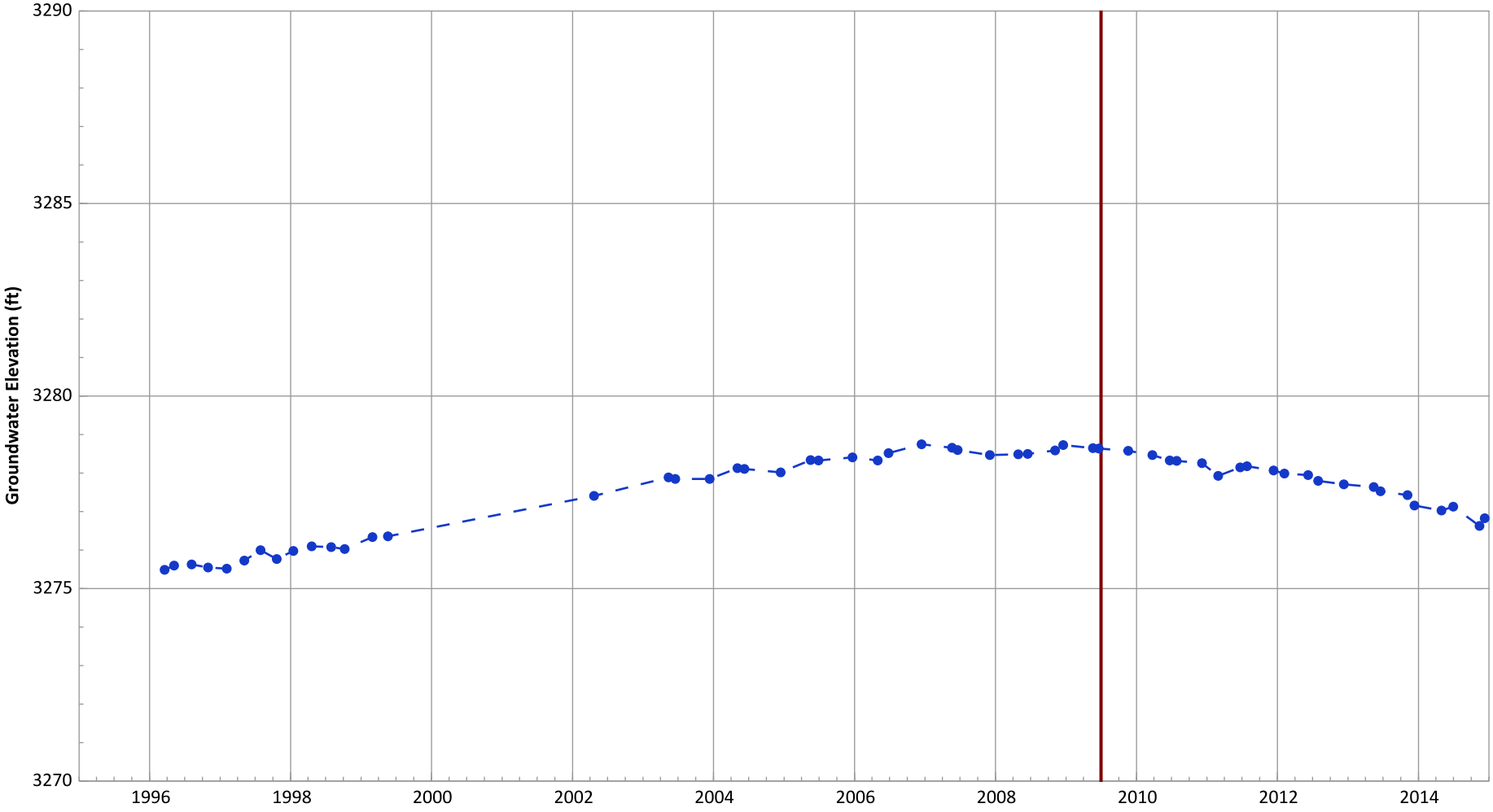
Perched Water Level Trending Results Vs. Expected Conditions

Indicator Area	Well ID	LTM Objectives	Progress Report Metrics	WL Expected Condition - LTM Design	Historic WL Trend	Recent WL Trend
North	OW-WR-38	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Burning Ground	PTX01-1004	PS	Dry	Remain dry	Dry	Dry
Burning Ground	PTX01-1009	PS	Dry	Remain dry	Dry	Dry
Southeast	PTX06-1002A	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1003	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1005	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1013	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	No Trend	Decreasing
Southeast	PTX06-1014	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1015	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	No Trend	Decreasing
Southeast	PTX06-1023	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1038	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1039A	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1040	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1041	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1042	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1045	RAE	Trend/Compare to GWPS	Limited Water	Dry	Dry
Southeast	PTX06-1046	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	No Trend	Decreasing
Southeast	PTX06-1047A	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	No Trend	Decreasing
North	PTX06-1050	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1051	PS	Dry	Remain dry	Dry	Dry
Southeast	PTX06-1052	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Miscellaneous	PTX06-1055	PS	Dry	Remain dry	Dry	Dry
Zone 11	PTX06-1073A	PS	Water Level, Trend/Compare to GWPS	Limited Water	No Trend	Decreasing
Southeast	PTX06-1088	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1089	PS	Dry	Remain dry	Dry*	Dry*
Southeast	PTX06-1090	PS	Dry	Remain dry	Dry	Dry
Southeast	PTX06-1091	PS	Dry	Remain dry	Dry	Dry
Southeast	PTX06-1093	PS	Dry	Remain dry	Dry	Dry
Southeast	PTX06-1094	PS	Dry	Limited Water	Dry	Dry
Southeast	PTX06-1095A	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Miscellaneous	PTX06-1096A	PS, UM	Dry	Remain dry	Dry	Dry
Miscellaneous	PTX06-1097	PS, UM	Dry	Remain dry	Dry	Dry
Southeast	PTX06-1102	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1103	RAE	Water Level, Trend/Compare to GWPS	Limited Water	Dry	Dry
Southeast	PTX06-1118	RAE	Trend/Compare to GWPS	Limited Water	Limited	Limited
Southeast	PTX06-1119	PS	Dry	Remain dry	Dry	Dry
Southeast	PTX06-1120	PS	Water Level, Trend/Compare to GWPS	Limited Water	Decreasing	Decreasing
Southeast	PTX06-1121	PS	Water Level, Trend/Compare to GWPS	Limited Water	Decreasing	Decreasing
Southeast	PTX06-1122	PS	Dry	Remain dry	Dry	Dry

Perched Water Level Trending Results Vs. Expected Conditions

Indicator Area	Well ID	LTM Objectives	Progress Report Metrics	WL Expected Condition - LTM Design	Historic WL Trend	Recent WL Trend
Southeast	PTX06-1124	PS	Dry	Remain dry	Dry	Dry
Southeast	PTX06-1125	PS	Dry	Remain dry	Dry	Dry
Southeast	PTX06-1130	RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX06-1133A	PS	Water Level, Trend/Compare to GWPS	Limited Water	Decreasing	Decreasing
Southeast	PTX06-1158	PS	Water Level, Trend/Compare to GWPS	Limited Water	Dry	Dry
Zone 11	PTX08-1001	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast	PTX08-1002	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing
Southeast, Zone 11	PTX08-1008	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	No Trend	Decreasing
Southeast	PTX08-1009	UM, RAE	Water Level, Trend/Compare to GWPS	Decreasing water levels	Decreasing	Decreasing

1114-MW4 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

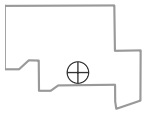


Notes:
1. Top of screen elevation is 3280.32 ft msl.
2. The bottom of screen elevation is 3260.32 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

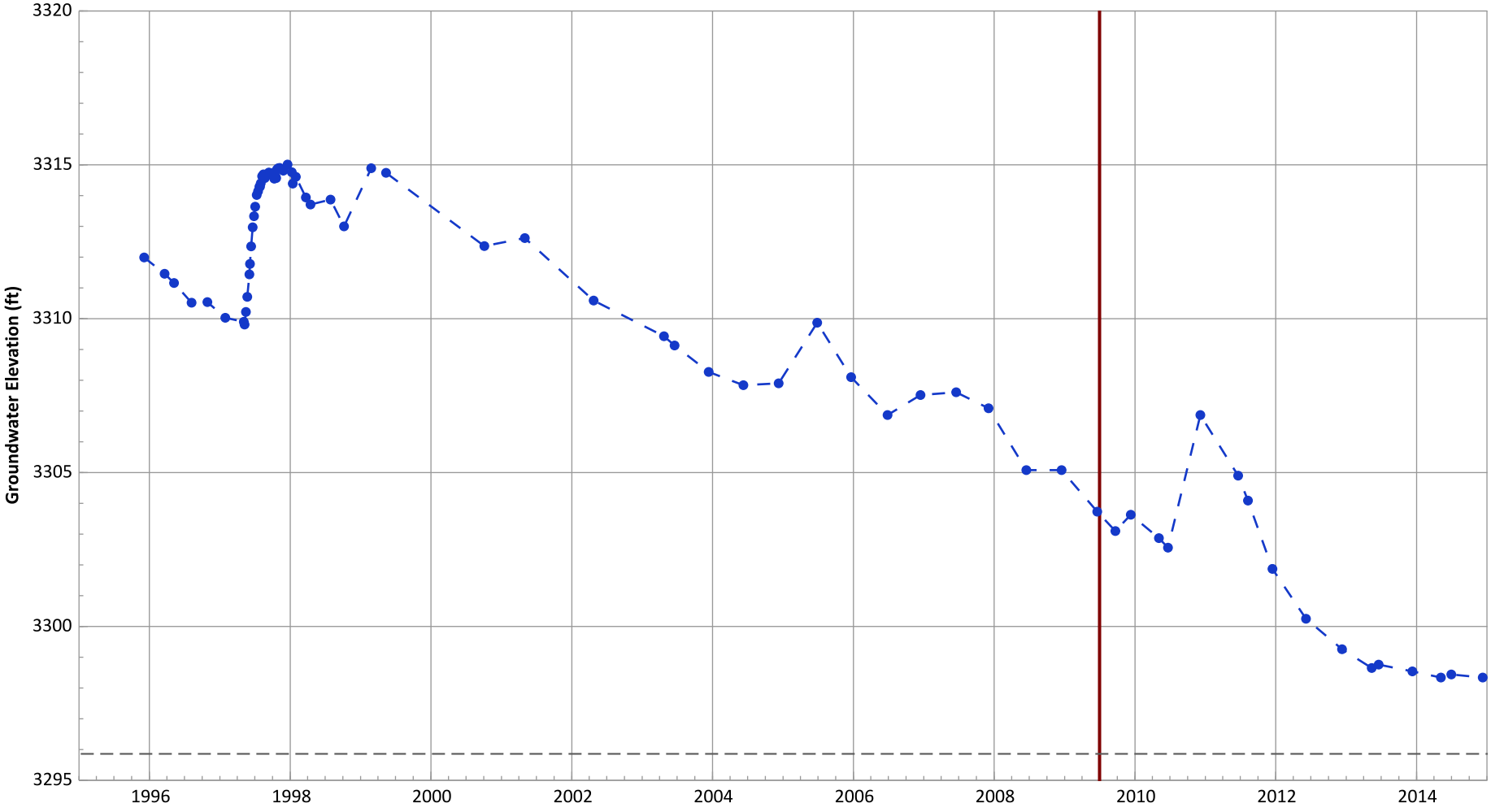
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.12 ft/yr
2012 - 2014 Data: Decreasing at 0.47 ft/yr

OW-WR-38 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

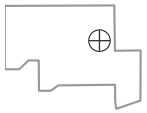


Notes:
1. Top of screen elevation is 3310.86 ft msl.
2. The bottom of screen elevation is 3295.86 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

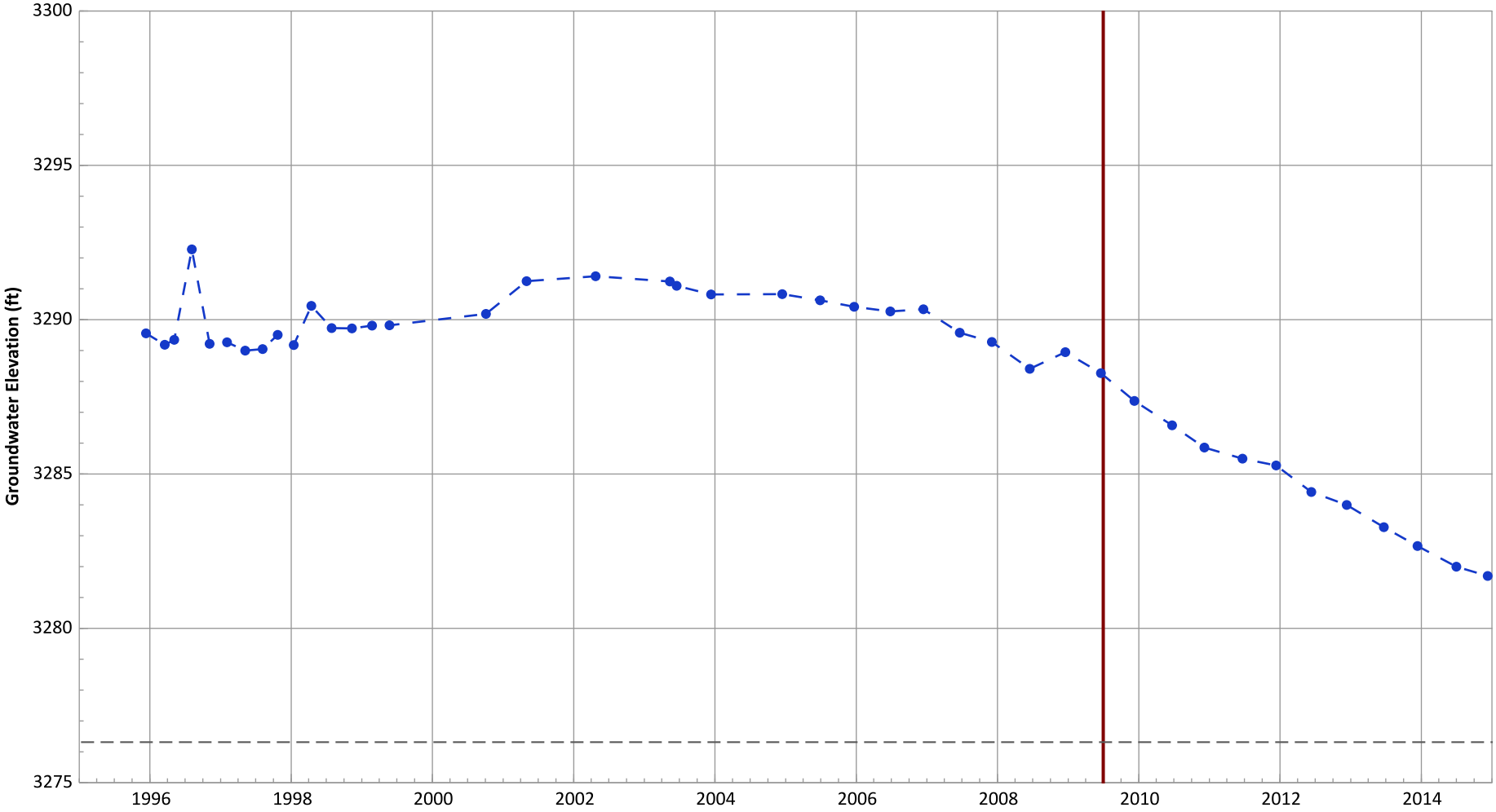
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.8 ft/yr
2012 - 2014 Data: Decreasing at 0.67 ft/yr

OW-WR-45 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

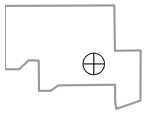


Notes:
1. Top of screen elevation is 3296.31 ft msl.
2. The bottom of screen elevation is 3276.31 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

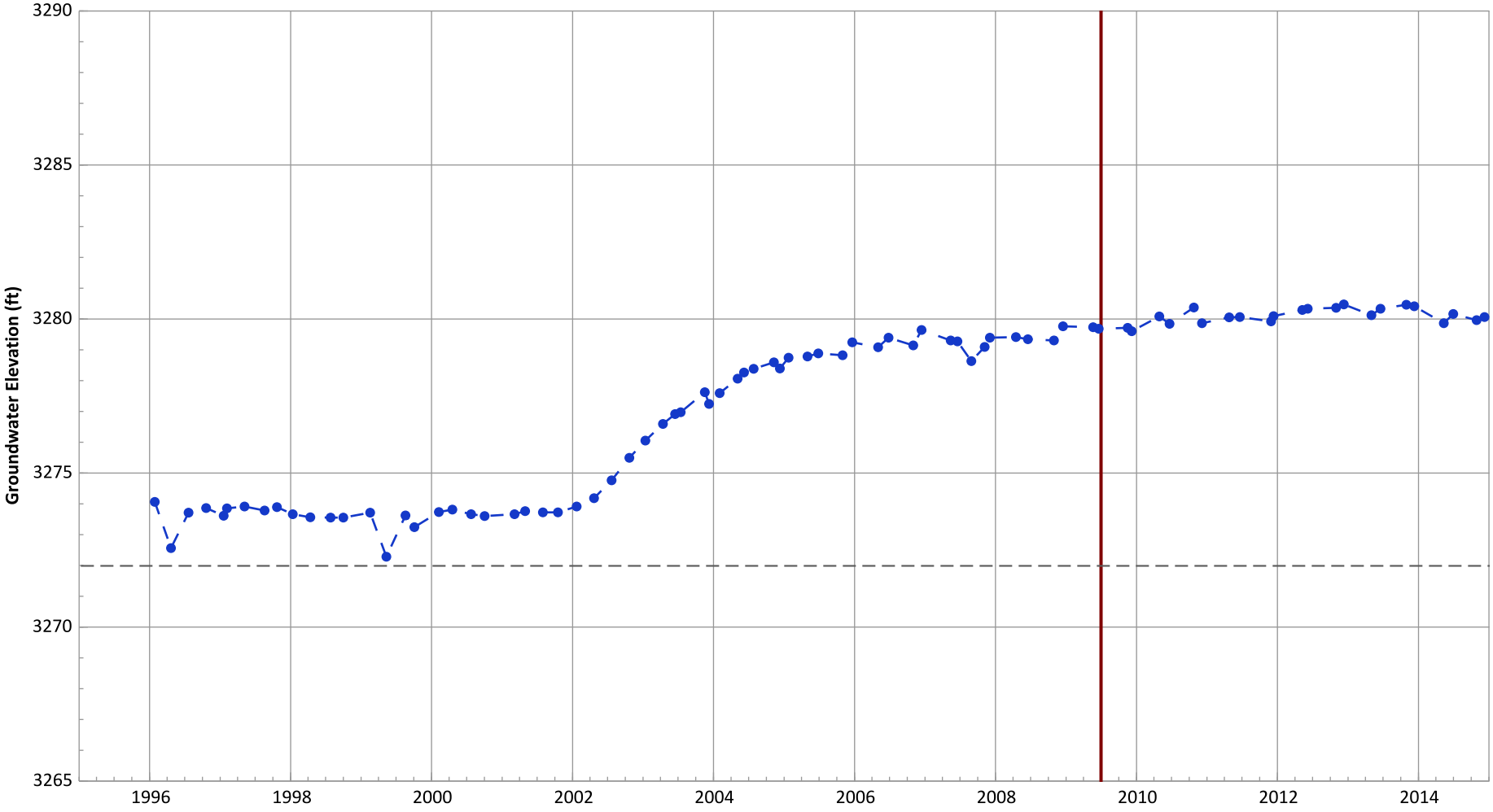
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.33 ft/yr
2012 - 2014 Data: Decreasing at 1.15 ft/yr

PTX01-1001 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

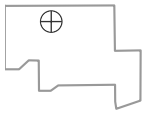


Notes:
1. Top of screen elevation is 3286.99 ft msl.
2. The bottom of screen elevation is 3271.99 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

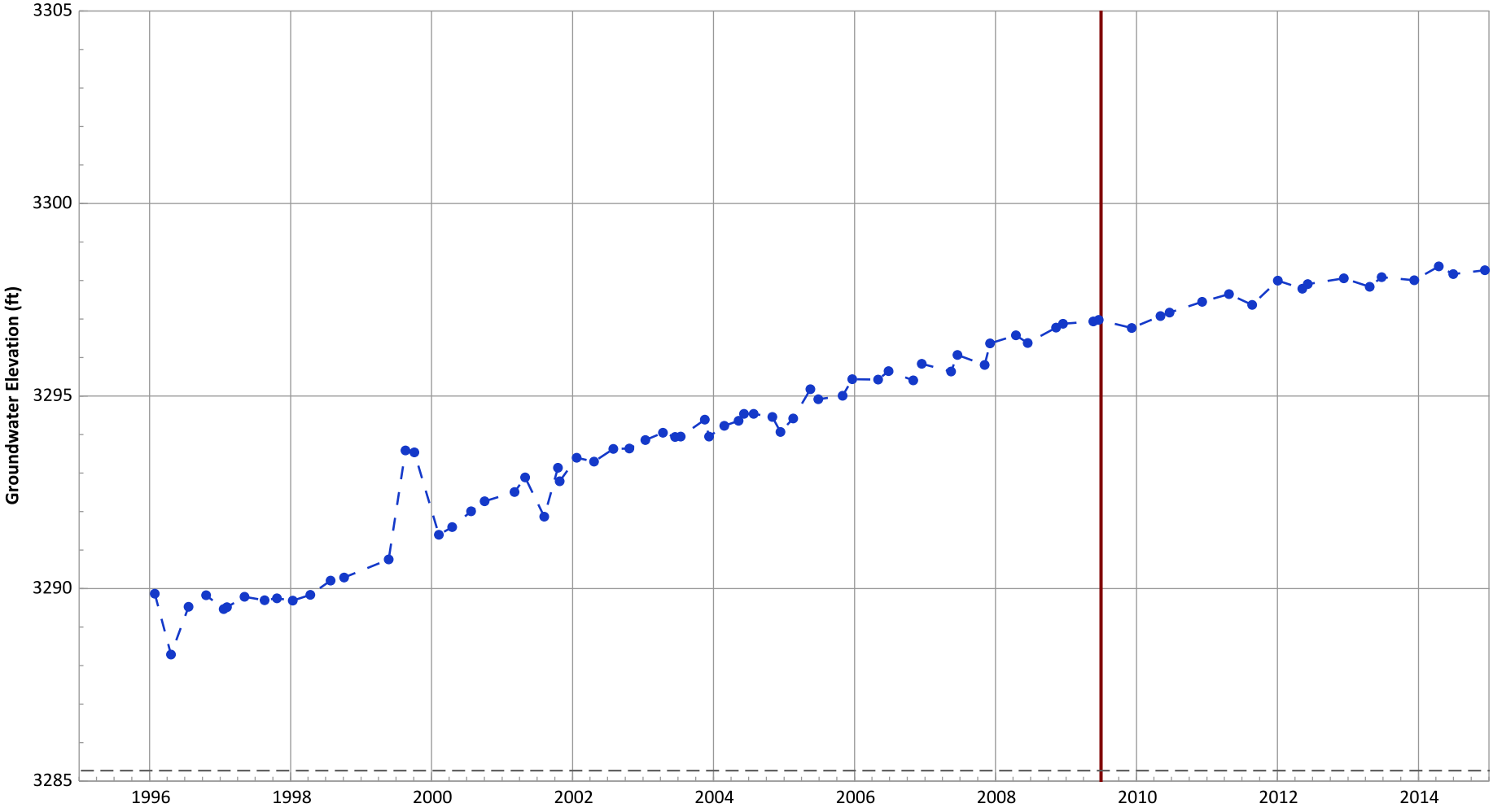
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.47 ft/yr
2012 - 2014 Data: Decreasing at 0.16 ft/yr

PTX01-1002 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

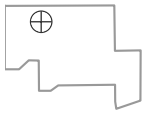


Notes:
1. Top of screen elevation is 3300.27 ft msl.
2. The bottom of screen elevation is 3285.27 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

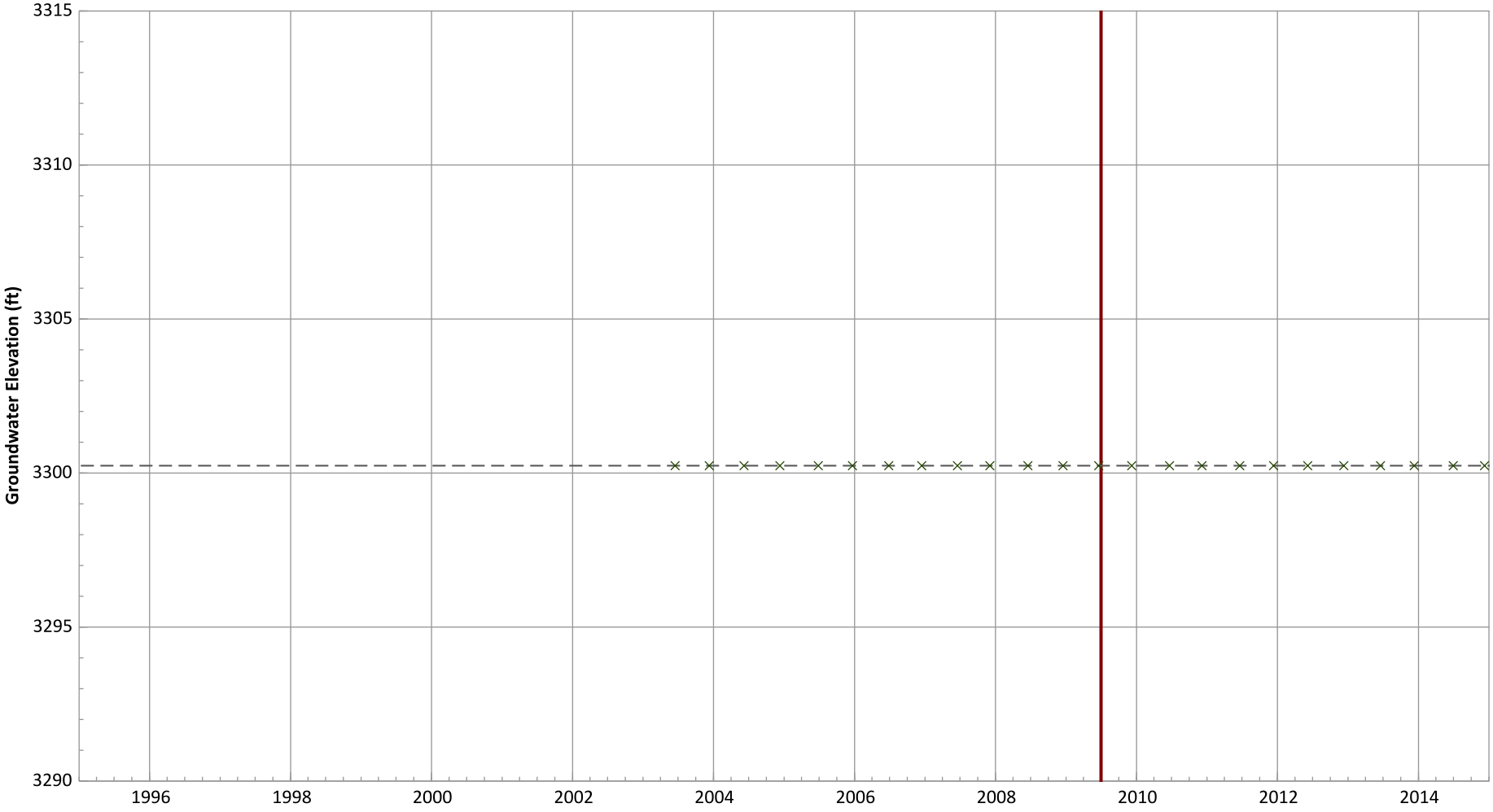
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.52 ft/yr
2012 - 2014 Data: Increasing at 0.16 ft/yr

PTX01-1004 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

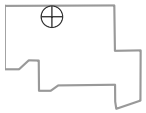


Notes:
1. Top of screen elevation is 3320.24 ft msl.
2. The bottom of screen elevation is 3300.24 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

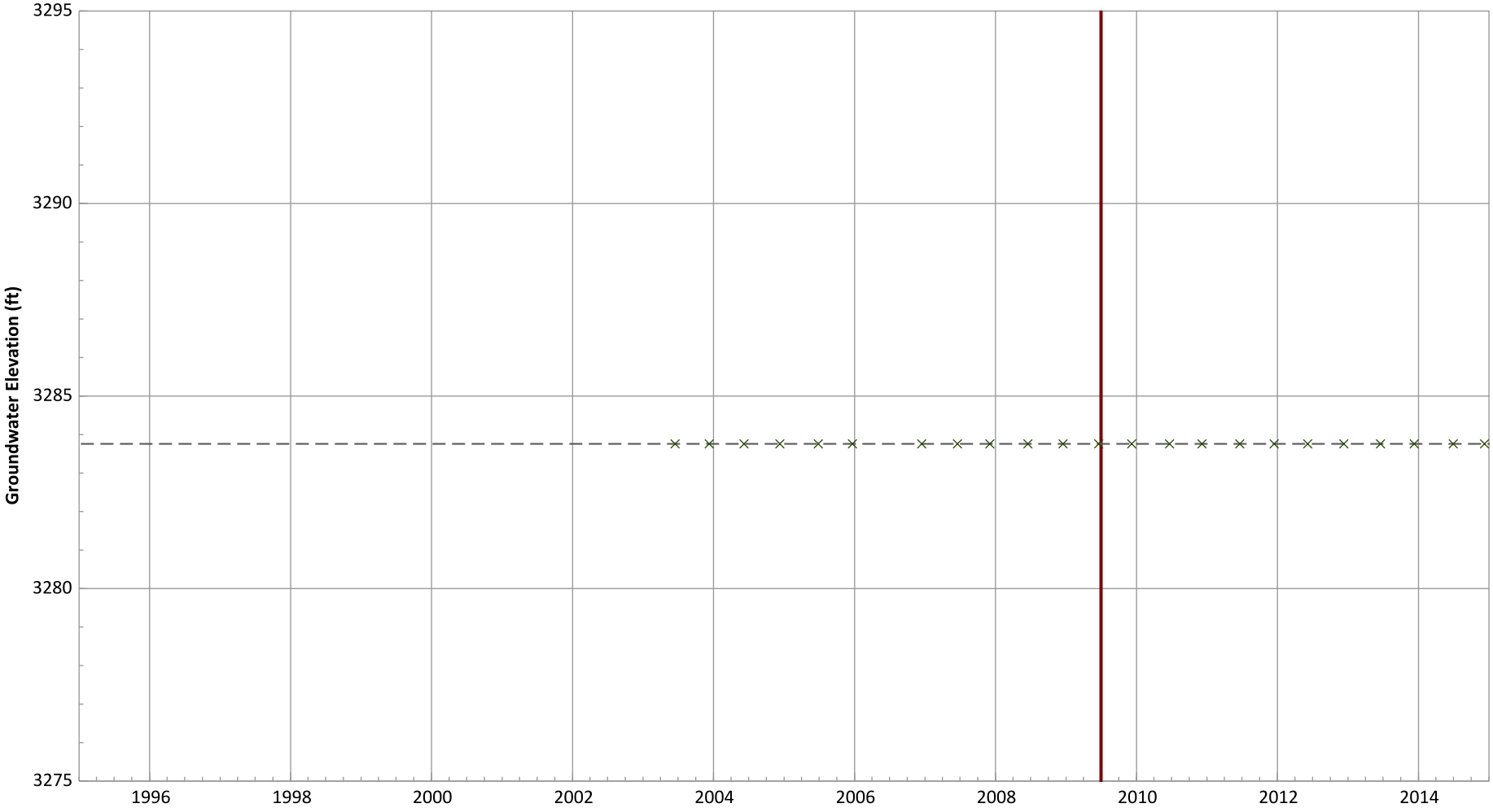
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX01-1006 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

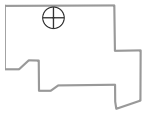


Notes:
1. Top of screen elevation is 3313.76 ft msl.
2. The bottom of screen elevation is 3283.76 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

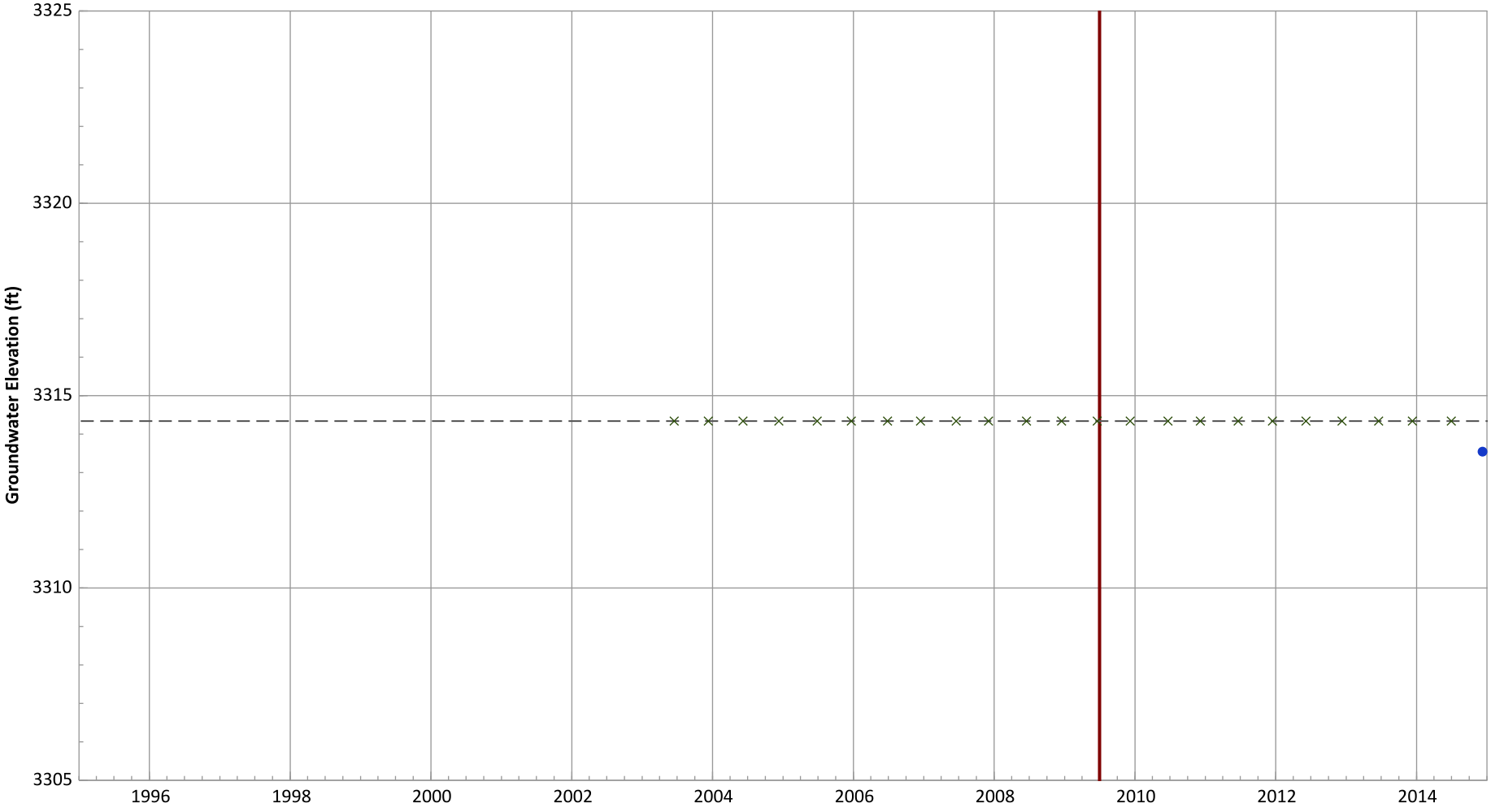
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX01-1007 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

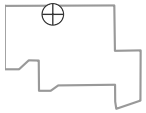


Notes:
1. Top of screen elevation is 3334.34 ft msl.
2. The bottom of screen elevation is 3314.34 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

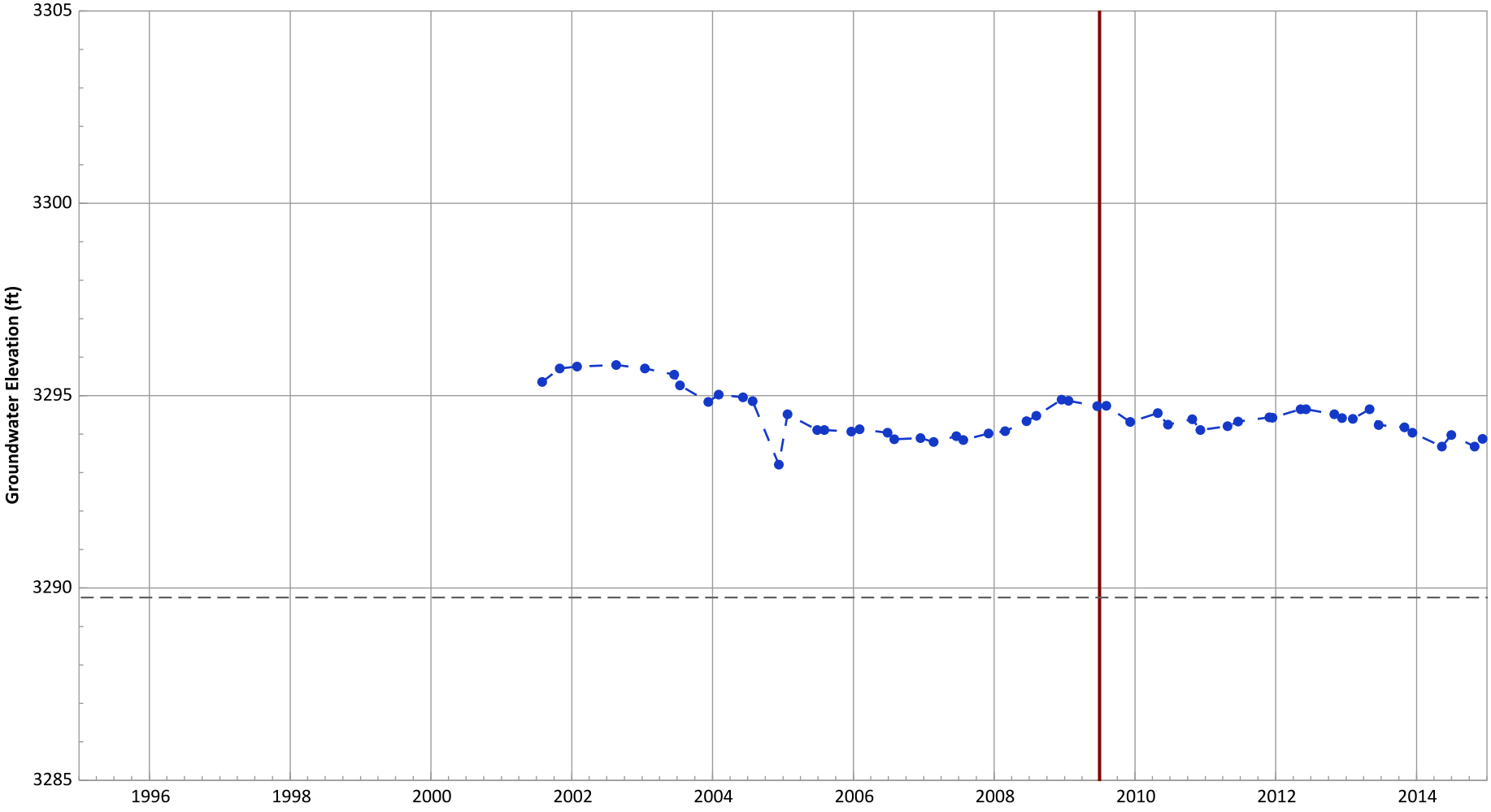
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (<3 Measurements)

PTX01-1008 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

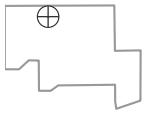


Notes:
1. Top of screen elevation is 3309.75 ft msl.
2. The bottom of screen elevation is 3289.75 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

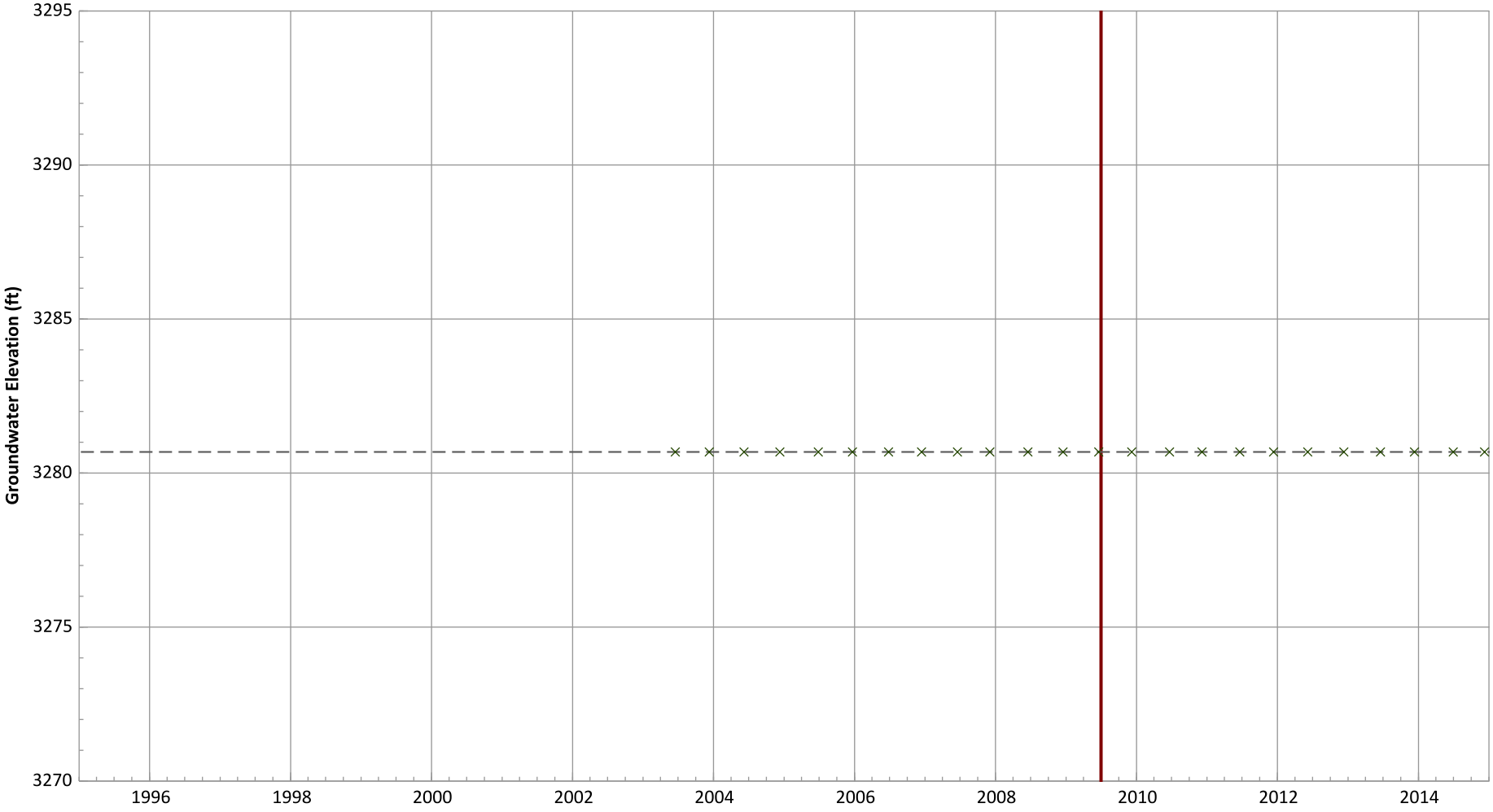
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.38 ft/yr

PTX01-1009 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

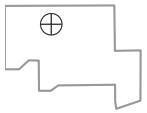


Notes:
1. Top of screen elevation is 3300.69 ft msl.
2. The bottom of screen elevation is 3280.69 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

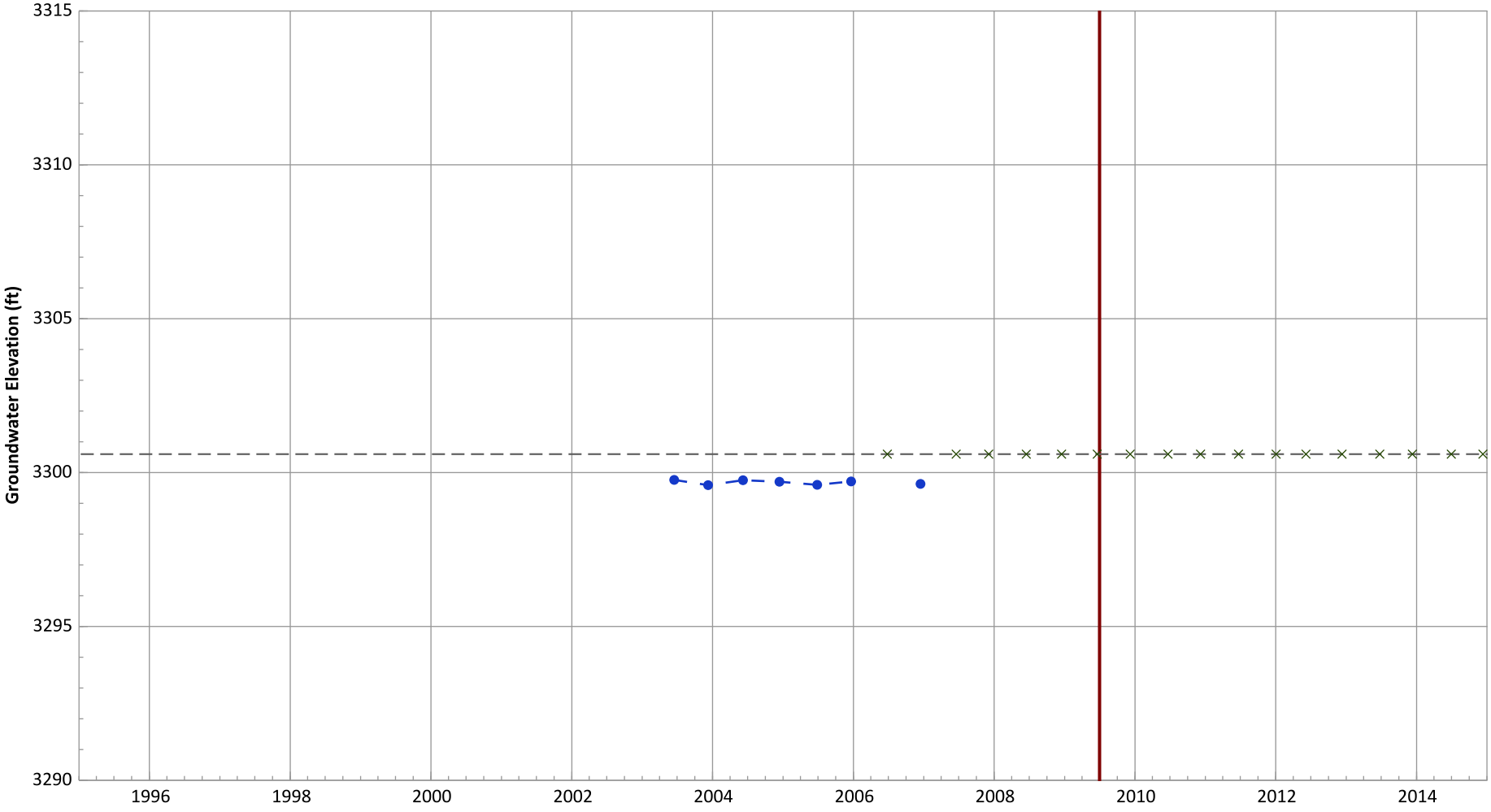
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX01-1014A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

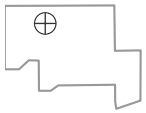


Notes:
1. Top of screen elevation is 3325.6 ft msl.
2. The bottom of screen elevation is 3300.6 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

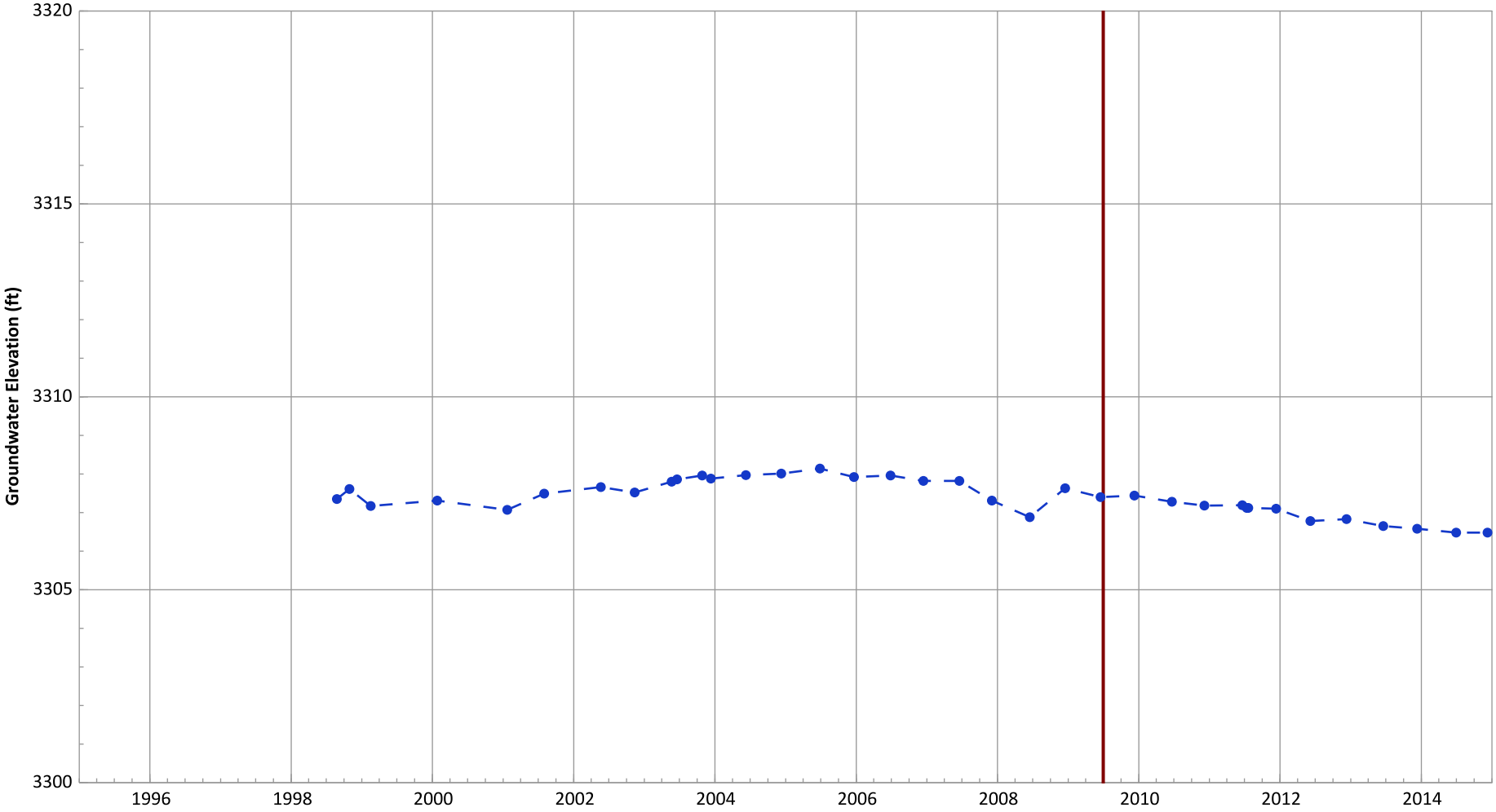
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: N/A (No Measurements)

PTX04-1001 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

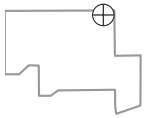


Notes:
1. Top of screen elevation is 3307.77 ft msl.
2. The bottom of screen elevation is 3289.07 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

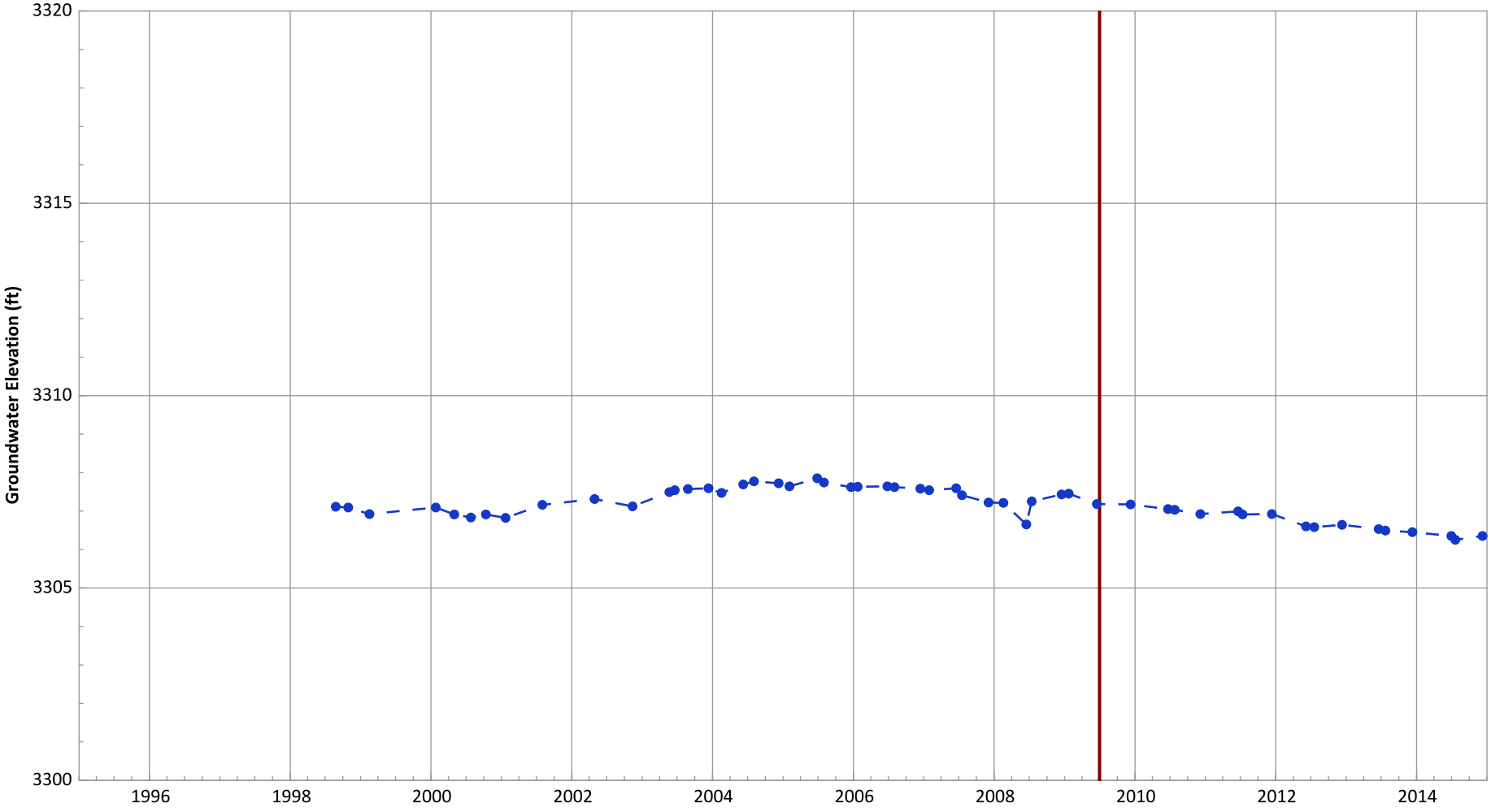
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.15 ft/yr

PTX04-1002 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

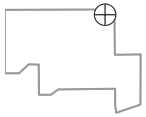


Notes:
1. Top of screen elevation is 3312.63 ft msl.
2. The bottom of screen elevation is 3288.83 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

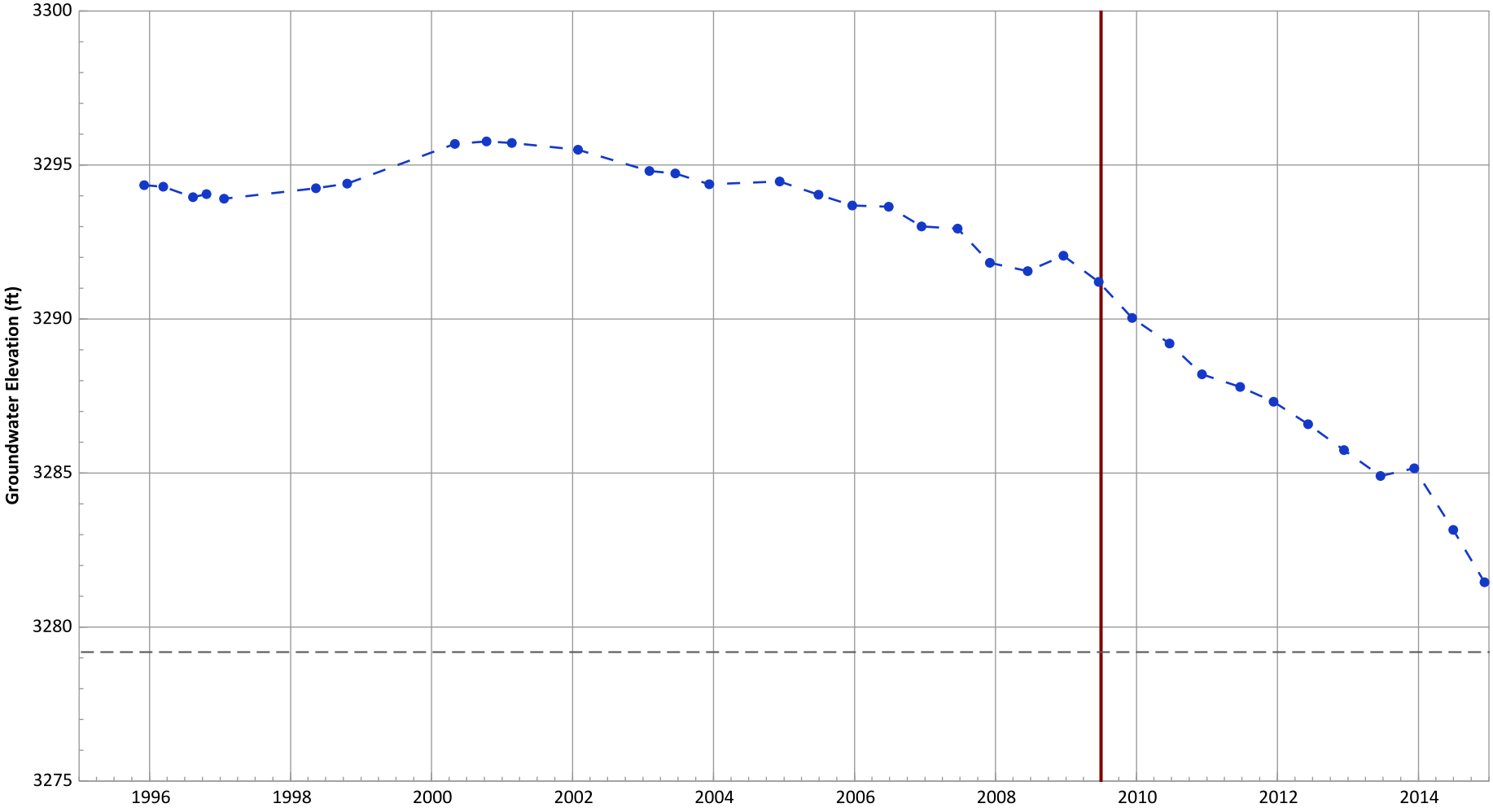
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.13 ft/yr

PTX06-1001A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

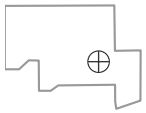


Notes:
1. Top of screen elevation is 3304.19 ft msl.
2. The bottom of screen elevation is 3279.19 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

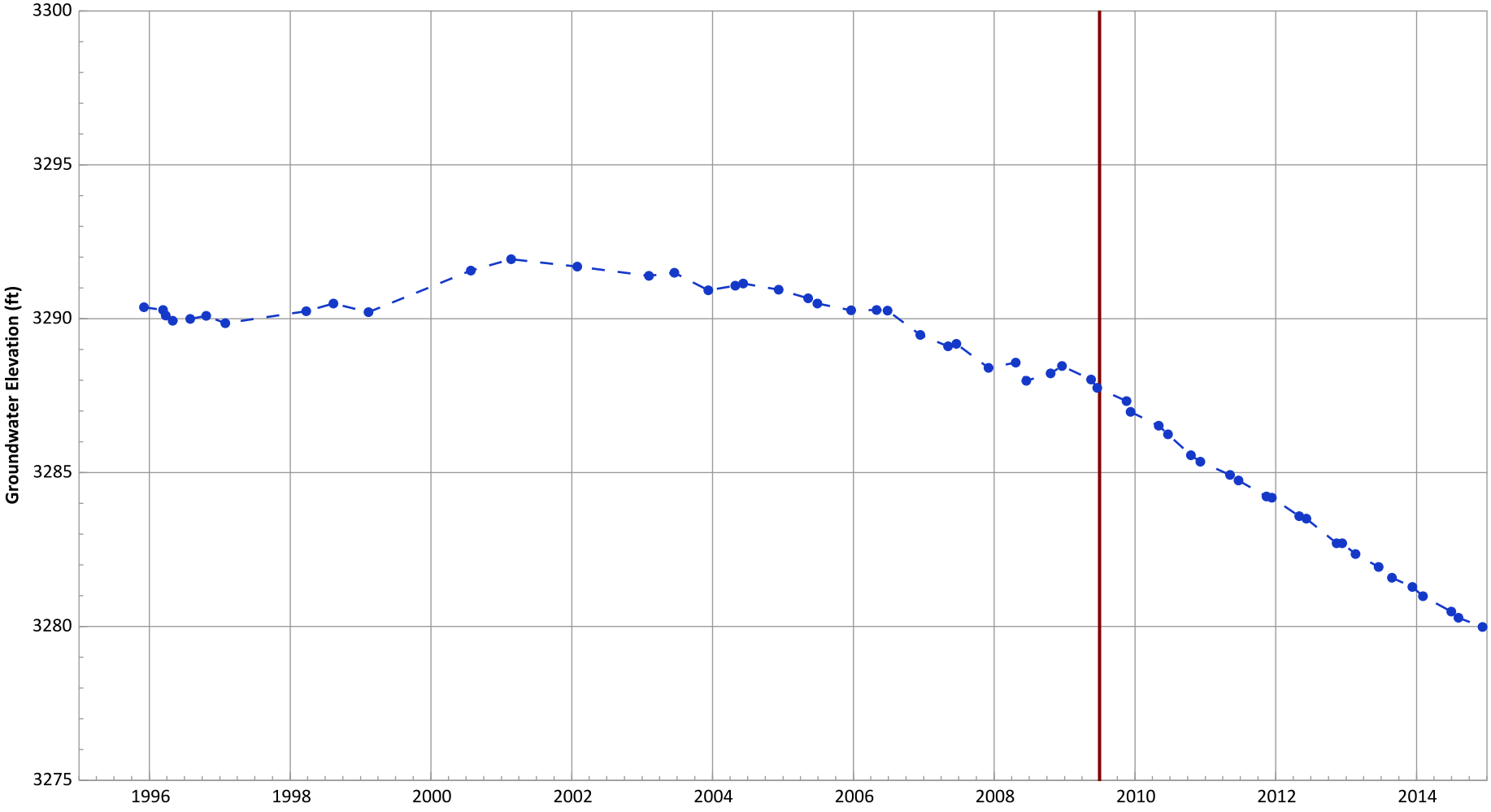
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.57 ft/yr
2012 - 2014 Data: Decreasing at 1.88 ft/yr

PTX06-1002A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

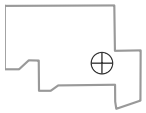


Notes:
1. Top of screen elevation is 3300.17 ft msl.
2. The bottom of screen elevation is 3270.67 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

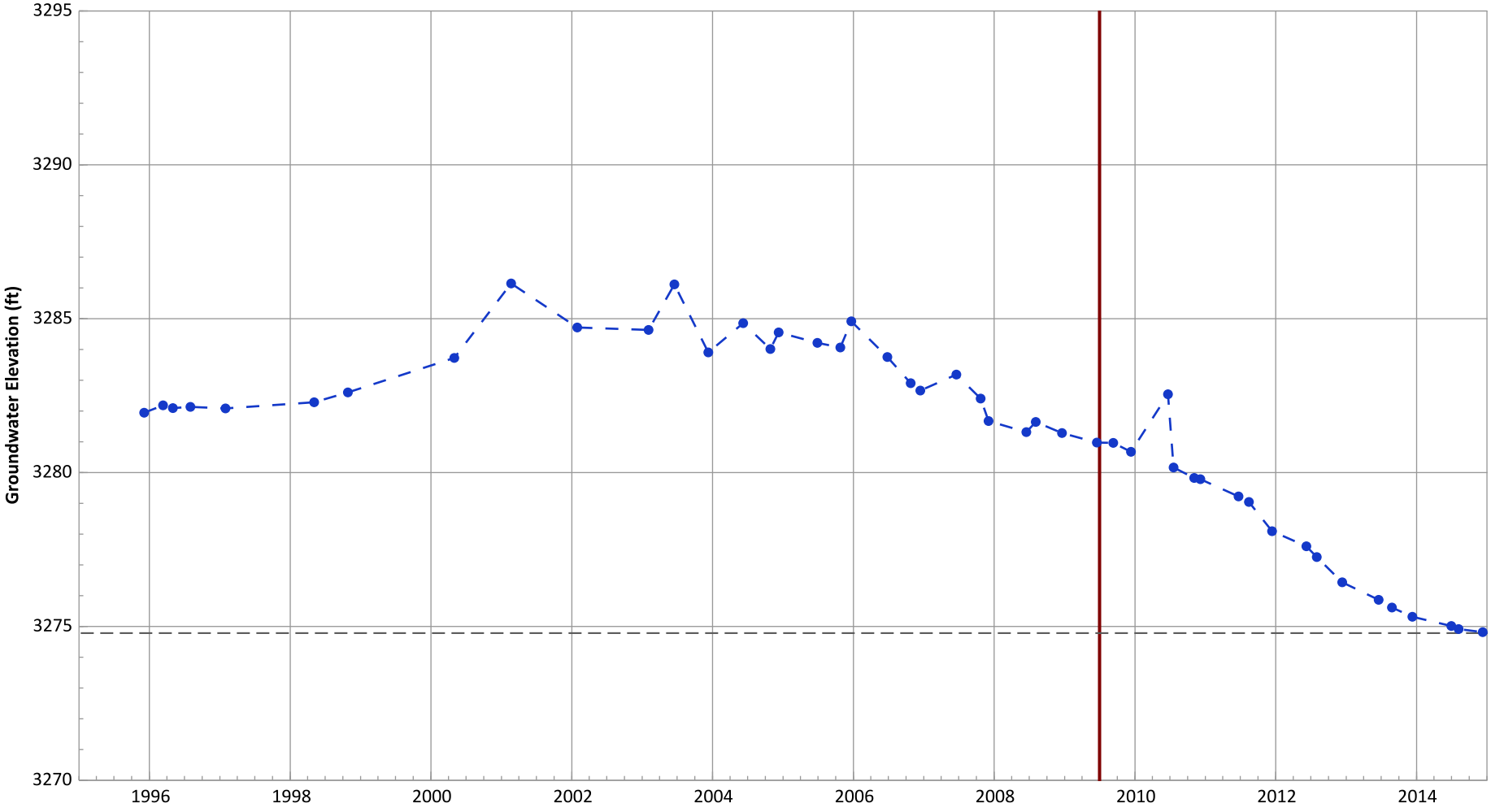
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.51 ft/yr
2012 - 2014 Data: Decreasing at 1.41 ft/yr

PTX06-1003 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

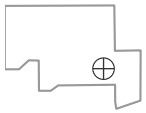


Notes:
1. Top of screen elevation is 3294.78 ft msl.
2. The bottom of screen elevation is 3274.78 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

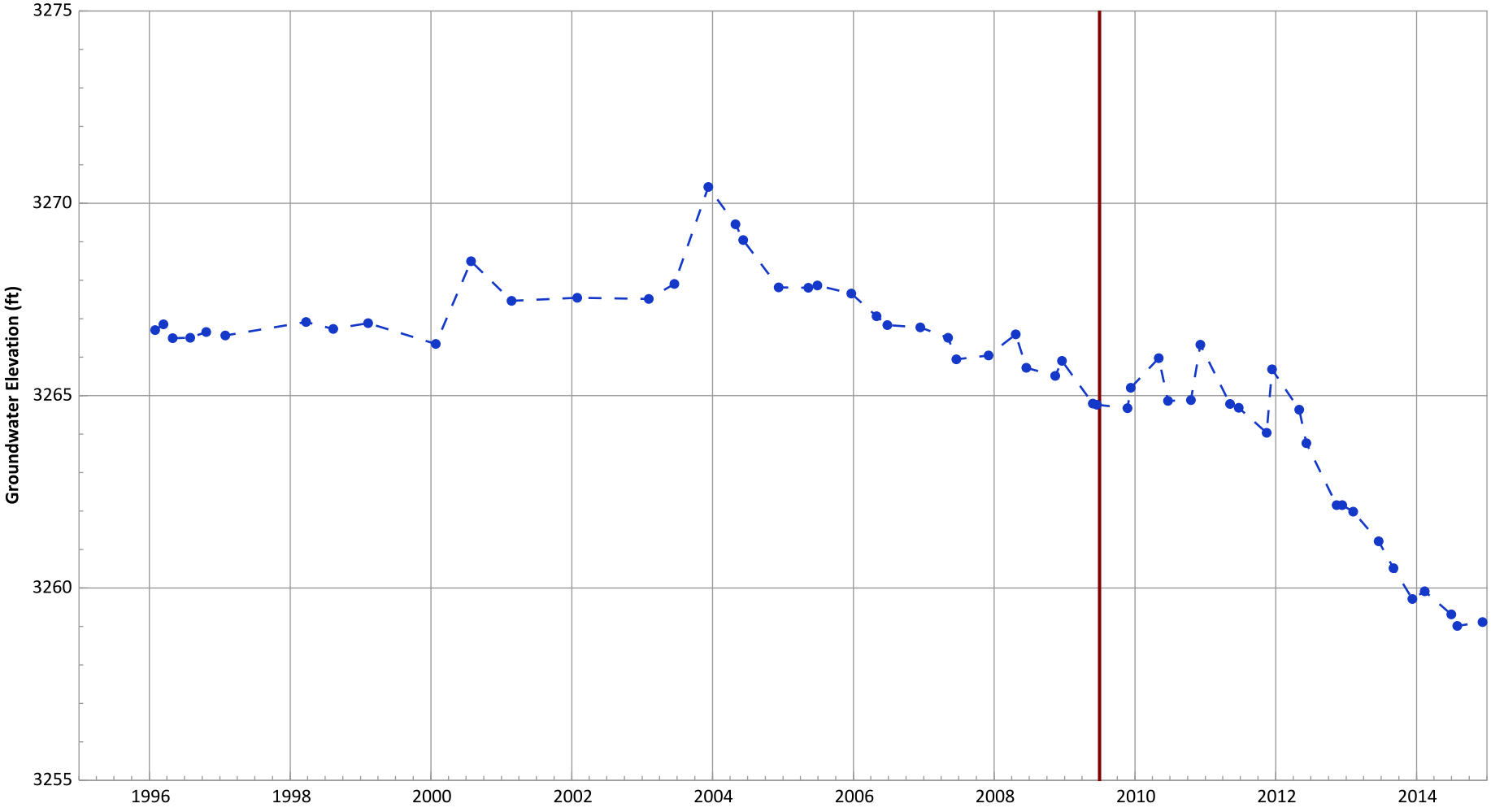
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.41 ft/yr
2012 - 2014 Data: Decreasing at 1.1 ft/yr

PTX06-1005 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

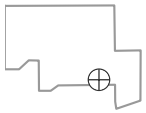


Notes:
1. Top of screen elevation is 3274.81 ft msl.
2. The bottom of screen elevation is 3244.81 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

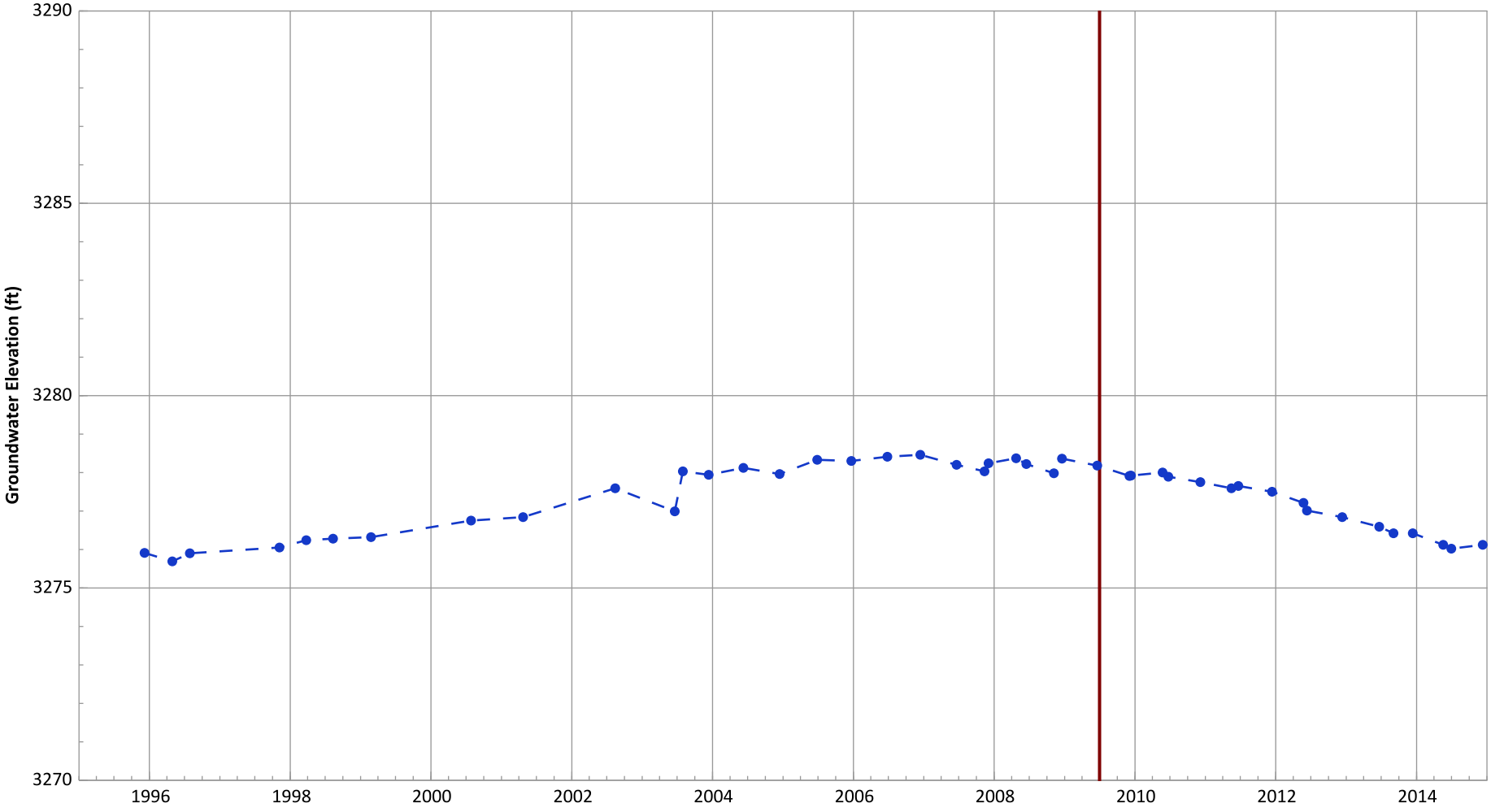
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.33 ft/yr
2012 - 2014 Data: Decreasing at 1.89 ft/yr

PTX06-1006 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

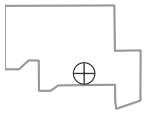


Notes:
1. Top of screen elevation is 3282.54 ft msl.
2. The bottom of screen elevation is 3252.54 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

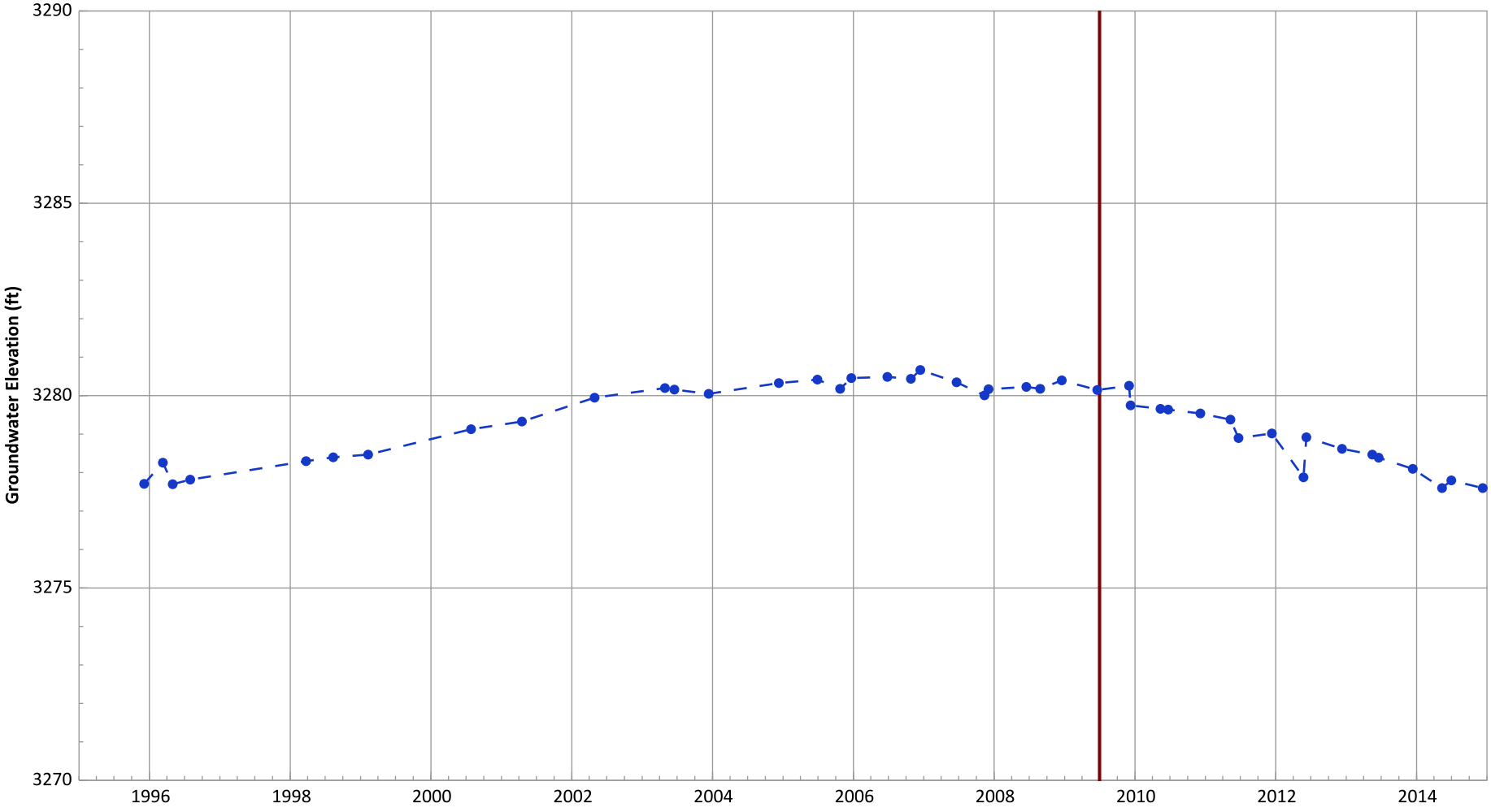
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.41 ft/yr

PTX06-1007 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

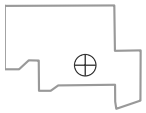


Notes:
1. Top of screen elevation is 3286.53 ft msl.
2. The bottom of screen elevation is 3256.53 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

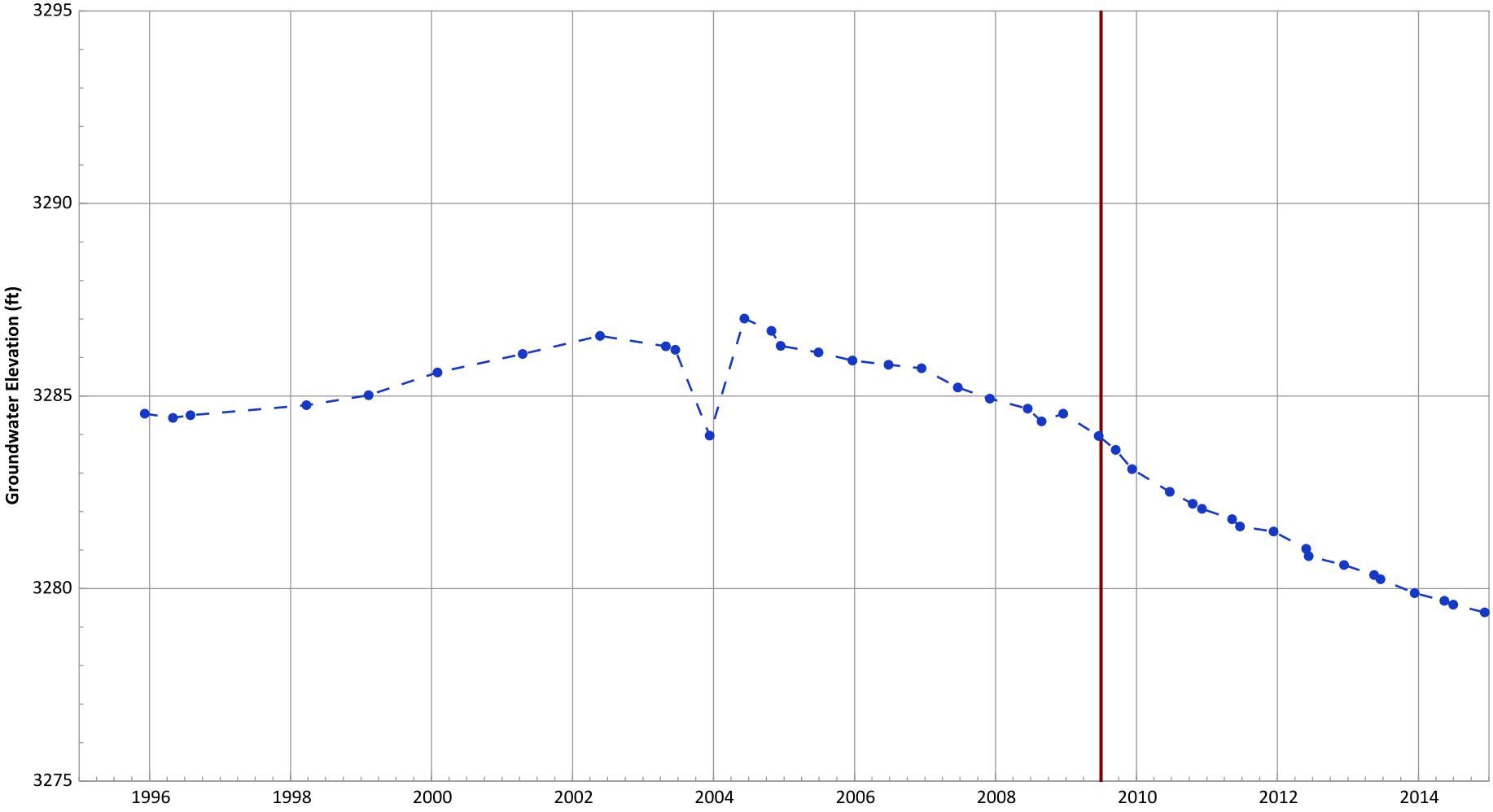
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.57 ft/yr

PTX06-1008 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

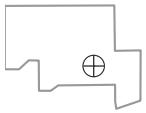


Notes:
1. Top of screen elevation is 3297.61 ft msl.
2. The bottom of screen elevation is 3272.61 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

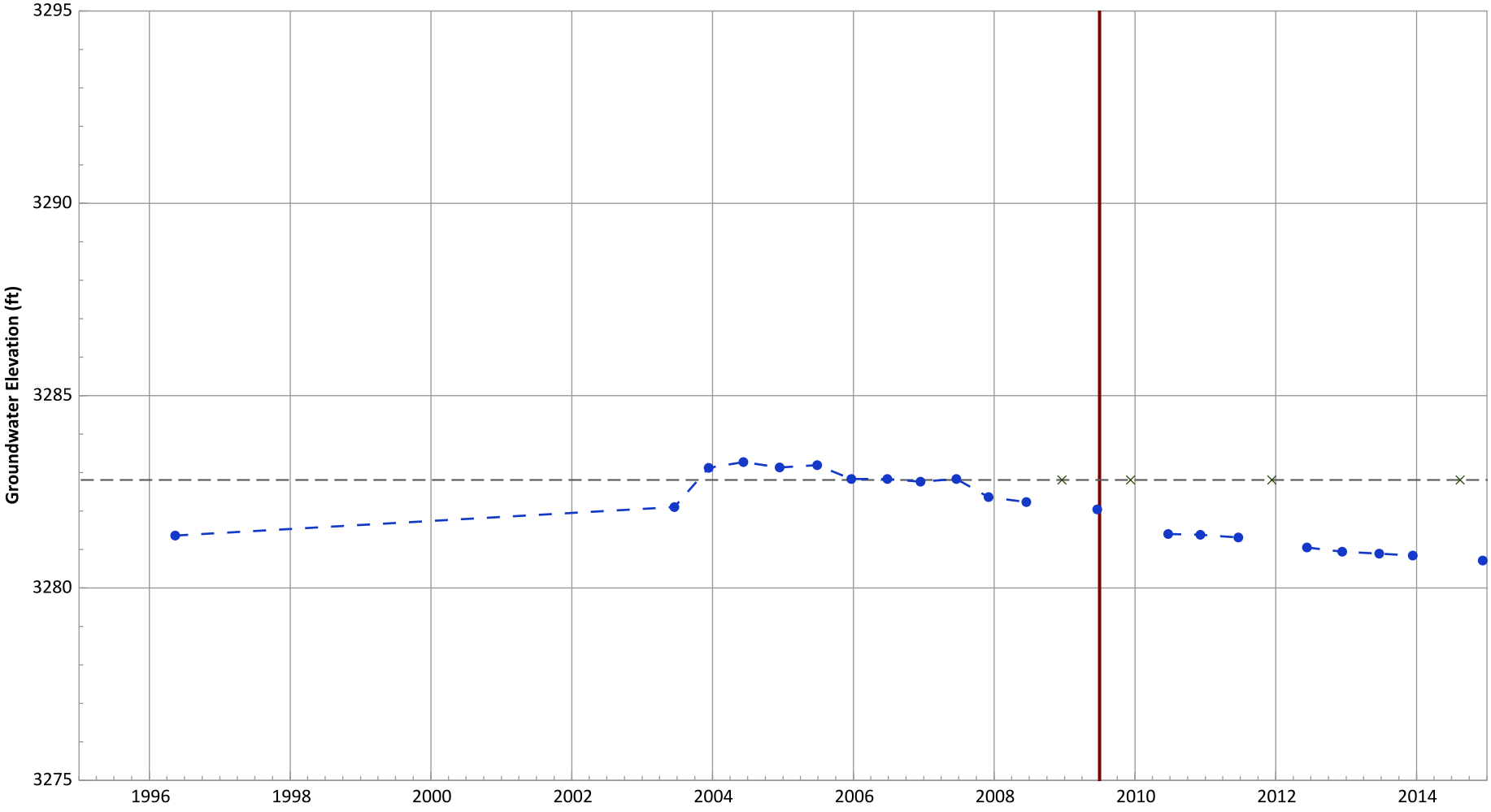
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.33 ft/yr
2012 - 2014 Data: Decreasing at 0.61 ft/yr

PTX06-1009 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

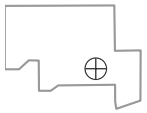


Notes:
1. Top of screen elevation is 3312.81 ft msl.
2. The bottom of screen elevation is 3282.81 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

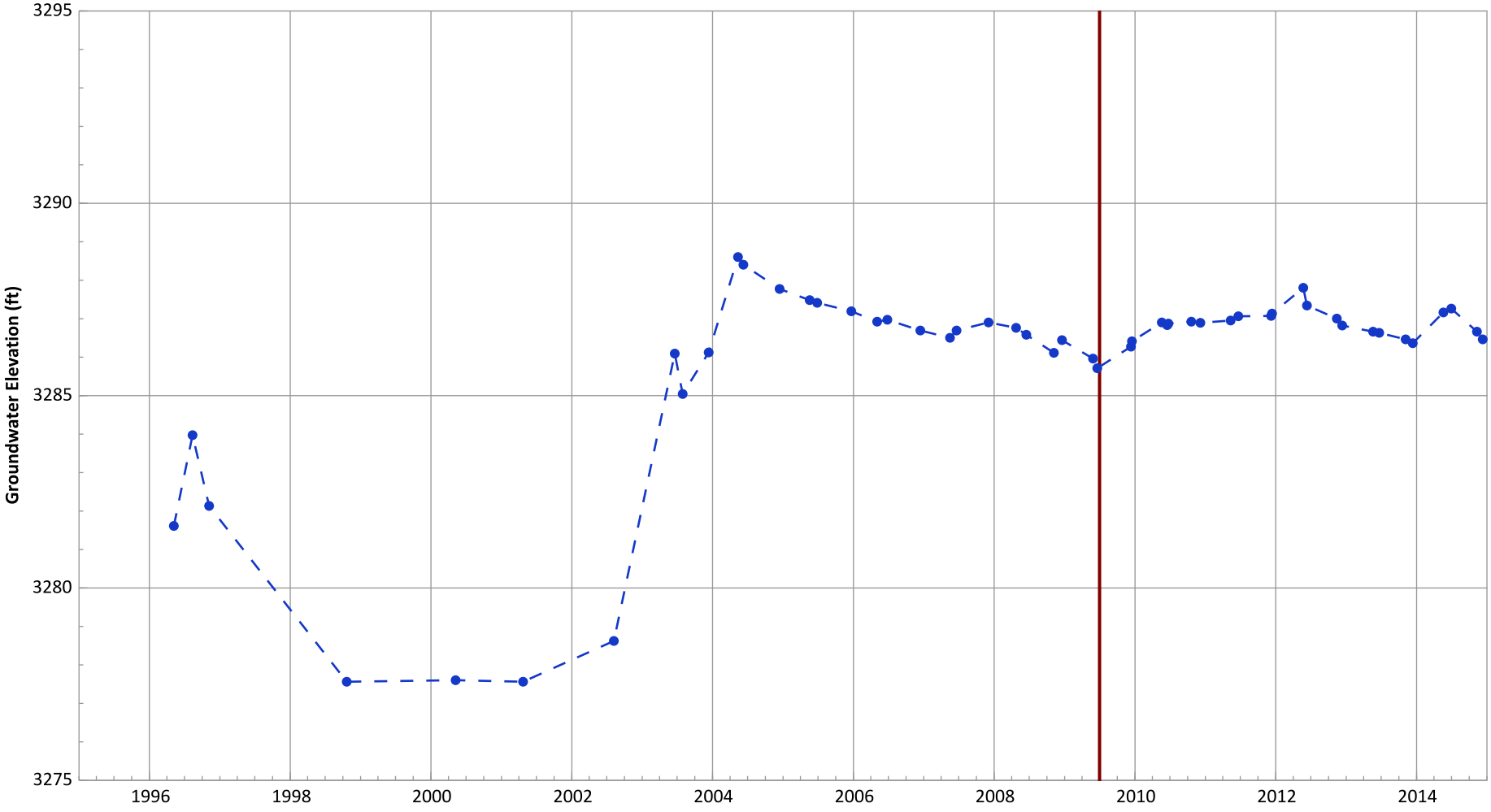
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.13 ft/yr
2012 - 2014 Data: Decreasing at 0.13 ft/yr

PTX06-1010 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

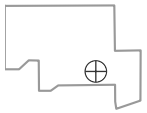


Notes:
1. Top of screen elevation is 3294.04 ft msl.
2. The bottom of screen elevation is 3264.04 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

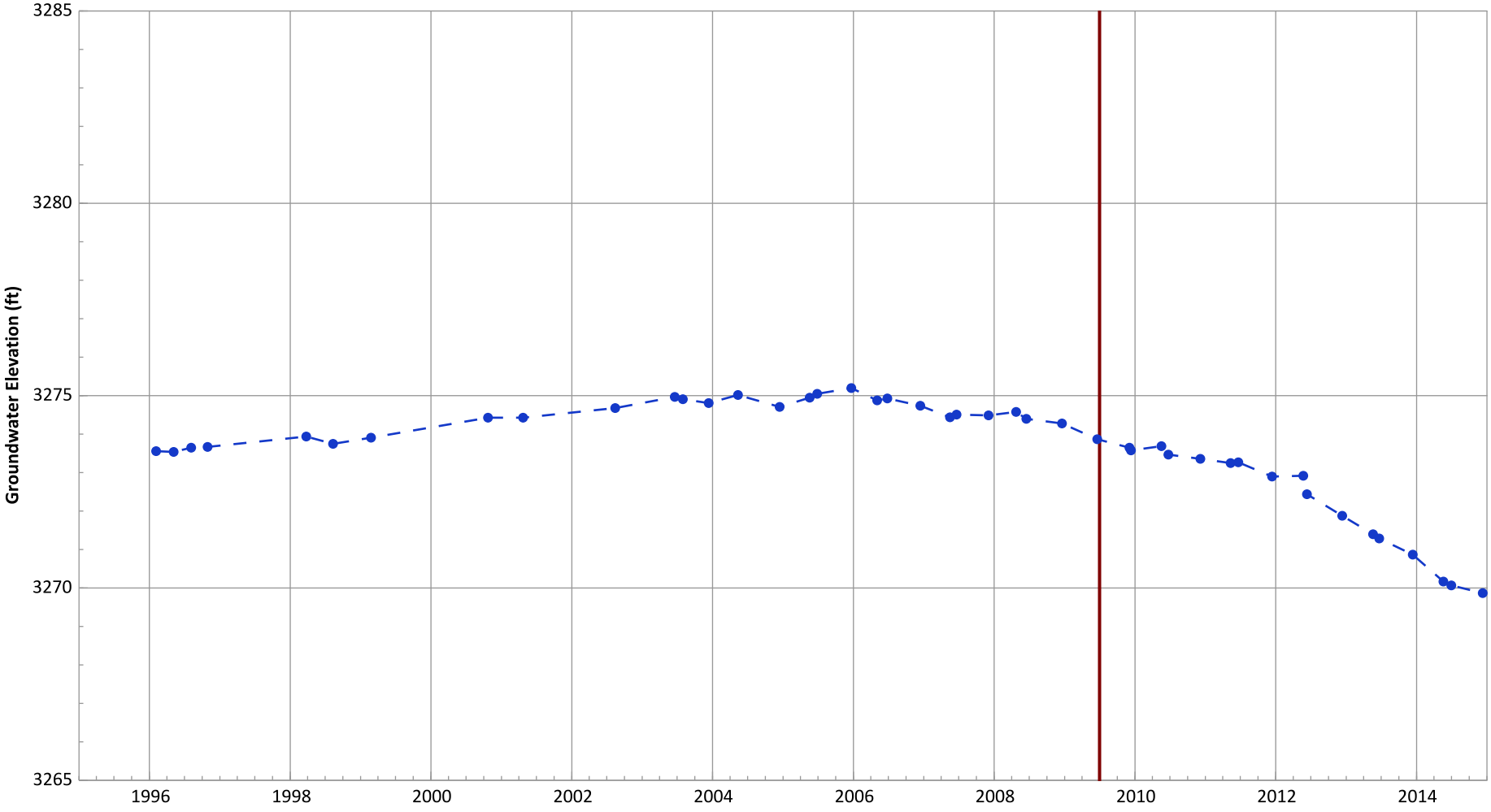
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.34 ft/yr
2012 - 2014 Data: Decreasing at 0.13 ft/yr

PTX06-1011 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

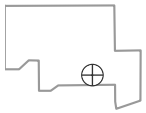


Notes:
1. Top of screen elevation is 3282.59 ft msl.
2. The bottom of screen elevation is 3252.59 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

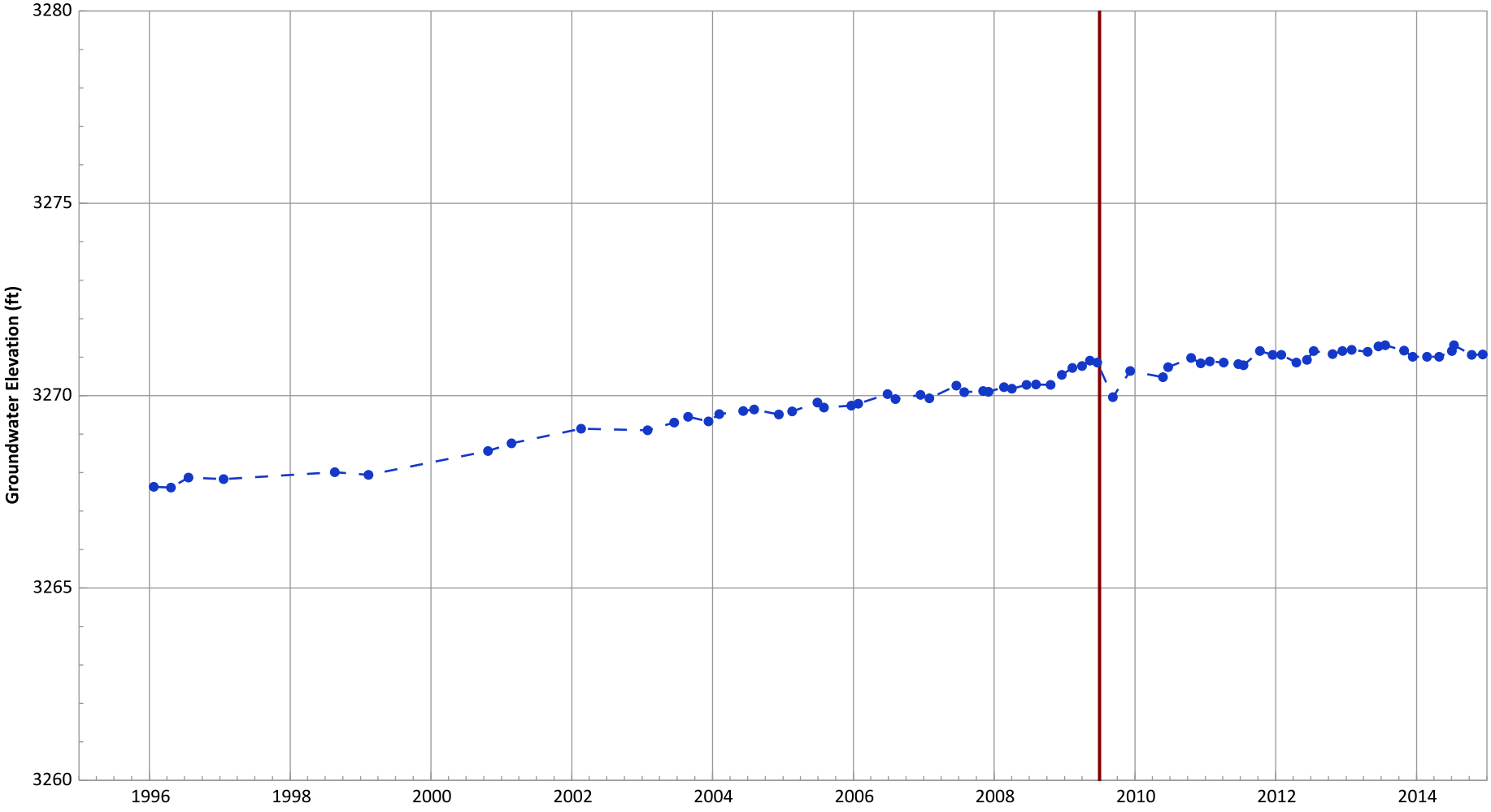
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.15 ft/yr
2012 - 2014 Data: Decreasing at 1.09 ft/yr

PTX06-1012 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

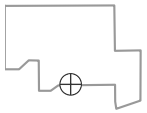


Notes:
1. Top of screen elevation is 3276.19 ft msl.
2. The bottom of screen elevation is 3256.19 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

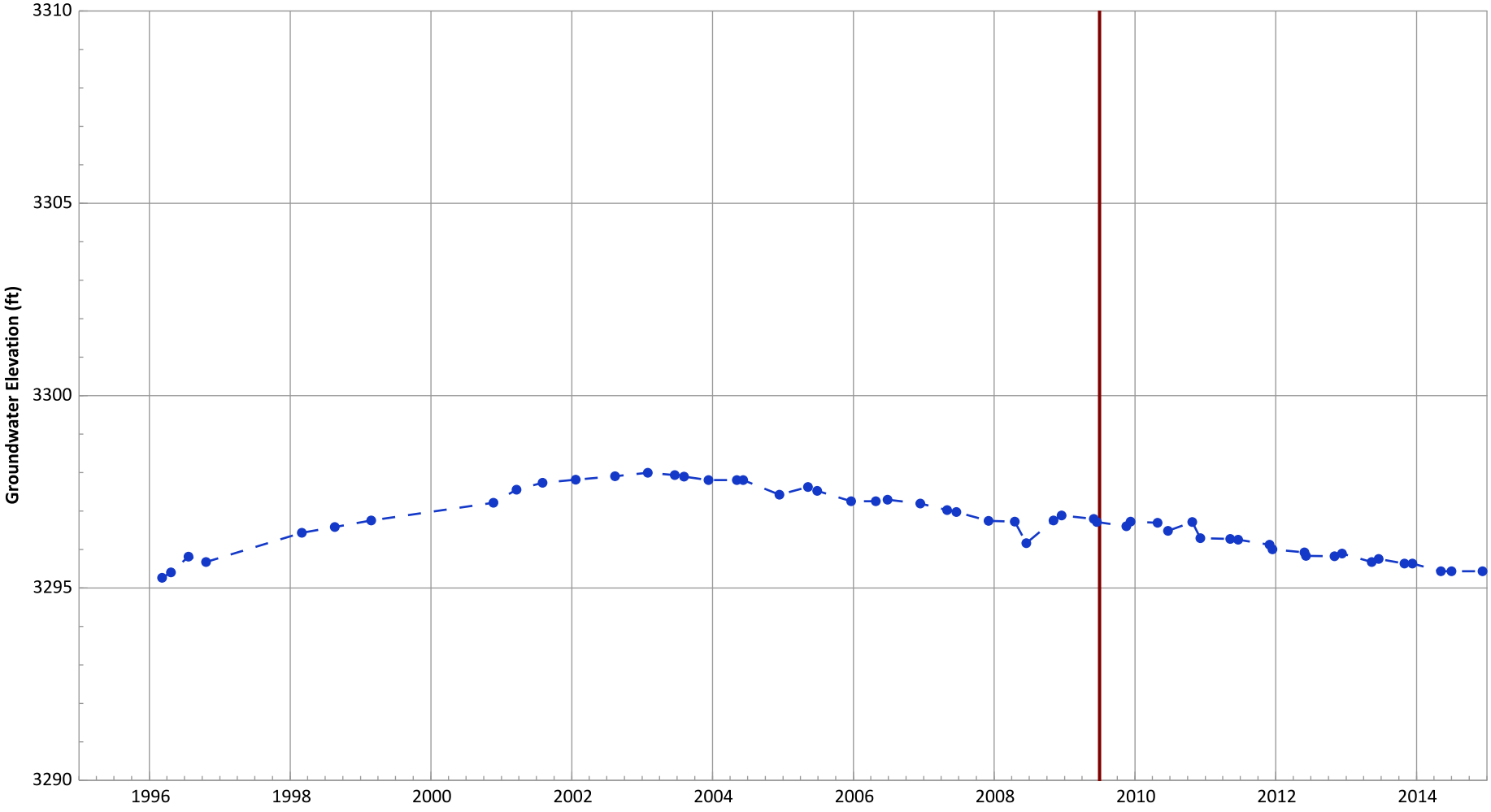
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.2 ft/yr
2012 - 2014 Data: No Trend

PTX06-1013 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

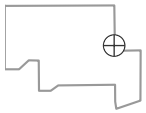


Notes:
1. Top of screen elevation is 3306.25 ft msl.
2. The bottom of screen elevation is 3286.25 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

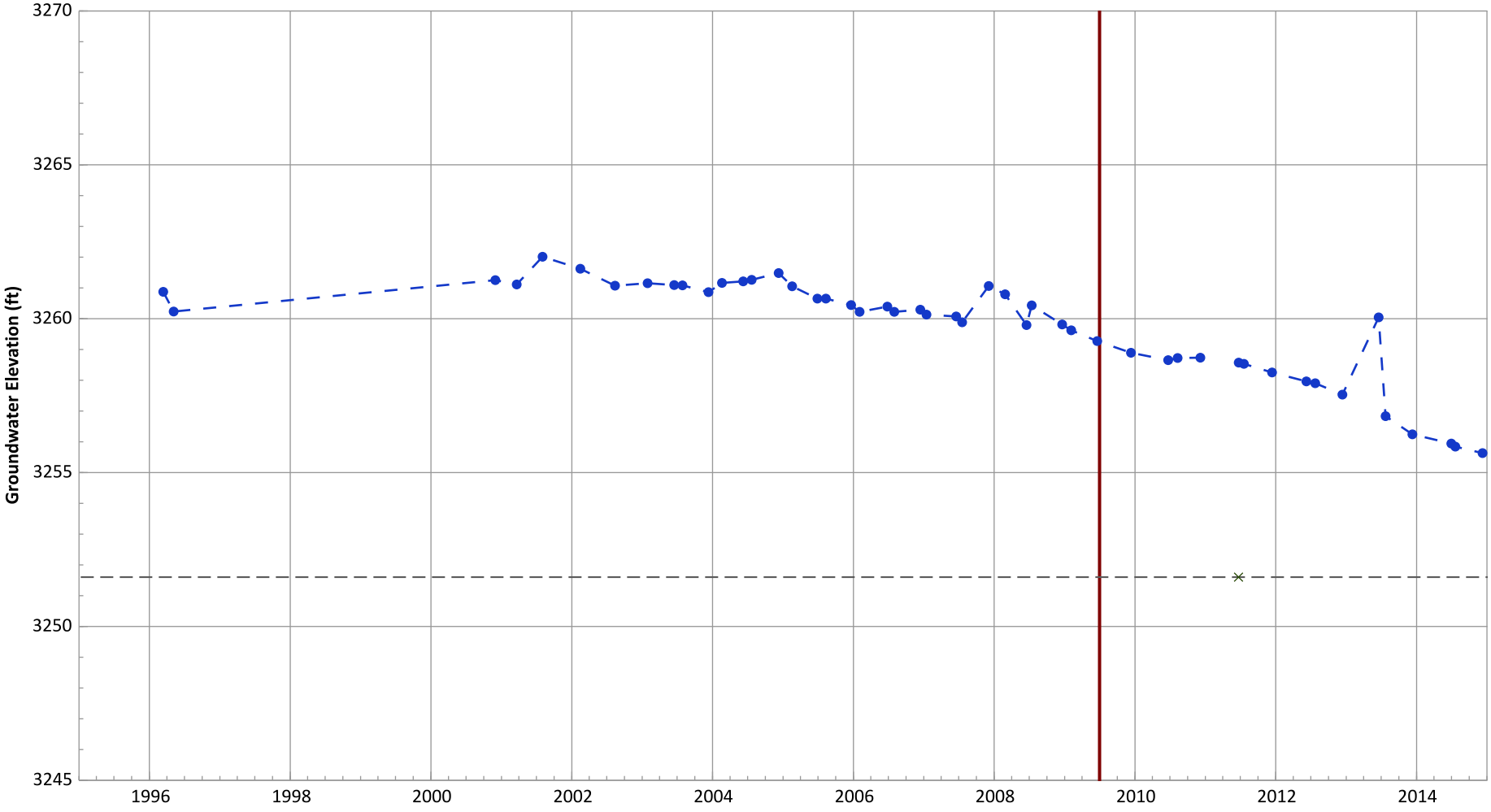
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.21 ft/yr

PTX06-1014 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

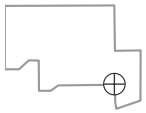


Notes:
1. Top of screen elevation is 3271.6 ft msl.
2. The bottom of screen elevation is 3251.6 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

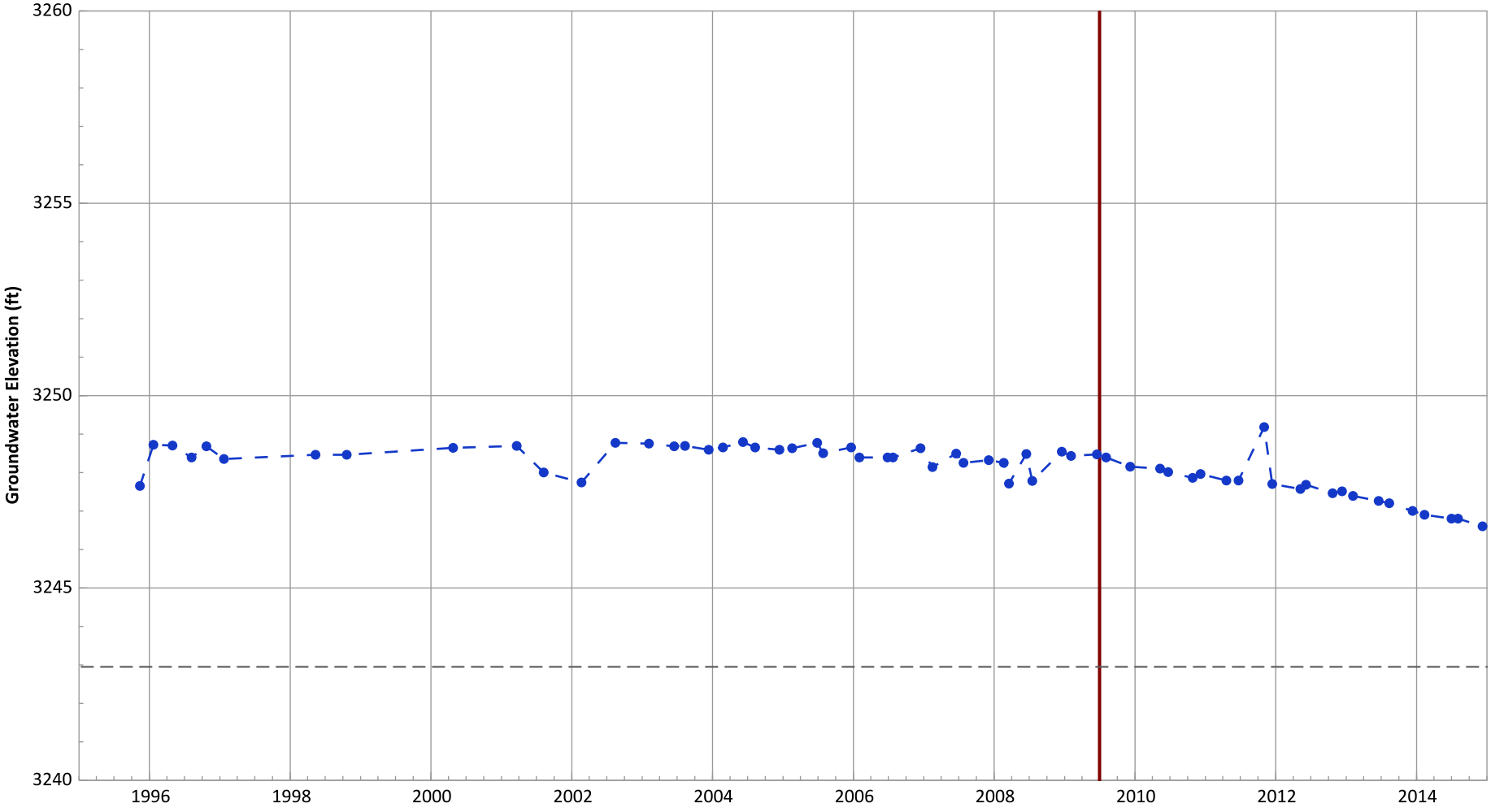
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.3 ft/yr
2012 - 2014 Data: Decreasing at 1.08 ft/yr

PTX06-1015 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

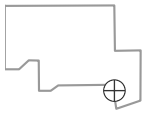


Notes:
1. Top of screen elevation is 3252.95 ft msl.
2. The bottom of screen elevation is 3242.95 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

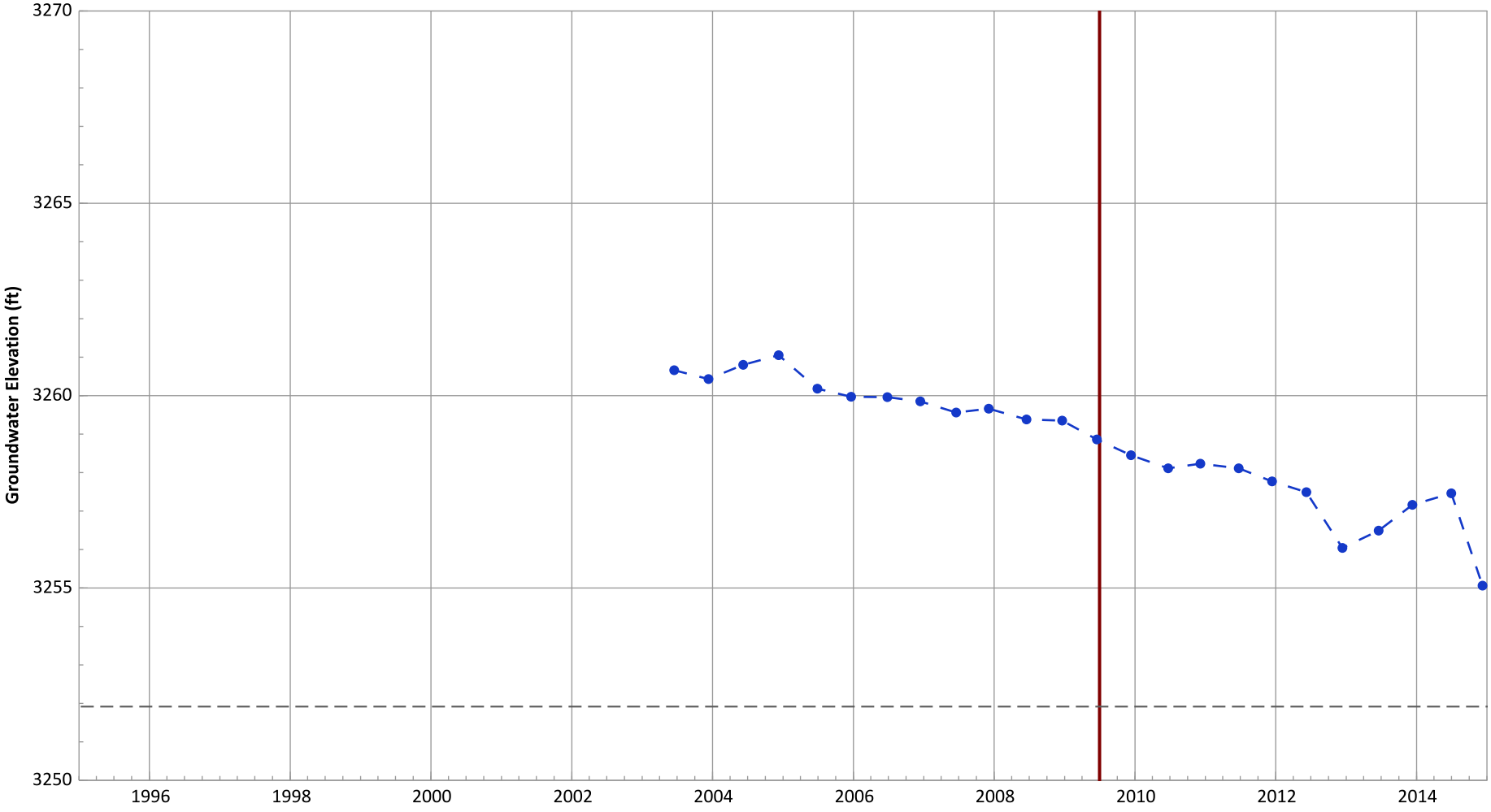
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.43 ft/yr

PTX06-1017 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

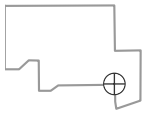


Notes:
1. Top of screen elevation is 3271.92 ft msl.
2. The bottom of screen elevation is 3251.92 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

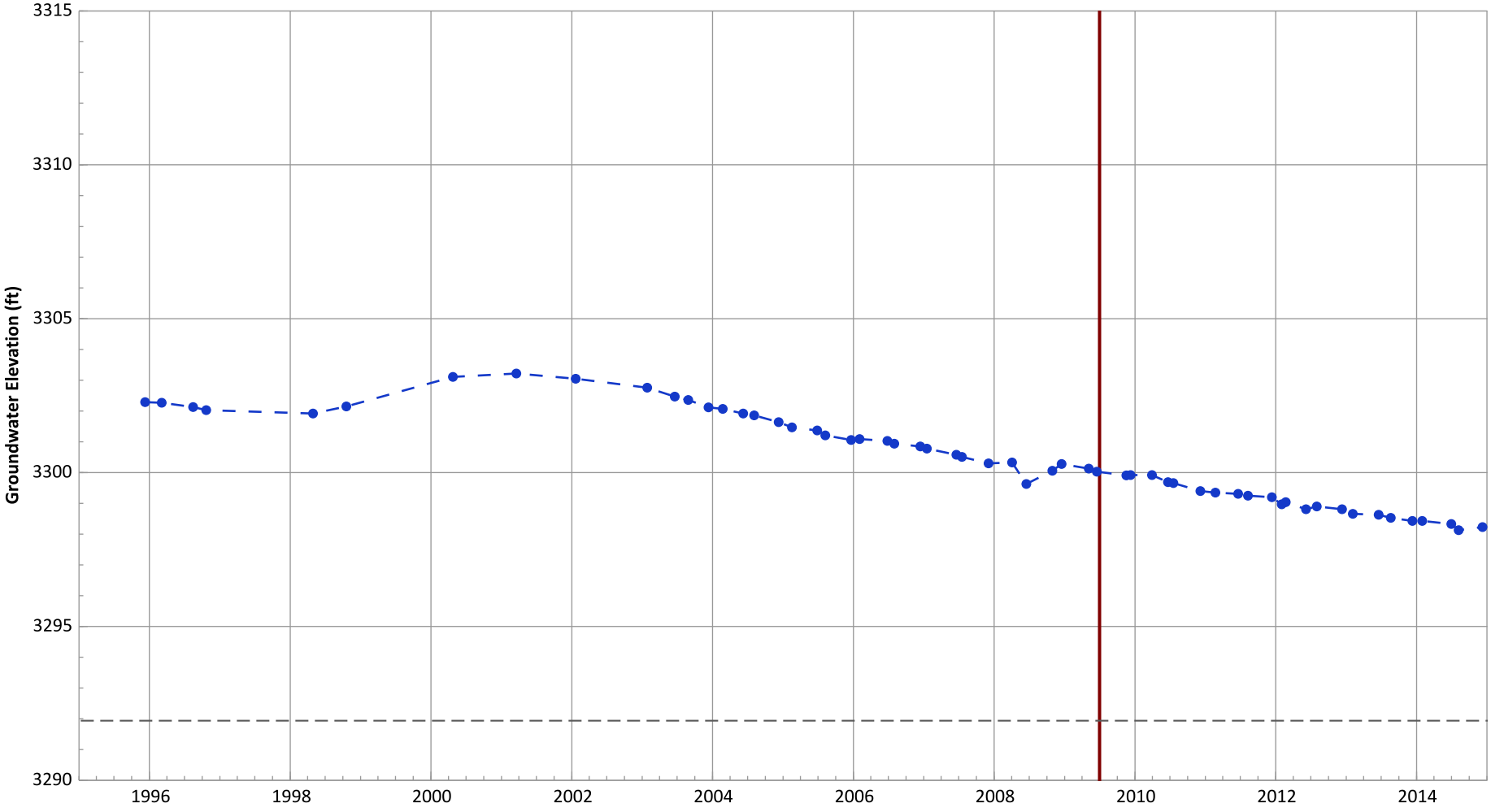
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.43 ft/yr
2012 - 2014 Data: Decreasing at 0.4 ft/yr

PTX06-1023 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

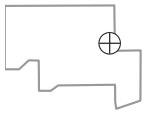


Notes:
1. Top of screen elevation is 3306.94 ft msl.
2. The bottom of screen elevation is 3291.94 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

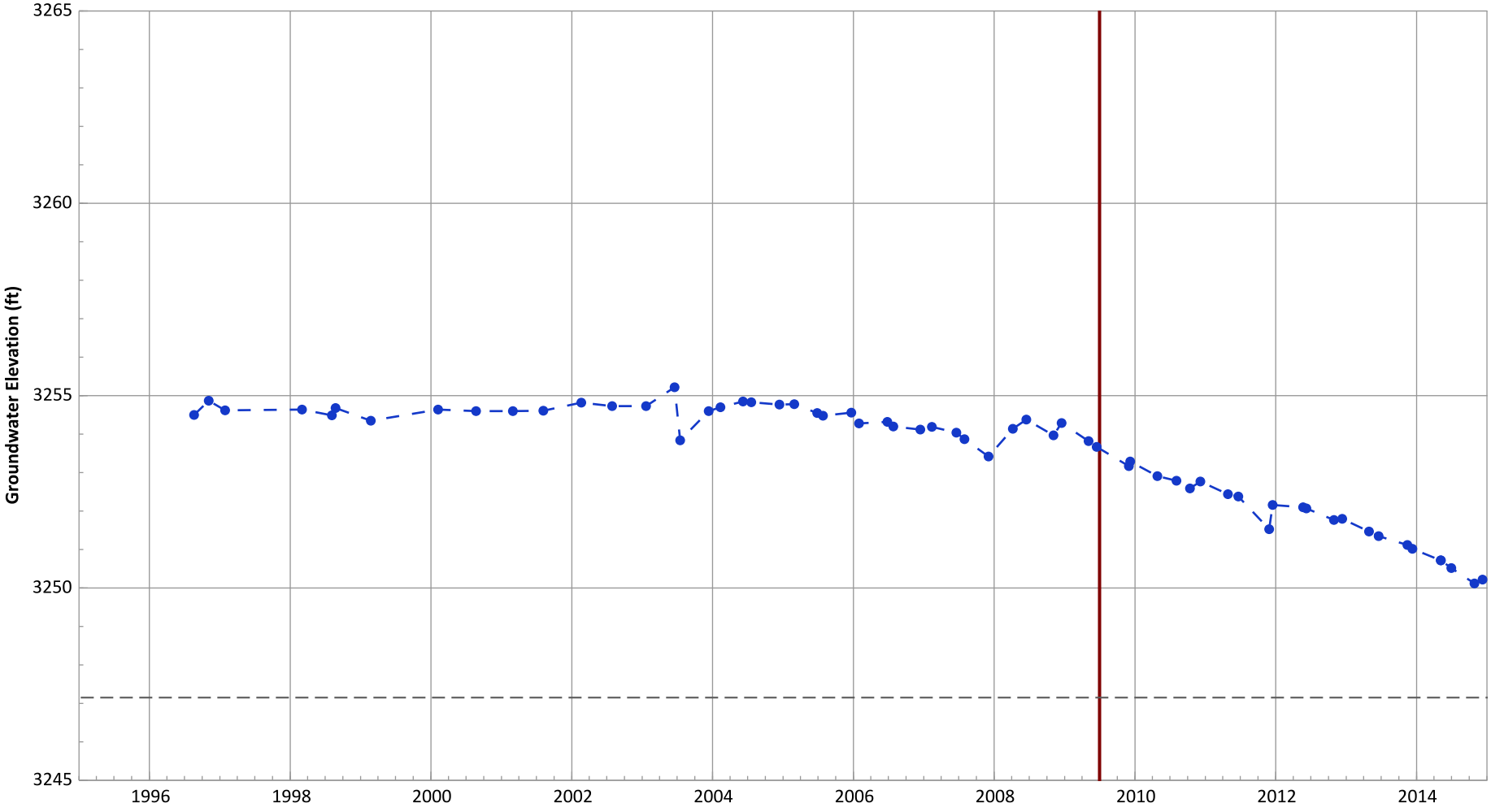
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.26 ft/yr
2012 - 2014 Data: Decreasing at 0.29 ft/yr

PTX06-1030 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

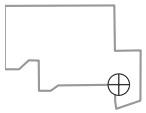


Notes:
1. Top of screen elevation is 3267.15 ft msl.
2. The bottom of screen elevation is 3247.15 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

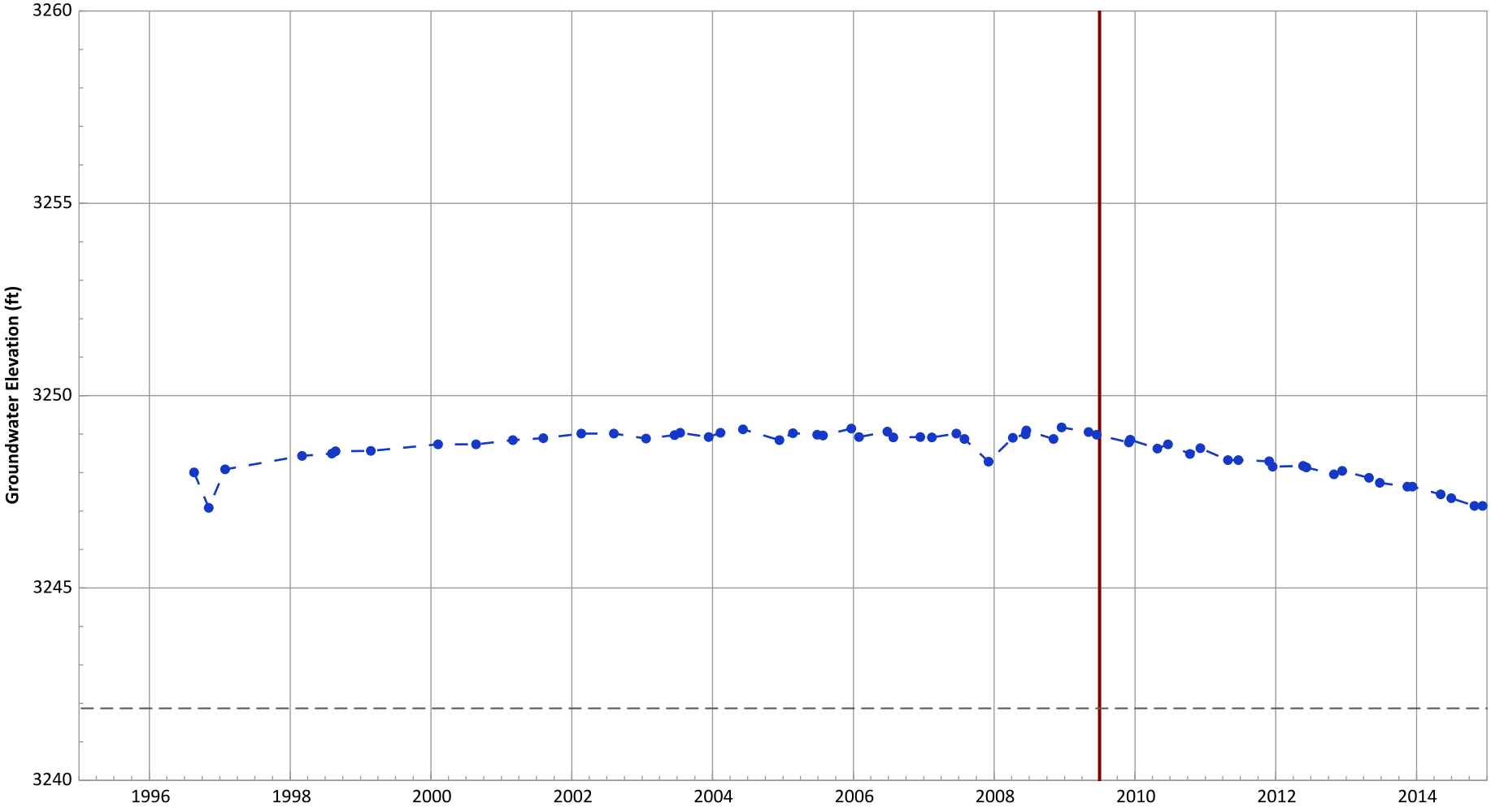
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.24 ft/yr
2012 - 2014 Data: Decreasing at 0.77 ft/yr

PTX06-1031 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

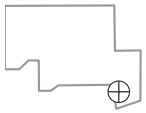


Notes:
1. Top of screen elevation is 3261.87 ft msl.
2. The bottom of screen elevation is 3241.87 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

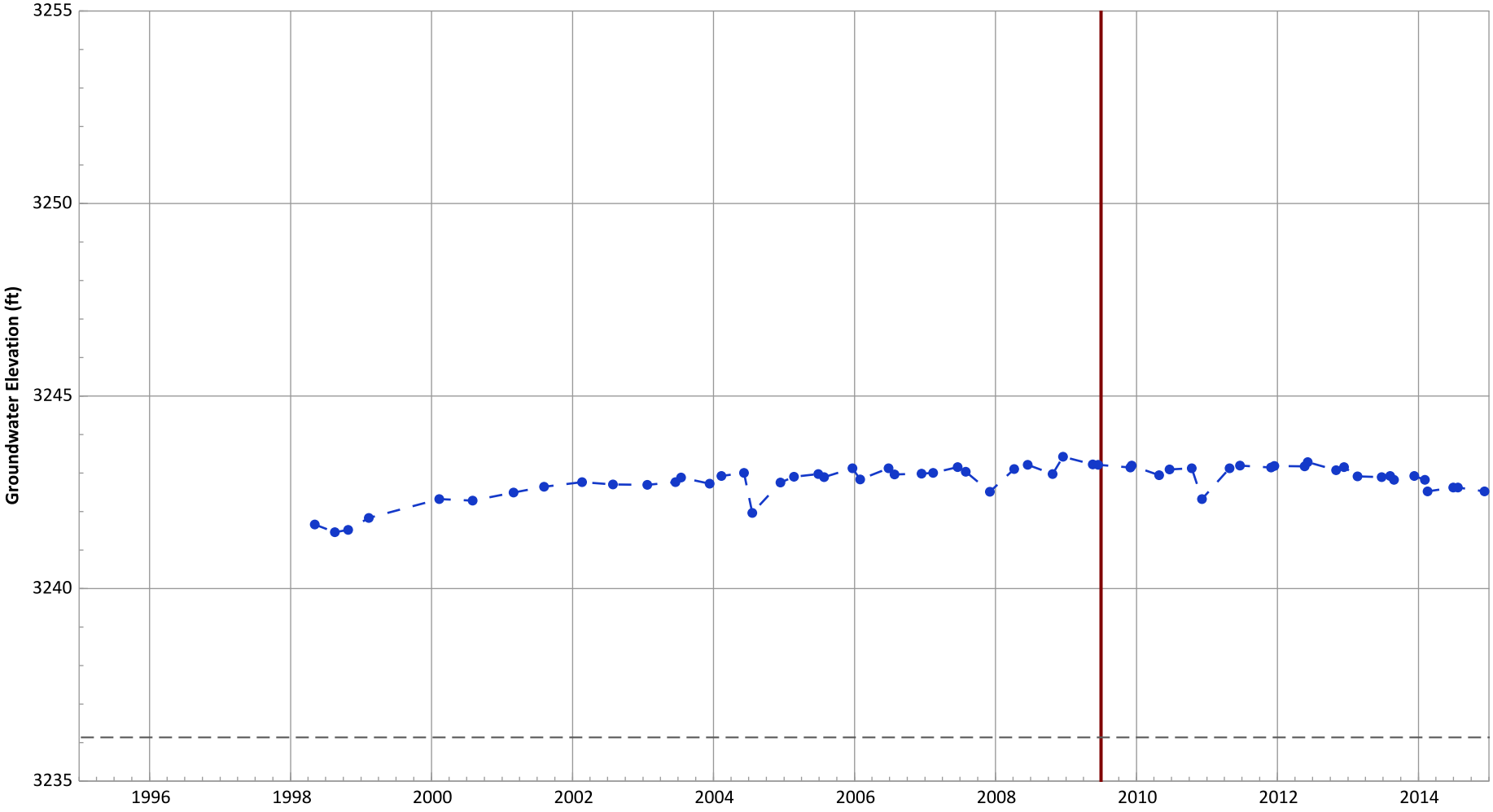
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.41 ft/yr

PTX06-1034 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

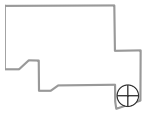


Notes:
1. Top of screen elevation is 3249.84 ft msl.
2. The bottom of screen elevation is 3236.14 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

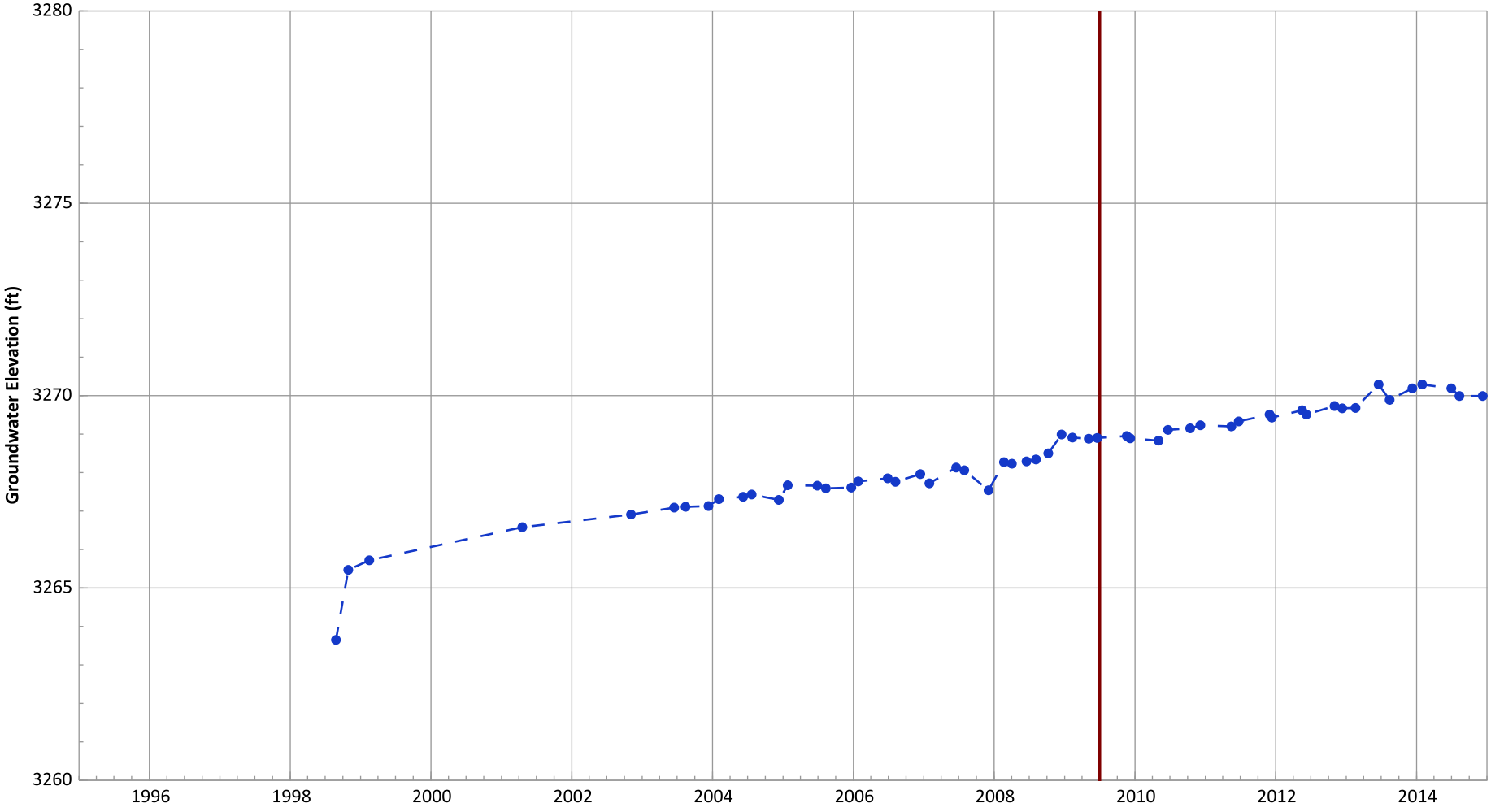
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.29 ft/yr

PTX06-1035 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

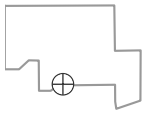


Notes:
1. Top of screen elevation is 3269.88 ft msl.
2. The bottom of screen elevation is 3256.18 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

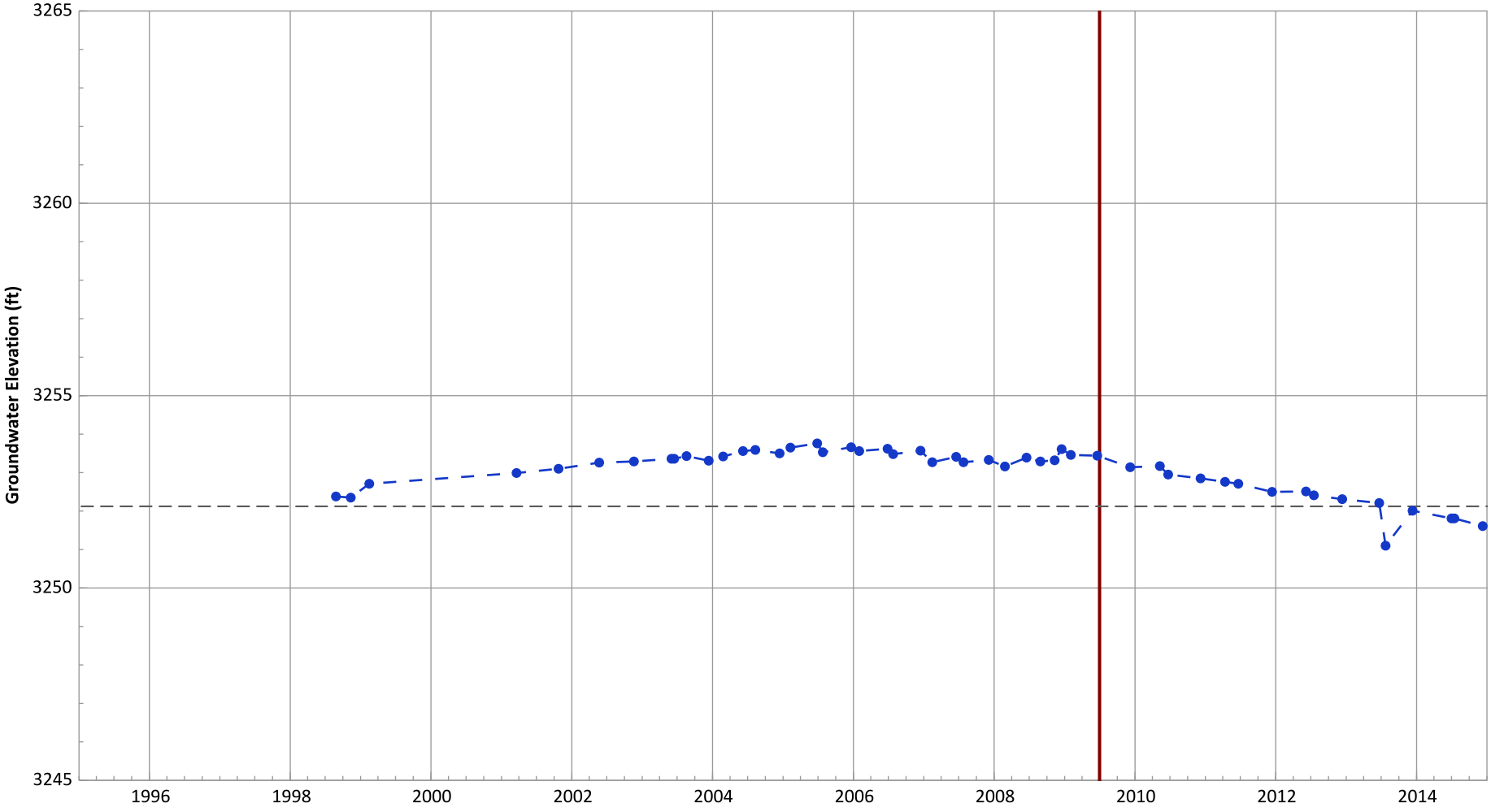
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.31 ft/yr
2012 - 2014 Data: Increasing at 0.23 ft/yr

PTX06-1036 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

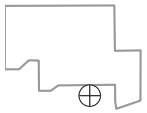


Notes:
1. Top of screen elevation is 3265.72 ft msl.
2. The bottom of screen elevation is 3252.12 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

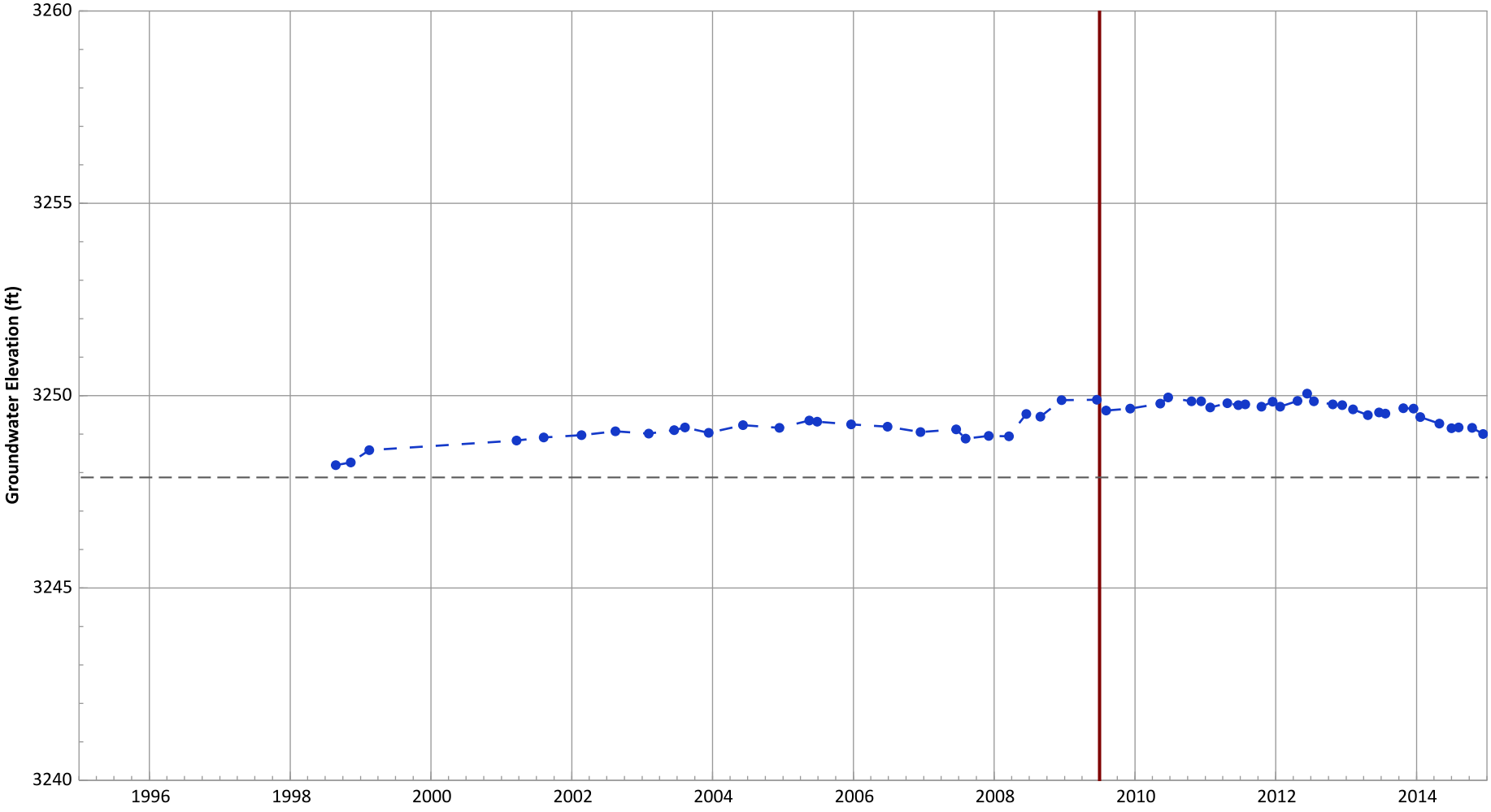
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.32 ft/yr

PTX06-1037 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

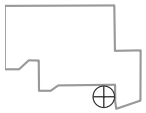


Notes:
1. Top of screen elevation is 3261.47 ft msl.
2. The bottom of screen elevation is 3247.87 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

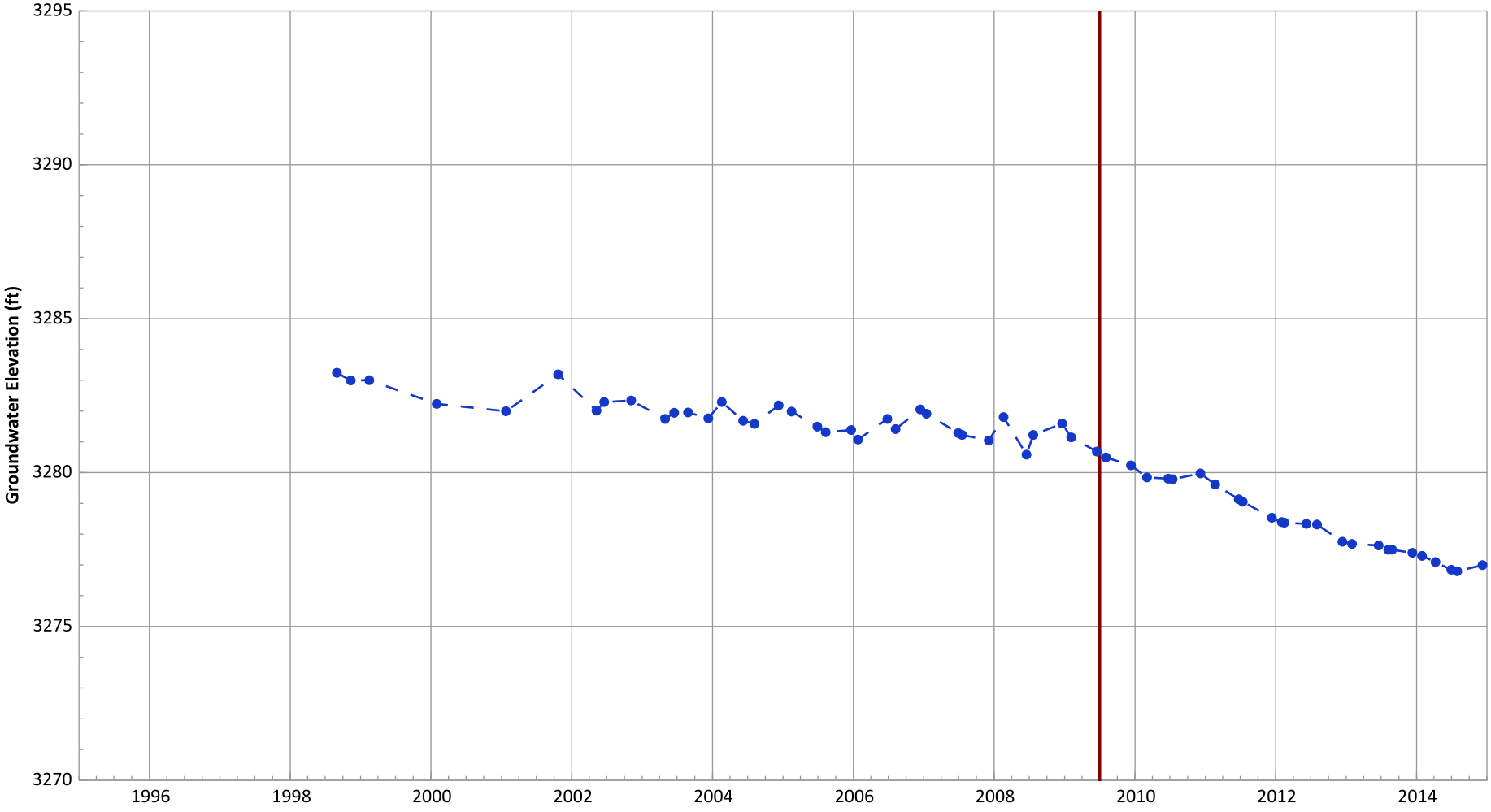
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.34 ft/yr

PTX06-1038 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant



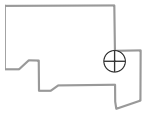
Notes:
1. Top of screen elevation is 3284.33 ft msl.
2. The bottom of screen elevation is 3260.73 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

Groundwater Elevation

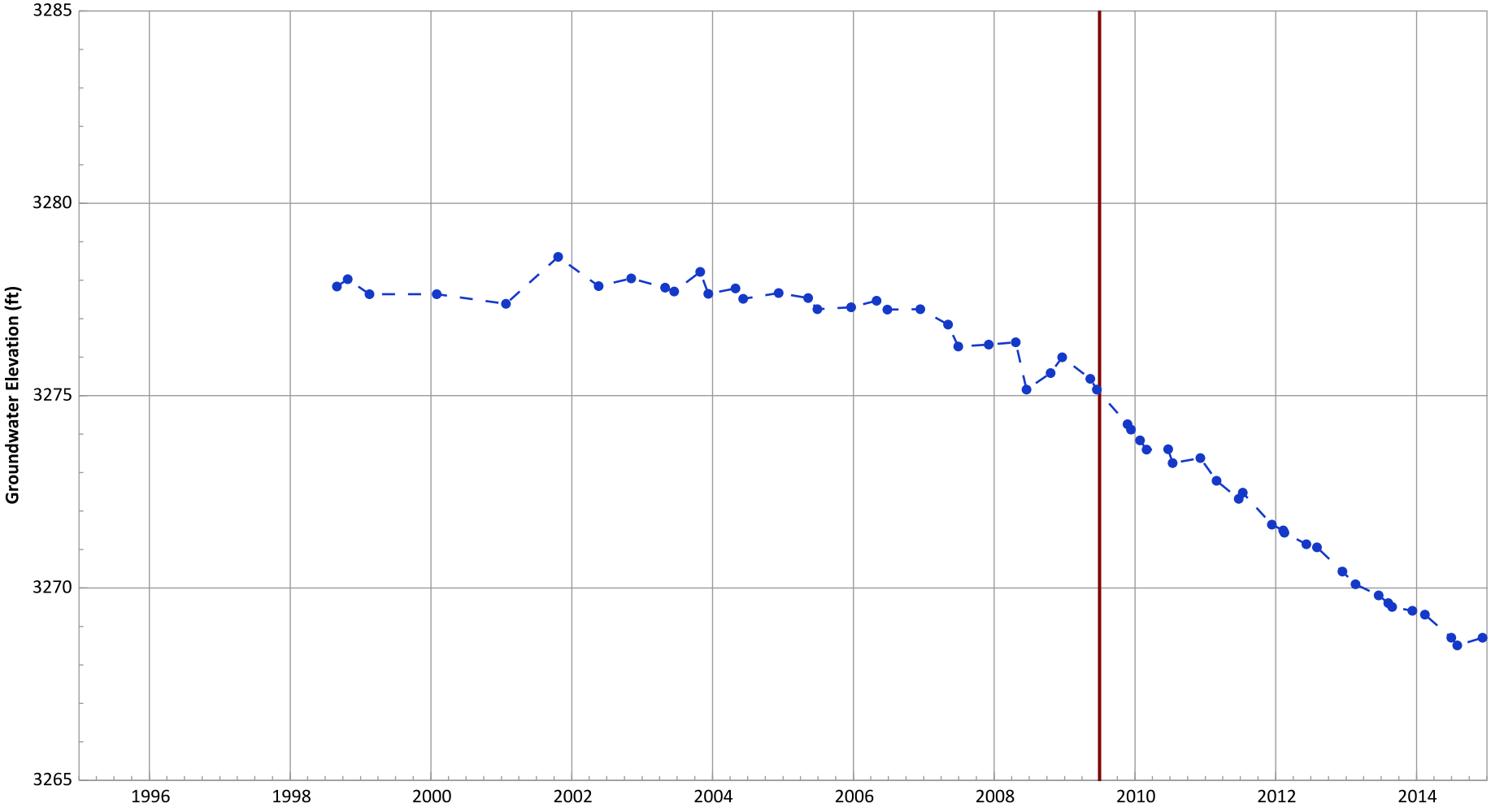
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.39 ft/yr
2012 - 2014 Data: Decreasing at 0.6 ft/yr

PTX06-1039A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

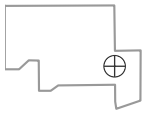


Notes:
1. Top of screen elevation is 3285.76 ft msl.
2. The bottom of screen elevation is 3262.06 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

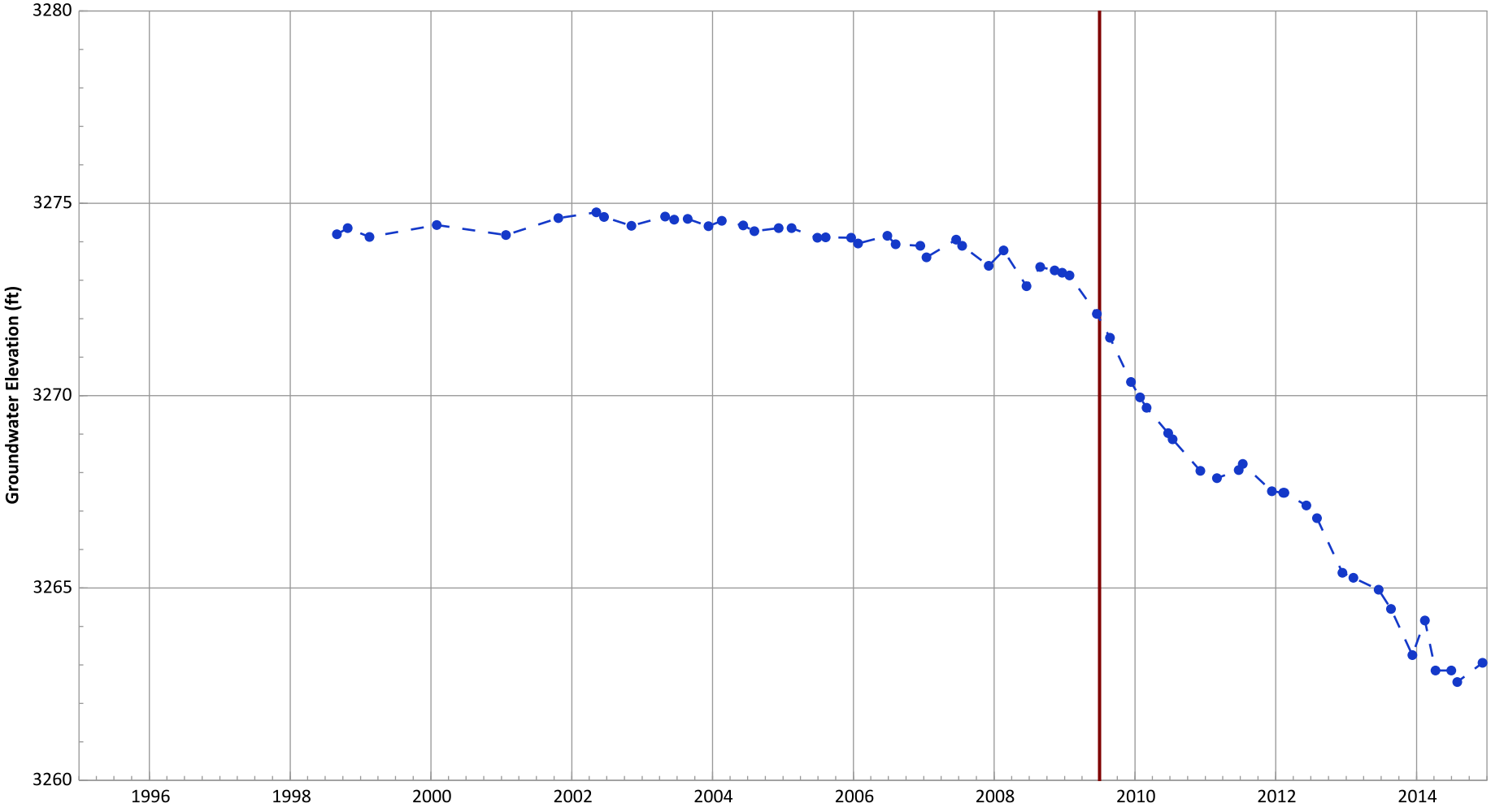
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.65 ft/yr
2012 - 2014 Data: Decreasing at 1.07 ft/yr

PTX06-1040 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

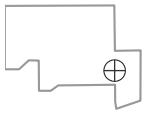


Notes:
1. Top of screen elevation is 3295.32 ft msl.
2. The bottom of screen elevation is 3254.52 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

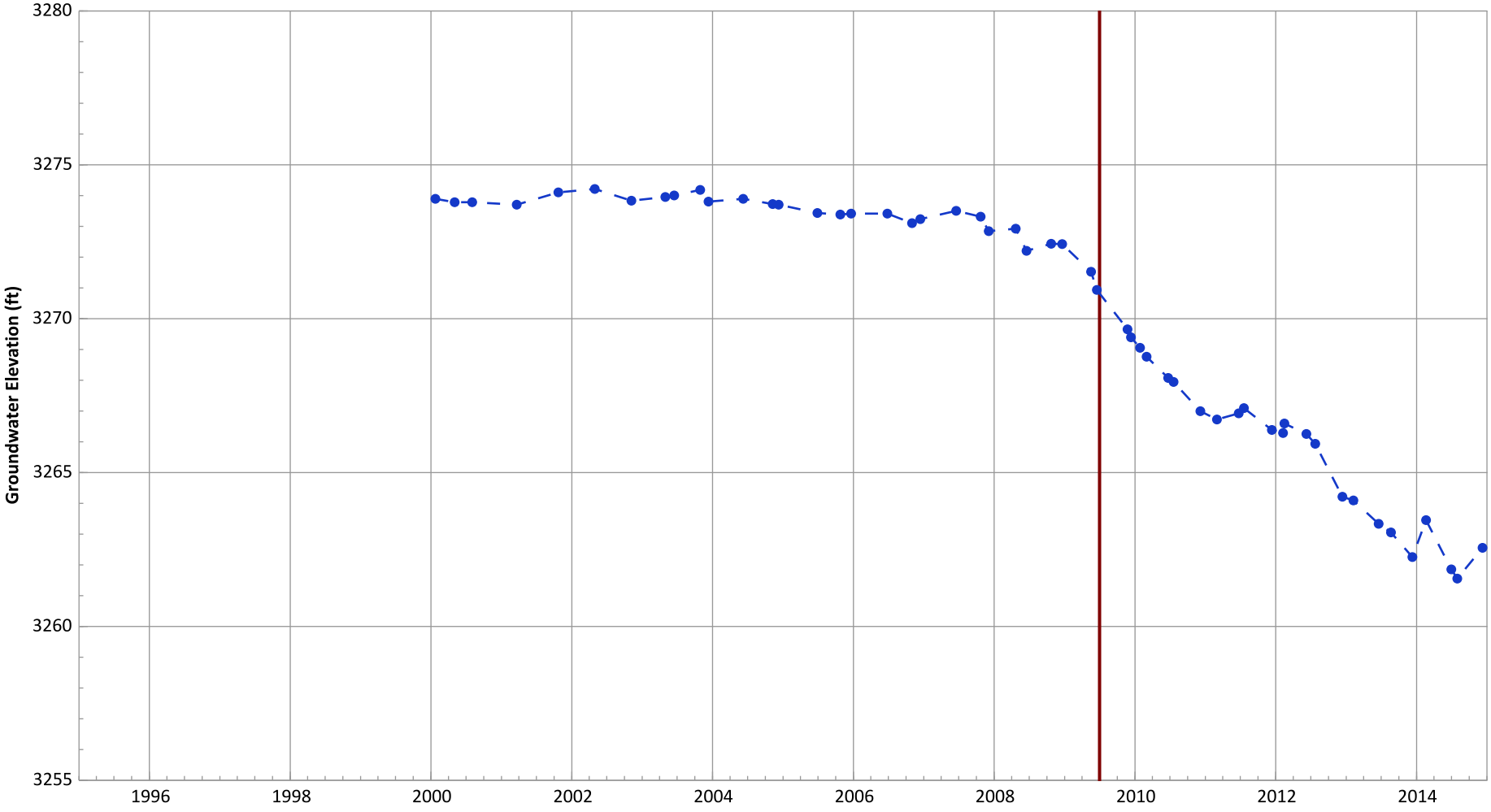
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.8 ft/yr
2012 - 2014 Data: Decreasing at 1.82 ft/yr

PTX06-1041 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

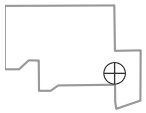


Notes:
1. Top of screen elevation is 3279.61 ft msl.
2. The bottom of screen elevation is 3239.61 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

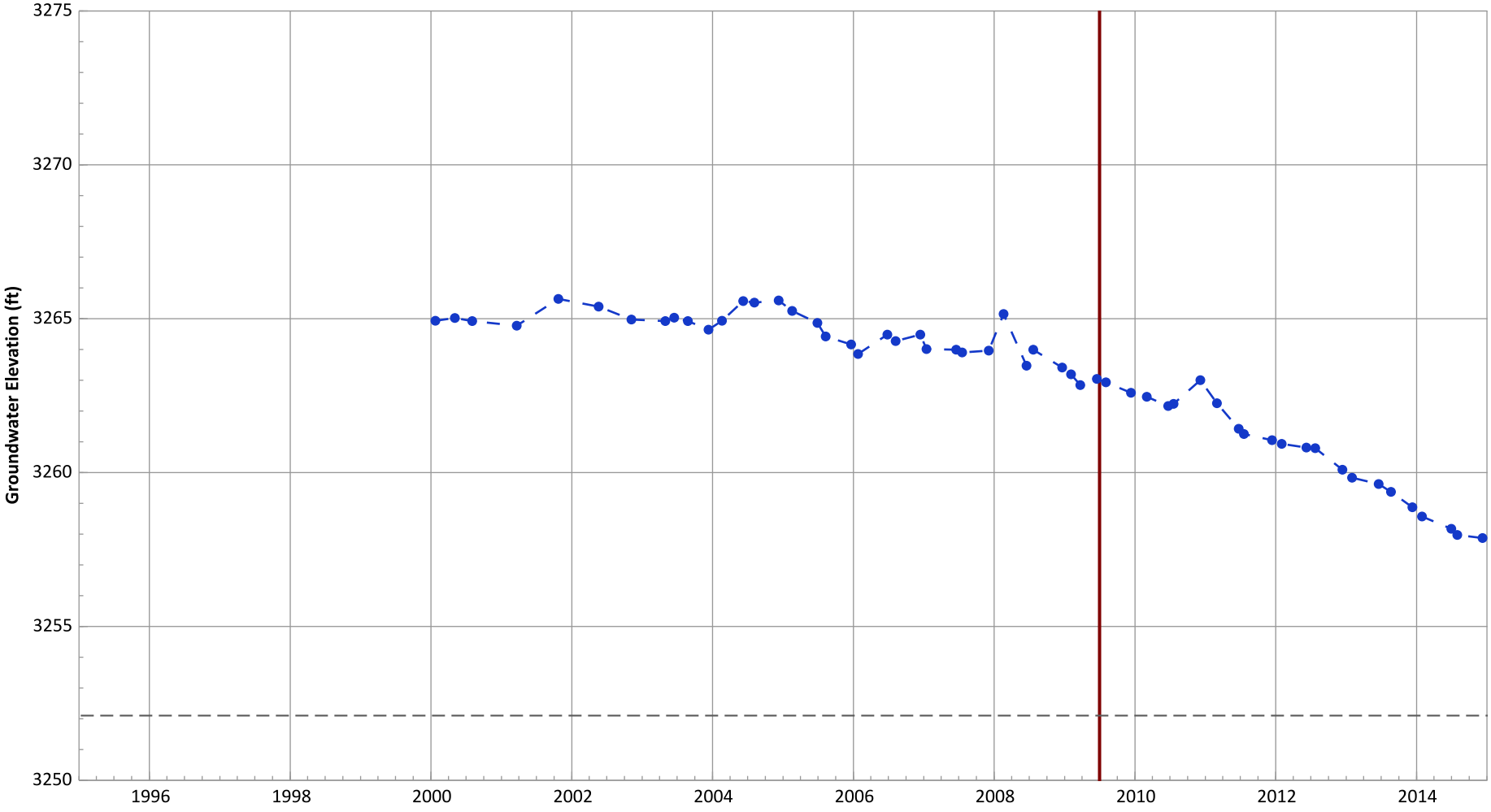
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.9 ft/yr
2012 - 2014 Data: Decreasing at 1.64 ft/yr

PTX06-1042 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

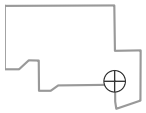


Notes:
1. Top of screen elevation is 3272.1 ft msl.
2. The bottom of screen elevation is 3252.1 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

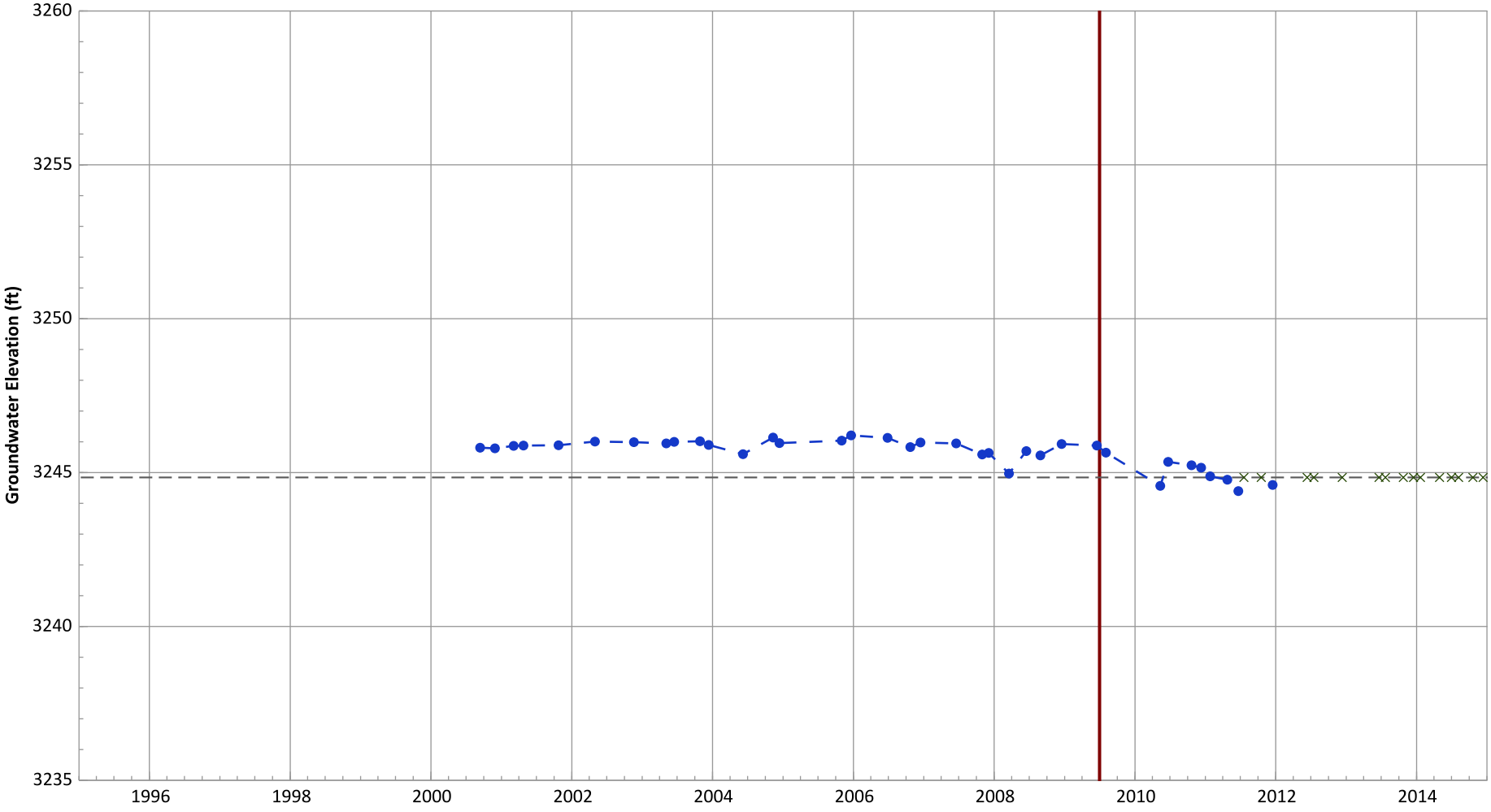
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.49 ft/yr
2012 - 2014 Data: Decreasing at 1.26 ft/yr

PTX06-1045 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

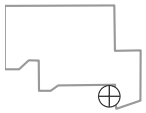


Notes:
1. Top of screen elevation is 3264.84 ft msl.
2. The bottom of screen elevation is 3244.84 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

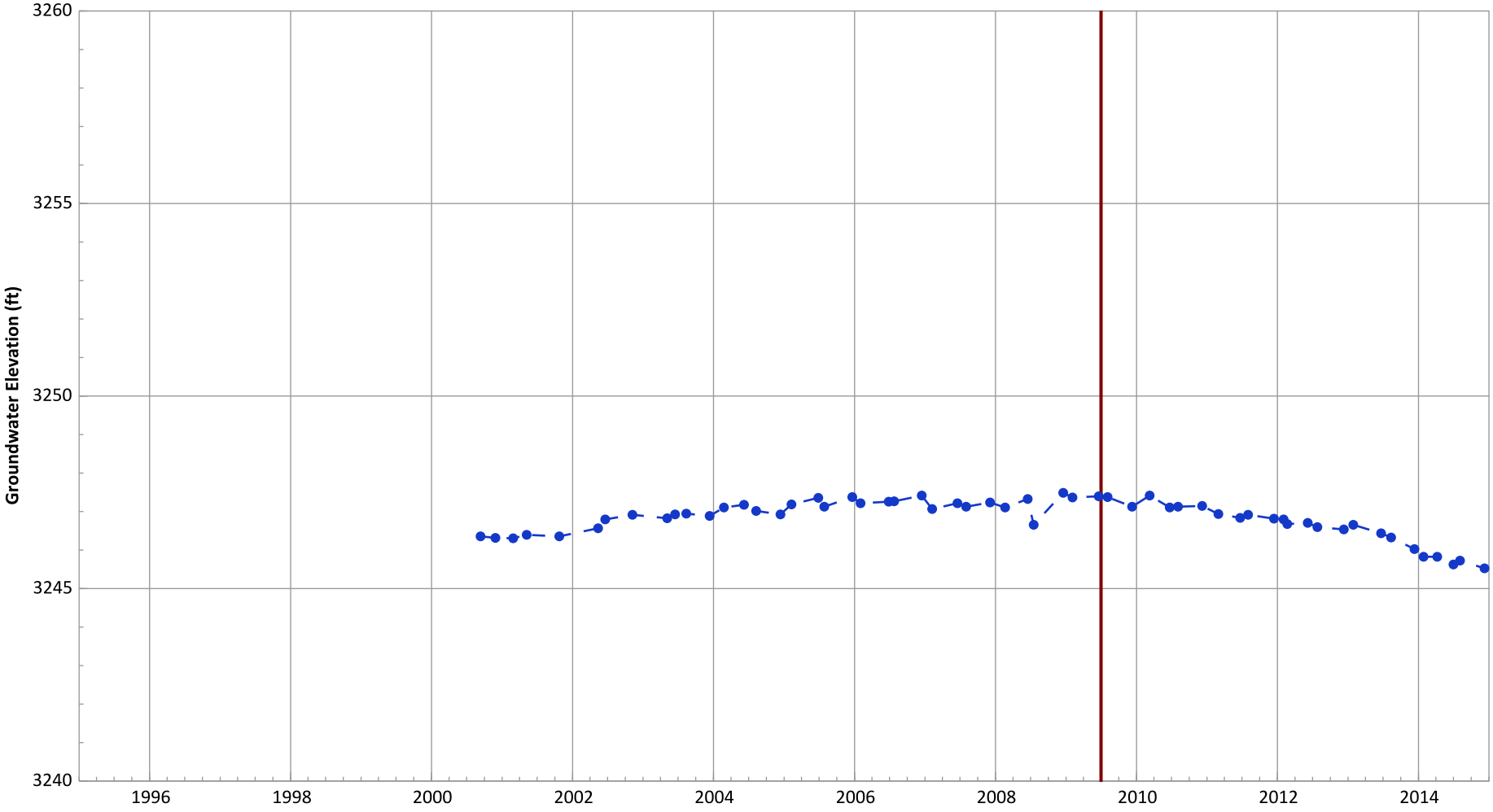
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: N/A (No Measurements)

PTX06-1046 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

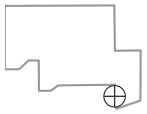


Notes:
1. Top of screen elevation is 3253.04 ft msl.
2. The bottom of screen elevation is 3233.04 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

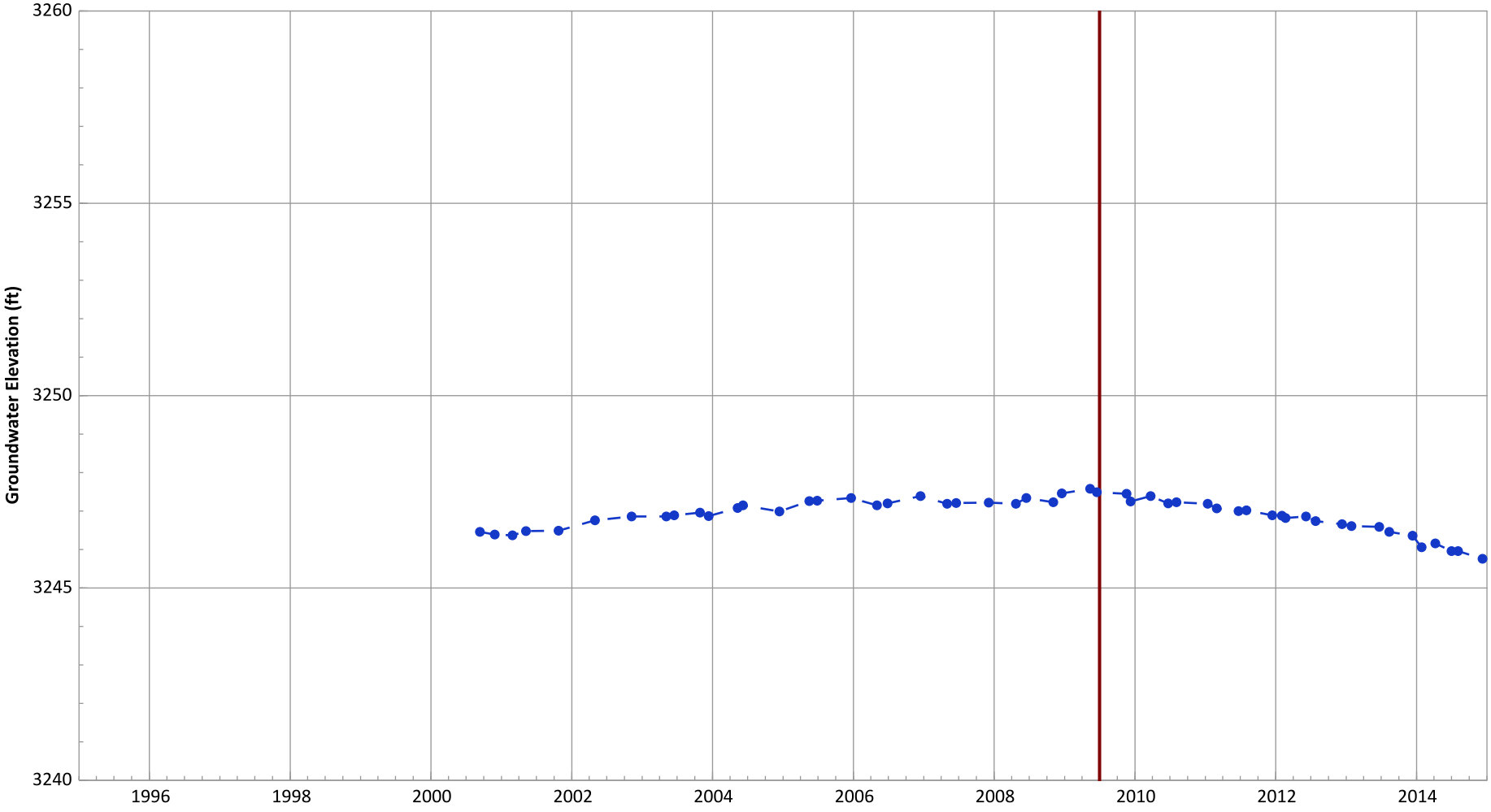
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.51 ft/yr

PTX06-1047A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

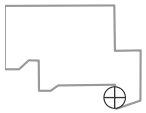


Notes:
1. Top of screen elevation is 3259.67 ft msl.
2. The bottom of screen elevation is 3239.67 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

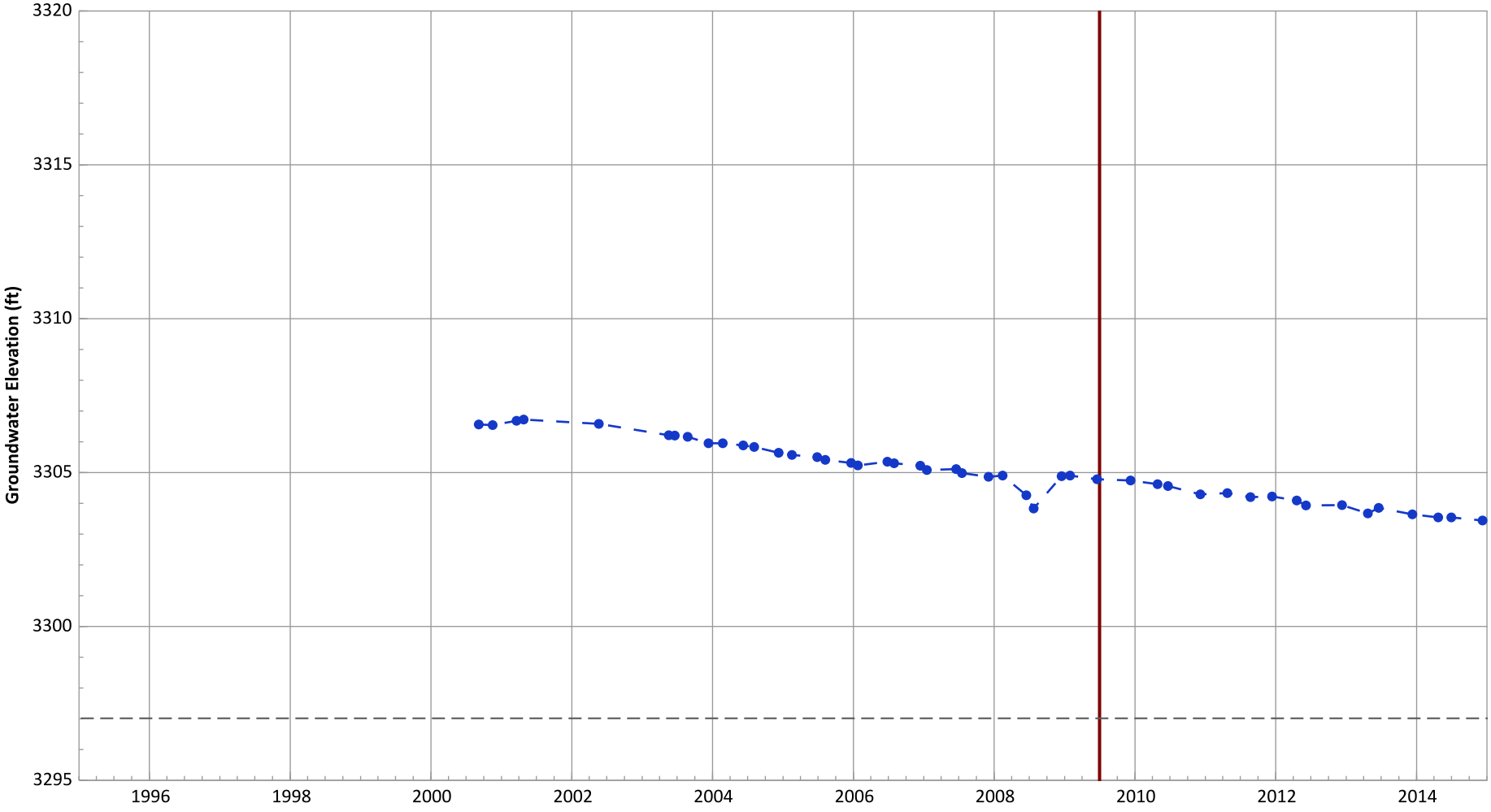
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.43 ft/yr

PTX06-1048A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

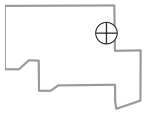


Notes:
1. Top of screen elevation is 3317.02 ft msl.
2. The bottom of screen elevation is 3297.02 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

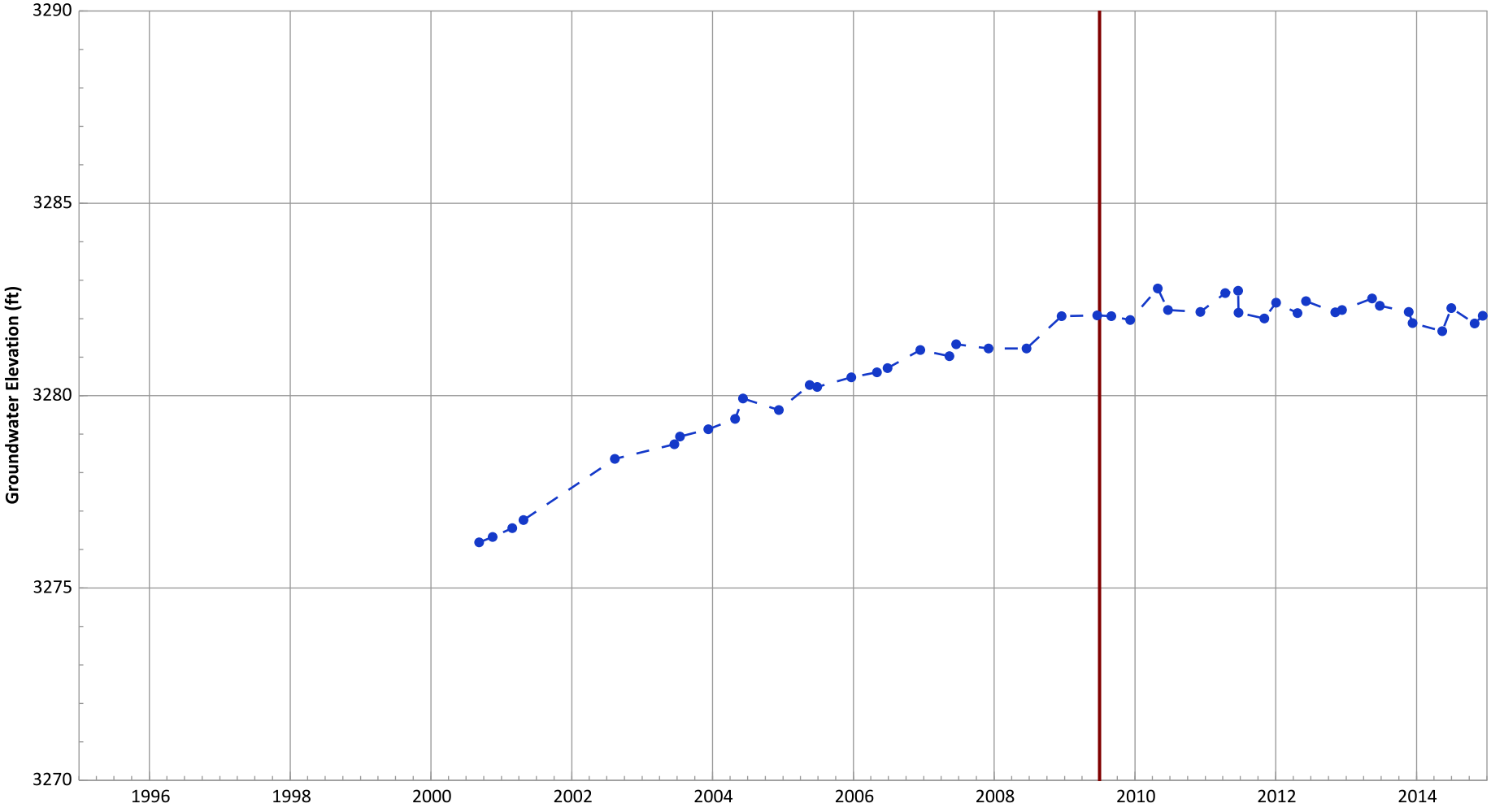
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.23 ft/yr
2012 - 2014 Data: Decreasing at 0.21 ft/yr

PTX06-1049 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

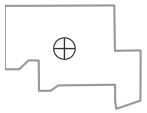


Notes:
1. Top of screen elevation is 3283.38 ft msl.
2. The bottom of screen elevation is 3243.38 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

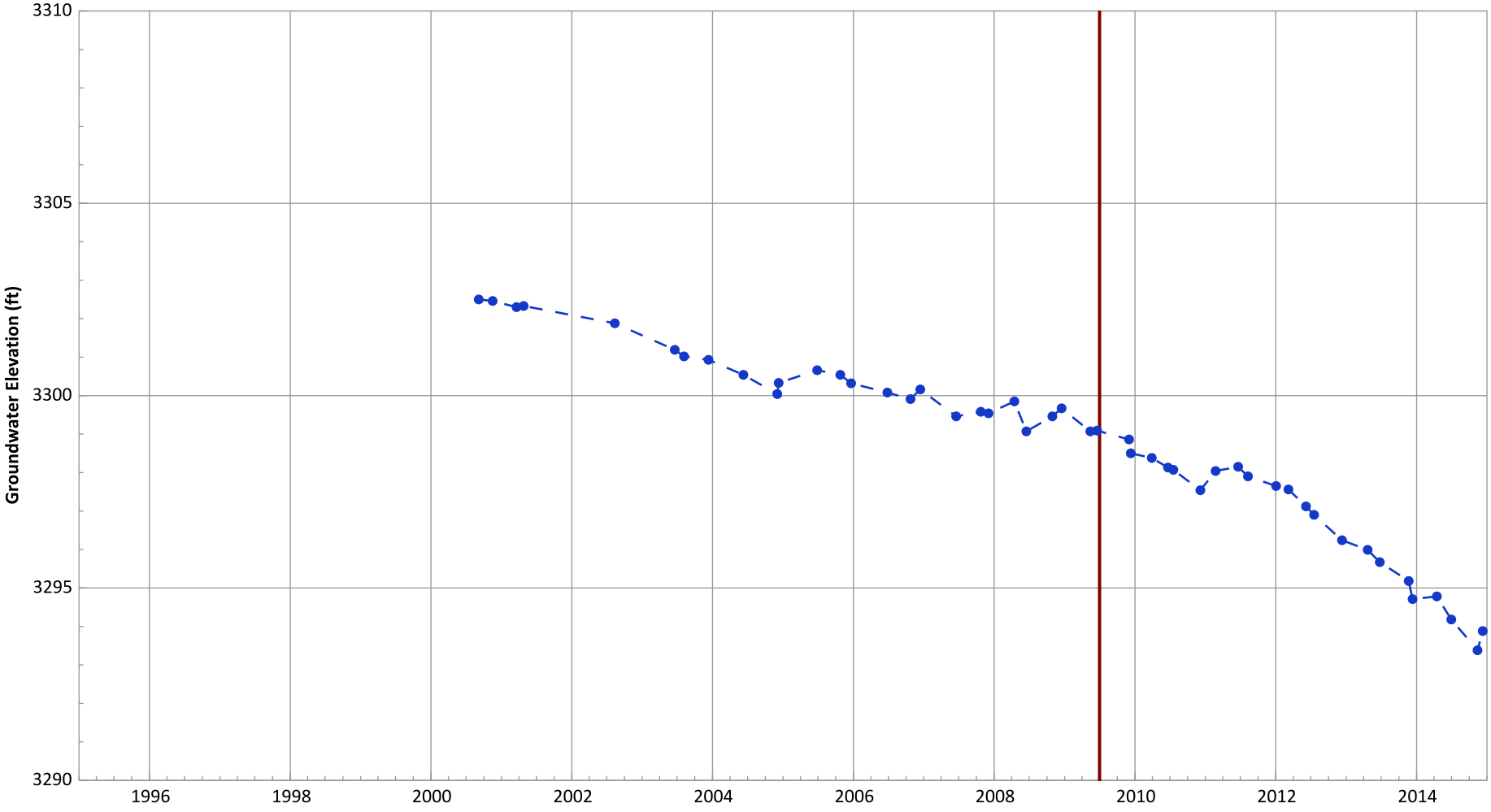
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.38 ft/yr
2012 - 2014 Data: Decreasing at 0.19 ft/yr

PTX06-1050 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

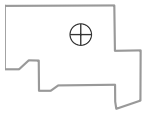


Notes:
1. Top of screen elevation is 3294.96 ft msl.
2. The bottom of screen elevation is 3264.96 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

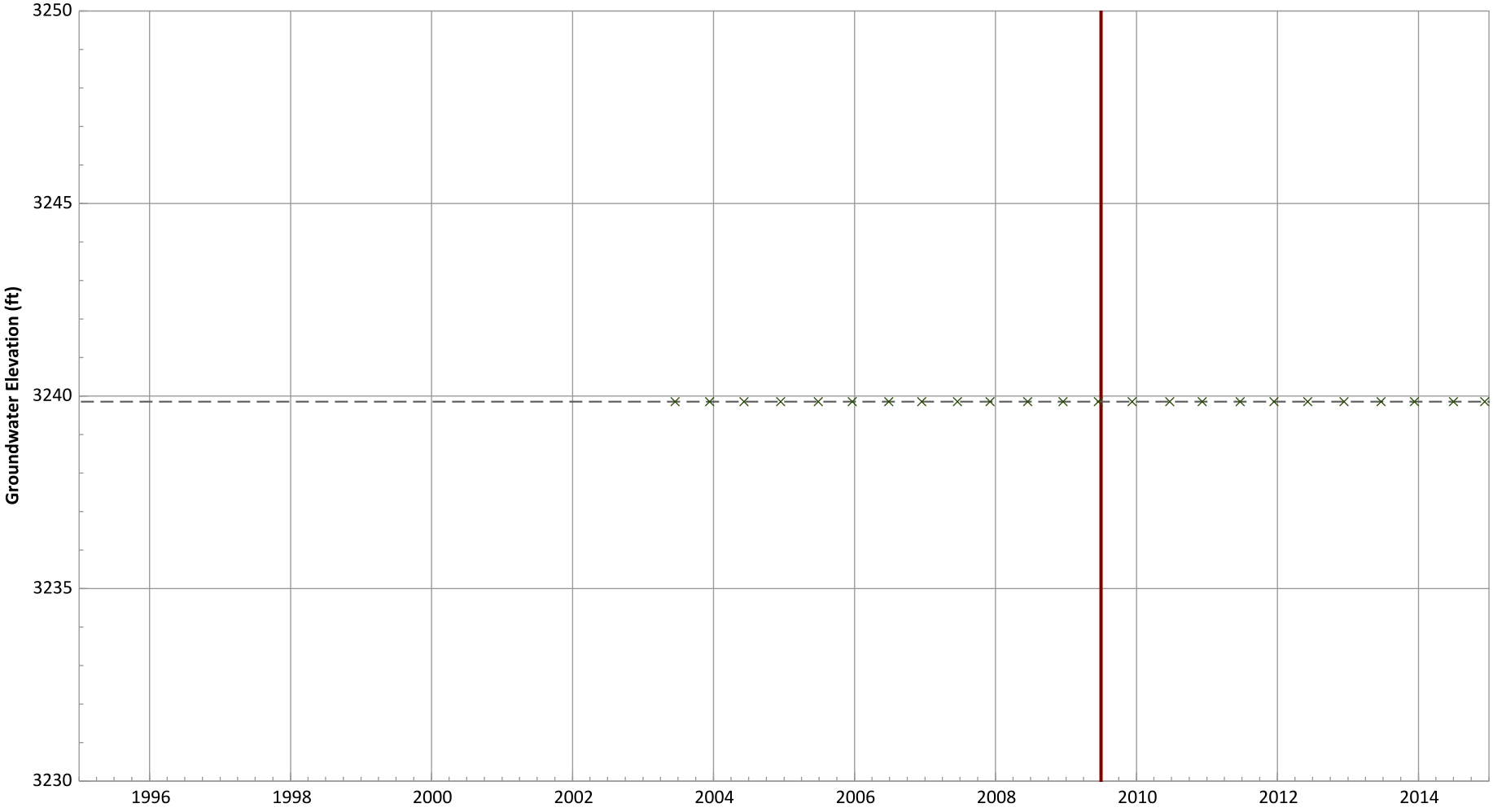
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.55 ft/yr
2012 - 2014 Data: Decreasing at 1.38 ft/yr

PTX06-1051 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

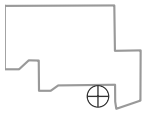


Notes:
1. Top of screen elevation is 3259.85 ft msl.
2. The bottom of screen elevation is 3239.85 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

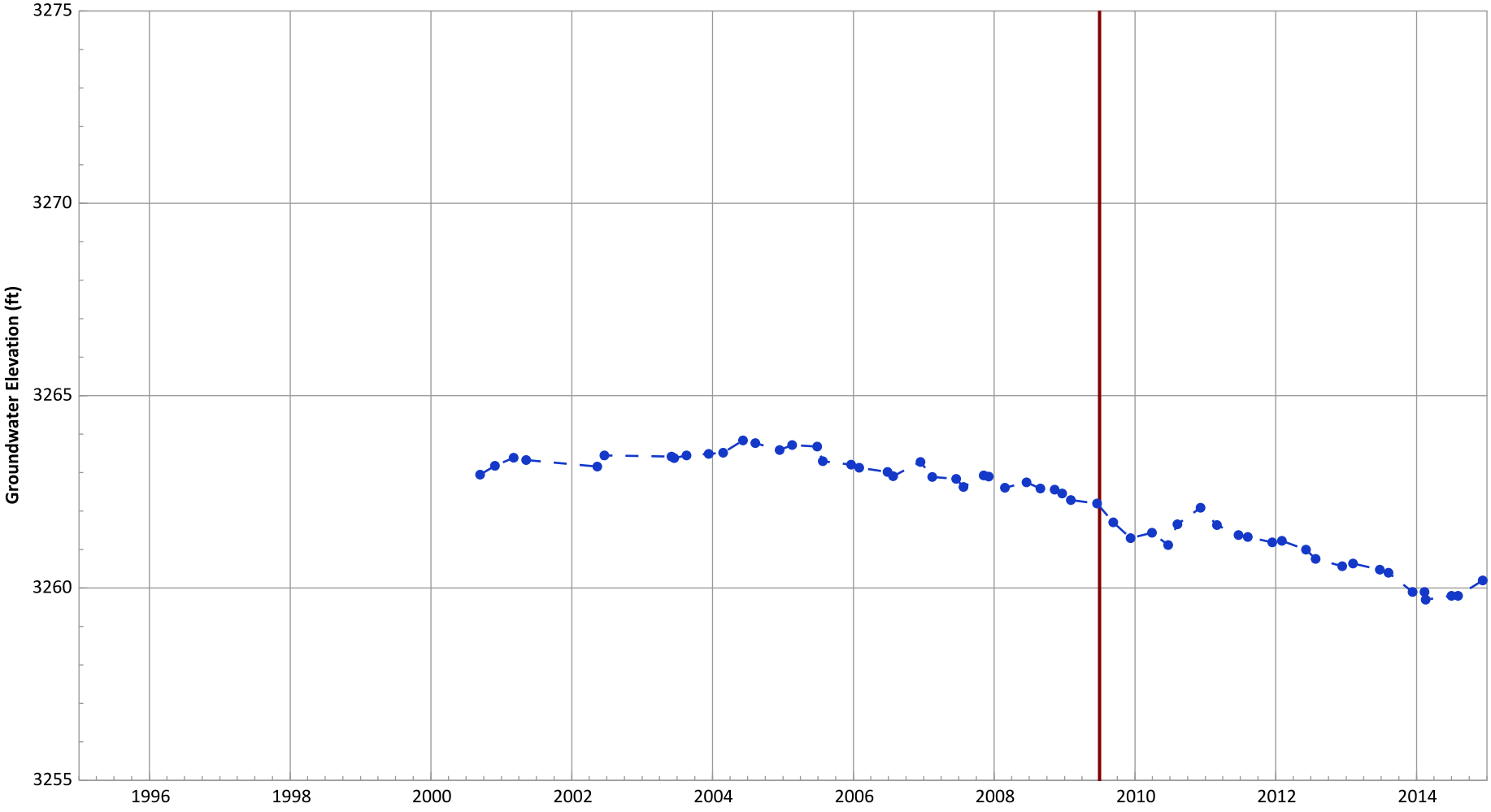
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1052 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

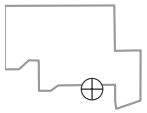


Notes:
1. Top of screen elevation is 3266.45 ft msl.
2. The bottom of screen elevation is 3246.45 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

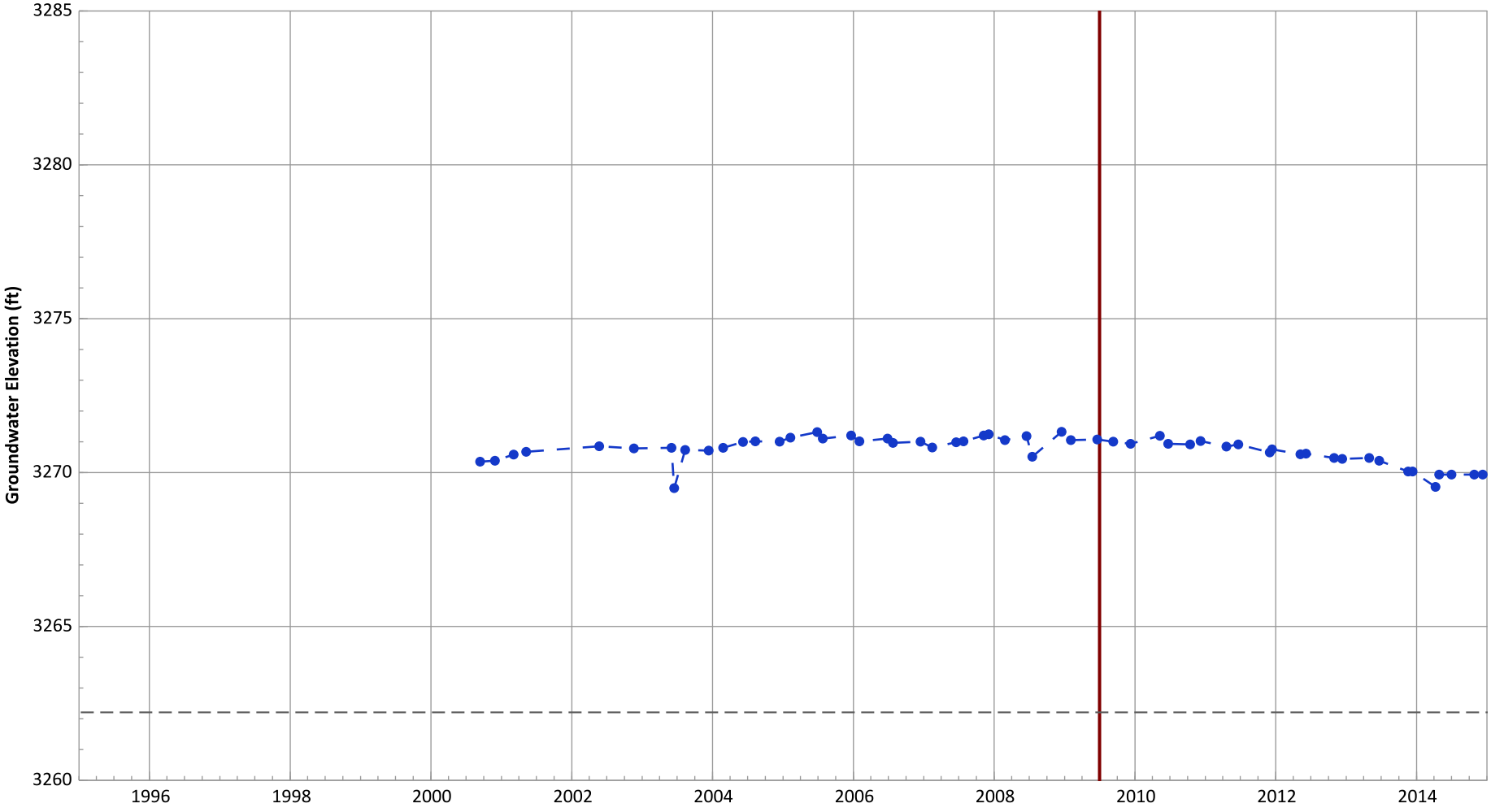
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.28 ft/yr
2012 - 2014 Data: Decreasing at 0.46 ft/yr

PTX06-1053 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

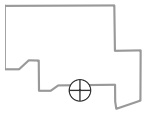


Notes:
1. Top of screen elevation is 3277.21 ft msl.
2. The bottom of screen elevation is 3262.21 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

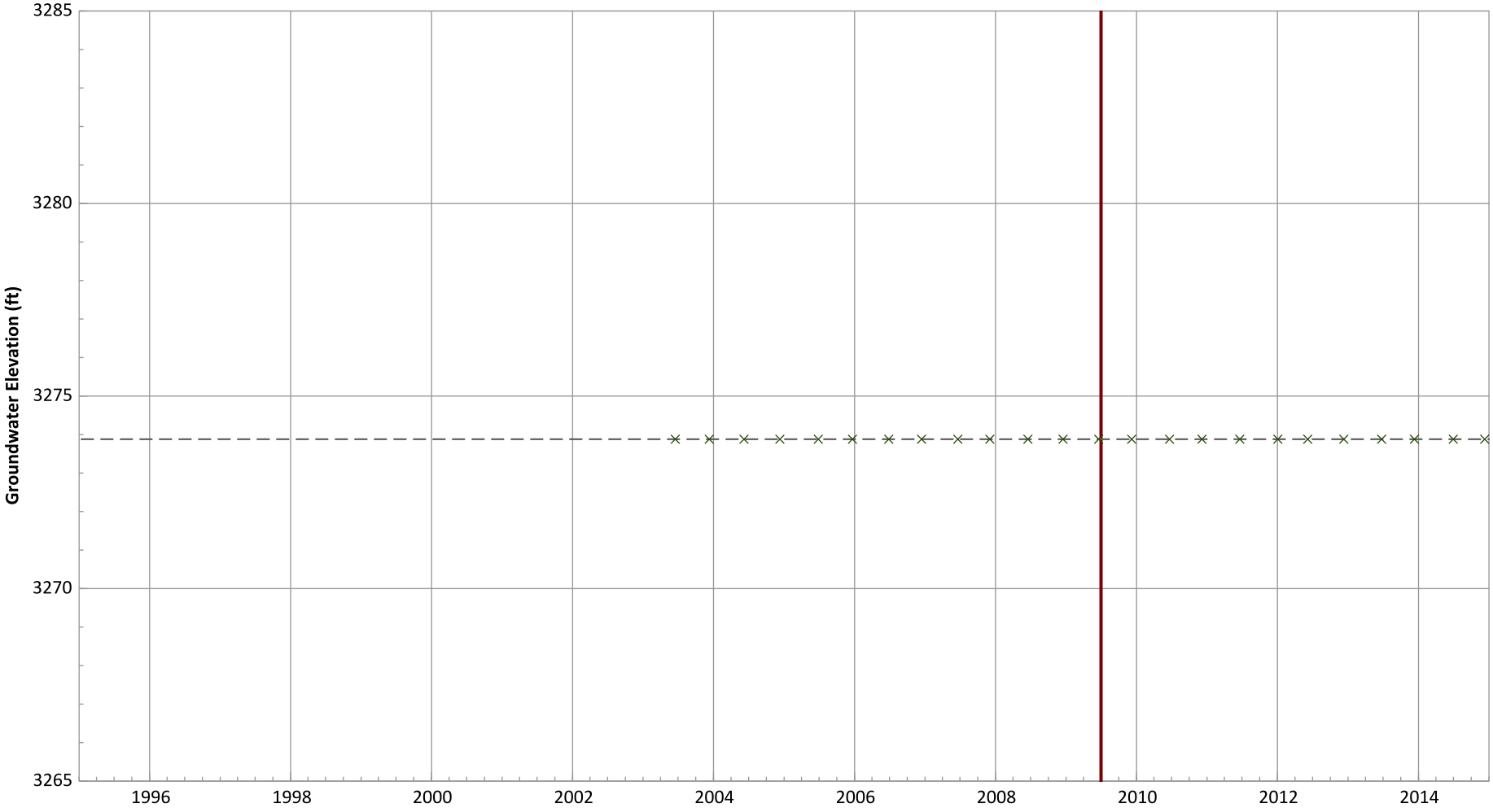
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.34 ft/yr

PTX06-1055 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

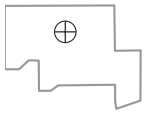


Notes:
1. Top of screen elevation is 3303.88 ft msl.
2. The bottom of screen elevation is 3273.88 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

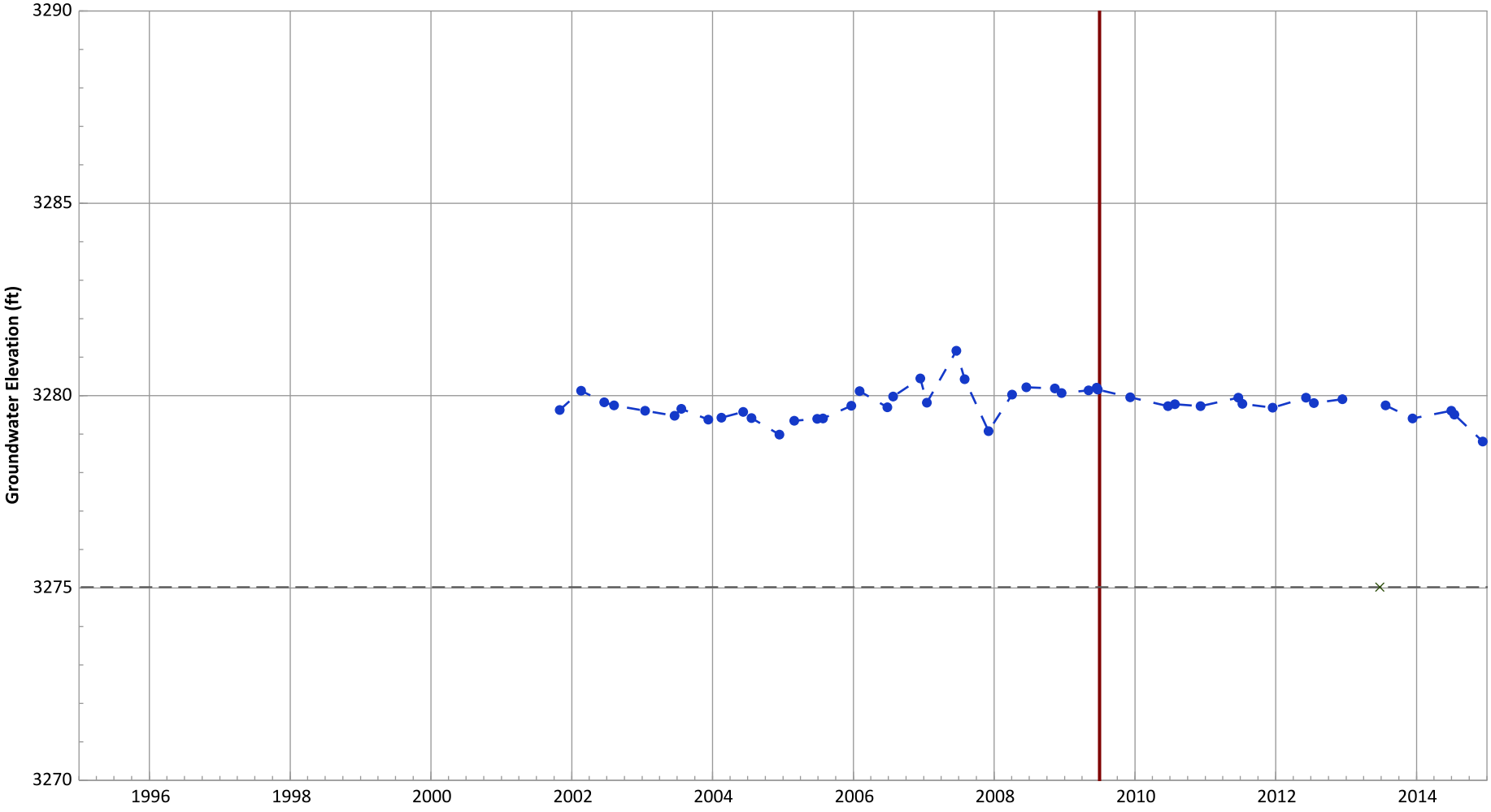
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1069 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

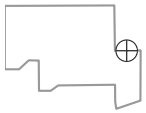


Notes:
1. Top of screen elevation is 3295.02 ft msl.
2. The bottom of screen elevation is 3275.02 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

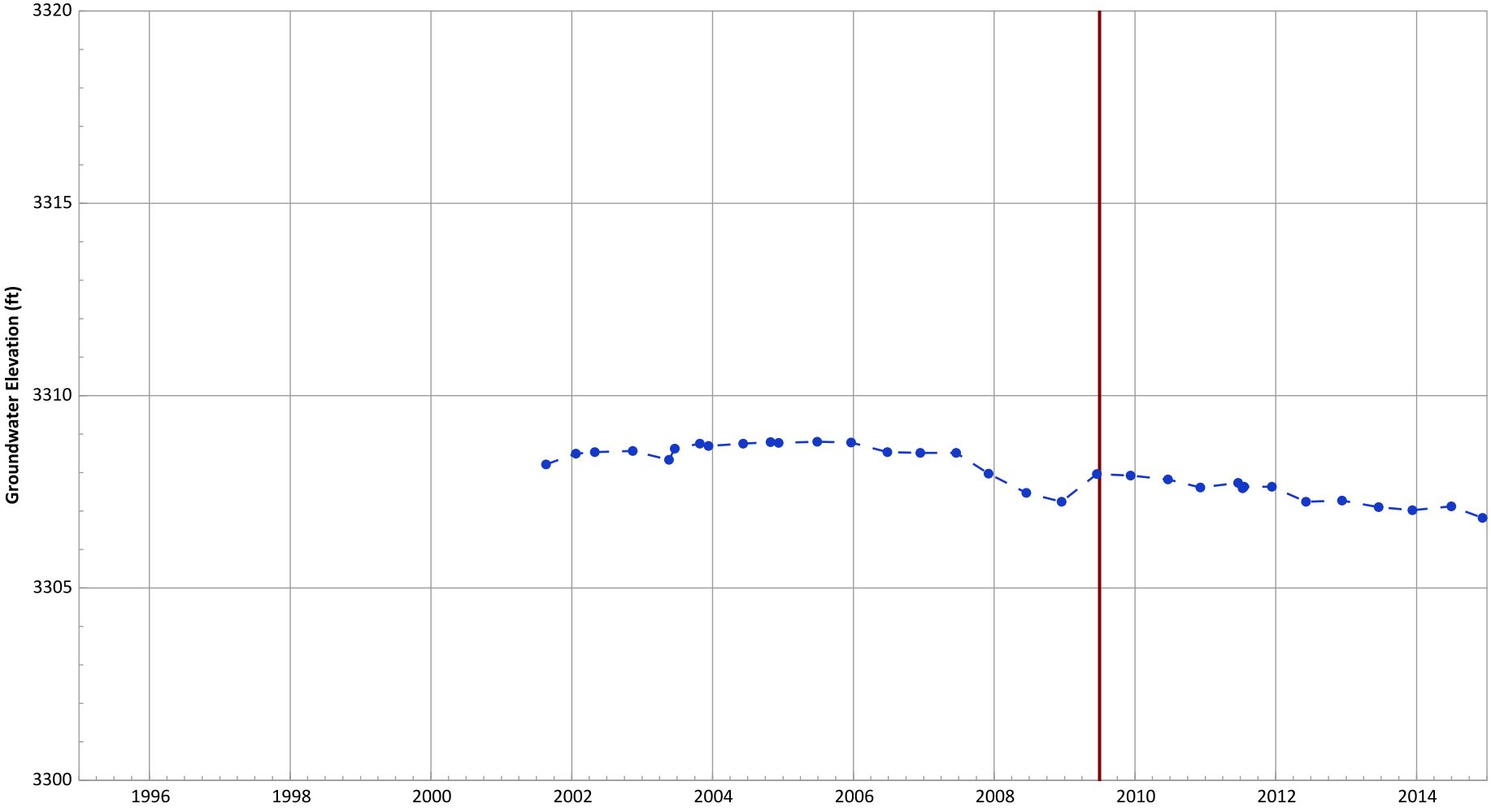
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.31 ft/yr

PTX06-1071 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

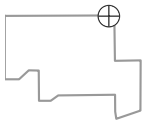


Notes:
1. Top of screen elevation is 3299.13 ft msl.
2. The bottom of screen elevation is 3269.13 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

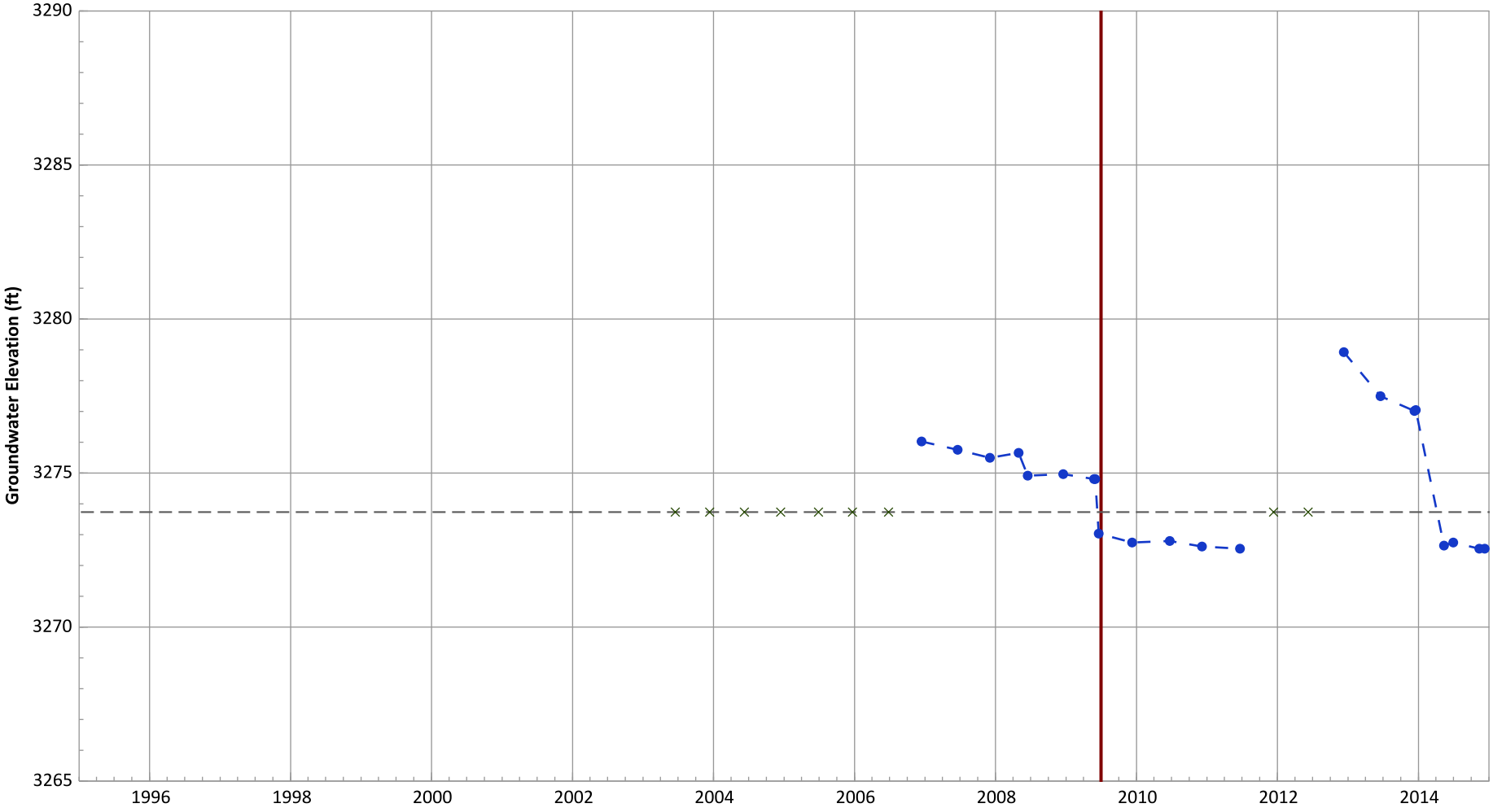
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.14 ft/yr
2012 - 2014 Data: Decreasing at 0.15 ft/yr

PTX06-1073A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

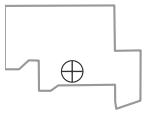


Notes:
1. Top of screen elevation is 3303.73 ft msl.
2. The bottom of screen elevation is 3273.73 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

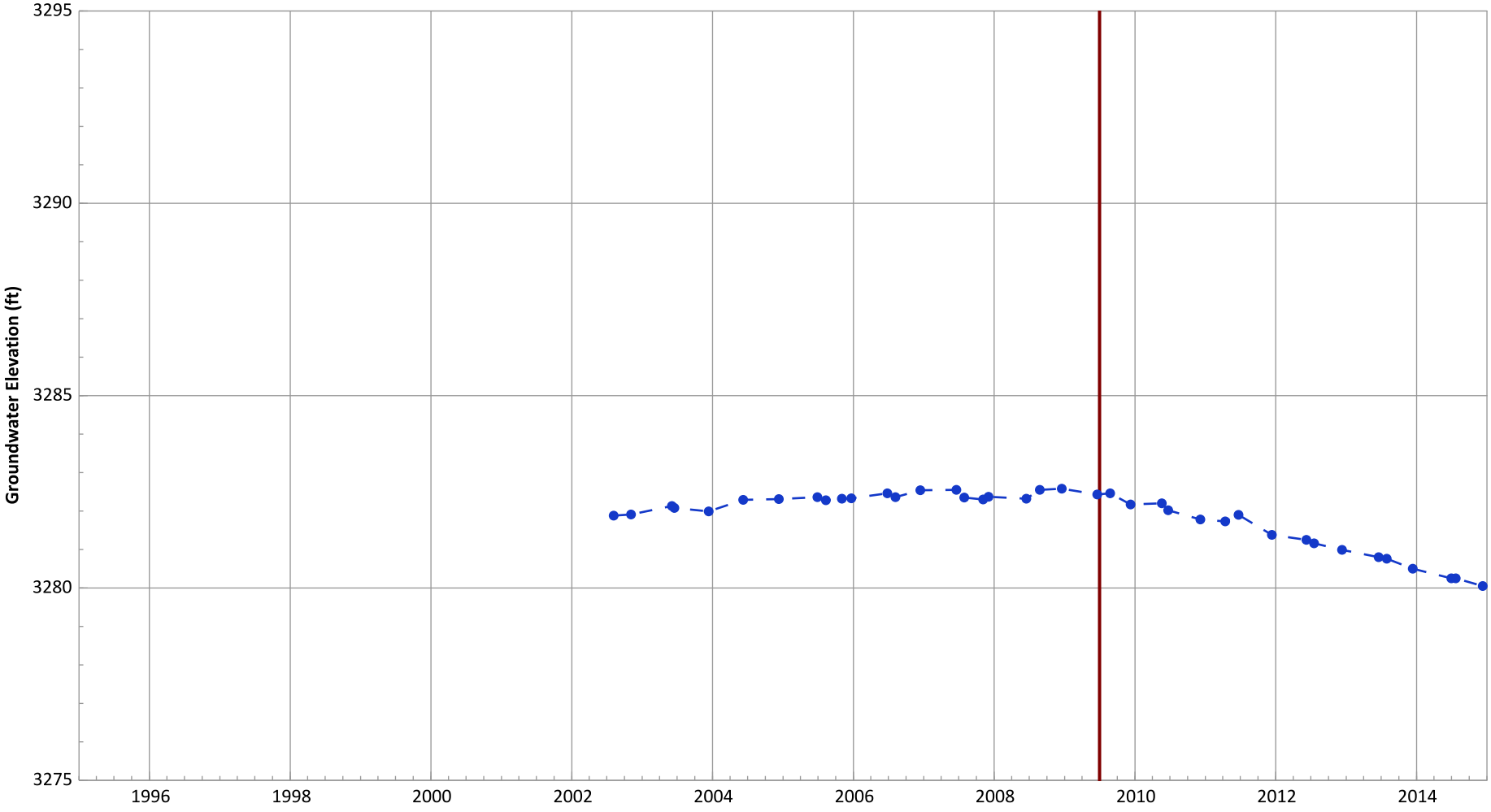
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 3.69 ft/yr

PTX06-1077A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

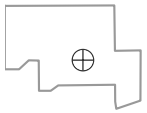


Notes:
1. Top of screen elevation is 3297.45 ft msl.
2. The bottom of screen elevation is 3272.45 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

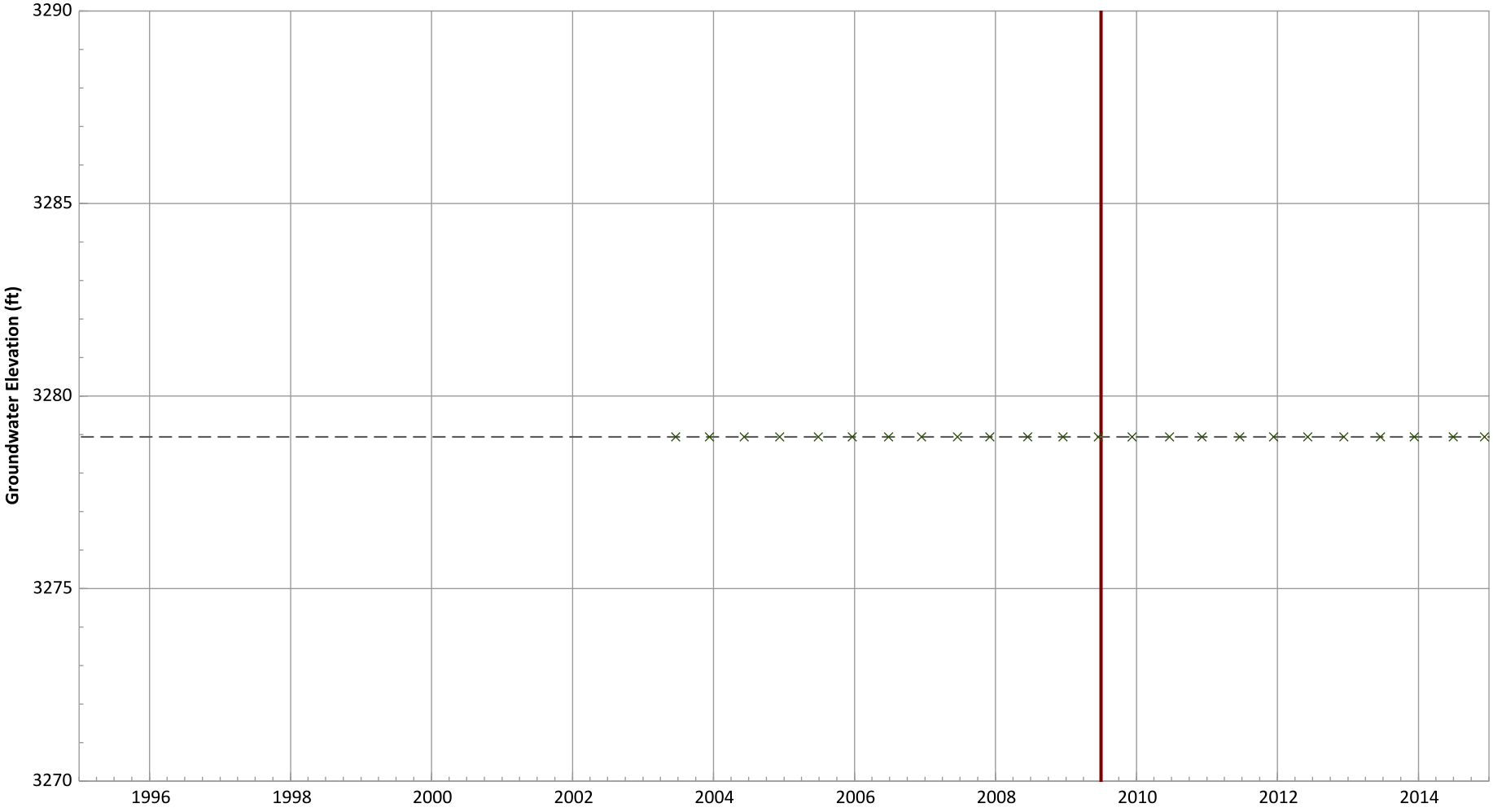
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.15 ft/yr
2012 - 2014 Data: Decreasing at 0.47 ft/yr

PTX06-1078 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

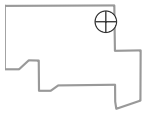


Notes:
1. Top of screen elevation is 3293.94 ft msl.
2. The bottom of screen elevation is 3278.94 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

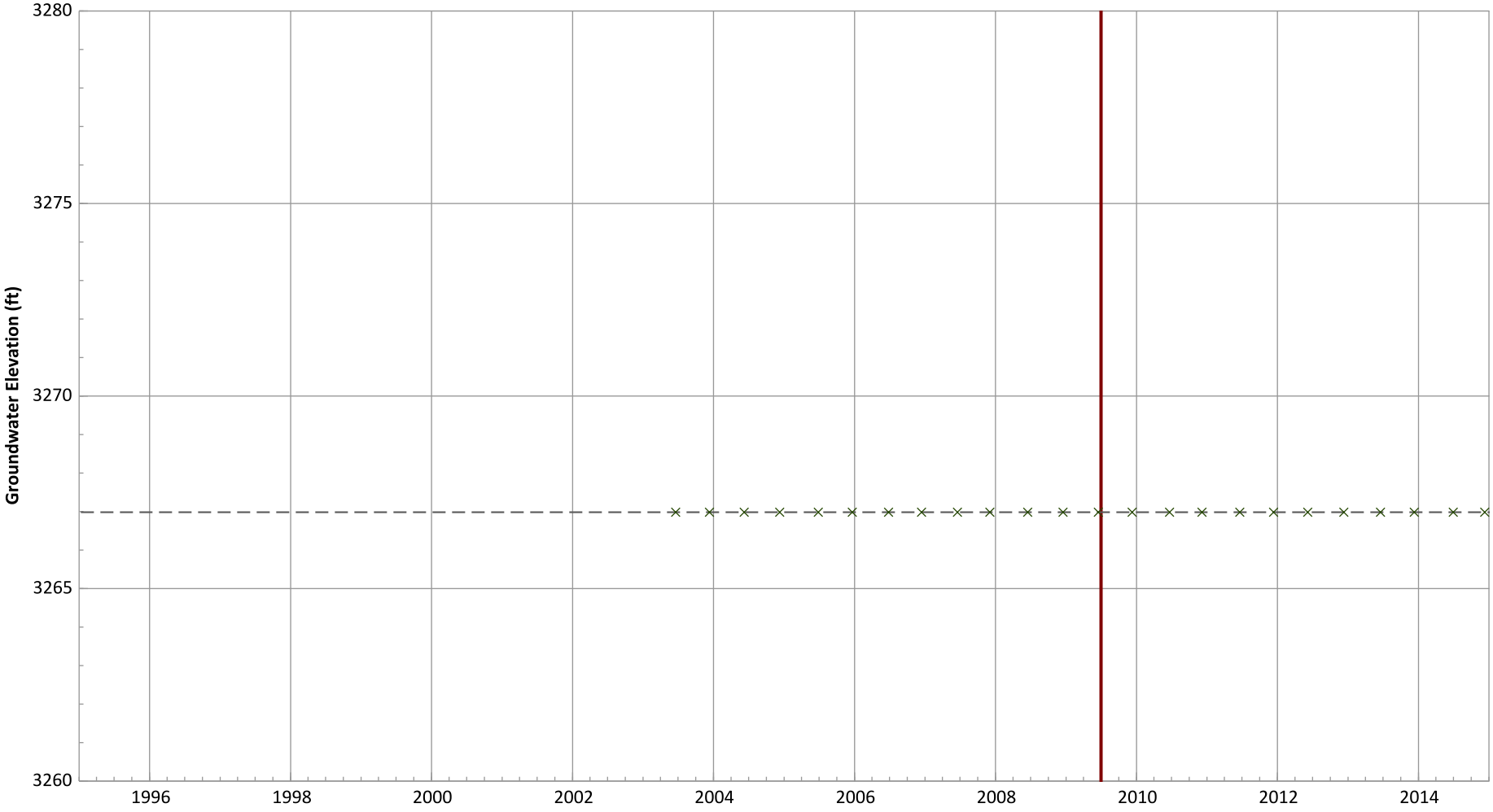
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1079 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

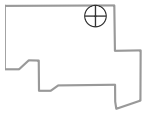


Notes:
1. Top of screen elevation is 3296.98 ft msl.
2. The bottom of screen elevation is 3266.98 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

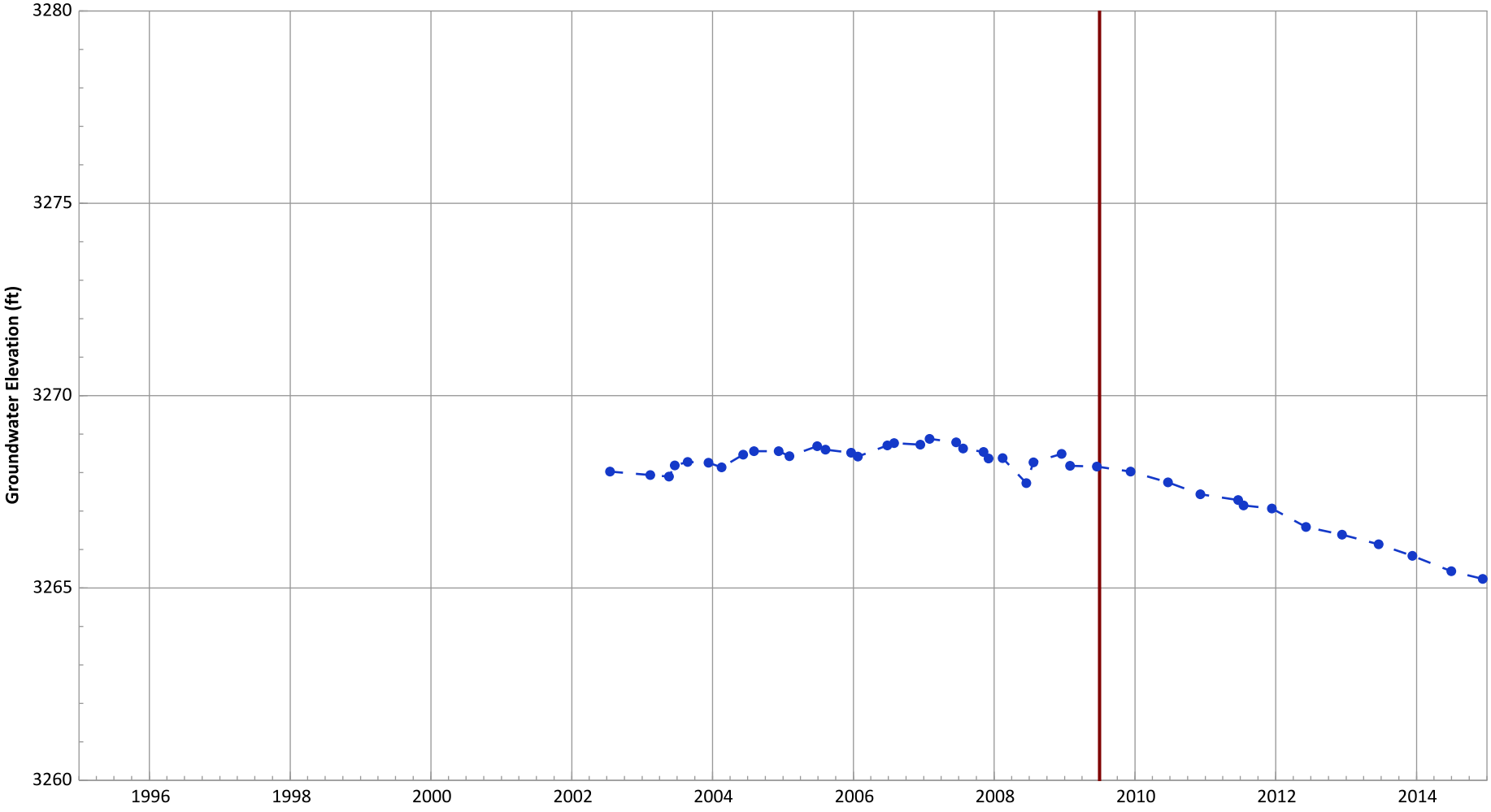
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1080 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

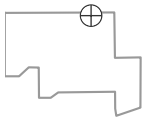


Notes:
1. Top of screen elevation is 3280.12 ft msl.
2. The bottom of screen elevation is 3250.12 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

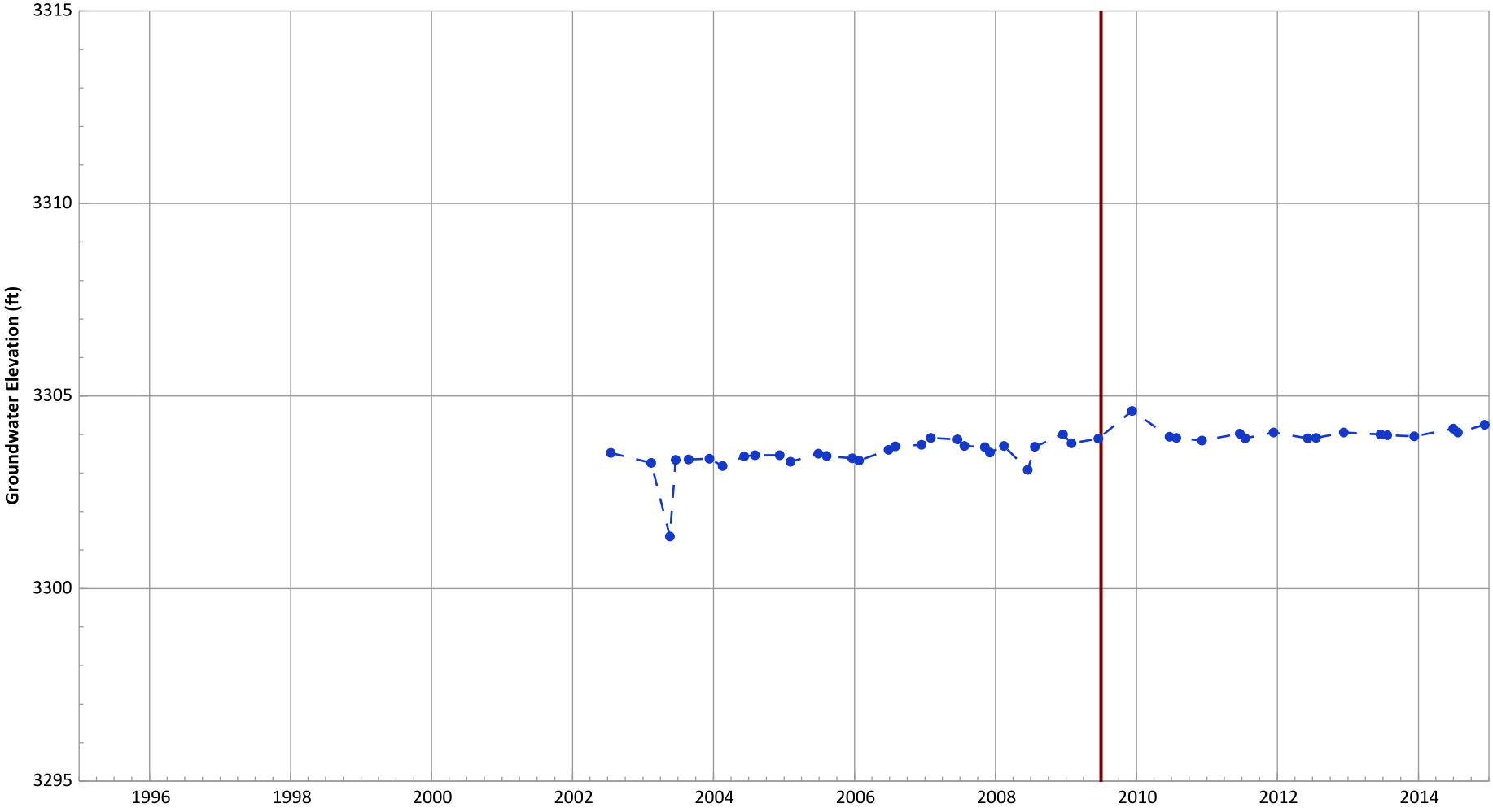
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.22 ft/yr
2012 - 2014 Data: Decreasing at 0.56 ft/yr

PTX06-1081 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

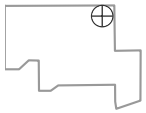


Notes:
1. Top of screen elevation is 3316.5 ft msl.
2. The bottom of screen elevation is 3286.5 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

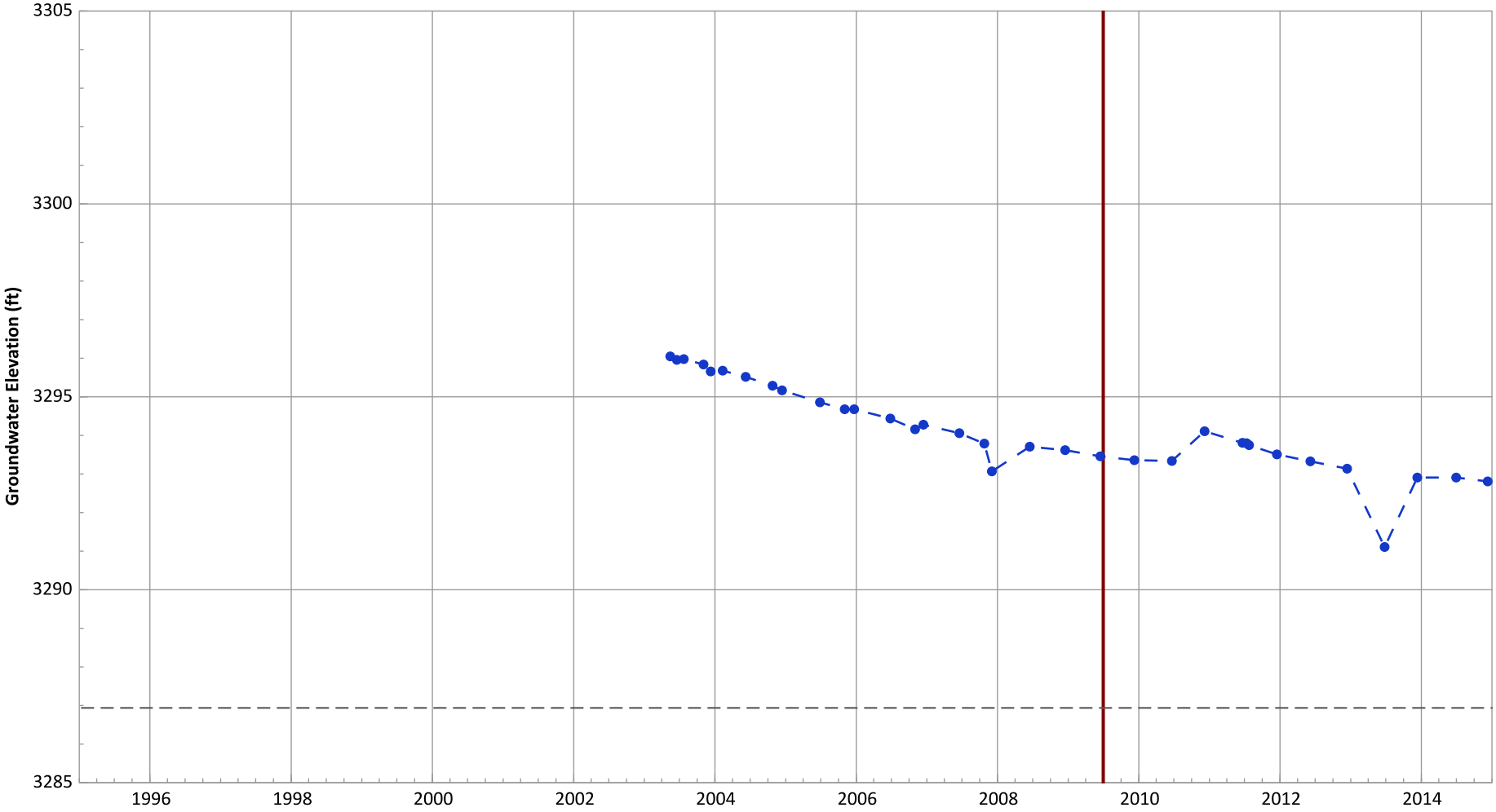
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Increasing at 0.1 ft/yr

PTX06-1082 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

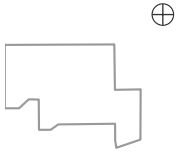


Notes:
1. Top of screen elevation is 3311.94 ft msl.
2. The bottom of screen elevation is 3286.94 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

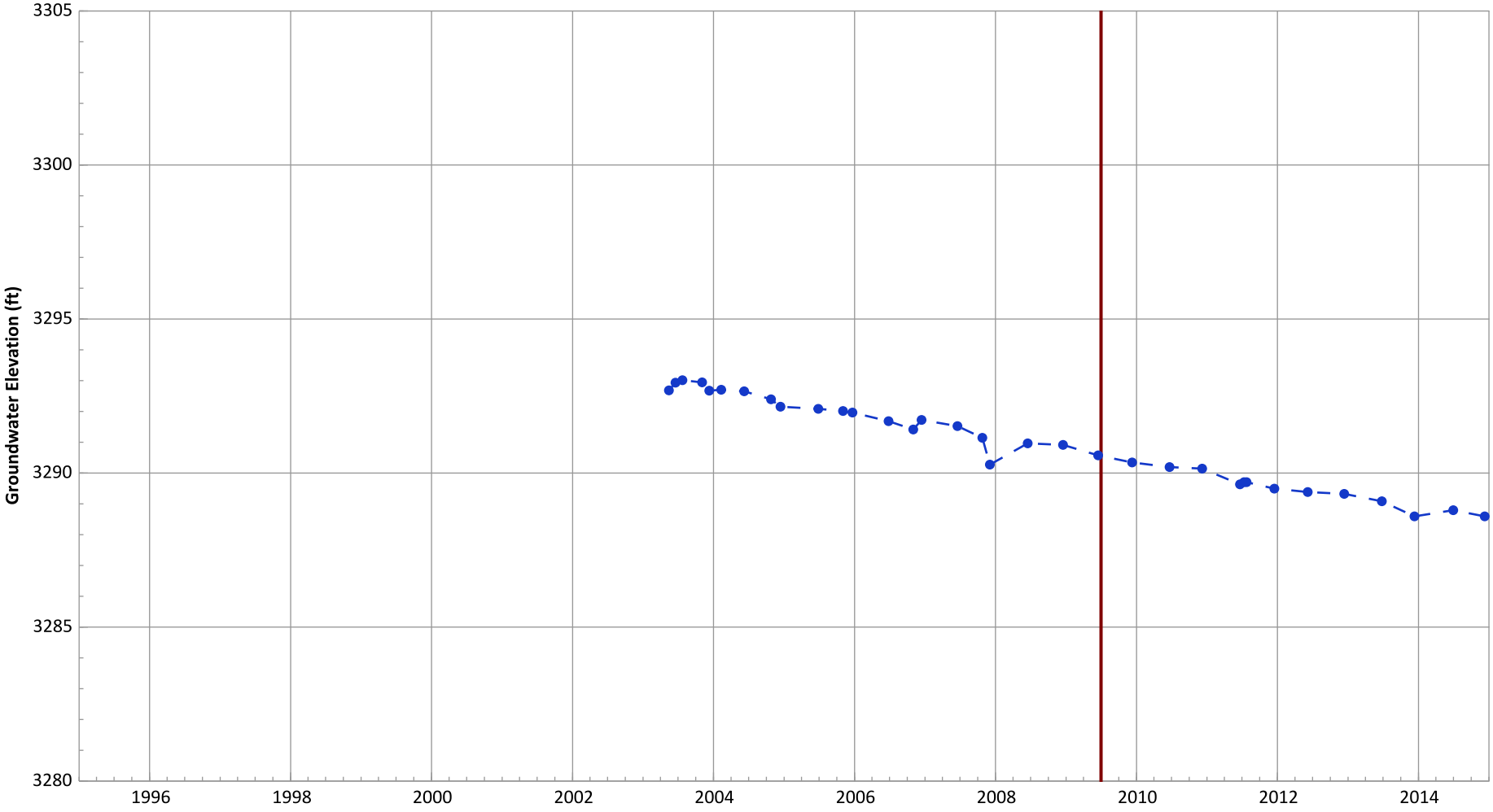
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.28 ft/yr
2012 - 2014 Data: No Trend

PTX06-1083 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant



Notes:
1. Top of screen elevation is 3299.91 ft msl.
2. The bottom of screen elevation is 3269.91 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

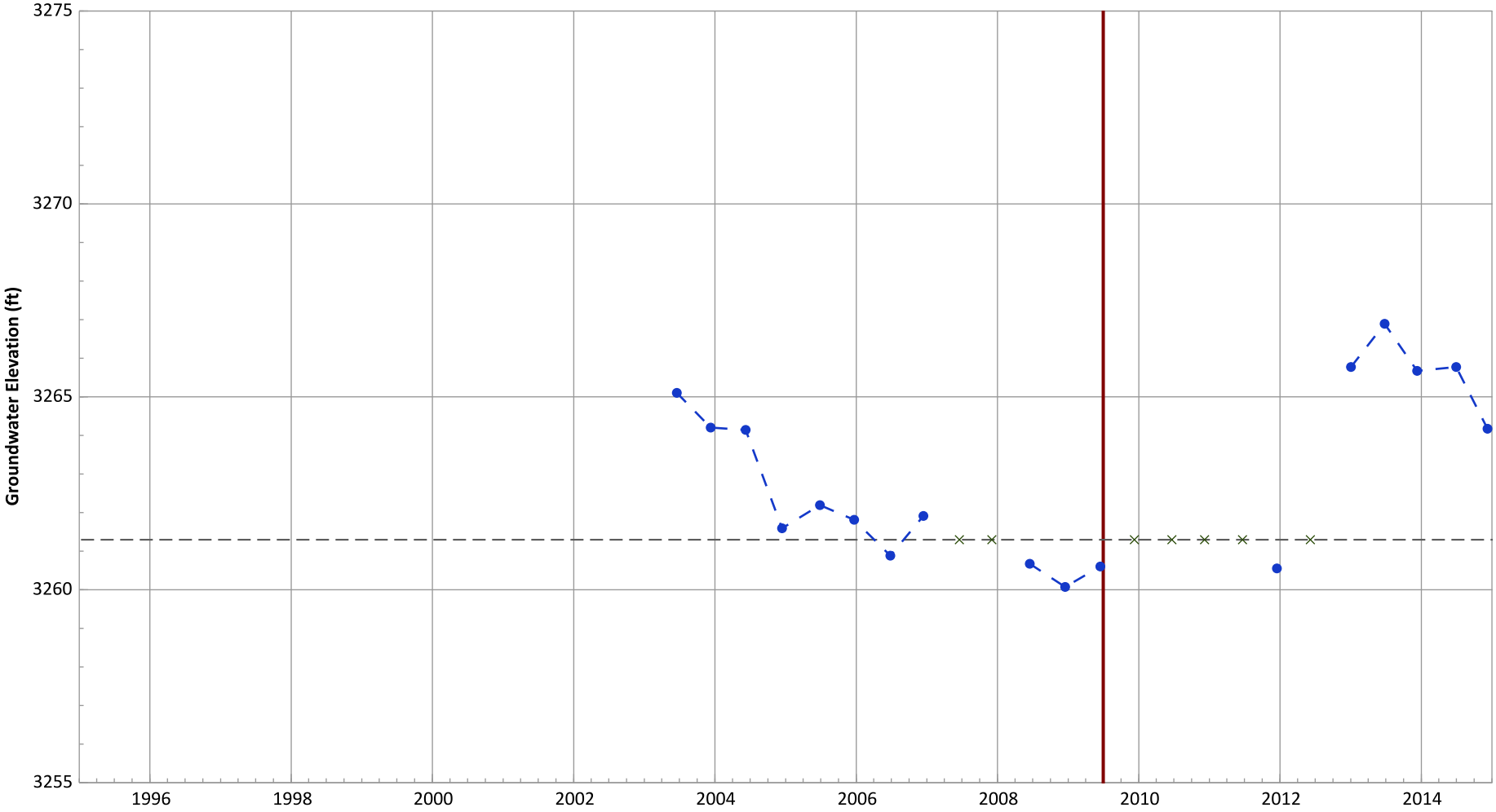
Analysis Date: 04/06/2015

Groundwater Elevation
Start of Remedial Action

Well Location

Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.39 ft/yr
2012 - 2014 Data: Decreasing at 0.34 ft/yr

PTX06-1084 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant



Notes:
1. Top of screen elevation is 3281.3 ft msl.
2. The bottom of screen elevation is 3261.3 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

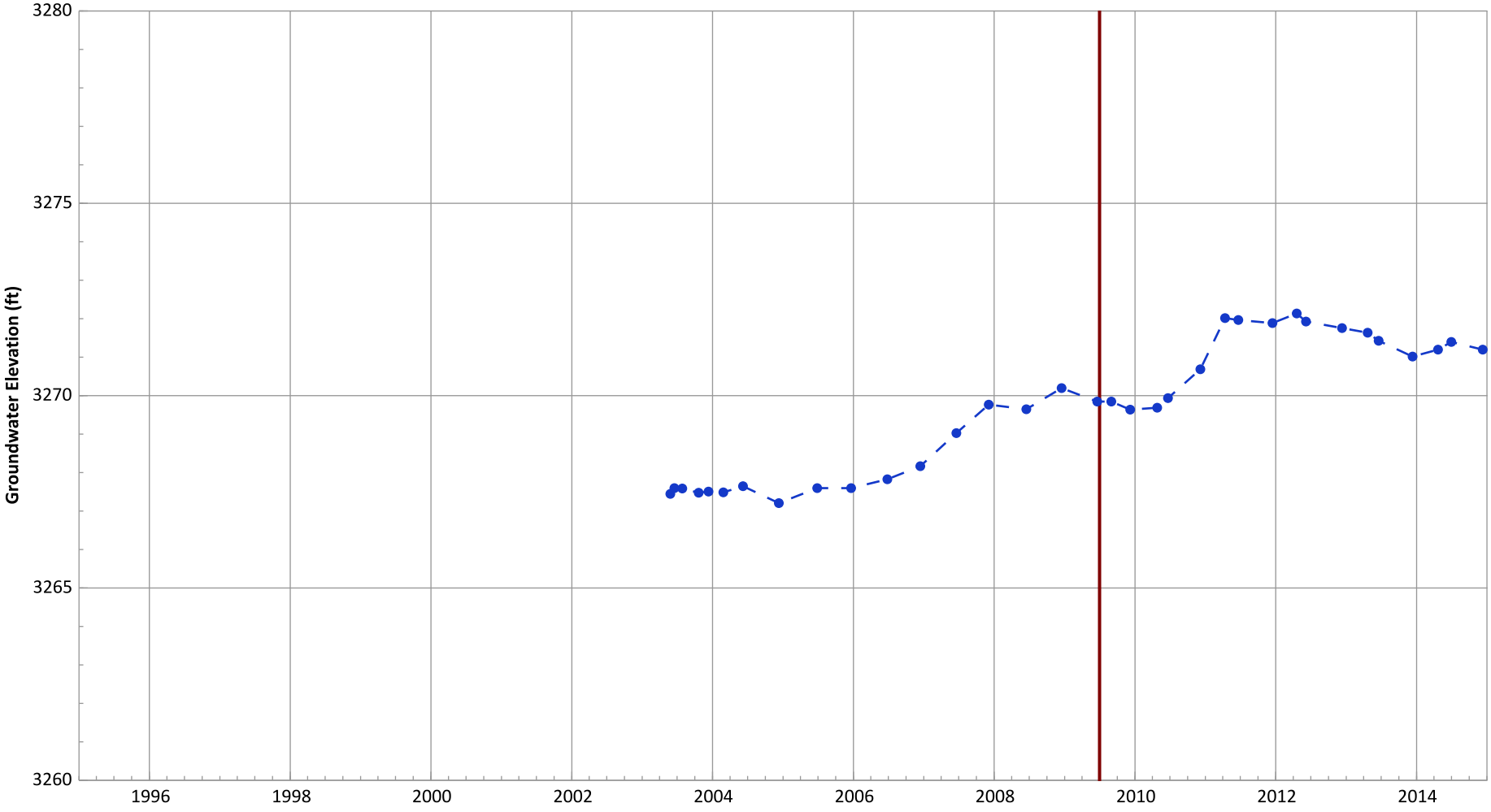
Analysis Date: 04/06/2015

Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location

Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.21 ft/yr
2012 - 2014 Data: Decreasing at 0.88 ft/yr

PTX06-1085 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

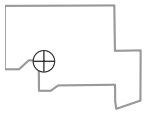


Notes:
1. Top of screen elevation is 3271.52 ft msl.
2. The bottom of screen elevation is 3246.52 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

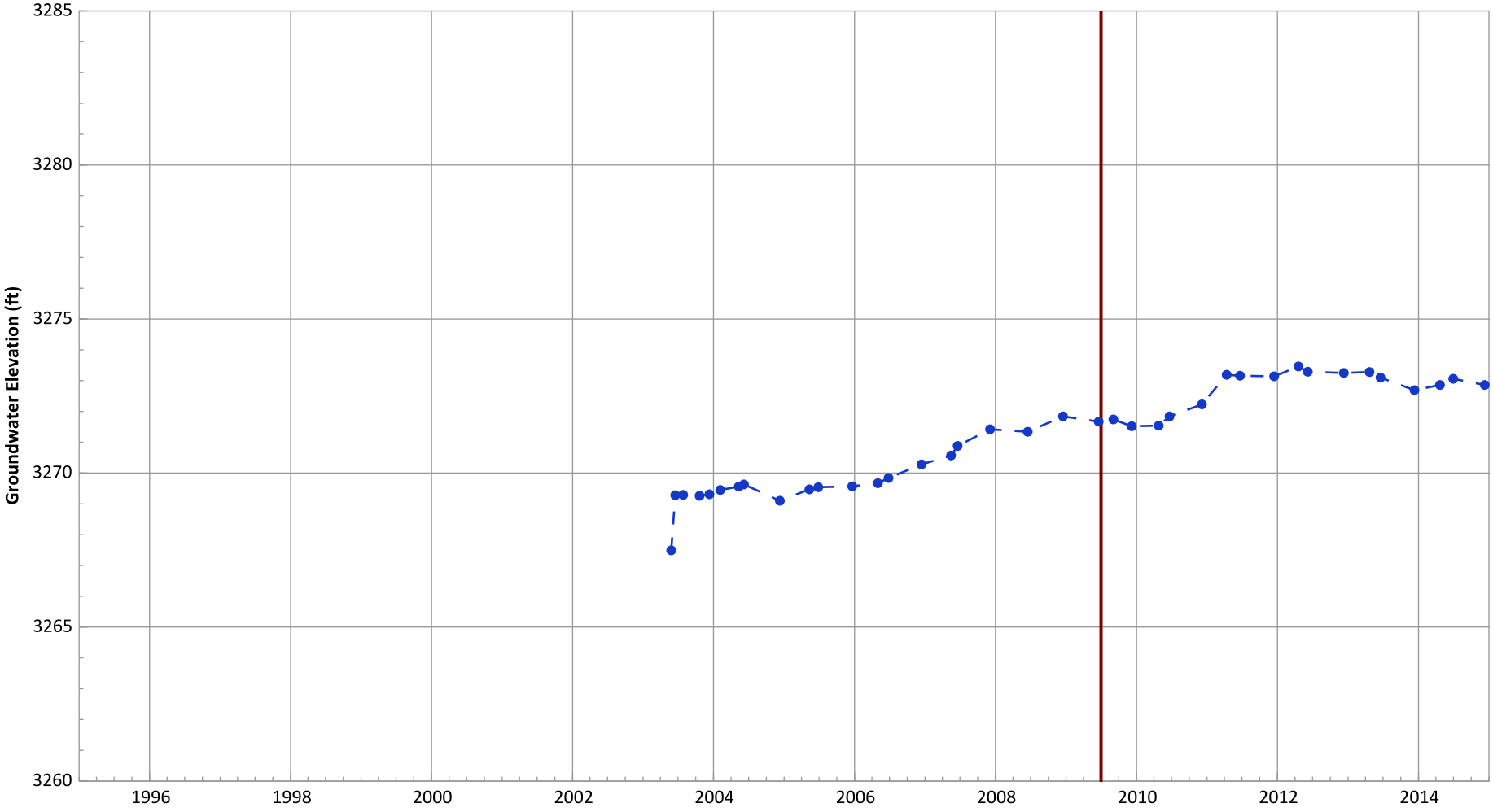
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.44 ft/yr
2012 - 2014 Data: Decreasing at 0.3 ft/yr

PTX06-1086 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

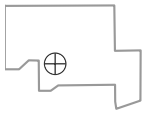


Notes:
1. Top of screen elevation is 3270.72 ft msl.
2. The bottom of screen elevation is 3225.72 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

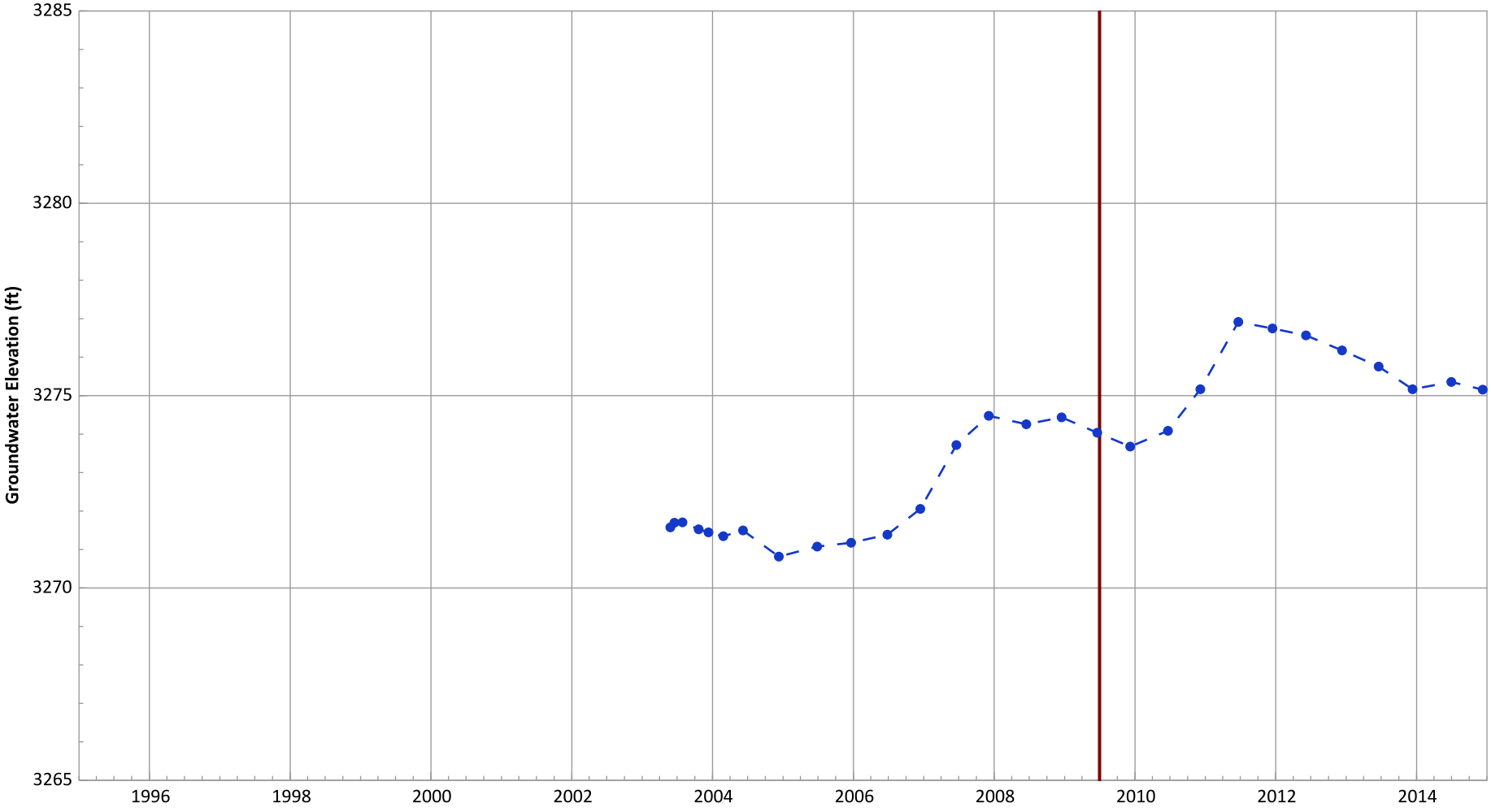
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.43 ft/yr
2012 - 2014 Data: Decreasing at 0.2 ft/yr

PTX06-1087 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

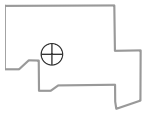


Notes:
1. Top of screen elevation is 3273.68 ft msl.
2. The bottom of screen elevation is 3243.68 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

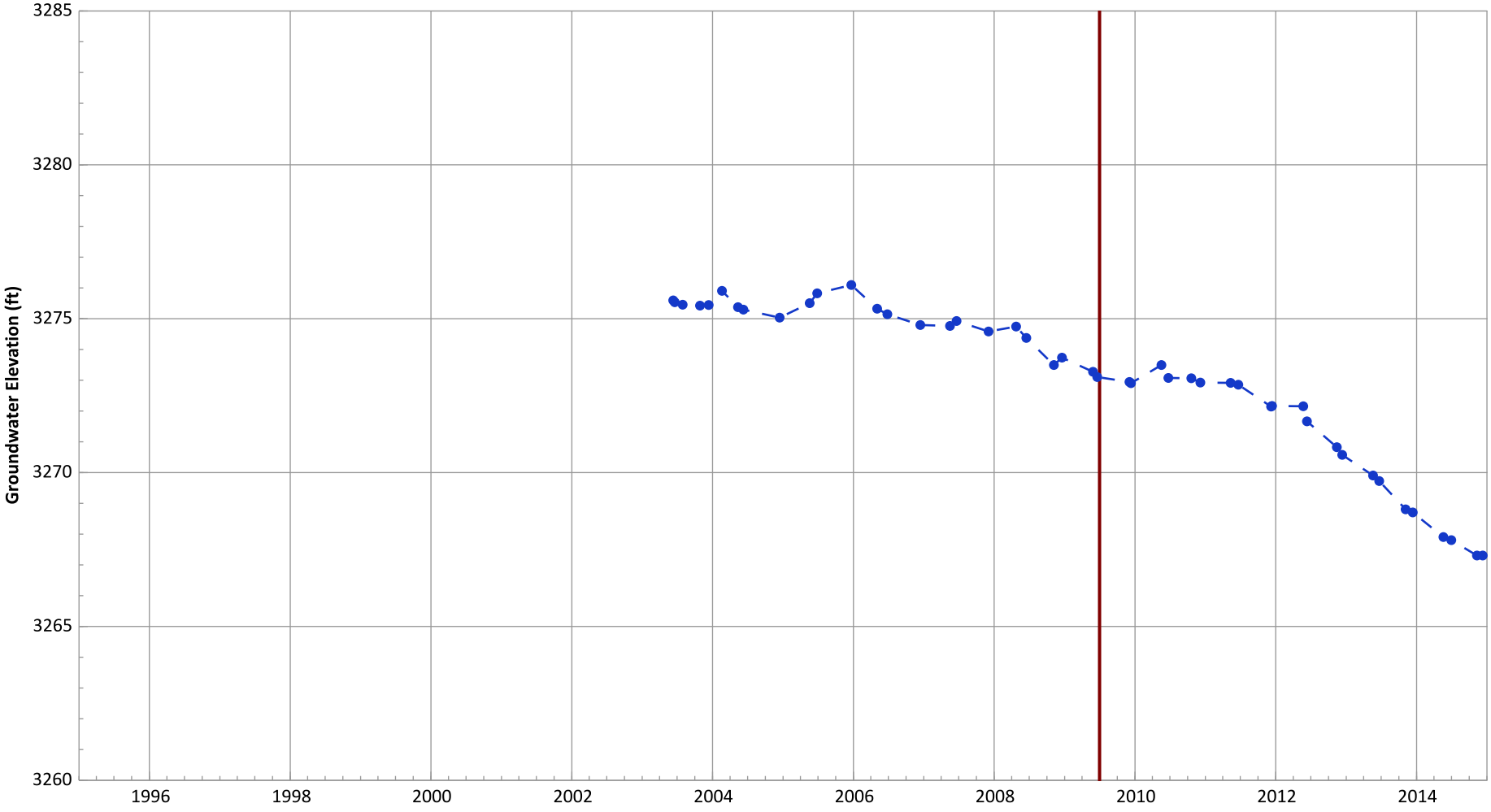
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.48 ft/yr
2012 - 2014 Data: Decreasing at 0.57 ft/yr

PTX06-1088 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

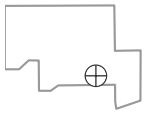


Notes:
1. Top of screen elevation is 3282.54 ft msl.
2. The bottom of screen elevation is 3247.54 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

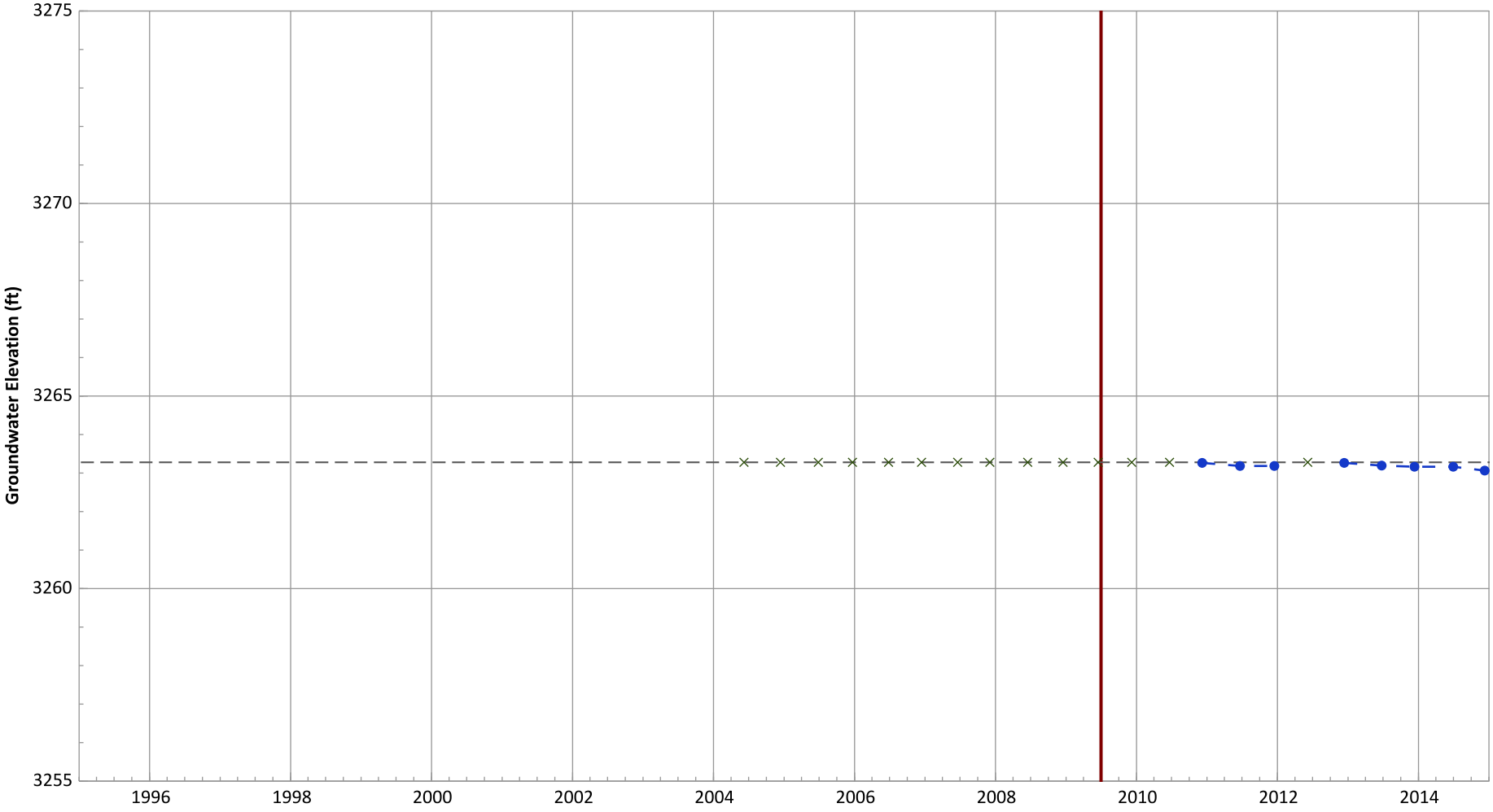
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.65 ft/yr
2012 - 2014 Data: Decreasing at 1.79 ft/yr

PTX06-1089 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

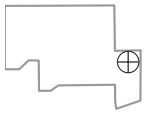


Notes:
1. Top of screen elevation is 3278.28 ft msl.
2. The bottom of screen elevation is 3263.28 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

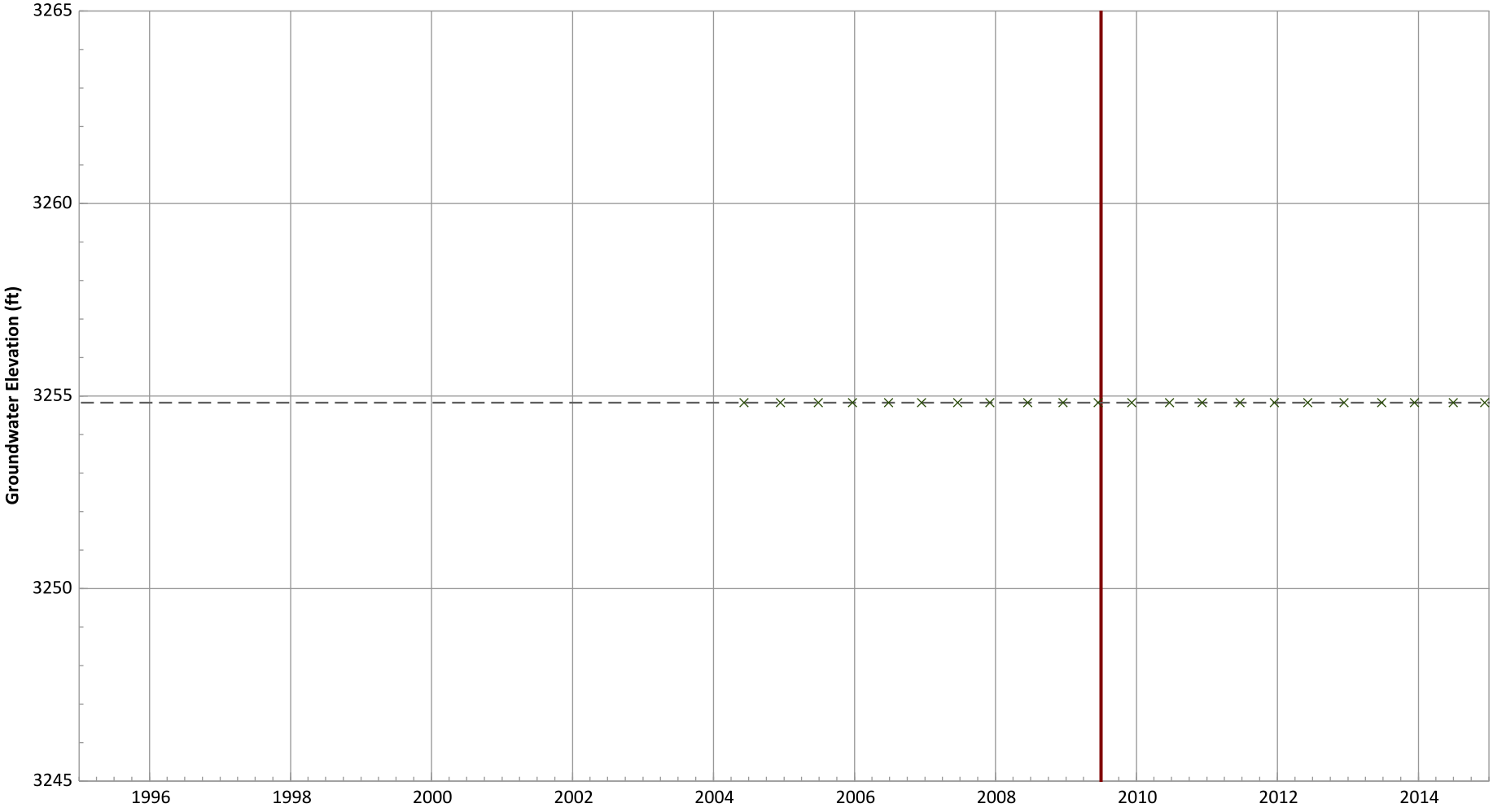
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-1090 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

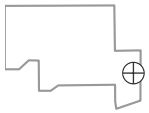


Notes:
1. Top of screen elevation is 3269.83 ft msl.
2. The bottom of screen elevation is 3254.83 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

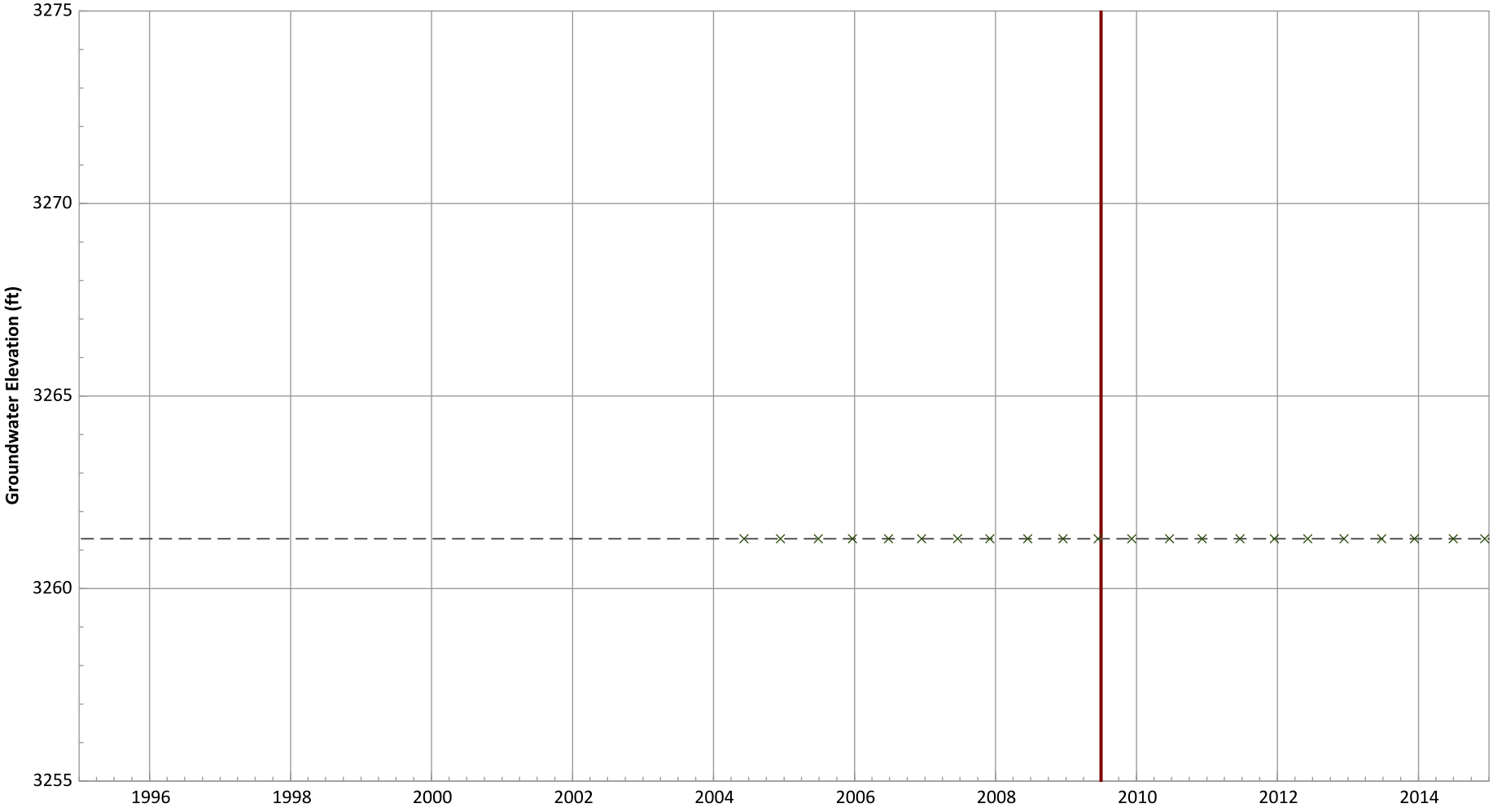
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1091 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

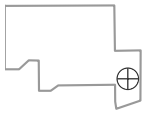


Notes:
1. Top of screen elevation is 3271.29 ft msl.
2. The bottom of screen elevation is 3261.29 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

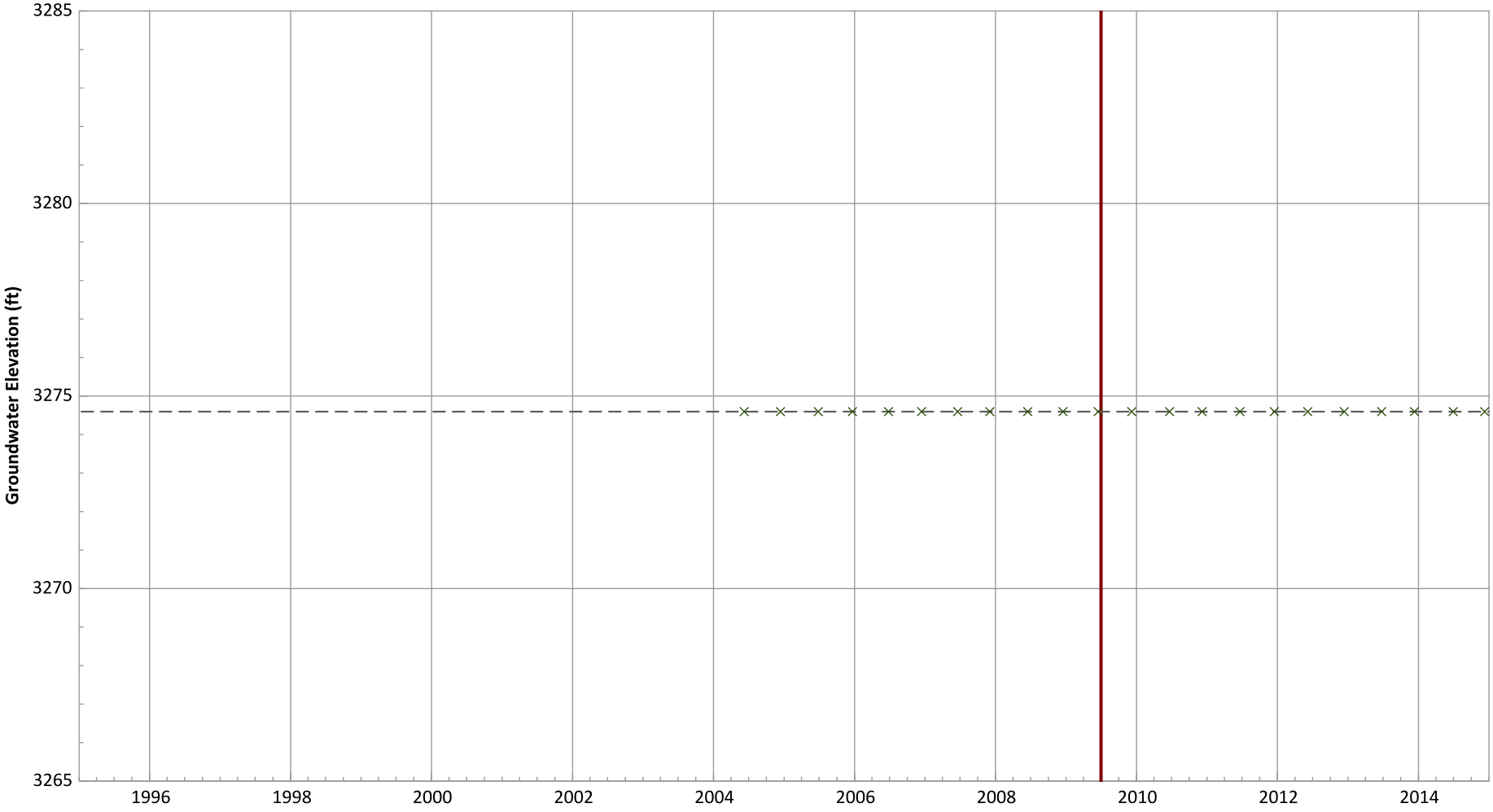
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1093 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

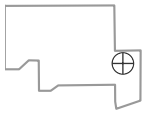


Notes:
1. Top of screen elevation is 3284.6 ft msl.
2. The bottom of screen elevation is 3274.6 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

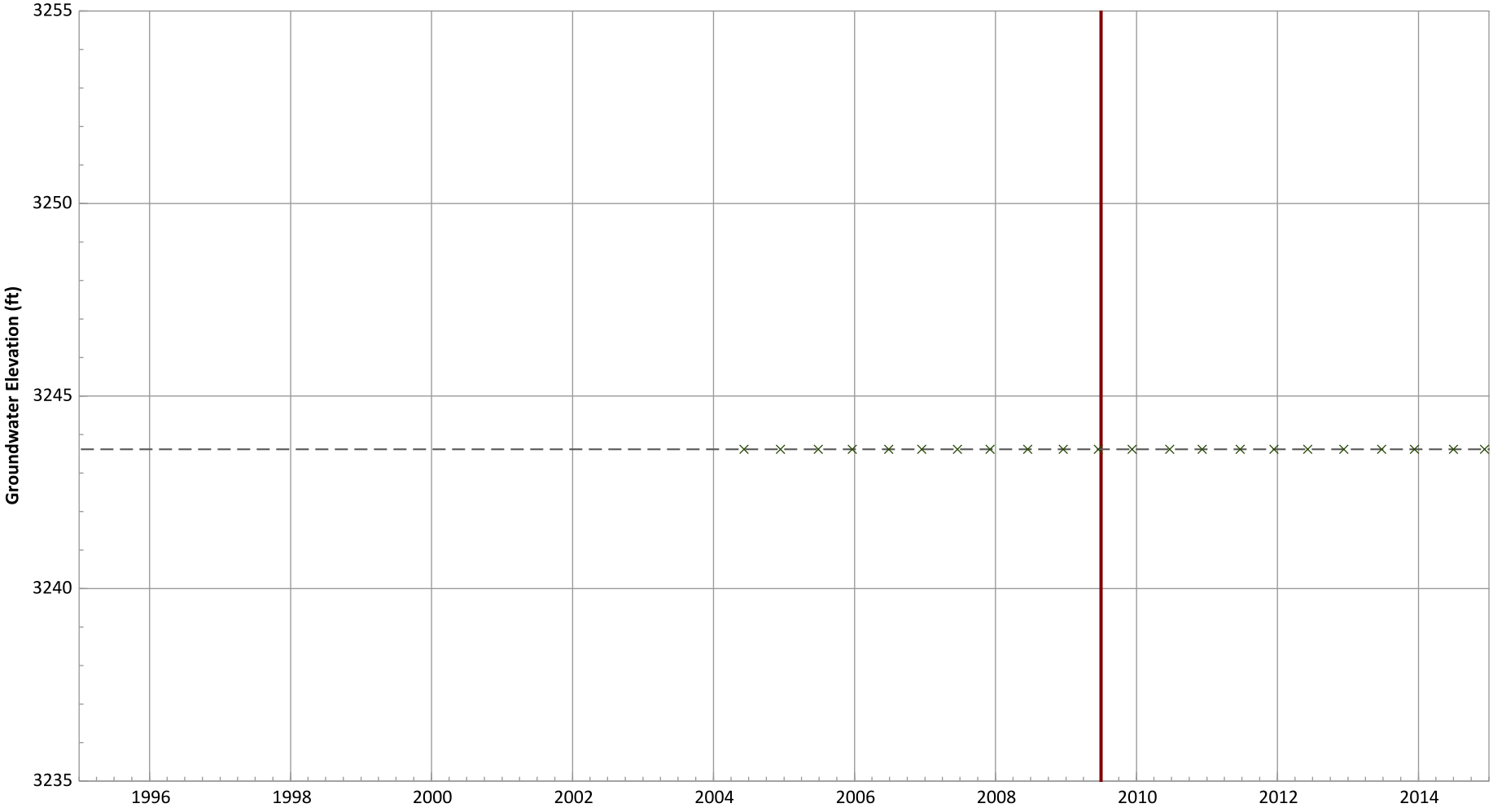
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1094 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

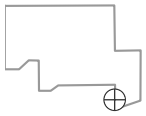


Notes:
1. Top of screen elevation is 3253.62 ft msl.
2. The bottom of screen elevation is 3243.62 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

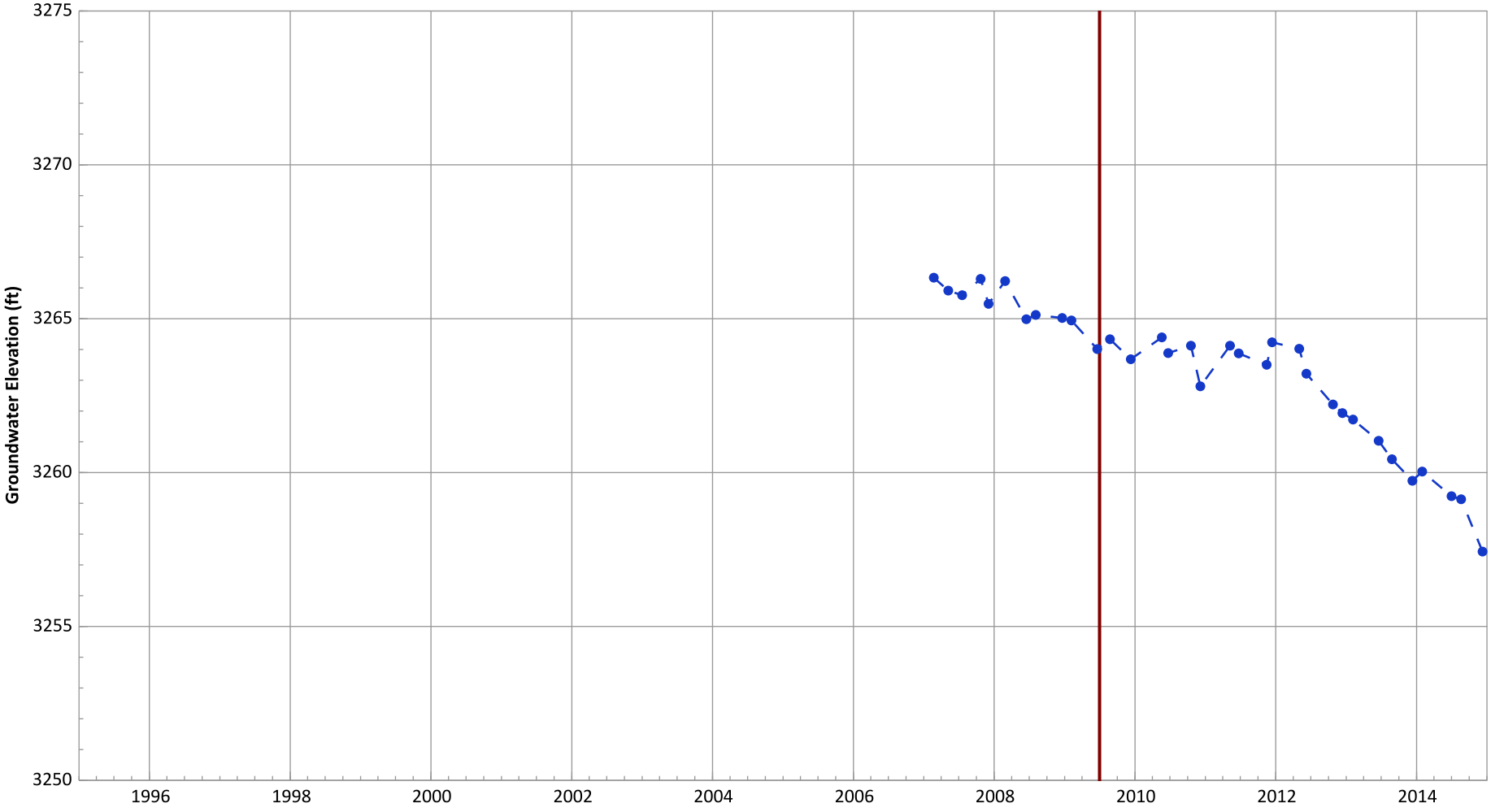
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1095A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

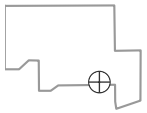


Notes:
1. Top of screen elevation is 3271.23 ft msl.
2. The bottom of screen elevation is 3246.23 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

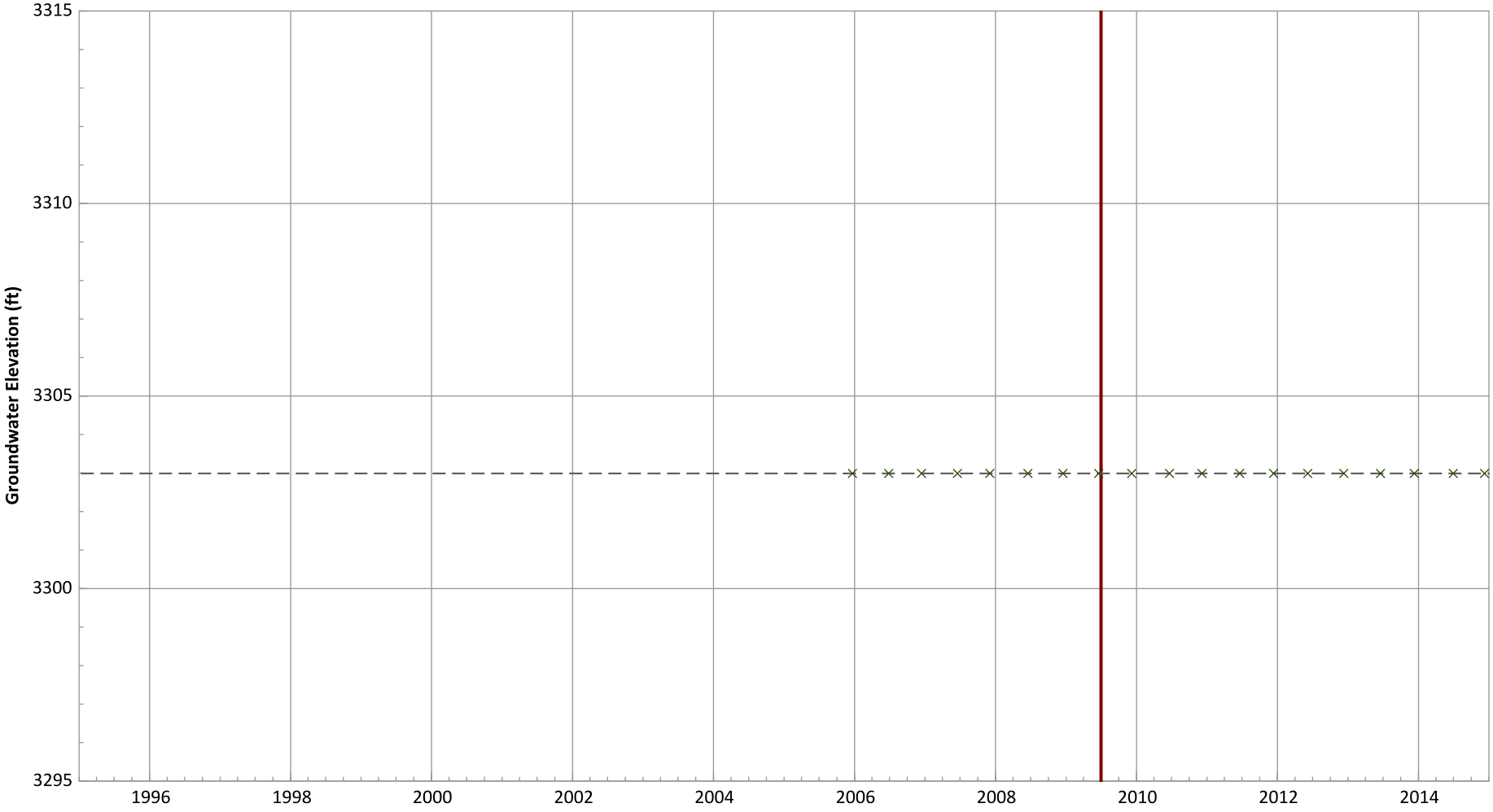
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.9 ft/yr
2012 - 2014 Data: Decreasing at 2.01 ft/yr

PTX06-1096A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

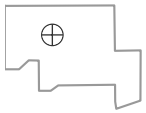


Notes:
1. Top of screen elevation is 3317.99 ft msl.
2. The bottom of screen elevation is 3302.99 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

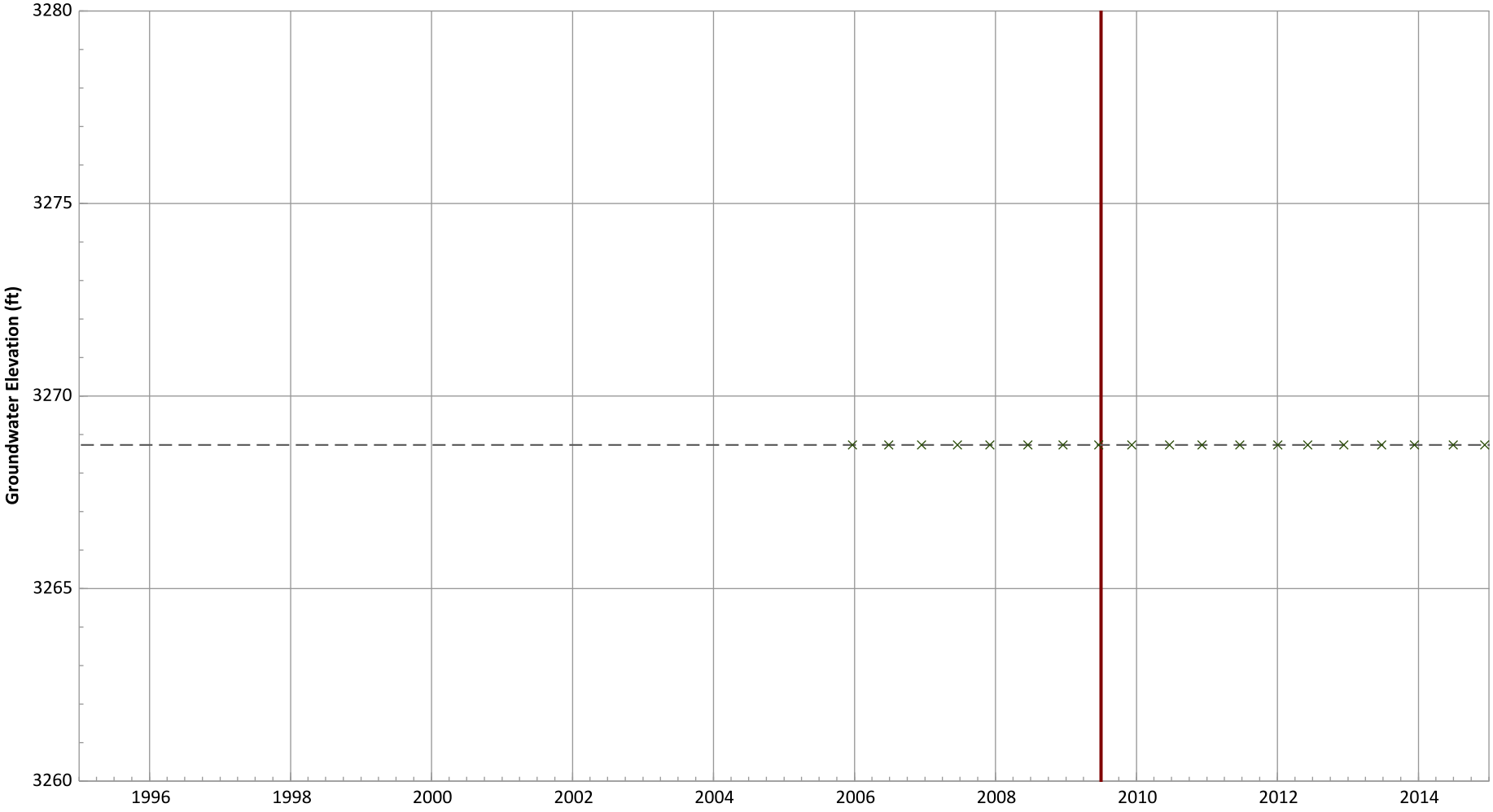
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1097 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

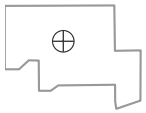


Notes:
1. Top of screen elevation is 3283.73 ft msl.
2. The bottom of screen elevation is 3268.73 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

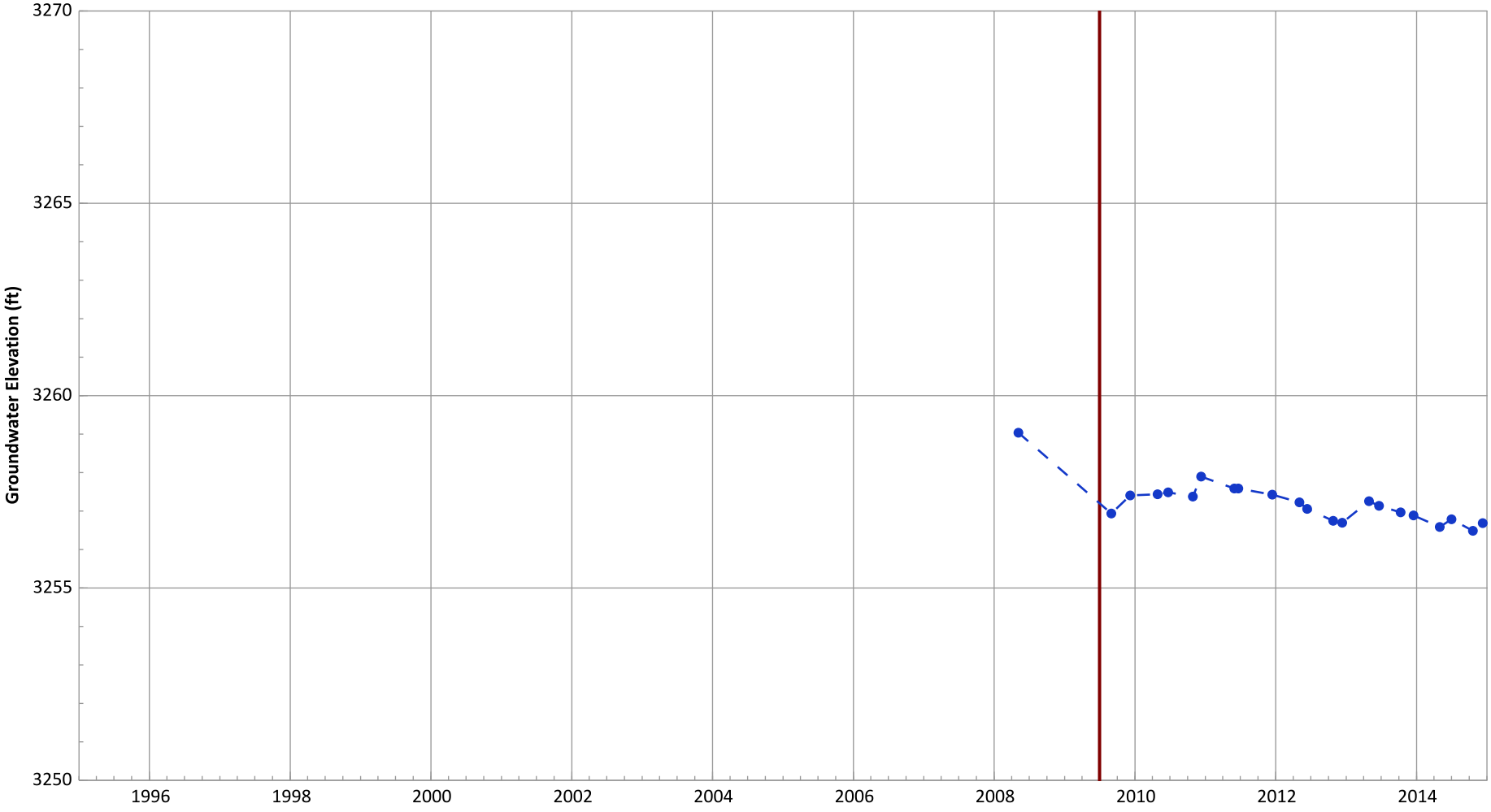
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1098 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

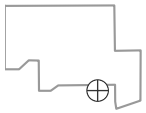


Notes:
1. Top of screen elevation is 3276.74 ft msl.
2. The bottom of screen elevation is 3241.74 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

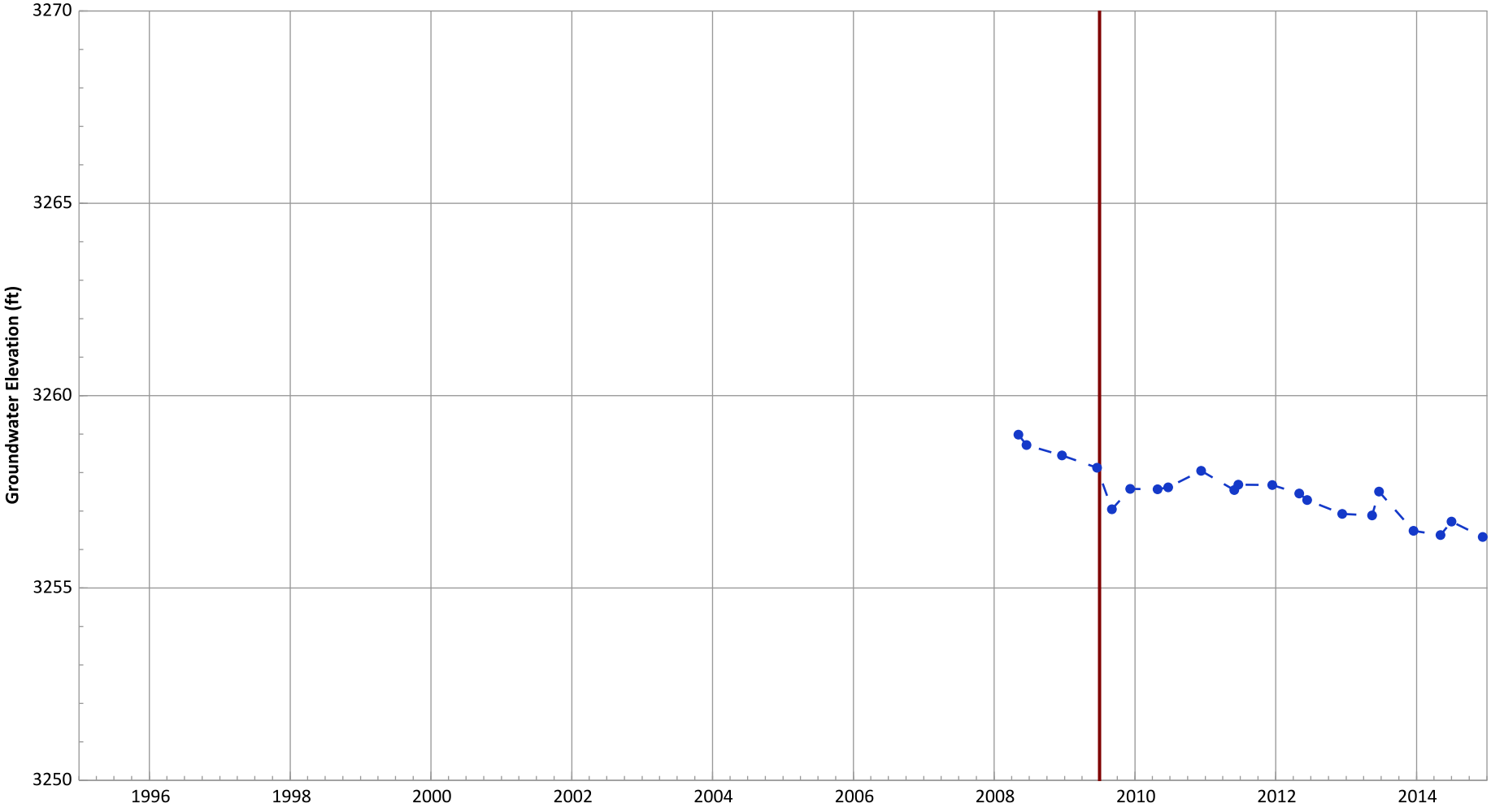
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.23 ft/yr
2012 - 2014 Data: Decreasing at 0.15 ft/yr

PTX06-1100 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

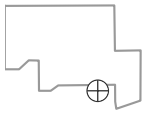


Notes:
1. Top of screen elevation is 3259.7 ft msl.
2. The bottom of screen elevation is 3244.7 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

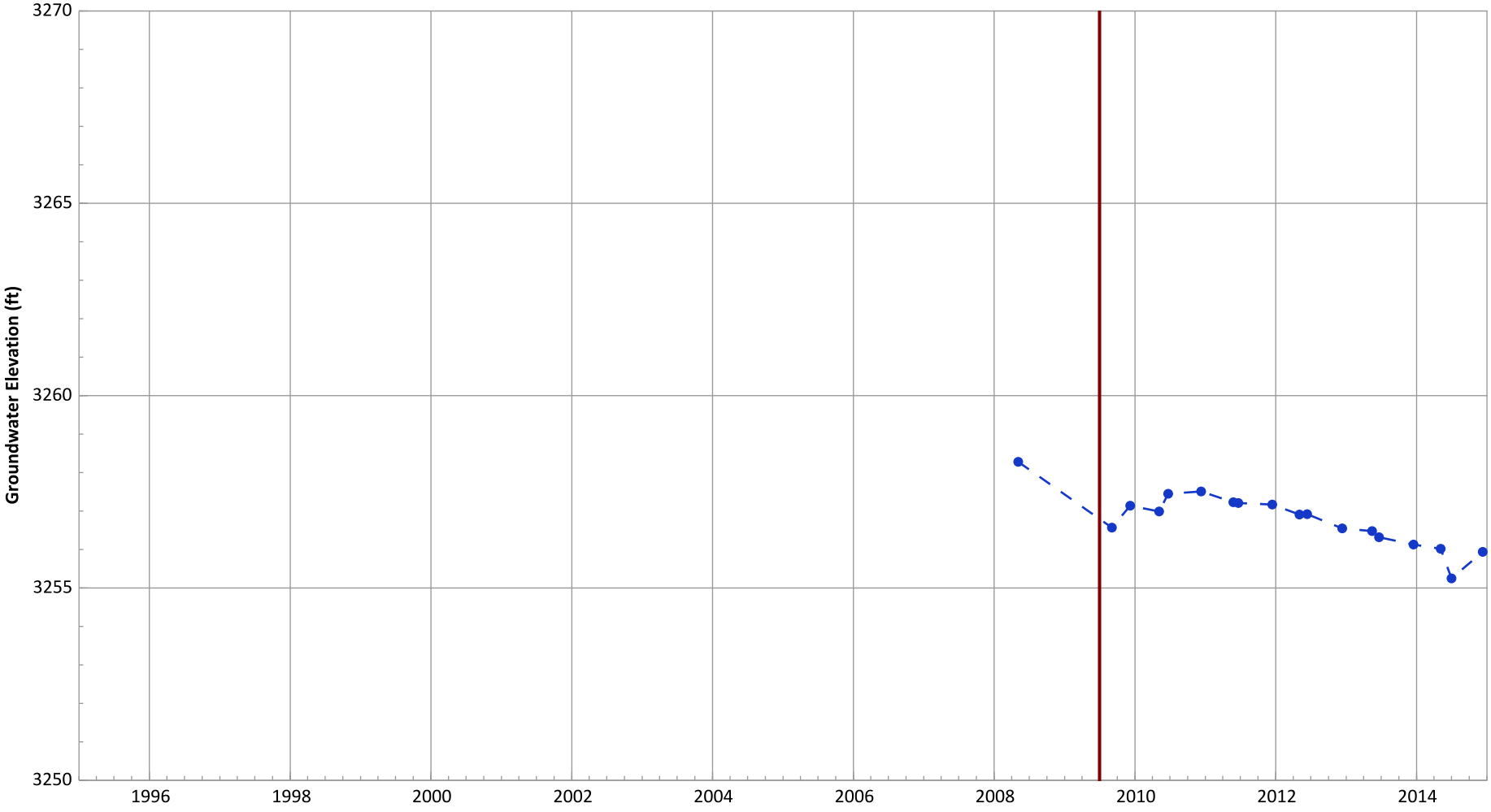
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.31 ft/yr
2012 - 2014 Data: Decreasing at 0.38 ft/yr

PTX06-1101 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

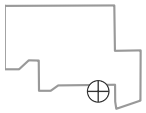


Notes:
1. Top of screen elevation is 3258.8 ft msl.
2. The bottom of screen elevation is 3243.8 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

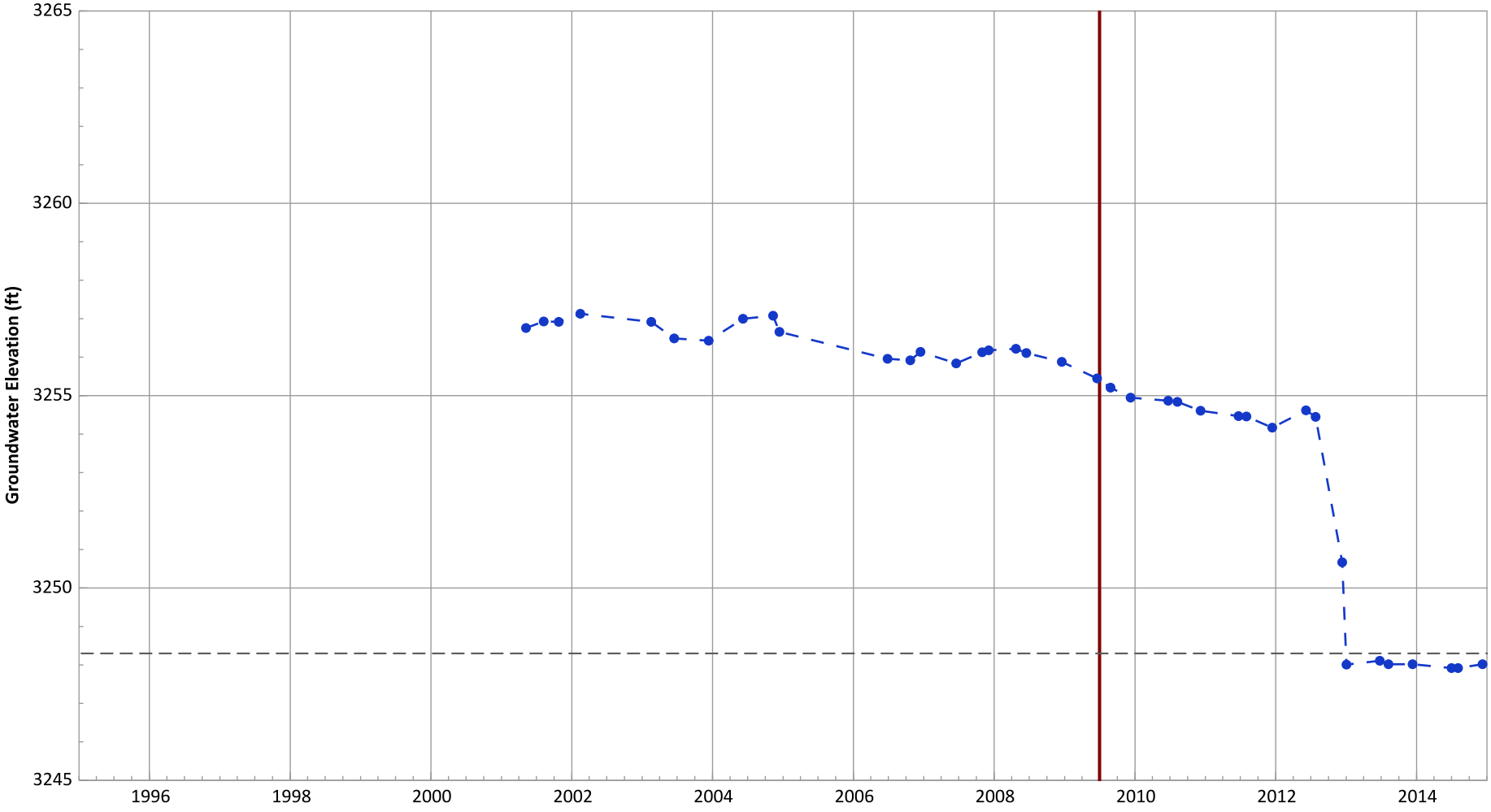
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.32 ft/yr
2012 - 2014 Data: Decreasing at 0.51 ft/yr

PTX06-1102 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

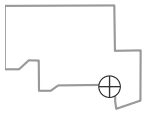


Notes:
1. Top of screen elevation is 3288.3 ft msl.
2. The bottom of screen elevation is 3248.3 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

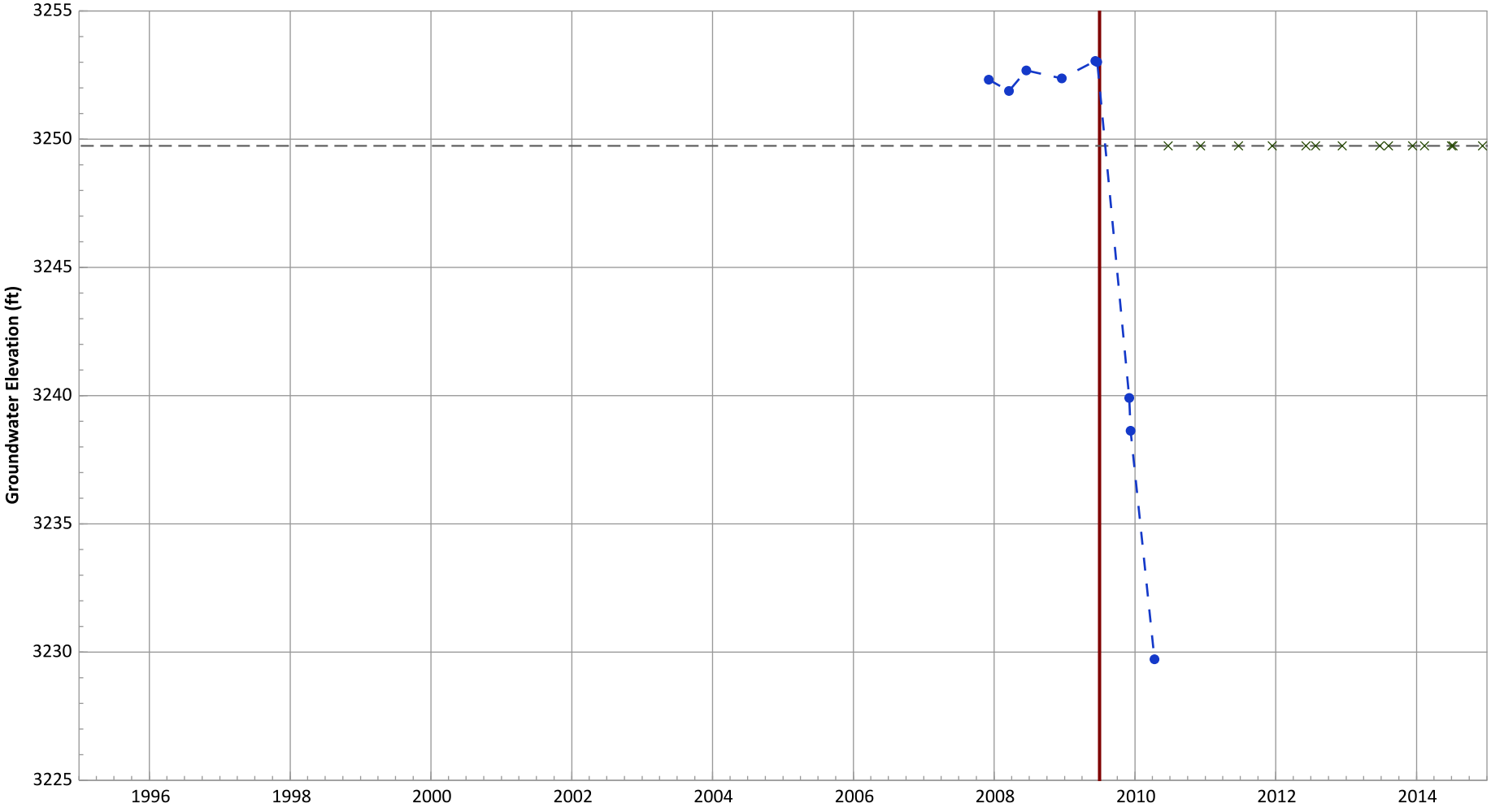
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.64 ft/yr
2012 - 2014 Data: Decreasing at 2.35 ft/yr

PTX06-1103 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

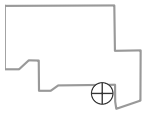


Notes:
1. Top of screen elevation is 3259.74 ft msl.
2. The bottom of screen elevation is 3249.74 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

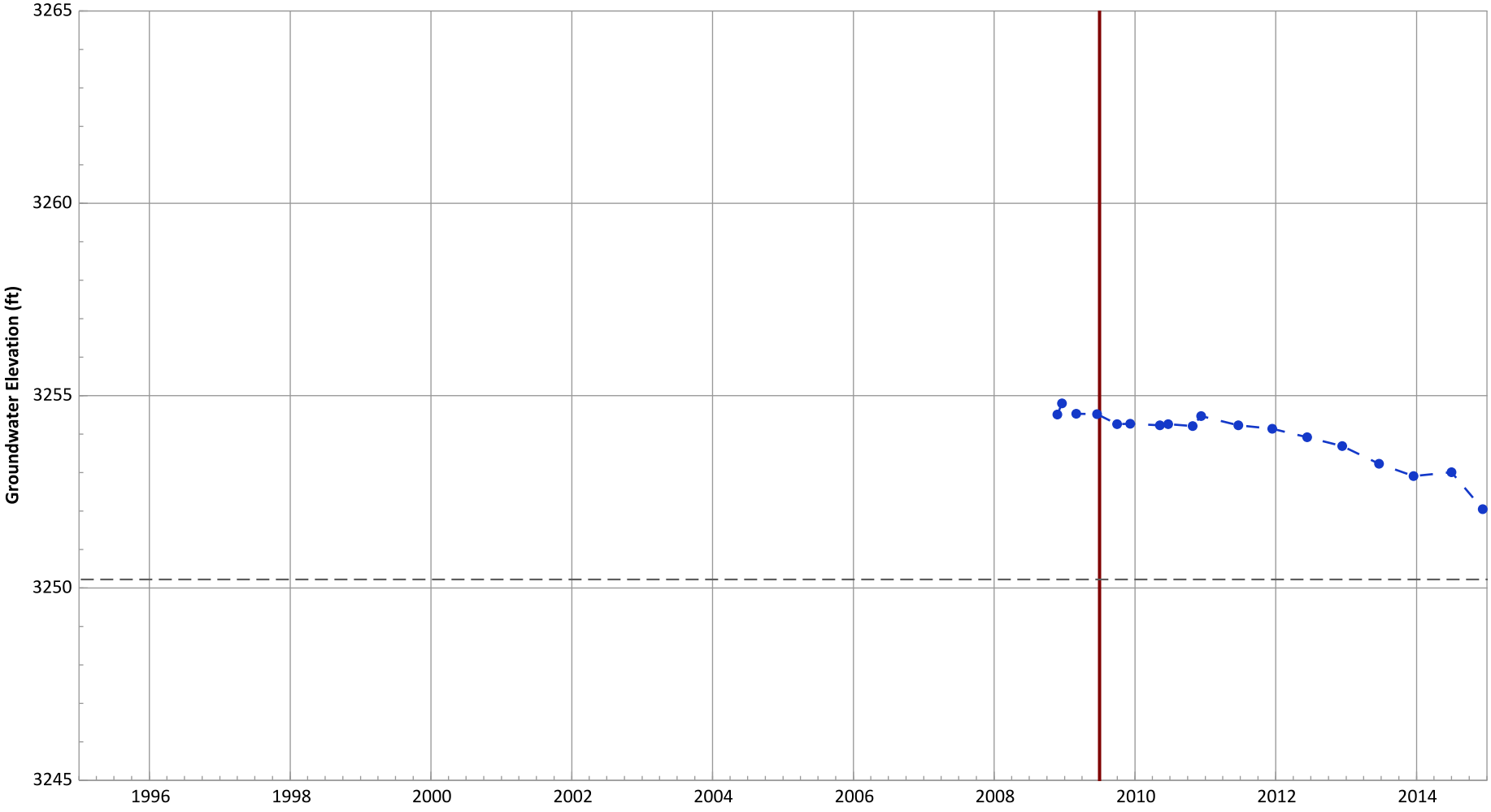
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 7.9 ft/yr
2012 - 2014 Data: N/A (No Measurements)

PTX06-1104 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

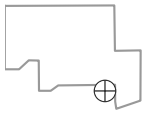


Notes:
1. Top of screen elevation is 3265.22 ft msl.
2. The bottom of screen elevation is 3250.22 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

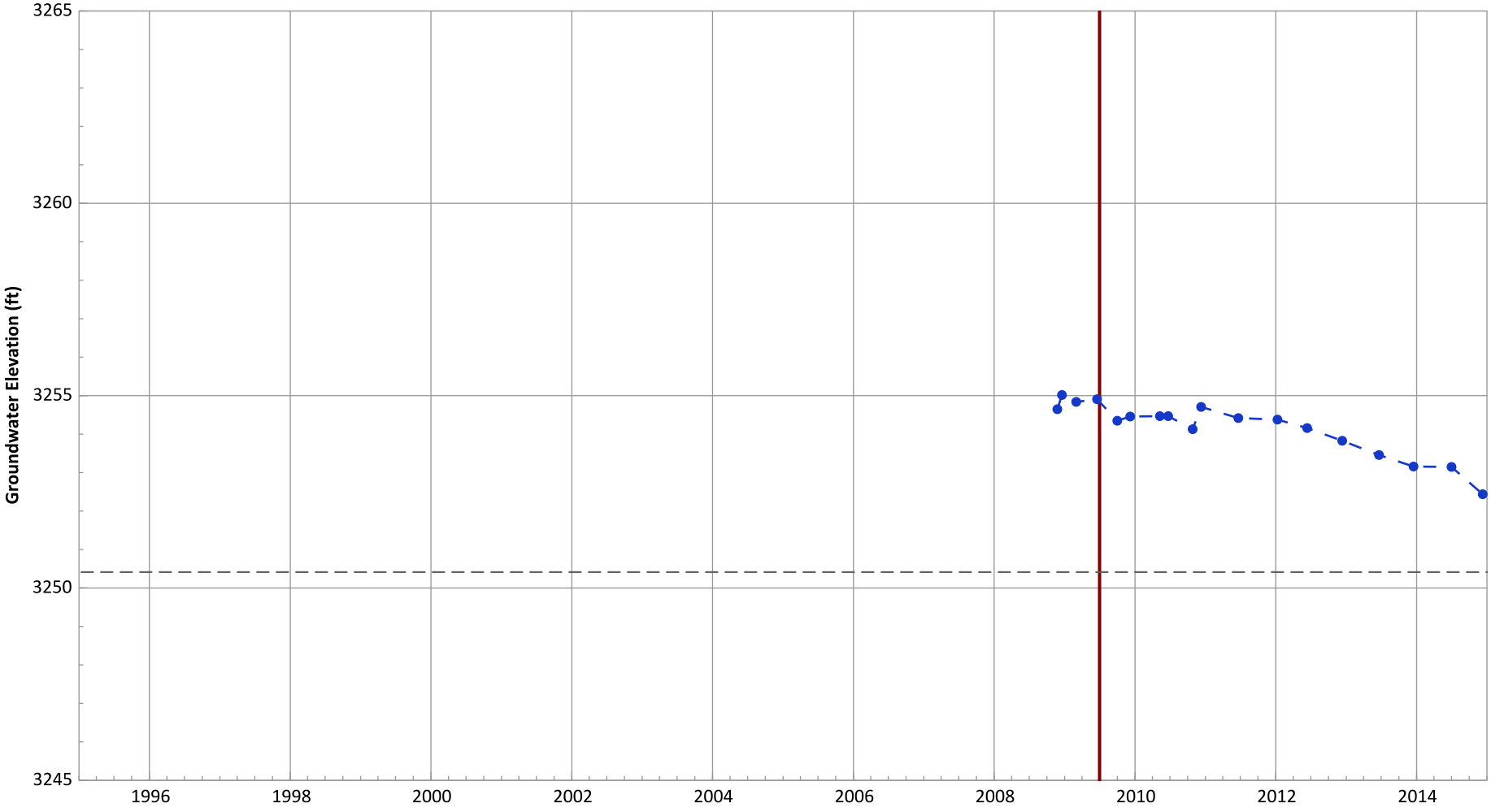
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.34 ft/yr
2012 - 2014 Data: Decreasing at 0.66 ft/yr

PTX06-1105 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

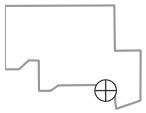


Notes:
1. Top of screen elevation is 3265.41 ft msl.
2. The bottom of screen elevation is 3250.41 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

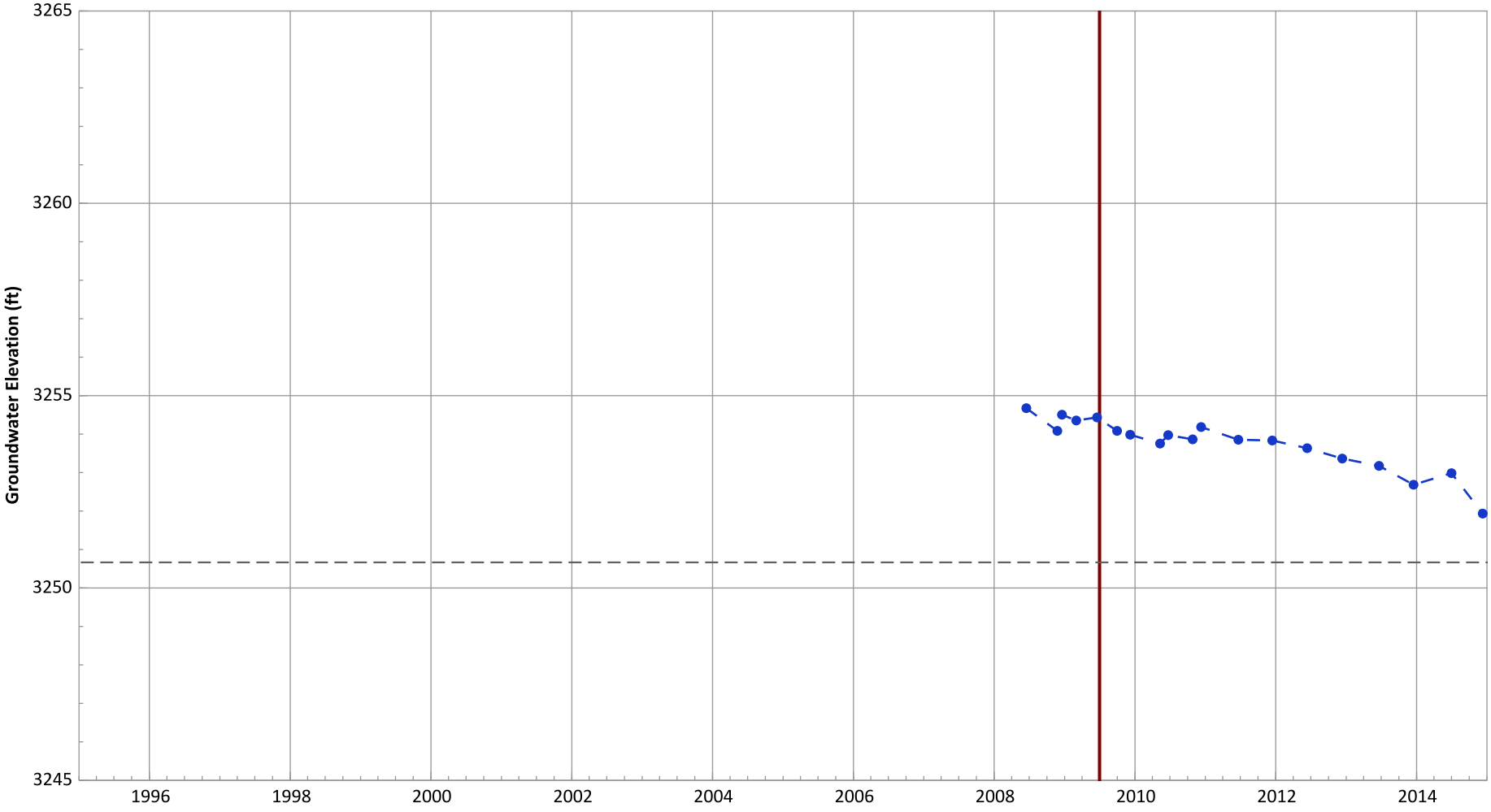
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.33 ft/yr
2012 - 2014 Data: Decreasing at 0.62 ft/yr

PTX06-1106 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

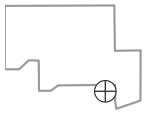


Notes:
1. Top of screen elevation is 3265.67 ft msl.
2. The bottom of screen elevation is 3250.67 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

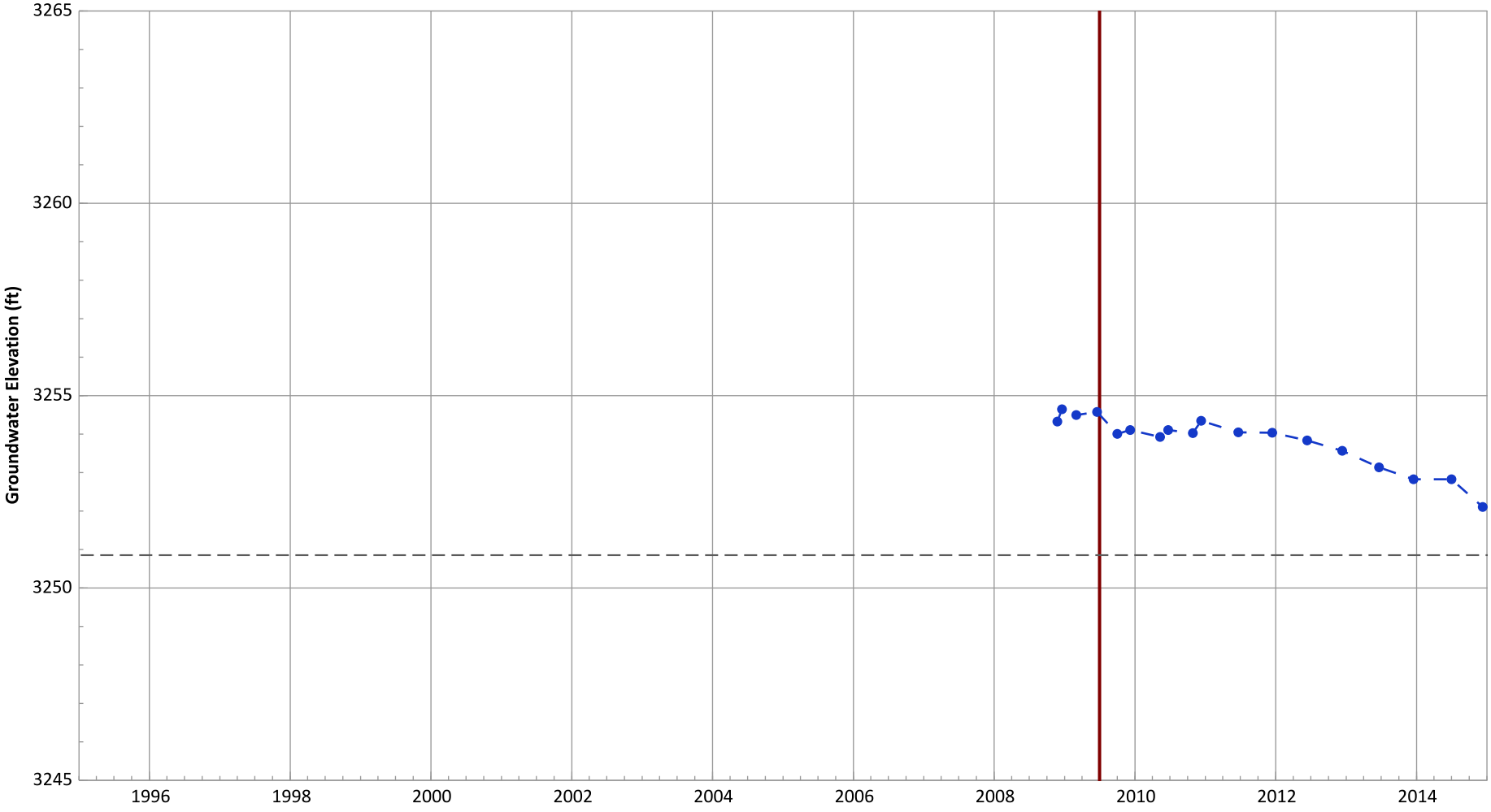
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.31 ft/yr
2012 - 2014 Data: Decreasing at 0.57 ft/yr

PTX06-1107 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

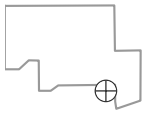


Notes:
1. Top of screen elevation is 3262.85 ft msl.
2. The bottom of screen elevation is 3250.85 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

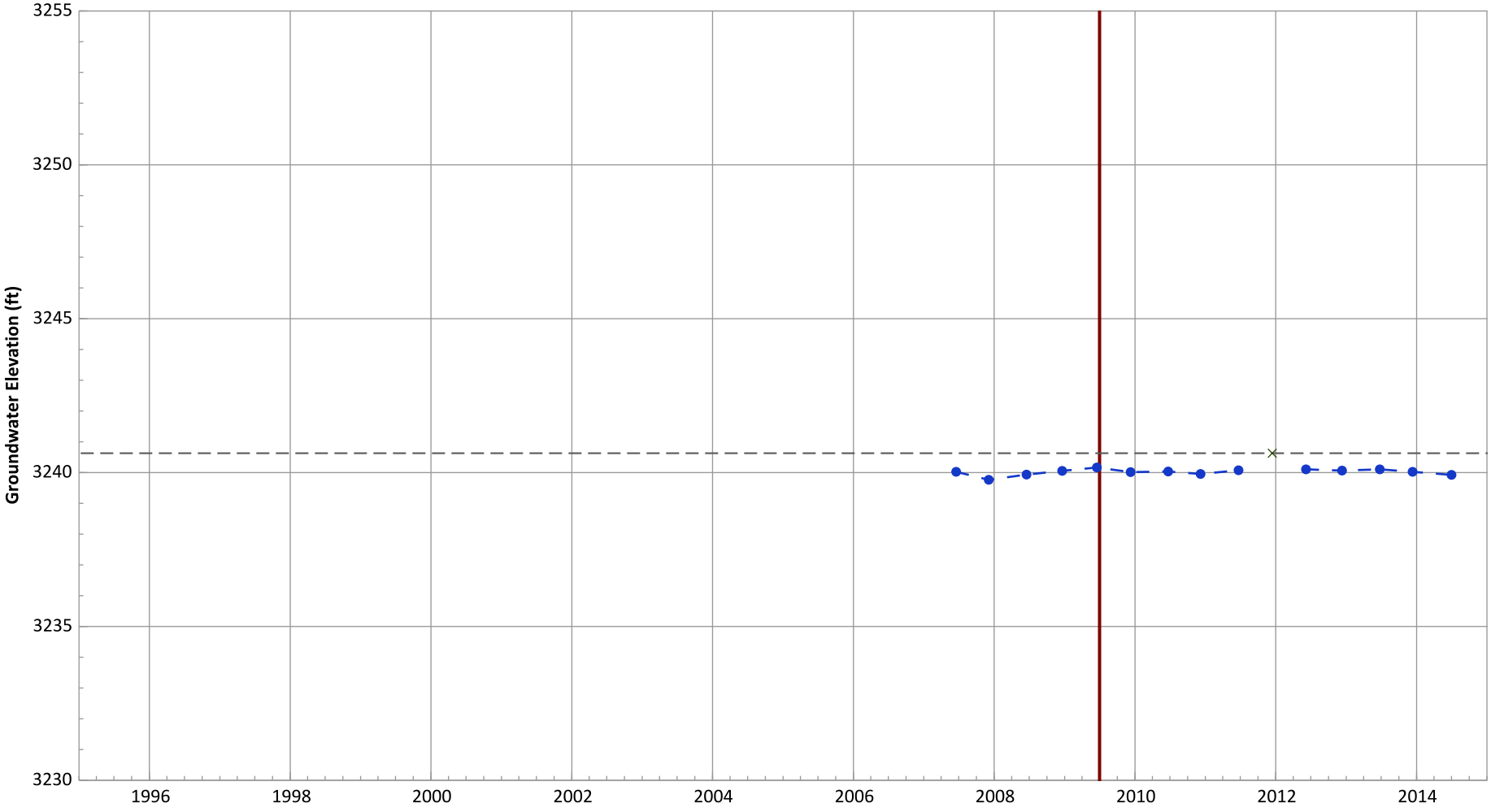
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.32 ft/yr
2012 - 2014 Data: Decreasing at 0.63 ft/yr

PTX06-1108 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

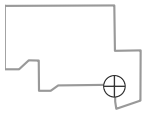


Notes:
1. Top of screen elevation is 3260.63 ft msl.
2. The bottom of screen elevation is 3240.63 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

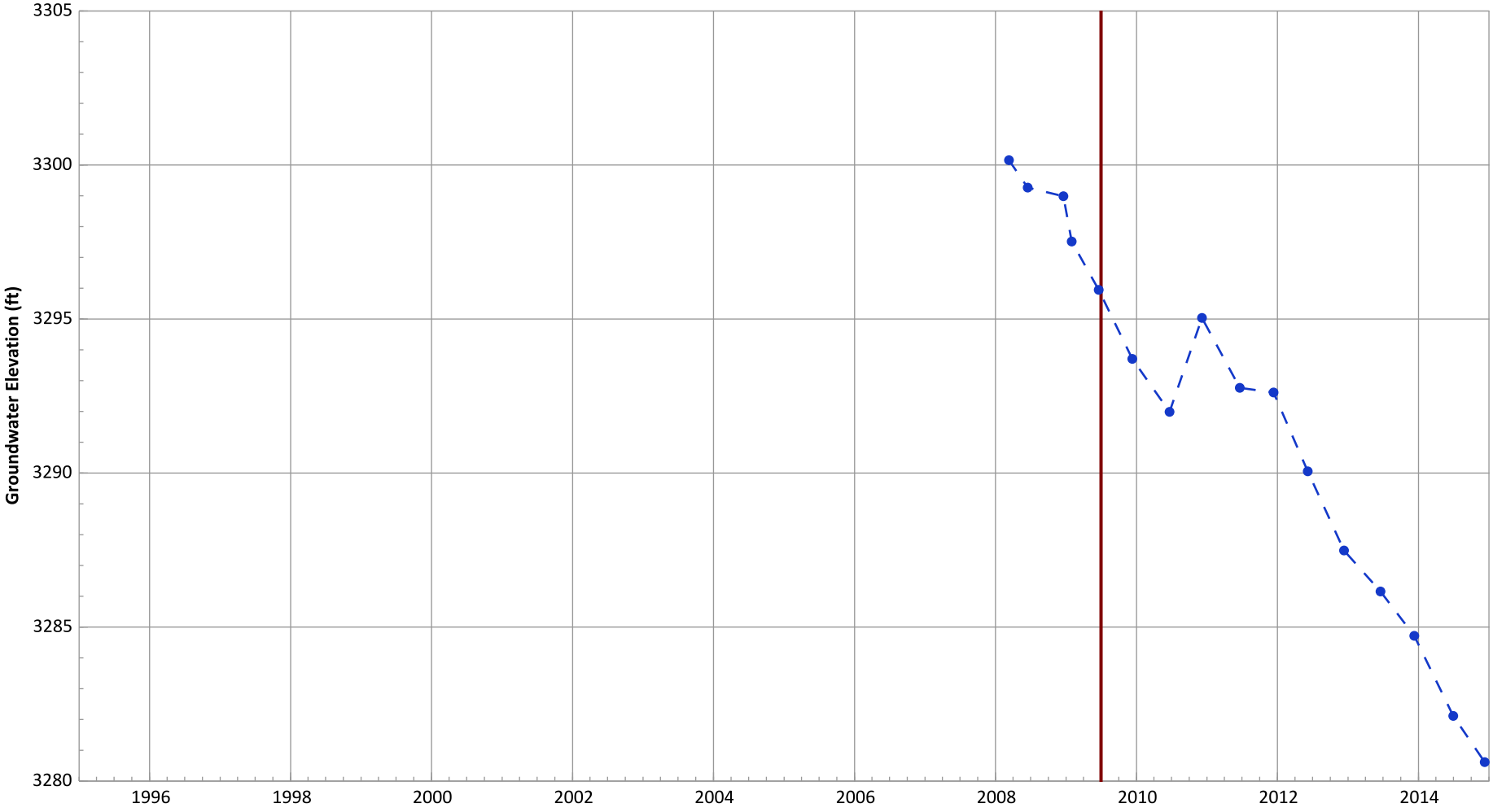
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-1109 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

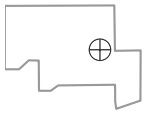


Notes:
1. Top of screen elevation is 3268.25 ft msl.
2. The bottom of screen elevation is 3258.25 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

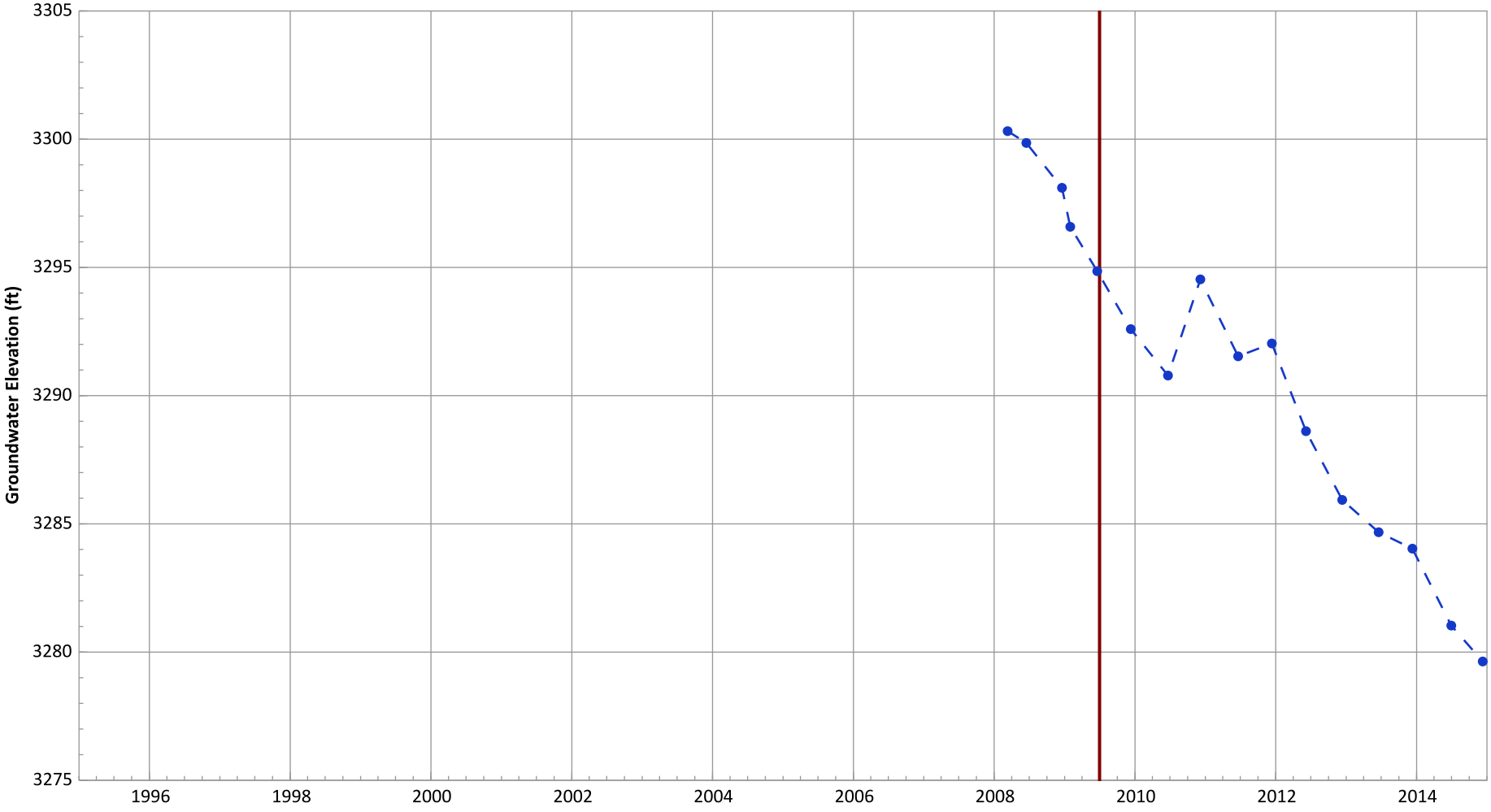
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 2.7 ft/yr
2012 - 2014 Data: Decreasing at 3.66 ft/yr

PTX06-1110 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

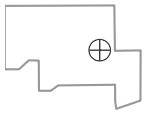


Notes:
1. Top of screen elevation is 3268.51 ft msl.
2. The bottom of screen elevation is 3258.51 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

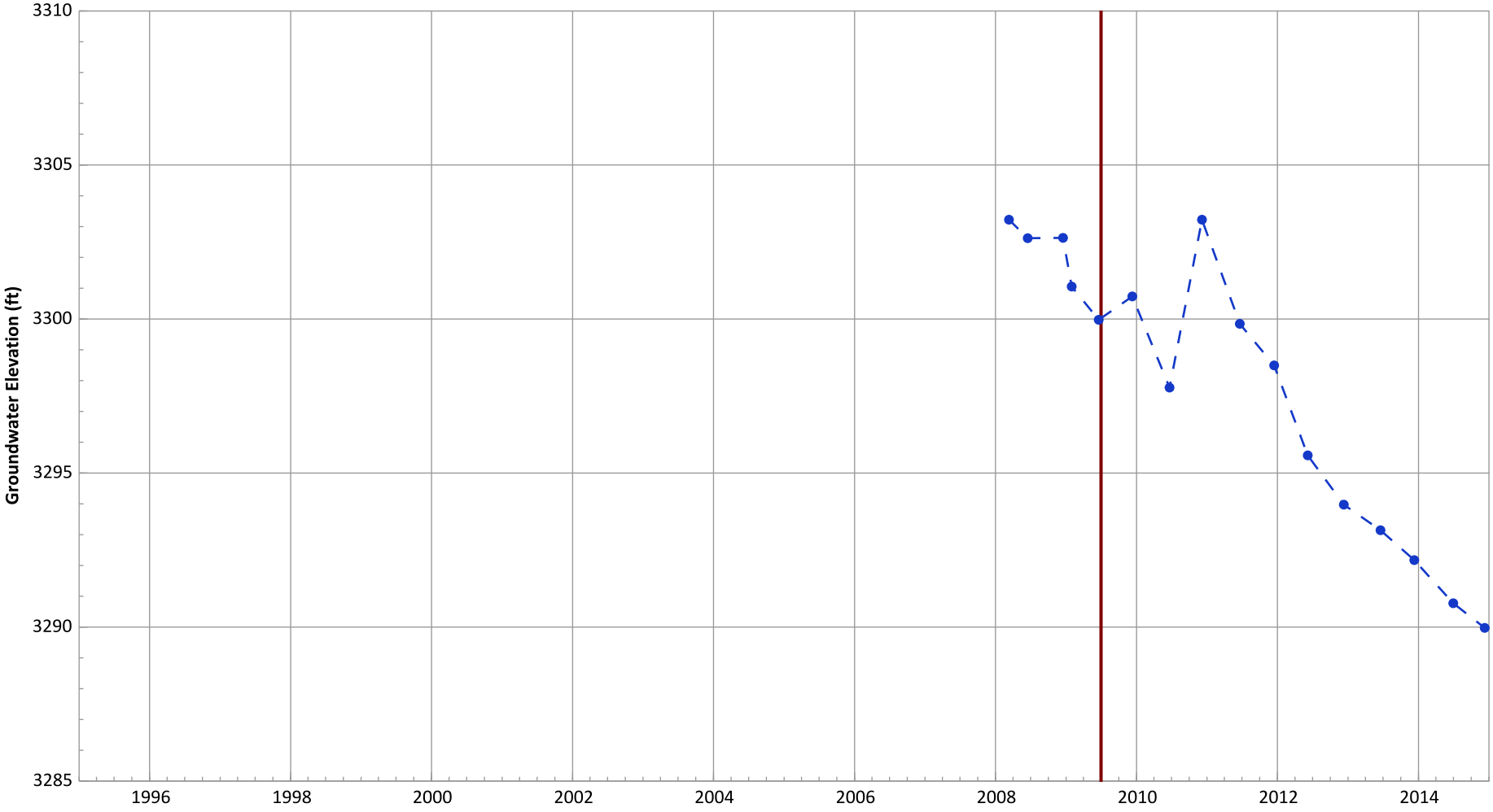
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 2.83 ft/yr
2012 - 2014 Data: Decreasing at 3.41 ft/yr

PTX06-1112 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

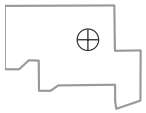


Notes:
1. Top of screen elevation is 3278.44 ft msl.
2. The bottom of screen elevation is 3268.44 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

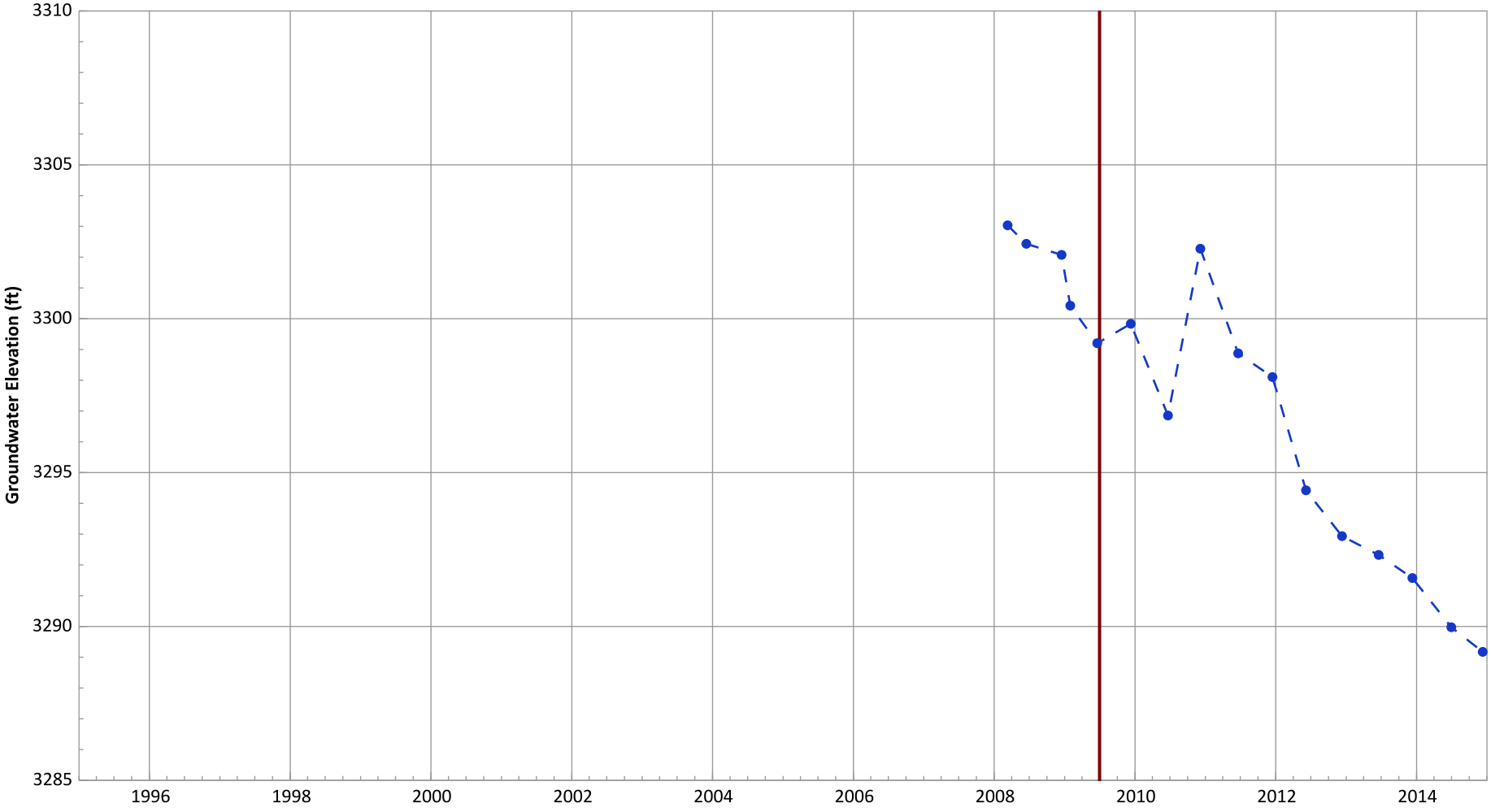
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.94 ft/yr
2012 - 2014 Data: Decreasing at 2.18 ft/yr

PTX06-1113 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

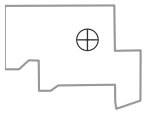


Notes:
1. Top of screen elevation is 3278.58 ft msl.
2. The bottom of screen elevation is 3268.58 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

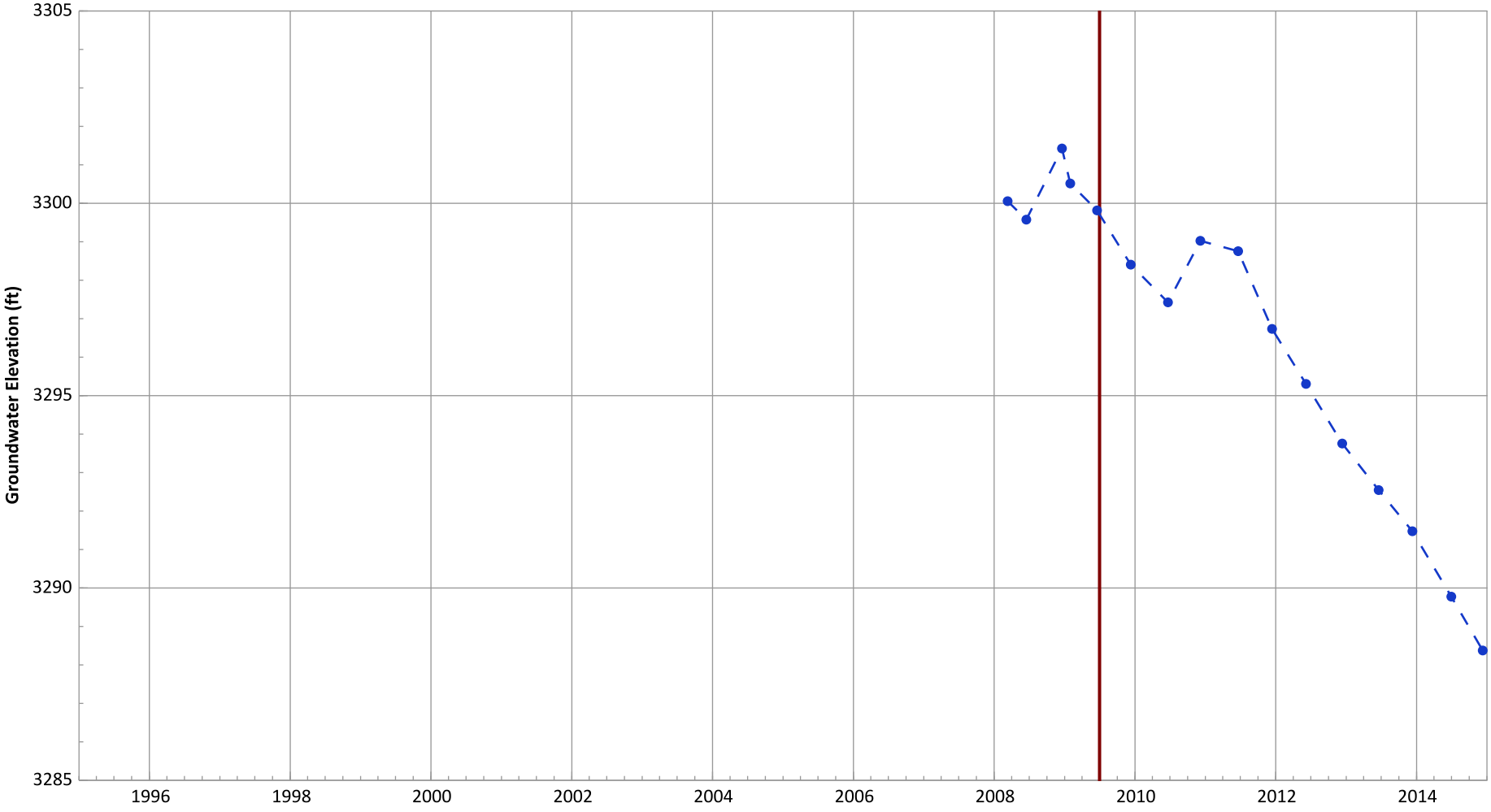
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 2.0 ft/yr
2012 - 2014 Data: Decreasing at 2.03 ft/yr

PTX06-1115 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

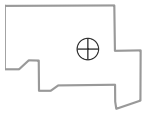


Notes:
1. Top of screen elevation is 3273.18 ft msl.
2. The bottom of screen elevation is 3263.18 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

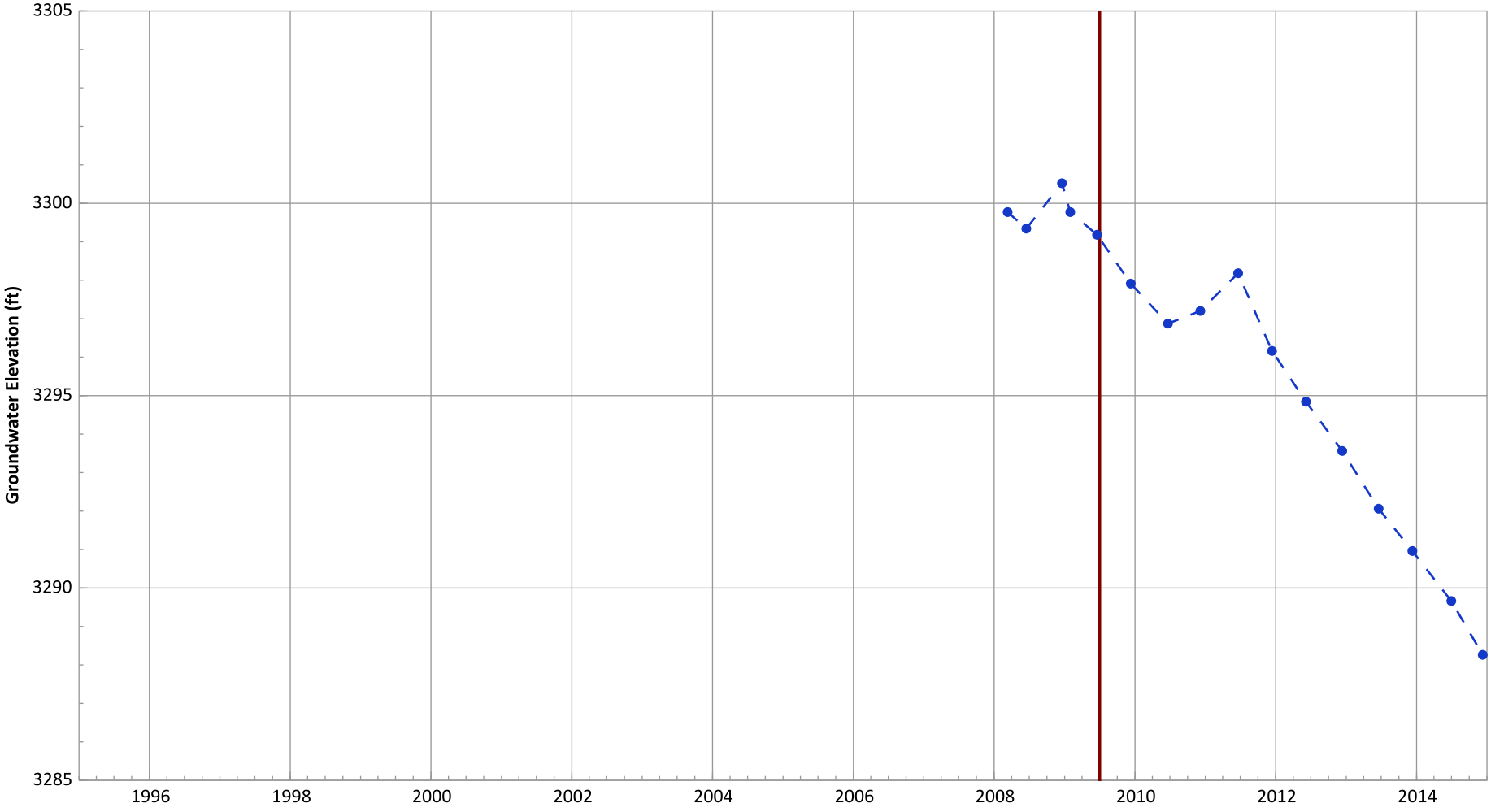
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.75 ft/yr
2012 - 2014 Data: Decreasing at 2.69 ft/yr

PTX06-1116 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

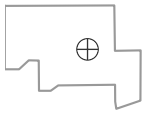


Notes:
1. Top of screen elevation is 3278.26 ft msl.
2. The bottom of screen elevation is 3268.26 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

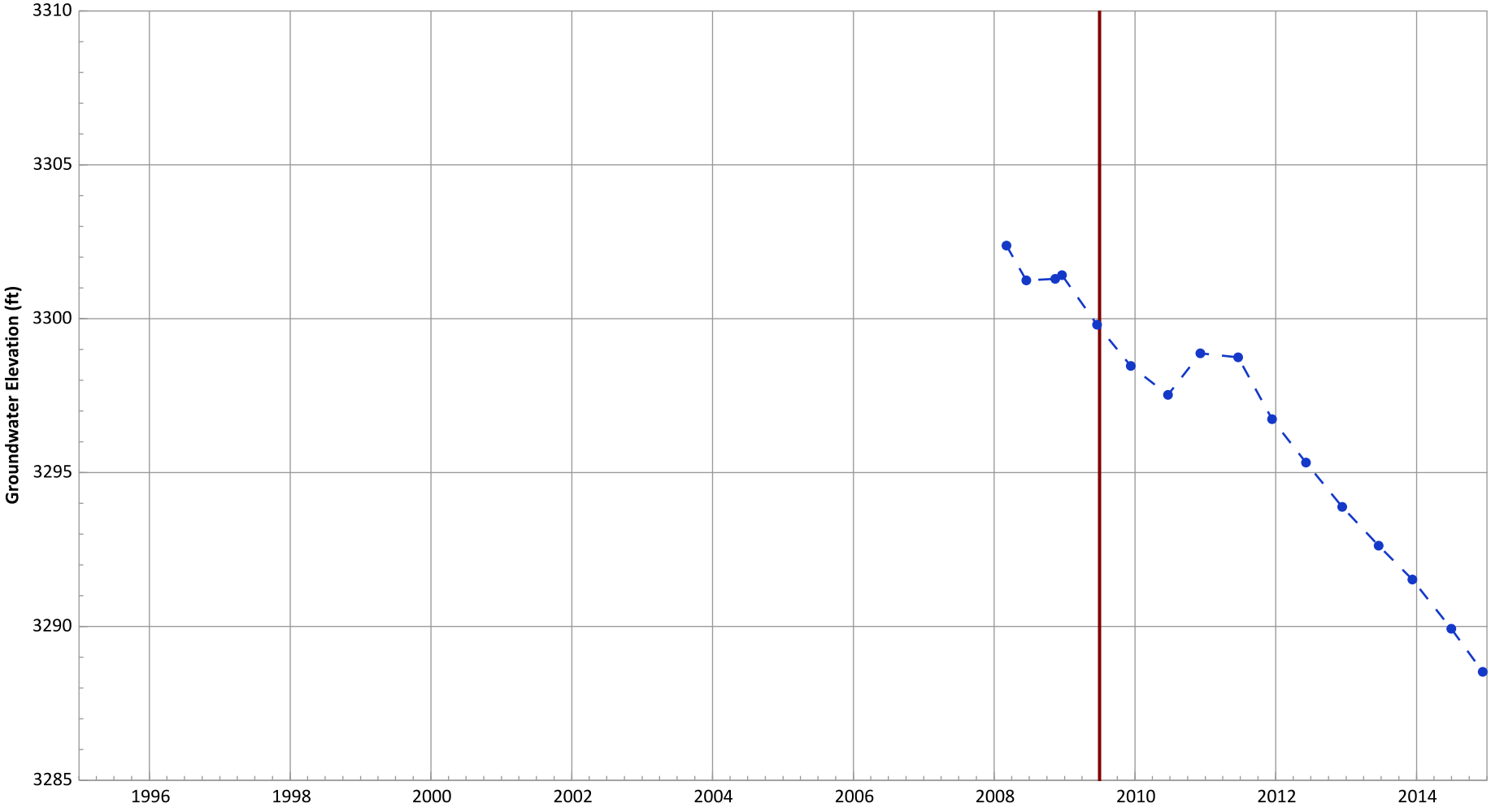
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.69 ft/yr
2012 - 2014 Data: Decreasing at 2.58 ft/yr

PTX06-1117 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

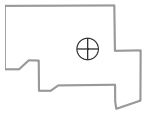


Notes:
1. Top of screen elevation is 3317.97 ft msl.
2. The bottom of screen elevation is 3267.97 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

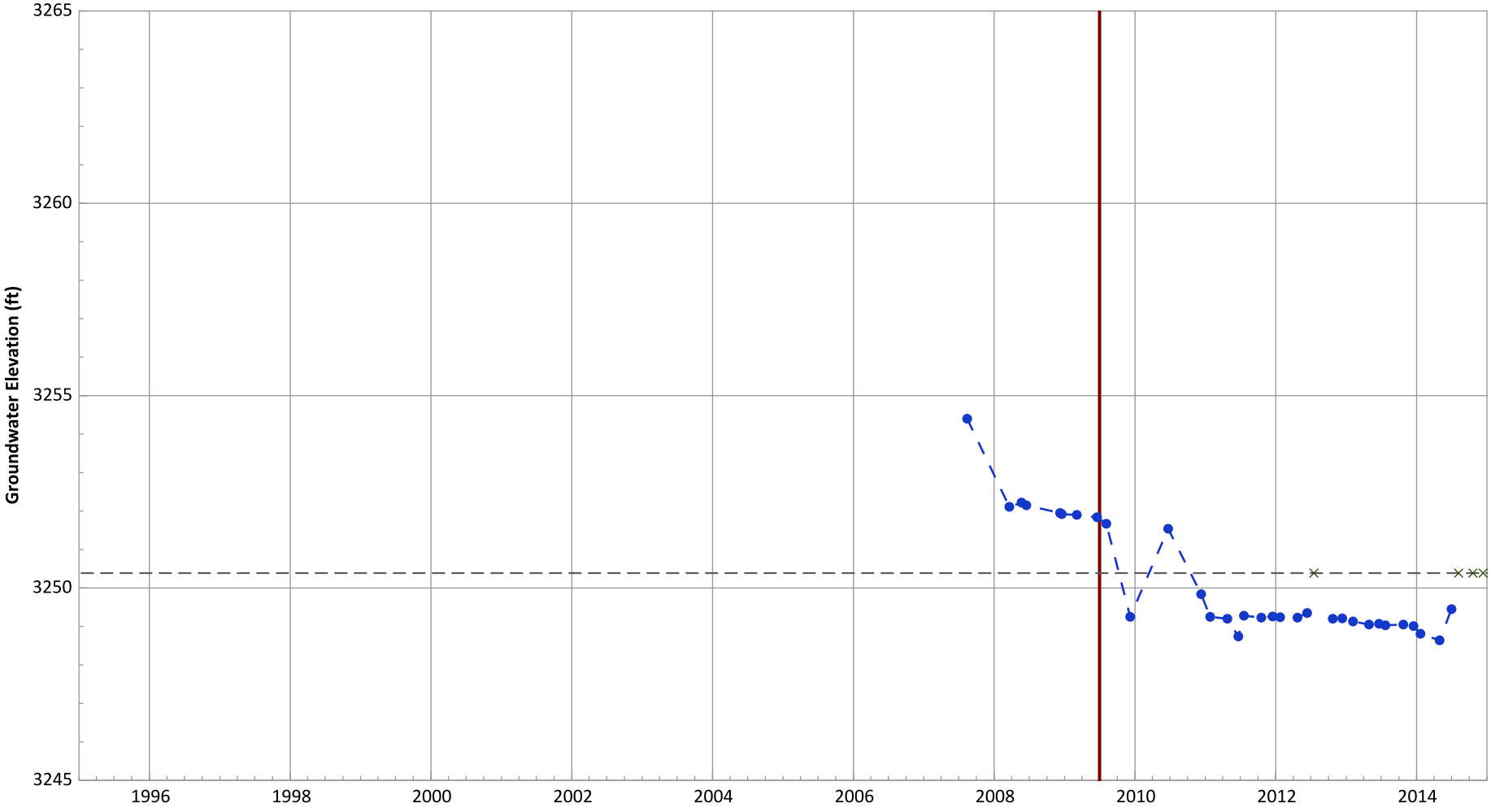
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.9 ft/yr
2012 - 2014 Data: Decreasing at 2.65 ft/yr

PTX06-1118 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

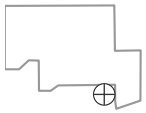


Notes:
1. Top of screen elevation is 3260.39 ft msl.
2. The bottom of screen elevation is 3250.39 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

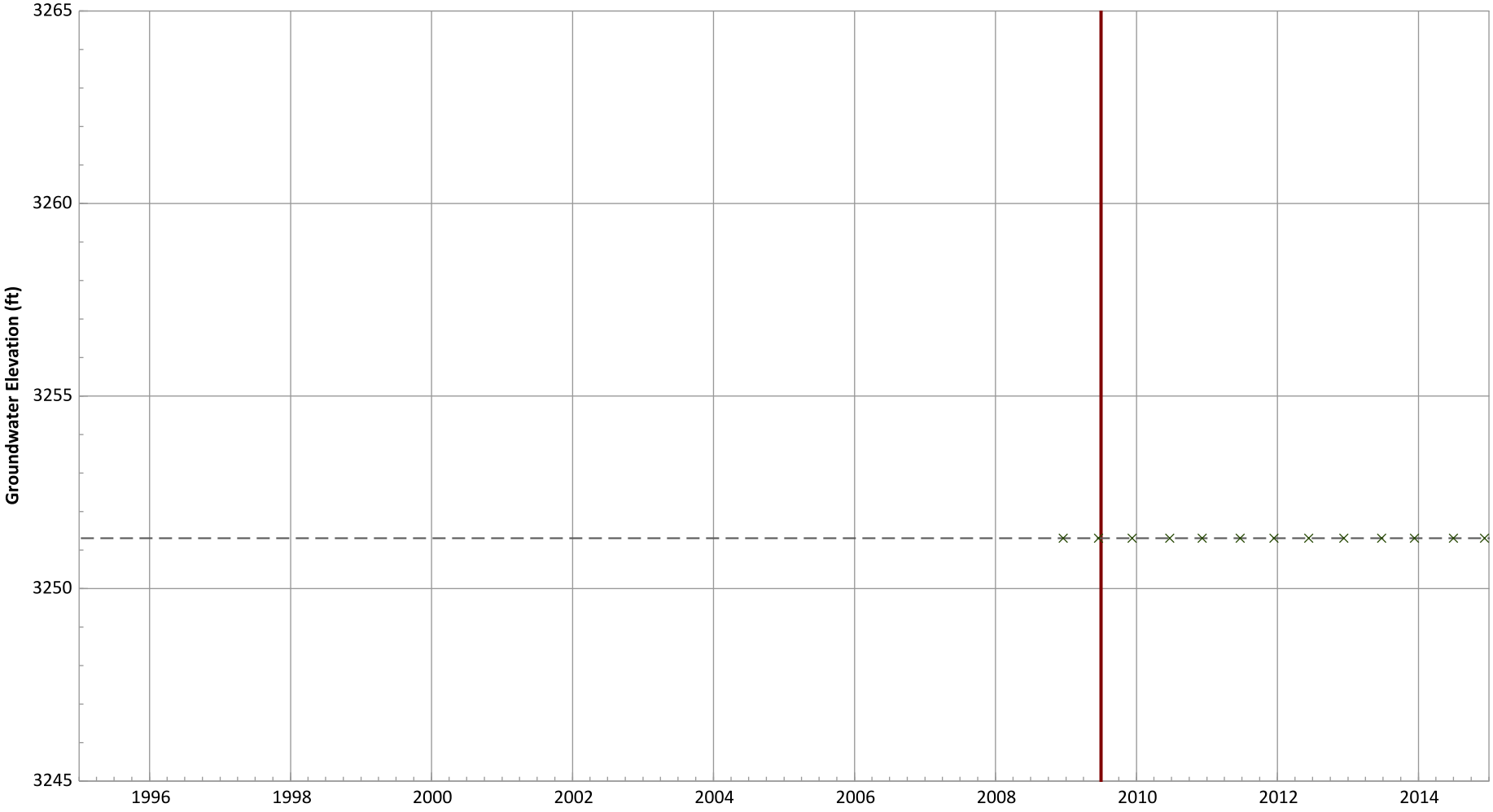
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.64 ft/yr
2012 - 2014 Data: Decreasing at 0.15 ft/yr

PTX06-1119 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

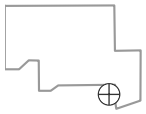


Notes:
1. Top of screen elevation is 3261.31 ft msl.
2. The bottom of screen elevation is 3251.31 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

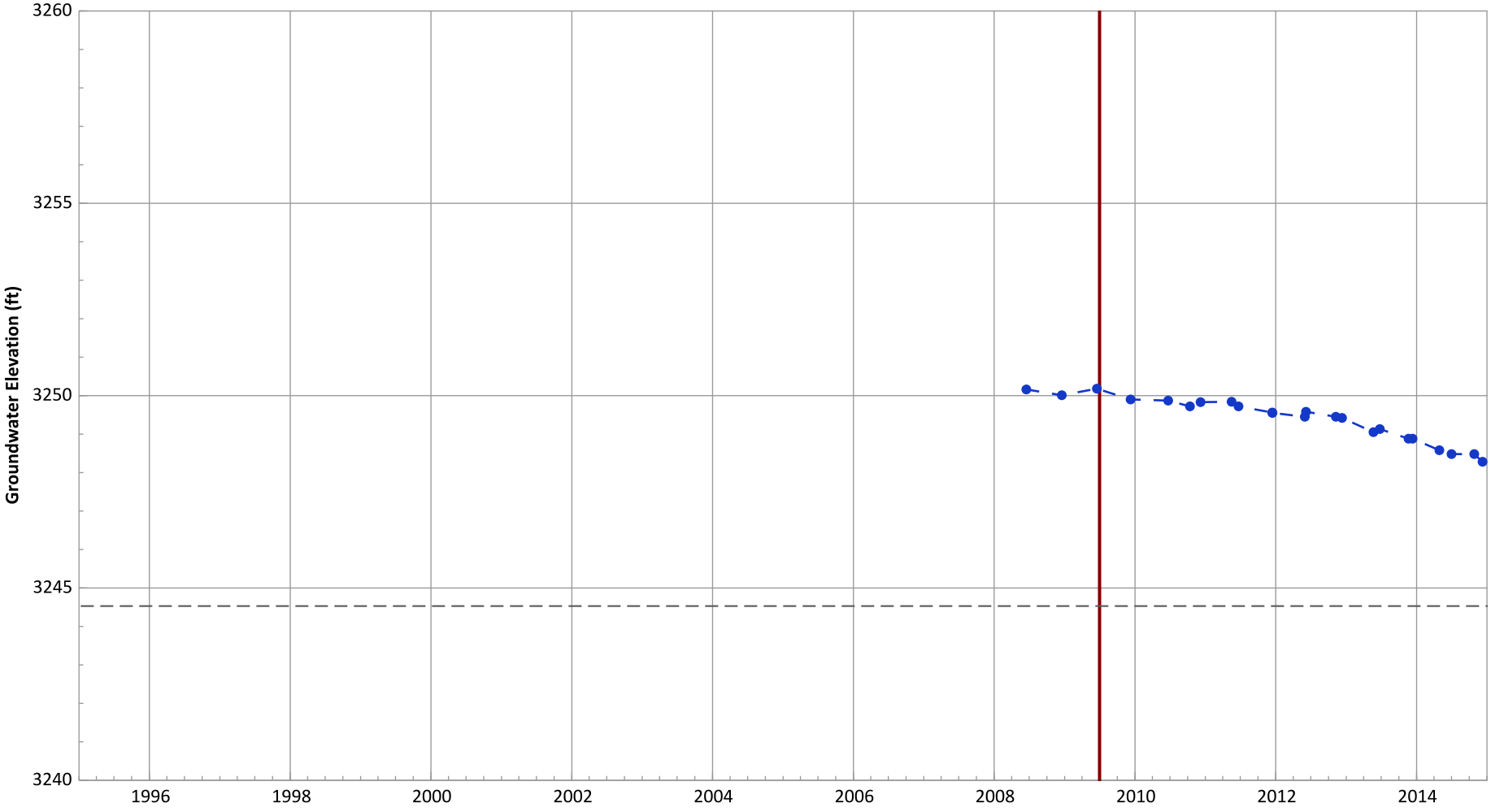
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1120 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

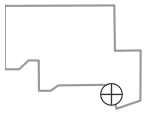


Notes:
1. Top of screen elevation is 3259.53 ft msl.
2. The bottom of screen elevation is 3244.53 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

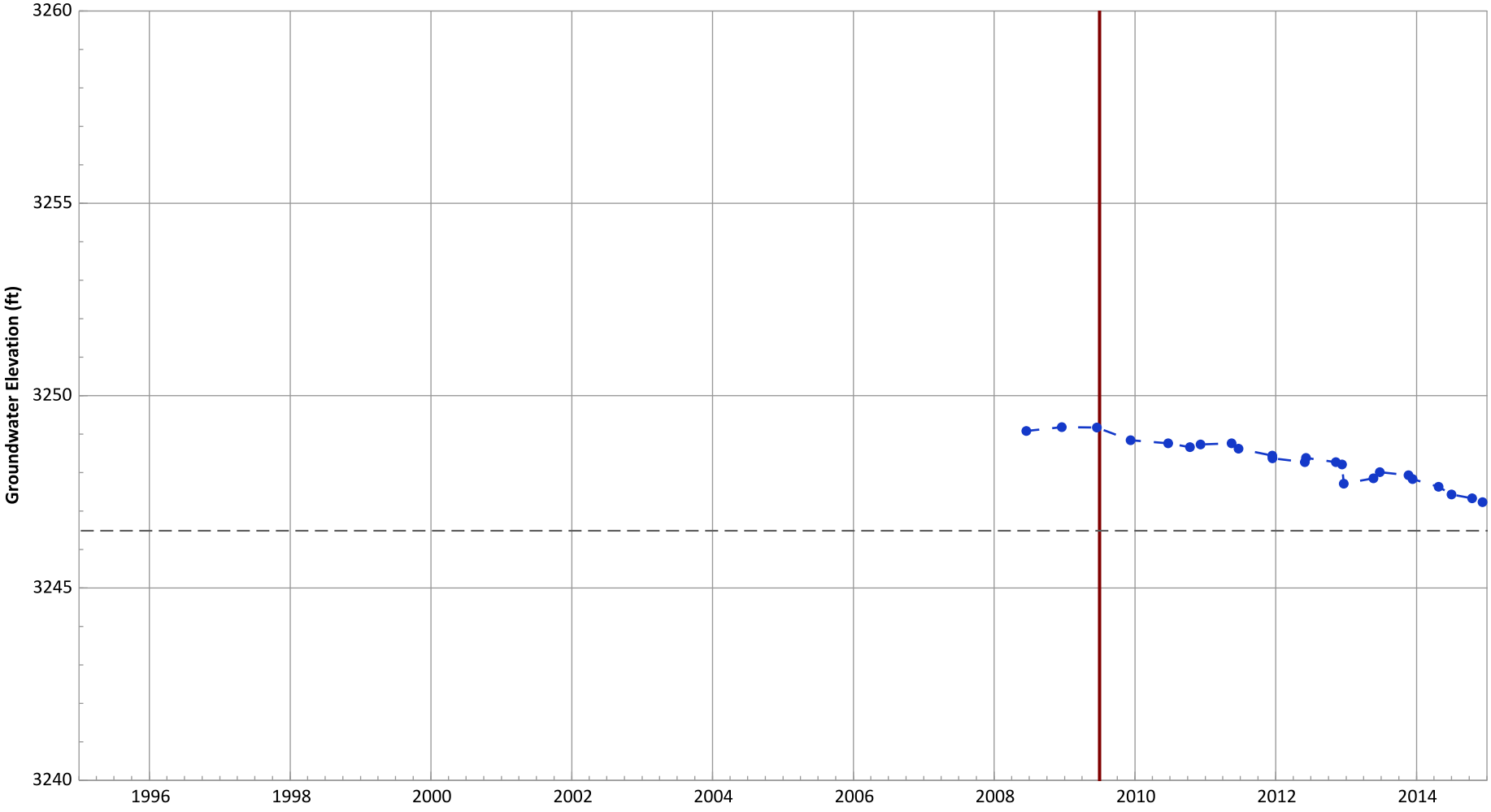
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.28 ft/yr
2012 - 2014 Data: Decreasing at 0.53 ft/yr

PTX06-1121 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

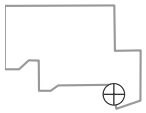


Notes:
1. Top of screen elevation is 3256.49 ft msl.
2. The bottom of screen elevation is 3246.49 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

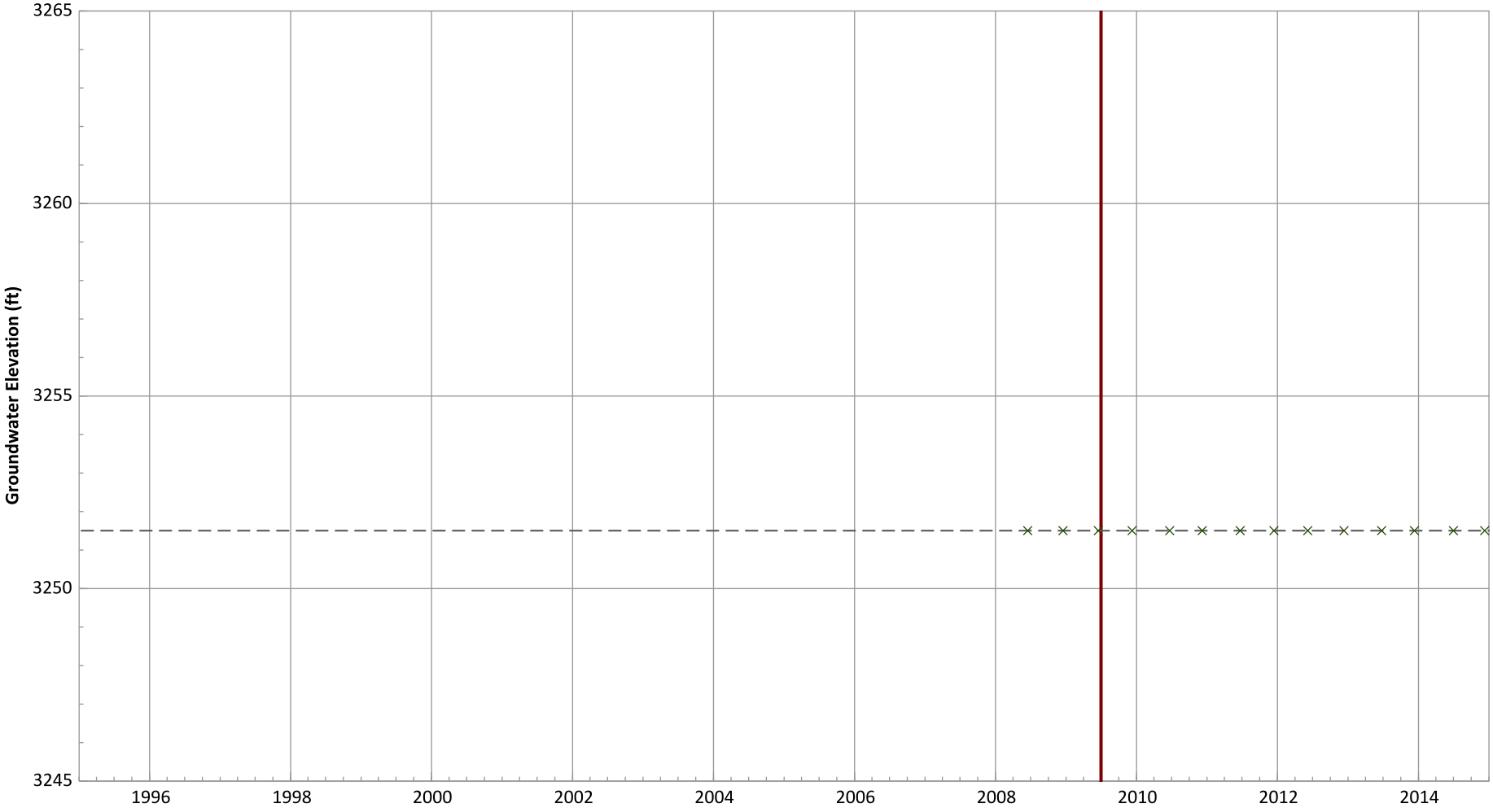
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.3 ft/yr
2012 - 2014 Data: Decreasing at 0.41 ft/yr

PTX06-1122 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

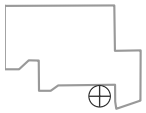


Notes:
1. Top of screen elevation is 3261.5 ft msl.
2. The bottom of screen elevation is 3251.5 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

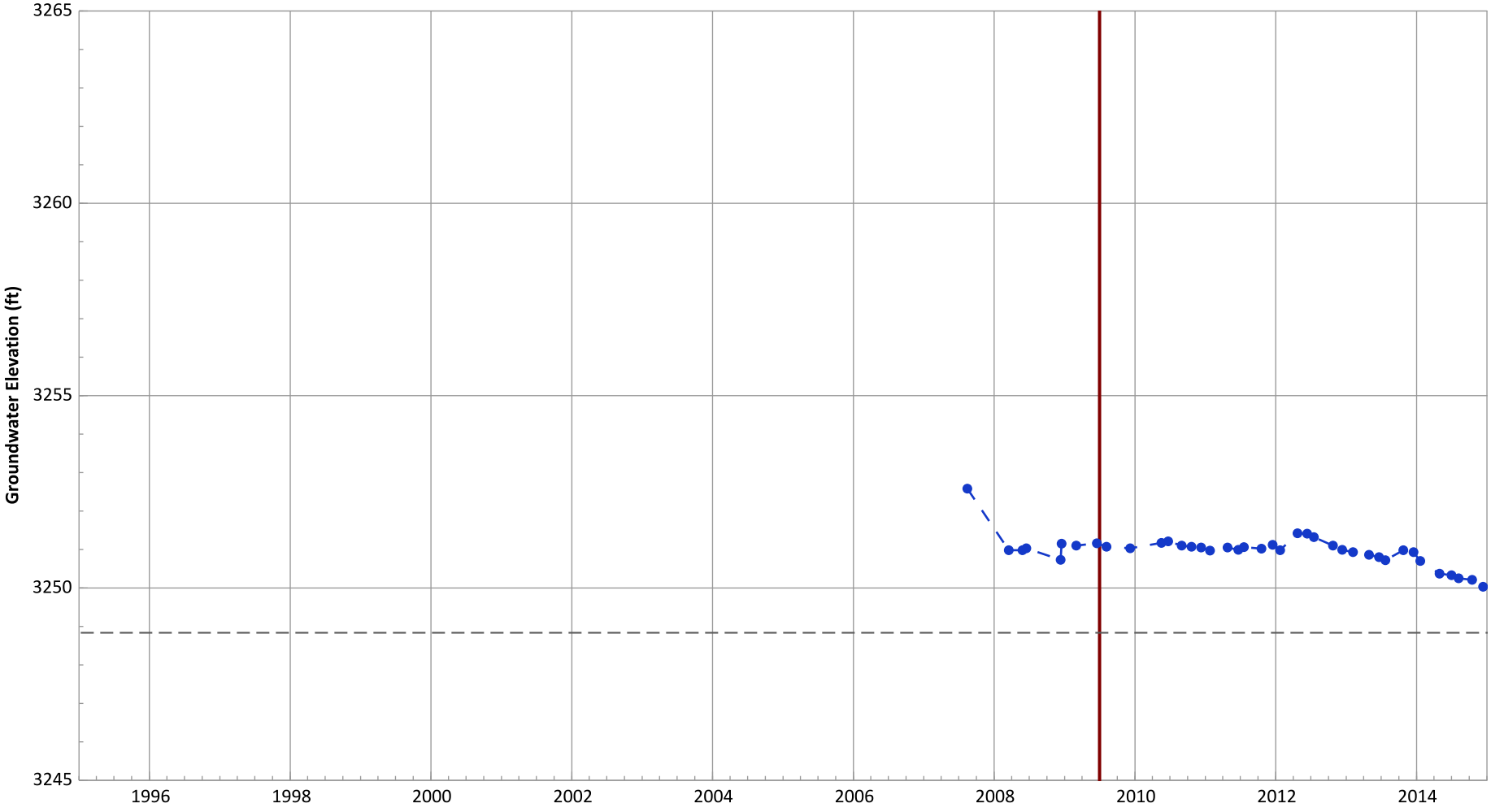
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1123 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

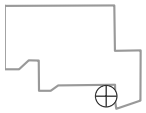


Notes:
1. Top of screen elevation is 3258.84 ft msl.
2. The bottom of screen elevation is 3248.84 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

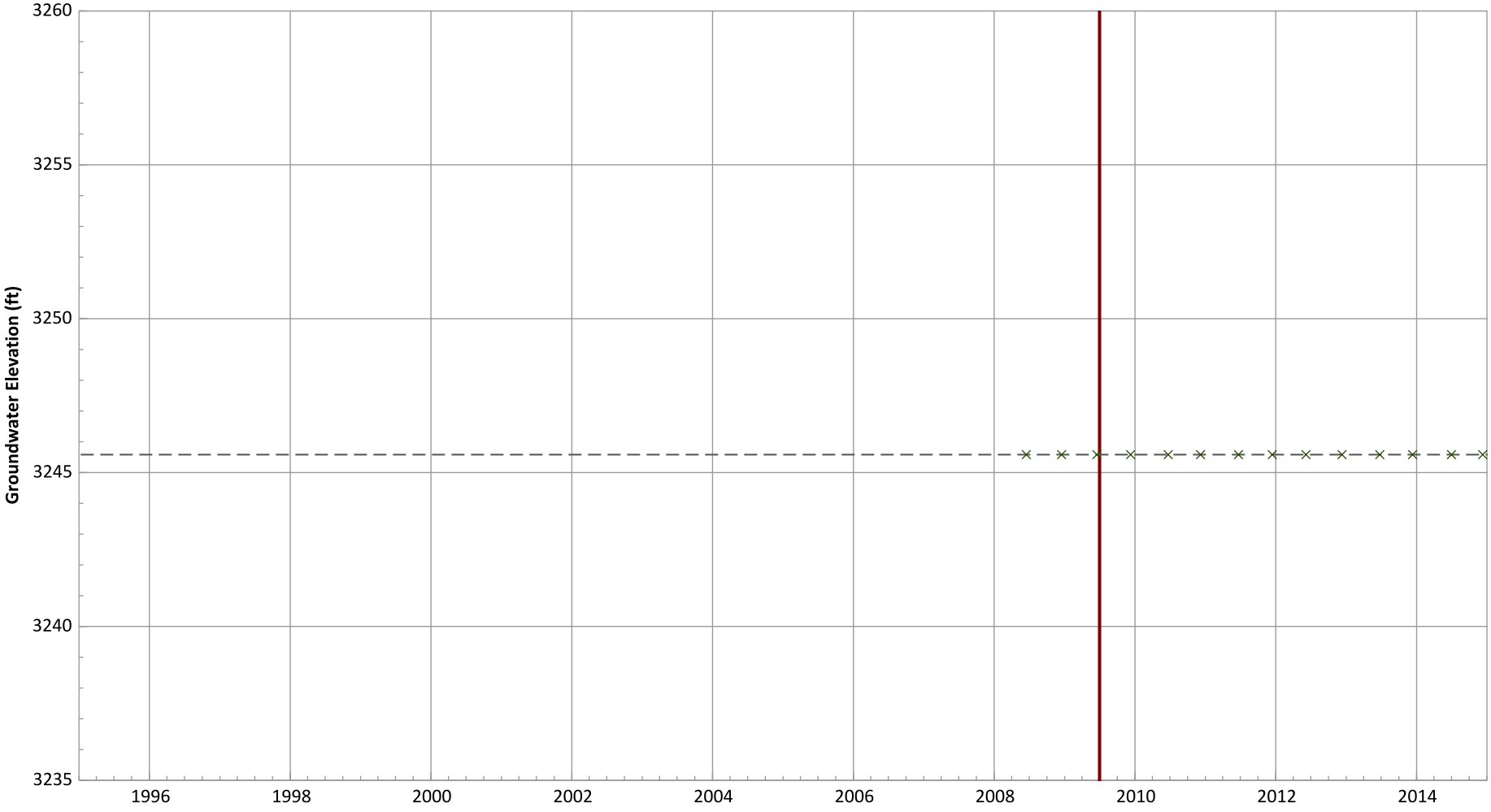
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.12 ft/yr
2012 - 2014 Data: Decreasing at 0.48 ft/yr

PTX06-1124 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

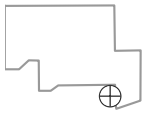


Notes:
1. Top of screen elevation is 3255.58 ft msl.
2. The bottom of screen elevation is 3245.58 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

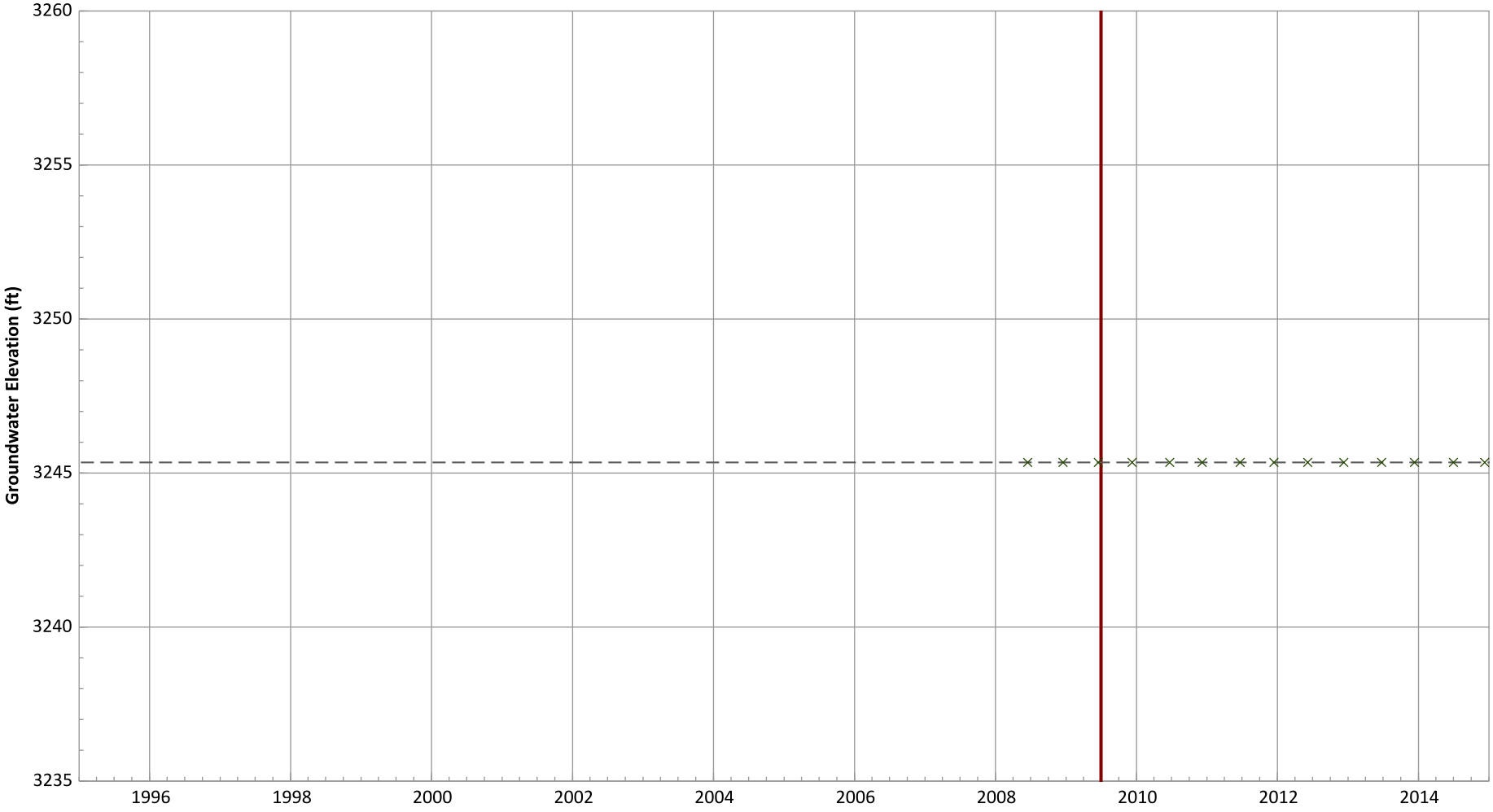
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1125 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

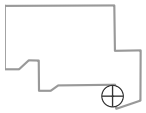


Notes:
1. Top of screen elevation is 3255.35 ft msl.
2. The bottom of screen elevation is 3245.35 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

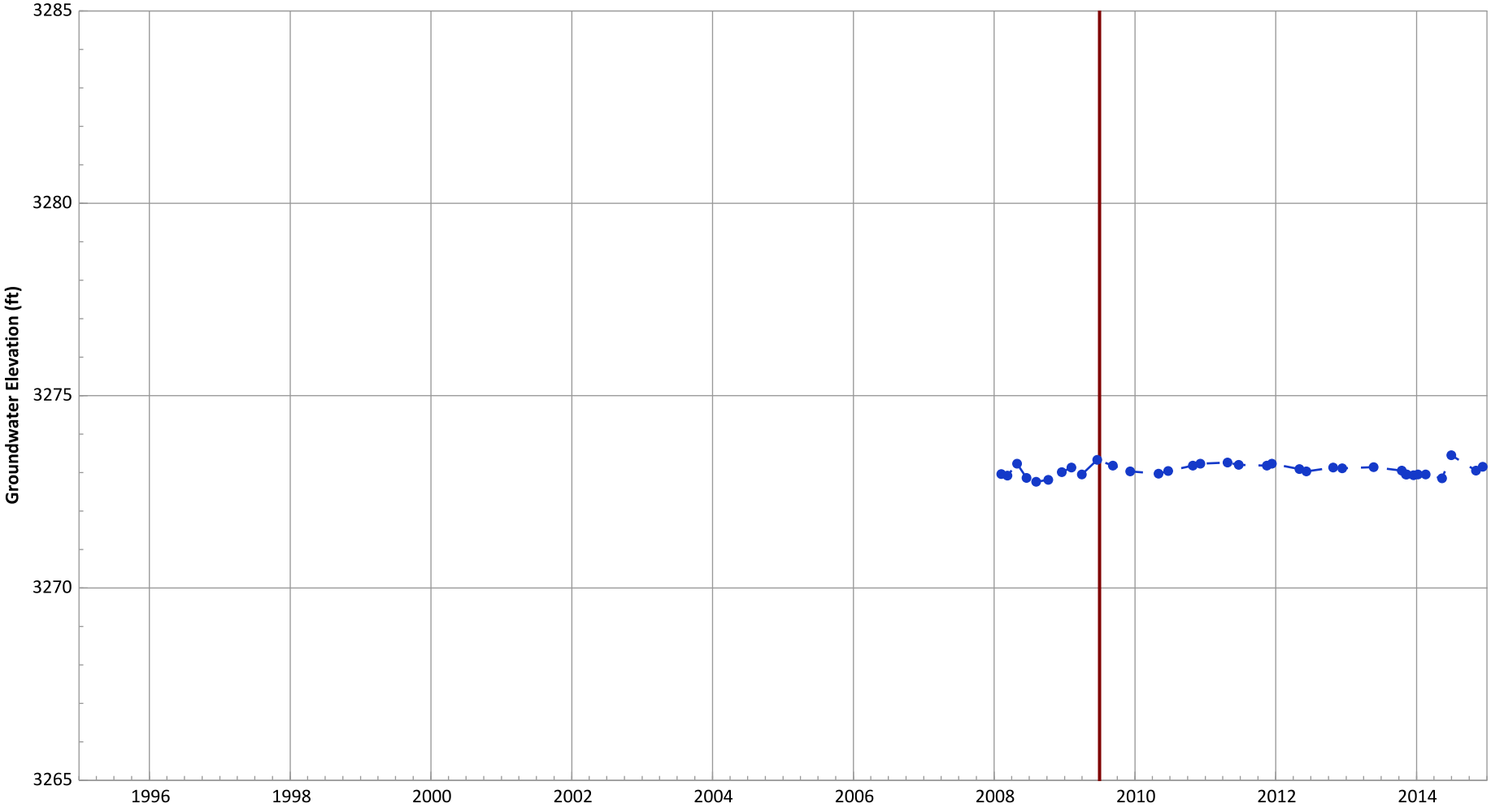
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1126 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

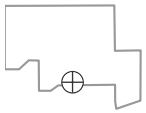


Notes:
1. Top of screen elevation is 3282.55 ft msl.
2. The bottom of screen elevation is 3252.55 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

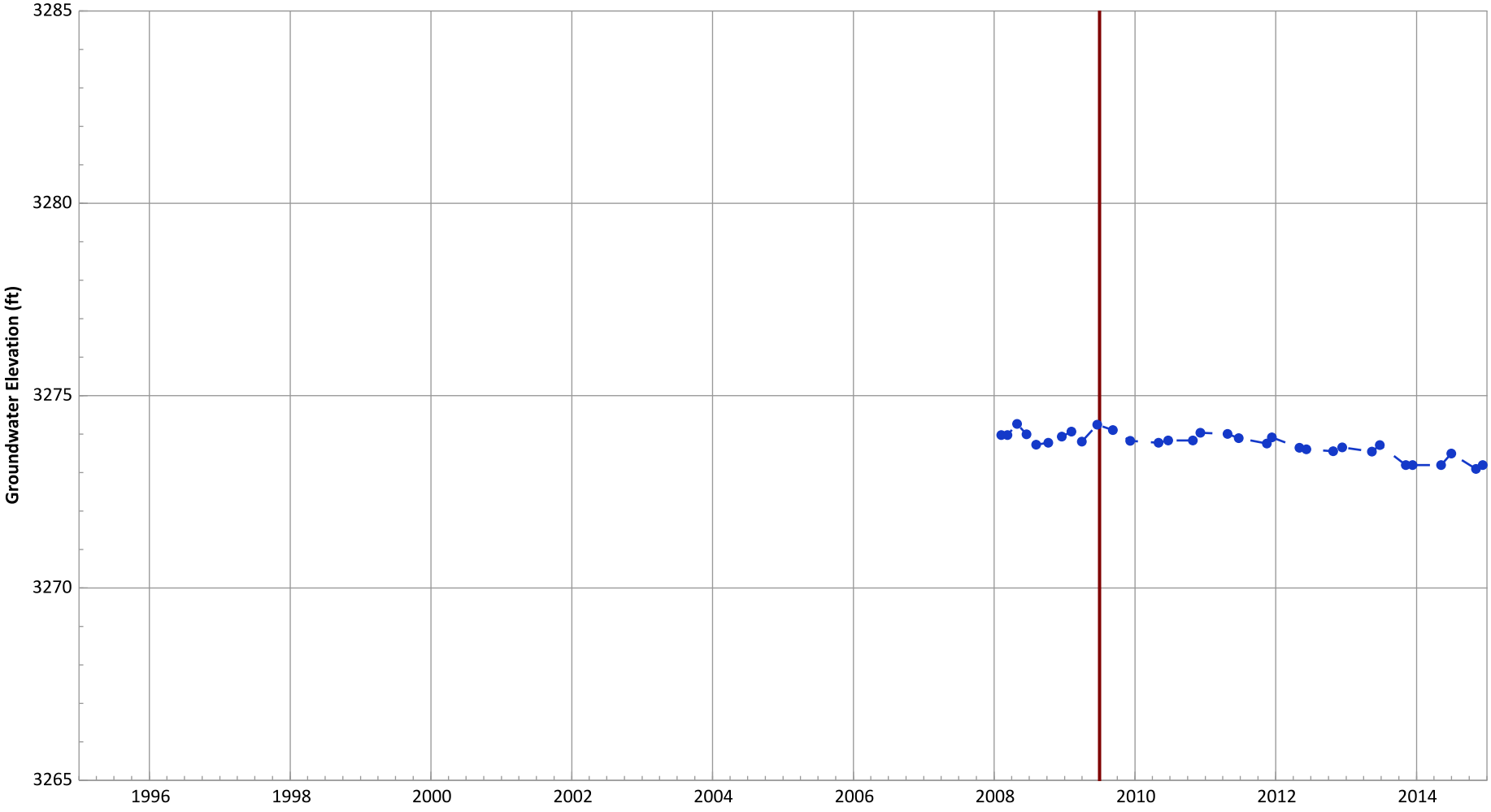
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-1127 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

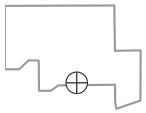


Notes:
1. Top of screen elevation is 3278.57 ft msl.
2. The bottom of screen elevation is 3248.57 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

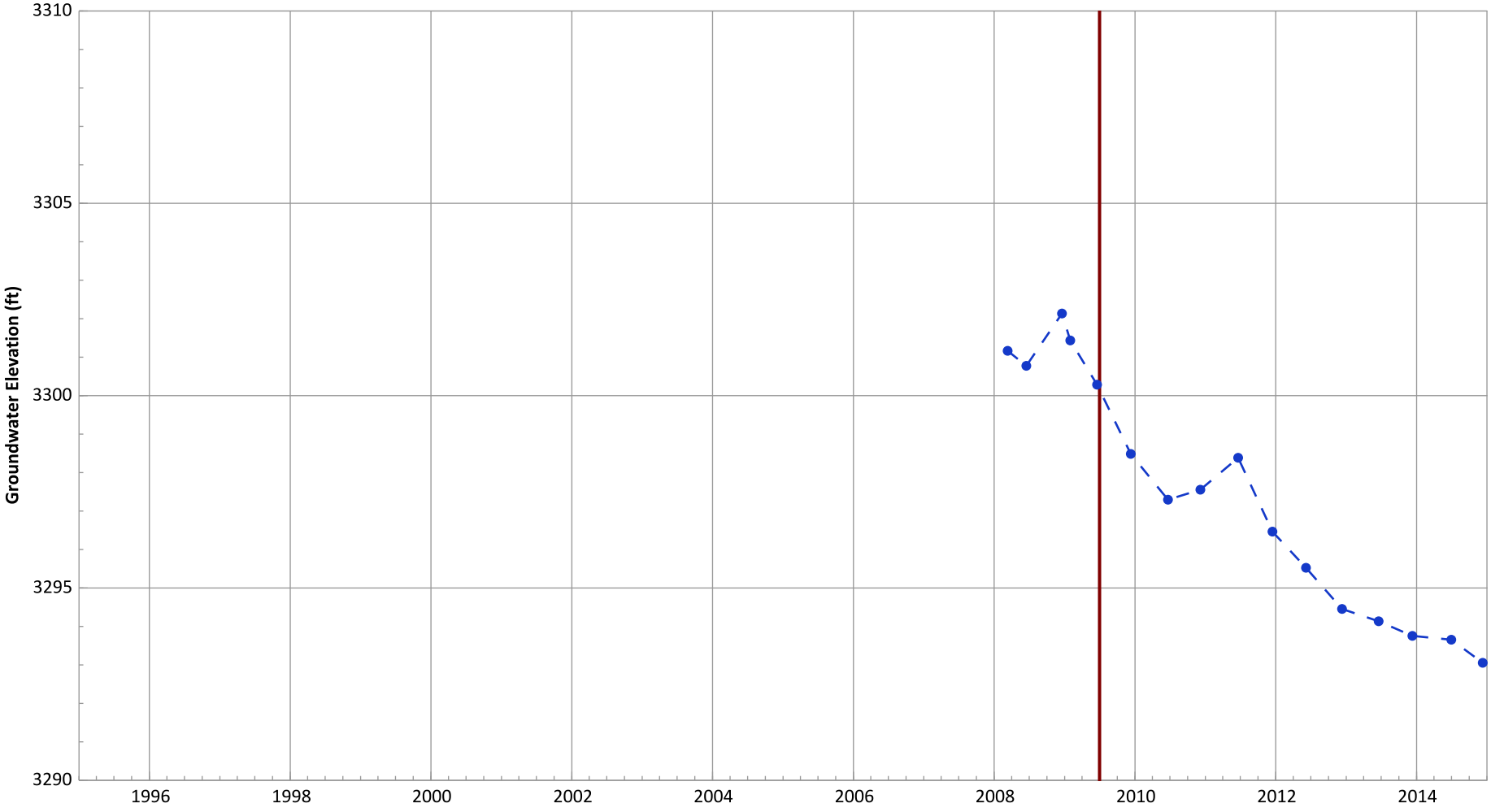
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.12 ft/yr
2012 - 2014 Data: Decreasing at 0.21 ft/yr

PTX06-1128 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

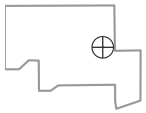


Notes:
1. Top of screen elevation is 3325.04 ft msl.
2. The bottom of screen elevation is 3285.04 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

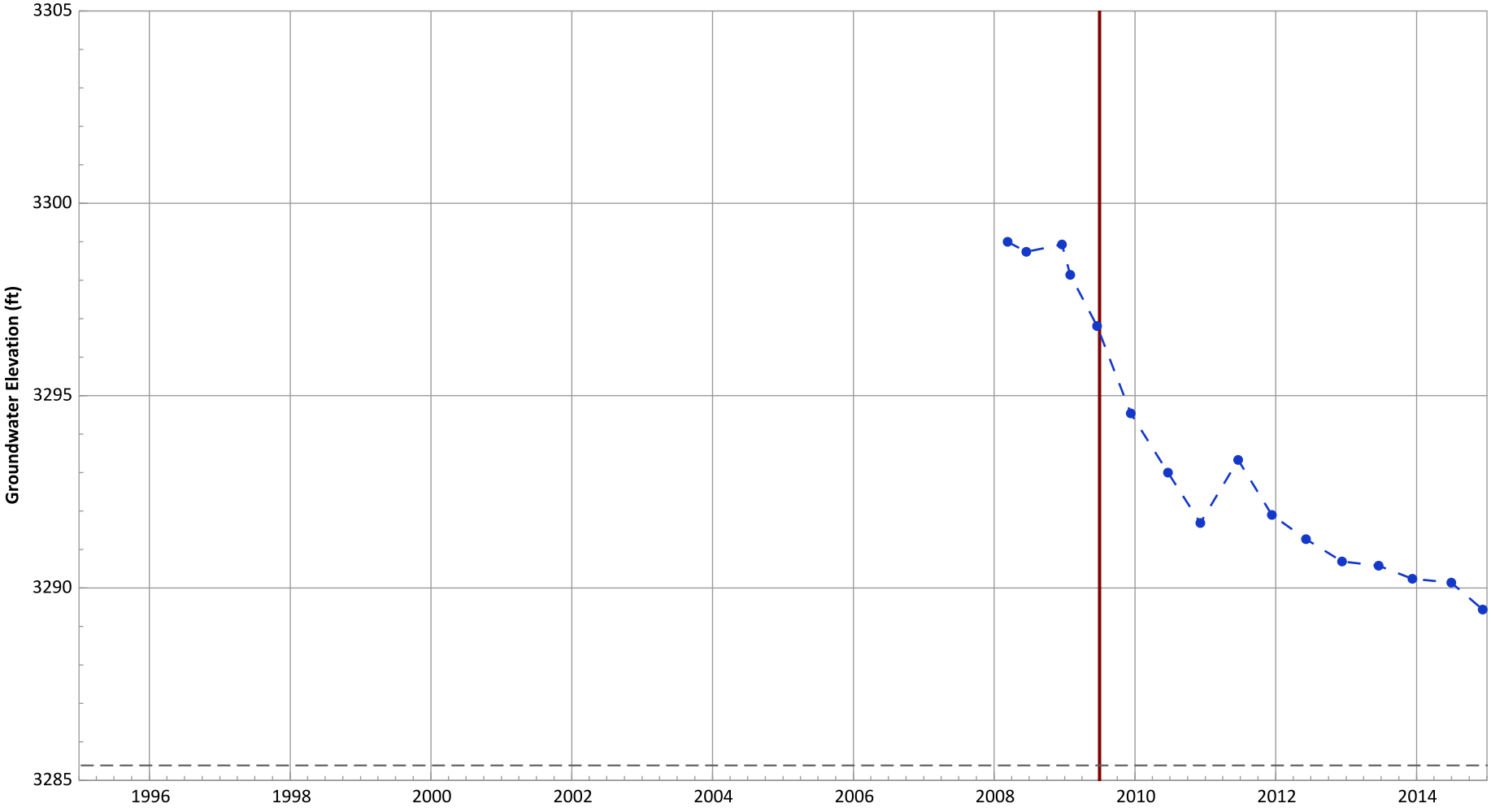
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.35 ft/yr
2012 - 2014 Data: Decreasing at 0.85 ft/yr

PTX06-1129 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

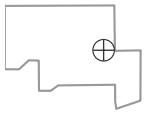


Notes:
1. Top of screen elevation is 3305.39 ft msl.
2. The bottom of screen elevation is 3285.39 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

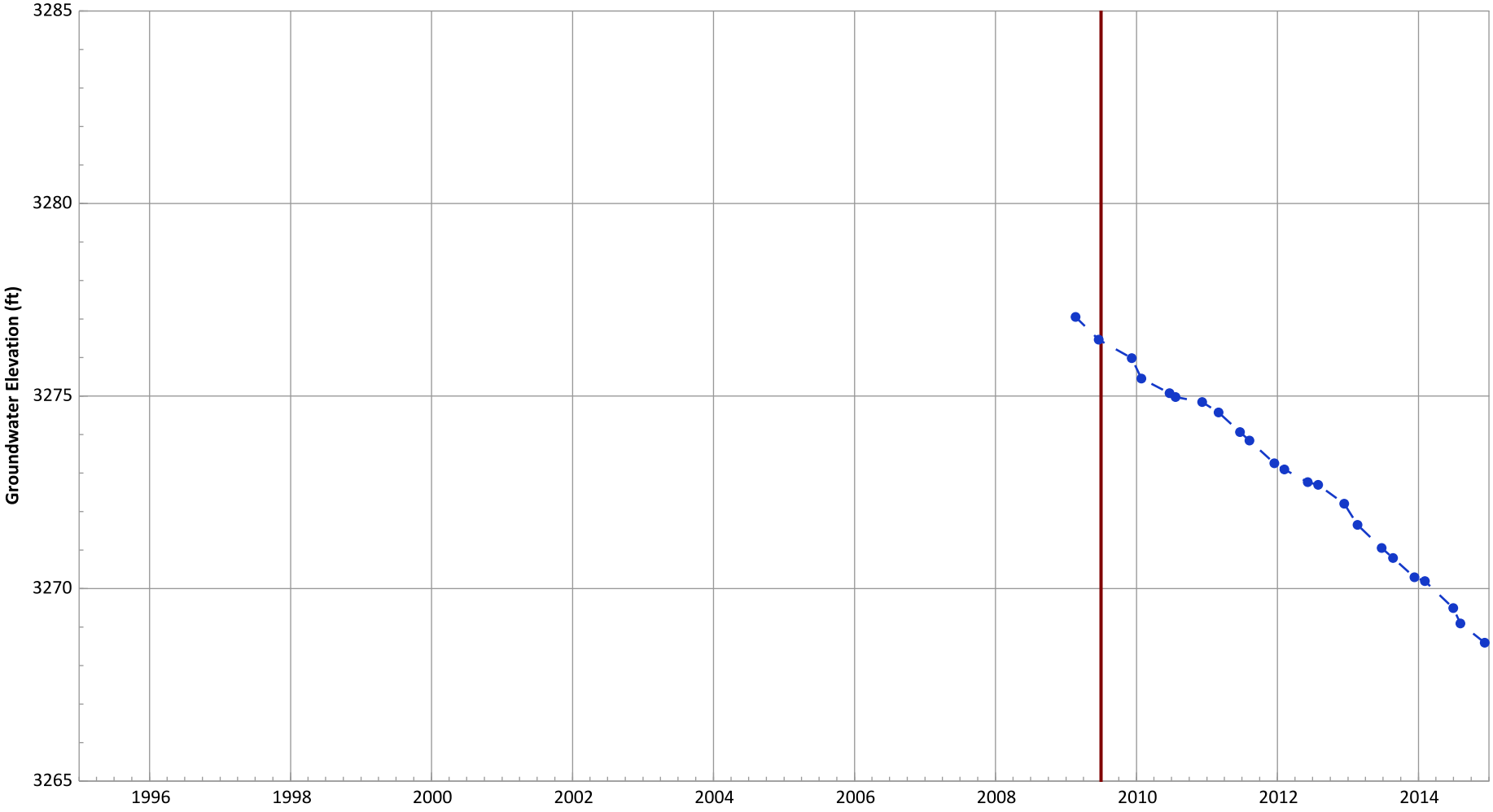
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.49 ft/yr
2012 - 2014 Data: Decreasing at 0.63 ft/yr

PTX06-1130 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

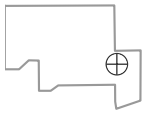


Notes:
1. Top of screen elevation is 3283.74 ft msl.
2. The bottom of screen elevation is 3258.74 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

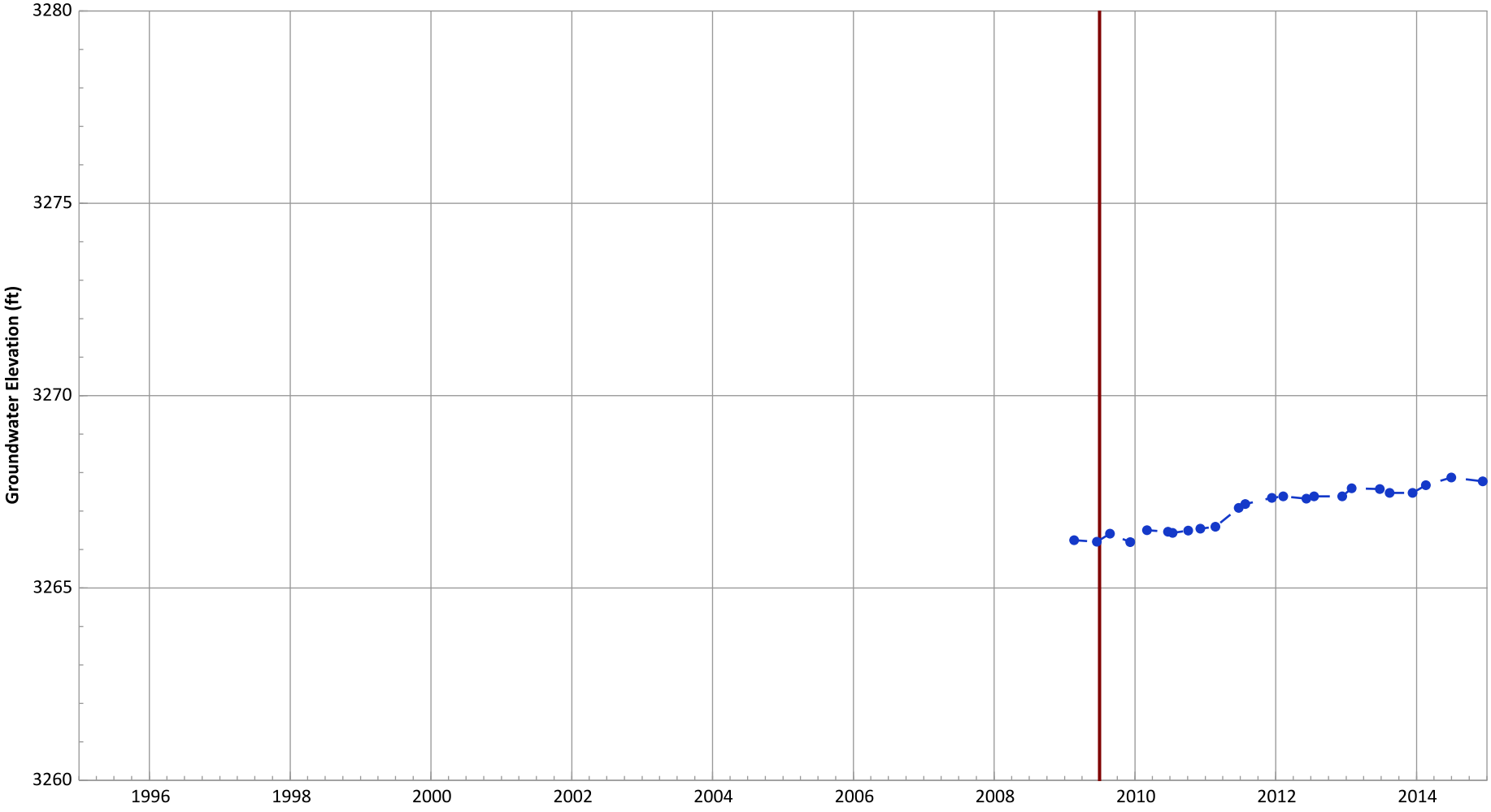
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.41 ft/yr
2012 - 2014 Data: Decreasing at 1.7 ft/yr

PTX06-1131 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

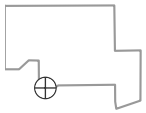


Notes:
1. Top of screen elevation is 3278.81 ft msl.
2. The bottom of screen elevation is 3258.81 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

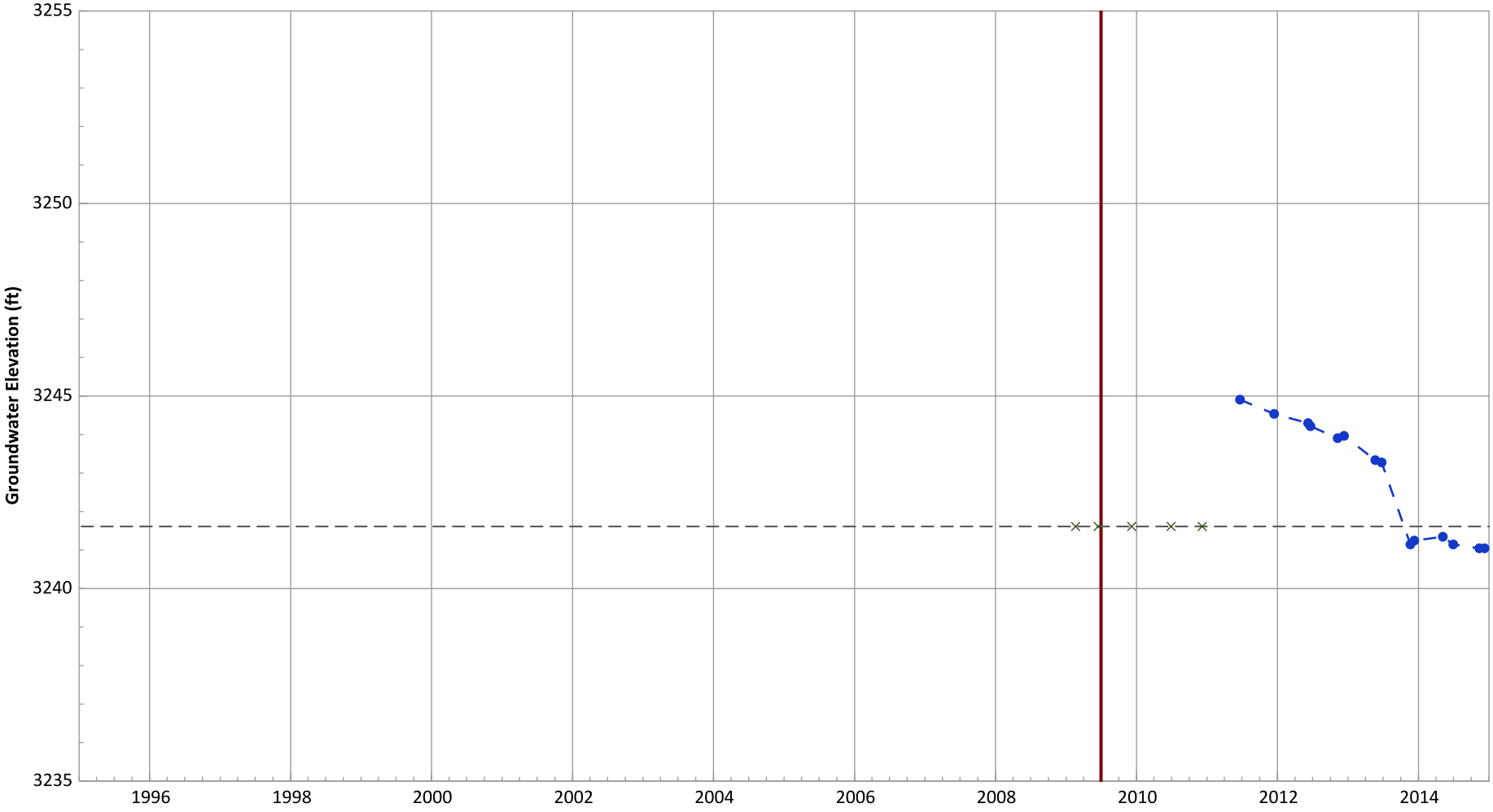
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.32 ft/yr
2012 - 2014 Data: Increasing at 0.19 ft/yr

PTX06-1133A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

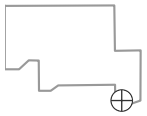


Notes:
1. Top of screen elevation is 3256.61 ft msl.
2. The bottom of screen elevation is 3241.61 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

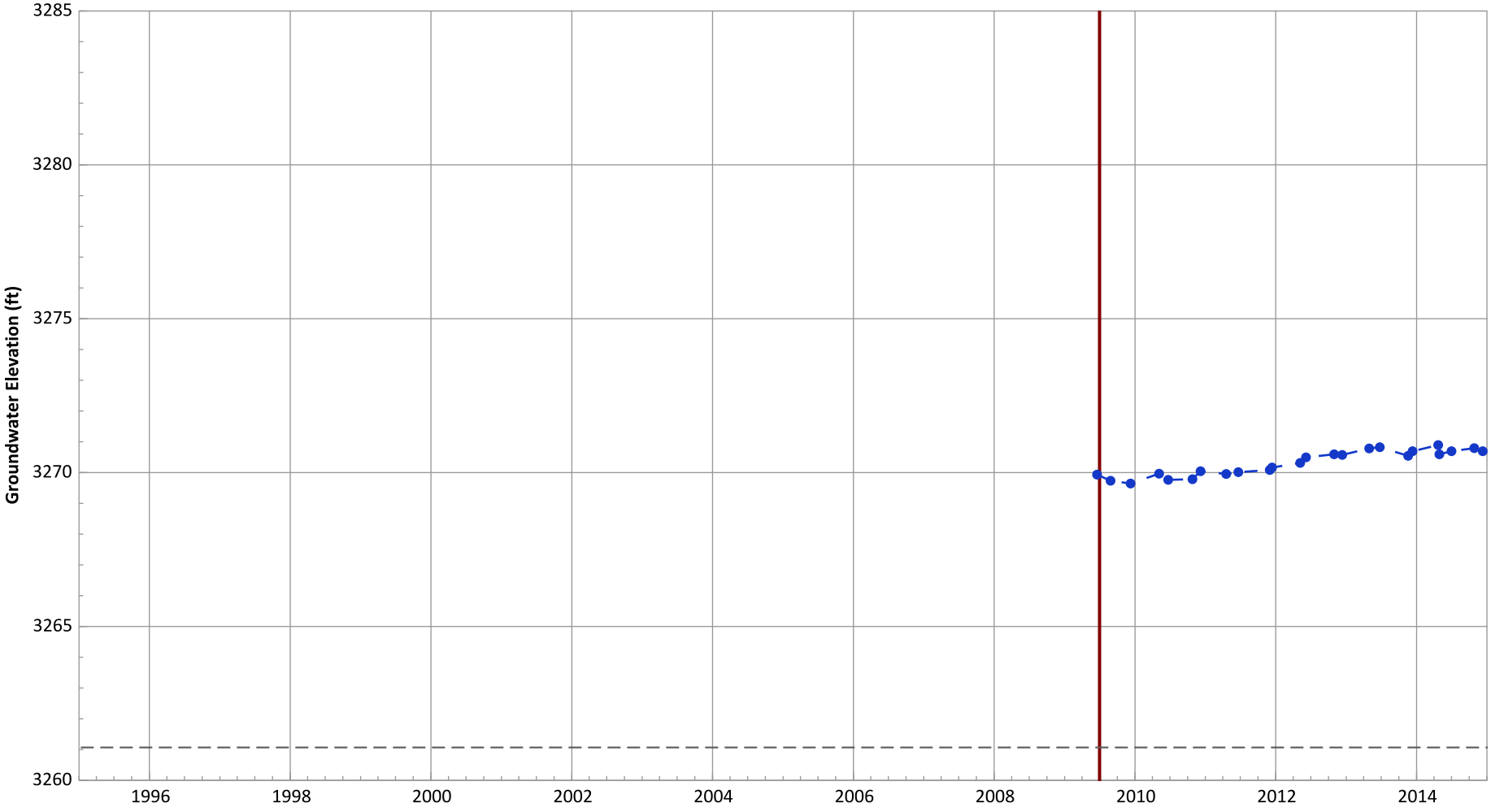
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.34 ft/yr
2012 - 2014 Data: Decreasing at 1.51 ft/yr

PTX06-1134 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

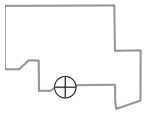


Notes:
1. Top of screen elevation is 3276.07 ft msl.
2. The bottom of screen elevation is 3261.07 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

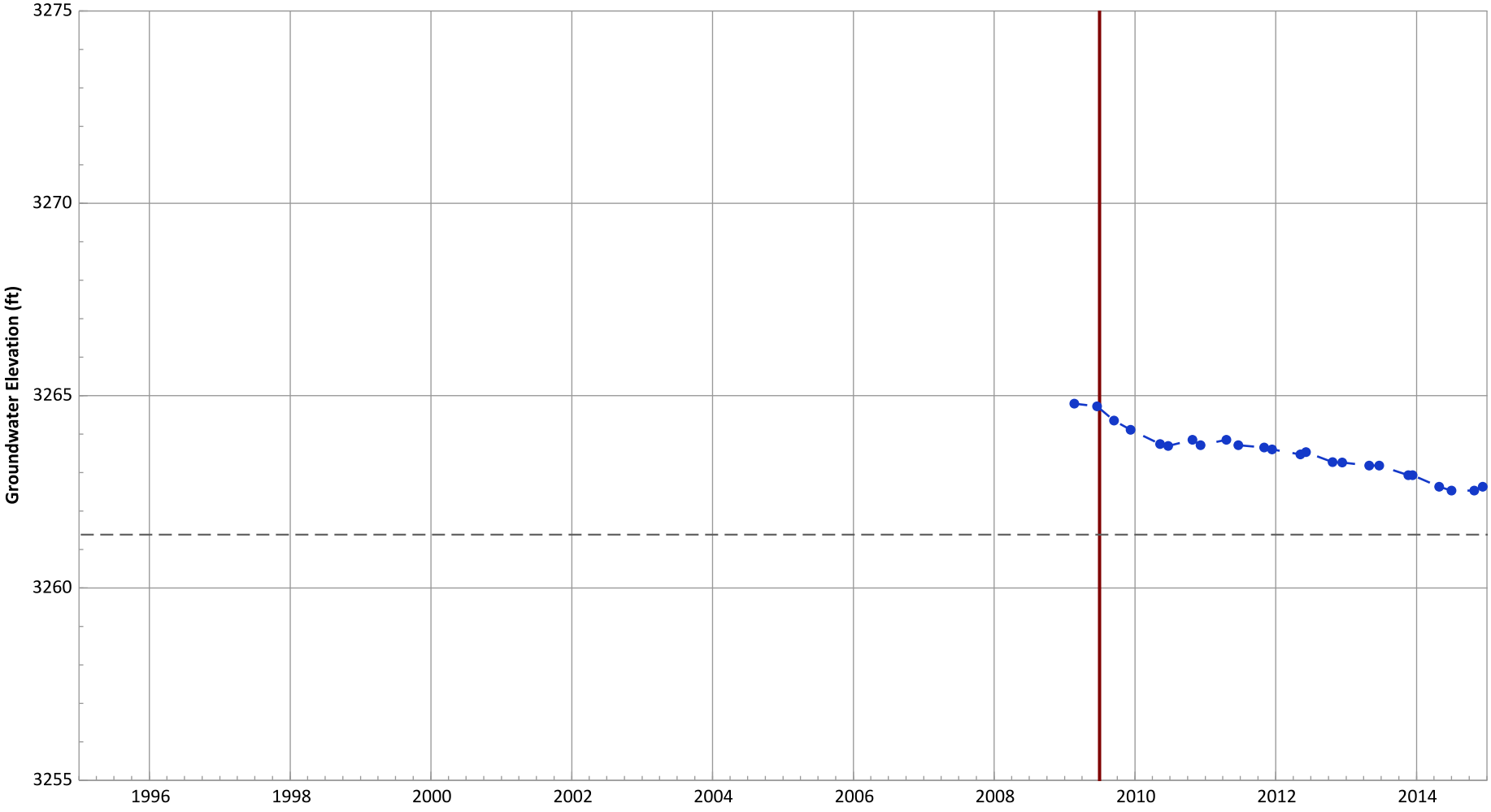
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.22 ft/yr
2012 - 2014 Data: No Trend

PTX06-1135 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

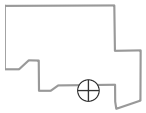


Notes:
1. Top of screen elevation is 3281.39 ft msl.
2. The bottom of screen elevation is 3261.39 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

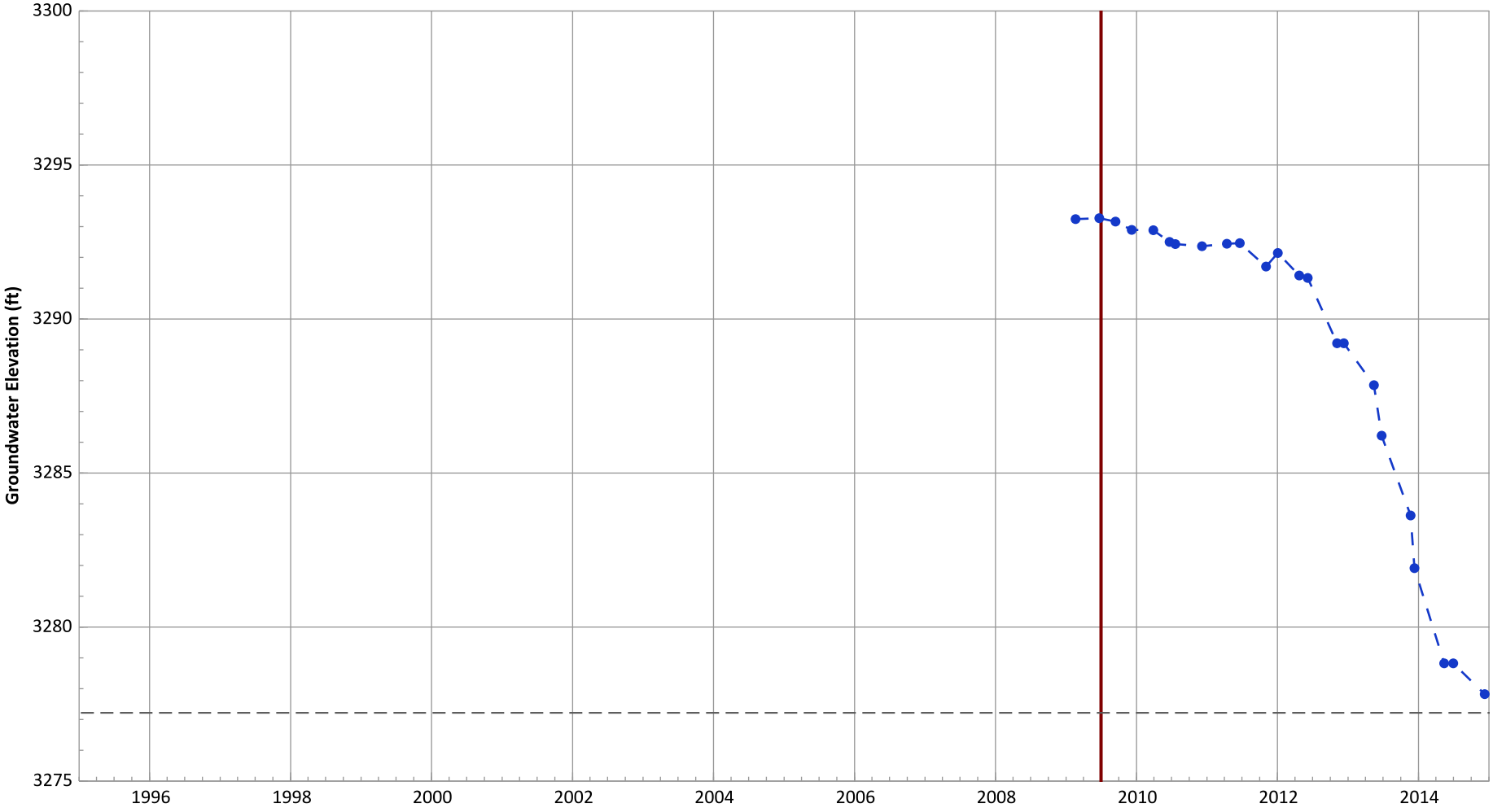
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.34 ft/yr
2012 - 2014 Data: Decreasing at 0.4 ft/yr

PTX06-1136 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

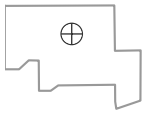


Notes:
1. Top of screen elevation is 3297.22 ft msl.
2. The bottom of screen elevation is 3277.22 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

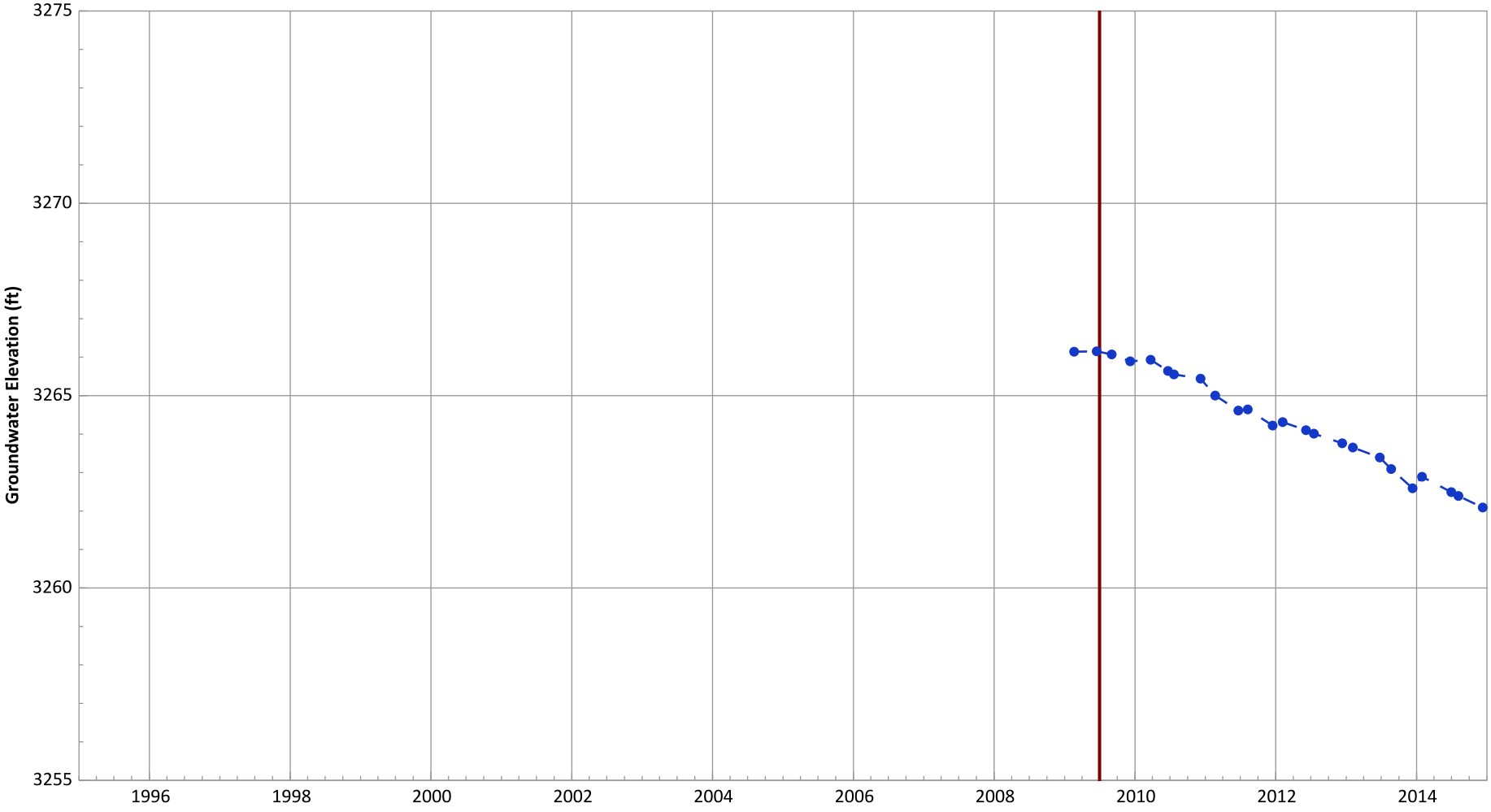
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 2.61 ft/yr
2012 - 2014 Data: Decreasing at 6.08 ft/yr

PTX06-1146 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

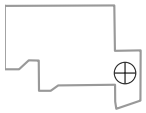


Notes:
1. Top of screen elevation is 3263.96 ft msl.
2. The bottom of screen elevation is 3243.96 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

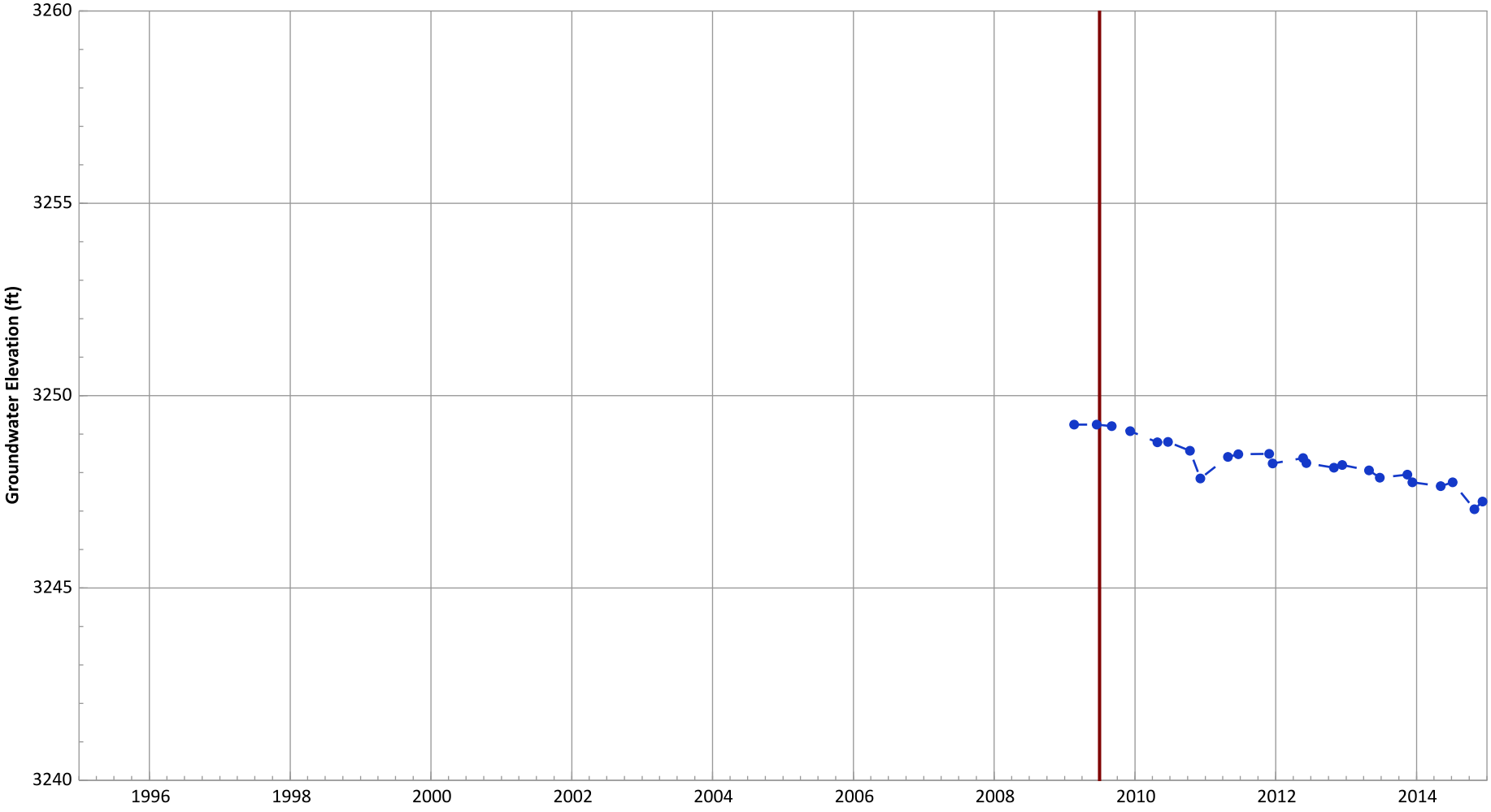
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.75 ft/yr
2012 - 2014 Data: Decreasing at 0.81 ft/yr

PTX06-1147 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

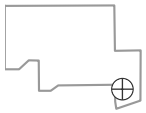


Notes:
1. Top of screen elevation is 3251.62 ft msl.
2. The bottom of screen elevation is 3231.62 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

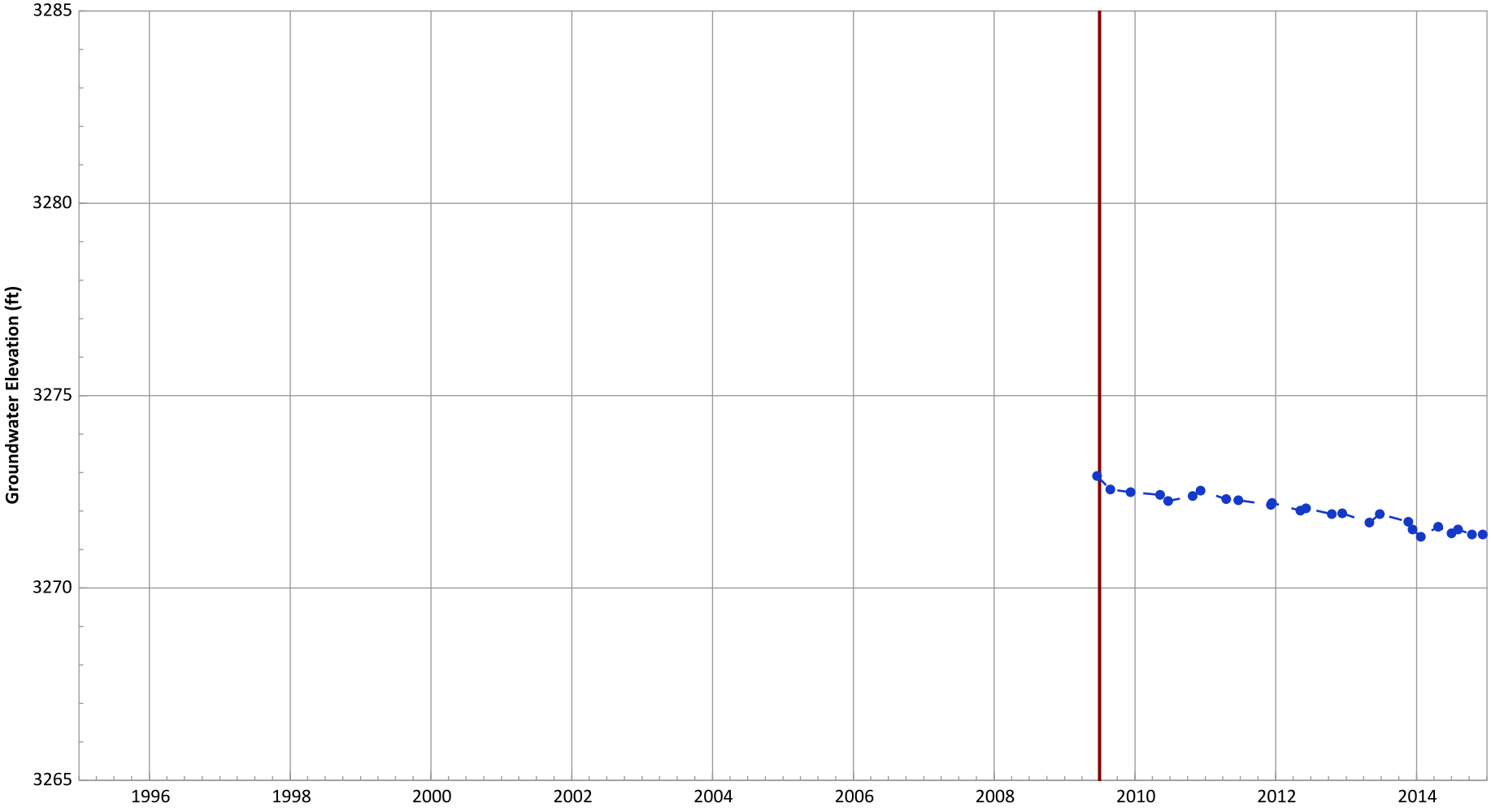
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.31 ft/yr
2012 - 2014 Data: Decreasing at 0.42 ft/yr

PTX06-1148 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

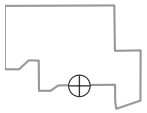


Notes:
1. Top of screen elevation is 3276.06 ft msl.
2. The bottom of screen elevation is 3256.06 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

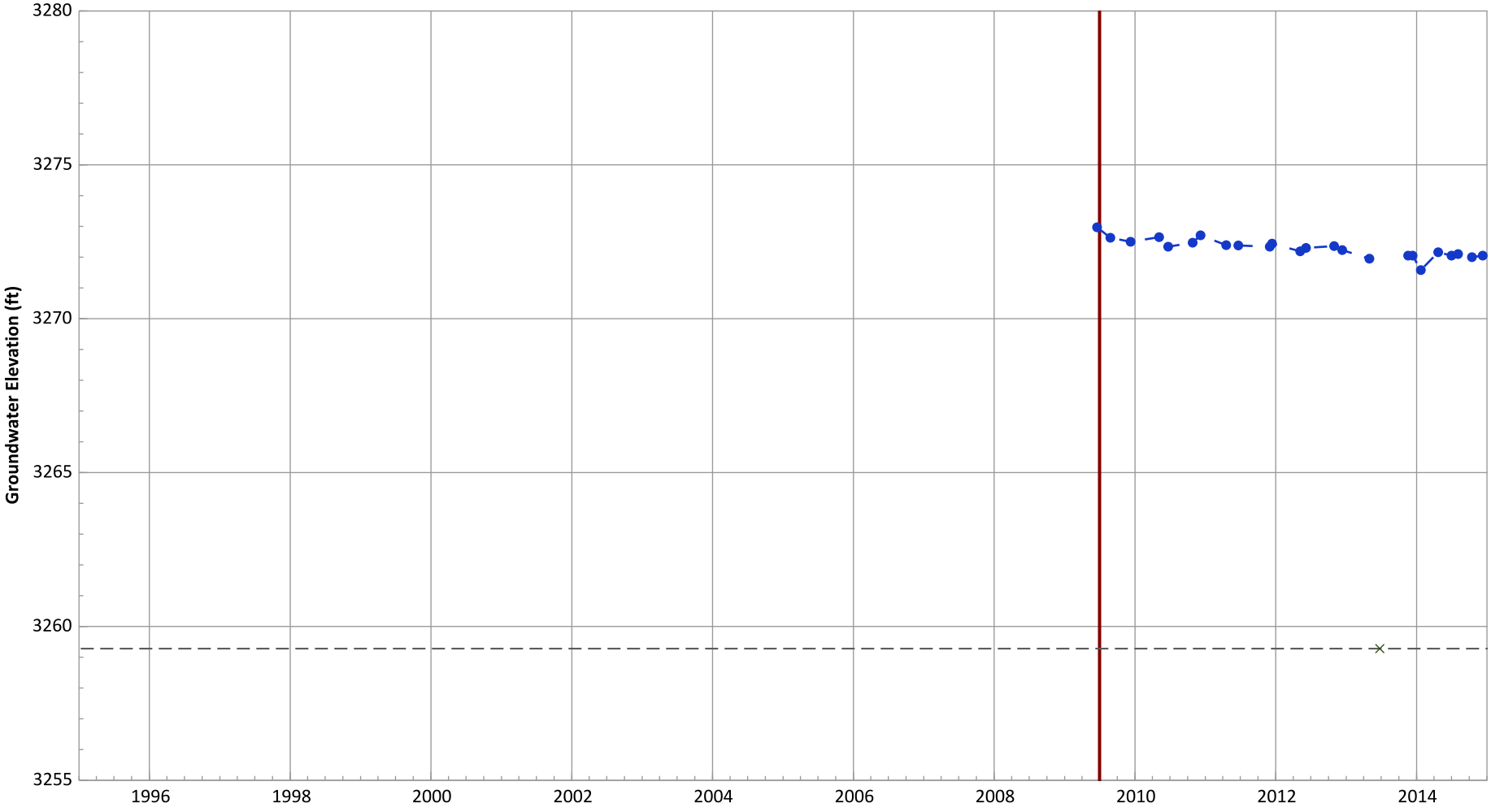
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.25 ft/yr
2012 - 2014 Data: Decreasing at 0.28 ft/yr

PTX06-1149 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

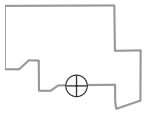


Notes:
1. Top of screen elevation is 3279.28 ft msl.
2. The bottom of screen elevation is 3259.28 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

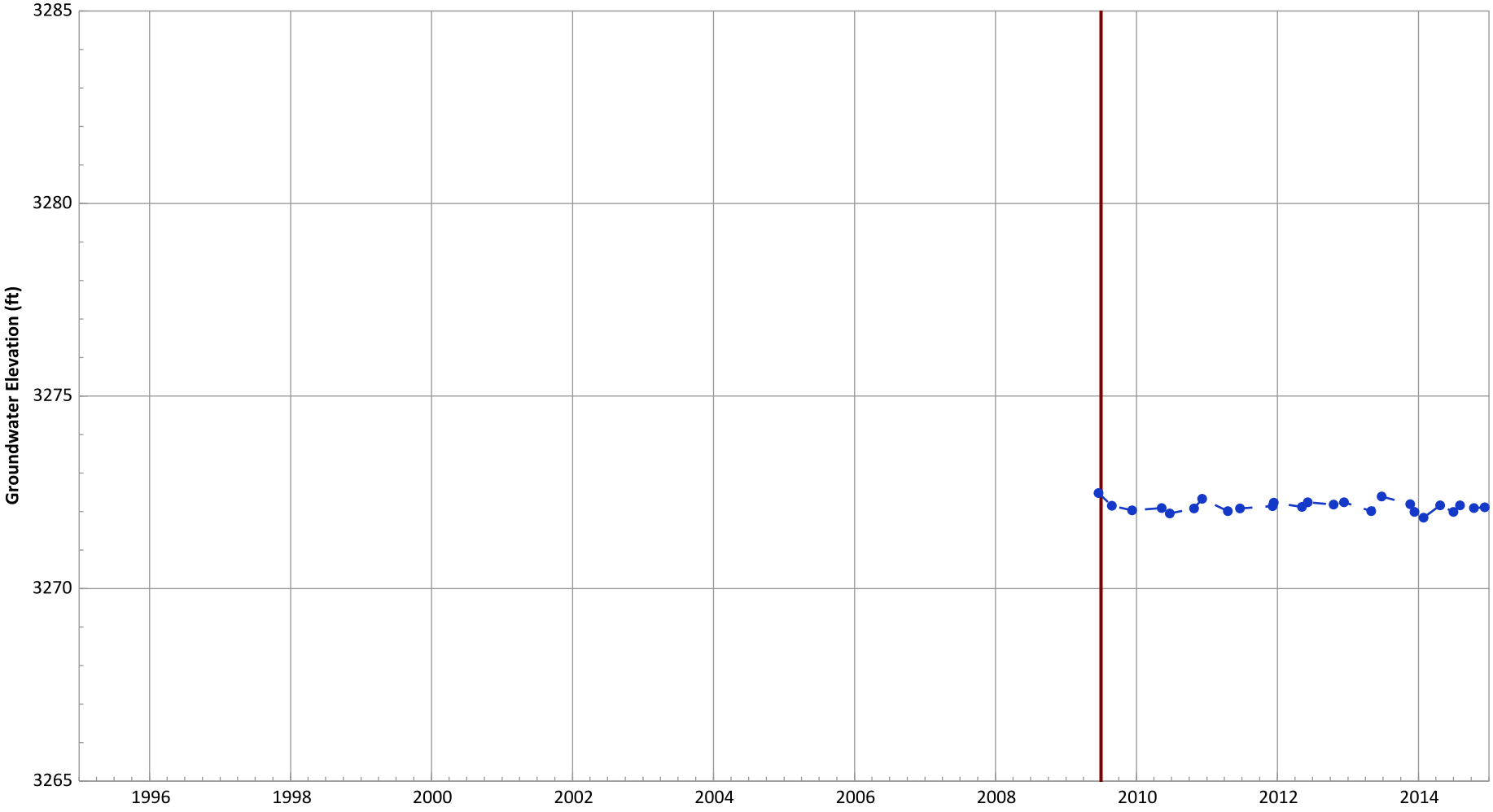
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.14 ft/yr
2012 - 2014 Data: Decreasing at 0.11 ft/yr

PTX06-1150 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

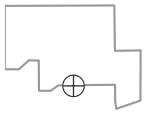


Notes:
1. Top of screen elevation is 3280.9 ft msl.
2. The bottom of screen elevation is 3260.9 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

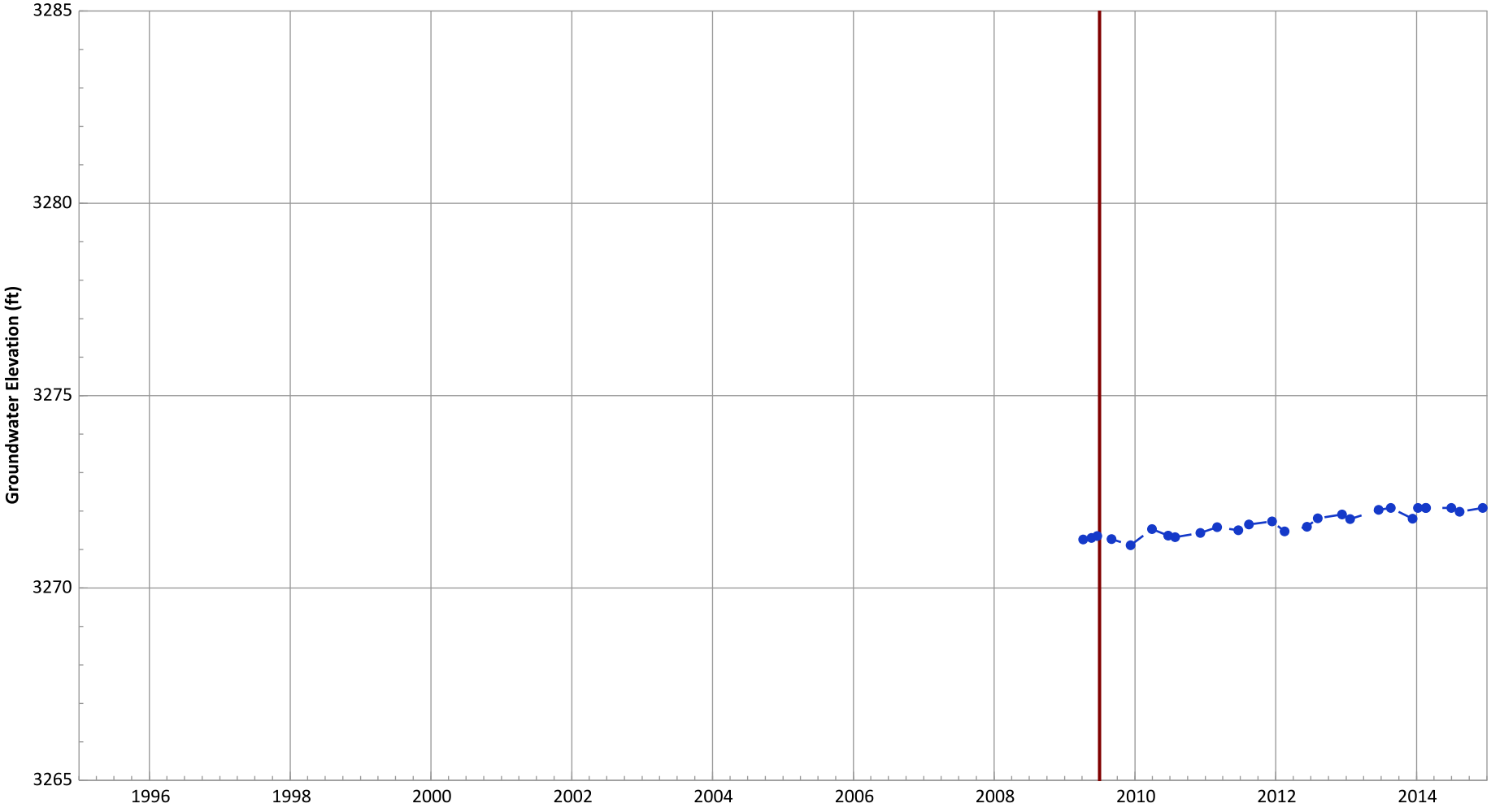
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-1151 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

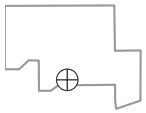


Notes:
1. Top of screen elevation is 3269.55 ft msl.
2. The bottom of screen elevation is 3254.55 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

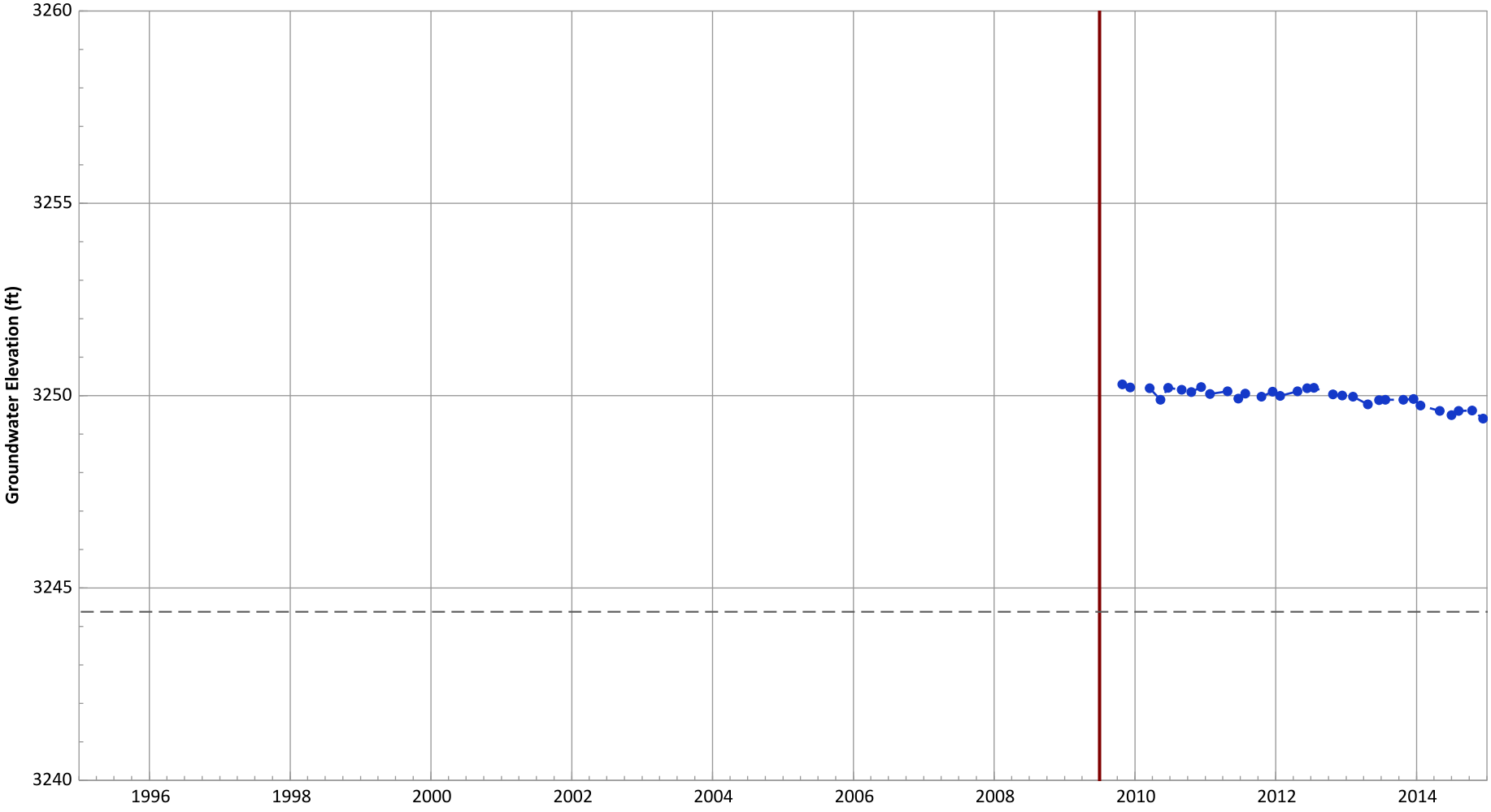
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.16 ft/yr
2012 - 2014 Data: Increasing at 0.15 ft/yr

PTX06-1153 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

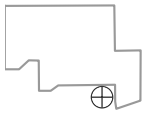


Notes:
1. Top of screen elevation is 3254.38 ft msl.
2. The bottom of screen elevation is 3244.38 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

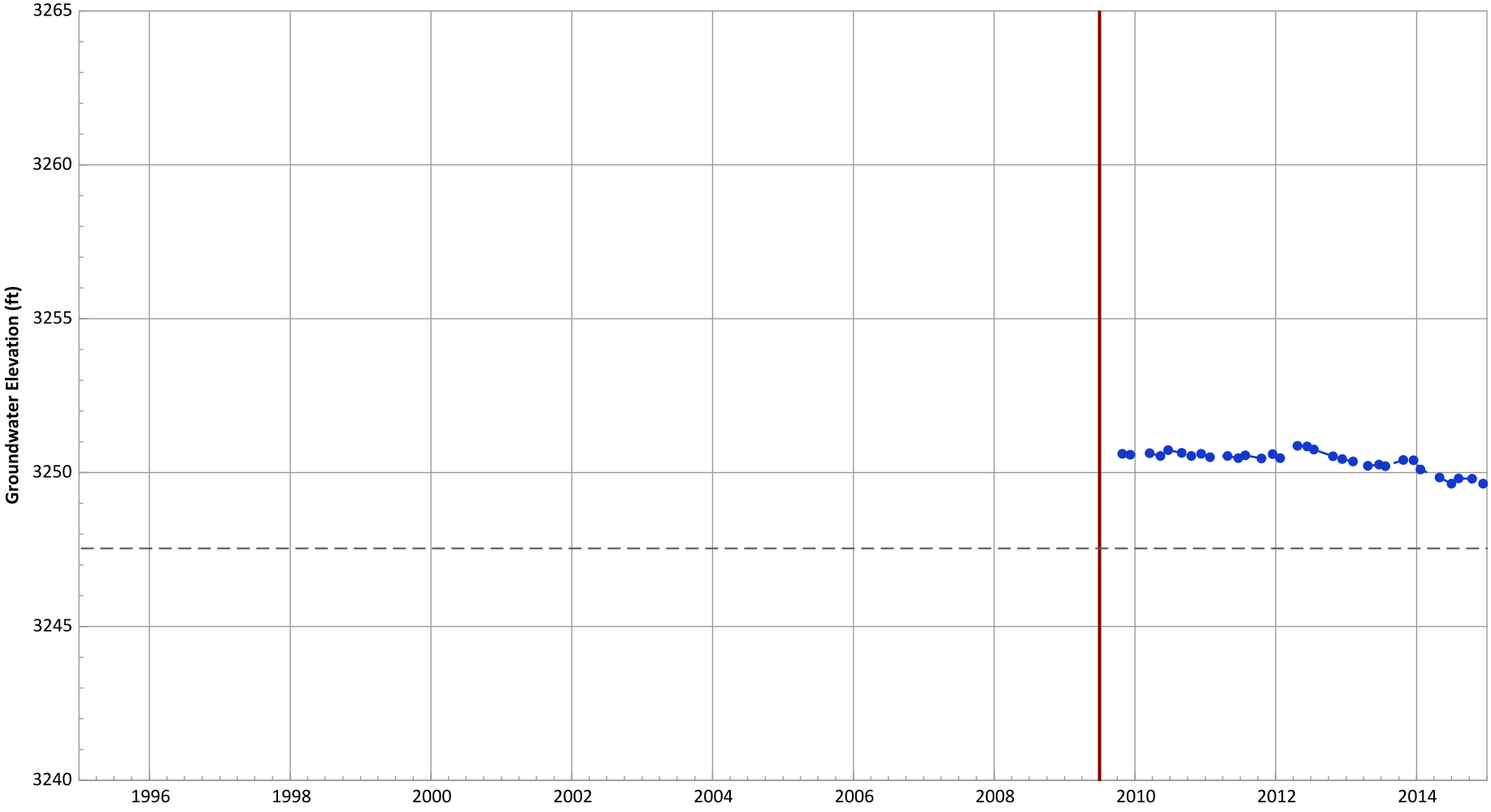
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.12 ft/yr
2012 - 2014 Data: Decreasing at 0.28 ft/yr

PTX06-1154 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

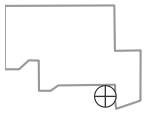


Notes:
1. Top of screen elevation is 3257.54 ft msl.
2. The bottom of screen elevation is 3247.54 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

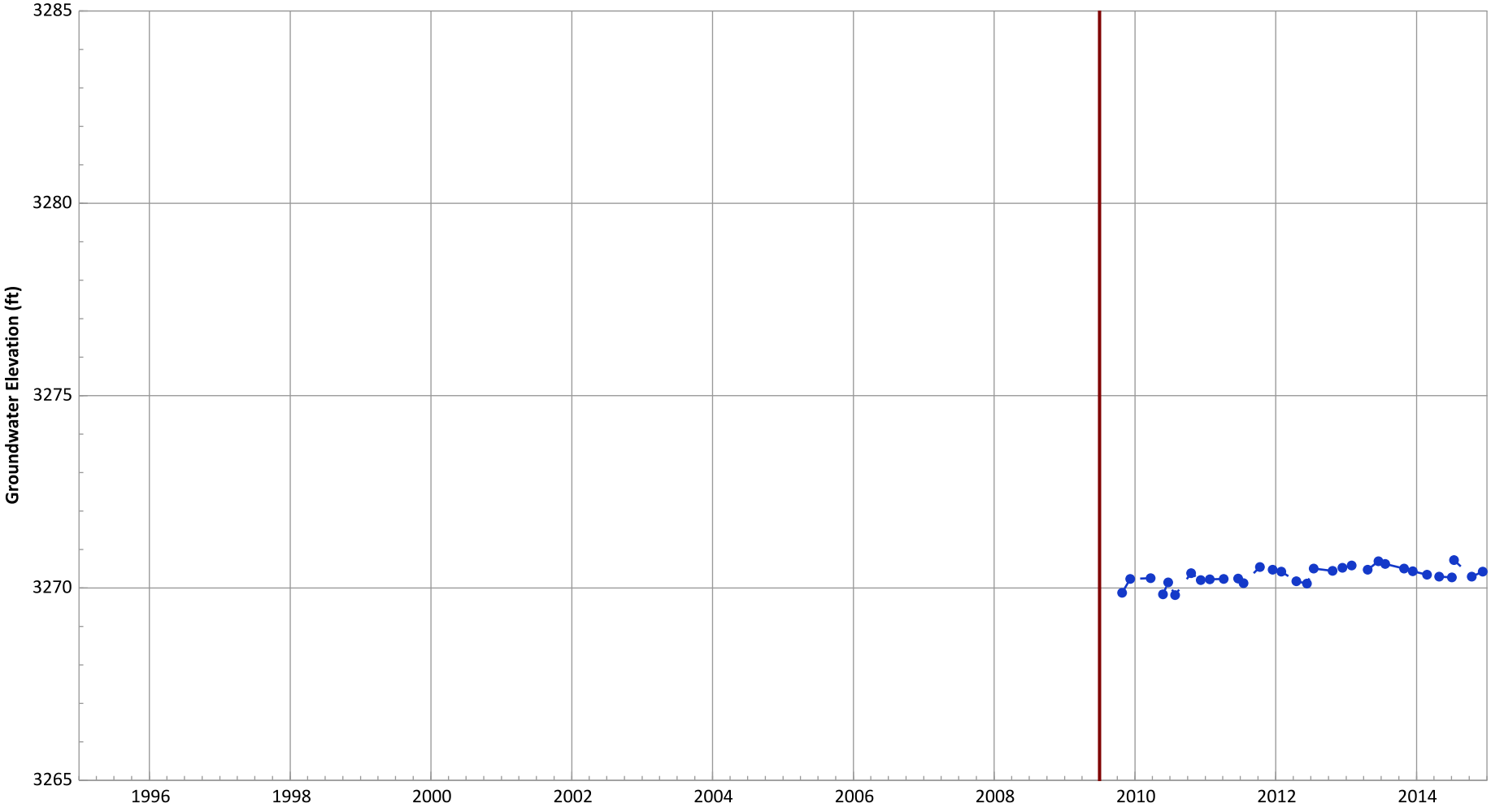
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.16 ft/yr
2012 - 2014 Data: Decreasing at 0.43 ft/yr

PTX06-1155 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

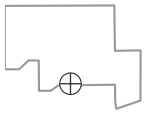


Notes:
1. Top of screen elevation is 3270.01 ft msl.
2. The bottom of screen elevation is 3255.01 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

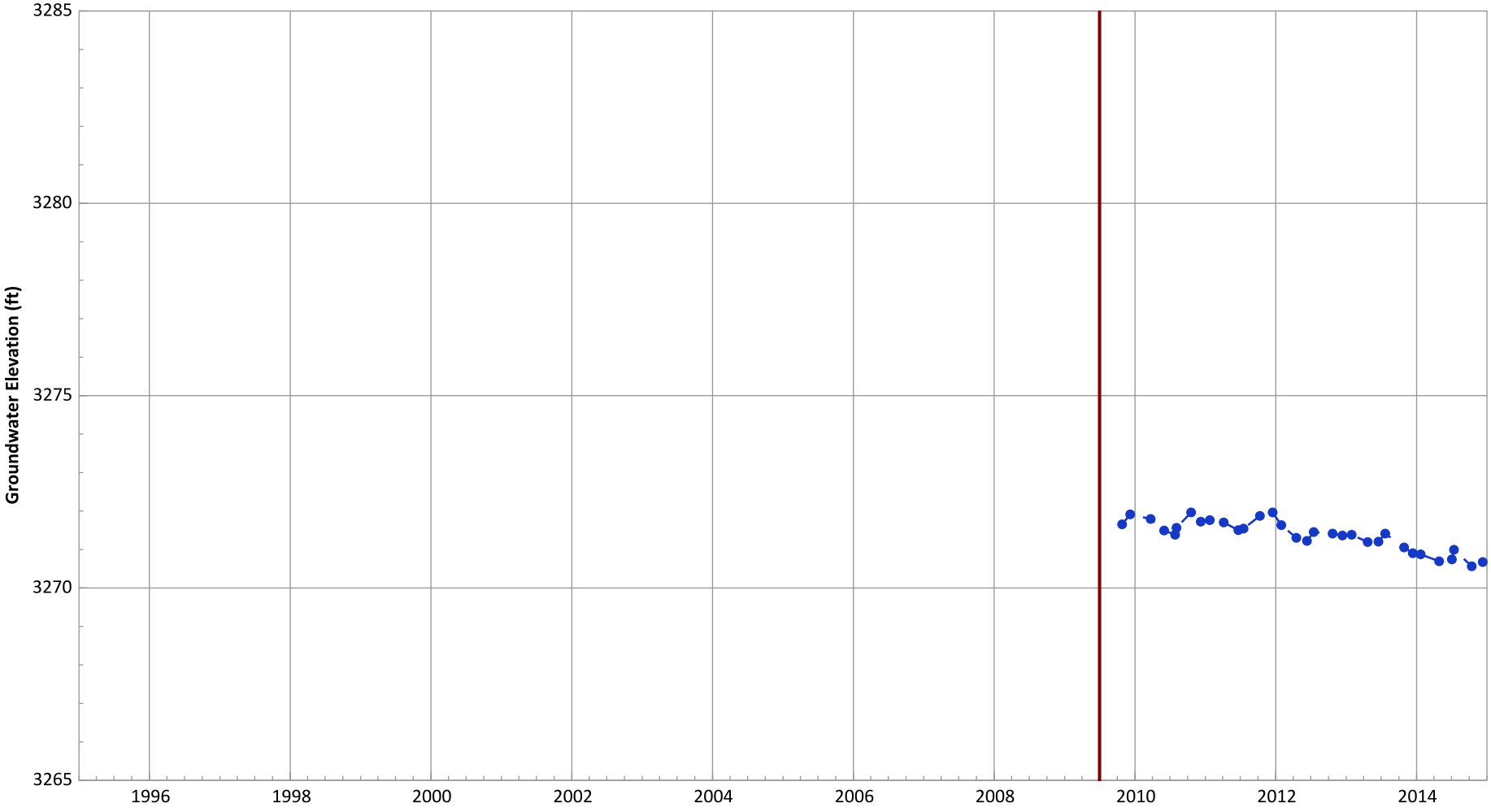
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-1156 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

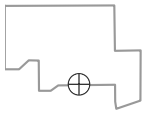


Notes:
1. Top of screen elevation is 3273.4 ft msl.
2. The bottom of screen elevation is 3248.4 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

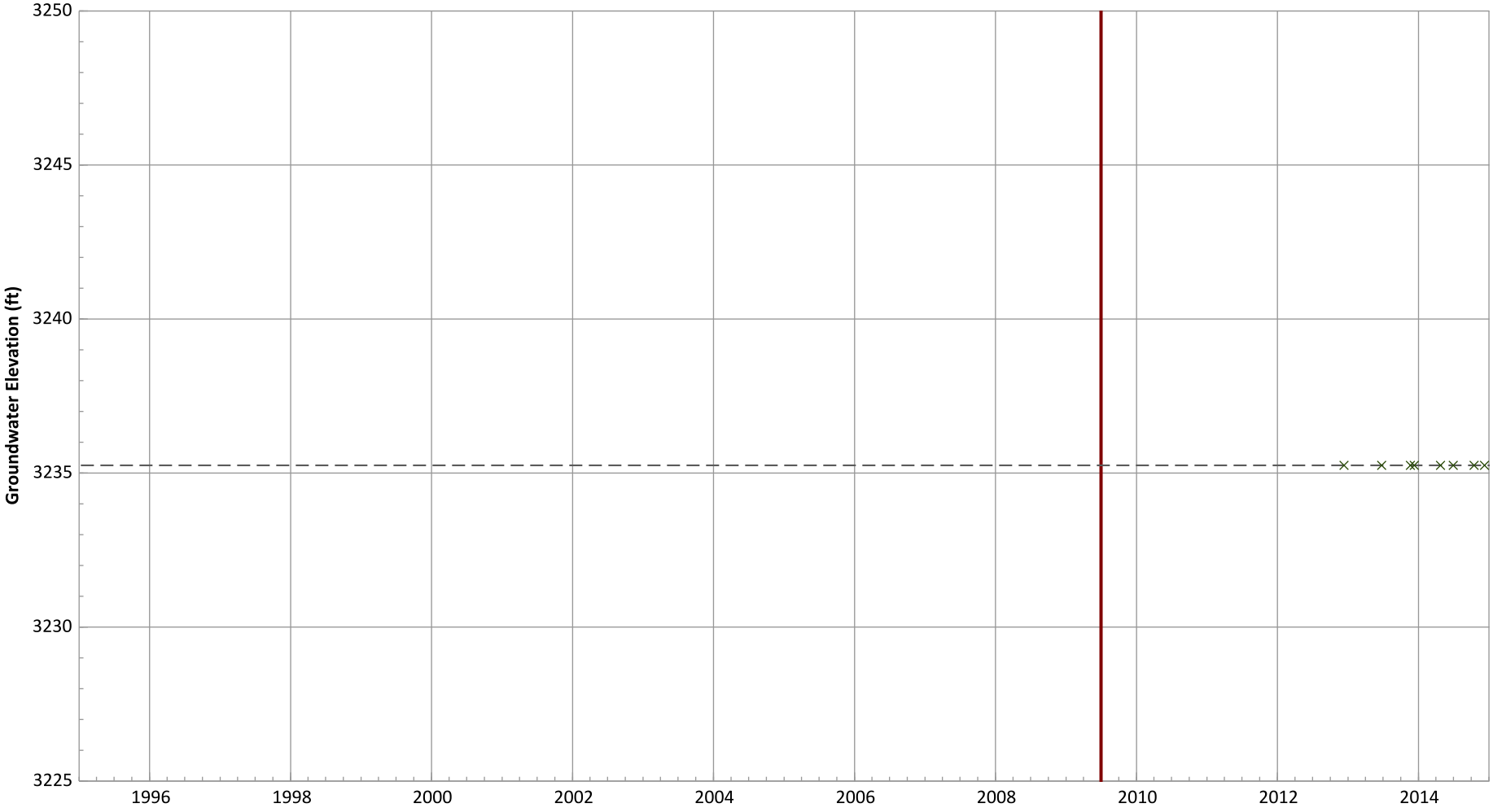
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.22 ft/yr
2012 - 2014 Data: Decreasing at 0.34 ft/yr

PTX06-1158 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant



Notes:
1. Top of screen elevation is 3245.25 ft msl.
2. The bottom of screen elevation is 3235.25 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

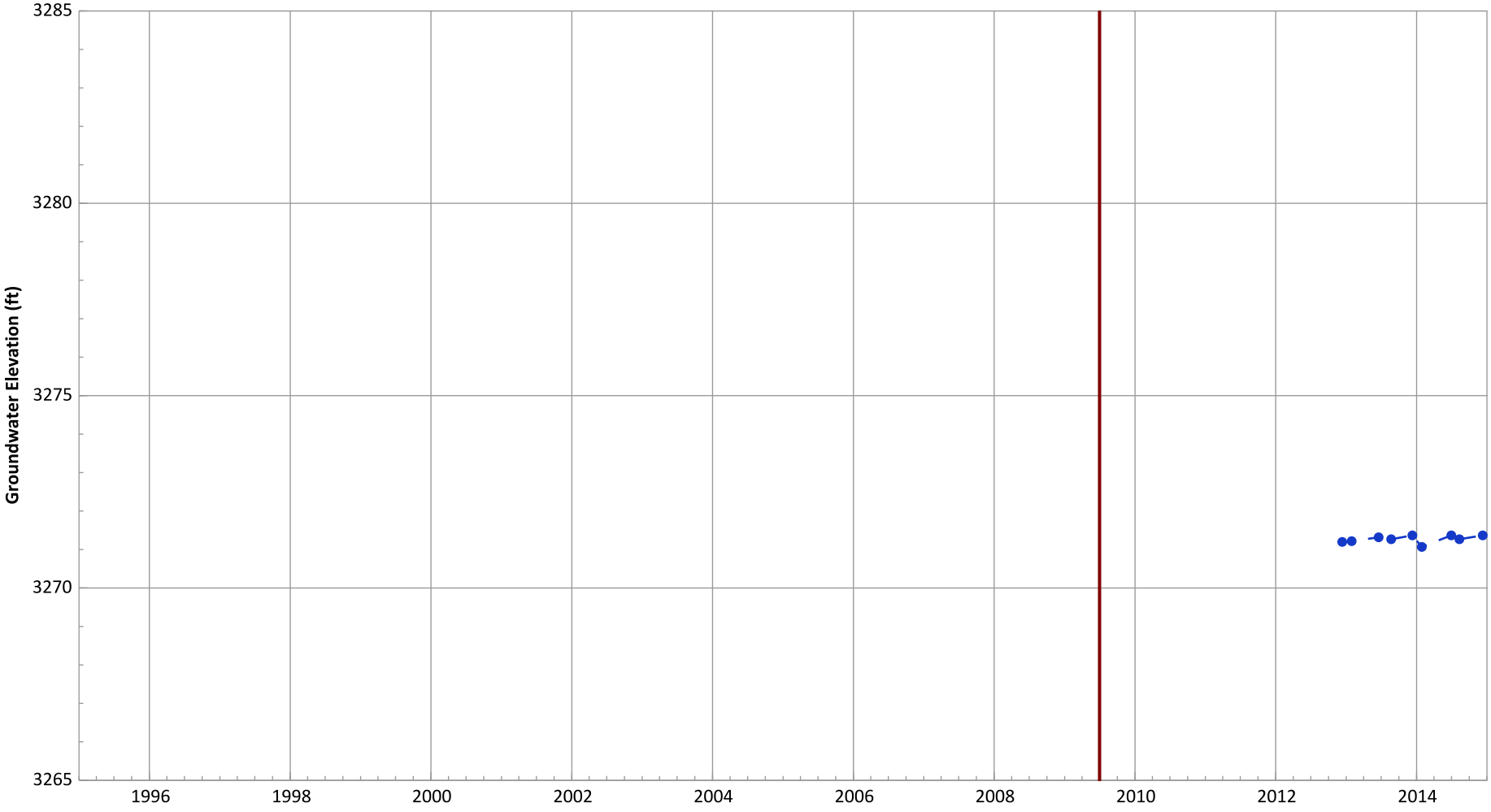
Analysis Date: 04/06/2015

Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location

Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1159 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

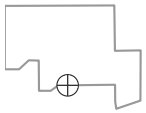


Notes:
1. Top of screen elevation is 3273.93 ft msl.
2. The bottom of screen elevation is 3253.93 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

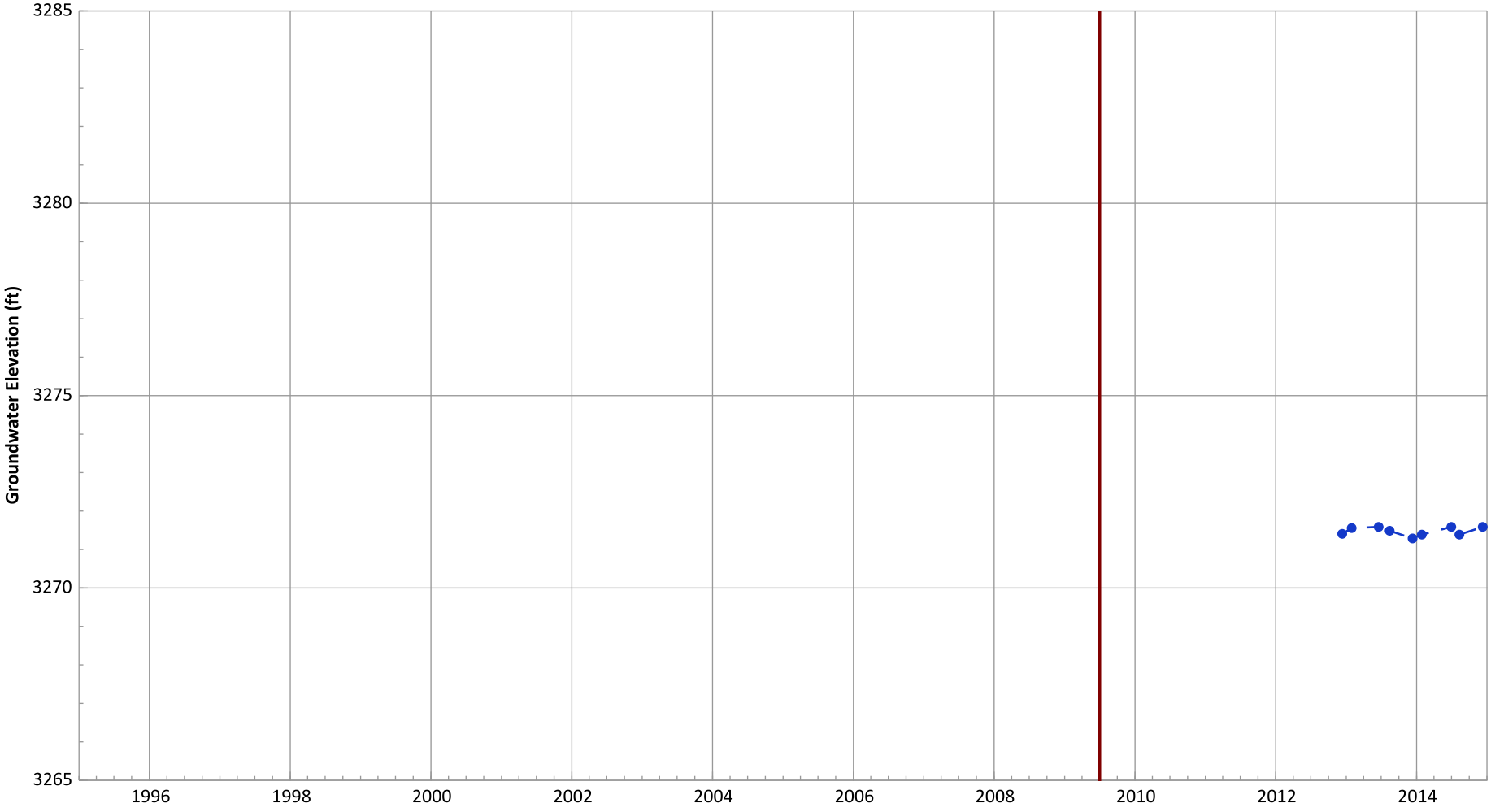
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-1160 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

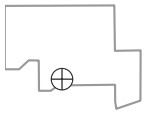


Notes:
1. Top of screen elevation is 3271.51 ft msl.
2. The bottom of screen elevation is 3246.51 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

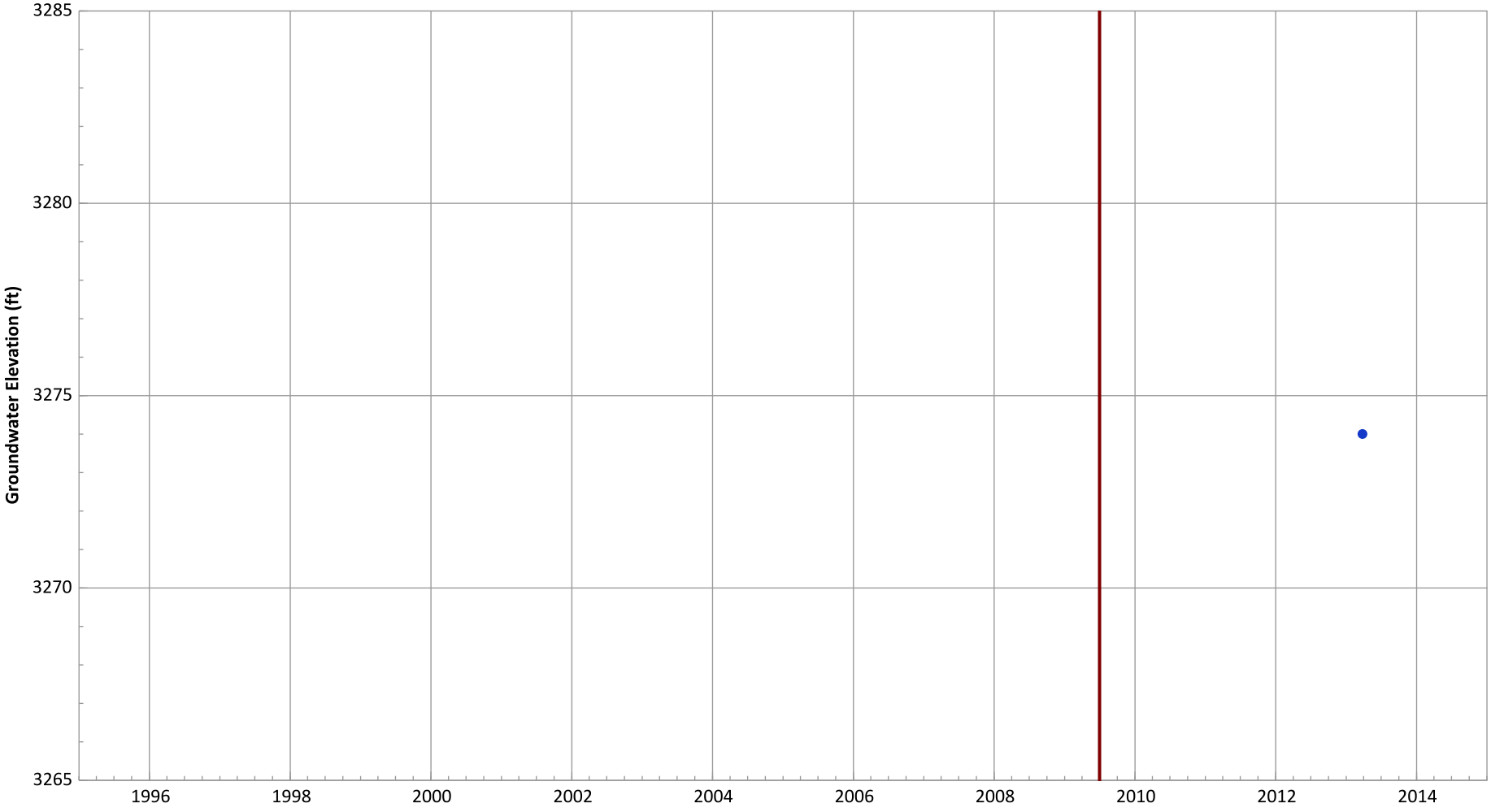
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-1162 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

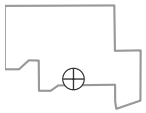


Notes:
1. Top of screen elevation is 3276.3 ft msl.
2. The bottom of screen elevation is 3256.3 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

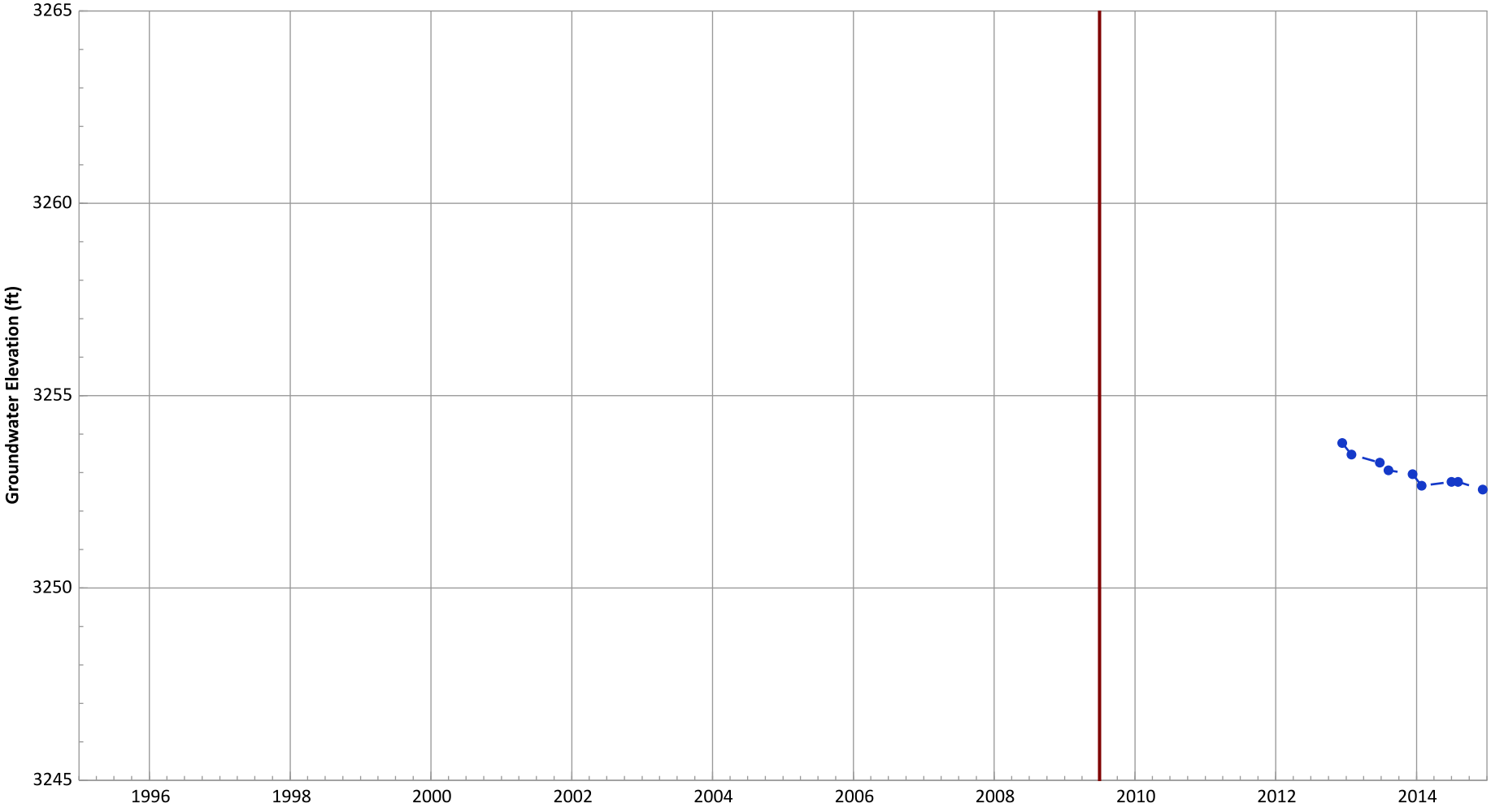
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-1166 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

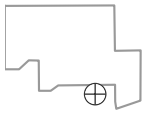


Notes:
1. Top of screen elevation is 3254.36 ft msl.
2. The bottom of screen elevation is 3244.36 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

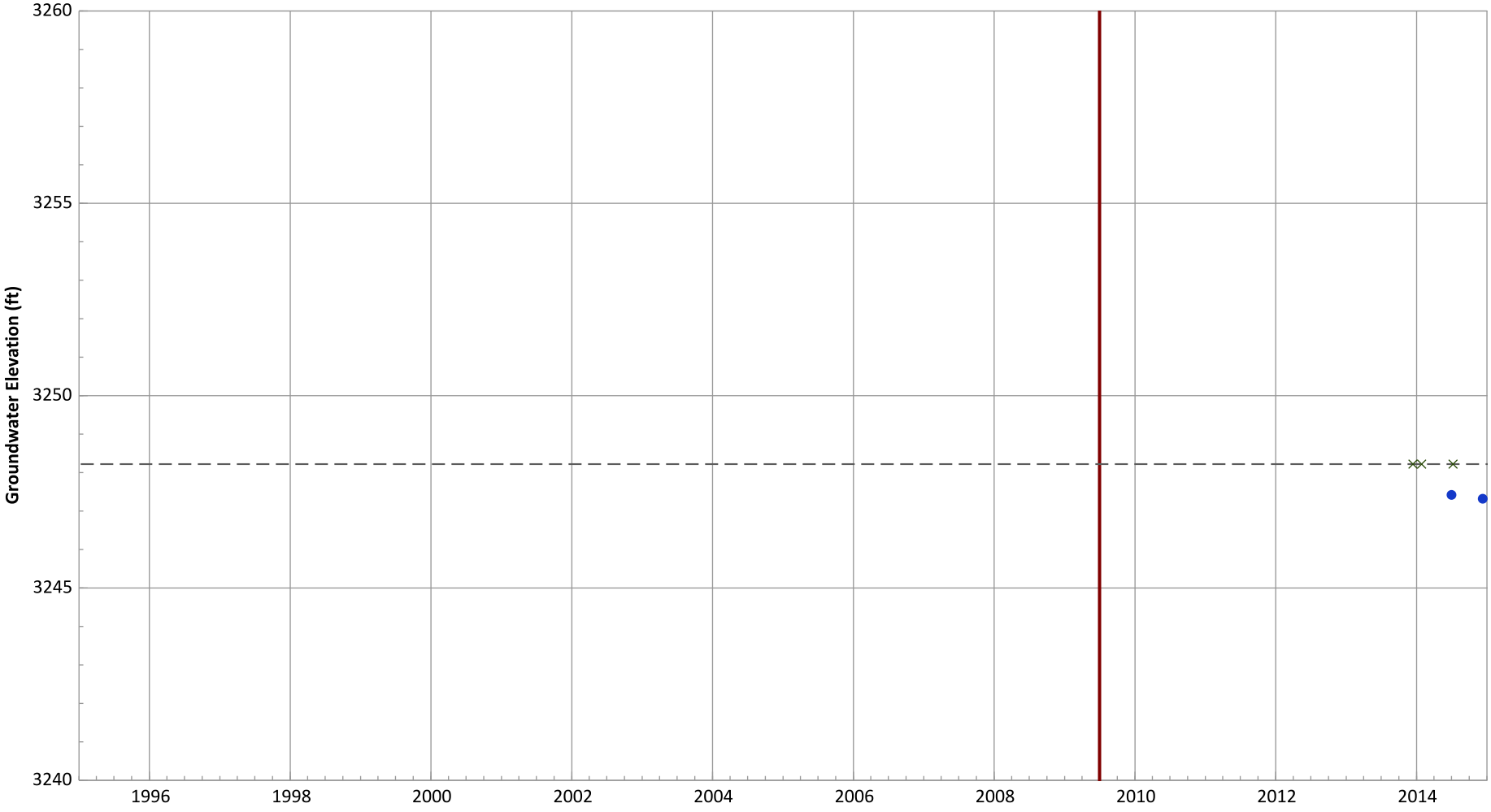
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.55 ft/yr
2012 - 2014 Data: Decreasing at 0.55 ft/yr

PTX06-1167 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

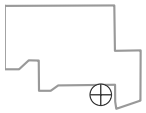


Notes:
1. Top of screen elevation is 3258.22 ft msl.
2. The bottom of screen elevation is 3248.22 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

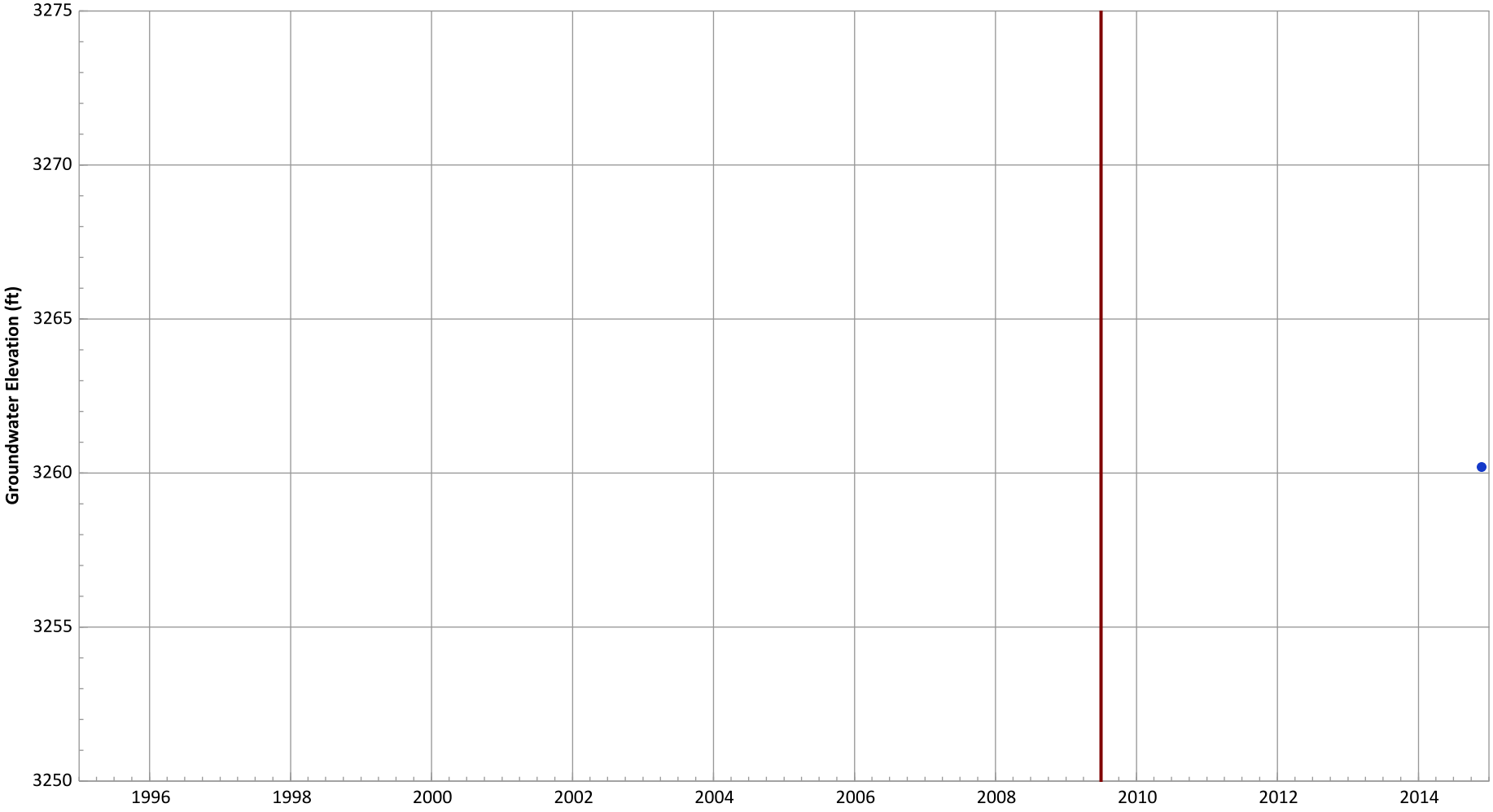
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: Decreasing at 0.23 ft/yr

PTX06-EW-26 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

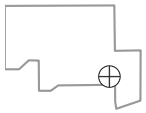


Notes:
1. Top of screen elevation is 3268.82 ft msl.
2. The bottom of screen elevation is 3238.82 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

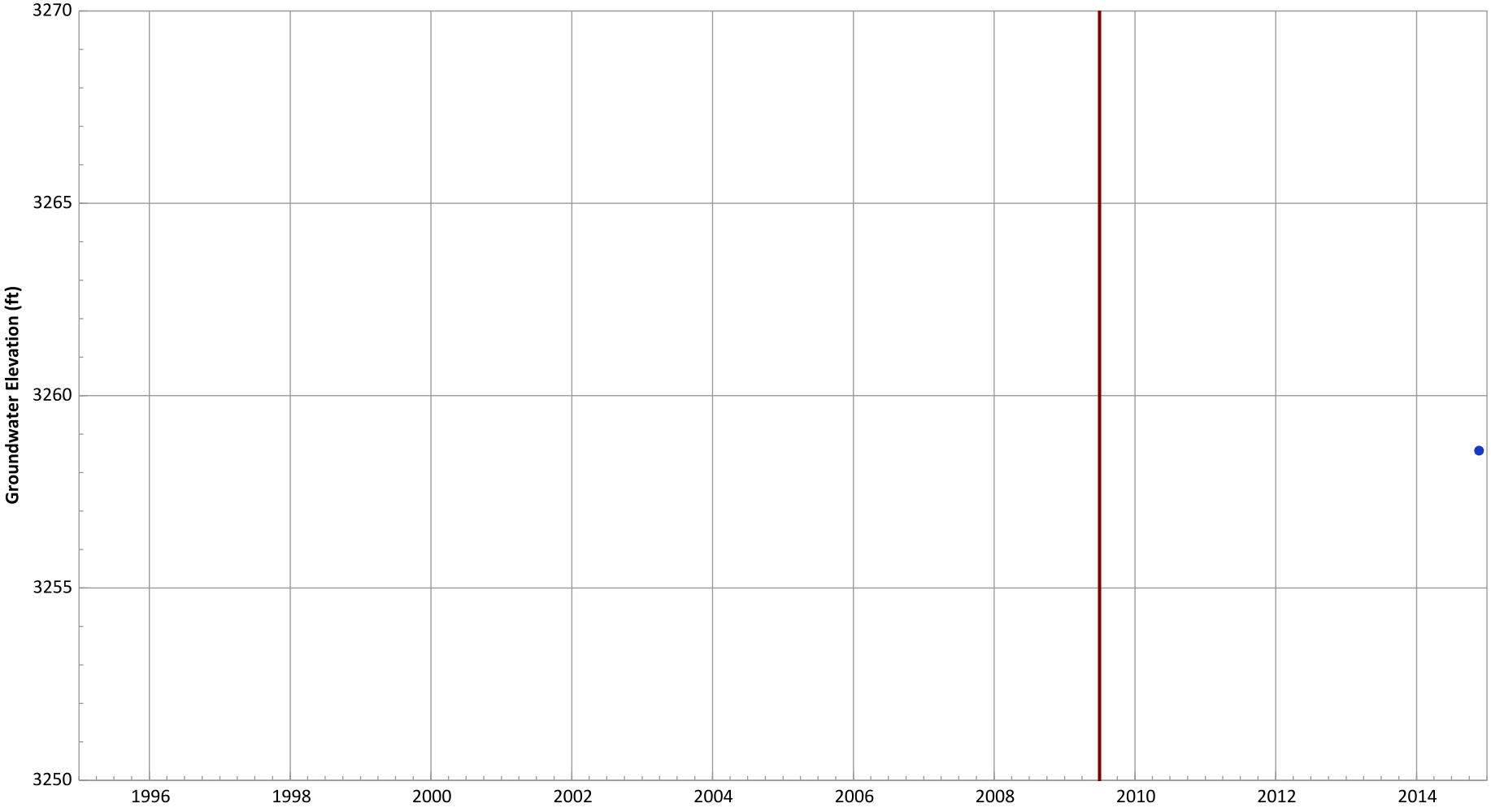
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-EW-36 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

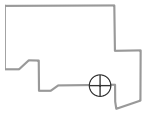


Notes:
1. Top of screen elevation is 3272.62 ft msl.
2. The bottom of screen elevation is 3242.62 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

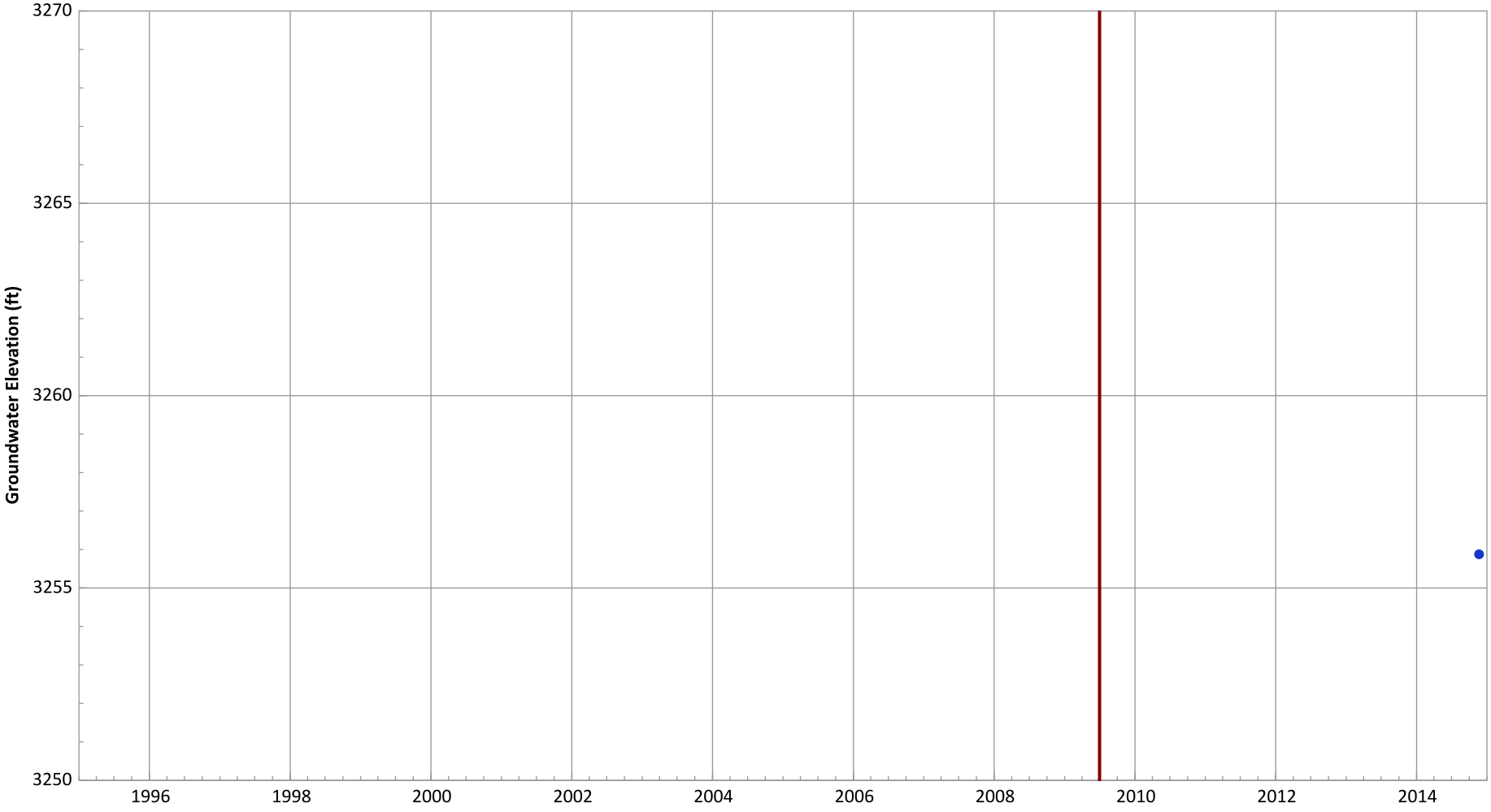
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-EW-49 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

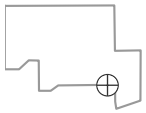


Notes:
1. Top of screen elevation is 3264.76 ft msl.
2. The bottom of screen elevation is 3244.76 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

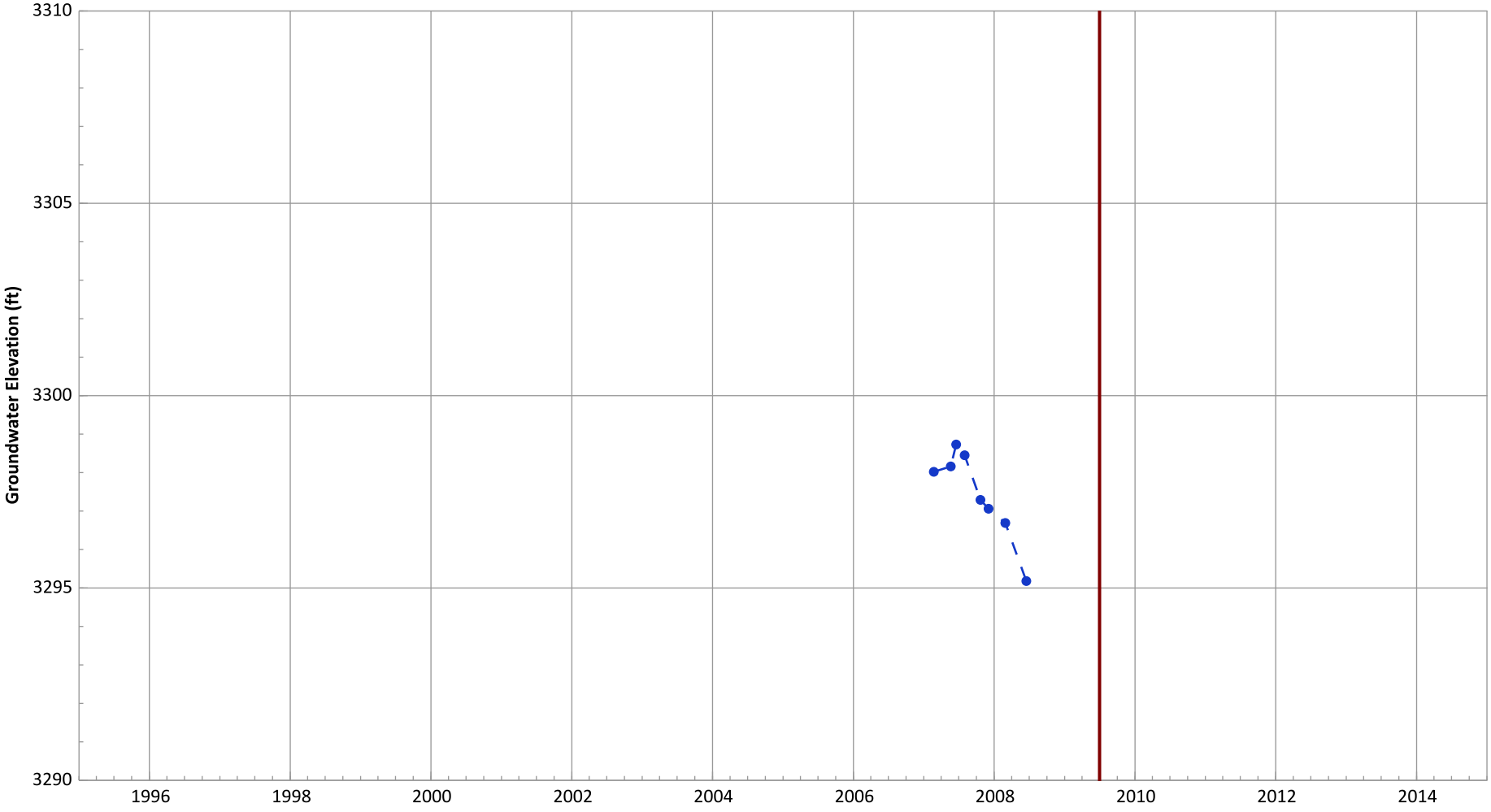
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-EW-70 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

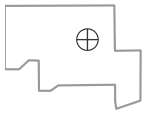


Notes:
1. Top of screen elevation is 3337.59 ft msl.
2. The bottom of screen elevation is 3267.59 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

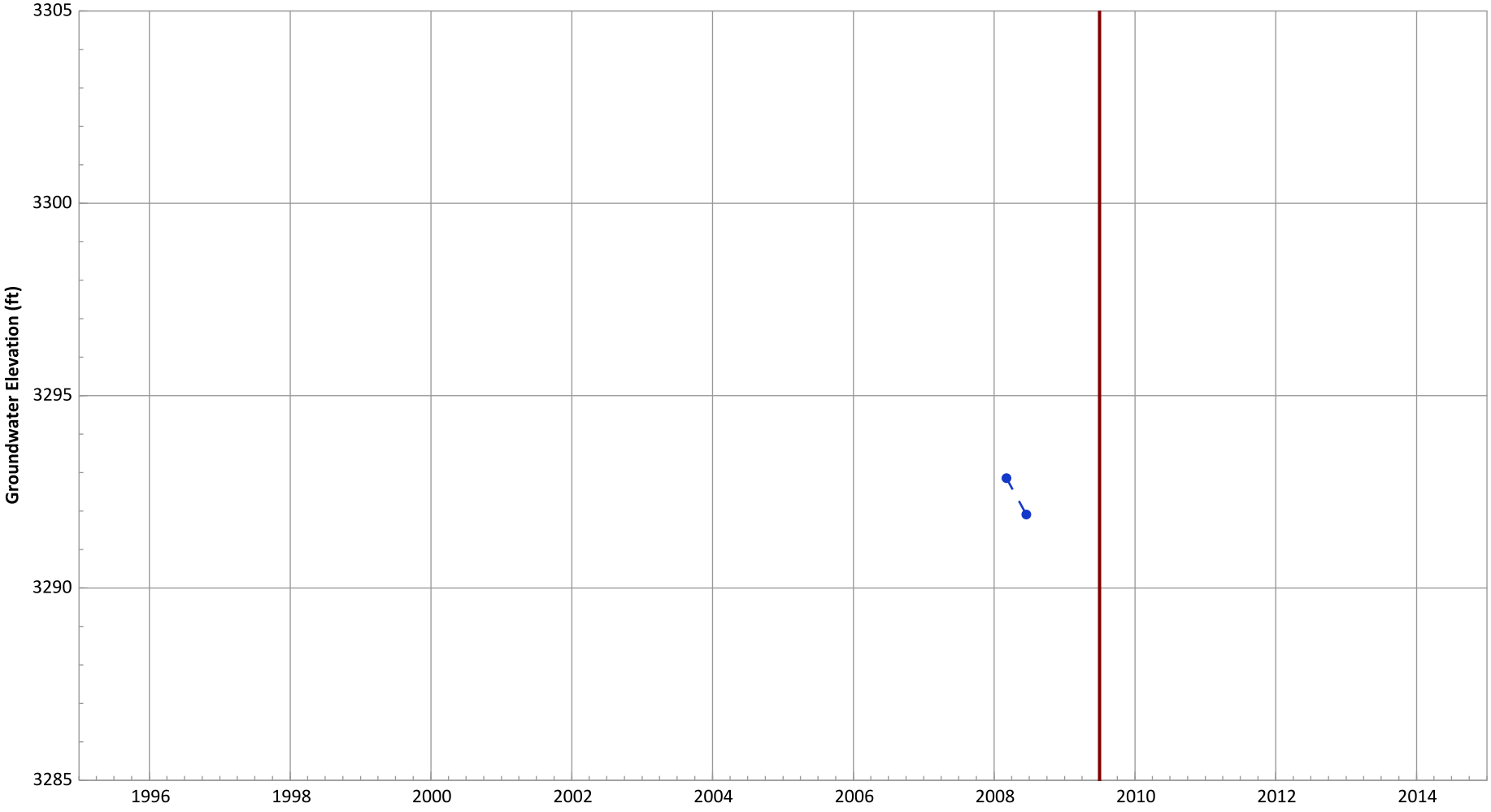
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 2.39 ft/yr
2012 - 2014 Data: N/A (No Measurements)

PTX06-EW-75 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

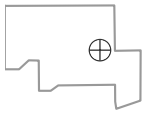


Notes:
1. Top of screen elevation is 3306.57 ft msl.
2. The bottom of screen elevation is 3256.57 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

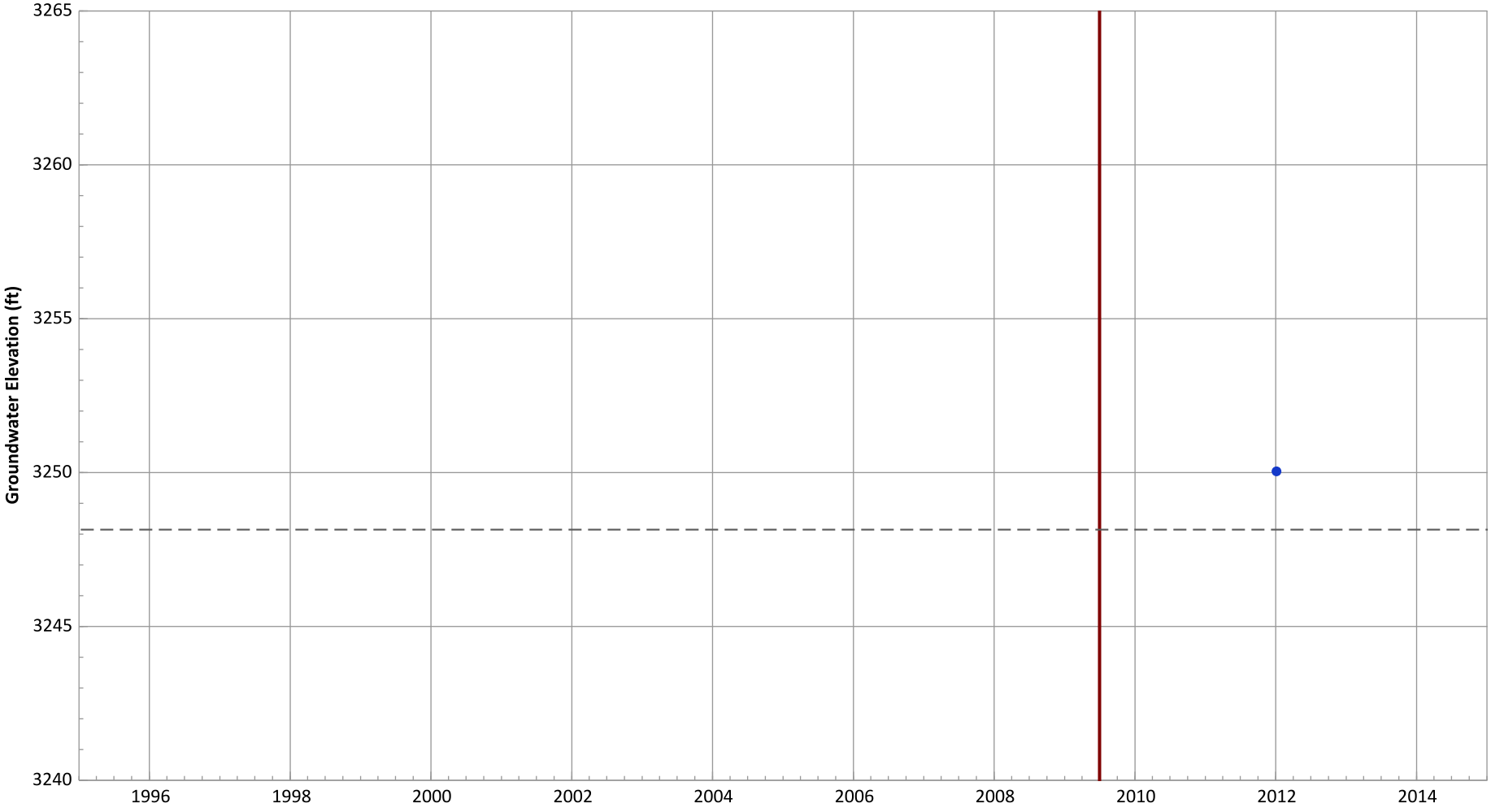
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB010 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

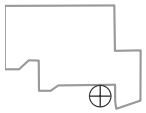


Notes:
1. Top of screen elevation is 3258.15 ft msl.
2. The bottom of screen elevation is 3248.15 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

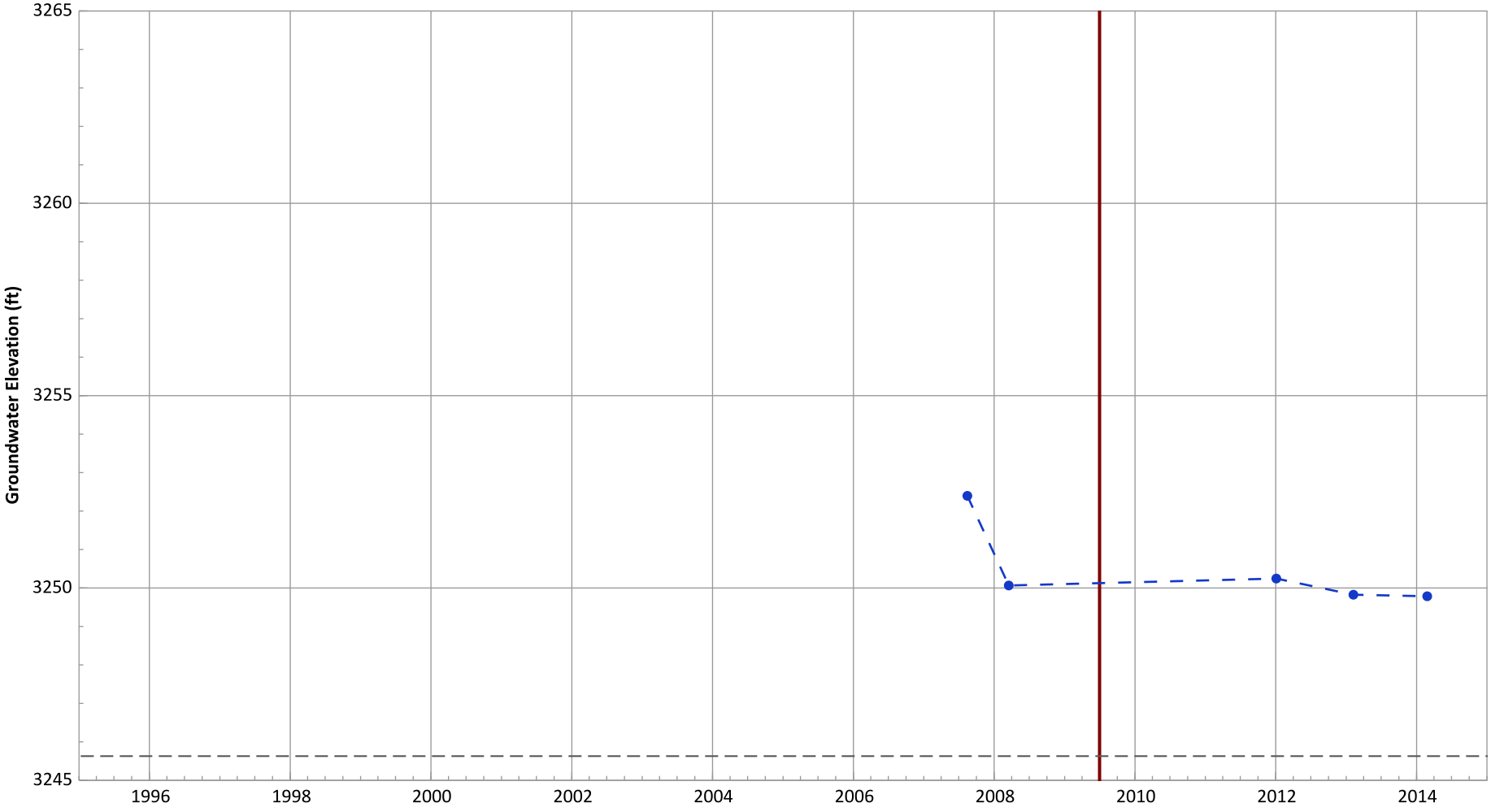
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB011 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

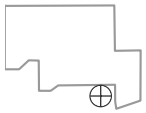


Notes:
1. Top of screen elevation is 3255.63 ft msl.
2. The bottom of screen elevation is 3245.63 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

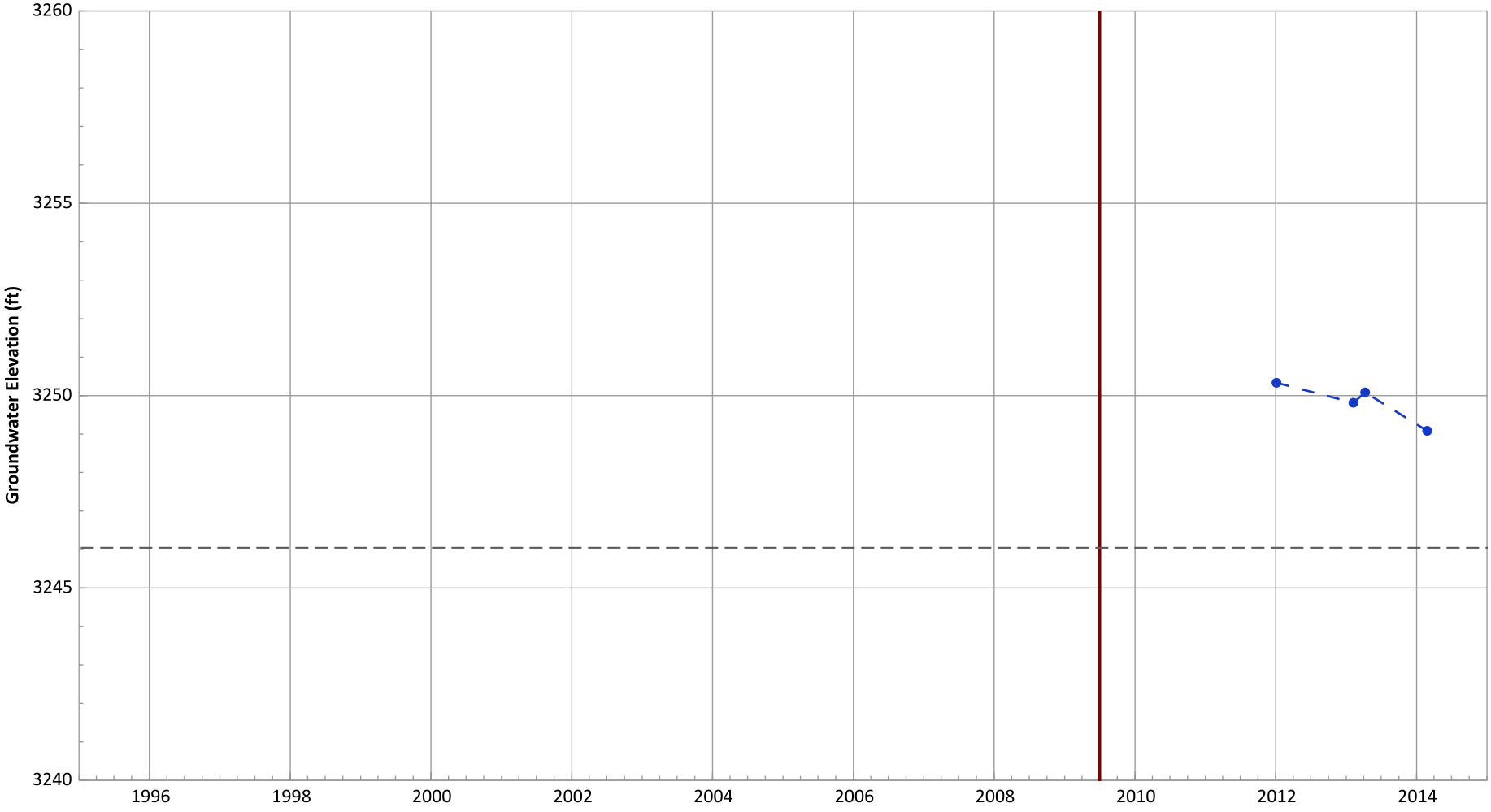
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.26 ft/yr
2012 - 2014 Data: N/A (<3 Measurements)

PTX06-ISB012 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

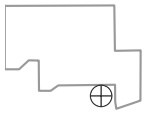


Notes:
1. Top of screen elevation is 3256.05 ft msl.
2. The bottom of screen elevation is 3246.05 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

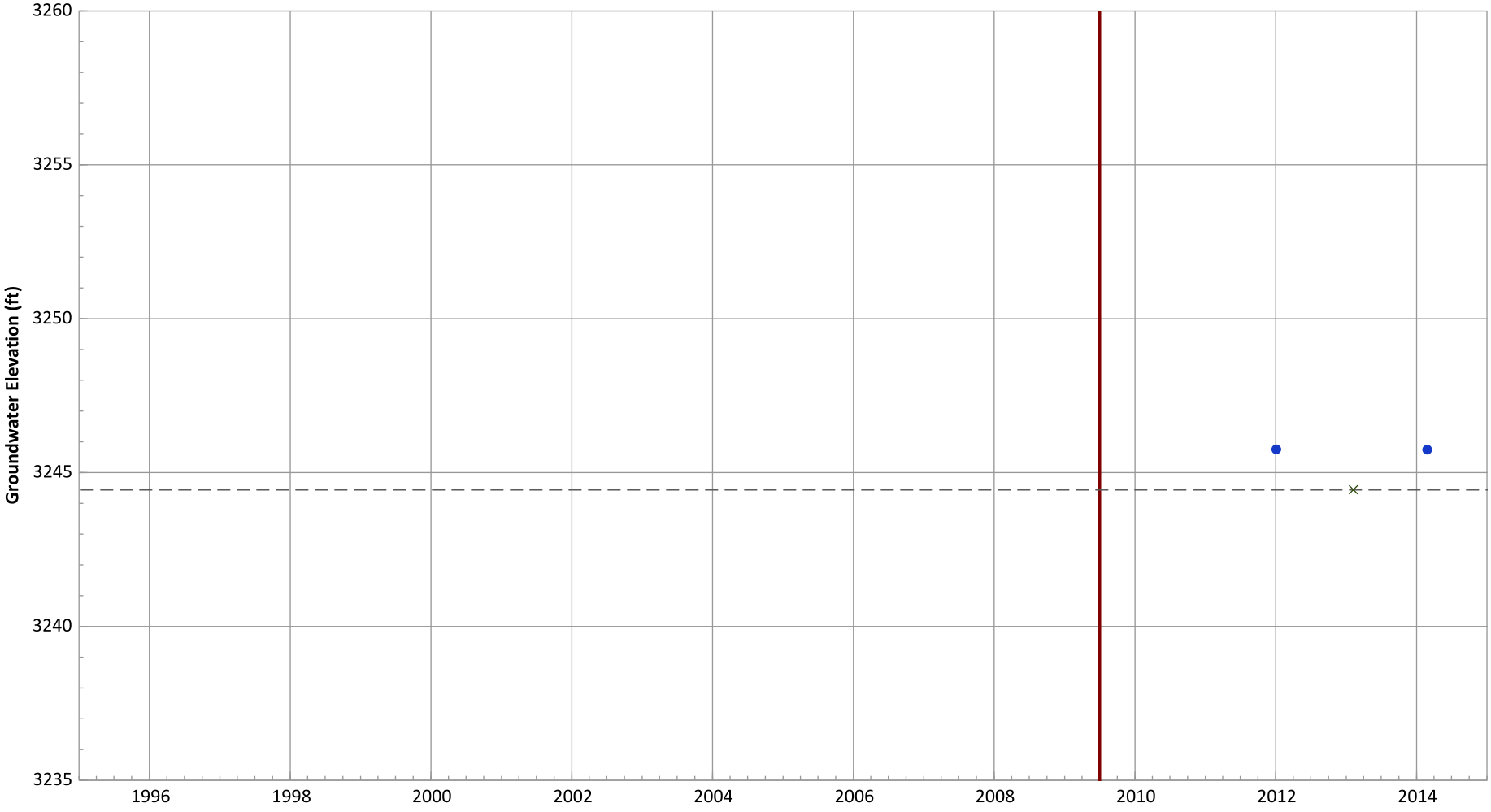
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.56 ft/yr
2012 - 2014 Data: Decreasing at 0.84 ft/yr

PTX06-ISB013 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

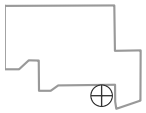


Notes:
1. Top of screen elevation is 3254.44 ft msl.
2. The bottom of screen elevation is 3244.44 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

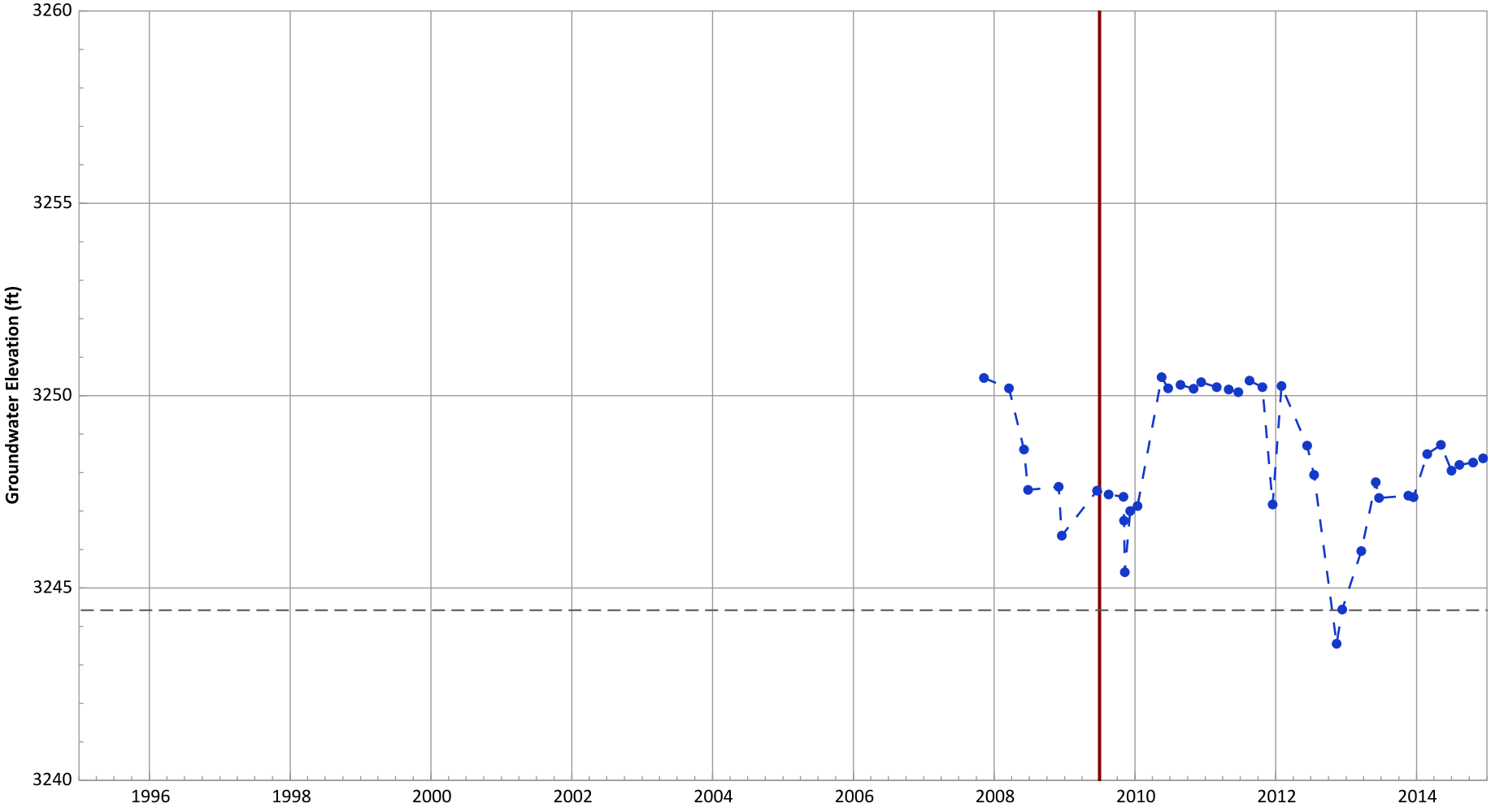
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (<3 Measurements)

PTX06-ISB014 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

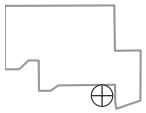


Notes:
1. Top of screen elevation is 3254.42 ft msl.
2. The bottom of screen elevation is 3244.42 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

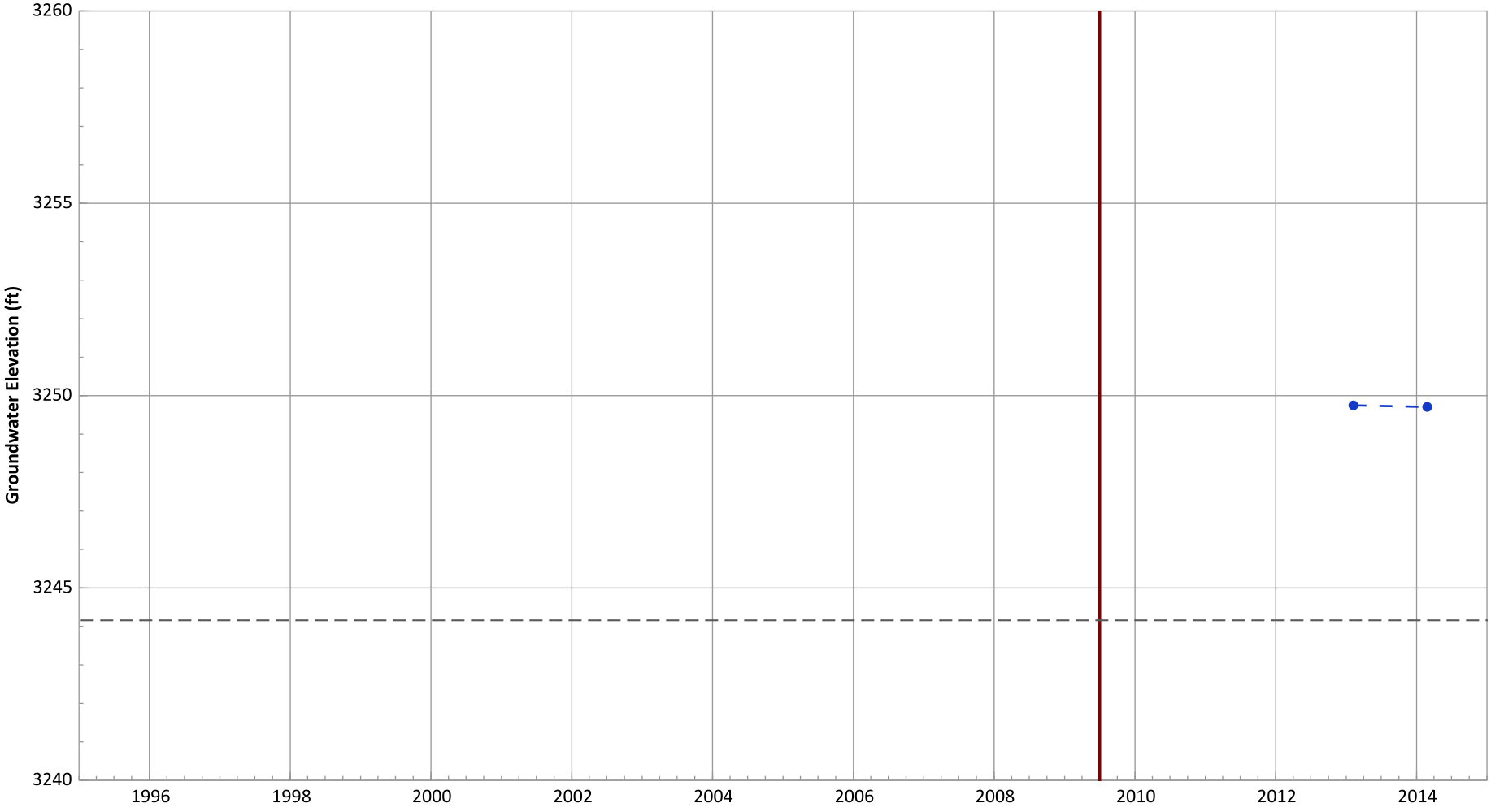
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.13 ft/yr
2012 - 2014 Data: Increasing at 0.9 ft/yr

PTX06-ISB015 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

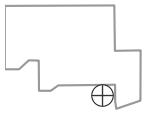


Notes:
1. Top of screen elevation is 3254.16 ft msl.
2. The bottom of screen elevation is 3244.16 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

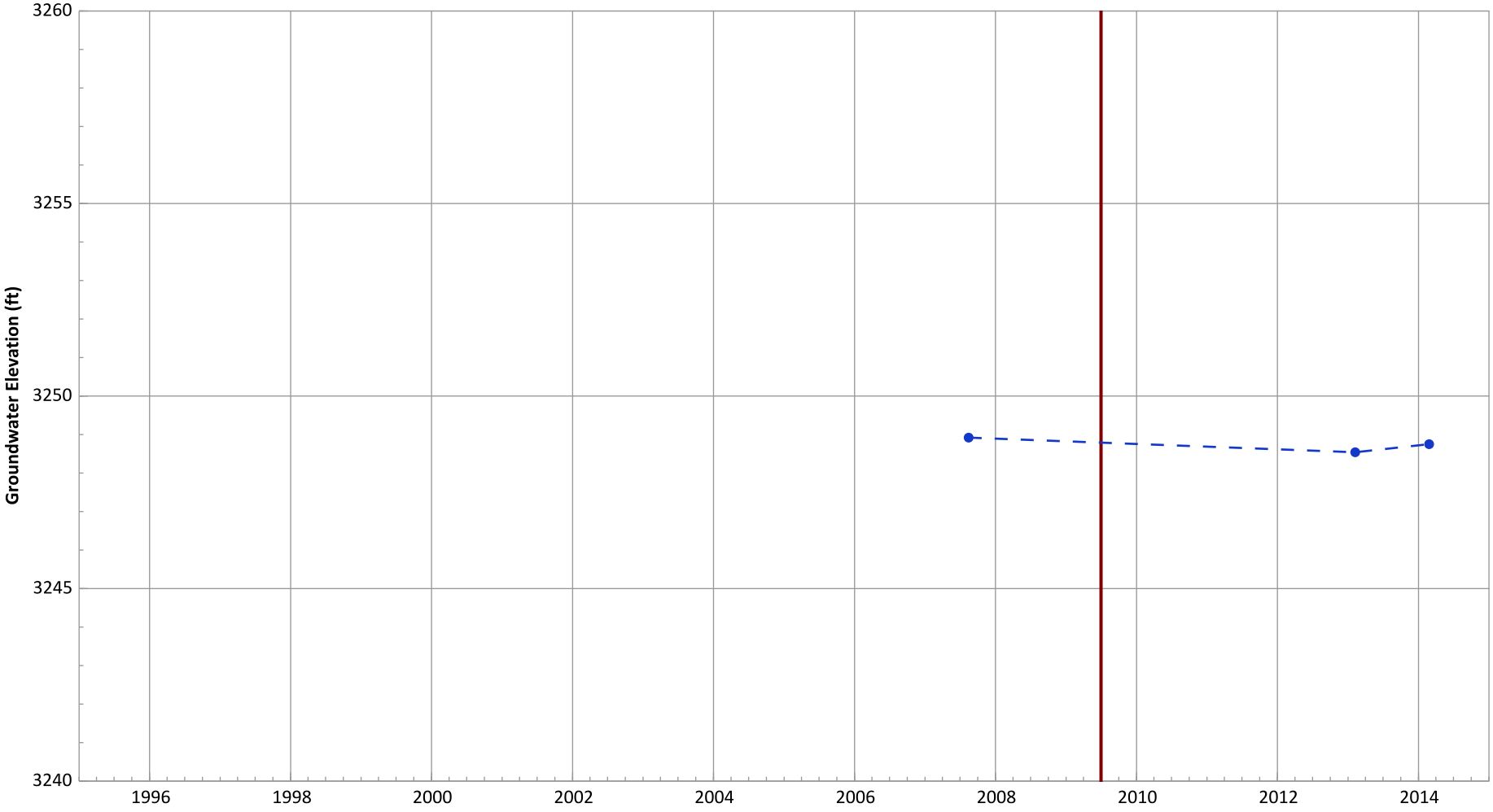
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (<3 Measurements)

PTX06-ISB016 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

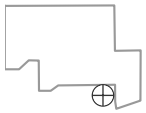


Notes:
1. Top of screen elevation is 3258.8 ft msl.
2. The bottom of screen elevation is 3348.8 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

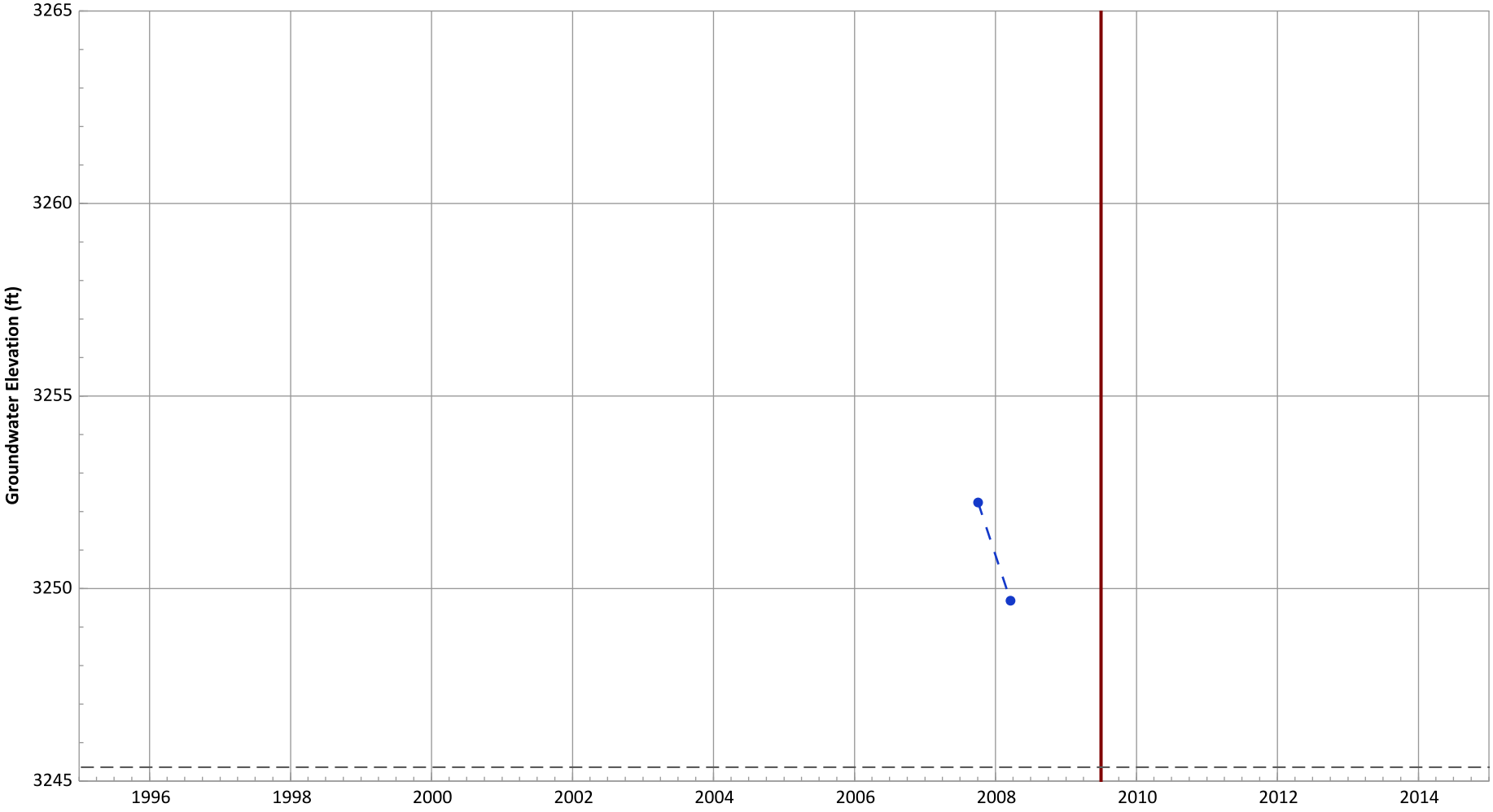
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: N/A (<3 Measurements)

PTX06-ISB018 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

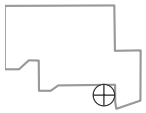


Notes:
1. Top of screen elevation is 3255.36 ft msl.
2. The bottom of screen elevation is 3245.36 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

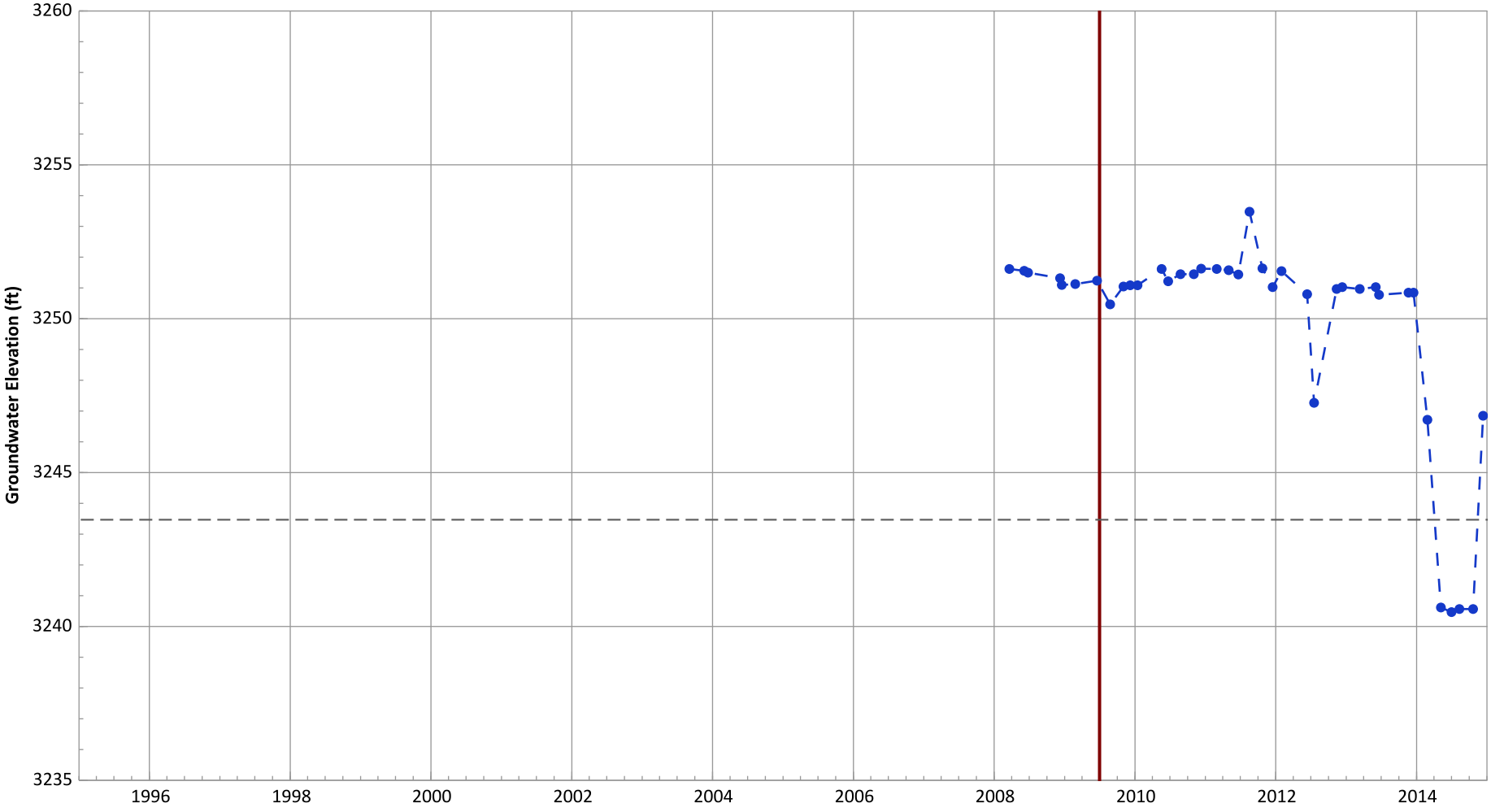
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB019 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

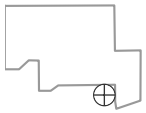


Notes:
1. Top of screen elevation is 3253.47 ft msl.
2. The bottom of screen elevation is 3243.47 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

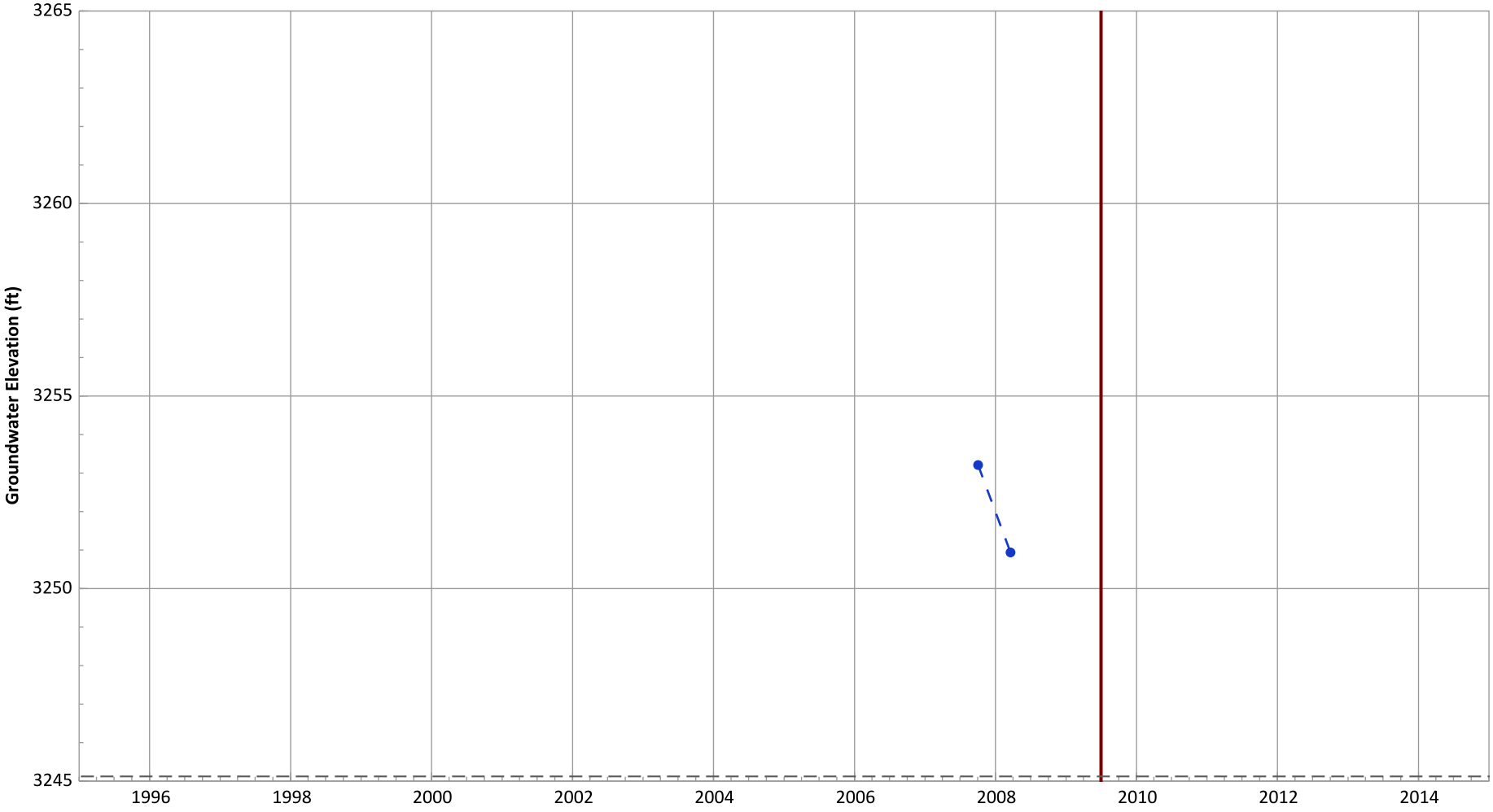
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.06 ft/yr
2012 - 2014 Data: Decreasing at 3.84 ft/yr

PTX06-ISB021 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

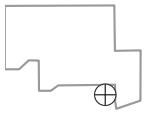


Notes:
1. Top of screen elevation is 3255.12 ft msl.
2. The bottom of screen elevation is 3245.12 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

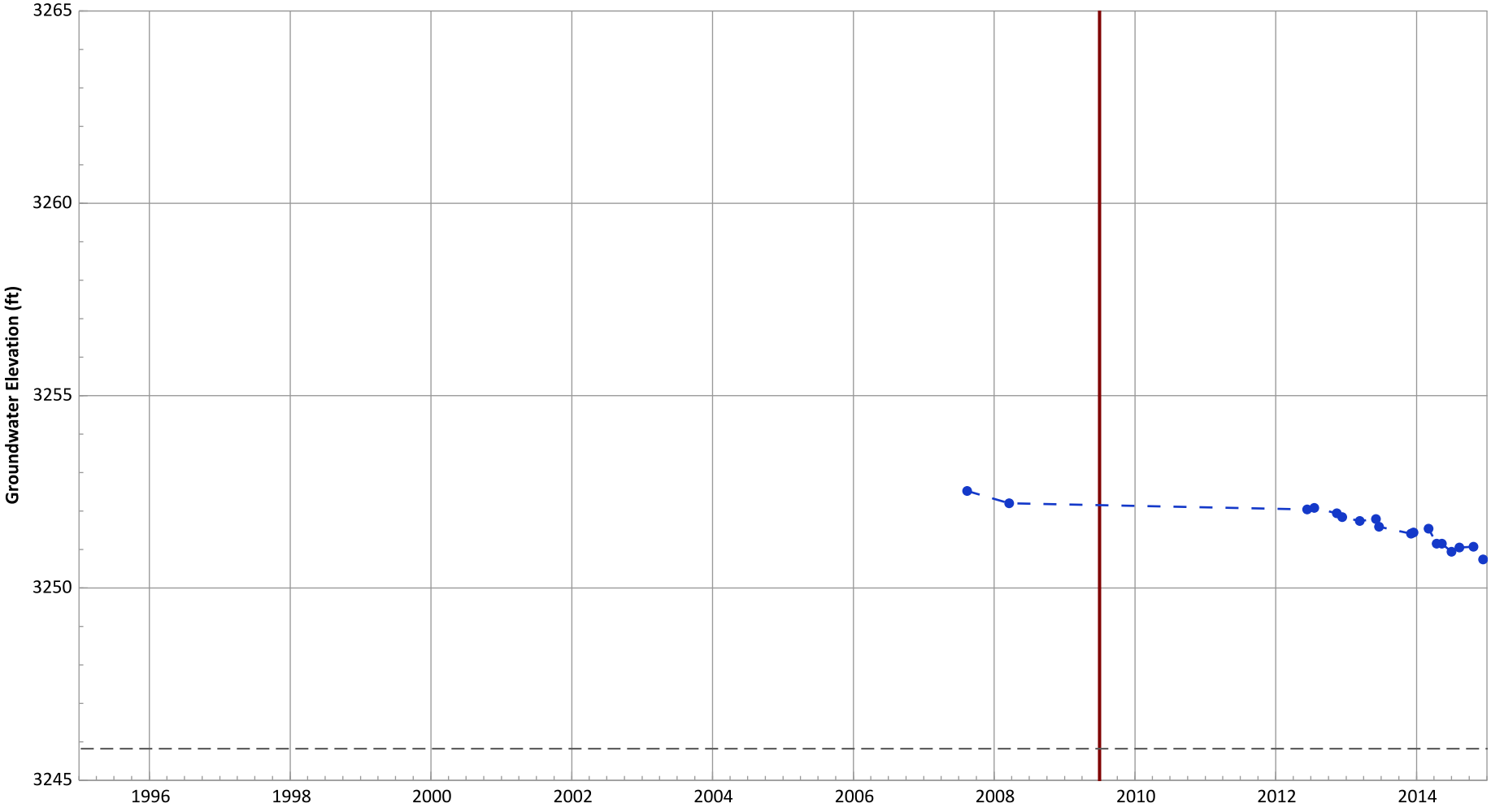
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB024 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

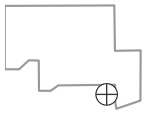


Notes:
1. Top of screen elevation is 3255.82 ft msl.
2. The bottom of screen elevation is 3245.82 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

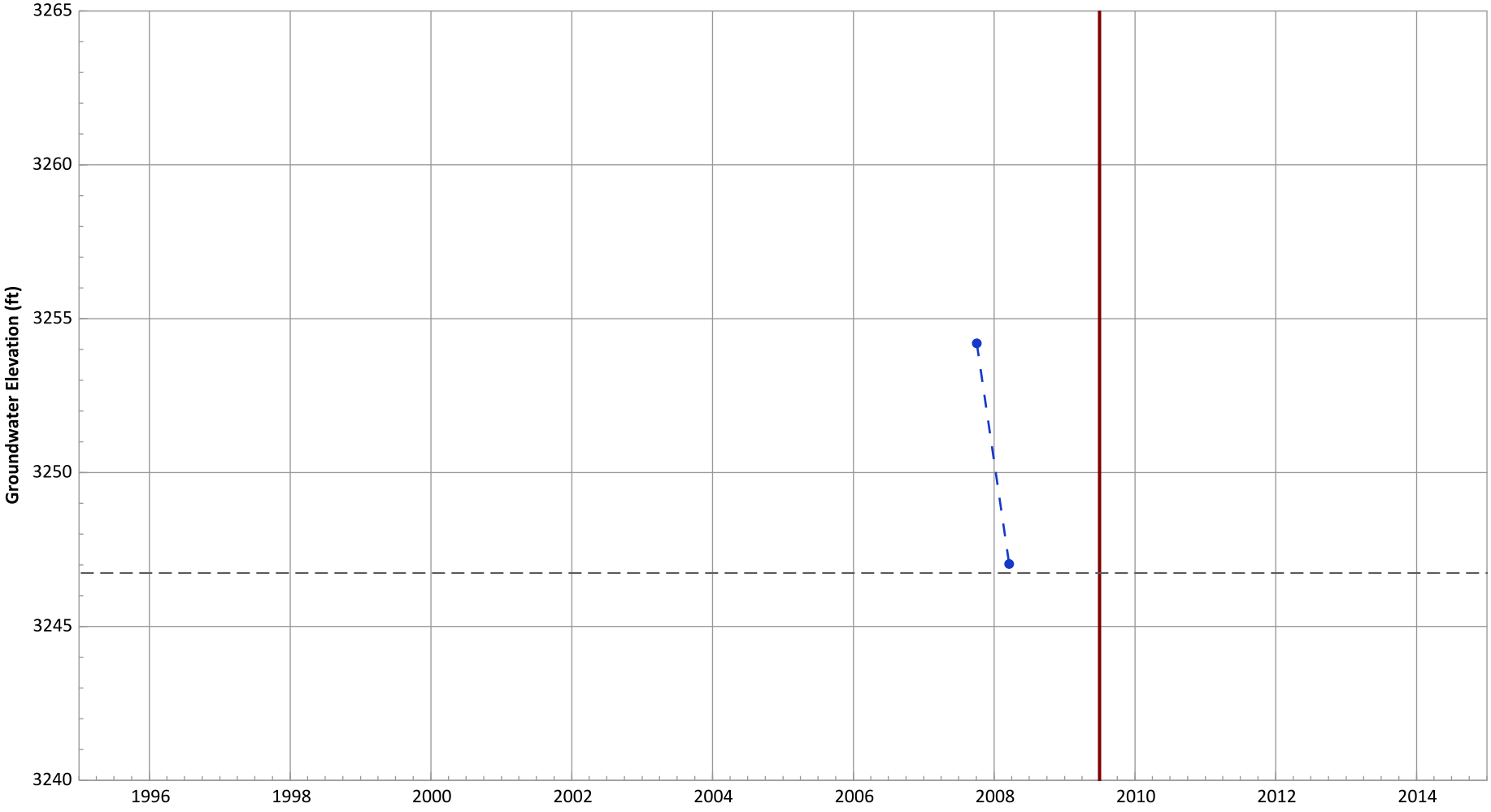
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.2 ft/yr
2012 - 2014 Data: Decreasing at 0.5 ft/yr

PTX06-ISB026 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

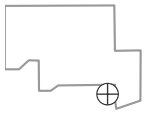


Notes:
1. Top of screen elevation is 3256.74 ft msl.
2. The bottom of screen elevation is 3246.74 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

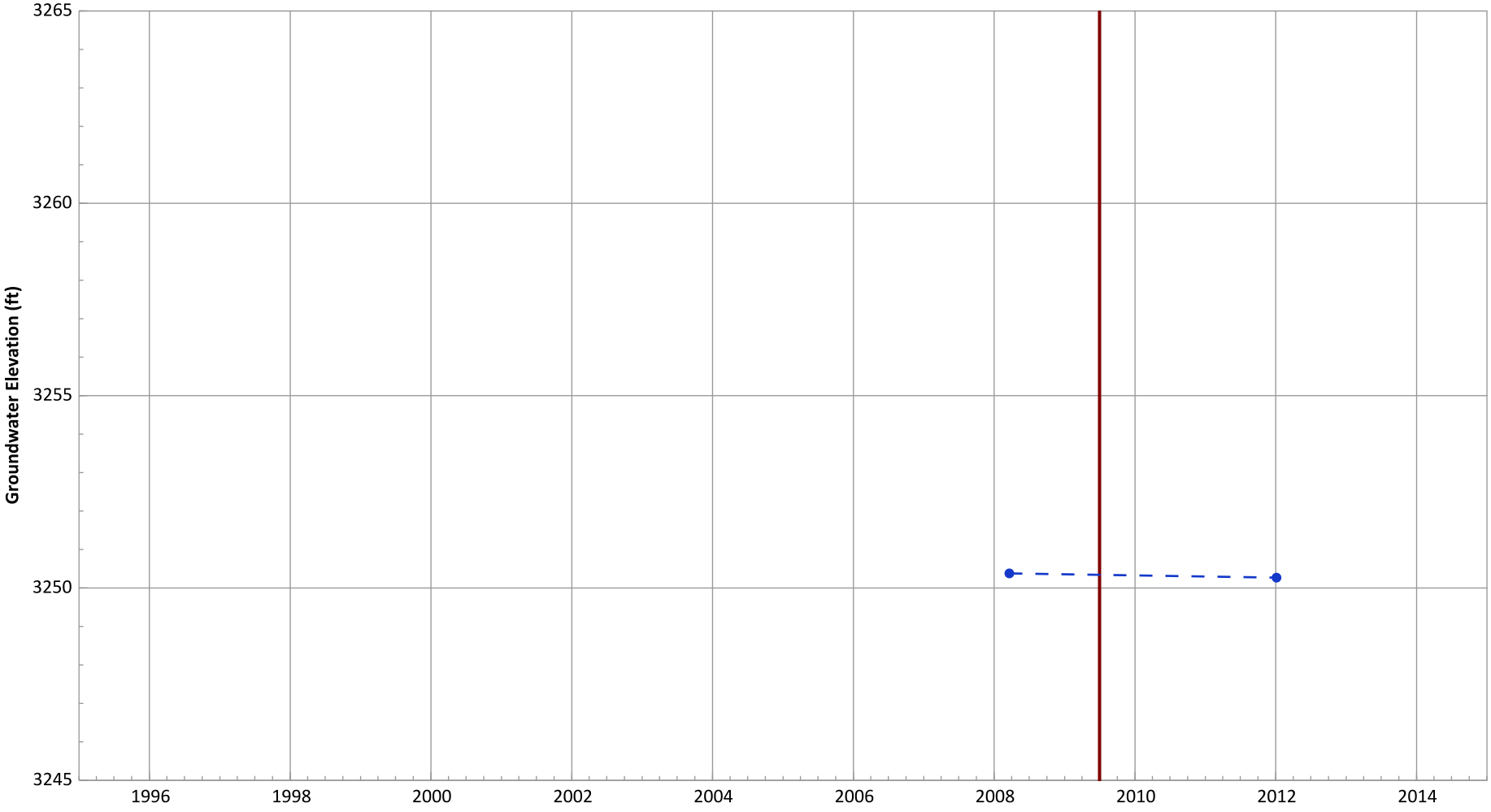
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB029A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

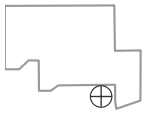


Notes:
1. Top of screen elevation is 3254.66 ft msl.
2. The bottom of screen elevation is 3244.66 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

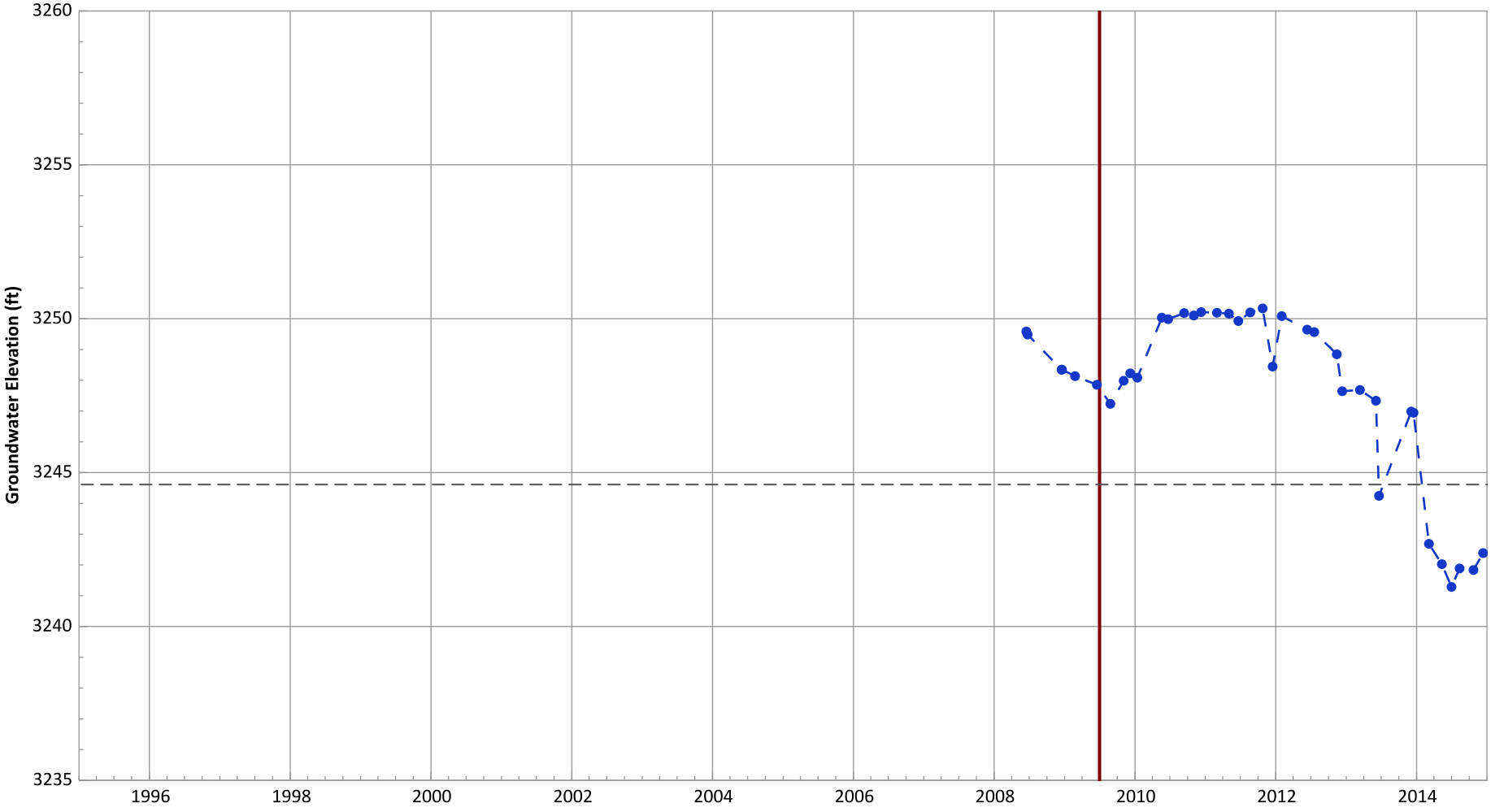
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB030B Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

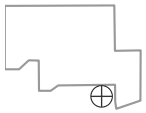


Notes:
1. Top of screen elevation is 3254.61 ft msl.
2. The bottom of screen elevation is 3244.61 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

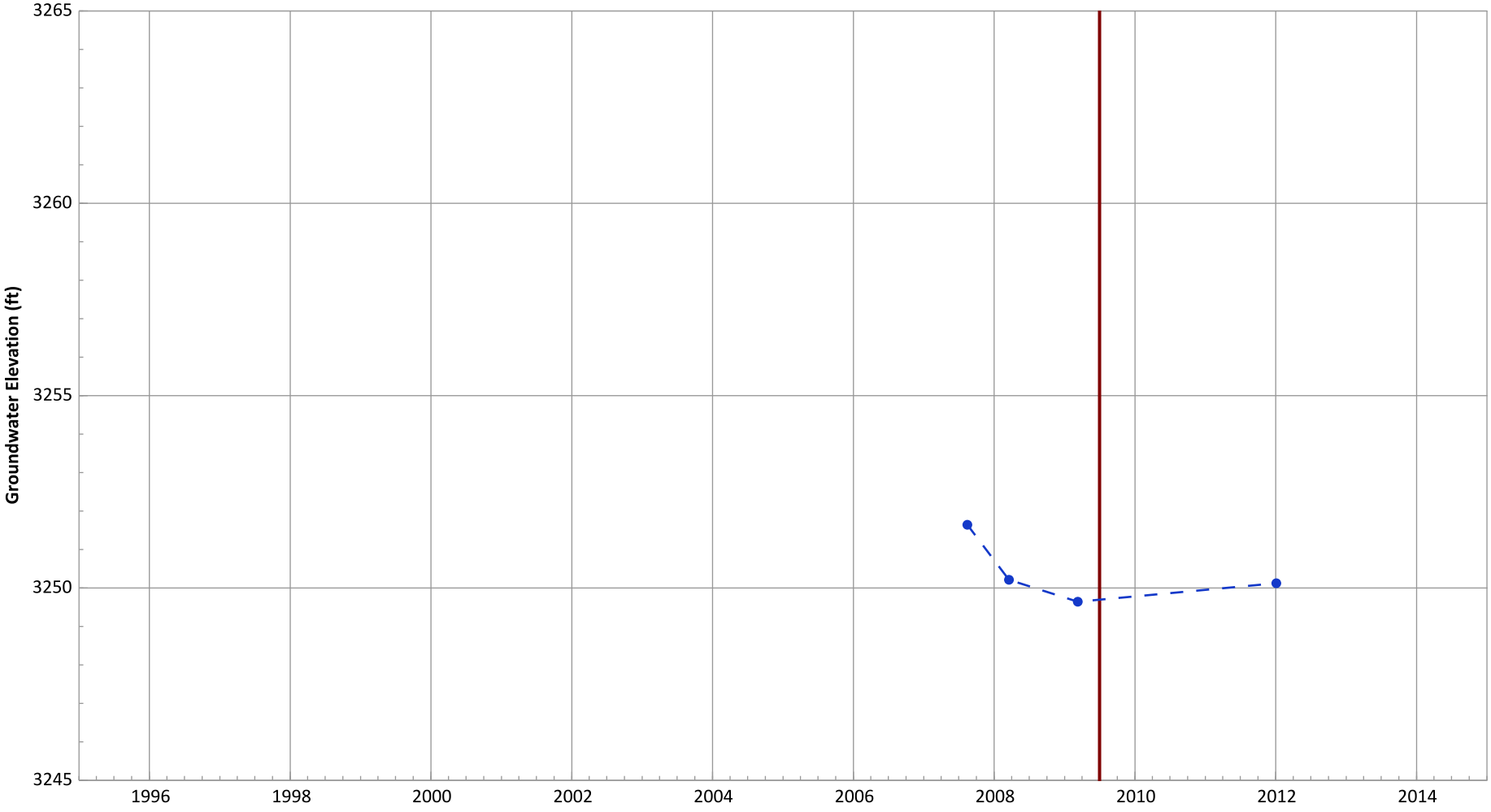
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.97 ft/yr
2012 - 2014 Data: Decreasing at 3.46 ft/yr

PTX06-ISB031 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

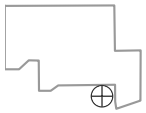


Notes:
1. Top of screen elevation is 3257.66 ft msl.
2. The bottom of screen elevation is 3242.66 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

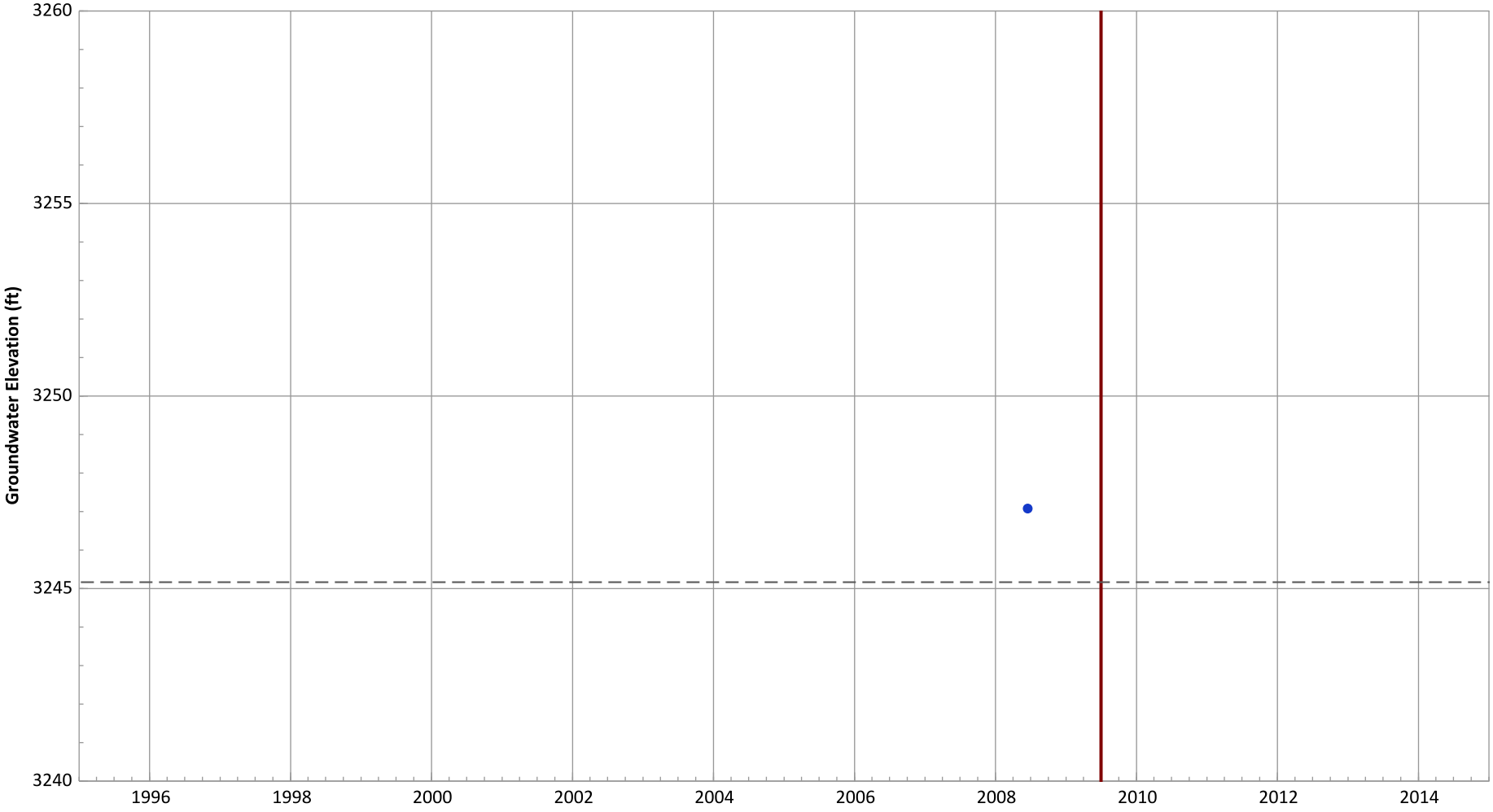
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.22 ft/yr
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB032 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

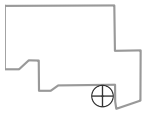


Notes:
1. Top of screen elevation is 3255.17 ft msl.
2. The bottom of screen elevation is 3245.17 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

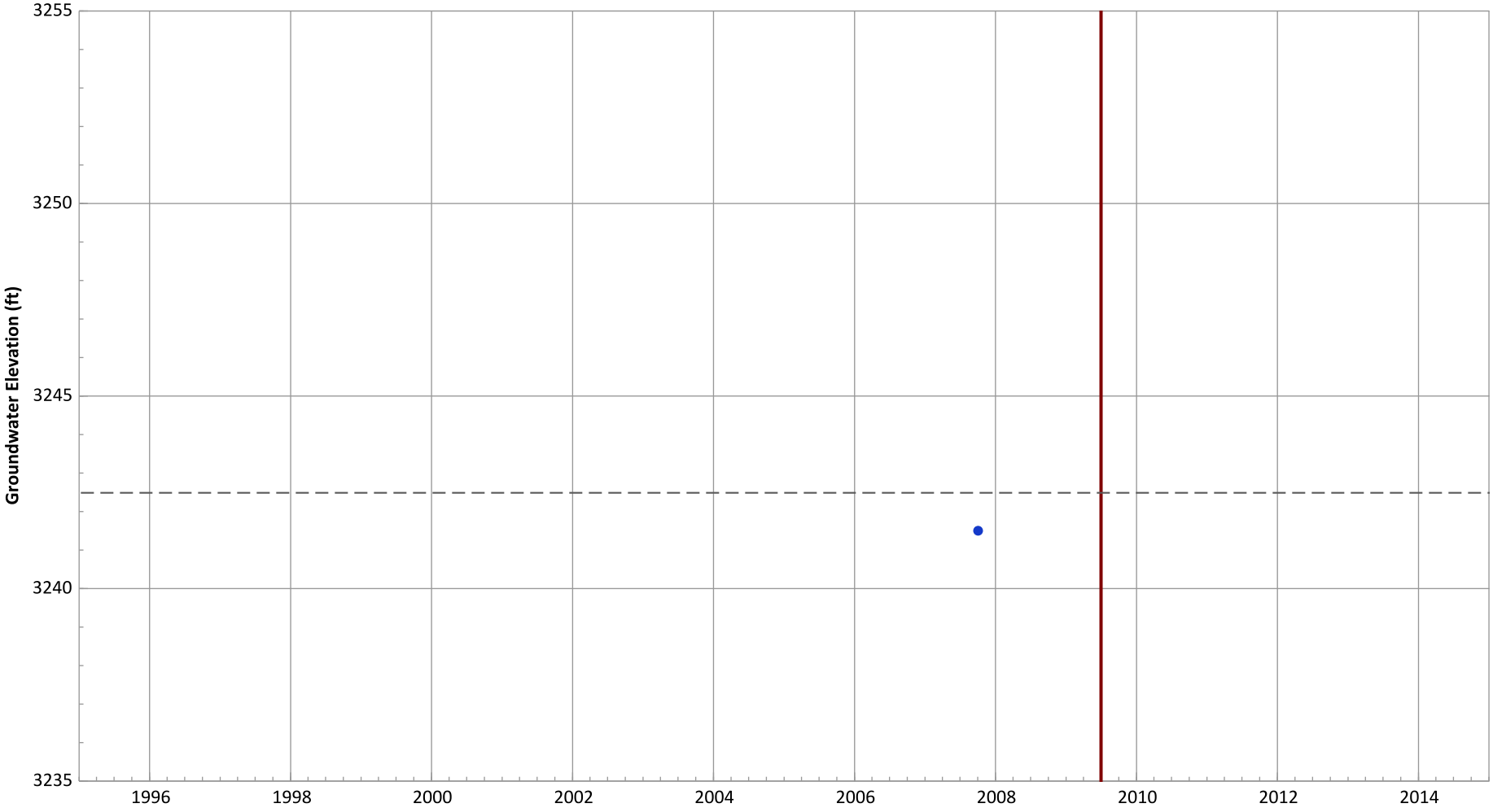
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB034 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

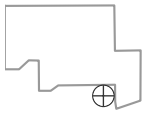


Notes:
1. Top of screen elevation is 3252.49 ft msl.
2. The bottom of screen elevation is 3242.49 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

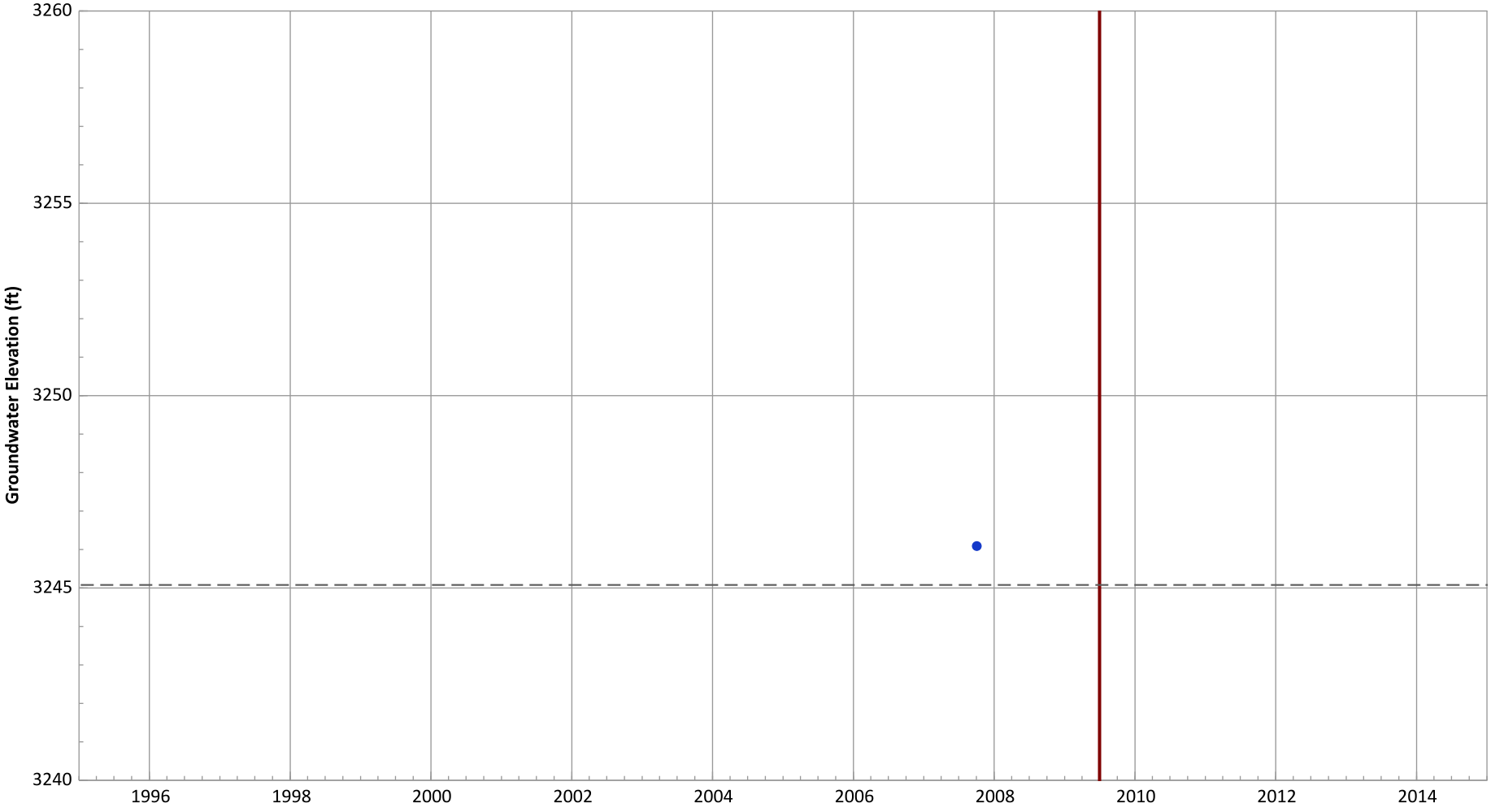
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB035 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

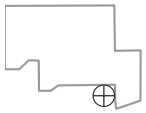


Notes:
1. Top of screen elevation is 3255.08 ft msl.
2. The bottom of screen elevation is 3245.08 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

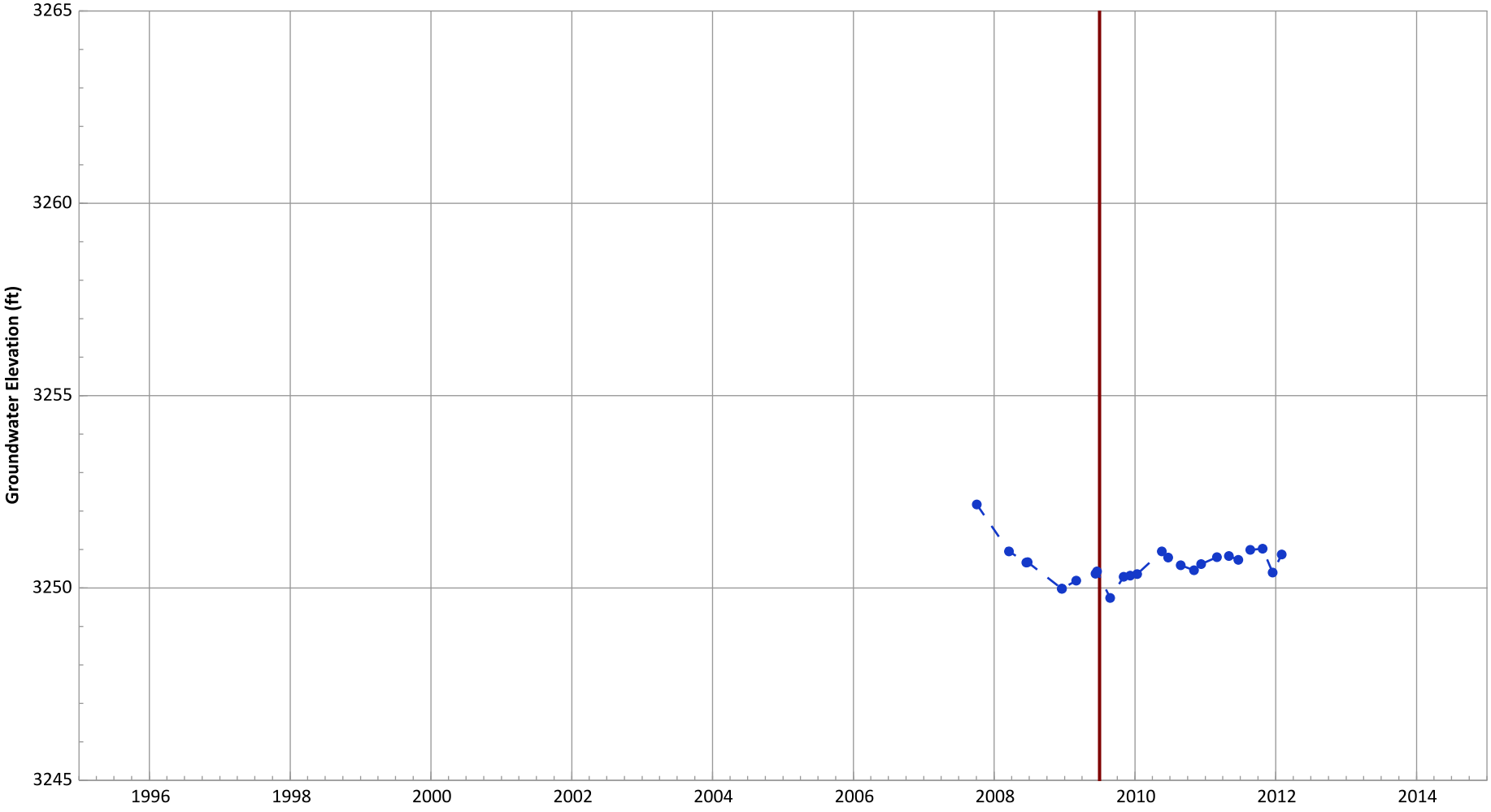
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB036 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

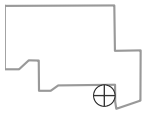


Notes:
1. Top of screen elevation is 3254.78 ft msl.
2. The bottom of screen elevation is 3244.78 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

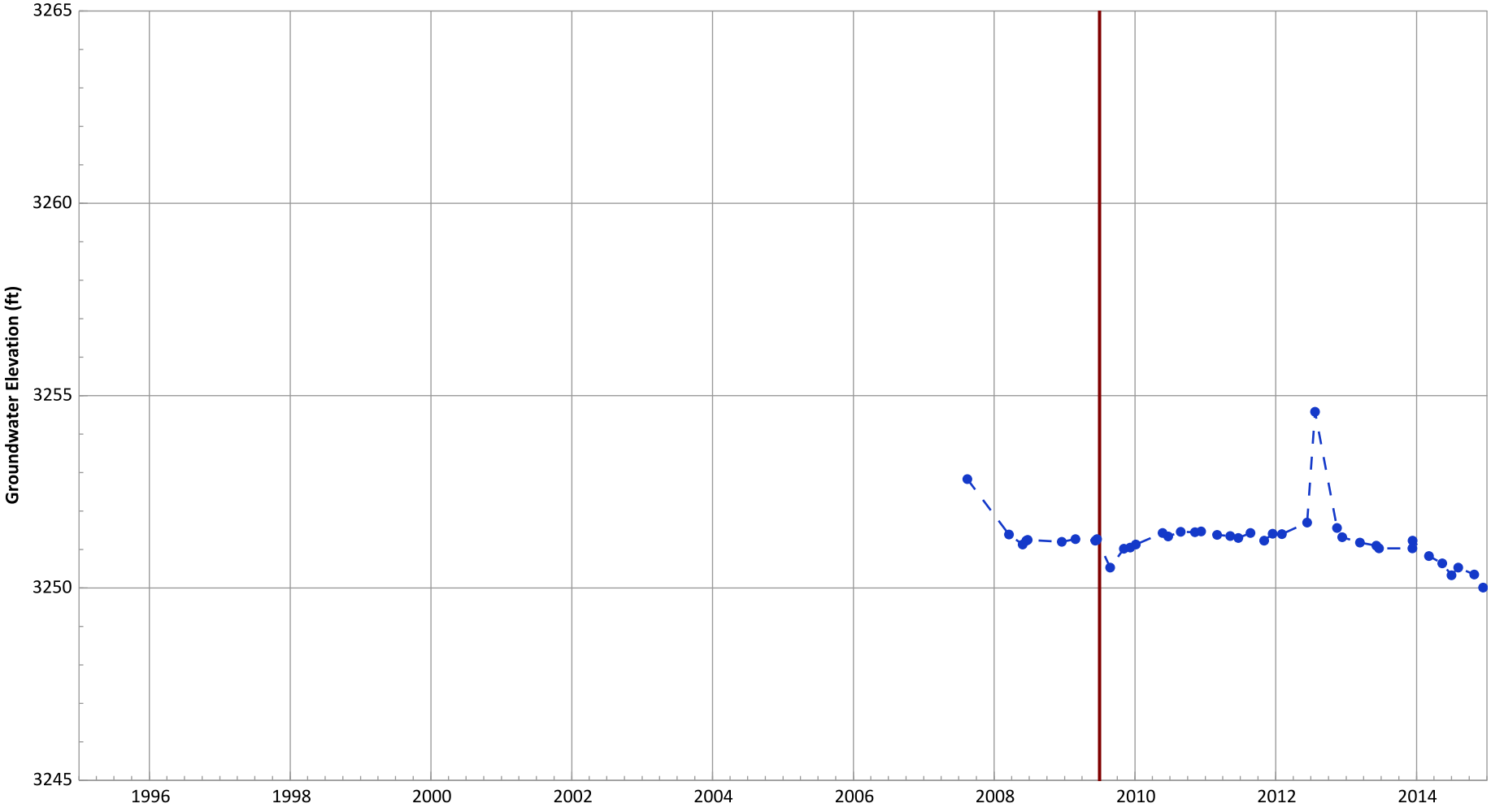
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB038 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

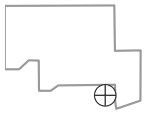


Notes:
1. Top of screen elevation is 3251.76 ft msl.
2. The bottom of screen elevation is 3241.76 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

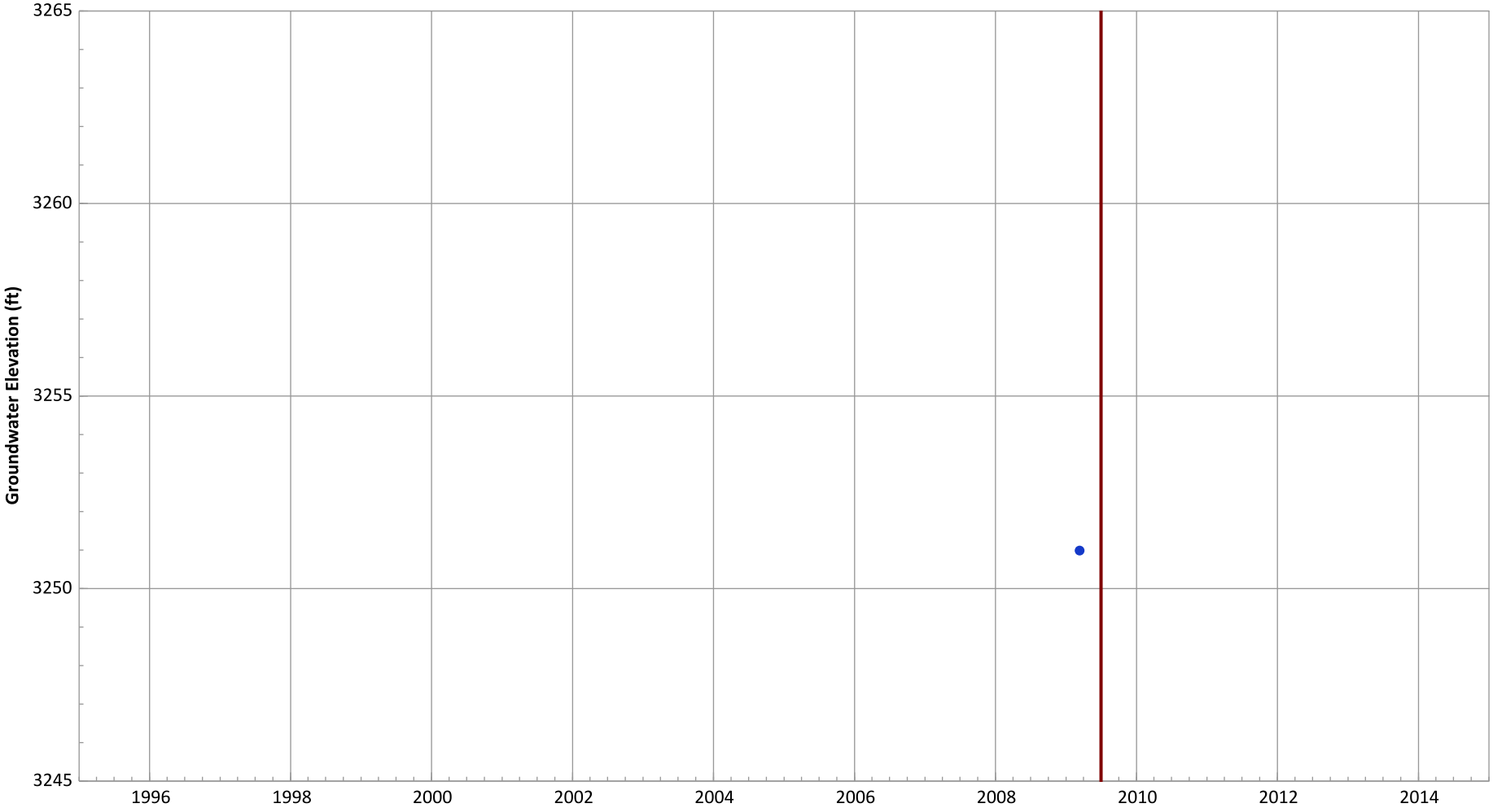
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.95 ft/yr

PTX06-ISB040 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

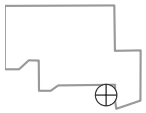


Notes:
1. Top of screen elevation is 3252.48 ft msl.
2. The bottom of screen elevation is 3242.48 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

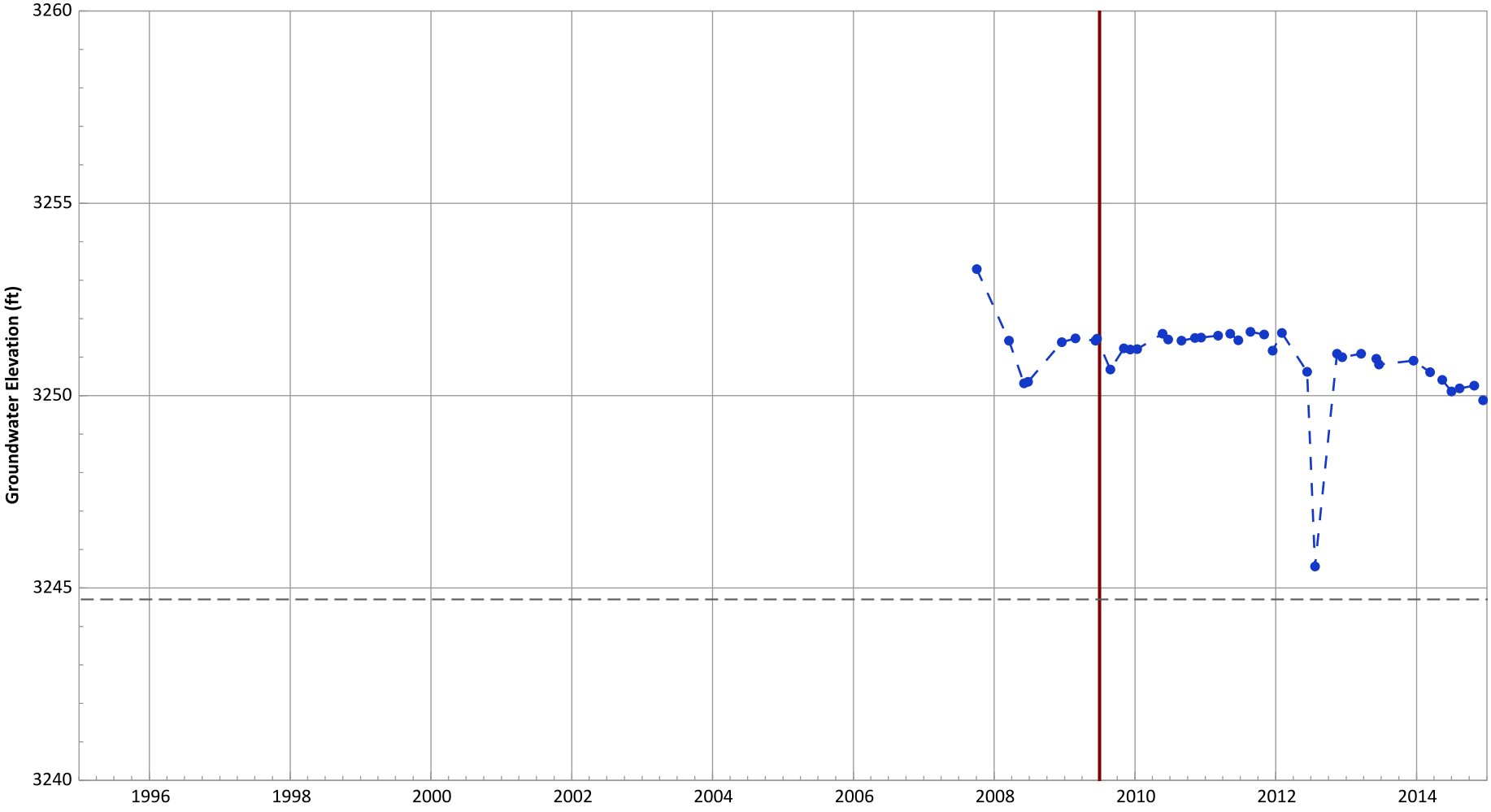
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB042 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

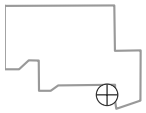


Notes:
1. Top of screen elevation is 3254.7 ft msl.
2. The bottom of screen elevation is 3244.7 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

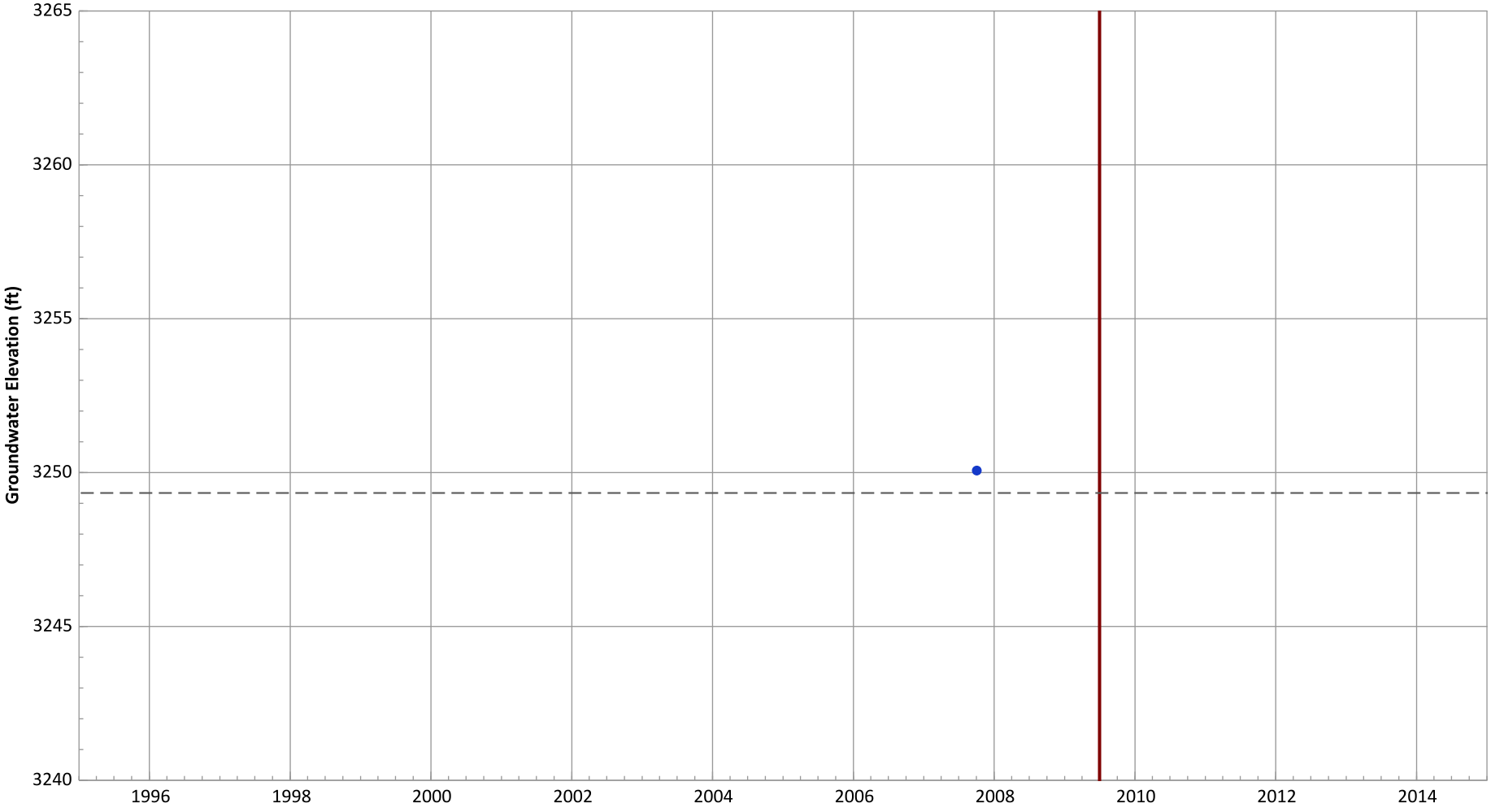
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.21 ft/yr
2012 - 2014 Data: Increasing at 0.29 ft/yr

PTX06-ISB045 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

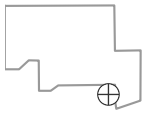


Notes:
1. Top of screen elevation is 3259.34 ft msl.
2. The bottom of screen elevation is 3249.34 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

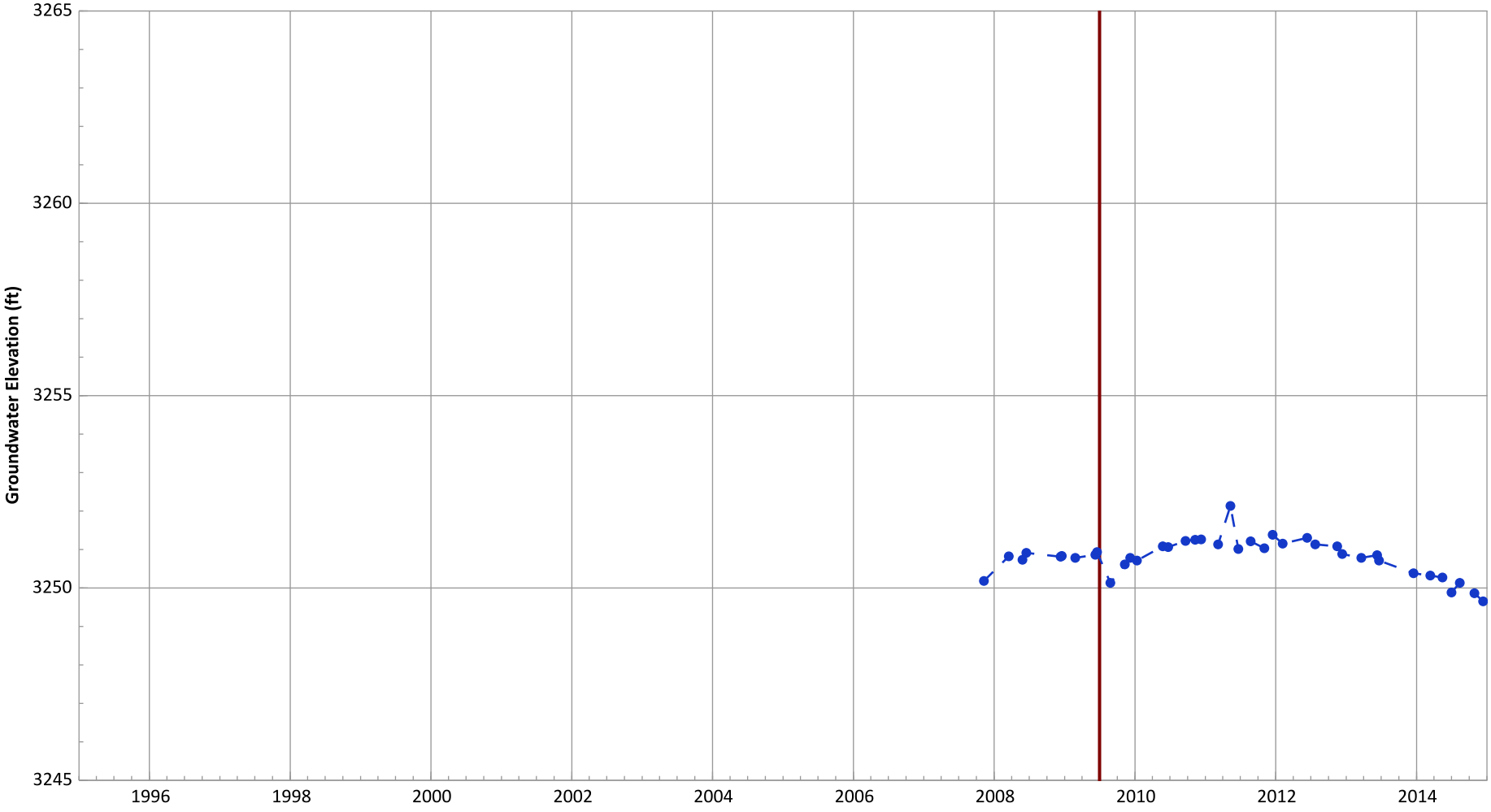
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB046 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

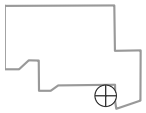


Notes:
1. Top of screen elevation is 3251.85 ft msl.
2. The bottom of screen elevation is 3241.85 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

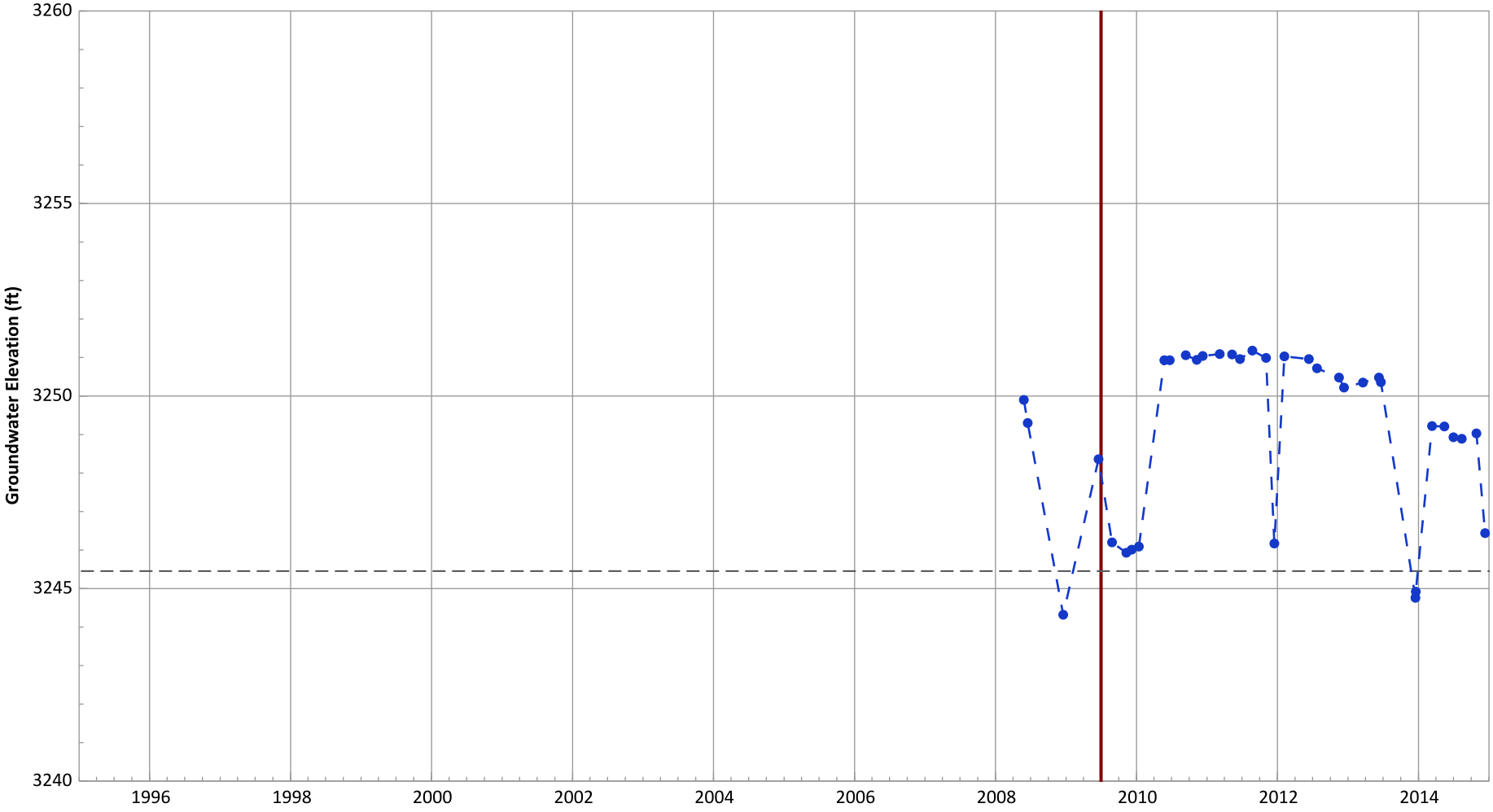
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.59 ft/yr

PTX06-ISB048 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

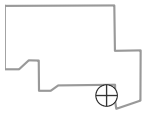


Notes:
1. Top of screen elevation is 3255.45 ft msl.
2. The bottom of screen elevation is 3245.45 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

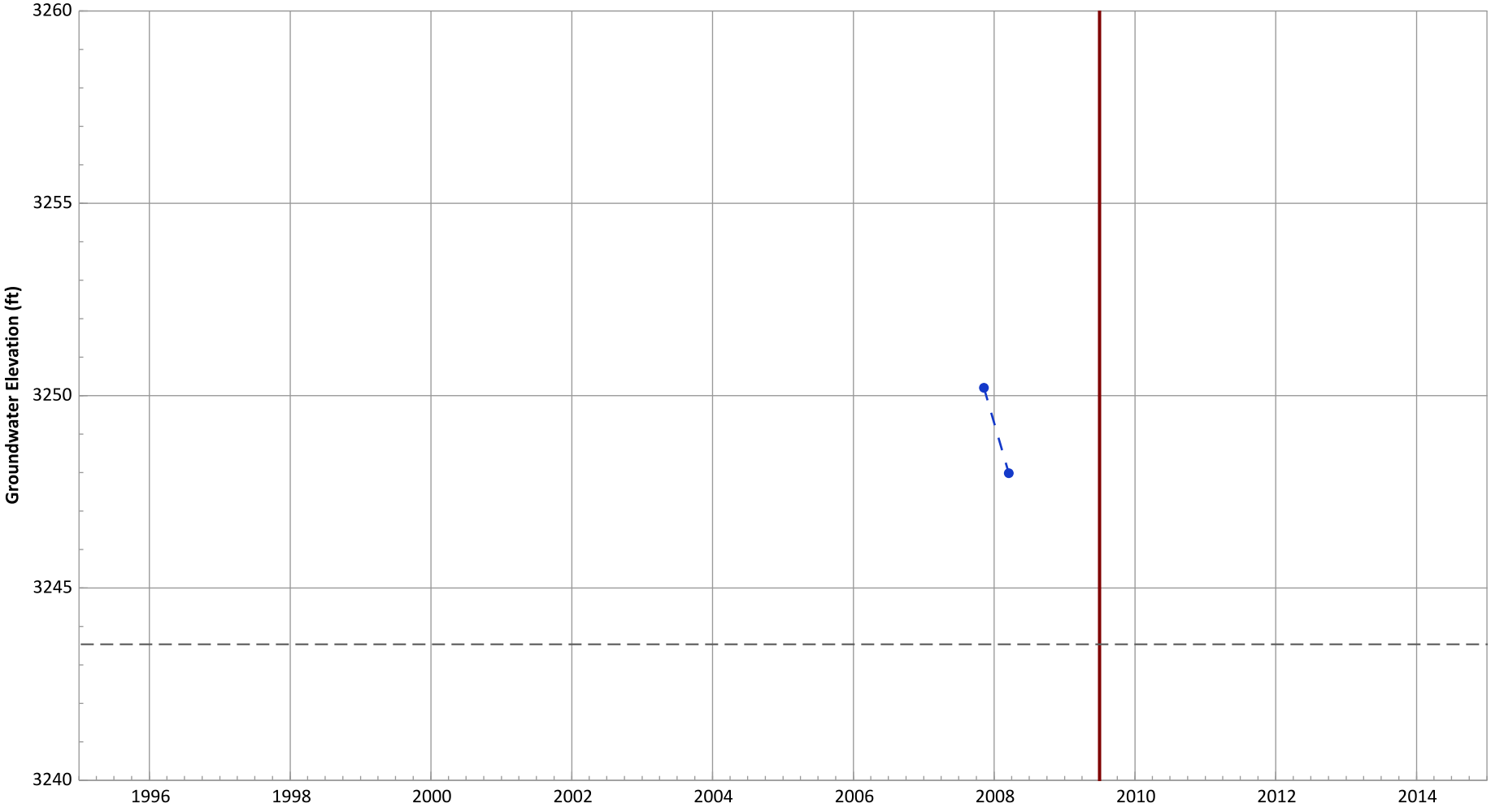
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 1.38 ft/yr

PTX06-ISB049 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

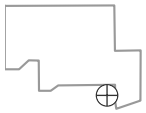


Notes:
1. Top of screen elevation is 3253.54 ft msl.
2. The bottom of screen elevation is 3243.54 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

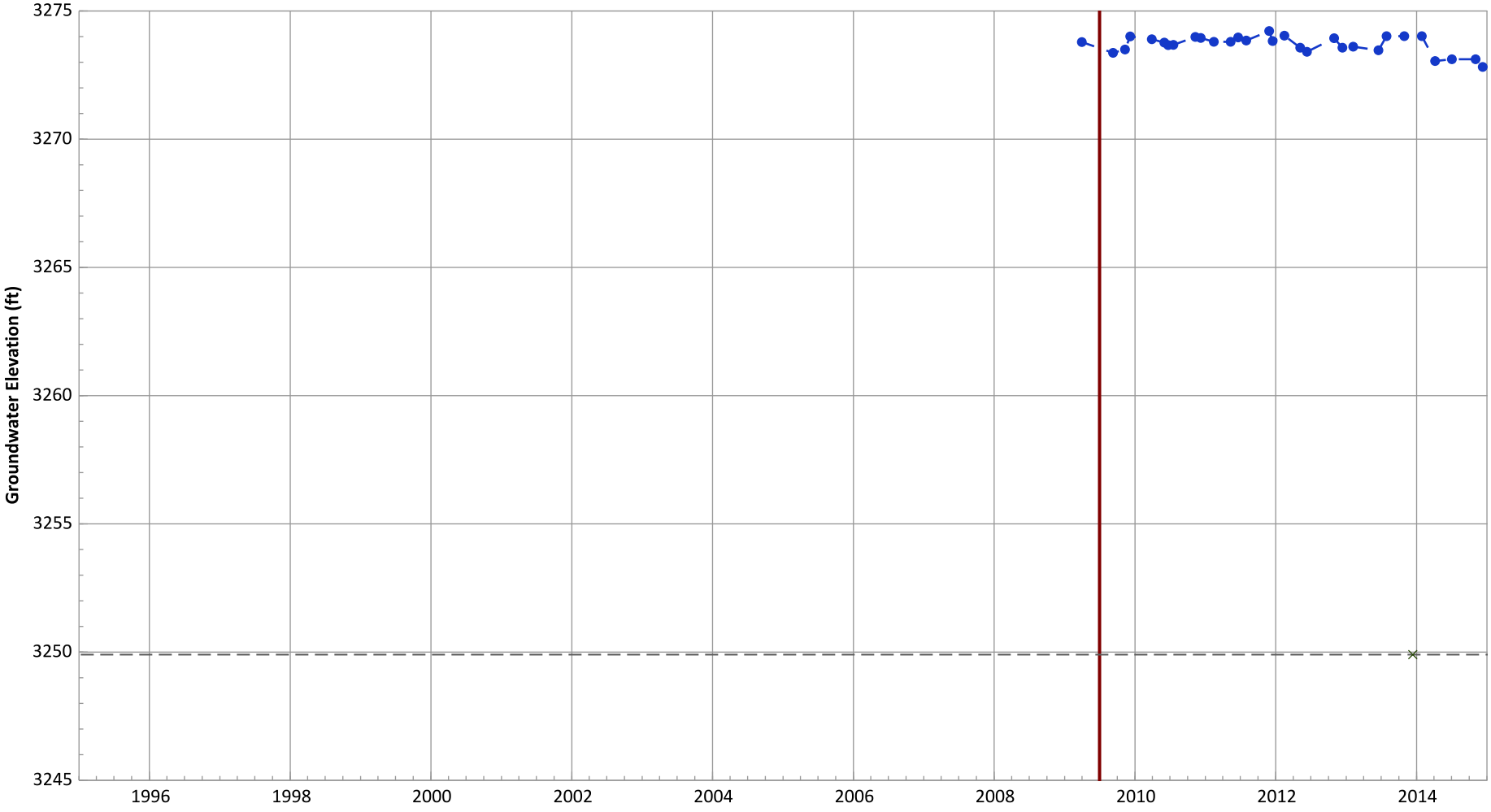
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB055 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

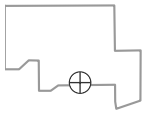


Notes:
1. Top of screen elevation is 3269.9 ft msl.
2. The bottom of screen elevation is 3249.9 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

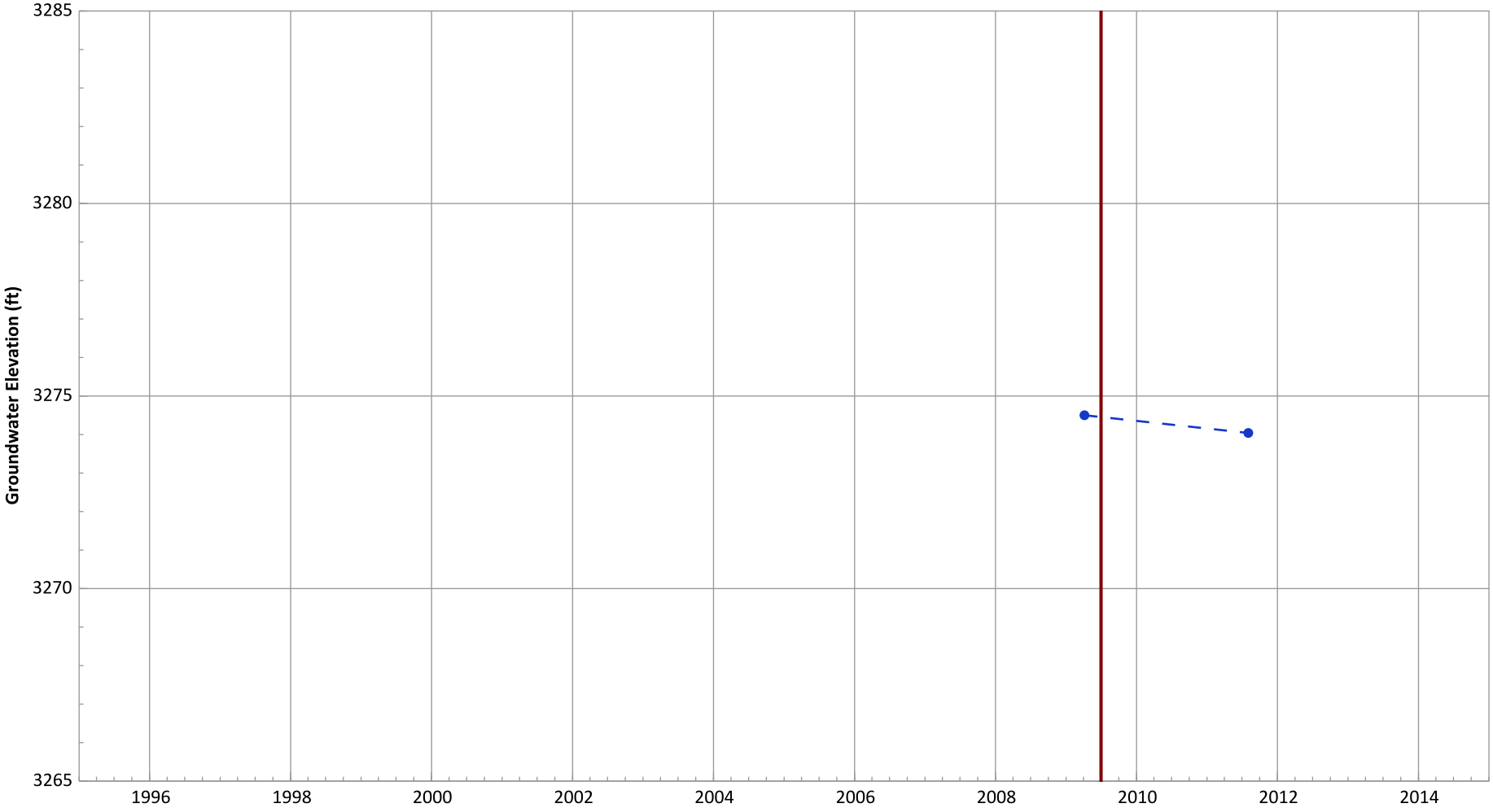
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.28 ft/yr

PTX06-ISB057 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

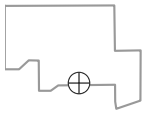


Notes:
1. Top of screen elevation is 3274.19 ft msl.
2. The bottom of screen elevation is 3254.19 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

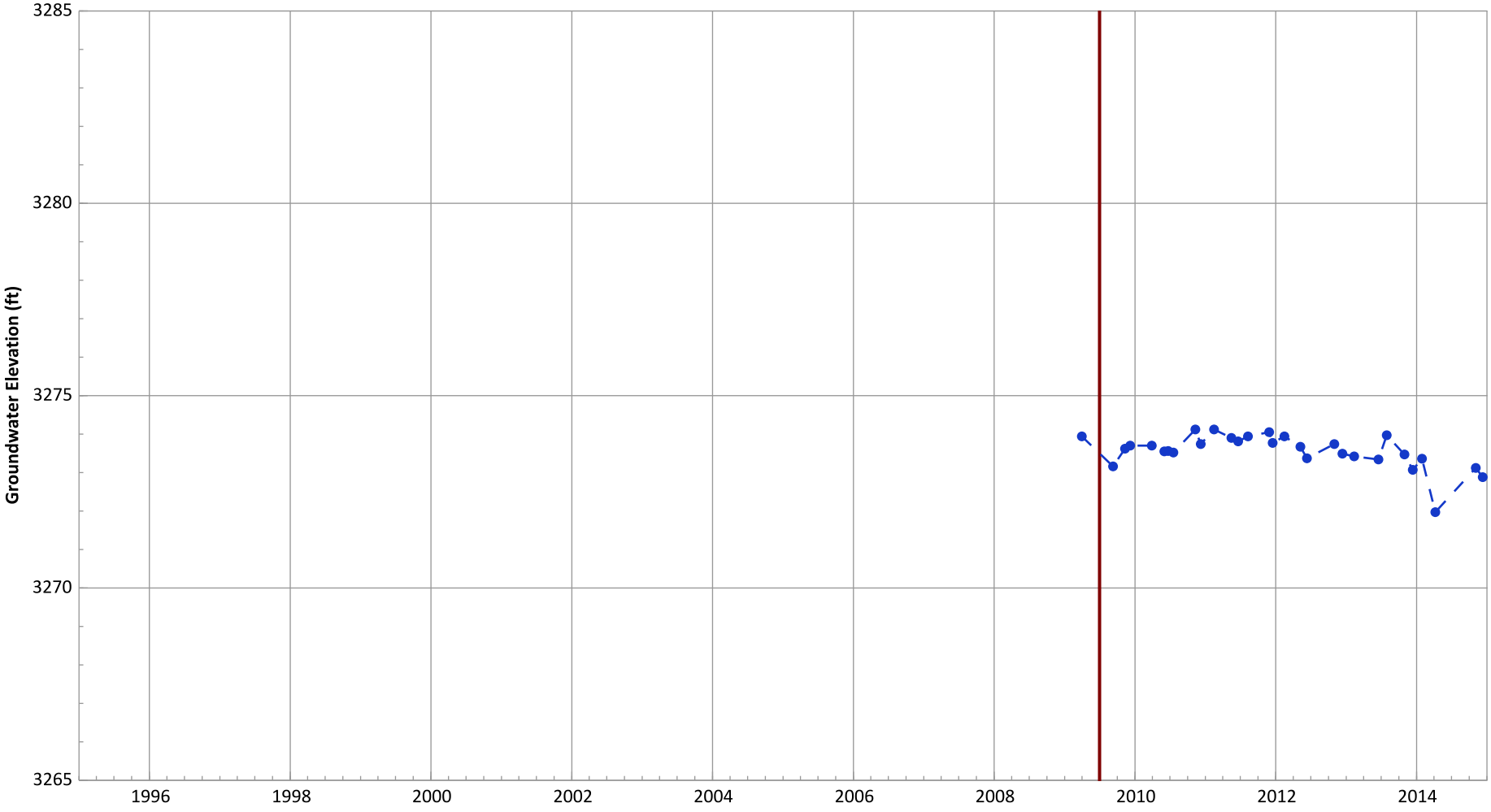
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (<3 Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB059 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

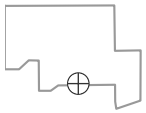


Notes:
1. Top of screen elevation is 3271.56 ft msl.
2. The bottom of screen elevation is 3251.56 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

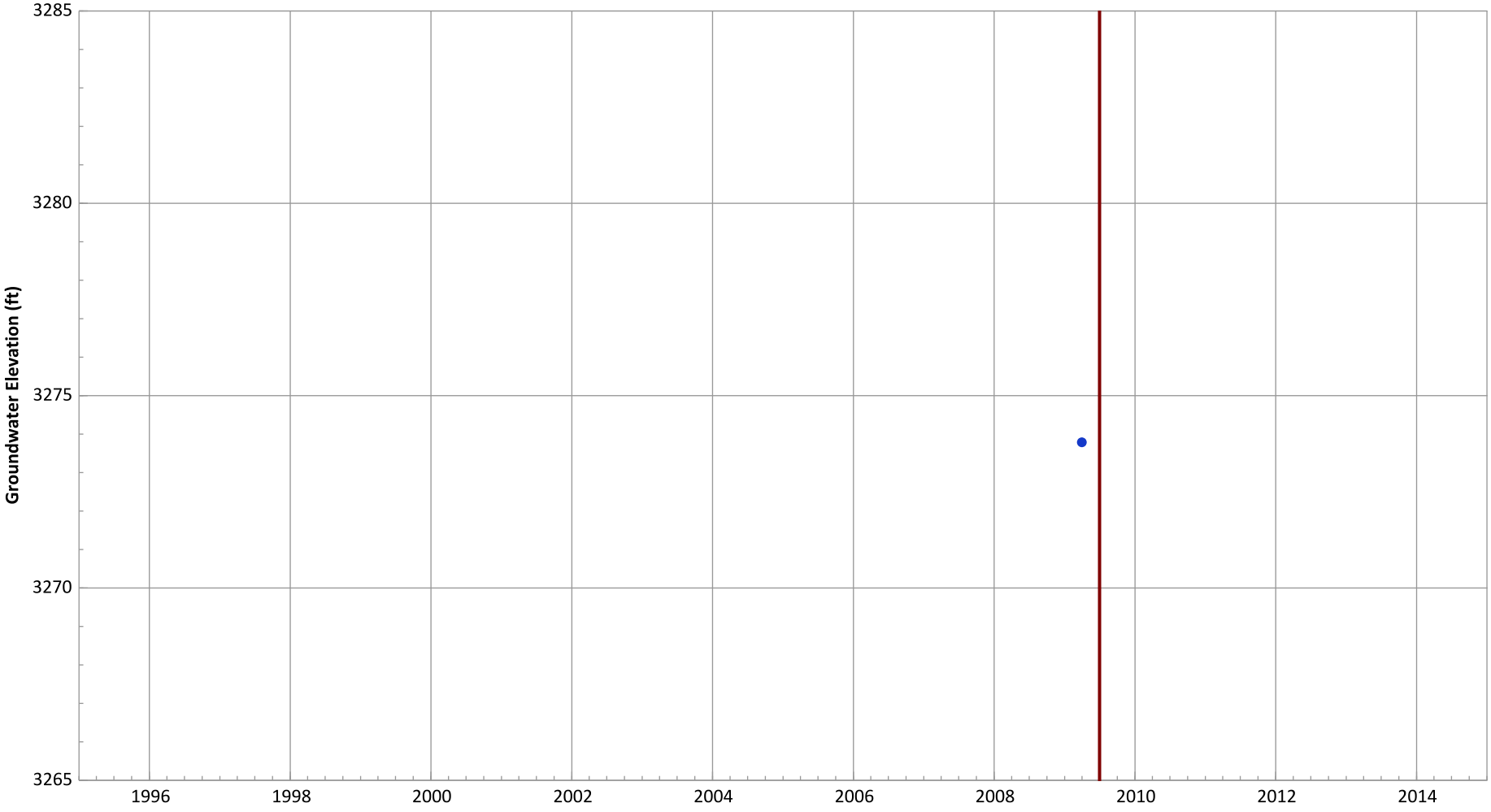
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.14 ft/yr
2012 - 2014 Data: Decreasing at 0.34 ft/yr

PTX06-ISB061 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

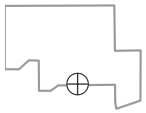


Notes:
1. Top of screen elevation is 3272.95 ft msl.
2. The bottom of screen elevation is 3253.95 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

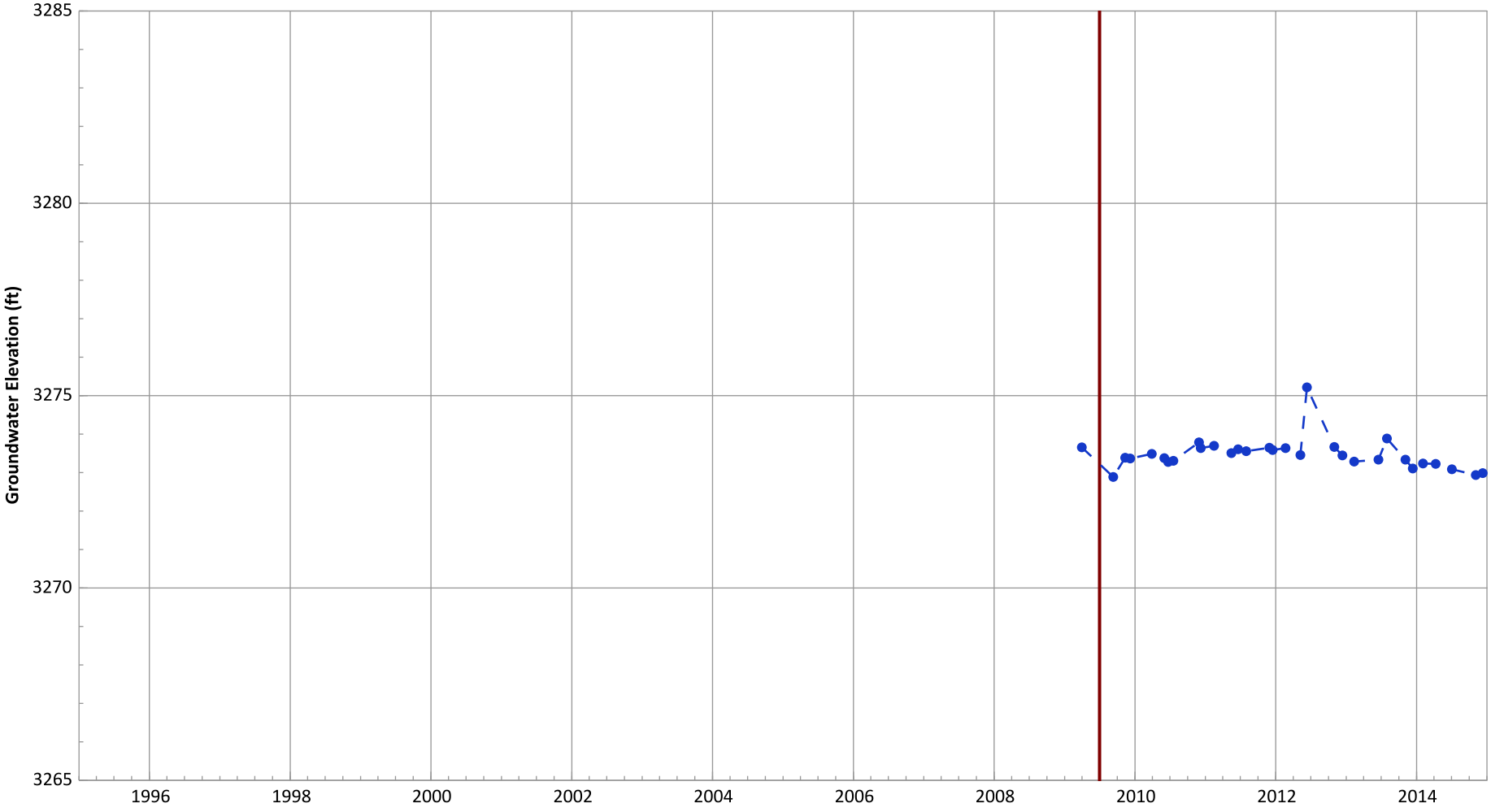
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB063 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

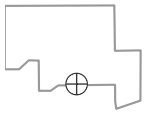


Notes:
1. Top of screen elevation is 3276.71 ft msl.
2. The bottom of screen elevation is 3256.71 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

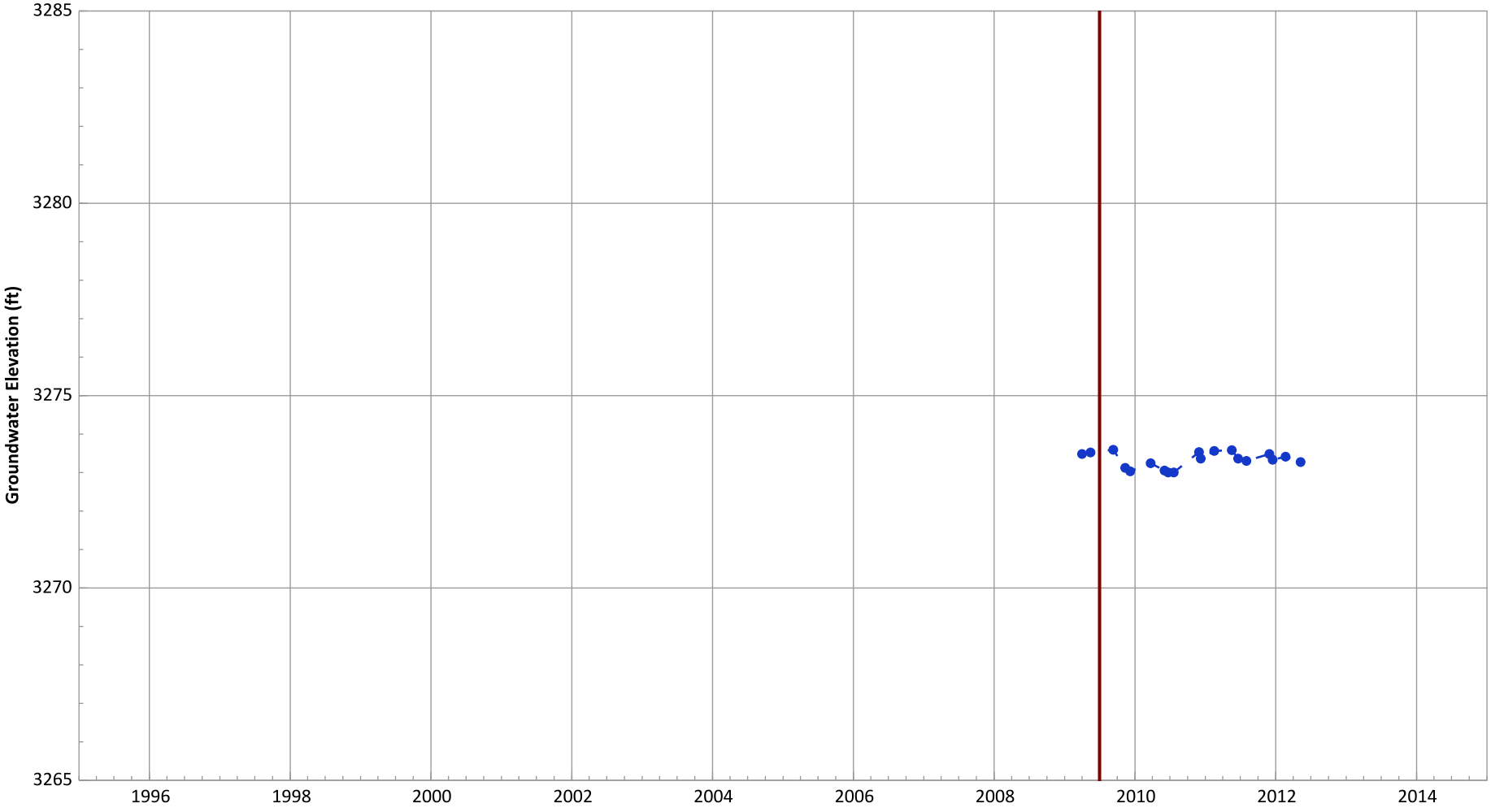
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.56 ft/yr

PTX06-ISB065 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

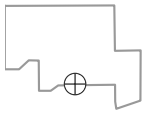


Notes:
1. Top of screen elevation is 3274.94 ft msl.
2. The bottom of screen elevation is 3254.94 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

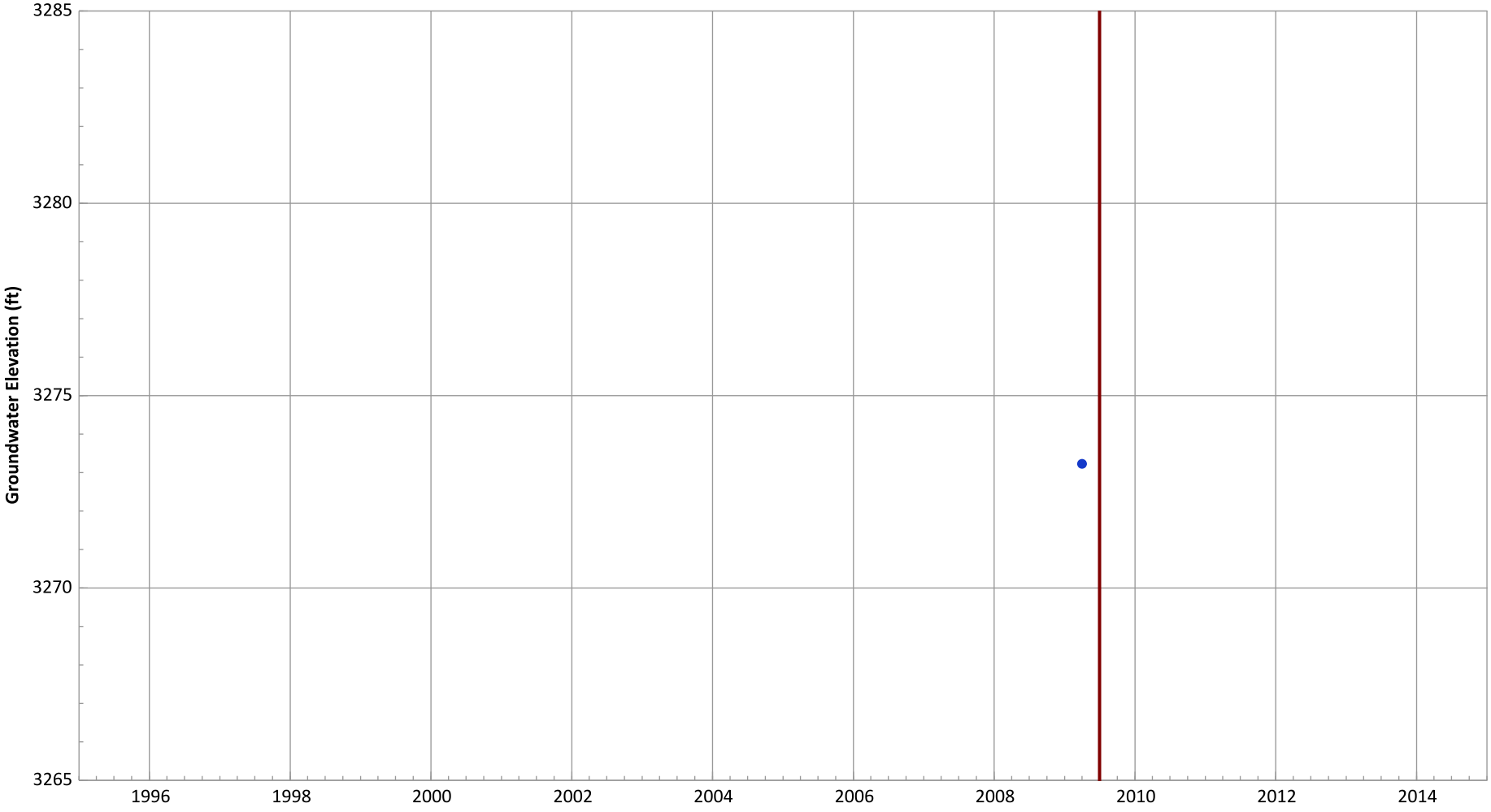
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB067 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

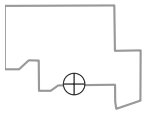


Notes:
1. Top of screen elevation is 3275.56 ft msl.
2. The bottom of screen elevation is 3255.56 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

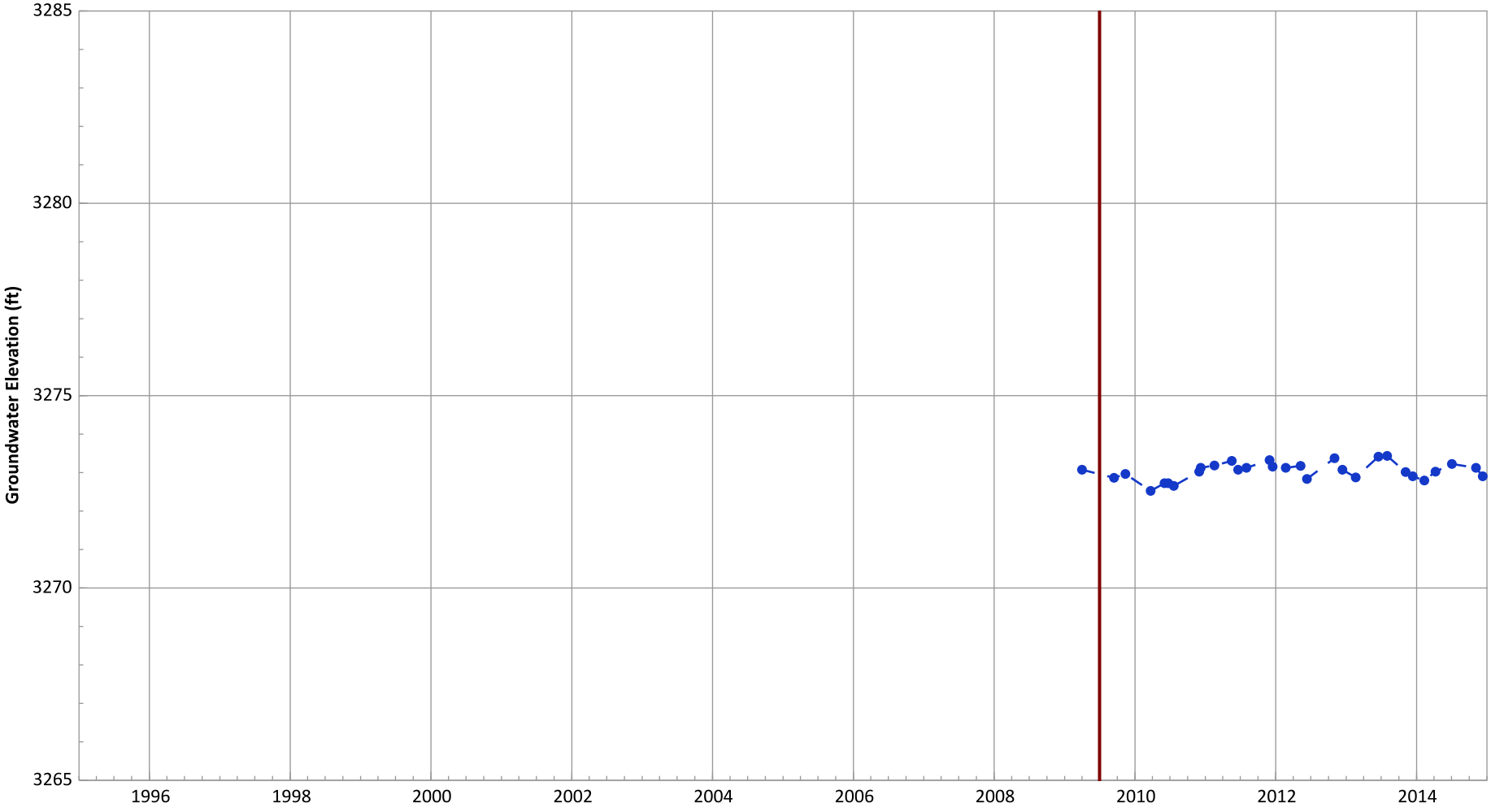
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB069A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

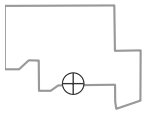


Notes:
1. Top of screen elevation is 3276.05 ft msl.
2. The bottom of screen elevation is 3256.05 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

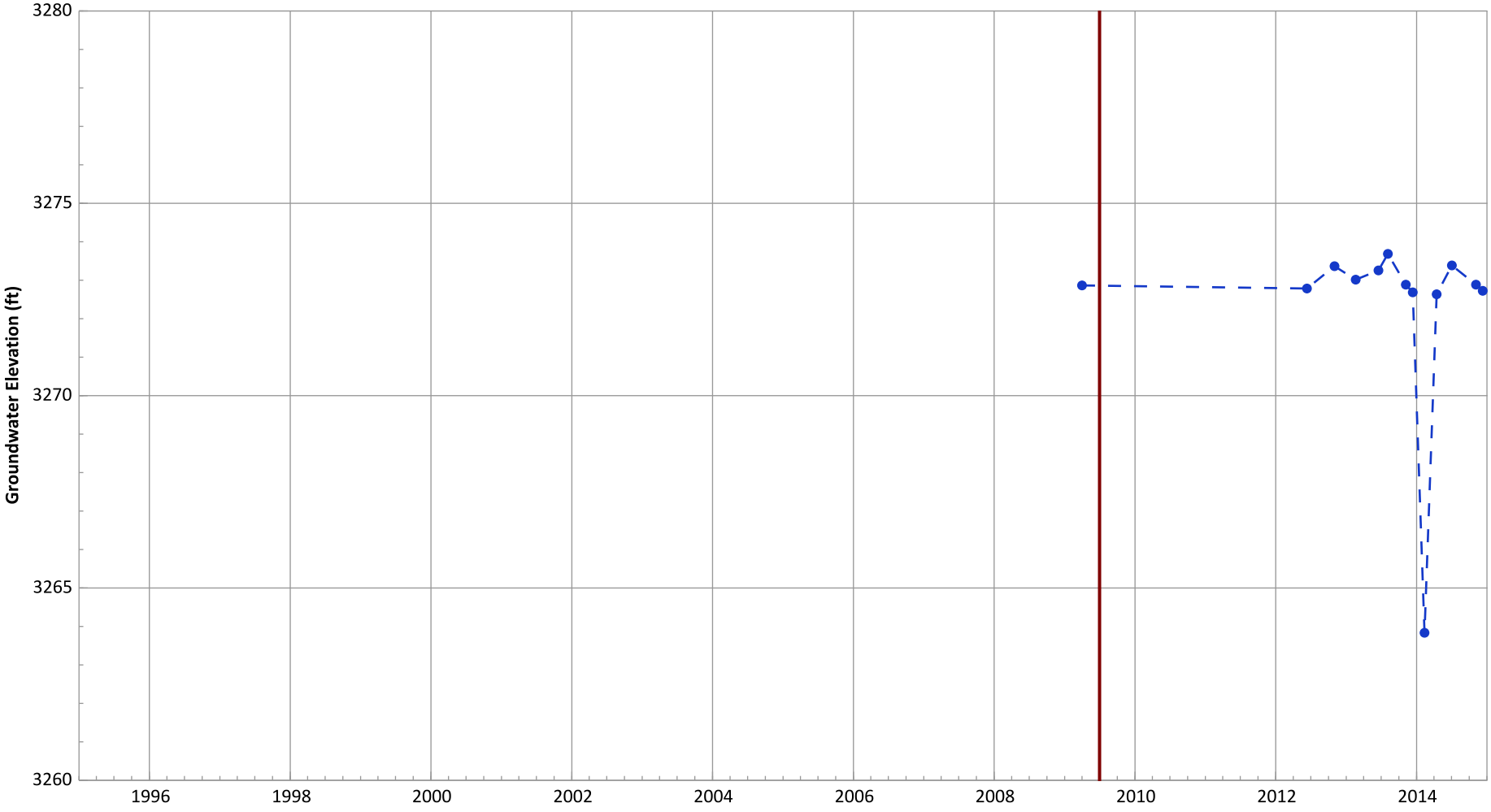
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-ISB071 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

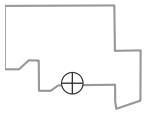


Notes:
1. Top of screen elevation is 3274.58 ft msl.
2. The bottom of screen elevation is 3254.58 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

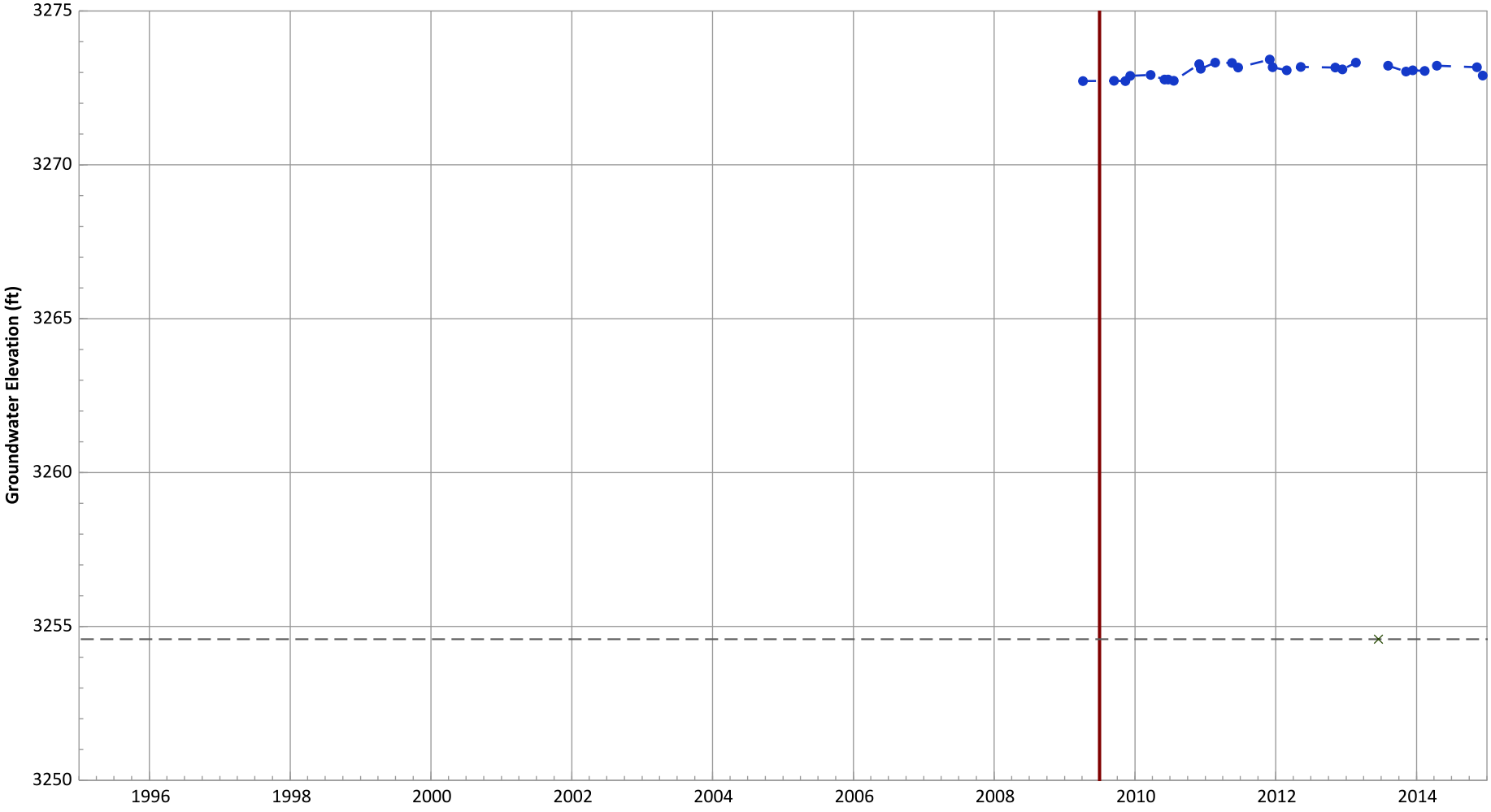
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.23 ft/yr
2012 - 2014 Data: Decreasing at 0.5 ft/yr

PTX06-ISB073 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

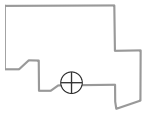


Notes:
1. Top of screen elevation is 3274.59 ft msl.
2. The bottom of screen elevation is 3254.59 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

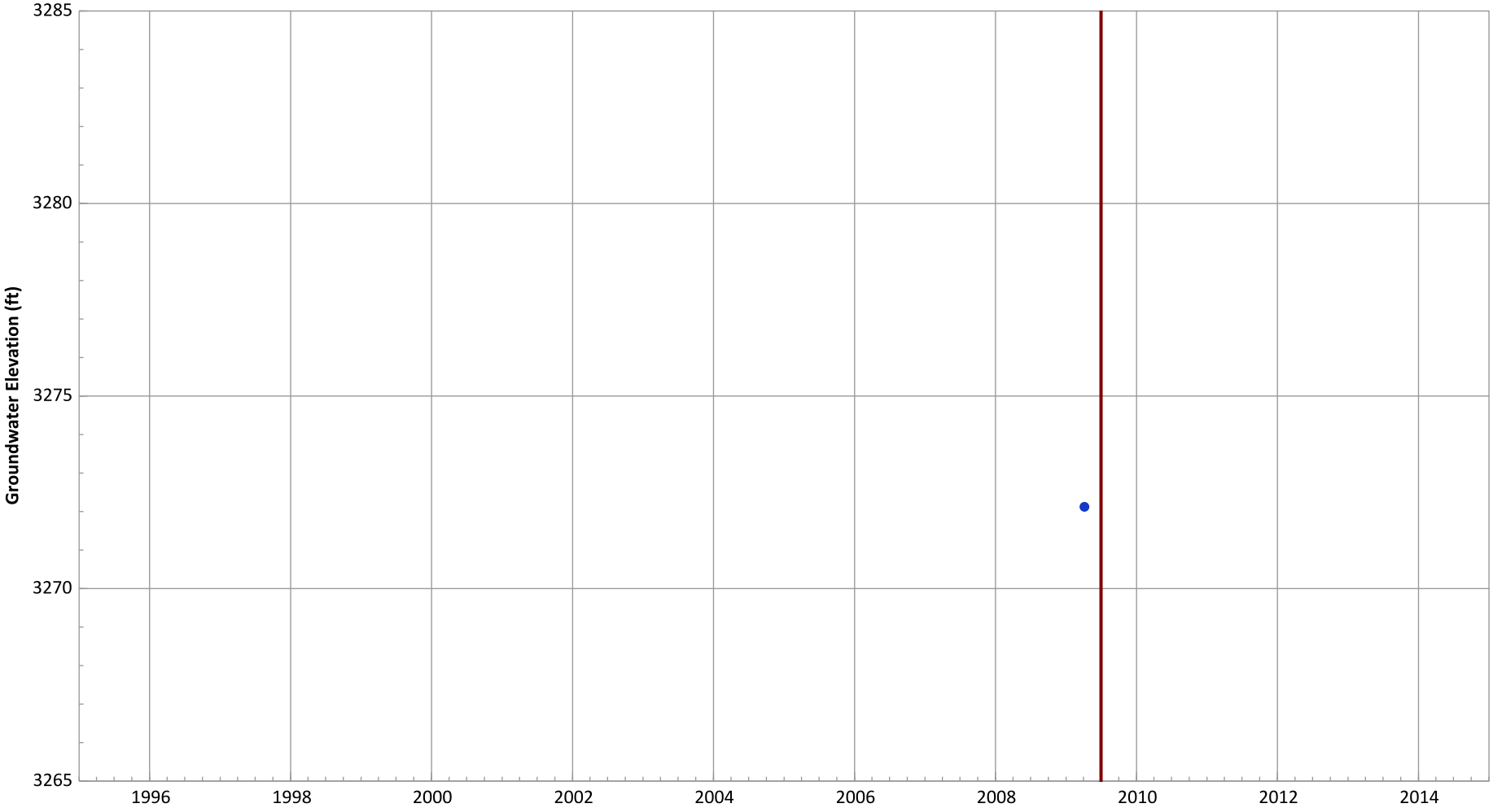
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-ISB074 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

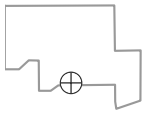


Notes:
1. Top of screen elevation is 3279.2 ft msl.
2. The bottom of screen elevation is 3259.2 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

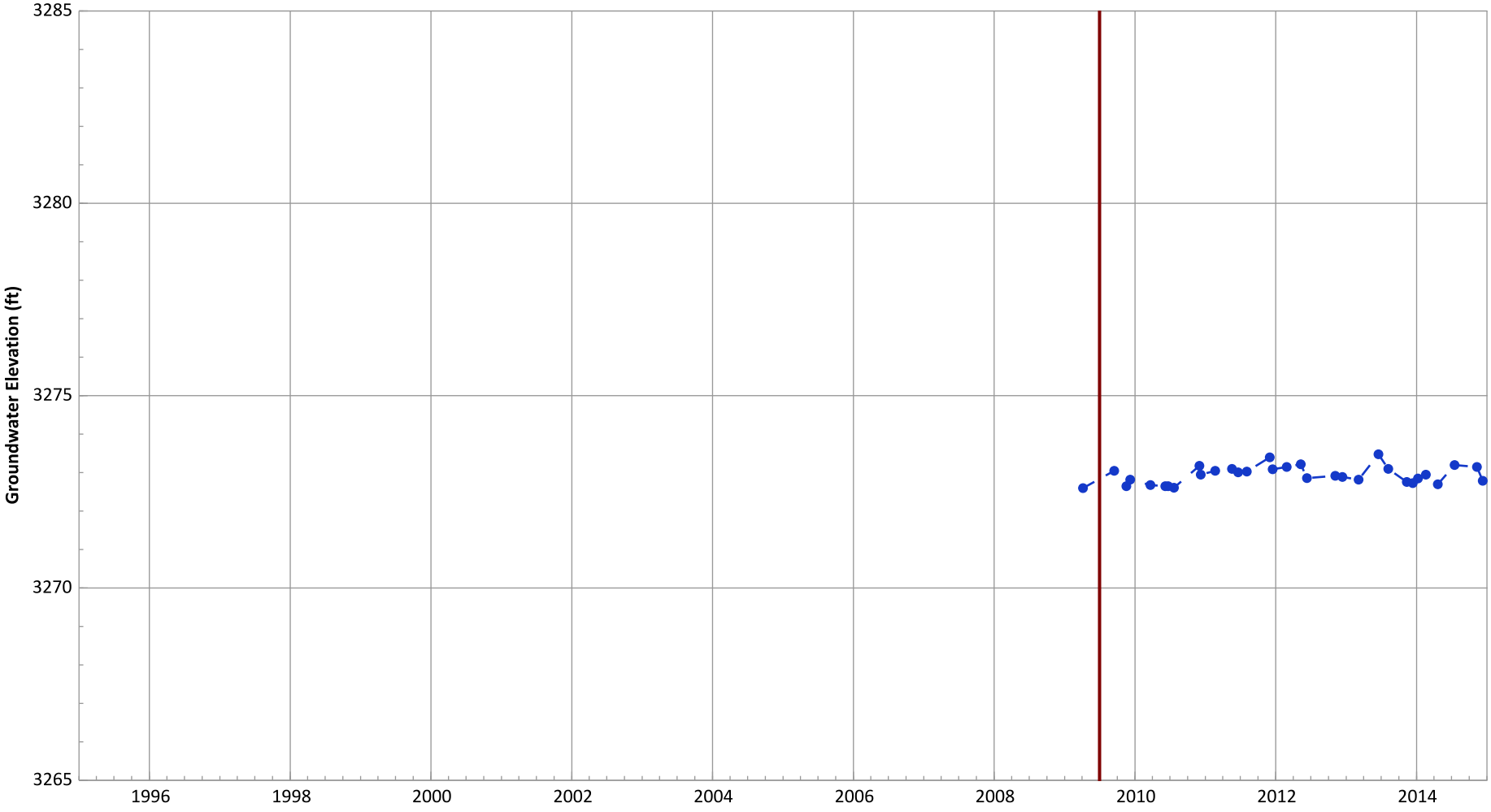
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB075 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

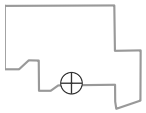


Notes:
1. Top of screen elevation is 3280.59 ft msl.
2. The bottom of screen elevation is 3260.59 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

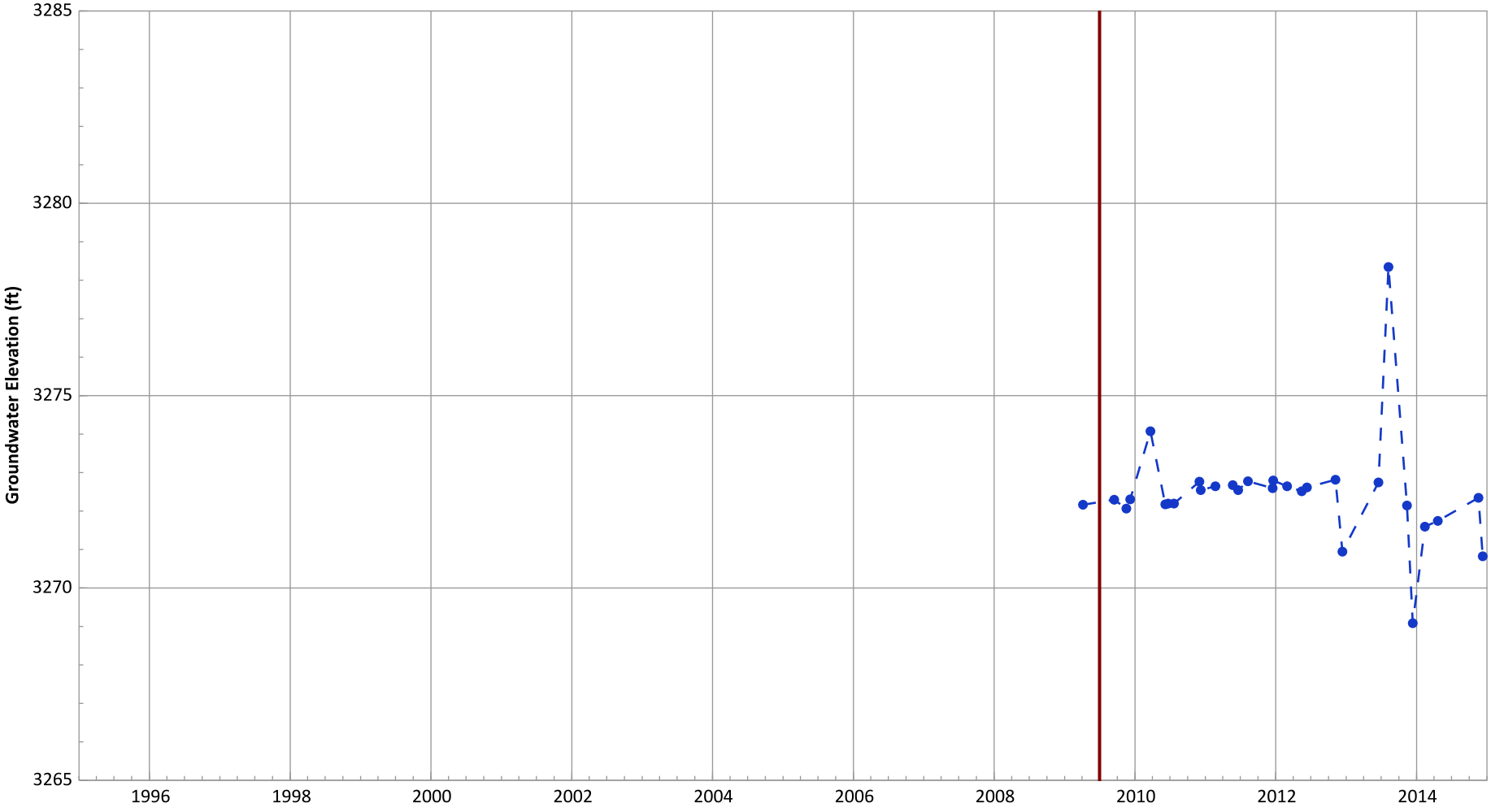
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: No Trend

PTX06-ISB077 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

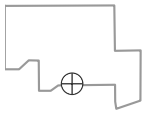


Notes:
1. Top of screen elevation is 3275.83 ft msl.
2. The bottom of screen elevation is 3255.83 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

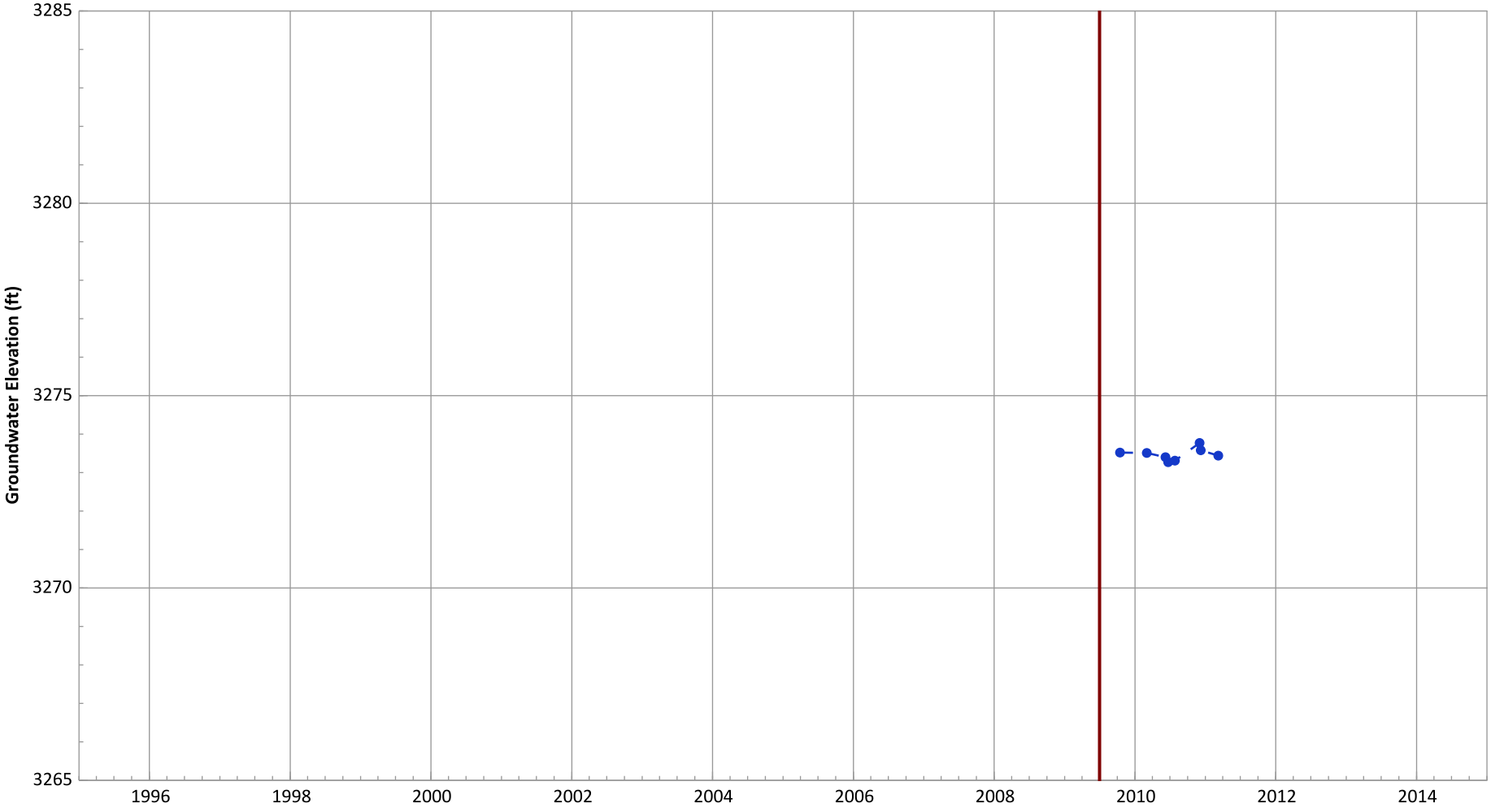
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.58 ft/yr

PTX06-ISB078 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

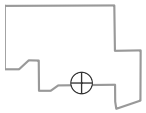


Notes:
1. Top of screen elevation is 3275.41 ft msl.
2. The bottom of screen elevation is 3250.41 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

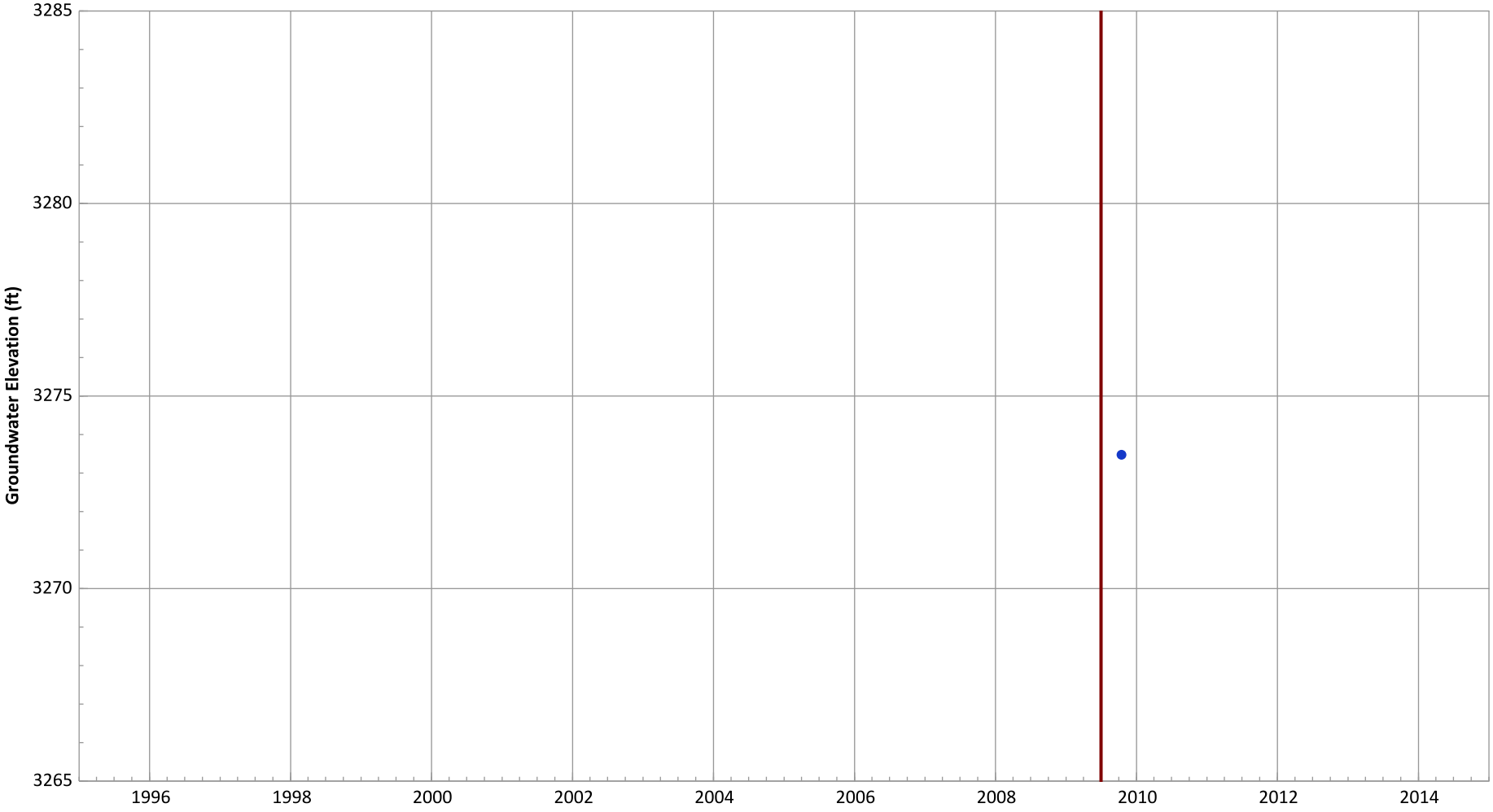
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB079 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

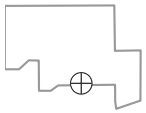


Notes:
1. Top of screen elevation is 3276.5 ft msl.
2. The bottom of screen elevation is 3251.5 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

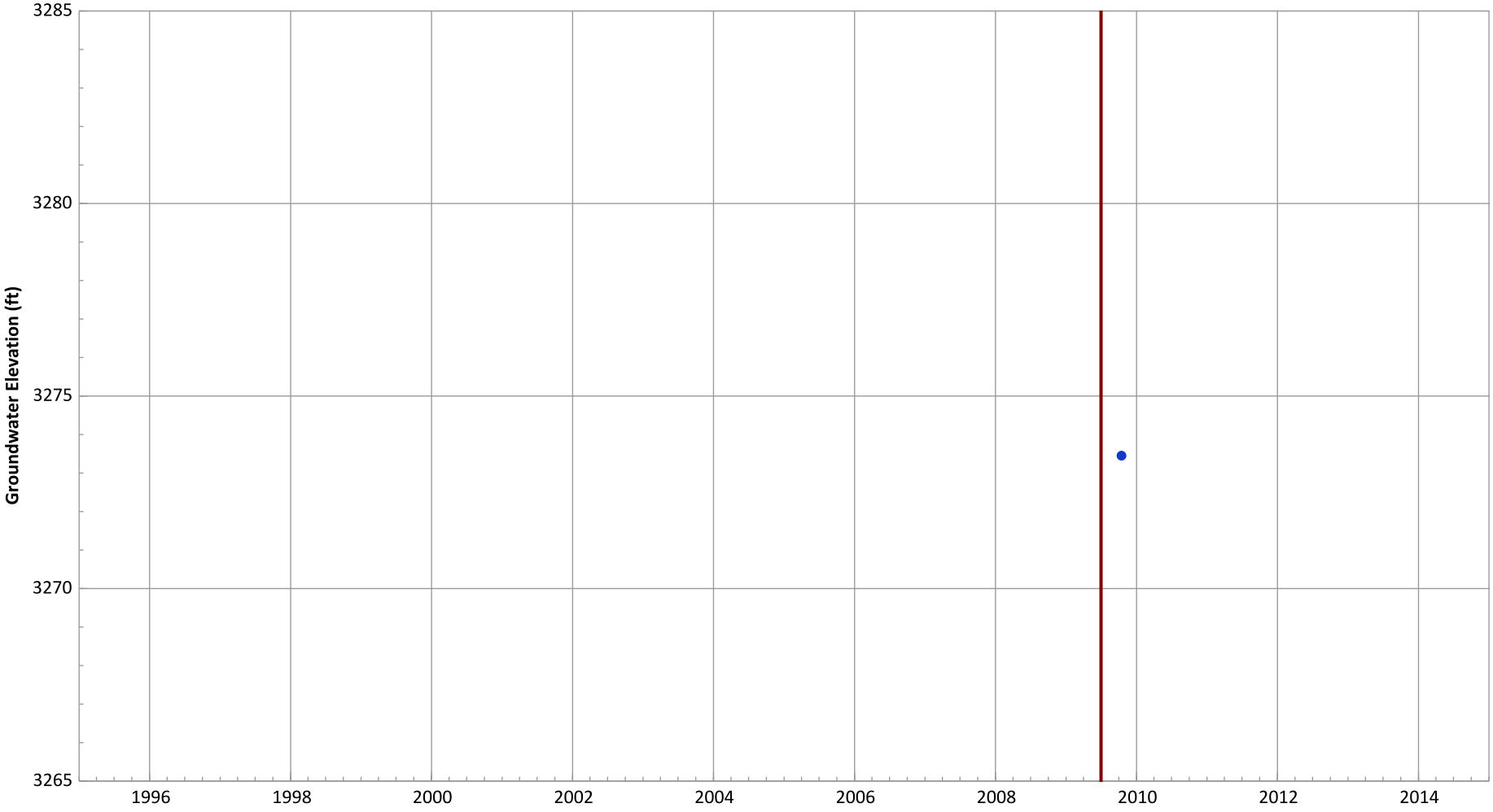
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB080 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

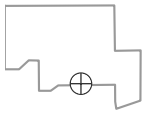


Notes:
1. Top of screen elevation is 3274.94 ft msl.
2. The bottom of screen elevation is 3249.94 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

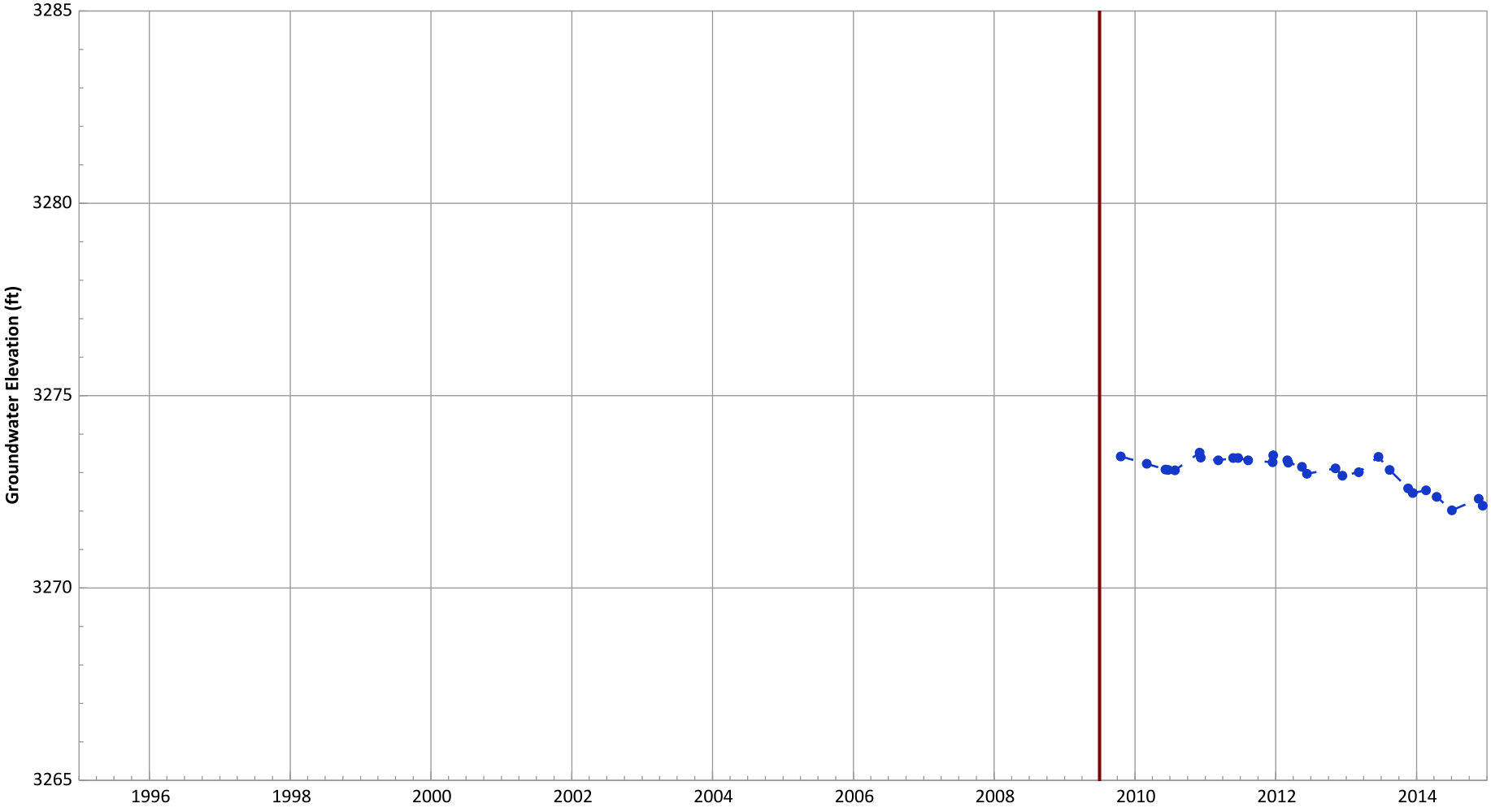
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB081 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

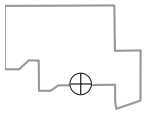


Notes:
1. Top of screen elevation is 3276.07 ft msl.
2. The bottom of screen elevation is 3251.07 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

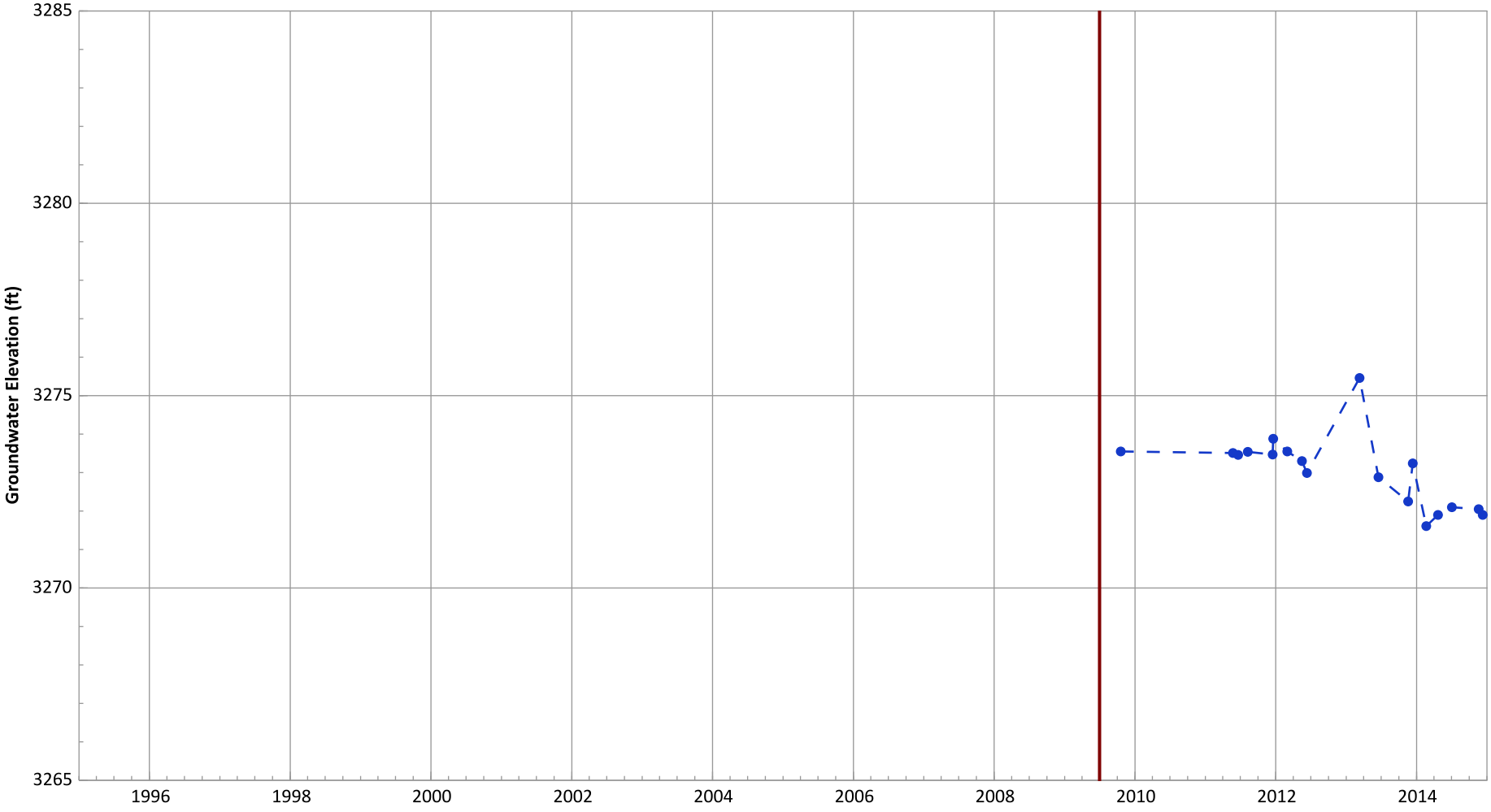
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.22 ft/yr
2012 - 2014 Data: Decreasing at 0.44 ft/yr

PTX06-ISB082 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

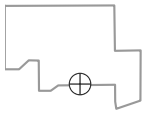


Notes:
1. Top of screen elevation is 3271.56 ft msl.
2. The bottom of screen elevation is 3251.56 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

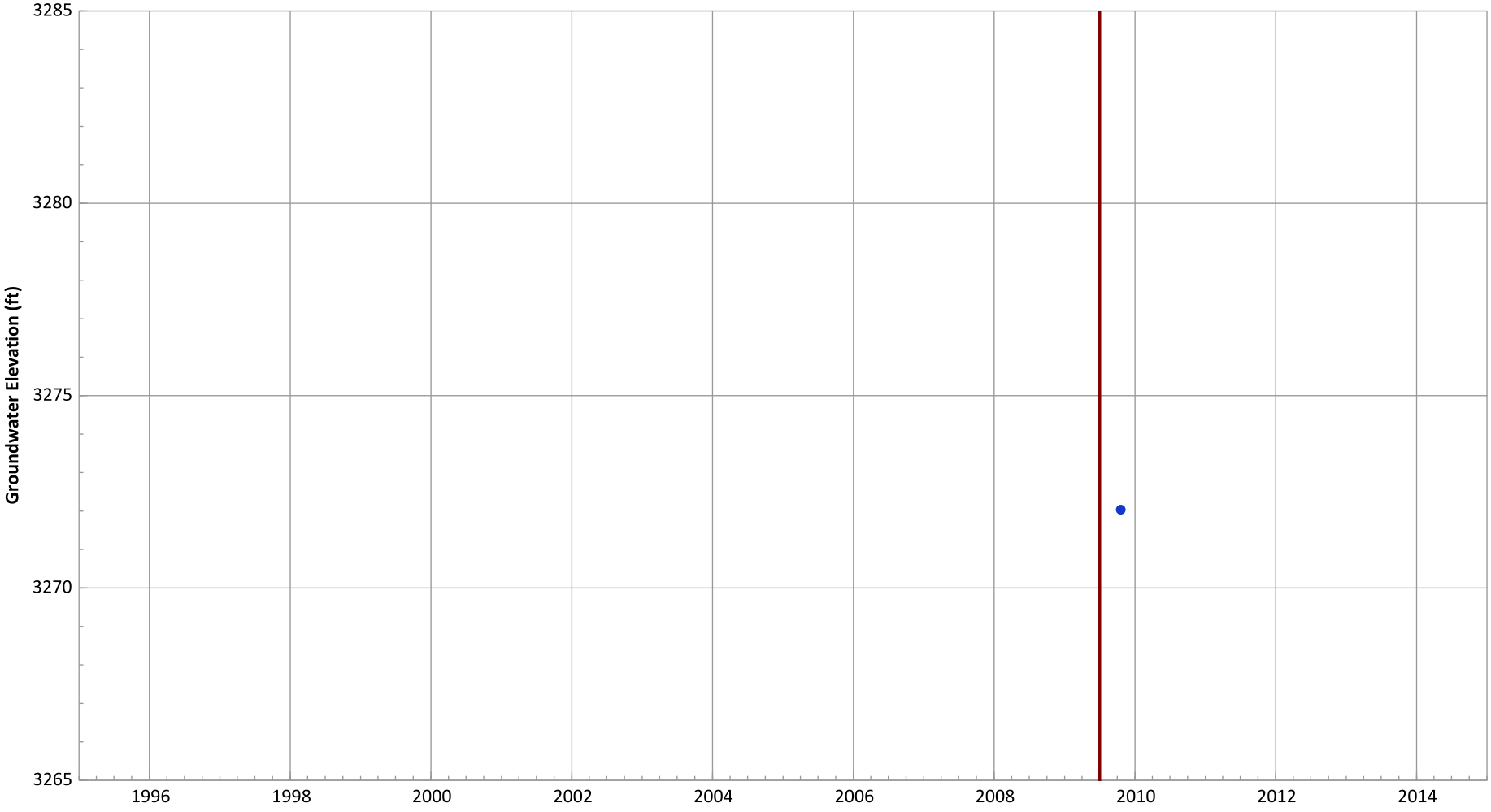
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.41 ft/yr
2012 - 2014 Data: Decreasing at 0.89 ft/yr

PTX06-ISB083 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

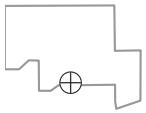


Notes:
1. Top of screen elevation is 3278.95 ft msl.
2. The bottom of screen elevation is 3258.95 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

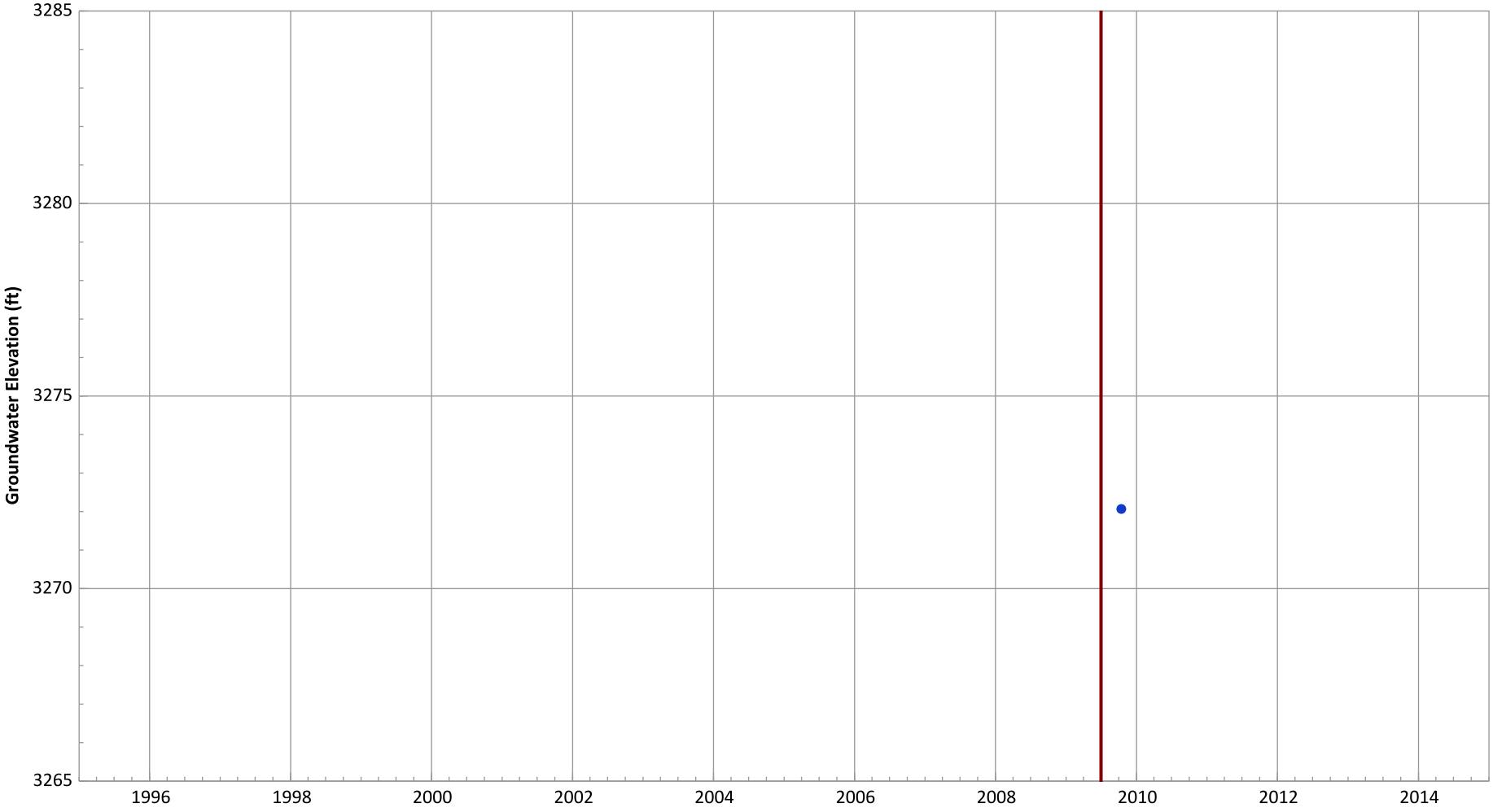
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB084 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

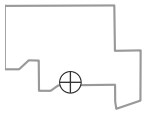


Notes:
1. Top of screen elevation is 3272.93 ft msl.
2. The bottom of screen elevation is 3257.93 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

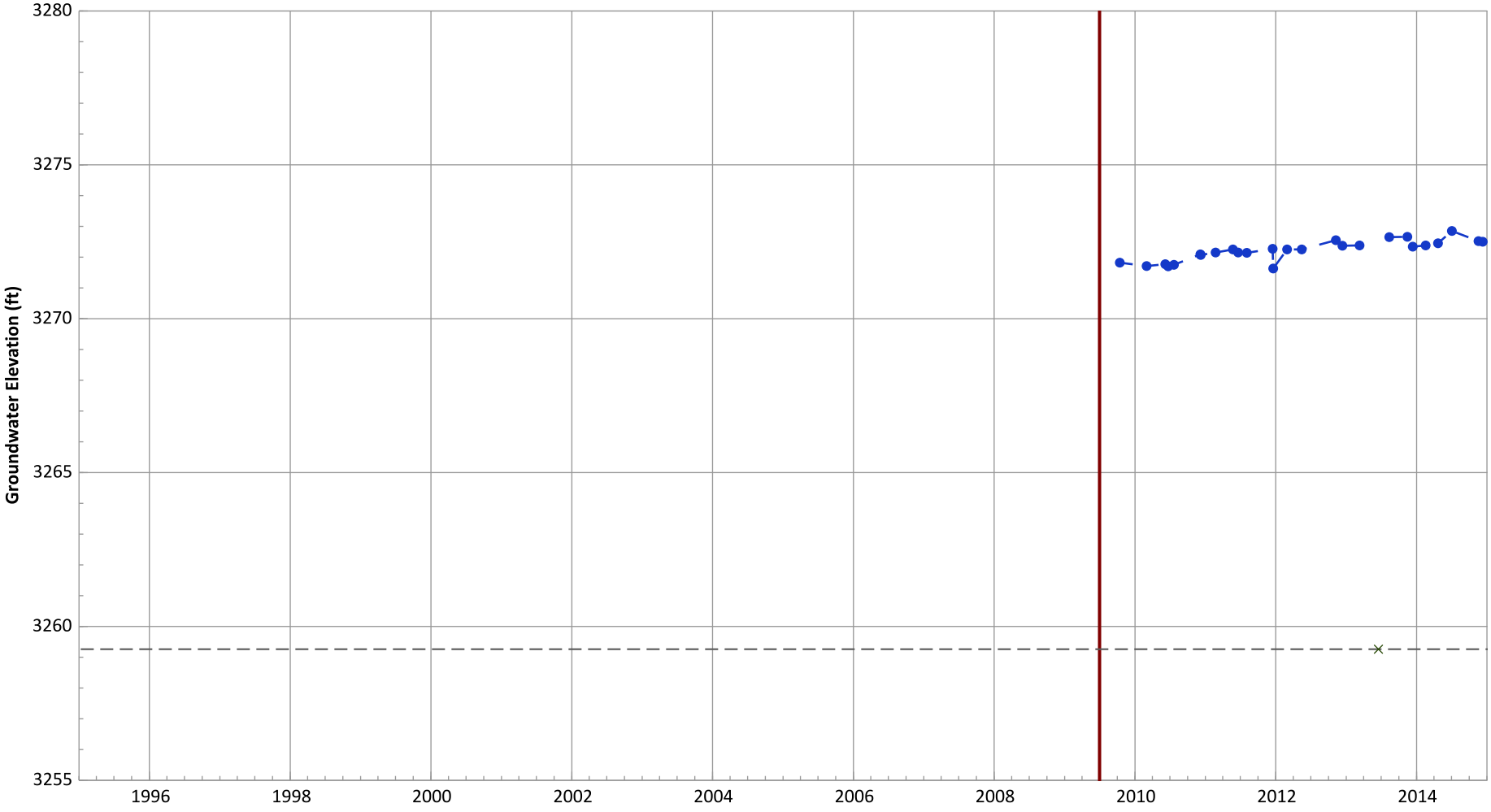
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-ISB085A Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

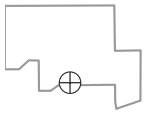


Notes:
1. Top of screen elevation is 3279.26 ft msl.
2. The bottom of screen elevation is 3259.26 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

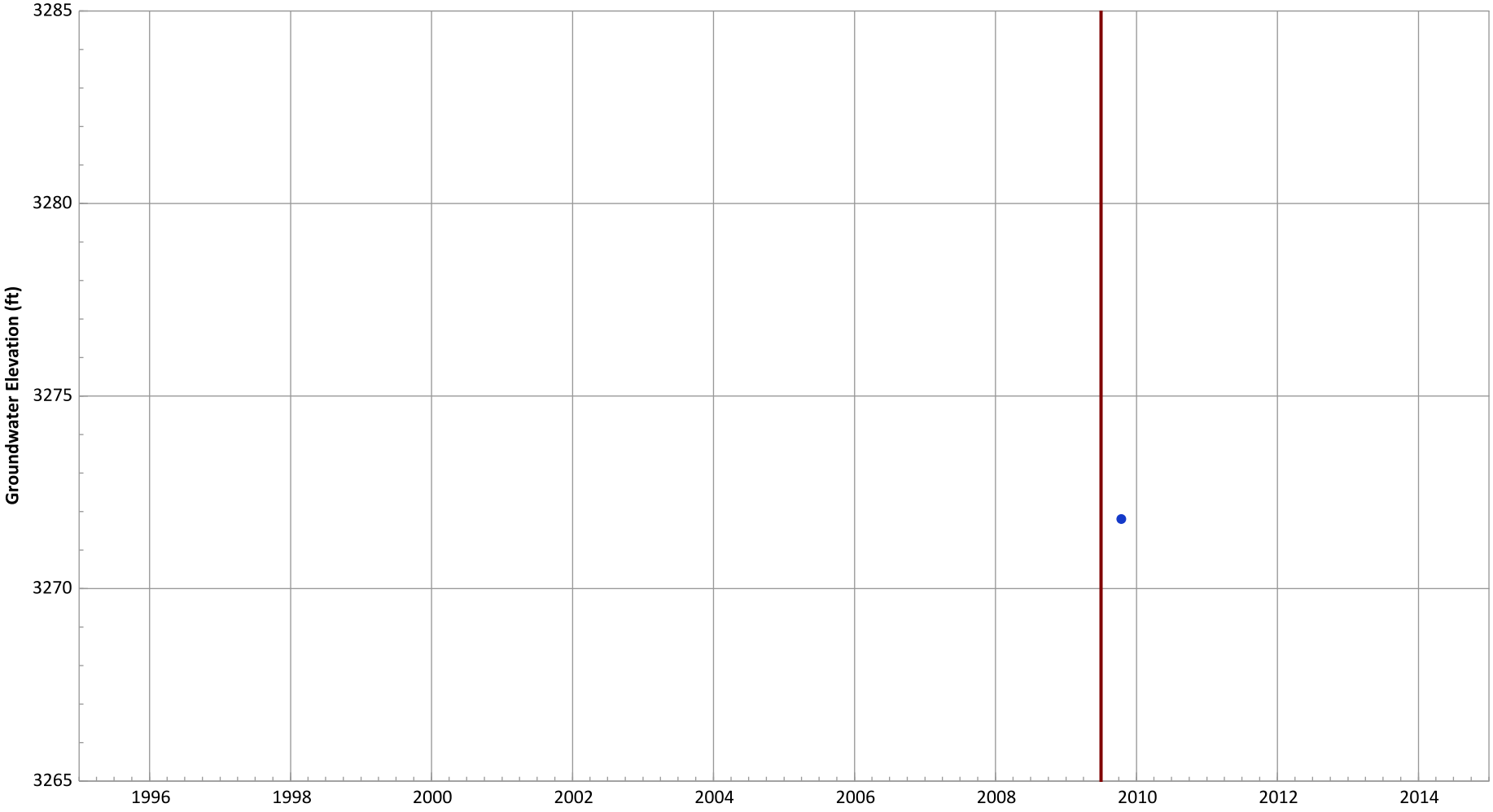
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.18 ft/yr
2012 - 2014 Data: No Trend

PTX06-ISB086 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

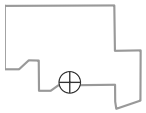


Notes:
1. Top of screen elevation is 3278.7 ft msl.
2. The bottom of screen elevation is 3258.7 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

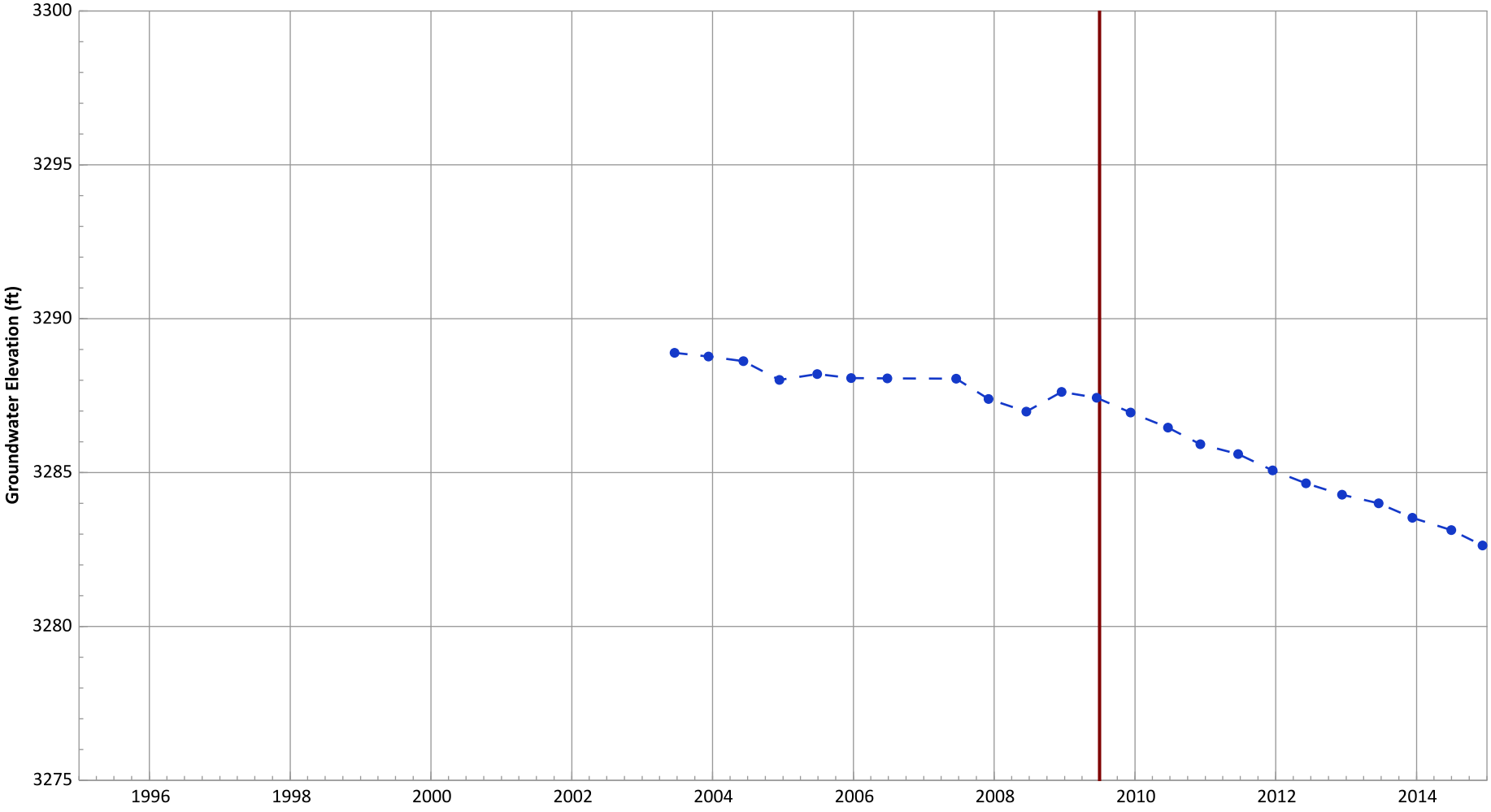
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: N/A (No Measurements)
2012 - 2014 Data: N/A (No Measurements)

PTX06-PZ01 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

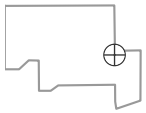


Notes:
1. Top of screen elevation is 3288.44 ft msl.
2. The bottom of screen elevation is 3269.44 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

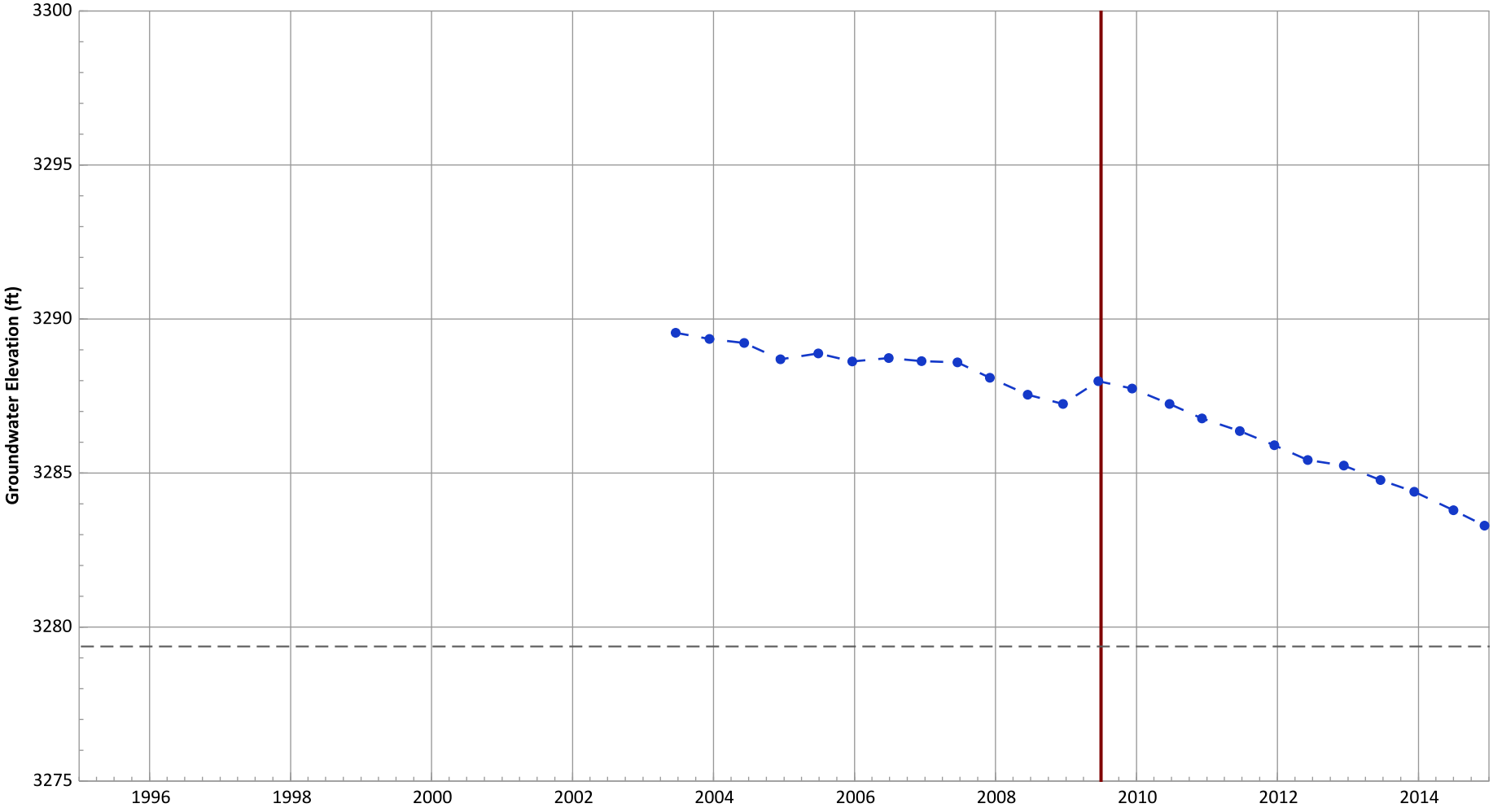
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.52 ft/yr
2012 - 2014 Data: Decreasing at 0.79 ft/yr

PTX06-PZ02 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

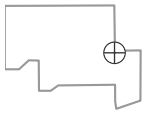


Notes:
1. Top of screen elevation is 3303.87 ft msl.
2. The bottom of screen elevation is 3279.37 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

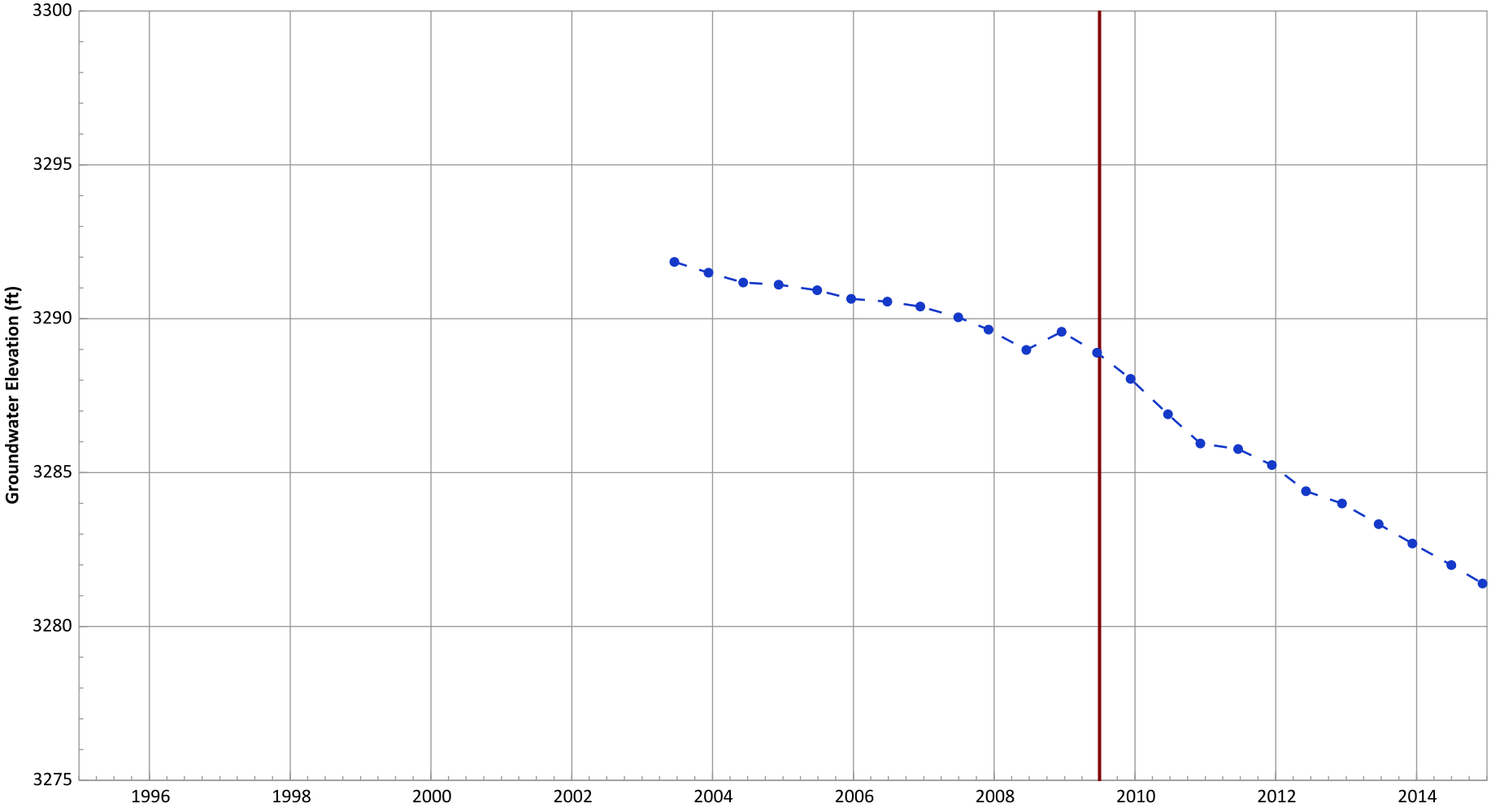
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.51 ft/yr
2012 - 2014 Data: Decreasing at 0.87 ft/yr

PTX06-PZ03 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

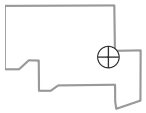


Notes:
1. Top of screen elevation is 3294.14 ft msl.
2. The bottom of screen elevation is 3265.64 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

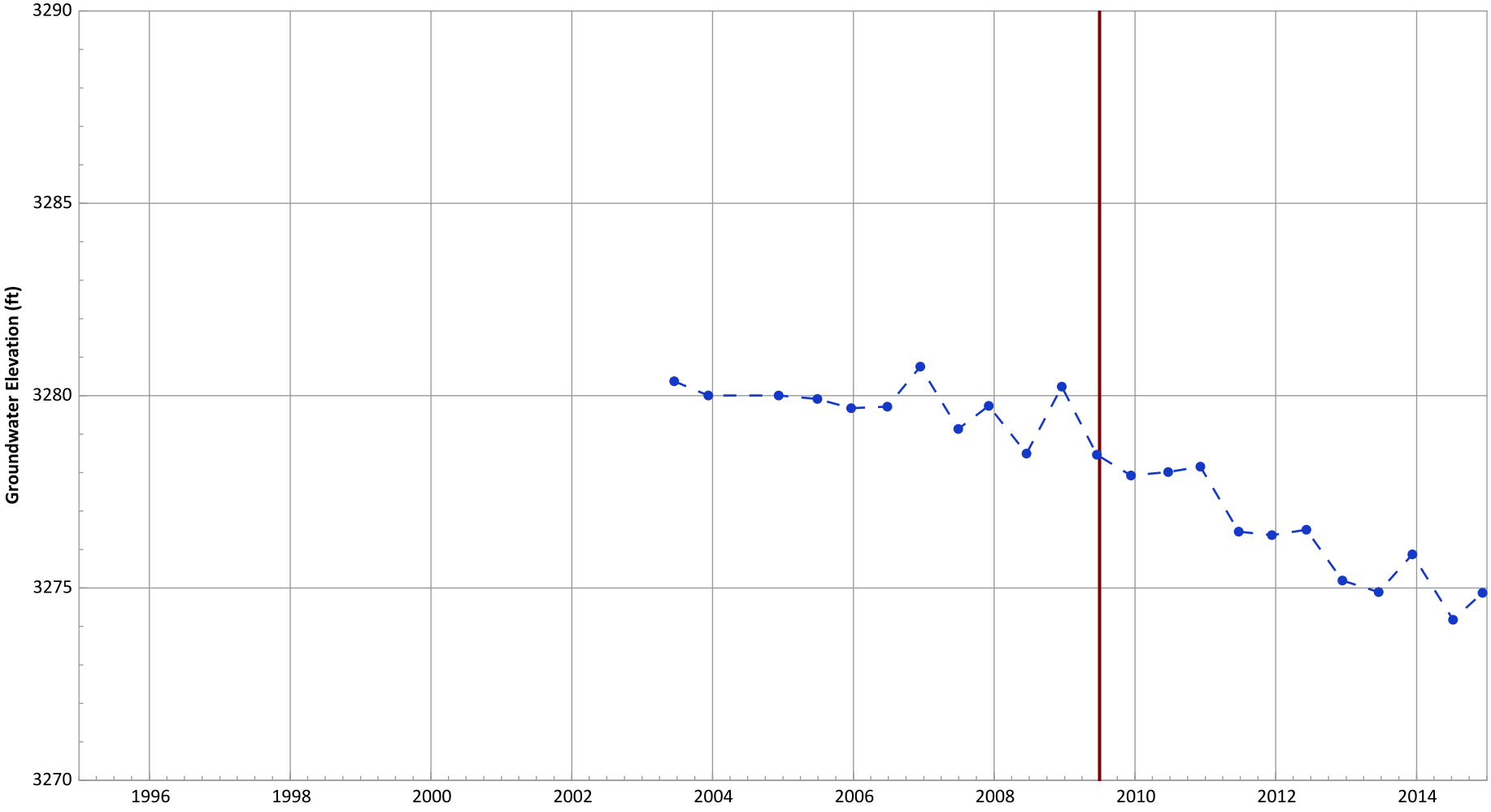
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.93 ft/yr
2012 - 2014 Data: Decreasing at 1.22 ft/yr

PTX06-PZ05 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

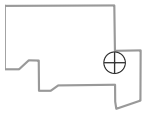


Notes:
1. Top of screen elevation is 3299.45 ft msl.
2. The bottom of screen elevation is 3259.45 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

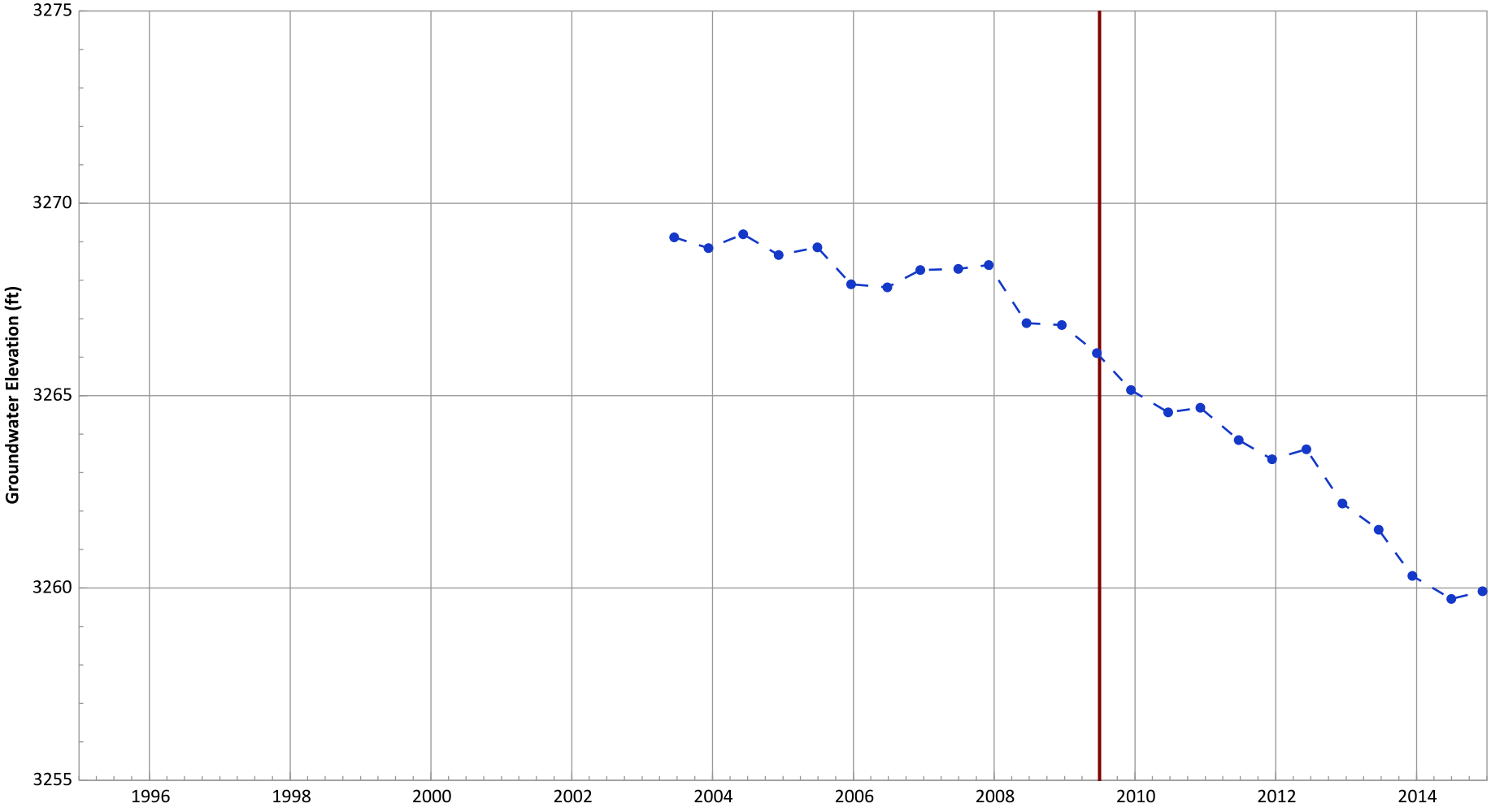
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.55 ft/yr
2012 - 2014 Data: Decreasing at 0.59 ft/yr

PTX06-PZ06 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

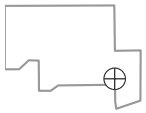


Notes:
1. Top of screen elevation is 3294.76 ft msl.
2. The bottom of screen elevation is 3254.76 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

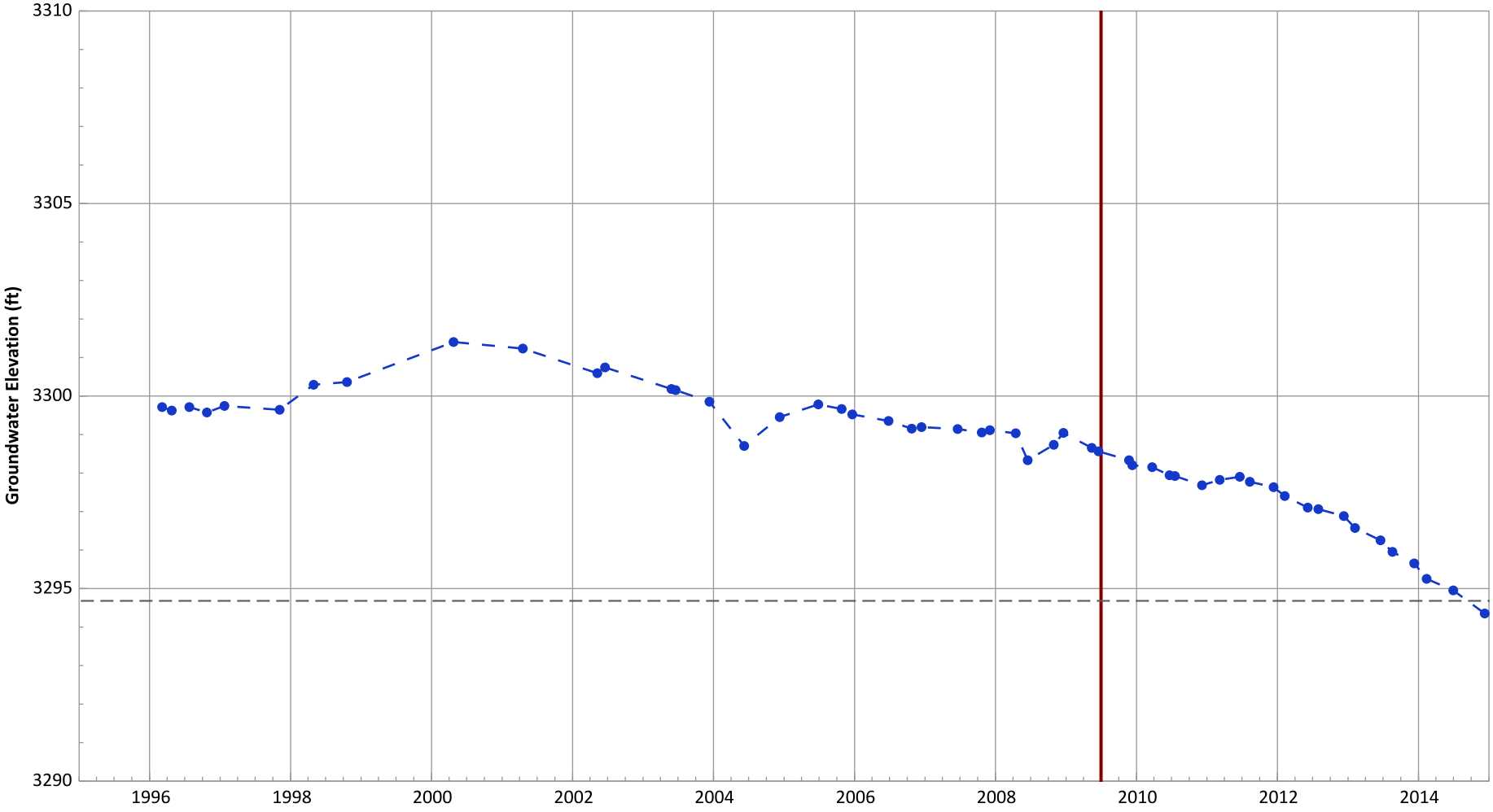
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.86 ft/yr
2012 - 2014 Data: Decreasing at 1.54 ft/yr

PTX07-1O01 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

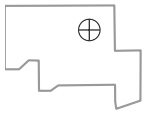


Notes:
1. Top of screen elevation is 3314.68 ft msl.
2. The bottom of screen elevation is 3294.68 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

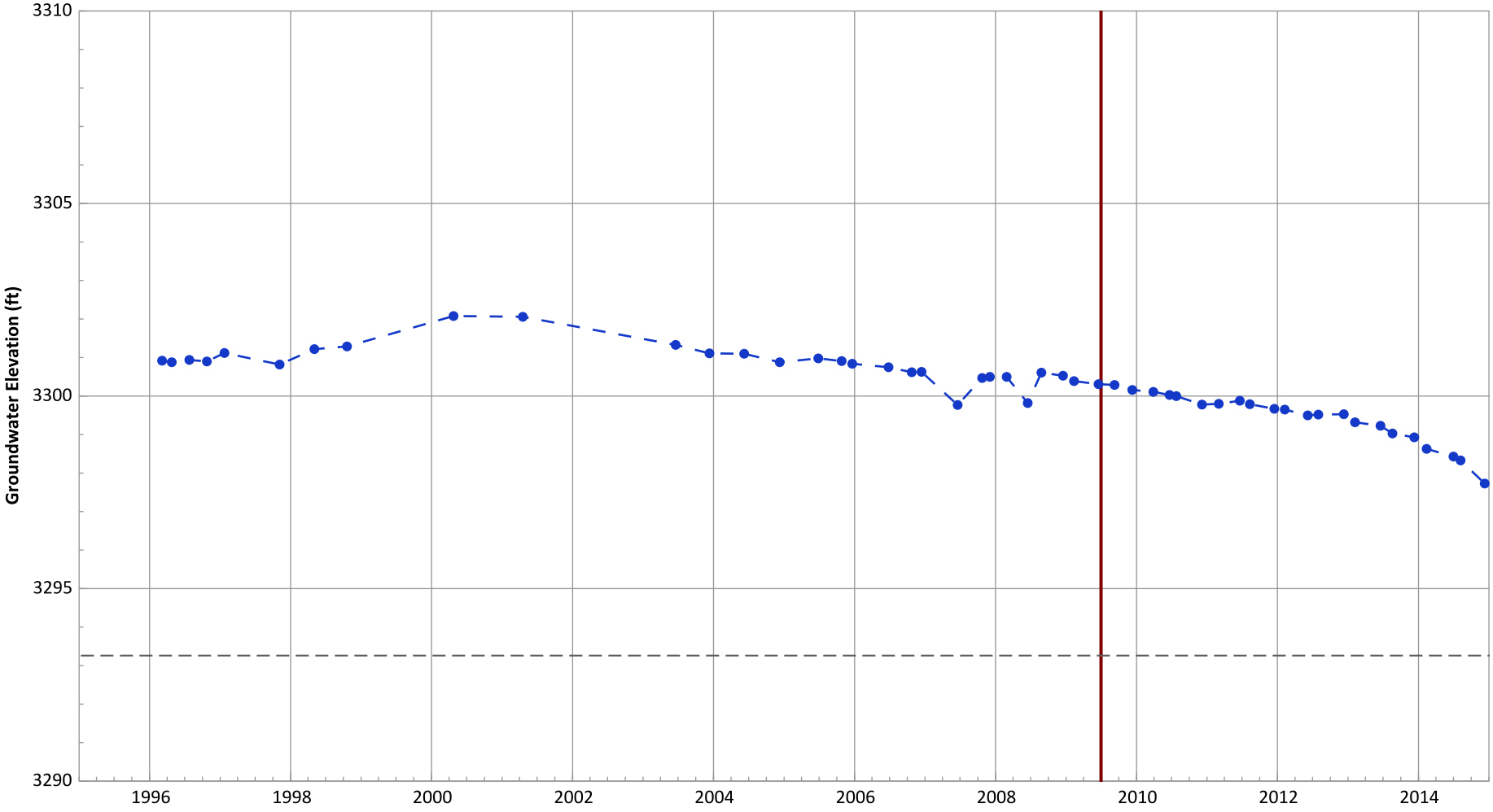
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.24 ft/yr
2012 - 2014 Data: Decreasing at 1.14 ft/yr

PTX07-1O02 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

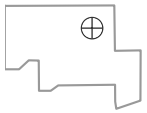


Notes:
1. Top of screen elevation is 3318.26 ft msl.
2. The bottom of screen elevation is 3293.26 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

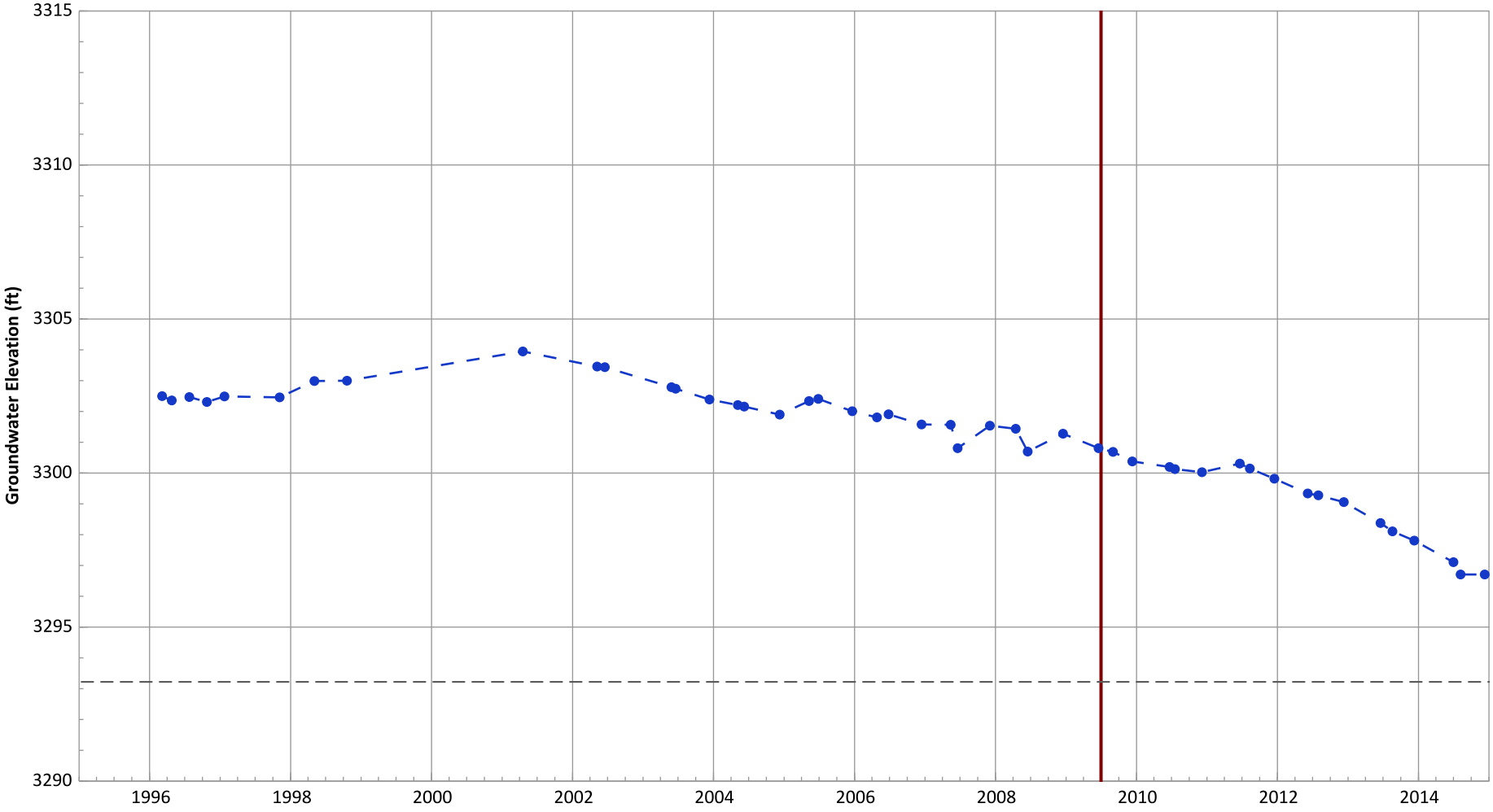
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.13 ft/yr
2012 - 2014 Data: Decreasing at 0.67 ft/yr

PTX07-1O03 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

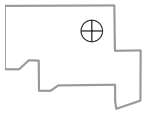


Notes:
1. Top of screen elevation is 3318.22 ft msl.
2. The bottom of screen elevation is 3293.22 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

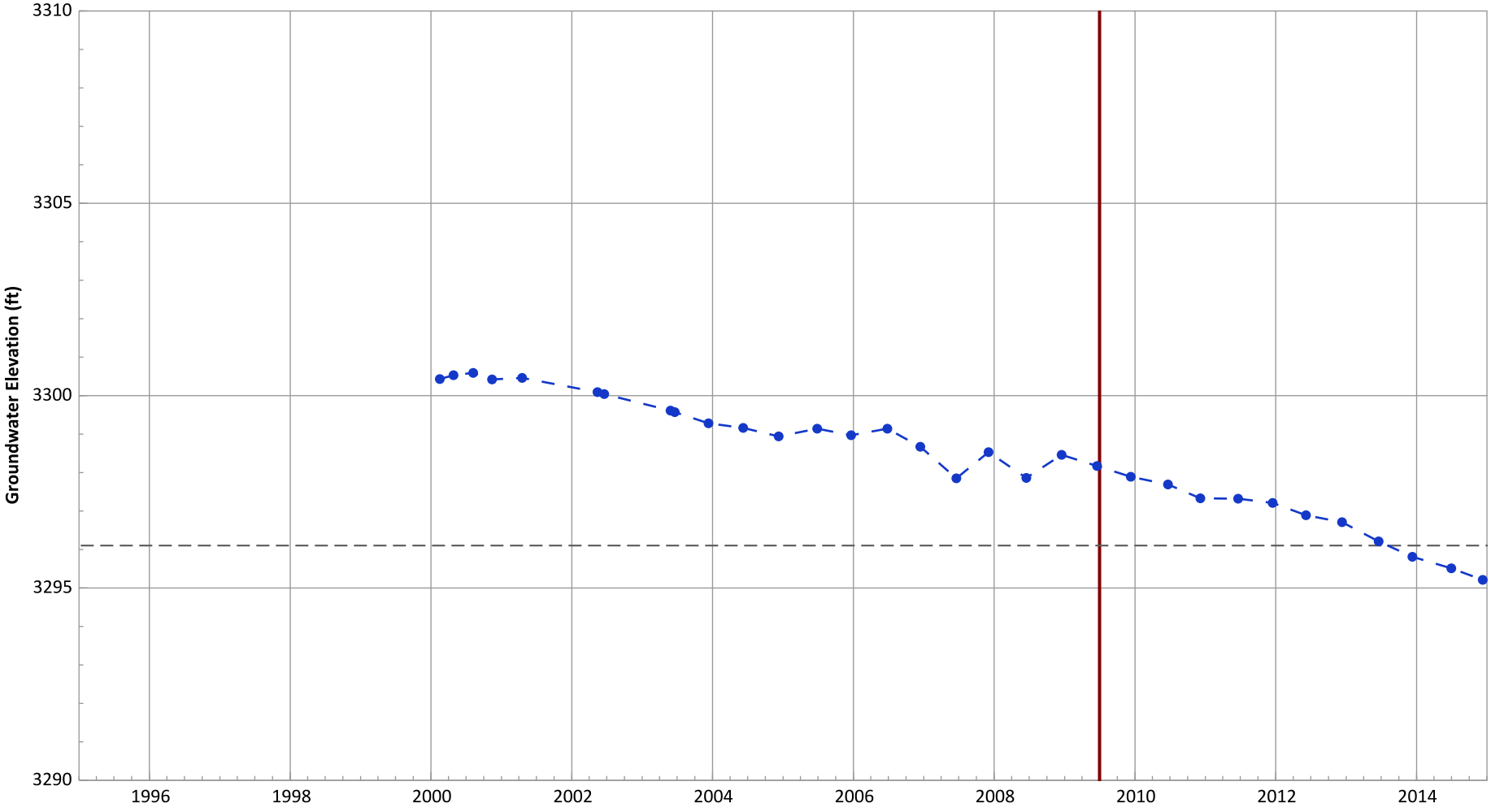
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.28 ft/yr
2012 - 2014 Data: Decreasing at 1.15 ft/yr

PTX07-1O04 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

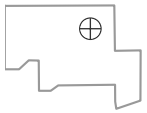


Notes:
1. Top of screen elevation is 3336.1 ft msl.
2. The bottom of screen elevation is 3296.1 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

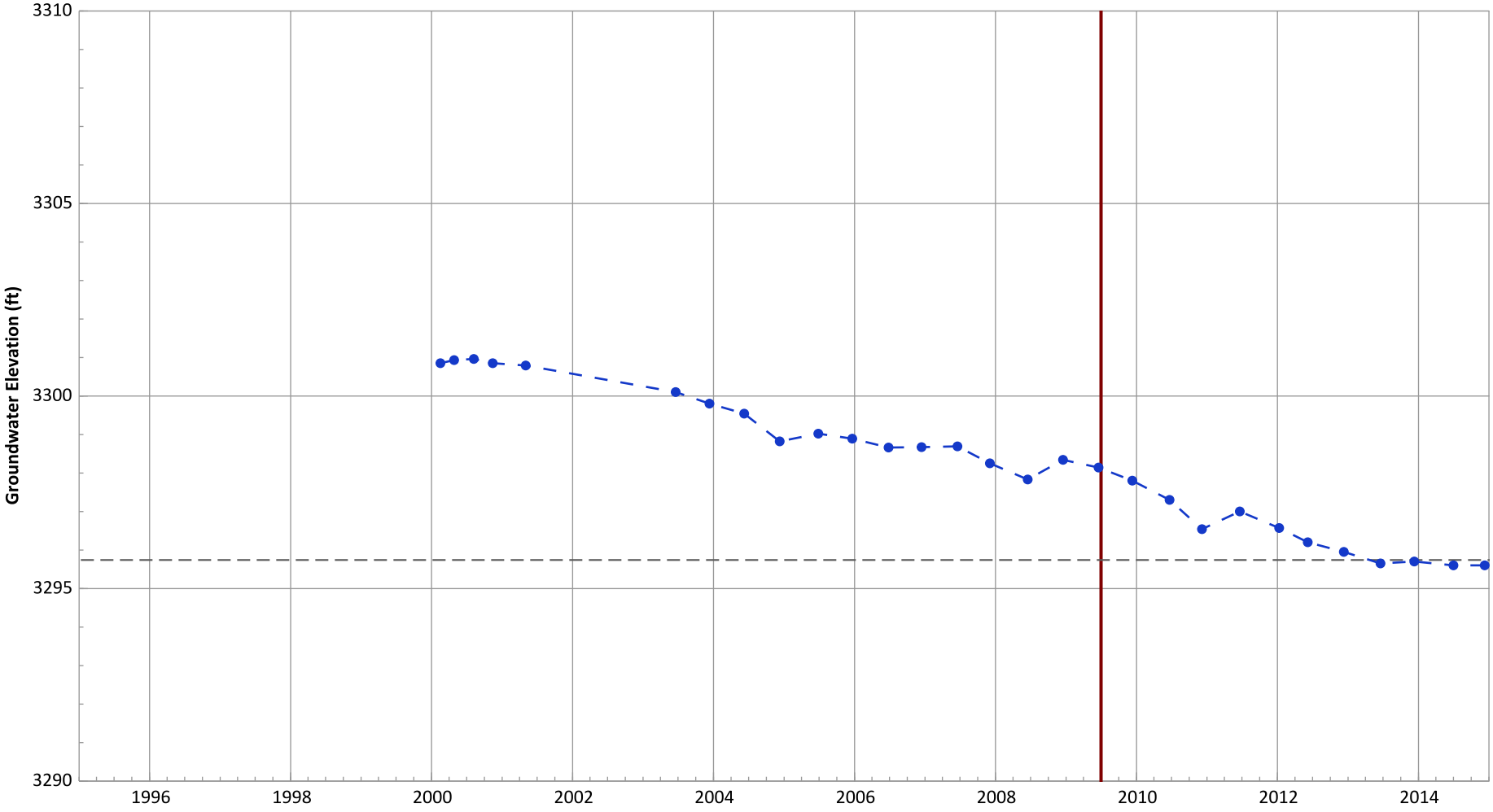
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.33 ft/yr
2012 - 2014 Data: Decreasing at 0.7 ft/yr

PTX07-1O05 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

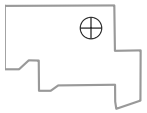


Notes:
1. Top of screen elevation is 3335.74 ft msl.
2. The bottom of screen elevation is 3295.74 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

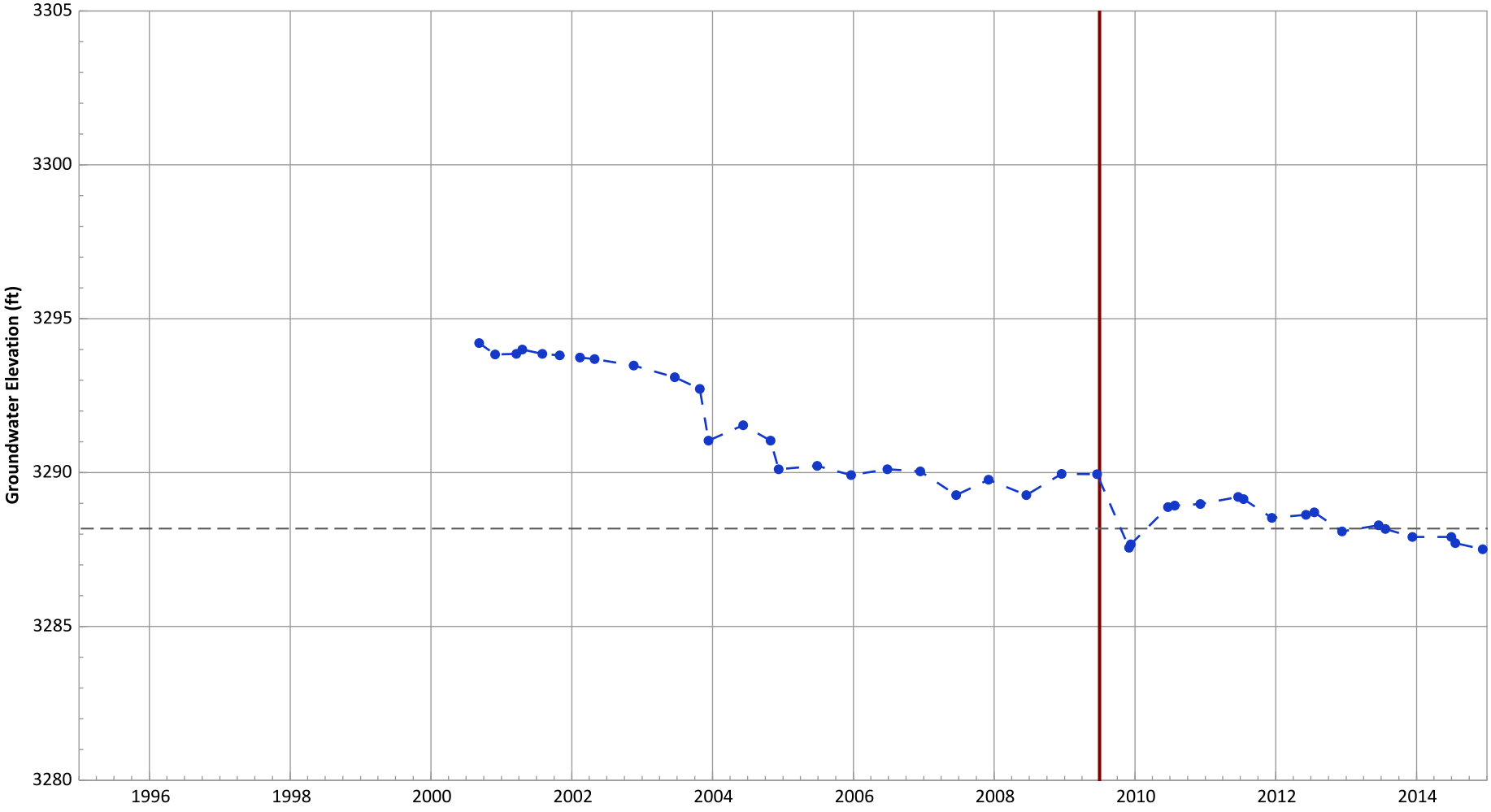
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.38 ft/yr
2012 - 2014 Data: Decreasing at 0.23 ft/yr

PTX07-1O06 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

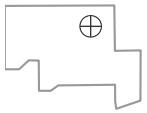


Notes:
1. Top of screen elevation is 3308.18 ft msl.
2. The bottom of screen elevation is 3288.18 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

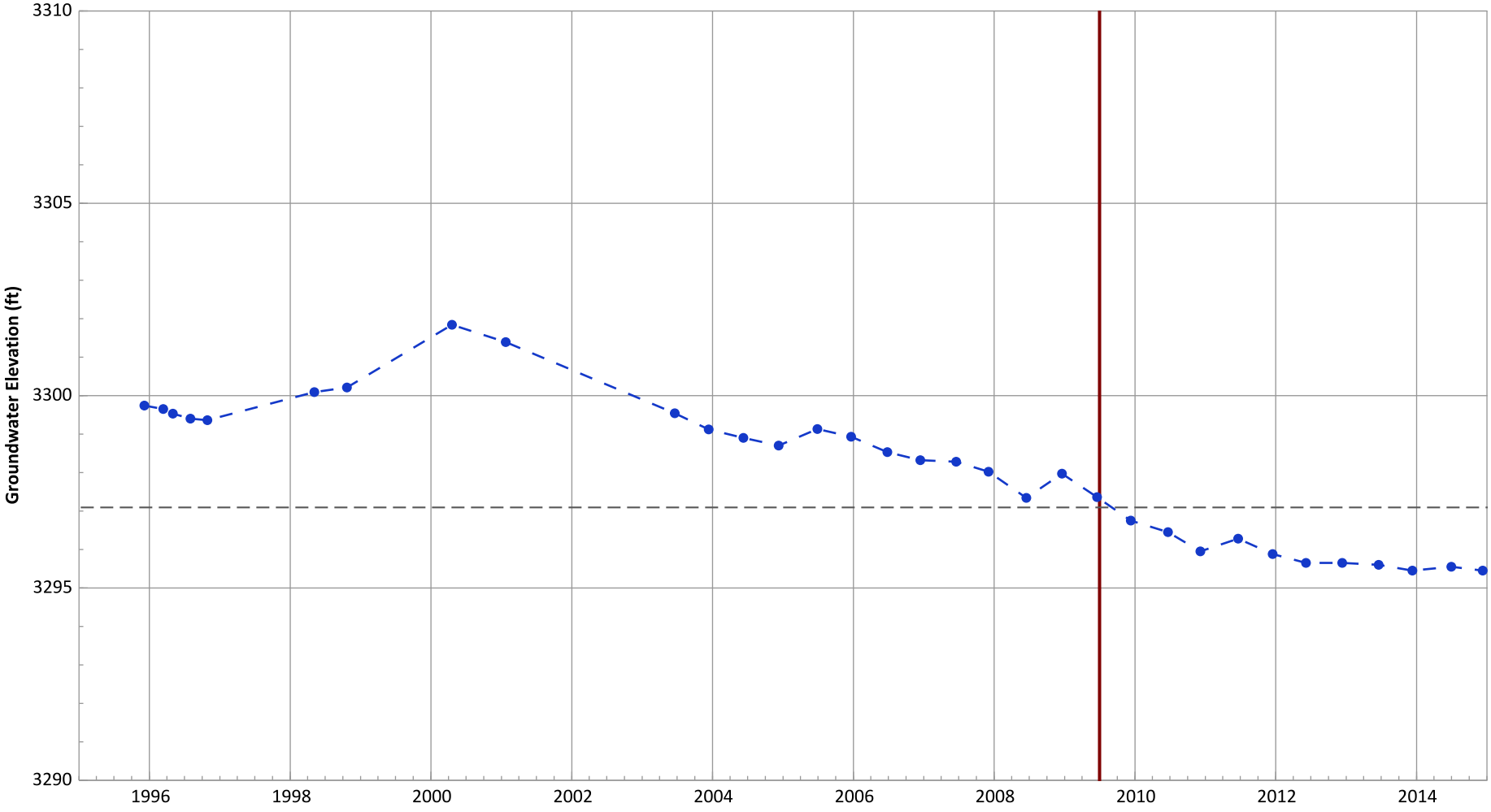
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.46 ft/yr
2012 - 2014 Data: Decreasing at 0.41 ft/yr

PTX07-1P01 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

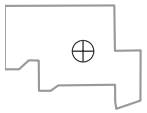


Notes:
1. Top of screen elevation is 3312.09 ft msl.
2. The bottom of screen elevation is 3297.09 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

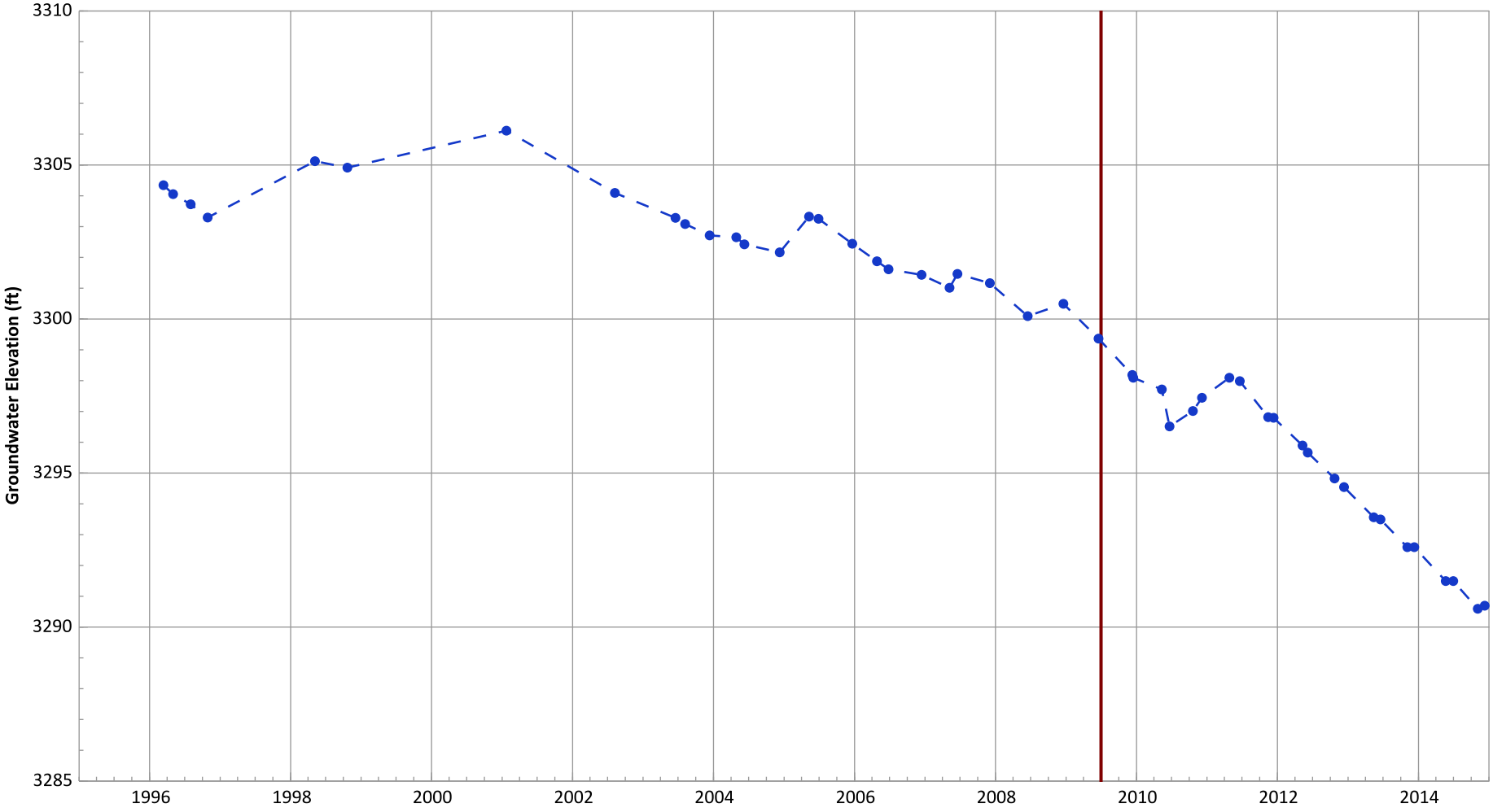
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.27 ft/yr
2012 - 2014 Data: No Trend

PTX07-1P02 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

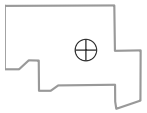


Notes:
1. Top of screen elevation is 3308.46 ft msl.
2. The bottom of screen elevation is 3283.46 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

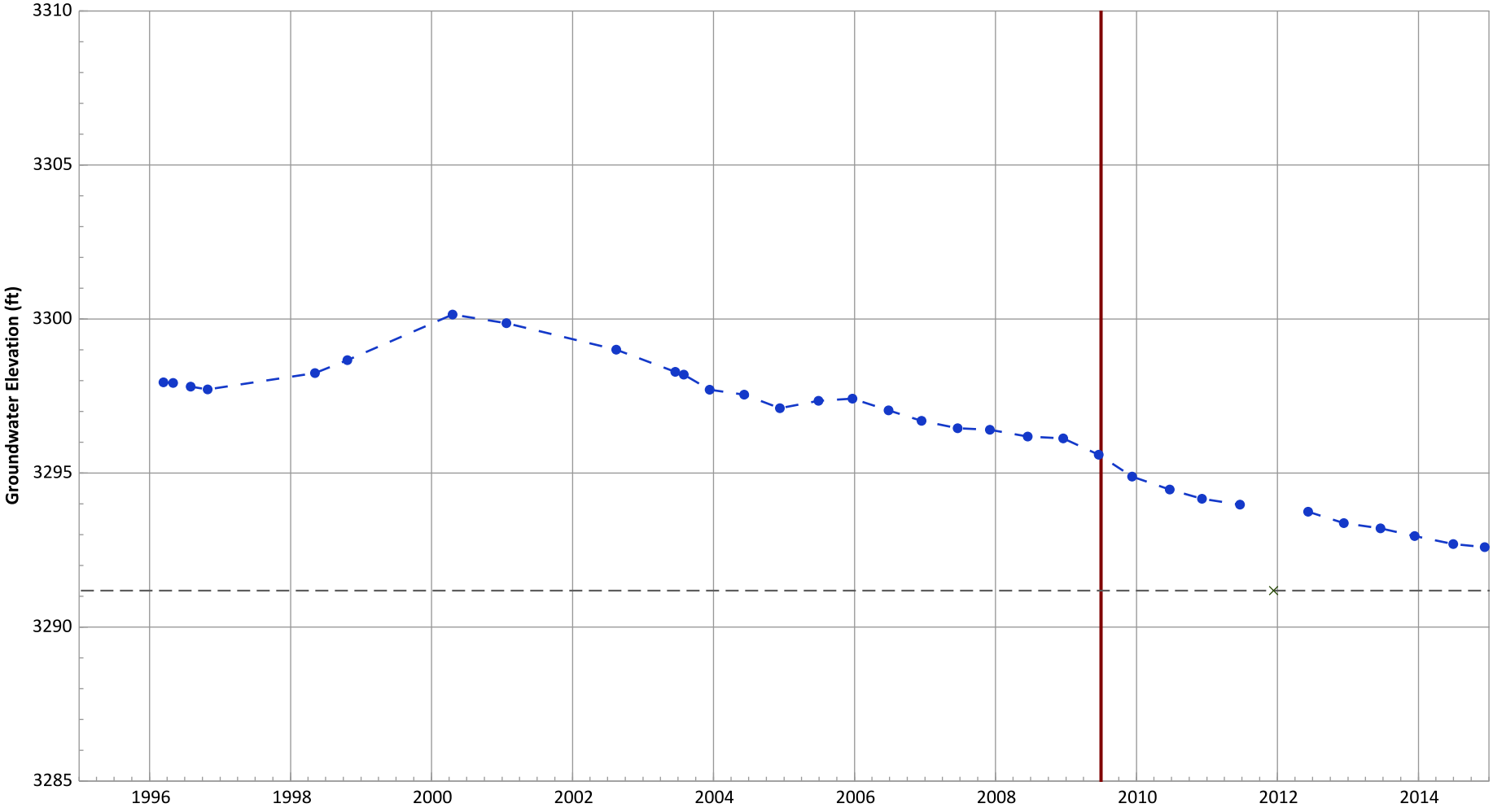
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.73 ft/yr
2012 - 2014 Data: Decreasing at 2.02 ft/yr

PTX07-1P03 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

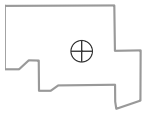


Notes:
1. Top of screen elevation is 3311.18 ft msl.
2. The bottom of screen elevation is 3291.18 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

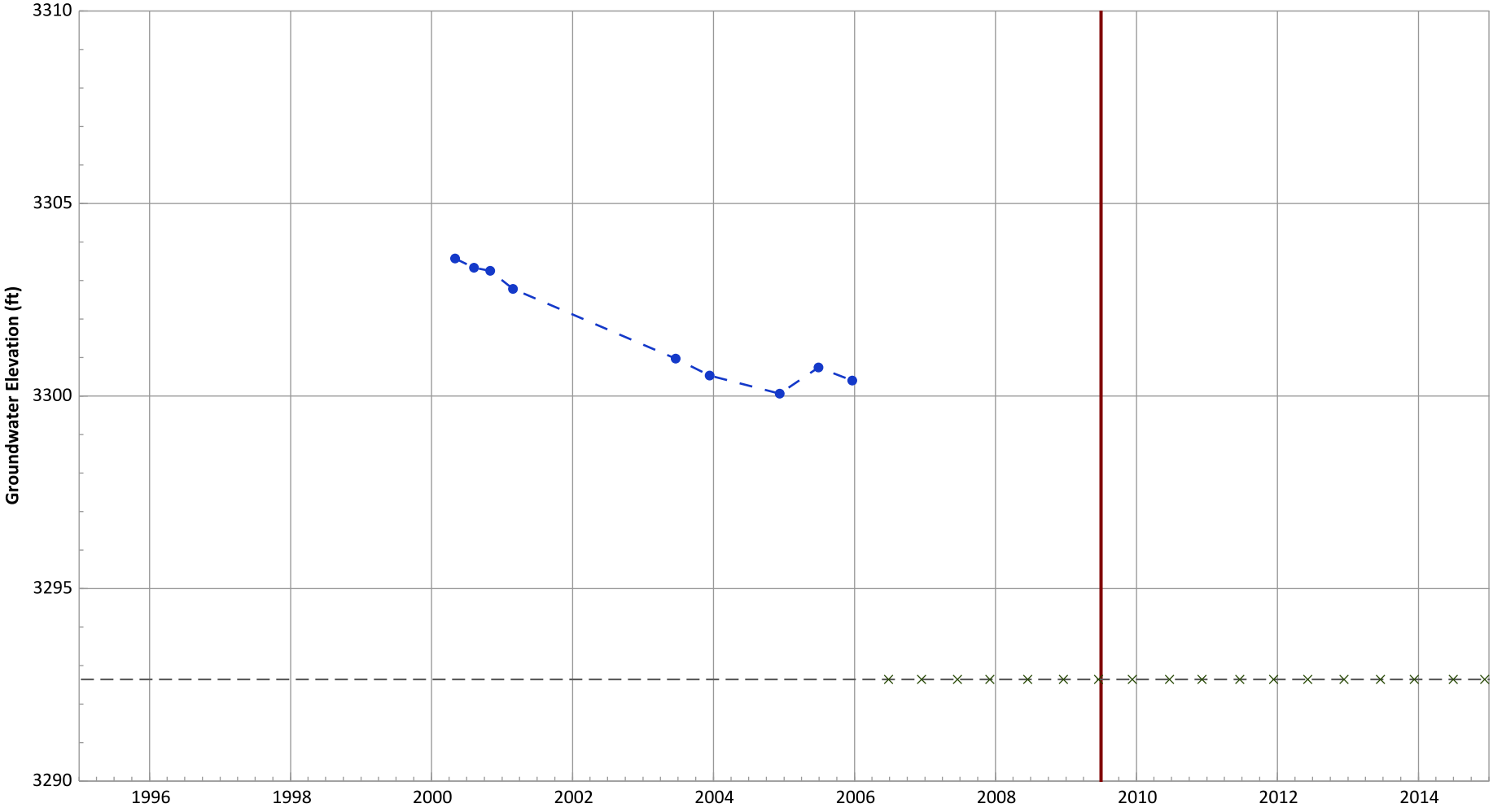
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.33 ft/yr
2012 - 2014 Data: Decreasing at 0.46 ft/yr

PTX07-1P04 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

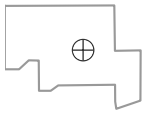


Notes:
1. Top of screen elevation is 3332.64 ft msl.
2. The bottom of screen elevation is 3292.64 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

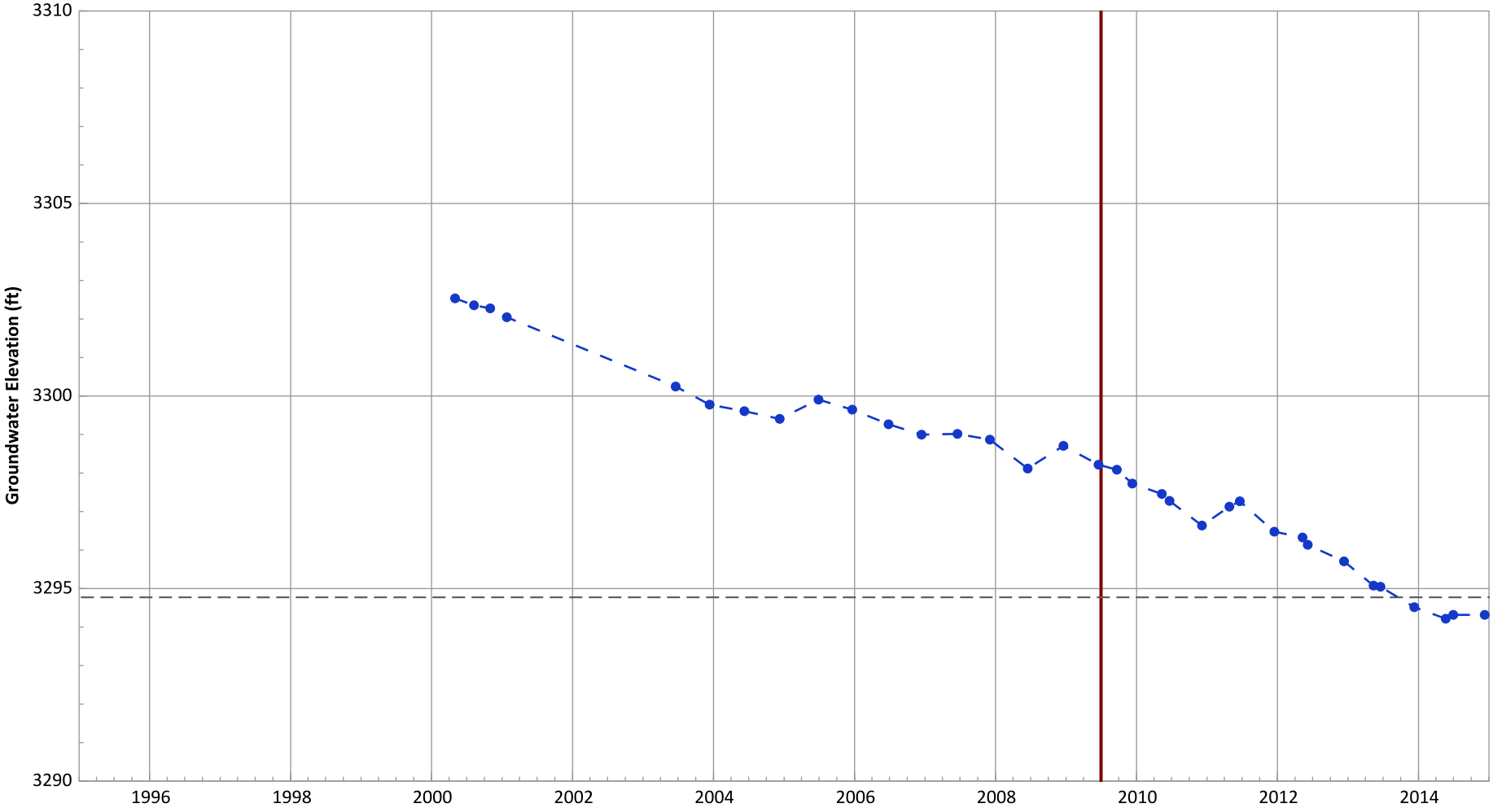
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.61 ft/yr
2012 - 2014 Data: N/A (No Measurements)

PTX07-1P05 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

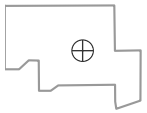


Notes:
1. Top of screen elevation is 3334.77 ft msl.
2. The bottom of screen elevation is 3294.77 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

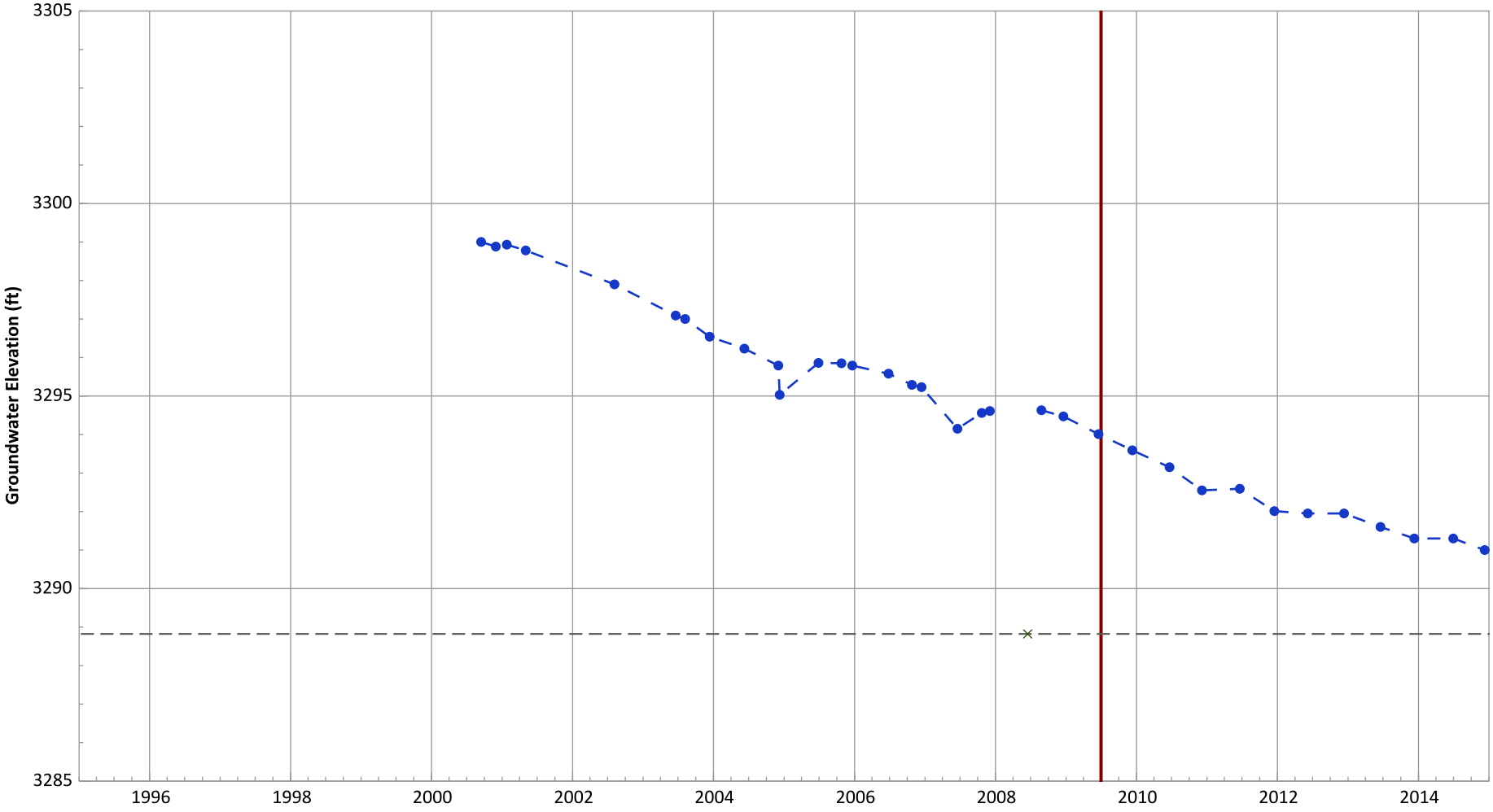
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.54 ft/yr
2012 - 2014 Data: Decreasing at 0.8 ft/yr

PTX07-1P06 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

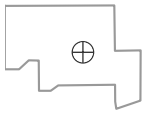


Notes:
1. Top of screen elevation is 3308.82 ft msl.
2. The bottom of screen elevation is 3288.82 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

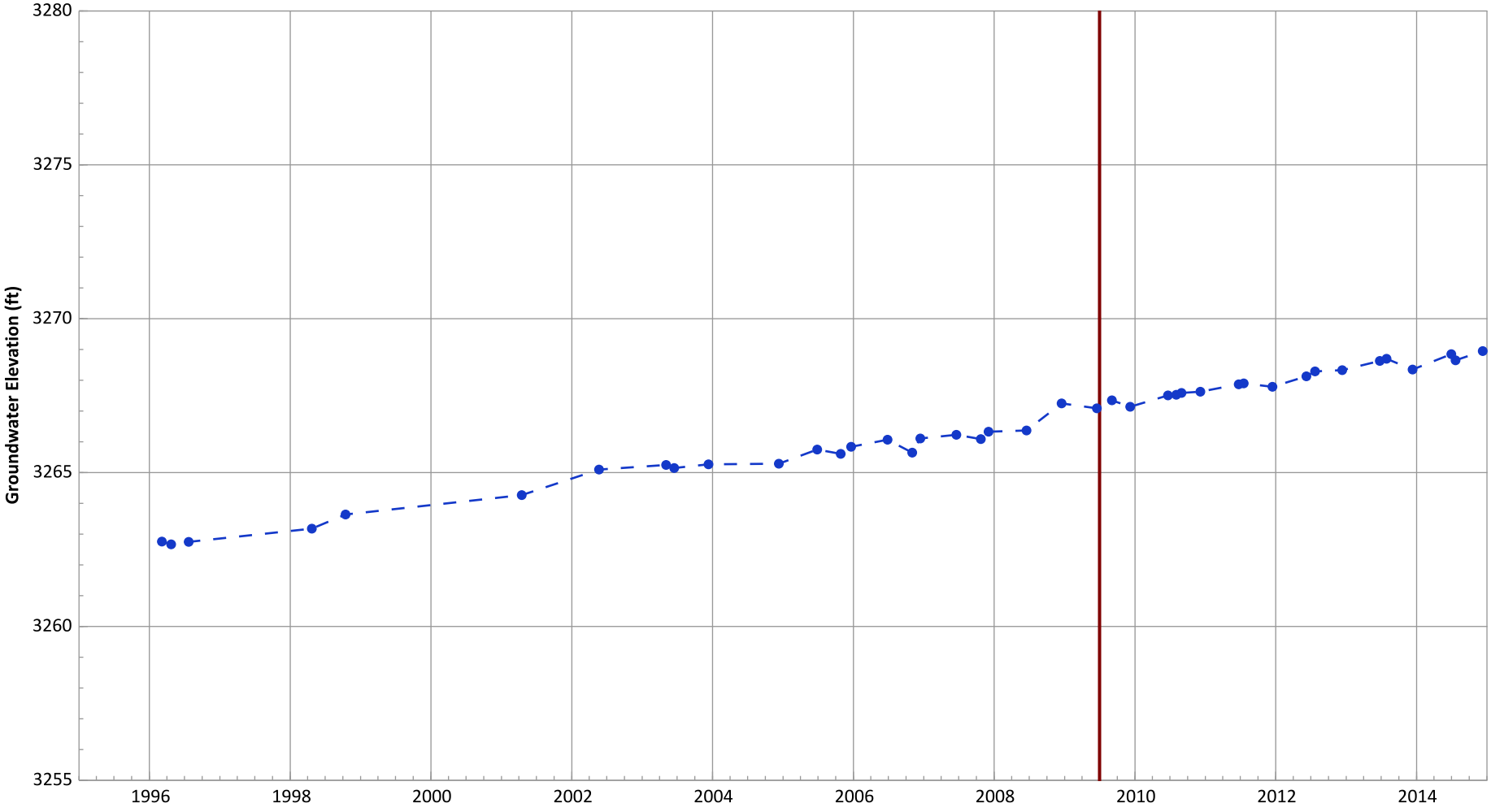
Groundwater Elevation
Bottom of Screen Elevation
No Water Detected
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.56 ft/yr
2012 - 2014 Data: Decreasing at 0.39 ft/yr

PTX07-1Q01 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

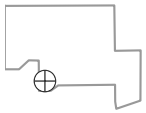


Notes:
1. Top of screen elevation is 3274.86 ft msl.
2. The bottom of screen elevation is 3249.86 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

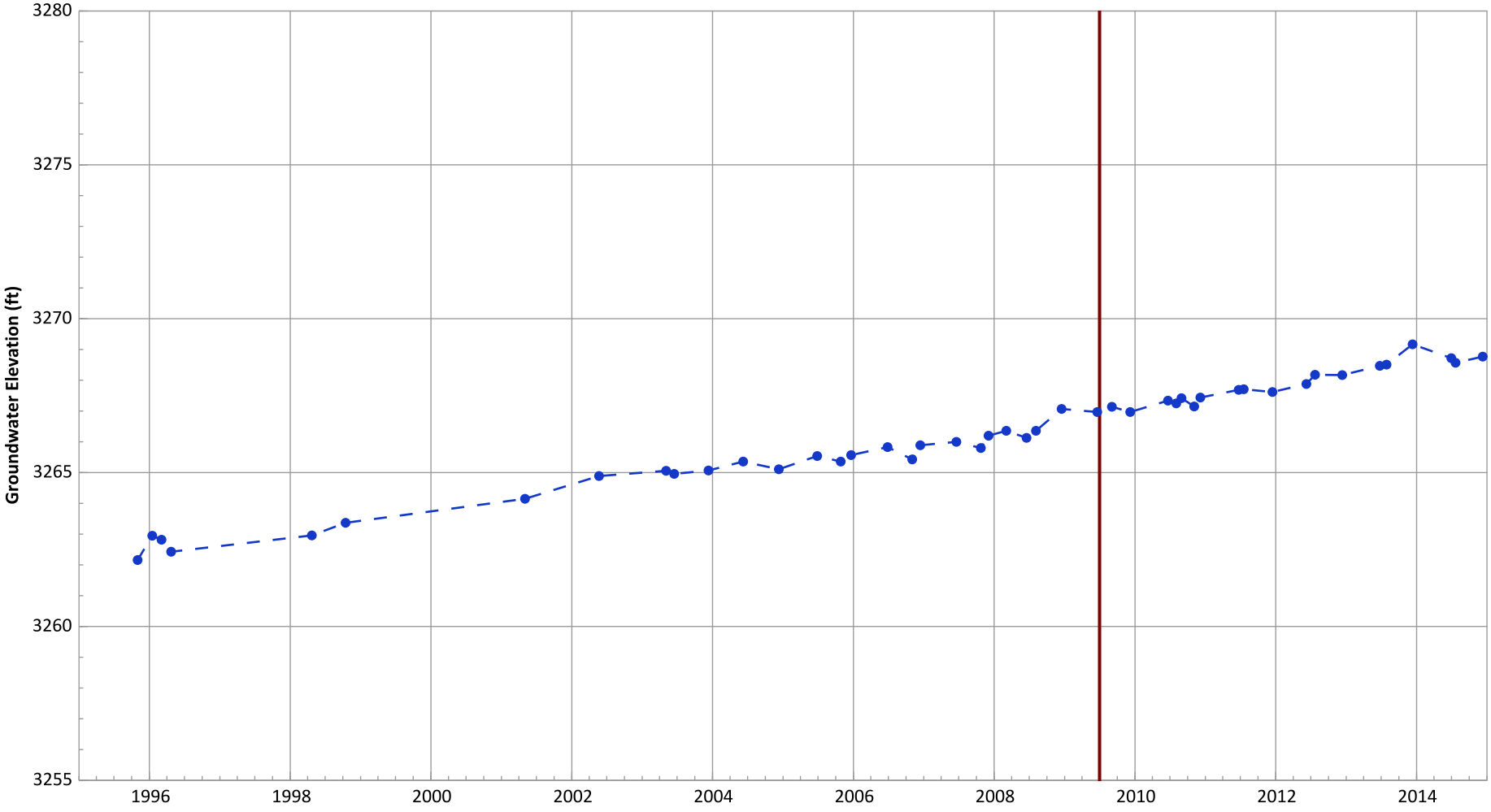
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.34 ft/yr
2012 - 2014 Data: Increasing at 0.27 ft/yr

PTX07-1Q02 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

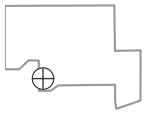


Notes:
1. Top of screen elevation is 3267.94 ft msl.
2. The bottom of screen elevation is 3237.94 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

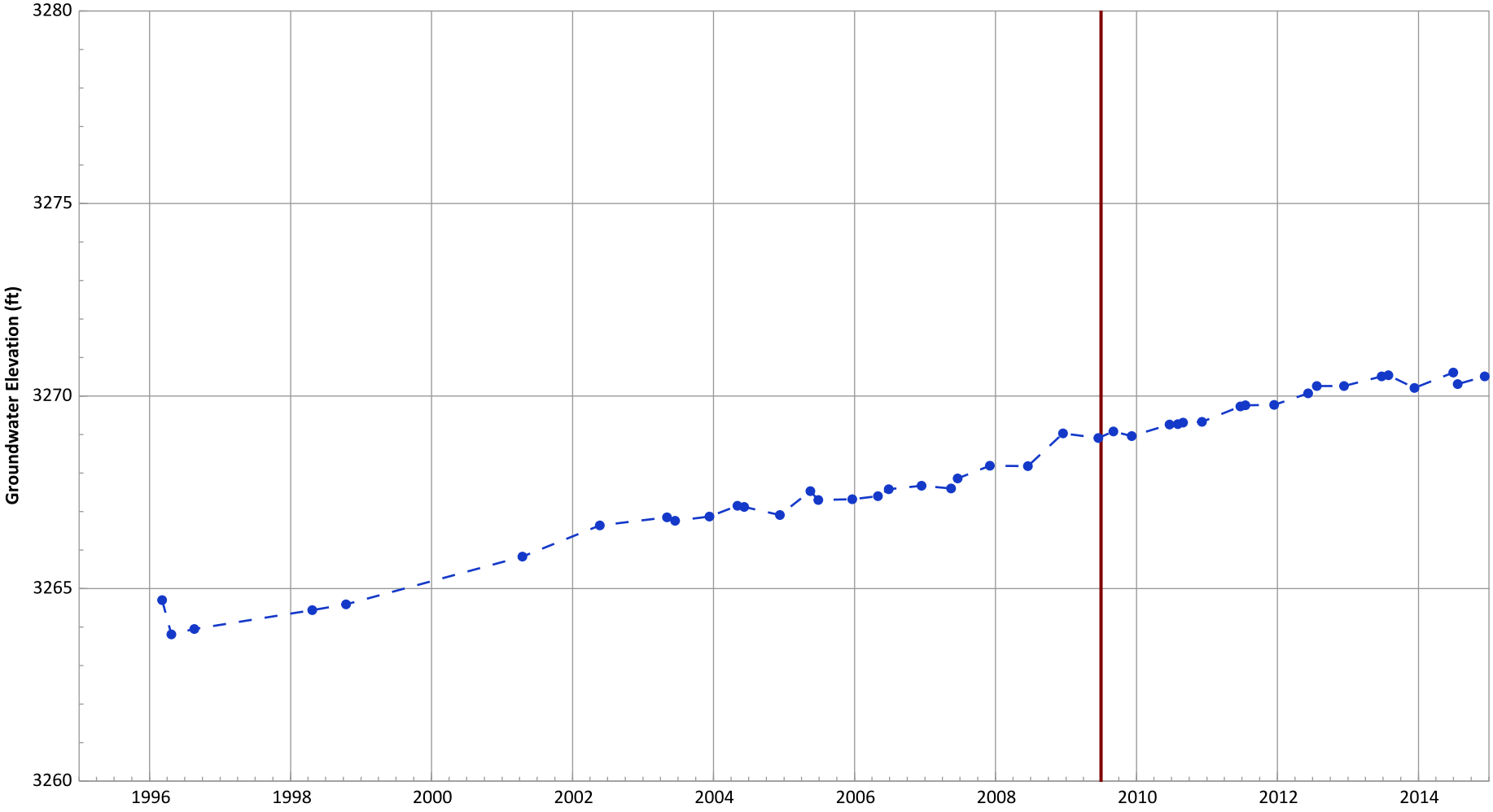
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.34 ft/yr
2012 - 2014 Data: Increasing at 0.33 ft/yr

PTX07-1Q03 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

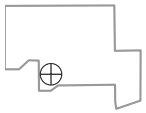


Notes:
1. Top of screen elevation is 3278.29 ft msl.
2. The bottom of screen elevation is 3228.29 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

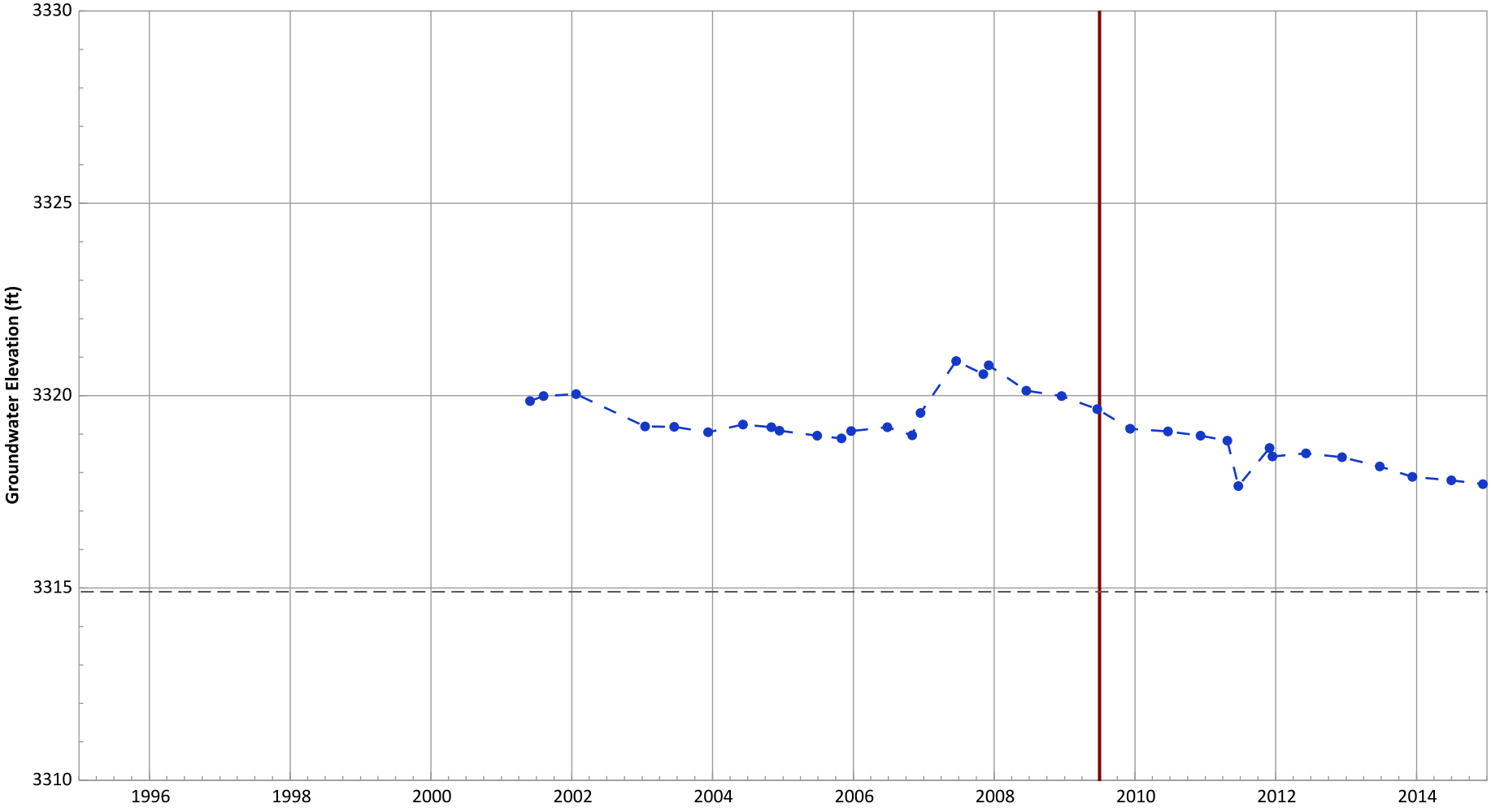
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.37 ft/yr
2012 - 2014 Data: Increasing at 0.12 ft/yr

PTX07-1R03 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

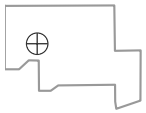


Notes:
1. Top of screen elevation is 3334.9 ft msl.
2. The bottom of screen elevation is 3314.9 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

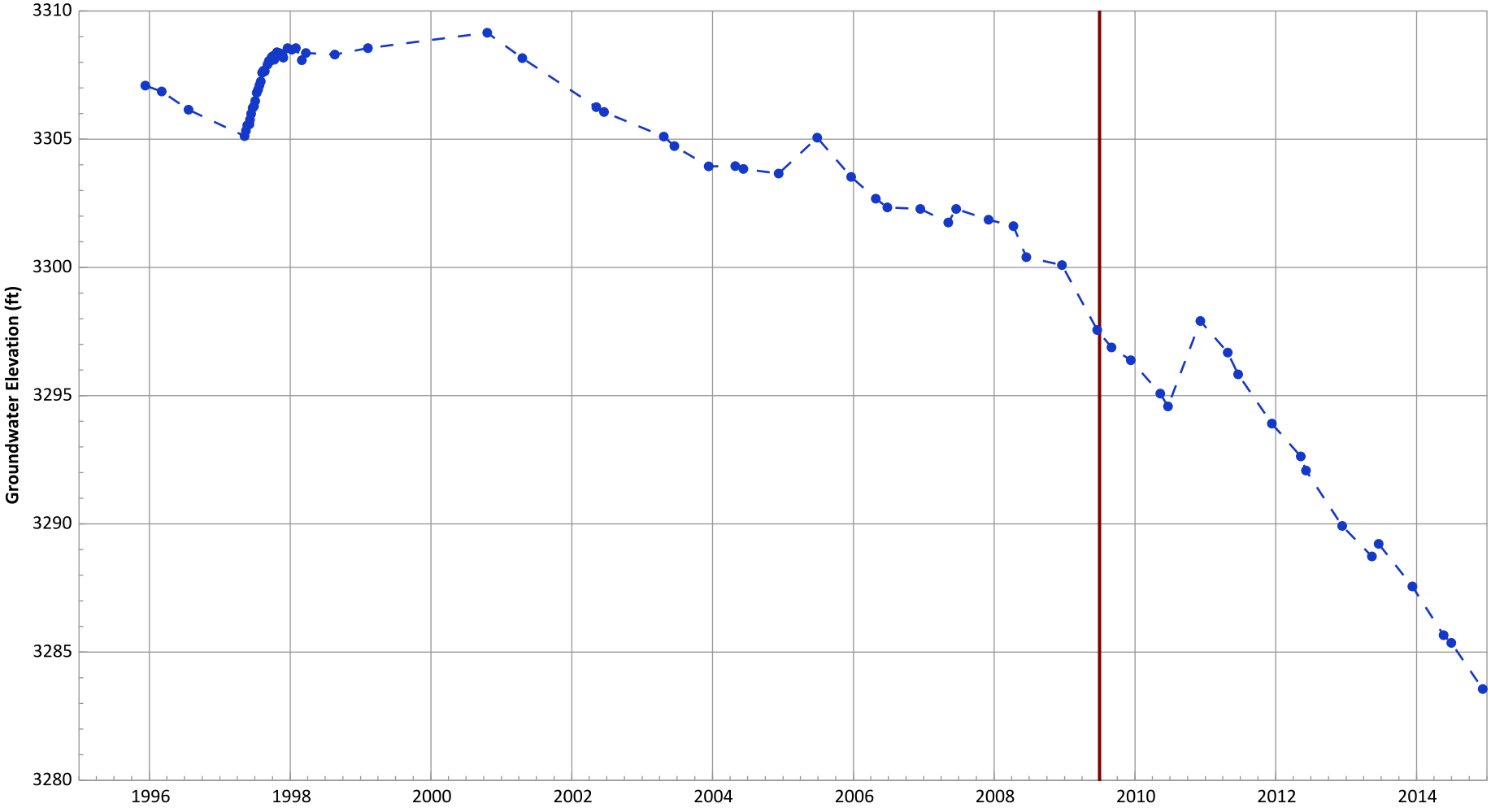
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.13 ft/yr
2012 - 2014 Data: Decreasing at 0.34 ft/yr

PTX08-1001 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

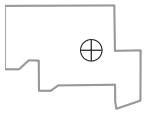


Notes:
1. Top of screen elevation is 3286.63 ft msl.
2. The bottom of screen elevation is 3241.63 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

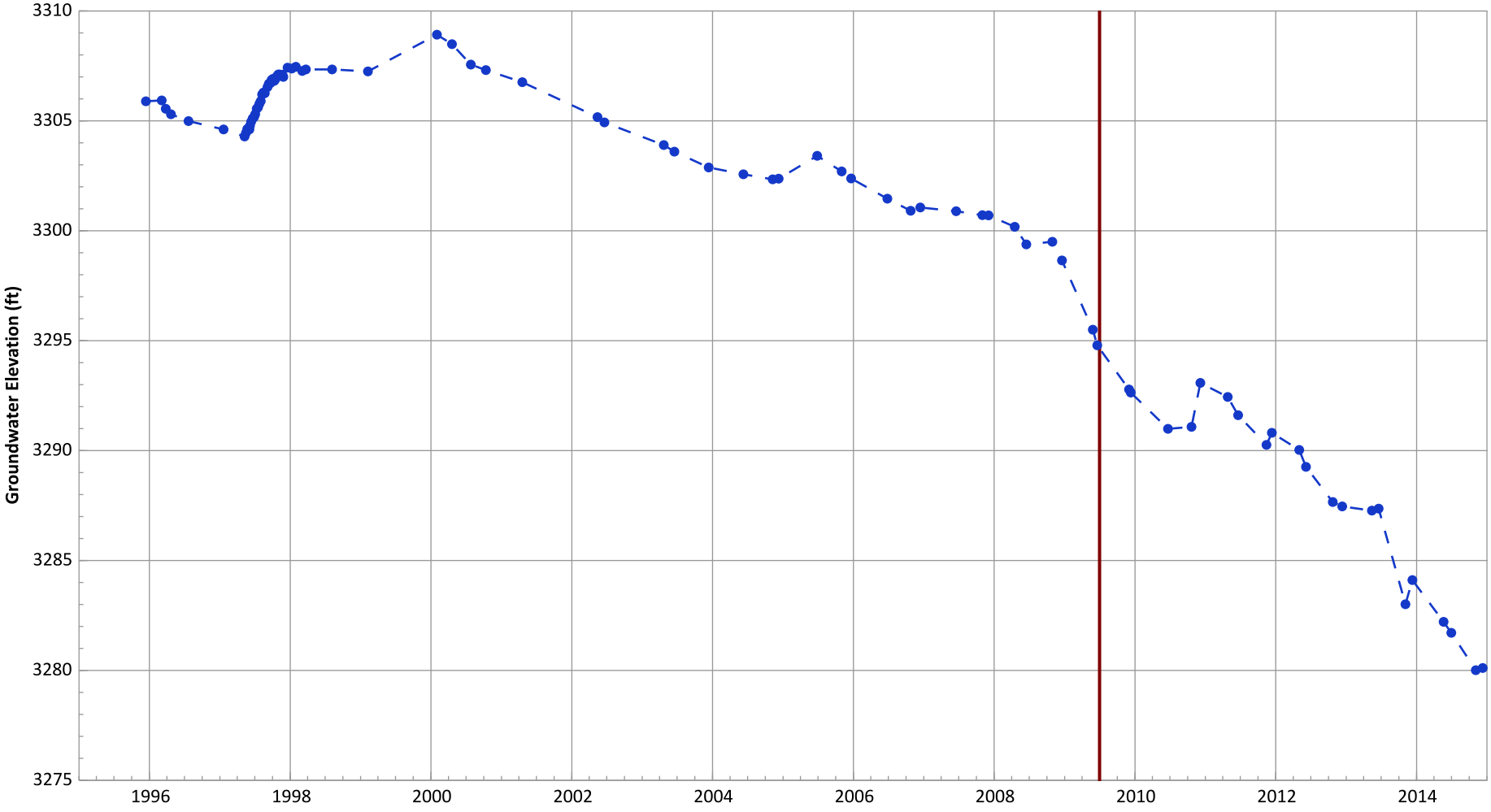
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.99 ft/yr
2012 - 2014 Data: Decreasing at 3.26 ft/yr

PTX08-1002 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

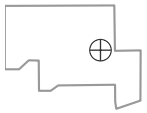


Notes:
1. Top of screen elevation is 3289.71 ft msl.
2. The bottom of screen elevation is 3254.71 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

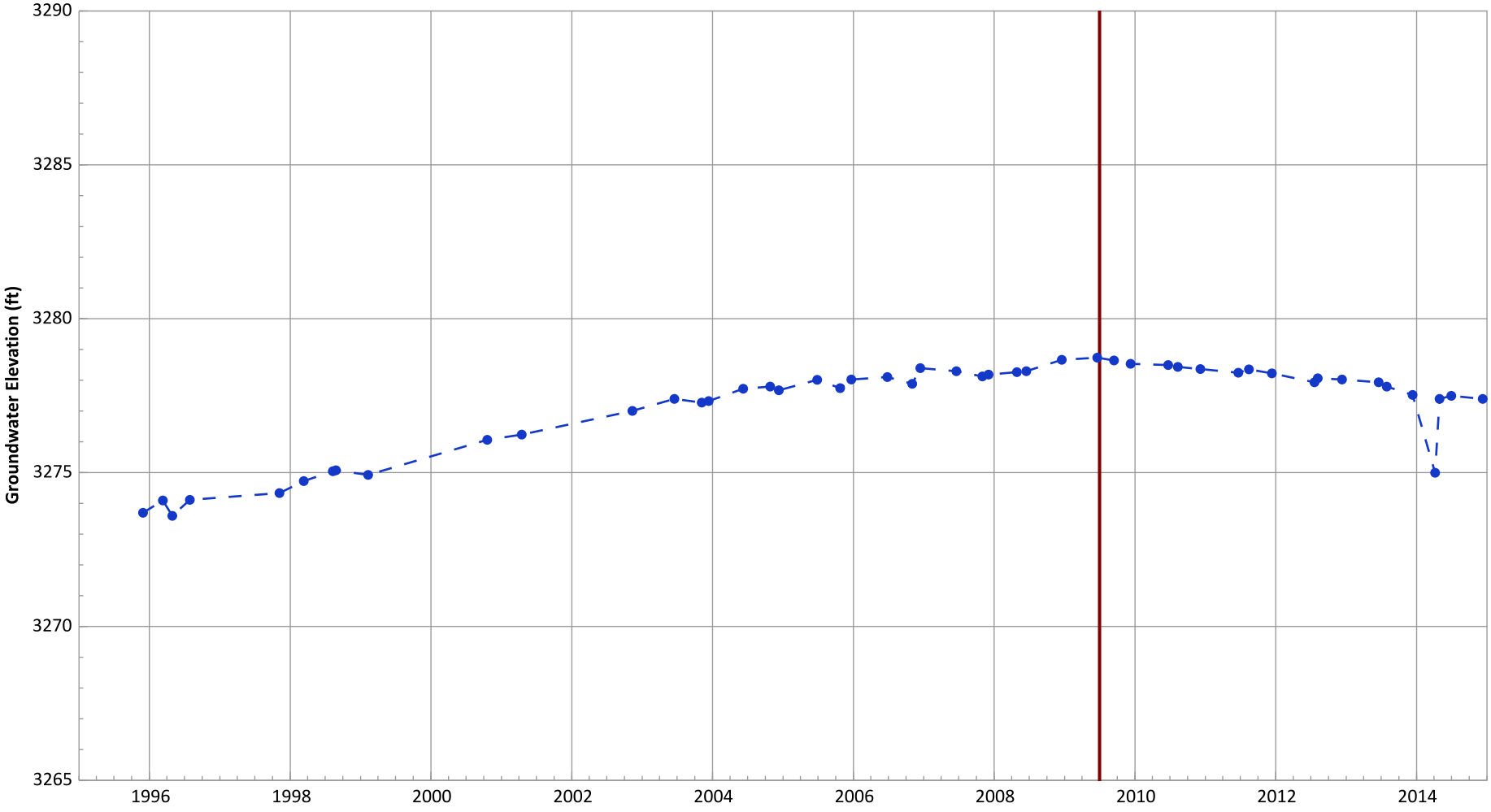
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.14 ft/yr
2012 - 2014 Data: Decreasing at 3.85 ft/yr

PTX08-1003 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

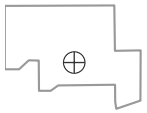


Notes:
1. Top of screen elevation is 3284.39 ft msl.
2. The bottom of screen elevation is 3254.39 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

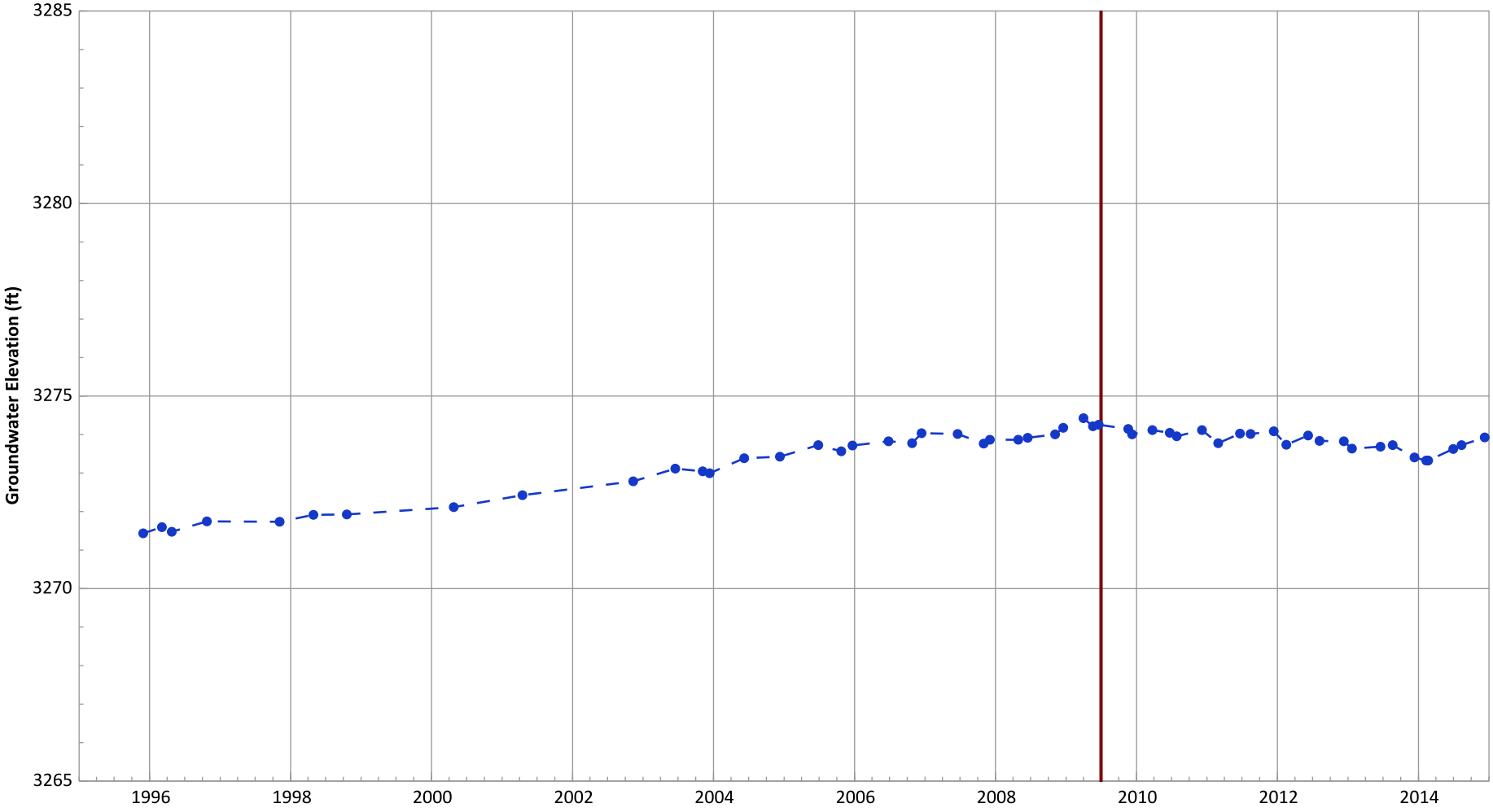
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.2 ft/yr
2012 - 2014 Data: Decreasing at 0.53 ft/yr

PTX08-1005 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

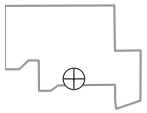


Notes:
1. Top of screen elevation is 3279.61 ft msl.
2. The bottom of screen elevation is 3259.61 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

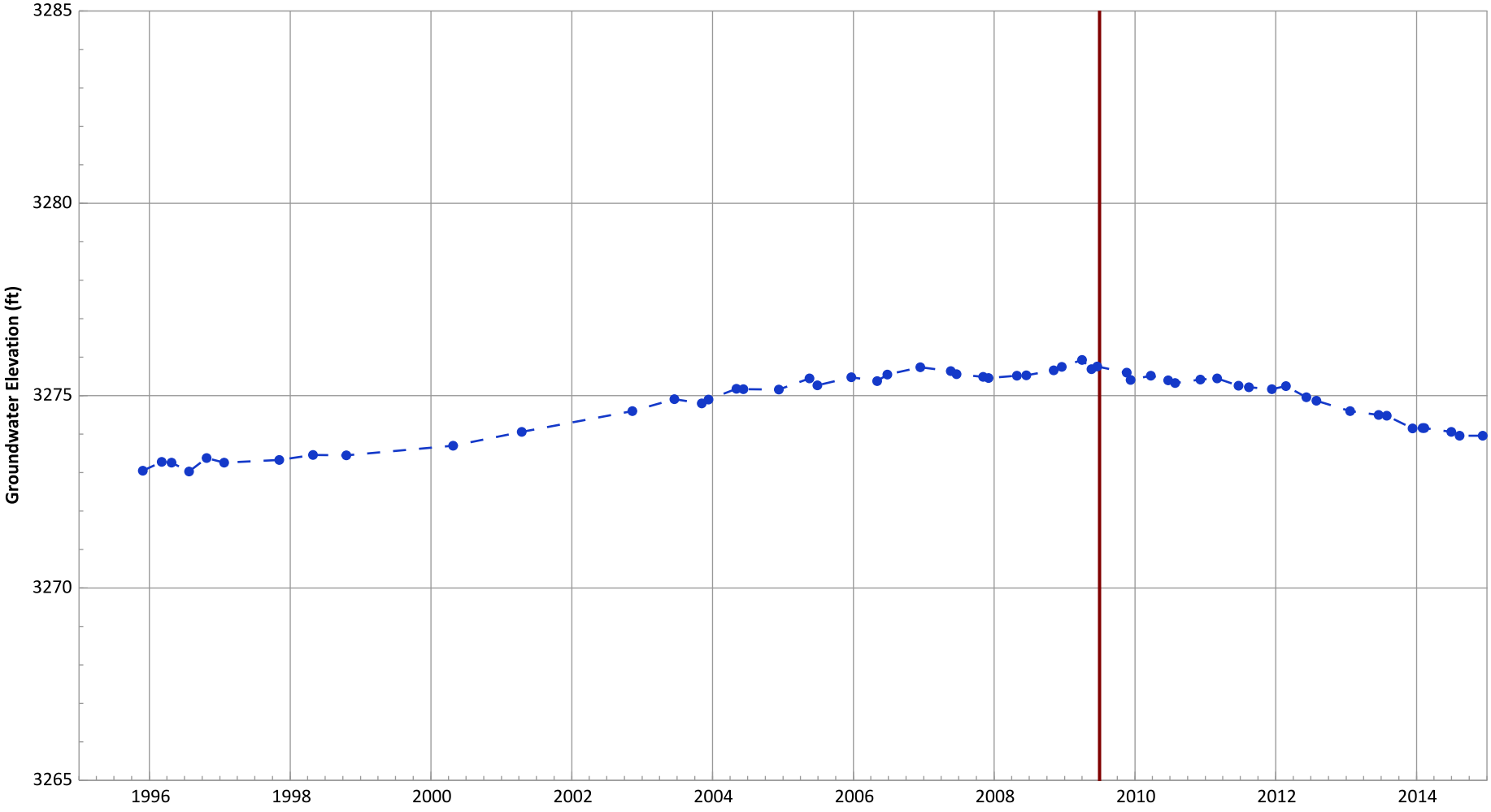
Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.12 ft/yr
2012 - 2014 Data: No Trend

PTX08-1006 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

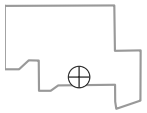


Notes:
1. Top of screen elevation is 3285.96 ft msl.
2. The bottom of screen elevation is 3240.96 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

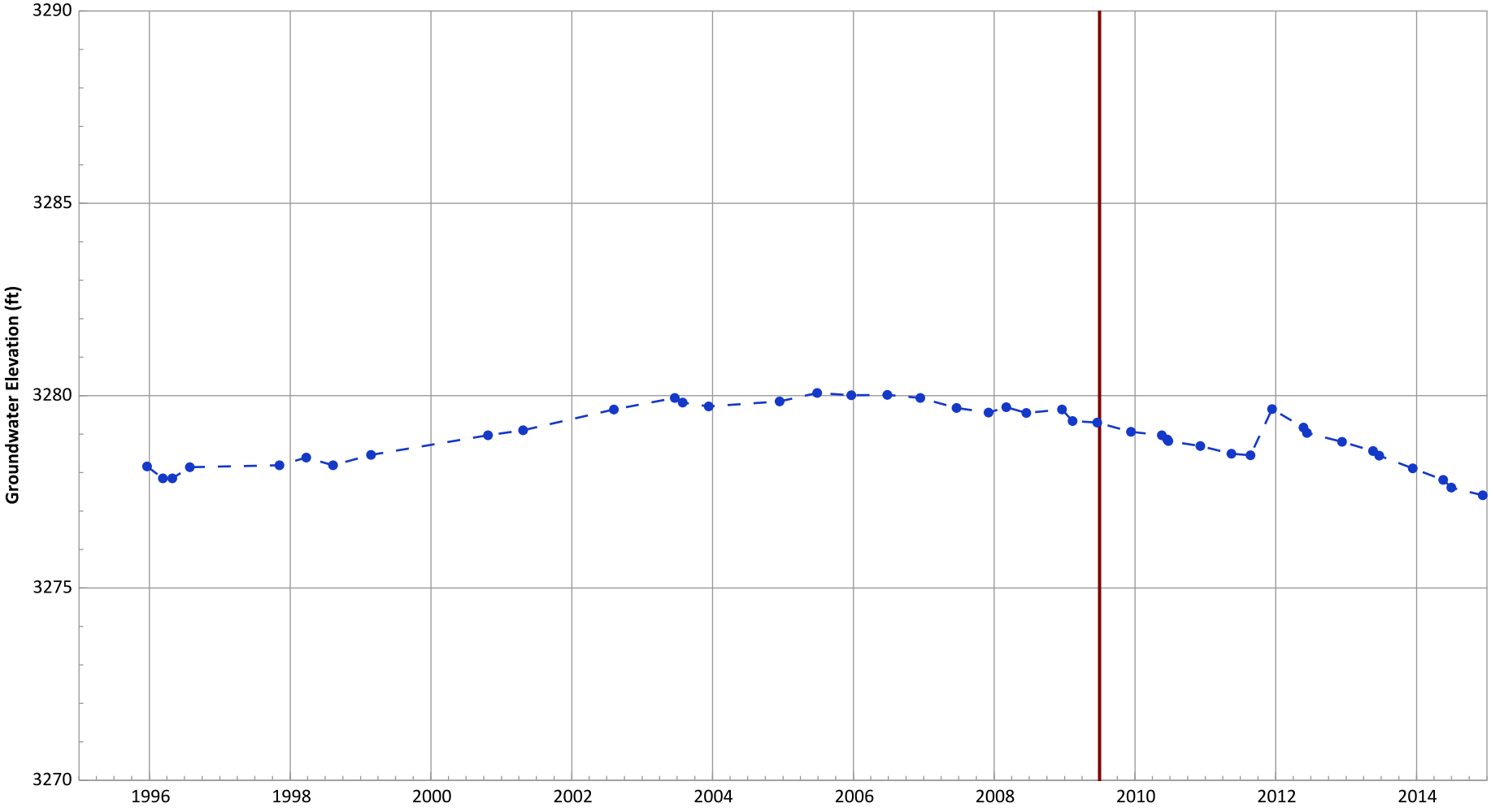
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.42 ft/yr

PTX08-1007 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

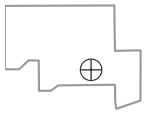


Notes:
1. Top of screen elevation is 3280.55 ft msl.
2. The bottom of screen elevation is 3245.55 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

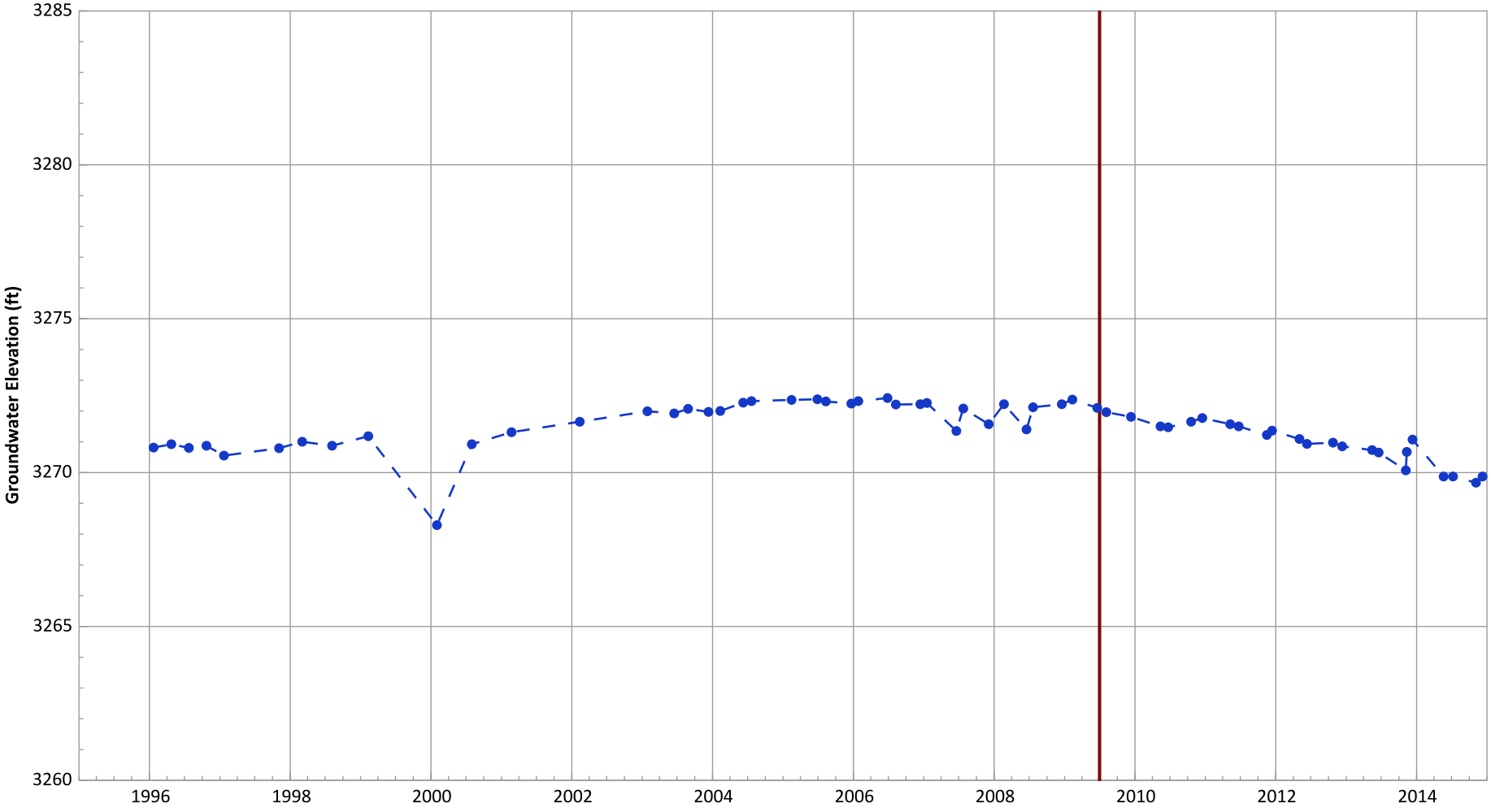
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.68 ft/yr

PTX08-1008 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

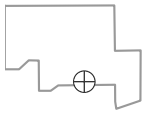


Notes:
1. Top of screen elevation is 3277.04 ft msl.
2. The bottom of screen elevation is 3247.04 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

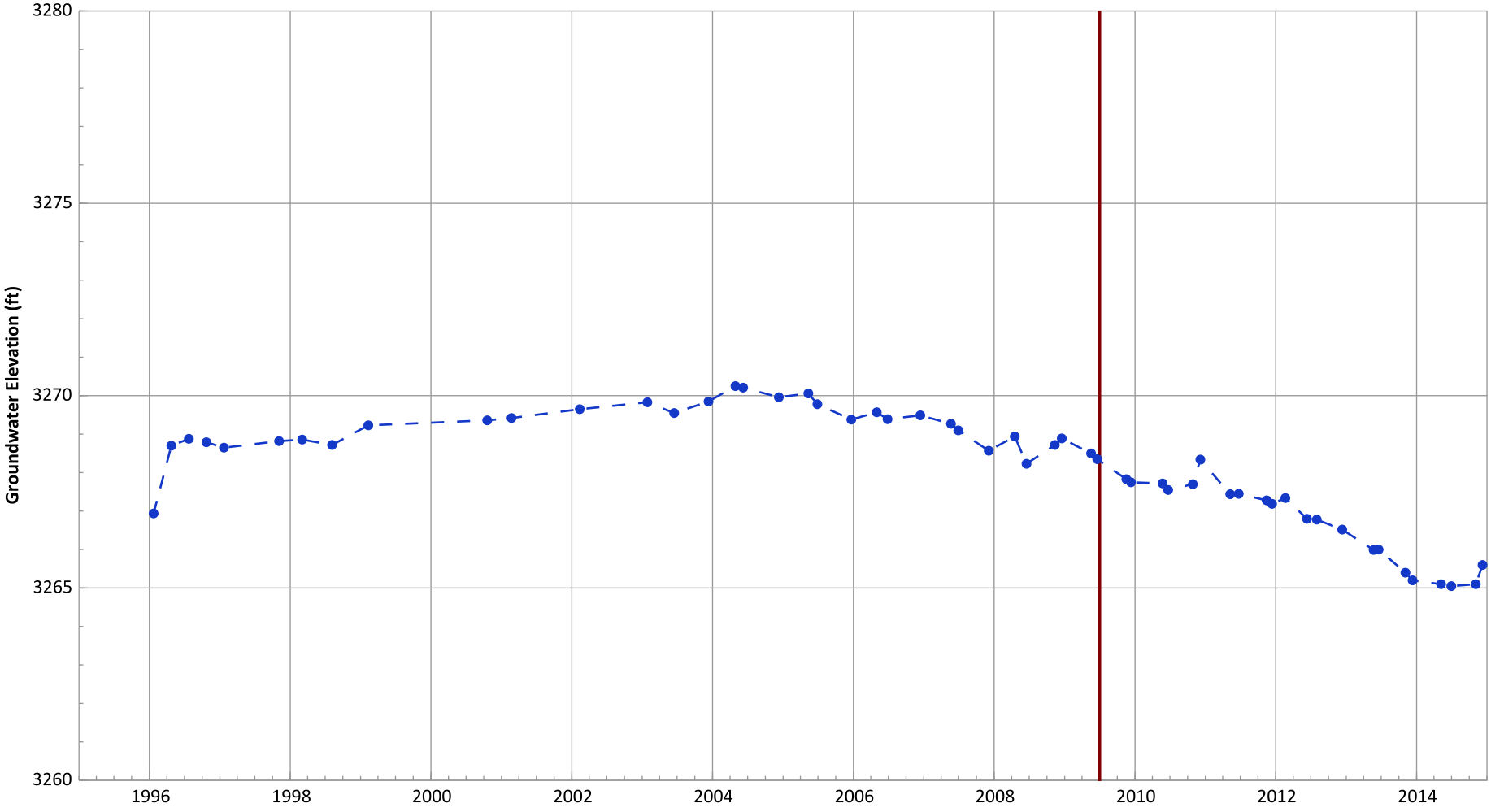
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.54 ft/yr

PTX08-1009 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

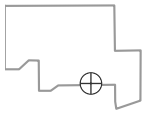


Notes:
1. Top of screen elevation is 3280.09 ft msl.
2. The bottom of screen elevation is 3250.09 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

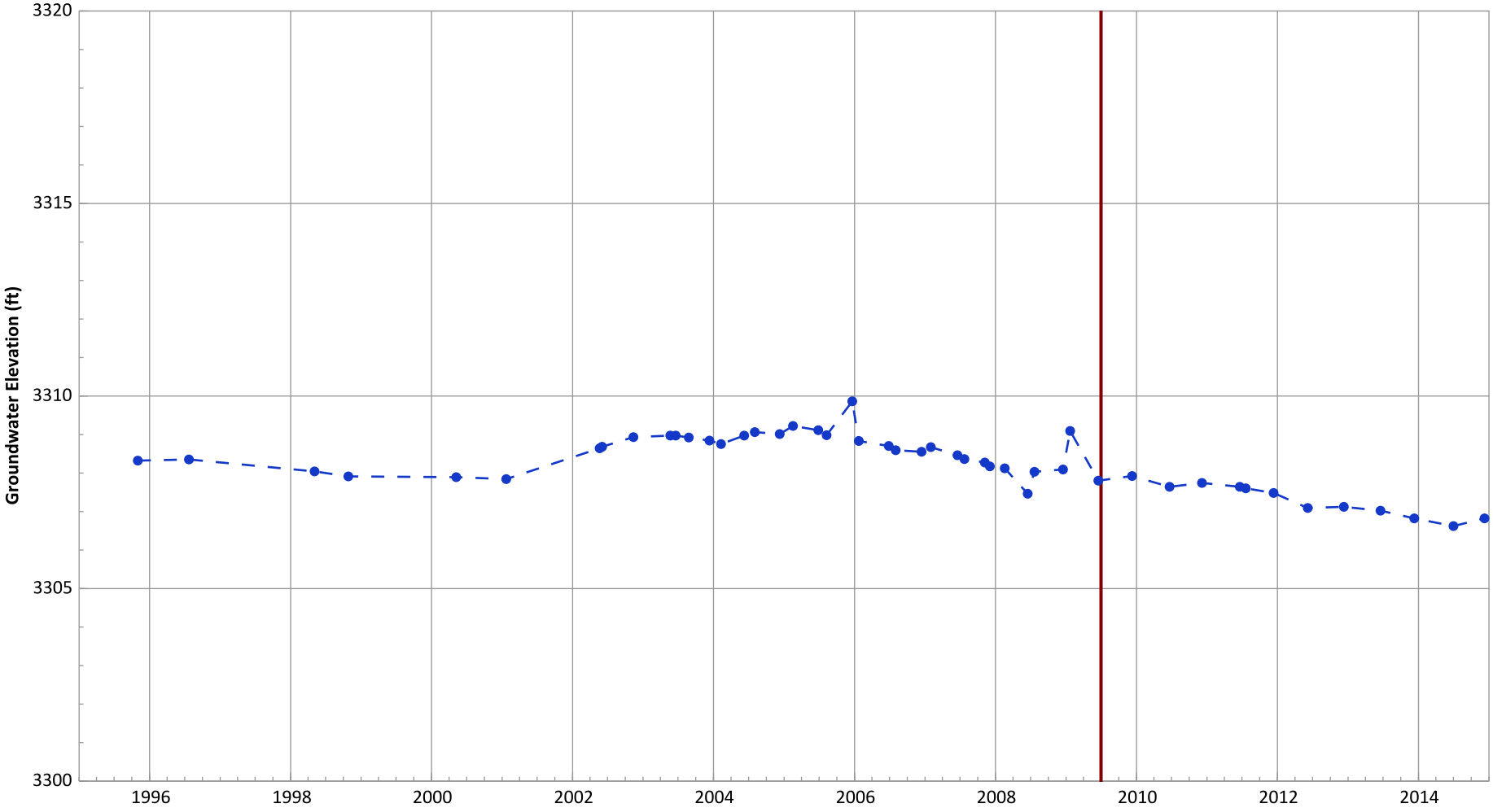
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.18 ft/yr
2012 - 2014 Data: Decreasing at 0.71 ft/yr

PTX08-1010 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

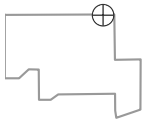


Notes:
1. Top of screen elevation is 3321.22 ft msl.
2. The bottom of screen elevation is 3286.22 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

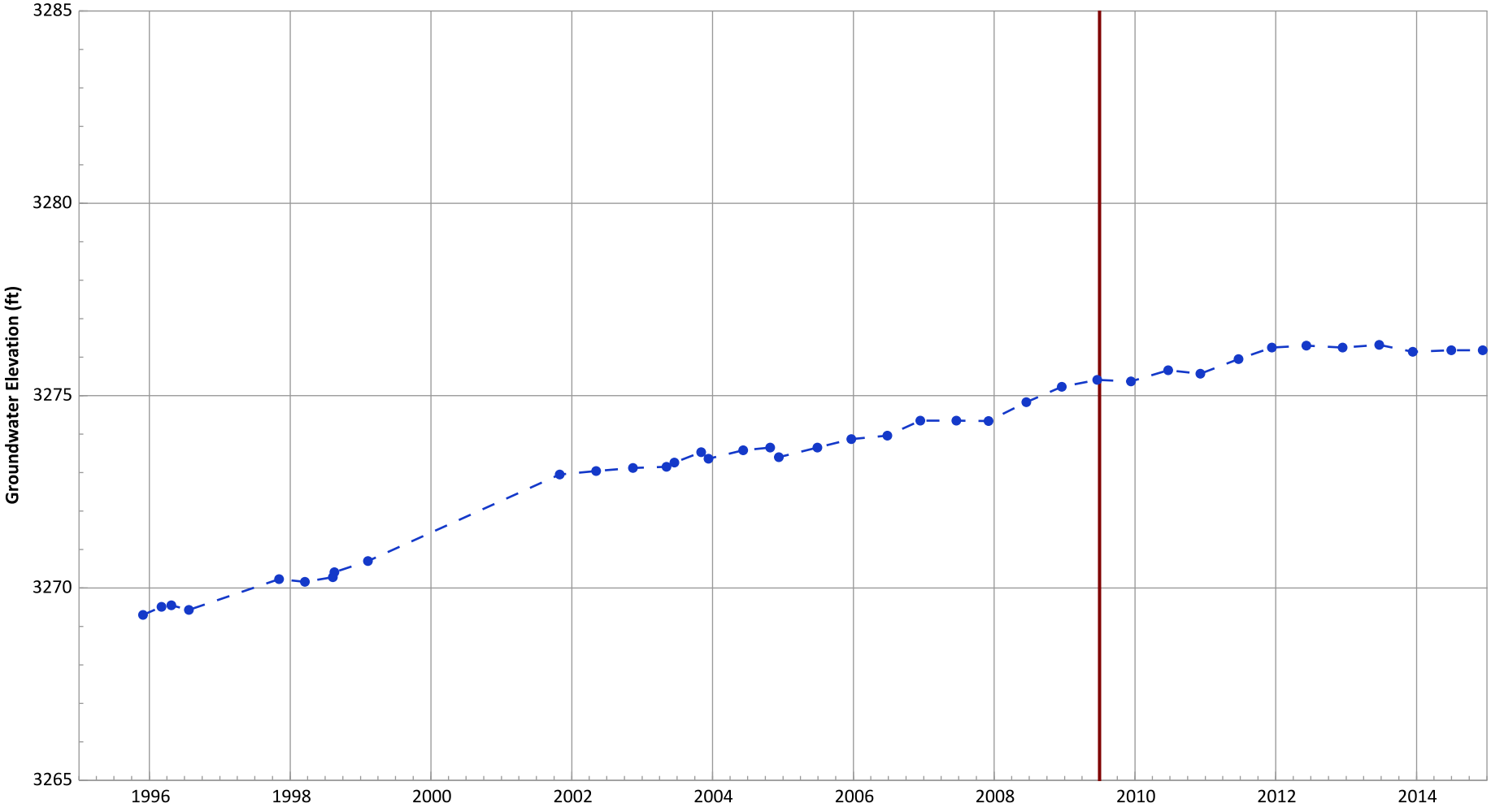
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.17 ft/yr

PTX10-1008 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant



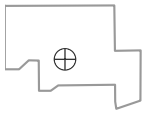
Notes:
1. Top of screen elevation is 3277.2 ft msl.
2. The bottom of screen elevation is 3252.7 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

Groundwater Elevation

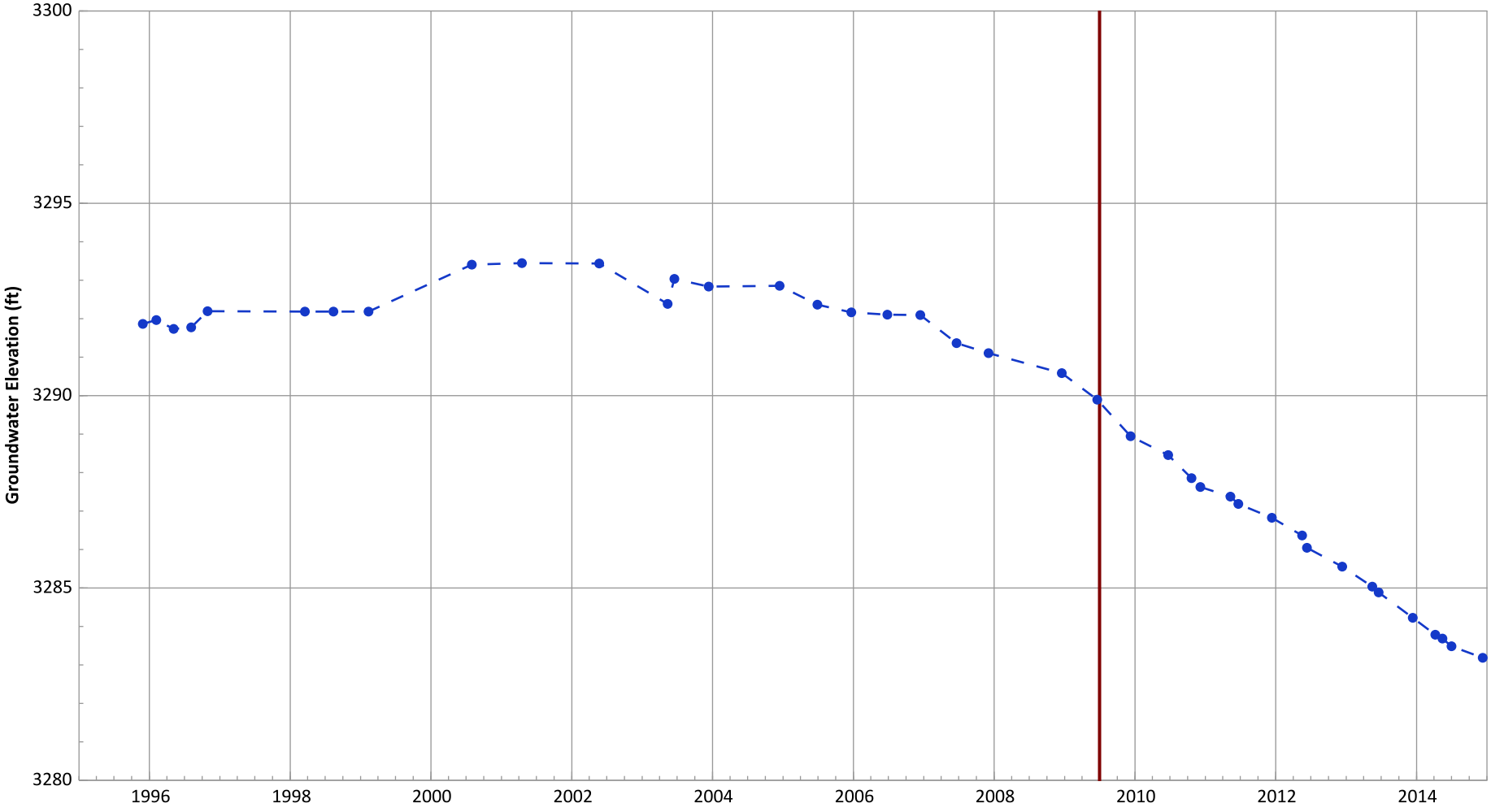
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.39 ft/yr
2012 - 2014 Data: No Trend

PTX10-1014 Hydrograph in Perched Aquifer
USDOE/NNSA Pantex Plant

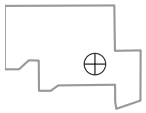


Notes:
1. Top of screen elevation is 3301.64 ft msl.
2. The bottom of screen elevation is 3271.84 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 04/06/2015

Groundwater Elevation
Bottom of Screen Elevation
Start of Remedial Action

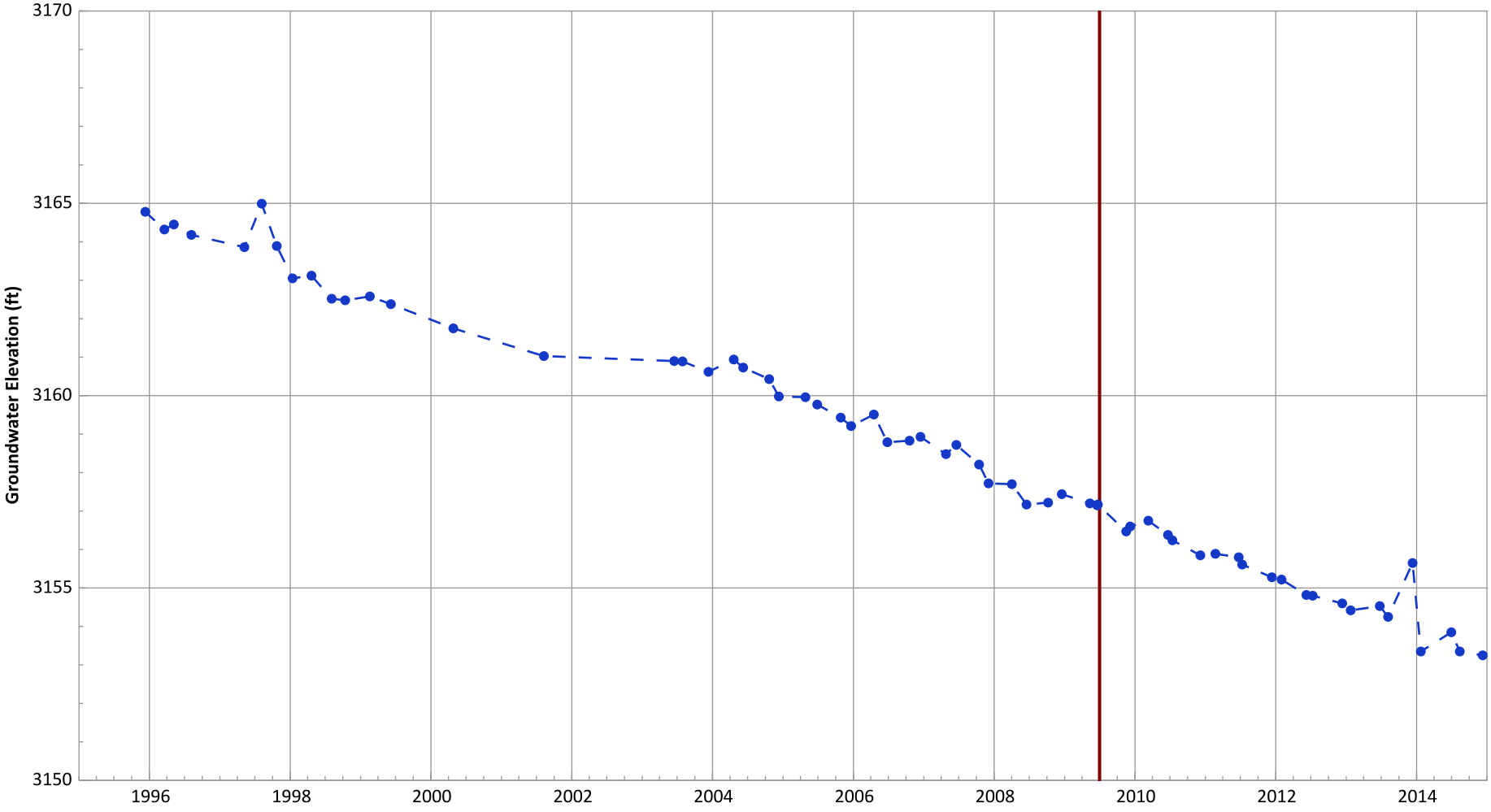
Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.46 ft/yr
2012 - 2014 Data: Decreasing at 1.23 ft/yr

Ogallala Aquifer Hydrographs

PTX-BEG2 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

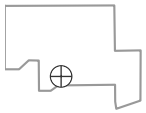


Notes:
1. Top of screen elevation is 3175.57 ft msl.
2. The bottom of screen elevation is 3125.57 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

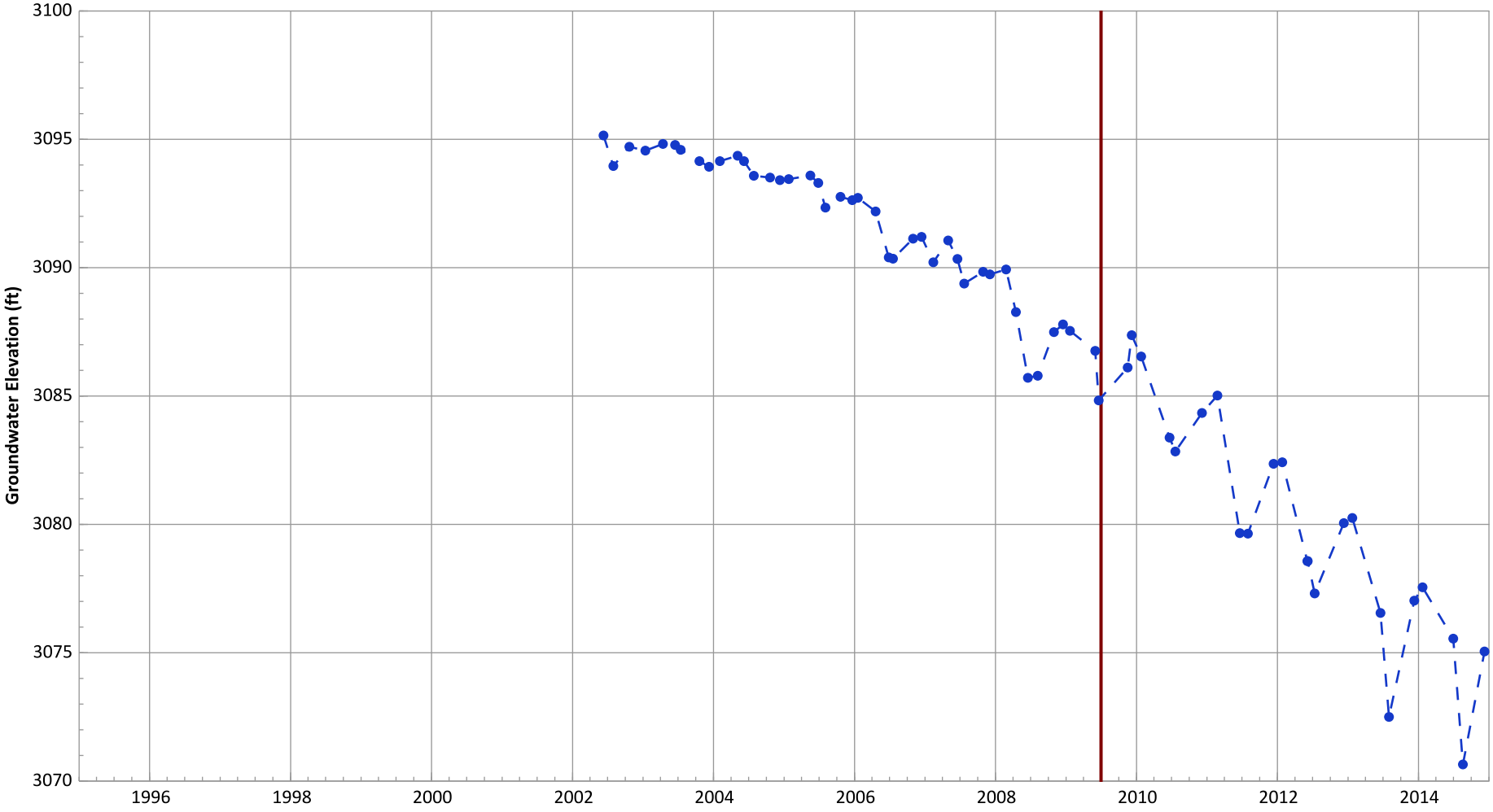
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.58 ft/yr
2012 - 2014 Data: Decreasing at 0.58 ft/yr

PTX01-1010 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

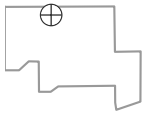


Notes:
1. Top of screen elevation is 3104.01 ft msl.
2. The bottom of screen elevation is 2729.01 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

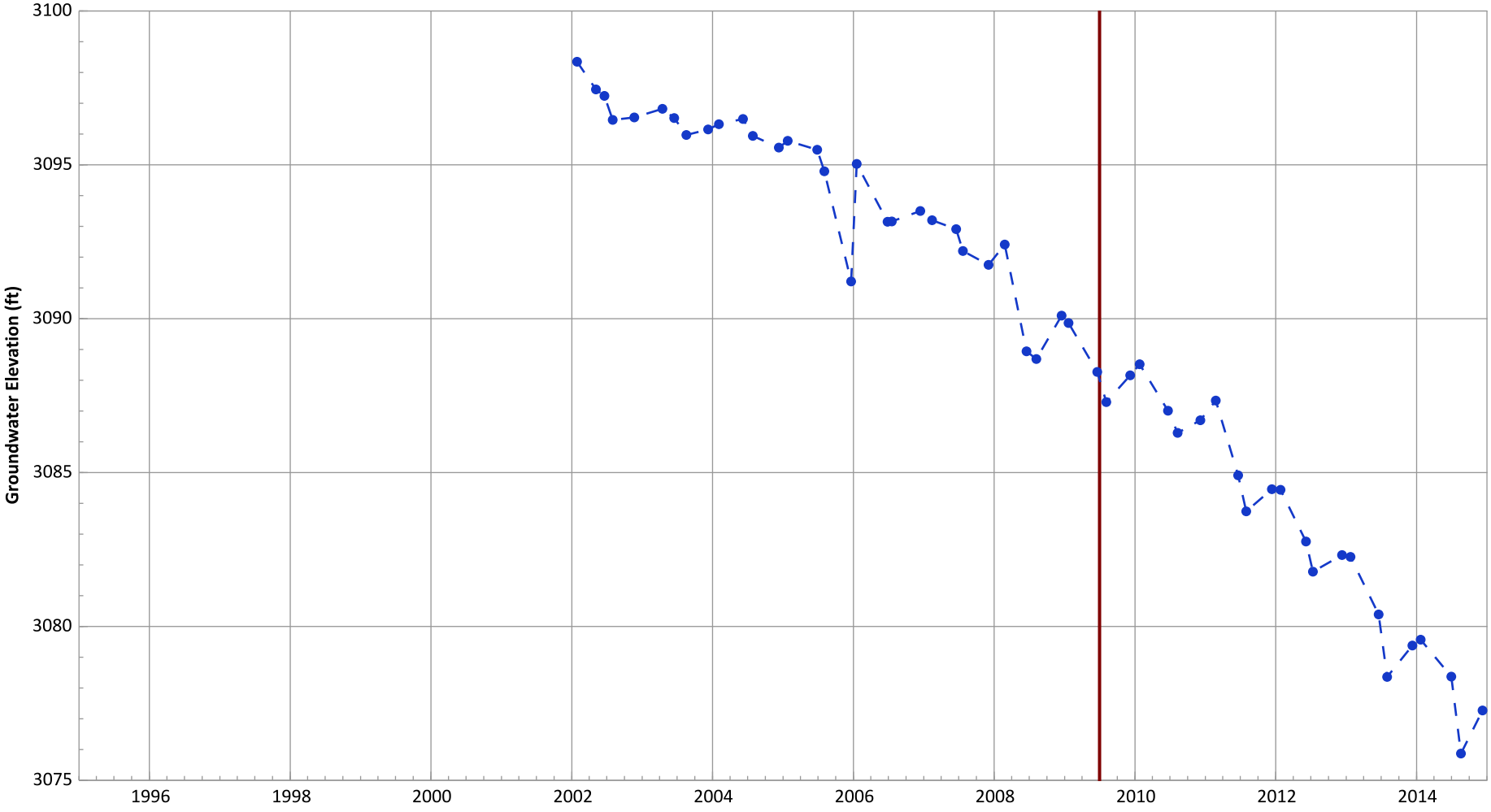
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.78 ft/yr
2012 - 2014 Data: Decreasing at 2.11 ft/yr

PTX01-1011 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

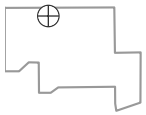


Notes:
1. Top of screen elevation is 3107.81 ft msl.
2. The bottom of screen elevation is 2782.81 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

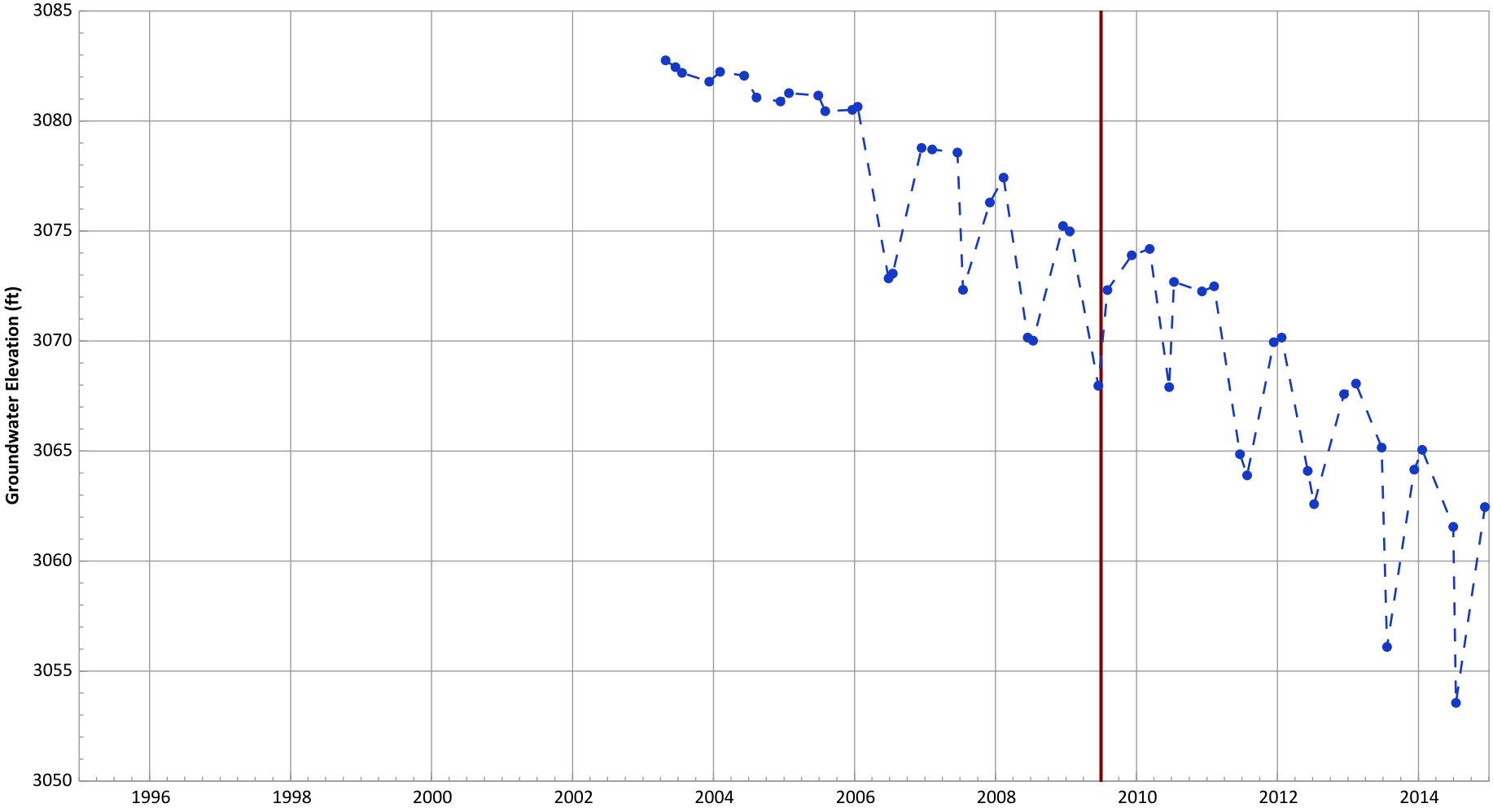
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.62 ft/yr
2012 - 2014 Data: Decreasing at 2.44 ft/yr

PTX01-1012 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



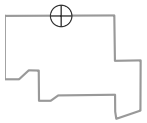
Notes:
1. Top of screen elevation is 3112.48 ft msl.
2. The bottom of screen elevation is 2677.48 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

Groundwater Elevation

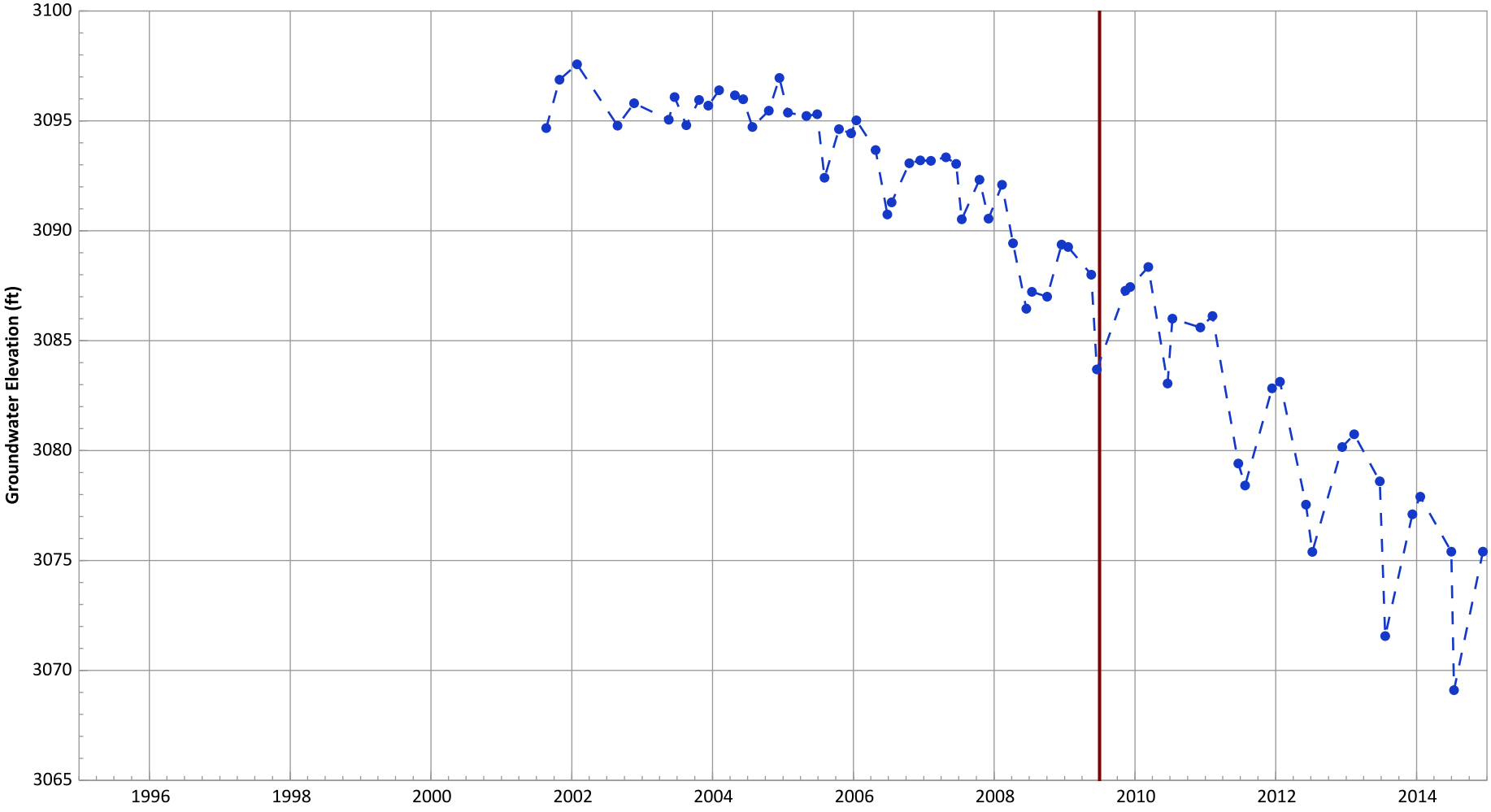
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.98 ft/yr
2012 - 2014 Data: Decreasing at 2.24 ft/yr

PTX01-1013 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

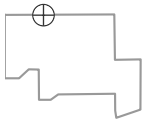


Notes:
1. Top of screen elevation is 3122.17 ft msl.
2. The bottom of screen elevation is 2717.17 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

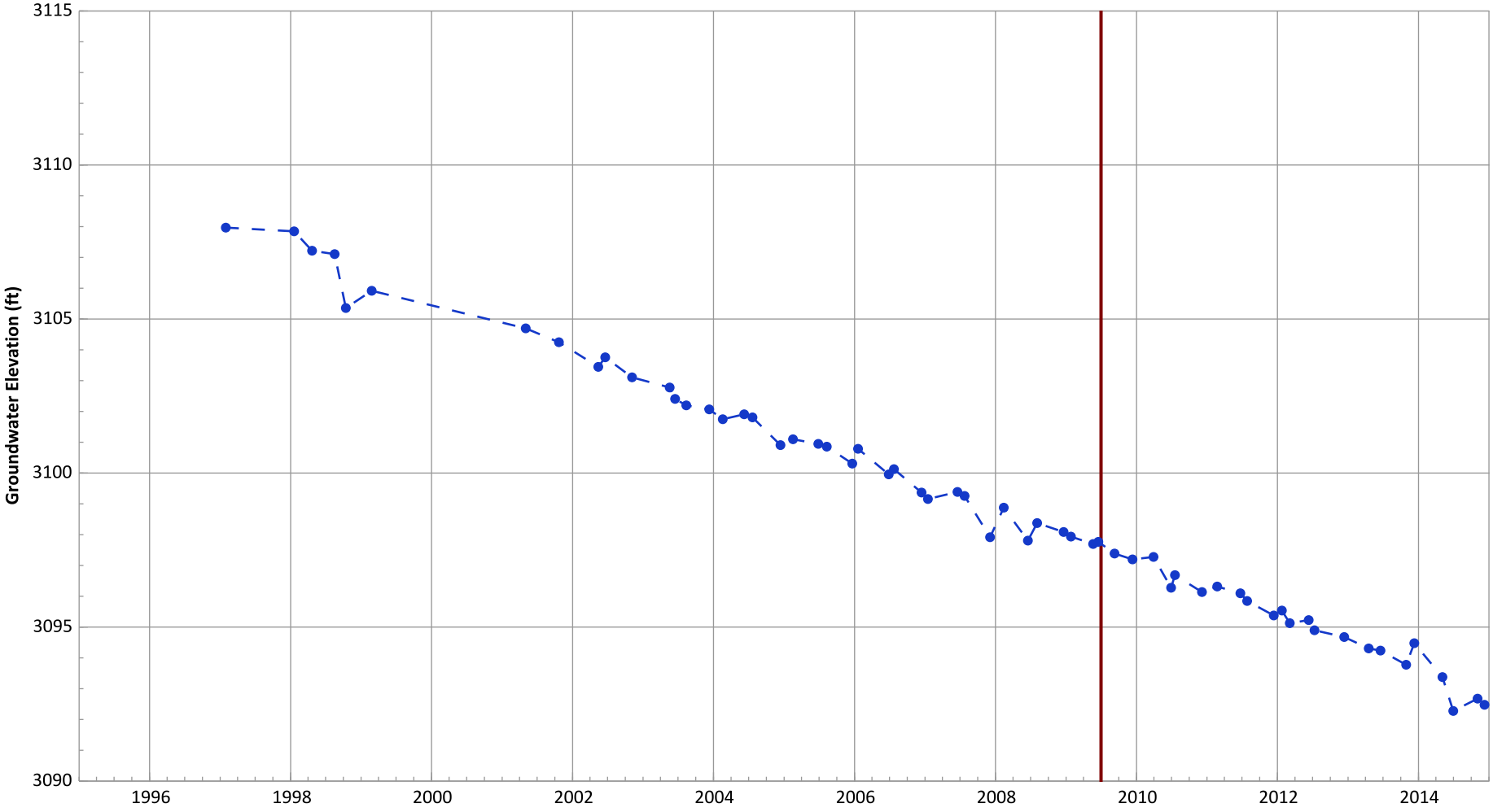
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.87 ft/yr
2012 - 2014 Data: Decreasing at 1.85 ft/yr

PTX06-1033 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



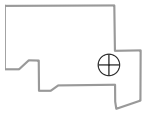
Notes:
1. Top of screen elevation is 3134.04 ft msl.
2. The bottom of screen elevation is 2994.04 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

Groundwater Elevation

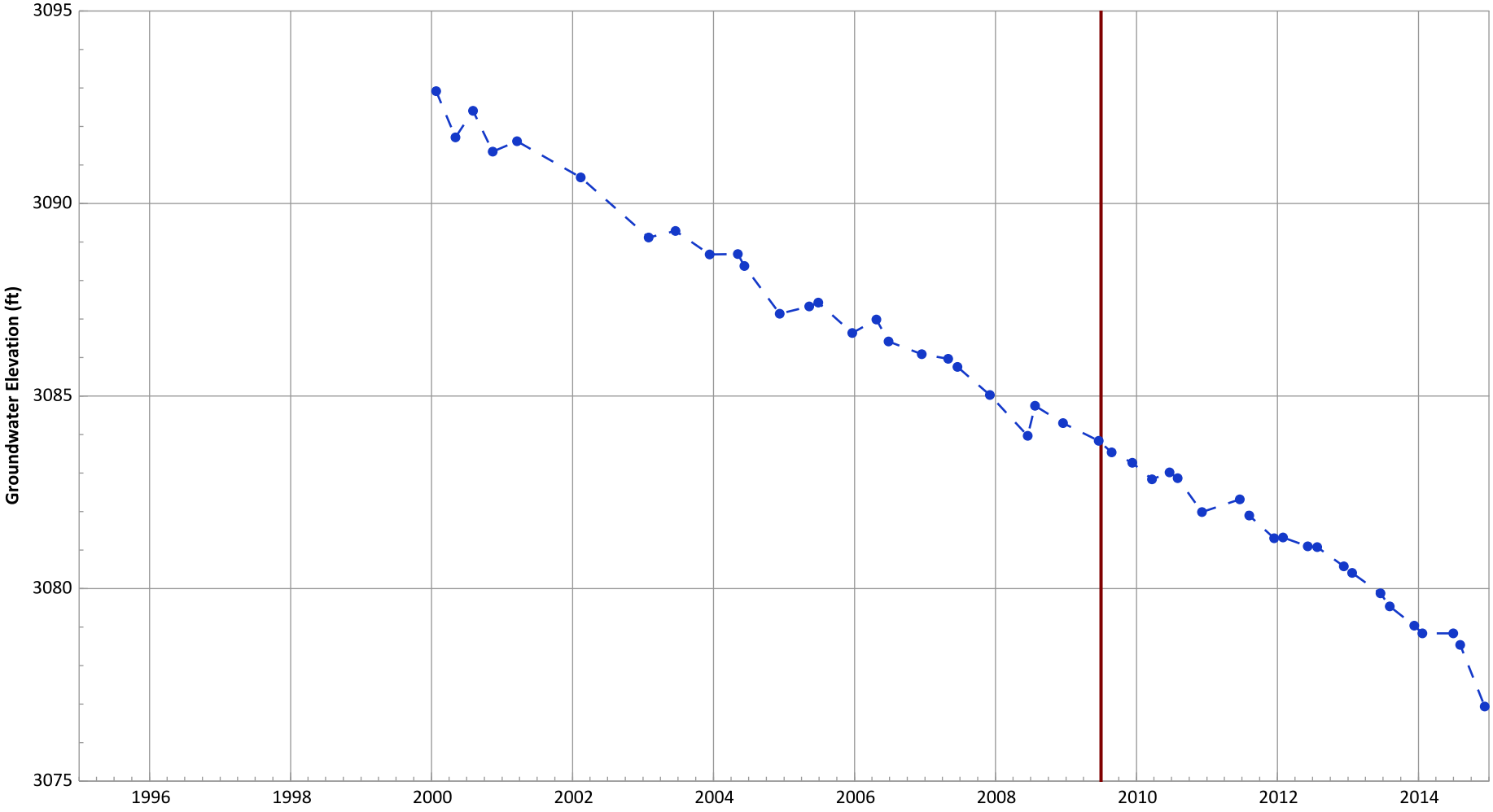
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.85 ft/yr
2012 - 2014 Data: Decreasing at 1.08 ft/yr

PTX06-1043 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



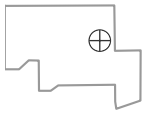
Notes:
1. Top of screen elevation is 3116.09 ft msl.
2. The bottom of screen elevation is 2896.09 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

Groundwater Elevation

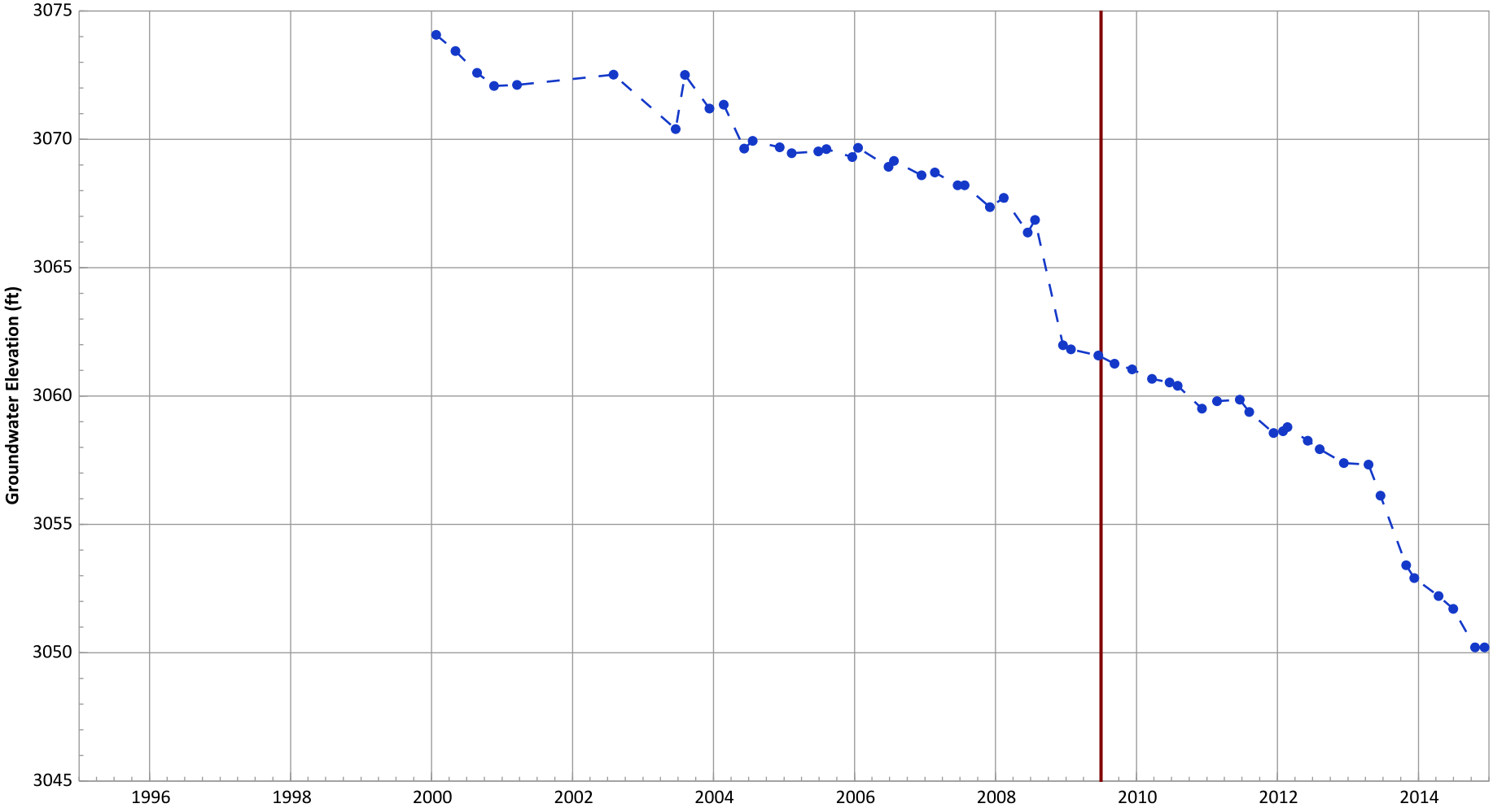
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.95 ft/yr
2012 - 2014 Data: Decreasing at 1.44 ft/yr

PTX06-1044 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

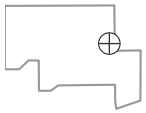


Notes:
1. Top of screen elevation is 3148.69 ft msl.
2. The bottom of screen elevation is 2928.69 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

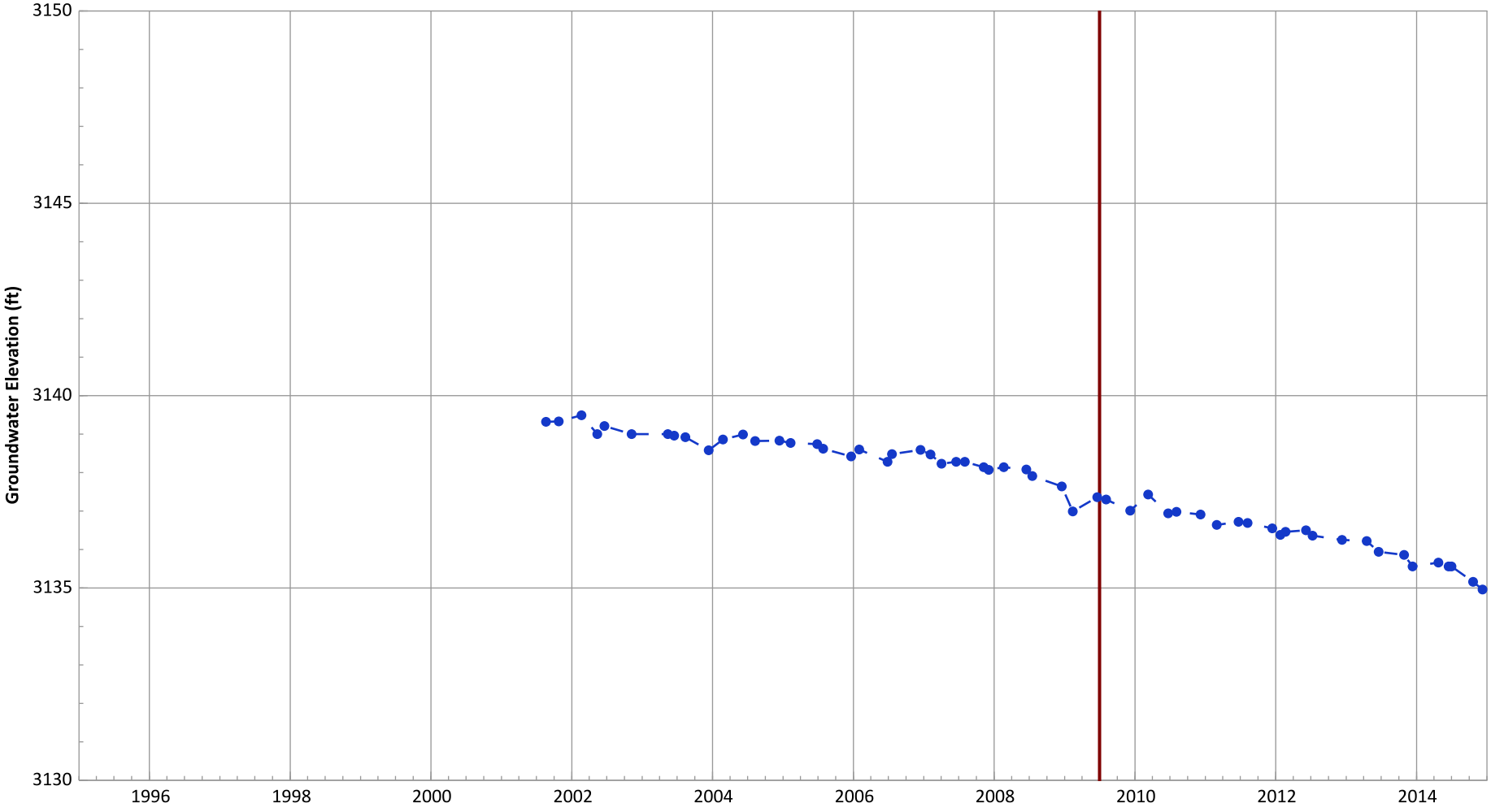
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.56 ft/yr
2012 - 2014 Data: Decreasing at 3.55 ft/yr

PTX06-1056 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

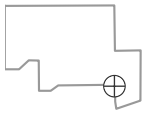


Notes:
1. Top of screen elevation is 3180.77 ft msl.
2. The bottom of screen elevation is 3060.77 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

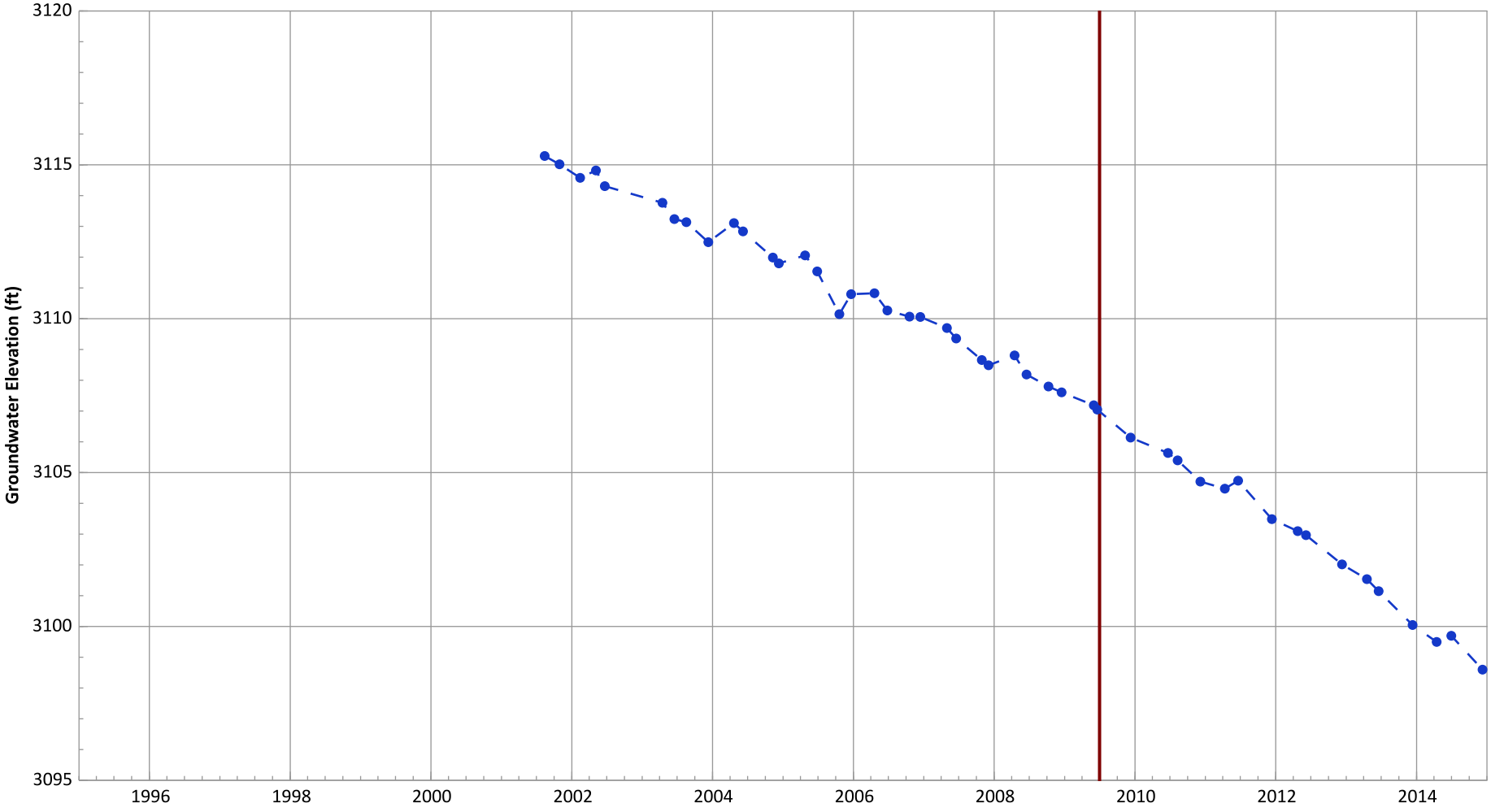
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.31 ft/yr
2012 - 2014 Data: Decreasing at 0.54 ft/yr

PTX06-1057A Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



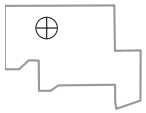
Notes:
1. Top of screen elevation is 3141.52 ft msl.
2. The bottom of screen elevation is 2811.52 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

Groundwater Elevation

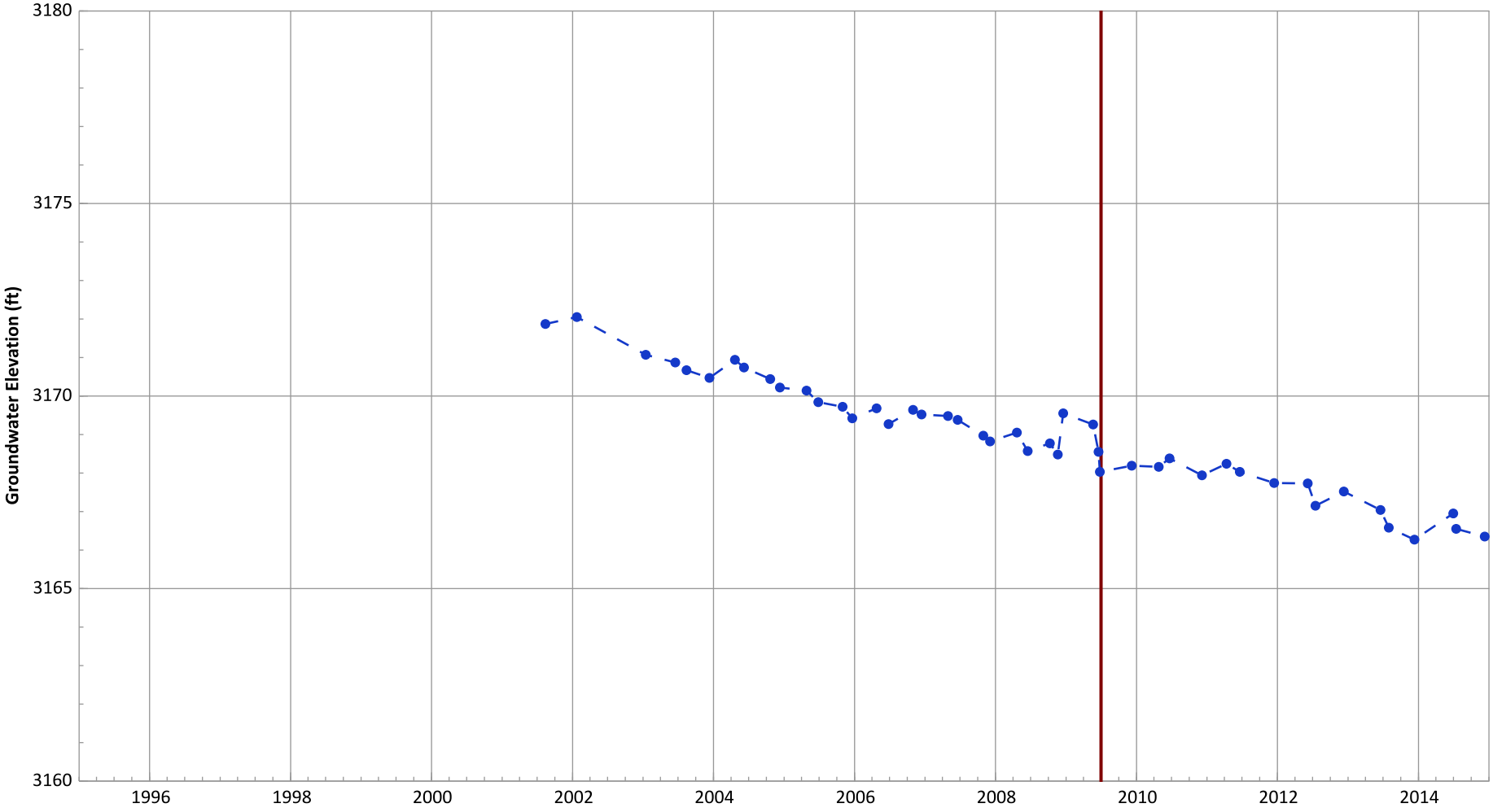
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.21 ft/yr
2012 - 2014 Data: Decreasing at 1.73 ft/yr

PTX06-1058 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

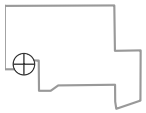


Notes:
1. Top of screen elevation is 3188.45 ft msl.
2. The bottom of screen elevation is 3038.45 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

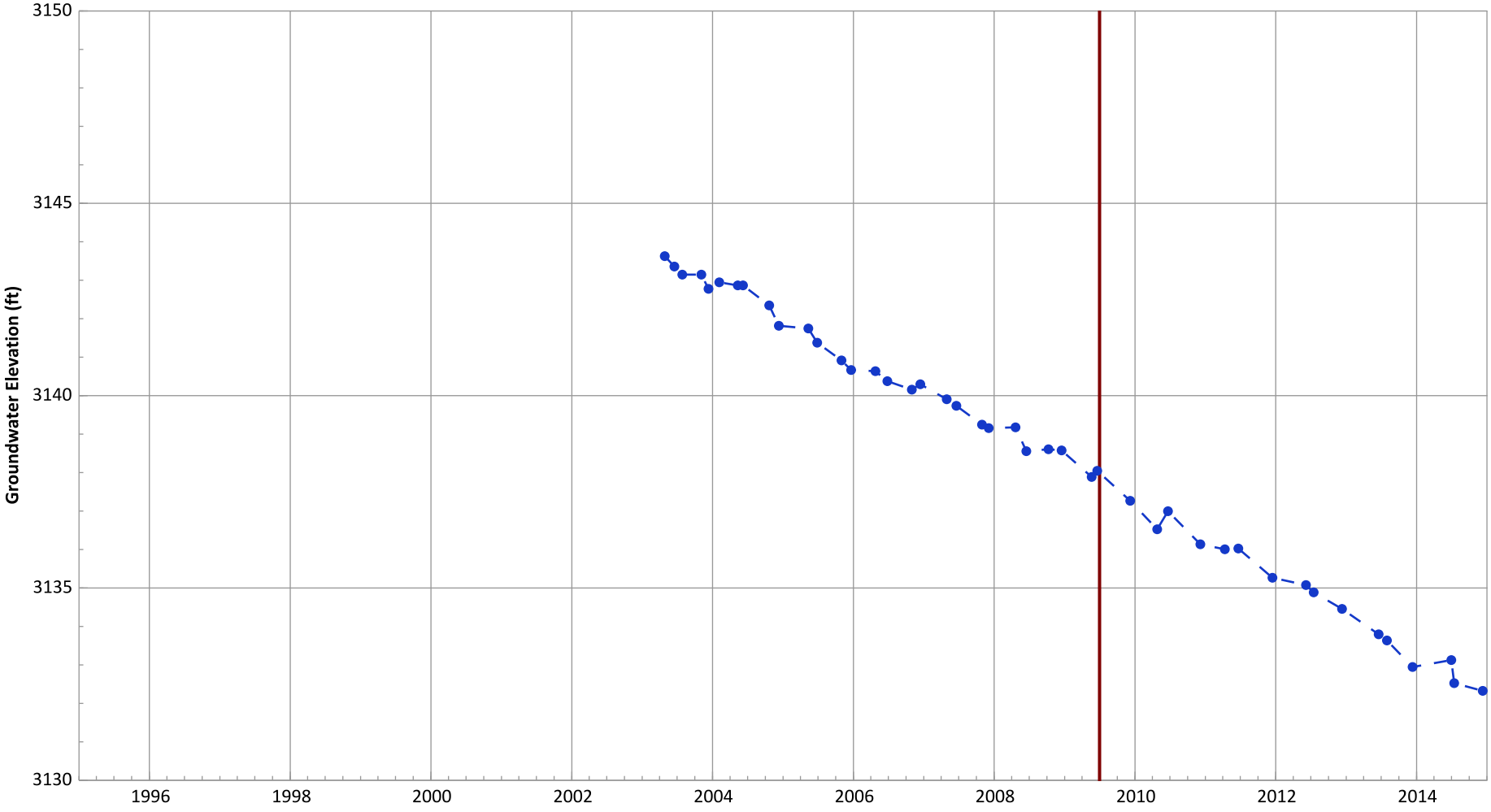
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.39 ft/yr
2012 - 2014 Data: Decreasing at 0.44 ft/yr

PTX06-1059 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

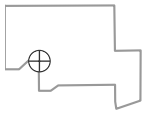


Notes:
1. Top of screen elevation is 3167.39 ft msl.
2. The bottom of screen elevation is 3007.39 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

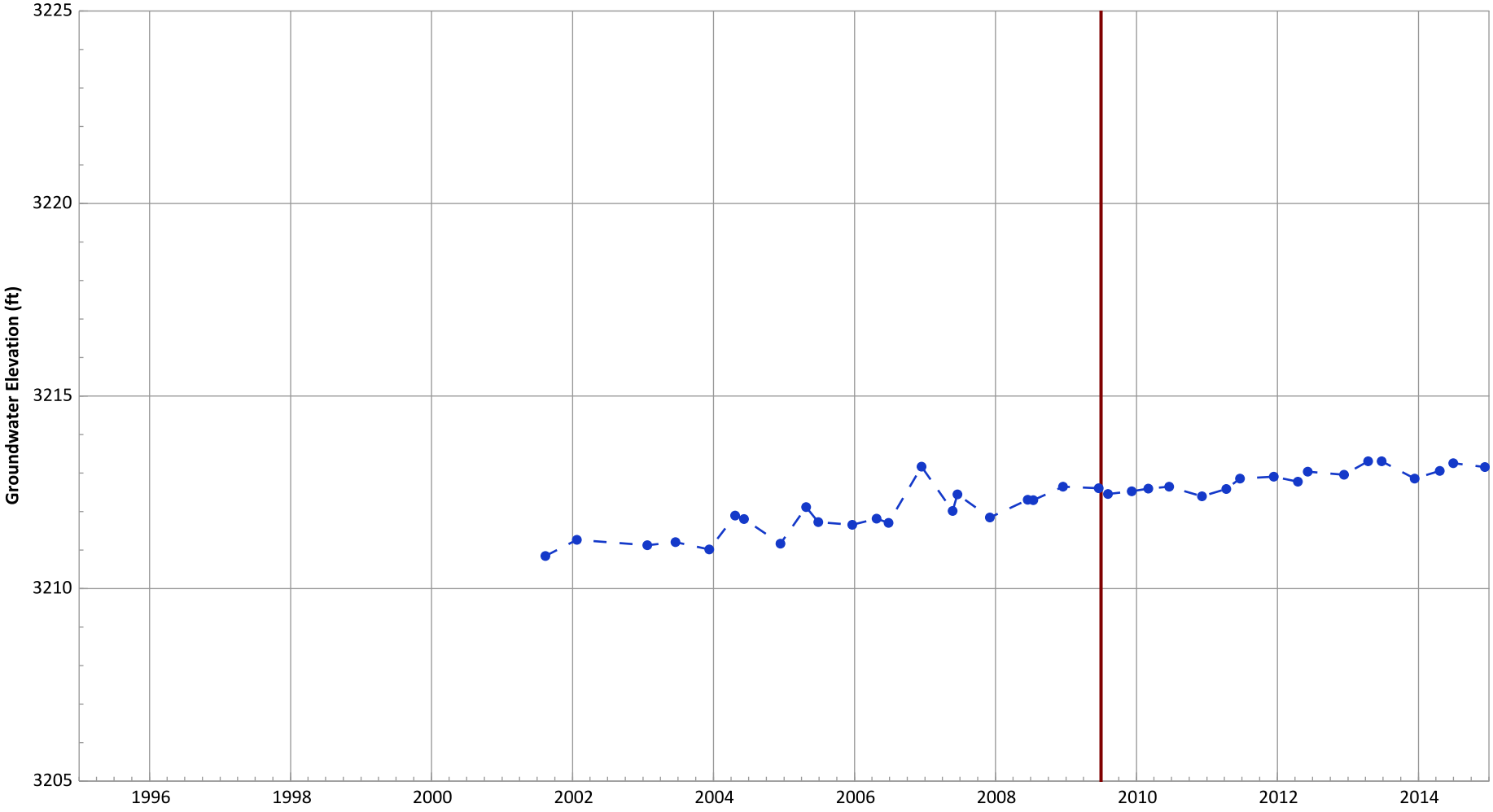
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.96 ft/yr
2012 - 2014 Data: Decreasing at 1.08 ft/yr

PTX06-1060 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



Notes:
1. Top of screen elevation is 3191.81 ft msl.
2. The bottom of screen elevation is 3066.81 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

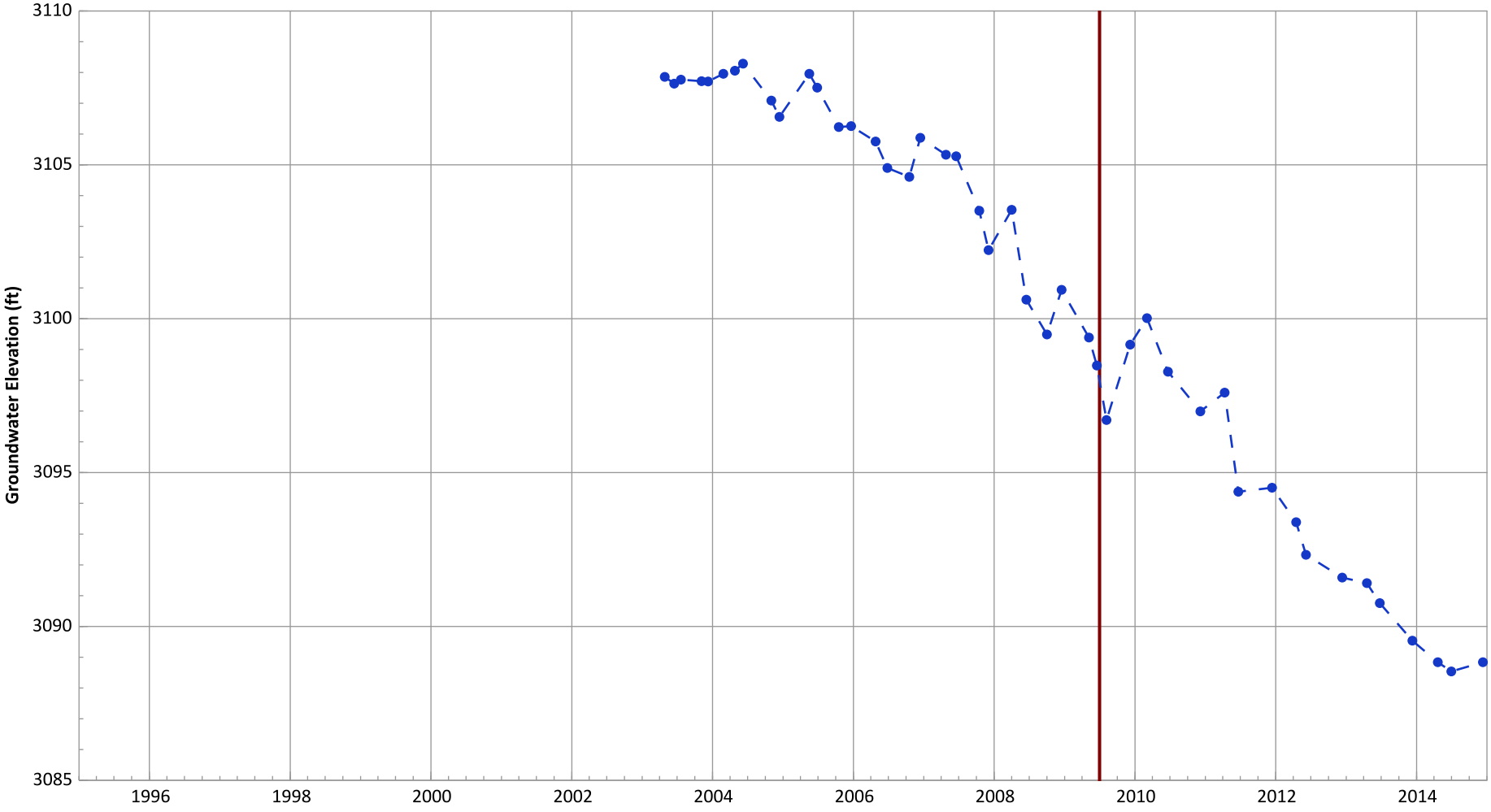
Analysis Date: 02/10/2015

Groundwater Elevation
Start of Remedial Action

Well Location

Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.17 ft/yr
2012 - 2014 Data: No Trend

PTX06-1061 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



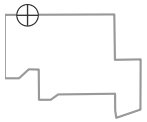
Notes:
1. Top of screen elevation is 3124.65 ft msl.
2. The bottom of screen elevation is 2729.65 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

Groundwater Elevation

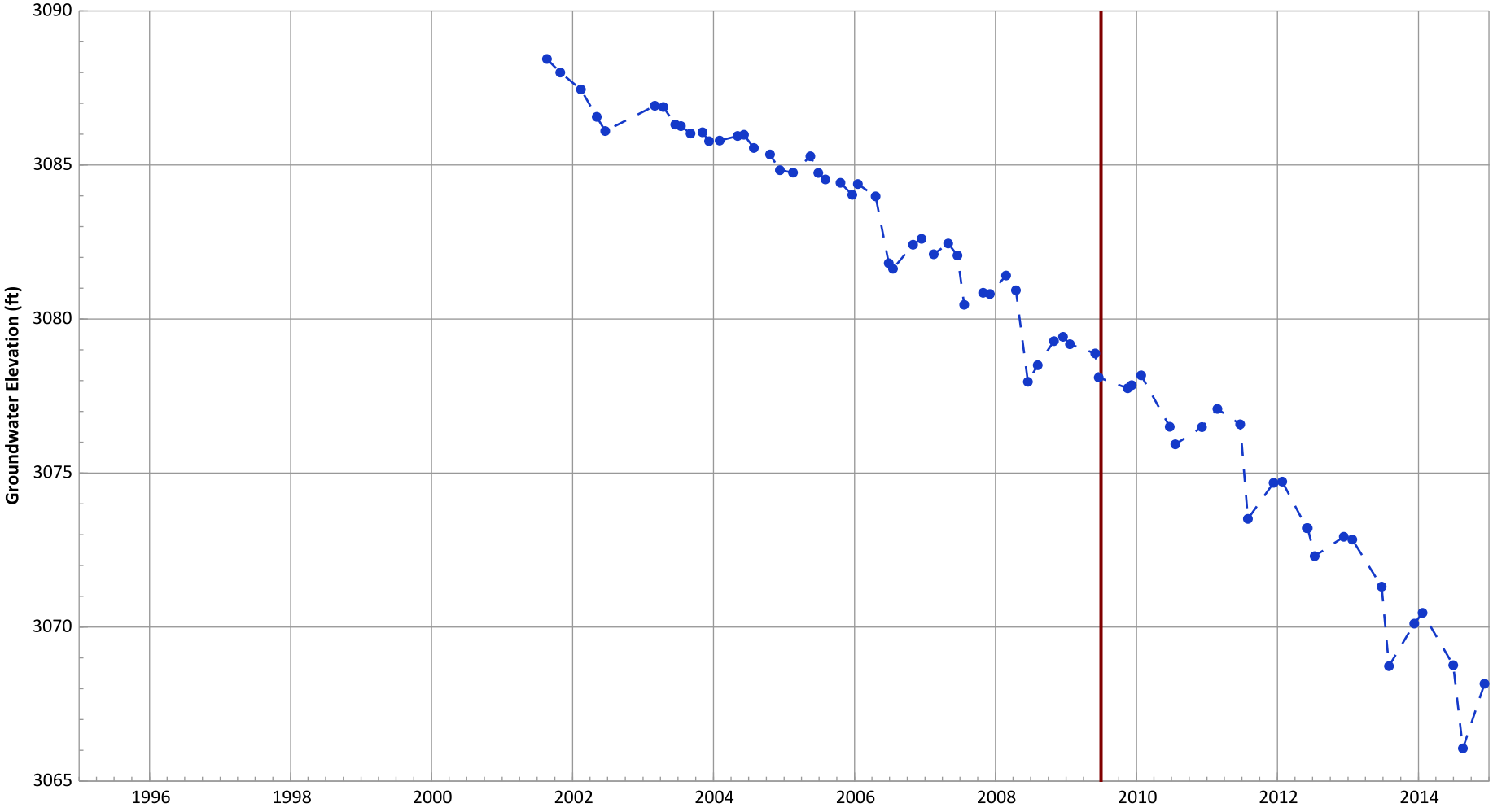
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.83 ft/yr
2012 - 2014 Data: Decreasing at 1.68 ft/yr

PTX06-1062A Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



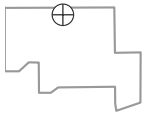
Notes:
1. Top of screen elevation is 3103.89 ft msl.
2. The bottom of screen elevation is 2683.89 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

Groundwater Elevation

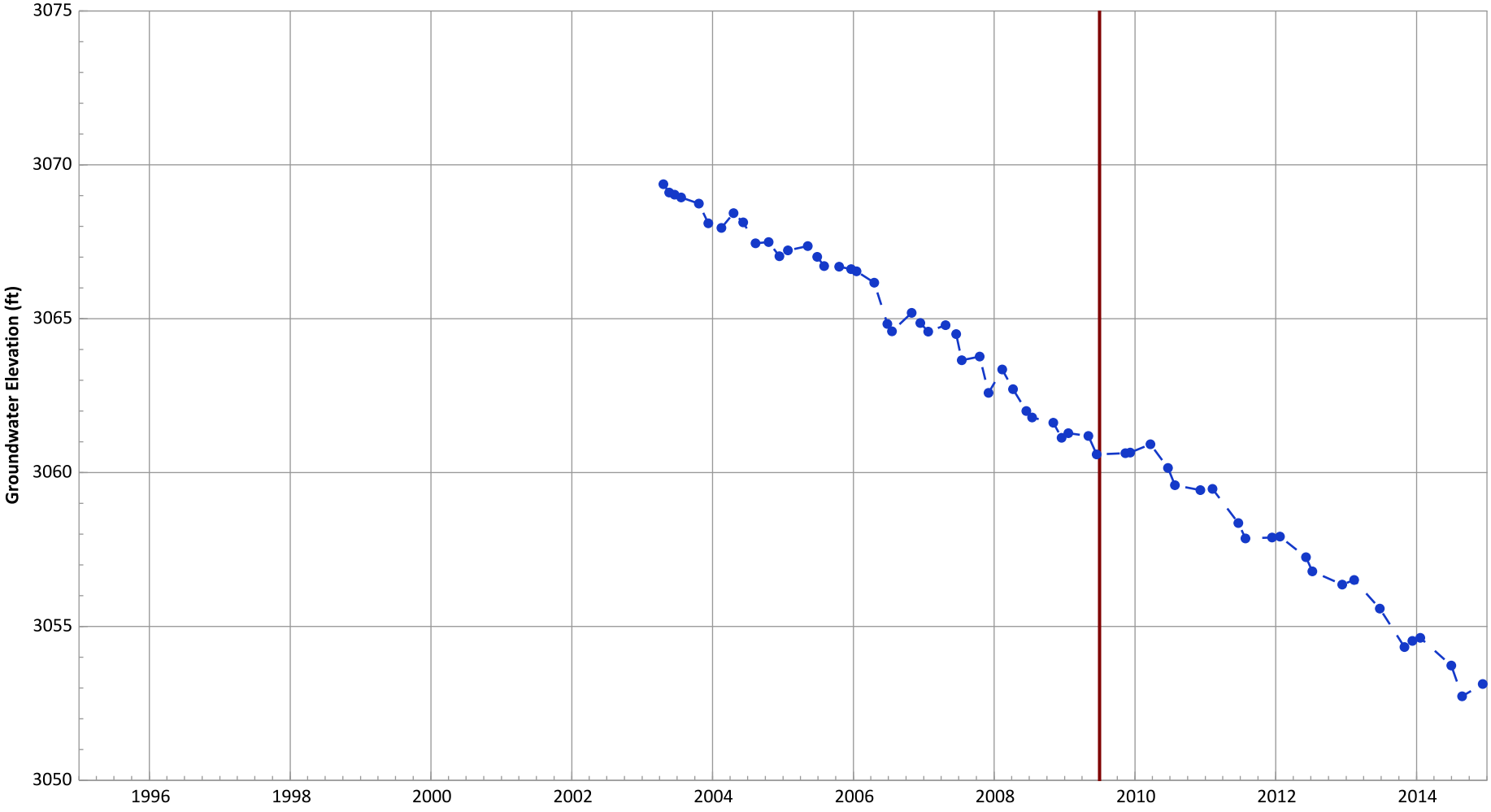
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.52 ft/yr
2012 - 2014 Data: Decreasing at 2.39 ft/yr

PTX06-1064 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

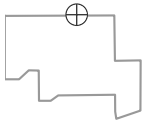


Notes:
1. Top of screen elevation is 3121.99 ft msl.
2. The bottom of screen elevation is 2771.99 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

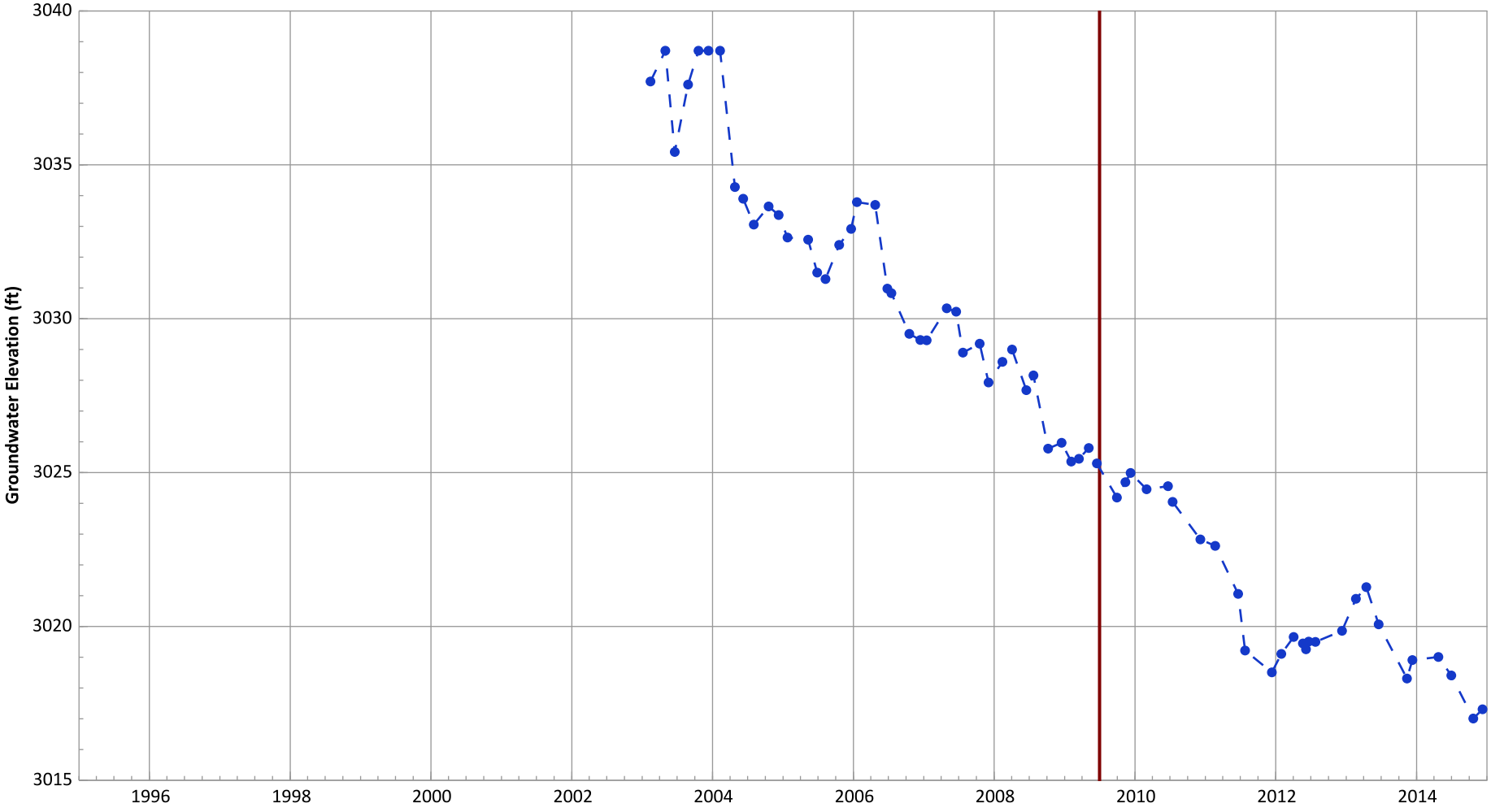
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.39 ft/yr
2012 - 2014 Data: Decreasing at 1.77 ft/yr

PTX06-1068 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



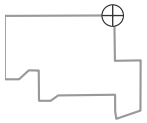
Notes:
1. Top of screen elevation is 3081.55 ft msl.
2. The bottom of screen elevation is 2736.55 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

Groundwater Elevation

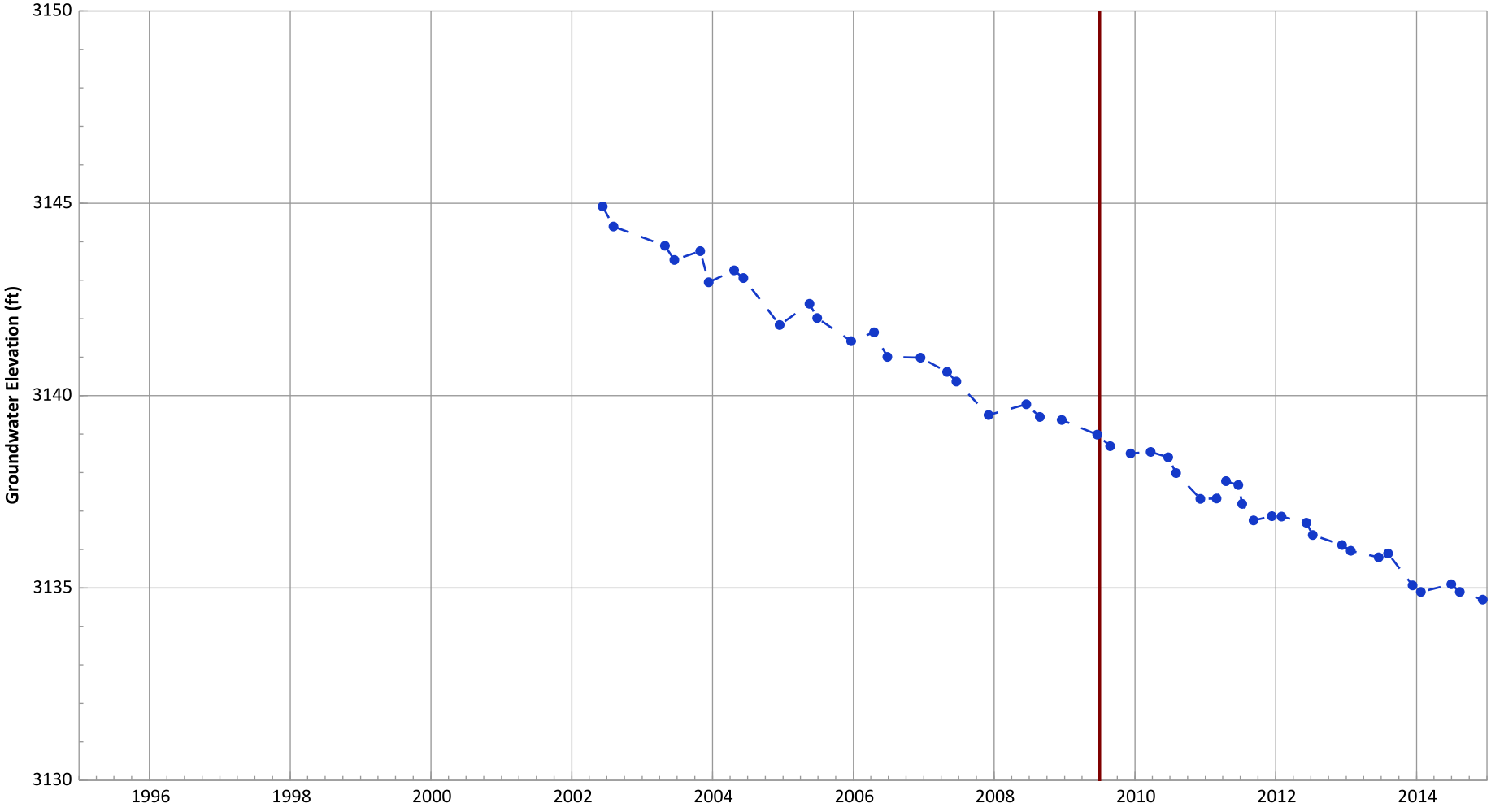
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.81 ft/yr
2012 - 2014 Data: Decreasing at 0.98 ft/yr

PTX06-1072 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

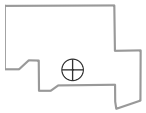


Notes:
1. Top of screen elevation is 3146.31 ft msl.
2. The bottom of screen elevation is 3006.31 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

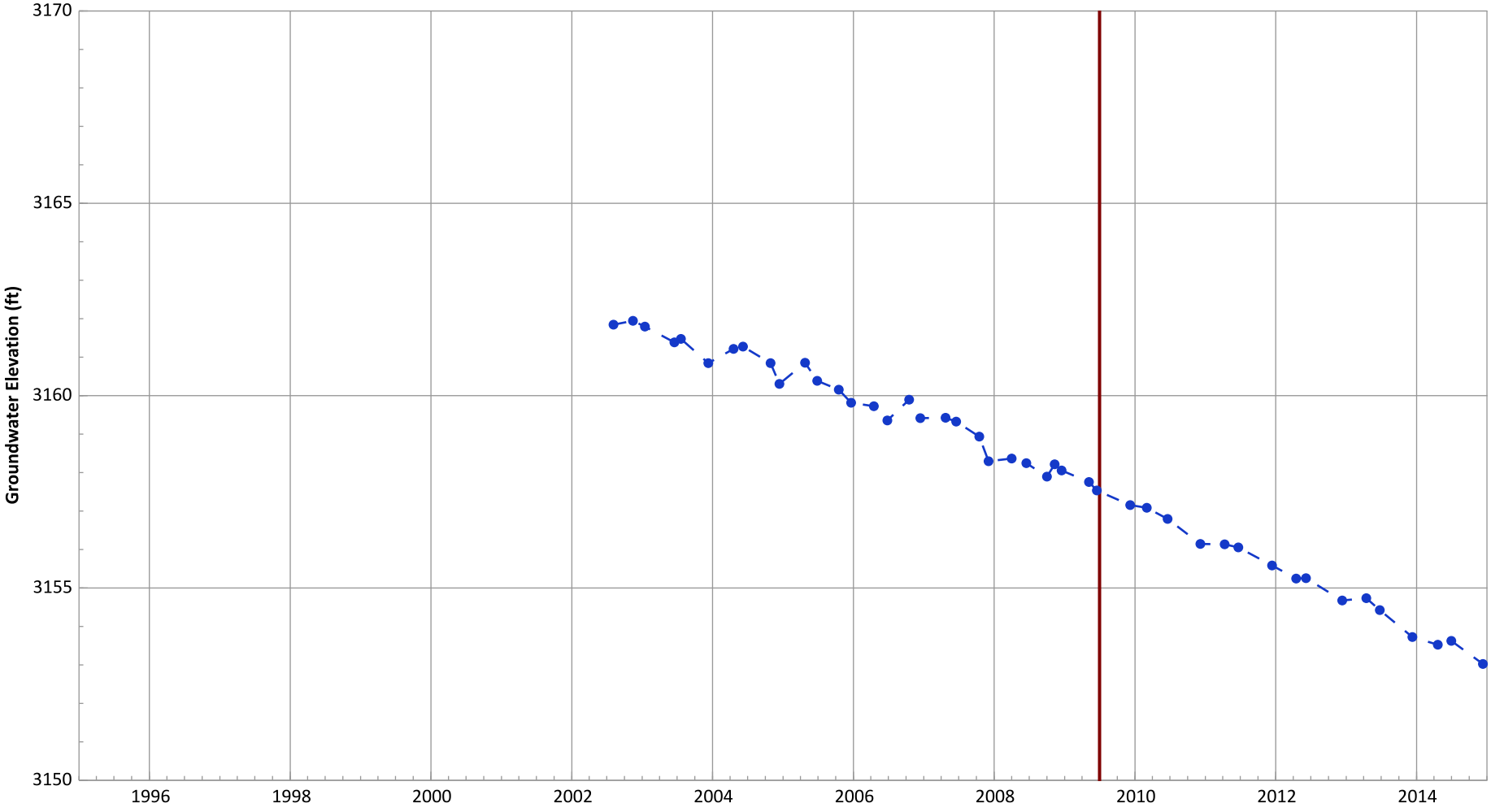
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.8 ft/yr
2012 - 2014 Data: Decreasing at 0.77 ft/yr

PTX06-1074 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



Notes:
1. Top of screen elevation is 3175.53 ft msl.
2. The bottom of screen elevation is 2955.53 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

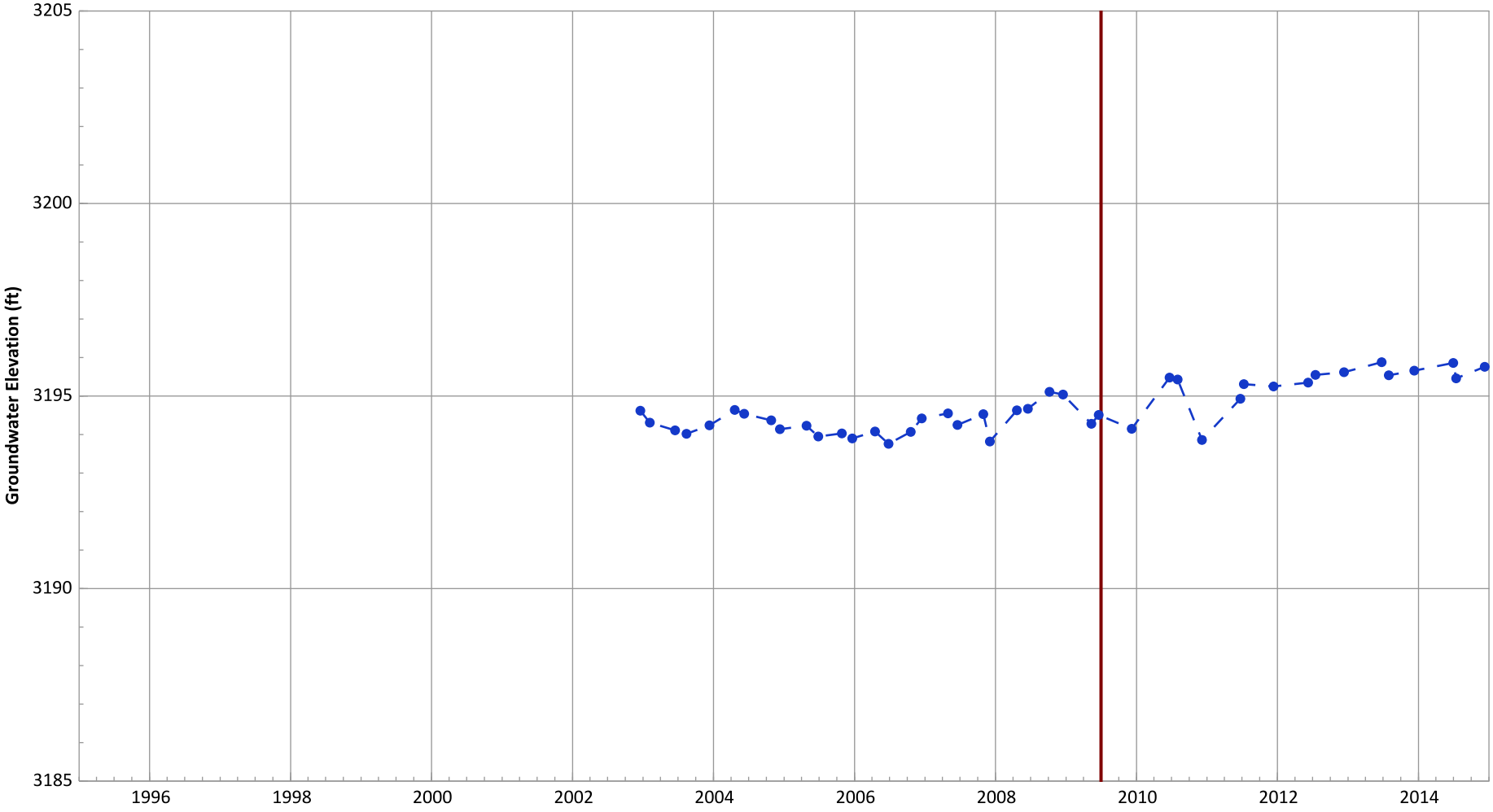
Analysis Date: 02/10/2015

Groundwater Elevation
Start of Remedial Action

Well Location

Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.72 ft/yr
2012 - 2014 Data: Decreasing at 0.88 ft/yr

PTX06-1075 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

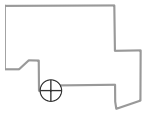


Notes:
1. Top of screen elevation is 3193.11 ft msl.
2. The bottom of screen elevation is 3133.11 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

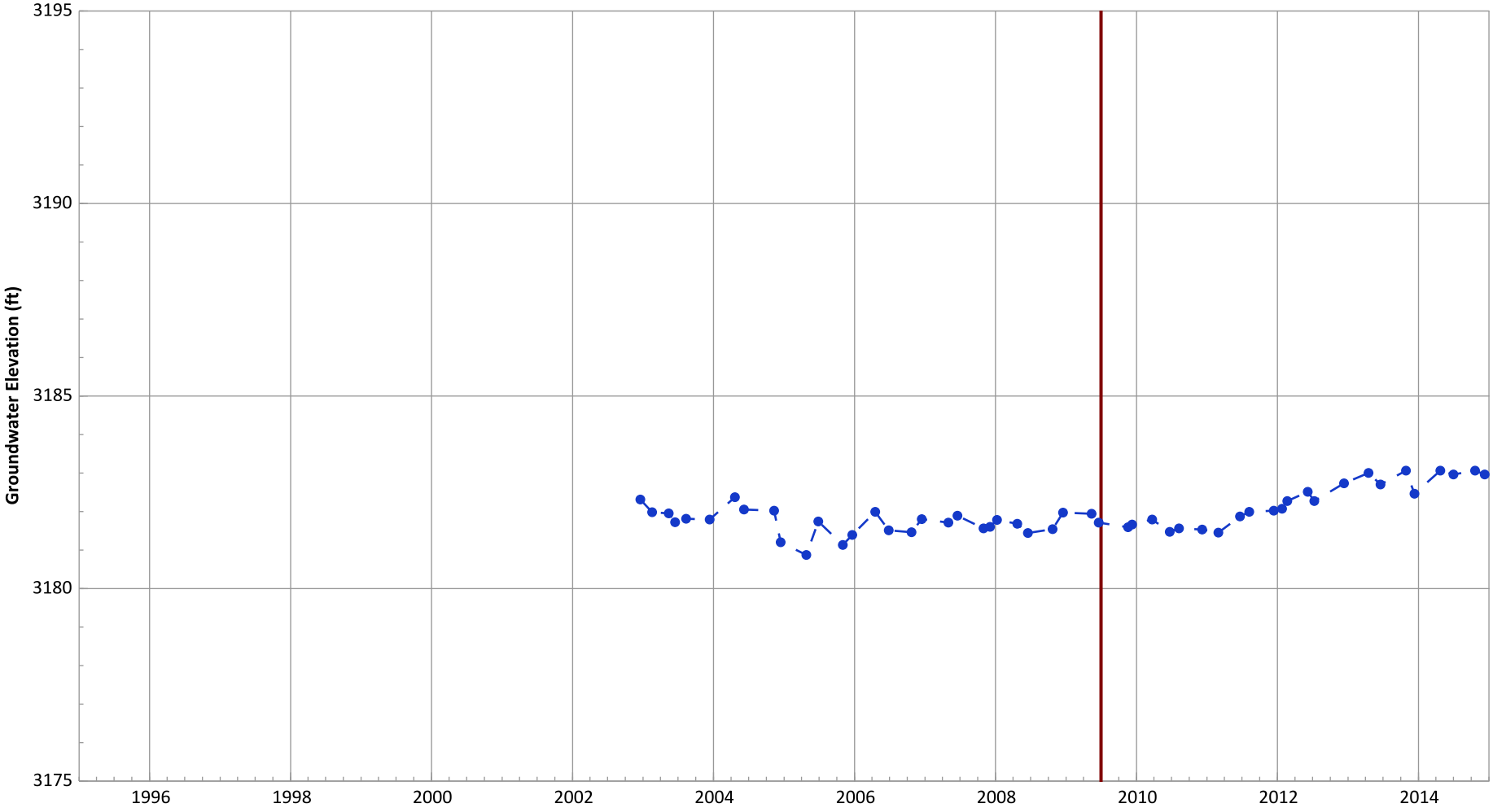
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Increasing at 0.14 ft/yr
2012 - 2014 Data: No Trend

PTX06-1076 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

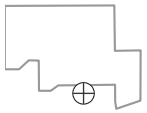


Notes:
1. Top of screen elevation is 3187.64 ft msl.
2. The bottom of screen elevation is 3167.64 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

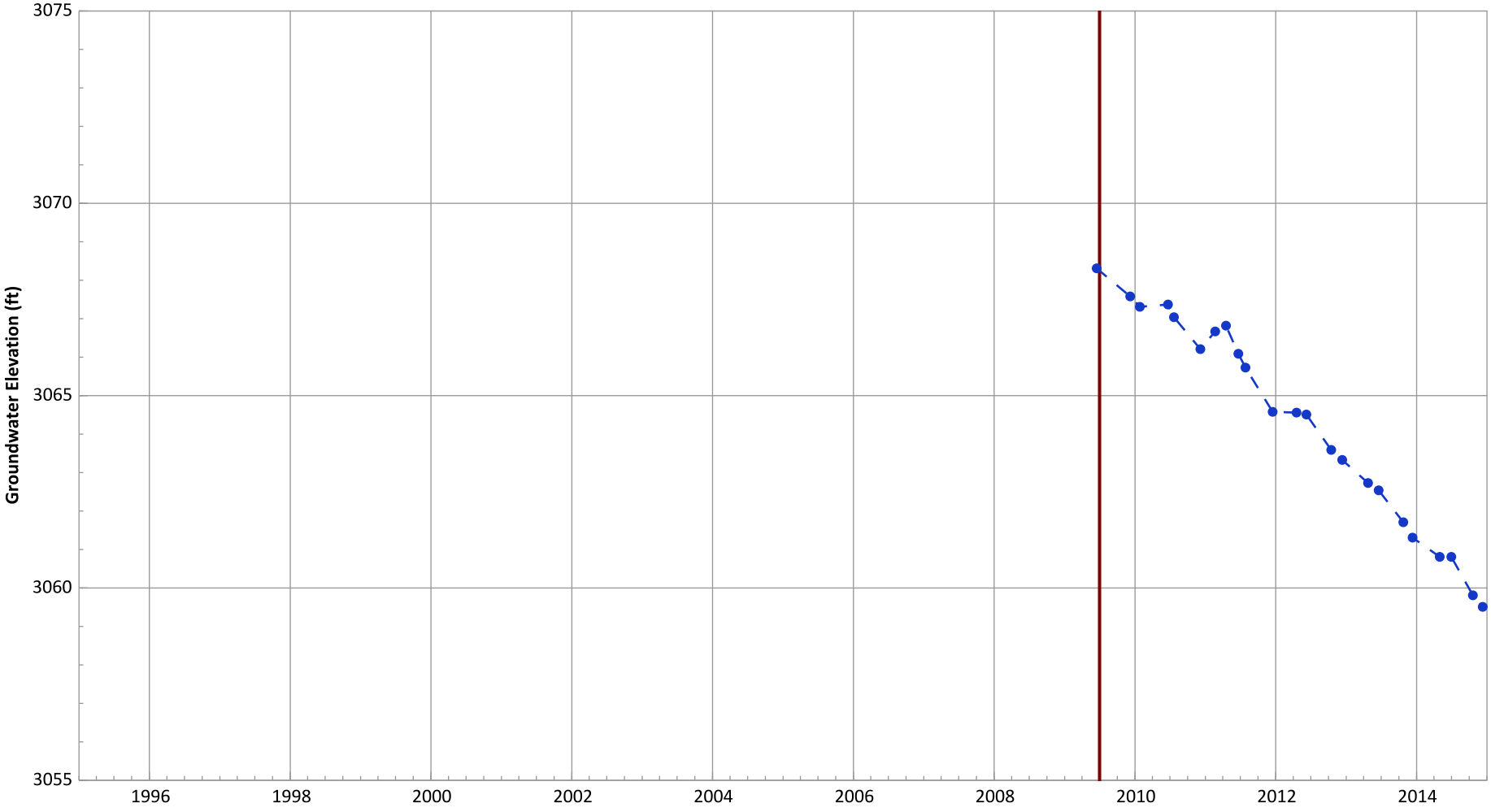
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Increasing at 0.22 ft/yr

PTX06-1137A Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

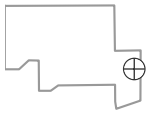


Notes:
1. Top of screen elevation is 3107.5 ft msl.
2. The bottom of screen elevation is 2952.5 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

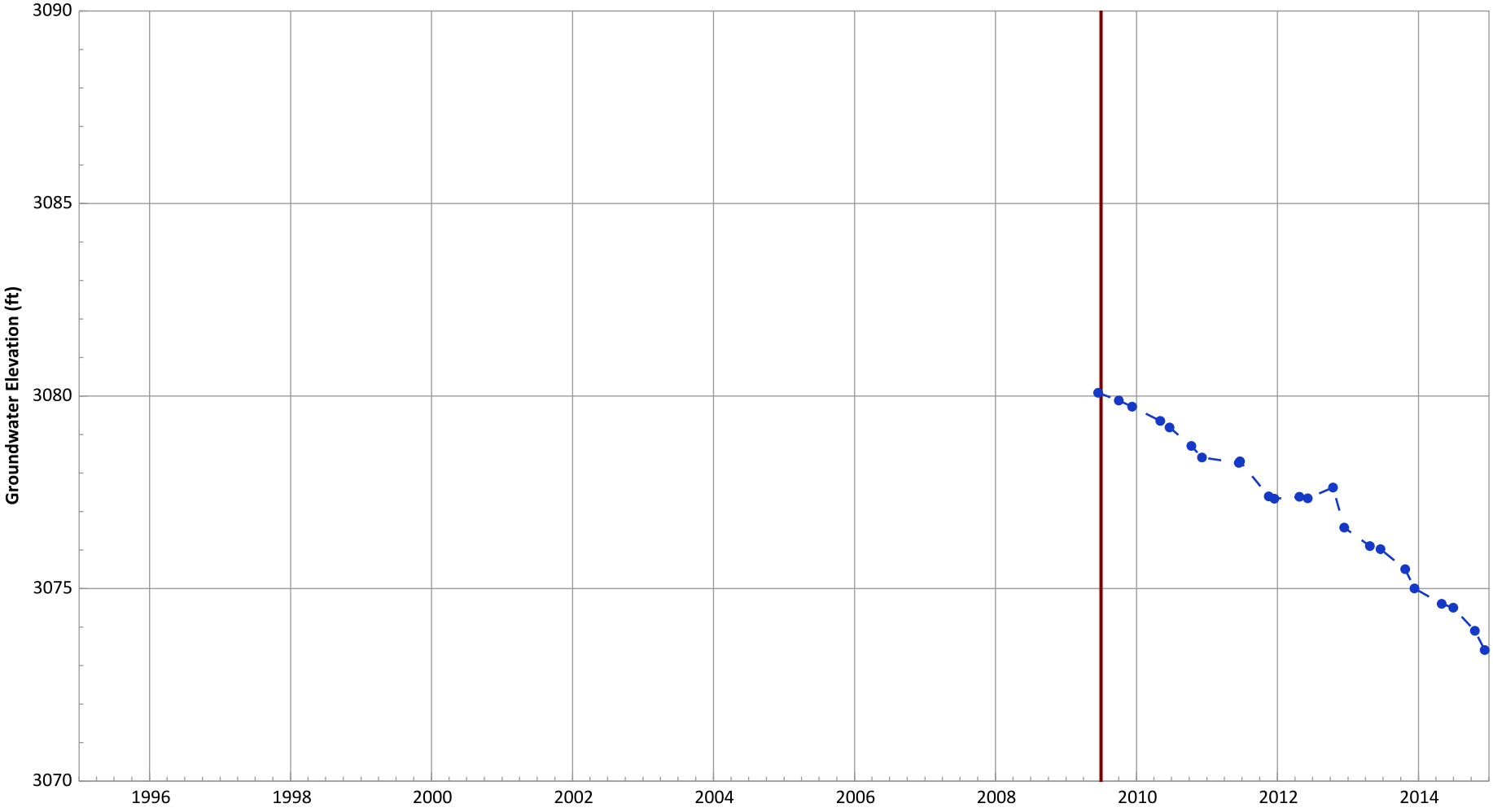
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.62 ft/yr
2012 - 2014 Data: Decreasing at 1.9 ft/yr

PTX06-1138 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

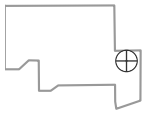


Notes:
1. Top of screen elevation is 3094.47 ft msl.
2. The bottom of screen elevation is 2949.47 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

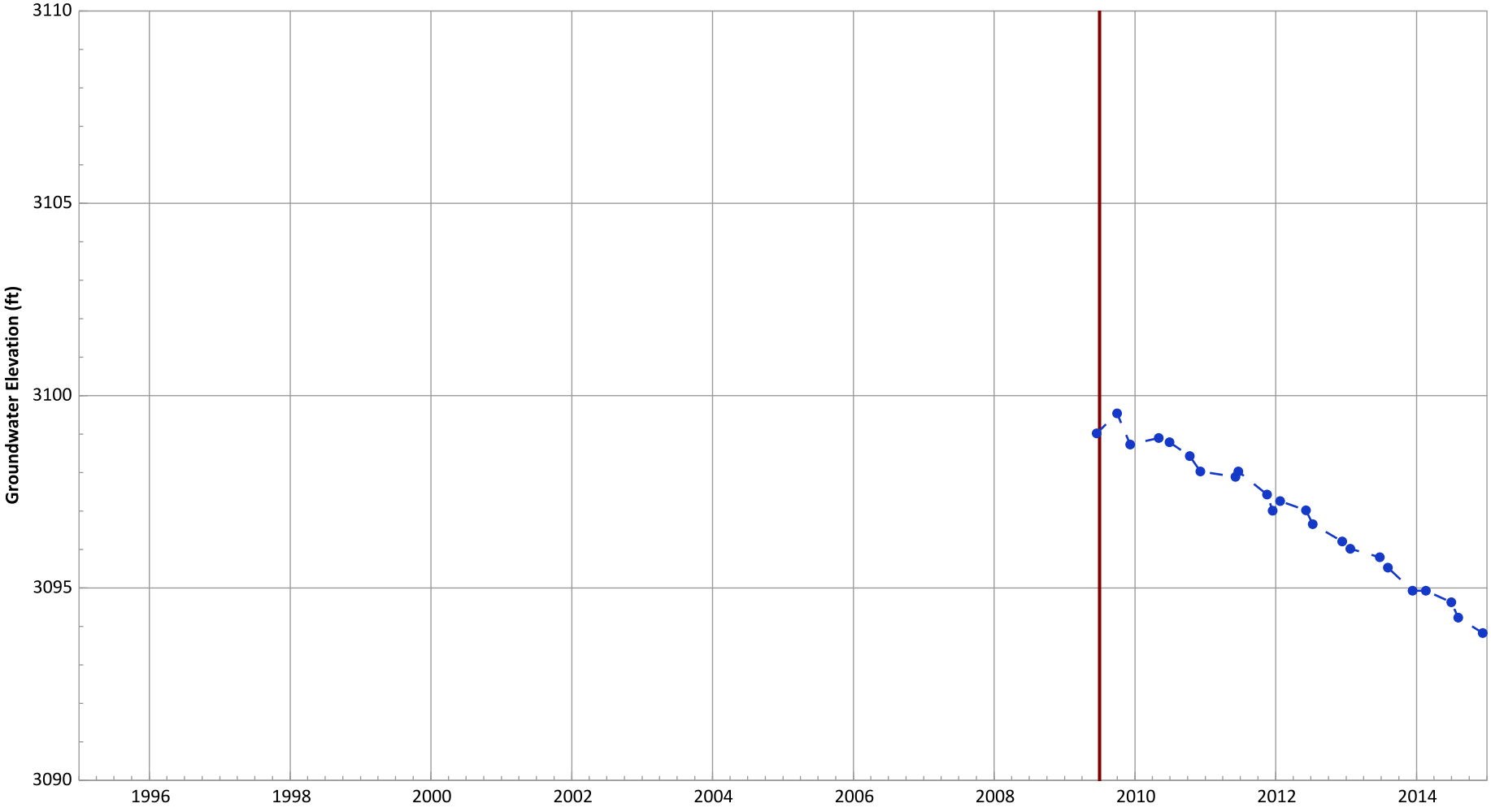
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.15 ft/yr
2012 - 2014 Data: Decreasing at 1.6 ft/yr

PTX06-1139 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

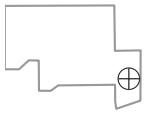


Notes:
1. Top of screen elevation is 3129.42 ft msl.
2. The bottom of screen elevation is 2979.42 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

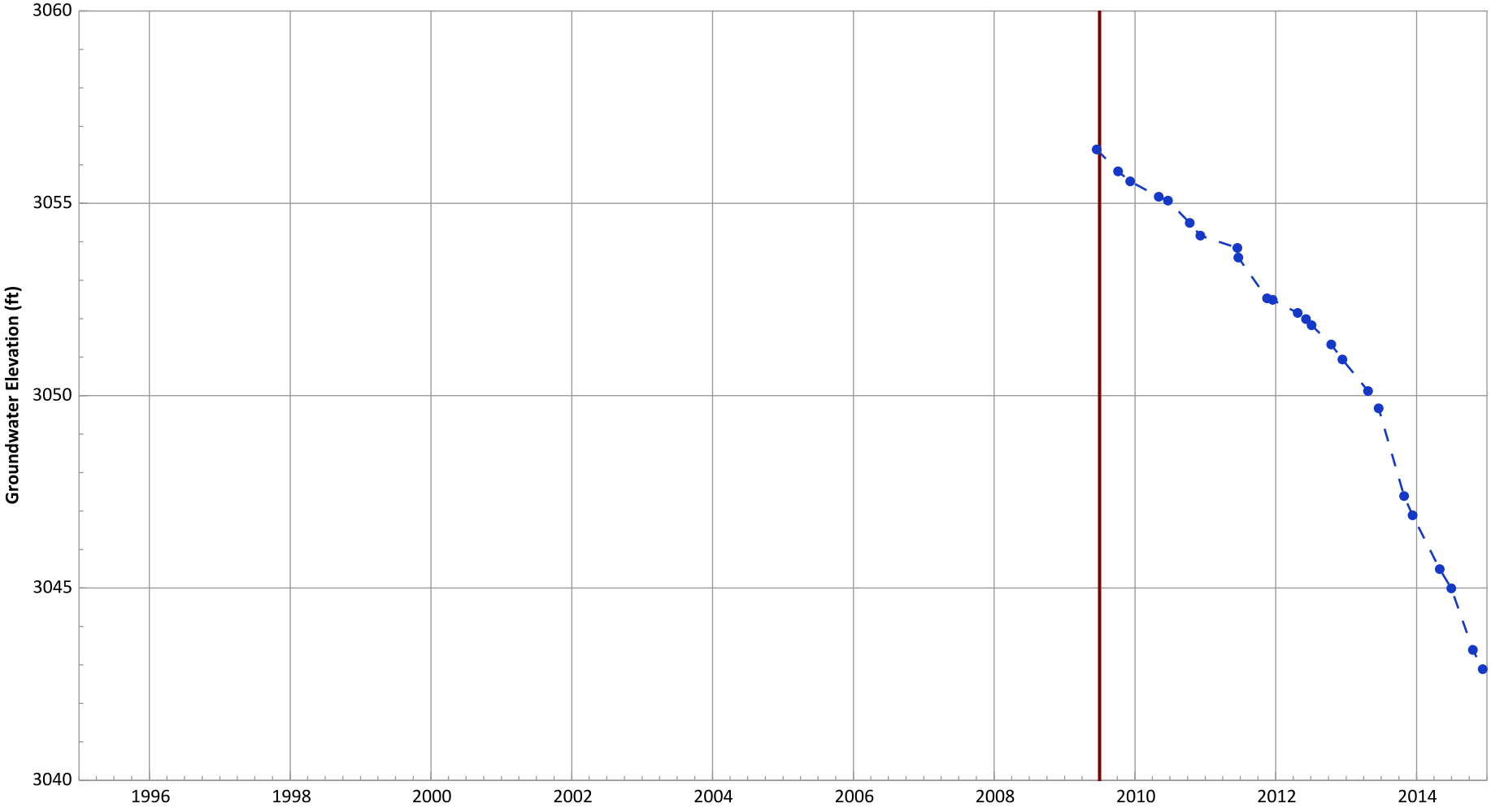
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.01 ft/yr
2012 - 2014 Data: Decreasing at 1.18 ft/yr

PTX06-1140 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

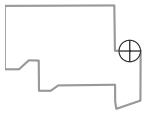


Notes:
1. Top of screen elevation is 3067.33 ft msl.
2. The bottom of screen elevation is 2847.33 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

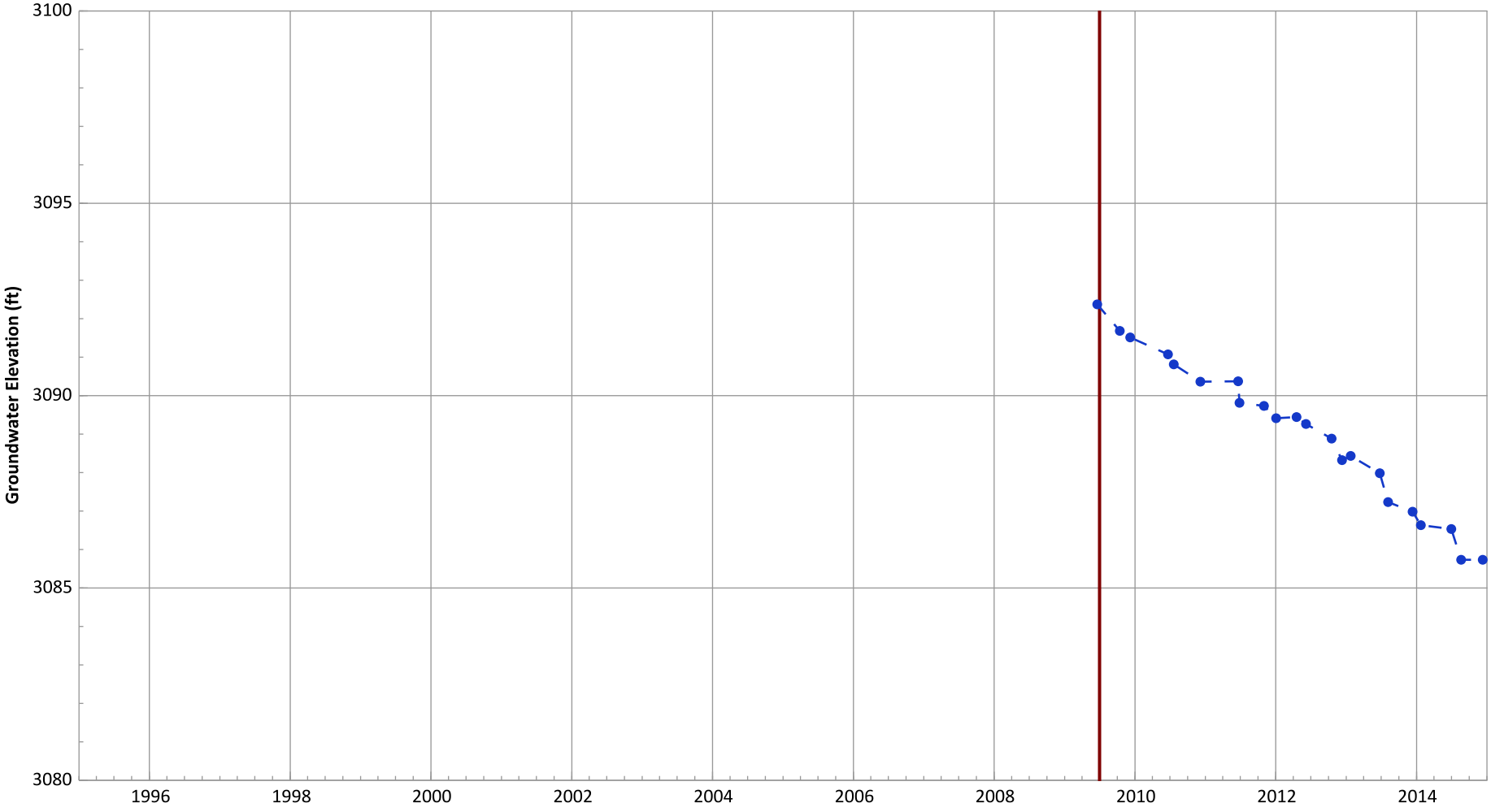
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 2.34 ft/yr
2012 - 2014 Data: Decreasing at 3.76 ft/yr

PTX06-1141 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

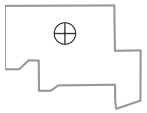


Notes:
1. Top of screen elevation is 3095.57 ft msl.
2. The bottom of screen elevation is 2885.57 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

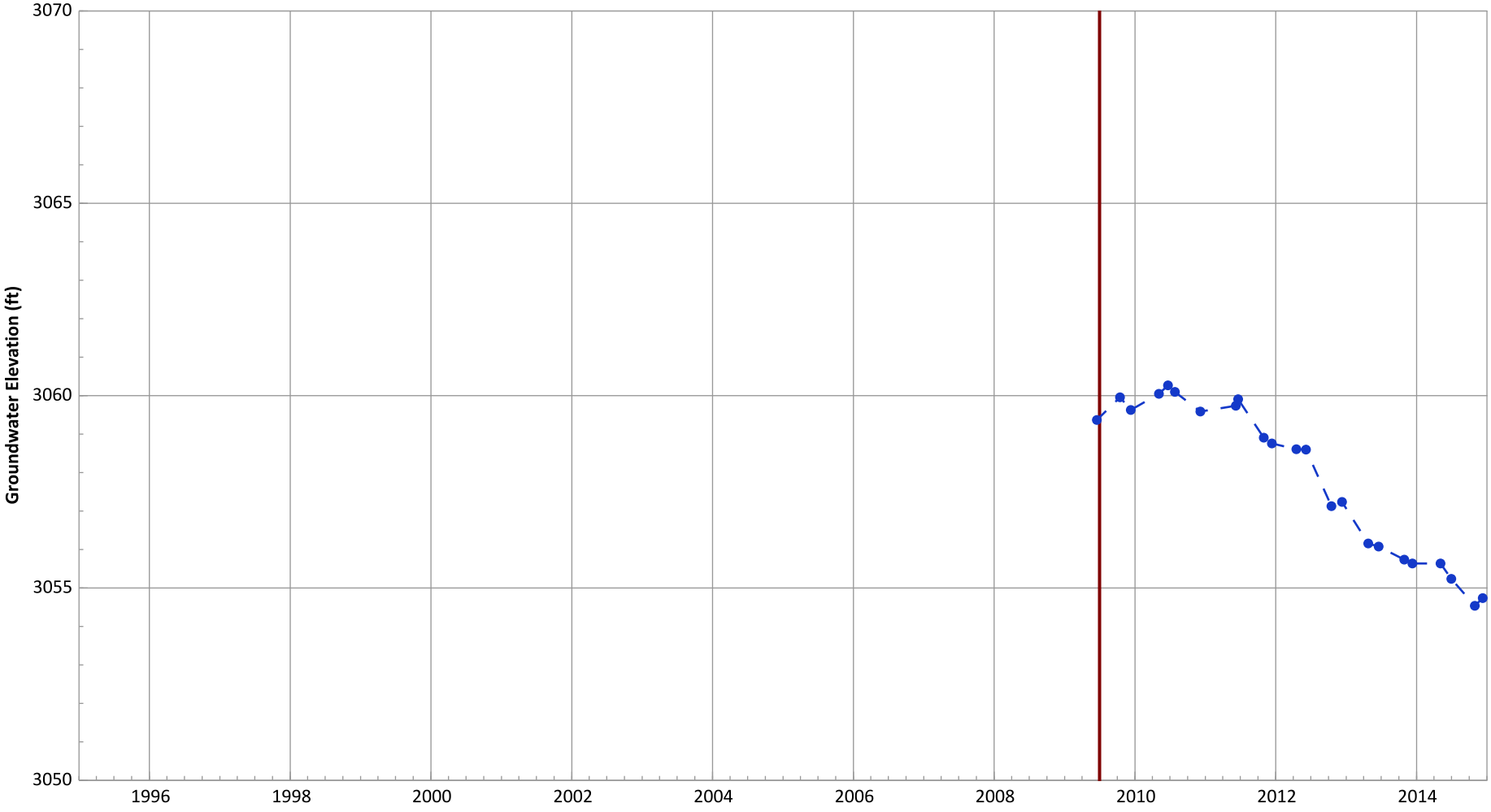
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.17 ft/yr
2012 - 2014 Data: Decreasing at 1.47 ft/yr

PTX06-1143 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

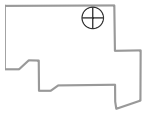


Notes:
1. Top of screen elevation is 3066.0 ft msl.
2. The bottom of screen elevation is 2766.0 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

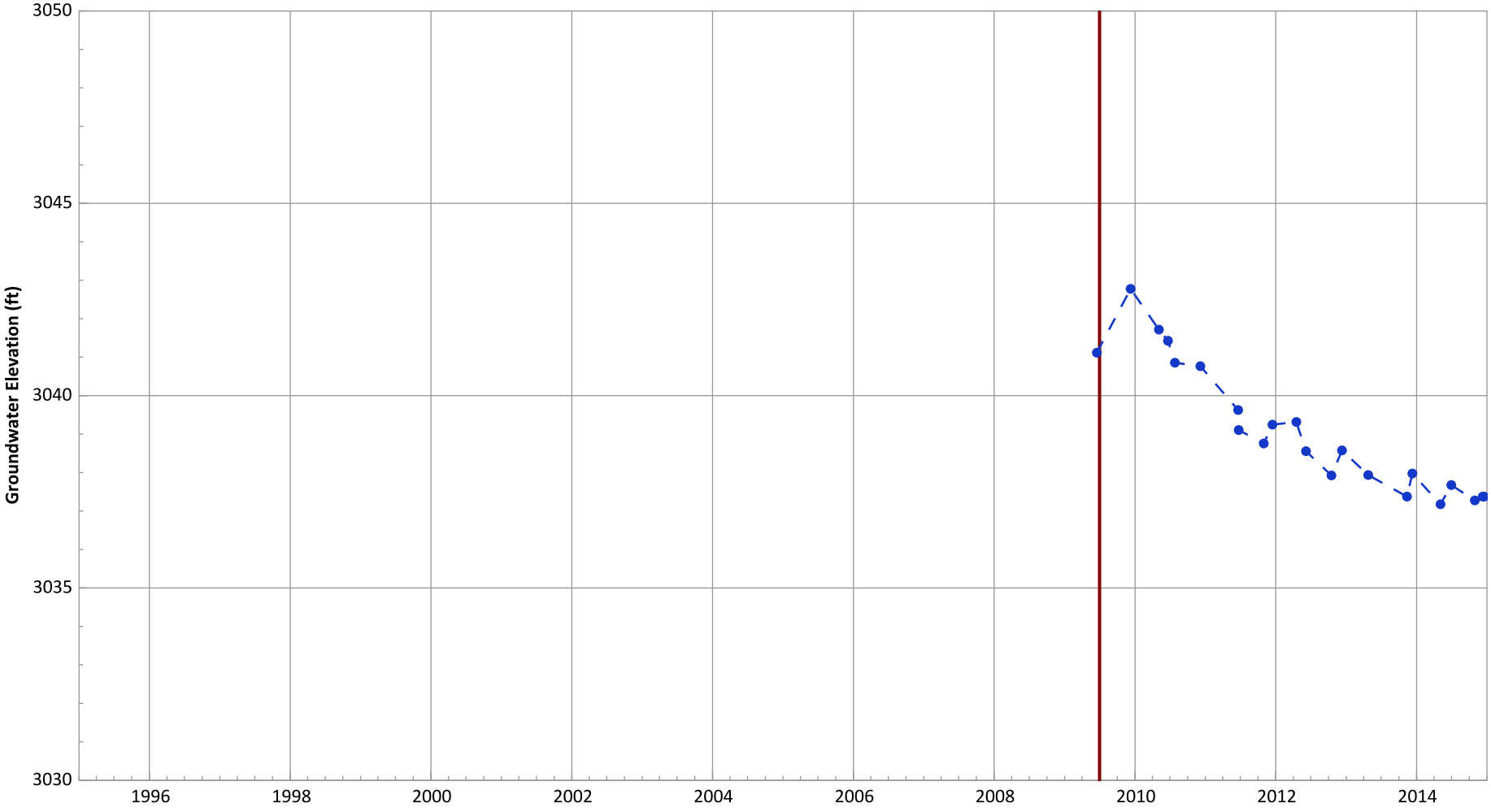
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.11 ft/yr
2012 - 2014 Data: Decreasing at 1.34 ft/yr

PTX06-1144 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

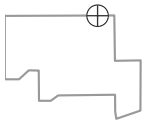


Notes:
1. Top of screen elevation is 3041.34 ft msl.
2. The bottom of screen elevation is 2726.34 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

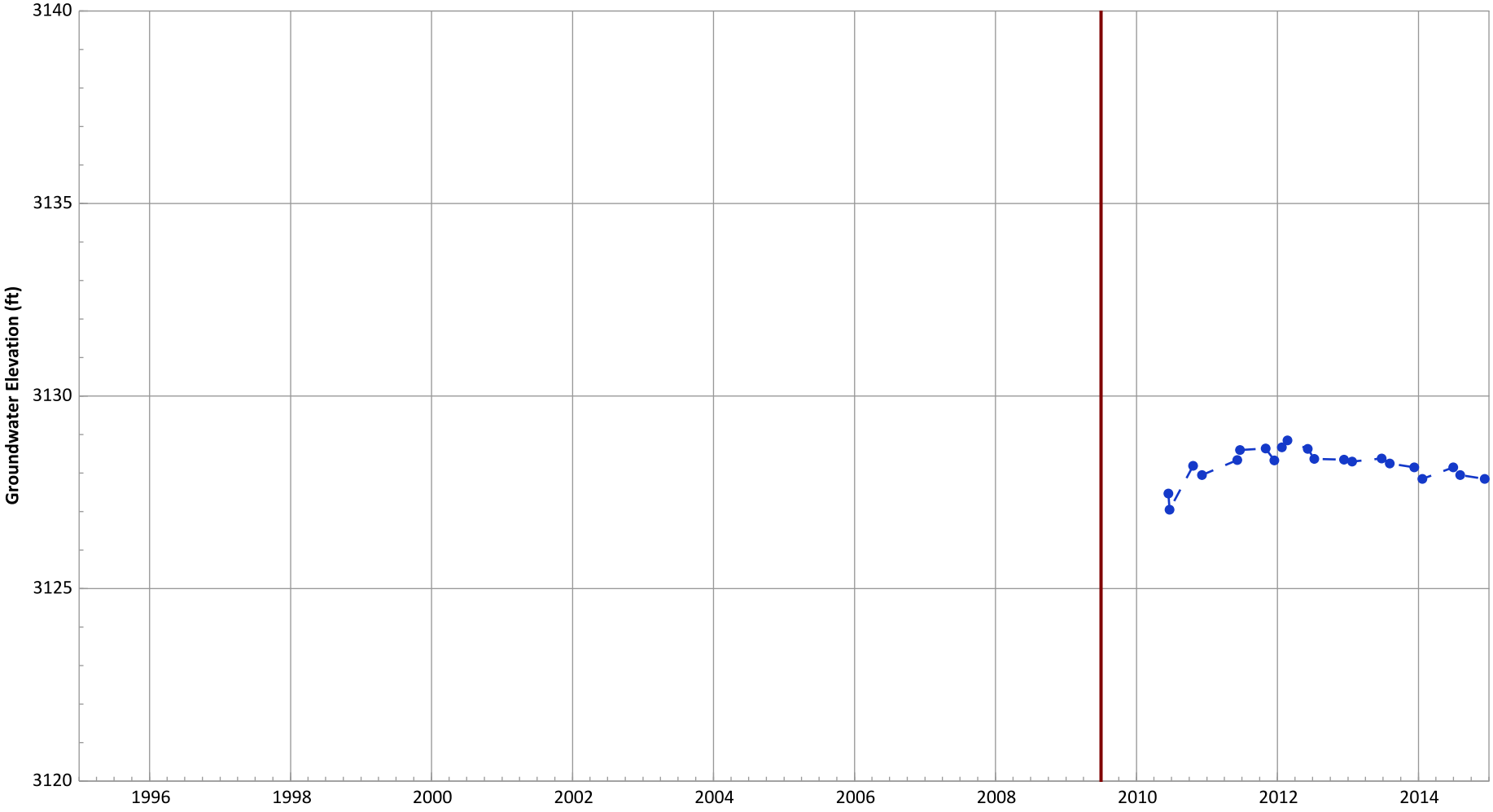
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.9 ft/yr
2012 - 2014 Data: Decreasing at 0.46 ft/yr

PTX06-1157 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant

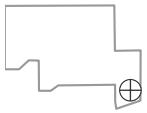


Notes:
1. Top of screen elevation is 3143.59 ft msl.
2. The bottom of screen elevation is 2998.59 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

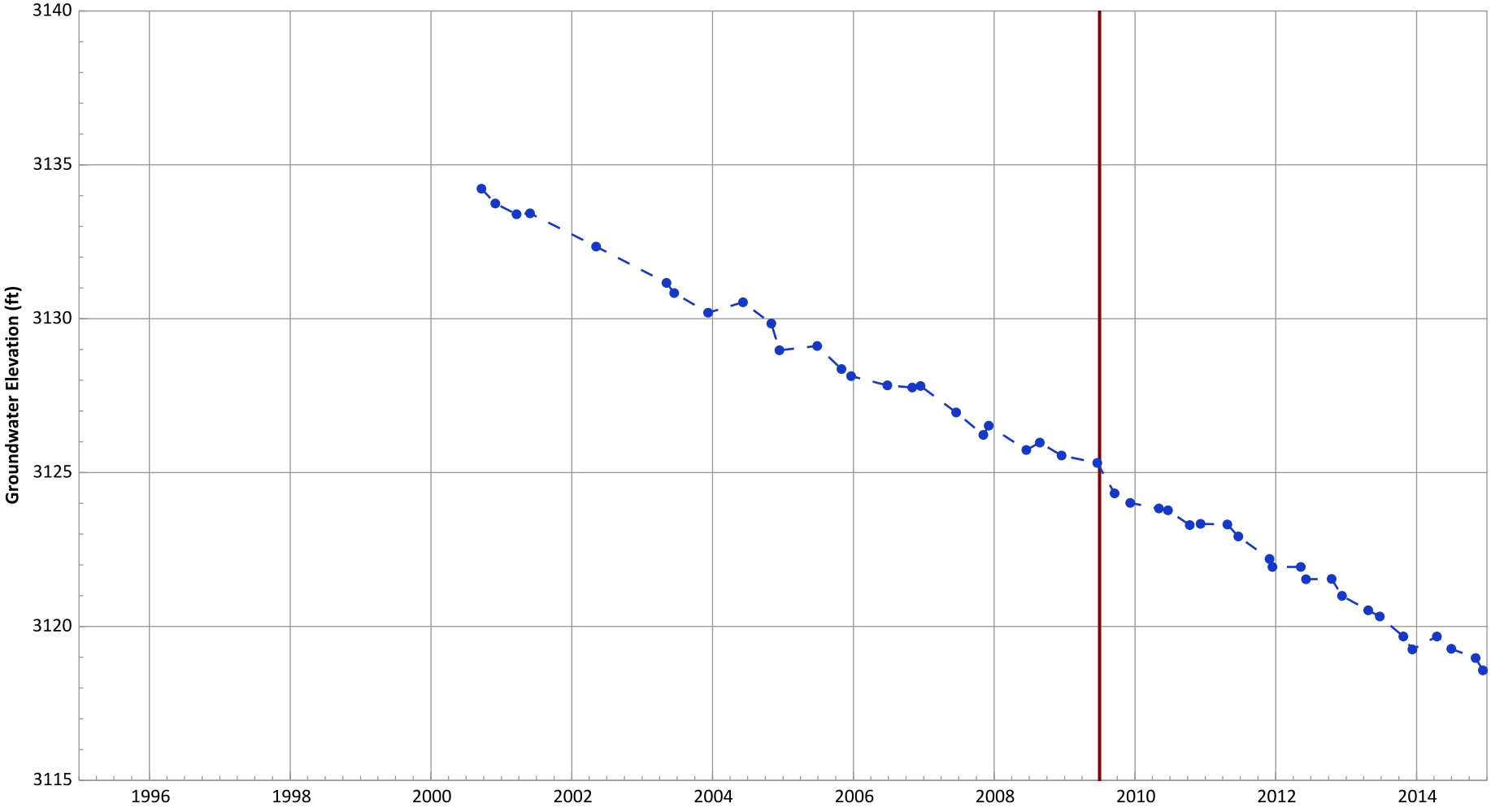
Groundwater Elevation
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: No Trend
2012 - 2014 Data: Decreasing at 0.25 ft/yr

PTX07-1R01 Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



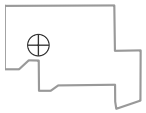
Notes:
1. Top of screen elevation is 3164.47 ft msl.
2. The bottom of screen elevation is 2974.47 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

Groundwater Elevation

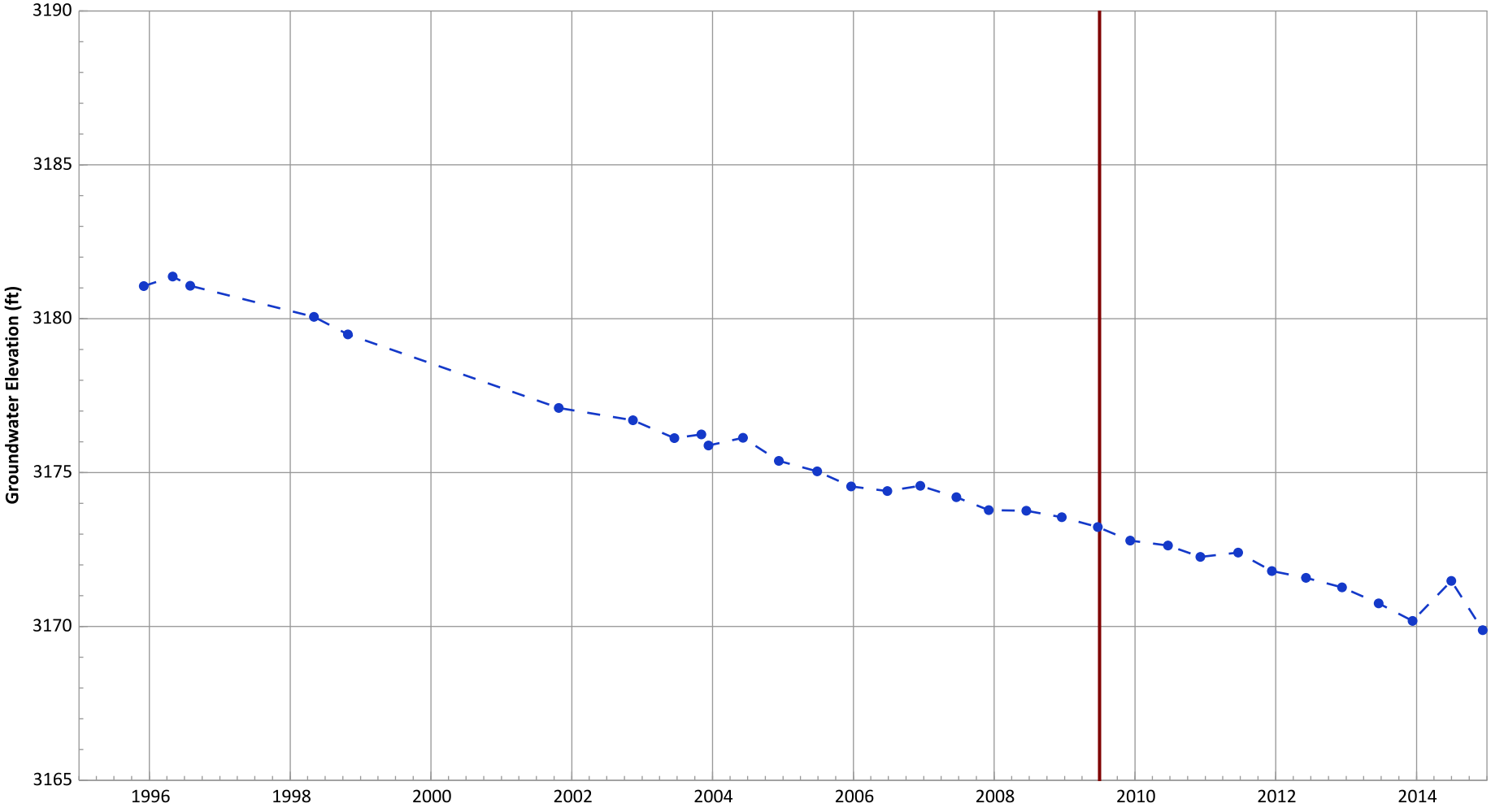
Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 1.07 ft/yr
2012 - 2014 Data: Decreasing at 1.18 ft/yr

PTX08-1011A Hydrograph in Ogallala Aquifer
USDOE/NNSA Pantex Plant



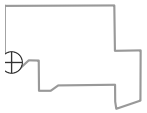
Notes:
1. Top of screen elevation is 3165.26 ft msl.
2. The bottom of screen elevation is 3135.26 ft msl.
3. A continous hydrograph was produced by linear interpolation between successive discrete measurements. Actual groundwater elevations between measurements may be different than shown.

Analysis Date: 02/10/2015

Groundwater Elevation

Start of Remedial Action

Well Location



Hydrograph Trend
(MAROS Linear Regression Method)
All Data: Decreasing at 0.58 ft/yr
2012 - 2014 Data: Decreasing at 0.47 ft/yr

Appendix F
Well Certifications and Completion Diagrams

U.S. Department of Energy/National Nuclear Security Administration – Pantex Plant
Amarillo, Texas

Certification of Well Construction
Industrial Solid Waste Registration No. 30459
Hazardous Waste Permit No. 50284
EPA Identification No. TX4890110527

Certification Statement:

This is to certify that the installation and plugging and abandonment of the following facility components authorized or required by Texas Commission On Environmental Quality HW-50284 Provision XI Compliance Plan has been completed, and that construction and plugging and abandonment of said components has been performed in accordance with and in compliance with the design and construction specifications of Provision XI Compliance Plan Attachment C of HW-50284:

- Installation of new Long-Term Monitoring Observation wells PTX06-1173, PTX06-1174, and PTX06-1175
- Installation of new in situ bioremediation injection wells PTX06-ISB087 through PTX06-ISB106
- Plugging and abandonment of parked monitoring well PTX06-1108

6/8/15

Tony Biggs

Date

Licensed Professional Geologist No. 2693
Environmental Projects
Consolidated Nuclear Security, LLC

STATE OF TEXAS
ANTHONY T. BIGGS
GEOLOGY
2693
LICENSED
PROFESSIONAL GEOSCIENTIST

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1173
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3540.9
Start Date:	9-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.0
End Date:	9-7-2014	**Method:**	ARCH	**Northing:**	3755312.4
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634197.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

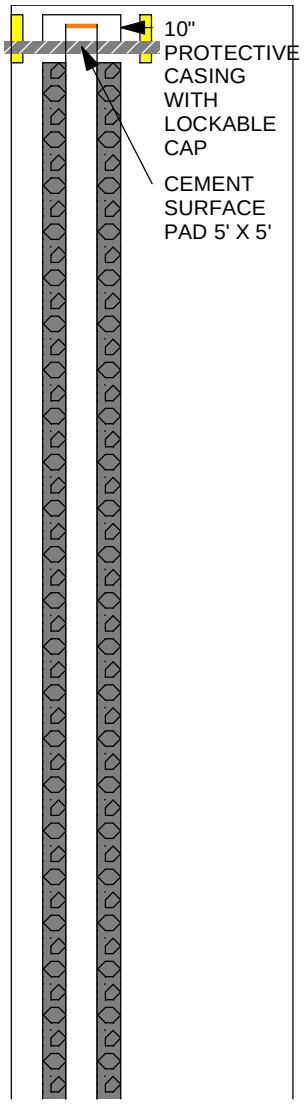
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
0	0-5	SILT: dark brownish red, 2.5 YR 5/4, dry, hard, topsoil.	ML
10	5-53	SILT: orangish brown, 5 YR 6/6, dry, hard, with trace sand vfg.	ML
20			
30			
40			
50	53-58	SILT: oangish brown, 2.5 YR 4/8, dry, stiff, with some subangular to subrounded, 1/4"-1/2" gravel.	ML
60	58-77	SILT: orangish red, 2.5 YR 4/8, damp, stiff, low plasticity.	ML
70			
80	77-83	GRAVELLY SILT: tannish white, 7.5YR 8/1, damp, low plasticity, gravel 1/8"-3/4" subangular to subrounded caliche.	ML
	83-86		SW
90	86-95	GRAVELLY SAND: tan, 5 YR 7/3, dry, vfg, gravel 1/8"-1/2" subrounded to rounded, caliche based, poorly sorted.	ML
100	95-101		ML
110	101-115	SILT: tan, 5 YR 7/3, dry, low plasticity, with some caliche gravel 1/4"-3/4".	SM

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 379052

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1173
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3540.9
Start Date:	9-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.0
End Date:	9-7-2014	**Method:**	ARCH	**Northing:**	3755312.4
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634197.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

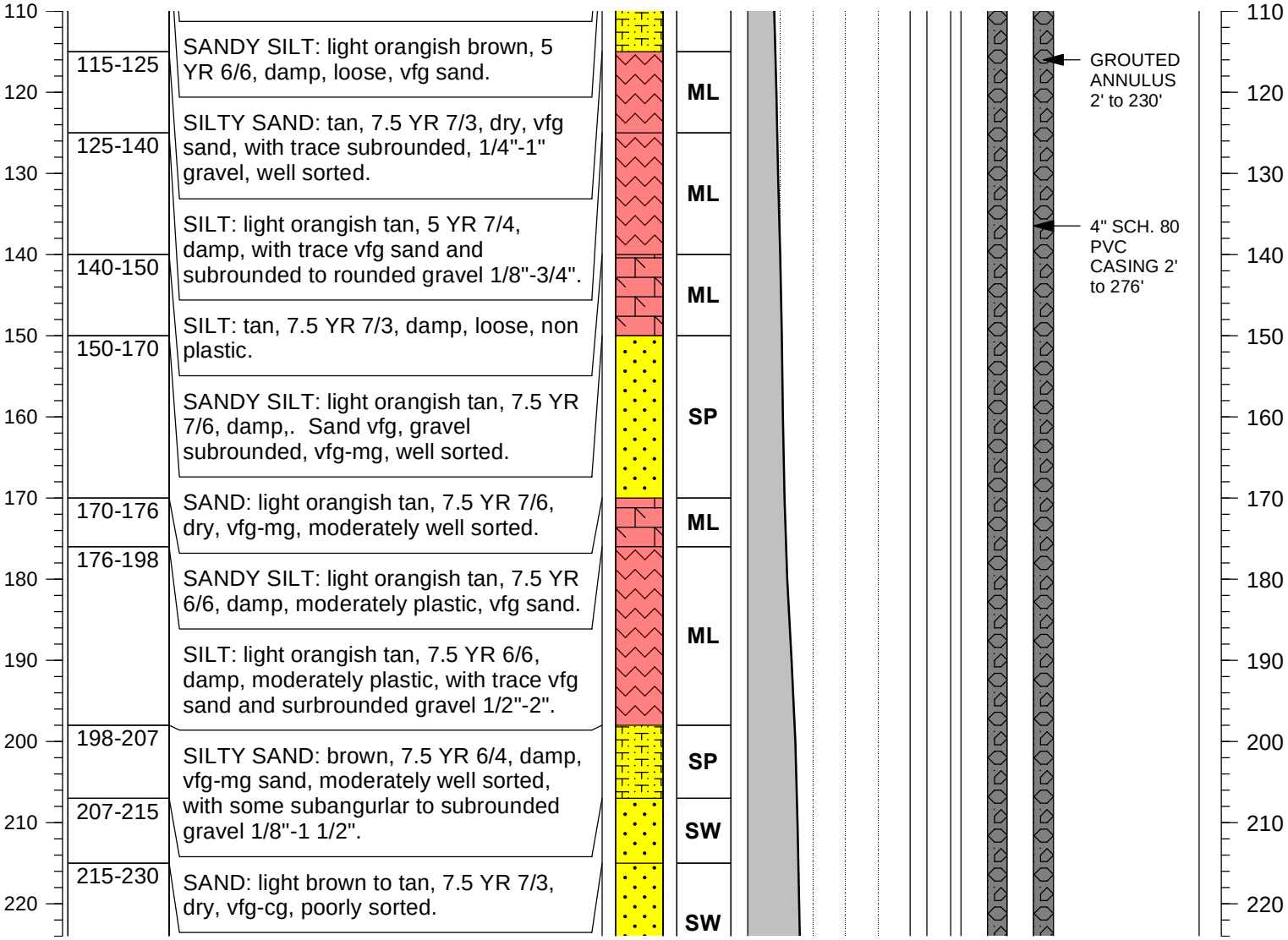
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	115-125	SANDY SILT: light orangish brown, 5 YR 6/6, damp, loose, vfg sand.	ML
	125-140	SILTY SAND: tan, 7.5 YR 7/3, dry, vfg sand, with trace subrounded, 1/4"-1" gravel, well sorted.	ML
	140-150	SILT: light orangish tan, 5 YR 7/4, damp, with trace vfg sand and subrounded to rounded gravel 1/8"-3/4".	ML
	150-170	SILT: tan, 7.5 YR 7/3, damp, loose, non plastic.	SP
		SANDY SILT: light orangish tan, 7.5 YR 7/6, damp,. Sand vfg, gravel subrounded, vfg-mg, well sorted.	
	170-176	SAND: light orangish tan, 7.5 YR 7/6, dry, vfg-mg, moderately well sorted.	ML
	176-198	SANDY SILT: light orangish tan, 7.5 YR 6/6, damp, moderately plastic, vfg sand.	ML
		SILT: light orangish tan, 7.5 YR 6/6, damp, moderately plastic, with trace vfg sand and surbrounded gravel 1/2"-2".	
	198-207	SILTY SAND: brown, 7.5 YR 6/4, damp, vfg-mg sand, moderately well sorted, with some subangurlar to subrounded gravel 1/8"-1 1/2".	SP
	207-215		SW
	215-230	SAND: light brown to tan, 7.5 YR 7/3, dry, vfg-cg, poorly sorted.	SW

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 379052

Boring and Well Log

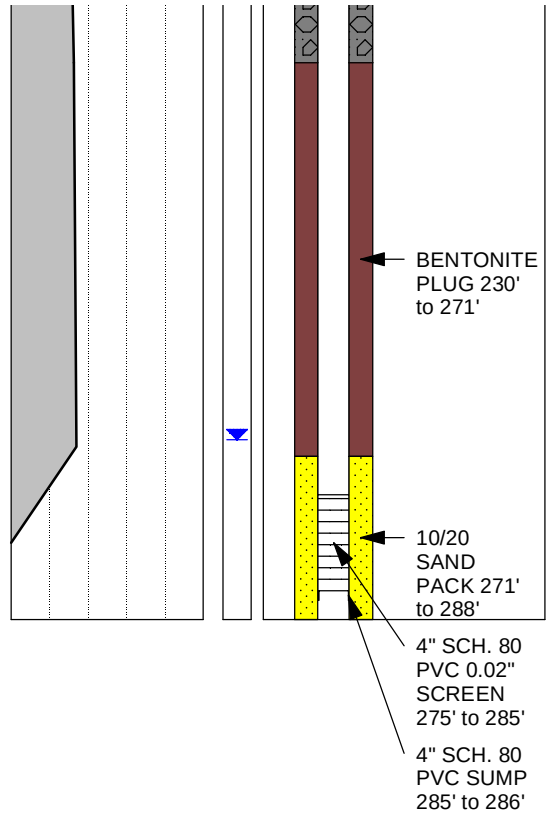
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1173
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3540.9
Start Date:	9-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.0
End Date:	9-7-2014	**Method:**	ARCH	**Northing:**	3755312.4
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634197.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	230-238	SAND: orangish brown, 7.5 YR 5/6, damp, vfg-cg sand, poorly sorted, with some silt and trace subrounded to rounded gravel 1/4"-3/4".	SW
240	238-242	GRAVELLY SAND: orangish brown, 7.5 YR 6/6, dry, mg-cg sand, gravel 1/4"-1" subrounded to rounded, poorly sorted	GW
	242-248		SW
250	248-285	GRAVEL: brownish grey, 7.5 YR 6/2, dry, gravel 1/4"-1 1/2", subangular to subrounded, with some fg-cg, sand, poorly sorted.	SP
260			
270		GRAVELLY SAND: orangish brown, 7.5 YR 7/3, dry, sand fg-cg, gravel 1/4"-2" angular to subrounded, poorly sorted.	
280	285-288	SAND: light orangish tan, 7.5 YR 7/3, damp to saturated, vfg, well sorted, with trace subrounded gravel to 2".	ML
		SILT: light brownish pink, 5 YR 7/4, moderately stiff. Top of FGZ.	

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 230, 240, 250, 260, 270, 280

State Well Report No.: 379052

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1174
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.1
Start Date:	6-18-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.3
End Date:	6-20-2014	**Method:**	ARCH	**Northing:**	3755489.1
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633904.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-74	SILT: light pink 5 YR 6/4, damp, hard.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50								50
60								60
70								70
80	74-85	GRAVELLY SAND: tan to white, 5 YR 8/1, hard, vfg-cg, poorly sorted.		SW				80
90	85-110	GRAVELLY SILT: tan, 7.5 YR 8/4, gravel is caliche, 1/16"-1/2", subrounded to well rounded.		CL				90
100								100
110								110

State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1174
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.1
Start Date:	6-18-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.3
End Date:	6-20-2014	**Method:**	ARCH	**Northing:**	3755489.1
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633904.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

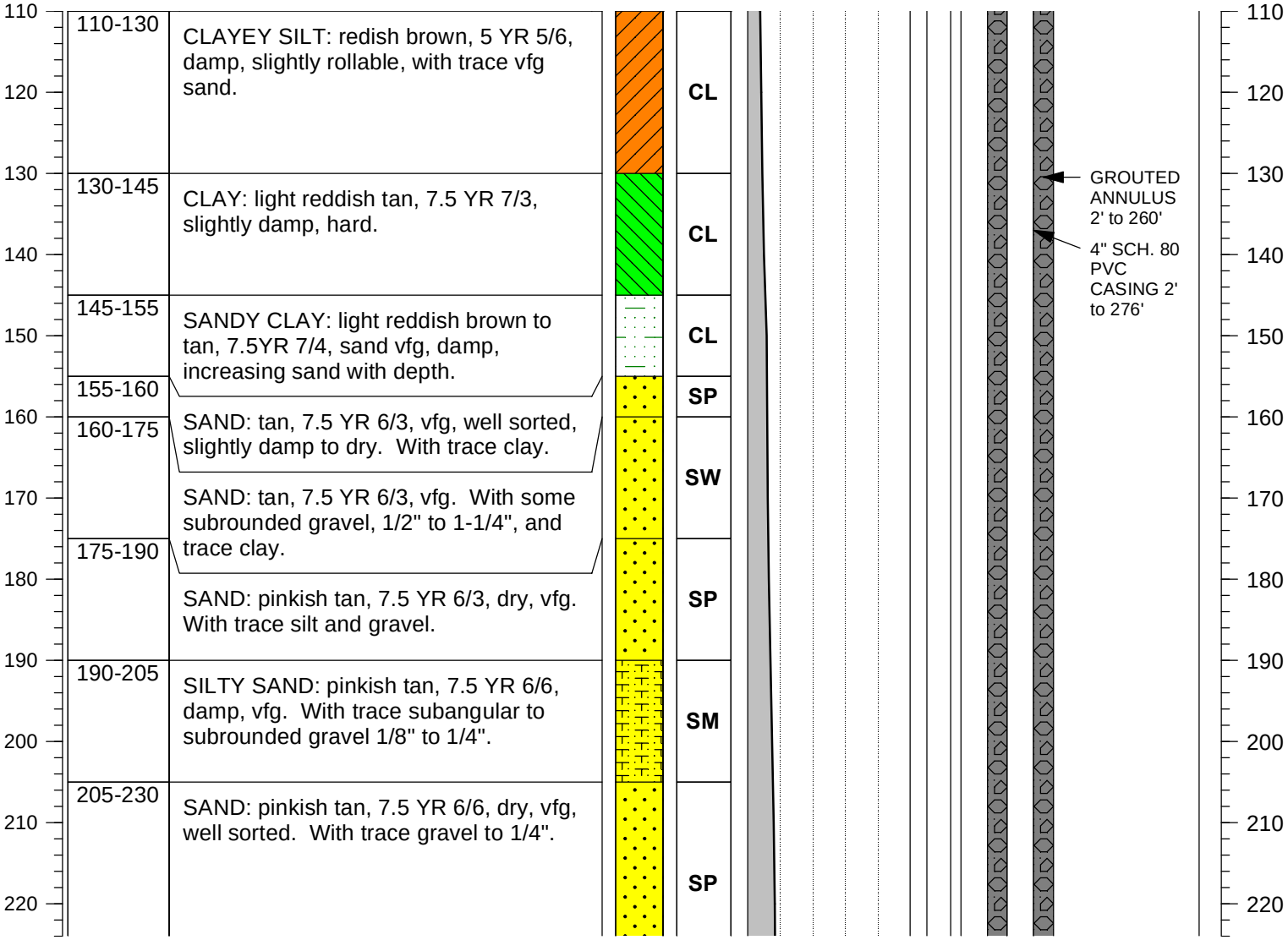
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	110-130	CLAYEY SILT: redish brown, 5 YR 5/6, damp, slightly rollable, with trace vfg sand.	CL
	130-145	CLAY: light reddish tan, 7.5 YR 7/3, slightly damp, hard.	CL
	145-155	SANDY CLAY: light reddish brown to tan, 7.5YR 7/4, sand vfg, damp, increasing sand with depth.	CL
	155-160	SAND: tan, 7.5 YR 6/3, vfg, well sorted, slightly damp to dry. With trace clay.	SP
	160-175	SAND: tan, 7.5 YR 6/3, vfg. With some subrounded gravel, 1/2" to 1-1/4", and trace clay.	SW
	175-190	SAND: pinkish tan, 7.5 YR 6/3, dry, vfg. With trace silt and gravel.	SP
	190-205	SILTY SAND: pinkish tan, 7.5 YR 6/6, damp, vfg. With trace subangular to subrounded gravel 1/8" to 1/4".	SM
	205-230	SAND: pinkish tan, 7.5 YR 6/6, dry, vfg, well sorted. With trace gravel to 1/4".	SP

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1174
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.1
Start Date:	6-18-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.3
End Date:	6-20-2014	**Method:**	ARCH	**Northing:**	3755489.1
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633904.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

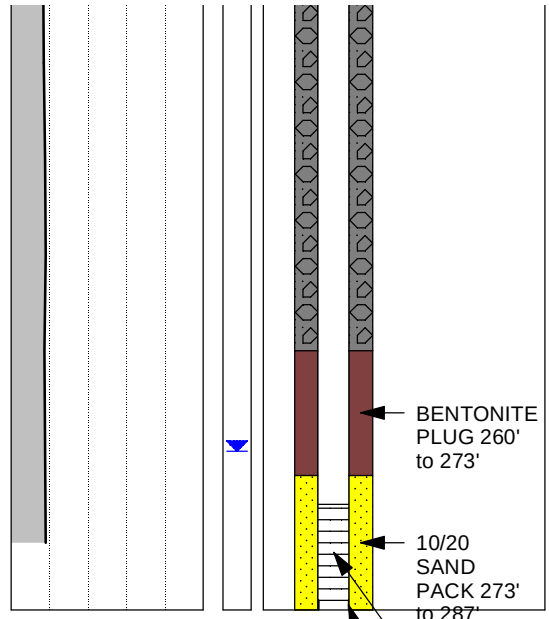
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	230-235	GRAVELLY SAND: tan, 10 YR 7/2, dry, vfg-fg. Gravel subangular to subrounded, 1/16" to 1/4", poorly sorted.	SW
	235-238	GRAVEL: tan, 10 YR 7/2, dry, subangular, 1/4" to 1".	GW
240	238-250	GRAVELLY SAND: tan, 10 YR 7/2, dry, vfg to fg, poorly sorted. Gravel subangular to subrounded, 1/16" to 1/4".	SW
250	250-285	GRAVELLY SAND: tan, 10YR 6/4, fg, dry, poorly sorted. Gravel subrounded to subangular, 1/4" to 1". Sand becoming vfg and damp with depth. Becoming wet at 275' with decreasing gravel content and increasing sand grain size.	SW
260			
270			
280	285-286	SILT: pink, 5 YR 7/3, dry. Grading to sandy silt at 288' based on split spoon samples. Top of FGZ.	ML

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 230, 240, 250, 260, 270, 280

State Well Report No.:

Boring and Well Log

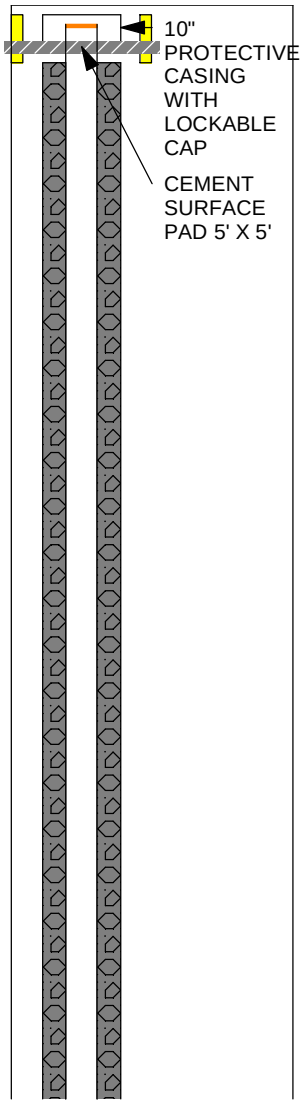
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1175
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	8-21-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.3
End Date:	8-22-2014	**Method:**	ARCH	**Northing:**	3755650.3
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633417.2
FGZ Depth:	286 ft.	**Logged by:**	T. Maloney	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
0	0-40	SILT: brown, 5 YR 3/2, dry, low plasticity.		ML
40	40-62	SILT: reddish orange, 2.5 YR 5/8, dry, low plasticity.		ML
60	62-71	CLAYEY SILT: orangish red, 2.5 YR 4/8, damp, moderate plasticity.		ML
70	71-78	SILTY CLAY: white, 2.5 YR 8/1, damp, low plasticity.		CL
80	78-85	SILT: light tan, 5 YR 6/4, damp, low plasticity, some caliche present.		ML
90	85-95	SANDY SILT: tan, 5 YR 6/4, damp, non-plastic.		ML
	95-99			ML
100	99-103	SILT: light grey, 5 YR 7/2, non-plastic, primarily caliche.		SP
	103-105			SM
	105-120			
110				

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.:

Boring and Well Log

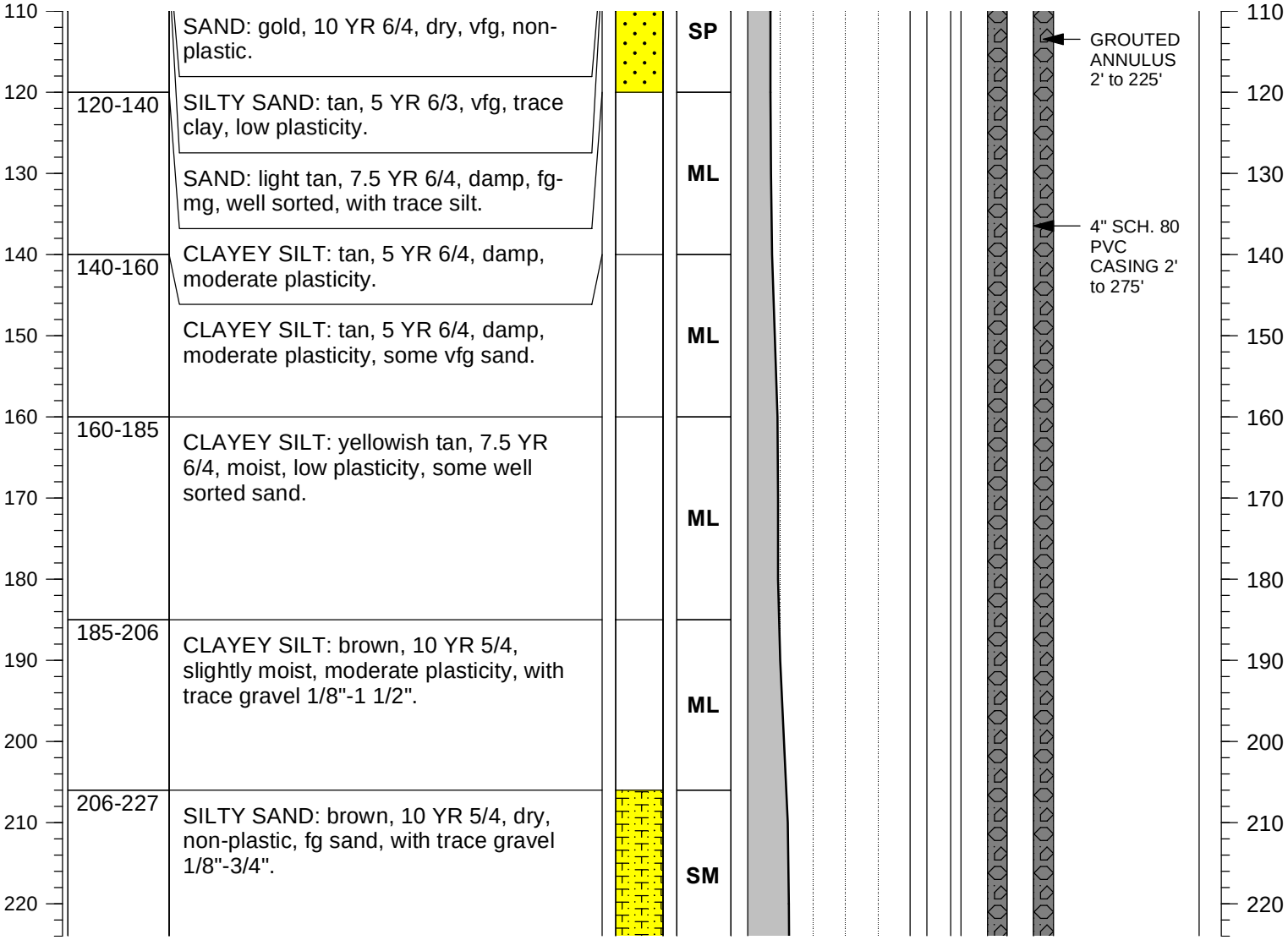
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1175
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	8-21-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.3
End Date:	8-22-2014	**Method:**	ARCH	**Northing:**	3755650.3
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633417.2
FGZ Depth:	286 ft.	**Logged by:**	T. Maloney	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
		SAND: gold, 10 YR 6/4, dry, vfg, non-plastic.		SP
	120-140	SILTY SAND: tan, 5 YR 6/3, vfg, trace clay, low plasticity.		ML
		SAND: light tan, 7.5 YR 6/4, damp, fg-mg, well sorted, with trace silt.		
	140-160	CLAYEY SILT: tan, 5 YR 6/4, damp, moderate plasticity.		ML
		CLAYEY SILT: tan, 5 YR 6/4, damp, moderate plasticity, some vfg sand.		
	160-185	CLAYEY SILT: yellowish tan, 7.5 YR 6/4, moist, low plasticity, some well sorted sand.		ML
	185-206	CLAYEY SILT: brown, 10 YR 5/4, slightly moist, moderate plasticity, with trace gravel 1/8"-1 1/2".		ML
	206-227	SILTY SAND: brown, 10 YR 5/4, dry, non-plastic, fg sand, with trace gravel 1/8"-3/4".		SM

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1175
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	8-21-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.3
End Date:	8-22-2014	**Method:**	ARCH	**Northing:**	3755650.3
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633417.2
FGZ Depth:	286 ft.	**Logged by:**	T. Maloney	**Note:**	New Monitor Well

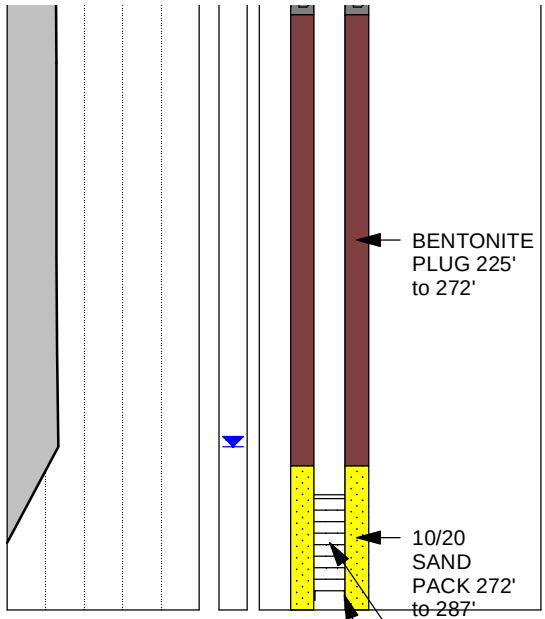
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	227-247	GRAVEL: grey, 10 YR 6/2, dry, 1/8"-1". With some silt and trace sand, non-plastic.	GW
240			
250	247-259	SANDY GRAVEL: brown, 10 YR 5/4, dry, 1/8"-3/4", sand fg-cg, non-plastic, poorly sorted.	GW
260	259-269	SANDY SILT: tan, 2.5 YR 6/4, moist, low plasticity, moldable, sand fg, with trace gravel	ML
270	269-275		SM
280	275-286	SILTY SAND: tan, 2.5 YR 6/4, saturated, fg, moderate plasticity, with trace gravel.	SW
	286-287	SAND: tan, 10 YR 5/6, saturated, fg-cg. With trace gravel and silt, poorly sorted.	CL
		SANDY CLAY: pink, 10 YR 6/4, high plasticity. Sand fg-cg. With trace silt and gravel. Top of FGZ.	

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 230, 240, 250, 260, 270, 280

State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB087
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-15-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.6
End Date:	7-24-2014	**Method:**	Mud Rotary	**Northing:**	3755523.1
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634360.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-25	SILT: reddish yellow, 7.5 YR 6/4, with some clay, moderately sorted, high plasticity. Trace caliche nodules above 8'.		CL			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
	25-30	SILT: strong brown, 7.5YR 5/6, moderately sorted, low plasticity, compressible.		ML				
30	30-50	SILTY SAND: brown, 7.5 YR 4/4, moderately sorted, low plasticity, compressible.		SM				30
40								40
50	50-77	SILT: reddish brown, 5 YR 4/4,with some fg-mg sand, moderately sorted, low plasticity, compressible.		ML				50
60								60
70								70
80	77-87	SANDY SILT: pink, 7.5 YR 8/3, fg-mg sand, moderately sorted, caliche present.		ML				80
90	87-108	SANDY SILT: reddish yellow, 7.5 YR 7/6, fg sand, moderately sorted.		ML				90
100								100
110	108-132							110

State Well Report No.: **375735**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB087
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-15-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.6
End Date:	7-24-2014	**Method:**	Mud Rotary	**Northing:**	3755523.1
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634360.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/T. Aseltyne	**Note:**	New Injection Well

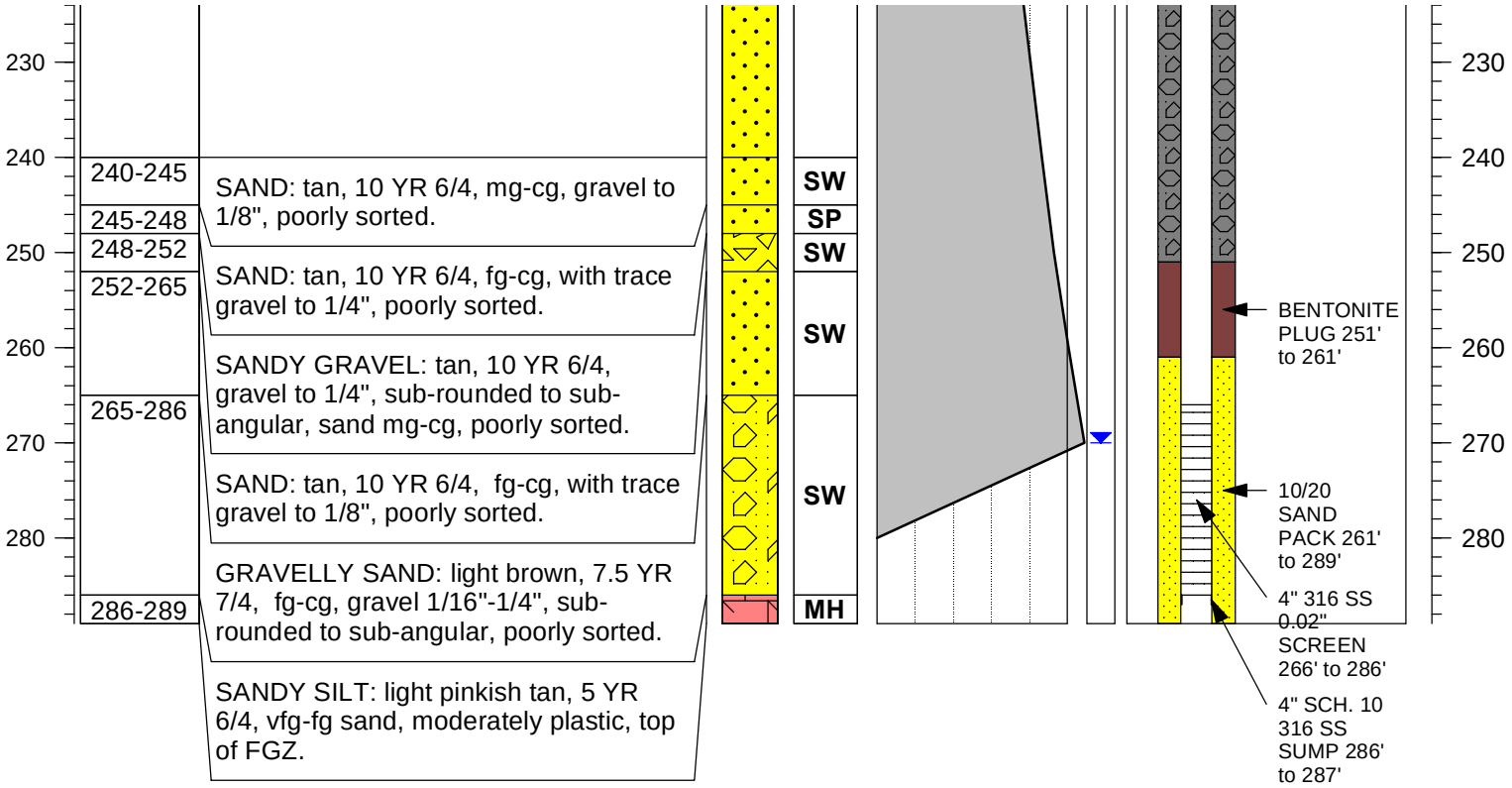
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–130		SAND: light brown, 7.5 YR 6/4, vfg-fg, well sorted.		SP			GROUTED ANNULUS 2' to 251'; 4" SCH.10 316 SS CASING 2' to 266'	110–130
130–190	132-190	SILTY SAND: reddish yellow, 7.5 YR 7/6, mg-fg, moderately sorted, low plasticity, slightly compressible.		SM				130–190
190–220	190-240	SAND: yellowish brown, 10 YR 5/6, fg-mg, well sorted.		SP				190–220

State Well Report No.: 375735

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB087
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-15-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.6
End Date:	7-24-2014	**Method:**	Mud Rotary	**Northing:**	3755523.1
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634360.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	240-245	SAND: tan, 10 YR 6/4, mg-cg, gravel to 1/8", poorly sorted.	SW
	245-248		SP
	248-252		SW
	252-265	SAND: tan, 10 YR 6/4, fg-cg, with trace gravel to 1/4", poorly sorted.	SW
	265-286	SANDY GRAVEL: tan, 10 YR 6/4, gravel to 1/4", sub-rounded to sub-angular, sand mg-cg, poorly sorted.	SW
		SAND: tan, 10 YR 6/4, fg-cg, with trace gravel to 1/8", poorly sorted.	
	286-289	GRAVELLY SAND: light brown, 7.5 YR 7/4, fg-cg, gravel 1/16"-1/4", sub-rounded to sub-angular, poorly sorted.	MH
		SANDY SILT: light pinkish tan, 5 YR 6/4, vfg-fg sand, moderately plastic, top of FGZ.	



State Well Report No.: 375735

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB088A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.8
Start Date:	9-18-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.0
End Date:	9-23-2014	**Method:**	Mud Rotary	**Northing:**	3755569.1
Total Depth:	292 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634266.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-72	SILT: orangish brown, 5 YR 6/6, dry, hard, with trace vfg sand.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50								50
60								60
70	72-75			CH				70
80	75-97	CLAY: white, 2.5 YR 8/1, soft, rollable, caliche. CLAYEY SILT: orangish brown, 5 YR 5/6, slightly rollable, trace vfg sand.		ML				80
90								90
100	97-105	CLAY: brown, 5 YR 5/3, hard, stiff.		CL				100
110	105-155	SAND: tan, 5 YR 6/4, vfg, well sorted,						110

State Well Report No.: **378963**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB088A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.8
Start Date:	9-18-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.0
End Date:	9-23-2014	**Method:**	Mud Rotary	**Northing:**	3755569.1
Total Depth:	292 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634266.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
110–150		trace silt.	SM
150–160	155-162	SAND: brown, 7.5 YR 5/4, vfg, with some gravel 1/4"-1/2", angular, poorly sorted.	SW
160–170	162-166		SP
170–190	166-190	SAND: medium brown, 5 YR 6/4, vfg-fg, well sorted.	ML
180–190		SANDY SILT: medium brown, 5 YR 6/4, sand vfg-fg, rollable, moderately well sorted.	
190–200	190-205	SILTY SAND: brown, 5 YR 6/4, vfg-fg, some caliche gravel, moderately well sorted.	SM
200–220	205-235	SAND: medium brown, 7.5 YR 6/4, fg-vfg, well sorted.	SP

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction:
- GROUTED ANNULUS 2' to 229'
- 4" SCH.10 316 SS CASING 2' to 265'

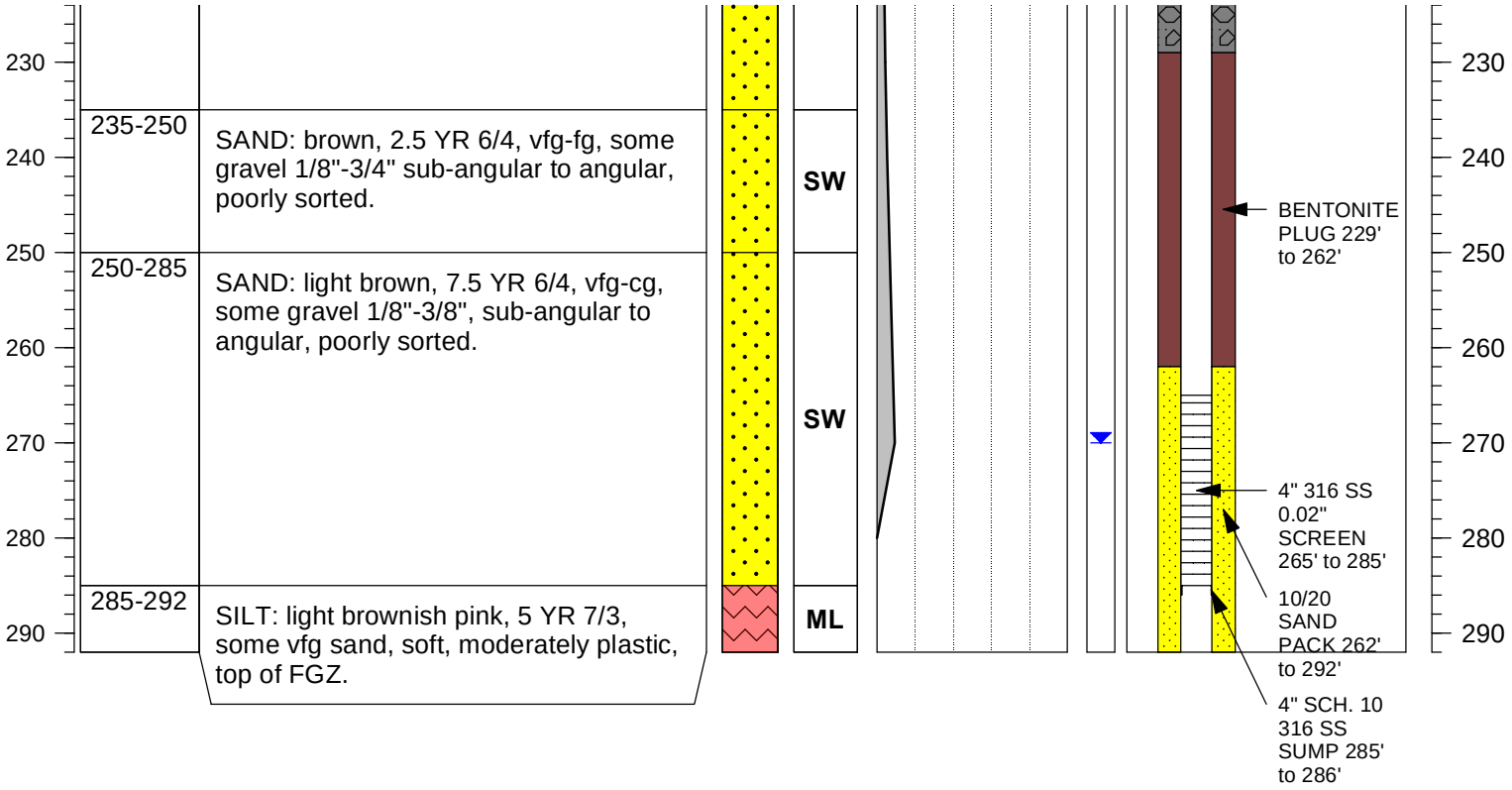
Depth (ft bgs): 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220

State Well Report No.: 378963

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB088A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.8
Start Date:	9-18-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.0
End Date:	9-23-2014	**Method:**	Mud Rotary	**Northing:**	3755569.1
Total Depth:	292 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634266.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	235-250	SAND: brown, 2.5 YR 6/4, vfg-fg, some gravel 1/8"-3/4" sub-angular to angular, poorly sorted.	SW
	250-285	SAND: light brown, 7.5 YR 6/4, vfg-cg, some gravel 1/8"-3/8", sub-angular to angular, poorly sorted.	SW
	285-292	SILT: light brownish pink, 5 YR 7/3, some vfg sand, soft, moderately plastic, top of FGZ.	ML



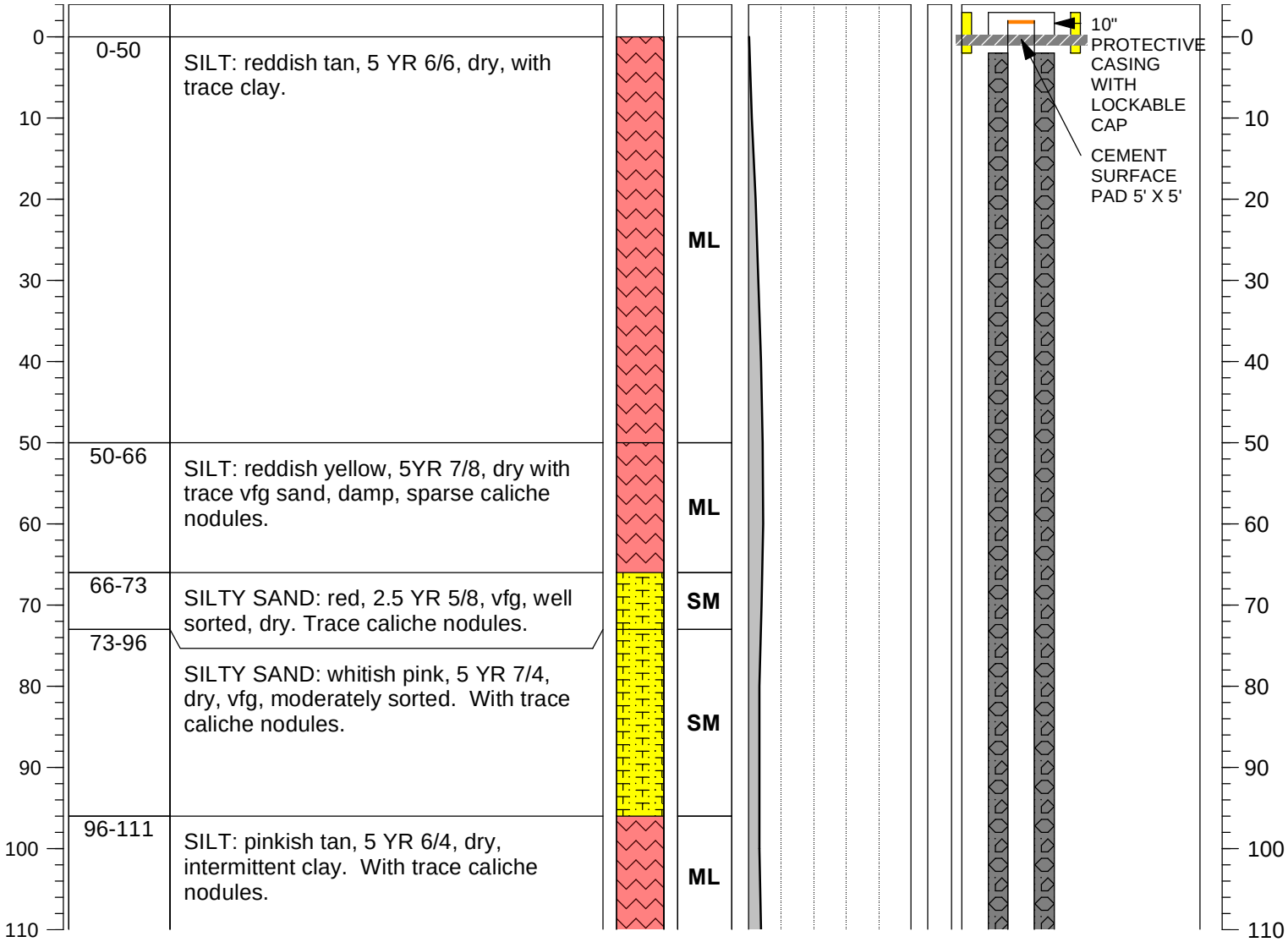
State Well Report No.: 378963

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB089
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.4
Start Date:	7-10-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3544.6
End Date:	7-12-2014	**Method:**	ARCH	**Northing:**	3755606.5
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634200.3
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-50	SILT: reddish tan, 5 YR 6/6, dry, with trace clay.	ML
	50-66	SILT: reddish yellow, 5YR 7/8, dry with trace vfg sand, damp, sparse caliche nodules.	ML
	66-73	SILTY SAND: red, 2.5 YR 5/8, vfg, well sorted, dry. Trace caliche nodules.	SM
	73-96	SILTY SAND: whitish pink, 5 YR 7/4, dry, vfg, moderately sorted. With trace caliche nodules.	SM
	96-111	SILT: pinkish tan, 5 YR 6/4, dry, intermittent clay. With trace caliche nodules.	ML

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)

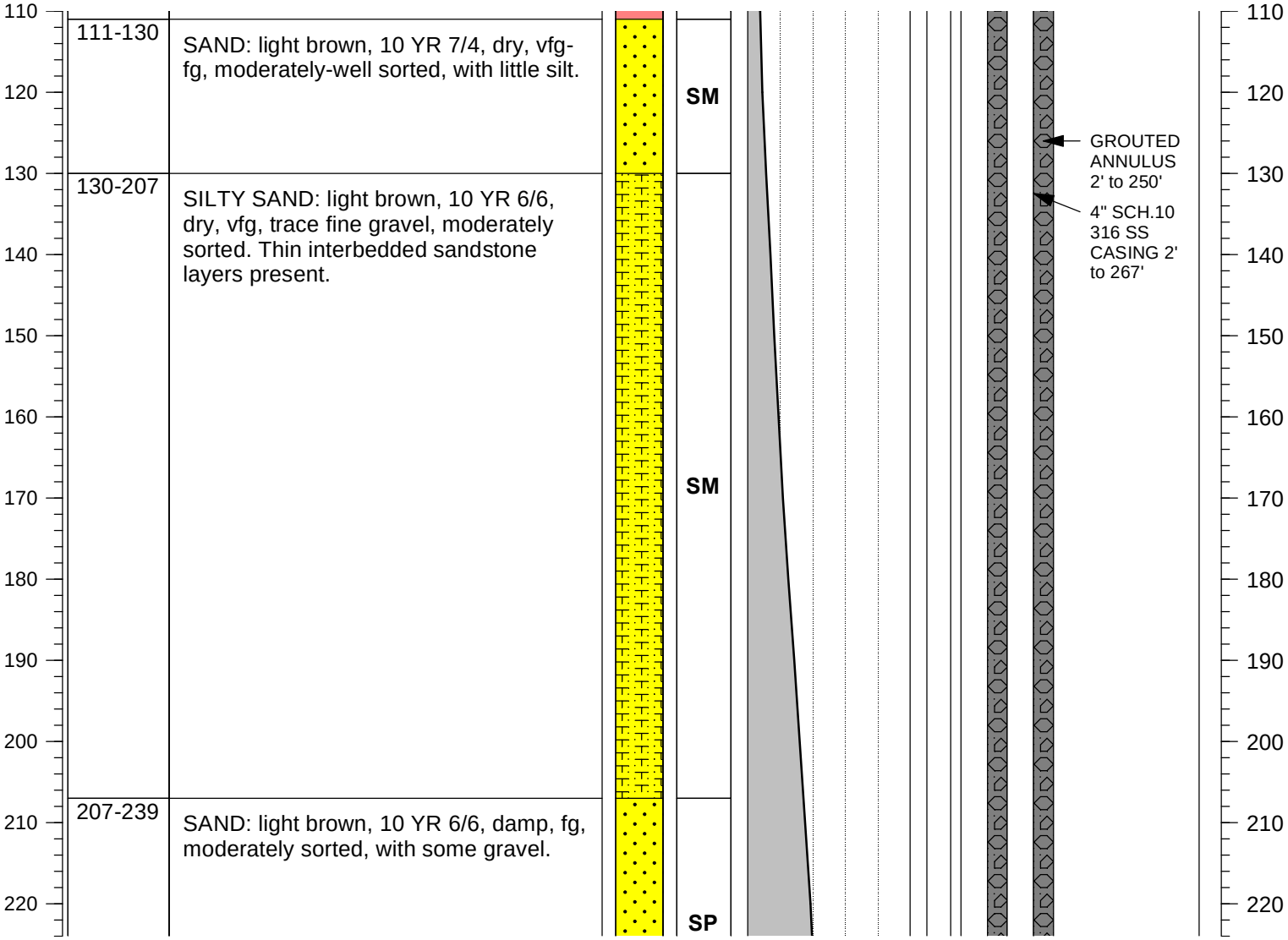


State Well Report No.: 375886

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB089
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.4
Start Date:	7-10-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3544.6
End Date:	7-12-2014	**Method:**	ARCH	**Northing:**	3755606.5
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634200.3
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
	111-130	SAND: light brown, 10 YR 7/4, dry, vfg-fg, moderately-well sorted, with little silt.		SM			GROUTED ANNULUS 2' to 250'	
	130-207	SILTY SAND: light brown, 10 YR 6/6, dry, vfg, trace fine gravel, moderately sorted. Thin interbedded sandstone layers present.		SM			4" SCH.10 316 SS CASING 2' to 267'	
	207-239	SAND: light brown, 10 YR 6/6, damp, fg, moderately sorted, with some gravel.		SP				



State Well Report No.: **375886**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB089
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.4
Start Date:	7-10-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3544.6
End Date:	7-12-2014	**Method:**	ARCH	**Northing:**	3755606.5
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634200.3
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230								230
240	239-251	SANDY GRAVEL: brown, 7.5 YR 5/6, dry, gravel fg, dand fg, poorly sorted.		GW				240
250	251-287	SAND: brown, 10 YR 5/4, damp, fg, well sorted.		SW			BENTONITE PLUG 250' to 263'; 10/20 SAND PACK 263' to 288'; 4" 316 SS 0.02" SCREEN 267 to 287'; 4" SCH. 10 316 SS SUMP 287' to 288'	250
260								260
270								270
280	287-288	SILT: pink, 2.5 YR 8/3, dry, very hard, top FGZ.		ML				280

State Well Report No.: **375886**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB090
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	7-7-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.1
End Date:	7-10-2014	**Method:**	ARCH	**Northing:**	3755650.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634117.3
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

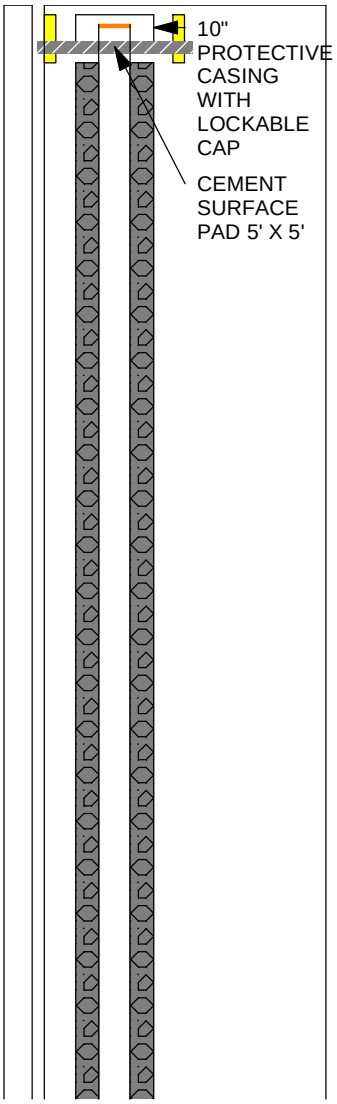
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-50	SILT: reddish yellow, 5 YR 6/6, dry, compressible, low plasticity. With trace clay.	ML
	50-63	SILT: reddish yellow, 5YR 7/8, dry, moderately sorted, with trace caliche nodules, slightly compressible.	ML
	63-72	SILT: red, 2.5 YR 5/8, with trace fine sand. Well sorted, dry, compressible.	ML
	72-88	SILT: pink, 5 YR 7/4, dry. With caliche nodules.	ML
	88-112	SANDY SILT: reddish yellow, 5 YR 7/8, dry, sand fg, moderately sorted, compressible.	ML

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **375887**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB090
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	7-7-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.1
End Date:	7-10-2014	**Method:**	ARCH	**Northing:**	3755650.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634117.3
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

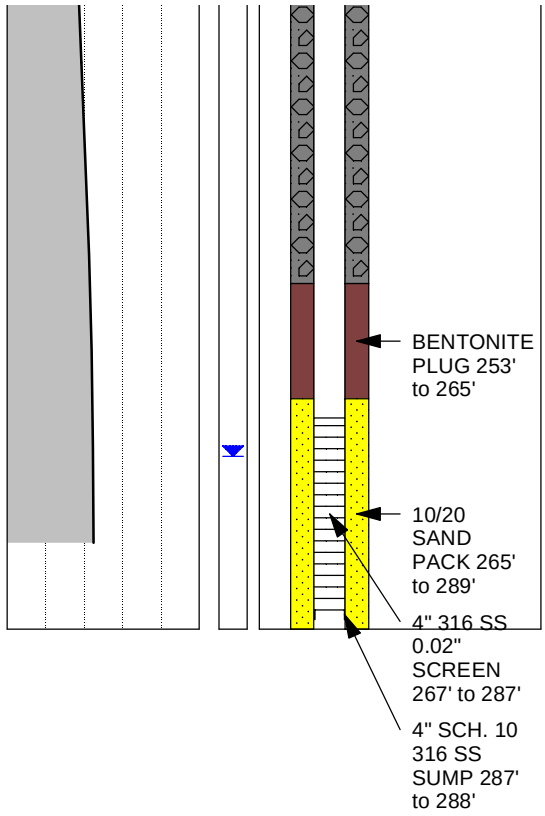
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110	112-118	SAND: light yellowish brown,10f YR 6/4, dry, fg-mg, with some silt, moderately sorted.		SM				110
120	118-148	SILT: reddish yellow, 7.5 YR 4/6, dry, well sorted, compressible.		ML			GROUTED ANNULUS 2' to 253'; 4" SCH.10 316 SS CASING 2' to 267'	120
130								130
140								140
150	148-204	SANDY SILT: yellowish brown, 10 YR 6/6, dry, fg-mg, moderatley sorted, slightly compressible.		SM				150
160								160
170								170
180								180
190								190
200								200
210	204-225	SAND: strong brown, 7.5 YR 5/6, fg-mg, dry, with some rounded to sub-rounded gravel.		SW				210
220								220

State Well Report No.: 375887

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB090
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	7-7-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.1
End Date:	7-10-2014	**Method:**	ARCH	**Northing:**	3755650.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634117.3
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
230	225-238	SAND: strong brown, 7.5 YR 5/6, dry, mg, decreasing gravel content.		SW
240	238-248	SANDY GRAVEL: strong brown, 7.5 YR 5/6, dry, gravel fg-cg, sub-rounded , sand mg, poorly sorted.		GW
250	248-287	SAND: strong brown, 7.5 YR 4/6, damp to saturated, mg, with trace gravel, moderately sorted, slightly compressible.		SP
280	287-289	SILT: pink, 2.5 YR 8/3, top of FGZ.		ML



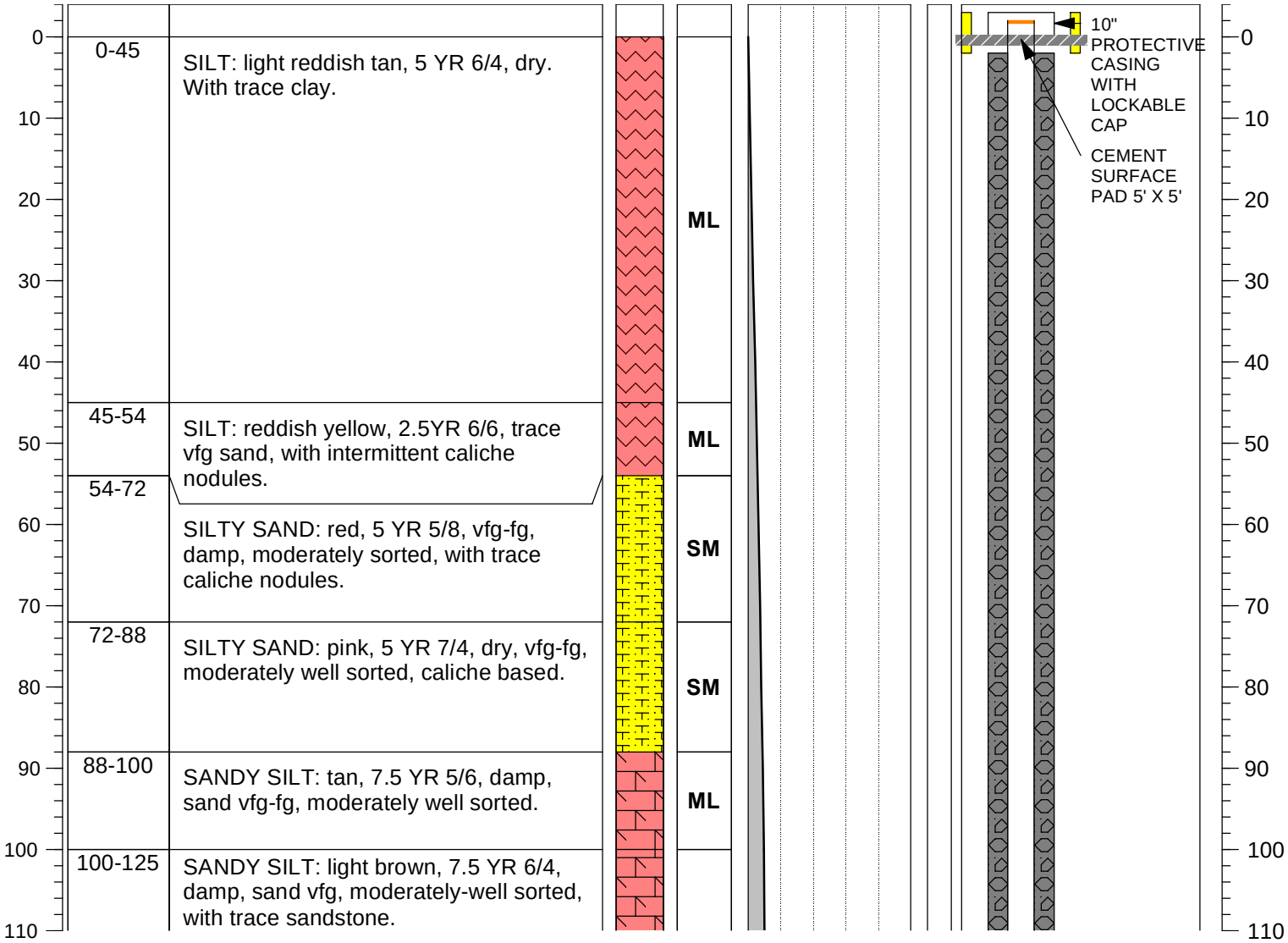
State Well Report No.: **375887**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB093
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.5
Start Date:	7-13-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.6
End Date:	7-16-2014	**Method:**	ARCH	**Northing:**	3755794.3
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633857.2
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-45	SILT: light reddish tan, 5 YR 6/4, dry. With trace clay.	ML
	45-54	SILT: reddish yellow, 2.5YR 6/6, trace vfg sand, with intermittent caliche nodules.	ML
	54-72	SILTY SAND: red, 5 YR 5/8, vfg-fg, damp, moderately sorted, with trace caliche nodules.	SM
	72-88	SILTY SAND: pink, 5 YR 7/4, dry, vfg-fg, moderately well sorted, caliche based.	SM
	88-100	SANDY SILT: tan, 7.5 YR 5/6, damp, sand vfg-fg, moderately well sorted.	ML
	100-125	SANDY SILT: light brown, 7.5 YR 6/4, damp, sand vfg, moderately-well sorted, with trace sandstone.	

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)



State Well Report No.: 375889

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB093
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.5
Start Date:	7-13-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.6
End Date:	7-16-2014	**Method:**	ARCH	**Northing:**	3755794.3
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633857.2
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

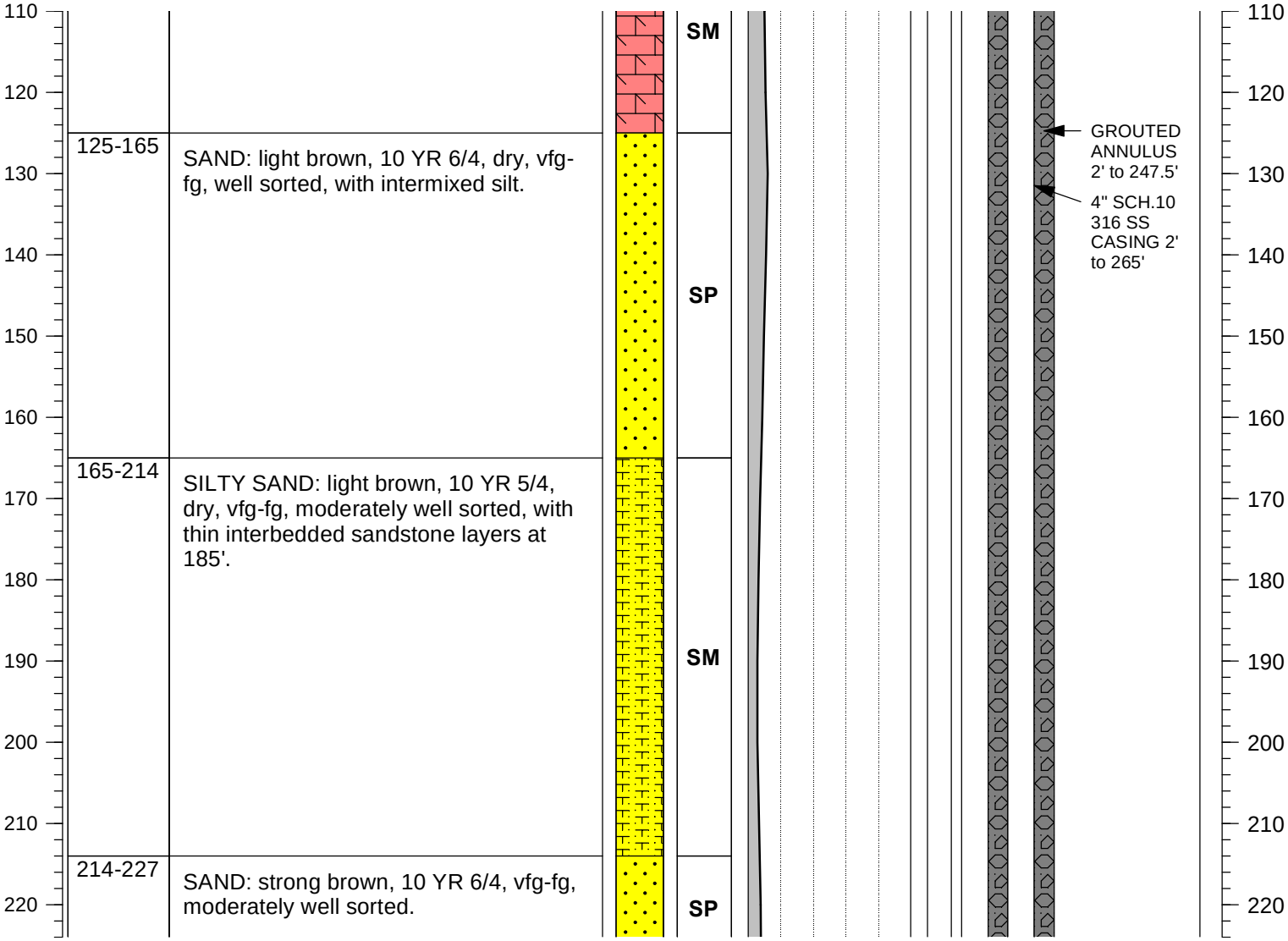
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
			SM
	125-165	SAND: light brown, 10 YR 6/4, dry, vfg-fg, well sorted, with intermixed silt.	SP
	165-214	SILTY SAND: light brown, 10 YR 5/4, dry, vfg-fg, moderately well sorted, with thin interbedded sandstone layers at 185'.	SM
	214-227	SAND: strong brown, 10 YR 6/4, vfg-fg, moderately well sorted.	SP

Lithology

Deviation Survey Closure Distance (ft)
0 ft — 5 ft

Water Level

Well Construction



Depth (ft bgs)

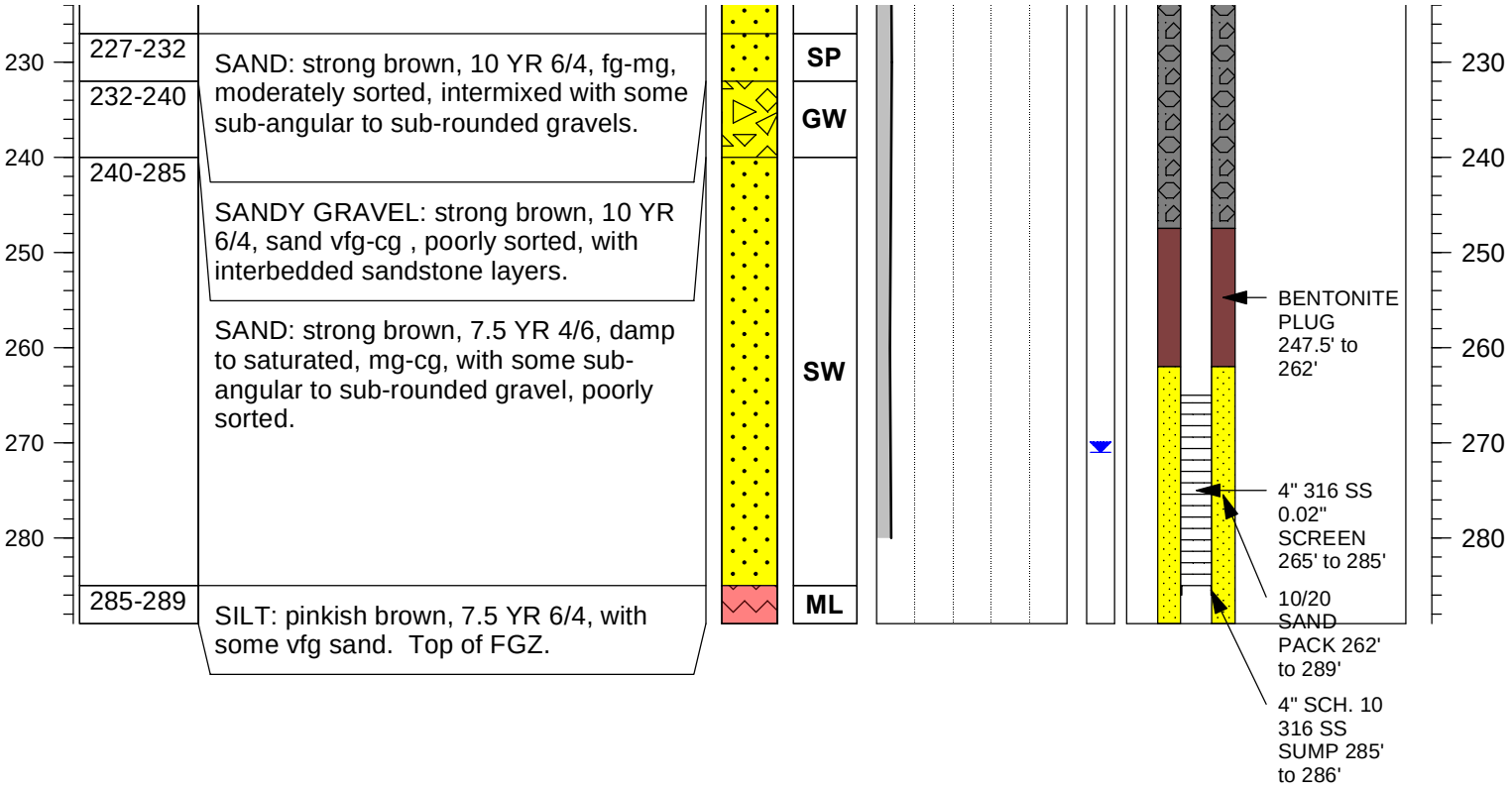
State Well Report No.: 375889

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB093
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.5
Start Date:	7-13-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.6
End Date:	7-16-2014	**Method:**	ARCH	**Northing:**	3755794.3
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633857.2
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	227-232	SAND: strong brown, 10 YR 6/4, fg-mg, moderately sorted, intermixed with some sub-angular to sub-rounded gravels.	SP
	232-240		GW
240	240-285	SANDY GRAVEL: strong brown, 10 YR 6/4, sand vfg-cg , poorly sorted, with interbedded sandstone layers.	
250		SAND: strong brown, 7.5 YR 4/6, damp to saturated, mg-cg, with some sub-angular to sub-rounded gravel, poorly sorted.	SW
260			
270			
280	285-289	SILT: pinkish brown, 7.5 YR 6/4, with some vfg sand. Top of FGZ.	ML

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)



State Well Report No.: **375889**

Boring and Well Log

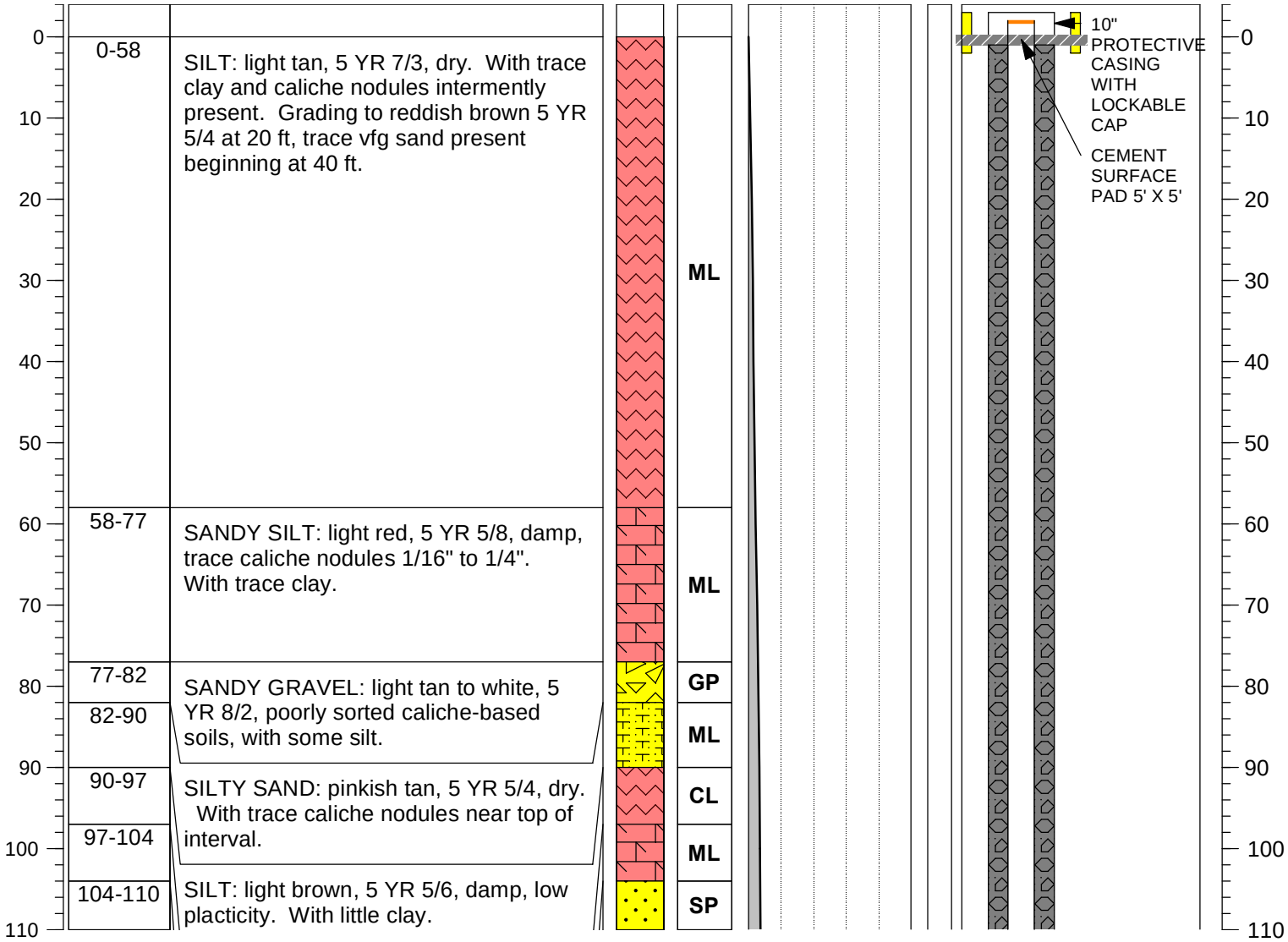
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB094
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	6-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	7-7-2014	**Method:**	ARCH	**Northing:**	3755839.0
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633769.2
FGZ Depth:	284 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-58	SILT: light tan, 5 YR 7/3, dry. With trace clay and caliche nodules intermently present. Grading to reddish brown 5 YR 5/4 at 20 ft, trace vfg sand present beginning at 40 ft.	ML
	58-77	SANDY SILT: light red, 5 YR 5/8, damp, trace caliche nodules 1/16" to 1/4". With trace clay.	ML
	77-82	SANDY GRAVEL: light tan to white, 5 YR 8/2, poorly sorted caliche-based soils, with some silt.	GP
	82-90		ML
	90-97	SILTY SAND: pinkish tan, 5 YR 5/4, dry. With trace caliche nodules near top of interval.	CL
	97-104		ML
	104-110	SILT: light brown, 5 YR 5/6, damp, low placticity. With little clay.	SP

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



State Well Report No.: 375736

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB094
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	6-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	7-7-2014	**Method:**	ARCH	**Northing:**	3755839.0
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633769.2
FGZ Depth:	284 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–120–130–140–150–160–170–180–190–200–210–220	110-125	SANDY SILT: light brown, 7.5YR 6/4, damp, sand vfg.		SM				
	125-152	SAND: light brown, 10 YR 5/4, damp, fg, well sorted.					GROUTED ANNULUS 1' to 250'	
		SILTY SAND: tan, 10 YR 6/4, damp, vfg-fg, moderately sorted.		SP			4" SCH.10 316 SS CASING 2' to 265'	
		SILTY SAND: tan, 7.5 YR 6/4, vfg to fg, damp, moderately sorted.						
	152-175	SAND: light brown, 10 YR 6/4, damp, fg-mg, moderately well sorted.		SM				
	175-200	SILTY SAND: light brown, 10 YR 6/6, damp, vfg-fg, moderately well sorted.		SP				
	200-217	SAND: light brown, 10 YR 5/6, damp, fg, moderately well sorted. With trace fg to cg gravel, 1/16" to 1-1/2".		SP				
	217-221	GRAVEL: light brown, 10 YR 5/6, dry, fg-vcg, subangular to subrounded. With		GW				
	221-241							

State Well Report No.: 375736

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB094
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	6-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	7-7-2014	**Method:**	ARCH	**Northing:**	3755839.0
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633769.2
FGZ Depth:	284 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

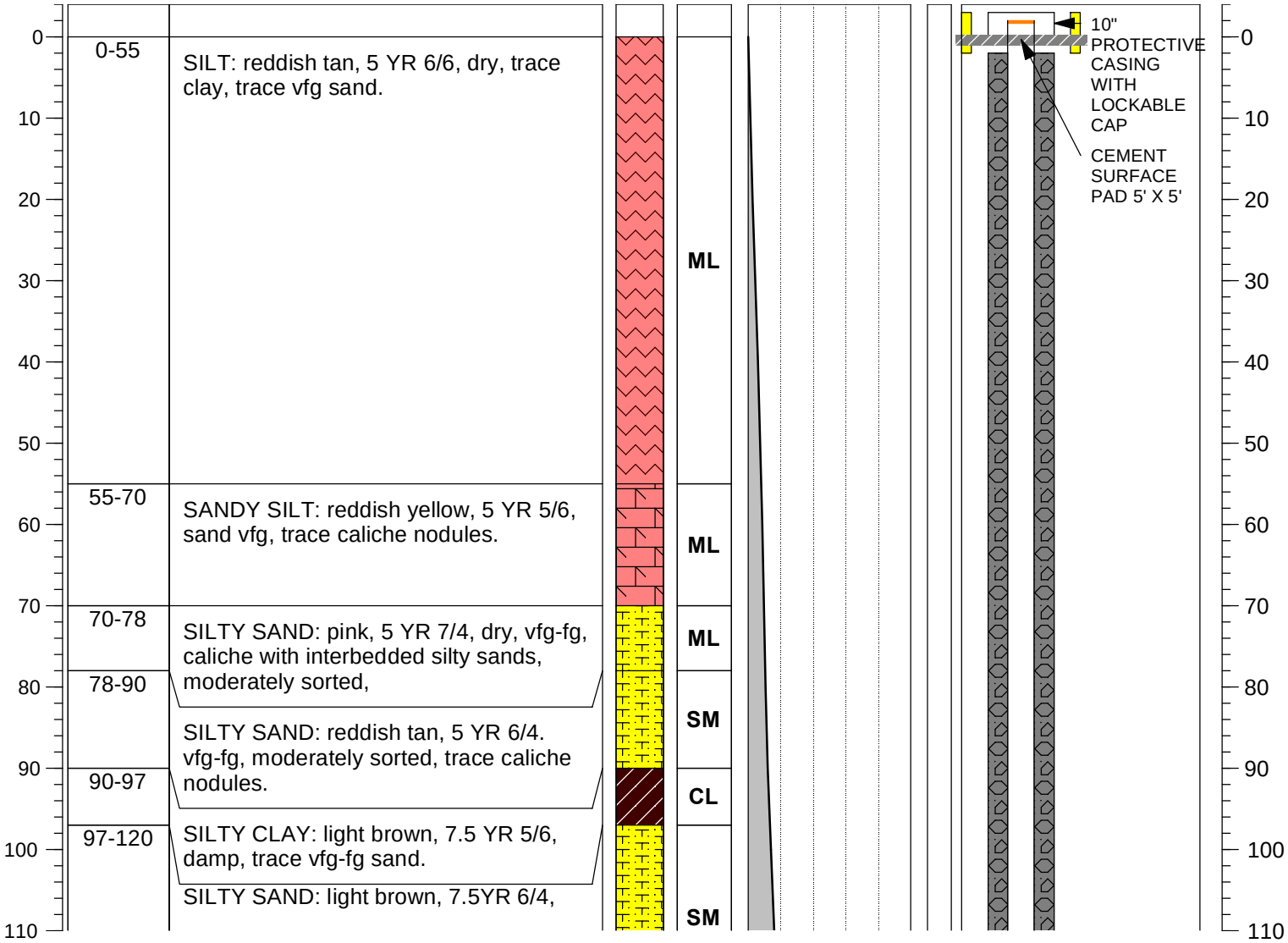
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
		little sand.						
230		SAND: light brown, 10 YR 5/6, damp, fg, well sorted. With trace silt and gravel. Sand coarsening with depth.		SP				230
240	241-245			GW				240
	245-284	GRAVEL: damp, fg-vcg, subangular to subrounded, poorly sorted. With little sand.						
250								250
260		SAND: light brown, 10 YR 6/4, fg-mg, moderately sorted, with little gravel 1/4"-1 1/2".		SP/SW			BENTONITE PLUG 250' to 262'	260
270								270
280							4" 316 SS 0.02" SCREEN 265' to 284'	280
	284-289	SANDY CLAY: light pinkish brown, 7.5 YR 6/4, sand vfg-fg. Top of FGZ.		ML			10/20 SAND PACK 262' to 289'	
							4" SCH. 10 316 SS SUMP 284' to 285'	

State Well Report No.: **375736**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB095
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.7
Start Date:	7-16-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.9
End Date:	7-24-2014	**Method:**	ARCH	**Northing:**	3755742.7
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633652.6
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-55	SILT: reddish tan, 5 YR 6/6, dry, trace clay, trace vfg sand.	ML
	55-70	SANDY SILT: reddish yellow, 5 YR 5/6, sand vfg, trace caliche nodules.	ML
	70-78	SILTY SAND: pink, 5 YR 7/4, dry, vfg-fg, caliche with interbedded silty sands, moderately sorted,	ML
	78-90	SILTY SAND: reddish tan, 5 YR 6/4. vfg-fg, moderately sorted, trace caliche nodules.	SM
	90-97	SILTY CLAY: light brown, 7.5 YR 5/6, damp, trace vfg-fg sand.	CL
	97-120	SILTY SAND: light brown, 7.5YR 6/4,	SM



State Well Report No.: **375738**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB095
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.7
Start Date:	7-16-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.9
End Date:	7-24-2014	**Method:**	ARCH	**Northing:**	3755742.7
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633652.6
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
		vfg-fg, moderately well sorted. With trace sandstone.						
120	120-130	SAND: light brown, 7.5 YR 6/6, dry, vfg-fg, moderately sorted, with little intermixed silt.		SM			GROUTED ANNULUS 2' to 250'	120
130	130-150	SILTY SAND: light redish brown, 7.5 YR 5/6, dry, vfg-fg, moderately well sorted.		SM			4" SCH.10 316 SS CASING 2' to 267'	130
150	150-168	SAND: tan, 10 YR 6/6, damp, vfg, well graded with trace sub-rounded to sub-angular <1/4" gravel.		SW				150
170	168-185	SILTY SAND: light brown, 7.5 YR 6/4, damp, vfg, well sorted.		SM				170
190	185-220	SAND: tan, 7.5 YR 6/6, damp, vfg-fg, well sorted. Trace gravel to 1/4".		SP				190
220	220-255	SAND: tan, 10 YR 6/3, dry, vfg-cg,						220

State Well Report No.: 375738

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB095
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.7
Start Date:	7-16-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.9
End Date:	7-24-2014	**Method:**	ARCH	**Northing:**	3755742.7
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633652.6
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230, 240, 250		poorly sorted, intermixed sub-angular to sub-rounded gravel.		SW				230, 240, 250
260, 270, 280	255-281	SAND: tan, 10 YR 6/4, damp, fg-cg, poorly sorted, sub-angular to sub-rounded, with trace fg rounded gravel.		SW			BENTONITE PLUG 250' to 264'; 10/20 SAND PACK 264' to 289'; 4" 316 SS 0.02" SCREEN 267' to 287'; 4" SCH. 10 316 SS SUMP 287' to 288'	260, 270, 280
	281-287	CLAYEY SAND: light brown, 10 YR 7/3, saturated, vfg-fg, moderately sorted, trace pinkish clay nodules.		SC				
	287-289	SANDY SILT: pinkish tan, 2.5 YR 6/6, damp, moderate plasticity, rollable. Sand, vfg. Top of FGZ.		ML				

State Well Report No.: 375738

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB096
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	6-20-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	6-22-2014	**Method:**	ARCH	**Northing:**	3755807.1
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633559.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-64	SILT: tan, 5 YR 6/4, dry, moderately stiff, slightly rollable. With trace clay and caliche nodules intermently present. Grading to reddish brown 5 TYR 5/6 at 25 ft, trace vfg sand present beginning at 40 ft.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50								50
60								60
70	64-85	SANDY SILT: light red, 5 YR 5/8, damp, some caliche nodules 1/16" to 1/2". With trace clay.		ML				70
80								80
90	85-90	SILTY SAND: light red, 5 YR 6/6, damp, vfg-fg, some caliche noduels 1/16" to 3/4", moderately well sorted.		SM				90
	90-101			ML				
100	101-102	SILT: reddish brown, 7.5 YR 5/4. With little clay and trace vfg sand.		CL				100
	102-120	CLAY: brown, 5 YR 3/4, damp, stiff.						
110								110

State Well Report No.: 375739

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB096
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	6-20-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	6-22-2014	**Method:**	ARCH	**Northing:**	3755807.1
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633559.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–120		SAND: light brown, 5YR 3/4, vfg, moderately well sorted. With trace silt.		SP				110–120
120–130	120-135	SILT: light brown, 7.5 YR 5/6, damp. With some vfg-fg sand, moderately sorted.		ML			GROUTED ANNULUS 2' to 250'; 4" SCH.10 316 SS CASING 2' to 267'	120–130
130–150	135-150	SILTY SAND: light brown, 7.5 YR 5/6, damp, vfg, moderately well sorted.		SM				130–150
150–170	150-170	SAND: light brown, 2.5 YR 6/6, damp, vfg-fg, well sorted. Increasing silt content with depth.		SP/SW				150–170
170–215	170-215	SILTY SAND: light brown, 7.5 YR 5/4, damp, vfg-fg, moderately well sorted, sligtly rollabe.		SM				170–215
215–220	215-237	SAND: light brown, 10 YR 6/4, damp, vfg-fg, moderately well sorted, with trace						215–220

State Well Report No.: **375739**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB096
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	6-20-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	6-22-2014	**Method:**	ARCH	**Northing:**	3755807.1
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633559.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Kruse	**Note:**	New Injection Well

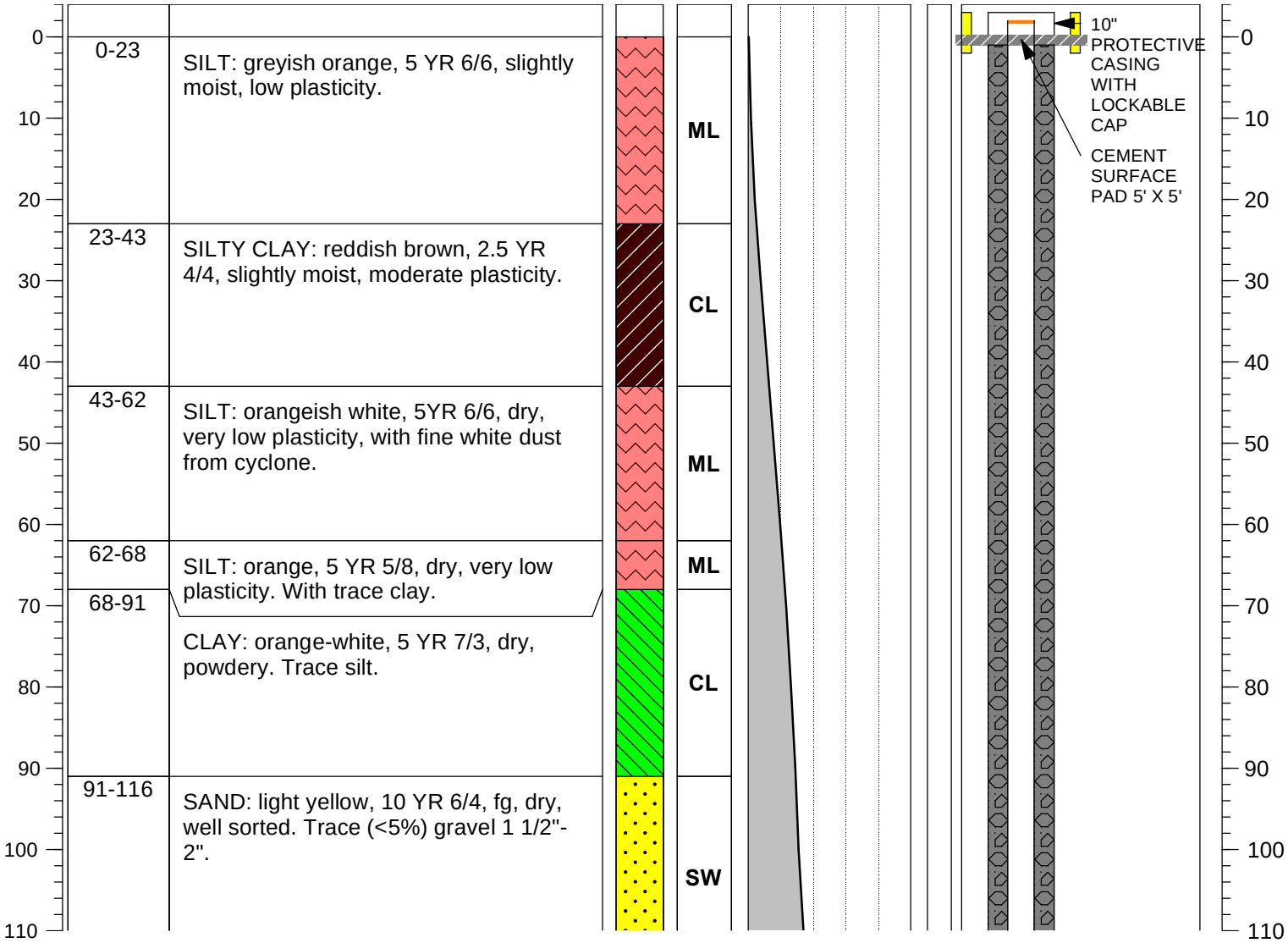
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230		silt.		SP/SW				230
240	237-245	SANDY GRAVEL: light brown, 10 YR 5/4, dry, gravel 1/4"-1", sand vfg-fg, poorly sorted.		GW				240
250	245-286	SAND: light brown, 10 YR 5/4, fg-cg, with little gravel 1 1/2"-2 1/2", damp to saturated, poorly sorted.		SW			BENTONITE PLUG 250' to 264'	250
260								260
270								270
280							10/20 SAND PACK 264' to 289'	280
	286-289	CLAYEY SILT: light pinkish brown, 7.5 YR 5/4, dry, with trace vfg sand. Top of FGZ.		ML			4" 316 SS 0.02" SCREEN 267' to 286' 4" SCH. 10 316 SS SUMP 286' to 287'	

State Well Report No.: **375739**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB097
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	8-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	8-27-2014	**Method:**	ARCH	**Northing:**	3755870.3
Total Depth:	285 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633470.5
FGZ Depth:	284 ft.	**Logged by:**	T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-23	SILT: greyish orange, 5 YR 6/6, slightly moist, low plasticity.	ML
	23-43	SILTY CLAY: reddish brown, 2.5 YR 4/4, slightly moist, moderate plasticity.	CL
	43-62	SILT: orangeish white, 5YR 6/6, dry, very low plasticity, with fine white dust from cyclone.	ML
	62-68	SILT: orange, 5 YR 5/8, dry, very low plasticity. With trace clay.	ML
	68-91	CLAY: orange-white, 5 YR 7/3, dry, powdery. Trace silt.	CL
	91-116	SAND: light yellow, 10 YR 6/4, fg, dry, well sorted. Trace (<5%) gravel 1 1/2"-2".	SW



State Well Report No.: **378962**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB097
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	8-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	8-27-2014	**Method:**	ARCH	**Northing:**	3755870.3
Total Depth:	285 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633470.5
FGZ Depth:	284 ft.	**Logged by:**	T. Moloney	**Note:**	New Injection Well

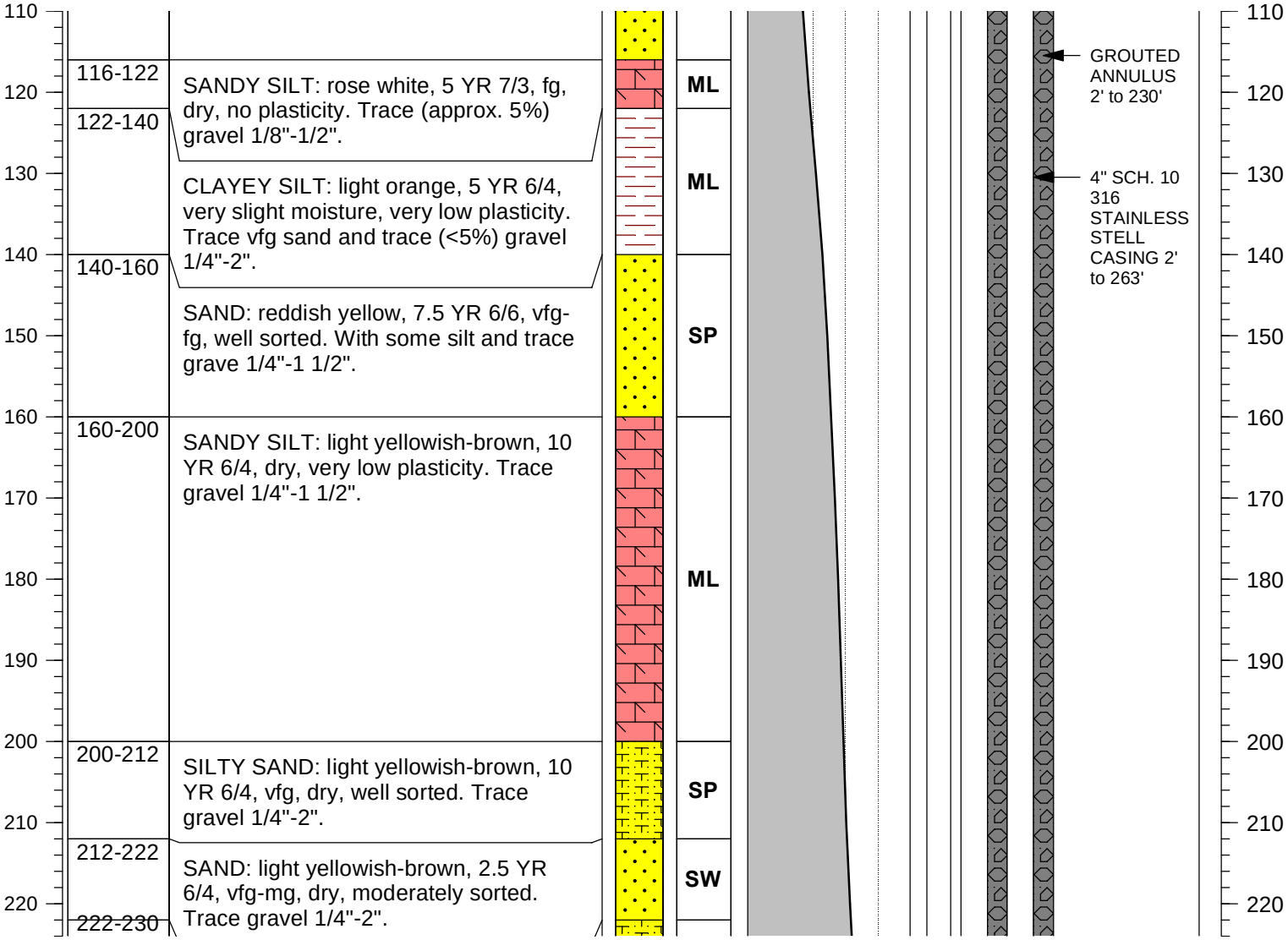
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	116-122	SANDY SILT: rose white, 5 YR 7/3, fg, dry, no plasticity. Trace (approx. 5%) gravel 1/8"-1/2".	ML
	122-140	CLAYEY SILT: light orange, 5 YR 6/4, very slight moisture, very low plasticity. Trace vfg sand and trace (<5%) gravel 1/4"-2".	ML
	140-160	SAND: reddish yellow, 7.5 YR 6/6, vfg-fg, well sorted. With some silt and trace grave 1/4"-1 1/2".	SP
	160-200	SANDY SILT: light yellowish-brown, 10 YR 6/4, dry, very low plasticity. Trace gravel 1/4"-1 1/2".	ML
	200-212	SILTY SAND: light yellowish-brown, 10 YR 6/4, vfg, dry, well sorted. Trace gravel 1/4"-2".	SP
	212-222	SAND: light yellowish-brown, 2.5 YR 6/4, vfg-mg, dry, moderately sorted. Trace gravel 1/4"-2".	SW
	222-230		

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 378962

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB097
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	8-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	8-27-2014	**Method:**	ARCH	**Northing:**	3755870.3
Total Depth:	285 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633470.5
FGZ Depth:	284 ft.	**Logged by:**	T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230	230-232	SILTY SAND: light yellowish-brown, 10 YR 6/4, vfg-mg, dry, moderately well sorted. Trace gravel 1/4"-2".		SP				230
	232-244	SANDY SILT: light grey, 2.5 YR 7/2, mg-cg sand, very dry, poorly sorted. Some gravel 1/8"-1/4".		ML				
240	244-260	GRAVEL: grey, 2.5 YR 5/1, 1/16"- 1 1/2", dry, poorly sorted. Some fg-cg sand. Slow drilling.		GW			BENTONITE PLUG 230' to 260'	240
250				SP				250
260	260-284	SILTY SAND: light yellowish-brown, 2.5 YR 6/4, fg, slightly moist, well sorted. Trace gravel 1/8"-1/4".						260
270		SAND: light yellowish-brown, 2.5 YR 6/4, fg-cg, slighly moist, poorly sorted. With some silt and trace gravel 1/16"-1/2". Saturated at/below 266' bgs.		SP			10/20 SAND PACK 260' to 285'	270
280	284-285	CLAY: reddish brown, 5 YR 5/3, moist, moderate plasticity. Top of FGZ.		CL			4" SCH. 10 316 STAINLESS STEEL 0.02" SCREEN 263' to 283' 4" SCH. 10 STAINLESS STEEL SUMP 283' to 284'	280

State Well Report No.: 378962

Boring and Well Log

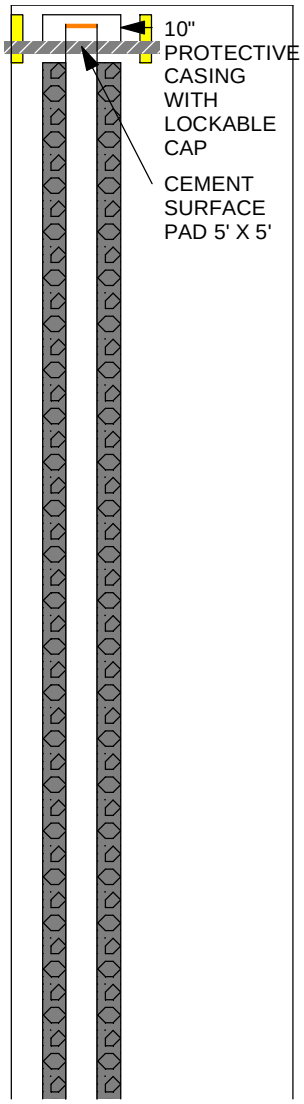
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB098
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3544.5
Start Date:	8-19-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3546.6
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755923.0
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633384.1
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove/T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
0	0-65	SILT: medium brown, 5 YR 5/8, dry, hard. Trace vfg-mg sand.		ML
	65-80	SILT: brownish-orange, 2.5 YR 4/8, slightly damp.		ML
80	80-83	SANDY GRAVEL: tannish-white, 5 YR 8/2, dry, 1/8"-3/4", subrounded to rounded, poorly sorted, caliche based. Sand fg-cg.		GW
	83-110	SILT: light tan, 7.5 YR 8/2, dry, with trace vfg sand.		ML

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



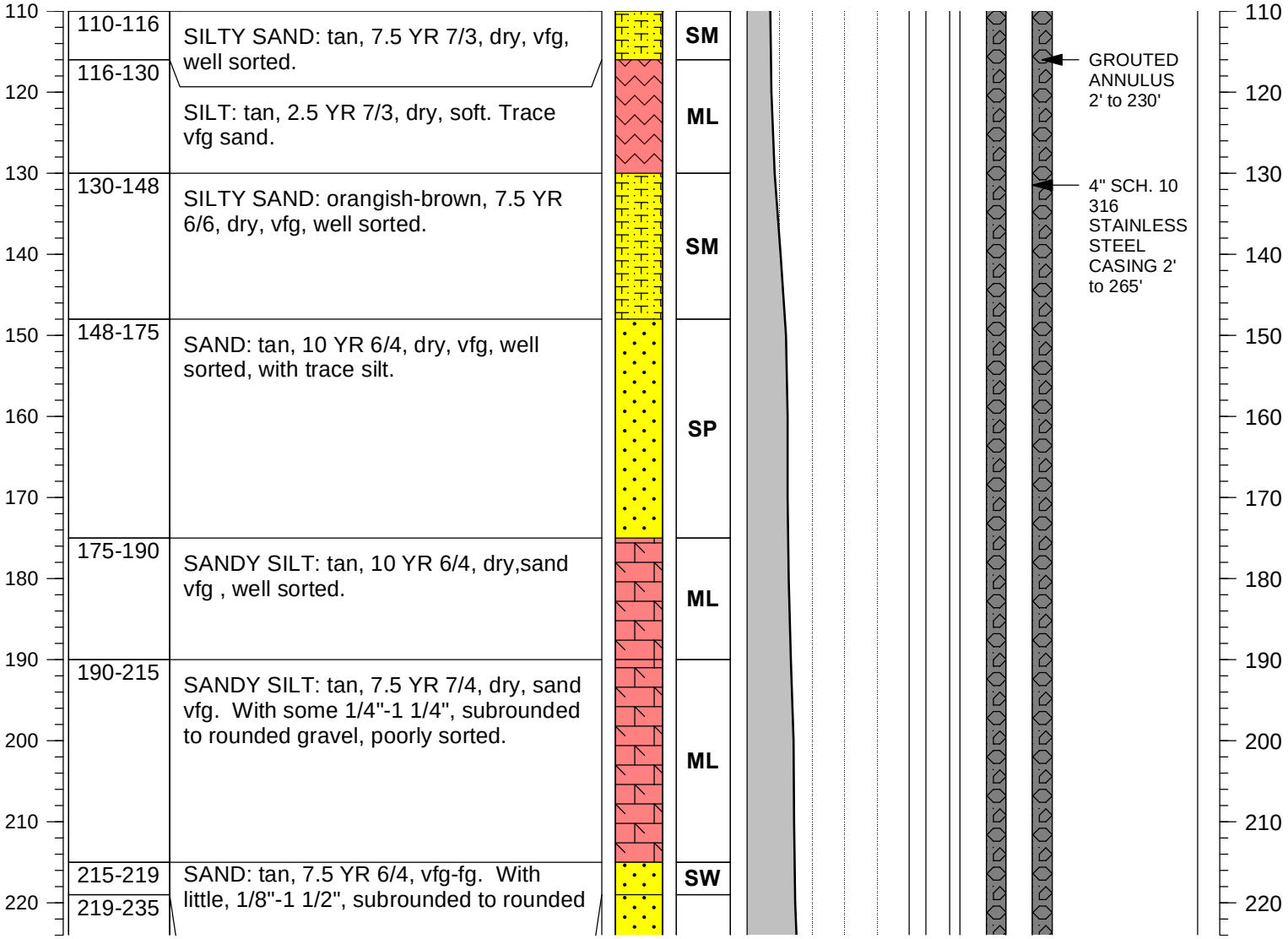
Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **378955**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB098
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3544.5
Start Date:	8-19-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3546.6
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755923.0
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633384.1
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove/T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	110-116	SILTY SAND: tan, 7.5 YR 7/3, dry, vfg, well sorted.	SM
	116-130	SILT: tan, 2.5 YR 7/3, dry, soft. Trace vfg sand.	ML
	130-148	SILTY SAND: orangish-brown, 7.5 YR 6/6, dry, vfg, well sorted.	SM
	148-175	SAND: tan, 10 YR 6/4, dry, vfg, well sorted, with trace silt.	SP
	175-190	SANDY SILT: tan, 10 YR 6/4, dry,sand vfg , well sorted.	ML
	190-215	SANDY SILT: tan, 7.5 YR 7/4, dry, sand vfg. With some 1/4"-1 1/4", subrounded to rounded gravel, poorly sorted.	ML
	215-219	SAND: tan, 7.5 YR 6/4, vfg-fg. With little, 1/8"-1 1/2", subrounded to rounded	SW
	219-235		

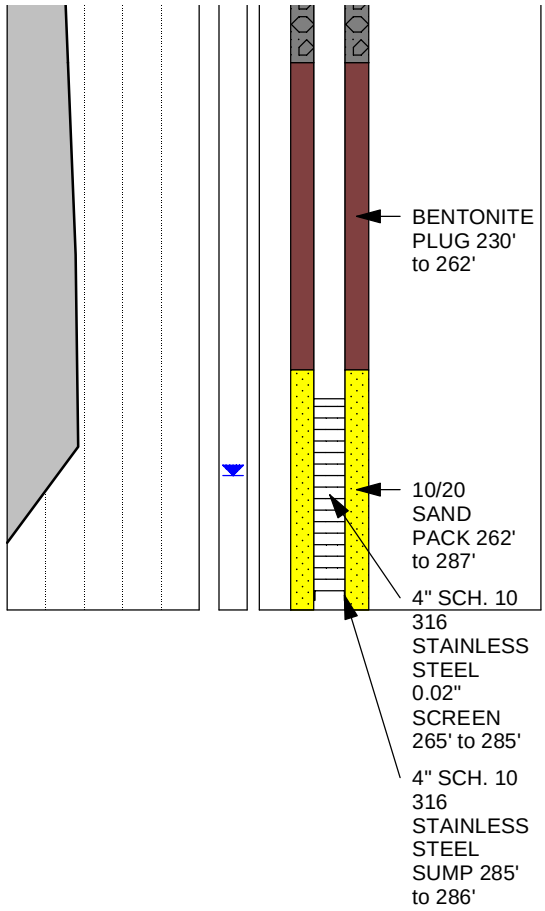


State Well Report No.: 378955

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB098
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3544.5
Start Date:	8-19-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3546.6
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755923.0
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633384.1
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove/T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
		gravel, poorly sorted.	
230		SAND: tan, 10 YR 7/3, dry, vfg-fg, well sorted.	SP
240	235-250	SANDY GRAVEL: tan, 10 YR 6/4, dry, 1/4"- 1 1/8", subangular to rounded, poorly sorted. Vfg-cg sand.	GW
250	250-271	SAND: orangish-tan, 10 YR 6/4, damp, vfg-fg, well sorted. Trace 3/4", subrounded to rounded gravel.	SP
260			
270	271-282	GRAVELLY SAND: tan, 7.5 YR 7/4, saturated, vfg-cg, poorly sorted. Gravel 1/4"-1", subangular to subrounded.	SW
280	282-285		SP
	285-287	SAND: tan, 7.5 YR 6/4, saturated, fg-cg, moderately sorted.	ML
		SANDY SILT: pinkish-tan, 5 YR 6/4, moist, medium plasticity. Top of FGZ.	



State Well Report No.: 378955

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB099
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.4
Start Date:	8-11-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.6
End Date:	8-11-2014	**Method:**	ARCH	**Northing:**	3755690.1
Total Depth:	287 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633757.6
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

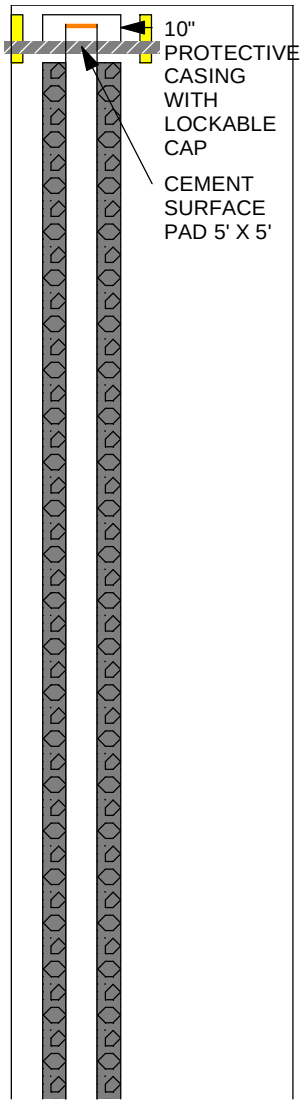
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
0	0-43	SILT: reddish tan, 5 YR 6/4, dry, trace clay.	ML
50	43-65	SANDY SILT: yellowish red, 5 YR 5/6, dry, vfg sand, trace clay.	ML
70	65-76	SILTY SAND: yellowish red, 5 YR 5/6, vfg, trace caliche nodules.	SM
80	76-87	SANDY SILT: pinkish white, 5 YR 7/4, dry.	
90	87-106	SILTY SAND: pinkish tan, 7.5 YR 7/3, dry, vfg sand, well sorted.	SM
110	106-111	SILT: light brown, 7.5 YR 6/4, with trace	ML

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **378951**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB099
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.4
Start Date:	8-11-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.6
End Date:	8-11-2014	**Method:**	ARCH	**Northing:**	3755690.1
Total Depth:	287 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633757.6
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–140	111-139	vf sand. SILTY SAND: light brown, 7.5 YR 6/4, damp, vfg-fg sand, trace poorly cemented sandstone .		SM			GROUTED ANNULUS 2' to 230' 4" SCH.10 316 SS CASING 2' to 265'	110–140
140–163	139-163	SAND: light brown, 10 YR 6/4, damp, vfg-mg, moderately sorted, with trace interbedded sandstone.		SW				140–163
163–212	163-212	SILTY SAND: light brown, 10 YR 5/4, damp, vfg-fg, well sorted.		SM				163–212
212–220	212-238	SAND: tan, 10 YR 6/4, dry, vfg-cg, subangular to subrounded, poorly sorted, with trace sandstone.						212–220

State Well Report No.: **378951**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB099
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.4
Start Date:	8-11-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.6
End Date:	8-11-2014	**Method:**	ARCH	**Northing:**	3755690.1
Total Depth:	287 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633757.6
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230				SW				230
240	238-251	SANDY GRAVEL: light brown, 10 YR 5/3, moist, 1/8"-3, subangular to subrounded, poorly sorted. Sand vfg-cg.		GW			BENTONITE PLUG 230' to 262'	240
250	251-269	SAND: light brown, 10 YR 6/4, damp, fg-cg, poorly sorted.		SW				250
260								260
270	269-274	SANDY GRAVEL: light tan, 10 YR 8/2, dry, very cemented.						270
	274-285	SAND: light brown, 10 YR 5/4, fg-cg, some gravel 1/4"-1 1/2", poorly sorted.		SW			10/20 SAND PACK 262' to 287'	
280	285-287	SANDY SILT: pinkish brown, 2.5 YR 6/6, damp, moderate plasticity, rollable. Sand, vfg. Top of FGZ.		ML			4" 316 SS 0.02" SCREEN 265' to 285' 4" SCH. 10 316 SS SUMP 285' to 286'	280

State Well Report No.: 378951

Boring and Well Log

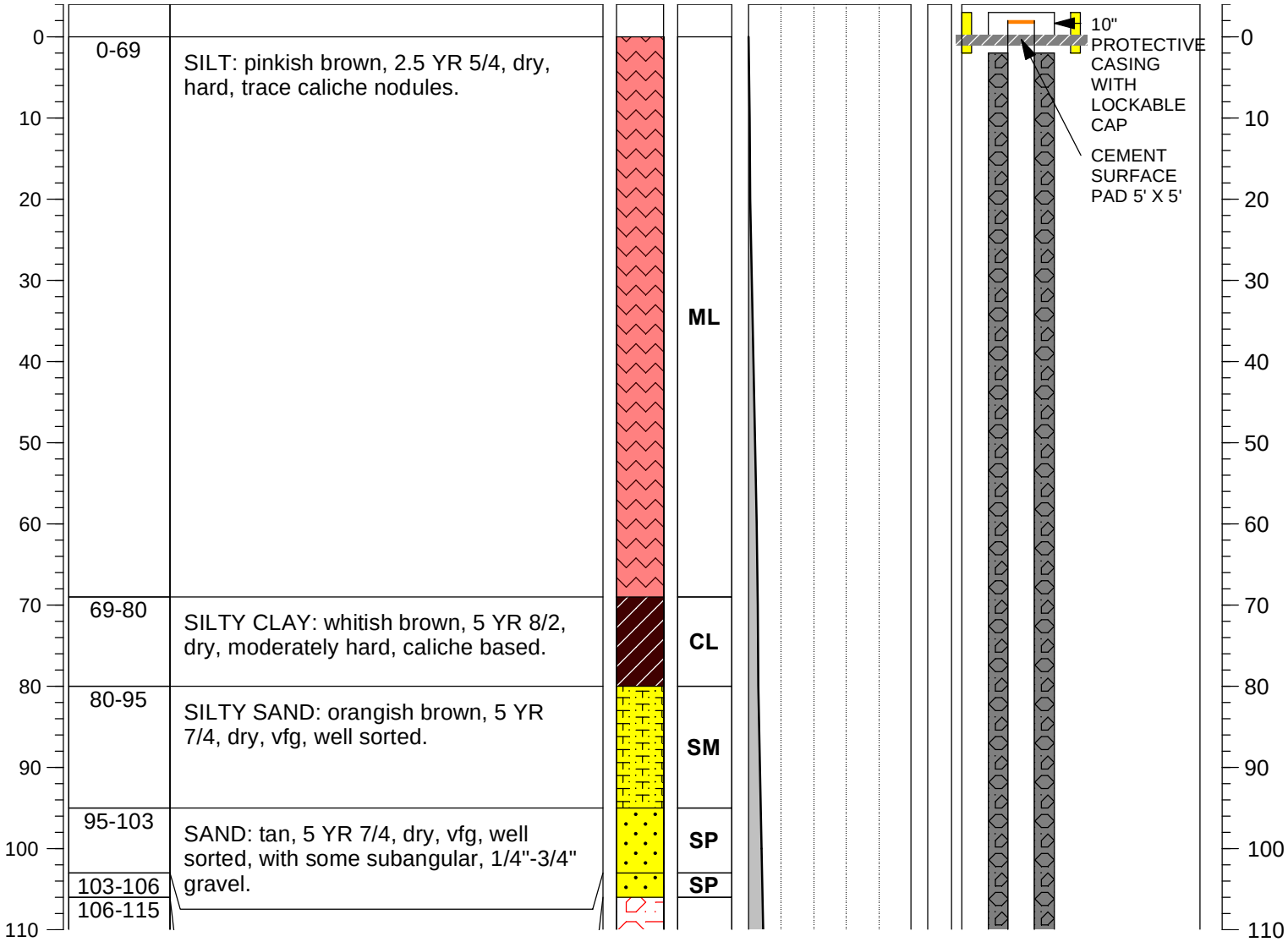
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB100A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.1
Start Date:	9-10-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	9-16-2014	**Method:**	ARCH	**Northing:**	3755646.0
Total Depth:	286 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633791.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-69	SILT: pinkish brown, 2.5 YR 5/4, dry, hard, trace caliche nodules.	ML
	69-80	SILTY CLAY: whitish brown, 5 YR 8/2, dry, moderately hard, caliche based.	CL
	80-95	SILTY SAND: orangish brown, 5 YR 7/4, dry, vfg, well sorted.	SM
	95-103	SAND: tan, 5 YR 7/4, dry, vfg, well sorted, with some subangular, 1/4"-3/4" gravel.	SP
	103-106		SP
	106-115		

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



State Well Report No.: 378948

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB100A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.1
Start Date:	9-10-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	9-16-2014	**Method:**	ARCH	**Northing:**	3755646.0
Total Depth:	286 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633791.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
110–115		SAND: tan, 5 YR 7/4, dry, vfg, well sorted.	ML
115–195	115-195	GRAVELLY SILT: orangish brown, 5 YR 7/3, dry. Gravel subangular to subrounded, 1/4"-1/2".	ML
115–195	115-195	SILT: orangish brown, 5 YR 6/4, dry, moderately plastic, intermixed trace gravel 1/4"-3/4".	ML
195–208	195-208	GRAVELLY SILT: orangish brown, 5 YR 6/4, damp. Gravel subangular to subrounded, 1/2"-1 1/2".	ML
208–218	208-218	SAND: orangish brown, 7.5 YR 6/4, dry, vfg, well sorted.	SP
218–237	218-237	GRAVELLY SAND: orangish brown, 7.5	

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction:
- GROUTED ANNULUS 2' to 235'
- 4" SCH.10 316 SS CASING 2' to 265'

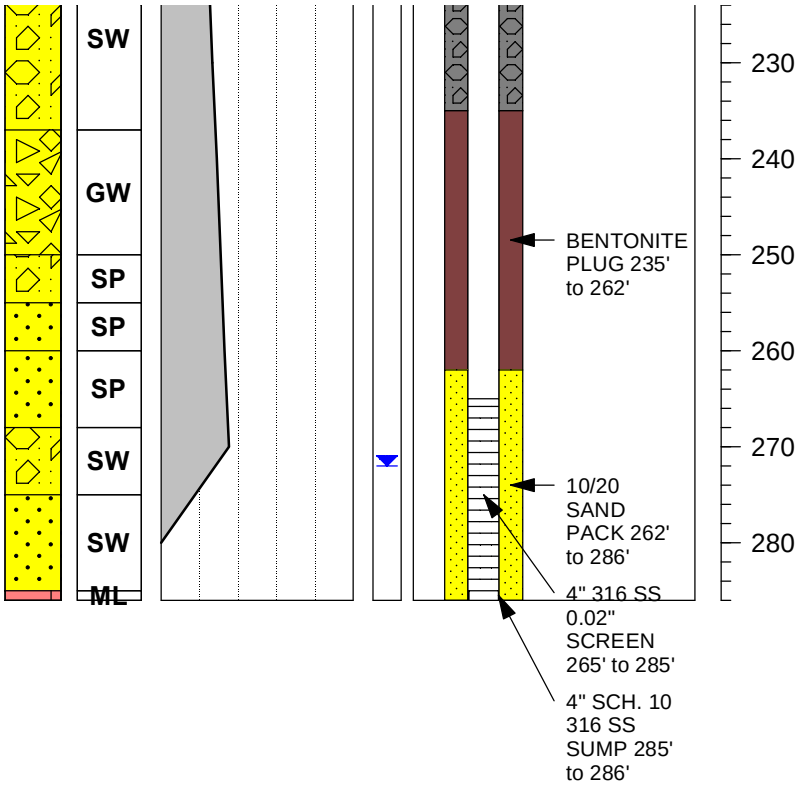
Depth (ft bgs): 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220

State Well Report No.: 378948

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB100A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.1
Start Date:	9-10-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	9-16-2014	**Method:**	ARCH	**Northing:**	3755646.0
Total Depth:	286 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633791.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230		YR 6/4, dry, vfg. Gravel 1/2"-2", poorly sorted.	SW
240	237-250	SANDY GRAVEL: orangish brown, 7.5 YR 6/4, 1/4"-1", rounded to subrounded, sand vfg-cg, poorly sorted.	GW
250	250-255	GRAVELLY SAND: orangish tan, 7.5 YR 6/6, damp, vfg, gravel 1/2"-1 1/2" subrounded to rounded, moderately well sorted.	SP
	255-260		SP
260	260-268		SP
270	268-275	SAND: orangish tan, 7.5 YR 6/6, damp-wet, fg-mg, gravel 1/4"-1" subrounded to rounded, moderately well sorted.	SW
	275-285	SAND: orangish tan, 7.5 YR 6/6, wet, fg-mg, gravel 1/4"-1" surounded to rounded, well sorted.	SW
280	285-286	GRAVELLY SAND: orangish tan, 7.5 YR 7/6, saturated, vfg-mg sand, gravel 1/4"-1", subdrounded to rounded, poorly sorted.	ML
		SAND: pinkish tan, 7.5 YR 6/6, saturated, vfg-cg, trace gravel 1/2"-1 1/2", poorly sorted.	
		SANDY SILT: pinkish brown, 2.5 YR 6/6, damp, moderate plasticity, rollable. Sand vfg. Top FGZ.	



State Well Report No.: 378948

Boring and Well Log

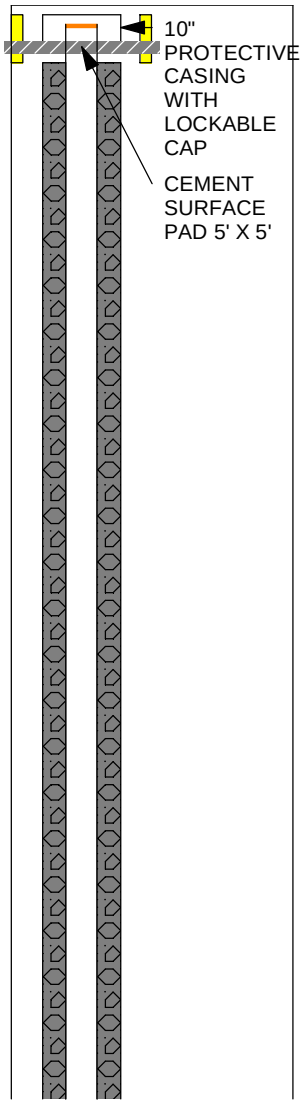
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB101
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	8-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	8-7-2014	**Method:**	ARCH	**Northing:**	3755616.9
Total Depth:	286 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633899.7
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
0	0-5	CLAY: dark brown, 10 YR 4/3, stiff, highly organic, topsoil.		OL
10	5-20	SILT: reddish brown, 5 YR 5/6, dry, stiff, with little mg-cg sand.		ML
20	20-35	SILT: medium brown/tan, 5 YR 4/6, dry, moderately hard.		ML
30				
40	35-65	SILT: reddish brown, 5 YR 5/6, with trace mg-cg sand and trace subrounded to rounded gravel to 1/2".		ML
50				
60				
70	65-70	GRAVELLY SILT: whitish tan, 5 YR 8/1, dry, soft, caliche based.		ML
	70-85	SANDY SILT: reddish brown, 5YR 6/6, dry, soft, vfg sand.		ML
80				
90	85-100	SAND: light brown, 5 YR 4/6, dry, vfg-fg, with trace 1/4" subrounded to rounded gravel, moderately sorted.		ML
100	100-110	SAND: tan , 10 YR 7/3, dry, vfg, trace subrounded gravel 1/8" to 3/8", well sorted.		SP
110				

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **375882**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB101
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	8-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	8-7-2014	**Method:**	ARCH	**Northing:**	3755616.9
Total Depth:	286 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633899.7
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110	110-140	GRAVELLY SAND: light brown, 7.5 YR 6/4, dry, vfg. Gravel 1/8"-1 1/4" rounded to subangular, poorly sorted.		SP			GROUTED ANNULUS 2' to 250'; 4" SCH.10 316 SS CASING 2' to 265'	110
120								120
130								130
140	140-170	SAND: tan, 10 YR 6/4, dry, vfg-fg, well sorted.		SP				140
150								150
160								160
170	170-230	SAND: tan, 10 YR 6/4, dry, vfg-cg, with some 1/8" to 1", subrounded to subangular gravel, poorly sorted.		SW				170
180								180
190								190
200								200
210								210
220								220

State Well Report No.: 375882

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB101
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	8-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	8-7-2014	**Method:**	ARCH	**Northing:**	3755616.9
Total Depth:	286 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633899.7
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230	230-245	SANDY GRAVEL: brown, 10 YR 5/3, damp, 1/8" to 1 1/4" rounded to subangular. Sand fg-cg, poorly sorted.		GW				230
240								240
250	245-285	SAND: tan, 5 YR 6/4, damp to wet, fg-mg. With little gravel to 3/8", subrounded, poorly sorted.		SW			BENTONITE PLUG 250' to 262'	250
260								260
270							10/20 SAND PACK 262' to 286'	270
280	285-286	SANDY SILT: tan, 5 YR 4/4, vfg sand, poor plasticity. Top of FGZ.		ML			4" 316 SS 0.02" SCREEN 265' to 285' 4" SCH. 10 316 SS SUMP 285' to 286'	280

State Well Report No.: **375882**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB102
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.5
Start Date:	7-29-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.7
End Date:	7-31-2014	**Method:**	ARCH	**Northing:**	3755572.7
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633985.5
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Schaffarzick	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-73	SILT: light pinkish brown, 2.5 YR 6/4, dry, stiff, slightly plastic. Increasing sand/gravel at 65-70'.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50								50
60								60
70								70
	73-80	SANDY SILT: light yellow/tan, 2.5 YR 8/2, dry, vfg-cg, caliche based sand with some gravel 1/8"-1/2", poorly sorted.		ML				
80	80-105	SILTY SAND: pinkish tan, 5 YR 6/4, dry, vfg-cg, with trace subrounded, 1/8"-3/4" gravel, poorly sorted.		SM				80
90								90
100								100
	105-115	SAND: tan, 5 YR 7/3, dry, fg. With trace		SW				
110								110

State Well Report No.: **375883**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB102
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.5
Start Date:	7-29-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.7
End Date:	7-31-2014	**Method:**	ARCH	**Northing:**	3755572.7
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633985.5
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Schaffarzick	**Note:**	New Injection Well

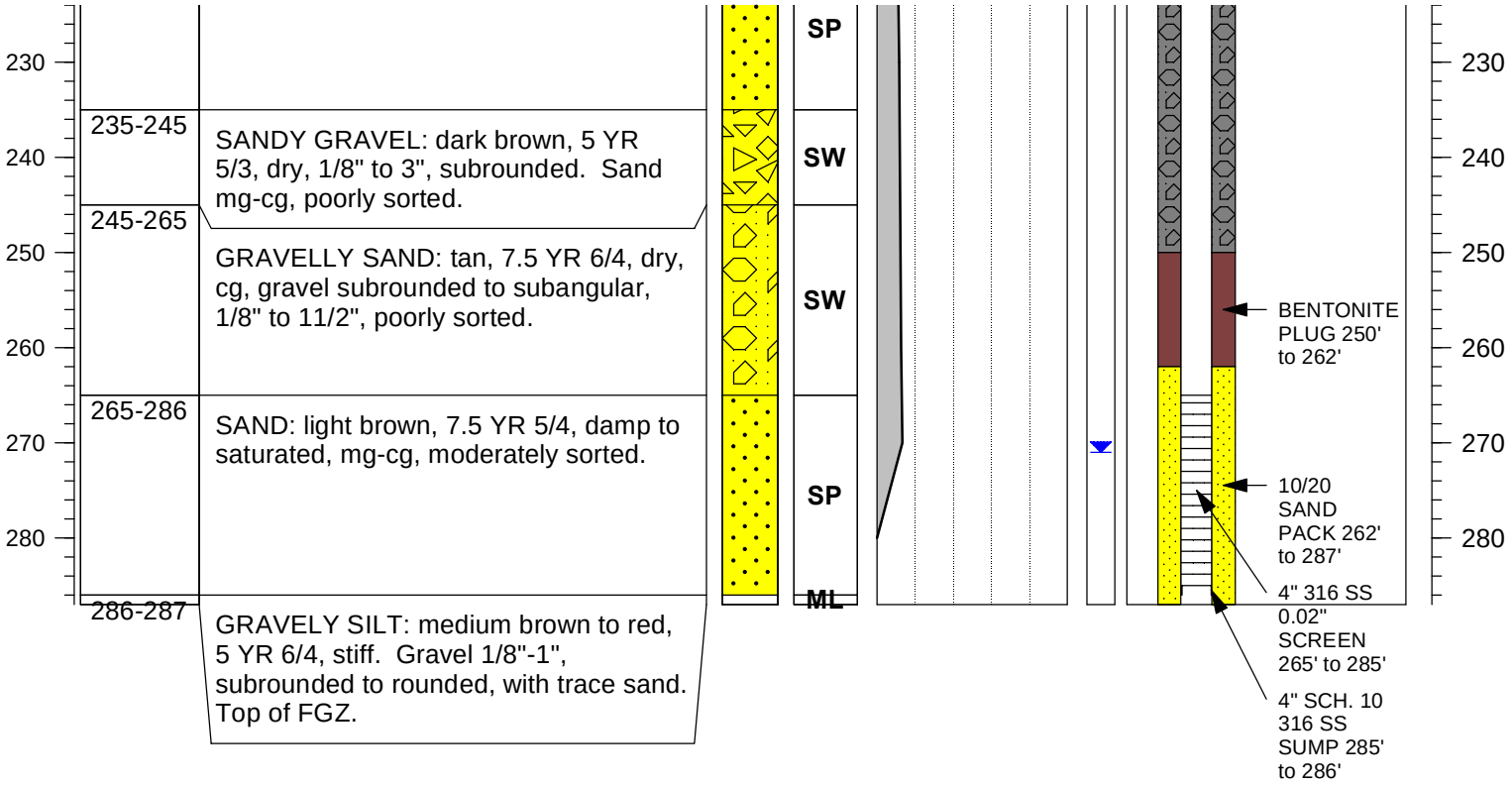
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
		1/8" to 1/4", subrounded to subangular gravel, poorly sorted.						
	115-130	SILT: light reddish brown, 5 YR 5/6, trace coarse sub-rounded sand and fine sub-rounded gravel.		ML				
	130-160	SAND: light brown, 5YR 5/6, dry, fg-mg, subrounded, well sorted.		SP			GROUTED ANNULUS 2' to 250'; 4" SCH.10 316 SS CASING 2' to 265'	
	160-170	SAND: tan, 5 YR 4/6, dry, fg-mg, with some subrounded gravel 1/8" to 1 1/2", poorly sorted.		SP				
	170-215	SAND: light brown, 5 YR 4/6, dry, fg, well sorted.		SP				
	215-235	SAND: light brown, 5 YR 4/6, dry, mg, becoming damp at 230'.						

State Well Report No.: 375883

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB102
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.5
Start Date:	7-29-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.7
End Date:	7-31-2014	**Method:**	ARCH	**Northing:**	3755572.7
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633985.5
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Schaffarzick	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	235-245	SANDY GRAVEL: dark brown, 5 YR 5/3, dry, 1/8" to 3", subrounded. Sand mg-cg, poorly sorted.	SW
	245-265	GRAVELLY SAND: tan, 7.5 YR 6/4, dry, cg, gravel subrounded to subangular, 1/8" to 11/2", poorly sorted.	SW
	265-286	SAND: light brown, 7.5 YR 5/4, damp to saturated, mg-cg, moderately sorted.	SP
	286-287	GRAVELY SILT: medium brown to red, 5 YR 6/4, stiff. Gravel 1/8"-1", subrounded to rounded, with trace sand. Top of FGZ.	ML



State Well Report No.: 375883

Boring and Well Log

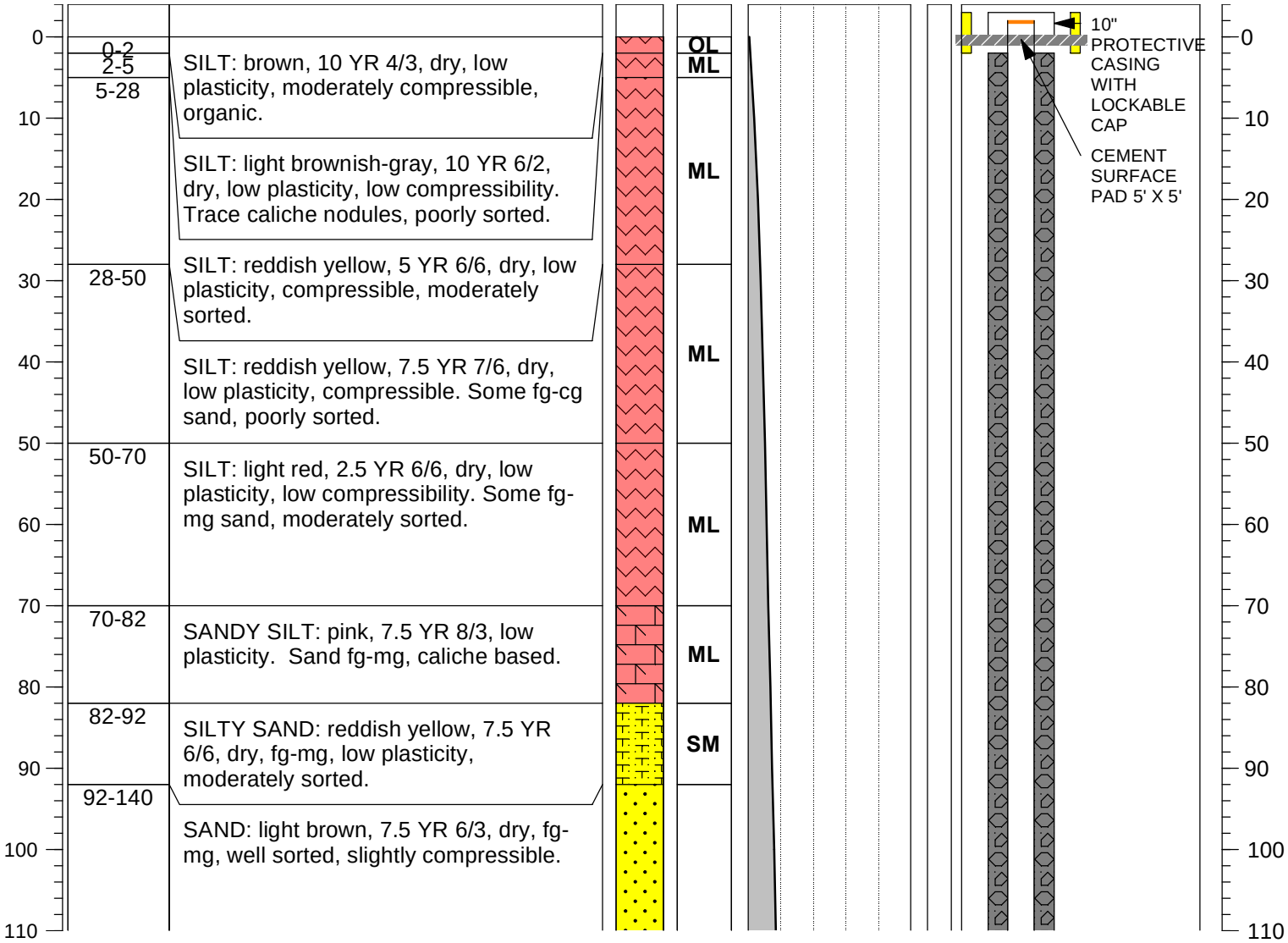
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB103
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.2
Start Date:	8-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.4
End Date:	9-2-2014	**Method:**	ARCH	**Northing:**	3755527.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634073.5
FGZ Depth:	284 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-2	SILT: brown, 10 YR 4/3, dry, low plasticity, moderately compressible, organic.	OL
	2-5		ML
	5-28	SILT: light brownish-gray, 10 YR 6/2, dry, low plasticity, low compressibility. Trace caliche nodules, poorly sorted.	ML
	28-50	SILT: reddish yellow, 5 YR 6/6, dry, low plasticity, compressible, moderately sorted.	ML
		SILT: reddish yellow, 7.5 YR 7/6, dry, low plasticity, compressible. Some fg-cg sand, poorly sorted.	
	50-70	SILT: light red, 2.5 YR 6/6, dry, low plasticity, low compressibility. Some fg-mg sand, moderately sorted.	ML
	70-82	SANDY SILT: pink, 7.5 YR 8/3, low plasticity. Sand fg-mg, caliche based.	ML
	82-92	SILTY SAND: reddish yellow, 7.5 YR 6/6, dry, fg-mg, low plasticity, moderately sorted.	SM
	92-140	SAND: light brown, 7.5 YR 6/3, dry, fg-mg, well sorted, slightly compressible.	

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 378942

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB103
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.2
Start Date:	8-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.4
End Date:	9-2-2014	**Method:**	ARCH	**Northing:**	3755527.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634073.5
FGZ Depth:	284 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
				SP			GROUTED ANNULUS 2' to 230'; 4" SCH.10 316 SS CASING 2' to 264'	
	140-152	SILTY SAND: light brown, 7.5 YR 6/4, dry, fg-mg, medium sorting, low plasticity, compressible.		SM				
	152-176	SAND: brownish yellow, 10 YR 6/6, dry, fg-mg, well sorted, compressible.		SP				
	176-195	SILT: brownish yellow, 10 YR 6/8, dry, low plasticity, compressible. Some fg-mg sand, moderately sorted.		ML				
	195-234	SAND: pale brown, 10 YR 7/4, dry, fg-mg, well sorted, low plasticity, not compressible.		SP				

State Well Report No.: 378942

Boring and Well Log

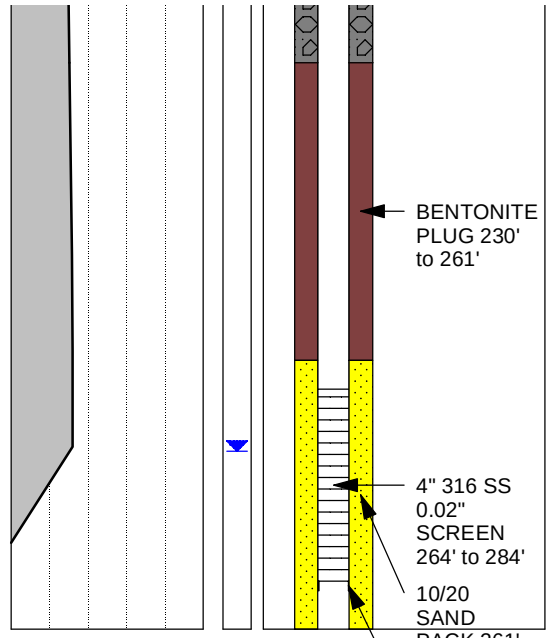
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB103
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.2
Start Date:	8-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.4
End Date:	9-2-2014	**Method:**	ARCH	**Northing:**	3755527.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634073.5
FGZ Depth:	284 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230			
240	234-240	GRAVELLY SAND: grayish brown, 10 YR 5/2, mg-cg, poorly sorted. Gravel, fg-mg pebble, subrounded to rounded.	SW
	240-250		GW
250	250-262	SANDY GRAVEL: orangish brown, 7.5 YR 6/4, damp, 1/4"-1 1/2", subangular to rounded, poorly sorted. Sand, vfg-mg.	SP
260	262-284	SAND: orangish brown, 2.5 YR 6/4, damp, vfg, well sorted.	
270		SAND: orangish brown, 2.5 YR 6/4, wet, vfg-cg, poorly sorted. Trace gravel, <= 1 1/4", subrounded.	SW
280	284-289	SILT: brownish pink, 5 YR 6/6, dry, stiff. Trace sand, vfg. Top of FGZ.	ML

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 230, 240, 250, 260, 270, 280

State Well Report No.: 378942

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB104
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.6
Start Date:	8-19-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.8
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755482.4
Total Depth:	291 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634160.4
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

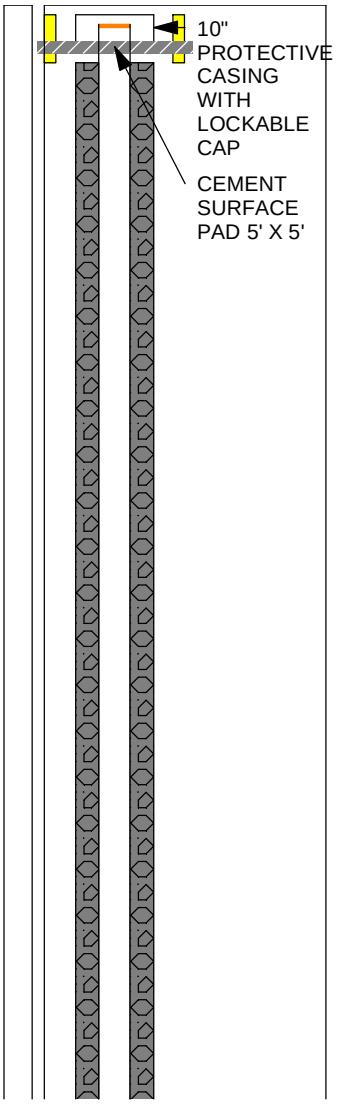
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-3	SILT: brown, 7.5 YR 4/3, dry, trace organic matter, low plasticity, some clay.	OL
	3-15	SILT: light brown, 7.5 YR 6/3, dry, trace caliche nodules, moderately sorted, low plasticity.	ML
	15-30	SILT: reddish yellow, 7.5 YR 6/6, dry, moderately sorted, compressible, low plasticity.	ML
	30-50	SILT: yellowish red, 5 YR 5/6, dry, moderately sorted, some fg-mg sand, low plasticity.	ML
	50-74	SILT: reddish brown, 5 YR 4/4, dry, compressible, low plasticity, moderately sorted.	ML
	74-88	SANDY SILT: pink, 7.5 YR 8/3, mg-fg sand, medium-poor sorting, trace caliche.	ML
	88-110	SILTY SAND: reddish yellow, 5 YR 6/6, dry, fg-mg, low plasticity, moderately sorted.	SM

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **378940**

Boring and Well Log

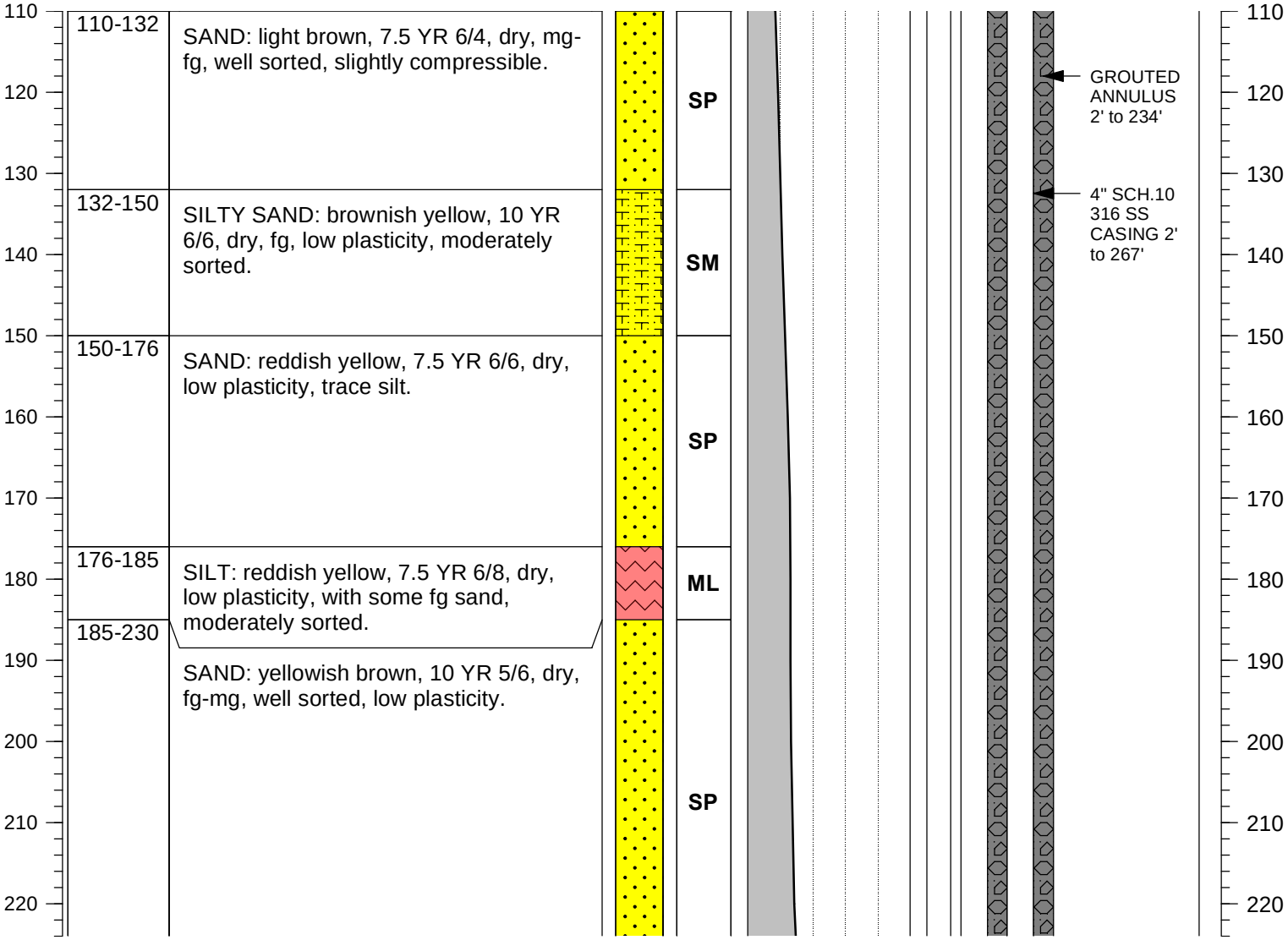
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB104
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.6
Start Date:	8-19-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.8
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755482.4
Total Depth:	291 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634160.4
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
	110-132	SAND: light brown, 7.5 YR 6/4, dry, mg-fg, well sorted, slightly compressible.		SP
	132-150	SILTY SAND: brownish yellow, 10 YR 6/6, dry, fg, low plasticity, moderately sorted.		SM
	150-176	SAND: reddish yellow, 7.5 YR 6/6, dry, low plasticity, trace silt.		SP
	176-185	SILT: reddish yellow, 7.5 YR 6/8, dry, low plasticity, with some fg sand, moderately sorted.		ML
	185-230	SAND: yellowish brown, 10 YR 5/6, dry, fg-mg, well sorted, low plasticity.		SP

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



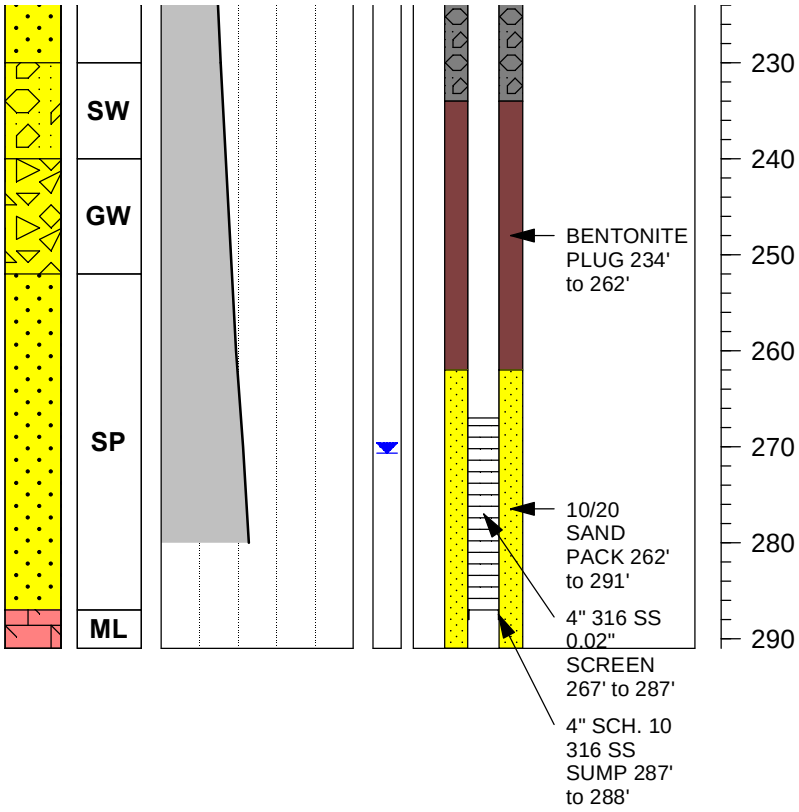
Depth (ft bgs)

State Well Report No.: 378940

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB104
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.6
Start Date:	8-19-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.8
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755482.4
Total Depth:	291 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634160.4
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	230-240	GRAVELLY SAND: brownish yellow, 10 YR 6/6, dry, mg-cg, with fine pebble gravel, poorly sorted.	SW
240	240-252	SANDY GRAVEL: brown, 10 YR 5/3, dry, fine pebble gravel, mg sand, poorly sorted.	GW
250	252-287	SAND: brown, 10 YR 5/3, dry to wet, mg, with trace fine pebble gravel, moderately sorted.	SP
260			
270			
280			
290	287-291	SANDY SILT: pink, 5 YR 7/4, sand fg, rollable, high placticity, compressible. Top of FGZ.	ML



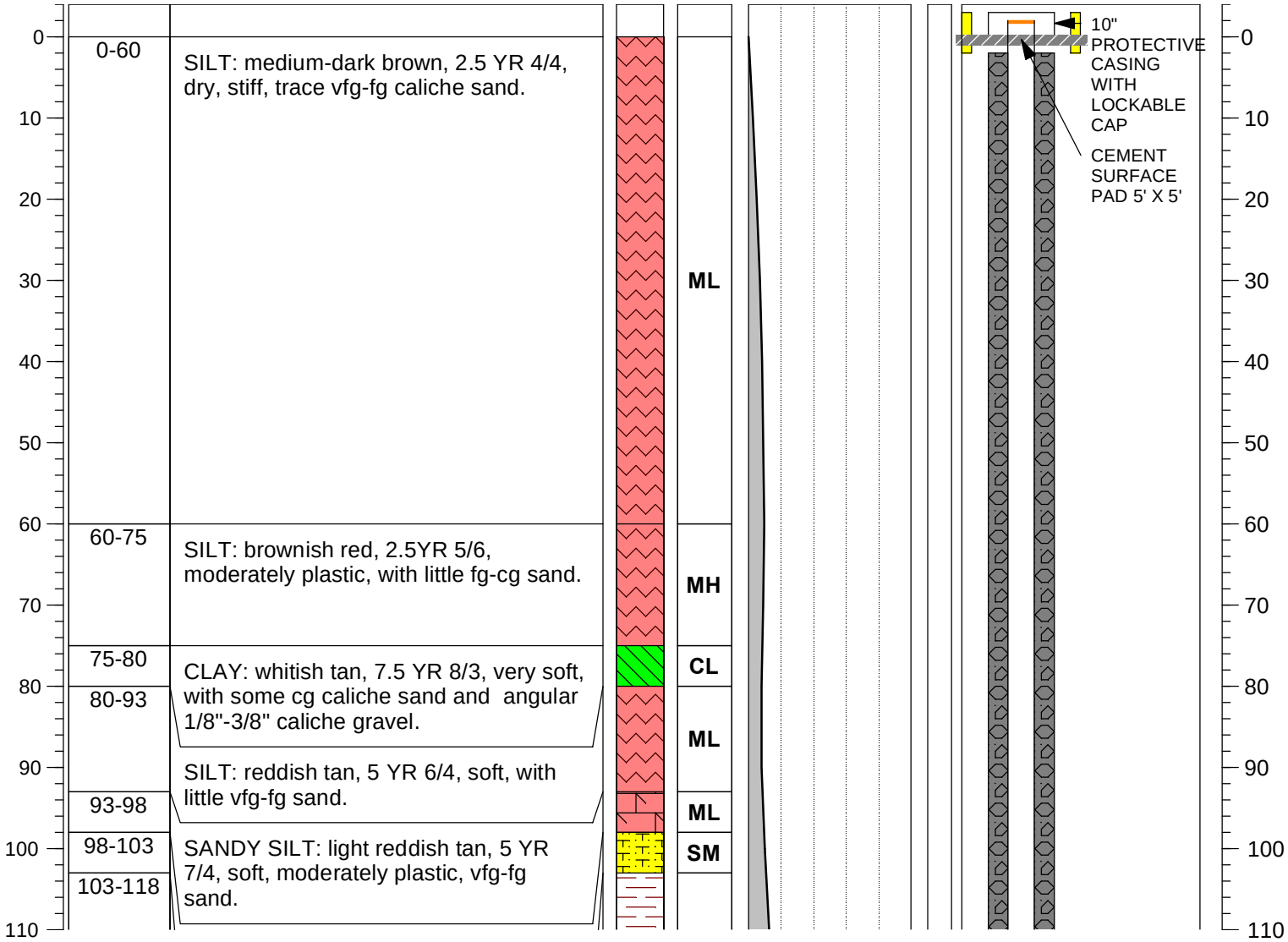
State Well Report No.: 378940

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB105
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-30-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.5
End Date:	8-6-2014	**Method:**	Mud Rotary	**Northing:**	3755438.2
Total Depth:	287 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634245.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-60	SILT: medium-dark brown, 2.5 YR 4/4, dry, stiff, trace vfg-fg caliche sand.	ML
	60-75	SILT: brownish red, 2.5YR 5/6, moderately plastic, with little fg-cg sand.	MH
	75-80	CLAY: whitish tan, 7.5 YR 8/3, very soft, with some cg caliche sand and angular 1/8"-3/8" caliche gravel.	CL
	80-93	SILT: reddish tan, 5 YR 6/4, soft, with little vfg-fg sand.	ML
	93-98		ML
	98-103	SANDY SILT: light reddish tan, 5 YR 7/4, soft, moderately plastic, vfg-fg sand.	SM
	103-118		

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)



State Well Report No.: 375884

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB105
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-30-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.5
End Date:	8-6-2014	**Method:**	Mud Rotary	**Northing:**	3755438.2
Total Depth:	287 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634245.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

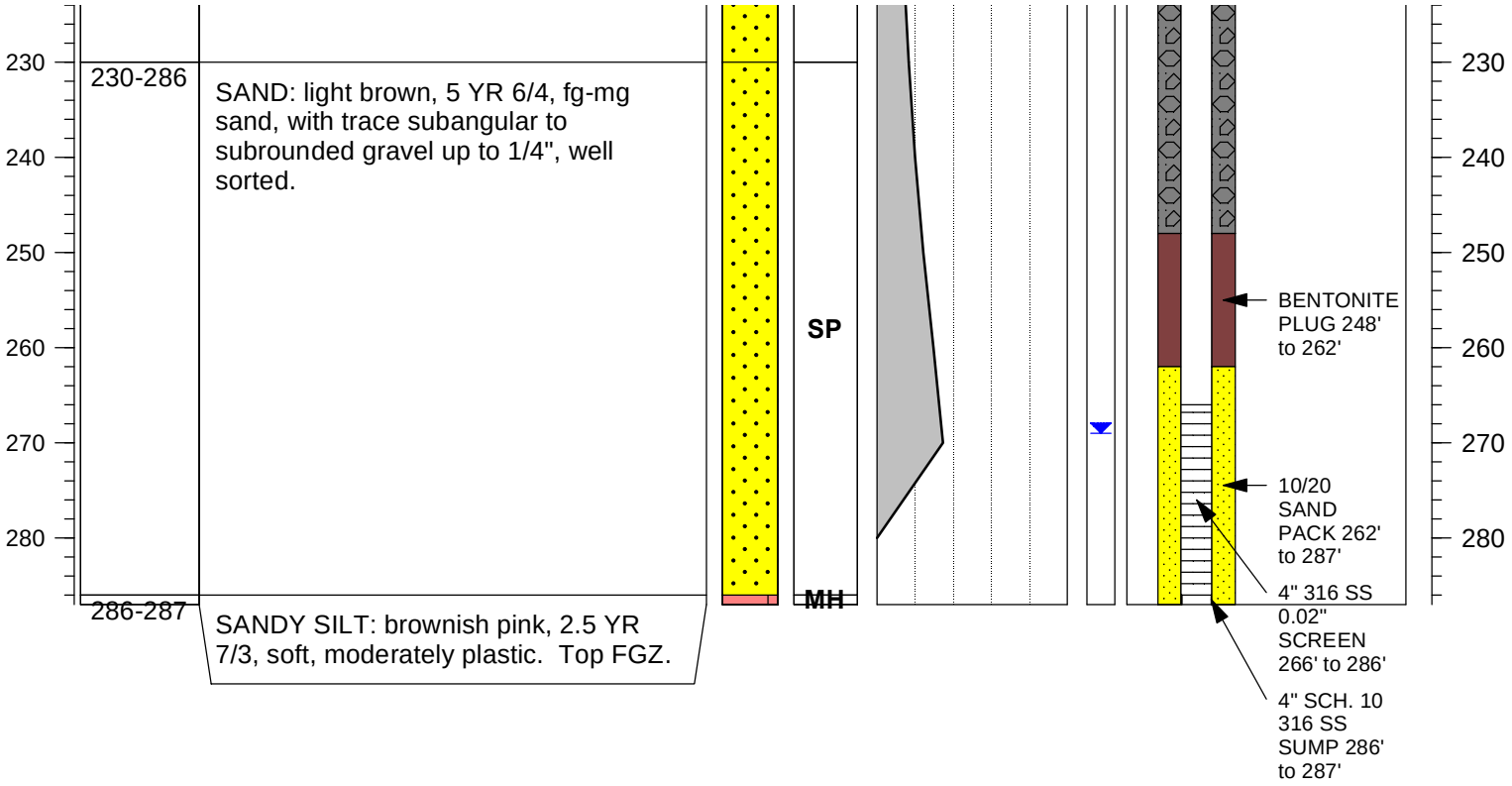
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–120		SILTY SAND: tan/reddish brown, 5 YR 7/4, soft, vfg-cg sand, poorly sorted.		MH				110–120
120–130	118-132	CLAYEY SILT: light brown, 10 YR 6/4, soft, rollable, moderately plastic, sand mg-cg , becoming less plastic with depth.		MH			GROUTED ANNULUS 2' to 248'	120–130
130–140	132-170	SANDY SILT: light brown, 2.5 YR 7/6, rollable, moderately soft, sand vfg-fg.					4" SCH.10 316 SS CASING 2' to 266'	130–140
140–150		SILTY SAND: light brown, 7.5 YR 7/6, fg-cg, with trace to 1/4" subangular to subrounded gravel, poorly sorted.		SM				140–150
150–160								150–160
160–170								160–170
170–180	170-210	SAND: light brown, 5 YR 6/4, vfg-mg, with little silt and trace gravel at varying intervals, moderately sorted.		SM				170–180
180–190								180–190
190–200								190–200
200–210								200–210
210–220	210-230	SAND: light brown, 5 TR 6/4, vfg-fg. Trace subangular to subrounded gravel up to 1/4", well sorted.		SP				210–220

State Well Report No.: **375884**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB105
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-30-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.5
End Date:	8-6-2014	**Method:**	Mud Rotary	**Northing:**	3755438.2
Total Depth:	287 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634245.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230	230-286	SAND: light brown, 5 YR 6/4, fg-mg sand, with trace subangular to subrounded gravel up to 1/4", well sorted.		SP			BENTONITE PLUG 248' to 262'; 10/20 SAND PACK 262' to 287'; 4" 316 SS 0.02" SCREEN 266' to 286'; 4" SCH. 10 316 SS SUMP 286' to 287'	230
240								240
250								250
260								260
270								270
280	286-287	SANDY SILT: brownish pink, 2.5 YR 7/3, soft, moderately plastic. Top FGZ.		MH				280



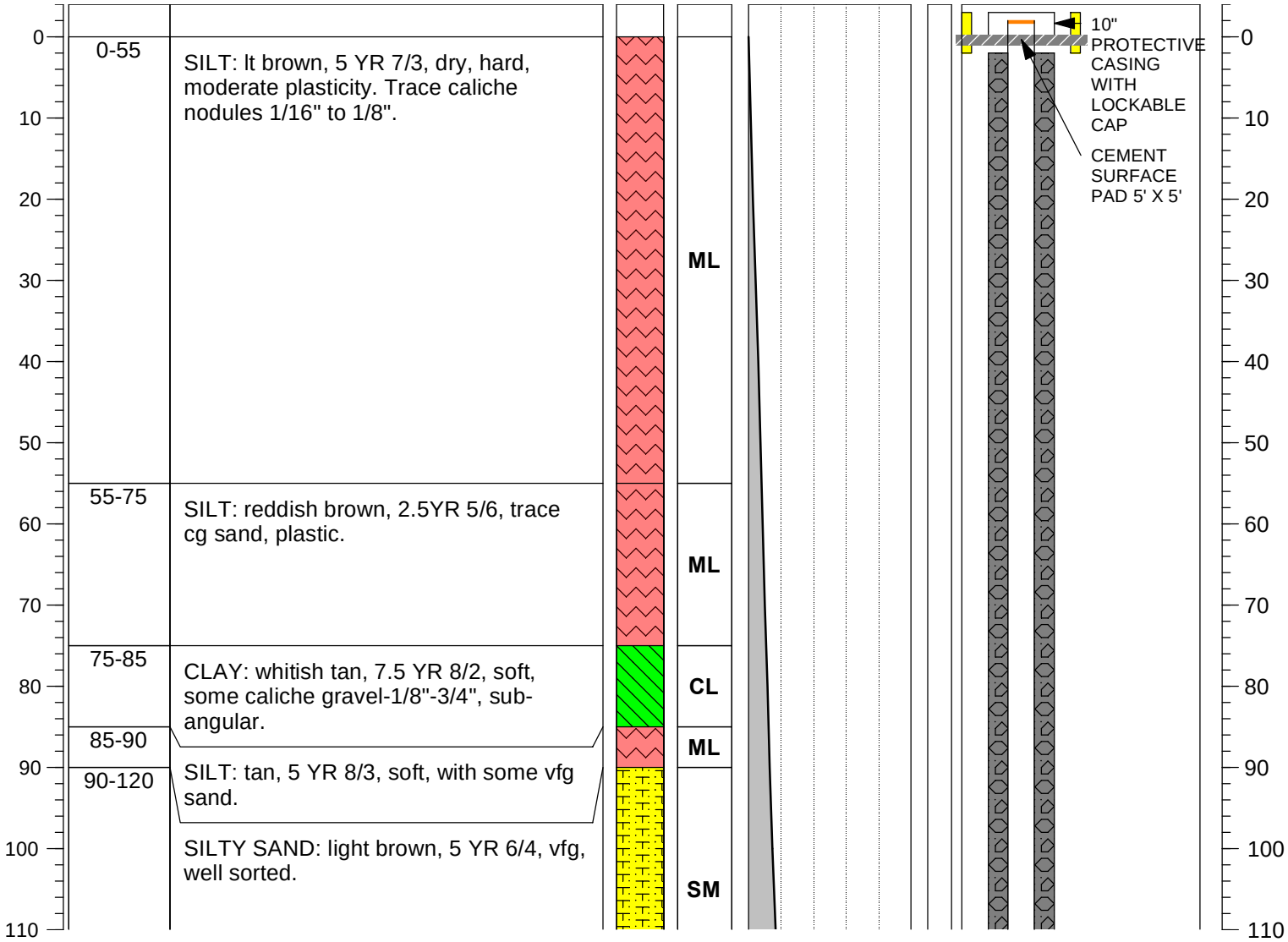
State Well Report No.: 375884

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB106
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.0
Start Date:	7-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.1
End Date:	7-29-2014	**Method:**	Mud Rotary	**Northing:**	3755393.4
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634332.5
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-55	SILT: lt brown, 5 YR 7/3, dry, hard, moderate plasticity. Trace caliche nodules 1/16" to 1/8".	ML
	55-75	SILT: reddish brown, 2.5YR 5/6, trace cg sand, plastic.	ML
	75-85	CLAY: whitish tan, 7.5 YR 8/2, soft, some caliche gravel-1/8"-3/4", sub-angular.	CL
	85-90	SILT: tan, 5 YR 8/3, soft, with some vfg sand.	ML
	90-120	SILTY SAND: light brown, 5 YR 6/4, vfg, well sorted.	SM

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)



State Well Report No.: 375885

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB106
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.0
Start Date:	7-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.1
End Date:	7-29-2014	**Method:**	Mud Rotary	**Northing:**	3755393.4
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634332.5
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
120	120-126	SILT: light brown, 5 YR 6/4, soft, easily rollable, with some vfg sand, well sorted.		ML			GROUTED ANNULUS 2' to 250'; 4" SCH.10 316 SS CASING 2' to 265'	120
130	126-175	SILTY SAND: light brown, 5 YR 6/4, vfg, with trace subrounded to rounded gravel to 1/8", well sorted.		SM				130
140								140
150								150
160								160
170								170
180	175-178			SM				180
	178-225	SILTY SAND: light brown, 5 YR 6/4, mg-cg, with some clay, moderately sorted.						
190		SAND: light brown, 5 YR 6/4, vfg-fg, with trace silt, moderately well sorted.		SP				190
200								200
210								210
220								220

State Well Report No.: 375885

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB106
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.0
Start Date:	7-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.1
End Date:	7-29-2014	**Method:**	Mud Rotary	**Northing:**	3755393.4
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634332.5
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230	225-285	SAND: light brown, 5 YR 6/4, vfg-cg,, with little subrounded to subangular gravel, 1/16"-1/4", poorly sorted.		SW			BENTONITE PLUG 250' to 262'; 4" 316 SS 0.02" SCREEN 265' to 285'; 10/20 SAND PACK 262' to 289'; 4" SCH. 10 316 SS SUMP 285' to 286'	230
240								240
250								250
260								260
270								270
280	285-289	SILT: brownish pink, 2.5 YR 6/6, soft, with some fg sand. Topof FGZ.		ML				280

State Well Report No.: **375885**

STATE OF TEXAS PLUGGING REPORT for Tracking #98371

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1108**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**Highway 60 & FM 2373 Amarillo , TX 79120**	Latitude:	**35° 17' 46" N**
Well County:	**Carson**	Longitude:	**101° 33' 34" W**
		GPS Brand Used:	**Garmin Etrex**

Well Type: **Monitor**

HISTORICAL DATA ON WELL TO BE PLUGGED

Original Well Driller:	**Jason Smith**
Driller's License Number of Original Well Driller:	**No Data**
Date Well Drilled:	**9/13/1996**
Well Report Tracking Number:	**No Data**
Diameter of Borehole:	**10 inches**
Total Depth of Borehole:	**295 feet**

Date Well Plugged:	**11/19/2014**
Person Actually Performing Plugging Operation:	**Stacy Fenton**
License Number of Plugging Operator:	**59433**
Plugging Method:	**Other plugging method.**
Plugging Variance #:	**No Data**
Casing Left Data:	1st Interval: **6 inches diameter, From 2 ft to 295 ft** 2nd Interval: **No Data** 3rd Interval: **No Data**
Cement/Bentonite Plugs Placed in Well:	1st Interval: **From 0 ft to 2 ft; Sack(s)/type of cement used: Top soil** 2nd Interval: **From 2 ft to 4 ft; Sack(s)/type of cement used: 2 cement** 3rd Interval: **From 4 ft to 8 ft; Sack(s)/type of cement used: 2 bentonite** 4th Interval: **From 8 ft to 295 ft; Sack(s)/type of cement used: 95 portland cement** 5th Interval: **No Data**

Certification Data:	The plug installer certified that the plug installer plugged this well (or the well was plugged under the plug installer's direct supervision) and that each and all of the statements herein are true and correct. The plug installer understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Talon/LPE 921 N Bivins Amarillo , TX 79107**

Plug Installer License Number:	**59433**
Licensed Plug Installer Signature:	**Stacy Fenton**
Registered Plug Installer Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Plugging Method Comments:	**High Pressure cement grout; originally drilled as an extraction well PTX06-EW-13.**

Please include the plugging report's tracking number (Tracking #**98371**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

Appendix G
Implementation and Maintenance Reports for Remedial Actions

List of Reports

100% Design Project Specifications. Zone 11 In-Situ Bioremediation Equipment Pad Design. Trihydro Corporation. June 30, 2014.

Well Field Maintenance Report – Zone 11 ISB System. Trihydro Corporation. September 12, 2014.

Post-Injection Report – Zone 11 ISB System May - July 2014. Trihydro Corporation. September 12, 2014.

Well Drilling Basic Ordering Agreement Release 4 Implementation Report. Trihydro Corporation. December 18, 2014.

100% DESIGN

PROJECT SPECIFICATIONS

B&W PANTEX

ZONE 11 IN-SITU BIOREMEDIATION EQUIPMENT PAD DESIGN

PURCHASE ORDER NO. 31015

PANTEX PLANT, AMARILLO TEXAS

June 30, 2014

Project #: 18A-011-001

SUBMITTED BY: Trihydro Corporation

1252 Commerce Drive, Laramie, WY 82070

STATE OF TEXAS
MICHAEL J. GAYNOR
105460
LICENSED
PROFESSIONAL ENGINEER
6/30/2014

STATE OF TEXAS
WILSON STONE CLAYTON
89044
LICENSED
PROFESSIONAL ENGINEER
6/30/2014

Trihydro
CORPORATION

ENGINEERING SOLUTIONS. ADVANCING BUSINESS.

Home Office | 1252 Commerce Drive | Laramie, WY 82070 | phone 307/745.7474 | fax 307/745.7729 | www.trihydro.com

Project Specifications Index

- Division 01000 General Specifications (Pantex Specific)
- Section 16000 Electrical
- Section 31 10 00 Earthwork
- Section 31 11 00 Clearing
- Section 31 23 16 Trench Excavation
- Section 31 23 33 Trench Backfill
- Section 33 11 00 Water Services
- Section 33 40 00 Storm Drains

CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Summary)

ISSUE HISTORY			
Issue	Date	Pages Affected	Comments
002	01/03/05	All	1.3.B, 1.3.C, 1.4.B, 1.5.A, 1.6, 1.6.A, Editors Note before 1.6.B, 1.9.A, 1.9.C-D, 1.10.B.1, 1.12.C, 1.13.B, 1.14.B, 1.14.B.1-2, 1.15.C, 1.17.B-C, 1.18.A, and all of Project Specific Requirements by Section
003	03/10/05	All	General change.
004	04/21/05	All	General change.
005	07/06/05	4, 6	Delete section 1.8 “Energy Star Compliance,” 1.13.B.1, 1.13.B.2, 1.14.A
006	03/10/06	3	1.5.A
007	02/02/07	6 and 7	1.15.A, 1.15.B, delete 1.15.C
008	10/02/07	All	Delete definitions and general requirements, in T&S’s (PX-200STC-76). Modified format and content for SOW, added applicable documents and requirements section. Revised RFI verbage, added FCR. Moved construction to new section 01200. Defined furnished temporary facilities to 01200. Reorganized/deleted “complete system,” belongs in SOW. Deleted drawings and specs, belongs in RFP or T&Cs. Deleted site condition, in T&Cs. Add requirements from Div 1, 01200, for construction water. Deleted “contract duration section, period of performance,” per comments from S/C.
009	4/26/11	All	Global changes to clarify Contractor requirements.
010	1/23/12	5	Format change.

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1.2 PROJECT INFORMATION 4
1.3 GOVERNMENT FURNISHED EQUIPMENT 4
1.4 REQUESTS FOR INFORMATION (RFI) CONTRACTOR INSTRUCTIONS 5
1.5 FIELD CHANGE REQUEST 5
PART 2. REQUIREMENTS 5
2.2 STATEMENT OF WORK 6
2.3 EXHIBITS 6
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SECTION 01010 - SUMMARY

PART 1. GENERAL

1.1 SCOPE

The purpose of this work is to construct an all-weather staging area and delivery road, an electrical supply feed, and a water conveyance line at the U.S. Department of Energy (DOE) Pantex Plant near Amarillo, Texas in order to accommodate the future expansion of the Zone 11 In-Situ Bioremediation (Z11ISB) well field.

The objectives of this work include the following tasks:

1. Construct an 100 feet x 80 feet all-weather equipment pad,
2. Construct an all-weather access road to the equipment pad,
3. Construct a 3 phase, 4 wire 480/277 volt grounded service (wye-wye configuration),
4. Construct a water conveyance line, approximately 2,500 feet in length and constructed of 6-inch diameter High Density Poly Ethylene (HDPE) with a side dimension ratio (SDR) of 11,
5. Construct a terminal equipment pad.

1.2 PROJECT INFORMATION

A. Project Identification: Z11 Equipment Pad Design.

B. Contractor: **[Insert Contractor name and contact information]**.

C. Project Location: Project is in Zone 10 south of Zone 11

1. The location(s) of work (is) are in the _X____ Property Protection Area _____ Limited Area _____ Protected Area _____ MAA.
2. This location **is not** in an area controlled for radiological purposes.

1.3 GOVERNMENT FURNISHED EQUIPMENT

A. B&W Pantex will furnish and install the following:

1. None.

B. B&W Pantex will provide and the Contractor will install the following:

1. None

1.4 REQUESTS FOR INFORMATION (RFI) CONTRACTOR INSTRUCTIONS

A. An RFI is a contractor-initiated technical question; not an authorized change document. An RFI cannot be used to direct a change in contract requirements.

The Contractor shall submit B&W Pantex form PX-4795 (see Div-01010, Exhibit 1) to Project Records Group in order to request clarification or additional information concerning the project. Impacts to the cost or schedule shall be identified within the RFI.

The contractor shall immediately advise B&W Pantex, via a contractor change proposal, when the B&W Pantex response to an RFI has a cost and /or schedule impact.

Work undertaken without authorization from the B&W Pantex Contract Specialist is at the contractor's risk and expense.

B. The Contractor shall allow 14calendar days for B&W Pantex to respond to an RFI.

1.5 FIELD CHANGE REQUEST

A. The Contractor shall submit a PX-5643, “Field Change Request” (FCR) (see DIV-01010, Exhibit 2) to Project Records Group if a change in drawings or specifications is requested.

B. B&W Pantex Engineering must concur with the FCR disposition prior to implementation.

C. The Contractor shall allow 14 calendar days for B&W Pantex to respond to an FCR.

PART 2. REQUIREMENTS

2.1 COMPLETE SYSTEM

A. The Contractor shall provide all incidental parts, labor, supplies, equipment, and materials necessary to provide a complete and functional system that performs as specified.

B. The Contractor shall follow all manufacturers’ recommendations and procedures for the installation of materials, equipment, and systems.

C. All equipment and systems shall comply with applicable government and industry codes, standards, laws, regulations, B&W-Pantex supplied drawings, and B&W Pantex -supplied specifications.

D. If two or more applicable codes, standards, laws, regulations, B&W Pantex-supplied drawings, or B&W Pantex-supplied specifications establish differing requirements, the Contractor shall comply with the most stringent requirement.

2.2 STATEMENT OF WORK

A Statement of Work (SOW) to be issued and a Design Basis Document are referenced here to describe the work associated with this project.

2.3 EXHIBITS

A. Exhibit 1 – PX-4795, Request for Information (RFI)

B. Exhibit 2 – PX-5643, Field Change Request (FCR)

2.4 REFERENCES

A. GOVERNING DOCUMENTS

1. https://iw.pxplant.com/ucm/groups/jsp/documents/documents/rms/ReqFlowdown.jsp?docno=DIV-01010

B. AUTHORIZING DOCUMENTS

1. DIR-0001, “Roles and Responsibilities for the Management and Operation of Pantex Plant

C. RELATED DOCUMENTS

1. Design Basis Document for the In-Situ Bioremediation Corrective Measures Design, November 19, 2008

2. Operation and Maintenance Plan In-Situ Bioremediation Corrective Measures Design Zone 11 South, April 20, 2009

3. Implementation Report In-Situ Bioremediation System Corrective Measures Construction Zone 11 South, September 1, 2009

D. GENERATED DOCUMENTS

1. PX-4795, “Request for Information (RFI)”

2. PX-5643, “Field Change Request”

E. RECORDS

1. PX-4795, “Request for Information (RFI)” RIDS R_024301

2. PX-5643, “Field Change Request” RIDS R_024301

END OF SECTION 01010

EXHIBIT 1
PX-4795, "Request for Information (RFI)"

USE MOST CURRENT ISSUE IN OPTIX

EXHIBIT 2
PX-5643, "Field Change Request"

USE MOST CURRENT ISSUE IN OPTIX

CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Submittals)

Level of Use: REFERENCE

Issue History		
Issue	**Date**	**Comments**
001 - 009		No history documentation available.
010	05/19/10	Update Action Code Definitions.
011	08/25/10	Changed number of Pantex Drafting Manual from MNL-293006 to DRQ-293006.
012	01/03/11	Correct the title of “Pantex Drafting Manual,” changing to “Engineering Drawing Requirements.
013	03/12	Format change to comply with MNL-0007 guidelines.
014	07/05/12	Global changes to clarify Contractor requirements.

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SECTION 01030 - SUBMITTALS

1. SUBMITTAL REQUIREMENTS

1.1 Contractor shall furnish all submittals (i.e., working papers, drawings, digital files, analyses, reports, other data, etc.) in accordance with the Contractor Submittal Form PX-5541 and this section.

1.2 All submittals prepared for this Subcontract shall show the following information in or near the title block:

B&W Pantex
Subcontract Number: TBD

1.3 Contractor shall furnish copies as stipulated in the Specification Submittal Reference Sheet (SSRS) PX-5541, Exhibit 2.

1.4 With each separate submittal, a copy of PX-4835 (Exhibit 1) and PX-5541 (Exhibit 2) shall be included.

1.5 Whenever possible, related items shall be submitted together to permit simultaneous review, as long as they are referenced in the same specification section. When such submittal is not possible, submittals shall be in an appropriate sequence to assure that necessary information is available for reviewing such item as it is received.

1.6 B&W Pantex will determine if submittals received are complete and reserves the right to reject and require resubmittal of any submittal(s) that does not meet the requirements.

1.7 B&W Pantex also reserves the right to request any submittal not included on the SSRS or any new submittal requirement.

2. SUBMITTAL RECIPIENTS

2.1 Submittals of all documents, as identified on the SSRS, shall be made as noted below.

Attention: Jennifer Trevino
B&W Pantex
FM 2373 & HWY 60
Amarillo, Texas 79120-0020

3. TYPES OF SUBMITTALS

3.1 Documents

3.1.1 The minimum size of each submittal shall be 8 ½ inches by 11 inches. Each submittal shall be of a sufficient quality to produce clearly legible third-generation copies using a commercial quality printer. Any submittals larger than 11” x 17” shall be secured or inserted into mailing tubes when hand delivered.

3.1.2 Contractor shall provide deliverable documents in printed form and also electronic form (Microsoft Word only) on Compact Disk (CD).

3.2 Drawing Requirements

3.2.1 All drawings and diagrams shall be prepared in accordance with the latest applicable Engineering Drawing Requirements (DRQ-293006). Drawings will be submitted in MicroStation format only, or accepted equal.

3.2.2 Electronic files shall be submitted in MicroStation format, or acceptable equal, as referenced in the DRQ-293006 on CD.

3.2.3 Please note that the U.S. system of measurement of units is standard.

3.2.4 Each drawing submitted shall have a separate drawing number. When a drawing is revised, revision numbers must be clearly legible and easily distinguishable from the drawing number and should be as close as possible to the title block. A short description of the nature of the revision must be included, and revised areas on the drawings shall be clouded and identified with the revision number. For correct title block format and revision number information, please refer to the DRQ-293006.

3.2.5 “Typical,” “standard,” or “off-the-shelf” drawings will be acceptable only if they have all non-applicable sections either removed or noted on each drawing.

3.3 As-Built Drawings

3.3.1 Progress As-Builts: During construction, Contractor shall keep a marked, up-to-date set of as-built drawings on the jobsite as an accurate record of all deviations between Work as shown and Work as installed. These drawings shall be available to Contractor and owner for inspection at any time during regular business hours.

3.3.2 Final As-Builts: Contractor shall, at its expense and not later than (15) calendar days after Use and Possession of the project, submit for approval to B&W Pantex a complete set of marked up, as-built reproducible drawings with AS-BUILT clearly printed on each sheet.

3.3.3 Contractor shall correct any returned as-builts submittals. Final as-builts are required for Final Acceptance and before Final Payment.

3.3.4 Endorsement: Contractor shall sign each final as-built drawing and shall note thereon that deviations and annotations are complete and accurate.

3.4 As-Built Specifications:

3.4.1 Progress As-Builts: During construction, Contractor shall keep a marked up-to-date set of as-built specifications on the jobsite annotated to clearly indicate all substitutions that are incorporated into the Work. Where selection of more than one product is specified, annotation shall show which product was installed. These specifications shall be available to B&W Pantex for inspection at any time during regular business hours.

3.4.2 Final As-Builts: Contractor shall, at its expense and not later than (15) calendar days after Use and Possession of the project, submit for approval to B&W Pantex a complete set of marked up, as-built reproducible drawings with AS-BUILT clearly printed on each sheet.

3.4.3 Contractor shall correct any returned as-builts submittals. Final as-builts are required for Final Acceptance and before Final Payment.

3.4.4 Endorsements: Contractor shall sign each cover of the as-built specifications and shall note thereon that deviations and annotations are complete and accurate.

3.5 Electronic Media

3.5.1 Data submitted on electronic media shall be accompanied by a hard copy of the media contents and a letter of transmittal, including the following:

(a) Contract number.

(b) A description of the contents per the SSRS or drawing files.

(c) Number and type of items.

(d) Note if the submittal is a re-submittal.

3.5.2 The Contractor shall allow for submittal processing time and can contact Pantex on a submittal status only after (14) calendar days from submittal receipt. The submittal will have a status (code) marked either approved or it will require additional information. The submittal turnaround can be extended pending submittal package quantity and/or complexity.

3.5.3 Permission to proceed does not constitute acceptance or approval of design details, calculations, analyses, test methods, or materials developed or selected by the Contractor/supplier, and does not relieve Contractor/supplier from full compliance with contractual obligations or release any "holds" placed on the contract.

3.5.4 Work shall not proceed until submittals requiring prior review have been returned by B&W Pantex with acceptance codes which are explained below:

(a) Code A – Approved.

(b) Code B – Approved, Except as Noted.

(c) Code C – Revise and resubmit; work may not proceed.

(d) Code D – Other (Specify).

3.5.5 Contractor shall incorporate changes, as required, by comments on submittals and resubmit corrected submittals for review. Submittals that have been given a Code A, Approved, notation by B&W Pantex shall not be changed without notification to B&W Pantex. If changes are required, affected submittals shall be resubmitted to B&W Pantex for review.

4. SUBMITTAL DISPOSITION

4.1 The work process for submittals is as follows. The Contractor (or supplier) validates that contents, to be submitted to B&W Pantex, meet the intent of the contractual requirements and identifies components along with justification that are not in compliance. The Contractor then submits the submittal package to B&W Pantex for disposition. B&W Pantex will review the submittal. Work impacted by a particular submittal is not expected to proceed until submittals, requiring review, have been granted concurrence from B&W Pantex.

4.2 Each submittal requiring review will have a Review Status stamp applied indicating the review status of the submittal. Each submittal package is to have a cover sheet. B&W Pantex will identify action codes on the cover sheet. The action codes identify the B&W Pantex response to the submittal. The "Technical Approval" signature is applied by the authority for that submittal, and the Project Manager (PM) (if one is assigned), then acknowledges the submittal.

4.3 The following explains the review status and action codes and how they relate:

4.3.1 Action Code A: Approved As Submitted:

(a) Review Status: Work may proceed. This is based on the submittal having been given a review which may or may not have covered all areas of the submittal's subject matter. This review status does not constitute acceptance or approval of design details, calculations, analysis, test methods, or materials developed or selected by the

supplier and does not relieve the supplier from full compliance with contractual obligations.

4.3.2 Action Code B: Approved except as noted.

(a) Review Status: Work may proceed based on incorporation of changes indicated. Same level of review has been given as Action Code A. Marks or notes have been applied to the submittal indicating deficiencies that are minor in nature and do not impact the desired outcome of the work. The submittal shall be corrected and submitted as part of the "As Built" submittals.

4.3.3 Action Code C: Revise and resubmit; work may not proceed.

(a) Review Status: Work affected by the submittal may not proceed. Same level of review has been given as Action Code A. Marks or notes have been applied to the submittal indicating deficiencies that are major in nature and could potentially impact the desired outcome of the work. The submittal shall be revised and resubmitted by the Contractor incorporating the intent of the remarks. Re-submittal will be reviewed to assure the intent of the marks and/or notes have been incorporated prior to allowing work to proceed.

(b) Special cases may exist where the submittal process needs to be expedited to maintain project schedule. Upon a submittal receiving an action code "C," the Contractor may request approval to resubmit red-line documents in place of formally revised documents. Upon approval, the request and re-submittal using red-lines is to occur within 5 working days. Expedited submittals using red-line documents are to be followed with a formally revised document submittal within 30 days.

4.3.4 Action Code D: Other (Specify).

(a) Review Status: This approval level or action code is used when all other action codes do not apply. An example is when the submittal will be addressed and returned by a correspondence other than the standard submittal process. This action is rarely used, but may be used when a response to a submittal is dependent on another submittal. For example, submittal #1 is received and does not have adequate information to complete a review. Submittal #2 is sent by the Contractor to provide the additional information needed to complete the review. The response for #1 and #2 will be processed through submittal #2, and submittal #1 is returned by separate correspondence (submittal #2).

5. REFERENCES

5.1 GOVERNING DOCUMENTS

https://iw.pxplant.com/ucm/groups/jsp/documents/documents/rms/ReqFlowdown.jsp?docno=DIV-01030

5.2 AUTHORIZING DOCUMENTS

(a) DIR-0001, "Roles and Responsibilities for the Management and Operation of Pantex Plant" (U)

5.3 RELATED DOCUMENTS

(a) DRQ-293006, "Engineering Drawing Requirements"

5.4 FORMS

5.4.1 GENERATED FORMS

(a) PX-4835, "Contractor Submittal Form"

(b) PX-5541, "Specification Submittal Reference Sheet"

5.4.2 RELATED FORMS

(a) None

5.5 RECORDS

(a) PX-4835, "Contractor Submittal Form" R_024301

(b) PX-5541, "Specification Submittal Reference Sheet" R_024301

EXHIBIT 1
PX-4835, "Contractor Submittal Form"

USE MOST CURRENT ISSUE

EXHIBIT 2
PX-5541, "Specification Submittal Reference Sheet"

USE MOST CURRENT ISSUE

CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Identification Systems)

Level of Use: Reference

Issue	Pages Affected	Comments
000	All	New Specification.
001	All	General change.
002	3	2.2.A.
003	All	Change all BWXT Pantex to B&W Pantex.
004	All	Global changes to clarify Contractor requirements.
005	All 8	Change format to comply with MNL-0007 guidelines Remove reference to “Section 16400”
006	3.11, 3.12	Addition of Trace wire and Utility marker requirements

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ACRONYMS

OSHA	Occupational Safety and Health Administration
PSIG	Pounds per Square Inch Gauge
PSTR	Project Subcontract Technical Representative
T&P	Temperature and Pressure

SECTION 01080 - IDENTIFICATION SYSTEMS

1. GENERAL

1.1 This section includes Contractor requirements for paint, marking, labeling, and identification standards for Plant systems.

1.2 The Contractor shall comply with MNL-00014 unless otherwise specified.

1.3 The Contractor shall submit appropriate documentation for the use of stenciling where the use of labels, tags, or specified markers are not feasible.

2. SPECIFIC REQUIREMENTS

2.1 Directional flow arrows shall be black on color-coded snap-on semi-rigid plastic pipe markers similar to Seton's Setmark pipe markers. All piping and ductwork shall be labeled with the direction of flow.

2.2 All exhaust ductwork shall be labeled "Caution - Potentially Hazardous." This labeling shall appear a minimum of every 20 feet on-center and on both sides of penetrations. Letters shall be a minimum of 3 inches high. Ductwork shall be labeled on the underside where it is over 10 feet from the floor and on all sides where it is less than 10 feet from the floor.

2.3 All Labels shall have the following data fields.

2.3.1 Line 1 - 12 character alphanumeric field, system abbreviation.

2.3.2 Line 2 - 20 character alphanumeric field, building and room numbers.

2.3.3 Line 3 - 16 character alphanumeric field, equipment/component name abbreviation and number.

2.3.4 Line 4 - Optional, alphanumeric field, engineering grid coordinates.

2.4 Plastic labels shall be laminated three-layer plastic with engraved white letters on black background.

2.5 Metal labels shall be a minimum thickness of 0.0375 inch (1 mm) stainless steel, 0.032 inch (0.8 mm) polished brass or 0.032 inch (0.8 mm) aluminum with stamped letters or material compatible with the labeled item.

2.6 Valve lists shall be a typewritten letter size list framed under Lucite in anodized aluminum frame. Provide separate list for each service. The valve list shall show valves in numerical order according to the numbers on the labels and indicate valve size, location, manufacturer, and type (such as gate, globe, or butterfly, etc.). It shall also include T&P valves. An as-built one-line diagram of the system with all valves labeled shall be included with the list in the frame. Valve lists will be located in each penthouse, equipment room, or as directed by the PSTR.

2.7 Pipe content label for stainless steel piping, attach identification tags of appropriate size. For hazardous material (explosive gas, acids, contaminated fluid, etc.) use industry standard hazard identification or symbol. Acceptable labels shall consist of the following:

2.7.1 Flexible, vinyl film tape with pressure sensitive adhesive backing and printed markings.

2.7.2 Factory fabricated, flexible, semi-rigid plastic, preformed to fit around pipe or pipe covering, minimum information indicating flow direction arrow and identification of fluid being conveyed.

2.7.3 Color-coded snap-on semi-rigid plastic pipe markers equal to Seton's Setmark pipe markers.

2.7.4 Color numbers on this page are defined in FED-STD No. 595 and conform to color chips listed therein.

2.7.5 Letter colors conform to the following table:

Predominate Background Color	Letter Color
Red	White
Yellow	Black
Green	Black
Bright Blue	White

2.7.6 All piping installed by the Contractor shall be labeled in accordance with ANSI/ASME A13.1 and this Section.

2.7.7 Color conforms to ANSI/ASME A13.1 and to the following table:

Pantex Plant Piping Color Code		
Material	**Color**	**Name**
Domestic Cold Water	Green, #14090	Domestic CW
Domestic Hot Water	Yellow, #13655	Domestic HW
Domestic Re-circulating Hot Water	Yellow, #13655	Recirc. Dom. HW
Heating-Hot Water	Yellow, #13655	Heating-Hot W.
Chilled Water	Green, #14090	Chill W.
Fire Protection Water	Red, #11105	None Reqd.
All Fire Prot'n. Chemical	Red, #11105	Name of Chemical
Laboratory Air	Black	Util. Air
Control Air	Black	Control Air

Pantex Plant Piping Color Code		
Material	**Color**	**Name**
Vacuum	White	HE Contaminated**
All Combustible Gases	Yellow, #13655	Name of Gas*
All Toxic Gases	Yellow, #13655	Name of Gas*
Nitrogen Gas (Less than 150 psig)	Green, #14260	Nitrogen
All Inert, Nontoxic (Safe) Gases	Green, #14260	Name of Gas*
All Gases at Press. (More than 150 psig)	Yellow, #13655	Name of Gas H.P.*
Cryogenic Liquid	Yellow, #13655	Liquid (Name of Gas)*
Deionized Water	Green, #14090	DI Water

NOTES:

*Standard pressures above 150 psig will be considered high pressure. All liquid or gas systems with pressures exceeding 150 psig will be color coded focal yellow and marked (H.P.). This will supersede any other criteria stated or implied in this standard.

**Mark "HE CONTAMINATED" in red lettering.

Name shall include supply or return as appropriate.

Color numbers on this page are defined in FED-STD No. 595 and conform to color chips listed therein.

3. EXECUTION REQUIREMENTS

3.1 Mark above ground piping in accordance with Exhibit 1 MNL-00014 and these specifications, except marking of Fire Safety Systems shall conform to the Fire Safety Systems specification.

3.2 Degrease and clean surfaces to receive adhesive for identification materials.

3.3 Labels shall be located in the normal line of vision and placed on or as near as practicable to the equipment.

3.4 Position labels horizontally, labels shall be readable without manipulation by personnel.

3.5 Labels shall not obscure or interfere with operation of any components and shall not obscure manufacturer's labels. Labels shall not bind tightly to valves.

3.6 Identification numbers shall be assigned based on a logical sequence of flow or pattern. Numbering systems shall be approved by the PSTR prior to fabrication or installation.

3.7 Install plastic labels with corrosive-resistant mechanical fasteners or chains, or with adhesive. Apply with sufficient adhesive to assure permanent adhesion and seal with clear lacquer.

3.8 Provide metal type in areas where plastic labels will be damaged by heat.

3.9 Position labels so they are readily visible and, where feasible, oriented in a horizontal position. Make labels readable without manipulation. Label large equipment, e.g., boilers, chillers, and tanks in multiple locations.

3.10 Provide labels for the following items (including on skid-mounted equipment):

3.10.1 Valves and dampers.

3.10.2 Instruments and gauges.

3.10.3 All equipment (scheduled or specified).

3.10.4 Piping and ventilation ductwork.

3.10.5 Electrical panels, breakers, switches, and instrument panel doors.

3.10.6 Fuse blocks, relays, terminal boards, and other components inside electrical panels.

3.10.7 Electronic/system devices.

3.10.8 Valve and damper labeling: Attach valve and damper labels so they will not be easily lost and misplaced. Where possible, thread stainless steel wire through the valve yoke and label plate. Care shall be taken not to damage the valve stem. Do not thread label plates and connecting wire through valve hand wheels or damper linkages.

3.10.9 Labeling:

(a) Provide labels that do not interfere with an operator's ability to read the instrument or gauge.

(b) For instruments located in environmental boxes, provide labels on the outside that will identify those instruments located inside, and label instruments individually inside the box.

(c) Include unit of measurement (e.g., psig for pressure instruments) on the instrument or gauge label.

3.10.10 Equipment labeling: Attach labels on equipment to a structural member of the equipment not normally removed during routine maintenance and in a consistent location for similar equipment. Label large equipment in multiple locations in areas where Plant personnel are expected to perform work.

3.10.11 Piping and ventilation ductwork: Identify with flow directional arrows and identification tag. Ventilation Ductwork shall be labeled at 30-foot intervals and on each side of walls. Labeling shall be visible from the floor. Labeling shall indicate the flow of air via arrows. Labels shall indicate if air is supply or return air.

3.10.12 OSHA warning signs: The Contractor shall install required warning, danger, and caution signs, labels, tags, etc., as required by 29 CFR 1910.145.

3.10.13 Valve List: Locate framed lists and one-lines where indicated by PSTR.

3.10.14 As-Built Drawings: Indicate valve labeling on as-built drawings.

3.10.15 Pipe Content Label:

(a) Place on each pipe at 30-foot intervals and on each side of walls, ceilings, or floors through which the pipe passes within 2 feet of either side of the penetration.

(b) Place adjacent to valves and branch fittings.

(c) Locate markers on exposed piping so as to be clearly visible to a person standing on the floor. Locate markers on concealed piping, such as that in shafts and over suspended ceilings so as to be clearly visible within the concealed area.

(d) Install plastic tape markers with adhesive and secure on each end with pressure-sensitive tape wrapped completely around the pipe and overlapping at least 1 inch.

(e) Install plastic tape pipe markers in accordance with manufacturer's instructions.

3.11 Utility line marker signs and posts shall be:

3.11.1 Located at each end and at any change in direction of a utility line.

3.11.2 At Intervals of 300 feet or less on straight runs (except when in roadways, parking lots, plowed fields, etc.).

3.11.3 Placed 2 feet to the side of the utility with the sign reading from the utility side. The marker must be on the same side of the line for the full length of the utility run.

3.12 Trace Wire shall be:

3.12.1 Installed beside and at centerline of utility.

3.12.2 Electronically continuous from termination to termination with a maximum distance of 300 feet between terminations.

3.12.3 Installed with test points where the utility enters a building and at termination locations.

3.12.4 Termination test points Trace wires shall be terminated in a weatherproof electrical junction box.

4. REFERENCES

4.1 Governing Documents

https://iw.pxplant.com/ucm/groups/jsp/documents/documents/rms/ReqFlowdown.jsp?docno=DIV-01080

4.2 Authorizing Documents

a) DIR-0001, "Roles and Responsibilities for the Management and Operation of Pantex Plant"

4.3 Related Documents

a) 29 CFR 1910.145, "Specifications for Accident Prevention Signs and Tags"

b) ANSI/ASME A13.1, "Scheme for the Identification of Piping Systems"

c) FED-STD, Federal Standard #595a, "Colors"

d) MNL-00014, "Labeling Manual"

4.4 Forms

4.4.1 Generated Forms

None

4.4.2 Related Forms

None

4.5 Records

None

4.6 Exhibits

MNL-00014, "Pantex Labeling Manual"

END OF SECTION 01080

EXHIBIT 1

MNL-00014, "Labeling Manual"

(USE MOST CURRENT ISSUE IN UCM)

CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Construction)

Level of Use: Reference

ISSUE HISTORY			
Issue	Date	Pages Affected	Comments
003	01/03/05	4	1.2.D.12 and 1.2.F.2
004	03/10/05	All	General change.
005	04/21/05	All	General change.
006	07/06/05	3	1.1.D
007	02/22/06	2-4	1.1.B.5, 1.1.D, 1.2.A, 1.2.A.2, 1.2.A.3, 1.2.C, delete 1.2.C.1, delete 1.2.D, 1.2.C.3, 1.2.C.10
008	6/07	all	Incorporates construction requirements from 01010, 01200, 01250, 01041, 01050, 01600, 01030, 01509, 01710 key personnel requirements from safety (01561), environ, and construction. Substantially deleted specific requirements for Contractor employees' individual responsibilities (safety and superintendent), temporary fence and how to install posts for it, survey. Description of temp facilities, access from multiple sections of Div 1 incorporated here and deleted elsewhere. Reduces work release to 1 process. Deletes all text relative to B&W Pantex rights, penalties, and definitions already contained in T&Cs.
009	09/16/11	All	Global changes to clarify Contractor requirements.

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ACRONYMS

AHA	Activity Hazard Analysis
CMP	Construction Management Plan
DFOW	Definable Feature of Work
HVAC	Heating Ventilation and Air Conditioning
NOA	Notice of Award
PSTR	Project Subcontract Technical Representative
QA	Quality Assurance
TCEQ	Texas Commission of Environmental Quality

SECTION 01200- CONSTRUCTION

1.0 PROJECT DURATION

1.1 The duration of this project shall be 90 calendar days from receipt of NOA.

2.0 SITE AVAILABILITY AND WORKING HOURS

2.1 The Contractor shall have access to the construction site during regular workdays, Monday-Friday. Any work on weekends or observed holidays shall be requested and be pre-approved in writing.

2.2 Regular working hours shall be between the hours of **7:30 a.m. and 4:00 p.m. Day shift, Monday through Friday**.

2.3 The Contractor shall request access from the PSTR/Logistics Coordinator (x-3777) by 4 p.m. on Wednesdays for the following week's work locations.

3.0 DELIVERIES

3.1 The Contractor shall coordinate all deliveries with the PSTR and assure that the Logistic Coordinator is notified at least 1 business day prior to the delivery.

3.2 The Contractor is responsible for verifying that the delivery company has a driver with a Pantex Construction badge or shall complete a PX-2707A.

3.3 Materials or supplies that are being delivered to the Contractor by a third party shall have a delivery invoice including the Contractor's name and the location of the construction or storage area.

4.0 MEETING

4.1 The Contractor shall attend a Pre-Construction Meeting prior to the start of work.

4.2 Before construction activities begin, it will be the Contractor's responsibility to hold a coordination meeting with the B&W Pantex's Contract Administrator, Project Manager, QA Representative, Construction Safety Representative, Project Engineer and PSTR.

A. The meeting shall cover the Contractor's list of the project's definable features and the processes the Contractor will use to assure the required levels of quality are met and documented. This meeting discussion will include the forms for recording inspections, control activities, inspection and hold points, and testing. The list of definable features will be agreed upon during the coordination meeting. Minutes of the meeting shall be prepared by the Contractor and approved by both the Contractor and B&W Pantex.

4.3 The Contractor shall attend periodic progress meetings, as requested by B&W Pantex.

5.0 CONSTRUCTION MANAGEMENT PLAN

5.1 The Contractor shall develop, submit for approval, and implement a CMP. The CMP shall cover the controls in place regarding Safety, Security and Quality and indicate that any laydown or storage area on Pantex is included within these controls. The CMP shall also include the following:

A. Organization Chart, depicting roles, responsibilities and the relationships of the Key Personnel, field organization and the corporate structure. For each position, indicate the percentage of time that will be spent at the project site.

1). "Key Personnel" are those who can directly influence the outcome of the project or hold

leadership positions that are directly involved in the execution of a project.

B. The Contractor shall include the resume(s) of site Superintendent(s). The Superintendent shall have at least 5 years of experience supervising work of similar size and complexity. Additional resumes of Key Personnel shall be supplied upon request for validation of qualification.

C. The names and telephone numbers for the Contractor's points of contact including emergency and after-hour contacts.

D. Subcontracting section that lists the subcontractors and key suppliers.

E. Material Storage and Protection section that describes how the Contractor shall store, protect, control and track construction materials.

F. Construction Configuration Control, including procedures for marking and tracking as-built information.

G. Three-Phased Control section that addresses the process for all definable features of work, Preparatory, Initial, and Follow-up phases.

1). Definable Feature of Work (DFOW) – A task that is separate and distinct from other tasks and has control, inspection or testing requirements or requires specialized work crews to perform the task. A DFOW is identified by different trades or disciplines and is usually an item or activity on a construction schedule. A few examples of DFOW's are demolition, excavation, electrical, concrete, roofing, mechanical systems, HVAC, structural, etc.

2). Each DFOW shall have documented evidence of the Preparatory, Initial and Follow-Up phases.

3). Preparatory Phase – This phase is the pre-work planning that usually takes place a day or more in advance of starting a DFOW. B&W Pantex shall be notified at least 24 hours in advance of beginning of a preparatory phase. For this phase the approved superintendent needs to at minimum do the following:

a). Review all the requirements for the DFOW within the contract specifications and drawings.

b). Assess the current situation and inspect the jobsite to assure that any required preliminary work has been completed and is in compliance with the contract.

c). Review the associated activity hazard analysis to assure safety requirements are clear and cover the DFOW.

d). Verify that the equipment, materials and permits are in compliance with the requirements for the DFOW.

e). Review the findings with staff, sub-tier contractors, and Pantex.

4). Initial Phase – This phase checks to see if the plan set in the Preparatory Phase of a DFOW is being followed. This check reviews the first day of work on a DFOW to assure workmanship, contract compliance, and safety requirements are being met. B&W Pantex shall be notified at least 24 hours in advance of beginning of an initial phase. For this phase the approved superintendent needs to at minimum do the following:

a). Verify that the work follows preparatory phase documentation and complies with the contract specifications, submittals and drawings.

b). Verifies that the DFOW activities are following the AHA, associated permits and

staying within the allowed working boundaries.

c). Document all inspections, testing, deficiencies or positive aspects of the DFOW.

d). Review the findings with staff, sub-tier contractors, and the client.

5). Follow-Up Phase – This phase documents daily the progression of work on a DFOW continues to follow the Preparatory and Initial Phases data. For this phase the approved superintendent needs to at minimum do the following:

a). Daily verification that the work follows preparatory and initial phase documentation and complies with the contract specifications, submittals, permits, boundaries and drawings.

b). Review any findings with staff, sub-tier contractors, and Pantex.

c). When a DFOW is complete the contractor indicates this on the final follow-up phase document. This will document that the DFOW is deficiency free and subsequent work will not be impacted. The contractor can add any lessons learned or positive remarks.

H. The Contractor shall provide a temporary facilities and construction section that includes proposed layout of temporary office space, storage, new access roads or points, temporary fencing and proposed utility tie-in methods for B&W Pantex approval prior to mobilization. The section shall also address the following requirements:

1). Laydown Area

a). The Contractor shall submit a PX-5865 if the use of a Laydown area in Zone 10 is required. The Contractor shall pre-inspect and record the current condition of the Laydown location on the PX-5865 prior to acceptance. Once a Laydown area is issued, the Contractor shall:

i). Assure that material is nFOR CONSTRUCTIONtruding hazards are present, and that stored material does not obstruct access into the area or any buildings within the area.

ii). Limit material and equipment stored to those required for the associated contract/project. Label, tag or have a master index that identifies what project any stored material is scheduled for. Loose material shall be secured to prevent the material from spreading in the event of high winds.

iii). Be responsible for vegetation, trash and debris control within the laydown area.

iv). Establish signage at the laydown yard, including company name and the names of any lower-tier subcontractors. The Contractor shall mount a durable sign on the fence near the main gate of the laydown yard. The company name shall be in letters at least 3 inches high. Below the company name shall be at least one (1) point of contact telephone number. The names of any additional contractors also occupying the lot shall be listed below the point of contact and can be part of the sign or a separate sign.

v). Anchor all temporary structures to prevent toppling during high winds.

vi). Participate in monthly inspections and shall correct any deficiencies by specified due dates.

vii). Shall remove all equipment, materials and any temporary structures from the laydown area once the project is complete or upon the request of B&W Pantex Plant.

2). Field Office Space

a). The Contractor can establish a field office at either the assigned Zone 10 laydown area or at the jobsite as approved.

b). Stairways shall be provided for job site offices and storage trailers. Stairways shall meet the requirements specified in 29 CFR 1926 Subpart X. Stairways shall not have loose or broken boards, protruding nails, or damaged handrails.

c). Office trailers shall be anchored to prevent toppling during high winds.

d). The Contractor is responsible for upkeep, maintenance and housekeeping of the field office space. Office trailers requiring electrical service shall be pre-inspected by Pantex to verify code compliance prior to use.

3). Temporary fencing

a). The Contractor shall be responsible for installing, supplying, repairing and maintaining temporary fences.

b). Temporary fencing established at a construction jobsite shall be stable and durable. Fencing and gates shall be grounded.

c). No vehicles or building material storage stacks are allowed within 10 feet of a temporary construction fence.

6.0 CONTRACTOR DAILY CONSTRUCTION LOGS

6.1 The Contractor shall complete a daily log of work activities, using the B&W Pantex form (PX-4785).

6.2 The Contractor shall provide the PSTR with a copy of each daily work log by close of business the following day. The Contractor, within two workdays, shall correct errors, conflicts and misinterpretations as indicated by the PSTR.

7.0 CONSTRUCTION UTILITIES

7.1 Utilities

A. Communication - Up to three (3) telephone lines for local service will be available in the Zone 10 laydown area. The cost of toll calls is the responsibility of the Contractor.

B. Power – The Contractor shall submit, in writing, a request to access Pantex power. If approved the Contractor shall follow the following.

1). The Contractor shall furnish, install, and maintain all taps, lines and extensions to existing distribution systems.

2). The Contractor shall comply with all applicable electrical codes and Pantex Electrical Safety inspection requirements prior to energization.

C. Construction Water

1). The Contractor shall obtain clearance through the PSTR from the Pantex Fire Department to access a low pressure fire hydrant to fill the contractor supplied water transport.

2). The Contractor is responsible for supplying and using an approved hydrant wrench and a fire hydrant hose bib. The hydrant hose bib shall be equipped with a correctly sized valve and approved RPBA. The RPBA shall have proof of current inspection by a TCEQ licensed RPBA inspector. An alternate to the RPBA is to maintain an air gap between the domestic water system and the unit being filled. Hydrants SHALL be OPENED 3 – 4 Rounds every 40 Seconds until FULLY OPEN and CLOSED 2 (TWO) Rounds every 60 Seconds until FULLY CLOSED to prevent water hammer.

D. Drinking Water - Contractor is responsible for supplying drinking water and ice for all employees and sub-tiers.

E. Sanitary Waste - Contractor is responsible for requesting approval for connection to any sanitary sewer or installation of septic systems.

F. Portable Toilets - Contractor is responsible for providing and maintaining portable toilets at the work location for all employees and sub-tiers.

8.0 CONCRETE BATCH PLANT

8.1 The contractor has the option of purchasing concrete or establishing a Batch Plant when concrete is required.

8.2 The Contractor shall assure that the concrete supplier is in conformance with ASTM 94/C 94M requirements.

8.3 The contractor shall submit, in writing, a Batch Plant plan that outlines the setup, maintenance and removal of a new Batch Plant. Once the plan is approved, the contractor shall:

A. Obtain authorization to operate a Batch Plant from the TCEQ and submit a copy of all permits or authorizations to the B&W Pantex before installing the Batch Plant.

B. Remove the Batch Plant and restore the site to original condition within 30 days after completion of the project.

C. Confirm that the concrete supplier is in conformance with ASTM 94/C 94M Requirements.

9.0 SURVEY

9.1 Surveying shall be performed by a professional land surveyor registered in the State of Texas.

9.2 The Contractor shall maintain a complete and accurate log of all control and survey work.

9.3 On completion of foundation walls and major site improvements, the Contractor shall prepare a certified survey showing all geographic projections/datum's utilized in survey, dimensions, locations, angles and elevations of construction.

10.0 REFERENCES

10.1 Governing Documents

https://iw.pxplant.com/ucm/groups/jsp/documents/documents/rms/ReqFlowdown.jsp?docno=DIV-01200

10.2 Authorizing Documents

DIR-0001, "Roles and Responsibilities for the Management and Operation of Pantex Plant"

10.3 Related Documents

29 CFR 1926 Subpart X, “Stairways and Ladders”

10.4 Forms

PX-2707A, “Access Request for Construction Contractors”

PX-4785, “Contractor Daily Construction Log”

PX-5865, “Request for Lot/Area”

10.5 Records

None

10.6 Exhibits

PX-2707A, “Access Request for Construction Contractors”

PX-4785, “Contractor Daily Construction Log”

PX-5865, “Request for Lot/Area”

END OF SECTION 01200

EXHIBIT 1

PX-2707A "Access Request for Construction Contractors"

USE THE MOST CURRENT ISSUE IN UCM

EXHIBIT 2

PX-4785 "Contractor Daily Construction Log"

USE THE MOST CURRENT ISSUE IN UCM

EXHIBIT 3

PX-5865 "Request for Lot/Area"

USE THE MOST CURRENT ISSUE IN UCM

CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Construction Schedule)

Level of Use: Reference

Issue History			
Issue	Date	Pages Affected	Comments
002	01/03/05	All	Format changes only.
003	03/10/05	All	General change.
004	04/21/05	All	General change.
005	07/06/05	4	1.1.B.1
006	07/14/05	All	General change.
007	01/20/06	All	Complete Revision
008	01/23/08	All	Change BWXT Pantex to B&W Pantex and update references to this procedure or other Division 1 sections only.
009	11/4/11	All	Global changes to clarify Contractor requirements.
010	1/02/12	8	Subcontractor status must be received by the 2nd work day of the month.

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EXHIBIT 1 PX-4094 “Pantex Accrual Form” 9

SECTION 01310 - CONSTRUCTION SCHEDULE

1.0 Commencement, Progress And Completion of the Work

1.1 Contractor shall complete the Work under the Contract to meet the Contract Milestone dates.

1.2 Contractor shall give B&W Pantex full information as to its plans for performing each part of the Work. If at any time, CONTRACTOR'S actual progress is inadequate to meet the requirements of this Contract, B&W Pantex may notify CONTRACTOR to take such steps as may be necessary to improve its progress. Neither such notice nor B&W Pantex's failure to issue such notice shall relieve Contractor of its obligation to achieve the quality of work and rate of progress required by this Contract.

2.0 Requirements

2.1 The Contractor shall develop a plan and schedule (P&S) for performing all work associated with this contract.

A. The P&S shall be presented in Gantt chart form using either Microsoft Project or Primavera scheduling software. All electronic submittals shall be in native file format.

B. P&S shall include:

1) A Gantt chart showing the total design and construction time and the relationships between the individual activities. The activities shall be logically linked using the critical path method.

2) Individual bars shall be used to represent each activity such as mobilization, submittals, materials and equipment procurement and demobilization.

a) Each activity shall identify the start date, finish date and duration in work days.

b) Failure to include an element of work on the P&S shall not excuse the Contractor from completing all work required by this contract.

c) A cost breakdown showing the cost of two major features of work.

d) A schedule of values detailing how performance will be measured on activities.

e) A time phased spend plan by month.

3) Original Duration – Contractor submissions shall be required to follow the direction of B&W Pantex regarding reasonable activity durations. Reasonable durations are those that allow the progress to be accurately determined between progress payment periods. In no instance shall work activity durations exceed **(14)** working days in length. Work activities shall represent definable work features.

4) Manpower – Expressed in men per day by craft. If no resource is required for an activity, then the activity shall be identified as requiring zero men per day.

C. The following milestones and activities are of particular interest to B&W Pantex and shall be reflected in the P&S if applicable to the project.

1) Notice of Award.
2) Design Phase Notice to Proceed Issued.
3) Design phases.
4) Design Completed.
5) Submittals approved.
6) Procurement of major equipment and materials.
7) Pre-construction meeting.
8) Obtain permits, badges, etc.
9) Construction Phase Notice to Proceed Issued.
10) Preparatory Meetings for each major feature of work.
11) Delivery of major equipment and materials.
12) Utility outages.
13) Receipt of government furnished equipment.
14) Test, balance and adjustment of systems and equipment.
15) Use and Possession.
16) Project Acceptance.
17) Clean sites and buildings.
18) Construction Complete.
19) Project Closeout.
20) Demobilize.

2.2 The contractor shall, within (20) working days following Notice of Award submit to B&W Pantex for its written approval a complete, electronic copy of a draft P&S. The submittal shall consist of three paper copies and one electronic copy.

A. The Contractor shall resolve any comments with the B&W Project Manager (PM) concerning the P&S prior to the issuing of the Notice to Proceed.

B. The Contractor shall resubmit the revised P&S within 5 calendar days after receiving the PM's comments.

C. The Contractor shall not receive Notice to Proceed until the P&S has been formally approved through the B&W Pantex submittal process.

2.3 The P&S shall consider lead times, construction and access constraints and the coordination of construction with B&W Pantex operations.

2.4 The Contractor's P&S shall reflect activity durations which include Contractor consideration of weather impacts. A weather impact is defined as a regularly scheduled work day where weather conditions prevent

work for 50 percent or more of the Contractor's work day and delay work critical to the timely completion of the project. For reference, the following table contains the average number of days historically unavailable each month for outdoor work.

Month	Days	Month	Days	Month	Days	Month	Days
January	7	April	5	July	5	October	5
February	6	May	5	August	4	November	5
March	6	June	6	September	4	December	9

2.5 B&W Pantex will only consider requests for time extension due to weather impacts if the actual days experienced by month exceed the monthly average shown in the table. All time extension requests for weather impacts shall be submitted to Pantex for approval.

2.6 Construction schedules must allow work to be performed in a safe manner.

A. The Contractor cannot reduce safety or worker protection in order to shorten construction schedules, recover lost time or accelerate the work.

B. Schedule performance shall never take precedence over safety.

2.7 The approved P&S will become part of the construction contract.

2.8 The Contractor shall use the P&S to coordinate and monitor the work (including the activities of subcontractors, equipment vendors and suppliers).

2.9 The use of activity external constraint dates and lags on relationships is prohibited unless specified and approved by B&W Pantex.

2.10 The Contractor shall include separate resource loaded activities for material and labor. Material is progressed based on verification of received materials. Labor is progressed based on completion of physical work.

2.11 Use of Level of Effort (LOE) activities should be minimized and require prior B&W Pantex approval.

2.12 The Contractor initial schedule submittal (P&S) will contain no progress and represent the planned work for the duration of the project. Once approved by B&W Pantex, this schedule will become the Contractor baseline against which all future variance analysis will be performed.

3.0 Plan and Schedule Updates & Reports

3.1 The Contractor shall update the P&S each month to input:

A. Actual Start Dates.

B. Actual Finish Dates.

C. Percent Complete for each activity.

D. Remaining durations for activities:

1) The remaining duration shall be the actual time in workdays to complete the activity.

2) Remaining duration shall not be automatically computed based on the percent complete of the activity.

3.2 The Contractor shall submit the updated P&S monthly as specified below:

A. Each report shall contain the following activity information:

1) Activity number.

2) Activity description.

3) Original duration.

4) Remaining duration.

5) Early and late start dates.

6) Early and late finish dates.

7) Total float.

8) Budgeted cost.

B. Each schedule update shall have a unique file name.

3.3 Three paper copies and one electronic copy of each update of the P&S shall be submitted. The contractors schedule update is expected to be error free.

4.0 Plan and Schedule Revisions

4.1 The Contractor shall revise the P&S when necessary to reflect:

A. Changes in the planned sequence of work.

B. Approved change orders.

C. Approved time extensions.

4.2 Any request to revise the P&S shall be submitted, in writing, to the CA. P&S revisions will only address the portion of the schedule concerning To-Go work (i.e., work after the Data Date). Each request shall include:

A. A written narrative describing the reasons for the request.

B. A sketch or fragmentary network showing proposed changes to the P&S.

C. A description of changes to the estimated cost of the project.

D. A description of the relationship between the proposed change and other activities in the P&S.

4.3 When B&W Pantex issues a proposed change order, the Contractor shall submit proposed revisions to the network logic and duration estimates for all affected activities as part of the change proposal.

A. Time extensions associated with approved Contract modifications will be limited to the amount of time the project is actually delayed.

B. The Contractor shall submit revisions within ten10 workdays after the date of the change request.

C. The changes in logic or durations shall be approved by B&W Pantex and the impacts shall be included in the change order.

4.4 Revisions to the P&S shall not become effective until approved by the CA.

5.0 Requests for Payment

5.1 The approved P&S shall be used as a basis for substantiating the Contractor requests for payment.

5.2 By the 2nd workday of the month, Contractor shall submit an updated P&S with progress through the end of the previous month with a file Data Date of the 1st of the current month. The submittal shall be in a standard AIA G702/703 format with the P&S attached in the form of one electronic and three paper copies of the file.

5.3 The Contractor monthly pay request shall be submitted by the 15th day of the month for the previously worked month. The approved P&S update is considered an integral part of the Contractor's invoice.

A. The invoice date shall be the 1st day of the current month, corresponding to the P&S Data Date.

B. Failure to submit all required documentation will result in the return of the Contractor's pay request.

5.4 Payments will be made after B&W Pantex has verified reported progress and corresponding Invoice has been approved.

5.5 The Contractor shall also submit by the 15th of the current month a PX-4094 accrual form that lists the amount of estimated services performed or expected to be performed between the 1st and the end of the current month. Detailed documentation of the submitted estimate must be attached to the statement.

6.0 References

6.1 Governing Documents

https://iw.pxplant.com/LinksMgr/linksMgr?docType=RMSFlowdown&docNum=DIV-01310

6.2 Authorizing Documents

A. DIR-0001, "Roles and Responsibilities for the Management and Operation of Pantex Plant (U)"

6.3 Related Documents

A. DIV-01311, "Construction Management Master Specifications Division 1 (Construction Schedule)"

6.4 Forms

A. Generated Forms

1) PX-4094, "Pantex Accrual Form"

B. Related Forms

1) None

6.5 Records

A. PX-4094, "Pantex Accrual Form" R_024344

6.6 Exhibits

A. PX-4094, "Pantex Accrual Form"

END OF SECTION 01310

EXHIBIT 1

PX-4094 “Pantex Accrual Form”

(U) CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

Quality Assurance Requirements for Construction Projects

Level of Use: Reference

ISSUE HISTORY			
Issue	Date	Pages Affected	Comments
002	01/03/05	All	Format changes only.
003	03/10/05	All	General change.
004	07/06/05	2	1.1.A. 1.1.C
005	11/05/05	15	1.12, 1.12.A, add Exhibit 1, PX-4785 “Contractor Daily Construction Log”
006	01/19/06	All	Replaces previous Index No’s 01400, 01405, 01410
007	11/28/06	2 & 3	Editor Note, Note, 1.3.B, 1.3.C, 1.3.D
008	07/03/07	All	Clarification of NQA-1 versus Non-NQA-1 requirements
009	08/17/11	4	Requirement to be on the QSL for “Special Processes” including welding, heat treating, non-destructive examinations, etc.
010	11/10/11	3, 5, 6, 7, 8, 9, &14	Update NQA-1 Requirements
011	06/21/12	5, 9	Add QSL requirement for contractor in Section 1.6, clarification of requirement in Part 1 and Extent of Condition reviews for NCR.
012/ U-51129	1/10/13		Add new requirement for B&W to conduct review prior to hold point verification. (PER-2013-0849.6)
013/ U-51345	4/1/14	6	Subcontract individuals authorized to perform independent inspections and sign the inspection forms shall be identified by title in the project specific key personnel organization chart approved by B&W Pantex.

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ACRONYMS LIST

ASME	American Society of Mechanical Engineers
CGD	Commercial Grade Dedication
DOE	Department of Energy
EOC	Extent of Condition
NOA	Notice of Award
PM	Project Manager
PSTR	Project Subcontract Technical Representative
QA	Quality Assurance
QAP	Quality Assurance Plan
QSL	Qualified Suppliers List
S/CI	Suspect/Counterfeit Items
SC	Safety Class
SQA	Software Quality Assurance
SSC	Structures, Systems, and Components
SS	Safety Significant
SME	Subject Matter Expert

SECTION 01400 - QUALITY ASSURANCE REQUIREMENTS FOR CONSTRUCTION PROJECTS

PART 1 GENERAL

A. The Contractor shall be on the QSL prior to award.

B. *Reserved.* Approval must be obtained by B&W Pantex prior to the work being performed.

C. The Contractor shall submit a Project Specific QAP to be approved by B&W Pantex prior to the start of work. The QAP shall clearly illustrate how the Contractor will meet the project specifications.

1. Personnel verifying activities affecting quality shall have sufficient authority, direct access to responsible levels of management and organizational freedom to access work and perform QA/QC related function.
2. The organizational structure, functional responsibilities, levels of authority, and lines of communications shall be documented and depicted in an organizational chart.

D. The Contractor shall implement the QAP under the leadership of a QA Manager meeting the following requirements.

1. Possess experience with NQA-1 and/or 10 CFR 830 Subpart A. Also, provide documented evidence to support a fundamental understanding of Quality (work, education and experience) or meet the requirements for Level III certifications (as defined in NQA-1).

E. Resumes of onsite/field Quality Representative and any other individuals authorized to perform independent inspections and sign inspection forms must be submitted to B&W Pantex for verification of qualifications. These individuals shall be identified by title in the project specific key personnel organization chart approved by B&W Pantex. The Quality Representative shall possess the relevant experience and education to implement the Contractor's construction quality program, including inspections, testing and acceptance activities outlined in contract drawings and/or specifications.

1.1 MATERIALS AND EQUIPMENT

All materials and equipment shall be inspected by the Contractor and verified to be free of known classes of S/CI as defined by the DOE and described on their web site for this purpose.

(Reference ***http://hss.energy.gov/CSA/CSP/sci/poc.html***)

1.2 INSPECTION POINTS

Inspection Points occur at significant junctures during the project but are different from Hold Points in that the Contractor may proceed without approval from B&W Pantex, provided the Contractor notifies B&W Pantex 48 hours in advance of the Inspection Point. Inspection Points are identified in the project specification sections.

Inspection Points

Spec. Section	Description
01300	Approval of submittal packages, including; plumbing, electrical and construction materials
01500	LO/TO of water line and concurrence of absence of energy prior to splice
01500	LO/TO of electrical line and concurrence of absence of energy prior to work on electrical system
01600	Inspection of seeded areas by PSTR and other appropriate plant personnel
01400	Final acceptance of work
312316	Inspection of completed trenches prior to placing pipe or conduit.

1.3 HOLD POINTS

A. Hold Points occur at significant junctures during the project to provide B&W Pantex or B&W Pantex Representatives (at its option) to witness, review, or conduct additional inspections or tests for Hold Point activities. Hold Points do not relieve the Contractor from its obligation to meet requirements, including acceptance testing and/or inspections cited in project specifications.

B. The Contractor shall notify the PSTR 48 hours prior to reaching a Hold Point and request a meeting be scheduled with the PM, PSTR, Construction Quality Specialists, and Engineering/SME to assure understanding of task(s) to be performed, personnel performing the task, the verification of the hold point and documentation to meet the hold point. The meeting shall be conducted prior to executing the hold points. Delays, damages, or time extensions will not be allowed if the Contractor fails to make this notification.

NOTE 1: Meetings for multiple Hold Points may be combined for those scheduled within a four week period when/if mutual agreement is reached.

NOTE 2: A record of the meeting shall be included in the Project file. This documentation shall include date/time of meeting, location of meeting, names of personnel attending, identification of Hold Points discussed and mutual agreements.

C. Hold Points shall be established for systems that require SQA. The Hold Points will be determined by the level of systems per PX-4940.

D. Hold Points for this project will be listed in a table of Hold Point(s) and/or identified in the contract/specification.

Hold Points

Spec. Section	Description
312316	Inspection of trench prior to placing pipe or electrical conduit
312333	Inspection of trench prior to backfilling
331100	The PSTR or engineer shall witness the piping leak test and approve prior to proceeding

1.4 NON-NQA-1 CONSTRUCTION PROJECTS

A. The Project Specific QAP submitted by the Contractor shall address the following DOE O 414.1D/10 CFR 830 QA requirements. Prior to the start of work, B&W Pantex approval of QAP is required.

Z11 Equipment Pad

1.5 QUALITY ASSURANCE REQUIREMENTS

DOE O 414.1D	Description
Program	Specify Organizational structure, functional responsibilities, levels of authority, and interfaces for activities affecting quality. Identification of management manpower providing resources for the work.
Personnel Qualification and Training	Assure Qualified/certified personnel perform work as specified in Project Specifications.
Quality Improvement	Specify method of identification, control, and correction of items, services and/or processes that do not meet requirements in Project Specifications.
Documents and Records	Preparation, use and submittal of documents/records identified in Project Specifications.
Work Processes	Identification and control of items to assure safe and proper usage and that only correct and accepted items are installed. Specify performance of work using approved instruction or procedures. Maintenance of items to prevent damage, loss, or deterioration. Calibrated equipment shall be used for process monitoring or data collection.
Design: *(If applicable)*	1. Sound engineering /scientific principles and appropriate standards are used in design. 2. Incorporate applicable requirements and design bases in design work and design changes. 3. Identify and control design interfaces. 4. Verify or validate the adequacy of design products using individuals or groups other than those who performed the work.
Procurement	Procure items and services that meet requirements and perform as specified in the Project Specifications or Scope of Work. Specify how suppliers are evaluated and/or the process implemented to ensure acceptable items and services are provided.
Inspection and Acceptance Testing	1. Inspect and test specified items, services, and processes as specified in Project Specifications, Scope of Work, and/or Procedures. 2. Calibrate and maintain equipment used for tests, inspections, and process monitoring or data collection.
Assessment/Management Assessment	Assure managers assess their management processes and identify and correct problems that hinder the organization from achieving its objectives.

Assessment/Independent Assessment	1. Plan and conduct independent assessments to measure item and service quality, to measure the adequacy of work performance, and to promote improvement. 2. Establish sufficient authority and freedom from line management for independent assessment teams. 3. Ensure persons who perform independent assessments are technically qualified and knowledgeable in the areas to be assessed.

The QAP shall describe an Extent of Condition process for addressing non-conforming items and/or conditions. (See Appendix B.)

1.6 NQA-1 CONSTRUCTION PROJECTS (RESERVED)

A. The contractor shall be listed on the Pantex Qualified Supplier List, prior to contract award.

B. The purpose of this section is to provide the Construction Contractor with requirements and guidance for the development and implementation of ASME NQA-1A-2009 Addendum as it applies to Projects affecting SSC classified as SC or SS.

C. SC and SS systems have been identified and designated in the project specifications and on drawings. This project includes the following SC or SS SSCs:

- Reserved

D. The Contractor shall submit the required project specific QAP addressing the following NQA-1 requirements for review and approval prior to start of project.

E. Completed NQA-1 documentation shall be submitted in accordance with Division 1 Spec 01030 (Submittal Requirements).

F. Where commercial grade items are utilized, CGD Plans shall be approved by B&W Pantex prior to purchase of material. The approval of the CGD Plan shall be identified in the table of Hold Point(s).

G. The QAP shall describe an Extent of Condition process for addressing non-conforming items (see Appendix B).

NQA-1A-2009 Overview

NQA-1A-2009, Part I, Requirements	Title
Part 1 Introduction	Introduction and Definitions
Criteria 1	Organization
Criteria 2	Quality Assurance Program
Criteria 3	Design Control (When design activities are within the Scope of Work)
Criteria 4	Procurement Document Control
Criteria 5	Instruction, Procedures, and Drawings
Criteria 6	Document Control
Criteria 7	Control of Purchased Items and Services
Criteria 8	Identification and Control of Items
Criteria 9	Control of Special Processes
Criteria 10	Inspections
Criteria 11	Test Control
Criteria 12	Control of Measuring and Test Equipment
Criteria 13	Handling, Storage, and Shipping
Criteria 14	Inspection, Test, and Operating Status
Criteria 15	Control of Nonconforming Items
Criteria 16	Corrective Action
Criteria 17	Quality Assurance Records
Criteria 18	Audits

NQA-1A-2009, Part II Requirements	
Subpart 2.7	Quality Assurance Requirements for Computer software for Nuclear Facility Applications
Subpart 2.14	Quality Assurance Requirements for Commercial Grade Items and Services

1.7 DEFINITIONS:

A. **Commercial Grade Dedication (CGD) –** A process of approving a "commercial quality" item(s) for a nuclear safety-related application using guidelines verifying established critical characteristics by Special Tests and Inspections for acceptance.

B. **Hold Point –** Hold Points occur at significant junctures during the project to provide B&W Pantex or B&W Pantex Representatives the option to witness, review, or to conduct additional inspections or tests.

C. **Inspection Point** – Inspection Points occur at significant junctures during the project but are different from Hold Points in that the Contractor may proceed without approval from B&W Pantex, provided the Contractor notifies B&W Pantex 48 hours in advance of the Inspection Point.

D. **Safety Class (SC) System –** Systems structures, or components whose failure initiates or fails to prevent, detect, or mitigate a credible accident sequence that leads to critical or catastrophic consequences to personnel, the public, environment, security, or the conduct of mission operations.

E. **Safety Significant (SS) Systems –** Systems, structures, and components not designated as safety class, but whose preventive or mitigative function is a major contributor to defense in depth or worker safety as determined from hazard analysis.

1.8 REFERENCES:

A. Governing Documents

1. https://iw.pxplant.com/ucm/groups/jsp/documents/documents/rms/ReqFlowdown.jsp?docno=DIV-01400
2. ASME-NQA-1A-2009, Quality Assurance Requirements for Nuclear Facility Applications
3. 10 CFR 830, Nuclear Safety Management
4. DOE O 414.1D, Quality Assurance

B. Authorizing Documents

1. DIR-0001, "(U) Roles and Responsibilities for the Management and Operation of Pantex Plant"

C. Related Documents

1. Qualified Supplier List
2. Contractor Quality Assurance Plan

D. Forms

1. Generated Forms

   a. PX-4940, "(U) New Software Identification Request"

2. Related Forms

   a. None

E. Records

1. PX-4940, "(U) New Software Identification Request" RIDS R_026727, R_026726
2. See Appendix A for sample list of records that may be applicable to specific projects.

APPENDIX A

GENERAL RECORDS • Nonconformance reports. • As-built drawings and records. • Final inspection reports and releases. • Progress reports. • Submittals. • Assessments/Self Assessments. • Personnel training and qualification documents for individuals executing QA Program requirements (Inspectors, Engineers, QA/QC personnel, etc.).	**DESIGN RECORDS** • Applicable codes and standards used in design. • Computer programs or corresponding mathematical model. • Design drawings and reports. • Design calculations and record of checks. • Approved design change requests. • Design deviations and verification data. • Design specifications and amendments. • Technical analysis, evaluations, and reports.
CIVIL RECORDS • Concrete cylinder test reports and charts. • Concrete design mix reports and placement. • Material property reports (reinforcing steel, steel embedment, bolting, and tendon fabrication). • Pile drive log or loading test reports/reports of high-strength bolt torque testing. • Procedure for containment vessel pressure proof test and leak rate test and results. • Soil compaction test reports.	**MANUFACTURING RECORDS** • Certified Material Test Reports. • Certificate of compliance. • Heat treatment records/liquid penetrant examination final results. • Performance test procedure and results records. • Radiograph review records\ultrasonic examination final results. • Welding Procedure Specifications and Performance Qualification Records. o
PROCUREMENT RECORDS • Procurement specification. • Purchaser order (un-priced) including amendments.	**MECHANICAL RECORDS** • Cleaning procedures and results. • Installed lifting and handling equipment procedures, inspection, and test data. • Material properties records. • Pipe hanger and restraint data/pipe and fitting location reports. • Pressure test results (hydrostatic or pneumatic).

Appendix A continued

OPERATIONAL RECORDS

- Records and drawing changes identifying facility design modifications made to systems and equipment described in the Final Safety Analysis Report.
- Shipment records.
- Facility radiation and contamination survey results.
- Radiation exposure records for individuals entering radiation areas.
- Records of gaseous and liquid radioactive material released to the environs.
- Records of transient or operational cycles for those facility components designed for a limited number of transients or cycles.
- In-service inspection records.
- Records of reviews performed for changes made to procedures or equipment, or reviews of tests and experiments.
- Surveillance activities, inspections, and calibrations required by the technical specifications records.
- Records of tests and experiments.
- Sealed source leak test results.
- Records of annual physical inventory of all sealed source material.
- Logs of facility operation covering time interval at each power level.
- Records and logs of maintenance activities, inspections, repair, and replacement of principal items of structures, systems, and components.
- Fire protection records.
- Nonconformance reports.
- Plant equipment operations instructions/ manuals.
- Security plan and procedures.
- Emergency plan and procedures.
- Quality assurance and quality control manuals.
- Records of activities required by security plan and procedures.
- Records of activities required by the emergency plan and procedures.
- Evaluation of results of reportable safety concerns as required by regulations.

PREPARATION AND START-UP TEST RECORDS

- Automatic emergency power source transfer procedures and results.
- Final system adjustment data.
- Pressure test results (hydrostatic or pneumatic).
- Initial test procedures and results.
- Main and auxiliary power transformer test procedures and results.
- Off-site power source energizing procedures and test reports.
- On-site emergency power source energizing procedures and test reports.
- Power transmission substation test procedures and results.
- Preoperational test procedures and results.
- Primary and secondary auxiliary power test procedures and results.
- System tests and results.
- Start-up logs.
- Start-up test procedures and results.
- Station battery and DC power distribution test procedures and reports.
- Water chemistry report.

ELECTRICAL AND I&C RECORDS

- Certified cable test reports.
- Relay test procedures.
- Voltage breakdown test results on liquid insulation.

END OF SECTION 01400

APPENDIX B

The following is guidance when conducting an EOC) review.

1. The EOC review should be tailored to fit the significance of the issue. This is determined while performing a cause analysis, whether that is the Eight Questions for Insight, An Apparent Cause Determination, or an in-depth Cause Analysis using the Causal Factors Chart or other techniques.
2. Review the background and circumstances of the issue.
3. Evaluate for uniqueness, recurrence, and potential or actual consequences.
4. Determine the breadth of facilities and activities that might have similar set-up factors.
5. Consider what might have been inadequate in earlier investigations if this is repetitive.
6. Identify applicability to other activities, processes, equipment, programs, facilities, operations, and organizations.
7. Assure appropriate managers and SMEs are involved in the evaluation.
8. Document findings and any appropriate actions taken or needed.
9. Re-evaluate as necessary.

(U) CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS

DIVISION 1

(Occupational Medicine Requirements)

Level of Use: Reference

Issue History			
Issue	Date	Pages Affected	Comments
001	8/1/12	All	Initial issue of document.
002	11/30/12	4	Clarify Occupational Medicine requirement information.
003	7/25/13	5	Revise Occupational Medicine information.
004	8/27/13	6	Remove Physician Verification Letter from Records

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SECTION 01450 – OCCUPATIONAL MEDICINE REQUIREMENTS

1. General

1.1 Contractor must provide Occupational Medicine services in compliance with the B&W Pantex 10 CFR 851 Appendix A.8, Occupational Medicine Compliance Approach, to all workers, including all lower tiered subcontractors, employed under this contract who:

1.1.1 Work at Pantex Plant more than 30 days in a 12-month period; or

1.1.2 Are enrolled for any length of time in a medical or exposure monitoring program required by this rule and/or any other applicable federal, state or local regulations, or other obligation.

1.2 The term "comprehensive" in 10 CFR 851 Appendix A, Section 8(a) refers to the specific services that the occupational medicine provider determines are appropriate, considering the specific work activities performed by the worker under the contract and are necessary for the occupational medicine program to be consistent with DOE requirements, e.g. Hazwoper, respiratory protection, and substance-specific standards. All possible services identified in the Rule are not necessary for all workers. Unless there are other applicable specific requirements concerning the content of workers' medical evaluations (see, for instance, 10 CFR section 712.11), the occupational medicine provider determines the content of the medical evaluations which can range from a "paper" review of a worker's essential job functions and completed medical history questionnaire to a hands-on physical examination and batteries of diagnostic tests.

NOTE
10 CFR 851 Appendix A Section 8 (d) (4) states that “Contractor must provide occupational medicine provider access to the workplace for evaluation of job conditions and issues relating to workers’ health.” Occupational medicine providers are allowed access to the Pantex Plant (within established national security protocols) and are encouraged to actively participate in worker safety and health activities.

2. Requirements

2.1 Health Evaluations and Fitness Determinations:

2.1.1 Required health examinations shall be conducted by a licensed physician or a qualified occupational health examiner under the direction of a licensed physician, in accordance with current sound and acceptable medical practices.

2.1.2 Required health examinations shall be done in accordance with applicable regulations, directives, and standards (e.g., 10 CFR 851, 29 CFR 1910, 49 CFR 40, etc.). The exact content of health examinations shall be the responsibility of the physician who is directing the delivery of medical services. The following types of examinations may be required for the purpose of providing initial and continuing assessment of employee health as determined by the physician responsible for

delivery of medical services:

(a) Pre-placement in accordance with the American with Disabilities Act (42 United States Code 12101).

(b) Qualification examinations.

(c) Fitness for duty.

(d) Medical surveillance and health monitoring.

(e) Return to work health evaluations.

(f) Exit examinations.

2.1.3 The physician responsible for the delivery of medical services or his/her designee shall inform Contractor Management of appropriate employee work restrictions as determined by an appropriate evaluation. Contractor Management will only place qualified contract employees in a given job.

2.1.4 Contractor must provide Occupational Medicine services in compliance with the B&W Pantex 10 CFR 851 Appendix A.8 Occupational Medicine Compliance Approach (See Appendix D Exhibit 1) contained in CD-0009. CD-0009 is available on www.pantex.com. From the home page, follow the "Doing Business with Pantex" link. From this webpage follow the "Documents and Forms" link. The B&W Pantex Worker Safety and Health Program (CD-0009) is linked under "Documents and Forms". Once CD-0009 is located, refer to Appendix D.

2.2 Contractors must document, through their health and safety plan, their specific occupational medicine program and/or process.

2.3 During execution of work performed under this contract, Contractor must:

2.3.1 Make records (e.g., medical, health history, exposure history, and demographic data collected for the occupational medicine purposes for each employee) available to B&W Pantex for review within five workdays from receipt of written request.

2.3.2 Use appropriate safeguards to prevent use or disclosure of any personally identifiable protected health information (PHI) as required under the Health Insurance Portability & Accountability Act (HIPAA).

2.4 Immediately upon completion of the contract, the Contractor will:

2.4.1 Provide the B&W Pantex Site Occupational Medical Director a copy of applicable medical records limited in relevance to their assigned work at Pantex Plant under this contract.

2.4.2 Use appropriate safeguards to prevent use or disclosure of any PHI as required under HIPAA.

3. References

3.1 Governing Documents

3.1.1 https://iw.pxplant.com/LinksMgr/linksMgr?docType=RMSFlowdown&docNum=DIV-01450

3.2 Authorizing Documents

3.2.1 DIR-0001, "Roles and Responsibilities for the Management and Operation of Pantex Plant"

3.3 Related Documents

3.3.1 PX-200STC-1B, "Additional Terms and Conditions for Access to PANTEX Plant for 10 CFR 851 Applicability"

3.4 Forms

3.4.1 Generated Forms

(a) None

3.4.2 Related Forms

(a) None

3.5 Exhibits

3.5.1 None

END OF SECTION 01450

(U) CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Safety and Health)

(U) Construction Management Master Specifications Division 1 (Safety and Health)

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Level of Use: Reference

Issue	Publish Date	Comments
002	01/03/05	Format changes only.
003	03/10/05	General change.
004	04/21/05	General change.
005	07/06/05	1.2.C, 1.2.H.1, 1.9.B
006	04/26/06	1.5.B, 1.5.B.1-3
007	6/28/07	Change title. Consolidated all safety requirements from 01561, 01562, 01041, 01250, 01559, 01560, into this section. Removed all requirements that were already stated in T&C's. Incorporated Fire chief updates to the 01562.
008	06/09/08	All of 1.28.
009	03/20/09	Inclusion of P7-3400, 1.17.A, 1.17.D, 1.17.E.3, 1.18.D.2, 1.19.C, 1.30.D, 1.42.C.
010	05/1/10	Clarification on utility trailers, contractor use of explosives, fall protection plan.
011	8/17/10	Clarification to Operations involving use of cranes and non-crane equipment and penetration permits, and format changes.
012	3/23/10	Global changes to clarify Contractor requirements.
013	11/22/11	Occupational Medicine editorial updates. Clarification of wording.
014	1/09/12	Clarification of Fall Protection Plan Process.
015	7/13/12	Change PXSO to NPO.
016	Est. 12/13/13	Update fire extinguisher requirements.
017/ U-51157	Est. 3/1/14	Include voltage rated rubber gloves requirement.

(U) Construction Management Master Specifications Division 1 (Safety and Health)

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Acronyms List

ACGIH	American Conference of Governmental Industrial Hygienist
ACM	Asbestos Containing Material
AFFF	Aqueous Film Forming Foam
AHA	Activity Hazard Analysis
AIHA	American Industrial Hygiene Association
BWP	Beryllium Work Permit
CA/MP	Cause Analysis/Mistake Proofing
CFR	Code of Federal Regulations
DOE	Department of Energy
DOT	Department of Transportation
EPA	Environmental Protection Agency
GFCI	Ground-Fault Circuit Interrupters
HE	High Explosive
HEPA	High Efficiency Particulate Air
HVAC	Heating, Ventilation and Cooling
ISM	Integrated Safety Management
kV	Kilovolts (1000 volts)
LA	Limited Area
LNG	Liquid Nitrogen Gas
LPG	Liquid Petroleum Gas
LPT	Lymphocyte Proliferation Test
LO/TO	Lockout/Tagout
MAA	Material Access Area
MSDS	Material Safety Data Sheet
NEC	National Electrical Code
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Association
NIOSH	National Institute of Occupational Safety and Health
NNSA	National Nuclear Security Administration
NPO	NNSA Production Office
NST	National Standard Thread

OC	Operations Center
OSHA	Occupational Safety and Health Administration
PA	Protected Area
PEL	Permissible Exposure Levels
PM	Project Manager
PPE	Personal Protective Equipment
PSTR	Project Subcontract Technical Representative
RACM	Regulated Asbestos Containing Material
RPBA	Reduced Pressure Zone Backflow Prevention Assembly
S&IH	Safety and Industrial Hygiene
SCA	Soil Contaminated Areas
SPO	Security Police Officer
SWMU	Solid Waste Management Units
TCEQ	Texas Commission on Environmental Quality
TDH	Texas Department of Health
TDSHS	Texas Department of State Health Services
TLV	Threshold Limit Value
UCM	Universal Content Manager
UL	Underwriters Laboratories
UN	United Nations
WMG	Waste Management Groups

Section 01500 - Safety and Health

1. Part 1 – General

A. The Contractor shall establish a Worker Safety and Health Program in compliance with 10 CFR 851. The Contractor's Worker Safety and Health Program must reduce or prevent occupational injuries, illnesses, and accidental losses. The Contractor must establish procedures for investigating whether a violation of a requirement of 10 CFR 851 has occurred, for determining the nature and extent of any such violation, and for imposing an appropriate remedy.

B. The Contractor shall take all reasonable precautions in the performance of the work under this contract to protect the safety and health of employees and members of the public, to minimize danger from hazards to life and property, and to comply with specified safety and health regulations and requirements.

C. If an operation has an unmitigated and/or unanalyzed potential to injure personnel or damage property, employees of the Contractor or Subcontractor(s) shall stop work immediately and shall not allow work to resume until the situation has been corrected.

D. It is the Contractor's responsibility to comply with specified regulations or requirements during the course of construction. If the Contractor fails to comply, the Contractor will be notified, in writing, of the non-compliance with the provisions of this contract and will implement controls in the form of a Corrective Action Plan. The Plan will include:

1. Actions that will be taken by the Contractor to comply with specified regulations and requirements.
2. The method as to how the actions will be implemented.

E. The Contractor will post the DOE designated Worker Protection Poster (10 CFR 851.20) in a conspicuous place and accessible to all Construction employees.

F. The following emergency telephone numbers are available for the Contractor's use:

Emergency Service	Phone	Emergency Service	Phone
Medical Emergency	477-3333	Fire	477-3333
Radiation Safety	477-4946	Fire (Business Only)	477-4486
Operations Center (OC)	477-5000	Construction Safety	477-6212 477-5446 477-4228 477-3256 477-3252 (swing shift)
Security	477-3934 477-3922	Medical (Physician)	477-3033

1.1. Safety and Health Program

The Contractor's Safety and Health Program shall include the following elements which are to be developed using a graded approach.

A. The Contractor's Safety and Health Plan.

B. AHA.

C. Definition of processes for establishing and utilizing competent and qualified persons.

D. Hazard Communication Program.

E. Occupational Medicine Program (as required).

1.2. Safety and Health Plan

The Contractor shall submit a Project Specific Safety and Health Plan for review and approval by B&W Pantex prior to construction mobilization. The Contractor's Safety and Health Plan will address how the Safety and Health Plan will be implemented for the project, and as a minimum it will provide the following:

A. Clear definition of Contractor roles and responsibilities for compliance with safety and health requirements, including implementing an accident prevention program and means for assuring supervisors, competent safety person, and workers analyze the work to define hazards.

B. Flow down of all safety and health requirements to lower tier Subcontractors. Tier Subcontractors must comply with the Contractor's Safety and Health Program. The Contractor will include methods to encourage tier Subcontractor participation in safety and health.

C. Incorporation of safety, health, and environmental requirements as defined and referenced in this Contract.

D. Description of methods to assure that personnel have the requisite knowledge, training, required certification, experience, and skills to successfully comprehend and follow safety and health responsibilities.

NOTE
During the course of construction, all individuals, including B&W Pantex, Contractor employees, and Subcontractor's employees, have the authorization to stop work because of the reasonable belief the task poses an imminent risk of death, serious physical harm, or other serious hazard to workers. The Contractor shall not discourage this right or take adverse actions against an individual who stops work for safety reasons.

E. Description of methods to maintain employee awareness and involvement regarding safety and health requirements, including employees right and obligation to report unsafe work conditions and express safety and health related concerns without concern of reprisal.

F. Description of Contractor programs, requirements, and procedures for safely performing confined space work, fall protection, respiratory protection, PPE, hazard communication, electrical, noise, forklift, machine guarding, hoisting and rigging, excavation/penetration work, cutting and grinding, welding, burning, and other work activities.

G. Description of employee disciplinary program for violations of safety and health requirements.

H. Description of Contractor Safety and Health Self-Assessment and Site inspection programs, including sampling and monitoring.

I. Method of conducting and documenting safety inspections (include copy of inspection form).

J. Investigation procedures for accidents, injuries, illnesses, noncompliance's, releases, spills, and near misses. A near miss is a narrowly avoided accident or incident that has the potential for adversely affecting personal safety, the environment, or Plant equipment.

K. Means for assuring adequate housekeeping in the work area.

L. The Contractor's Substance Abuse Program.

M. Modification of the Safety and Health Plan.

1. If a contract modification is executed and the Contractor's Safety and Health Plan does not adequately address the scope of work in the modification, the identified operation will not commence until the Safety and Health Plan is modified and approved.

2. The Safety and Health Plan shall be modified to address the specific safety and health concerns associated with this scope of work and shall be approved by B&W Pantex Plant prior to commencement of work on this phase.

N. A copy of the Safety and Health Plan shall be maintained by the Contractor at the worksite and be available upon request by B&W Pantex Plant personnel, Contractor and Subcontractor employees, employee representatives, and other personnel with a need-to-know.

1.3. Activity Hazard Analyses (AHA)

A. The Contractor shall prepare and submit an AHA, PX-4798, to address each definable feature of work and the associated hazards and mitigations. An AHA may be developed for each definable feature, or several features may be incorporated into a single AHA.

B. AHA will define the work activity(ies) to be executed, identify the equipment that will be needed to perform the activities, identify the associated hazards that could adversely affect health, safety, or environment, and define specific actions to eliminate or minimize the risks involved. The AHA shall address permit requirements, training requirements, engineering and administrative controls, and PPE requirements.

1. If the work includes the use of high pressure water cutting equipment, such as a waterjet, special attention, and hazard evaluation shall be included in AHA as described above for the work process.

C. The Contractor will provide drawings and/or other documentation of protective measures prepared by a Professional Engineer or other qualified professional when the applicable construction activity (e.g., excavations, foundations, structural steel, fall protection systems, scaffolding, etc.) is required by OSHA standards.

D. The AHA is a living document throughout the duration of the project. The AHA will identify specific safety and health requirements for identified tasks. The AHA must be modified by the Contractor and approved by B&W Pantex should additional activities need to be performed or if additional equipment is required or if emergent hazards are identified.

E. The Contractor shall require workers to acknowledge being informed of the hazards and protective measures associated with assigned work activities addressed in the AHA.

F. An approved AHA submittal is not usable for work until the last page of the PX-4798 has the required signatures. The Contractor is responsible for ensuring that the signatures are in place prior to commencing work. The approved and signed AHA will allow the Contractor to commence operations for which an AHA has been approved. No activities will commence that are not identified in the AHA.

G. A copy of the approved and signed AHA used for the activity shall be submitted by the Contractor to B&W Pantex for the project records. The submittal coversheet shall state that it is for a records copy and shall be submitted within 2 working days of receiving it. Any approved and signed AHA updates, revisions or addendums shall also be submitted within 2 working days after receipt and the submittal coversheet be marked appropriately for a records copy.

1.4. Competent and Qualified Persons

NOTE
"Competent and qualified persons in this section (1.4) refer to the OSHA designation i.e., competent person for excavations."

A. Qualifications of competent and of qualified persons.

Per definition, the competent person shall have knowledge of the Contractor's Safety and Health Program including the requirement to conduct Site inspections, identify safety deficiencies, initiate corrective actions, and enforce safety and health requirements for Contractor and tier Contractor personnel. As a minimum, competent persons shall be designated and qualifications submitted for each of the following major areas:

- Excavation.
- Scaffolding.
- Fall protection.
- Hazardous energy.
- Confined space.
- Rigging.

B. The competent person designee shall also have as a minimum 10-hour OSHA construction safety class or equivalent within the last 3 years.

C. The resume and letter of authority for each primary and any alternate competent and qualified person(s) shall be submitted to B&W Pantex prior to execution of the activity they are designated for.

D. Safety inspection logs required by OSHA that are generated by the competent persons shall be attached to the Contractors' Daily Report.

1.5. Contractor's Hazard Communication Program

A. The Contractor shall have a Hazard Communication Program that meets the requirements of 29 CFR 1910.1200.

B. The Contractor shall assure that each Subcontractor at the Site who uses chemicals has a Hazard Communication Program that meets the requirements of 29 CFR 1910.1200.

C. The Contractor shall maintain a current copy of the MSDS for all chemicals associated with the construction project on file at the Contractor's field office.

D. The Contractor shall maintain a master list of all chemicals associated with the construction project, including Subcontractors, at the worksite or on file at the Contractor's field office.

E. The Contractor shall coordinate the use of any hazardous chemicals with Subcontractor Safety Group and PSTR.

1. The Contractor shall maintain exposure levels below established OSHA PEL or ACGIH TLV in areas where NNSA, DOE, B&W Pantex, or Contractor personnel may be present. The lower exposure level will be enforced.

2. If personnel in occupied areas adjacent to the construction site could be exposed to hazardous chemicals, the Contractor shall request that B&W Pantex Plant relocate those employees.

3. The Contractor shall not proceed with any operation that could expose their own employees or B&W Pantex personnel to hazardous chemicals without controls in place. Controls shall be approved by the Subcontractor Safety Group and the PSTR.

F. The Hazard Communication Program for the Contractor and all Subcontractors shall be maintained on the worksite and shall be available upon request by B&W Pantex Plant personnel, Contractor and Subcontractor employees, employee representatives, and other personnel with a need-to-know.

1.6. Contractor Occupational Medicine

A. Contractors must provide Occupational Medicine services in compliance with 10 CFR 851 Appendix A.8 to all workers, including all lower tiered subcontractors, employed under this contract who:

1. Work on a DOE site for more than 30 days in a 12-month period; or

2. Are enrolled for any length of time in a medical or exposure monitoring program required by this rule and/or any other applicable federal, state or local regulations, or other obligation.

B. Health Evaluations and Fitness Determinations:

1. Required health examinations shall be conducted by a licensed physician or a qualified occupational health examiner under the direction of a licensed physician, in accordance with current sound and acceptable medical practices.

2. Required health examinations shall be done in accordance with applicable regulations, directives, and standards (e.g., 10 CFR 851, 29 CFR 1910, 49 CFR 40, etc.). The exact content of health examinations shall be the responsibility of the physician who is directing the delivery of medical services. The following types of examinations may be required for the purpose of providing initial and continuing assessment of employee health as determined by the physician responsible for delivery of medical services:

    a. Pre-placement in accordance with the American with Disabilities Act (42 United States Code 12101).

    b. Qualification examinations.

    c. Fitness for duty.

    d. Medical surveillance and health monitoring.

    e. Return to work health evaluations.

    f. Exit examinations.

3. The physician responsible for the delivery of medical services or his/her designee shall inform Contractor Management of appropriate employee work restrictions as determined by an appropriate evaluation. Contractor Management will only place qualified contract employees in a given job.

4. In order to assist Contractors in complying with the 10 CFR 851 Occupational Medicine requirements, reference the B&W Pantex 10 CFR 851 Occupational Medicine Compliance Approach (See Appendix D Exhibit 1) contained in CD-0009. CD-0009 is available on www.pantex.com under the Procurement tab.

1.7. Integrated Safety Management (ISM)

A. ISM shall be utilized to establish and maintain a systematic approach to effectively incorporate safety and health requirements into all work performed. Protection of the public, the worker, and the environment shall be integrated into the project. Safety management activities shall include five core functions:

1. Define scope of work.

2. Analyze hazards.

3. Develop and implement hazard controls.

4. Perform work within controls.

5. Provide feedback and continuous improvement.

B. The Contractor shall incorporate these five core safety management functions during the course of construction. The Define, Analyze, Develop, and Implement functions shall be addressed during the development of the AHA. Hazards Controls will be confirmed when the AHA is submitted by the Contractor and approved by B&W Pantex. The Performance functions shall be implemented once work commences. The Feedback and Continuous Improvement function will be implemented during the course of construction when unforeseen circumstances arise that could inhibit the Contractor's ability to perform a particular task. The Feedback and Continuous Improvement function may require a revision to the Contractor's Safety and Health Plan and/or to the Contractor's AHA.

C. Under the ISM process, the Contractor will tailor the controls to the complexity of work and associated hazards.

1.8. Communication of Site Safety Requirements

A. The Contractor is required to conduct a daily "tailgate safety meeting" for all employees, including lower-tier Subcontractor employees.

B. The meeting is intended to be part of (and an enhancement to) Contractor's normal daily work assignment process. While the meeting may cover a variety of safety matters, its focus should be on work activities to be conducted that day, the hazards associated with those activities, and measures to eliminate, isolate, or minimize the hazards. The AHA is a resource for discussion, as it should identify hazards and mitigation measures. Permits provide an additional resource of information to be reviewed in tailgate safety meetings.

C. The Superintendent and or the Competent Safety Person normally leads the tailgate safety meeting, but may delegate authority to subordinate supervisors or foremen who have expertise in the work to be performed by each group.

D. Contractors will relay any provided safety information related to incidents that have occurred at the Pantex Site, safety equipment recalls, or general safety and health reminders to their Site employees during the daily work review meeting.

E. Each tailgate safety meeting will be documented by recording the hazards identified, mitigation measures, and attendance. Records shall be provided to the PSTR upon request.

1.9. Subcontractor Safety Council Meetings

A. Contractors must attend the Subcontractor Safety Council meetings hosted by B&W Pantex. Tier Subcontractors may attend, but are not required to do so. The Subcontractor Safety Council will provide Contractor personnel the ability to identify areas for improvement related to B&W Pantex.

B. The Subcontractor Safety Council meets quarterly and one member of the Contractor's Management Team will attend.

1.10. Personal Protective Equipment (PPE)

A. Foot protection is mandatory for all Contractor personnel working at the Pantex Site. Foot protection shall meet the requirements as specified in 29 CFR 1910.136. The Contractor can request that foot protection be waived if foot protection could damage equipment being installed and there are no potential hazards to the workers. The Contractor shall submit a written request to B&W Pantex stating why foot protection is not needed, but shall not exempt employees from using foot protection without B&W Pantex Plant approval. Non-metallic footwear will enhance progress through security inspections.

B. Eye protection is mandatory for all Contractor personnel working at the Pantex Site. Eye protection must meet the requirements as specified in 29 CFR 1910.133. Additional eye/face protection may be required based upon the operations to be performed. The Contractor shall base all eye/face protection requirements on the provisions outlined in 29 CFR 1926.102.

C. Contractor employees shall wear appropriate hearing protection based upon hearing protection requirements identified in 29 CFR 1926.101.

D. Contractor employees shall wear hand protection while performing operations that could cause hazards to the hands from skin absorption of harmful substances, severe cuts or laceration, severe abrasions, punctures, chemical burns, thermal burns and harmful temperature extremes, or electrical shocks. The Contractor shall be responsible for evaluating the activities to be performed and shall specify the type of hand protection that will be used.

1. "Level 0" insulated voltage rated rubber gloves are required to be worn by workers when drilling or cutting concrete walls, floors, concrete encased objects, cinder block, or brick anytime facility electrical is present (energized or nonenergized, anywhere within the facility). This requirement covers use of all types of drilling & cutting equipment. (Electrical, water, gas, air, or hand powered)

E. Head protection is mandatory for all Contractor personnel working at the Pantex Site. Head protection must meet the requirements as specified in 29 CFR 1926.100. "Cowboy Hardhats," metal hardhats, and bump hats are not permitted for use at the Pantex Site.

F. Respiratory protection shall be required if employees could be exposed to hazardous chemicals or substances that exceed allowable TLVs according to ACGIH or PEL according to OSHA. The most stringent ACGIH or OSHA shall be enforced while selecting respiratory protection.

G. If respiratory protection is required, the Contractor shall submit a respiratory protection plan that complies with the provisions specified in 29 CFR 1910.134. In addition, any employee required to wear respiratory protection shall have a current annual physical or medical questionnaire, the respiratory protection to be used, documentation of a fit test, and documented evidence of respiratory protection training. All information shall be submitted to and approved by the B&W Pantex Subcontractor Safety Group and PSTR prior to performing an operation requiring respiratory protection.

H. The Contractor shall include any operations requiring respiratory protection on the Contractor's AHA. The AHA shall address barricading requirements, ventilation requirements, and precautions to be taken to prevent exposure to other Site personnel.

I. The Contractor shall require employees to wear appropriate electrical protective equipment when employees are working in areas where they may be exposed to electrical hazards. The electrical protective equipment shall comply with 29 CFR 1910.137 and the PPE requirements of NFPA 70E as addressed in 10 CFR 851.23 (a) (14).

J. It will be the responsibility of the Contractor to assure that personnel are physically capable of wearing PPE. Physically capable may include fit tests, physicals, and medical questionnaires. The Contractor shall provide documentation as required by the OSHA regulations to assure personnel are physically capable of wearing prescribed PPE. Actual medical documentation will be maintained by the Contractor and may be audited by B&W Pantex.

K. The term Spotter and Flagger are used synonymously and when required must meet OSHA §1926.201(a) PPE requirements.

1.11. Site Safety and Health Inspections

A. The Contractor shall allow B&W Pantex personnel to inspect project sites on a periodic basis. Inspections will be based upon the requirements identified in the Division I Specifications, 29 CFR 1910, and 29 CFR 1926.

B. The Contractor shall correct all B&W Pantex documented and noted deficiencies deemed to be detrimental to the safety and health of Site workers. If the deficiencies cannot be corrected during the inspection, the operation involving the deficiencies will be terminated during the inspection. Deficiencies not corrected during the inspection, and not detrimental to the safety and health of Site workers, will be placed in a tracking system until the deficiency has been corrected.

C. The Contractor shall conduct daily safety and health inspections at the jobsite and promptly correct all deficiencies. Safety and health inspections performed by the Contractor shall be documented and shall be maintained at the jobsite.

1.12. Preparatory and Progress Meetings

A. The Contractor shall participate in periodic meetings with the B&W Pantex to address construction safety issues experienced at Pantex.

B. Preparatory and progress meetings will be held on an as needed basis in correlation with the different phases of the construction project. As a minimum, one member of the Contractor's Management Team and the designated Safety Person will attend. Contractor may elect to invite the Contractor's tier Subcontractor Representatives to this meeting.

1.13. Construction Safety Incidents

A. If a construction safety incident occurs, the Contractor shall first take action to obtain aid for any injured employee and notify B&W Pantex at (806) 477-3333 and then preserve the incident scene. The Contractor will preserve the conditions and evidence at the incident scene until the Investigation Team arrives on site and the investigation is conducted. The Contractor may be required to cease all or some operations until:

1. A joint B&W Pantex and Contractor safety investigation has been completed.
2. A critique and CA/MP Meeting is completed.
3. A Corrective Action Plan has been developed and approved.
4. Corrective actions have been implemented.

B. Occurrence Reports

1. The Contractor shall report:

a. Accidents or incidents that result in injury.
b. Accidents or incidents that cause property damage.
c. Near misses that could have resulted in injury or damage to property.
d. Any release of a hazardous substance, regulated pollutant, fuel, or oil.
e. Conditions that could result in the degradation of personnel safety.
f. Condition that could result in the degradation of security.
g. Any use or suspected use of illegal drugs or alcohol.
h. Radiological exposure.

i. Any unplanned contact with energized electrical circuits or other energy systems such as air, gas, or steam.

2. All occurrences shall be reported immediately to:

a. B&W Pantex Plant OC at 477-5000.

b. B&W Pantex PSTR.

3. DOE Form PX-5484.3 Modified (Exhibit # 15) shall be submitted to the Safety Industrial Health Department within 7 days from the date of the injury.

1.14. Monthly Frequency Reporting

Work hours and injury reports DOE Form PX-5484.4 Modified (Exhibit # 13) shall be submitted on the fifth of each month for the prior month. The Contractor shall include the total number of hours worked by all construction personnel, including sub-tier Subcontractor personnel during the reporting period.

1.15. Injuries and Medical Emergencies

A. The Contractor shall notify the B&W Pantex Plant Fire Department (806-477-3333) in the event of a medical emergency. Emergency medical treatment is required when:

1. An employee loses consciousness or has pain or numbness in any portion of the body.

2. An employee suffers cuts or abrasions that may require suturing by a physician.

3. An employee has a bone that may be fractured or dislocated.

4. An employee suffers second or third degree burns, including electrical, thermal, and chemical burns, to any portion of the body.

5. An employee experiences any chest pain, difficulty in breathing or stomach pain.

6. An employee suffers allergic reactions to food products or insect stings.

7. An employee is bitten by a snake.

B. The Contractor shall manage injuries and medical emergencies to prevent or reduce further injury to an ill or incapacitated employee until B&W Pantex Fire Department personnel arrive. The Contractor is required to maintain a first-aid kit at the jobsite that complies with the provisions addressed in 29 CFR 1926.50.

C. The Contractor shall provide first-aid treatment at the project site. If first-aid treatment is rendered at the project site, the Contractor shall inform the B&W Pantex Plant at (806) 477-3333 as to the injury and first-aid treatment.

D. Ambulance service can be obtained by calling (806) 477-3333 or by asking a SPO to summon an ambulance. Ambulance service and transportation to a medical facility or emergency doctor is available and provided at no cost to the Contractor. State Certified Paramedics and Emergency Medical Technicians staff B&W Pantex Plant ambulances.

E. Patients requiring medical attention may first be taken to the B&W Pantex Plant Occupational Medical Facility for stabilization prior to transportation to an emergency room or doctor.

1.16. Occupational Safety or Health Complaints

Contractor and Subcontractor employees may notify B&W Pantex if they have an occupational safety or health complaint. B&W Pantex will investigate the complaint and will provide feedback to the employee. The employee's name will not be disclosed to the Contractor.

1.17. Flammable Gas or Flammable and Combustible Liquid Transporting

A. Transportation of Hazard Division 2.1 Flammable Gas or Class 3 Flammable and Combustible Liquid on the Pantex Site, in quantities that are required to be placarded by 49 CFR 172.504 shall be coordinated 48-hours in advance with the B&W Pantex Divisional Logistics Coordinator. The Contractor shall provide the amount and/or capacity of the material to be transported, the name of the company transporting the material, the date and time of the delivery, the destination of the delivery, the driver's name (if no badge), the material type, the placarded status, and route. The Contractor is responsible for acquiring an authorized time and entrance point for the delivery from the B&W Pantex Divisional Logistics Coordinator. The Contractor shall abide by any escort requirements for such loads entering the LA, PA, or MAA. The Contractor is responsible for coordinating any notifications to the OC with both the PSTR and B&W Pantex Divisional Logistics Coordinator.

B. Hazard Division 2.1 Flammable Gases are identified in 49 CFR 172.101, described in 49 CFR 173.115, and includes (but not limited to) propane, acetylene, compressed natural gas, and liquefied natural gas. A placarded quantity of these items is any amount where the weight of the container and contents combined is 1,001 lb. or more.

C. Hazard Class 3, Flammable and Combustible Liquids are identified in 49 CFR 172.101, described in 49 CFR 173.120, and include (but not limited to) gasoline, diesel fuel, fuel oil, or road asphalt. A placarded quantity, as defined by B&W Pantex Plant, is any container that exceeds 110-gallons in quantity regardless of the content amount inside the container or any amount where the weight of the container and contents combined is 1,001 lb. or more.

D. Transportation or staging of flammable or combustible liquids in quantities greater than 12 gallons, at any one location in the Zone 12 MAA ramps, corridors and loading docks is prohibited without the advanced notification and authorization from the OC. The Contractor is responsible for acquiring and coordinating the advanced notification with the PSTR.

E. The Contractor shall coordinate in advance the use of compressed gas cylinders at Pantex with Construction Safety or the assigned PSTR. [B&W Pantex Reference 06-0382-A]

1. Compressed gas cylinders rated greater than 3600 psi will not be allowed on the Pantex Plant. [B&W Pantex Reference 06-0382-A]

2. Compressed gas cylinders equipped with valve protection caps shall have caps in place at all times. Caps will be hand tight, except when cylinders are in use or connected for use. Cylinders not designed to have a valve cap must be in a container to protect the valve assembly from damage during transport and use or be designed with valve protection. [B&W Pantex Reference 06-0382-A]

3. Compressed gas cylinders shall be mechanically restrained at all times, except when being changed out, loading or unloading. Compressed gas cylinders shall not be changed out or unrestrained in Zone 4 magazines and Zone 12 MAA ramps, corridors, loading docks or facilities without the permission of the PSTR. The Contractor is responsible for acquiring and coordinating the advanced notification with the PSTR. [B&W Pantex Reference 06-0382-A]

4. Compressed gas cylinders brought into Zone 4 magazines or Zone 12 MAA ramps, corridors, loading docks, or facilities shall be restrained in a rack or cart, contained in a frame or container. For cylinders not designed for valve protection caps, the container frame shall extend past the valve assembly if the valve is not protected with a valve protection barrier. [B&W Pantex Reference 06-0382-A]

F. The Contractor shall coordinate in advance the refueling and transport of propane tanks at Pantex with the assigned PSTR. The following procedures shall be followed prior to refueling and transporting propane tanks onto Pantex property:

1. The Contractor shall request the use of on-site Pantex approved propane tanks from the assigned PSTR if available for use.

2. If Pantex tanks are unavailable, the Contractor shall coordinate a time and location with the assigned PSTR to get the Contractor supplied tanks approved and tagged for use onsite. Once tanks have been verified and recorded, the tanks shall not be taken from the Pantex Site until the completion of the project or unless escorted to a refueling location by a Pantex Q-cleared employee. The tanks shall be stored in the Pantex storage area while not in use.

3. The Contractor shall coordinate the refueling of the propane tanks with the assigned PSTR. A Pantex Q-cleared employee shall escort the tanks to a refueling point and return the tanks to the project site or the Pantex storage area.

1.18. Electrical

A. EXTENSION CORDS

1. All general use extension cords shall be of a 3-wire type rated for hard or extra hard use. (Reference the current addition of the NEC for size and type of hard or extra-hard use extension cords.)

2. The Contractor shall take necessary precautions to protect extension cords from vehicle or foot traffic.

3. Extension cords shall not be suspended with bare wire.

4. Extension cords routed through doorways or windows shall be protected by a rigid sleeve, conduit or similar device secured to prevent the sleeve being dislodged.

5. Extension cords routed through metal structures shall be protected with a non-conductive barrier.

6. Extension cords shall be protected from sharp edges.

7. Extension cords shall be inspected prior to use for frays, cuts, and ground-prongs. All damaged extension cords shall be immediately removed from service.

B. PORTABLE ELECTRIC DEVICES

1. All portable electric devices, such as saws, drills, compressors, etc., shall be equipped with 3-prong plugs or shall be double insulated.

2. Electrically powered equipment shall be inspected prior to use. Damaged or defective equipment shall be immediately removed from service.

3. All electrically powered equipment shall be disconnected at the conclusion of the workday.

4. All 120-volt, single-phase, 15- and 20-ampere receptacle outlets on construction sites shall have Type A GFCI for personnel protection. The "Assured Equipment Grounding Conductor Program" is not an acceptable alternative for the use of GFCI protective devices.

5. Contractors utilizing permanent Plant receptacles for construction power shall not rely on a permanently installed GFCI device for protection and must utilize a portable GFCI device.

C. TEMPORARY WIRING

1. All temporary wiring and fixtures shall be installed in a manner that protects employees from energized electrical parts.

2. All temporary wiring shall be installed by a trained and qualified electrician and the temporary wiring shall meet the provisions of 29 CFR 1926 Subpart K.

3. Temporary wiring shall be removed prior to project turnover.

4. Temporary wiring may be provided to jobsite trailers provided the wiring is installed in accordance with the latest version of the NEC and the temporary wiring is protected from Site operations.

5. Temporary wiring shall not be used for any office trailers located in the Zone 10 Contractor Lay-Down Area.

D. ELECTRICAL CLOSE PROXIMITY WORK

1. The following is a partial list of activities that B&W Pantex defines as electrical close proximity work:

a. Trouble shooting (this does not include lifting of energized leads).

b. Pre-operational testing (this does not include lifting of energized leads).

c. By-passing circuits during system testing.

d. Tracing circuits (this does not include lifting of energized leads).

e. Infrared measuring.

f. Voltage measurements (this does not include lifting of energized leads).

g. Measuring current (if using inline current meters, the circuit will be de-energized prior to placing or removing the meter connections).

2. Contractor personnel may not work within close proximity of exposed energized electrical parts unless:

   a. Work to be performed within close proximity of exposed energized electrical parts is approved by B&W Pantex. The Contractor shall request approval for PX-5253 (Exhibit 10), before close proximity work is initiated. The request to work within close proximity of exposed energized electrical parts shall meet the provisions listed in NFPA 70E as addressed in 10 CFR 851 Subpart C, Section 23 (a) (14). PPE will also be selected based upon current NFPA 70E requirements as addressed in 10 CFR 851 Subpart C Section 23 (a) (14).

   b. The Contractor has a procedure approved by B&W Pantex Plant that specifically addresses work within close proximity of exposed energized electrical parts and the procedure is consistent with the provisions identified in 29 CFR 1910.333. The procedure shall address PPE (as required by NFPA 70E), insulated barriers, insulated tools, and precautions to protect non-electrical personnel from energized circuits.

E. OVERHEAD OBSTRUCTIONS

1. The operations of cranes, equipment with masts, and equipment with booms around electrical lines shall be performed in accordance with OSHA requirements of 29 CFR 1926.1400, “Subpart CC – Cranes and Derricks in Construction.”

2. All overhead lines shall be considered energized.

3. All cranes, equipment with masts, and equipment with booms must maintain a minimum clearance of 10 feet between the crane, hoist or boom and an energized line of 15 kV or less. Any energized overhead power lines greater than 15 kV will require a minimum clearance of 15 feet.

4. The Contractor shall be responsible for inspecting the work area and determining if energized lines are present and if construction equipment can be operated with the minimal distance requirement.

5. If such equipment must operate within 10 feet of an energized line 15 kV or less or within 15 feet of an energized power line 15 kV or greater, the Contractor shall obtain the appropriate LOTOs.

6. When moving equipment underneath overhead power lines, the Contractor shall maintain a minimum clearance of 6 feet for energized overhead power lines 15 kV or less. For any energized overhead power lines greater than 15 kV the Contractor will maintain a minimum a minimum clearance of 10 feet. The Contractor shall measure the height of the equipment to be moved and estimate the height of the overhead power lines.

7. If the Contractor cannot maintain minimum clearances referenced in item 6 above, an alternate route or a LOTO of the overhead power lines shall be obtained prior to moving the equipment.

8. The Contractor shall provide a spotter to assist operators when overhead clearances could be a concern.

1.19. Utility Shutdowns and Lockout/Tagout (LOTO)

A. LOTO is required for all energy sources directly and indirectly involved with the project. All utility system (electrical, high pressure fire loop, domestic water, sewer, steam, natural gas, compressed air) shutdowns will be performed in accordance with the B&W Pantex LOTO procedures. The Contractor is responsible for coordinating LOTO operations with the PSTR. The B&W Pantex LOTO Program will be the program of record and shall be included in the Contractor's Safety and Health Plan.

B. The Contractor is responsible for having any employee involved with or downstream from a LOTO trained and certified in "CURRENT" B&W Pantex LOTO procedures. The Contractor shall coordinate with the Pantex Logistics Coordinator for current class offerings.

C. The Contractor shall initiate and assist in the completion of the PX-665, provide a diagram or drawing of area to denote the scope of LOTO and boundaries at least 5 working days (unless specified otherwise) in advance of the date any utility outage is required.

D. Only Contractor employee's that have been certified under B&W Pantex LOTO procedures shall be allowed to work within the boundaries or downstream of the LOTO. Each Contractor employee shall have an individual green lock on the lock box prior to work in accordance with B&W Pantex LOTO procedures.

E. Contractor personnel are NOT AUTHORIZED to shutdown or start, open or close, energize, or de-energize, any utility system (electrical, high pressure fire loop, domestic water, sewer, steam, natural gas, compressed air) for any reason other than that of imminent danger.

1.20. Point of Use Utilities

A. Contractor personnel are allowed to manipulate "Point of Use" devices. Examples of these "Point of Use" devices will include: light switches, unit power and operating controls, domestic fire hydrants, cord and plug assemblies and other controls normally intended to be used by a consumer, not an installer or service person. Point of Use controls are readily accessible and may require an operating tool. Control manipulation by Contractors or Subcontractors may not alter the flow configuration of a utility system.

1.21. Ladders, Scaffolds, and Aerial Lifts

A. If ladders are used on the project site, they shall conform to the provision of 29 CFR 1926 Subpart X.

B. The Contractor shall provide details as to how ladder inspections will be performed, how defective ladders will be tagged from service, and how personnel will be trained in regards to ladder safety. This information shall be included in the Contractor's Safety and Health Plan.

C. If scaffolds are used on the project site, they shall conform to 29 CFR 1926 Subpart L.

D. The Contractor shall assure that scaffolds are assembled under the supervision of a competent person. The Contractor shall provide the names of the competent personnel in regards to scaffolding.

E. The Contractor shall address scaffold safety requirements in the Safety and Health Plan. Scaffolding requirements will address applicable OSHA requirements associated with the type of scaffolding being used.

F. If aerial lifts are used on the project site, they shall conform to 29 CFR 1926 Subpart L.

G. Personnel operating aerial lifts shall be trained as to the safe operation of the lift.

H. The Contractor shall address aerial lift safety in the Contractor's Safety and Health Plan. Aerial lift requirements shall include training, inspection, and PPE.

I. All aerial lifts shall have current preventive maintenance records available for inspection by B&W Pantex.

J. Personnel operating lifts shall perform a documented pre-operation inspection prior to service.

K. Electric lifts shall be charged only in locations specified by B&W Pantex.

1.22. Penetration/Excavation Permits

A. Subsurface penetrations below site finished grade or through walls, floors, ceiling and roofs of structures could contain unidentified utilities and electrical in addition to known utilities. Therefore, for proposed penetrations and excavations involving drilling, boring, cutting, heating, and digging require a permit as detailed in B&W Pantex WI 02.01.01.05.23 and accompanying TABLE-117. No penetrations/excavations will be made prior to evaluation and approval by B&W Pantex. The B&W Pantex Excavation and Penetration Program will be the program of record and will be included in the Contractors Safety and Health Plans. (Reference Exhibit 11, WI 02.01.01.05.23)

1. The Contractor (Requestor) shall assist the PSTR in completing the PX-2872A.
2. The Contractor shall provide a map or sketch of area to be worked and shall mark the intended penetrations/excavations before applying for a permit.
3. A copy of the approved and signed permit used for the activity shall be submitted by the Contractor to B&W Pantex for the project records. The submittal coversheet shall state that it is for a records copy and shall be submitted within 2 working days of receiving it. Any approved and signed permit updates, revisions or addendums shall also be submitted within 2 working days after receipt and the submittal coversheet be marked appropriately for a records copy.

B. The Contractor shall verify the markings for all utilities known to exist within the permitted area prior to beginning or continuing a penetration or excavation.

1. There may be utility lines in the area that are not known to B&W Pantex.
2. B&W Pantex makes no representation, guarantee, or warranty concerning the accuracy of these markings.
3. The Contractor shall consider the uncertainties associated with these markings and perform the penetration with due caution.
4. The Contractor is responsible for mitigating hazards associated with excavating in the proximity of known and identified utilities. Based on site conditions and soils, mechanical digging, hand digging, and/or hydro vacuum digging may be appropriate to avoid hazards.

C. The Contractor shall update the as-built drawings or sketches as necessary to identify locations and interferences, and will communicate this information to the employees performing the penetration known to all equipment operators before beginning a penetration.

1.23. Procedures for Damaged or Cut Utilities

A. If a utility is accidentally damaged, the Contractor shall evacuate all personnel to a safe distance. No one will be permitted to work on a damaged line or pipe until it is proven safe.

B. The Contractor shall notify the OC at (806) 477-5000 and the PSTR. The Contractor is responsible for filling out required B&W reports concerning the incident.

C. The Contractor shall not repair or continue work until B&W Pantex has released the area and proper LOTO or controls are in place.

D. Prior to covering the utility, the Contractor shall notify the B&W Pantex PSTR that repairs are complete. The Contractor shall not cover the utility until the B&W Pantex PSTR has verified and approved the repair, inclusive of the placement of any required utility marking tape.

1.24. Penetrations

A. The Contractor shall address penetration safety requirements in the AHA.

B. Utilize a mechanical drill stop to prevent damage to concealed metallic items. A DRILLCO, DS-69A Drill Stop Box, a Lorien Instruments Protek SRS, or equal shall be used to provide worker safety and prevent damage to metallic items by terminating power to the drill motor.

C. Provide documented training that details the operation and safety features of this equipment.

D. Prior to daily use, test the operation of the equipment to assure that the equipment will terminate power to the drill motor upon contact with grounded metal.

E. The Contractor shall follow all control requirements stated in the permit for identified utilities prior to work.

1.25. Excavations

A. The Contractor shall comply with the excavation safety requirements in 29 CFR 1926, Subpart P.

B. The Contractor shall address excavation safety requirements in the Contractor's Safety and Health Plan. Excavation safety requirements shall include competent person inspections, techniques for classifying soil, excavation permits, locating, and protection of underground utilities, barricading, access/egress, maintaining spoil material, benching/shoring, and traffic control.

C. There are contaminated soil areas at Pantex as defined by B&W Pantex Plant. Contaminated soil areas are classified as SWMU, SCA, or WMG. These locations have known soil contaminants and require special permission from B&W Pantex Plant prior to excavating. B&W Pantex Plant must submit an interference request to the State of Texas prior to performing any excavation work in a contaminated soil area. The interference request will identify the level of protection and training needed by the Contractor prior to performing excavation activities. If it is determined that 40-hour hazardous waste training is needed, the Contractor shall submit a Safety and Health Plan that complies with the provisions outlined in 29 CFR 1910.120 for environmental work or 29 CFR 1926.65 for construction work. No excavation work, hand or mechanical, shall be performed in a contaminated soil area without the written permission from B&W Pantex Plant.

D. If suspected archeological resources (i.e., bones, ceramic vessels fragments, stone artifacts, areas of charcoal or red-stained earth) are uncovered during excavation, the Contractor shall stop work related to the excavation immediately and contact the PSTR.

E. The Contractor shall document the exact location and depth of all utility lines exposed during the excavation.

F. The Contractor shall maintain all physical utility markings until the excavation is complete.

G. The Contractor shall update as-built drawings to show the exact location and depth of new or modified utilities.

H. A competent person designated by the Contractor shall inspect all excavations which require personnel entry.

I. All open excavations shall be barricaded when unattended.

J. Any open excavation within 6 feet of roadway shall be barricaded with flashing yellow lights.

K. Any open excavation over personnel walkways shall be covered with a physical barrier and equipped with standard railing.

L. If the Contractor encounters evidence of contamination during excavation, the Contractor shall:

1. Stop all work in or near the excavation.
2. Notify the OC or PSTR.
3. Work in or near the excavation shall not resume until authorized by the PSTR.

M. The Contractor shall follow all control requirements stated in the permit for identified utilities prior to work.

1.26. Vehicles

A. All vehicles entering B&W Pantex Plant are subject to a safety inspection. Brakes, lights, glass, fuel systems, electrical systems, and exhaust systems shall be in good condition. Vehicles that leak fluids will be taken off-site. Other vehicles or equipment that has the potential for fluid spills/leaks will have a spill kit available to mediate the spill. The spill kit shall contain a 10x10 sheet of plastic, a shovel, and a container to catch fluid or to place cleaned up soil.

B. All Contractor personnel shall obey posted speed limit signs, stop signs, or applicable traffic signs whether in their personnel vehicle or a Contractor-owned vehicle. Drivers shall reduce speeds as necessary for the safe operation of vehicles during inclement weather or poor road conditions.

C. All personnel shall wear seat belts while operating or riding in a vehicle on the Pantex site. Seat belts are mandatory on the Pantex site.

D. The number of passengers in a vehicle shall not exceed the number the vehicle was designated to transport.

E. Riding in the back of a truck is prohibited.

F. Getting on or off vehicles while they are in motion is prohibited.

G. Vehicles shall stop and yield the right of way when meeting a vehicle displaying flashing lights. Drivers shall not proceed until the vehicle has passed their location. Passing these vehicles is prohibited.

H. Equipment or vehicles that may have caused or been a contributing factor in an accident shall not be moved until released by B&W Pantex Plant. Equipment or vehicles may be moved to prevent further injury to an accident victim or to allow access to an accident victim.

I. The Contractor shall use Spotters/Flaggers when maneuvering a vehicle in an area with obstructed views, heavy obstacles, narrow passageways or high congestion. For areas requiring a dedicated spotter/flagger, the Contractor shall document the individual(s) in the daily report.

1.27. Equipment

A. The Contractors shall maintain comprehensive records documenting all structural changes or corrected structural damage for oncoming drilling rigs. These records shall be kept up to date and made available to the assigned B&W Pantex PSTR for inspection upon request. The records shall also document that qualified personnel, as appropriate, completed modifications to the drilling rig (e.g., use of a certified welder).

B. The Contractor shall consider the height, width, weight, and turning radius of any equipment or deliveries brought onto the Pantex Site. The Contractor shall allow enough clearance to prevent damage to Plant buildings, utilities, fences or other structures. The Contractor shall obtain approval, 24-hours in advance, from the Construction Management Logistics Coordinator prior to bringing oversize vehicles or overweight vehicles onto B&W Pantex Plant. Oversized vehicles or overweight vehicles are any vehicles that exceed 13 feet 8 inches in height, exceed 8 feet 6 inches in width, vehicles (including transport and load) that exceed 80,000-pounds or a tractor/trailer that exceeds 53 feet in length.

C. Contractors typically utilize utility trailers for transporting small materials and equipment to and from the Pantex Plant. Utility trailers, per the Texas Transportation Code Chapter 547, states that trailers having a gross weight of 4500-pounds or more (this includes trailer and content), must be equipped with trailer brakes. Contractors are to verify the gross weight of trailers prior to use at Pantex. Also, trailers will be equipped with safety chains and the use of chains will be strictly enforced.

D. It is the responsibility of the Contractor and associated sub-tier Contractors to protect Plant buildings and structures. Therefore, the Contractor will be required to assign and document a Spotter/Flagger to assist vehicle operators while passing through overhead ramp doors. The Spotter will be responsible for verifying ramp doors are fully raised and to assure passing equipment have sufficient clearance in regards to height and width. The assigned Spotter/Flagger shall be documented in the daily report.

E. Equipment shall be located so that exhausts discharge away from combustible materials.

F. Where exhausts for equipment are piped to outside a structure, a clearance of 9’ is required between the exhaust piping and combustibles.

G. Service areas for equipment shall not be located within structures under construction, alteration, or demolition.

1.28. Loads of 254,300 Pounds or Greater

A. Loads in excess of 254,300 pounds gross vehicle weight will not be allowed within the LA, PA, or MAA without specific authorization from B&W Pantex.

1.29. Fall Protection

A. The Contractor shall establish a fall protection and prevention program that complies with the fall protection requirements in 29 CFR 1926 Subpart M for the protection of all employees exposed to fall hazards. The fall protection provisions outlined in 29 CFR 1926 Subpart R are not permissible at Pantex Plant. The Program shall include company policy: identify responsibilities, education and training requirements, fall hazard identification, prevention and control measures, inspection storage, care and maintenance of fall protection equipment, and rescue and evacuation procedures.

NOTE
The Contractor shall maintain a copy of the Fall Protection Plan at the project site. A Fall Protection Plan will not be required when using equipment that protects personnel from a fall such as a guard rail system or equipment that already requires the use of fall protection such as an aerial lift.

B. For work locations where fall protection anchor points are available, the Contractor shall verify availability for use with B&W Pantex and address the use of such points in the site specific AHA. For work locations where fall protection anchor points are not available, the Contractor shall submit a Fall Protection Plan for Construction Contractor Roofing/Elevated Work Activities (PX-5151) prior to performing any roofing/elevated work operations at Pantex. The Fall Protection Plan shall include fall hazards, locations (i.e., drawings), fall protection methods, overhead protection methods, equipment assembly/disassembly, maintenance and inspection, injured worker removal/rescue, employee training, and designated fall protection competent person. The Fall Protection Plan shall be approved by B&W Pantex prior to performing any roofing/elevated work operations.

C. A copy of the approved and signed Fall Protection Plan (PX-5151) used for the activity shall be submitted by the Contractor to B&W Pantex for the project records. The submittal coversheet shall state that it is for a records copy and shall be submitted within 2 working says completing it. Any approved and signed Fall Protection Plan (PX-5151) updates, revisions or addendums shall also be submitted within 2 working days after receipt and the submittal coversheet be marked appropriately for a records copy.

D. Fall Protection for Roofing Work.

1. Low-slope roofs:

a. For work within 6 feet of an edge, on low-slope roofs, personnel shall be protected from falling by use of personal fall arrests systems, fall restraint system, or guardrails. A safety monitoring system is not adequate fall protection and is not authorized.

b. For work greater than 6 feet from an edge, warning lines shall be erected and installed in accordance with 29 CFR 1910.500.

2. Steep-sloped roofs:

a. Work on steep-sloped roofs requires a personal fall arrest system.

b. Anchorages to be used for the attachment of personal fall arrest systems shall be certified by a qualified person for fall protection. Horizontal lifelines shall be designed, installed and used under the supervision of a qualified person.

E. Personal Fall Arrest Equipment.

1. Personal fall arrest equipment, systems, subsystems, and components shall meet 29 CFR 1926.502. Only a full-body harness with a shock-absorbing lanyard or self-retracting lanyard is an acceptable personal fall arrest body support device. Harnesses shall have a fall arrest attachment affixed to the body support (usually the Dorsal D-ring) and specifically designated for attachment to the rest of the system. The harness shall have side D-rings if used for fall restraint or work positioning and shall have a front D-ring if used for ladder climbing. Only locking snap hooks and carabineers shall be used. Webbing, straps, and ropes shall be made of synthetic fiber. The maximum free fall distance when using fall arrest equipment shall not exceed 1.8m (6 feet). The total fall distance and any swinging of the worker (pendulum-like motion) that can occur during a fall shall always be taken into consideration.

2. The Contractor shall designate a competent person to assure that applicable fall protection requirements are enforced.

1.30. Operations Involving the Use of Cranes and Non-Crane Equipment

A. All operations involving the use of cranes and non-crane types of equipment shall be performed in accordance with OSHA requirements of 29 CFR 1926.1400 and DOE-STD-1090-2007. All operations must be evaluated by B&W Pantex to assure the safety of site workers in addition to Plant facilities and material routes. The Contractor shall verify with and assist the PSTR with the development of any permits necessary for these type operations. Advanced authorization to conduct crane and non-crane type activities will be granted by B&W Pantex based upon the location where such operations are to take place. The B&W OC will authorize crane and non-crane (equipment such as bucket trucks, backhoes, excavators, loaders, aerial lifts, scissor lift trucks, forklifts, etc.), which may have the potential to impact B&W buildings, ramps, corridors, loading docks, or equipment within Zone 11, Zone 12 South, Zone 12 MAA, Zone 4, east and west gate roadways, and weapon material movement routes connecting the identified locations (i.e., paved roadways). For clarification, crane operations and non-crane type equipment will be defined as follows:

1. Cranes will be considered equipment that has booms, whether lattice or hydraulic, that could have rotating platforms, and are used to raise and lower material. This will include forklifts that perform below-the-tine lifting. All crane activities require a lift plan.

2. Non-crane type equipment will be considered equipment that could have booms, hydraulic cylinders, rotating platforms, platform lifts, etc., that have the capability of being raised perpendicular to, adjacent to, or over occupied buildings, ramps, corridors loading docks, or equipment where fall down would be a concern.

B. For crane operations in the specified locations, the B&W OC will require sufficient information from a PX-4782 for review BEFORE granting authorization for the lifting activity. The Lift Plan will be completed and will include the controls necessary, including barricades to the affected area, to prevent personnel or weapon materials from being impacted during hoisting and rigging operations. Locations outside the specified parameters may still require a lift plan but the lift plan will not need to be submitted to the OC nor will authorization be required through the OC.

C. For non-crane type operations (such as aerial lift, scissor lift, bucket truck, pole cat, extendable forklift, backhoe, trackhoe, and front end loader) in the specified locations the B&W OC will require a PX-5668 for B&W Subcontractor operations for review BEFORE granting authorization. The PX-5668 will be completed and will address the controls necessary, to include barricading of affected areas, to prevent personnel or materials from being impacted while using such equipment within fall down distance of potential impact locations.

D. The Contractor shall verify with the PSTR that advanced notification to the B&W Pantex OC for authorization of crane and non-crane operations has been made. The Contractor shall verify that proper barricades are erected before such operations begin.

1. If the OC denies the request to perform crane or non-crane operations, the activity is not permitted to begin until the authorization is granted.

E. A copy of the approved and signed lift plan or lift notification used for the activity shall be submitted by the Contractor to B&W Pantex for the project records. The submittal coversheet shall state that it is for a records copy and shall be submitted within 2 working days of receiving it. Any approved and signed lift plan or lift notification updates, revisions or addendums shall also be submitted within 2 working days after receipt and the submittal coversheet be marked appropriately for a records copy.

F. The Contractor shall use Spotters/Flaggers for operations involving the use of cranes and non-crane equipment in areas with obstructed views, heavy obstacles, narrow passageways, high congestion, or areas identified by B&W PSTR or PM. For areas requiring a dedicated spotter/flagger, the Contractor shall document the individual(s) in the daily report.

1.31. Mobile Crane Operations

A. Mobile crane operations are to comply with 29 CFR 1926.1400, Subpart CC and DOE-STD-1090-2007.

B. Crane operators shall have proof of license prior to performing any hoisting and rigging operations.

C. A durable rating chart with legible letters and figures shall be provided with each crane and attached in a location accessible to the operator while at the controls.

D. A daily preoperational check will be performed to verify operation of the controls and to inspect crane hooks, wire rope, hydraulic systems, and warning systems for operation or damage.

E. Crane owners shall have a documented preventive maintenance program.

F. Operators shall not engage in any activity that will divert attention from operating the crane. In addition the Operator shall not operate the crane if experiencing any condition that could result in reduced physical or mental capabilities.

G. Operators shall know the rated capacity of the crane and the weight of the load.

H. Operators shall test for crane stability before lifting loads.

I. Operators shall always fully extend outriggers beams unless otherwise specified on the manufacturer's load chart for the crane.

J. If operating crane near power lines, maintain a minimum of 10 feet clearance between the crane hoist or boom and an energized line of 15 kV or less. Any energize overhead power lines greater than 15 kV will require a minimum clearance of 15 feet.

K. Assure that the load is attached to the load block hook properly, securely, and using approved slings and devices.

L. Ordinary lifts require a designated leader who shall be present at the lift site during the entire lift operation.

1.32. Forklift Operations

A. Forklift operations are to comply with DOE-STD-1090-2007.

B. Forklifts shall not be used beyond the rated capacity.

C. Forklifts shall have a nameplate with the truck model and serial number, weight of the truck, rated capacity, and additional information concerning codes and standards.

D. Instructions for the pre-operational inspections shall be readily available to the Operator.

E. Forklift Operators shall provide documentation of training and qualification.

F. Operators shall perform daily pre-operational checks.

G. Prior to initial use of newly arrived rental forklift, the forklift shall be inspected by a qualified inspector.

H. Do not attach or operate any attachment on a forklift that has not been approved for use by the manufacturer.

I. The fork length should be at least two thirds of the load length.

J. Lifts require a designated leader who shall be present at the lift site during the entire lift operation.

K. A B&W Pantex approved lift plan will be required for forklift operations by the Contractor if:

1. The tines of the forklift are extended above the roof of a building/ramp that could be occupied during lifting operations or impact a B&W Pantex material access route, or

2. A forklift is used for a “below the tine” lifting activities using slings.

L. The Contractor shall use Spotters/Flaggers for forklift operations in areas with obstructed views, heavy obstacles, narrow passageways, high congestion or areas identified by B&W PSTR or PM. For areas requiring a dedicated spotter/flagger, the Contractor shall document the individual(s) in the daily report.

1.33. Slings

A. Rigging slings (wire rope, alloy steel-chain slings, and synthetic slings) are to comply with DOE-STD1090-2007.

B. Slings should be stored in racks (preferably vertical) when not in use and should be protected from chemical and mechanical damage.

C. Slings shall be visually inspected prior to each use and annually inspected by a qualified inspector.

D. Wire rope slings shall be marked with the following information: Name or trademark of the manufacturer, rated capacity for the type of hitch(es), diameter size, and evidence of periodic inspection.

E. Synthetic slings shall be permanently marked with the following: name or trademark of the manufacturer, manufacturer's code or stock number, rated capacity for types of hitches used, type of core, cover, or web material, and the inspection due date.

F. Slings shall be removed for service if showing signs of damage or missing or illegible sling identification.

1.34. Rigging Accessories

A. Rigging accessories are to comply with DOE-STD-1090-2007.

B. The Operator or other designated person shall visually inspect rigging accessories at the beginning of each work shift prior to use.

C. Rigging hooks shall be marked with the manufacturer's identification by forge, cast, or die-stamped in a low stress and non-wearing area of the hook.

D. Shackles shall be marked with manufacturer's name or trademark, size, and rated capacity.

E. Eyebolts used for hoisting shall be fabricated from forged carbon or alloy steel.

F. Eyebolt marking: carbon steel shall have the manufacturer's name or trademark. Alloy steel shall have the symbol "A" and the manufacturer's name or trademark.

G. Swivel hoist rings shall be fabricated from carbon or alloy steel and shall be marked with the working load limit.

H. The Contractor will designate a competent person to supervise rigging operations.

1.35. Demolition

NOTE
TDSHS defines demolition as operations in which **load-bearing structural members** of a building are wrecked or removed.

A. Reserved

1.36. Fire Safety

A. Reporting Fires

1. All fires, including fires extinguished by the Contractor, must be reported immediately to the Pantex Plant Fire Department by using one of the following methods:
   - Activating a fire alarm manual pull station.
   - Using a telephone to call Extension 3333.
   - Requesting SPOs make notification by radio.
2. All Contractor employees shall be familiar with the nearest location of fire alarm manual pull stations or telephones to prevent delays in reporting a fire.

B. Emergency Exits and Means of Egress

1. NFPA 101 will be used as the guideline for establishing all means of exit and egress. Special attention should be given to NFPA 101 Chapter 7.
2. The Contractor shall verify the Muster Stations or Assembly Points for each work area with the PSTR at the start of the project.
3. The Contractor shall familiarize all employees, including Subcontractor employees, with escape routes, mustering stations, and assembly points before assigning them to a work area.
4. The Contractor shall assure adequate means of escape are provided for all construction employees per NFPA 1 Chapter 14.
5. Emergency exits and passageways in existing or partially occupied new facilities will be kept clear at all times. The Contractor shall maintain a clear path at least 44 inches wide to these exists.
6. No materials or equipment will be stored, stacked or parked in a manner preventing access to an emergency exit or egress route.

C. Fire Extinguishers

1. The Contractor shall provide portable fire extinguishers at the construction site per NFPA 10 Chapter 5 and 7.
2. All contractor supplied fire extinguishers shall be UL 299 listed and maintained to NFPA 10 requirements.
3. Fire extinguishers must have a gauge or other visual charge indicator.
4. The Contractor shall provide and mount at least one 2 ½" pound "ABC" type fire extinguisher on equipment powered by internal combustion engines.
5. Tampers and vibrators are exempt from the mounting requirements but an extinguisher must be available within 50 feet of operations.
6. Vehicles used solely for personnel transportation are exempt from this requirement.
7. Fire extinguishers must be located where they are readily available for use.
8. All extinguishers shall be properly charged, current inspection tagged, approved safety pin, and tamper resistant seal.
9. Fire extinguishers containing pressured water are allowed provided they are least 2 ½ gallons in size and are used where the only hazard is ordinary combustible materials (e.g., wood, paper, plastics, etc.).
10. "ABC" or "BC" rated dry chemical fire extinguishers, at least 10 lbs. in size, are required where flammable or combustible liquid fires or energized electrical fires may occur.
11. The Contractor shall not remove Government owned fire extinguishers from their installed locations except for emergency use.

D. Cutting, Welding, and Other Hot Work

1. The Contractor shall use NFPA 51B Chapter 4 and 5 and NFPA 241 Chapter 5 as a guideline for performing cutting, welding, grinding or other hot work.
2. The Contractor shall request and obtain a B&W Pantex Permit for Hot Work (PX-5394) prior to performing any Hot Work. A copy of the approved and signed permit used for the activity shall be submitted by the Contractor to B&W Pantex for the project records. The submittal coversheet shall state that it is for a records copy and shall be submitted within 2 working days of receiving it. Any approved and signed permit updates, revisions or addendums shall also be submitted within 2 working days after receipt and the submittal coversheet be marked appropriately for a records copy.

3. The Contractor shall perform all brazing, welding and cutting operations in compliance with 29 CFR 1926, Subpart J. The Contractor shall include brazing, cutting, and welding safety requirements in the Contractor's Safety and Health Plan. Safety requirements shall include PPE requirements, protection of hoses and cables, cylinder storage, fire protection, and fire prevention.

4. Prior to performing "Hot Work" (welding, cutting, etc.) or operating other flame producing/spark producing devices, the Contractors are required to provide at least two (2), twenty (20) pound 4A:20 BC rated extinguishers. All extinguishers shall be current inspection tagged, approved safety pin, and tamper resistant seal.

5. A designated FIRE WATCH is required for any "Hot Work" performed at B&W Pantex. The Fire Watch shall be trained in accordance with NFPA 51B Chapter 4 and 5 and remain on-site for a minimum of 30 minutes after cessation of Hot Work or as specified on the hot work permit. Personnel assigned fire watch duties shall check all concealed and blind areas to confirm there are no hidden or smoldering fires before leaving the area.

6. The designated Fire Watch shall be assigned no other concurrent duties. The Fire Watch shall wear fire retardant clothing.

7. A Fire Watch shall be posted on each side of a wall where Hot Work is being performed.

8. The Contractor is responsible to perform pre-job inspections of proposed Hot Work locations. The pre-job inspection will include the identification of potential fire hazards to aid in the determining of hazard controls. To the extent possible, cutting, welding and grinding operations shall be conducted to direct sparks or slag toward open areas where all combustibles have been removed.

9. The Contractor is responsible for protecting any equipment of structures that could be damaged while performing Hot Work operations.

10. Openings in floors, wall, ducts, and blind areas within 35 feet of the work shall be covered.

11. All curtains for welding flash protection shall be suitable to protect personnel from the flash.

12. No cutting, welding, or grinding on HE contaminated piping or piping that is painted white is permitted without the approval of the Safety Department.

13. The Contractor shall not perform cutting, welding, grinding, or other Hot Work in any facility or on any fixtures, duct work, or equipment that may be contaminated with HEs or solvents unless the work has been approved by the Nuclear Explosives Safety Department.

14. The Contractor shall be required to provide ventilation and respiratory protection (if needed) to assure worker exposures do not exceed any OSHA PEL or ACGIH TLV. The most stringent exposure limit will be enforced.

15. Unless otherwise approved by B&W Pantex Plant, the Contractor shall not use welding rods or electrodes that contain lead or brazing filler metals, which contain cadmium.

E. Electric Arc Welders

1. Electric arc welders shall be operated in accordance with NFPA 70, Chapter 6, Article 630.

2. Unless the building frame is completely exposed between the ground and the worksite, no part of the building frame, lightning protection system or grounding system will be used as an earth ground for welding operations.

3. Ground leads shall be connected as near as possible to the worksite to prevent arcing in blind areas.

4. Cables shall be of adequate size for the current used and in good condition.

F. Sprinkler and Riser Systems

1. Building sprinkler, risers or any part of a fire protection system shall not be used as an anchor or suspension point for any construction activities.

2. Impairment of any fire protection system or component requires compensatory actions (fire watch) and prior approval from B&W Pantex.

G. Smoking Areas

1. Smoking is prohibited in all existing buildings and structures except in designated and approved locations.

2. The Contractor may request permission to establish smoking areas from the Fire Prevention Officer.

3. Smoking areas will not be permitted:

a. Within 50 feet of an existing structure.

b. Inside a new structure if it is attached to an existing structure and the new structure is not protected by a fully operational

sprinkler system.

4. Smoking areas shall be posted with signs supplied by the Contractor.

5. Adequate receptacles (butt cans) to extinguish smoking materials shall be provided by the Contractor.

6. The Contractor shall provide 10-lbs "ABC" fire extinguishers in each designated smoking area.

7. The Contractor shall supply permanently mounted electric cigarette lighters. Matches and all other lighters are prohibited.

8. Smoking shall be discontinued 30 minutes prior to the end of the work shift. No construction site shall be left unattended until 30 minutes after the last smoking material is extinguished.

9. Smoking areas shall be kept clean and all waste materials shall be removed daily.

H. Equipment Inspection

1. Equipment shall meet the following fire safety criteria:

a. Fuel systems (except LPG or LNG for tar pots or portable heaters) must be permanently mounted.

b. When fuel systems are equipped with air cleaners, they must be in place.

c. Fuel caps or covers must be in place.

d. Batteries must be firmly mounted to prevent arcing.

e. Externally mounted batteries must be covered and firmly mounted.

f. All electrical wires must be in good condition.

g. Motor vehicles must have a muffler or spark arrestor in place while in operation.

h. Exhaust manifolds and header pipes must be free from leaks.

i. Exhaust shall be directed away from operating personnel.

I. Portable Heating Equipment

1. Portable heaters fueled by combustible liquids must be approved by a nationally recognized testing laboratory, have legible labels and instructions affixed to the heater, use a fuel with a flash point greater than 100 degrees Fahrenheit (°F).

2. Portable heaters fueled by LPG must be approved by Underwriters Laboratories or Factory Mutual, follow the guidelines in 29 CFR 1926.153.
3. Portable heating equipment will be used only after it is approved and labeled by the Fire Prevention Officer and Construction Safety.
4. When feasible, the Contractor shall station portable heaters outside of buildings and duct the heat inside. Duct material shall be approved and rated for this use.
5. Equipment must be installed per code and manufacturer's requirements, including maintaining required clearances from combustible materials.
6. Fueling by combustible liquids requirements:
    a. All operations producing heat, flame, or sparks within 50 feet of the heater must be shut down prior to fueling the heater.
    b. Heaters will be shut down and allowed to cool before fueling.
    c. Approved safety containers of 5 gallon capacity or less will be used to fuel portable heaters.
    d. The safety container will be moved at least 50 feet from the heater prior to relighting.
    e. Remove all combustible materials from within 10 feet from the rear and sides and 30 feet from the discharge side of the heater.
    f. The Contractor shall supply and keep a dedicated fire extinguisher (minimum 10-lbs "ABC") within 10 feet of the heater.
    g. Heaters shall have a safety control to prevent discharge of fuel in case of ignition failure or flame extinguishment and a safety shut-off device that minimizes fire hazards in the event the heater is tipped or turned over.
7. Fueling by LPG requirements:
    a. Flexible hose may be used on the low pressure side of the fuel regulator to connect to the portable heater.
    b. For indoor use, the hose will be kept to a minimum length. Hose length should be as near 6 feet in length as practical.
    c. A leak test, at normal operating pressure, will be performed on the complete system prior to lighting the pilot or burner.
    d. Remove all combustible materials from within 10 feet from the

rear and sides and 30 feet from the discharge side of the heater.

e. The Contractor shall supply and keep a dedicated fire extinguisher (minimum 10-lbs "ABC") within 10 feet of the heater.

f. Refilling of LPG cylinders will not be allowed inside structures. All ignition sources within 50 feet must be extinguished when changing cylinders. LPG cylinders will be securely fastened to prevent tipping/falling over.

g. Heaters shall have an automatic device to shut off the flow of gas to the main burner or pilot in the event of flame extinguishment or combustion failure and an approved electric ignition system or a pilot, which must be lit and proven before the main burner can be turned on.

J. Storage of Combustible Building Materials

1. The Contractor shall reference 29 CFR 1926.152 as guidelines for the storage of combustible building materials.

2. Temporary storage of combustible building materials is not permitted inside existing structures when the fire protection system is out of service unless authorized by the PSTR and the Fire Prevention Officer.

3. Combustible building materials shall not be stored in unprotected structures under construction or alteration unless authorized by the PSTR and the Fire Prevention Officer.

4. Combustible building materials shall be stored at least 30 feet from other structures.

K. Storage of Flammable and Combustible Liquids

1. The Contractor shall use NFPA 30 as guidance for handling, storing, and dispensing flammable and combustible liquids.

2. Class II combustible liquids having a flash point at or above 100° F and below 140° F will be handled and stored as a flammable liquid. This class includes: diesel fuel, kerosene, some types of parts and equipment cleaners, and various paint thinners.

3. Flammable or Class II Combustible liquids in quantities of 5 gallons or less will be transported and stored in safety containers approved by a nationally recognized testing laboratory.

4. The safety container must be equipped with a spring closing lid and internal spark arrestor. Spring operated lids must function as designed. Spark arrestor screens must be in place and in good condition.

5. Containers must be properly identified and labeled.

6. Bulk storage of flammable or combustible liquids must be approved by the Fire Prevention Officer.

7. Bulk storage containers must have a dike constructed around them that will hold 110% capacity of the largest container in the event of a spill or release.

8. At least two 10-lbs "ABC" or "BC" type fire extinguishers mounted on posts no farther than 50 feet from, nor closer than 25 feet to, the diked area will be in place at all times.

9. Where gravity flow tanks are installed, emergency shut off valves will be in place between the tank and the transfer valve. Emergency shut off valves will be clearly identified, labeled, and operable.

10. The Contractor or fuel supplier will attach locking devices to the tank(s) to prevent unauthorized access to the contents. Keys will be maintained by the Contractor for their use.

11. Storage of Class I or Class II liquids shall not exceed 60 gallons within 50 feet of a structure.

12. Fuel for internal combustible engines shall not be stored within structures under construction, alteration, or demolition.

L. Storage and Handling of Combustible and Flammable Gases

1. Storage and handling of combustible and flammable gases shall be in accordance with 29 CFR 1926.153.

M. Temporary Enclosures

1. NFPA 241 Chapter 8 shall govern the selection of materials and the installation of temporary enclosures.

2. Temporary enclosures, barricades, or sight barriers must be of a flame retardant material or painted with an approved flame retardant paint. The enclosing material shall be securely fastened to avoid blowing into a source of ignition.

3. The Contractor must supply an approval form or qualification test of the material prior to its use.

4. Materials, such as Griffolyn 75FR, that will not support or contribute to a fire shall be used.

5. Plastic films, tarpaulins, and other type of drapes shall not be used.

N. Blocking Exits

1. If the nature of the work requires blocking an exit, the Contractor shall assure acceptable alternate exits are available and obtain concurrence from the Fire Prevention Officer and the PSTR.
2. If an exit is removed from service, the Contractor shall remove or cover all signs directing personnel towards that exit.
3. A "NO EXIT" sign with letters at least 3 inches high made of reflective material shall be placed on the door.
4. The Contractor shall verify with the PSTR that the building occupants have been informed the exit is no longer available for use.
5. Hasps or locking devices shall not be placed on an emergency exit.
6. The Contractor shall remove all chains or locks placed on exit doors for security at the end of shift if the area will be occupied by Plant personnel.
7. Emergency exits shall be returned to service as soon as possible after completion of work.
8. The Contractor shall replace or uncover any signs covered or removed when the exit was removed from service.
9. All “NO EXIT” signs installed when the exit was removed from service shall be removed.

O. Fire Hydrants

1. Fire hydrants must be available at all times for emergency use. Fire hydrants will not be blocked or obstructed at any time.
2. All connections to fire hydrants made by the Contractor shall be approved by the Pantex Plant Fire Department. If a continuous supply or large volumes of water are required, the Contractor can request permission from the Pantex Plant Fire Department to make connections daily rather than obtain approval for each individual connection.
3. Approved pentagon type hydrant wrenches shall be used to operate fire hydrants.
4. Connections may be made at the 4-½ inch NST thread streamer or the 2 ½ inch NST thread connection.
5. Couplings shall be removed and hydrant caps replaced after each use.
6. The Contractor shall provide and use a fire hydrant hose bib equipped with an approved RPBA, with proof of current inspection by a TCEQ licensed RPBA Inspector, and a gate valve, or maintain an air gap between the domestic water system and the unit being filled.

7. Fire hydrants shall be fully opened and closed slowly.

P. Fueling Operations - Vehicles and Light Equipment

1. Fueling of vehicles such as pickups, trucks and similar equipment will be performed at the bulk storage area.

2. Light equipment with internal combustion engines (e.g., tampers, vibrators, etc.) may be fueled at the jobsite provided a Contractor supplied 10-lbs "ABC" or "BC" fire extinguisher is located at the fueling site and all engines, motors, and spark producing devices within 50 feet are stopped.

3. Fuel shall be transported in approved safety containers of 5 gallons or less.

4. Fuel containers shall be removed immediately after fueling.

5. Fuel containers shall be approved by a nationally recognized testing laboratory, equipped with a spring closing lid and internal spark arrestor and be properly identified and labeled.

6. The quantity of fuel at the jobsite shall be limited to that necessary for one day of operation.

7. Internal combustion engines shall be shut down and allowed to cool prior to refueling.

Q. Fueling Operations - Heavy Equipment

1. Fueling of heavy equipment such as motor graders, tracked vehicles, and other specialized equipment shall be performed in designated areas.

2. Bulk fueling may be performed at the jobsites provided the following requirements are met:

a. At least two fire extinguishers (10-lbs "ABC" or "BC") shall be properly mounted on all fuel trailers or trucks.

b. All engines and motors (except approved dispensing motors) shall be stopped during fueling operations.

c. All open flames will be extinguished during the fueling operation.

d. No smoking is allowed within 50 feet of the fueling operation.

e. Cutting, welding, grinding, or other hot work within 50 feet of the fueling operation must be discontinued.

f. Service vehicles and fuel trailers will be placarded on four sides with:

(1) "No Smoking Within 50 Feet," and

(2) The proper UN or DOT Identification numbers (1203 and/or 1993) and placarded as Class 3 Flammable and Combustible Liquid.

3. Fueling is not permitted inside buildings, ramps or other enclosures or within 50 feet of existing structures.

4. Bulk fuel vehicles and trailers will be removed from the jobsite immediately after fueling operations are complete. They will be kept at the bulk fuel storage area or off Pantex property.

5. If fueling operations require more than 100 gallons of fuel to be transported into the Zone 4 MAA or Zone 12 MAA, the following additional requirements shall apply:

a. Pantex Plant Fire Department personnel and apparatus capable of supplying AFFF shall be staged in the MAA before bulk fuel vehicles or trailers are allowed to enter the MAA.

b. Pantex Plant Fire Department personnel and apparatus capable of supplying AFFF shall accompany the bulk fuel vehicles or trailers while in the MAA.

c. Pantex Plant Fire Department personnel will maintain constant visual contact with bulk fuel vehicles or trailers during transportation and fueling operations inside the MAA.

d. The Contractor shall cooperate with the B&W Pantex PSTR to coordinate bulk fuel truck movements with Transportation operations.

6. Dispensing pumps shall be approved by a nationally recognized testing laboratory.

7. Automatic shut-off nozzles are required on all electric or pneumatic pumps.

8. Flammable liquid dispensing nozzles approved by the Fire Prevention Officer will be used.

9. The dispensing nozzle shall be in contact with the vehicles being fueled to prevent static discharge. Bonding straps between the two vehicles may be required.

10. Fuel pumps shall not operate from the dispensing vehicle's engine unless it is powered by an approved power take off driven pump.

R. Tar Kettles

1. The Contractor shall use NFPA 1 Chapter 16 and 41, and NFPA 241 Chapter 9 as guidelines for tar kettles.

2. The location of tar kettles shall be approved by the Fire Prevention Officer. The Contractor shall request and obtain a B&W Pantex Permit for Hot Work (PX-5394) prior to using the tar kettle if the Fire Prevention Officer deems one is needed. A copy of the approved and signed permit used for the activity shall be submitted by the Contractor to B&W Pantex for the project records. The submittal coversheet shall state that it is for a records copy and shall be submitted within 2 working days of receiving it. Any approved and signed permit updates, revisions, or addendums shall also be submitted within 2 working days after receipt and the submittal coversheet be marked appropriately for a records copy.

3. The Contractor shall position tar kettles using the following guidelines:

   a. All vegetation will be removed from under and 10 feet around the kettle.

   b. Kettles shall not be positioned closer than 25 feet from a structure if the adjacent wall has no openings. If doors, windows or other openings are in place, the minimum distance will be extended to 50 feet. Exceptions to this requirement may be approved by the Fire Prevention Officer, if warranted, and additional safety measures are implemented.

   c. Kettles shall not be positioned closer than 50 feet from any building containing HE or marked with the symbol "1."

   d. Motorized vehicles will be detached and moved away from the kettle prior to lighting the burners.

   e. At sites where the tar kettle is positioned over blacktop or pavement, a 3-inch layer of sand or soil will be placed between the pavement and the kettle. The layer of sand or soil will extend 12 inches beyond the outside edge of the kettle.

   f. At sites where the tar kettle is positioned over vegetation, the Contractor shall mow the area and place a fire retardant blanket between the vegetation and the kettle.

4. The Contractor shall operate tar kettles using the following requirements:

   a. Operators shall be familiar with the operation and safety features of the tar kettle.

b. A fire extinguisher rated not less than 20-B shall be no closer than 5 feet and no further than 25 feet of horizontal travel from every kettle in operation.

c. Temperature probes or sensors will be in place and operational.

d. Fuel tanks will be permanently mounted or positioned to prevent tipping or falling. Fuel tanks, if not permanently mounted, must be removed from the work site at the end of the workday

e. The fuel tank will be attached to the tar kettle with hose or piping designed for use with that fuel.

f. One way check valves between the burner and the fuel source will be in place.

g. Fuel containers located at the site shall be connected for use. Only a one-day's supply of fuel will be allowed at the jobsite. Additional fuel containers will be located away from the worksite in a protected location.

h. Metal covers or lids must be in place to smother fires.

i. Tar kettles must be attended at all times when the burners are lit.

j. Tar pumps and piping must be properly supported and stabilized to prevent falling.

S. ROOFING OPERATIONS

1. The Contractor shall use NFPA 1 Chapter 16 and NFPA 241 Chapter 9 as guidelines for roofing operations.

2. Fire extinguishers rated at least 2-A:20-B:C will be located on the roof so the maximum travel distance does not exceed 20 feet.

3. Scrapers with internal combustion engines may be fueled on the roof if a 10-lbs "ABC" fire extinguisher is located at the fueling site and all engines, motors, and spark producing devices within 50 feet are stopped and fuel is in approved safety containers of 5 gallons or less and they are removed immediately after fueling.

4. All roofing mops will be removed from the roof at the end of the workday. All roofing mops must be kept away from ignition sources and combustible materials.

5. For torch-applied roofing, a fire watch shall be posted for the duration of the work and remain for 60 minutes after torches have been extinguished.

1.37. Powder-Actuated Tools

A. Contractor personnel using powder-actuated tools must be trained and certified (i.e., licensed). Proof of certification must be maintained at the construction site.

B. The Contractor will assure that the powder-actuated tools, and all loaded cartridges, are controlled at the jobsite and not left unattended or made available to unauthorized personnel. The powder-actuated tools, and all loaded cartridges, are to be removed from the project site daily.

C. The Contractor will address specified operational safety requirements for powder-actuated tools in an AHA.

1.38. Electromagnetic Radiation Producing Equipment

A. The Contractor shall not use any equipment in Zone 4, Zone 11, Zone 12 South, Zone 12 MAA, the Burning Grounds, or the Firing Site Areas that could emit radio frequencies unless approved by B&W Pantex. Equipment that could emit radio frequencies include:

- Vehicle two-way radios
- Portable two-way radios
- Signal generators
- Intrusion detectors
- Electronic sweep oscillators
- Radar equipment
- Cellular phones
- Ground penetrating radar
- Field magnetometers

B. If the Contractor requires equipment that could emit radio frequencies in the listed areas, the Contractor shall complete a PX-740 and obtain approval prior to the use of this equipment.

1.39. Explosives Safety

A. The use of explosives by Contractors at B&W Pantex Plant is prohibited.

B. The Contractor shall not perform any work on any structure, equipment, utility, piping, duct, or other object that is, or may be, contaminated with HEs without prior approval from the Nuclear Explosives Safety Department. The Contractor personnel shall be qualified to perform work on any item that may be contaminated with HE residue. The qualifications will be reviewed and approved by B&W Pantex Explosive Safety personnel prior to work.

C. The use of explosives by Contractors at B&W Pantex Plant is prohibited unless prior arrangements are made and are incorporated into contract documents. If explosives are allowed, the operations will be performed in accordance with 29 CFR 1910.109 requirements. The use of explosives will require the submittal and approval of an Explosive Safety Work Plan. The plan, at a minimum, shall address the following controls:

- Scope of work requiring the use of explosives.
- Type of explosives to be used.
- Transportation of explosives.
- Storage of explosives.
- Site controls (communication, no smoking, radio frequency, etc.).
- Control zone.
- Notification requirements.
- Explosives operations (i.e., unpacking explosives, installing explosives, detonation of explosives).
- Miss-fire procedures.
- Personnel qualifications.

1.40. Concertina (Razor) Wire

A. Reserved

1.41. Inclement Weather

A. The Contractor will be informed when lightning warnings are issued at the Pantex Site. When lightning warnings are issued, a representative of the Contractor shall determine if it is necessary to leave the work location until the warnings have been canceled. Termination of work when lightning warnings are issued is not mandatory. Lightning Personnel Safety Conditions will be issued when lightning strikes are detected within a 10-mile radius of the Pantex site. When Lightning Personnel Safety Conditions are issued, the Contractor shall terminate all exterior operations. The Contractor shall direct all Site personnel to seek shelter inside company vehicles or buildings.

B. When high winds, ice, or other hazardous condition are present, Personnel Safety Conditions will be announced by the B&W Pantex Plant OC. When Personnel Safety Conditions are issued, a representative of the Contractor shall determine if it is necessary to leave the work location until the warnings have been canceled. If conditions become severe, B&W Pantex Plant may direct the Contractors to cease effected work until Personnel Safety Conditions are canceled.

C. When performing elevated work, unless evaluated by the Competent Safety Person, the assigned PSTR, involved Contractor employees and an S&IH Representative, activities will cease when wind speeds, including gusts, exceed 25 mph. If work activities and wind conditions are evaluated and employees are allowed to perform elevated work when the wind is in excess of 25 mph, including gust, justification for approval will be documented by the Competent Safety Person on the Contractor's daily log.

D. If tornado warnings are issued, the Contractor shall seek the best available shelter. If the Contractor is under Security Escort, the Contractor shall follow the direction of the SPO. If the Contractor is not under Security Escort, and a harden structure is not accessible, the Contractor shall seek shelter in ditches, depressions, or culverts.

1.42. Pesticide Applications

A. A pesticide is any substance or mixture of substances intended to prevent, destroy, repel, or mitigate any pest or for use as a Plant regulator, defoliant, or desiccant. Examples of pesticides include: insecticide, fungicide, herbicide, rodenticide, predicide, nematicide, avicide, molluscicide, and piscide.

B. The Contractor shall submit proof the applicator has:

1. A current Certified Commercial Applicator License from the Texas Department of Agriculture or the Structural Pest Control Board.
2. Appropriate bonding and insurance.
3. The Contractor shall have the MSDS for the pesticides. The MSDS must be accessible to all employees associated with the project requiring the application.
4. The Contractor shall provide and require the use of appropriate PPE while handling, mixing or applying pesticides.

1.43. Pesticide Application Notification

A. Before applying an agriculture pesticide, the Contractor shall make the notifications as referenced in 40 CFR 170.

B. Before applying a structural pesticide, the Contractor shall make the notifications specified in Article 135B-6.

C. The Contractor shall coordinate the application with the PSTR at least 2 working days prior to the application.

D. The Contractor shall inform the PSTR of the:

1. Type of pesticide to be used.
2. The targeted pest.
3. Date and time of the planned application.

E. If a scheduled application is canceled, the entire notification process shall be repeated for the new application date.

F. The Contractor shall verify with the PSTR that the B&W Pantex Plan OC has the date and time the application will occur. The Contractor shall verify with the PSTR that notification of the OC has taken place prior to the start of the application.

1.44. Pesticide Recordkeeping

A. The Contractor shall submit a completed PX-3736 (Exhibit 5) no later than 24 hours after application and provide the PSTR with a copy of the record.

B. The Record of Pesticide Application shall contain the following information:

1. Date and time of day that each application started and ended.
2. Name of the PSTR for whom the application was made.
3. The location of the building or land where the application was made, stated in a manner that would permit inspection by authorized parties (such as building numbers or grid numbers from a Plant grid map).
4. The pesticide applied, including:
   a. Product name.
   b. The products Environmental Agency registration number.
   c. Rate of product applied per unit (e.g., lb/acre).
   d. Total volume of spray mix, dust, granules, or other materials applied (e.g., lb, gal, oz).
5. Name of the pest targeted.
6. Total acreage or building area treated.
7. Wind direction and velocity and air temperature during outdoor application.
8. Description of application equipment used.

1.45. Asbestos

A. Installation of New Materials: No products containing asbestos are to be used in the performance of this contract.

1.46. No Asbestos in Scope

NOTE
Reserve Section 1.46 if the scope of work requires asbestos abatement.

A. No asbestos is expected to be encountered during the performance of this contract.

B. If materials containing asbestos or materials suspected to contain asbestos are encountered, the Contractor shall stop work immediately and notify the PSTR.

1.47. Asbestos Abatement

A. Reserved

1.48. Execution of Asbestos Abatement

A. Reserved

1.49. Monitoring of Asbestos Abatement

A. Reserved

1.50. Accountability and Emergency Preparedness

A. The Contractor shall provide a daily attendance roster to the Logistics Coordinator. The roster shall identify the names of all Contractor employees, including sub-tiers that are present for work at Pantex. The daily roster shall be provided no later than 90 minutes after the designated shift start time.

1.51. Evacuation of the Work Area

A. Contractor shall observe and participate in notices to evacuate the work area. The evacuation notices may be a drill or actual event. Contractor employees shall proceed to their designated assembly area. The Contractor and the PSTR may use SPOs, radio, phone, or other means to provide the Logistics Coordinator verification of personnel accountability. No personnel re-entry will be allowed until the emergency conditions have been corrected or controlled, the hazards reassessed, and needed actions implemented.

B. Before evacuating the work area, shut down or make safe equipment or processes, which could become a safety or fire hazard if left unattended, unless doing so endangers personnel.

1.52. Equipment and Tools

A. Tools and equipment brought onto the site shall be used only for the purpose for which they are designed. Tools and equipment shall be inspected, and determined (or certified, such as lifting slings) to be adequate for the use intended. Routine inspections shall be conducted by the Contractor to assure needed repairs and maintenance are completed. Defective or otherwise unsafe equipment shall be immediately removed from the service and segregated or disabled to prevent inadvertent use.

B. The Contractor shall maintain comprehensive records documenting all structural changes or corrected structural damage for oncoming drilling rigs. These records shall be kept up to date and made available to B&W Pantex upon request. The records shall also document that qualified personnel, as appropriate, completed modifications to the drilling rig (e.g., use of a certified welder).

1.53. Lead Abatement

A. Reserved

1.54. Sandblasting

A. Reserved

1.55. Beryllium Operations

A. Reserved

1.56. References

1.56.1. Governing Documents

https://iw.pxplant.com/ucm/groups/jsp/documents/documents/rms/ReqFlowdown.jsp?docno=DIV-01500

1.56.2. Authorizing Documents

a. DIR-0001, "(U) Roles and Responsibilities for the Management and Operation of Pantex Plant"

1.56.3. Related Documents

a. CD-0009, "(U) B&W Pantex Worker Safety and Health Program"

b. WI 02.01.01.05.23, "Planning and Execution of Excavations and Penetrations"

1.56.4. Forms

1.56.4.1. Generated Forms

a. PX-665, "Utility Outage Worksheet"

b. PX-740, “Request for Installation, Modification, or Relocation of Emergency Management Emitting Equipment”

c. PX-2872A, “Excavation/Penetration (Assessment and Authorization Permit)”

d. PX-3736, “Record of Pesticide Application”

e. PX-4782, “Lift Plan for Construction Contractor Crane Operations”

f. PX-4798, “Contractor Activity Hazard Analysis (AHA) / Safe Work Permit”

g. PX-5151, “Fall Protection Plan for Construction Contractor Roofing/Elevated Work Activities”

h. PX-5253, “(U) Electrical Hazard/Risk Analysis”

i. PX-5394, “(U) Hot Work Permit”

j. PX-5668, “B&W Pantex Activity Plan”

k. PX-5745, “Request for Authorization of Moves Outside of Move Right”

1.56.4.2. Related Forms

a. DOE Form 5484.3, “Individual Accident/Incident Report”

b. DOE Form 5484.4, “Tabulation of Injuries and Work Hours”

c. TDSHS Form APB #5, “Demolition/Renovation Notification”

1.56.5. Records

a. PX-665, “Utility Outage Worksheet” R_026802

b. PX-740, “Request for Installation, Modification, or Relocation of Emergency Management Emitting Equipment” R_024485, R_024260

c. PX-2872A, “Excavation/Penetration (Assessment and Authorization Permit)” R_024301

d. PX-3736, “Record of Pesticide Application” R_026758

e. PX-4782, “Lift Plan for Construction Contractor Crane Operations” R_024301

f. PX-4798, “Contractor Activity Hazard Analysis (AHA) Safe Work Permit” R_024301

g. PX-5151, “Fall Protection Plan for Construction Contractor Roofing/Elevated Work Activities” R_024344

h. PX-5253, “(U) Electrical Hazard/Risk Analysis” R_026802

i. PX-5394, “(U) Hot Work Permit” R_026802

j. PX-5668, “B&W Pantex Activity Plan” R_024301

k. PX-5745, “Request for Authorization of Moves Outside of Move Right” R_024873

l. DOE Form 5484.3, “Individual Accident/Incident Report”, R_024694

m. DOE Form 5484.4, “Tabulation of Injuries and Work Hours”, R_024694

n. Daily Attendance Roster, R_024301

o. Daily Log, R_024301

p. Daily Report, R_024301

q. Permits, R_024301

r. Pre-operational Checklists, R_024301

s. Tailgate Safety Meeting Documentation, R_024301

t. TDSHS Form APB #5, “Demolition/Renovation Notification”, R_026829

1.56.6. Exhibits

NOTE
Use most current PX Form in UCM

1. Exhibit 1: Texas DSHS Form APB #5 (Contractor Completed Form)
2. Exhibit 2: PX-665, “Utility Outage Worksheet”
3. Exhibit 3: PX-740, “Request for Installation, Modification, or Relocation of Emergency Management Emitting Equipment”
4. Exhibit 4: PX-2872A, “Excavation/Penetration Permit”
5. Exhibit 5: PX-3736, “Record of Pesticide Application”
6. Exhibit 6: PX-4782, “Lift Plan for Construction Contractor Crane Operations”
7. Exhibit 7: PX-4798, “Contractor Activity Hazard Analysis (AHA) Safe Work Permit”
8. Exhibit 8: PX-5394, “(U) Hot Work Permit”
9. Exhibit 9: PX-5745, “Request for Authorization of Moves Outside of Move Right”
10. Exhibit 10: PX-5253, “(U) Electrical Hazard/Risk Analysis”
11. Exhibit 11: WI 02.01.01.05.23, “Planning and Execution of Excavations and Penetrations”
12. Exhibit 12: PX-5151, “Fall Protection Plan for Construction Contractor Roofing/Elevated Work Activities”
13. Exhibit 13: DOE Form 5484.4, “Tabulation of Injuries and Work Hours”
14. Exhibit 14: PX-5668, “B&W Pantex Activity Plan”
15. Exhibit 15: DOE Form PX-5484.3, “Individual Accident/Incident Report”

END OF SECTION 01500

EXHIBIT 1

Contractor Completed Form
Texas DSHS Form APB #5

EXHIBIT 2

PX-665, "Utility Outage Worksheet"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 3

PX-740, "Request for Installation, Modification, or Relocation of Emergency Management Emitting Equipment"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 4

PX-2872A, "Excavation/Penetration Permit"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 5

PX-3736, "Record of Pesticide Application"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 6

PX-4782, "Lift Plan for Construction Contractor Crane Operations"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 7

PX-4798, "Contractor Activity Hazard Analysis (AHA Safe Work Permit"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 8

PX-5394, "(U) Hot Work Permit"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 9

PX-5745, "Request for Authorization of Moves Outside of Move Right"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 10

PX-5253, "(U) Electrical Hazard/Risk Analysis"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 11

WI 02.01.01.05.23, "Planning and Execution of Excavations and Penetrations"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 12

PX-5151, "Fall Protection Plan for Construction Contractor Roofing/Elevated Work Activities"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 13

DOE Form PX-5484.4 Modified, "Tabulation of Injuries and Work Hours"

EXHIBIT 14

PX-5668, "B&W Activity Plan"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 15

DOE Form PX-5484.3 Modified, "Individual Accident / Incident Report"

(U) CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Radiation Safety)

Level of Use
Reference

Issue	Pages Affected	Comments
000	All	New section. Consolidated and edited 01567, 01570, 01571, and 01572.
001	All	Updated Specifications.
003	All	Global changes to clarify Contractor requirements.
004	12	PX-2209 changed to PX-2099

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SECTION 01550 - RADIATION SAFETY

1. OPERATION OR USE OF RADIATION PRODUCING DEVICE

1.1. Definitions

- Radiation Producing Device: Collective term for devices which produce ionizing radiation: sealed radioactive sources and radiation generating devices.
- Sealed Radioactive Source: a radioactive source manufactured, obtained, or retained for the purpose of utilizing the emitted radiation.
- Radiation Producing Device Operator: An individual who is trained and deemed qualified by the radiation protection organization and the Radiation Producing Device Custodian to use a radiation-generating device.
- Radiation Producing Device Custodian: An individual who is trained and designated to maintain cognizance over accountability and control of radiation-generating devices assigned to him or her.
- Radiation-Generating device (RGD): Collective term for devices which produce ionizing radiation, sealed sources which emit ionizing radiation, small particle accelerators used for single purpose applications which produce ionizing radiation (e.g., radiography), and electron generating devices that produce X-rays incidentally.
- As Low as Reasonably Achievable (ALARA): The "approach" to radiation protection to manage and control exposures (both individual and collective) to the work force and to the general public to levels as low as is reasonable, taking into account social, technical, economic, practical, and public policy considerations. "ALARA is not a dose limit but a process" which has the objective of attaining doses as far below the applicable limits of 10 CFR 835 as is reasonably achievable.

1.2. The following is a list of common types of Radiation Producing Device's and is not all inclusive. The contractor shall verify that any equipment brought on Pantex site that has radioactive components shall be treated as a Radiation Producing Device.

- Sealed Sources
  - Portable Moisture/Density Devices (Troxler, CPN, Humboldt, InstroTek, Seaman, etc)
  - Well Logging Devices
  - Instrument check sources
- RGD's
  - Industrial Radiography (Non-destructive testing (NDT) equipment)
  - Portable linear accelerators (linacs)
  - X-ray machines

1.3. The Contractor's Radiation Producing Device Custodian is responsible for acquiring and submitting any License or Permits required for operation of a Radiation Producing Device.

1.4. The Contractor's Radiation Producing Device Operator is responsible for acquiring any radiological training requirements to use or operate the Radiation Producing Device on the Pantex site. (Refer to Section 5.0)

1.5. The Contractor shall submit an Evaluation of Radiological Operations Request (PX-2998) 10 days prior to the initial arrival of the equipment. This request determines the level and types of permitting required for use of the Radiation Producing Device at Pantex. The Contractor shall also include in the submittal:

- A detailed description of how and where the Radiation Producing Device will be used.
- A schedule of when the source will be used (dates/times) and where (location) the source will be stored while at the Pantex Plant if applicable.
- A copy of the Nuclear Regulatory Commission (NRC) License, Agreement State License, or By-Product Material License, if applicable.
- For radioactive sources: the source isotope, activity, date of manufacture, and latest leak test records.
- For RGDs: type of radiation produced and the corresponding output parameters (i.e., kvP, dose rate).
- Manufacturer, model, and serial number, if applicable.
- Latest integrity and leak test records.
- Copies of operator training certifications.
- Copies of personnel's operating and emergency procedures.

1.6. The Contractor shall receive an approved Pantex Radiation Safety Entry/Exit Permit (PX-2863) as a result of the PX-2998 review.

1.7. Upon arrival at the Pantex Plant with the radiation producing device and the PX-2863, the Contractor shall notify the PSTR and Radiation Safety Department (RSD) for the initial leak test prior to any use or operation.

1.8. RSD may schedule periodic leak tests and require an exit test, as noted on the PX-2863.

1.9. The Contractor shall comply with all requirements stated on the PX-2863 and is responsible for requesting a new permit 5 days prior to expiration.

1.10. The Contractor shall verify with the PSTR that RSD has been notified every day of the Radiation Producing Device location onsite prior to use.

1.11. The Contractor shall protect, control and maintain installed radiological signs and boundaries specific to their job/scope. The Contractor is responsible for the following actions while controlling or performing their work:

- Alert individuals to the presence of radiation and/or radioactive materials.
- Control exposure to radiation using the ALARA principles.
- Prevent the spread of contamination.
- Minimize radioactive waste.

1.12. The Contractor shall comply with Radiological Work Permit (RWP) (PX-2099) requirements if the PX-2998 review determined that the work or use of the Radiation Producing Device requires this additional level of permit.

1.13. The Contractor may be required to participate in the B&W Pantex Dosimetry Program.

2. WORK WITHIN RADIOLOGICAL CONTROLLED AREAS

2.1 Definitions

- Controlled Area: Any area to which access is managed by or for DOE to protect individuals from exposure to radiation and/or radioactive material, designated with a magenta standard three-bladed radiological warning symbol (trefoil) on yellow background. Entrance points to radiological controlled areas will have entry requirements posted.

2.2 The Contractor or PSTR shall submit an Evaluation of Radiological Operations Request (PX-2998), detailing the scope of the work to be performed, to the RSD 24 hours in advance of initiating, changing scope, or concluding the following radiological work:

- Access to posted Contamination Areas, High Contamination Areas, Radioactive Material Management Areas, Airborne Radioactivity Areas, High Radiation Areas, or
- Establishment of posted Radioactive Material Areas or access to posted Radioactive Material Areas to conduct work with radioactive materials or on radioactive systems.
- First time, infrequent, or complex work activities performed in posted Radiation Areas.
- Work in pit staging/storage areas.
- Access to fixed contamination areas or fixed contaminated items, to conduct work that disturbs the fixed contamination.
- Access to posted soil contamination areas, to conduct work that disturbs the soil.
- Work on heating, ventilation and air conditioning (HVAC) systems including dehumidifiers, regenerative blowers, and task exhausts that are posted as having potential internal contamination.
- Installation and removal of Continuous Air Monitors.
- Work involving all radiological vacuum systems including maintenance on radioactive material vacuum cleaners.
- Radiological decontamination activities.
- Breaching any area or system that is posted as requiring an RWP or notification of RSD.
- Prior to bringing an RGD on site, work involving relocation of RGD shielding, adjustment of RGD output, movement of an RGD, or operation of a portable RGD.
- Prior to bringing a sealed radioactive source on site or movement to a new storage location that is not an established location for sealed radioactive sources.
- Industrial radiography.
- Any time the scope of work changes for a previously evaluated activity. This can result from of an unintended system response or an introduction of additional hazards, or

- Any work with radioactive material that is not covered by a current PX-2998. This includes opening bags, army/navy (AN) cans, or any item labeled as radioactive material.

2.3 The PX-2998 is used by RSD to determine the radiological hazards associated with the work and identify worker protection/monitoring requirements that must be in place.

2.4 The Contractor shall comply with worker protection/monitoring requirements specified in the procedure governing the work, the area posting and/or radiological work permit, specifically:

- Radiological training requirements
- Dosimetry requirements
- Personnel protective equipment requirements
- Radiological hold points
- Exit requirements
- Emergency response procedures

2.5 Only RSD personnel are authorized to physically move/remove a Pantex radiological posting or boundary.

3. ABNORMAL RADIOLOGICAL EVENT

3.1 The Contractor shall notify the RSD (Ext. 4452) and the PSTR immediately in the event of any unusual or abnormal radiological occurrence.

- Examples of unusual or abnormal radiological occurrences include, but are not limited to:
  - The loss or damage of radioactive sources.
  - The loss or control of radioactive material.
  - Radiological boundary violations.
  - Discovery of any violation, lapse, or termination of any license or permit.
  - A spill of contaminated material or waste.

3.2 Depending on the location, contractors may encounter radiological alarms (see Figure 1). In the event of a radiological alarm:

- Follow instructions announced over the public address system, given by escorts, and/or Pantex personnel in the immediate vicinity.
- Evacuate within 5 minutes of the alarm.
- Do not enter a facility with a radiological alarm if the green light is not illuminated.

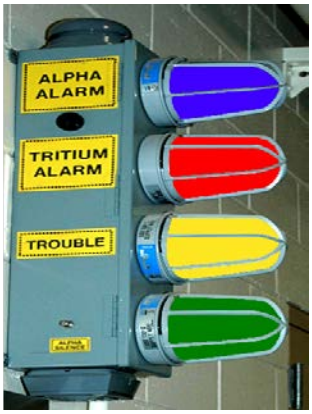

Figure 1. Radiological Evacuation Alarm Units (EAU)

4. DOSIMETRY

4.1 Contractors, lower tier subcontractors, vendor, or supplier employees shall wear a dosimeter as required by the procedure governing the work, the area posting and/or radiological work permit when entering a radiologically posted area.

4.2 External Dosimetry

- Contractors can obtain an external dosimeter by completing a PX-2868 and returning it to Access Control or Dosimetry in Building 12-122.
- Dosimeters shall be stored at a designated storage board approved by B&W Pantex when not in use. Dosimeters shall NOT be removed from the Pantex Plant.
- Dosimeters shall be returned to the PSTR/Logistics Coordinator when:
- Work is completed.
- Any individual terminates employment.
- The Contractor agrees to pay **$400.00** for failure to return each dosimeter upon completion of work or employee termination to compensate B&W Pantex for dosimeter costs.
- RSD may require Contractors to wear extremity (wrist) dosimeters, depending on the type of work that will be performed. Wrist dosimeters will also be provided by B&W Pantex.
- Contractor employees (e.g., well loggers, radiographers, contractors, or visitors from other government facilities) can use a non-Pantex Plant dosimeters while on site in conjunction with the Pantex issued dosimeter with written approval from the Pantex RSD Manager.

4.3 Internal Dosimetry

- Internal Dosimetry shall consist of bioassay of urine samples. Contractors in an Internal Dosimetry Program will be required to provide a baseline urine sample.
- Contractors can obtain an internal bioassay kit by completing a PX-3489 and returning it to the PSTR 48 hours in advance of Contractor's baseline sample submittal.

- Upon completion of work, or upon termination of an employee performing this work, the Contractor shall notify the RSD at least **48 hours in advance of the employee's departure** to permit collection of a sample prior to departure.

5. RADIOLOGICAL TRAINING/ESCORT REQUIREMENTS

5.1 General employee radiological training (GERT)

- Contractors entering a posted controlled area at Pantex Plant that do not require a dosimeter (per posting) must complete GERT for Visitors and Contractors training (ST 553.05) in the Visitor/Contractor Orientation Guide. Any exception must have RSD approval.
- Contractors that are unescorted in radiologically posted areas and need a dosimeter (per posting) will be required to take an instructor led GERT class (CR 7.03) and successfully pass a written test with 80%.

5.2 Radiological Worker Training I

- To perform radiological work in a Radioactive Material Area requires a minimum of RWT I. Radiological work includes using, packaging, handling, moving and storing radioactive material, weapons, weapon parts and components, using sealed radioactive sources, operating RGDs and generating radioactive waste.
- Unescorted entry to an Radiation Area, Radiological Buffer Area, High Radiation Area, and Very High Radiation Area also requires a minimum of RWT I.

5.3 Radiological Worker Training II

- Unescorted entry to a Contamination Area, High Contamination Area, Airborne Radioactivity Area, Fixed Contamination Area (while work disturbing the fixed contamination is being performed), and Soil Contamination Area (while work disturbing the soil is being performed) requires a minimum of RWT II.

5.4 Radiological Escorts

- A contractor may be escorted into a radiologically posted area when:
  - The individual enters the area for a short period of time.
  - The individual completes the GERT for Visitors and Contractors (ST 553.05) in the Visitor/Contractor Orientation Guide.
  - When an escort is permitted by the RWP, if applicable.
- The escort:
  - Is qualified to the level of radiological training required to enter the area.
  - Informs the escorted individual of the potential hazards in the area.
  - Assist the escorted individual in proper response to radiological conditions the appropriate way.
  - May escort a maximum of four unqualified individuals.
  - May not perform work or supervising duties while escorting.

6. RADIOACTIVE WASTE GENERATION, PACKAGING, TRANSPORTATION AND STORAGE

6.1 Generation

- The Contractor will not start work without a proper radioactive waste container at the job-site.
- The Contractor shall strive to minimize the amount of radioactive waste generated and minimize the spread of contamination.
- The Contractor shall implement the following practices to the extent they can be reasonably achieved:
  - Recyclable or burnable items shall be used where practical.
  - Equipment, chemicals, solvents, and cleaners shall be reused to the extent practical.
  - Uncontaminated waste shall be segregated from potentially contaminated waste.
  - Selected consumable materials shall be compatible with volume reduction practices and waste processing systems.
  - The Contractor shall train employees in waste reduction philosophy, techniques, and methods.
  - Reusable items shall be segregated from other items.

6.2 Packaging

- Labels and containers for radioactive materials shall be provided by B&W Pantex.
- Radioactive material shall be securely wrapped in plastic or placed in a closed container unless it is in a:
  - Contamination Area.
  - High Contamination Area.
  - Airborne Radioactivity Area.
- Sharp edges or projections shall be covered with tape or other protection to assure the integrity of the package.

6.3 Transportation

- B&W Pantex will provide transportation for radioactive materials, except for Contractor-owned sealed sources.

6.4 Storage

- Radioactive material shall be used, handled, or stored in Radioactive Material Areas or Radiologically Controlled areas designated by B&W Pantex.
- Flammable or combustible materials shall not be stored next to a Radioactive Material Areas.
- The use of flammable or combustible materials in a Radioactive Material Areas shall be minimized as much as reasonably achievable.

7. SITE SPECIFIC REQUIREMENTS

7.1 (Radiation Safety Department Editor may add any additional site specific requirements here or reserve this section)

8. REFERENCES

8.1 GOVERNING DOCUMENTS

https://iw.pxplant.com/ucm/groups/jsp/documents/documents/rms/ReqFlowdown.jsp?docno=DIV-01550

8.2 AUTHORIZING DOCUMENTS

DIR-0001, "Roles and Responsibilities for the Management and Operation of Pantex Plant"

8.3 RELATED DOCUMENTS

MNL-RS0001, "Pantex Radiological Control Manual"

8.4 FORMS

8.4.1 Generated

(a) PX-2099, "Radiation Work Permit"

(b) PX-2863, "Pantex Radiation Safety Entry/Exit Permit"

(c) PX-2868, "Visitor Dosimetry Information"

(d) PX-2998, "Evaluation of Radiological Operations Request"

(e) PX-3489, "Internal Dosimetry Bioassay Transaction Request"

8.4.2 Related

None

8.5 RECORDS

(a) PX-2099, "Radiation Work Permit" R_024960

(b) PX-2863, "Pantex Radiation Safety Entry/Exit Permit" R_025001

(c) PX-2868, "Visitor Dosimetry Information" R_024980

(d) PX-2998, "Evaluation of Radiological Operations Request" R_024960, R_045165, R_024533

(e) PX-3489, "Internal Dosimetry Bioassay Transaction Request" R_025003, R_024644, R_024980

END OF SECTION 01550

EXHIBIT 1

PX-2099, "Radiation Work Permit"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 2

PX-2863, "Pantex Radiation Safety Entry/Exit Permit"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 3

PX-2868, "Visitor Dosimetry Information"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 4

PX-2998, "Evaluation of Radiological Operations Request"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 5

PX-3489, "Internal Dosimetry Bioassay Transaction Request"

USE MOST CURRENT ISSUE IN UCM

(U) CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Environmental Protection)

Level of Use: Reference

ISSUE HISTORY			
Issue	Date	Pages Affected	Comments
002	01/03/05	All	Format changes only.
003	03/10/05	All	General change.
004	04/21/05	All	General change.
005	07/06/05	2	1.1.B, 1.1.C
006	09/27/07	All	Change title of Specification. Consolidated sections of 01561, edited all of 01557, 01558, 01563. Deleted all content related to fines and penalties, Pantex rights, see T&Cs. Moved qualifications to 01200, key personnel. Deleted EPP, not required.
007	6/14/10	All	General changes.
008	4/18/11	5, 6, 8-11	Change to vegetation requirements. Added Requirements for Protection of Environmental Resources
009		All	Global changes to clarify Contractor requirements.
010	Published Date: 10/12/12	8	To incorporate CR #48267 to make updates to Vegetation requirements.
11	9/8/13	18-20	Update Storm Water Pollution Prevention Plan requirements

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SECTION 01600 – ENVIRONMENTAL PROTECTION

1. GENERAL REQUIREMENTS

1.1 The Contractor shall provide, install and maintain procedures, controls or other protective measures to minimize environmental pollution and damage caused by construction activities associated with this contract.

1.1.1 Environmental pollution and damage is defined as the presence of chemical, physical or biological elements or agents which:

(a) Adversely affect human health or welfare.

(b) Unfavorably alter ecological balances of importance to human life.

(c) Affect threatened or endangered species, species of concern, or nests of birds protected by the Migratory Bird Species Act.

(d) Degrade the environment for aesthetic, cultural, or historical purposes.

1.1.2 Control of environmental pollution and damage shall consider:

(a) The air, water, and land.

(b) Management of noise, solid waste, radiant energy, and other pollutants.

(c) Wildlife.

(d) Historical, Archaeological, and Cultural Resources.

1.2 The Contractor shall comply with all Federal, State, and local regulations pertaining to the environment. This includes, but is not limited to:

1.2.1 Water pollution.

1.2.2 Air pollution.

1.2.3 Noise pollution.

1.2.4 Protection of wildlife.

1.3 The Contractor shall perform weekly inspections to assure the controls and components of the plans required by this section are in place. Completion of the inspections and any corrective action(s) taken shall be documented in the Contractor's Daily Log.

2. PROTECTION OF ENVIRONMENTAL RESOURCES

2.1 Protection of Land Resources

2.1.1 Prior to start of construction, the contractor shall verify that all land resources to be preserved within the work area are identified.

(a) The Contractor shall not remove, cut, deface, injure, or destroy land resources including trees, shrubs, vines, grasses, topsoil, and landforms without permission from the Project Subcontract Technical Representative (PSTR).

(b) No ropes, cables, or guys shall be fastened to or attached to any tree for anchorage.

2.1.2 Prior to the start of construction, the Contractor shall mark the areas where no work is to be performed.

(a) Isolated areas within the general work area that are to be saved shall be marked or fenced.

(b) Monuments and markers shall be protected.

(c) Markers shall be visible during darkness if construction operations are conducted during darkness.

(d) The Contractor shall inform all his personnel of the purpose for marking or protecting objects.

2.2 Protection of Landscape

2.2.1 The Contractor shall clearly identify trees, shrubs, vines, grasses, landforms and other landscape features to be preserved. Identification methods may include marking, fencing, wooden enclosures, barricades, or other approved techniques.

2.2.2 The Contractor shall reduce exposure of unprotected erodible soils.

2.2.3 Earthwork brought to final grade shall be finished as indicated and specified.

2.2.4 Side slopes and back slopes shall be protected as soon as practicable upon completion of rough grading.

2.2.5 All earthwork shall be planned and conducted to minimize the amount of unprotected soil.

2.2.6 All earthwork shall be planned and conducted to minimize the length of time unprotected soil is exposed to wind and water erosion.

2.3 Erosion and Sediment Control

2.3.1 The Contractor shall construct or install temporary storm water control measures to prevent erosion and sedimentation. Acceptable temporary control measures include, but are not limited to, berms, dikes, sedimentation basins, or bio-degradable products such as soil retention blankets, hay bales, and straw wattles. Temporary control measures shall be inspected and maintained until construction is complete.

2.3.2 Runoff from the construction site may be controlled, diverted to protected drainage courses, or retarded by using diversion ditches, benches, and berms.

2.3.3 Borrow areas shall be managed to minimize erosion.

2.3.4 Bio-degradable straw wattles/logs are preferred in or around Solid Waste Management Units (SWMUs) and high runoff areas. The Contractor shall verify with the PSTR all location where the bio-degradable straw wattles/logs shall remain in place after contract completion.

2.4 Stabilization of Disturbed Soil

2.4.1 Stabilization shall be initiated on disturbed areas as soon as practicable but no more than 14 days after the construction activity on this portion of the site has been temporarily or permanently ceased except:

(a) Where construction will resume within 21 days from the time when activities temporarily ceased.

(b) Stabilization cannot be initiated due to snow cover.

2.5 Temporary Excavation and Embankments shall be controlled to protect adjacent areas from contamination.

2.6 Solid waste, chemical waste, and discarded materials shall be disposed of in accordance with the Contractor's approved Waste Management plan.

2.7 Protection of Historical, Archaeological, and Cultural Resources

2.7.1 Known, existing historical, archaeological, and cultural resources within the Contractor's work area will be identified by the PSTR.

2.7.2 The Contractor shall take precautions to preserve all such resources in the condition existing at the time they were identified to the Contractor.

2.7.3 The Contractor shall install and maintain protective devices as required by the PSTR. Such devices may include off-limit markings, fences, and barricades.

2.7.4 If items of historical, archaeological, or cultural interest are discovered during construction, the Contractor shall cease work in the area and notify the PSTR immediately.

2.8 The Contractor shall supervise and control construction activities to avoid pollution of surface or ground water.

2.9 Protection of Wildlife Resources

2.9.1 The Contractor shall manage and control construction activities to minimize interference with or disturbance of wildlife.

2.9.2 The Contractor shall cease work in the area and notify the PSTR immediately if a bird nest containing, or potentially containing, eggs or young is encountered during work activities.

2.9.3 Birds cannot be prevented from tending to eggs or young, and this includes by means of physical barriers or by project activity (50 CFR 10, Migratory Bird Treaty Act).

2.9.4 The Contractor should anticipate that delays are possible, and that the PSTR may ask them to discard nests not containing eggs or young or to prevent bird access to structures provided that active nests are not present.

2.9.5 The Contractor shall cease work in the area and notify the PSTR immediately if a bird would be trapped in a structure by work activities.

2.9.6 The Contractor shall have nuisance or hazardous species (e.g. rattlesnakes, skunks, etc.) removed from the area by Pantex. Contact the PSTR to arrange removal if the animal is or could impact work.

2.10 Protection of Air Resources

2.10.1 The Contractor shall supervise, manage, and control construction activities, inside or outside of the project boundaries, to minimize air pollution.

2.10.2 All equipment and processes operated by the Contractor shall be in accordance with Federal and State emission and performance laws and standards.

2.10.3 Air pollution control techniques shall include, but are not limited to, the following:

(a) Dust particles, aerosols, and gaseous by-products from construction activities and processing and preparation of materials shall be controlled to levels permitted by law at all times; including weekends, holidays, and hours when work is not in progress.

(b) Excavations, stockpiles, haul roads, access roads, spoil areas, borrow areas, and other work areas inside or outside the job site shall be kept free of particulates which would exceed air pollution standards or create a hazard or nuisance.

(c) Hydrocarbon and carbon monoxide emissions from equipment shall be controlled to Federal and State limits at all times.

(d) Odors shall be controlled during all construction activities, processing of materials, and preparation of materials.

2.11 Requirements for routine maintenance

2.11.1 Reserved

2.12 Environmental Record Keeping Requirements for routine maintenance

2.12.1 Chemical MSDS for chemicals used (per requirements of Specification 1500, 1.5 (CONTRACTOR'S HAZARD COMMUNICATION PROGRAM).

2.12.2 Quantities used.

2.12.3 Date(s) of use.

2.12.4 For abrasive blasting: date(s) and duration of operations; quantities of abrasive applied.

2.12.5 For portable generators, the manufacturer's emission specification sheets, the dates and hours of operations.

2.13 Reporting Requirements for routine maintenance (Reserved)

2.13.1 MSDS copies for chemicals to be used and emission specification sheets for any stationary engine will be provided to Pantex through the submittal process prior to the start of activities, and prior to the introduction of any new chemicals to the activities.

2.13.2 Bi-weekly written report containing information identified in section 1.3.M to the Pantex PSTR for the previous two week period.

3. VEGETATION

3.1 Contractor shall re-seed or otherwise re-vegetate all areas denuded by construction activities associated with this contract.

3.2 Before re-seeding, the Contractor shall ensure adequate topsoil and repair as needed.

3.3 Unless otherwise specified, re-seed damaged or denuded areas as follows:

3.3.1 First, the contractor shall plant (drill) a nurse crop to moisture, if possible. Planting depth will be 1 to 1.5 inches. If dry conditions exist, planting depth shall be 0.25 inches to 0.50 inches. The following schedule shall be used:

(a) Between February 1 and April 30 plant Spring Oats at the rate of 30 lbs/acre.

(b) Between May 1 and July 31 plant German Millet at the rate of 4.0 lbs/acre.

(c) Between August 1 and September 30 plant Hard Red Winter Wheat at the rate of 15 lbs/acre.

(d) Between October 1 and November 15 plant Hard Red Winter Wheat at the rate of 20 lbs/acre.

(e) Between November 15 and January 31 plant Hard Red Winter Wheat at the rate of 30 lbs/acre.

3.3.2 A second planting of native grass mix consisting of green sprangletop, blue gramma, buffalo grass and annual ryegrass is required. The two plantings, nurse crop and native grass mix, will be two separate planting operations but can be done consecutively back to back the same day. The native grass mix planting (drilling) depth will be 1/16 to 1/8 inches. Approximately 2/3 of the seed will be covered with soil and 1/3 will be on the soil surface. The following seed application rates are minimum:

(a) Green sprangletop = 1.0 lbs/acre.

(b) Blue gramma = 8.0 lbs/acre.

(c) Buffalo grass = 10.0 lbs/acre.

(d) Annual Ryegrass = 4.0 lbs/acre.

3.4 The Contractor shall provide, install, and maintain controls to protect newly seeded areas. All projects that have denuded slope areas shall have bio-degradable soil retention blanket installed after the nurse crop and native grass mix are planted. The retention blanket shall have a minimum longevity rating of 18 months. The retention blanket shall be installed per manufacturer's recommendations or industry guidelines.

3.5 At a frequency of 4 times per week and at an application rate of approximately a half-inch of water per acre, water all newly re-seeded areas for a period of 6 weeks following re-seeding. It is preferred that water used to irrigate newly seeded areas be obtained from the Groundwater Pump & Treat System building(s). Treated water from these systems meets drinking water standards, but has not been chlorinated or disinfected in another manner. Treated water received from the pump and treat a system has been approved for surface irrigation use through TCEQ Permit No. WQ0004397000. Contractors can contact the Building Manager or Operations Manager at 477-4128 to coordinate access. Any storm event that results in greater than 0.50" of moisture within a 24-hour period will suffice as an irrigation event. Application of water within Solid Waste Management Units (SWMUs) requires prior approval by the SWMU Coordinator.

4. BULK FUEL STORAGE

4.1 Bulk fuels may be stored in approved areas. Bulk storage cannot exceed 1000 gallons in size. Proper secondary containment shall be provided for any bulk fuel storage. This secondary containment should be capable of holding the entire contents of the storage tank plus 10% for freeboard allowance. The most common type of secondary containment utilized is metal stock tanks. Plastic protective sheeting shall be placed on the bottom of a bermed area to protect the ground from leakage and spills as long as the size of the bermed area is adequate.

4.2 The contractor shall inspect any bulk storage at least once a month or through routine use for leaks, any damage to secondary containment, and accumulated storm water in the secondary containment. Any accumulated storm water must be removed to maintain sufficient secondary containment capacity. Secondary containment should be capable of holding the entire contents of the storage tank plus 10% for freeboard allowance. If the storm water has any sheen it cannot be released as clean storm water and must be containerized. Contact Waste Operations for assistance.

4.3 If gasoline or diesel fuel is spilled, the Contractor shall immediately stop the fueling process and contact the Emergency Services Dispatch Center (ESDC) at 3333 AND Operations Center at Extension 5000.

5. SPILL RESPONSE AND NOTIFICATION

5.1 The Contractor shall report all spills to the Fire Department through the ESDC at 3333 AND the Operations Center at Extension 5000.

5.2 The Contractor will make an approved spill response kit available at each job site and during all heavy equipment operations. The spill response kit will include:

5.2.1 A clean, plastic five gallon bucket labeled "Spill Kit."

5.2.2 A piece of plastic measuring 10 feet x 10 feet for placement of contaminated soils during clean up.

5.2.3 A shovel.

5.3 The Contractor shall take immediate action to:

5.3.1 Minimize the amount of material spilled.

5.3.2 Dam, dike or otherwise stop the flow of materials to reduce the environmental impact of a spill.

5.3.3 Cleanup all materials spilled.

5.4 The Contractor will follow all directions given by the Fire Department/Operations Center and the Spill Response teams.

6. WASTE MANAGEMENT

6.1 The Contractor shall practice good housekeeping. The work site and associated lay down yard areas shall be kept clean and orderly with debris, scrap and waste removed as it is created and accumulated.

6.2 The Contractor shall minimize the generation of waste.

6.3 Waste material shall not be removed from Pantex Plant without prior approval from the PSTR.

6.4 Burning of waste is prohibited.

6.5 The Contractor shall segregate waste appropriately and handle it in accordance with the Contractor Waste Management Plan and all applicable rules, orders, laws and regulations.

7. WASTE CLASSIFICATIONS

7.1 Hazardous Waste is defined in 40 CFR §261.3 Resource Conservation and Recovery Act (RCRA). Examples of Hazardous Waste include, but are not limited to:

7.1.1 Solvent or heavy metal-contaminated solids or soils.

7.1.2 Mineral spirits or solvents.

7.1.3 Paint waste.

7.1.4 Paint thinners.

7.1.5 Acids.

7.1.6 Used batteries.

7.1.7 Sandblasting sand contaminated with a hazardous material.

7.1.8 Aerosol containers.

7.2 Class I Waste is defined in 30 TAC §335.1 and is regulated by TCEQ rules as posing "substantial present or potential danger to human health or the environment." It does not meet the RCRA definition of Hazardous Waste. Examples of Class I Waste include, but are not limited to waste oil, antifreeze, and asbestos.

7.3 Class II Waste is defined in 30 TAC §335.1 as "any individual solid waste or combination of industrial solid waste which cannot be described as Hazardous or Class I Waste." Examples of Class II Waste include, but are not limited to paper, cardboard recyclables, plastic wrapping, and dumpster waste.

8. CONTRACTOR'S WASTE MANAGEMENT PLAN (CWMP)

8.1 The Contractor shall submit, prior to construction mobilization, a project specific CWMP to Pantex for review and approval. The Contractor shall not deviate from the approved CWMP or change the CWMP without Pantex approval.

8.2 The Contractor shall modify the CWMP and submit the modifications to Pantex for review and approval in the event of:

8.2.1 Changes in waste generation processes.

8.2.2 Changes in the number or location of storage and accumulation sites.

8.2.3 Changes in the type or volume of materials and waste.

8.2.4 Changes in the schedule.

8.2.5 Changes in the operations.

8.3 The contractor may request a generic model CWMP from Waste Operations Department through the PSTR. At a minimum, the CWMP shall address the following:

8.3.1 Scope.

8.3.2 Waste management responsibilities.

8.3.3 Waste minimization practices and procedures.

8.3.4 Inventories of hazardous materials to be used including estimated quantity to be used and estimated volume of storage.

8.3.5 Descriptions of all proposed waste streams including: hazardous constituents, characteristics, waste classification, generation processes and estimated volumes.

8.3.6 Descriptions of proposed Hazardous Waste and Class I Waste accumulation sites including less than 55 gallons accumulation sites.

8.3.7 Spill prevention and control plans including personnel protective equipment, equipment, response procedures, and clean-up and mitigation.

8.3.8 Schedule and activities for closure of the work sites.

8.3.9 Immediate action procedures in the event a bulging drum is discovered.

8.3.10 An estimate of the amount of excess soil to be excavated at each Solid Waste Management Unit.

8.3.11 An estimate of the amount of water required to decontaminate equipment at each Solid Waste Management Unit.

9. CONTRACTOR WASTE COORDINATOR (CWC)

9.1 The Contractor shall designate a CWC to:

9.1.1 Implement the provisions of the CWMP.

9.1.2 Assure all waste streams are properly characterized and classified for proper disposal.

9.1.3 Request waste containers and waste disposition.

9.1.4 Make appropriate notification in the event of spills.

9.1.5 Perform closure of the site at completion of the contract.

10. EXCESS SOIL

10.1 The Contractor is encouraged to use excess uncontaminated soil from excavations for grading and foundations where possible.

10.2 Unless other arrangements are proposed by the Contractor and approved by Pantex, excess uncontaminated soils and hydro-vac slurries that are free of concrete, asphalt and debris, will be placed in a designated area in Zone 10. This area is called the Zone 10 Borrow Pit. The Contractor shall make prior arrangements with the PSTR before placing material in the Zone 10 Borrow Pit.

10.3 The Contractor shall contact the PSTR prior to disposal to confirm the soils are placed in the correct location.

11. ASPHALT

11.1 The Contractor shall segregate asphalt from other materials (concrete, base material, dirt, bollards, fence posts, sign posts, etc.) to the extent possible before removing it from the construction site.

11.2 The Contractor shall recycle asphalt that has not been characterized as hazardous waste or unless deemed unsuitable for recycling.

11.3 The Contractor shall select a firm to recycle the material and make all arrangements for recycling; including transportation of the material.

11.3.1 The Contractor shall submit the name of the proposed recycling firm to the PSTR. The PSTR will submit the name of the recycler to Waste Operations for approval.

11.3.2 No material shall be removed from the Pantex Plant until the recycling firm has been approved by Waste Operations.

11.3.3 All vehicles removing recyclable material from the Pantex Plant shall be weighed at the scales located in Zone 10 before and after the vehicle is loaded to determine the weight of the material removed.

11.3.4 The Contractor shall provide the PSTR with documentation that the material was delivered to an approved recycling firm. Documentation shall include the:

(a) Construction project name.

(b) Date the material was removed.

(c) Type of material removed.

(d) Weight of the material removed.

(e) Name of the recycling firm.

11.4 Asphaltic Roofing Material

11.4.1 Asphaltic roofing material and debris will be characterized as a Class II Waste.

11.4.2 Asphaltic roofing material and debris will be disposed of at an off-site managed landfill capable of receiving this type of material. Contractor will be responsible for procuring a contract for disposal/transportation cost.

11.4.3 The Contractor shall select a landfill and make all arrangements for disposal; including transportation of the material.

11.4.4 The Contractor shall submit the name of the proposed landfill to the PSTR. No material shall be removed from the Pantex Plant until the landfill has been approved by Waste Operations.

11.4.5 The Contractor shall notify the PSTR and Waste Operations Department before scheduling shipments. Waste Operations Department will provide and sign manifest for each shipment.

12. CONCRETE

12.1 The Contractor shall segregate concrete from other materials (base material, dirt, bollards, fence posts, sign posts, etc.) to the extent possible before removing it from the construction site.

12.2 The Contractor shall recycle all concrete that has been characterized as Uncontaminated and suitable for recycling.

12.3 The Contractor shall select a firm to recycle the material and make all arrangements for recycling; including transportation of the material.

12.4 The Contractor shall submit the name of the proposed recycling firm to the PSTR. No material shall be removed from Pantex Plant until the recycling firm has been approved by Waste Operations.

12.5 All vehicles removing recyclable material from Pantex Plant shall be weighed at the scales located in Zone 10 before and after the vehicle is loaded to determine the weight of the material removed.

12.6 The Contractor shall provide the PSTR with documentation that the material was delivered to an approved recycling firm. Documentation shall include the:

12.6.1 Construction project name.

12.6.2 Date the material was removed.

12.6.3 Type of material removed.

12.6.4 Weight of the material removed.

12.6.5 Name of the recycling firm.

12.7 All concrete washouts shall be performed at the Batch Plant or managed properly at the jobsite utilizing groundcover (plastic, etc.).

13. SCRAP WOOD

13.1 Scrap wood consists of all pallets, crates and all other wood that can be shredded and reused.

13.2 Scrap wood will be segregated from other materials prior to leaving the construction site.

13.3 Scrap wood will be collected at a designated area within the Pantex Landfill. The Contractor will be responsible for the transportation of scrap wood to this location.

13.4 Wood containing preservatives (e.g. creosotes of phenolic preservatives) will be segregated from other scrap wood and managed separately by the Contractor.

13.5 No other plant trash or waste will be placed in the collection pile.

13.6 Nails and other fasteners shall be removed or bent to minimize hazards when handling the material.

13.7 All loads must be weighed at the scales prior to placement into Pantex collection pile.

13.8 Weights must be reported to the Waste Operations Landfill Operator.

14. REFRIGERANT AND REFRIGERANT OIL

14.1 The contractor shall coordinate with the PSTR to have a Pantex reclaim any refrigerant and refrigerant oil in a system prior to demolition or replacement.

14.2 The contractor shall obtain a copy of the complete PX-5311 for records and verify that a copy is attached to the emptied equipment.

15. METALS

15.1 Clean scrap metal that is not contaminated shall be recycled.

15.2 Pantex will provide an area for recyclable metals.

15.3 The contractor shall verify that any equipment that contained oil's or refrigerants has been tagged empty and a copy of the completed PX-5311 is attached prior to delivering to the recyclable metals collection area or the material will not be accepted.

15.4 The Contractor shall transport recyclable metals to the collection area.

15.5 Scrap metals being removed from any radiological areas (radiation area, contamination area, RMAA, etc.) will be documented per Radiation Safety as "Suspension Impacted Metal ". Scrap metals will be managed as non-releasable to the public for recycling. Contractor will be responsible for segregating this Suspension Impacted Metal from other non-Suspension Impacted Metals. The Contractor will be responsible for transporting all Suspension Impacted Metal to designated collection area.

15.6 Scrap metals that are released by Radiation Safety and not considered "Suspension Impacted" will be transported to Zone 10 by the Contractor for final disposition by Pantex.

16. CHARACTERIZATION OF WASTE

16.1 All waste generated during construction will be characterized and classified for proper disposal by Pantex.

17. HAZARDOUS WASTE MANAGEMENT

17.1 The contractor shall coordinate all Hazardous Waste disposal through Pantex Waste Operations Department (WOD).

17.2 Hazardous Waste shall be accumulated and managed at Less Than 55 Gallon Waste Accumulation Sites in accordance with 30 TAC §335.69.

17.3 Waste containers will be provided by the WOD.

17.4 All container labels shall be provided by WOD. Each container or drum shall be labeled with:

17.4.1 "Hazardous Waste" labels.

17.4.2 Waste stream and generator identifications.

17.4.3 A container or drum identification bar code.

17.5 Containers shall be stored in a closed condition with lid and bungs secure when not adding waste.

17.6 Drums greater than 30 gallons shall be palletized and drums shall not be stacked.

18. LESS THAN 55 GALLON WASTE ACCUMULATION SITES

18.1 Only one container per waste stream is normally allowed at each 55 Gallon Waste Accumulation Site. A second container may be allowed if one container is full and awaiting transport from the site.

18.2 The Contractor shall contact WOD (EXT 5449) when a container has been in a site 350 days. WOD will determine if the drum needs to be released to WOD or if there will be an extension to the 1 year time limit for drums in a waste accumulation site.

18.3 The Contractor shall have full containers removed within 72 hours. An accumulation start date shall be placed on the label of the full container once 55 gallons has been exceeded at the site.

18.4 Each Less Than 55 Gallon waste accumulation site shall meet the following minimum criteria:

18.4.1 Access must be controlled through the use of fences with locking gates.

18.4.2 Secondary containment must be provided to prevent spilled or accumulated wastes contacting the ground.

18.4.3 A minimum of 24 inches of aisle space is required around drums to permit inspection and access.

18.4.4 Incompatible wastes shall be separated by an impermeable barrier.

18.4.5 The following signs, legible from 25 feet, shall be posted at the entrance to accumulation site:

(a) "Warning - Unauthorized Personnel Keep Out".

(b) "No Smoking within 25 Feet".

18.4.6 The site must be at or near the point of generation of the waste and be under the control of the Contractor of the waste site.

18.5 The Contractor shall maintain a current log of waste material and volume of waste at each

waste accumulation site by using form PX-2844.

18.6 The Contractor shall maintain a current log of empty containers placed in each waste drum using form PX-1447.

19. DISPOSITION OF HAZARDOUS WASTE

19.1 When the waste container is full (90% volume capacity) or no more Hazardous Waste is to be accumulated in the container, the Contractor shall prepare the containers for transport. This includes, but is not limited to:

19.1.1 Closing containers.

19.1.2 Tightening bungs and bolts.

19.1.3 Palletizing drums.

19.1.4 Removing contamination from the surface of container.

19.1.5 Including the proper documentation with the container.

19.1.6 The Contractor shall be responsible for staging all containers scheduled for pick-up in an area suitable for loading, (i.e. level ground with easy access, etc.).

19.2 The Contractor shall submit the completed PX-2844 or PX-1447 to the PSTR before requesting transport of full waste containers.

20. CLASS I WASTE MANAGEMENT

20.1 The Contractor shall accumulate and manage Class I Waste in accordance with applicable regulations.

20.2 Class I Waste disposal.

20.2.1 The Contractor can request Class I Waste accumulation containers from Pantex that shall remain in Pantex control. The contractor shall comply will all Pantex requirement of Pantex controlled containment and disposal of Class I Waste.

20.2.2 The Contractor can utilize an outside contract to provide approved collection containers, licensed transport and licensed dispose of bulk Class I Waste to an off-site managed landfill capable of receiving this type of material. Contractor will be responsible for procuring a contract for disposal/transportation cost. Certificates of disposal must be provided back to Pantex Waste Operations for each manifested shipment. The landfill utilized must be approved by the Waste Operations Department.

20.2.3 The Contractor shall notify the PSTR and Waste Operations Department before scheduling shipments of all Class I Waste. The contractor must receive a signed manifest for each shipment from the Pantex Waste Operations Department.

20.3 Each container or drum shall be labeled with "Class I Non RCRA Regulated" labels and a container or drum identification bar code provided by WOD.

20.4 Class I Waste shall be accumulated and managed using care to protect employees and the environment:

20.4.1 Impermeable barriers shall be used to separate incompatible wastes.

20.4.2 Containers shall be stored in a closed condition with lid and bungs secure when not adding waste.

20.4.3 Drums greater than 30 gals shall be palletized and drums shall not be stacked.

20.5 The Contractor shall maintain a current log of waste material and volume of waste at each waste accumulation site by using PX-2844.

20.6 The Contractor shall maintain a current log of empty containers placed in each waste drum using form PX-1447.

21. DISPOSITION OF CLASS 1 WASTE

21.1 When the waste container is full (90% volume capacity) or no more waste is to be accumulated in the container, the Contractor shall prepare the containers for transport. This includes, but is not limited to:

21.1.1 Closing containers.

21.1.2 Tightening bungs and bolts.

21.1.3 Palletizing drums.

21.1.4 Removing contamination from the surface of container.

21.1.5 Including the proper documentation with the container.

21.2 The Contractor shall submit the completed PX-2844 or PX-1447 to the PSTR before requesting transport of full waste containers.

21.3 Disposal of Asbestos

21.3.1 Contractor will be responsible for procuring a contract for disposal/ transportation cost of bulk loads of asbestos to BFI Southwest Landfill; or other approved Landfills.

21.3.2 If an asbestos notification to the state is required by Master Spec 01500, the Contractor shall be responsible for providing a copy of the Texas Department of State Health Services (TDSHS) Asbestos Notification Form to WOD for proper waste characterization.

21.3.3 Pantex has profiles that allow Contractors to dispose of all asbestos waste at BFI Southwest Landfill.

21.3.4 Pantex (Waste Operations) personnel will inspect and manifest all asbestos loads.

22. CLASS II WASTE MANAGEMENT

22.1 The Contractor shall dispose of Class II Waste at a landfill approved by Pantex. The Contractor shall notify the PSTR and Waste Operations Department before scheduling shipments of all Class II Waste. Waste Operations Department will provide and sign a manifest for each shipment.

22.2 The Contractor shall provide all Class II Waste collection containers.

22.3 The Contractor shall accumulate Class II Waste in collection containers.

22.4 The Contractor may subcontract a reputable organization to provide containers and transport all

Class II waste off-site.

22.5 WOD can provide the Contractor with Class II commercial dumpsters to collect approved plant trash, e.g. office trash, packing material etc. The Contractor shall inspect Class II commercial dumpsters weekly to prevent unauthorized collection of materials in the commercial dumpsters. WOD will be responsible for the empting and transporting of dumpster waste.

23. SOLID WASTE MANAGEMENT UNITS (SWMU)

23.1 Pantex WOD will classify the soil in a SWMU as either:

23.1.1 Hazardous Waste.

23.1.2 Class I Waste.

23.1.3 Class II Waste.

23.1.4 Analysis Pending.

23.2 Pantex will coordinate with the State of Texas to:

23.2.1 Approve the disposition of the excess soil excavated from SWMUs.

23.2.2 Determine the type of container required for excess soil excavated from SWMUs.

23.3 Excavated SWMU soils shall be placed back into the excavation where it was generated whenever possible.

23.4 Excess soils that have been characterized as Class II and meet landfill waste acceptance criteria will be placed in the Environmental Landfill at the Pantex Plant. The Contractor shall contact the PSTR for specific directions for this process.

23.5 Equipment Decontamination:

23.5.1 The Contractor shall decontaminate all equipment to applicable release limits or less before removing it from the SWMU.

23.5.2 Dry decontamination must be used whenever possible. If water must be used to decontaminate equipment, it shall be placed in containers and labeled according to the classification of the soil in the SWMU.

24. SITE CLOSURE

24.1 The Contractor shall close laydown areas and waste accumulation sites by:

24.1.1 Cleaning and decontaminating the area.

24.1.2 Providing documentation of spills or clean up during the construction project.

24.1.3 Assuring all waste containers have been properly removed from the construction site.

24.2 The Contractor shall notify Pantex 5 working days prior to closure of the work site. Notification shall include the number of:

24.2.1 Hazardous materials storage areas.

24.2.2 Waste accumulation sites.

24.2.3 Empty drum storage areas.

24.2.4 Containers at each area.

24.3 Pantex shall inspect and approve closure.

25. STORM WATER POLLUTION PREVENTION PLAN (SWPPP) (Reserved-not anticipated at this time)

25.1 The Contractor must submit to Pantex a SWPPP if any of the conditions below apply to this contract:

25.1.1 Disturbing or exposing soil of a single area 1 acre or more in size.

25.1.2 Disturbing or exposing soil in a combination of areas totaling 1 acre or more in size.

25.2 The Contractor shall comply with all requirements specified in Texas Pollutant Discharge Elimination System (TPDES) General Permit for Storm Water Discharges for Construction Activities (Permit No. TXR150000) issued by the TCEQ.

25.3 The Contractor shall use the Pantex Storm Water Pollution Prevention Plan, TMP-0063, as the SWPPP for their construction projects.

25.4 The Contractor shall incorporate project-specific information into the Pantex SWPPP including required site maps as specified in TPDES General Permit No. TXR150000.

25.5 The SWPPP shall be:

25.5.1 Tailored to the site-specific conditions.

25.5.2 Designed to control the amount of pollutants, including sediment, in water discharged from the construction site.

25.5.3 Approved by Pantex Environmental Stewardship Department before the Notice of Intent (NOI), if required, is submitted to the TCEQ and before construction activity begins.

25.5.4 Changes to the scope of work that exceed the boundaries of the SWPPP shall require the Contractor to modify and obtain approval of the revised SWPPP.

26. CONSTRUCTION SITE INSPECTIONS

26.1 The Contractor shall inspect the construction site weekly as described in TPDES General Permit No. TXR150000 issued by the TCEQ.

26.2 The inspection shall address:

26.2.1 All areas where soil has been disturbed.

26.2.2 Material storage areas.

26.2.3 Construction site entrance/egress.

26.2.4 All erosion and sediment controls identified in the SWPPP.

26.3 The Contractor shall provide documentation (PX-5736) of each inspection to the PSTR no later than 5 working days from the day of the inspection.

27. MAINTENANCE OF CONTROLS

27.1 All erosion and sediment controls identified in the SWPPP must be installed and maintained according to the manufacturer's specifications until possession of the facility has been transferred to Pantex.

28. RECORD KEEPING

28.1 The Contractor shall maintain records of all:

28.1.1 Site inspections.

28.1.2 Maintenance and repairs to control measures either as a result of required inspections or from observation of daily activities.

28.1.3 Dates when major grading activities occurred.

28.1.4 Dates when construction starts and stops.

28.1.5 Dates when the area is stabilized.

28.2 All records shall be kept with the SWPPP for at least three years after final stabilization is achieved. Final stabilization is achieved when all soil disturbing activities at the site have been completed and one of the following conditions is met:

28.2.1 A uniform perennial vegetative cover having a density of at least 70% of the native background vegetative cover is established in all areas not covered with pavement, concrete, or permanent structures.

28.2.2 Equivalent permanent stabilization measures (such as the use of riprap, gabions or geotextiles) have been employed.

28.2.3 Cultivated land is returned to its original grade and pre-construction condition.

29. REFERENCES

29.1 GOVERNING DOCUMENTS

(a) https://iw.pxplant.com/ucm/groups/jsp/documents/documents/rms/ReqFlowdown.jsp?docno=DIV-01600

29.2 AUTHORIZING DOCUMENTS

(a) DIR-0001, "Roles and Responsibilities for the Management and Operation of Pantex Plant"

29.3 RELATED DOCUMENTS

(a) None

29.4 GENERATED DOCUMENTS

(a) PX-1447, "Drum Inventory of Empty Containers"

(b) PX-2844, "Inventory of Container at Waste Accumulation Site"

(c) PX-5311, "Refrigerant Service Order Form"

(d) PX-5736, "Construction Storm Water Inspection Report"

(e) TMP-0063, "Storm Water Pollution Prevention Plan (SWPPP)"

29.5 RECORDS

(a) PX-1447, "Drum Inventory of Empty Containers" R_026848

(b) PX-2844, "Inventory of Container at Waste Accumulation Site" R_026848

(c) PX-5311, "Refrigerant Service Order Form" R_026617

(d) PX-5736, "Construction Storm Water Inspection Report" R_105700

(e) Contractor Daily Logs, R_024301

(f) Contractor Waste Management Plan, R_024301

(g) TMP-0063,"Storm Water Pollution Prevention Plan (SWPPP)" , R_024301

END OF SECTION 01600

EXHIBIT 1

PX-1447, "Drum Inventory of Empty Containers"

USE MOST CURRENT ISSUE

EXHIBIT 2

PX-2844, "Inventory of Container at Waste Accumulation Site"

USE MOST CURRENT ISSUE

EXHIBIT 3

PX-5311, "Refrigerant Service Order Form"

USE MOST CURRENT ISSUE

EXHIBIT 4

PX-5736, "Construction Storm Water Inspection Report"

USE MOST CURRENT ISSUE

EXHIBIT 5

TMP-0063 "Storm Water Pollution Prevention Plan (SWPPP)"

USE MOST CURRENT ISSUE

(U) CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Security)

Level of Use: Reference

Issue History			
Issue	Publish Date	Pages Affected	Comments
002	01/03/05	All	Format changes only.
003	03/10/05	All	General change.
004	04/21/05	All	General change.
005	07/06/05	2	1.1.A.
006	10/08	All	Change title. Incorporates 01540, input from SRAG, MAA access info from old 01250, deleted all covered in T&Cs, all edited.
007	07/10	5, 6	Add reference to LIST-0144.
008	08/11	All	Global changes to clarify Contractor requirements.
009	10/11	All	Global change of DESKAID-0302 to LIST-0144.
010	2/12	9	MAA and PA access considerations.
011	11/12	6,11,12,16	To incorporate CR #48406. PX-4319 has been archived and information added to PX-3429.
012	2/13	6, 15	To incorporate CR #49017. PX-2432 has been archived and information added to PX-3429.

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Acronyms

LA	Limited Area
LC	Logistics Coordinator
MAA	Material Access Area
PA	Protected Area
PPA	Property Protection Area
PSTR	Project Subcontract Technical Representative
SPO	Security Police Officer
SRAG	Security Requirements Acquisition Guide
STR	Subcontract Technical Representative
SUV	Sport Utility Vehicle
T&C	Terms and Conditions

Section 01700 – Security

1.0 General

1.1 This section includes Contractor responsibilities for requesting, maintaining, and complying with access and security requirements.

1.2 The Contractor shall attend a Security briefing prior to starting work on the contract.

2.0 Identification Badges

2.1 The Contractor is responsible for requesting, control, and accountability of all badges issued under the contract.

2.2 The Contractor shall submit a PX-1195 form to Access Control in Building 16-12. Only Contractor personnel who have signed the PX-1195 will be allowed to sign the PX-1196 forms to obtain Contractor employee identification badges.

2.3 The Contractor shall complete, sign, and retain a copy of PX-1196 for each employee who will be assigned to work at Pantex. The Contractor employee shall submit the completed PX-1196 to Access Control in Building 16-12, along with a valid driver's license or official photo identification, to obtain a construction identification badge.

2.4 The Contractor employee shall sign a PX-5185 to receive the badge and shall comply with the terms of use, protection and return as stated on the form.

2.5 Badges shall be worn conspicuously on the upper portion of the body while at Pantex Plant. The badge may be temporarily removed if the employee is performing an operation that does not allow the badge to be worn safely. The badge shall be placed back on once it is safe to wear it.

2.6 Any Contractor whose badge is confiscated shall only be allowed on Pantex property while under the control of Pantex Security personnel. Once released from Pantex Security personnel, the Contractor shall immediately vacate Pantex Property as directed.

2.7 The Contractor shall obtain a new picture and badge if there are significant changes in facial features (e.g., growing or removing a beard or mustache).

2.8 Contractor employees who will be absent from Pantex Plant for 10 days or more shall surrender their badge to Access Control. Upon returning to Plant the Contractor employee will report to Building 16-12, Access Control, to pick up the badge.

2.9 Upon completion or termination of work, Contractors shall return badges that were issued under the contract to Access Control.

3.0 Lost Badges

3.1 The Contractor employee shall report the lost badge to his superintendent or foreman. The superintendent or foreman shall notify the PSTR and Access Control.

4.0 Prohibited Items

4.1 Any item that may jeopardize the safety or security of the Pantex Plant or workforce, or compromise National Security interests is prohibited.

4.2 The Contractor shall assure his employees do not bring prohibited articles onto the Pantex Plant. Contractors shall review LIST-0144.

4.3 Illegal articles include any item that is prohibited by local, state, or federal law, such as illegal drugs, weapons, and associated paraphernalia. Possession of illegal articles requires involvement of the appropriate law enforcement agency.

4.4 All prohibited articles will be confiscated:

- The first offense may involve a warning or dismissal from the site. An offense involving illegal drugs shall result in the violator being detained and turned over to the Carson County Sheriff's Office.
- The second offense shall result in removal of the badge, removal from the site, and denial of future site access.

5.0 Controlled Items

5.1 Any controlled item that requires a PX form to be used on-site or listed in LIST-0144 may remain in a personal vehicle in the PPA. Any controlled item entering the LA, PA or MAA without proper Pantex documentation is prohibited.

5.2 The Contractor shall assure his employees do not bring controlled items into the Pantex Plant LA, PA, and MAA areas. Contractors shall review LIST-0144. Contractors shall place any controlled items in designated contractor repositories at the entrances to the limited areas prior to entry.

5.3 The use of unapproved wireless items at the Pantex Plant is prohibited in any facility. The Contractor shall request permission for the use of specific wireless devises and/or computer equipment or storage media by filling out PX-3429 and coordinating with the STR for approval through Security.

6.0 Scheduling SPO Escorts

6.1 The Contractor shall notify the PSTR /LC in writing to schedule SPO escorts.

6.2 The Contractor shall request SPO support by 4 PM on Wednesdays for the following work week locations.

6.3 The Contractor shall notify the PSTR/LC 24 hours in advance when cancelling a guard.

6.4 The Contractor shall notify the PSTR/LC any time personnel will be arriving later than the start of a regular shift.

7.0 Site Access

7.1 Contractors shall enter the Pantex designated contractor entrance. Contractors entering through unapproved entrances can be turned away or have their badges confiscated pending a corrective action. The Contractor shall verify the construction entry with the LC and not impede the Pantex employee entrance.

7.2 Upon arriving at a Pantex Plant entrance, Contractor employees shall stop and present their identification badge to the SPO for examination and a comparison check.

7.3 All vehicles, toolboxes, lunch kits, personnel, etc., are subject to search while at Pantex Plant by SPOs and Canine. When subjected to a Canine search, the Contractor shall not say or do anything to distract the canine. Any interference with a search can result in the confiscation of the contractors badge and permanent removal from Pantex.

7.4 If the construction site is located in the LA, PA, or MAA, a Security escort is required unless the employee has a valid security clearance for the area they are working in. Security escorts are normally not required in the PPA.

7.5 Prior to entering the LA, PA, or MAA, Contractor owned vehicles (except vehicles not licensed for highway use) shall be van, an SUV, or truck (no sedan type) and shall display:

7.5.1 A current state license.

7.5.2 A current state safety inspection sticker.

7.5.3 A professional company sign or logo. The sign or logo shall be:

- At least 12 inches by 12 inches in size.
- Contain the company's name printed in 3/4 inch or larger letters.
- Be permanent or magnetic (not paper or handwritten).
- Displayed on both sides of the vehicle.

7.6 All Contractor employees shall present their badges to the SPO at the entrance stations to the LA, PA, MAA and at the gates of any fenced in construction site. All vehicles and hand carried items (e.g., lunch boxes, tool boxes, etc.) will be searched upon entering and exiting the LA, PA and MAA. When vehicles are to be searched, the driver shall:

- Require all passengers to dismount.
- Turn off the engine.
- Raise the hood.
- Open all doors.
- Unlock and open any toolboxes or other compartments.
- Comply with the SPO’s instructions.

7.7 Access to jobsites inside LA, PA, and MAA require a Security shuttle escort from the entrance station to the jobsite. Shuttles can originate from Stations 703, 707, 714, or SS-15:

- The number of vehicles permitted access is limited to that necessary to perform work associated with the contract.
- Only van, truck, or SUV type vehicles and essential equipment will be allowed on construction sites in LA, PA and MAA.

7.8 Access to construction sites in the PA or MAA will require that Contractor employees successfully pass through the Argus Security System. If a Contractor cannot pass through the Argus System, access will be denied. Contact Access Control for initial Argus enrollment.

7.9 Once at the jobsite, personnel will be under security escort and shall not be allowed to leave without a Security shuttle or escort, unless they have a security clearance.

8.0 Construction Site Security

8.1 Vehicles, equipment, construction materials, debris, etc., will be parked or placed in a manner to maintain a “clear zone” of 20 feet from any facility (building, ramp, tower, etc.).

8.2 Vehicles, equipment, materials, and debris will be parked or placed in a manner to maintain a “clear zone” of 20 feet from any temporary or permanent security fence.

8.3 Materials shall not be stacked in a manner that will hamper Security or Emergency response.

8.4 Unless otherwise approved by Security, Contractor owned vehicles and heavy equipment used inside the LA, PA, and MAA will be removed and returned to the lay down area at the end of each workday.

8.5 The Contractor is responsible for submitting a sketch or drawing depicting any materials or equipment that needs to be left at the jobsite. The Contractor shall comply with the requirements of the Pantex Security Plan based off the submittal. If any vehicles or heavy equipment are allowed to remain in these areas, they must be disabled.

9.0 Deliveries

9.1 All deliveries to Pantex Plant site shall enter through the designated construction entry. The Contractor shall verify the construction entry with the LC.

9.2 Deliveries shall be made before 2:00 p.m. unless special arrangements have been made in writing with the PSTR/LC.

9.3 Notify the PSTR/LC in writing a day in advance of any delivery. Provide company, date, description, destination, driver’s name (if not badged), and time. The Contractor shall fill out all required paperwork for any non-badged delivery personnel a minimum of 24 hours in advance of the delivery date.

9.4 Delivery drivers are required to be US citizens with a valid license.

10.0 Security Shuttle

10.1 If the construction site is inside the LA, PA, or MAA, uncleared Contractor personnel shall be escorted to and from the construction site by SPOs.

10.2 The Contractor shall notify the LC when scheduling SPO support if they will have more than six vehicles entering the jobsite at one time for shuttle arrangements.

10.3 Shuttles are not dedicated to a single project. Contractors should not anticipate immediate or unplanned access to shuttle services.

10.4 The Contractor shall minimize the usage of the shuttle service by providing sufficient materials and equipment at the construction site and by minimizing exits and entries into the work areas.

10.5 The Contractor shall request shuttle service to and from a jobsite in advance with the SPO assigned to the construction site or to a SPO at the entry station.

11.0 Termination of Employees

11.1 If the Contractor or a Subcontractor terminates the employment of an employee while at Pantex Plant, the Contractor shall escort the employee from the site.

11.2 Any employee who is under the influence of alcohol or drugs will not be permitted to drive a vehicle on or away from Pantex Plant.

11.3 In no case will a terminated employee be taken to the gates of the Plant and left to walk on adjacent roadways.

11.4 The Contractor shall comply with the all termination requirements within the Terms and Conditions for the contract.

12.0 Visitors

12.1 The Contractor shall notify PSTR/LC at least a day in advance, of any visitors requiring access to the construction site. Visitors must meet the site access requirements to obtain a badge.

12.2 The Contractor shall fill out the all required paperwork for any visitors a minimum of 24 hours in advance of the visit.

13.0 MAA and PA Access Considerations [reserve if access to MAA or PA is not required]

13.1 To improve access to work in the MAA and PA, the Contractor shall observe the following guidelines:

- For passage through the metal detectors, assure personnel are free of all metal. Personnel should leave metal items such as metal toe shoes, suspenders, and belt buckles at the jobsite or in the company vehicle.

- For passage through the Argus System, the Contractor's personnel must remember password. Individuals who fail to gain access through Argus due to inability to follow directions or inability to remember password will not receive access.
- Limit materials moved to the site during personnel access periods. Move material to the jobsite when personnel are not accessing the site. Stage materials at the site prior to the next day of work where possible and as allowed by the specifications.
- Contractor use of a bus or multi-person van is the most efficient means of access for workers. This method is more efficient than having small numbers of workers in a pickup truck. The Contractor is encouraged to utilize multi-person vehicles.

14.0 References

14.1 Governing Documents

https://iw.pxplant.com/ucm/groups/jsp/documents/documents/rms/ReqFlowdown.jsp?docno=DIV-01700

14.2 Authorizing Documents

(a) DIR-0001, "Roles and Responsibilities for the Management and Operation of Pantex Plant"

14.3 Related Documents

(a) LIST-0144, "Safeguards and Security Prohibited and Controlled Items"

14.4 Forms

14.4.1 Generated Forms

(a) PX-1195, "Construction Security Signature Authorization Form"

(b) PX-1196, "Construction Security Badge Request Form"

(c) PX-3429, "Technical Security Request for Use of Potential Technical Surveillance Equipment"

(d) PX-5185, "Receipts for Security Badge"

14.4.2 Related Forms

None

14.5 Records

(a) PX-1195, "Construction Security Signature Authorization Form" R_024511

(b) PX-1196, "Construction Security Badge Request Form" R_024510, R_024511

(c) PX-3429, "Technical Security Request for Use of Potential Technical Surveillance Equipment" R_026701, R_026697, R_026696, R_024634

(d) PX-5185, "Receipts for Security Badge" R_024501, R_025149

15.0 Exhibits

(a) PX-1195, “Construction Security Signature Authorization Form”

(b) PX-1196, “Construction Security Badge Request Form”

(c) PX-3429, “Technical Security Request for Use of Potential Technical Surveillance Equipment”

(d) PX-5185, “Receipts for Security Badge”

END OF SECTION 01700

EXHIBIT 1

PX-1195, "Construction Security Signature Authorization Form"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT 2

PX-1196, "Construction Security Badge Request Form"

USE MOST CURRENT ISSUE IN UCM

EXHIBIT3

PX-3429, "Technical Security Request for Use of Potential Technical Surveillance Equipment"

USE THE MOST CURRENT ISSUE IN UCM

EXHIBIT 4

PX-5185, "Receipts for Security Badge"

USE MOST CURRENT ISSUE IN UCM

CONSTRUCTION MANAGEMENT

MASTER SPECIFICATIONS DIVISION 1

(Construction Completion and Acceptance)

Level of Use: Reference

ISSUE HISTORY			
Issue	Date	Pages Affected	Comments
000	09/27/07	All	Incorporated requirements for turnover (01300)/start-up (01650)/cleaning (01710) and close out (01700). Deleted all content duplicated by T&Cs.
002	01/2012	All	Global changes to clarify Contractor requirements.

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1.0 USE AND POSSESSION (U&P) AND FINAL ACCEPTANCE (FA) 4
2.0 WARRANTIES 4
3.0 START-UP 5
4.0 TRAINING 5
5.0 REFERENCES 6

SECTION 01800 – CONSTRUCTION COMPLETION AND ACCEPTANCE

1.0 USE AND POSSESSION (U&P) AND FINAL ACCEPTANCE (FA)

1.1 The Contractor shall notify B&W Pantex in writing, when the work associated with this contract is ready for U&P or FA. U&P may be for the entire project or select elements of the project. FA is only taken once ALL required submittals, as-builts and associated documents have been submitted and accepted.

1.2 The Contractor shall coordinate a U&P and/or FA walkdown with the PSTR .

A. The Contractor shall document the inspection.

B. All deficiencies and remaining work shall be documented on a Punch List (PX-5248). The Punch List activities shall be addressed by the Contractor prior to receiving U&P or FA.

1.3 The Contractor shall complete all outstanding contract requirements prior to receiving FA. These may include, but are not limited to, the following:

A. Approved submittals, shop drawings and diagrams.

B. Approved as-built drawings.

C. Approved as-built specifications (when required).

D. All operating and maintenance manuals.

E. All warranties.

F. Spare parts and maintenance materials.

G. Testing and training programs.

H. Waste Stream closeout.

I. Badge return.

J. Dosimeter return.

K. Affidavits and releases.

1.4 Contractor may submit an application for final payment after receiving a statement of FA from B&W Pantex.

2.0 WARRANTIES

2.1 The contractor shall follow all requirements of warranty set forth in the Terms and Conditions.

2.2 The Contractor shall obtain and is responsible for the required warranties and guaranties from lower tier subcontractors.

2.3 The warranties and guaranties of this provision are in addition to any other rights or remedies available to B&W Pantex under this contract or pursuant to applicable law.

2.4 These warranties and guaranties are in addition to any implied manufacturers' or other suppliers' warranties indicated in the specifications or the contract.

3.0 START-UP

3.1 The Contractor shall:

A. Submit a Startup Plan for equipment and systems including Test Procedure, Test Schedule, and Test Reports to be utilized. Procedures shall include pass/fail criteria.

B. Verify and document that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, internal fuses, or other conditions which may cause damage.

C. Verify and document that tests, meter readings, and specified electrical characteristics meet requirements of the equipment or system manufacturer.

D. Verify and document that support components for equipment are complete and tested.

E. When covered in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.

F. Submit a written report stating corrective actions taken to achieve startup and certify that equipment or system has been properly installed and is functioning correctly. Also state any observation, site decisions or instructions given to B&W personnel that are supplemental or contrary to manufacturers written instructions. Submit this report within 15 days after start-up.

4.0 TRAINING (Reserved)

4.1 The Contractor shall submit a plan of instruction for systems operation and maintenance 30 days prior to first proposed training date. The plan shall include:

A. The method of proposed training (video, factory trained, authorized representatives) for the operation, maintenance and trouble shooting of products associated with systems included in the startup plan.

B. The Contractor, at a minimum, shall provide basic demonstration and instruction for proper operation and maintenance of each installed piece of equipment provided.

4.2 The Contractor shall conduct the training in accordance with the approved plan. Training requirements include:

A. The Contractor shall prepare and insert additional data into operations and maintenance manuals when the need for additional data becomes apparent during instruction. Manuals are to be supplemented with troubleshooting and repair data when absent from normal O & M submission.

B. Include instructions by manufacturer’s representative when installers are not expert in the required procedures.

C. Review maintenance manuals, record documentation, tools, spare parts and materials, lubricants, fuels, identification system, control sequences, trouble shooting, repairing, hazards, cleaning and similar procedures and facilities.

D. For operational equipment, demonstrate start-up, shutdown, emergency operations, noise and vibration adjustments, safety, economy/efficiency adjustments, and similar operations.

E. Review maintenance and operations in relation with applicable warranties and similar continuing commitments.

5.0 REFERENCES

5.1 GOVERNING DOCUMENTS

A. https://pxweb.uad.pxplant.com:8201/RMS/ReqFlowdown.jsp?docno=DIV-01800

5.2 AUTHORIZING DOCUMENTS

A. None

5.3 RELATED DOCUMENTS

A. None

5.4 FORMS

A. GENERATED FORMS

1). PX-5248 Turnover Punchlist Form

5.5 RECORDS

A. PX-5248 Turnover Punchlist Form, RIDS R_024301

5.6 EXHIBITS

A. PX-5248 Turnover Punchlist Form

END OF SECTION 01800

EXHIBIT 1

PX-5248 TURNOVER PUNCHLIST FORM

SECTION 16010
BASIC ELECTRICAL REQUIREMENTS

PART 1 GENERAL

1.01 REFERENCED SECTIONS

A. Section 16195 - Electrical Identification.

1.02 REFERENCES

Publications listed below form part of specification to extent referenced. Publications are referenced in text by basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) ANSI C2 (2002) National Electrical Safety Code

CODE OF FEDERAL REGULATION (CFR)

OSHA 29 CFR 1910 (Current Edition) Occupational Safety and Health Administration, Labor; Occupational Safety and Health Standards

NATIONAL FIRE PROTECTION AGENCY (NFPA) ANSI/NFPA 70 (2005) National Electrical Code ANSI/NFPA 101 (1997) Life Safety Code

UNDERWRITERS LABORATORIES (UL) UL 1449 (1985) Standard for Safety Transient Voltage Surge Suppressors

NATIONAL ELECTRIC CODE (NEC) NFPA 70 (2012)

1.03 SUBMITTALS

A. Submit under provisions of Pantex Division Specification 01030

1. Individual electrical systems
2. Individual pieces of equipment
3. Posted operating instructions

1.04 REGULATORY REQUIREMENTS

A. Electrical: Conform to ANSI/NFPA 70 and ANSI C2

B. Life Safety: Conform to ANSI/NFPA 101

C. Occupational Safety and Health Act: Conform to OSHA 29 CFR 1910

D. 16010-1 Subpart 5, Electrical

E. American National Standards Institute C 84.1 (1989) Standard for Electric Power Systems and Equipment - Voltage Ratings (60Hertz)

1.04.1 UTILITY COORDINATION

Coordinate requests for connections, changeovers or switching with the Pantex Plant Utility Department. Coordinate all utility outages through Pantex.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Handle and store equipment and materials properly, in a suitably protected area, to prevent damage before and during installation.

B. Do not install equipment damaged prior to installation.

C. Handle equipment and materials in accordance with manufacturer's recommendations and as approved.

D. Store electrical conduit to provide protection from the weather and accidental damage.

E. Seal cables being stored and handle carefully to avoid damage to the outer covering or insulation and damage from moisture and weather.

F. Replace items which, in the opinion of Pantex or the Project Engineer, are damaged or defective.

1.06 EQUIPMENT ARRANGEMENT

A. The contract drawings indicate the extent and general arrangement of equipment, fixtures, and conduit and wiring systems.

B. Submit any departures deemed necessary including details of such departures and the reasons therefore submitted for approval as soon as practicable and within 30 days after award of the contract. Departures require written approval.

1.07 COORDINATION

Provide final connections for all equipment specified in the Contractual documents.

1.08 STANDARD PRODUCTS

A. Provide products and materials that are the standard products of manufacturers regularly engaged in the production of such equipment and of the manufacturer's latest design unless specified or approved otherwise.

B. Provide identical items of the same type or rating.

1.09 POSTED OPERATING INSTRUCTIONS

A. Provide operating instructions for individual systems and principal pieces of equipment, as specified in this Division, for the use of operation and maintenance personnel prior to substantial completion.

B. Include wiring and control diagrams showing the complete layout of the entire system, including equipment, devices, block diagrams, terminal block diagrams, schematics, conductor labels, and control sequence. Frame under glass or in approved laminated plastic, and post on related equipment.

C. Provide printed or engraved operating instructions for each principal piece of equipment, including start-up, proper adjustment, operating, lubrication, shutdown, safety precautions, procedure in the event of equipment failure, and any other necessary items of instruction as recommended by the manufacturer of the unit, and attach to the piece of equipment or post adjacent to it.

D. Use weather-resisting materials where operating instructions are exposed to the weather or suitably enclose to be protected from the weather.

E. Protect from the effects of sunlight exposure and secure to prevent easy removal or peeling.

PART 2 PRODUCTS

2.01 IDENTIFICATION OF EQUIPMENT

Identification of equipment is specified in Section 16195.

2.02 CERTIFICATION OF MATERIAL

Provide material with UL/FM-tested label attached.

PART 3 EXECUTION

3.01 BASES AND SUPPORTS

Support equipment securely in accordance with manufacturer's recommendations. Provide special frames, braces, and anchors as required.

A. Bases

1. Reserved

3.02 TESTING ELECTRICAL SYSTEMS

A. Make final adjustments to the electrical system and all operational tests under the direct supervision of the manufacturer's representative and in the presence of Pantex or the Project Engineer.

B. Provide 3-day written notice before testing is to begin.

END OF SECTION 16010

SECTION 16195
ELECTRICAL IDENTIFICATION

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Nameplates and labels.

B. Wire and cable markers.

C. Conduit markers.

D. Underground warning tape

1.02 REFERENCED SECTION

A. Section 16010 - Underground Utilities and Identification Systems.

1.03 REFERENCE

The publication listed below forms part of this specification to extent referenced. The publication is referenced in text by basic designation only.

NATIONAL FIRE PROTECTION AGENCY (NFPA) ANSI/NFPA 70 (2005) National Electrical Code.

1.04 SUBMITTALS

Submit under provisions of Section 01030.

A. Manufacturer's Catalog Data

1. Nameplates

2. Labels

3. Markers

B. Instructions

1. Electrical identification.

Indicate application conditions and limitations of use stipulated by Product testing agency specified under regulatory requirements. Include instructions for storage, handling, protection, examination, preparation and installation of Product.

1.05 REGULATORY REQUIREMENTS

Conform to requirements of ANSI/NFPA 70 and Pantex, MNL-00014 Labeling Manual.

PART 2 PRODUCTS

2.01 NAMEPLATES AND LABELS

A. Nameplates: Engraved three-layer laminated plastic, black letters on white background. Refer to Pantex Division Specification 01080.

B. Location: Each electrical distribution, monitoring and control system equipment enclosure.

C. Letter Size

1. Use 1/8-inch letters for identifying individual equipment and loads.

2. Use 1/4-inch letters for identifying grouped equipment and loads.

D. Labels: Embossed adhesive tape, with 3/16 inch white letters on black background. Use only for identification of individual wall switches, receptacles, and control device stations, and marked with appropriate voltage.

2.02 CONDUIT MARKERS

A. Location: Furnish markers for each conduit longer than 6 feet.

B. Spacing: each end of conduit.

C. Color

1. 480 Volt System: Orange.

2. 208 Volt System: Blue.

2.03 UNDERGROUND WARNING TAPE

Description: Four-inch wide plastic tape, detectable type, colored red with suitable warning legend describing buried electrical lines conforming to requirements of Pantex Division Specification 01080.

2.04 Reserved

PART 3 EXECUTION

3.01 PREPARATION

Degrease and clean surfaces to receive nameplates and labels.

3.02 APPLICATION

A. Install nameplate and label parallel to equipment lines.

B. Secure nameplate to equipment front using screws.

C. Identify underground conduits using underground warning tape and tracer wire. Install one tape per trench at 12 inches below finished grade.

END OF SECTION 16195

SECTION 16301
OVERHEAD TRANSMISSION AND DISTRIBUTION

PART 1 GENERAL

1.01 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI C2	(2002) National Electrical Safety Code
ANSI C29.2	(1992) Insulators - Wet-Process Porcelain and Toughened Glass – Suspension Type
ANSI C29.3	(1986; R 1995) Wet Process Porcelain Insulators - Spool Type
ANSI C29.4	(1989; R 1995) Wet-Process Porcelain Insulators - Strain Type
ANSI C29.5	(1984; R 1995) Wet-Process Porcelain Insulators - Low- and Medium-Voltage Types
ANSI C29.7	(1996) Wet Process - Porcelain Insulators - High-Voltage Line-Post Type
ANSI C37.42	(1996) High Voltage Expulsion Type Distribution Class Fuses, Cutouts, Fuse Disconnecting Switches and Fuse Links
ANSI C57. 12.01	(1998) Transformers—Dry-Type Distribution
ANSI C57. 12.20	(1997) Transformers - Overhead-Type Distribution Transformers, 500 kVA and Smaller: High-Voltage, 67,000 Volts and Below; Low-Voltage, 7970/1 3800Y Volts and Below
ANSI 57. 12.26	(1992) Transformers-Pad-Mounted, Self-Cooled, Three-Phase, Distribution Transformers
ANSI O5.1	(1992) Wood Poles
ANSI C62.11	(1999) Standard for Metal-Oxide Surge Arresters for Alternating Current Power Circuits (>1 kV)

AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)

ASME B16.11	(1996) Forged Fittings, Socket-Welding and Threaded

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A 53	(1997) Pipe, Steel, Black and Hot- Dipped, Zinc-Coated, Welded and Seamless
ASTM A 153A/153M	(1995) Zinc Coating (Hot-Dip) on Iron and Steel Hardware
ASTM A 475	(1995) Zinc-Coated Steel Wire Strand
ASTM B 1	(1995) Hard-Drawn Copper Wire
ASTM B 2	(1994) Medium-Hard-Drawn Copper Wire
ASTM B 3	(1995) Soft or Annealed Copper Wire
ASTM B 232	(1997) Concentric-Lay-Stranded Aluminum Conductors, Coated Steel-Reinforced (ACSR)
ASTM D 117	(1996) Electrical Insulating Oils of Petroleum Origin
ASTM D 3487	(1988; R 1993) Mineral Insulating Oil Used in Electrical Apparatus

INSULATED CABLE ENGINEERS ASSOCIATION (ICEA)

ICEA S-68-5 16	Ethylene-Propylene-Rubber-Insulated Wire and Cable for the Transmission and Distribution of Electrical Energy

INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, INC. IEEE)

IEEE Std 142	IEEE Recommended Practice for Grounding of Industrial and Commercial Power Systems
IEEE Std 242	IEEE Recommended Practice for Protection and Coordination of Industrial and Commercial Power Systems
ANSI/IEEE C57.12.00	(1993) General Requirements for Liquid-Immersed Distribution, Power, and Regulating Transformers
ANSI/IEEE C57. 12.90	(1993) Test Code for Liquid-Immersed Distribution, Power and Regulating Transformers and Guide for Short-Circuit Testing of Distribution and Power Transformers
ANSI/IEEE C62.11	(1999) Metal-Oxide Surge Arresters for Alternating Current Power Circuit

1.02 REFERENCED SECTIONS

A. Section 16010 --Basic Electrical Requirements.

B. Section 16195 --Equipment Identification.

1.03 DEFINITIONS

A. ACSR: Aluminum conductor, steel reinforced.

B. BIL: Basic impulse level, stated in kilovolts.

C. EPR: Ethylene Propylene Rubber.

D. RUS: Department of Agriculture, Rural Utilities Service.

E. Secondary: Conductors and components for circuits operating at the utilization voltage of 600V or less.

F. Service: Set of insulated conductors extending from a pole to the metering point or service entrance connection at the location of utilization of electricity.

1.04 Reserved

1.05 SUBMITTALS

A. Submit under provisions of Pantex Division Specification 01030.
Data

1. Tested transformer losses.

B. Manufacturer's Catalog Data

1. Anchors and Anchor Rods

2. Brackets, Cutout/Arrester, Fiberglass

3. Conductors.

a. Overhead

i. Primary

ii. Reserved

b. Underground

i. Reserved

ii. Secondary

4. Crossarms, Crossarm Assemblies, and Crossarm Braces
5. Cutouts
    a. Load Break
    b. Non-Load Break
6. Fuses
    a. Primary, 12.47/7.2 kV
    b. Secondary, 600 V
7. Insulators
    a. Reserved
8. Grounding Material
    a. Ground Rod
    b. Ground Plate, Pole
    c. Grounding Conductor
    d. Groundwire Protector
9. Reserved
10. Reserved
11. Reserved
12. Surge Arresters
    a. Distribution
    b. Riser Pole
13. Switches
    a. Group-Operated Load Break
    b. Hook-Stick Operated
    c. Secondary Fused Disconnect Switch
    d. Load Center

14. Transformers

    a. Overhead-Type Distribution

15. Reserved

16. Reserved

17. Wild Life Protectors

    a. Equipment Bushings

    b. Center Phase Coverup

18. Reserved

19. Reserved

C. Test Reports

1. Reserved.

D. Factory Test Reports

1. Overhead-type distribution transformer routine and other tests.

E. Reserved

F. Reserved

1.06 Reserved

1.07 Reserved

PART 2 PRODUCTS

2.01 GENERAL

Consider materials specified herein or shown on construction drawings which are identical to materials listed in RUS 202-1 as conforming to requirements.

2.02 Reserved

2.03 CONDUCTOR

A. Overhead

1. Primary

Conductors of bare 4/0 ACSR 6/1, 1/0 ACSR 6/1, and #2 ACSR 7/1 as designated.

2. Secondary

Reserved

B. Underground

1. Reserved

2. Secondary

Underground secondary cable shall be stranded copper XHHW 600 volts 90°C. The cable shall be rated for wet or dry locations. The grounding conductor shall be green. The size of the conductor shall be as designated on the drawings.

2.04 CONDUIT and CONDUIT RISERS

A. All above ground conduit and riser conduit shall be PVC coated steel conforming to UL6.

B. All underground conduit, sweeps, and risers to 6" above ground shall be PVC-coated steel.

C. Conduit carrying primary or secondary 15 kV cable shall be encased in red concrete.

D. Provide cable and terminations as specified on drawing or staking sheets.

E. All underground conduits shall be provided with trace wires to identify direct buried electrical conduits. See Section 01565.

2.05 CUTOUTS

A. Cutouts, enclosed fuse type, rated 100 amperes and 10,000 amperes symmetrical interrupting current at 15 kV ungrounded, conforming to ANSI C37.42 shall be used for fused taps and transformers. Type K fuses conforming to ANSI C37.42 with ampere ratings equal to 150 percent of the transformer full load rating. Open link type fuse cutouts are not acceptable.

B. Cutouts, enclosed fuse loadbreak type, rated 100 amperes and 10,000 amperes symmetrical interrupting current at 15 kV ungrounded, conforming to ANSI C37.42 shall be used for underground primary cable terminals.

2.06 FUSES

A. Fuse Links

1. The fuse link shall be a EEI-NEMA type K fuse link in the ampere rating as specified for the equipment or line tap.

2. The fuse link shall be the universal button style for use in fuse cutout.

B. Secondary Fuse Cartridge

1. Provide voltage rating not less than circuit voltage.

2.07 Reserved

2.08 Reserved

2.09 HARDWARE

Hot-dip galvanized conforming to ASTM A 153/A 153M.

2.10 Reserved

2.11 Reserved

2.12 GROUNDING MATERIALS

A. Ground Rod

B. Copper clad steel ground rods at least ¾ inch in diameter, 10 feet long with a minimum of 13 mil copper clad shall be provided. Die-stamp each near the top with name or trademark of manufacturer and length of rod in feet. Rods shall have a hard, clean, smooth, continuous surface throughout length of rod.

C. Ground Wire

D. Stranded, soft drawn copper conductor shall be provided.

E. Ground Wire Protector

F. PVC ground wire protectors shall be provided.

2.13 SURGE ARRESTERS

A. Distribution Overhead Arresters

1. ANSI/IEEE C62. 11, metal oxide, polymer housed, ground-lead disconnect surge arresters arranged for crossarm mounting. RMS voltage rating shall be 9 kV, 7.65 kV MCOV.

2. Arresters shall be heavy duty distribution class, OB DynaVar PDV-100 Cat. No. 213708 or equivalent for line and transformer applications.

3. For underground riser pole applications, the arresters shall be distribution class, OB DynaVar PVR Cat. No 218608 or equivalent.

B. Reserved

C. Reserved

2.14 SWITCHES, PRIMARY, OUTDOOR 15 kV

A. Reserved

B. Reserved

C. Reserved

D. Switch, Secondary, 600 V.A.C.

1. Secondary switch shall be heavy duty fused disconnect switch in a NEMA 4X rainproof enclosure for outdoor application.

2. Secondary switch shall be UL listed and meet NEMA KS1-2001.

3. Switch shall be fusible with a minimum rating of 100 amperes with a minimum 20 KA short circuit rating 600 Volts A.C.

4. Provide fuse holders of the type that will reject all Class H fuses.

5. Switch mechanism shall have a positive action quick-make, quick-break with visible blades.

6. Cover shall have dual purpose interlock.

7. Handle shall be padlockable in either the OFF or ON position.

E. Reserved

2.15 TAPE, SEALING AND MASTICS

Sealing and mastic tape shall be a composite of an all-weather polyvinyl chloride (PVC) backing and a thick rubber based, pressure sensitive adhesive. The product must not degrade when exposed to various indoor or outdoor environments. When applied the installation shall be moisture tight. Acceptable products are Cooper Aqua Seal Cat. No. 10474C or 3M-Scotch 2200 of 2210 vinyl mastic pads and rolls or equivalent.

2.16 TRANSFORMERS

All transformers shall be equipped with no-load taps with two 2-1/2% above and two 2-1/2% below normal voltage.

A. Overhead-Type Distribution-Pole Mounted

1. ANSI C57.12.20

2. Single phase, self-cooled, 65 degrees C, continuous temperature rise, two winding, 60 Hertz.

3. Insulating Liquid

a. Mineral oil per ASTM D 3487, Type II, tested in accordance with ASTM D 117.

b. Provide identification of transformer as "non-PCB" on the nameplate.

c. Do not provide insulating liquids containing poly-chlorinated biphenyls (PCB) or tetrachloroethylene (TCE) or perchloroethylene.

4. Ratings

   a. kVA: As designated

   b. BIL: 95 kV.

   c. Primary Voltage: 12.47Y/7.2 kV.

   d. Secondary Voltage.

      1. 120/240 volts

      2. 240/480 volts

      3. 277/480 volts

   e. Minimum Tested Impedance at 85 Degrees C: Impedance shall limit the through fault value to 10 kA and matching impedance for clusters.

5. Three-Phase Connections

   a. Connect Primary: Grounded wye.

   b. Connect Secondary, three phase, 4 wire grounded Wye service.

      i. 120/208 volts

      ii. 277/480 volts

      iii. Provide transformer with 2 high voltage bushings.

6. Corrosion Protection: Paint coating system shall comply with ANSI C57.12.28 regardless of tank and cover material. Finish coat shall be light gray, ANSI color No. 70.

7. Show transformer kVA capacity using 2-1/2 inch Arabic numerals placed near the low-voltage bushings.

B. Reserved

C. Reserved

D. Reserved

E. Specified Transformer Efficiency

Minimum efficiency, based on test results, shall not be less than NEMA Class 1efficiency as defined by NEMA TP 1.

F. Tested Transformer Losses

Submit certification from the manufacturer, with the submitted catalog data, to show conformance with the specified efficiency requirements. The values used to determine the actual efficiency shall be the tested no-load losses (NLL) (in watts) at a reference temperature of 20°C and the tested load losses (LL) (in watts) at a reference temperature of 85°C. If the efficiency based on the aforementioned test results is less than the NEMA Class 1 efficiency, the transformer is unacceptable. Transformer efficiency values at both full load and at one-half full load shall be included on the routine test report.

2.17 Reserved

2.18 Reserved

2.19 WILDLIFE GUARDS

A. General

Every effort has been made in the design of the new overhead power line to comply with "Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996," by Edison Electric Institute and the Raptor Research Foundation. Equipment and transformer bushing covers, center phase line covers and insulated jumpers are specified throughout the new line construction.

B. Arrester Covers

Arrester covers shall be made of UV-resistant, flame retardant and fire resistant material. The cover shall be designed to snap over the first "shed" or "skirt" of the arrester, as well as fit down snugly over the arrester lead wire.

C. Bushing Covers

Bushing covers shall be made of ozone and UV resistant silicone rubber designed to interlock with the top skirt or shed of the transformer bushing.

D. Jumpers, Equipment, and Pole Grounds

1. All jumpers shall be stranded copper with 600 V black insulated conductors.

a. Jumpers to arresters shall be a minimum of #4 AWG copper.

b. Jumpers to transformers shall be a minimum of #2 AWG copper.

c. Jumpers to line fused disconnect switches, hook stick disconnect switches, and VCR's shall have equal or greater current carrying capacity than the aluminum conductor the jumpers are attached to i.e. 4/0 ACSR will require 4/0 copper

2. Equipment and Pole Grounds

The length of the equipment ground and pole ground that extends above the crossarms shall be #4 AWG stranded copper with 600 V black insulated conductor.

2.20 Reserved

2.21 Reserved

2.22 Reserved

2.23 RECEPTACLES and CONNECTORS

A Meltric Decontactor receptacle will be installed at the junction box next to the equipment pad. The Meltric Decontactor shall be a DS100, 480 volt Model number 33-94043. Accessories will include: Padlock Pawl (Recep #-843), Santoprene Handles (65-9A013-D35), Nylon 30° Angle (MP10), Junction Box (MB10114).

PART 3 EXECUTION

3.01 Reserved

3.02 INSTALLATION

A. Hardware

Provide hardware with washer against wood and with spring washers, nuts and lock nuts applied wrench tight. Install square washers parallel to crossarm length and parallel to ground on pole. Provide locknuts on all threaded hardware connections. Locknuts shall be M-F style and not palnut style. A locknut and spring washers shall be installed with each nut, eyenut, or other fastener on all bolts or threaded hardware such as insulator pins and studs, upset bolts, double arming bolts, crossarm brace bolts, arrester mounting bolts, etc.

B. Grounding

Grounding shall conform to ANSI C2. When work in addition to that indicated or specified is required in order to obtain specified ground resistance, provisions of the contract covering changes shall apply.

1. Ground rods shall be driven full length in undisturbed earth in accordance with the construction drawings. The top shall be at least 12 inches below the surface of the earth. The ground wire shall be attached to the rod with a clamp and shall be secured to the pole with staples. The staples on the ground wire shall be spaced 2 feet apart, except for a distance of 8 feet above the ground and 8 feet down from the top of the pole where they shall be 6 inches apart.

a. All equipment shall have at least two (2) connections from the frame, case, or tank to the multi-grounded neutral conductor.

b. The equipment ground, neutral wires, and surge-protection equipment shall be interconnected and attached to a common ground wire.

2. Grounding and Grounded Connections

a. Where no primary or common neutral exists, surge arresters and frames of equipment operating at over 750 volts shall be bonded together and connected to a dedicated grounding electrode.

b. Where no primary or common neutral exists, transformer secondary neutral bushing, secondary neutral conductor, and frames of equipment operating at under 750 volts shall be bonded together and connected to a dedicated grounding electrode.

c. When a primary or common neutral exists, connect all grounding and grounded conductors to a common grounding electrode.

3. Protective Molding: Protect grounding conductors which are run on surface of poles with PVC molding extending from 1 foot below ground line to 7 feet above ground.

C. Conductors

1. Conductors must be handled with care. Conductors shall neither be trampled on nor run over by vehicles. Each reel shall be examined and the wire shall be inspected for cuts, kinks, or other injuries. Injured portions shall be cut out and the conductor spliced.

2. All conductors shall be meggered prior to termination and all electrical connections need to be torqued properly in accordance with the manufacturer's recommendation and NEC Article 110.14. NEC commentary tables 110.1 and 110.4 provide data on tightening torques that Underwrites Laboratories uses. This data needs to be documented by the installer and witnessed by project PSTR. The documentation needs to be submitted to Projects for filing.

D. Risers

Secure RGS conduits on poles with galvanized standoff bracket tee bars spaced no more than 10 feet apart and within 3 feet of any outlet or termination. Ground metallic conduits.

3.03 TRANSFORMER SOURCE QUALITY CONTROL

A. Transformer Test Schedule: The Government reserves the right to witness tests. Provide transformer test schedule for tests to be performed at the manufacturer's test facility. Submit required test schedule and location, and notify the Contracting Officer 30 calendar days before scheduled test date. Notify Contracting Officer 15 calendar days in advance of changes to scheduled date.

1. Test Instrument Calibration

a. The manufacturer shall have a calibration program which assures that all applicable test instruments are maintained within rated accuracy.

b. The accuracy shall be directly traceable to the National Institute of Standards and Technology.

c. Instrument calibration frequency schedule shall not exceed 12 months for both test floor instruments and leased specialty equipment.

d. Dated calibration labels shall be visible on all test equipment.

e. Calibrating standard shall be of higher accuracy than that of the instrument tested.

f. Keep up-to-date records that indicate dates and test results of instruments calibrated or tested. For instruments calibrated by the manufacturer on a routine basis, in lieu of third party calibration, include the following:

i. Maintain up-to-date instrument calibration instructions and procedures for each test instrument.

ii. Identify the third party/laboratory calibrated instrument to verify that calibrating standard is met.

B. Routine and Other Tests

ANSI/IEEE C57.12.00 and ANSI/IEEE C57.12.90. Routine and other tests shall be performed by the manufacturer on each of the actual transformer(s) prepared for this project to ensure that the design performance is maintained in production. Submit test reports by serial number and receive approval before delivery of equipment to the project site. Required tests shall be as follows:

1. Polarity.

2. Ratio.

3. No-load losses (NLL) and excitation current.

4. Load losses (LL) and impedance voltage.

5. Dielectric

a. Impulse.

b. Applied voltage.

c. Induced voltage.

6. Impedance

3.04 FIELD QUALITY CONTROL

A. Performance of Acceptance Checks and Tests Perform in accordance with the manufacturer's recommendations and include the following visual and mechanical inspections and electrical tests, performed in accordance with International Electrical Testing Association – Acceptance Testing Specifications NETA ATS.

1. Overhead Distribution Transformers

a. Visual and Mechanical Inspection

i. Compare equipment nameplate information with specifications and approved shop drawings.

ii. Inspect physical and mechanical condition.

iii. Verify tightness of accessible bolted electrical connections by calibrated torque-wrench method.

iv. Perform specific inspections and mechanical tests as recommended by manufacturer.

v. Verify correct equipment grounding.

b. Electrical Tests

i. Perform insulation-resistance tests.

ii. Perform continuity test.

2. Grounding System

a. Visual and Mechanical Inspection: Inspect ground system for compliance with contract plans and specifications.

b. Electrical Tests: Perform ground-impedance measurements utilizing the fall-of-potential method. On systems consisting of interconnected ground rods, perform tests after interconnections are complete. On systems consisting of a single ground rod perform tests before any wire is connected. Take measurements in normally dry weather, not less than 48 hours after rainfall. Use a portable ground testing megger in accordance with manufacturer's instructions to test each ground or group of grounds. The instrument shall be equipped with a meter reading directly in ohms or fractions thereof to indicate the ground value of the ground rod or grounding systems under test.

B. Devices Subject to Manual Operation

Each device subject to manual operation shall be operated at least three times, demonstrating satisfactory operation each time.

C. Follow-Up Verification Upon completion of acceptance checks and tests, the Contractor shall show by demonstration in service that circuits and devices are in good operating condition and properly performing the intended function. As an exception to requirements stated elsewhere in the contract, the Contracting Officer shall be given 5 working days advance notice of the dates and times of checking and testing.

END OF SECTION 16301

SECTION 311000 - EARTHWORK

PART 1 – GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 31 specification sections, apply to Work of this section.

1.02 DESCRIPTION OF WORK

A. The extent of earthwork is shown on the plans and generally described as the preparation of the access road and equipment pad. The Work includes site grading, material placement, and compaction.

1.03 RELATED WORK

A. Section 311100 – Clearing

B. Section 334000 – Storm Drains and Culverts

1.04 QUALITY CONTROL/QUALITY ASSURANCE

A. Codes and Standards: Perform excavation and grading work in compliance with applicable requirements of governing authorities having jurisdiction.

1.05 SUBMITTALS

A. Test Reports-Excavating: Submit following reports directly to ENGINEER from the testing services, with copy to CONTRACTOR:

1. Test reports on imported borrow material.

2. Description of material and location for borrow source.

1.06 JOB CONDITIONS

A. Existing Utilities: Locate existing underground utilities in areas of Work. If utilities are to remain in place, provide adequate means of protection during earthwork operations.

B. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility OWNER immediately for directions. Cooperate with OWNER and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to satisfaction of utility OWNER.

C. Do not interrupt existing utilities serving facilities occupied and used by OWNER or others except when permitted in writing by ENGINEER or OWNER. Acceptable temporary utility services may be required to be provided by CONTRACTOR.

D. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies or OWNER for shut-off of services if lines are active.

1.07 USE OF EXPLOSIVES

A. The use of explosives is not permitted.

1.08 PROTECTION OF PERSONS AND PROPERTY

A. Adequately barricade open excavations occurring as part of this Work. This may require posting with warning lights, barricade rope, or other acceptable method.

B. Operate warning lights as recommended by authorities having jurisdiction.

C. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.

PART 2 – PRODUCTS

2.01 SOIL MATERIALS

A. Unsatisfactory Subgrade and Fill Materials: Loose rock, shale, hardpan, boulders, muck, peat, matted roots, frozen material, as well as any other soft or yielding material which does not lend itself to meeting the compaction requirements of this section shall be considered unsatisfactory material.

B. Sub base Material: Sub base material will consist of compacted native material.

C. Fill Materials: The access road and equipment pad will be constructed of a Type A or B, Grade 2 material such as 1 ¾ inch minus crushed caliche base. The proposed surfacing material shall be identified and a submittal transmitted to the OWNER for approval prior to delivery to the site. Materials will be free of debris, waste, frozen materials, vegetation, and other deleterious matter.

PART 3 – EXECUTION

3.01 CONSTRUCTION

A. An 80 foot by 100 foot equipment pad and all-weather access road will be constructed at the location shown on the Drawings. Pad access will be required which will connect the access road to the equipment pad and will have approximate dimensions of 50 feet wide by 75 feet long.

B. Truck access to the pad will be incorporated into the road and pad using the same surfacing material to facilitate the delivery of portable tanks and amendment to the site as illustrated on the Drawings.

C. Prior to construction of the equipment pad, the vegetative layer will be removed to a depth of approximately 4 inches below existing grade. The material removed will be

either transported to the Pantex landfill or back bladed and spread out at the site in a location determined by the PSTR. The subgrade, native material, will be compacted prior to placement of the surface materials with a smooth drum vibratory roller. The material will be compacted to the density shown in Table 1.

D. The surface material backfill consisting of a Type A or B, Grade 2 materials such as 1 ¾ inch minus crushed caliche base or equivalent material will be placed in maximum 8-inch lifts and compacted with a smooth drum vibratory roller. The material will be compacted to the density shown in Table 1.

E. The pad will be required to provide positive drainage in addition to be angled in one direction to allow drainage of the amendment tankers and in another direction to allow for complete drainage of the frac tanks as shown on the Drawings.

F. Design and installation of a grounding grid will be required prior to placement of the pad material. Location identified on the Drawings

G. Access to the equipment pad will be provided by an all-weather gravel/caliche road from South 11th Street, (main paved road to the west) along an existing two-track dirt road. The distance from the asphalt road to the proposed equipment pad location is approximately 820 feet.

H. The road and pad will accommodate a semi tractor-trailer rig with a weight up to 80,000 pounds. The road will be accessible in all types of weather conditions, constructed with a competent surfacing material, such as caliche or like material, a minimum width of 12 feet, and crowned to prevent any ponding of water on the road.

I. The existing two-track dirt road will be graded to remove the center vegetative layer and expose the roadbed to competent native material. The native subgrade material shall be compacted prior to placement of surfacing material.

J. A minimum thickness of 8 inches of compacted surface material will be used to construct the road. Moisture may need to be added to gain maximum compaction of materials. In all cases, the road surface will extend above the existing native surface and be crowned to positively drain.

K. Unauthorized excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of OWNER or ENGINEER. Unauthorized excavation, as well as remedial work directed by OWNER or ENGINEER, shall be at CONTRACTOR's expense.

L. Additional Excavation: When excavation has reached required subgrade elevations, notify OWNER who will make an inspection of conditions.

1. If unsuitable bearing materials are encountered at required subgrade elevations, carry excavations deeper and replace excavated material as directed by OWNER or ENGINEER.

2. Removal of unsuitable material and its replacement as directed will be paid on basis of contract conditions relative to changes in Work.

M. Dewatering: Prevent surface water and subsurface or groundwater from flowing into excavations and from flooding project site and surrounding area.

1. CONTRACTOR will not be required to submit a Storm Water Pollution Prevention Plan (SWPPP) but will incorporate Best Management Practices (BMP's) to manage run on and run off conditions at the site to avoid areas where water can accumulate.

2. If water accumulates, remove water to prevent softening of excavated areas, and soil changes detrimental to stability of subgrade. Provide and maintain pumps, well points, sumps, suction and discharge lines, and other dewatering system components necessary to convey water away from excavations.

3. Convey water removed from excavations and rainwater to collecting or run-off areas. Establish and maintain temporary drainage ditches and other diversions outside excavation limits for each structure. Do not use trench excavations as temporary drainage ditches.

N. Material Storage: Stockpile satisfactory excavated materials where directed, until required for backfill or fill. Place, grade, and shape stockpiles for proper drainage.

1. Locate and retain soil materials away from edge of excavations.

2. Dispose of excess soil material and waste materials as herein specified.

O. Disposal of Excess Material: CONTRACTOR shall use suitable excavated material to construct embankments and grade site to the lines shown on the Drawings. CONTRACTOR shall dispose of all excess excavated material off the site at location approved by the ENGINEER or OWNER. The cost of this Work will be considered incidental to construction. Changes in field conditions which result in changes to the Design Objectives shall be reviewed and approved by the OWNER or ENGINEER prior to proceeding.

P. Caliche or equivalent surface material for the access road and pad will be compacted with a smooth drum vibratory roller.

Q. Moisture Control: Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations.

1. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified performance standard.

2. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing, or pulverizing until moisture content is reduced to a satisfactory value.

R. The Contractor shall follow the procedure in TxDOT designation Tex-114-E to determine the maximum dry density (Da) and optimum moisture content (Wopt). Contractor shall

meet the requirements for field density and moisture content in Table 1, unless otherwise shown on the plans.

Table 1 Field Density Control Requirements

Description	Density	Moisture Content
	Tex-115-E	
Plasticity Index (PI) ≤ 15	≥ 98% D_a	
15 < PI ≤ 35	≥ 98% D_a and ≤ 102% D_a	≥ W_{opt}
PI > 35	≥ 95% D_a and ≤ 100% D_a	≥ W_{opt}

S. Each layer is subject to testing by the Contractor for density and moisture content, according to the following frequency:

1. Road sub-base: 2 tests
2. Pad sub-base: 2 tests
3. Ramp sub-base leading to pad: 1 test
4. Caliche road: 2 tests per lift
5. Caliche pad: 2 tests per lift
6. Ramp (caliche): 1 test per lift

T. During compaction, the moisture content of the soil shall not exceed the value shown on the moisture-density curve, above optimum, required to achieve;

1. 98% dry density for soils with a PI greater than 15 but less than or equal to 35 or
2. 95% dry density for soils with PI greater than 35.

U. When required, remove small areas of the layer to allow for density tests. Replace the removed material and recompact at no additional expense to Pantex. Correct soft spots as required. Maintain the density and moisture content once all requirements in Table 1 are met. For soils with a PI greater than 15, maintain the moisture content no lower than 4 percentage points below optimum. Rework the material to obtain the specified compaction when the material loses the required stability, density, moisture, or finish. Alter the compaction methods and procedures on subsequent work to obtain specified density as directed. Compaction work is acceptable when not more than 1 of the 5 most recent density tests is outside the specified density limits, and no test is outside the limits by more than 3 lb. per cubic foot. Plasticity tolerances are acceptable when not more than 1 of the 5 most recent PI tests is outside the specified limit by no more than 2 points.

3.02 GRADING

A. Grading: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finished surface within specified tolerances, compact

with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.

3.03 MAINTENANCE

A. Protection of Graded Areas: Protect newly graded areas from traffic and erosion. Keep free of trash and debris.

1. Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.

B. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify surface, re-shape, and compact to required density prior to further construction.

3.04 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Waste materials shall be disposed by the CONTRACTOR at a location specified by the OWNER.

END OF SECTION 311000

SECTION 311100 – CLEARING

PART 1 – GENERAL

1.01 WORK INCLUDED

A. The work within this section consists of removing all trees, shrubs, brush, and similar vegetation.

PART 2 – PRODUCTS

A. None

PART 3 – EXECUTION

3.01 REQUIREMENTS

A. The CONTRACTOR shall remove all trees, shrubs, brush, tall grass, and similar vegetation in conflict with the construction indicated on the Construction Drawings. All work shall be performed in a safe and prudent manner. Disposal of all material shall be the complete responsibility of the CONTRACTOR at no cost to the OWNER.

B. Prior to construction of the pad, the vegetative layer will be removed to a depth of approximately 4 inches below existing grade. The material removed will be either transported to the Pantex landfill or back bladed and spread out at the site in a location determined by the PSTR. The subgrade, native material, will be compacted prior to placement of the surface materials.

C. Prior to construction of the road, the existing two-track dirt road will be graded to remove the center vegetative layer, exceeding the depth of the ruts in the road and expose the roadbed to competent native material. The native subgrade material will be compacted prior to placement of surfacing material (See Specification 311000 for compaction).

D. The trench alignment for the waterline will be mowed by the contractor prior to excavating. An area that is a minimum of 25 foot wide, centered along the trench excavation shall be close crop mowed.

3.02 ENGINEER'S APPROVAL

A. No trees shall be removed from the site without the approval of the OWNER.

END OF SECTION 311100

SECTION 312316 - TRENCH EXCAVATION

PART 1 GENERAL

1.01 SUMMARY

A. This section consists of excavation and trenching for pipelines, handling and storage of materials and preparation of subgrade, pumping and dewatering as necessary, and dressing and surface restoration cleanup of the site.

PART 2 PRODUCTS (Reserved)

PART 3 EXECUTION

3.01 CONSTRUCTION

A. The trench alignment shall be surveyed by CONTRACTOR prior to excavation and the area inspected for proximity to other utilities and final approval of utility location by OWNER.

B. During excavation, materials suitable for backfilling shall be piled in an orderly manner a sufficient distance from the banks of the trench to avoid overloading and to prevent slides or cave-ins. Excavated material shall be piled on one side of the trench, to permit ready access to trench and piping, valves, and other appurtenances. Surface drainage of adjoining areas shall be unobstructed to the extent possible.

C. All excavated materials not required or suitable for backfill shall be removed from the site and disposed of in a manner and/or by methods acceptable to OWNER.

D. Grading shall be done as may be necessary to prevent surface water from flowing into excavations, and any other water accumulating therein shall be promptly removed. Under no circumstances shall water be permitted to rise in unbackfilled trenches until after the pipe has been placed, tested and covered to final grade with backfill. Any pipe having its alignment or grade changed as a result of a flooded trench shall be re-laid at no additional cost to the OWNER.

E. Adequate provisions shall be made for maintaining drains and water courses encountered during construction. Culverts, ditches, fences, crosswalks and structures which are disturbed by this construction shall be satisfactorily restored to their original condition upon completion of the work.

F. A hold point of completed trenches shall be conducted by Pantex prior to placing pipe or conduit.

3.02 SITE CONDITIONS

A. CONTRACTOR’S SAFETY RESPONSIBILITIES

1. The CONTRACTOR shall be responsible for enforcing safety and maintaining safe working conditions in all trenching, and shoring, operations to conform to OSHA regulations.

2. The CONTRACTOR shall employ qualified, properly trained personnel to design shoring, and perform safety inspections of the trenches and other operations involving safety procedures, as prescribed by OSHA.

3.03 TRAFFIC CONTROL AND WARNING DEVICES

A. The CONTRACTOR shall plan and construct the project in such a manner as to minimize the interruption of the use of roads, highways, streets and sidewalks involved and shall provide for emergency access for critical routes of travel at all times.

B. THE CONTRACTOR is responsible for providing and maintaining adequate barricades of high visibility design, lanterns, signs, flaggers and prewarning devices to alert the public, motorists and pedestrians of hazardous conditions in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways published by the U.S. Department of Transportation.

C. Work shall also be done in accordance with the Manual on Uniform Traffic Control Devices for Work Zone Areas.

3.04 STRUCTURES

A. The CONTRACTOR shall exercise every precaution to prevent damage to existing buildings or structures in the vicinity of his work. In the event of such damages, he shall repair them to the satisfaction of the OWNER of the damaged structure and at no cost to the OWNER.

3.05 OVERHEAD UTILITIES

A. The CONTRACTOR shall use extreme caution to avoid a conflict, contact, or damage to overhead utilities, such as power lines, street lights, telephone lines, television lines, poles, or other appurtenances during the course of construction of this Project. This includes appropriate set-backs for working near utility poles. CONTRACTOR is required to address in the work plan a proposed appropriate set back distance for work near existing utility poles and other utilities.

3.06 SURVEY MARKERS AND MONUMENTS

A. The CONTRACTOR shall use every care and precaution to protect and not disturb any survey marker or monuments, such as those that might be located at lot or block corners, property pins, intersection of street monuments or addition line demarcation. Such protection shall include marking with flagged high lath and close supervision. No monuments shall be disturbed without prior approval of the OWNER. Any survey marker or monument that is disturbed or destroyed by the CONTRACTOR without approval during the construction of this Project shall be replaced at no cost to the OWNER by a licensed land surveyor.

3.07 CLEANUP

A. As work progresses, that portion of the work completed shall be cleared of debris and brought to the finished grade. Upon completion of the work, the entire site shall be cleared of all debris and ground surfaces shall be finished to smooth, uniform slopes and

shall present a neat and workmanlike appearance. All rocks brought to the ground surface by excavation or backfilling operations shall be removed.

B. At all times during construction, the CONTRACTOR shall be responsible for dust control as directed by the OWNER.

3.08 TRENCH EXCAVATION

A. Trench excavation shall be performed in accordance with minimum requirements of OSHA Regulations.

3.09 PREPARATION

A. PROTECTION OF EXISTING PROPERTIES

1. Existing utilities which will intersect with the new pipelines or structures shall be identified and protected by the CONTRACTOR.

3.10 PRIVATELY OWNED UTILITIES

A. Reserved.

3.11 EXPLORATORY EXCAVATION

A. Location of buried utilities that might interfere with alignment or grade shall be verified by exploratory excavation prior to construction. If any existing utility interferes with the work in either alignment or grade and has to be moved, such work shall be done by the CONTRACTOR. A Lock Out Tag Out of the utility may be required prior to proximity work near this utility.

3.12 SHORING, SHEETING, AND BRACING

A. The CONTRACTOR shall do all shoring, bracing, and tight sheeting required to prevent caving and to protect his workmen, in accordance with Occupational Safety and Health Regulation Requirements, and to protect adjacent property and structures.

3.13 DEWATERING

A. No ground water is expected to be encountered during excavating and therefore dewatering of the excavation is not anticipated.

B. CONTRACTOR shall manage run-on and run-off as a result of precipitation events. Any pumping of collected water from the excavation as a result of run-on will be coordinated with the OWNER prior to performing.

3.14 GENERAL EXCAVATION OPERATIONS

A. The CONTRACTOR shall excavate as necessary at the locations shown on the drawings, staked in the field, or otherwise specified for the installation of pipelines.

B. Prior to installation, the CONTRACTOR will survey the trench alignment to establish the location of the trench and subsequent pipeline. The alignment will be marked in the field at 100 foot increments.

C. The trench alignment and work area will be mowed by the CONTRACTOR to allow for a safe work area with good visibility.

D. The trench alignment will cross a ditch that trends north – south. The Plant has identified this ditch as a solid waste management unit (SWMU), DIV-01600. The contractor shall coordinate with the Project Subcontract Technical Representative (PSTR) prior to disturbance of the SWMU. Material removed from the SWMU will be segregated from other materials so that this material can be replaced when complete. If site conditions are wet and muddy the contractor will notify the PSTR and may be required to decontaminate equipment prior to continued use.

E. CONTRACTOR is responsible for a thorough evaluation of the existing subsurface utilities in the areas to be excavated. Prior to any intrusive work, the trench and work area will be walked down by Pantex underground utility locators. Utilities that cross the trench alignment will require lock out tag out (LOTO) permits prior to intrusive work within 15 feet. Depending on how close other utilities are to the trench alignment hydro excavation may be required to identity and protect the utility.

F. The CONTRACTOR shall take precautions and protect all adjoining private and public property and facilities, including underground and overhead utilities, utility poles, driveways, structures, and fences. Any disturbed or damaged facilities will be suitably restored or replaced by the CONTRACTOR.

G. EXCAVATION FOR APPURTENANCES

1. Excavations for manholes, hydrants, structures and other appurtenances shall be sufficient to leave clearance adequate for proper compactive effort on all sides. The depth, provisions for removing water, and other applicable portions of these specifications shall apply to excavation for appurtenances.

3.15 TRENCH DIMENSIONS

A. Trench dimensions shall be as specified below:

1. The excavation for the water supply line will be installed to a minimum depth of 42 inches below ground surface (bgs) and to a width of approximately 12 to 14 inches. This will result in a top of pipe depth of at least 36 inches bgs. Care shall be taken not to excavate below the required depth.

2. TRENCH BOTTOM

a. The bottom of the trenches shall be accurately graded to the depth indicated. Bedding material shall provide uniform bearing and support for each section of the pipe at every point along its entire length. Unauthorized overdepths shall be backfilled with bedding material at the CONTRACTOR’s expense.

3.16 TIME OF OPEN TRENCHES

A. The CONTRACTOR will be required to conduct his work so that trenches will remain open for as minimum of a time as possible.

B. All backfill and compacting shall be completed in all trenching and structural excavations within a maximum distance of 500 feet (153 m) behind the end of newly installed pipe and the maximum distance between the newly installed pipe and the excavator shall be 500 feet. Portion of the pipe may be backfilled earlier as long as joints remain exposed until leak testing and approval to backfill is received. For each work group consisting of trench excavator, a pipelaying crew, and a backfilling and compacting crew, the maximum allowable open ditch at any time will be 600 feet.

C. Certain conditions may necessitate the closing of certain sections of trench prior to daily, weekend or holiday shutdown.

3.17 EQUIPMENT

A. The use of trench digging machinery will be permitted except in places where its operation will cause damage to existing structures or features, in which case hand methods shall be employed.

END OF SECTION 312316

SECTION 312333 - TRENCH BACKFILL

PART 1 GENERAL

1.01 SUMMARY

A. This section consists of handling and storage of materials to be used for fill and backfill; backfill; and final grading.

PART 2 PRODUCTS

2.01 MATERIALS

A. PIPE BEDDING MATERIAL

1. Pipe bedding material will consist of native backfill. Bedding material shall be free from clods, frozen material, or stones larger than 3/4 inch (19 mm) in their maximum dimension.

B. BACKFILL MATERIAL

1. Backfill material will consist of native material excavated from the trench.

PART 3 EXECUTION

3.01 CONSTRUCTION

A. COMMON AND SELECT BACKFILL

1. Trenches may be backfilled once the alignment and jointing of the pipe has been inspected, tested and approved. A final leakage test or pressure test shall be performed after complete backfill has been performed. If any test fails, the CONTRACTOR shall be responsible for work required to correct the defects.

2. A hold point will be conducted by Pantex prior to backfilling the trench.

3. All backfill material shall be free from cinders, ashes, refuse, organic and frozen material, boulders, or other materials that are unsuitable.

4. The CONTRACTOR may be required to mound excess earth over the top of the trench so that a depression will not be formed after the trench settles. If a depression forms the OWNER may require the CONTRACTOR to repair the trench in this area.

3.02 COMPACTION

A. Bedding material under and around the pipe to twelve (12) (300 mm) inches above the top of the pipe shall be distributed by hand in maximum layers of six (6) (150 mm) inches. Pipe joints shall remain open until that section of constructed pipe has been tested.

B. Compaction of pipe bedding shall be in accordance with this specification. The contractor shall follow the procedure in TxDOT designation Tex-114-E to determine the maximum dry density (D_a) and optimum moisture content (W_{opt}). During compaction, the moisture content of the soil shall not exceed the value shown on the moisture-density curve, above optimum, required to achieve 85% dry density for soils. Each lift is subject to testing by the Contractor for density and moisture content, according at a frequency of one sample per lift per 300 feet of trench.

C. Compaction of backfilled material will be performed via wheel rolling or other Pantex approved method. Moisture may be required to achieve acceptable results from backfilling and compaction.

3.03 TESTING

A. Compaction tests of the backfilled material will be required at one test per 12 inch lift every 300 linear feet.

3.04 TRENCH GUARANTEE

A. The CONTRACTOR shall, for a period of one (1) year after completion and final acceptance of the work, repair any trench settlement which may occur and shall make suitable repairs to any other structures which may become damaged as a result of backfill settlement.

END OF SECTION 312333

SECTION 331100 - WATER SERVICES

PART 1 GENERAL

1.01 SUMMARY

A. This section consists of construction of water services, water service piping, tapping the main line, curb stops, and other appurtenances normally used for water supply and distribution systems.

1.02 QUALITY ASSURANCE

A. The CONTRACTOR shall be required to furnish certification by the manufacturer of the pipe to be furnished on this project, certifying that the pipe and fittings comply with applicable specifications. REQUIRED CERTIFICATION SHALL ACCOMPANY EACH DELIVERY OF MATERIAL.

B. All pipe shall be clearly marked with type, class and/or thickness as applicable. Lettering shall be legible and permanent under normal conditions of handling and storage.

C. The CONTRACTOR shall provide the ENGINEER with a complete set of submittals for all materials incorporated into the work. No materials shall be incorporated into the work until the OWNER or ENGINEER has provided written approval within ten (10) calendar days of receipt of the related submittal.

PART 2 PRODUCTS

2.01 MATERIALS

A. All materials furnished and used shall be new and shall be less than two (2) years old since date of manufacture. No used material shall be allowed. All material used in water systems must be NSF approved.

B. Origin of Material - “Suspect material” as used in this clause, means any material or item that is not known to conform to established U.S. Buyer or industry-accepted specifications and national consensus standards.

1. The CONTRACTOR shall not use or provide suspect or counterfeit materials or parts as part of the end item for delivery, including any fasteners (i.e., Grade 5, Grade 8, Grade 8.2, ASTM A325, A449, Metric 8.8, 10.9, 12.9, bolts, studs, cap screws, washers, nuts, etc.), electrical components (circuit breakers, relays, fuses, transformers, etc.), piping components or mechanical piping components (pipe valves, fittings, nipples, flanges, couplings, plugs, spacers, and nozzles, etc.), valves, metal framing (plate fittings, post base, beam clamp channel, spring clips, square washers), wire ripe, lifting materials (shackles, hooks, slings, cables, forklifts, hoists, etc.), welding material (rods, wire, flux, etc.) on any equipment, assemblies, components, or facilities under this contract.

2. Any suspect or counterfeit material provided by the CONTRACTOR to the OWNER will be subject to seizure by the OWNER. The OWNER shall

investigate, analyze and report in writing to the CONTRACTOR the appropriate course of action. The CONTRACTOR shall replace any and all suspect or counterfeit material with genuine parts conforming to the design requirements at no additional charge to OWNER.

3. The CONTRACTOR shall provide documentation that authenticates traceability of the new material being exchanged and other information as may be requested by the OWNER.

4. The CONTRACTOR assumes responsibility and liability for all cost associated with the delivery of suspect or counterfeit material, including, but not limited to, cost for identification, testing, and any corrective actions required for the removal and replacement of the suspect or counterfeit material. The remedies shall apply regardless of whether the warranty period or guaranteed period has ended.

C. PIPE

Pipe used in water main construction shall be in accordance with the following specifications:

1. HIGH DENSITY POLY ETHYLENE (HDPE) PIPE - HDPE pipe for the water main shall be six (6) inch outside diameter (O.D.) pipe with a Side Dimension Ratio (SDR) of 11. At the new equipment pad, the pipe will be reduced down to four (4) inch O.D. HDPE SDR 11 pipe.

2. STEEL PIPE - At the new water supply pipeline terminal, four (4) inch diameter Schedule 40, 150 psi galvanized steel pipe shall be used as shown on the Drawings. A four (4) inch diameter steel tee, vertical straight section of four (4) inch diameter Schedule 40 steel pipe, and four (4) inch diameter flanged fitting with 8 holes will be used. A ten (10) inch diameter Schedule 40 steel protective casing will be installed around the vertical four (4) inch diameter steel pipe and flange to a height of 4 inches above the pad and a depth of 18 inches below the top of the pad.

D. VALVE BOXES

1. Cast iron valve boxes will be installed at the new pipeline terminal and just downstream of the connection of the new pipeline to the existing pipeline as shown on the Drawings. The valve boxes will have Lockout/Tagout bolts and locks at the surface.

2. The terminal end sump will consist of a standard 24-inch diameter by 48-inch high manhole, manhole ring and lid assembly. The sump will be grouted in place with concrete cement. The manhole will require a knockout for the pipe penetration. Pipe penetrations will be sealed with link seal or equivalent material to seal the sump. The floor of the manhole will consist of a poured concrete floor. The vault will have a pre-fabricated 24-inch diameter removable circular steel lid with a thickness of ¾ inch. The vault will contain a pipeline drain with a non-wasting type 1-inch brass curb valve as shown on the Drawings.

E. CURB STOPS AND VALVES

1. The curb stop valve at the new pipeline terminal shall be a four (4) inch diameter ductile iron pipe gate valve, right hand close. A one (1) inch diameter non-wasting brass curb valve will be installed in the terminal end sump. A six (6) inch diameter ductile iron pipe gate valve, right hand close, will also be installed at the new pipeline connection so that either line can be isolated at this point as shown on the Drawings.

F. POLY SHEETING

1. The HDPE pipeline shall be wrapped in black, 10 mil thick, poly sheeting to protect areas where the pipeline will be in direct contact with the poured concrete for thrust blocks.

PART 3 EXECUTION

3.01 CONSTRUCTION

A. GENERAL

1. Pipe shall be installed in accordance with these specifications for installing the type of pipe used. The CONTRACTOR shall provide all tools and equipment including any special tools designed for installing each particular type of pipe used.

2. Pipe shall be of the size or sizes designated in the plans.

3. The water supply for the new pad will be originated from the existing water pipeline at the Z11 equipment pad. The starting point of the new water supply pipeline will be before the valve vault located at the existing Z11 equipment pad. The new pipeline will Y off from the existing pipeline upstream of the existing curb valve. A 6-inch diameter ductile iron gate valve will be installed at that connection so that either line can be isolated at this point.

4. The pipeline termination at the equipment pad will be similar to existing equipment and will consist of a 6-inch to 4-inch HDPE SDR-11 reducing fitting, a flanged transition from HDPE pipe, a sub-grade 4-inch ductile iron pipe gate valve enclosed within a valve box, a 4-inch 150 psi galvanized steel tee, and a pipeline drain sump with a non-wasting type 1-inch brass curb valve. The leg on the 4-inch tee included an above-grade 4-inch diameter 8-hole flanged fitting transitioning to a 4-inch male cam-lock connection (provided by others). The pipeline termination will include a surface completion consisting of a concrete pad and protective bollards.

B. RESPONSIBILITY FOR MATERIAL

1. The CONTRACTOR shall be responsible for all material furnished by him and shall replace at his own expense all such material found defective in manufacture or damaged. This shall include the furnishing of all materials

and labor required for the placement of installed material discovered damaged or defective prior to the final acceptance of the work, or during the guarantee period.

2. The CONTRACTOR shall be responsible for the safe and proper storage of material furnished by him or to him and accepted by him, and intended for the work, until it has been incorporated in the completed project. The interior of all pipe and other accessories shall be kept free from dirt and foreign matter at all times.

C. HANDLING OF PIPE

1. All pipe furnished by the CONTRACTOR shall be delivered and distributed at the site by the CONTRACTOR. Pipe, fittings, specials, valves and accessories shall be loaded and unloaded by lifting with hoists to avoid shock or damage. Under no circumstances shall such materials be dropped. Pipe shall not be skidded or rolled against pipe already on the ground.

D. LAYING OF PIPE

1. Before installation, the pipe and pipe coating shall be inspected for defects. Any damage to pipe coatings shall be repaired as recommended by the pipe manufacturer before laying the pipe. If a satisfactory repair cannot be found, the pipe will be marked and removed from the site.

2. All pipe shall be laid and maintained to the required lines and grades with fittings and valves at the required locations. The trench alignment may be field-modified as required by surface topography or other surface features, within a corridor of no more than +/- 7 feet from alignment of the surveyed coordinates, as specified in the excavation permit and as approved by the PSTR.

3. Trenches for the pipe shall be opened in accordance with the lines and grades given or to the standard depth of cover provided on the plans. The survey staking shall consist of line and grade stakes adequate to keep the pipeline to the plan lines and grade.

4. Wherever obstructions not shown on the plans are encountered, during the progress of the work and interfere to such an extent that an alteration in the plan is required, the OWNER or ENGINEER shall be contacted to change the plans and order a deviation from the line and grade or arrange with the owners of the structures for the removal, relocation, and reconstruction of the obstructions.

5. All pipe, fittings, and valves shall be carefully lowered into the trench using appropriate equipment and in such a manner as to prevent damage to pipe materials and protective coatings and linings. Under no circumstances shall materials be dropped or dumped into the trench.

6. Every precaution shall be taken to prevent foreign material from entering the pipe while it is being placed. During laying operations, no debris, tools, clothing or other materials shall be placed in the pipe. At times when pipe

laying is not in progress, the open ends of the pipe shall be covered using a means acceptable to the Engineer, Project Manager, or PSTR.

7. Long radius curves, either horizontal or vertical, may be laid with standard pipe by gradual deflections. If the pipe is shown curved on the plans and no special fittings are shown, CONTRACTOR can assume that the curves can be made by deflection with standard lengths of pipe. If shorter lengths are required, the plan will indicate maximum lengths that can be used.

8. The cutting of pipe for inserting valves, fittings or closure pieces shall be done in a neat and competent manner without damage to the pipe or coating and so as to leave a smooth end at right angles to the axis of the pipe. The CONTRACTOR shall be responsible for collection of pipe cuttings and appropriate house-keeping.

9. The HDPE pipeline will be butt fused together using manufacturer's recommended procedure for butt fusion welding. The pipeline can be constructed in sections and then lowered into the trench.

10. Trace wire will be required in the open trench following pipe installation. Outdoor-rated junction boxes housing locating connections (banana plugs) attached to line marker posts will be required above grade along the pipeline. These will be required at 500-foot intervals along the entire pipeline route, at the 90 degree bend, and at the terminus of the water line.

11. DEWATERING

    a. No dewatering of excavations is anticipated.

3.02 THRUST BLOCKS

A. Cast in place concrete thrust blocks shall be installed at each 90/45 degree bend in the pipeline and at direction fittings. The concrete thrust blocks shall be formed using plywood or other suitable material, but may be constructed to an approximate overall shape, as indicated on the Drawings. The HDPE pipeline shall be wrapped in poly sheeting to protect areas where the pipeline will be in direct contact with the poured concrete. The soil bearing surface of the thrust block shall consist of compact native soils and any loose soils or debris shall be removed.

Thrust blocks shall be required;

- At each valve location, the thrust block shall be constructed as shown on the Drawings, with a minimum bearing surface area of 6 square feet, corresponding to a span width of 36 inches and a minimum height of 24 inches.
- At the upward 4-inch tee fitting at the pipeline terminus the thrust block shall be restrained with a thrust block consisting of concrete poured between the tee fitting and the 24-inch sump for a height of 36-inches and to the width of the 24-inch sump.
- At the new Y in the water line with dimensions of 3.9 feet wide by 3 feet high by 1 foot thick.

3.03 PIPE JOINTING

A. WATER MAIN

1. The HDPE pipeline will be butt fused together according to manufacturer's recommended procedures for butt fusion welding, and in accordance with ASTM F-2620.

3.04 LEAK TESTING

A. MAIN WATER LINE

1. Leak tests will be conducted a minimum of every 500 feet along the pipeline during construction. A final leak test will be conducted after complete construction and backfilling of the pipeline, including the terminal at the equipment pad. This final pressure test will ensure the integrity of the completed pipeline. The design will include QA/QC for pipe installation and hold points for leak testing milestones. The OWNER or ENGINEER will be required to observe these "hold points." American Society for Testing and Materials (ASTM) D2164 will be referenced as a guide for the final approved hydrostatic leak test procedure. All piping will be pressure tested to 90 psi for greater than 60 minutes.

END OF SECTION 331100

SECTION 334000 - STORM DRAINS AND CULVERTS

PART 1 GENERAL

1.1 SUMMARY

This section consists of construction of drainage culverts and storm drains, including manholes, inlets and other appurtenant structures. The design will incorporate drainage considerations such as a culvert where the new access road meets the existing paved road and a culvert where the constructed road enters the new equipment pad.

1.2 REFERENCES

Where reference is made to an ASTM, ANSI or AASHTO designation, it shall be the latest revision at the time of call for Bids, except as noted on the Drawings or in the Special Provisions.

1.3 QUALITY ASSURANCE

A. CERTIFICATION BY MANUFACTURER

1. CONTRACTOR shall furnish certification by the manufacturer of the pipe to be furnished on this project, certifying that the pipe complies with the applicable specifications. Required certification shall accompany each delivery of material.

2. All pipe shall be clearly marked with type, class and or, thickness as applicable. Lettering shall be legible and permanent under normal conditions of handling and storage

3. Type of joint, class, thickness designation, casting, lining, marking, testing, etc., shall be specified.

PART 2 PRODUCTS

2.1 MATERIALS

A. All storm drain and culvert piping shall be as called out in the Contract Documents and shall be in accordance with materials and testing as specified in this section. Pipe sizes shall be as shown on the Drawings.

B. CORRUGATED STEEL PIPE

1. Corrugated steel pipe and coupling bands for culverts shall meet the requirements of AASHTO M-36 for the specified sectional dimensions. All pipe shall also have metal pipe ends that are flared for gathering. The culvert located at the intersection of the two track road and the main paved road shall consist of two zinc coated (galvanized) corrugated steel pipe that are buried next to each other and shall be constructed of 16 gauge or thicker, 8 inch diameter pipe, rated for H20 live load, with a minimum of 4 inches of cover material. There is also a culvert located at the low area between the two-track road and the equipment pad.

This culvert material shall be similar to the other culver however; it shall be 12 inches in diameter with a minimum of 12 inches of cover.

PART 3 EXECUTION

3.1 PIPE INSTALLATION

A. RESPONSIBILITY FOR MATERIAL

1. CONTRACTOR shall be responsible for all material furnished by him and shall replace at his own expense all such material found defective in manufacture or damaged in handling after delivery by the manufacturer. This shall include furnishing all material and labor required for the replacement of installed material discovered defective prior to final acceptance of the work or during the guarantee period.

2. CONTRACTOR shall be responsible for the safe storage of material intended for the work until it has been incorporated in the completed project.

3. Reflective safety posts/road delineators will be required to be placed at the road entrance and at culvert crossings.

4. There is also an existing culvert located under the two-track road associated with the ditch to the west of the equipment pad location that the contractor will be required to maintain. If this culvert is damaged during construction of the road the contractor will be required to replace the culvert. The contractor is also required to excavate and clean out the ends of the existing culvert to ensure that there are no obstructions to this culvert upon completion of road construction.

B. HANDLING OF PIPE

1. All pipe furnished by CONTRACTOR shall be delivered and distributed at the site by CONTRACTOR. Pipe, fittings and accessories shall be loaded and unloaded by lifting with hoists or skidding so as to avoid shock or damage. Under no circumstances shall materials be dropped. Pipe shall not be skidded or rolled against pipe already on the ground.

2. In distributing the material at the site of the work, each piece shall be unloaded opposite or near the place where it is to be laid in the trench. The interior of all pipe and other accessories shall be kept free from dirt and foreign matter at all times.

3. Pipe shall be handled so that no coating or lining will be damaged. If, however, any part of the coating or lining is damaged, the repair shall be made by CONTRACTOR at his expense in a manner satisfactory to ENGINEER.

C. LAYING PIPE

1. All pipe shall be laid and maintained to the required lines and grades with fittings.

2. Sub base where culverts are to be placed shall be excavated and hand tamped to form a haunch for the pipe.

3. Proper tools and equipment satisfactory to ENGINEER shall be used by CONTRACTOR for the safe and convenient prosecution of the work. All pipe and fittings shall be carefully lowered into place in such a manner as to prevent damage to pipe materials and protective coatings and linings.

4. Every precaution shall be taken to prevent foreign material from entering the pipe while it is being installed. At times when pipe laying is not in progress, the open ends of pipe shall be closed by a plug or other means approved by ENGINEER. CONTRACTOR shall clean and remove all sand, gravel, concrete and cement grout that has entered the lines in the process of construction.

5. The bottom of trench shall be shaped to fit the bottom quadrant of the pipe, with holes for joints just large enough to permit assembly.

6. Storm culverts will be backfilled and compacted with caliche road material consisting of a Type A or B, Grade 2 material such as 1 ¾ inch minus crushed caliche base as specified in Section 311000, and compacted in accordance with Section 311000. Material placed and compacted next to culverts shall be performed in uniform lifts on both sides of the culvert pipe.

D. TOLERANCES

Storm culverts will be installed at the locations shown on the Drawings or as determined in the field by the OWNER or ENGINEER.

3.2 INLETS AND CATCH BASINS

Reserved.

3.3 TESTING

A. LIGHT TEST

After the trench has been backfilled, a light test shall be made between pipe end to check alignment and grade for displacement of pipe. Except for curved alignments shown on the plans, the completed pipeline shall be such that a true circle of light can be seen from one pipe end to the next. If alignment or grade is other than specified and displacement of pipe is found, CONTRACTOR shall remedy such defects at his own expense.

B. LEAKAGE TEST

Unless specified in the Special Provisions, a leakage test will not be required. However, this does not preclude the fact that obvious and concentrated leaks (such as open joints, pinched gaskets, cracked barrels or bells, etc.) will not be allowed.

END OF SECTION 334000

WELL FIELD MAINTENANCE REPORT – ZONE 11 ISB SYSTEM

***IN-SITU* BIOREMEDIATION OPERATIONS AND MAINTENANCE**

PANTEX PLANT, AMARILLO, TEXAS

B&W PANTEX PURCHASE ORDER NO. 5293

September 12, 2014

Project #: 18A-006-003

SUBMITTED BY: Trihydro Corporation

1252 Commerce Drive, Laramie, WY 82070

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List of Acronyms

AqSol	Aquifer Solutions, Inc.
b	Saturated thickness
cfm	Cubic Feet per Minute
COPC	Constituent Of Potential Concern
CSM	Conceptual Site Model
F	Fahrenheit
ft	Feet or foot
ft^2/day	Feet squared per day
gpm	Gallons per minute
ISB	*In-Situ* Bioremediation
HDPE	High density polyethylene
K	Hydraulic Conductivity
O&M	Operation and Maintenance
Pantex	B&W Pantex, LLC
PE	Polyethylene
psi	Pounds per square inch
S	Coefficient of Storage
SEISB	Southeast ISB
SEPTS	Southeast Pump & Treat System
T	Transmissivity
Trihydro	Trihydro Corporation
Z11ISB	Zone 11 ISB

EXECUTIVE SUMMARY

This report documents the methods and results of well testing and maintenance activities performed at the Zone 11 *In-Situ* Bioremediation (Z11ISB) System from March to May 2014. These activities were performed on behalf of B&W Pantex LLC (Pantex) as a component of Trihydro Corporation's (Trihydro) *In-Situ* Bioremediation (ISB) Operations and Maintenance (O&M) work, under Purchase Order #5293. Consolidated Nuclear Systems, LLC (CNS) assumed responsibility for management and operations at Pantex on July 1, 2014, and Trihydro completed work after this time on CNS's behalf. Well hydraulic testing and maintenance activities were performed to assess whether injection wells had been impacted by biofouling and to minimize impacts to wells through periodic maintenance consisting of the application of Welgicide chemical, physical agitation, and fluids removal.

Well hydraulic testing consisted of constant-rate injection testing from which transmissivity (T) values were calculated. Pre- and post-well maintenance constant-rate injection testing was performed at 31 injection wells during the 2014 event. Hydraulic testing was not performed at well PTX06-ISB082, as this well is being removed as an injection well.

Well maintenance involved the addition of a caustic chemical cleaner to assist with breaking down residual organic material, termed biofouling. Additionally, a custom-fabricated assembly that includes an integrated surge block and brush in combination with an airlift tool was used to remove the caustic chemical cleaner, fluids, and particulates from the wells.

The following conclusions were drawn from the 2014 well maintenance event at the Z11ISB:

1. Well maintenance activities were completed at 32 injection well locations. Three metrics were used to assess the completion of well maintenance activities: 1) the volume of fluids removed by airlift from the well relative to that added during chemical cleaner addition; 2) the return of pH to near neutral; and 3) field observations such as color, odor, and turbidity.
2. Hydraulic testing to calculate transmissivity (T) before and after well maintenance yielded slightly higher values on average, indicating that the well maintenance program increased the T in the vicinity of the injection well. Increases in T were greatest in the wells with the lowest pre-maintenance T, indicating that the maintenance program was successful in mitigating biofouling impacts at these locations.

Trihydro generated a lessons learned during the course of this work. This included:

1. Label the chain on the hopper with high visibility tape to remind the operator to connect it to the skid steer before dumping the purge water into the roll off waste container.

1.0 INTRODUCTION

O&M activities are conducted by Trihydro at two existing ISB treatment systems (**Figure 1**) and include two major components: well maintenance and amendment injection. Well maintenance includes the inspection and maintenance of the injection wells associated with the ISB treatment systems. The primary goal of well maintenance is to maintain injection well performance and mitigate the effects of biofouling so that the wells are suitable for injection of bioremediation amendment. Well maintenance is intended to serve primarily as a preventative measure. However, well maintenance activities could also perform a rehabilitation function. This report documents the injection well inspection and maintenance activities performed at the Z11ISB System in March to May 2014.

1.1 PROJECT BACKGROUND

The Z11ISB System consists of 34 injection wells (**Figure 2**), which are used for injection of bioremediation amendment on a periodic basis. The original Z11ISB System consisted of 23 wells that were installed in early 2009 (PTX06-ISB055 through PTX06-ISB077). These wells were supplemented by 9 additional or expansion wells in late 2009 (PTX06-ISB078 through PTX06-ISB086). Two wells originally installed for an aquifer pump test were converted to ISB injection wells in 2014 (PTX06-ISB087 and PTX06-ISB088). Eleven of these injection wells are referred to as "sampled injection wells" in that they are sampled by Pantex personnel for the purpose of evaluating the bioremediation effectiveness.

Bioremediation amendment consists primarily of emulsified soybean oil and lactate with lesser amounts of surfactants and buffering agents. Soybean oil serves as a carbon donor that stimulates anaerobic microorganisms that in turn degrade constituents of potential concern (COPCs) in groundwater (Aquifer Solutions, Inc. [AqSol] 2009a). The first injection event for the original 23 wells at the Z11ISB System was completed in early 2009 (AqSol 2009b). In late 2009, the initial injection into the 9 additional wells was completed (AqSol 2009c). A second injection event was completed in 2010 (AqSol 2010a), a third injection event in late summer of 2011 (Trihydro 2011a), a fourth in late summer of 2012 (Trihydro 2012a), and a fifth in summer of 2013 (Trihydro 2013a). Well maintenance activities were performed prior to the 2010, 2011, 2012, and 2013 injection events. Maintenance was preformed again prior to the 2014 injection event, and this maintenance event is discussed in this report.

As a result of the ISB process, the injection wells can become impacted by a general process termed biofouling. Biofouling may consist of the growth of a microbial mat on the wells screen, clogging due to residual amendment that is only partially consumed, or some combination of the two. Biofouling impacts such as reduced flow rates and residues in purge water have been observed at some Southeast ISB (SEISB) and Z11ISB injection wells by Pantex

personnel during environmental sampling activities. Biofouling is a concern because it can potentially result in decreased connectivity between the injection well and the surrounding perched groundwater unit as well as decreased amendment injection rates during future injection events.

The purpose of the well maintenance work reported herein was to: 1) assess the degree to which biofouling had impacted injection wells; 2) to take measures to maintain well performance and mitigate adverse impacts to well performance; and 3) to assess the extent to which maintenance efforts were effective in maintaining wells at a condition that facilitates amendment injection.

The activities performed during the well maintenance process included:

- Pre-maintenance hydraulic testing to quantify the transmissivity (T) of the formation immediately surrounding injection wells before any well maintenance was performed.
- Submittal of hydraulic testing data and approval by Pantex for further maintenance to occur.
- With the exception of the two wells previously used for pump testing, PTX06-ISB087 and PTX06-ISB088, well maintenance at each of the other 31 injection wells included chemical cleaner application followed by physical development.
- Post-maintenance confirmation hydraulic testing and approval by Pantex for injection activities to take place.
- Reporting of results.

The work documented in this report is one part of a project that has spanned multiple years. The following documents provide additional information related to the project:

- Work Plan for *In-Situ* Bioremediation Systems, Operations and Maintenance, March 26, 2014 (Trihydro 2014a).
- Post Injection Report: Zone 11 ISB System, November (Trihydro 2013a).
- Well Maintenance Report: Zone 11 ISB System, November (Trihydro 2013b).
- Work Plan for *In-Situ* Bioremediation Systems, Operations and Maintenance, January 27, 2012 (Trihydro 2012b).
- Post Injection Report: Zone 11 ISB System, December (Trihydro 2012a).
- Pantex *In-Situ* Bioremediation Operation & Monitoring, 2010 Annual Monitoring Report (AqSol 2011).
- Post Injection Report: Zone 11 ISB System, November (Trihydro 2011a).
- Well Maintenance Report: Zone 11 ISB System, November (Trihydro 2011b).

- Post Injection Report: Zone 11 System, December 7, 2010 (AqSol 2010a).
- Well Maintenance Report: Zone 11 In-Situ Bioremediation System, December 20, 2010 (AqSol 2010b).
- Statement of Work for *In-Situ* Bioremediation System Operation and Maintenance for the Southeast and Zone 11 ISB Systems, August 2009 (Pantex 2009).
- Operations and Maintenance Plan: *In-Situ* Bioremediation Corrective Measures Design Zone 11 South, April 20, 2009 (AqSol 2009a).
- Implementation Report: *In-Situ* Bioremediation System Corrective Measures Construction Zone 11 South, September 1, 2009 (AqSol 2009b).
- Design Basis Document: *In-Situ* Bioremediation System Corrective Measures Design Zone 11 South, November 18, 2008 (AqSol 2008).

1.2 PROJECT SCHEDULE

The sequence of events including specific milestones with which testing and maintenance was performed are presented by injection well in **Table 1**. Field maintenance activities at Zone 11 began on March 18, 2014 and were completed May 5, 2014. Trihydro and Pantex coordinated work schedules to accommodate obtaining quarterly groundwater samples from sampled injection wells prior to maintenance.

2.0 METHODS

This section discusses the methods used during injection well inspection and maintenance. Well inspection consisted of measuring the depth to groundwater and noting any apparent physical damage to the wells at the ground surface. Well hydraulic testing consisted of constant-rate injection testing and evaluation of steady-state amendment monitoring data. Well maintenance consisted of adding a caustic well cleaner, surging/brushing the well screens, and removal of fluids/biofouling debris by airlift. Each activity is discussed below.

2.1 WELL HYDRAULIC TESTING METHODS

Constant-rate injection testing was used as the hydraulic testing method during this well maintenance event. Constant-rate injection analysis is similar to analysis of a pump test: water is injected and the water level in the well is logged with a pressure transducer over time.

2.1.1 INJECTION TESTING AND ANALYSIS METHOD

Constant-rate injection testing consisted of adding approximately 50 to 200 gallons of water at a known flow rate(s) and monitoring the resulting response fluid level in the injection well. Data collection consisted of monitoring the head in the injection well over time with a LevelTroll pressure transducer. The source of water was from the Southeast Pump & Treat System (SEPTS).

Data was analyzed using a pump test analysis module in AQTESOLV 4.50 Pro. A confined solution was used to allow for drawdown amounts that may be greater than the formation saturated thickness, which is a condition that can occur during injection of fluids. In addition, a confined solution is consistent with a conceptual model of injection in which flow is essentially horizontal away from the injection well. Mounding of 2 to 17 (feet) ft was observed at nearby monitoring locations during amendment injection in the ISB Pilot Study (AqSol 2006). Minimal mounding in the formation supports a conceptual model of injection into the perched groundwater unit consisting of flow that is primarily horizontal, thus supporting the applicability of a confined solution in this setting. The Papadopulos-Cooper solution was used for the AQTESOLV analysis. This solution models T and storativity in a confined aquifer as a function of aquifer hydraulics, pumping rate(s), and time. The Papadopulos-Cooper solution was selected because it produced good fits between the raw data and type curves for the first few tests that were analyzed using multiple confined solutions. The following specific parameters were used to fit the injection monitoring data to the type curve.

- T, (in units of feet squared per day [ft^2/day]) is a hydraulic parameter that is a function of a formation's ability to transmit water, and is equal to the hydraulic conductivity (K) times the formation saturated thickness (Fetter 1994). T was used as a fitting parameter in the data analysis process in AQTESOLV.

- Coefficient of Storage (S, dimensionless) is ratio of the amount of water taken (or removed) from aquifer storage per unit of area per unit drawdown. In confined formations, S is a function of both the elasticity of the fluid being removed and of the formation itself (Fetter 1994). S was used as a fitting parameter in the data analysis.
- Anisotropy Ratio ($K_{vertical}$ / $K_{horizontal}$, dimensionless) is a measure of the degree to which fluids will flow preferentially in the horizontal direction relative to the vertical direction. This value was assumed to be 0.1 because anisotropic flow is reasonable in the stratified unconsolidated deposits present in the perched groundwater unit.
- Saturated thickness (b, in units of ft) was set equal to the perched groundwater unit saturated thickness measured at that well. Wells with screened lengths exceeding the formation saturated thickness were entered in AQTESOLV as being fully penetrating wells.

AQTESOLV's automated curve fitting program was used to calculate the aquifer parameters T and S by repeatedly modifying these parameters until the type curve fits the actual data to the extent possible.

2.2 WELL MAINTENANCE METHODS

This section presents the methods used during well maintenance, which consisted of addition of a treatment reagent and subsequent removal of the fluids. In past maintenance activities at the Z11ISB System, "acid maintenance" (Dry Acid Special) and "chemical maintenance" (ethyl lactate and/or catalyzed hydrogen peroxide) have been used (Trihydro 2011b). While the treatment reagent applied at Z11ISB in 2014 is a chemical, the term chemical is not used in this report to avoid confusion with the past use of ethyl lactate and/or catalyzed hydrogen peroxide. During the maintenance event discussed in this report, the following two general mechanisms were used:

- Addition of a solution of Welgicide Cleaner (Cotey Chemical Corporation) mixed in water, which was used to chemically dissolve and remove mineral scale and/or biomass on the well screen and in the filter pack.
- Surging/brushing and airlifting, which was used to physically remove particles, residues, and Welgicide solution.

Welgicide Cleaner is a powder consisting primarily of sodium hydroxide (a strong base) with lesser amounts of sodium metasilicate and tetrasodium pyrophosphate. This material was received and stored in 5-gallon buckets. The appropriate quantity of Welgicide Cleaner was weighed using a scale and added to water obtained from the SEPTS. These were mixed in a graduated 55-gallon drum using one-quarter pound of Welgicide Cleaner to one gallon of water, following the manufacturer's recommendation. The volume of chemical reagent added to each well equaled approximately half gallon of solution per foot of saturated thickness. For example, for a well with a 20 ft saturated thickness, 10 gallons of solution consisting of 2.5 pounds of Welgicide Cleaner and the balance water was used for the

dose. This volume was intended to equal the volume of perched groundwater inside the saturated well screen and filter pack, and was noted on maintenance field forms. Data from field forms are presented in the figures and tables of this report. Scanned copies of field forms will be submitted to Pantex during project close-out.

Immediately following mixing of granular Welgicide and makeup water, the temperature of the solution was measured and recorded due to the potential for exothermic reactions to occur during Welgicide dissolution. Temperatures were also measured and recorded after mixing to ensure that the temperature does not exceed 100°Fahrenheit (F). Only after these measurements were made was the Welgicide solution added to wells. The highest recorded temperature of Welgicide solution during mixing was 72°Fahrenheit (F), and temperature readings were always below the 100°F threshold (Trihydro 2012c).

Welgicide solution was delivered through a chemical-resistant hand pump placed inside the drum. The pump discharge was attached to a ½ in. diameter polyethylene (PE) tube. This tube extended to the bottom of the well, with three PE discs attached near the bottom of the assembly that served to mix the solution in the water column. Approximately half of the total volume was delivered to the lower half of the well screen and the remaining half into the upper portion. After the required amount of Welgicide solution was delivered, the pump was removed from the drum and inserted into a 5-gallon bucket of water and the water siphoned down the well to rinse the tubing. The final step was to surge or mix the Welgicide solution by raising the tube up and down the water column for several minutes following delivery. The well was allowed to rest for at least one day in order to allow the Welgicide solution to react with the biological growth and/or mineral scale before airlift removal commenced.

Physical maintenance activities included two processes: use of a standard surge block attached to the wire line of the pump rig; and use of a custom-fabricated airlift assembly that included an integrated surge block and brush. The standard surge block was used to vigorously surge the well for approximately 30 minutes following the one-day reaction period described above. After the initial surge was completed, the airlift assembly was lowered to the bottom of the well. The airlift assembly was comprised of surge blocks on the top and bottom of the tool with a nylon brush in between. Compressed air was delivered to the tool at a pressure of 50-90 pounds per square inch (psi) using one of two available 210 cubic feet per minute (cfm) compressors. Groundwater was forced to the surface through a separate eductor pipe and contained in 200-gallon hoppers. Color, pH, turbidity, and olfactory observations of the discharge water were noted on field forms and in field logbooks. An airlift assembly was used to remove water in lieu of a bailer to reduce the risk of damage to injection wells.

3.0 RESULTS

This section presents results of well maintenance activities, and is divided into two subsections: the first presents results of well testing activities and the second subsection presents the well maintenance activities performed.

3.1 WELL TESTING RESULTS

This section presents the results of well testing, including pre-and post-maintenance constant-rate injection testing. Further discussion of these data along with historical data is provided in **Section 4.0**.

3.1.1 DEPTH TO WATER AND SATURATED THICKNESS

Depth to water was gauged in each well prior to hydraulic testing. These data and the resulting saturated thickness are presented on **Table 2**. Depth to water data from historical events are also shown on **Table 2** to provide additional context.

Saturated thickness values, calculated from depth to water measurements and fine-grained zone elevations, were generally similar before and after well maintenance (**Table 2**). The small magnitude of changes in depth to water (one foot or less) following well maintenance suggests that the wells were generally in good hydraulic communication with the surrounding perched groundwater both before and after maintenance. An exception was at well PTX06-ISB060A, where the apparent saturated thickness increased by 5.3 ft after well maintenance. The pre-maintenance value is generally consistent with previous data at this injection well location (**Table 2**), 20 gallons of water was added at PTX06-ISB060A during well maintenance. However, a greater volume of fluids was removed. Another exception was at well PTX06-ISB072 where the calculated saturated thickness was observed to have decreased by 7 ft following well maintenance. Because the pre-maintenance value is consistent with previous data, the post-maintenance value is assumed to be anomalous. This anomalous value is attributed to very slow recharge at this well location during the six-day period between the end of maintenance and collection of the post-maintenance depth to water.

3.1.2 CONSTANT-RATE INJECTION TESTING RESULTS

Pre- and post-maintenance constant-rate injection testing results are presented on **Table 3**. Injection testing is being used instead of slug testing as a means of applying a greater amount of head, and thereby performing a test that is potentially more representative of amendment injection. This was the fourth application of this type of hydraulic testing at the Z11ISB System, thus no direct comparisons to historical slug test data are possible. **Table 3** includes the calculated T, specific capacity (flow rate divided by displacement), maximum displacement, and maximum flow rate during the injection test for pre-and post-maintenance tests.

T values ranged from 0.083 to 143 ft^2/day in the pre-maintenance results, with an average of 29 ft^2/day and a median of 19 ft^2/day. The value of 143 ft^2/day was from PTX06-ISB066, which was installed before the 2013 injection event. The maximum pre-maintenance T among wells that had previously received more than one bioamendment injection was 91 ft^2/day. The post-maintenance T results ranged from 0.035 to 132 ft^2/day with an average of 35ft^2/day and a median of 28ft^2/day. AQTESOLV calculations of pre-and post-maintenance T values and the associated response curves are included as **Appendix A**.

Calculated T values were greater after maintenance relative to before maintenance at 21 of the 32 locations (note that pre and post hydraulic testing was not performed at PTX06-ISB075(new) or PTX06-ISB082). This is an increase from the 2013 maintenance event in which 17 of 31 locations showed improvement. Most of the well locations increased as a result of well maintenance, or were within 20% of the initial value, which is considered similar to the pre-maintenance value.

Increases in T were greatest at well locations that had relatively lower pre-maintenance values of T. For the 10 wells with a pre-maintenance value of T of less than 10 ft^2/day, the average increase in T was 350%. For the 21 wells with a pre-maintenance value of T of greater than 10 ft^2/day, the average change in T was 22%, which is considered no change on average. This suggests that wells with relatively lower pre-maintenance T may have been impacted by biofouling, and were successfully mitigated by the well maintenance program. For the other wells, the wells may have not have been impacted by fouling. However, well maintenance at these locations likely provided a benefit from a preventive purpose.

Injection testing at PTX06-ISB081 produced anomalous data during both the pre- and post-maintenance constant-rate injection testing. Pre- and post-maintenance test data are shown in **Figure 3**. The portions of the data that are considered anomalous is the decrease in displacement observed after approximately five minutes of injection, and the area of recovery where displacement increased around the 19th minute. The injection rate was constant for the initial portion of the test, then injection was stopped after 9 minutes, which is the same procedure followed during injection testing performed at other wells. The result observed at other locations was an increase in displacement during the period of injection, i.e. the curves sloped upward until injection stopped (**Appendix A**).

Hydraulic testing at PTX06-ISB081 was repeated in the field during both the pre- and post-maintenance hydraulic testing phases, and anomalous data similar to that in **Figure 3** were produced each time. This behavior is not attributed to the pressure transducer or the test implementation because: 1) the result was reproduced during repeated testing at this location; and 2) the tests were conducted using the same methods and instrumentation as the other constant-rate injection tests.

3.2 WELL MAINTENANCE RESULTS

This section presents the results of well maintenance activities that were performed at 32 of the 33 injection wells in the Z11ISB System. PTX06-ISB075(new) is a replacement well that is currently being used for monitoring, and not amendment injection, and therefore did not require maintenance. PTX06-ISB087 and PTX06-ISB088 had not yet been used for amendment injection when well maintenance was performed, so no maintenance was performed at these locations. Results include the means and methods used for well maintenance at each injection well (**Section 3.2.1**) and observations recorded during the well maintenance process (**Section 3.2.2**).

3.2.1 WELL MAINTENANCE PERFORMED

The details of well maintenance performed at each well location are shown in **Table 4**, including the following information: saturated thickness, initial surge duration, amount of water added, amount of Welgicide solution added, cumulative surge duration, volume removed, and final pH of the purge water.

Maintenance using Welgicide was performed at 32 well locations (**Table 4**). The volume of Welgicide solution added ranged from 6 to 14 gallons and was based upon the saturated thickness at each well location. Additionally, due to low recharge at 3 of the wells (PTX06-ISB060A, PTX06-ISB074 and PTX06-ISB082), between 10 and 20 gallons of water were added during the brushing and surging process as indicated on **Table 4**. The volume of fluids removed by airlift ranged from 25 to 100 gallons. The volume of fluids removed was greater than the volume of Welgicide solution added to the well at each of the 32 wells at which maintenance was performed. pH of purge water was 12 or greater shortly after addition of Welgicide and the start of surging and air lift. The pH at the end of well maintenance activities was 8 or lower at 31 of the wells that were maintained, except for PTX06-ISB082 which had a final pH of 9 (**Table 4**). Other maintenance parameters (volume purged, cumulative surge duration etc.) were similar at PTX06-ISB082 relative to other wells. Also note that due to the logarithmic nature of the pH scale, a reduction of pH from 13 to 9 is by definition a reduction in the hydroxide concentration (i.e., “basicity”) of four orders of magnitude.

Three metrics used to define the endpoint of maintenance activities were removal of a volume of fluids greater than the volume of Welgicide solution added, return of pH to near neutral, and visual / olfactory observations (Trihydro 2012b). At each of the 32 locations maintained, the volume of fluids removed was greater than that added, and the pH returned to near neutral.

3.2.2 OBSERVATIONS FROM WELL MAINTENANCE

This section discusses visual observations and process monitoring data that are relevant to maintenance activities, including field observations (**Section 3.2.2.1**).

3.2.2.1 FIELD OBSERVATIONS

Field forms were used to document data collected during well maintenance, with the relevant data summarized in the preceding section. Additional observations reported by field personnel are presented in this section.

Groundwater, reagents, and fine-grained sediments were removed from the wells using an airlift procedure. The volume of groundwater removed at each well was generally similar to the volume removed in 2012 and 2013.

Purge water characteristics from most wells exhibited many similarities throughout chemical well maintenance activities. These characteristics included initial high turbidity levels followed by lower turbidity levels at the end of maintenance; an odor (interpreted as a strong reducing odor) that typically diminished over time; and the presence of a semi-solid layer of foam on the hopper surface. In most cases this foam was observed to have grey to brown color, although some wells were nearly white in color. Very fine-grained sand was noted in many of the well discharges.

Although many variations in color, odor, turbidity, etc. were observed throughout maintenance, the wells generally demonstrated a trend towards lighter color, less odor, and decreasing turbidity, providing an additional line of evidence that the well maintenance program was successful.

4.0 DISCUSSION OF RESULTS

This section discusses and synthesizes the results of the constant-rate injection tests results before and after well maintenance. The purpose of pre- and post-maintenance constant rate injection testing was to evaluate the general degree of biofouling and/or if an improvement was noted immediately after maintenance, based upon results presented in **Section 3.1.2**.

On average, the value of T calculated from injection testing results increased as a result of well maintenance. Several summary statistics showing this increase are listed below.

- The median value of T increased from 19 to 27 ft^2/day from pre- to post-maintenance.
- The 25th percentile value of T increased from 5.2 to 11 ft^2/day pre- and post-maintenance.
- The 75th percentile value of T increased from 44 to 52 ft^2/day pre- and post-maintenance.
- Of the 31 wells at which pre- and post-maintenance constant-rate injection tests were performed, 21 had a greater value of T post-maintenance and 10 had a lower value of T post-maintenance.

When considering the lower half of the dataset with respect to pre-maintenance T (the 10 wells with pre-maintenance values of T less than 10 ft^2/day), the average increase in T as a result of maintenance was approximately 350%. In contrast, the upper half of the dataset with respect to pre-maintenance T showed a 22% change in T on average. This suggests that for wells with relatively lower pre-maintenance values of T, the well maintenance program was successful in mitigating biofouling impacts. Additionally, the data from wells with relatively higher pre-maintenance values of T could be interpreted to suggest that these wells had not been adversely impacted by biofouling. However, the well maintenance program likely provided benefit at these locations from a biofouling prevention perspective.

5.0 WASTE MANAGEMENT

Liquid and solid wastes were managed according to specifications in the Waste Management Plan (Work Plan Appendix B [Trihydro 2012b]).

Liquid Wastes included fluids generated during well maintenance, i.e. perched groundwater with residual well maintenance chemicals (Welgicide). These wastes were contained and stored in Pantex-provided roll-off containers while on site. **Appendix B** includes a copy of the waste collection tracking forms (form PX-2844). Liquid wastes were disposed by the Pantex Waste Operations Department.

Solid Wastes were limited to packaging materials such as empty well maintenance chemical containers and spent high density polyethylene (HDPE) tubing. These wastes were cleaned to a non-hazardous residual and recycled for future use (empty containers) or cut up and disposed of as class-2 non-hazardous waste according to the Waste Management Plan.

6.0 LESSONS LEARNED

This section presents lessons learned associated with various aspects of well maintenance work including those related to use of an airlift assembly for well maintenance, Welgicide application, and health and safety issues. Each is discussed in the sections that follow. The lessons learned during well maintenance activities were minimal due to optimization of the systems and procedures.

6.1 CHAIN ON THE WASTE HOPPER

The Trihydro SSO noticed that the chain that holds the waste hopper on the forklift was not connected. The SSO issued stop work authority and had the chain attached to the forklift. The SSO discussed this with the Trihydro PM and it was decided that this activity would be modified to remind the forklift driver to check the chain prior to dumping the material in the Pantex provided waste bin. High visibility tape was placed on the hopper to remind the operator to secure the chain before proceeding.

7.0 CONCLUSIONS AND RECOMMENDATIONS

This section presents conclusions from the work performed and the data that were analyzed as part of this work. This includes visual observations, hydraulic testing data, and well performance during injection. Recommendations for future well maintenance events are presented based on these data and analysis.

7.1 VISUAL OBSERVATIONS

Visual observations during well maintenance activities indicated that surging/airlift removed both liquids (i.e. groundwater and treatment reagents) and some entrained solids. The semi-solid and solid residues are the intended target of well maintenance activities, because these could reduce injection well performance if they were allowed to accumulate over time. Visual evidence that well purge fluids were initially turbid and more clear as maintenance progressed indicates that the maintenance program was successful at removing residues from the wells.

7.2 COMPARISON OF PRE- AND POST-MAINTENANCE INJECTION TESTING RESULTS

Values of T were slightly higher at most well locations when comparing pre-maintenance and post-maintenance constant-rate injection testing results. Increases in T were much greater in wells that had a relatively lower pre-maintenance value of T, which suggests that the well maintenance program was successful in mitigating impacts of biofouling at these locations. At locations with relatively higher pre-maintenance T, injection testing T values did not increase as drastically as a result of well maintenance. This suggests that well maintenance has generally been successful in its role as a preventive program.

7.3 EVALUATION OF WELL MAINTENANCE REAGENTS

Use of Welgicide Cleaner solution as the treatment reagent resulted in a more streamlined well maintenance program relative to acid and previous “chemical” maintenance programs. Visual observations indicated that use of this cleaner resulted in removal of amounts of residue that were greater than that observed with other reagents that have been applied in the past. Specifically, there was a relatively greater amount of foam observed in the fluids removed with use of Welgicide cleaner relative to other reagents. This qualitative measure suggests that the Welgicide is more effective at solubilizing biomass and/or residual amendment in the vicinity of the well.

7.4 RECOMMENDATIONS

The well maintenance program described herein is one that has been optimized over time. This is the fifth event that has been conducted at the Z11ISB System. Lessons learned from previous maintenance events are continually

incorporated into the program. Based upon the well maintenance events conducted to date, Trihydro recommends the following procedures for future well maintenance events:

- The well maintenance program should continue. The program has been successful in maintaining the injection wells in a condition that is suitable for amendment injection.
- Welgicide cleaner should continue to be used as the maintenance treatment chemical. Visual observations indicate that use of this reagent was able to solubilize more residue than previous reagents. Protocols have been developed for reagent delivery that are precise regarding dose and include the proper health & safety considerations.
- Constant-rate injection testing should be used as the hydraulic testing method. Constant-rate injection testing produced reproducible numerical data. Use of this testing method in the future will allow direct comparison between future data and the 2013 data described herein. It is not anticipated that use of an alternative short-term testing method rather than constant-rate injection testing would produce results that are more highly correlated with other hydraulic parameters.
- Pre-maintenance hydraulic tests may not be required. The pre-maintenance test was initially used to determine if hydraulic test would need to be performed at a well. Based on observations made on well conditions following injection activities we have determined that it is beneficial to maintain each well as a preventative maintenance measure as this program continues, regardless of the hydraulic test information.

8.0 REFERENCES

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TABLES

TABLE 1. SPECIFIC WELL MAINTENANCE COMPLETION DATES
WELL MAINTENANCE REPORT - ZONE 11 ISB SYSTEM
PANTEX ISB O&M, PURCHASE ORDER 5293

Well ID	Pre-Maintenance Hydr. Test Date	Date Welgicide Added	Date Welgicide Maintenance Complete	Post-Maintenance Hydr. Test Date
PTX06-ISB055	4/15/2014	4/15/2014	4/21/2014	4/25/2014
PTX06-ISB056A	4/1/2014	4/9/2014	4/15/2014	4/25/2014
PTX06-ISB057	4/1/2014	4/9/2014	4/15/2014	4/25/2014
PTX06-ISB058	4/2/2014	4/9/2014	4/11/2014	4/25/2014
PTX06-ISB059	4/16/2014	4/21/2014	4/25/2013	4/28/2014
PTX06-ISB060A	3/25/2014	4/8/2014	4/11/2014	5/2/2014
PTX06-ISB061	3/25/2014	4/8/2014	4/10/2014	4/28/2014
PTX06-ISB062	3/25/2014	4/7/2014	4/9/2014	4/28/2014
PTX06-ISB063	4/16/2014	4/21/2014	4/28/2014	5/1/2014
PTX06-ISB064	3/25/2014	4/7/2014	4/9/2014	4/28/2014
PTX06-ISB065	3/24/2014	4/4/2014	4/8/2014	4/28/2014
PTX06-ISB066	3/28/2014	4/4/2014	4/8/2014	5/1/2014
PTX06-ISB067	3/20/2014	4/2/2014	4/7/2014	4/17/2014
PTX06-ISB068	3/20/2014	4/2/2014	4/7/2014	4/17/2014
PTX06-ISB069A	4/17/2014	4/22/2014	4/25/2014	5/1/2014
PTX06-ISB070	3/20/2014	4/2/2014	4/4/2014	4/10/2014
PTX06-ISB071	4/16/2014	4/22/2014	4/30/2014	5/5/2014
PTX06-ISB072	3/20/2014	3/31/2014	4/4/2014	4/10/2014
PTX06-ISB073	4/24/2014	4/28/2014	5/1/2014	5/5/2014
PTX06-ISB074	3/19/2014	3/28/2014	4/1/2014	4/9/2014
PTX06-ISB075(old)	3/19/2014	3/28/2014	4/2/2014	4/10/2014
PTX06-ISB076A	3/20/2014	3/31/2014	4/2/2014	4/10/2014
PTX06-ISB077	4/24/2014	4/28/2014	5/1/2014	5/14/2014
PTX06-ISB078	3/28/2014	4/15/2014	4/21/2014	5/3/2014
PTX06-ISB079	4/2/2014	4/11/2014	4/17/2014	5/3/2014
PTX06-ISB080	3/28/2014	4/11/2014	4/16/2014	5/3/2014
PTX06-ISB081	4/16/2014	4/17/2014	4/22/2014	5/9/2014
PTX06-ISB082	Note 1	4/25/2014	4/30/2014	Note 1
PTX06-ISB083	3/19/2014	3/25/2014	3/28/2014	4/9/2014
PTX06-ISB084	3/19/2014	3/21/2014	3/26/2014	4/8/2014
PTX06-ISB085A	4/24/2014	4/28/2014	5/1/2014	5/5/2014
PTX06-ISB086	3/19/2014	3/21/2014	3/25/2014	4/8/2014

Note:

1. Well maintenace but not hydraulic testing was conducted at PTX06-ISB082.

TABLE 2. HISTORICAL AND CURRENT DEPTH TO WATER AND SATURATED THICKNESS
WELL MAINTENANCE REPORT - ZONE 11 ISB SYSTEM
PANTEX ISB O&M, PURCHASE ORDER 5293

	Baseline (Pre-Injection) 2009		Pre-Maintenance 2010		Post-Maintenance 2010		Pre-Maintenance 2011		Post-Maintenance 2011		Pre-Maintenance 2012		Post-Maintenance 2012		Pre-Maintenance 2013		Post-Maintenance 2013		Pre-Maintenance 2014			Post-Maintenance 2014		
Well ID	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW Date**	**DTW (ft btoc)**	**Saturated Thickness (ft)**	**DTW Date**	**DTW (ft btoc)**	**Saturated Thickness (ft)**
PTX06-ISB055	262.18	21.0	260.10	21.0	260.64	20.5	260.08	21.0	260.33	20.8	260.45	20.7	260.38	20.7	260.59	20.5	260.68	20.4	4/15/2014	261.14	20.0	4/25/2014	261.1	20.0
PTX06-ISB056A	261.62	22.5	259.89	22.2	260.00	22.1	259.68	22.4	259.68	22.4	259.85	22.3	260.04	22.1	260.00	22.1	260.05	22.1	3/00/2014	260.57	21.5	4/25/2014	260.83	21.3
PTX06-ISB057	261.78	21.4	Note 1						260.29	21.0	260.35	19.8	260.46	19.7	260.42	19.8	260.35	19.8	3/00/2014	261.08	19.1	4/25/2014	260.86	19.3
PTX06-ISB058	261.92	20.1	260.30	19.7	260.18	19.8	259.93	20.1	260.01	20.0	261.17	18.9	260.31	19.7	260.28	19.7	260.38	19.6	3/00/2014	259.7	20.3	4/25/2014	260.68	19.3
PTX06-ISB059	261.92	20.2	260.05	20.1	260.08	20.0	259.92	20.2	260.09	20.0	260.91	19.2	260.24	19.9	260.21	19.9	260.37	19.7	4/16/2014	260.58	19.5	4/28/2014	260.65	19.5
PTX06-ISB060A	262.92	17.2	261.20	17.0	261.08	17.1	260.94	17.2	260.87	17.3	260.71	17.5	261.00	17.2	261.62	16.6	261.64	16.5	3/25/2014	262.20	16.0	5/2/2014	256.92	21.3
PTX06-ISB061	262.64	18.5	260.81	18.4	260.71	18.5	260.61	18.6	260.65	18.3	260.88	18.3	260.76	18.4	258.04	21.2	260.86	18.3	3/25/2014	261.28	17.9	4/28/2014	261.22	18.0
PTX06-ISB062	263.90	17.3	261.92	17.2	262.01	17.1	261.82	17.3	262.03	17.1	261.90	17.2	261.95	17.2	261.94	17.2	262.51	16.6	3/25/2014	262.57	16.6	4/28/2014	262.52	16.6
PTX06-ISB063	264.55	16.6	262.52	16.7	263.08	16.1	262.15	17.0	262.45	16.7	262.63	16.6	262.62	16.6	262.55	16.6	262.66	16.5	4/16/2014	262.8	16.4	5/1/2014	262.90	16.3
PTX06-ISB064	264.12	18.8	262.38	19.6	261.10	20.8	262.00	19.9	262.29	19.7	261.98	20.0	262.43	19.5	262.31	19.6	262.8	19.1	3/25/2014	262.82	19.1	4/28/2014	262.72	19.2
PTX06-ISB065	265.75	14.2	263.86	14.1	264.05	13.9	263.86	14.1	261.15	16.8	263.83	14.2	263.85	14.1	263.92	14.1	263.83	14.2	3/24/2014	264.04	13.9	4/28/2014	264.05	13.9
PTX06-ISB066	266.73	14.2	264.64	14.3	264.82	14.1	264.69	14.3	Note 4		264.72	14.2	Note 4		264.60	14.4	Note 4		3/24/2014	264.95	14.0	5/1/2014	265.00	14.0
PTX06-ISB067	267.88	13.2	264.90	14.2	265.80	13.3	264.60	14.5	264.79	14.3	264.58	14.5	264.61	14.5	264.53	14.6	265.05	14.1	3/20/2014	264.85	14.3	4/17/2014	265.19	13.9
PTX06-ISB068	267.01	15.0	264.99	15.1	265.85	14.2	264.70	15.4	264.64	15.4	264.80	15.3	264.74	15.3	264.75	15.3	264.65	15.4	3/20/2014	264.97	15.1	4/17/2014	265.26	14.8
PTX06-ISB069A	267.41	14.7	265.30	14.8	265.31	14.8	265.29	14.8	264.97	15.1	265.34	14.7	265.13	14.9	265.1	15.0	265.17	14.9	4/17/2014	265.54	14.5	5/1/2014	265.33	14.7
PTX06-ISB070	269.31	13.8	267.15	13.9	264.66	16.4	267.33	13.8	266.97	14.1	266.78	14.3	267.28	13.8	266.86	14.2	266.8	14.3	3/20/2014	267.02	14.1	4/10/2014	267.06	14.0
PTX06-ISB071	270.26	15.8	268.13	16.0	268.87	15.2	267.89	16.2	267.87	14.3	267.83	16.3	267.8	16.3	267.82	16.3	267.85	16.3	4/16/2014	268.25	15.9	5/3/2014	267.91	16.2
PTX06-ISB072	271.05	17.0	269.03	17.0	268.52	17.5	268.63	17.4	268.53	17.5	268.79	17.3	269.12	16.9	268.82	17.2	276.36	9.7	3/20/2014	269.2	16.9	4/10/2014	276.15	9.9
PTX06-ISB073	271.91	18.1	269.79	18.2	269.96	18.1	269.16	18.9	Note 3		269.75	18.3	269.59	18.4	269.59	18.4	269.54	18.5	4/24/2014	269.85	18.2	5/3/2014	269.64	18.4
PTX06-ISB074	272.27	17.8	270.30	19.5	269.74	20.1	269.82	20.0	269.50	20.3	269.80	20.0	267.47	22.4	269.72	20.1	269.7	20.1	3/19/2014	269.89	20.0	4/9/2014	272.15	17.7
PTX06-ISB075 (OLD)	271.58	15.6	269.32	15.8	269.16	15.9	269.80	15.3	269.20	15.9	269.00	16.1	269.13	16.0	268.86	16.2	268.81	16.3	3/19/2014	269.25	15.8	4/10/2014	268.94	16.2
PTX06-ISB075 (NEW)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	269.27	10.1			Note 5					
PTX06-ISB076A	270.94	14.6	Note 2		268.72	17.4	268.50	17.6	267.91	18.2	268.50	17.6	268.52	17.6	268.35	17.8	268.25	17.9	3/20/2014	268.44	17.7	4/10/2014	268.44	17.7
PTX06-ISB077	269.97	13.6	Note 2		268.28	15.9	267.67	16.5	267.64	16.5	267.73	16.4	267.31	16.9	270.46	13.7	273.69	10.5	4/24/2014	268.81	15.4	5/3/2014	272.57	11.6
PTX06-ISB078	261.35	20.8	257.60	24.5	257.02	25.1	257.13	25.0	257.10	25.0	257.36	24.8	257.28	24.8	257.72	24.4	257.55	24.6	3/28/2014	258.35	23.8	5/3/2014	258.22	23.9
PTX06-ISB079	262.58	24.5	258.25	28.9	258.25	28.9	258.30	28.8	258.00	29.1	258.61	28.5	258.45	28.7	258.90	28.2	258.60	28.5	3/00/2014	259.25	27.9	5/3/2014	259.29	27.8
PTX06-ISB080	260.50	21.3	257.00	24.8	257.05	24.7	256.95	24.8	257.00	24.8	257.21	24.6	257.08	24.7	257.62	24.2	257.33	24.4	3/28/2014	258.05	23.7	5/3/2014	257.94	23.8
PTX06-ISB081	262.17	19.0	257.31	23.8	257.66	23.5	256.89	24.3	257.77	23.4	257.95	23.2	257.97	23.2	258.14	23.0	258.16	23.0	4/16/2014	258.58	22.6	5/3/2014	258.64	22.5
PTX06-ISB082	260.85	17.0	257.19	20.6	257.11	20.7	257.07	20.8	257.05	20.8	257.33	20.5	257.24	20.6	257	20.8	260.97	16.9	Note 6					
PTX06-ISB083	274.91	9.5	270.82	13.6	271.19	13.2	270.65	13.7	270.70	13.7	271.00	13.4	270.56	13.8	270.41	14.0	270.32	14.1	3/19/2014	271.75	12.6	4/9/2014	270.18	14.2
PTX06-ISB084	276.00	10.0	271.53	14.5	271.90	14.1	271.22	14.8	269.89	16.2	271.18	14.9	271.22	14.8	271.09	15.0	270.92	15.1	3/19/2014	271.49	14.6	4/8/2014	271.09	15.0
PTX06-ISB085A	275.49	8.4	271.35	12.5	272.45	11.4	271.08	12.8	271.00	12.9	271.34	12.5	271.05	12.8	271.04	12.8	270.73	13.2	4/24/2014	270.95	12.9	5/3/2014	271.05	12.8
PTX06-ISB086	276.39	9.7	271.86	14.2	270.05	16.0	271.73	14.3	271.84	14.2	271.46	14.6	271.60	14.5	271.46	14.6	271.40	14.7	3/19/2014	271.74	14.3	4/8/2014	271.51	14.6

Notes:

1. ISB057 was replaced in 2011 due to well damage observed in 2010. Therefore, no maintenance was performed in 2010 or 2011.
2. No pre-maintenance tests were performed in 2010 at ISB076A and ISB077 because those wells were observed to be dry presumably due to biofouling.
3. No maintenance was performed because an obstruction was observed in ISB073 well casing following hydrogen peroxide addition. Subsequent downhole camera data indicated that the well casing had deformed inwards.
   In 2011, acid maintenance was performed at some locations, chemical maintenance at others, and both acid and chemical at other locations.
4. Maintenance and post-maintenance hydraulic testing were not performed at ISB066 in 2011 and 2012 due to separation in well casing above screen.
5. ISB075 (new) was installed in late 2012, and has not received amendment injection as of this years' well maintenance program, therefore no maintenance or post-maintenance testing was performed.
6. ISB082 No hydraulic testing, pre-maintenance or post-maintenance testing was performed due to well being clogged.

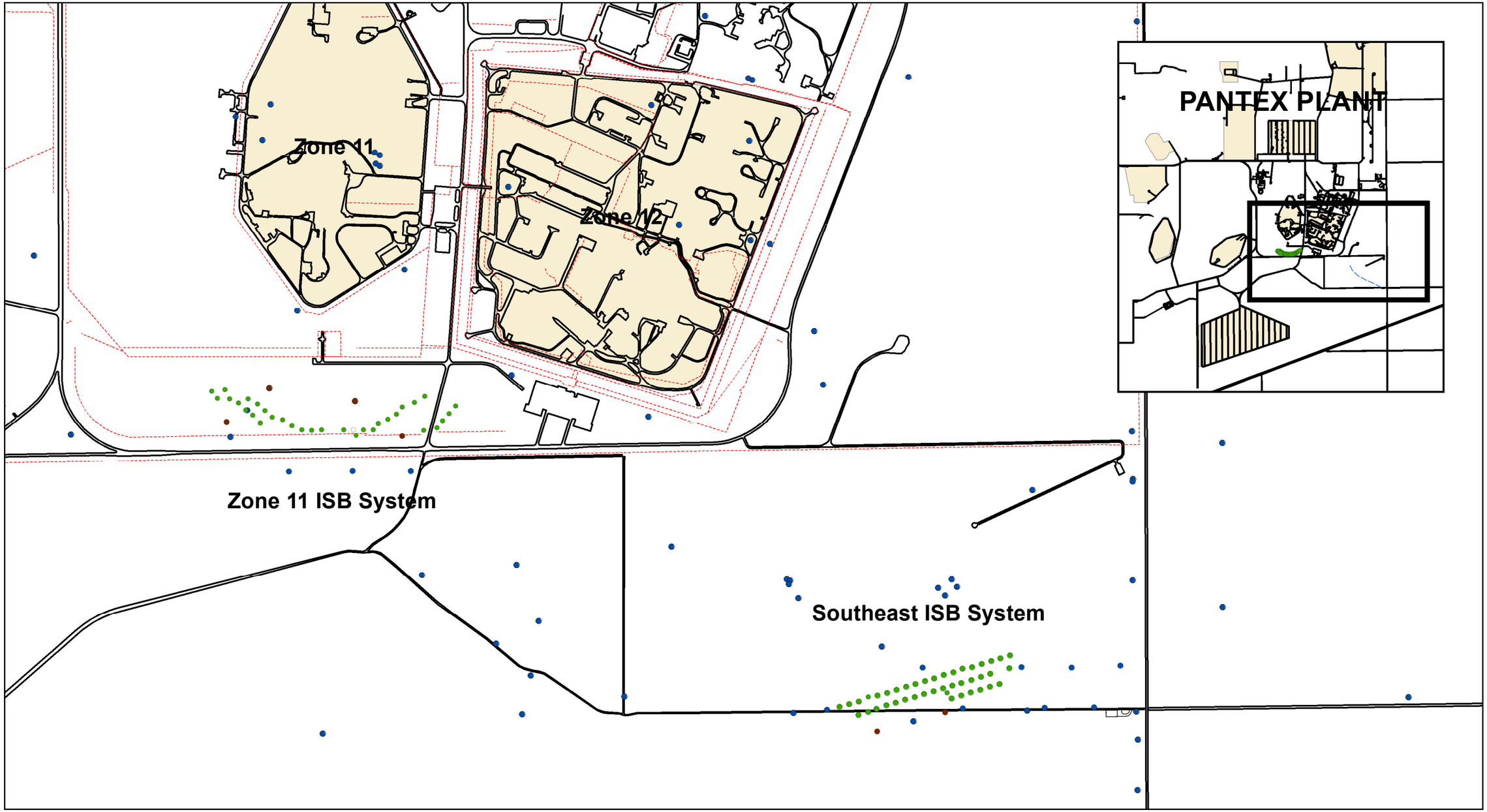
TABLE 3. PRE- AND POST-MAINTENANCE CONSTANT-RATE INJECTION RESULTS
WELL MAINTENANCE REPORT - ZONE 11 ISB SYSTEM
PANTEX ISB O&M, PURCHASE ORDER 5293

	Pre-Rehabilitation 2014					Post-Rehabilitation 2014					
Well ID	**Test Date**	**Papadopulos-Cooper T (ft2/day)**	**Max. Displacement (ft)**	**Max. Flow Rate (gpm)**	**Capacity (gpm / ft displacement)**	**Test Date**	**Papadopulos-Cooper T (ft2/day)**	**Max. Displacement (ft)**	**Max. Flow Rate (gpm)**	**Capacity (gpm / ft displacement)**	**Change in T (%)**
PTX06-ISB055	4/15/2014	63	18.0	12.1	0.67	4/25/2014	79	12.02	12.16	1.01	26%
PTX06-ISB056A	3/00/2014	15	25.3	4.9	0.19	4/25/2014	24	17.75	6.03	0.34	58%
PTX06-ISB057	3/00/2014	0.53	30.7	4.9	0.16	4/25/2014	6.5	29.46	6.03	0.20	1117%
PTX06-ISB058	3/00/2014	27	13.5	5.0	0.37	4/25/2014	36	9.21	5.01	0.54	29%
PTX06-ISB059	4/16/2014	4.8	22.4	3.3	0.15	4/28/2014	3.2	22.68	3.99	0.18	-33%
PTX06-ISB060A	3/25/2014	0.083	34.4	2.2	0.063	5/2/2014	0.035	34.40	1.86	0.05	-58%
PTX06-ISB061	3/25/2014	5.7	30.4	5.1	0.17	4/28/2014	11	18.62	5.01	0.27	88%
PTX06-ISB062	3/25/2014	28	14.2	9.8	0.69	4/28/2014	45	8.78	9.10	1.04	60%
PTX06-ISB063	4/16/2014	59	14.0	7.9	0.56	5/1/2014	25	11.17	7.05	0.63	-57%
PTX06-ISB064	3/25/2014	42	9.2	4.62	0.50	4/28/2014	33	5.83	4.75	0.81	-23%
PTX06-ISB065	3/24/2014	52	19.3	8.99	0.47	4/28/2014	55	10.19	9.10	0.89	7%
PTX06-ISB066	3/24/2014	144	10.3	20.05	1.9	5/1/2014	132	6.76	18.03	2.7	-8%
PTX06-ISB067	3/20/2014	12	25.4	7.82	0.31	4/17/2014	17	21.15	8.33	0.39	34%
PTX06-ISB068	3/20/2014	22	18.5	8.07	0.44	4/17/2014	38	14.85	8.33	0.56	75%
PTX06-ISB069A	4/17/2014	62	14.2	12.93	0.91	5/1/2014	59	15.00	12.16	0.81	-5%
PTX06-ISB070	3/20/2014	15	23.4	6.79	0.29	4/10/2014	16	18.90	6.98	0.37	2%
PTX06-ISB071	4/16/2014	3.2	24.6	4.54	0.18	5/3/2014	71	19.95	5.01	0.25	2166%
PTX06-ISB072	3/20/2014	0.17	31.1	2.18	0.07	4/10/2014	0.28	31.00	2.00	0.06	70%
PTX06-ISB073	4/24/2014	17	11.0	4.24	0.38	5/3/2014	28	16.77	8.07	0.48	64%
PTX06-ISB074	3/19/2014	0.66	32.2	3.22	0.10	4/9/2014	0.63	30.90	2.93	0.09	-5%
PTX06-ISB075 (OLD)	3/19/2014	0.81	25.2	2.18	0.09	4/10/2014	1.7	21.70	2.56	0.12	106%
PTX06-ISB075 (NEW)	No Maintenance or Injection										
PTX06-ISB076A	3/20/2014	5.6	11.2	3.99	0.36	4/10/2014	10	12.00	6.97	0.58	83%
PTX06-ISB077	4/24/2014	1.9	32.8	3.99	0.12	5/3/2014	0.92	26.70	3.62	0.14	-52%
PTX06-ISB078	3/28/2014	28	14.3	11.82	0.83	5/3/2014	39	13.29	12.16	0.91	42%
PTX06-ISB079	3/00/2014	19	20.3	12.08	0.60	5/3/2014	25	16.64	12.16	0.73	29%
PTX06-ISB080	3/28/2014	91	14.4	14.56	1.01	5/3/2014	92	11.70	14.20	1.21	2%
PTX06-ISB081	4/16/2014	54	9.3	14.5	1.6	5/3/2014	65	9.70	14.71	1.5	22%
PTX06-ISB082	Maintenance Performed Without Hydraulic Testing										
PTX06-ISB083	3/19/2014	46	14.9	12.6	0.8	4/9/2014	48	14.70	14.94	1.0	4%
PTX06-ISB084	3/19/2014	13	13.3	10.8	0.81	4/8/2014	11	28.50	10.28	0.36	-18%
PTX06-ISB085A	4/24/2014	42	12.1	14.7	1.22	5/3/2014	32	15.76	14.97	0.95	-24%
PTX06-ISB086	3/19/2014	35	9.6	12.1	1.3	4/8/2014	83	13.10	14.91	1.1	136%

TABLE 4. WELL MAINTENANCE METHODS
WELL MAINTENANCE REPORT - ZONE 11 ISB SYSTEM
PANTEX ISB O&M, CONTRACT 5293

Well ID	Saturated Thickness (ft)	Initial Surge Duration (hrs)	Water Volume Added (gal)	Volume Welgicide Added (gals)	Cumulative Surge Duration (hrs)	Volume Removed with Air Lift (gal)	Final pH Purge Water (SU)
PTX06-ISB055	20.0	0.5	0	10	4.50	60	8
PTX06-ISB056A	21.3	0.5	0	11	6.00	85	7
PTX06-ISB057	19.3	0.5	0	10	5.75	60	7
PTX06-ISB058	19.3	0.5	0	10	6.50	65	7
PTX06-ISB059	19.5	0.5	0	10	6.00	40	8
PTX06-ISB060A	21.3	0.5	20	8	5.00	50	8
PTX06-ISB061	18.0	0.5	0	9	6.00	60	7
PTX06-ISB062	16.6	1	0	8	5.00	58	7
PTX06-ISB063	16.3	0.5	0	8	6.00	50	8
PTX06-ISB064	19.2	0.75	0	9	4.25	70	7
PTX06-ISB065	13.9	0.5	0	7	5.25	85	7
PTX06-ISB066	14.0	0.5	0	7	3.5	80	7
PTX06-ISB067	13.9	0.5	0	7	5.25	60	7
PTX06-ISB068	14.8	0.5	0	8	6.75	60	7
PTX06-ISB069A	14.7	0.5	0	7	5.50	65	7
PTX06-ISB070	14.0	0.5	0	7	4.50	40	7
PTX06-ISB071	16.2	0.5	0	8	6.00	75	7
PTX06-ISB072	9.9	0.5	0	9	5.00	50	8
PTX06-ISB073	18.4	0.5	0	9	5.00	60	8
PTX06-ISB074	17.7	0.5	10	10	5.00	25	8
PTX06-ISB075(old)	16.2	0.5	0	8	5.50	45	7.5
PTX06-ISB076A	17.7	0.5	0	9	5.25	60	8
PTX06-ISB077	11.6	0.5	0	8	6.00	50	8
PTX06-ISB078	23.9	0.5	0	12	6.00	70	8
PTX06-ISB079	27.8	0.5	0	14	7.50	60	7
PTX06-ISB080	23.8	0.5	0	12	5.50	100	7
PTX06-ISB081	22.5	0.5	0	11	5.00	55	8
PTX06-ISB082	No Hydraulic Testing	0.5	10	8	6.50	35	9
PTX06-ISB083	14.2	0.5	0	7	6.50	45	8
PTX06-ISB084	15.0	0.5	0	7	6.50	40	8
PTX06-ISB085A	12.8	0.5	0	6	4.50	50	8
PTX06-ISB086	14.6	0.5	0	7	6.00	40	8

FIGURES



EXPLANATION

- ISB INJECTION WELLS
- PANTEX MONITORING WELLS
- FENCES
- ROADS
- PANTEX PLANT ZONES

N

0 1,000'

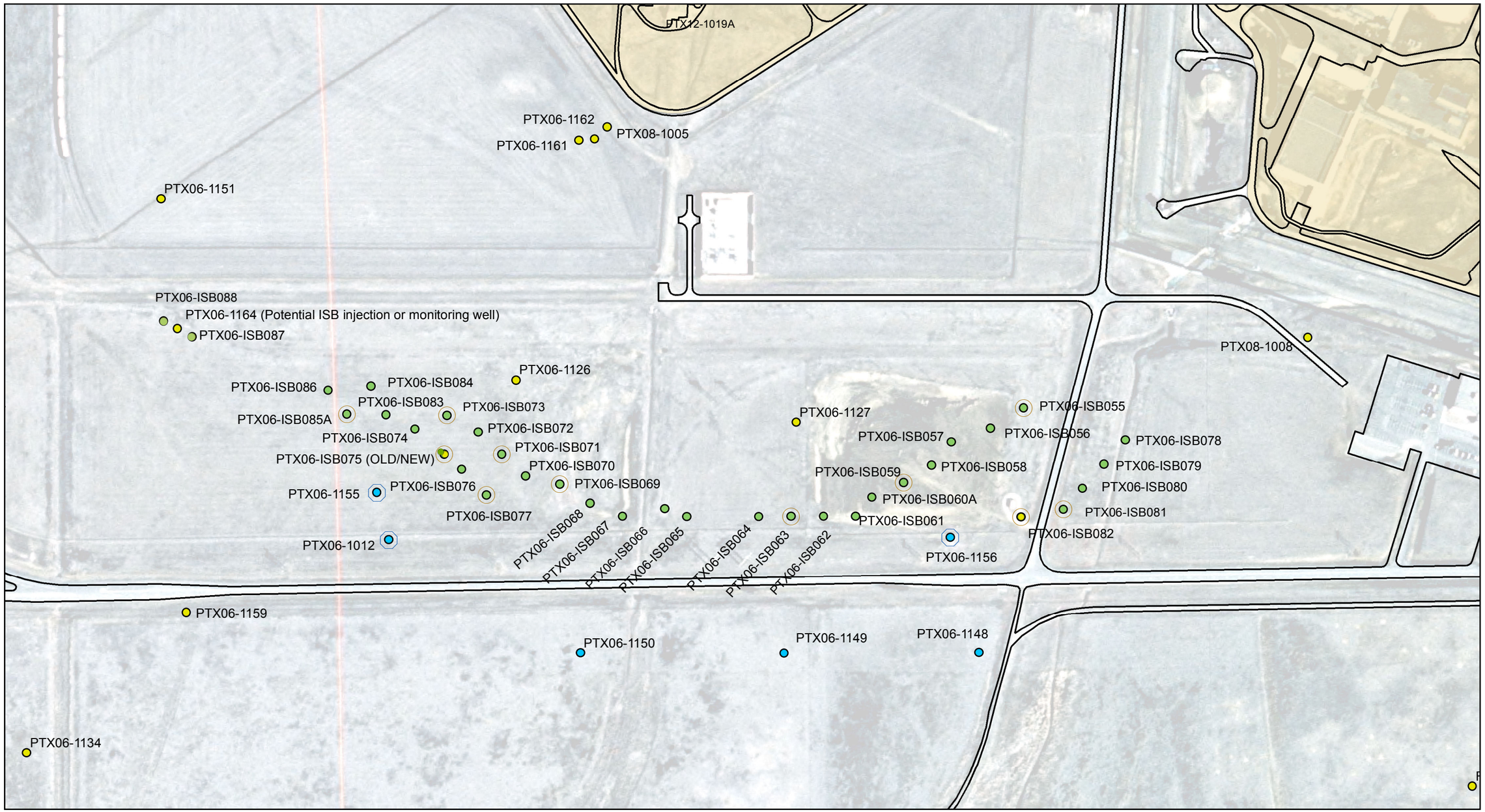
Trihydro CORPORATION
1252 Commerce Drive
Laramie, WY 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 1

PANTEX PLANT OVERVIEW

B&W PANTEX
IN SITU BIOREMEDIATION O&M
PANTEX PLANT, AMARILLO, TEXAS

Drawn By: SJS	Checked By: FJK	Scale: 1" = 1,000'	Date: 01/30/13	File: Fig1_ISB_Layout.mxd



EXPLANATION

- SAMPLED INJECTION WELLS
- ISB PERFORMANCE MONITORING WELLS
- ROADS
- PANTEX PLANT ZONES
- EXTRACTION WELL
- INJECTION WELL
- ISB INJECTION WELL
- ISPM WELL
- INVESTIGATION WELL
- PIEZOMETER

N

0 250'

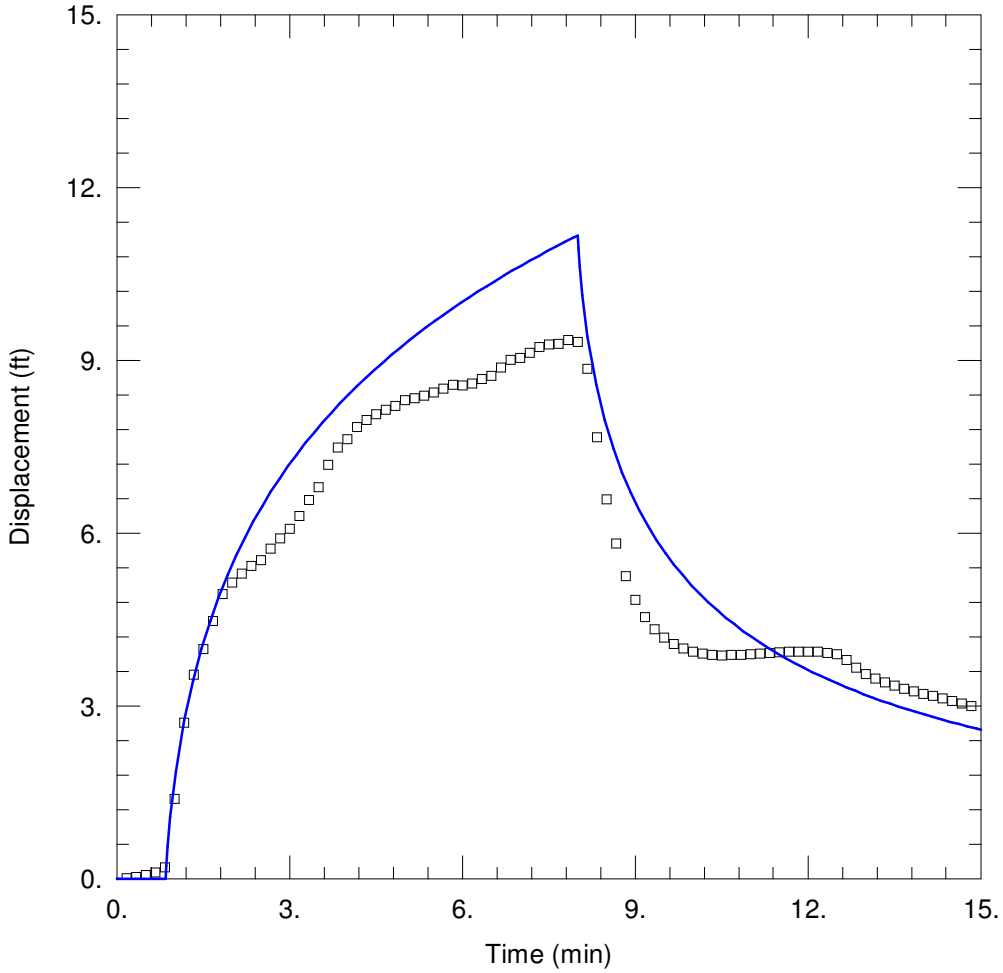
Trihydro CORPORATION
1252 Commerce Drive
Laramie, WY 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 2

ZONE 11 ISB SYSTEM

B&W PANTEX
IN SITU BIOREMEDIATION O&M
PANTEX PLANT, AMARILLO, TEXAS

Drawn By: SJS	Checked By: JS	Scale: 1" = 250'	Date: 03/14/14	File: Fig3_Z11_ISBLayout.mxd



WELL TEST ANALYSIS

Data Set: M:\...\ISB081_1inj_PC.aqt
Date: 04/17/14 Time: 08:44:01

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB081
Test Date: 4/16/2014

AQUIFER DATA

Saturated Thickness: 22.6 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB081	0	0

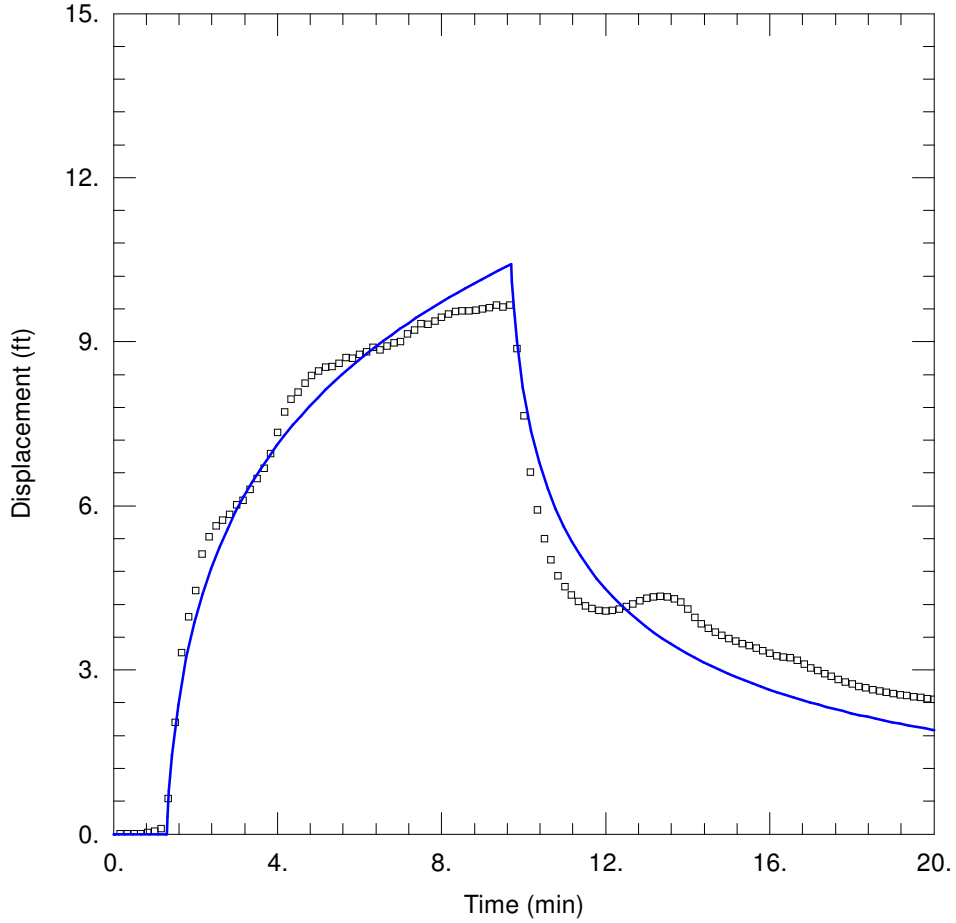
Observation Wells

Well Name	X (ft)	Y (ft)
□ ISB081	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 53.72 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB081redo_2inj_PC.aqt
Date: 05/14/14 Time: 20:43:15

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB081redo
Test Date: 5/09/2014

AQUIFER DATA

Saturated Thickness: 22.4 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB081redo	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB081redo	0	0

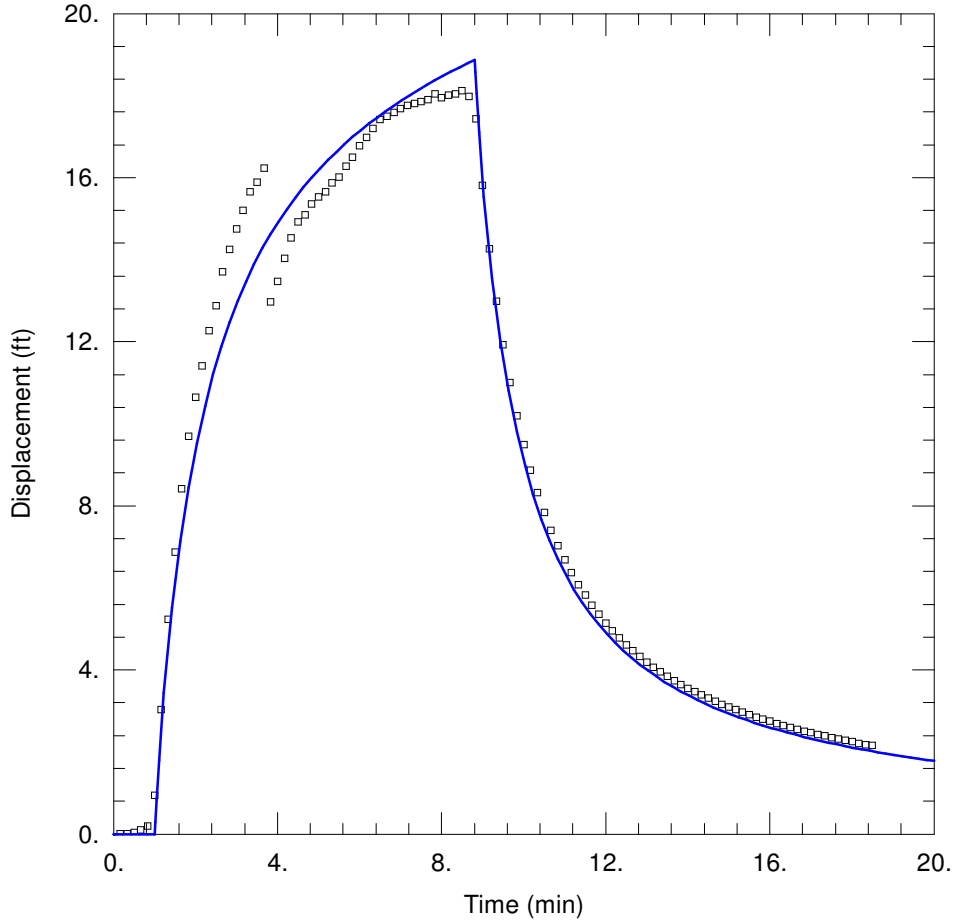
SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 65.33 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft

APPENDIX A

PRE- AND POST- MAINTENANCE CONSTANT-RATE INJECTION TESTING AQTESOLV OUTPUTS



WELL TEST ANALYSIS

Data Set: M:\...\ISB055_1inj_PC.aqt
Date: 04/17/14 Time: 08:46:24

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB055
Test Date: 4/15/2014

AQUIFER DATA

Saturated Thickness: 20. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB055	0	0

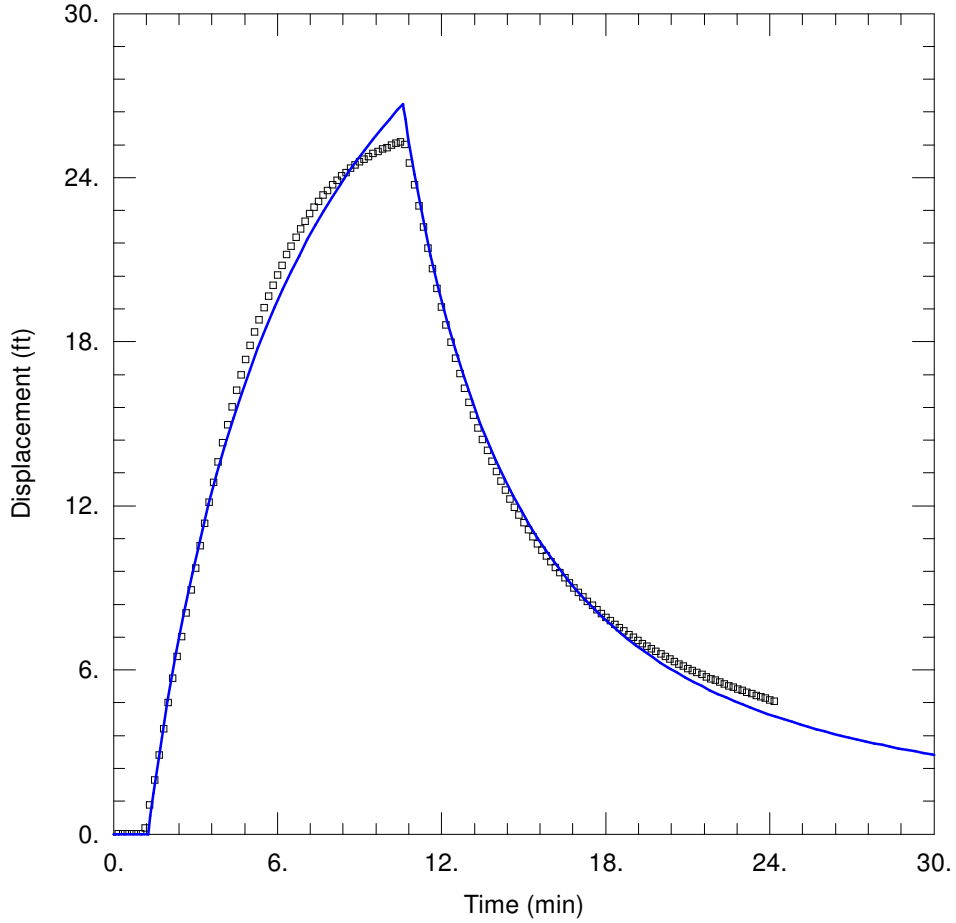
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB055	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 62.6 ft^2/day S = 0.006146
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB056A_1inj_PC.aqt
Date: 04/05/14 Time: 07:50:19

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB056A
Test Date: 4/1/2014

AQUIFER DATA

Saturated Thickness: 21.5 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB056A	0	0

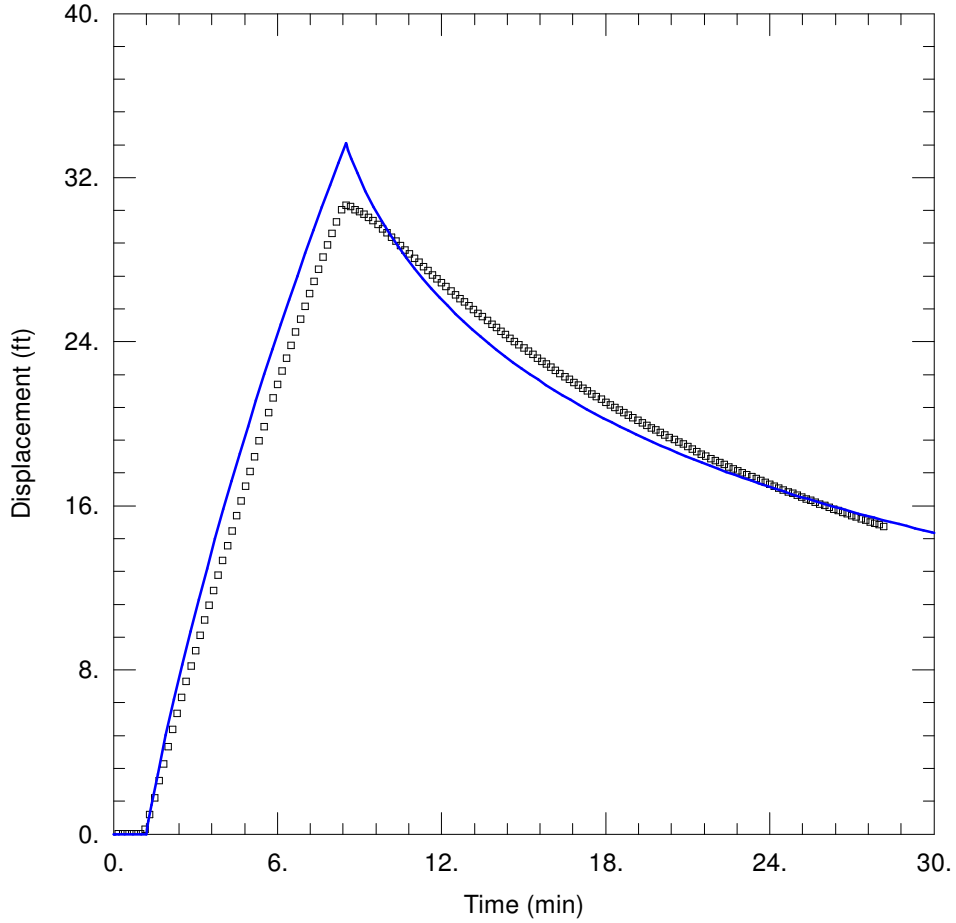
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB056A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 15.34 ft^2/day S = 0.001797
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB057_1inj_PC.aqt
Date: 04/05/14 Time: 07:51:10

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB057
Test Date: 4/1/2014

AQUIFER DATA

Saturated Thickness: 19.1 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB057	0	0

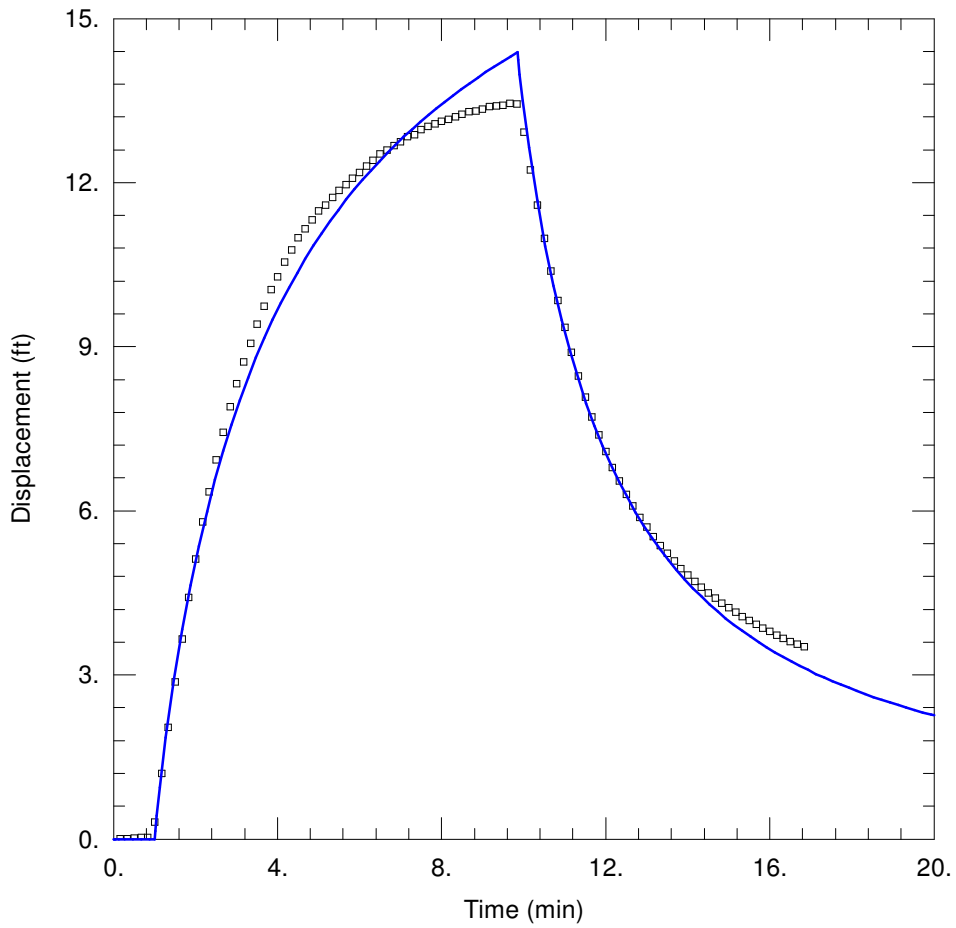
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB057	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 0.5331 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB058_1inj_PC.aqt
Date: 04/05/14 Time: 07:53:10

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB058
Test Date: 4/2/2014

AQUIFER DATA

Saturated Thickness: 20.3 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB058	0	0

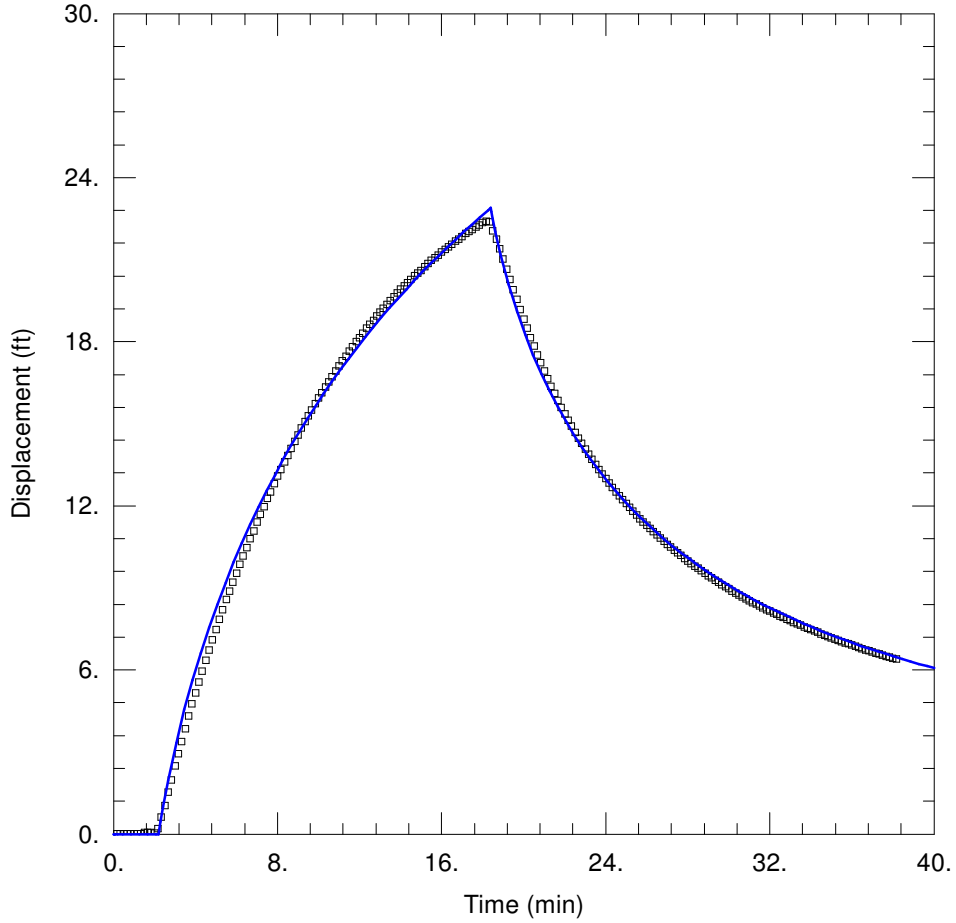
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB058	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 27.49 ft^2/day S = 0.008704
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB059_1inj_PC.aqt
Date: 04/17/14 Time: 08:47:10

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB059
Test Date: 4/16/2014

AQUIFER DATA

Saturated Thickness: 19.5 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB059	0	0

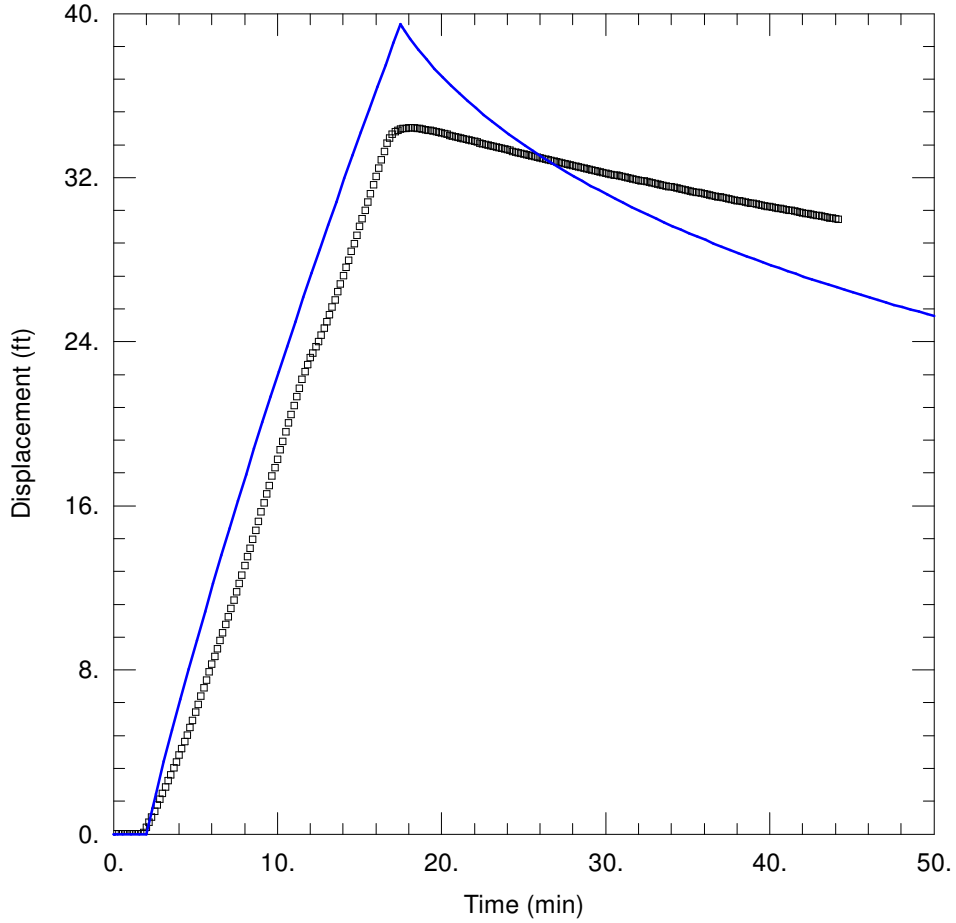
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB059	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 4.803 ft^2/day S = 0.07251
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB060A_1inj_PC.aqt
Date: 03/27/14 Time: 10:07:37

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB060A
Test Date: 3/25/2014

AQUIFER DATA

Saturated Thickness: 16. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB060A	0	0

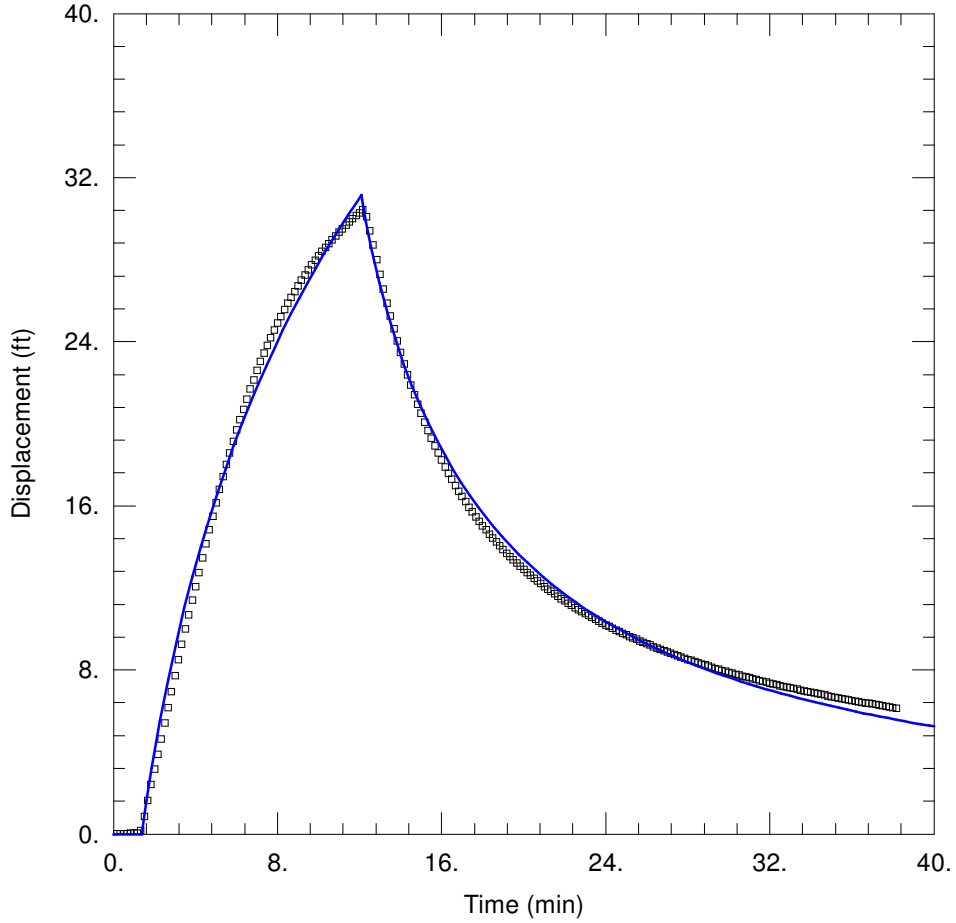
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB060A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 0.08264 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB061_1inj_PC.aqt
Date: 03/27/14 Time: 10:08:14

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB061
Test Date: 3/24/2014

AQUIFER DATA

Saturated Thickness: 17.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB061	0	0

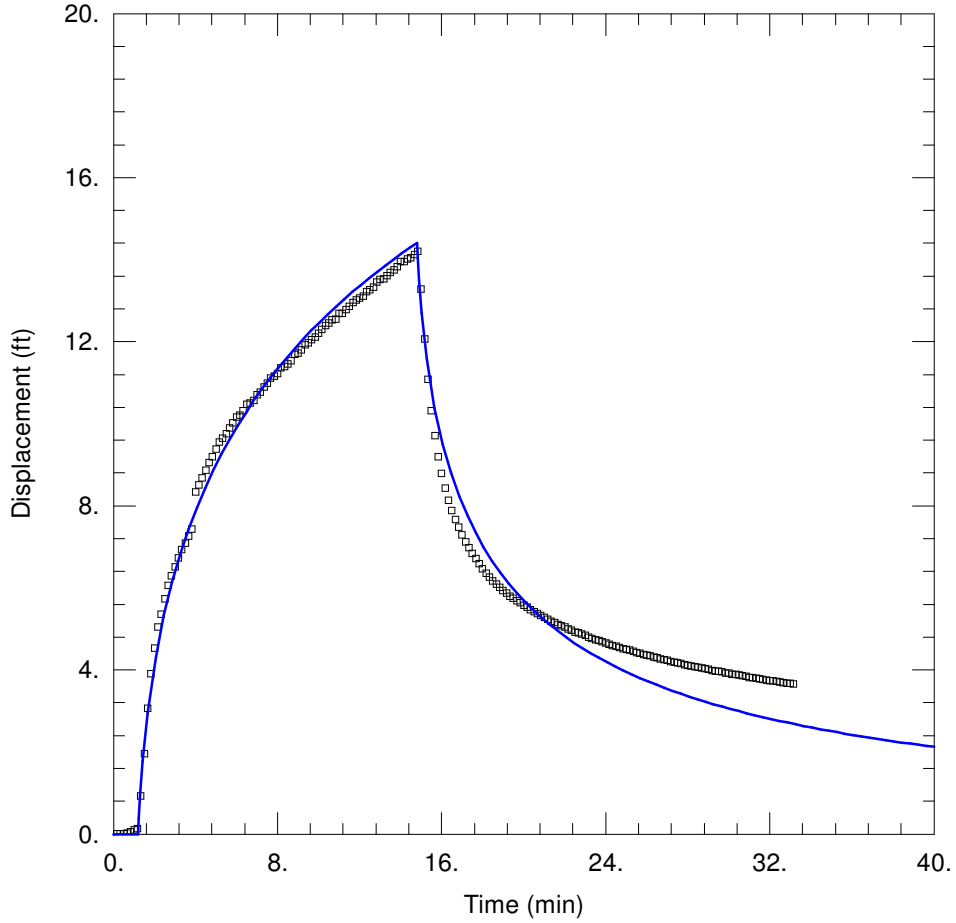
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB061	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 5.688 ft^2/day S = 0.04008
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB062_1inj_PC.aqt
Date: 03/27/14 Time: 10:08:35

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB062
Test Date: 3/25/2014

AQUIFER DATA

Saturated Thickness: 16.6 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB062	0	0

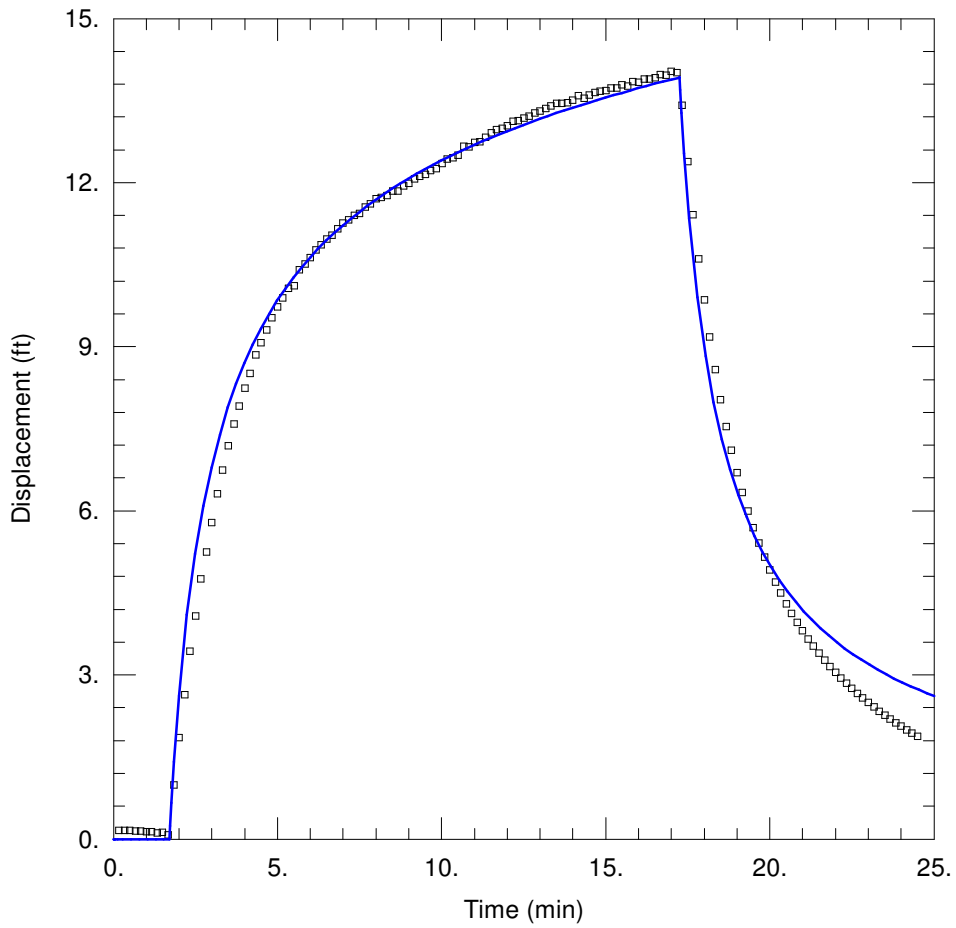
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB062	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 28.01 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB063_1inj_PC.aqt
Date: 04/17/14 Time: 16:23:55

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB063
Test Date: 4/16/2014

AQUIFER DATA

Saturated Thickness: 16.4 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB063	0	0

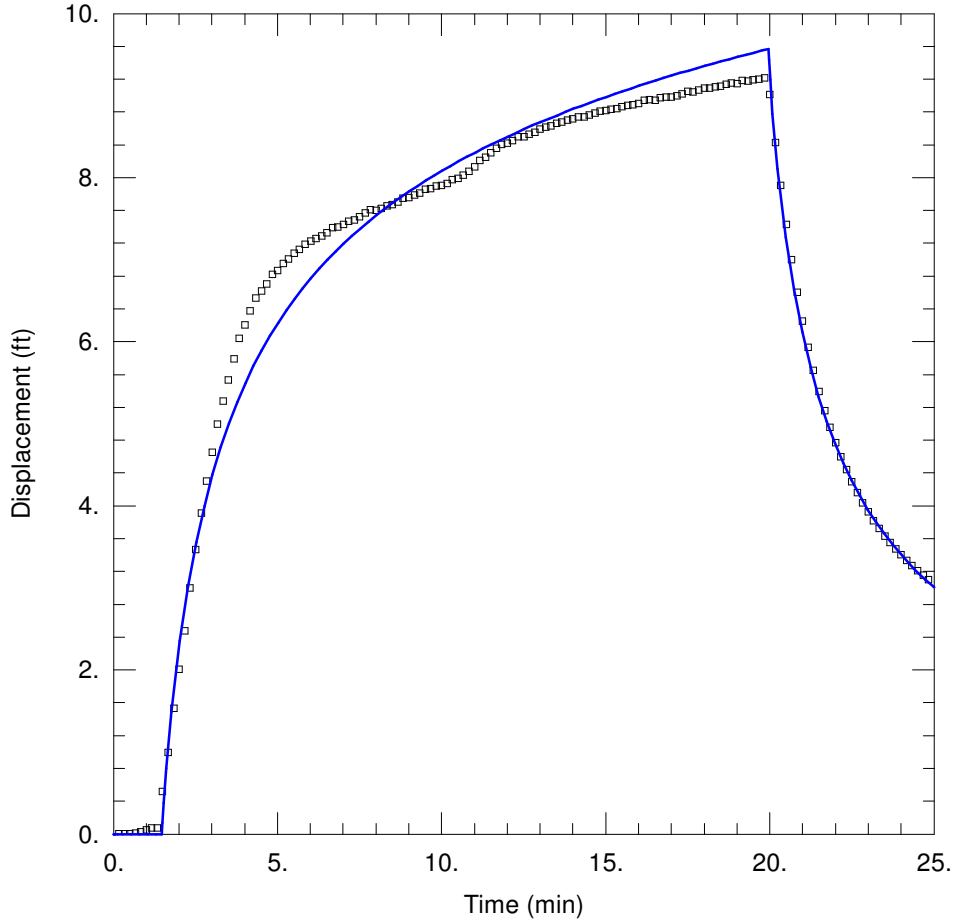
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB063	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 58.56 ft^2/day S = 0.009164
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB064_1inj_PC.aqt
Date: 03/27/14 Time: 10:08:56

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB064
Test Date: 3/25/2014

AQUIFER DATA

Saturated Thickness: 19.1 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB064	0	0

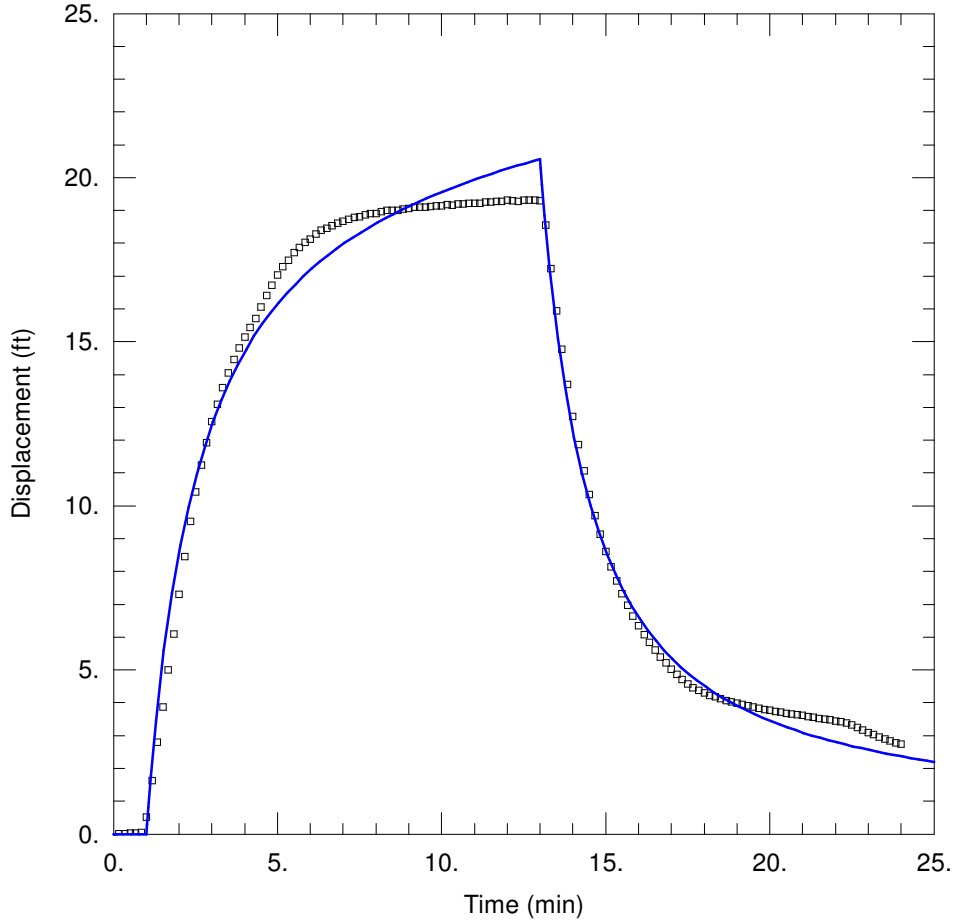
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB064	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 42.07 ft^2/day S = 0.02278
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB065_1inj_PC.aqt
Date: 03/26/14 Time: 16:00:19

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB065
Test Date: 3/24/2014

AQUIFER DATA

Saturated Thickness: 13.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB065	0	0

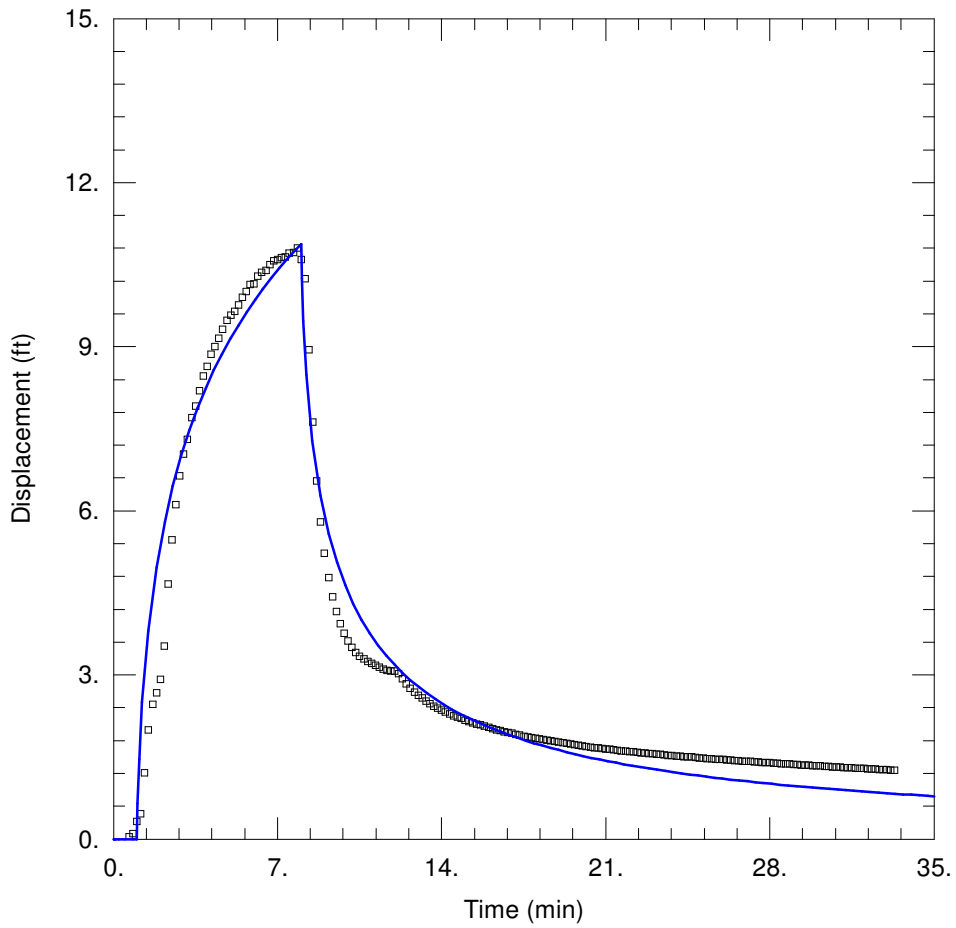
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB065	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 51.61 ft^2/day S = 0.002077
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB066RE_1inj_PC.aqt
Date: 04/01/14 Time: 13:44:13

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB066
Test Date: 3/28/2014

AQUIFER DATA

Saturated Thickness: 13.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB066	0	0

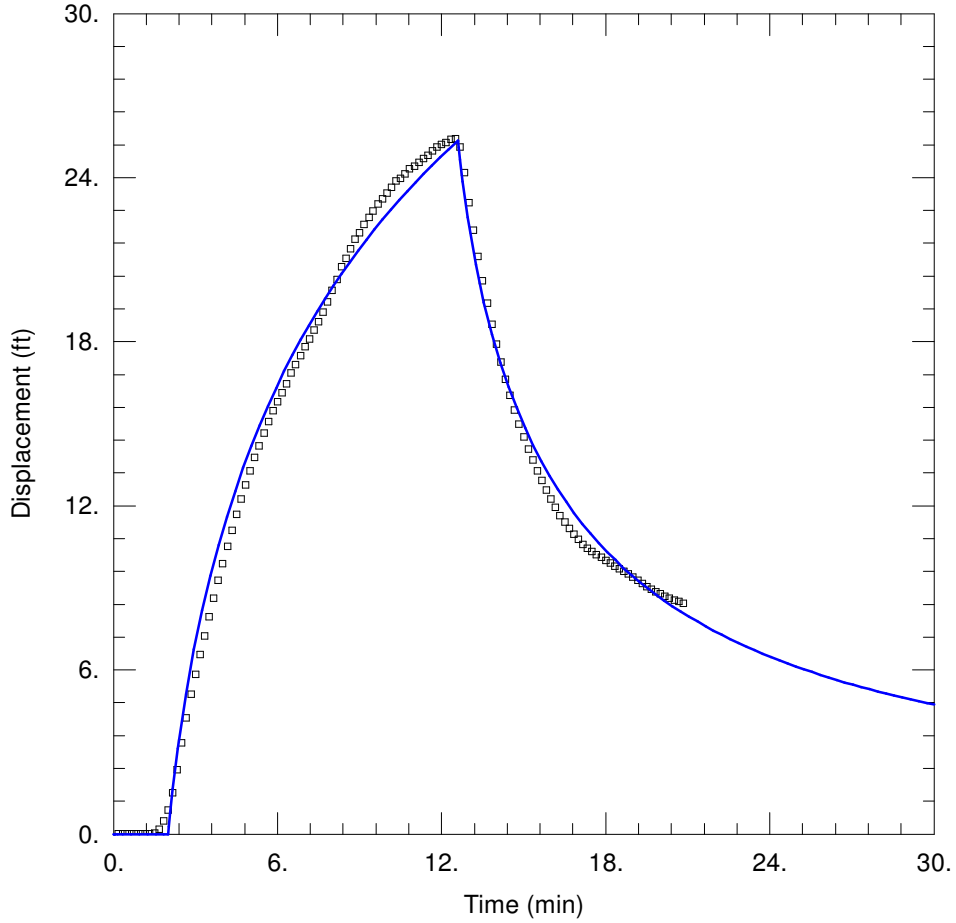
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB066	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 85.08 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB067_1inj_PC.aqt
Date: 03/21/14 Time: 13:23:41

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB067
Test Date: 3/20/2014

AQUIFER DATA

Saturated Thickness: 14.3 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB067	0	0

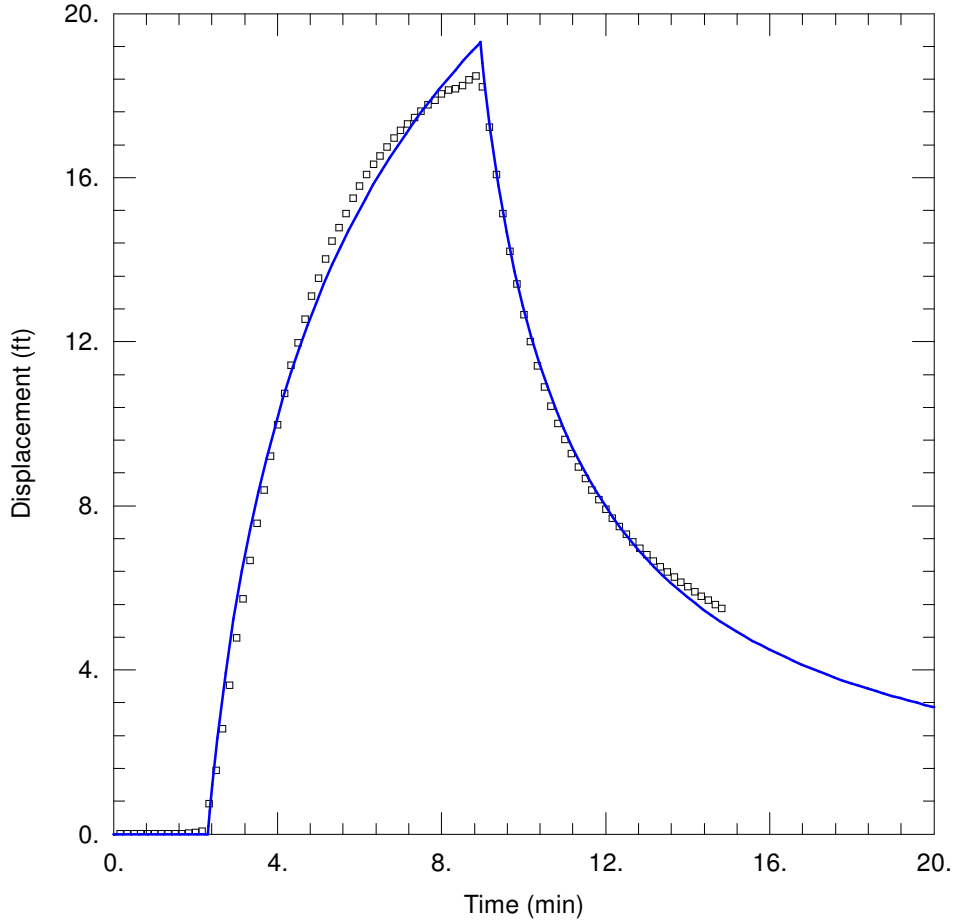
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB067	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 12.4 ft^2/day S = 0.08564
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB068_1inj_PC.aqt
Date: 03/21/14 Time: 13:22:25

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB068
Test Date: 3/20/2014

AQUIFER DATA

Saturated Thickness: 15.1 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB068	0	0

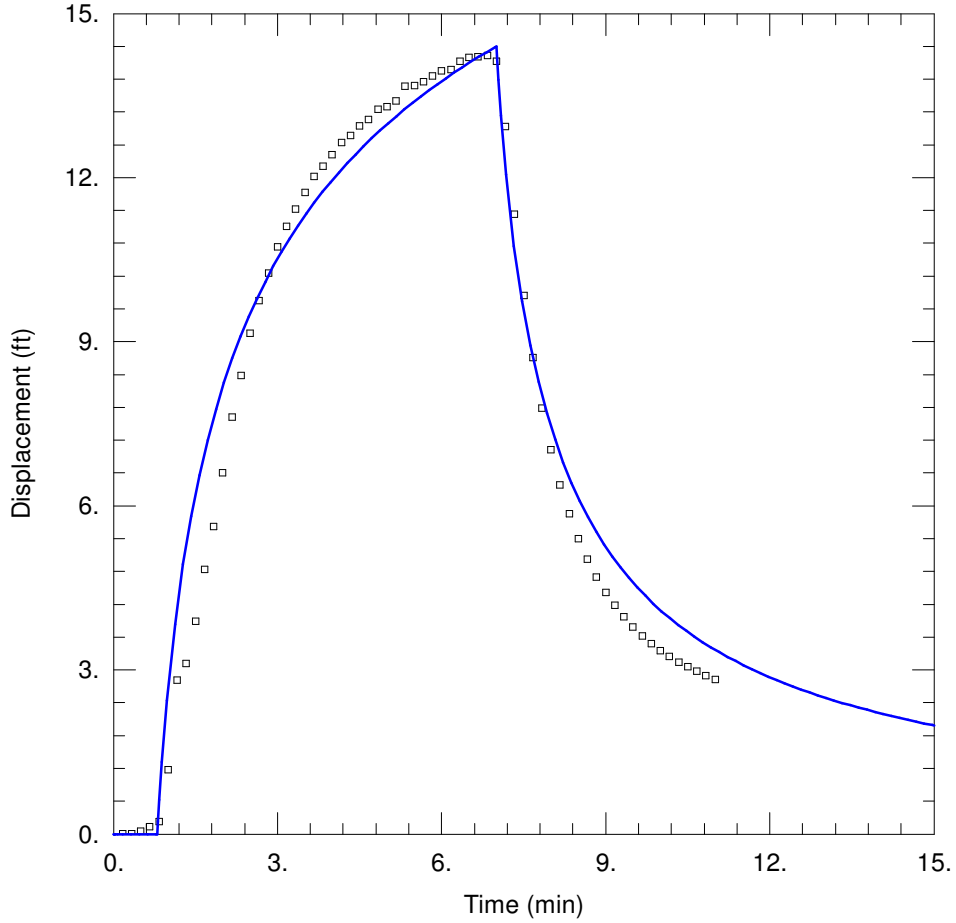
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB068	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 21.89 ft^2/day S = 0.03243
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB069A_1inj_PC.aqt
Date: 04/23/14 Time: 13:49:23

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB069A
Test Date: 4/17/2014

AQUIFER DATA

Saturated Thickness: 14. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB069A	0	0

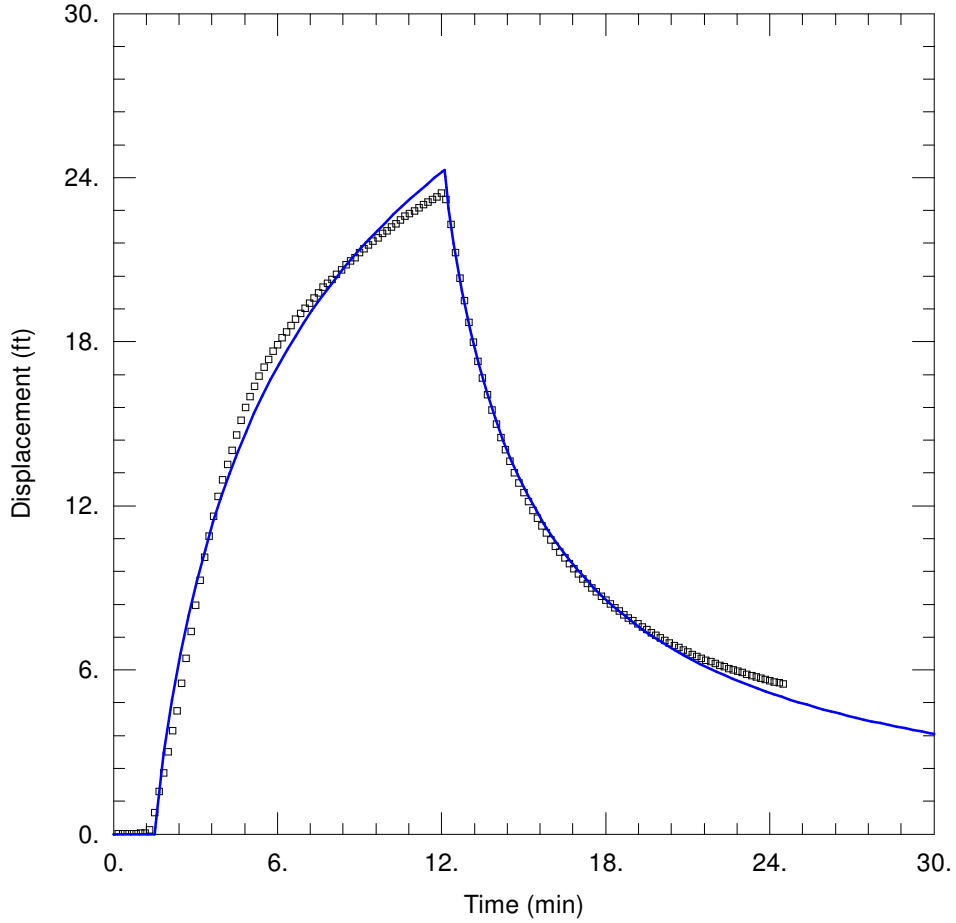
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB069A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 62.46 ft^2/day S = 0.03385
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB070_1inj_PC.aqt
Date: 03/21/14 Time: 13:21:16

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB070
Test Date: 3/20/2014

AQUIFER DATA

Saturated Thickness: 14.1 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB070	0	0

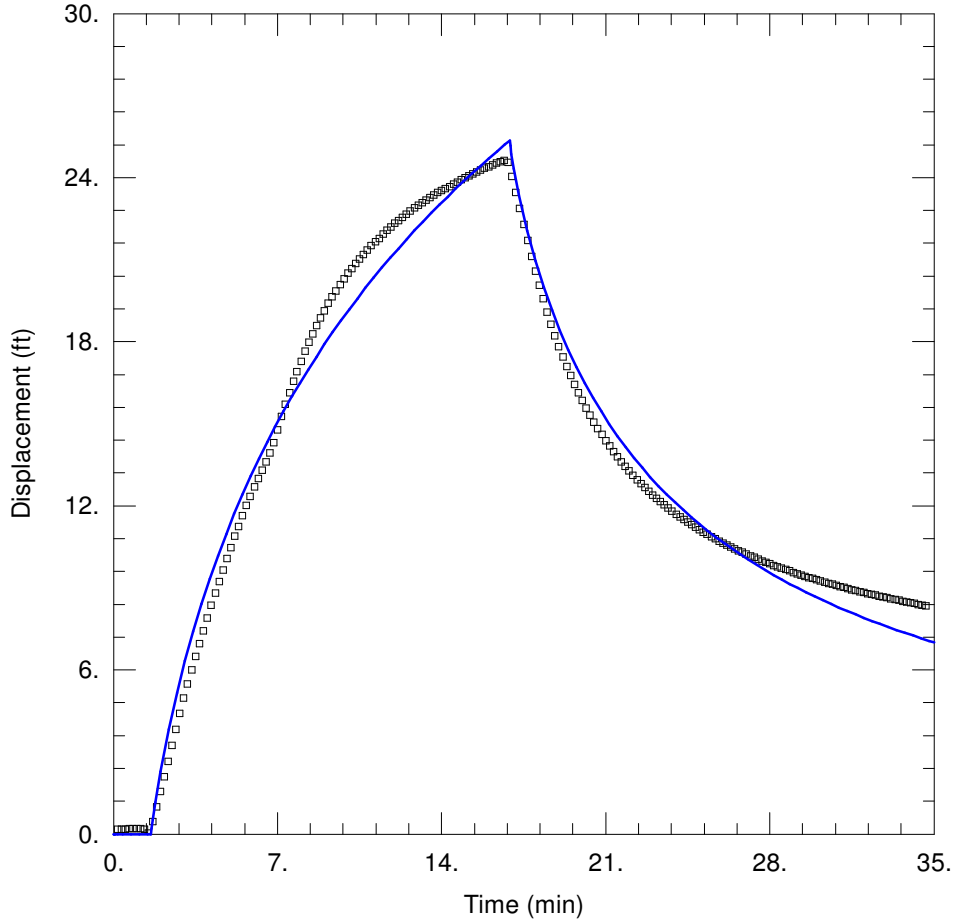
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB070	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 15.23 ft^2/day S = 0.032
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB071_1inj_PC.aqt
Date: 04/17/14 Time: 16:30:11

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB071
Test Date: 4/16/2014

AQUIFER DATA

Saturated Thickness: 15.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB071	0	0

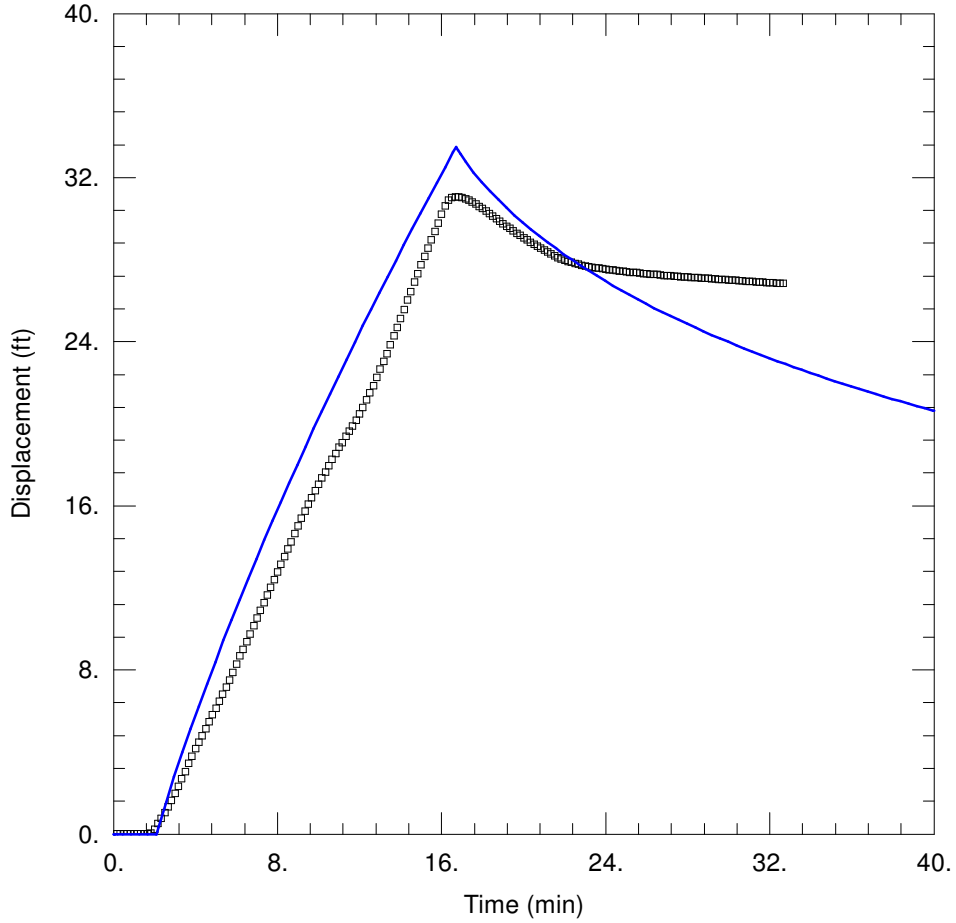
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB071	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 5.907 ft^2/day S = 0.1021
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB072_1inj_PC.aqt
Date: 03/21/14 Time: 13:20:02

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB072
Test Date: 3/20/2014

AQUIFER DATA

Saturated Thickness: 16.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB072	0	0

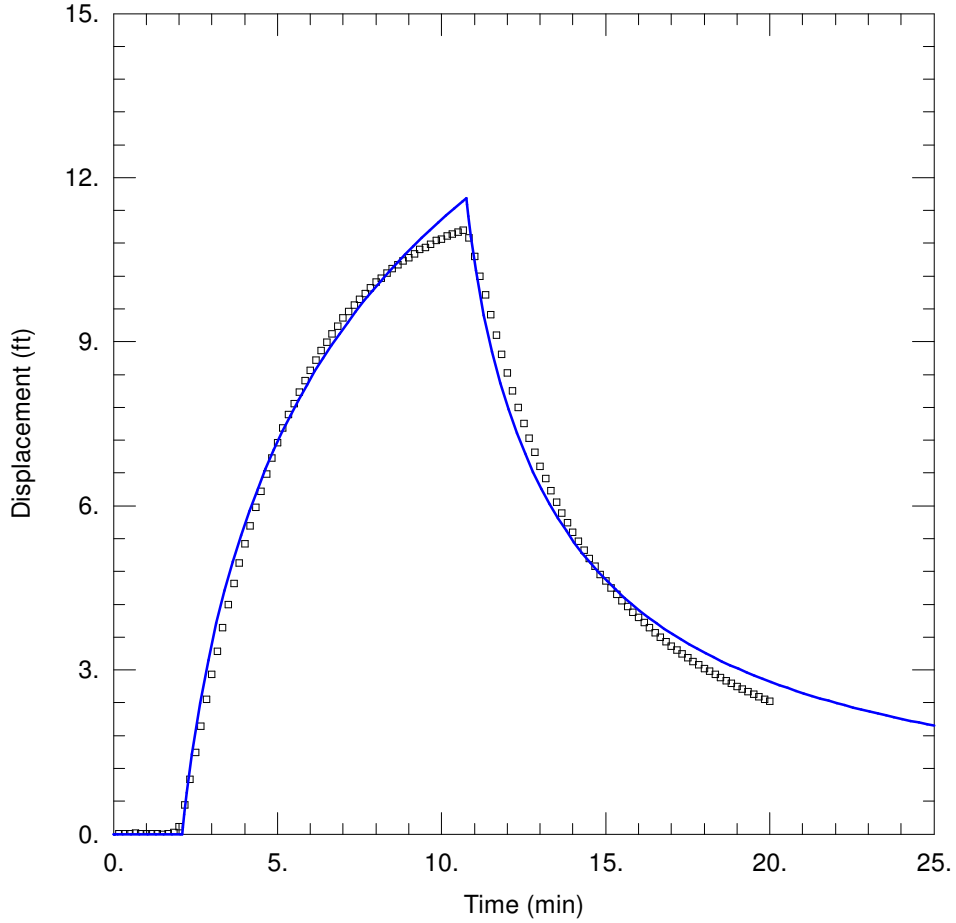
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB072	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 0.1646 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB073_1inj_PC.aqt
Date: 04/28/14 Time: 09:50:39

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB073
Test Date: 4/24/2014

AQUIFER DATA

Saturated Thickness: 18.2 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB073	0	0

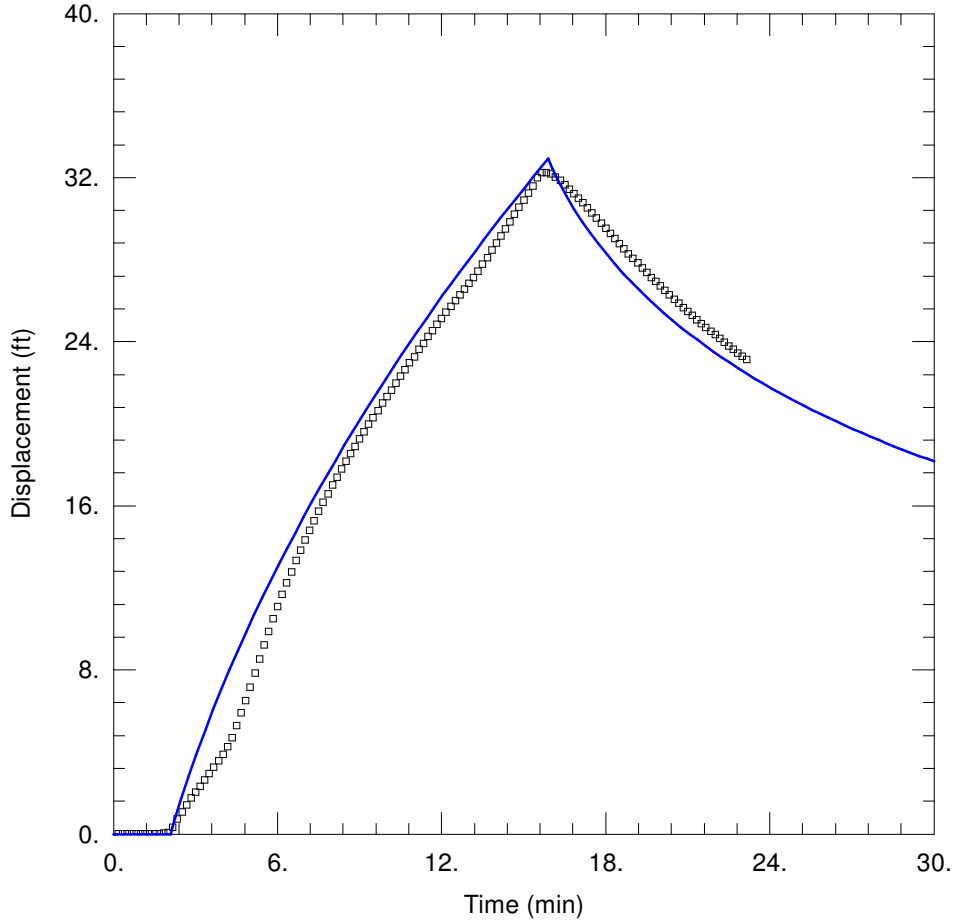
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB073	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 16.89 ft^2/day S = 0.05663
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB074_1inj_PC.aqt
Date: 03/21/14 Time: 10:32:59

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB074
Test Date: 3/19/2014

AQUIFER DATA

Saturated Thickness: 20. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB074	0	0

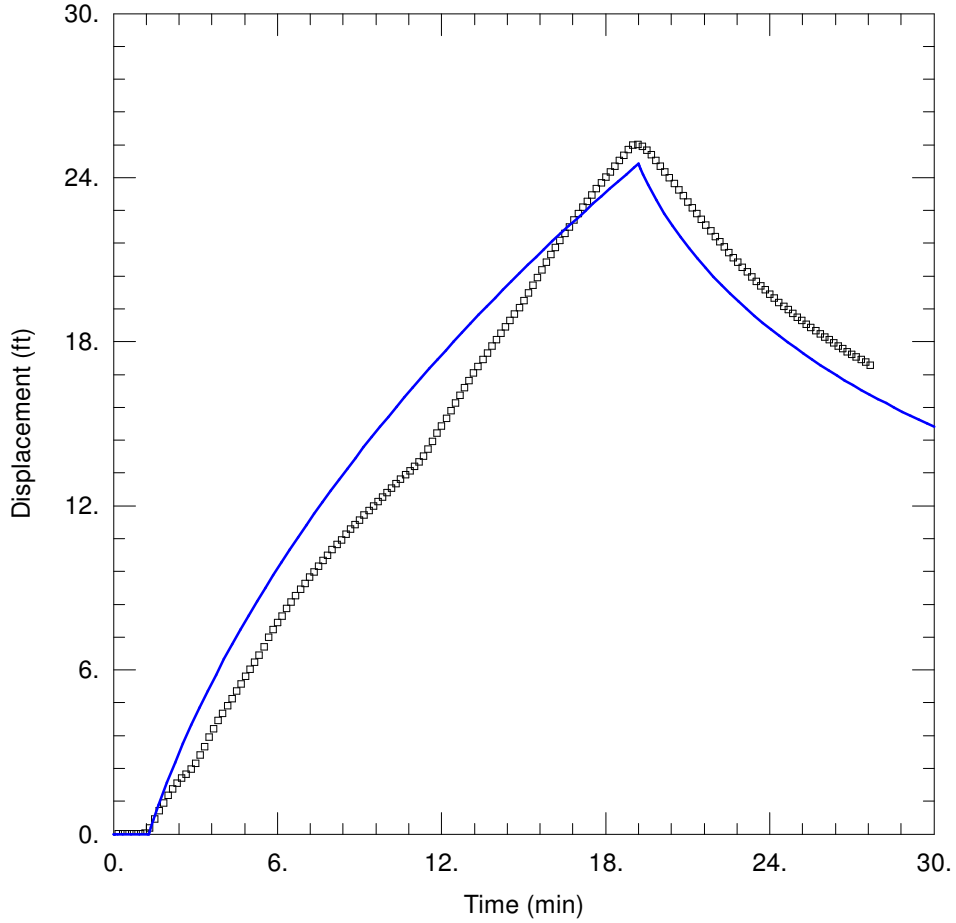
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB074	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 0.6594 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB075old_1inj_PC.aqt
Date: 03/21/14 Time: 10:34:13

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB075 old
Test Date: 3/19/2014

AQUIFER DATA

Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB075 old	0	0

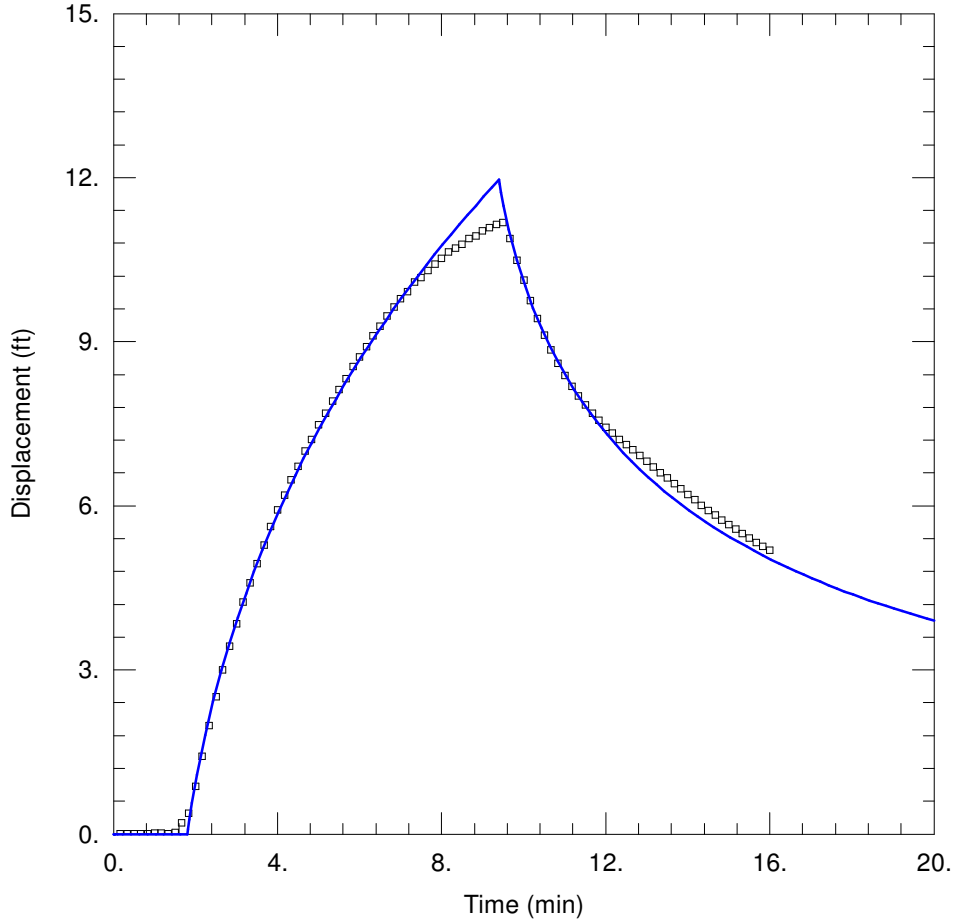
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB075 old	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 0.8149 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB076A_1inj_PC.aqt
Date: 03/21/14 Time: 13:17:10

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB076A
Test Date: 3/20/2014

AQUIFER DATA

Saturated Thickness: 17.7 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB076A	0	0

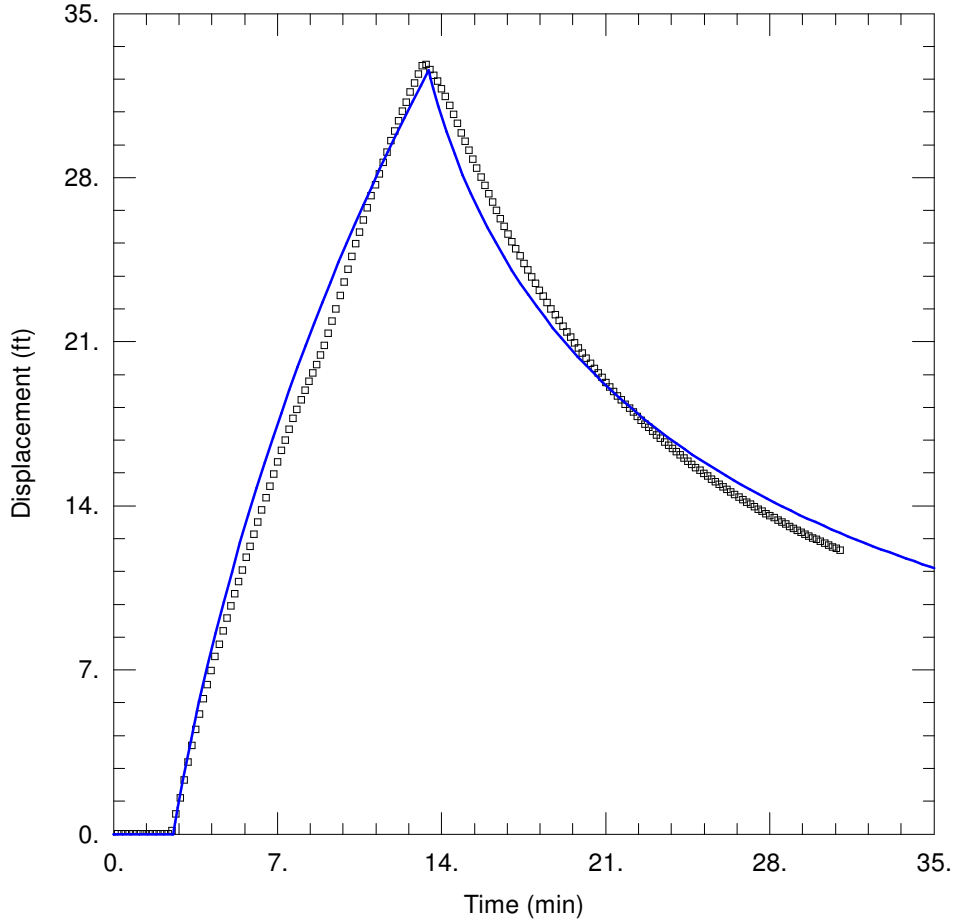
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB076A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 5.638 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB077_1inj_PC.aqt
Date: 04/28/14 Time: 12:50:46

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB077
Test Date: 4/24/2014

AQUIFER DATA

Saturated Thickness: 15.4 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB077	0	0

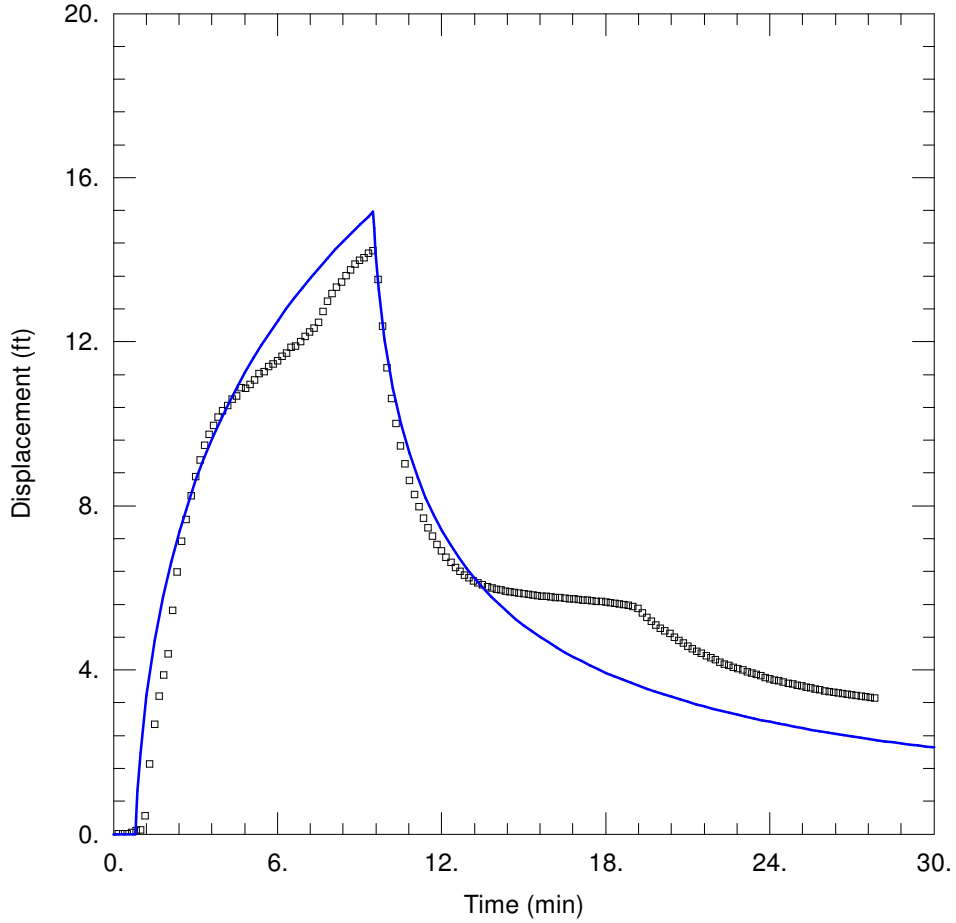
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB077	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 1.889 ft^2/day S = 0.09151
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB078_1inj_PC.aqt
Date: 04/01/14 Time: 14:16:12

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB078
Test Date: 3/28/2014

AQUIFER DATA

Saturated Thickness: 23.8 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB078	0	0

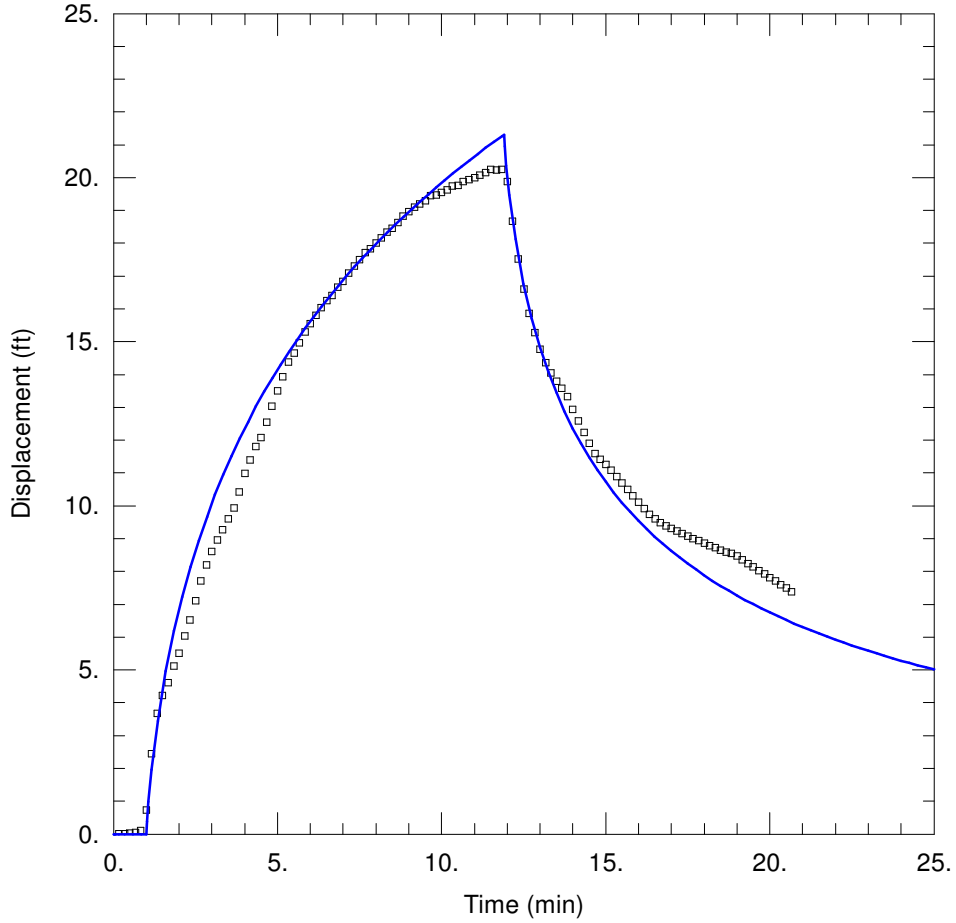
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB078	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 27.59 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB079_1inj_PC.aqt
Date: 04/05/14 Time: 07:53:50

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB079
Test Date: 4/2/2014

AQUIFER DATA

Saturated Thickness: 27.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB079	0	0

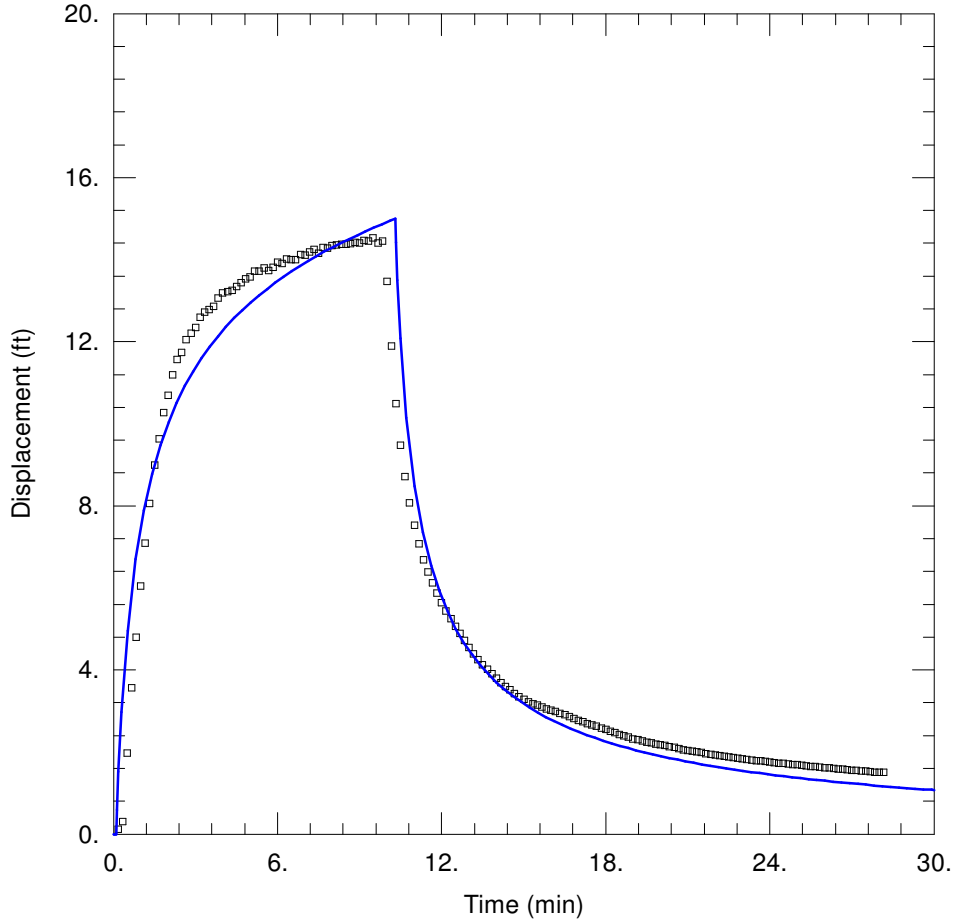
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB079	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 19.04 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB080_1inj_PC.aqt
Date: 04/01/14 Time: 15:10:24

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB080
Test Date: 3/28/2014

AQUIFER DATA

Saturated Thickness: 23.7 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB080	0	0

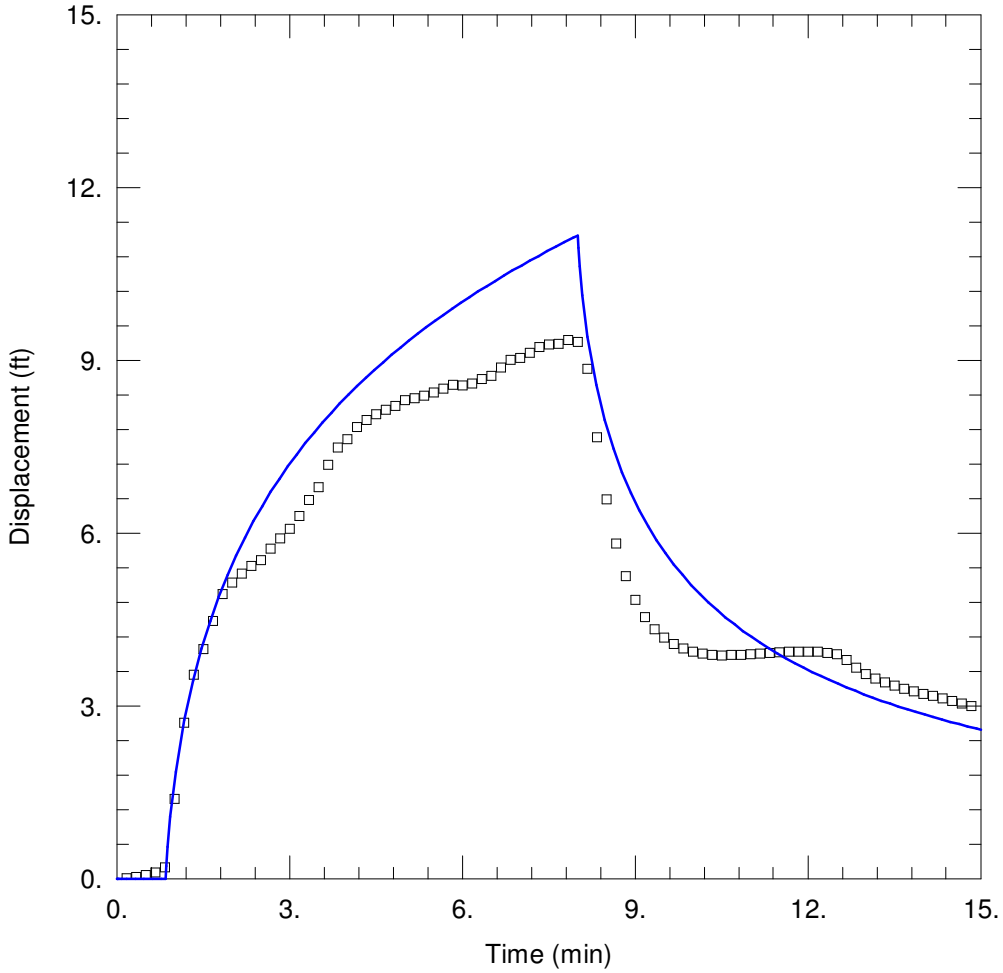
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB080	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 90.72 ft^2/day S = 0.0181
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB081_1inj_PC.aqt
Date: 04/17/14 Time: 08:44:01

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB081
Test Date: 4/16/2014

AQUIFER DATA

Saturated Thickness: 22.6 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB081	0	0

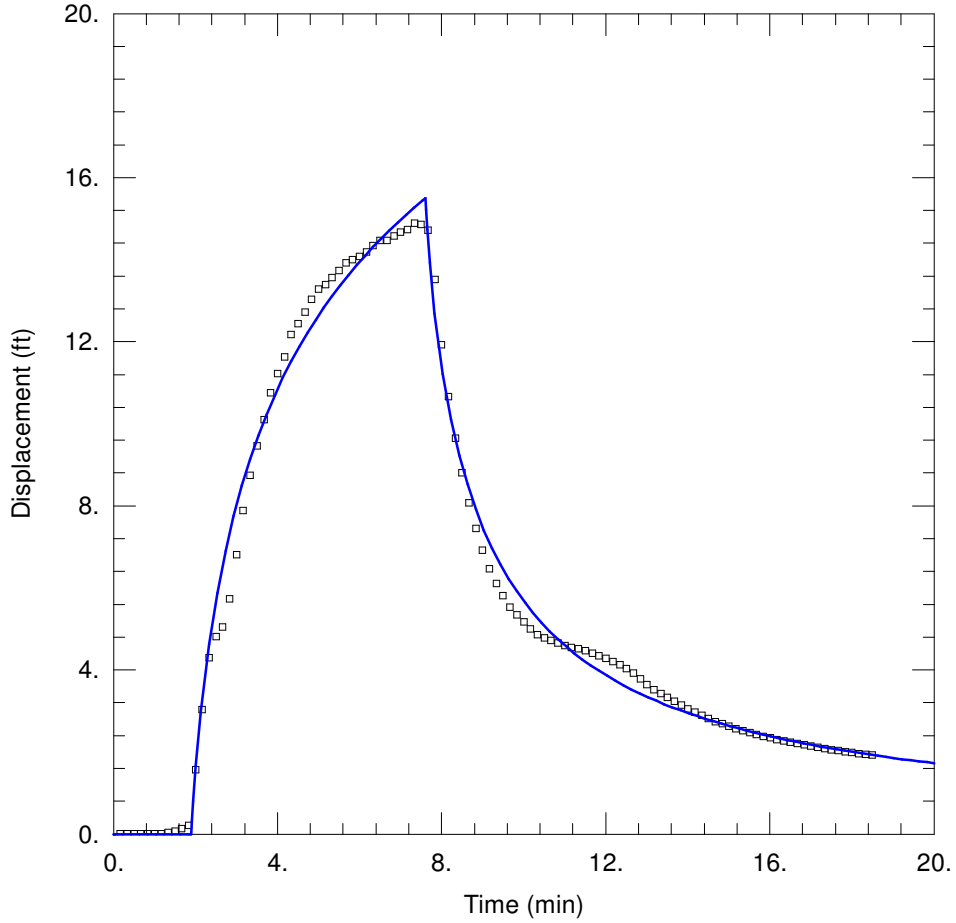
Observation Wells

Well Name	X (ft)	Y (ft)
□ ISB081	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 53.72 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB083_1inj_PC.aqt
Date: 03/21/14 Time: 10:36:57

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB083
Test Date: 3/19/2014

AQUIFER DATA

Saturated Thickness: 12.6 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB083	0	0

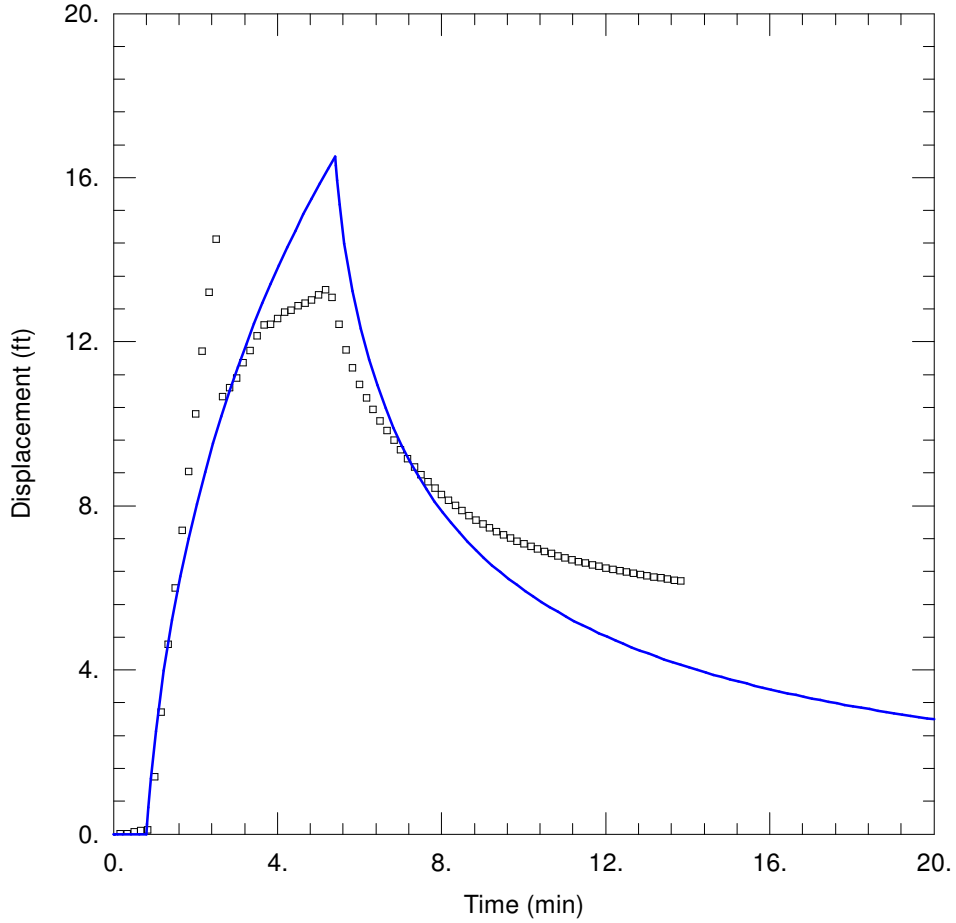
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB083	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 46.17 ft^2/day S = 0.06598
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB084_1inj_PC.aqt
Date: 03/21/14 Time: 10:39:00

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB084
Test Date: 3/19/2014

AQUIFER DATA

Saturated Thickness: 14.6 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB084	0	0

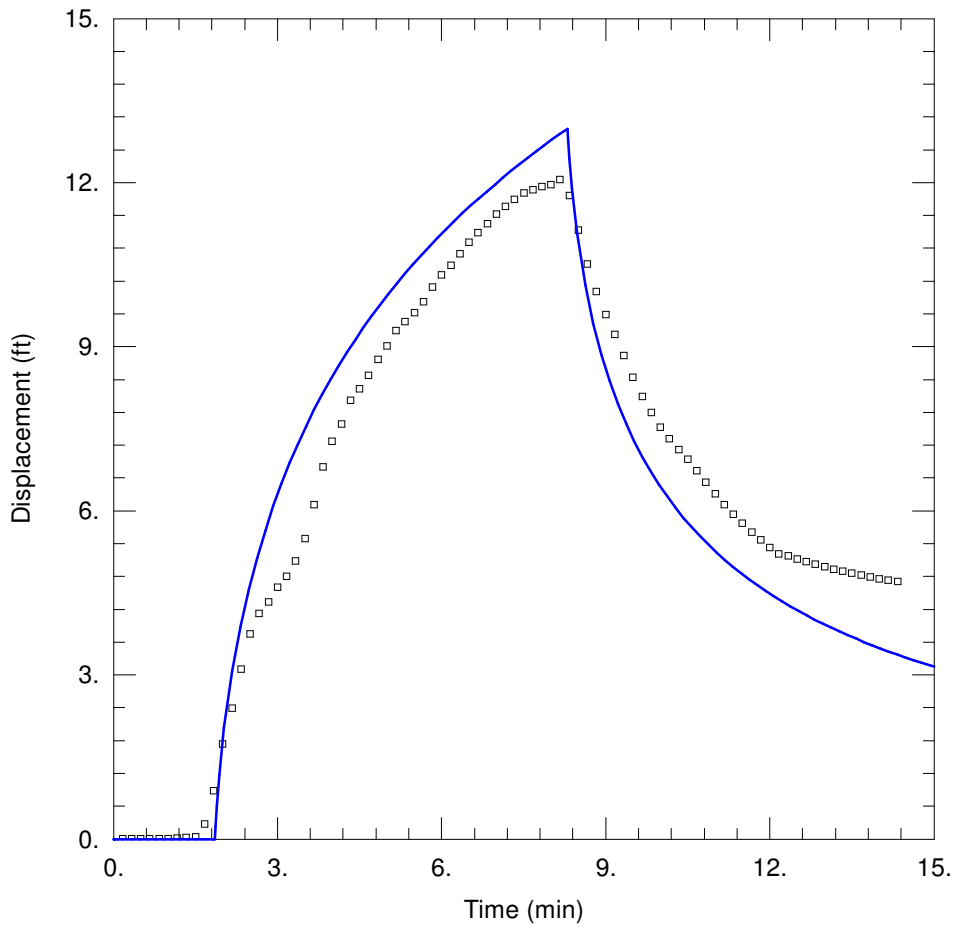
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB084	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 13.09 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB085A_1inj_PC.aqt
Date: 04/28/14 Time: 10:05:08

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB085A
Test Date: 4/24/2014

AQUIFER DATA

Saturated Thickness: 12.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB085A	0	0

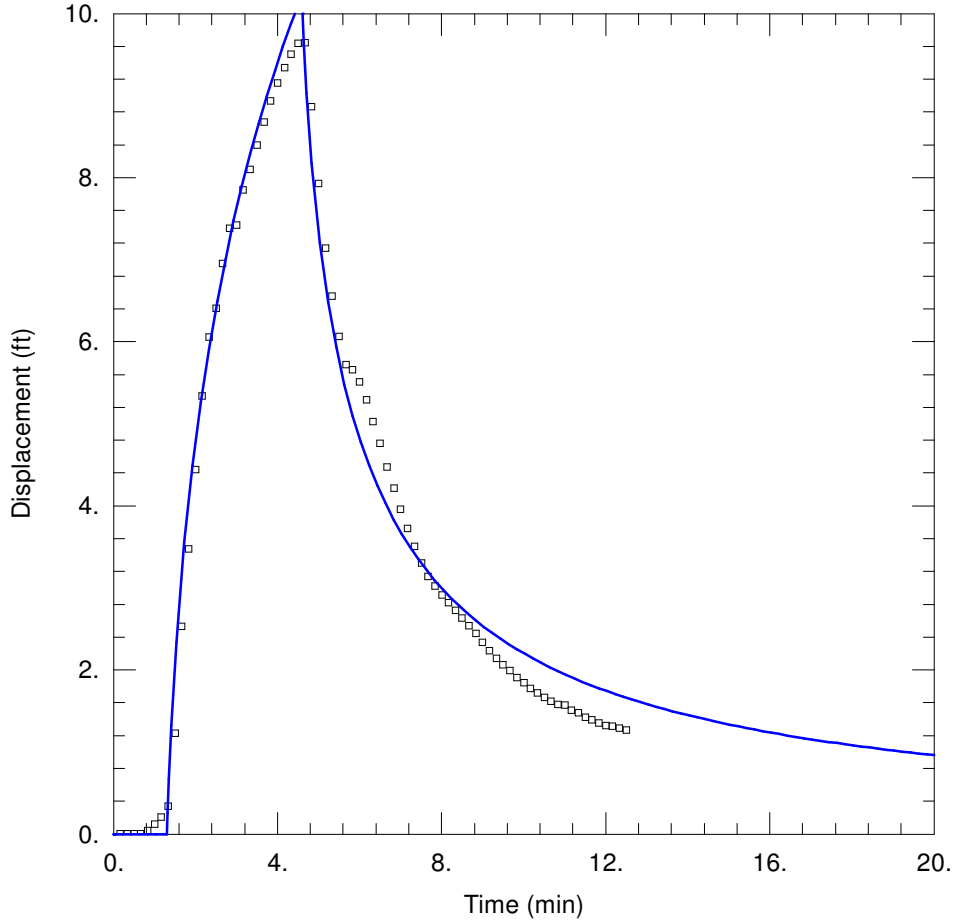
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB085A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 41.7 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB086_1inj_PC.aqt
Date: 03/21/14 Time: 10:41:25

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Pre Maint.
Test Well: ISB086
Test Date: 3/19/2014

AQUIFER DATA

Saturated Thickness: 14.3 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB086	0	0

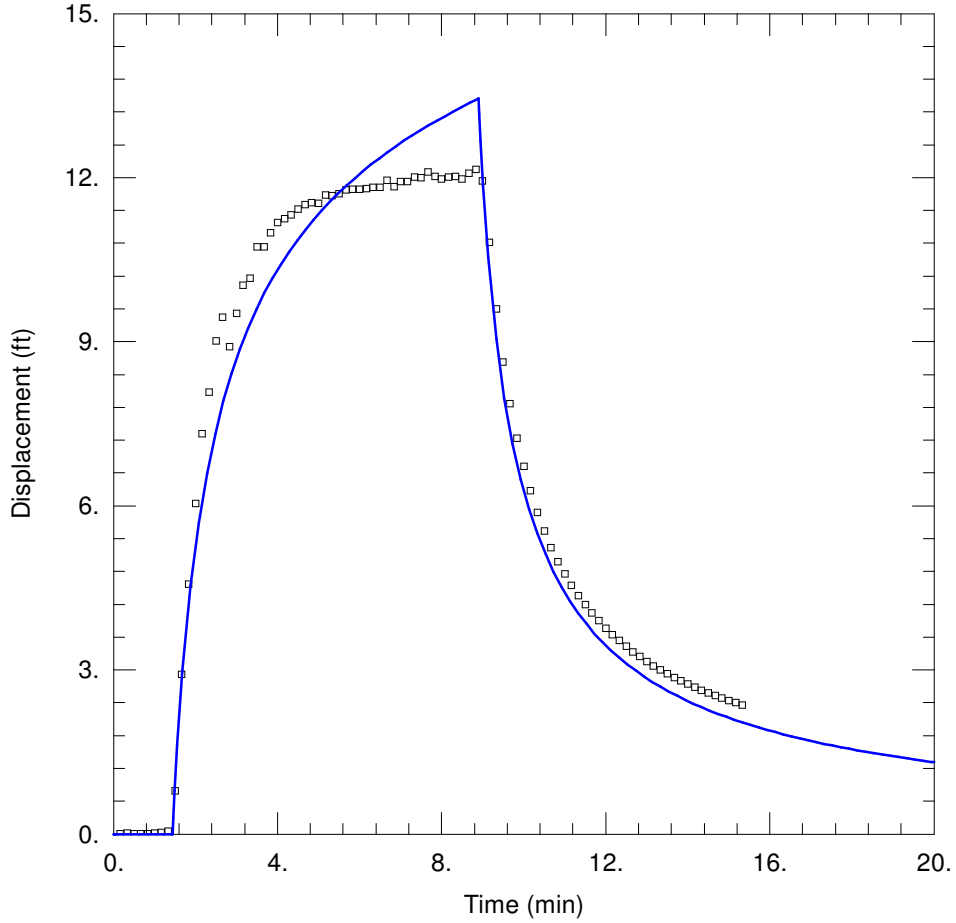
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB086	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 35.22 ft^2/day S = 0.215
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB055_2inj_PC.aqt
Date: 04/28/14 Time: 15:06:19

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB055
Test Date: 4/25/2014

AQUIFER DATA

Saturated Thickness: 20. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB055	0	0

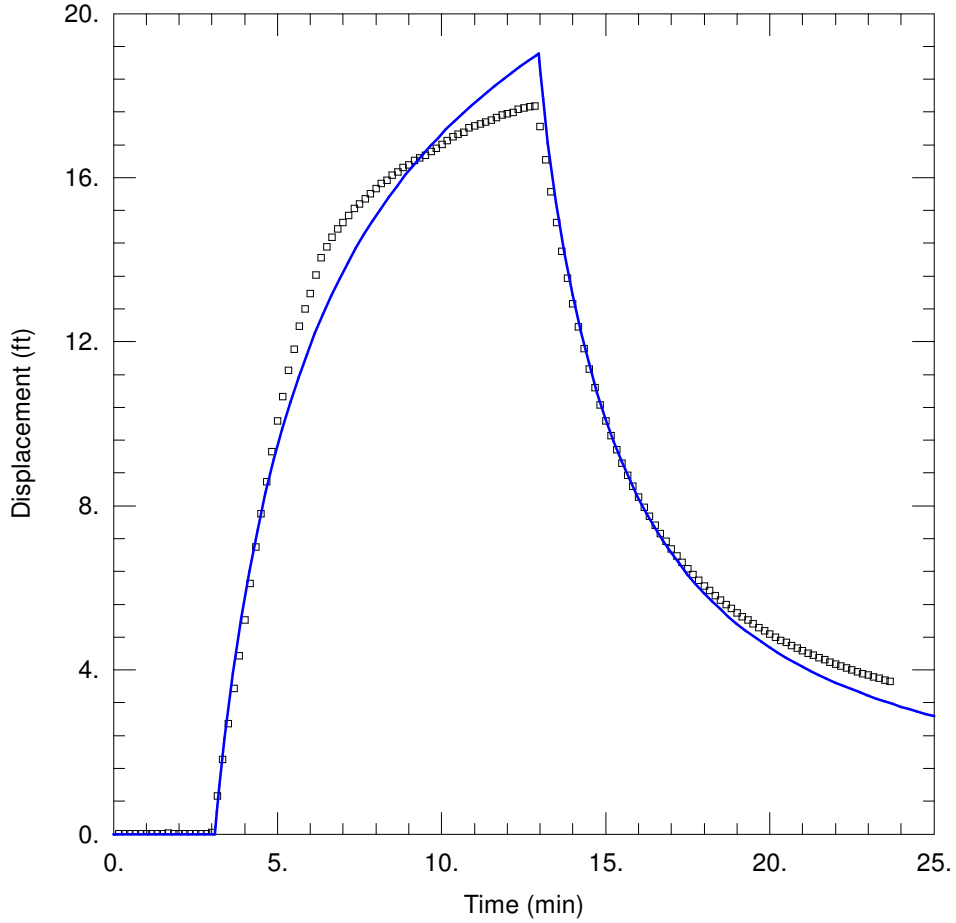
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB055	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 79.12 ft^2/day S = 0.01599
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB056A_2inj_PC.aqt
Date: 04/28/14 Time: 15:51:04

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB056A
Test Date: 4/25/2014

AQUIFER DATA

Saturated Thickness: 21.3 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB056A	0	0

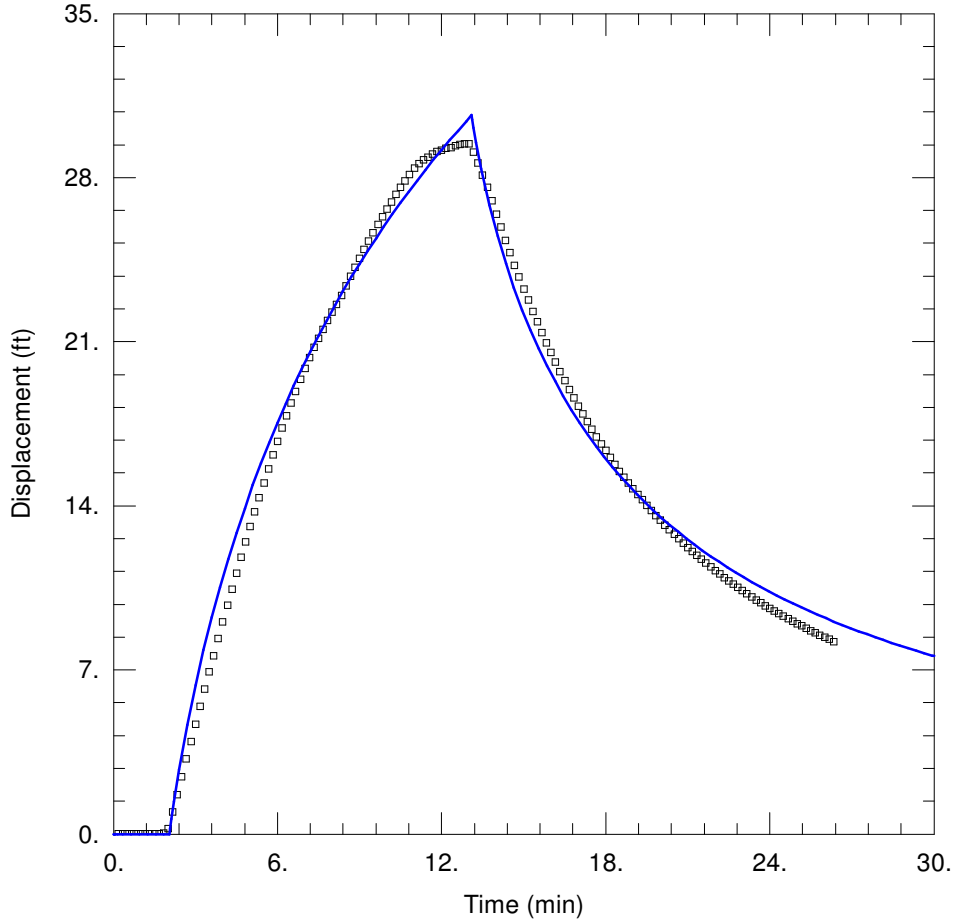
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB056A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 24.29 ft^2/day S = 0.009993
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB057_2inj_PC.aqt
Date: 04/28/14 Time: 15:46:10

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB057
Test Date: 4/25/2014

AQUIFER DATA

Saturated Thickness: 19.3 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB057	0	0

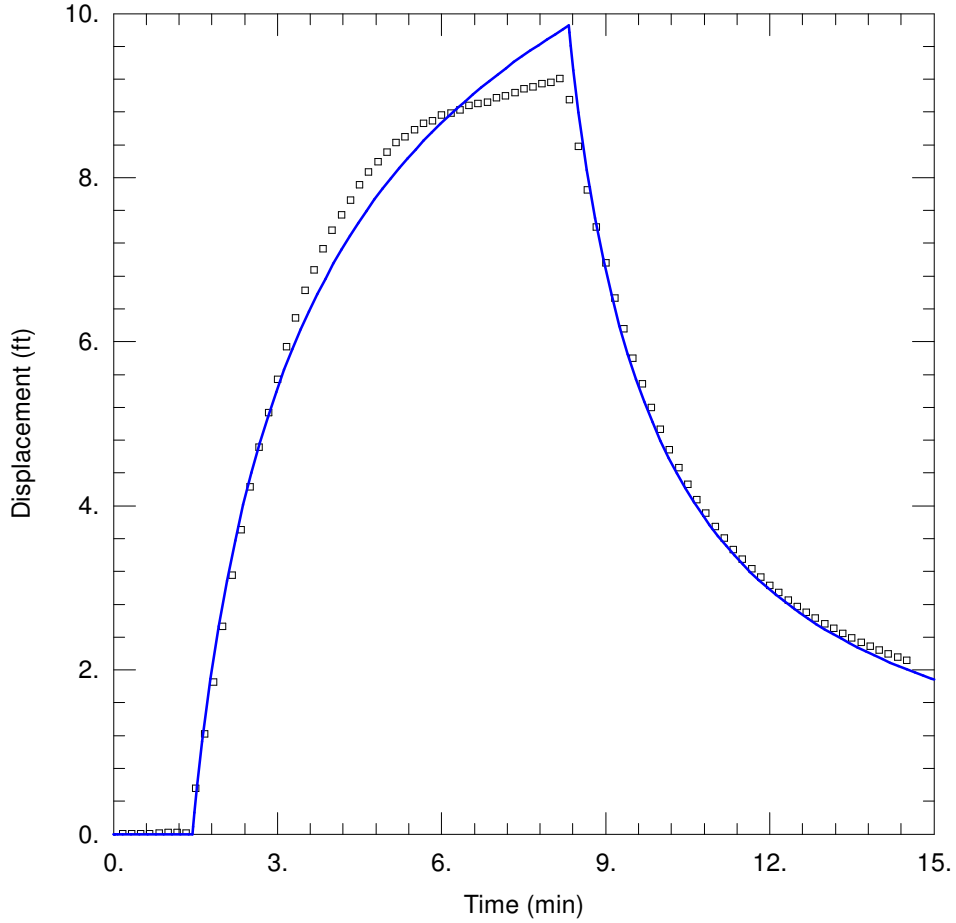
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB057	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 6.45 ft^2/day S = 0.06898
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB058_2inj_PC.aqt
Date: 04/29/14 Time: 10:59:53

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB058
Test Date: 4/25/2014

AQUIFER DATA

Saturated Thickness: 19.3 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB058	0	0

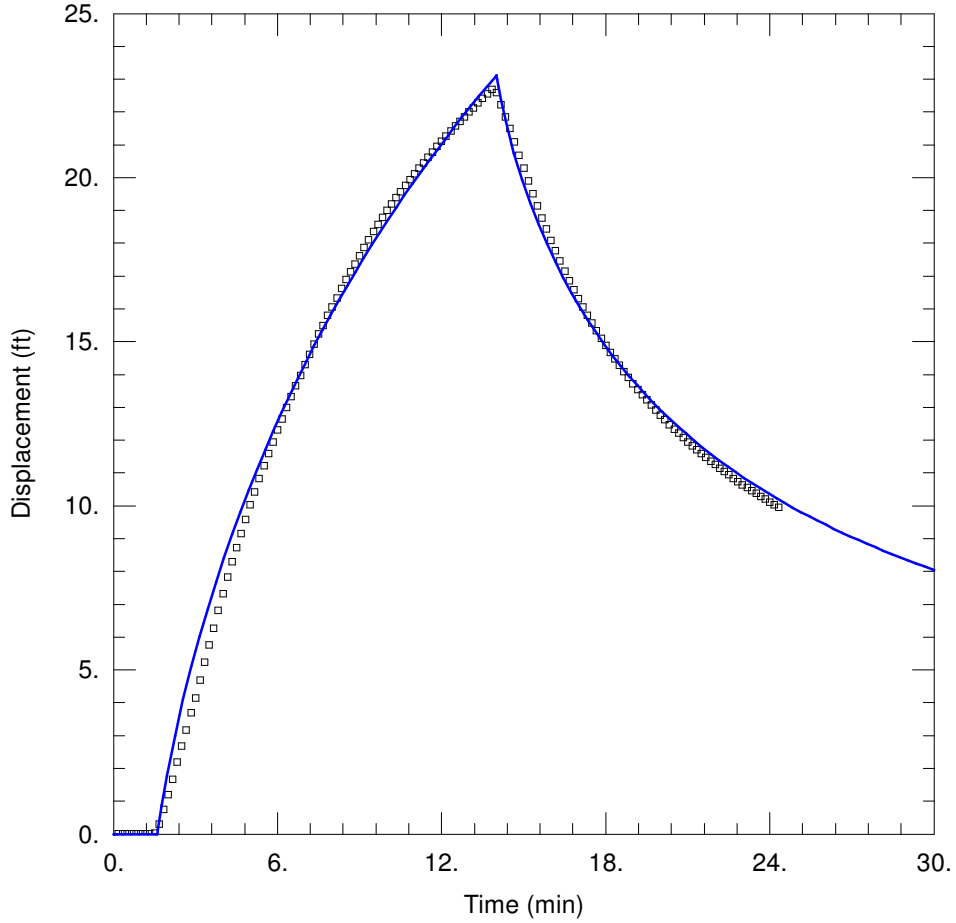
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB058	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 35.56 ft^2/day S = 0.01738
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB059_2inj_PC.aqt
Date: 05/02/14 Time: 16:19:56

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB059
Test Date: 4/28/2014

AQUIFER DATA

Saturated Thickness: 19.5 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB059	0	0

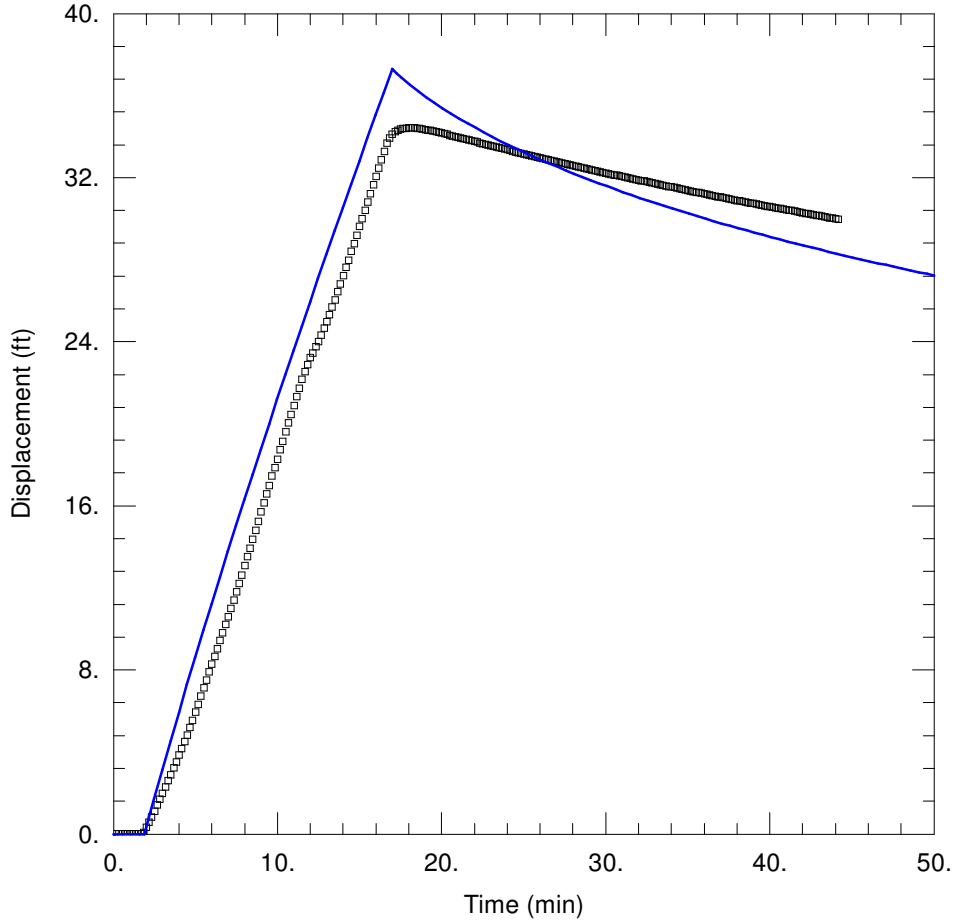
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB059	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 3.214 ft^2/day S = 0.1928
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB060A_2inj_PC.aqt
Date: 05/05/14 Time: 08:36:37

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB060A
Test Date: 5/02/2014

AQUIFER DATA

Saturated Thickness: 21.3 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB060A	0	0

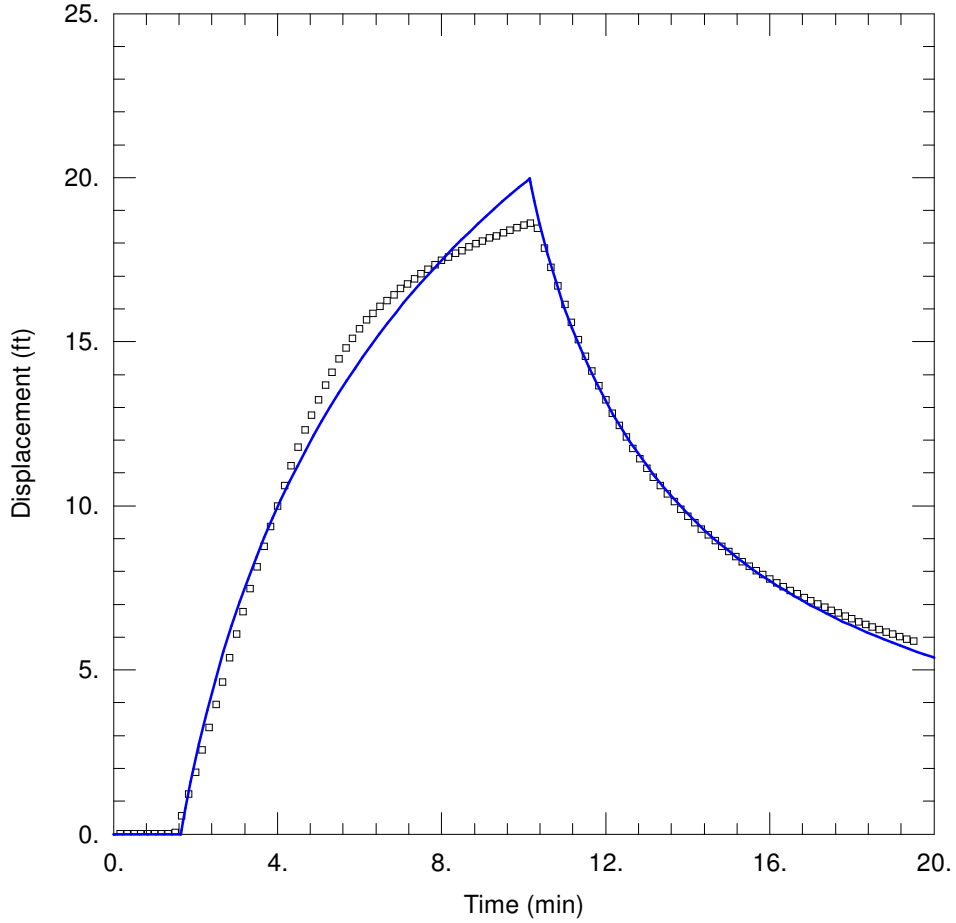
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB060A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 0.03473 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB061_2inj_PC.aqt
Date: 05/02/14 Time: 16:09:35

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB061
Test Date: 4/28/2014

AQUIFER DATA

Saturated Thickness: 18. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB061	0	0

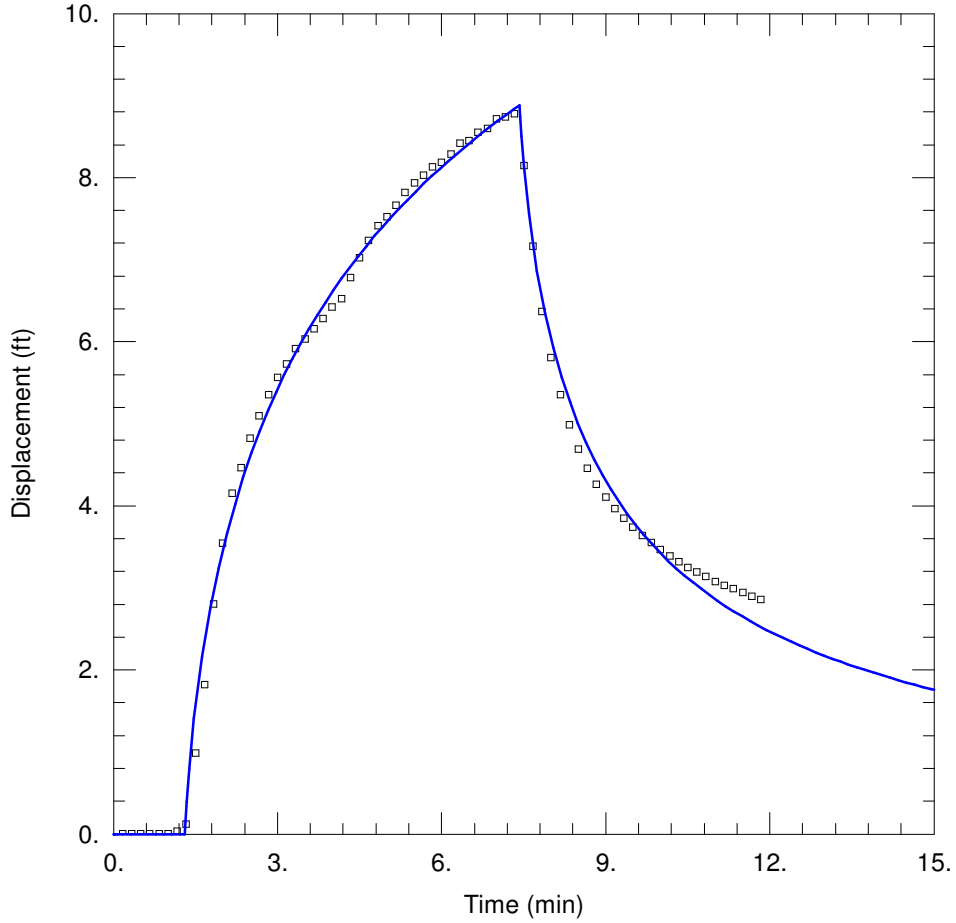
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB061	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 10.69 ft^2/day S = 0.03558
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB062_2inj_PC.aqt
Date: 05/02/14 Time: 16:10:23

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB062
Test Date: 4/28/2014

AQUIFER DATA

Saturated Thickness: 16.6 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB062	0	0

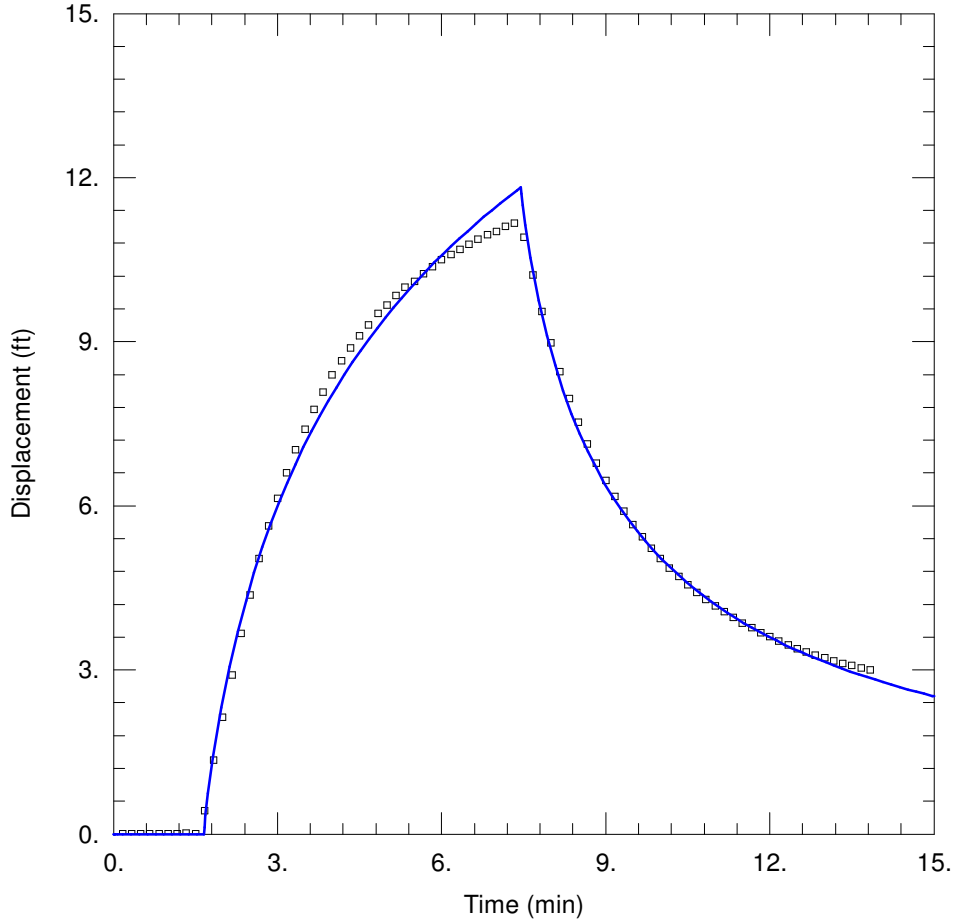
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB062	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 44.71 ft^2/day S = 0.1671
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB063_2inj_PC.aqt
Date: 05/02/14 Time: 16:11:01

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB063
Test Date: 5/01/2014

AQUIFER DATA

Saturated Thickness: 16.3 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB063	0	0

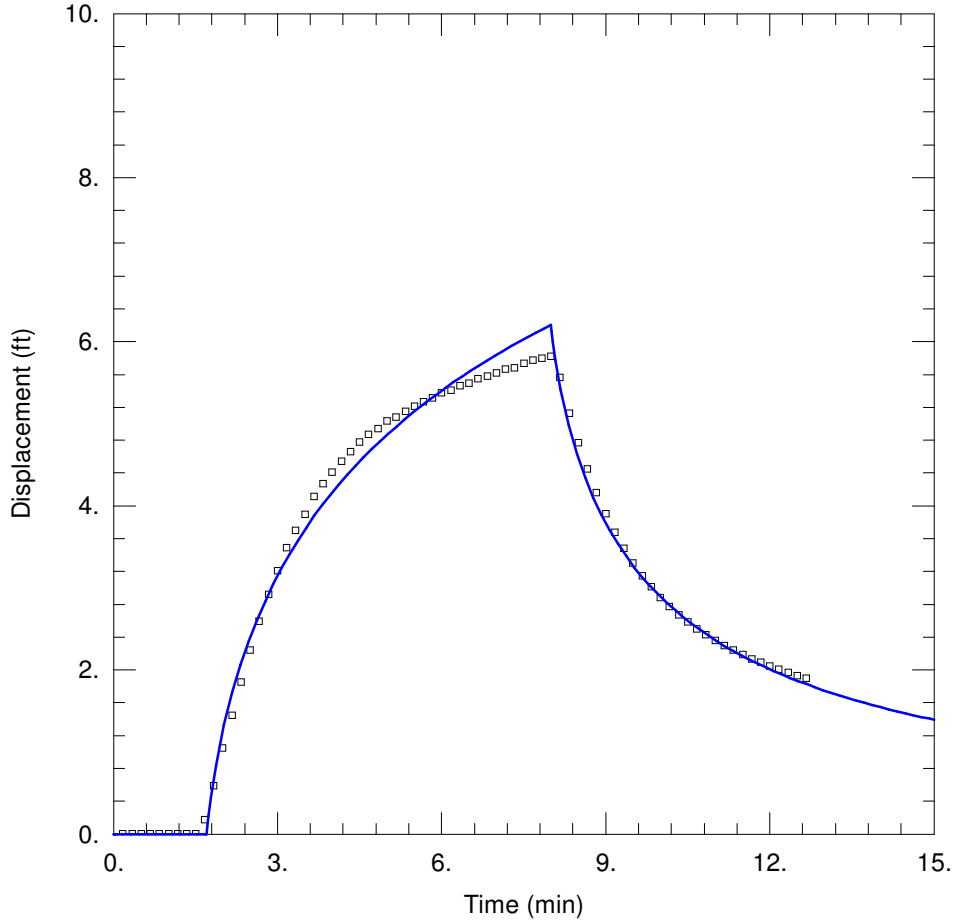
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB063	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 25.34 ft^2/day S = 0.08128
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB064_2inj_PC.aqt
Date: 05/02/14 Time: 16:11:46

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB064
Test Date: 4/28/2014

AQUIFER DATA

Saturated Thickness: 19.2 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB064	0	0

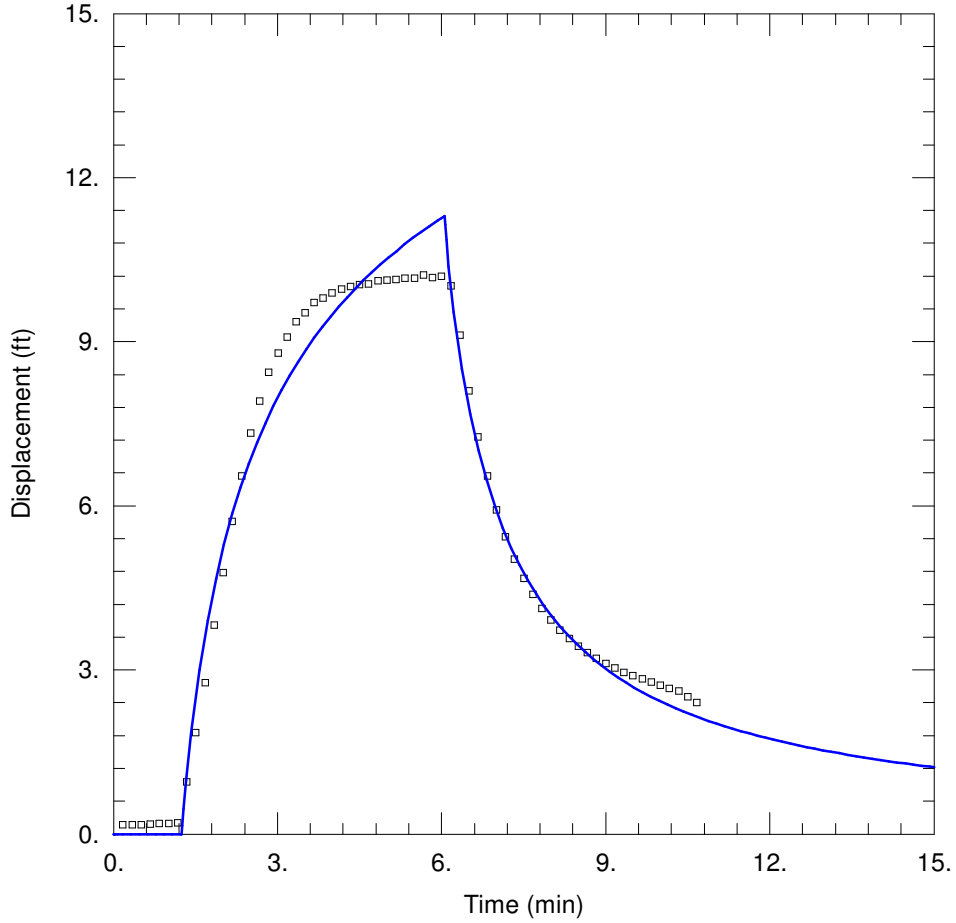
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB064	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 32.62 ft^2/day S = 0.1278
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB065_2inj_PC.aqt
Date: 05/02/14 Time: 16:12:36

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB065
Test Date: 4/28/2014

AQUIFER DATA

Saturated Thickness: 13.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB065	0	0

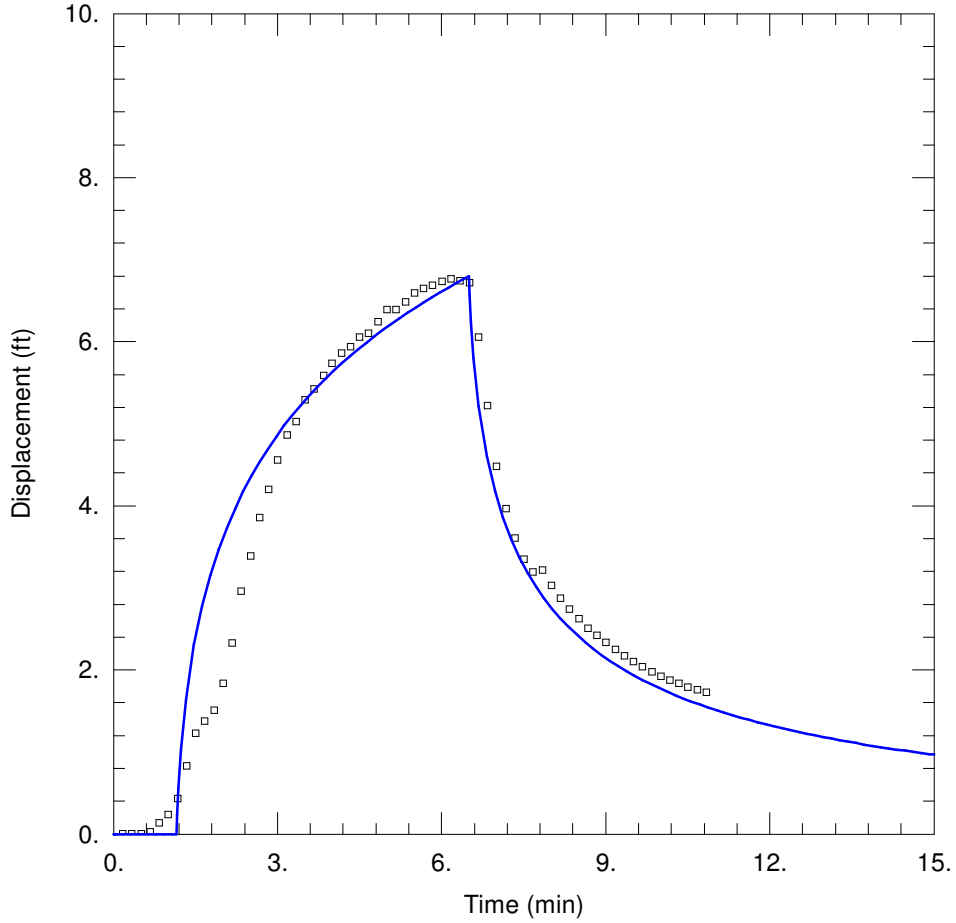
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB065	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 55.27 ft^2/day S = 0.02174
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB066_2inj_PC.aqt
Date: 05/02/14 Time: 16:13:16

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB066
Test Date: 5/01/2014

AQUIFER DATA

Saturated Thickness: 14. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB066	0	0

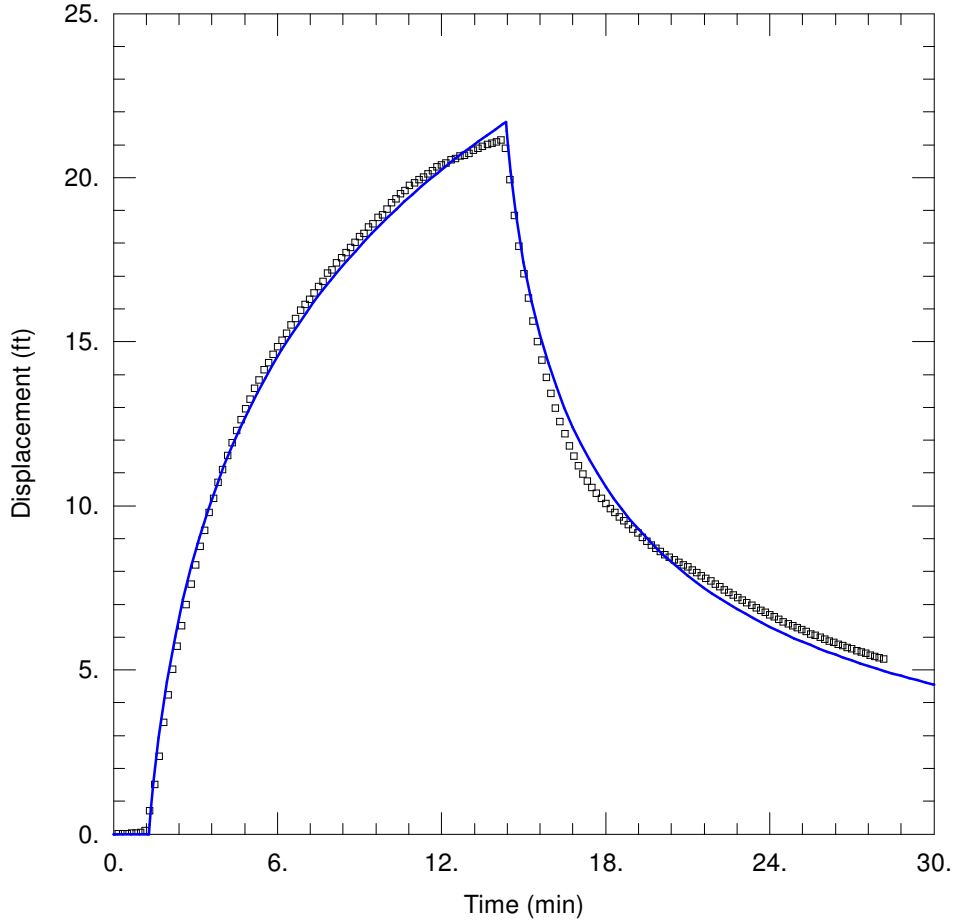
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB066	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 131.9 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB067_2inj_PC.aqt
Date: 04/22/14 Time: 10:37:58

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB067
Test Date: 4/17/2014

AQUIFER DATA

Saturated Thickness: 13.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB067	0	0

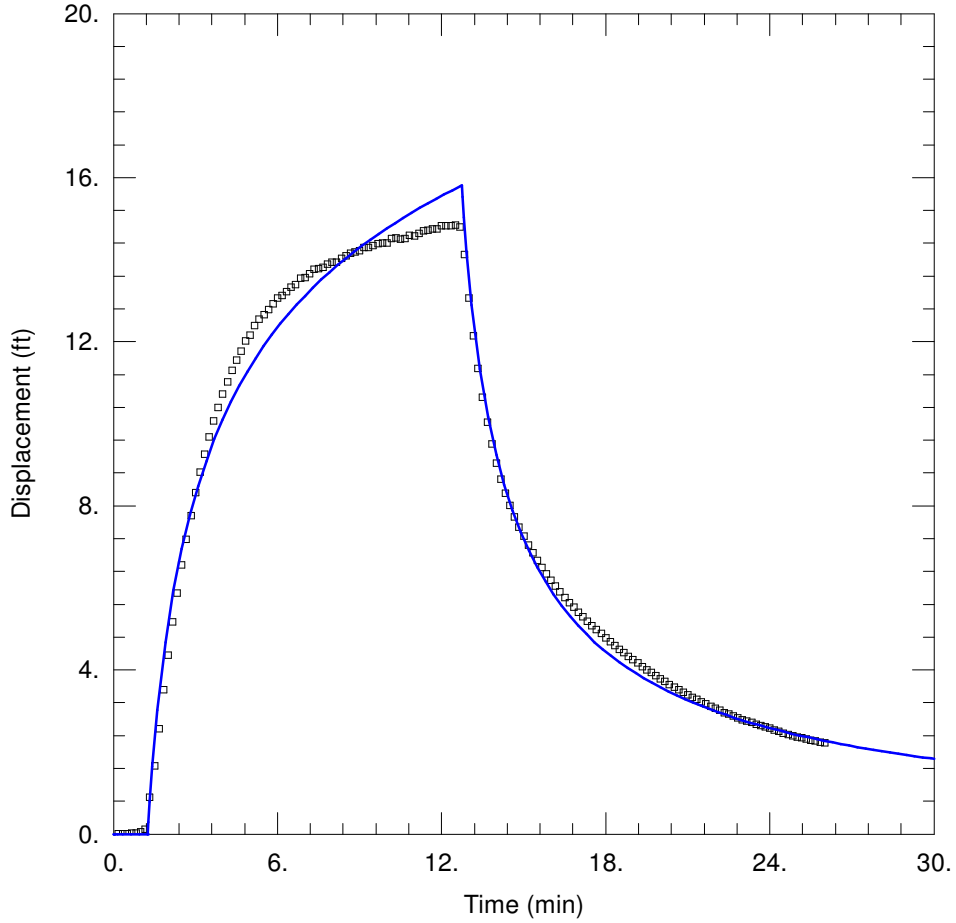
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB067	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 16.57 ft^2/day S = 0.1299
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB068_2inj_PC.aqt
Date: 04/22/14 Time: 10:49:17

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB068
Test Date: 4/17/2014

AQUIFER DATA

Saturated Thickness: 14.8 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB068	0	0

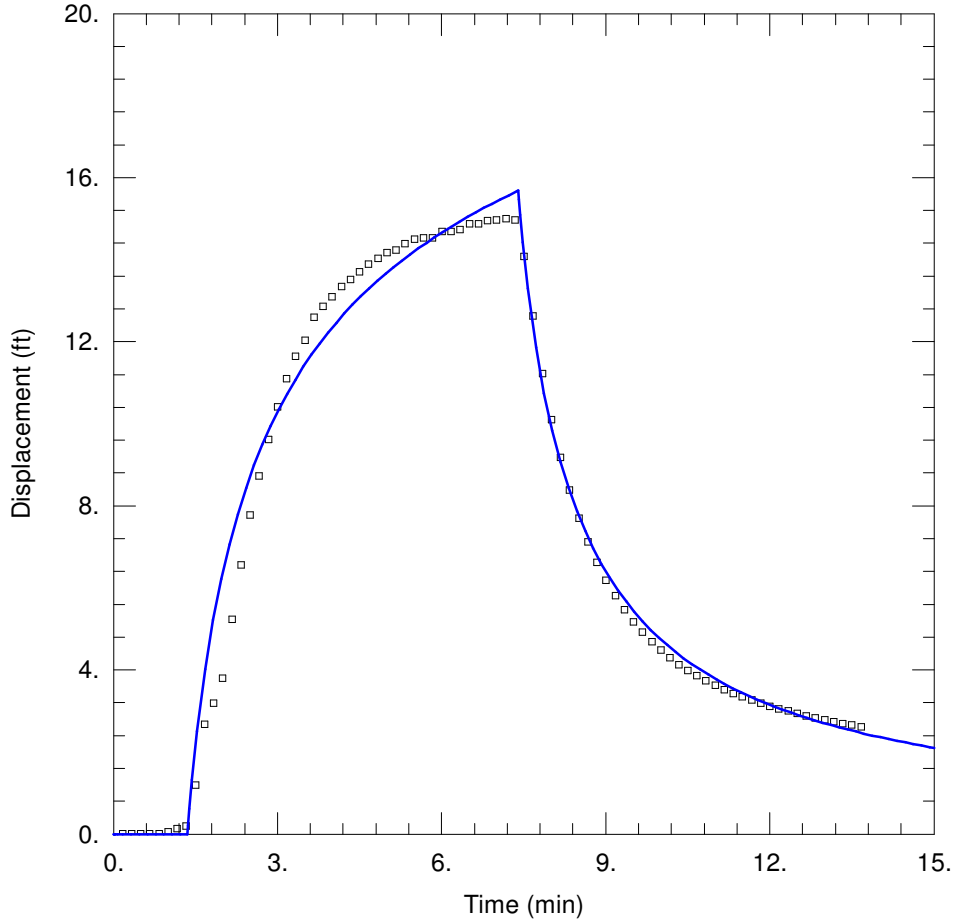
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB068	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 38.39 ft^2/day S = 0.03147
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB069A_2inj_PC.aqt
Date: 05/02/14 Time: 16:05:35

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB069A
Test Date: 5/01/2014

AQUIFER DATA

Saturated Thickness: 14.7 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB069A	0	0

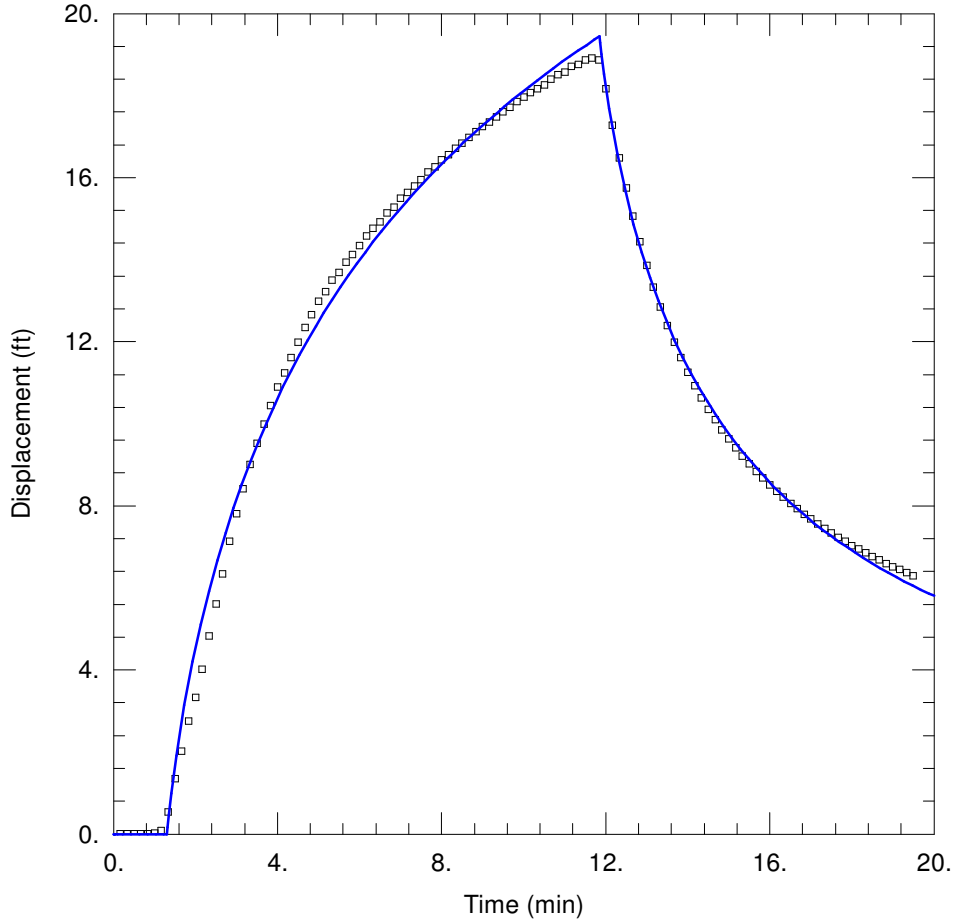
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB069A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 59.14 ft^2/day S = 0.01868
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB070_2inj_PC.aqt
Date: 04/15/14 Time: 09:47:38

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB070
Test Date: 4/10/2014

AQUIFER DATA

Saturated Thickness: 14. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB070	0	0

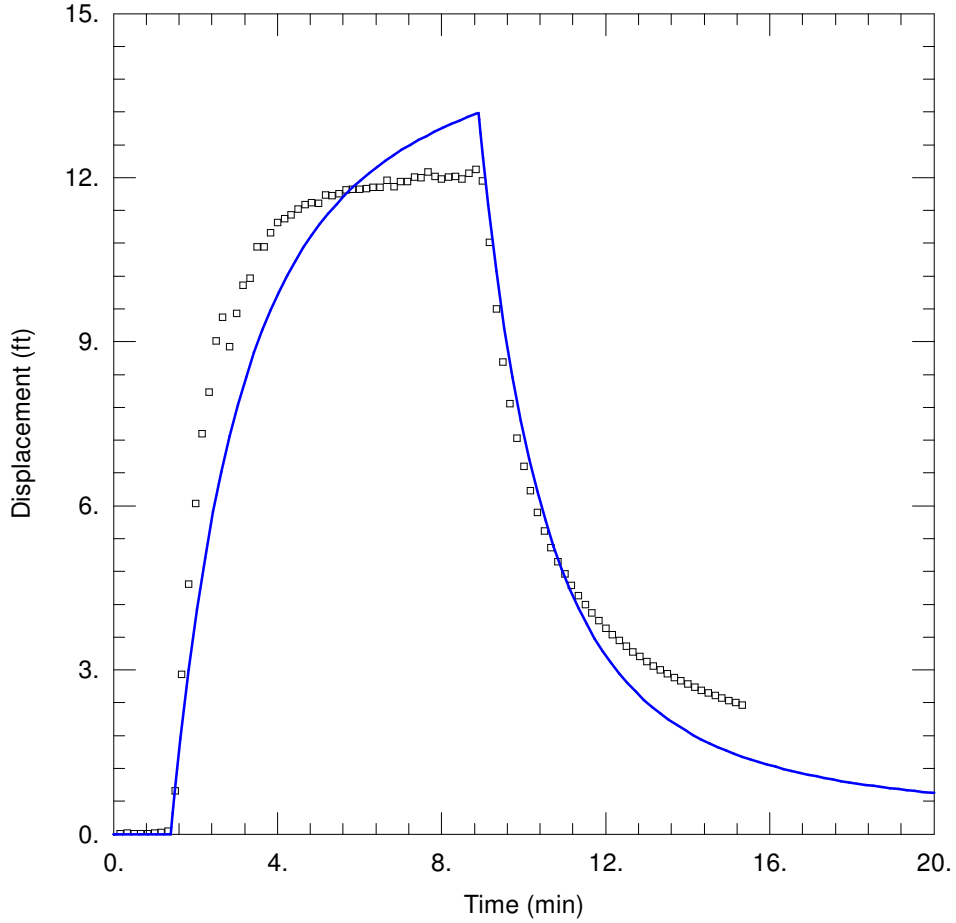
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB070	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 15.51 ft^2/day S = 0.08877
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB071_2inj_PC.aqt
Date: 05/08/14 Time: 13:55:59

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB071
Test Date: 5/05/2014

AQUIFER DATA

Saturated Thickness: 16.2 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB071	0	0

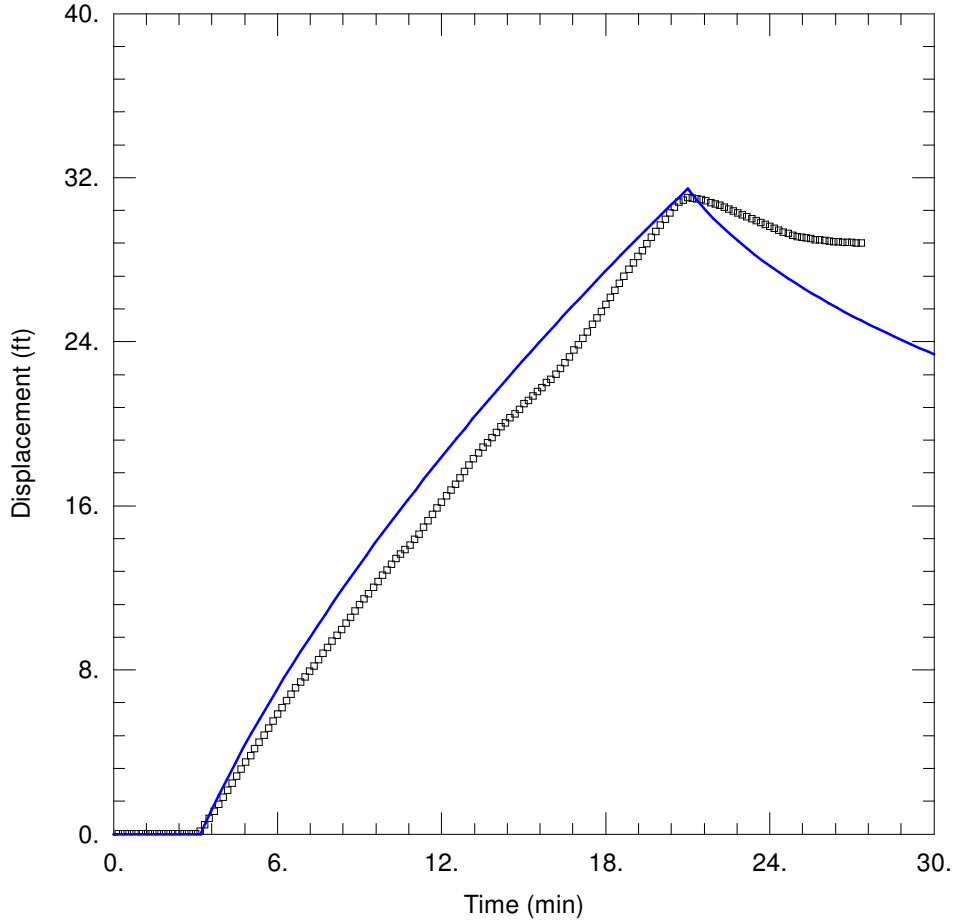
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB071	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 71.37 ft^2/day S = 1.258E-5
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB072_2inj_PC.aqt
Date: 04/15/14 Time: 09:48:41

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB072
Test Date: 4/10/2014

AQUIFER DATA

Saturated Thickness: 9.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB072	0	0

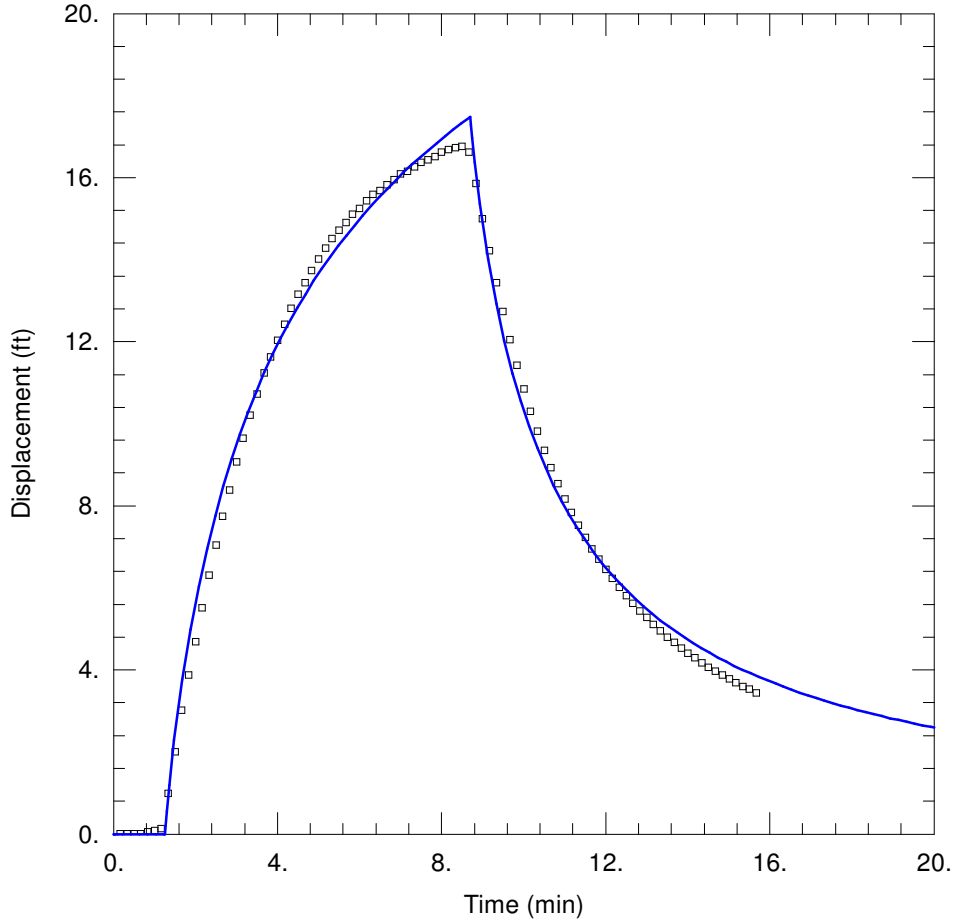
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB072	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 0.2823 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB073_2inj_PC.aqt
Date: 05/08/14 Time: 13:58:22

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB073
Test Date: 5/05/2014

AQUIFER DATA

Saturated Thickness: 18.4 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB073	0	0

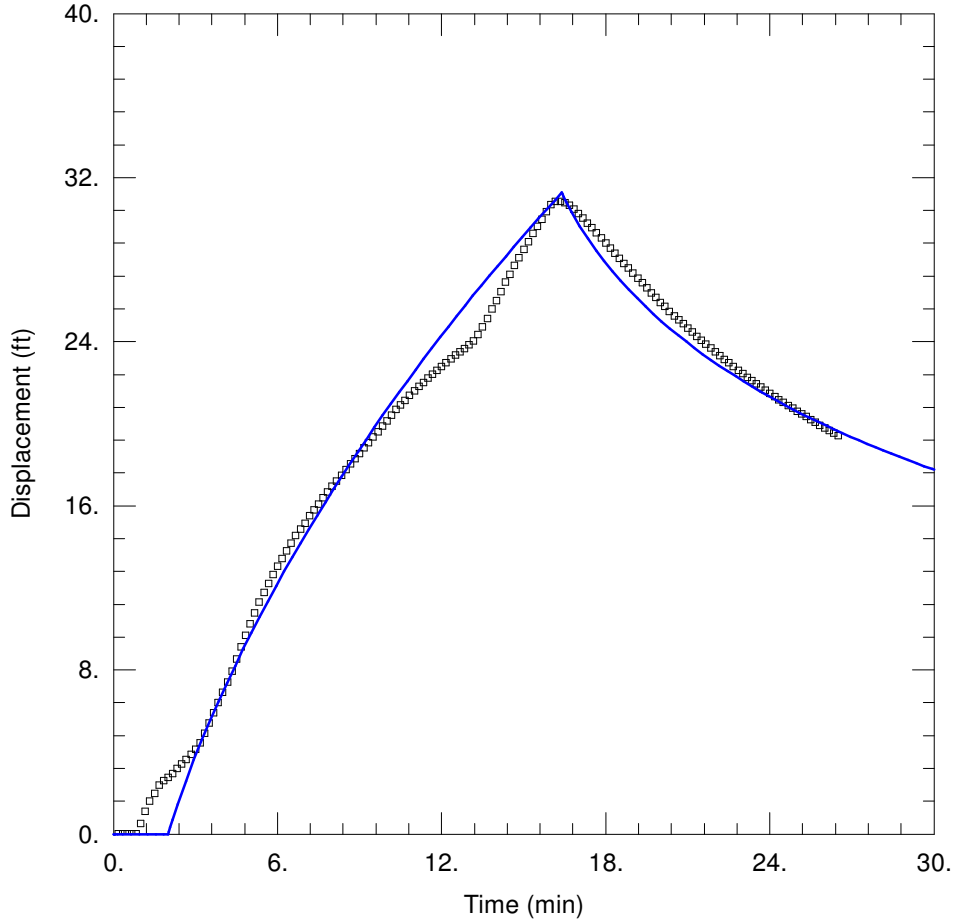
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB073	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 27.66 ft^2/day S = 0.02968
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB074_2inj_PC.aqt
Date: 04/15/14 Time: 09:49:43

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB074
Test Date: 4/9/2014

AQUIFER DATA

Saturated Thickness: 17.7 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB074	0	0

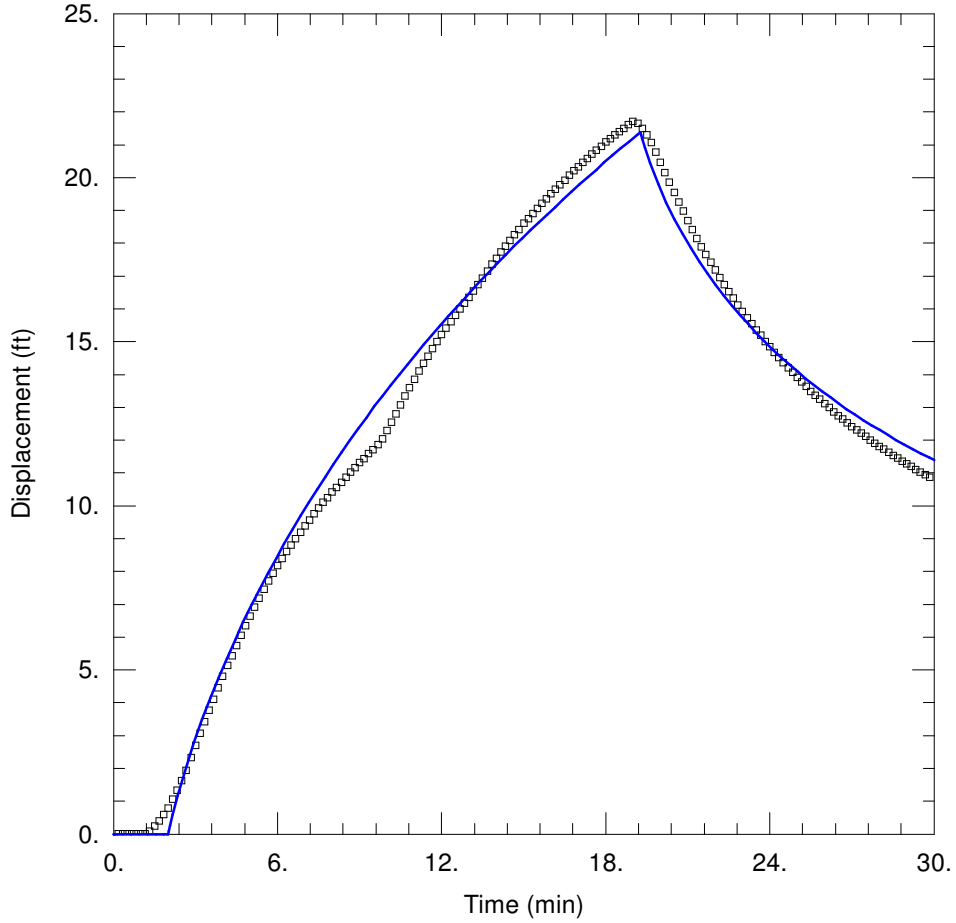
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB074	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 0.6307 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB075old_2inj_PC.aqt
Date: 04/15/14 Time: 09:50:53

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB075old
Test Date: 4/10/2014

AQUIFER DATA

Saturated Thickness: 16.2 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB075old	0	0

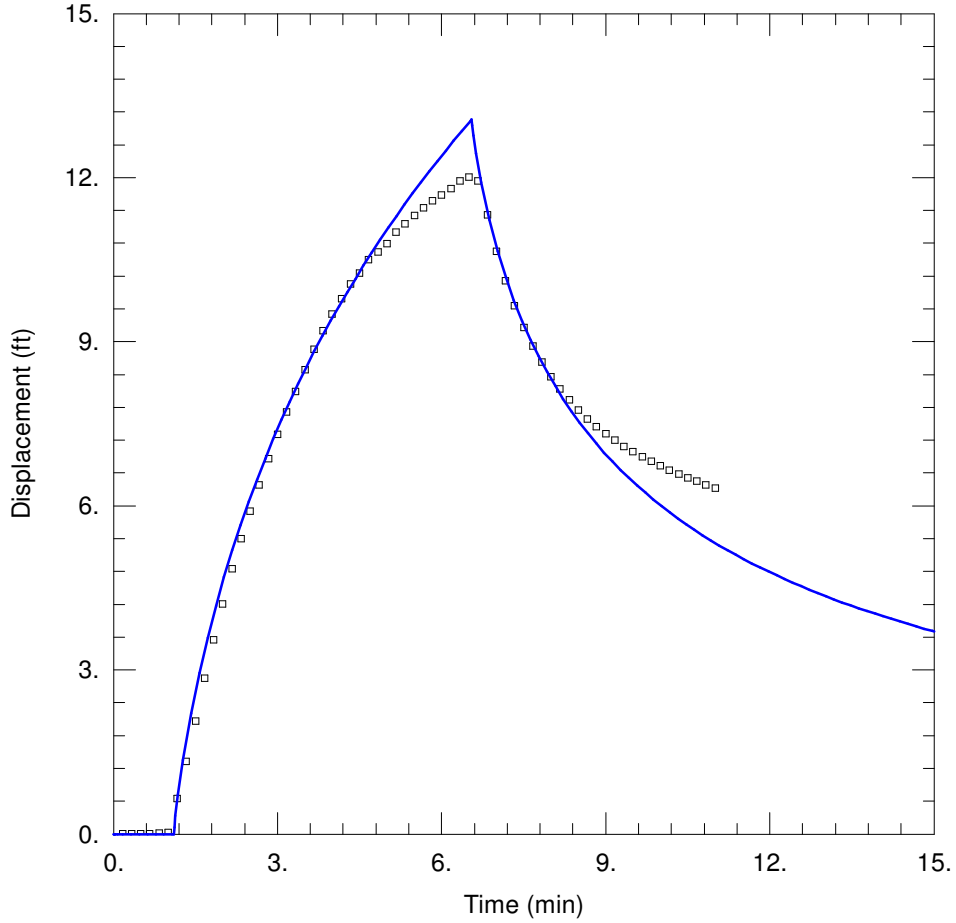
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB075old	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 1.665 ft^2/day S = 0.2829
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB076A_2inj_PC.aqt
Date: 04/15/14 Time: 09:51:20

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB076A
Test Date: 4/10/2014

AQUIFER DATA

Saturated Thickness: 17.7 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB076A	0	0

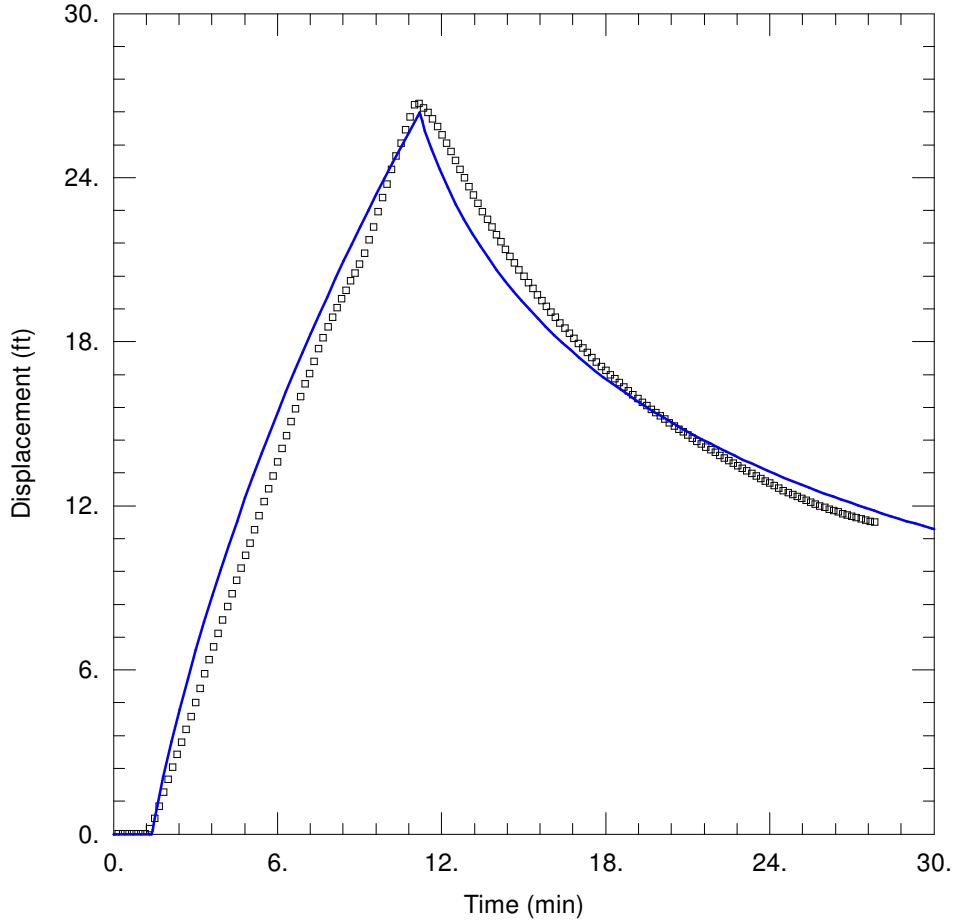
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB076A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 10.33 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB077redo_2inj_PC.aqt
Date: 05/14/14 Time: 20:31:14

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB077redo
Test Date: 5/14/2014

AQUIFER DATA

Saturated Thickness: 18.4 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB077redo	0	0

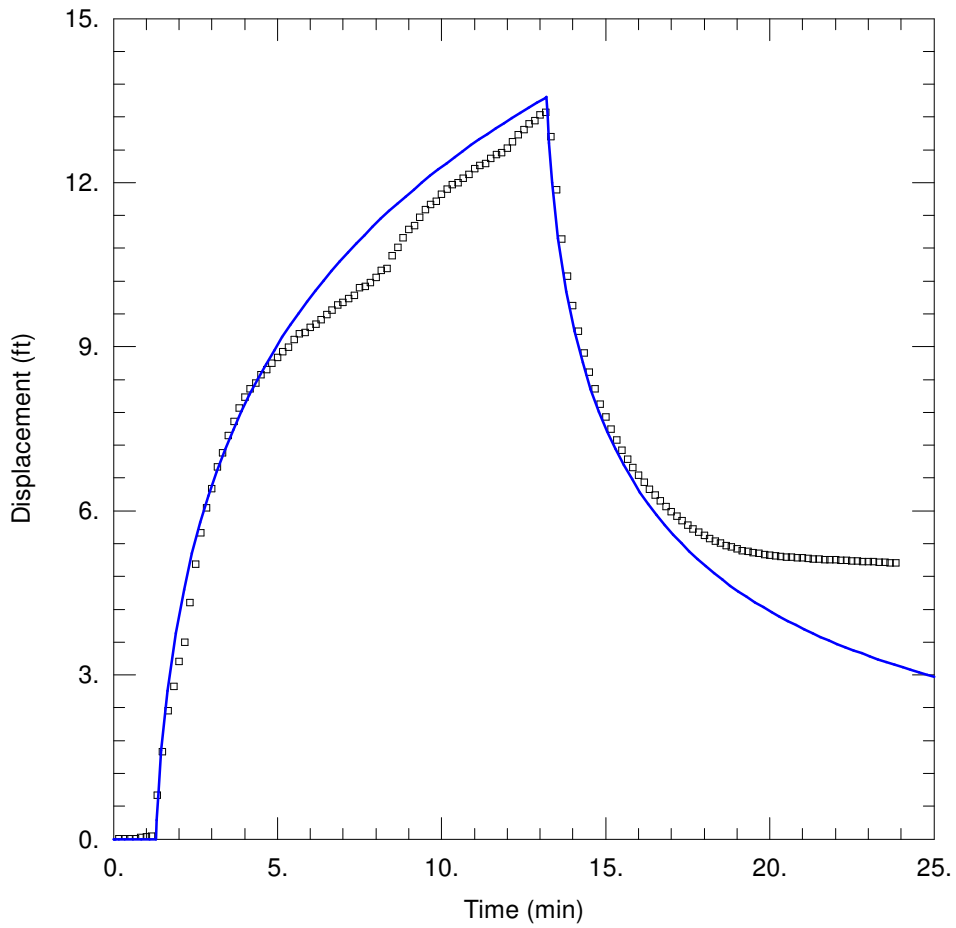
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB077redo	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 0.9176 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB078_2inj_PC.aqt
Date: 05/09/14 Time: 07:30:18

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB078
Test Date: 5/03/2014

AQUIFER DATA

Saturated Thickness: 23.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB078	0	0

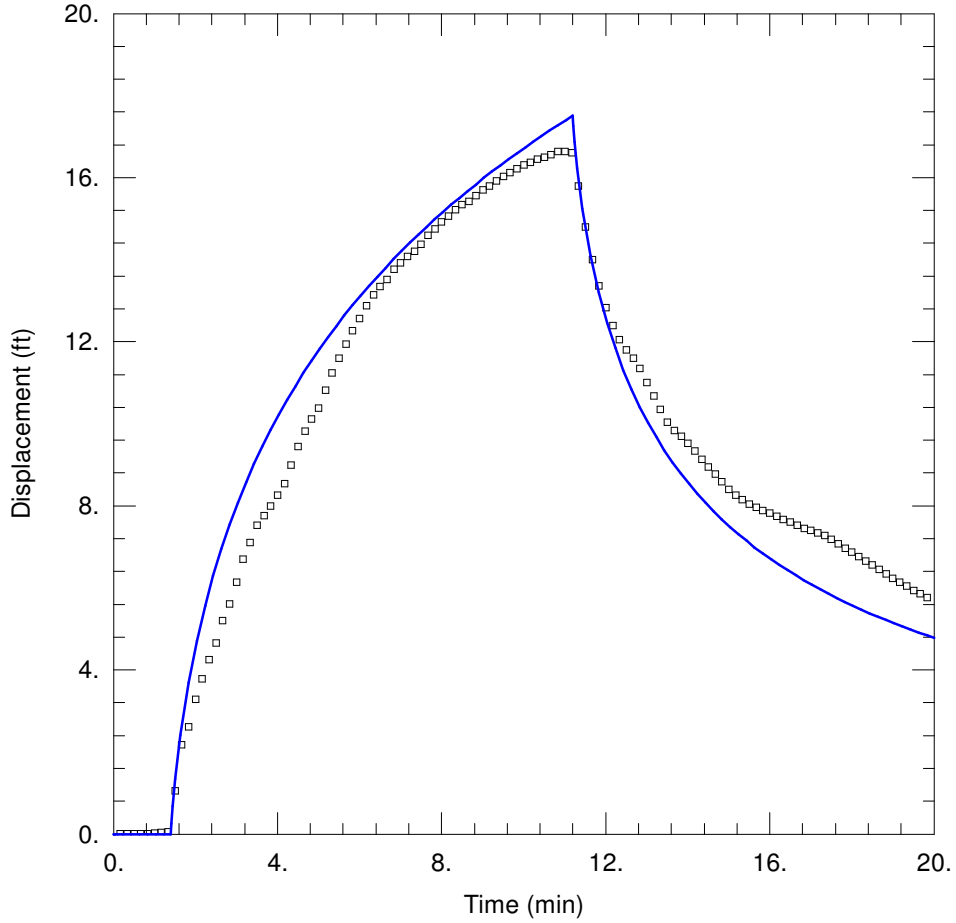
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB078	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 39.62 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB079_2inj_PC.aqt
Date: 05/08/14 Time: 13:16:46

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB079
Test Date: 5/03/2014

AQUIFER DATA

Saturated Thickness: 27.8 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB079	0	0

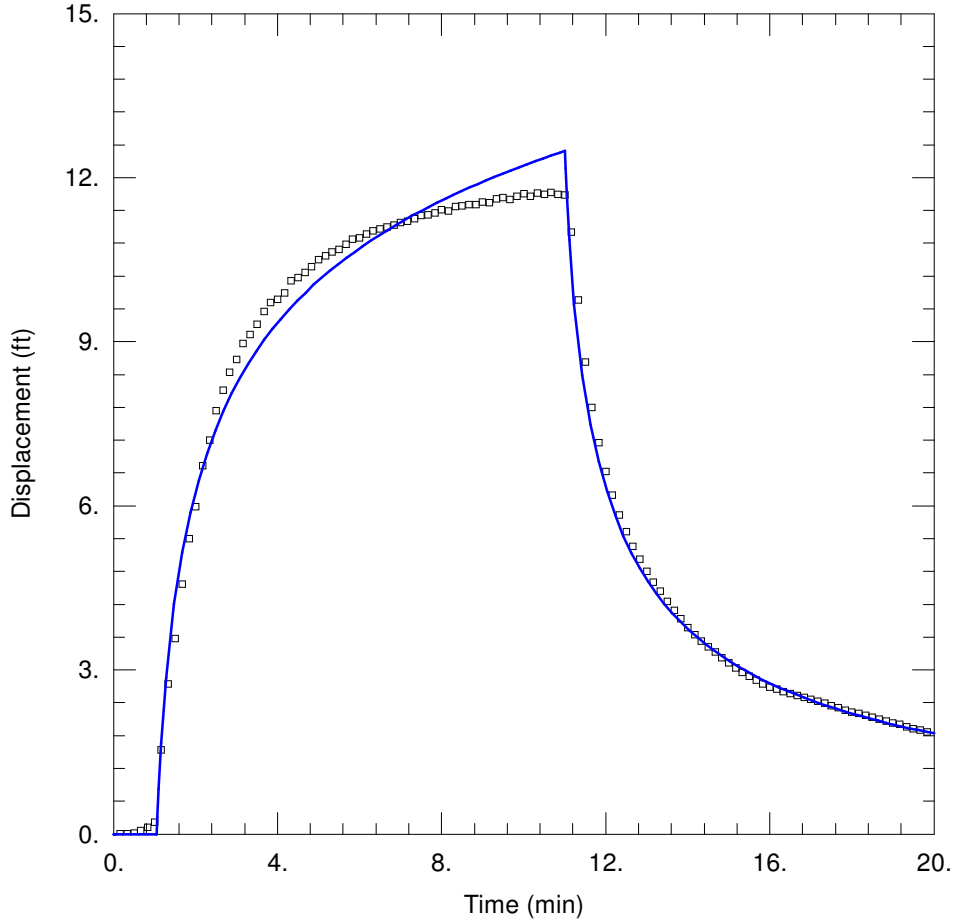
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB079	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 24.62 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB080_2inj_PC.aqt
Date: 05/08/14 Time: 13:17:23

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB080
Test Date: 5/03/2014

AQUIFER DATA

Saturated Thickness: 23.8 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB080	0	0

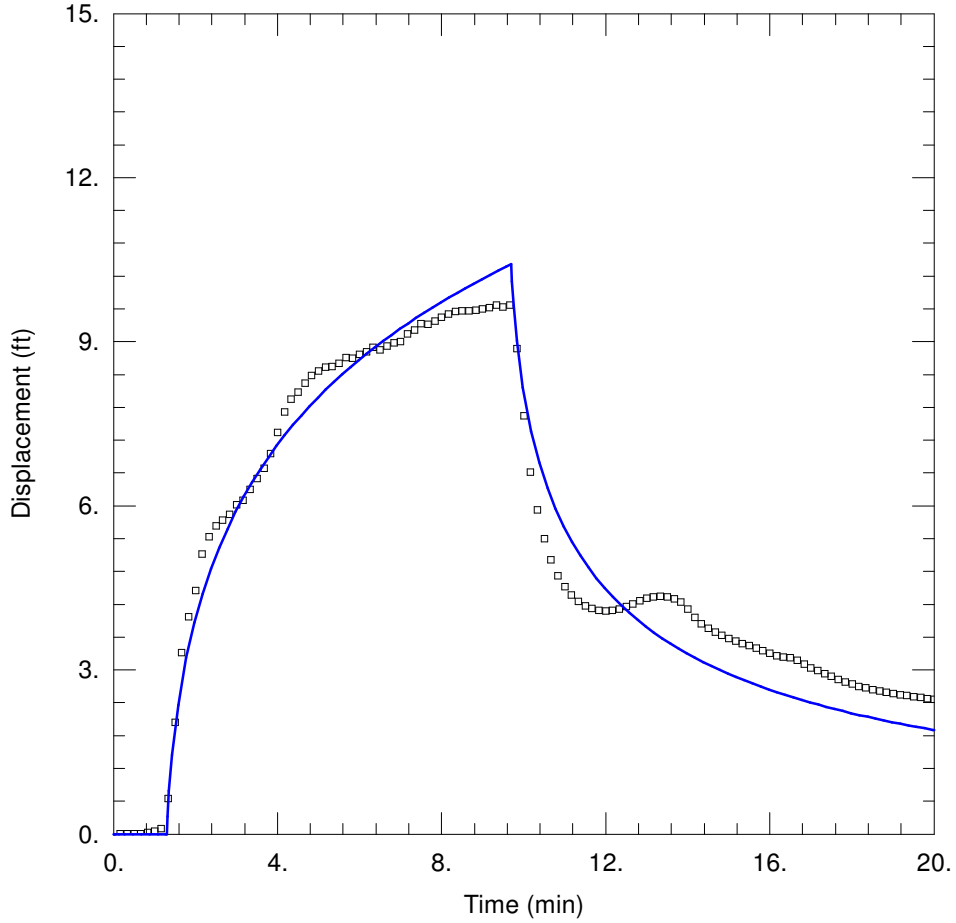
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB080	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 92.46 ft^2/day S = 0.04118
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB081redo_2inj_PC.aqt
Date: 05/14/14 Time: 20:43:15

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB081redo
Test Date: 5/09/2014

AQUIFER DATA

Saturated Thickness: 22.4 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB081redo	0	0

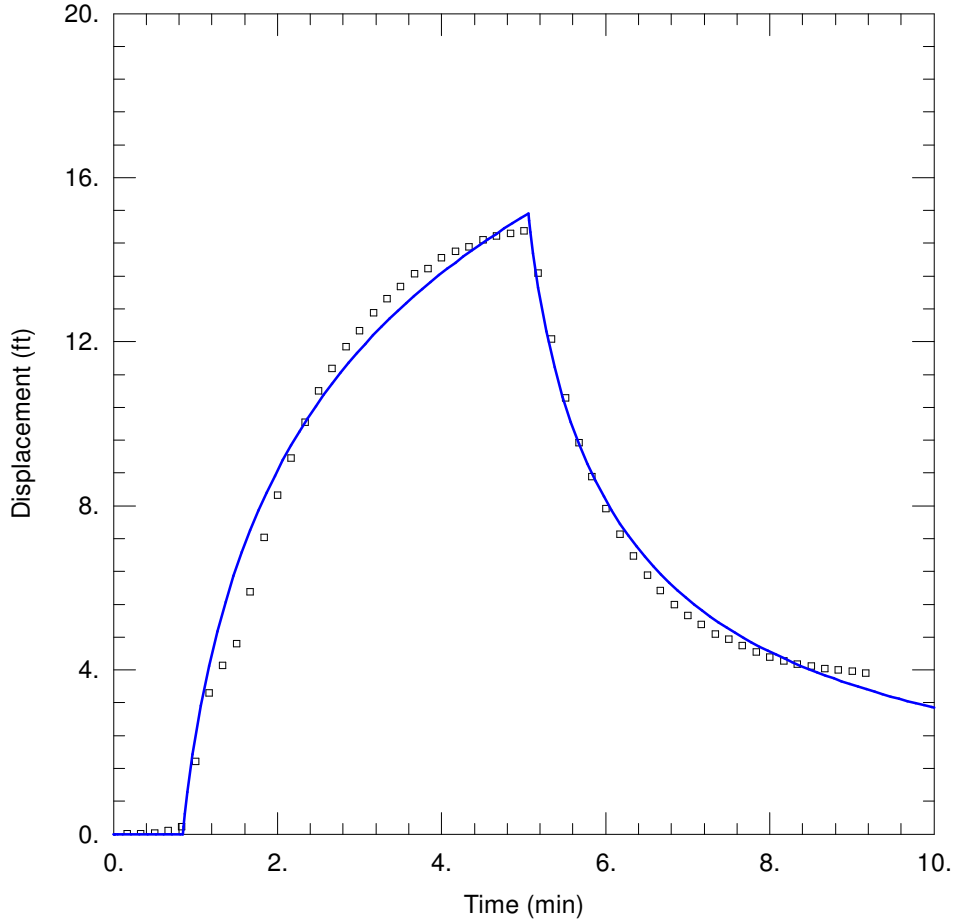
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB081redo	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 65.33 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB083_2inj_PC.aqt
Date: 04/15/14 Time: 09:42:08

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB083
Test Date: 4/9/2014

AQUIFER DATA

Saturated Thickness: 14.2 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB083	0	0

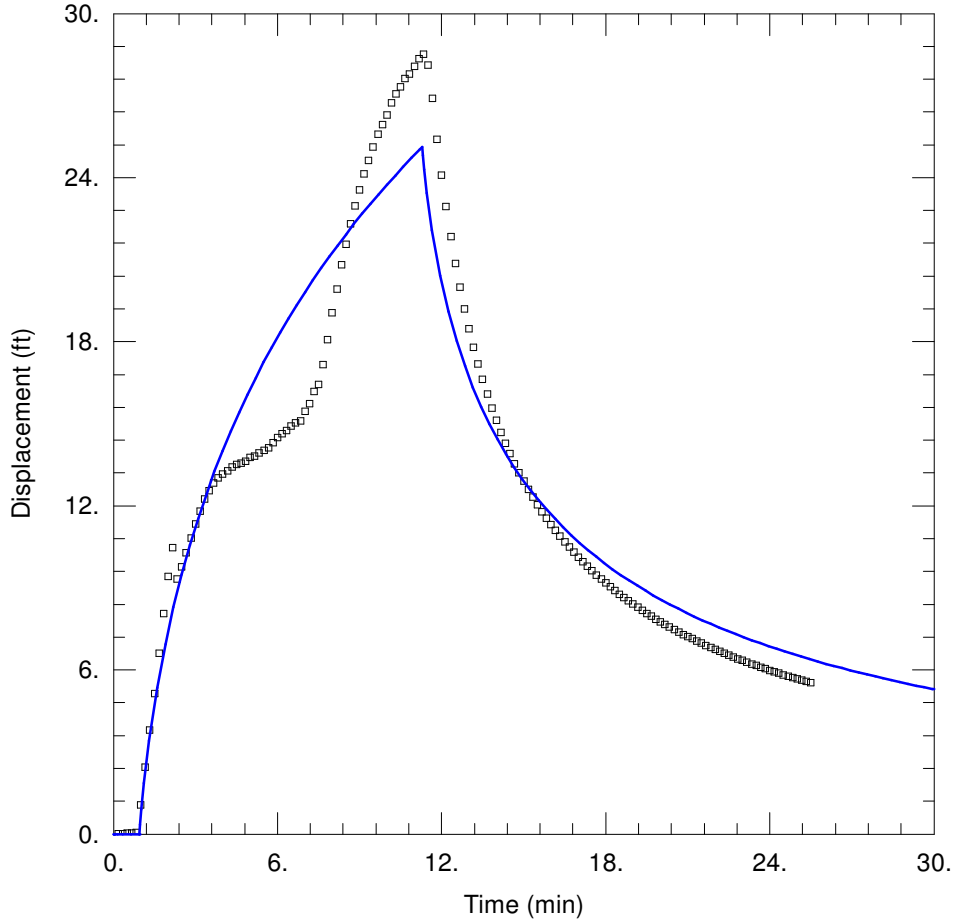
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB083	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 48.07 ft^2/day S = 0.07377
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB084_2inj_PC.aqt
Date: 04/21/14 Time: 14:19:04

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB084
Test Date: 4/8/2014

AQUIFER DATA

Saturated Thickness: 15. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB084	0	0

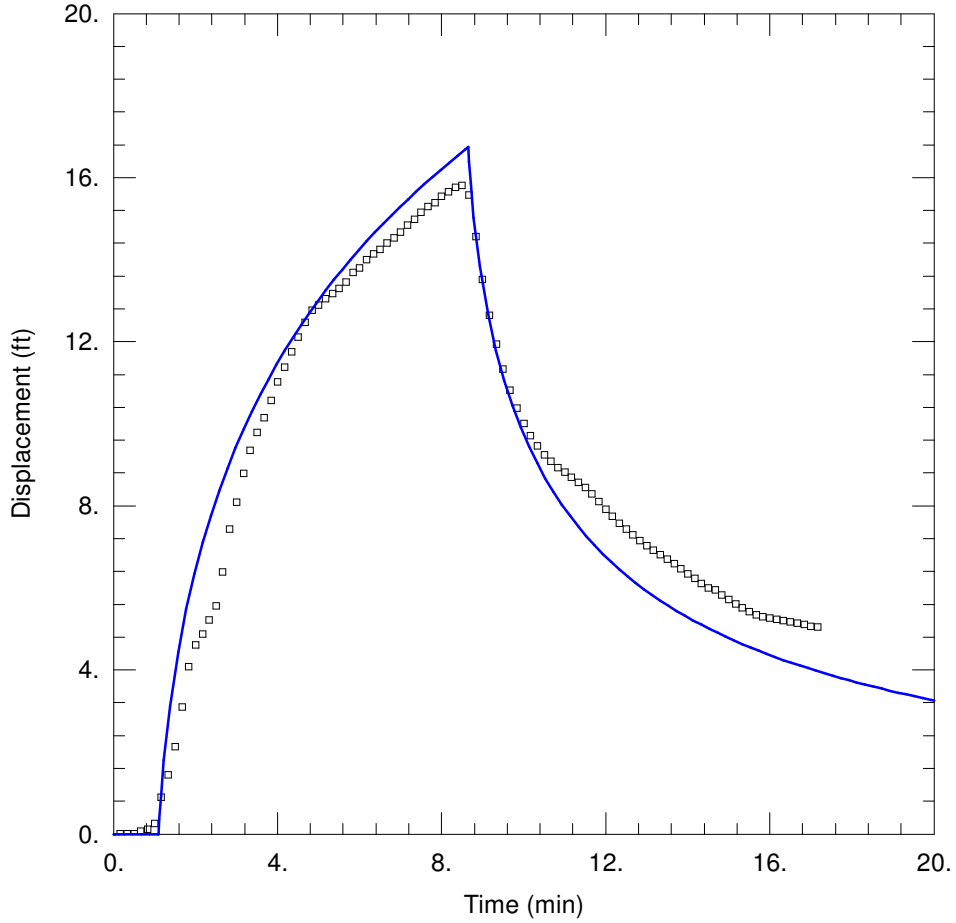
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB084	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 10.77 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB085A_2inj_PC.aqt
Date: 05/09/14 Time: 07:41:51

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB085A
Test Date: 5/05/2014

AQUIFER DATA

Saturated Thickness: 12.8 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB085A	0	0

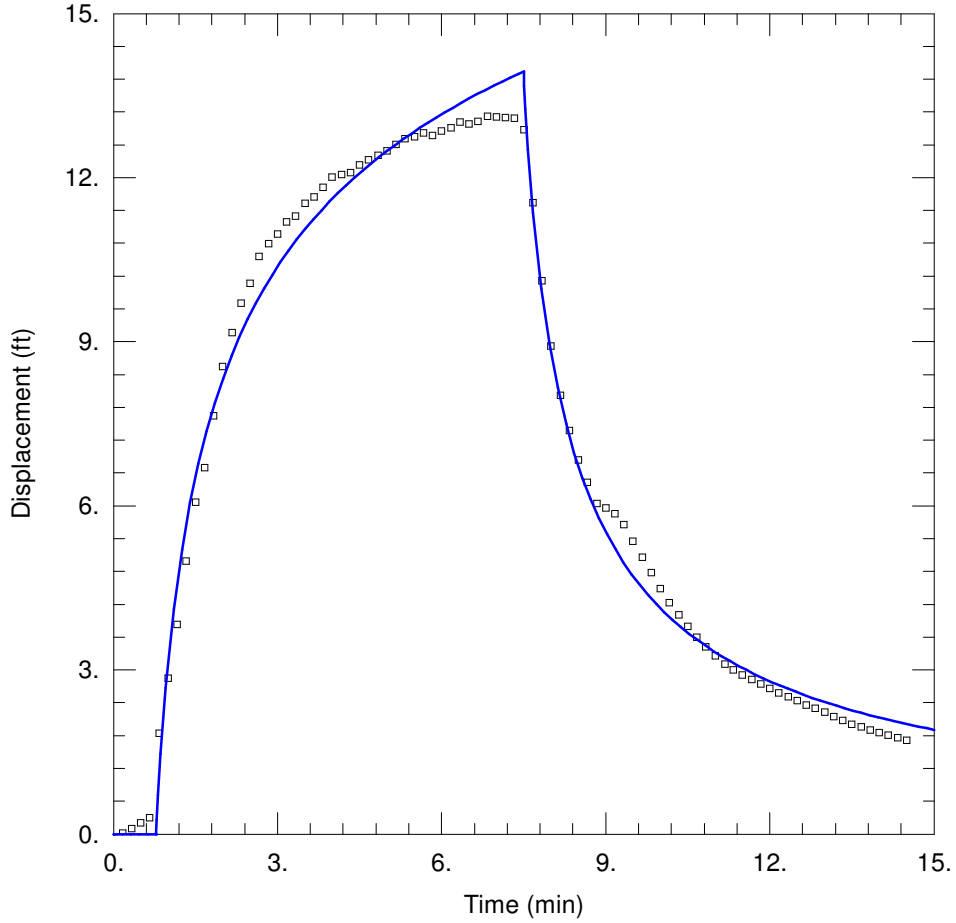
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB085A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 31.57 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB086_2inj_PC.aqt
Date: 04/15/14 Time: 09:59:49

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 5293 / 18A-006-003
Location: Zone 11 Post Maint.
Test Well: ISB086
Test Date: 4/8/2014

AQUIFER DATA

Saturated Thickness: 14.6 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB086	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB086	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 82.97 ft^2/day S = 0.02987
r(w) = 0.4 ft r(c) = 0.167 ft

APPENDIX B

WASTE ACCUMULATION FORMS

Inventory Of Container At Waste Accumulation Site

(Reference WI 02.01.04.05.04, WI 02.01.04.05.05, WI 02.01.04.05.06, WI 02.01.04.05.07)

To have the container removed after container is full or when accumulation of waste has ended:
Plant personnel contact Waste Operations Department (WOD) at ext. 5449 and
fax completed form to fax ext. 7669.
Sub-Contractor personnel contact WOD Point of Contact at ext. 5534 and
fax completed form to ext. 6384
A copy of this form should accompany the container when picked up by WOD.

Complete the following:

Drum ID #	Date Accumulation Started 3/25/2014
Container Type Roll-off	Date Accumulation Ended 5/2/2014
Phone # 303-570-9930	Location Zone 11 Well Field
Mail Drop n/a	Contact Sarah Seitz

DATE	WASTE DESCRIPTION	35 ACCOUNT # OR MSDS # OR PEELABLE BARCODE #	BADGE #
3/25/14	ISB086 --- 40 GAL		19484
3/28/14	ISB084 --- 40 GAL		19484
3/28/14	ISB083 --- 45 GAL		19484
4/1/14	ISB074 --- 23GAL		64373
4/2/14	ISB075 (OLD) --- 45 GAL		64373
4/2/14	ISB076A --- 60 GAL		64373
4/4/14	ISB072 --- 51 GAL		64373
4/7/14	ISB070 --- 40 GAL		64373
4/7/14	ISB068 --- 60 GAL		64373
4/7/14	ISB067 --- 60 GAL		64373
4/8/14	ISB066 --- 80 GAL		64373
4/8/14	ISB065 --- 85 GAL		64373
4/9/14	ISB064 --- 70 GAL		64373
4/9/14	ISB062 --- 58 GAL		64373
4/10/14	ISB061 --- 60 GAL		64373
4/11/14	ISB060A --- 57 GAL		64373
4/11/14	ISB058 --- 60 GAL		33876
4/14/14	ISB057 --- 60 GAL		33876
4/15/14	ISB0056A --- 85 GAL		33876
4/16/14	ISB080 --- 100 GAL		33876
4/17/14	ISB079 --- 60 GAL		19484
4/22/14	ISB055 --- 60 GAL		19484

Inventory Of Container At Waste Accumulation Site

(Reference WI 02.01.04.05.04, WI 02.01.04.05.05, WI 02.01.04.05.06, WI 02.01.04.05.07)

4/23/14	**ISB078 --- 70 GAL**		19484
4/23/14	**ISB081 --- 50 GAL**		19484
4/25/14	**ISB059 --- 55 GAL**		19484
4/25/14	**ISB069A --- 65 GAL**		19484
4/28/14	**ISB082 --- 35 GAL**		19484
4/28/14	**ISB063 --- 50 GAL**		19484
4/30/14	**ISB071 --- 70 GAL**		19484
5/2/14	**ISB073 --- 60 GAL**		19484
5/2/14	**ISB077 --- 50 GAL**		19484
5/2/14	**ISB085A--- 50 GAL**		
	Total --- 1854 Gallons		
5/7/14	**Flush Water**		**64873**
	New Total --- 2354 Gallons		

POST-INJECTION REPORT – ZONE 11 ISB SYSTEM

MAY – JULY 2014

***IN-SITU* BIOREMEDIATION OPERATIONS AND MAINTENANCE**

PANTEX PLANT, AMARILLO, TEXAS

B&W PANTEX PURCHASE ORDER 5293

September 12, 2014

Project #: 18A-006-003

SUBMITTED BY: Trihydro Corporation

1252 Commerce Drive, Laramie, WY 82070

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List of Acronyms

AHA	Activity Hazard Analysis
AqSol	Aquifer Solutions, Inc.
COPC	Constituent Of Potential Concern
CSM	Conceptual Site Model
DOE	Department of Energy
DBD	Design Basis Document
FM	Farm to Market
HASP	Health and Safety Plan
HDPE	High Density Polyethylene
HE	High Explosives
ISB	*In-Situ* Bioremediation
MSDS	Material Safety Data Sheet
O&M	Operation and Maintenance/Monitoring
Pantex	B&W Pantex, LLC
PC	Personal Computer
PERC	Perchlorate
PLC	Programmable Logic Control
PSTR	Project Subcontract Technical Representative
PVC	Polyvinyl Chloride
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control

List of Acronyms (cont.)

RPD	Relative Percent Difference
SEISB	Southeast ISB
SEPTS	Southeast Pump & Treat System
SSO	Site Safety Officer
SWP	Safe Work Permit
TCE	Trichloroethylene
Trihydro	Trihydro Corporation
TTU	Texas Tech University
UIC	Underground Injection Control
WMP	Waste Management Plan
Z11ISB	Zone 11 ISB

EXECUTIVE SUMMARY

This report documents the amendment injection activities performed at the Zone 11 *In-Situ* Bioremediation (Z11ISB) System from May to July 2014. These activities were performed on behalf of B&W Pantex LLC (Pantex) as a component of Trihydro Corporation's (Trihydro) *In-Situ* Bioremediation (ISB) Operations and Maintenance (O&M) work performed under Purchase Order #5293. Consolidated Nuclear Systems, LLC (CNS) assumed responsibility for management and operations at Pantex on July 1, 2014, and Trihydro completed work after this time on CNS's behalf. Amendment injection was performed to maintain the biologically-active treatment zone at the Z11ISB System. The specific tasks performed included equipment mobilization, setup, equipment maintenance, amendment injection and associated monitoring, and equipment demobilization. Each of these tasks and pertinent data and observations are summarized below.

Mobilization and setup consisted of moving the injection system trailer from the southeast equipment pad to the Zone 11 equipment pad, delivery and placement of frac tanks for water storage and intermodal tanks for storage of bioamendment. Site setup consisted of the connection of a header system for water transmission from the frac tanks and transmission of mixed amendment to the injection trailer per the project plans.

Trihydro began the injection event following the on-site pre-injection safety meeting and operator refresher training. Amendment was injected into 33 of the 35 wells in the Z11ISB System. Two wells were not injected into for the following reasons.

A replacement well PTX06-ISB075 was installed in 2012. However, the previously installed PTX06-ISB075 remains in place. These two wells are approximately 18 feet apart based on Pantex survey data. The old ISB075 has a deformed PVC casing based on 2012 downhole camera data. However, this well is believed to be suitable for injection of bioamendment at this time. Therefore, the old ISB075 was used for injection in the 2013 and 2014 bioamendment injection events. The new ISB075 well was not maintained or injected into.

PTX06-ISB082 is a well designated to be sampled by Pantex. However, the Pantex Sampling & Analysis team has not been able to sample this well since November 2012 due to the presence of a residue on the water surface in the well. This residue is assumed to be a byproduct of amendment injection. To facilitate sampling at this location in the future, PTX06-ISB082 was maintained during the well maintenance program, but was not injected into in 2014.

In total, 125,145 gallons of pure amendment, 2,005,520 gallons of mixed amendment (after addition of makeup water), and 198,091 gallons of flush water were delivered during this event. Each of the 33 wells received the target volume of

pure amendment (i.e. dose) and total fluids specified in the project plans. The amendment and volume targets achieved were based on the Design Basis Document (DBD), updated Conceptual Site Model (CSM), and an additional factor of safety. The factor of safety beyond the amendment dose specified in the DBD varied by injection location, and was based on concentrations of constituents of potential concern (COPCs) and groundwater flux.

Injection monitoring at each well was performed to document the execution of the work and as one means of redundancy to reduce the risk of releases of amendment or water to the ground surface. The monitoring program included recording injection volumes, flow rates, and displacement observed inside injection well casing. Steady-state displacement data at a given flow rate was also used to compare the ability of the injection wells to accept fluids. This is an important consideration relative to the ongoing well maintenance program, with the most recent well maintenance event being conducted immediately before the injection event described herein. Steady-state injection data suggests that well performance has declined somewhat relative to previous injection events. Six wells had sustained flow rates of 10 gallons per minute (gpm) or less during this injection event (PTX06-ISB057, PTX06-ISB058, PTX06-ISB060A, PTX06-ISB065, PTX06-ISB072, and PTX06-ISB074), while flow rates below 10 gpm had not been observed in previous injection events. Injection well performance in 2014 suggests that additional testing and well maintenance procedures should be evaluated prior to future injection events.

Maintenance was performed on various components of the Pantex-owned injection system during the course of this work. This included increasing the pipe size on the amendment feed line inside the injection trailer and installation of a new touchscreen personal computer (PC) with updated PLC logic, and routine changes of bag filters, changing compressor oil, cleaning of y-strainers etc.

Quality Assurance (QA) activities associated with this work included QA documentation for the amendment and cross-checks of redundant flow meter readings. Amendment QA documentation was provided to Pantex for each of the 22 tankers delivered, and each of these conformed to the project QA requirements. Redundant flow meter data suggested that the flow instrumentation performed in the same manner as previous injection events, and that the volumes delivered to each well were accurately tracked by the instrumentation.

This work was performed with zero Health & Safety incidents. Several lessons learned were developed as part of this work. This includes assessing vehicles, updating air purge procedures, fall protection equipment inspection procedures, and the importance of equipment replacement.

1.0 INTRODUCTION

Trihydro provides O&M activities at two ISB treatment Systems at the Pantex Plant under Purchase Order 5293 with B&W Pantex, LLC (Pantex). The two ISB Systems include:

1. Southeast ISB (SEISB) System located on Texas Tech University (TTU) property
2. Z11ISB System located on the Pantex Plant

Post-injection reports are prepared following completion of injection activities at each ISB System as required by the *In-Situ Bioremediation System Operation and Maintenance* Statement of Work, October 2011 (Pantex 2011). This report constitutes the seventh post-injection report prepared for the Z11ISB System since the initial injection event that was conducted at Z11ISB in 2009. This report addresses injection work that Trihydro performed during the May through July 2014 O&M period, collectively referred to as the summer 2014 injection event.

This post-injection report covers activities associated with the summer 2014 Z11ISB injection event, including:

- A brief summary of well rehabilitation and hydraulic testing
- A brief description of the injection event
- Injection start and finish dates
- Summary tables of the total injected volumes into each well
- Average flow rates into each well
- Completed data collection sheets from the Z11ISB injection event
- Description of lessons learned

This work was performed following the methods described in the planning documents prepared for this project, including the *Work Plan* (Trihydro 2014) and the *Health and Safety Plan* (HASP), the Contractor *Waste Management Plan* (WMP) and the *Quality Assurance Project Plan* (QAPP) appended to the *Work Plan*.

Additional information detailing site background and ISB implementation and historical results, are included in the following documents:

- Pantex *In-Situ* Bioremediation Operation & Monitoring, 2010 Annual Monitoring Report (AqSol 2011).
- Well Maintenance Report: Zone 11 ISB System (Trihydro 2014a).

- Operator's Manual – Southeast and Zone 11 ISB Systems (Trihydro 2013a).
- Well Maintenance Report: Zone 11 ISB System (Trihydro 2013b).
- Post Injection Report: Zone 11 ISB System (Trihydro 2013c).
- Well Maintenance Report: Zone 11 ISB System, October (Trihydro 2012a).
- Post Injection Report: Zone 11 ISB System, December (Trihydro 2012b).
- Post Injection Report: Zone 11 ISB System, November (Trihydro 2011a).
- Well Maintenance Report: Zone 11 ISB System, November (Trihydro 2011b).
- Post-Injection Report: Zone 11 System, December 7, 2010 (AqSol 2010a).
- Well Maintenance Report: Zone 11 In-Situ Bioremediation System, December 20, 2010 (AqSol 2010b).
- Statement of Work for *In-Situ* Bioremediation System Operation and Maintenance for the Southeast and Zone 11 ISB Systems, August 2009 (Pantex 2009).
- Operations and Maintenance Plan: *In-Situ* Bioremediation Corrective Measures Design Zone 11 South, April 20, 2009 (AqSol 2009a).
- Implementation Report: *In-Situ* Bioremediation System Corrective Measures Construction Zone 11 South, September 1, 2009 (AqSol 2009b).
- Post-Injection Report Zone 11 South Nine Expansion Wells, December 23, 2009 (AqSol 2009c).

1.1 SITE DESCRIPTION

The Pantex Plant is located in the Texas Panhandle in Carson County, north of U.S. Highway 60. The Plant is centered on an approximately 17,500-acre site located approximately 17 miles northeast of downtown Amarillo and 1 mile north of U.S. Highway 60. The Pantex Plant site consists of land owned and leased by the U.S. Department of Energy (DOE) and operated by Pantex. The DOE owns 11,703 acres, including 9,100 acres in the main Plant area, 1,526 acres in four tracts purchased in the latter part of 2008 (east of Texas Farm-to-Market Road (FM) 2373 near the main Plant area), and 1,077 acres at Pantex Lake, which is located approximately 2.5 miles northeast of the main Plant area. Industrial operations are conducted on approximately 2,500 acres, most of which is within Zones 11 and 12. In addition, 5,800 acres of land south of the main Plant area are leased from TTU for a safety and security buffer zone. The facility is bordered on the west by FM 683, on the north by FM 293, and partially on the east by Texas FM 2373.

1.2 PROJECT DESCRIPTION

The ISB O&M project is designed to operate and maintain two bioremediation treatment systems located within the perched groundwater unit beneath the site: the Z11ISB System and the SEISB System (**Figure 1**). O&M of these systems is accomplished through periodic injection of bioremediation amendment and other associated maintenance activities. Both systems are constructed as a linear array of injection wells installed perpendicular to the direction of groundwater flow. These systems allow for hydraulic movement of groundwater through the system and result in treatment of COPCs through biotic degradation and abiotic transformation of COPCs.

Pantex has identified the following COPCs in the perched groundwater near the two systems:

- Chromium (total and hexavalent) (SEISB System)
- High Explosives (HE) including RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine) and HMX (Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine) (SEISB System)
- Trichloroethylene (TCE) (Z11ISB System)
- Perchlorate (PERC) (Z11ISB System)

The ISB Systems were created by injecting bioremediation amendment into the 42 injection wells at the SEISB System and 33 wells at the Z11ISB System (**Figure 2**). The original Z11ISB System consisted of 23 wells that were installed in early 2009 (PTX06-ISB055 through PTX06-ISB077). These wells were supplemented by nine additional or expansion wells in late 2009 (PTX06-ISB078 through PTX06-ISB086). Two wells originally installed for an aquifer pump test were converted to ISB injection wells in 2014 (PTX06-ISB087 and PTX06-ISB088). The continued effectiveness of the bioremediation systems relies on periodic injection of amendment to maintain the treatment zone within the perched groundwater unit at each System.

The remainder of this report summarizes the observations and findings of the most recent round of injection activities at the Z11ISB System, performed during the summer of 2014.

2.0 MOBILIZATION ACTIVITIES

Mobilization included the physical mobilization to the site, as well as the associated coordination efforts to initiate field activities. These are described in the following subsections.

2.1 PERMITS

A safe work permit was obtained before initiation of fieldwork. The contractor Activity Hazard Analysis (AHA) and Safe Work Permit, Pantex form PX-4798 (SWP), was issued for all applicable service contract work by the Pantex Safety Department. Addenda to the AHA/SWP were issued throughout the project as required based on changes to the activities performed or equipment utilized. An Underground Injection Control (UIC) permit was also required for the project and this permit was obtained by Pantex.

2.2 SECURITY REQUIREMENTS

Site access required for deliveries, visitors, and subcontractors was coordinated through the Project Subcontract Technical Representative (PSTR), Mr. Chad McGarry. The PSTR arranged for badges, guards, and site access for field personnel. Contractor and subcontractor personnel were required to obtain access to the facility through a construction badge or a visitor's badge prior to entry onto the site.

2.3 ACCESS TO WORK AREAS

Daily requirements for work during the performance period described herein included the following notification protocols:

- Notified PSTR that work had begun, typically at the beginning of the work day
- Notified PSTR or acting person in charge that work had ended for the day (contact provided daily by PSTR)

2.4 INJECTION TRAILER AND ASSOCIATED EQUIPMENT RELOCATION

The mixing and injection trailer was located at the Southeast equipment pad following injection activities in 2013. The trailer was moved to the Z11ISB equipment pad in 2014 and the tie downs were installed to secure the trailer in the wind.

The three 21,000-gallon water storage tanks (or "frac tanks") were mobilized to the Z11ISB equipment pad before this injection event. These were positioned in the same configuration as used in previous injections. Ancillary equipment

including distribution pipes, wires, control boxes, and wellhead assemblies were present at the Z11ISB equipment pad or in the general area.

The existing water supply pipeline and infrastructure located at the Z11ISB equipment pad was used to supply water for injection. The source of water was treated groundwater from the Southeast Pump and Treat System (SEPTS) located at Building 16-28. The water supply was connected from the termination of the pipeline and run to the injection trailer using a 4-inch flexible hose with quick connect fittings on both ends. Piping connections were made in a manner consistent with the equipment requirements described in the Work Plan (Trihydro 2014).

3.0 SUMMARY OF WELL MAINTENANCE AND HYDRAULIC TESTING

Well maintenance work was performed on the Z11ISB injection wells from March to May 2014. The maintenance program is designed to: assess the degree to which biofouling may have impacted injection well performance; take measures to mitigate adverse impacts to well performance; and verify that mitigation efforts have restored wells to a condition that would support future amendment injection. Of the 35 injection wells in the Z11ISB System, 32 injection wells were hydraulically tested and/or maintained. PTX06-ISB087 and PTX06-ISB088 were not maintained, as they were new wells added to the system. PTX06-ISB075 has both new and old wells. The new well was neither maintained nor injected with amendment. The old well was both maintained and injected. PTX06-ISB082 was maintained, however was not injected. The methods and results of this well maintenance effort were documented in the Well Maintenance Report being submitted to Pantex in conjunction with this report, and are briefly summarized here.

Biofouling impacts were assessed by performing hydraulic injection tests before well maintenance at each injection well. After receiving approval from Pantex, Trihydro performed maintenance activities using reagents and mechanical means. The reagent applied during maintenance was Cotey Chemical Corporation's Welgicide Cleaner, which is a granular material that consists primarily of sodium hydroxide (a strong base). This reagent is intended to dissolve and remove mineral scale and/or biomass on the well screen and filter pack. The mechanical component consisted of use of a surge block and well purging using a combination airlift/surge block/brush device constructed for this project.

4.0 EQUIPMENT MAINTENANCE

The following equipment repairs and maintenance was performed during this injection event:

- The amendment supply line inside the injection trailer was modified to increase the pipe size to 2-inch Schedule 80 PVC from 1 inch. The increased size in supply line was intended to maintain a more consistent pressure inside the supply line, and thereby supplying all SuperDos units with a consistent amount of amendment. In the past, if the upstream SuperDos units along the supply line were using amendment at a high rate, the pressure would be reduced inside the supply line, and the downstream units would receive relatively less amendment.
- The touchscreen PC and associated software inside the injection trailer was replaced. The hardware installation consisted of installing a new PC into the same opening on the PLC panel inside the trailer. The PC came with a new version of Windows 7 operating system and a new version of the PLC interface program WonderWare installed. In addition, the PLC logic was updated to include the following new functionalities: 1) updated programming to improve accuracy of amendment flow meter computer readings; 2) addition of an amendment setpoint so that an injection well will shut off automatically if the pure amendment or mixed amendment setpoint is reached; and 3) addition of a field that displays the time remaining to completion of each well at the current flow rate. The new PC and associated software was tested extensively during the injection event, and each component functioned as intended at the completion of the injection event. The PC that was removed remained functional when it was removed, and has been retained by the PSTR for use as an emergency backup. Appendix A contains documentation of the revised PLC programming.
- One of the fluid level sensors in the water storage frac tanks was replaced.
- Wear parts (i.e. o-rings and dosing pistons) were replaced in the SuperDos mixers in each of the 8 mixers before the injection event, and several were replaced as needed during the course of the injection event.

The following routine maintenance activities were performed immediately prior to and/or during this injection event:

- The coalescing filters on the compressed air system were drained periodically to remove condensate.
- The compressed air desiccant medium was changed at the beginning of the injection event.
- The air compressor oil was changed on a monthly basis.
- The 100-micron bag filter (F-102) was changed twice; once approximately half way through the injection event and then again following completion of injection activities.
- Periodic maintenance of flow meters FIQ-201 through FIQ-205 and FIQ-401 through FIQ-404 including, but not limited to, removal, inspection, and reinstallation to increase meter responsiveness. The system was purged of

fluids and valves left in a half-open position for the extended shutdown. In addition, all 200- and 400-series meters were removed, cleaned, and reinstalled in preparation for the injection event at SEISB System.

5.0 FIELD INJECTION OPERATIONS

The field injection operations at the Z11ISB System consisted of amendment receipt, storage, mixing, and injection. These operations were implemented in accordance with Pantex procedures, the Operator's Manual (Trihydro 2013a), the Trihydro Work Plan (Trihydro 2014), and the means and methods used in past ISB injection events at Pantex. This section documents the injection process and reports as-injected volumes and concentrations. Injection activities were implemented between May 6 and July 9, 2014. **Table 1** summarizes the injection start and finish dates at each injection well.

5.1 AMENDMENT DELIVERY AND STORAGE

Similar to previous injection events at Pantex, Newman Zone® (Newman Zone) non-ionic, buffered, bioremediation amendment was injected for this project. This formulation is an aqueous (water-based) solution containing 46% by weight emulsified soybean oil and 4% sodium lactate, with less than 10% surfactants and other food-grade additives. The amendment is a non-hazardous, food-grade substance.

Amendment delivery occurred between May and July 2014, and was noted in daily field logs and logbooks. Twenty-two 5,800-gallon capacity food-grade tankers were used to deliver the bioremediation amendment for this injection event. A total of 120,000 gallons of amendment were ordered. A total of 120,005 gallons were delivered, the difference being five gallons (discussed in **Section 8.2** Quality Assurance), mixing and shipment of five extra gallons by the supplier. Receipt and injection of the excess five gallons (0.004% of total ordered) will not have performance implications and did not have cost impacts. The bills of lading and manufacturer's internal quality monitoring forms received from the supplier and delivery service were tracked to ensure that the product received matched the manufacturer's specifications. See **Section 8.2** (Quality Assurance) for additional details on amendment quality assurance.

Two amendment tankers were typically kept onsite at any given time. Depending on the shipping schedule and injection progress, the volume of amendment in the tankers ranged from two empty tankers to two full tankers. When a new tanker arrived, it was staged on the equipment pad, and the driver would remove an empty tanker from the site when applicable. Prior to placing a tanker in service, the field supervisor placed the tanker in a Quality Assurance / Quality Control (QA/QC) hold and flagged with a yellow QA/QC tag. Trihydro then reviewed the associated QA/QC documentation and transportation chain of custody documents to ensure that both the pass-fail acceptance criteria and other evaluation criteria were acceptable. Trihydro's amendment QA/QC review was submitted to the PSTR for

acceptance and the tanker was then taken out of QA/QC hold, flagged with a green QA-Accepted tag, and put into service.

5.2 AMENDMENT MIXING AND INJECTION EQUIPMENT

The Pantex-owned mixing and injection equipment consisted of the following major components:

- **Water delivery system**: Treated groundwater from the SEPTS (Building 16-28) was piped directly into the injection trailer, metered, and then stored in three 21,000-gallon frac tanks. The frac tanks were equipped with Low-Low, Low, High, and High-High level switches to regulate the quantity of water received into the system. The amount of treated groundwater stored in the frac tanks was based on the position of the Low and High level switches; the Low-Low and High-High switches were for redundancy.
- **Amendment delivery system**: Amendment was delivered to the Z11ISB in food-grade tankers and allowed to gravity feed into the injection trailer. Pressuring the amendment tankers with compressed air was intermittently used during this injection event to aid in providing more consistent amendment delivery. Once inside the trailer, suction applied by the SuperDos mixers drew the amendment into the mixing zone. The amendment level in each tanker was physically measured before placing it into service. Additionally, the amendment level in the tanker was gauged daily with a site tube.
- **Mixing system**: This system consisted of a 32-foot insulated trailer equipped with HVAC that houses the controls, pumps, and mixing/injection equipment.

Detailed specifications of these major components are available in previous O&M and Work Plan project documents (AqSol 2008, AqSol 2010, and Trihydro 2014).

5.3 INJECTION DOCUMENTATION

Injection-related field activities were documented in field log books and field forms (well connections checklists, trailer injection forms, and field injection forms). Collectively, these field forms were designed to record pertinent observations and measurements as specified in the Work Plan and in the project QAPP. At Pantex's request, these forms will be submitted to Pantex as part of project closeout rather than appended to this report. Pertinent data contained in the field notes and forms have been placed in the text, tables, or figures included in this report.

Field forms were used to gather the following data, collected at the frequency shown in parentheses:

- Flow meter totalizer readings, including water supply, pure amendment, mixed amendment, and field meters (twice each shift, and at completion of mixed amendment injection and water flush for each well)
- Mixed amendment and flush volume injection rates (each shift)
- Fluid level, flow rate, and totalizer volume at injection wells during injection (several times per day while on site, with greater measurement frequency obtained during well startup)
- Measurement of amendment tanker fluid levels using the site tube which were converted into volumes (twice each shift)

In addition to recording the above information, Trihydro performed calculations to derive the following parameters for each day's injection:

- Daily injection volumes at each injection well.
- Amendment concentrations at each injection well
- Quality control calculations to check the above data, including relative percent difference (RPD) values between the following data:
  - Computer vs. mechanical totals for each flow meter in the injection trailer.
  - Totals between redundant meters (e.g., total amendment at FIQ-201 vs. individual amendment meters calculated by summing FIQ-202 through 205).
  - Amendment tanker site-tube gauging vs. flow meter totals.

The above calculations were completed following each shift. When injecting overnight, each day was divided into a day shift (manned operations) and night shift (unmanned operations), hence these calculations would be conducted twice each day if overnight operations occurred. When quality control calculations indicated that RPDs were greater than 10%, Trihydro reconciled the data by checking for data entry errors, duplicating data collection points, or rejecting data that were believed to be anomalous based on past experience (e.g. computer readings on 200-series flow meters). .

Daily quantities of mixed amendment, pure amendment, flush volume (if applicable), and as-injected amendment concentration were all reported for each active well. In addition, an overall progress summary table was updated on a daily basis. These data were made available to project personnel on a daily basis.

5.4 INJECTION QUANTITIES, CONCENTRATIONS, AND FLUSH VOLUMES

Target injection quantities for mixed amendment and flush volumes were determined based on prior design work and knowledge gained at the site, including:

- The *Design Basis Document* (DBD) (AqSol 2007) dose and volume calculations. Specifically, the DBD defines the dose of pure amendment and volume of fluids to be injected based on saturated thickness.
- Updated understanding of the CSM as described in the AqSol 2010 Annual Monitoring Report (AqSol 2011).
- Saturated thickness from 2013 based on depth to water data collected during the well maintenance program conducted prior to this injection event (Trihydro 2012a).

The injection quantities were determined by using the amendment dosage calculation basis specified in the DBD as a starting point, and then modifying these values in consideration of the results of the modified CSM. The DBD calculation accounts for a uniform amendment dose across the area based on the saturated thickness at each injection well location. As specified in the DBD, this amendment volume and dose target is calculated based on injection of 15% of a pore volume (porosity x saturated thickness x assumed 10,000 square foot area x 0.15), and a 5% amendment concentration. Therefore, delivery of a volume of pure amendment that is equal to, or greater than, this minimum design dose is a key design parameter. The DBD also specifies injection of a volume of fluids at each location based on the saturated thickness of the perched groundwater unit.

Actual injection volumes broken down by pure amendment, mixed amendment, flush water, and total volume are shown on **Table 2**. A total of 2,203,611 gallons of fluids were injected into 33 injection wells over the 2014 Z11ISB injection event. This includes 125,145 gallons of pure amendment (as measured by 200-series flow meters), 2,005,520 gallons of mixed amendment, and 198,091 gallons of flush water. 31 of the 33 injection wells in the Z11ISB System received an amendment dose equal to or greater than the target and greater than the DBD minimum dose. PTX06-ISB066 and PTX06-ISB067 were stopped one and three gallons short of the DBD target, respectively. These values are within 0.1% of the target. All 33 injection wells in the Z11ISB System received the target total volume specified by the DBD. An additional operational parameter that Trihydro tracks is the concentration of mixed amendment (pure amendment divided by total volume of mixed amendment). Amendment concentration is not a design parameter as specified by the DBD. The operational target amendment concentration was met at the majority of the well locations. At the other well locations, the target amendment dose and total volume of fluids were met by injecting a greater volume of mixed amendment at a lower concentration. At these wells, the design objectives were met, and the injection of a lower concentration is not anticipated to reduce the effectiveness of the treatment. Operational and actual concentration targets are shown in **Table 2**.

In order to optimize the amendment injection, Trihydro worked with Pantex to evaluate COPC concentrations and groundwater flux (groundwater velocity multiplied by saturated thickness) as described in the CSM developed in the 2010 Annual Monitoring Report for the two ISB Systems (AqSol 2011). A similar optimization procedure was followed in the previous two injection events at the Z11ISB System. The CSM was utilized to identify ISB injection wells located in: a) high groundwater flux zones; and b) high COPC concentration zones. Following that evaluation, a relative ranking was assigned to each ISB injection well for both groundwater flux and COPC concentration. The higher ranking represented higher flux and higher COPC concentration. Since both higher flux and higher COPC concentration represent important parameters that would dictate potentially faster rates of amendment consumption, the amendment dosage was optimized considering these parameters. In addition, the total volume of mixed amendment was increased in the western portion of the well field where the Z11ISB System treats TCE. A greater volume was injected in this area in an effort to increase the treatment response observed in downgradient monitoring wells. This change was made in coordination with Pantex after submittal of the WP but before the start of injection activities.

These target dosages were reconciled as the injection event progressed by comparison of the actual amount of amendment used against the estimated remaining volume of amendment. The basis for this calculation was the volume of amendment delivered to the site per the manufacturers shipping information compared to the volume injected based on the mechanical flow meters that measure pure amendment (200-series meters). The 200-series mechanical flow meters were typically observed to indicate volumetric totals of approximately 4% greater than the volume of amendment ordered and received. The amendment amounts remaining were distributed to the wells that had not been injected into as of that time. The target amendment concentrations for the remaining wells were slightly increased to spread injection of additional amendment amounts throughout the remaining wells. Multiplying the amendment concentration by a constant factor preserved the relative weighting scale based on groundwater and COPC flux specified in the CSM (AqSol 2011). The resulting dosages that were applied to each well are presented in **Table 2**.

Injection activities at each well consisted of the injection of mixed amendment, targeted at the concentration calculated as described above, followed by a period of a water-only flush. The water-only flush represented approximately 10% of the target injection volume at each well. By flushing the injected mixed amendment with water, amendment was transported away from the direct vicinity of the well, thereby potentially lessening the degree of biofouling. While the operational target for flush water was 10% of the total injection volume, some wells received more or less than this target flush water volume based on the concentration of mixed amendment that had been injected at the point where the design target pure amendment volume had been met. In some wells, the mixers added a concentration of mixed amendment slightly higher than the operational target, and injection of additional flush water beyond the target was needed to reach the design target total volume. In other wells, concentrations were lower than the operational target, so less flush water was needed to reach the design target total volume.

5.5 INJECTION RATES

Maximum sustainable injection flow rates at each injection well and the amount of displacement observed in the injection well casing at this flow rate are shown on **Table 3**, with data from the historical injection events shown for reference. The flow rate and displacement data indicated that well performance (as determined from specific capacity in gpm flow rate divided by feet of displacement in well) in the 2014 injection event was comparable to the well performance in previous injection events. The maximum flow rate ranged from 6 to 38 gallons per minute with an average of 20 gallons per minute. Note that 38 gpm is approaching the maximum design flow rate (40 gpm) that can be injected through the two SuperDos units on each injection leg. The water level mounding observed in the well casing ranged from 56 to 208 feet below top of casing with an average of 133 feet below top of casing.

Table 4 shows summary statistics of specific capacity for each injection event conducted to date. Summary statistics in the 2014 injection event were somewhat lower in 2014 relative to previous years. From 2012 to 2014, flow rates and specific capacity data may suggest a downward trend. This potential trend should be monitored in the future during well maintenance and amendment injection events.

Six wells (PTX06-ISB057, PTX06-ISB058, PTX06-ISB060A, PTX06-ISB065, PTX06-ISB072, and PTX06-ISB074) had sustained injection flow rates of 10 gpm or less during the 2014 injection event. Sustained flow rates were above 10 gpm at all Z11ISB injection wells during each of the previous injection events. Specific capacity values at these six wells were lower at these locations as well. At each of these locations, flow rates and specific capacity decreased by approximately 50% relative to 2013. These data suggest that alternative means of well maintenance should be evaluated prior to the next injection event so that future maintenance can avoid the need for replacement of injection wells.

Well PTX06-ISB088 is a 6-inch diameter well that was used as a recovery well for an aquifer pump test that was conducted in 2013. The 2014 injection event was the first time that amendment was injected at this location. The observed displacement of 11 feet and calculated specific capacity of 3.3 gpm/ft are much lower than, and greater than the values of these parameters for the other wells, respectively. All other wells are 4-inch diameter, and therefore differences in injection performance are expected.

6.0 WASTE MANAGEMENT

Liquid and solid wastes were managed according to specifications in the Waste Management Plan (Work Plan Appendix B [Trihydro 2014]). Limited quantities of wastes were generated due to efficient management and recycling to the extent possible.

Liquid Wastes included residual pure and mixed amendment. These wastes were contained and disposed of in Pantex-provided 55-gallon drums. Amendment wastes were generated during three types of field activities; minor leakage from amendment tanker valves, during routine and other necessary maintenance activities, and during preparation for long-term shut down. **Appendix B** includes a copy of the waste collection tracking forms (form PX-2844). The following summarizes liquid waste quantities generated:

- 5/23/2014, 50 gallons of amendment and rain water
- 5/23/2014, 45 gallons of amendment and rain water
- 6/9/2014, 54 gallons of amendment and rain water
- 6/23/2014, 55 gallons of amendment and rain water
- 6/25/2014, 55 gallons of amendment and rain water
- 7/9/2014, 25 gallons of amendment and rain water

Solid Wastes included small amounts of packaging and maintenance related trash such as bag filters and PVC fittings. These items are Class 2 (non-hazardous) waste, and Trihydro disposed of these accordingly per the WMP (Trihydro 2014, Appendix B).

7.0 HEALTH AND SAFETY

The injection event was conducted with no incidences or accidents. The original Safe Work Permit was not amended during this work. The following list highlights the notable features of the health and safety program:

- Tailgate health and safety meetings were typically conducted twice per day. Safety calendars were prepared to provide alternative health and safety topics for tailgate safety meetings to avoid redundancy and encourage interaction from the entire crew.
- A discussion of the "plan of the day" was held daily in conjunction with the tailgate meeting to detail the specific allowable activities. The "plan of the day" was designed to make personnel aware that if additional or unanticipated work was required, that the field team should stop and discuss the relevant safety procedures with the Site Safety Officer (SSO).
- Copies of material safety data sheets (MSDSs) were kept available on site.
- A pre-injection safety briefing was completed which included a detailed review of system operation, potential hazards and actions to mitigate and control hazards.
- The project lead engineer conducted an on-site training review of injection trailer operational procedures.
- Pantex construction safety conducted periodic safety inspections. There were no activities identified that required improvement.

8.0 QUALITY ASSURANCE

Trihydro's QA procedures included assessment of operations (e.g., flow meter) data collected in both the injection trailer and from the field flow meters and amendment QA verification. Each of these is presented below.

8.1 INJECTION DATA QA

Redundant flow meter totals were compared on a daily basis to ensure accurate injection tracking documentation. Flow meters in the injection trailer generate both mechanical and computer readings. For each flow meter, the mechanical and computer readings were within approximately 1% for both the 100-series (injection makeup water) and 400-series (mixed amendment), as has been observed in past injection events. In the few situations in which the computer or mechanical readings varied by significantly more than this percentage, the mechanical dial readings were double checked, and corrected to reflect potentially misread mechanical readings.

The mechanical and computer data for the 200-series (pure amendment) varied by as much as 50%, as has been observed in the past. FIQ-201 measures the total amendment used, while FIQ-202 through FIQ-205 measure the amendment in the individual legs, and thus the total for FIQ-201 should equal the summed total of FIQ-202 through FIQ-205. As has also been observed in the past the mechanical readings of the 200-series flow meters were reliable, while the computer readings were not. This discrepancy is attributed to the pulsing nature of the amendment flow in the system, and how the computer system integrates flow meter electronic signals. As a result, mechanical meter readings were used to track the daily volumes of amendment injected.

Trailer flow meter totals and field flow meter totals varied by up to +/- 30%, as has been observed in past injection events. Variations in field flow meter data are potentially attributed to the vacuum/ syphon formed at the wellhead field flow meters during injection. The injection system was operated during this injection event by injecting into only one well at a time on each injection leg, as a result trailer flow meters were used to record daily injection volumes at each well.

The total quantity of amendment injected was assessed by comparing the 200-series mechanical flow meter totals over the course of the work to the total weight and average density of the amendment shipped by the production facility. The mechanical flow meter totals for FIQ-201 (all amendment) and the sum of FIQ 202 through FIQ 205 (amendment in individual legs) were within 0.03% of each other over the course of the project. The mechanical 200-series flow totals were 4.3% higher than the volume shipped by the production facility. Similar variations have been observed in past injection events, though the magnitude of this difference was slightly higher in this injection event than had been

observed historically. This slight variation may be due to changes in the amendment density as a function of temperature or slight variation between the density and viscosity of amendment relative to that of water.

8.2 AMENDMENT QA

Amendment QA included examination of the amendment supplier's internal QA and shipping documents. QA documentation was provided to Pantex throughout the project, with complete results attached as **Appendix C**. A summary of the data that were tracked as part of the amendment QA procedures are included as **Table 5**. The amendment supplier provided results of QA testing to document that the product was produced according to their internal specifications and in compliance with the criteria set forth in the QAPP. The QAPP specified a set of pass/fail criteria (QAPP Table 1, including percent fat, percent total solids, and several droplet size parameters) as well as secondary criteria (QAPP Table 2, including pH, coliform, bacterial plate count, yeast, and mold).

Amendment shipping documentation was also QA reviewed and included the truck number, seal numbers, and the net weight of product shipped and received onsite. These were reviewed to ensure that the materials received onsite were the same as those for which analytical testing results had been provided. Following field and office inspection of the provided QA/QC documents, Trihydro submitted the QA/QC approval to Pantex for review and approval prior to injection of each amendment tanker.

All of the tanker deliveries of the 125,005 gallons of amendment delivered had acceptable QA/QC documentation. No tankers contained detectable total plate counts or concentrations of yeast. These are classified as secondary parameters rather than pass/fail criteria as defined in the QAPP.

9.0 REPORTING

As part of this injection event, a number of reports and other forms of communication were submitted documenting the various elements of the project, including the project status; data collected, data analysis; and data interpretations and conclusions. These consisted of:

- Daily Log Reports/Contractor Daily Construction Logs - The site superintendent provided the PSTR with electronic contractor daily construction logs on a daily basis. Copies of the daily tailgate safety meeting forms and daily equipment inspection checklists during the project will be provided to the PSTR in an electronic format at the end of the contract year. The site superintendent also provided the project team with daily electronic reports of injection volumes and overall progress status information; these were conveyed to Pantex via Trihydro's Project Direct software system.
- Weekly Verbal Reports - The B&W Project Manager and PSTR were provided with a verbal status report on a weekly basis. These reports were presented by the Trihydro Project Manager and discussed the progress of the work performed the previous week.

10.0 LESSONS LEARNED

This section presents lessons learned during the execution of this injection event.

10.1 VEHICLE ASSESSMENT

Trihydro routinely performs assessments on all of their vehicles to assess the ability of the vehicle to perform tasks safely and effectively. Prior to mobilization for the 2014 injection event, it was determined that one of the vehicles was unable to complete maintenance and injection activities as well as mobilizations. The vehicle was taken out of service and replaced with a new vehicle.

10.2 AIR PURGE PROCEDURES

Trihydro modified amendment injection procedures in regards to air purge procedures. Air is periodically purged into the HDPE lines leading to the well to clear the line of flush water after injection. Changes to the procedures included purging lines at a lower pressure and having continuous monitoring at the wellhead when purging. This procedure reduces the possibility of flush water that could be released on the ground surface as well as reducing the effort to transport HDPE lines.

10.3 FALL PROTECTION INSPECTION PROCEDURES

Trihydro inspects fall protection equipment before every use. This includes the safety harness as well as the safety line that is connected to amendment trailers. During tasks on top of the tankers, the worker connects the safety harness to the safety line. During one of the equipment inspections, one of the two safety lines was identified for improved safety. Specifically, the safety line was braided back onto itself but the braided knot was not secured with wire clamps. The safety line was taken out of service, tagged out, repaired by adding wire clamps, re-inspected, and placed back into service.

10.4 EQUIPMENT REPLACEMENT

Trihydro uses caps and plugs to prevent debris from entering HDPE pipes with storing and transporting. Caps and plugs were replaced at the end of the 2014 injection event and HDPE lines were organized and stored properly.

11.0 REFERENCES

Final Design Basis Document: In-Situ Bioremediation Corrective Measures Design, BWXT Pantex Contract 54761 Aquifer Solutions, Inc. (AqSol 2007).

Final Operations and Maintenance Plan, Southeast Plume In-Situ Bioremediation Corrective Measures Design, Aquifer Solutions Inc., (AqSol 2008).

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Well Maintenance Report – Zone 11 ISB System, Trihydro Corporation, October 31, 2012 (Trihydro 2012a).

Post Injection Report – Zone 11 ISB System, Trihydro Corporation, December 6, 2012 (Trihydro 2012b).

Operator's Manual – Southeast and Zone 11 ISB Systems, Trihydro Corporation, April 30, 2013 (Trihydro 2013a).

Well Maintenance Report – Zone 11 ISB System, Trihydro Corporation, November 1, 2013 (Trihydro 2013b).

Post Injection Report – Zone 11 ISB System, Trihydro Corporation, November 5, 2013 (Trihydro 2013c).

Work Plan for In Situ Bioremediation Systems Operations & Maintenance for B&W Pantex, Purchase Order No. 5293 Trihydro Corporation (Trihydro 2014).

TABLES

TABLE 1. INJECTION START AND FINISH DATES
POST INJECTION REPORT - ZONE 11 ISB SYSTEM
PANTEX ISB O&M, PO 5293

Well ID	Date Started	Date Completed
PTX06-ISB055	5/8/2014	5/16/2014
PTX06-ISB056A	5/19/2014	5/31/2014
PTX06-ISB057	5/31/2014	6/5/2014
PTX06-ISB058	6/5/2014	6/18/2014
PTX06-ISB059	6/24/2014	7/2/2014
PTX06-ISB060A	5/6/2014	5/21/2014
PTX06-ISB061	5/21/2014	5/30/2014
PTX06-ISB062	5/30/2014	6/3/2014
PTX06-ISB063	6/3/2014	6/9/2014
PTX06-ISB064	7/2/2014	7/9/2014
PTX06-ISB065	6/9/2014	6/13/2014
PTX06-ISB066	5/6/2014	5/8/2014
PTX06-ISB067	5/8/2014	5/16/2014
PTX06-ISB068	5/19/2014	5/22/2014
PTX06-ISB069A	5/22/2014	5/28/2014
PTX06-ISB070	5/28/2014	6/2/2014
PTX06-ISB071	6/2/2014	6/5/2014
PTX06-ISB072	6/6/2014	6/23/2014
PTX06-ISB073	6/24/2014	7/9/2014
PTX06-ISB074	5/28/2014	6/11/2014
PTX06-ISB075	6/24/2014	7/9/2014
PTX06-ISB076A	6/13/2014	6/19/2014
PTX06-ISB077	6/13/2014	6/19/2014
PTX06-ISB078	6/19/2014	6/24/2014
PTX06-ISB079	6/24/2014	6/28/2014
PTX06-ISB080	6/28/2014	7/7/2014
PTX06-ISB081	7/7/2014	7/9/2014
PTX06-ISB082	No injection	No injection
PTX06-ISB083	6/19/2014	6/24/2014
PTX06-ISB084	5/21/2014	5/28/2014
PTX06-ISB085A	6/11/2014	6/13/2014
PTX06-ISB086	5/19/2014	5/21/2014
PTX06-ISB087	5/13/2014	5/16/2014
PTX06-ISB088	5/6/2014	5/9/2014

TABLE 2. TARGET AND ACTUAL INJECTION VOLUMES
POST INJECTION REPORT - ZONE 11 ISB SYSTEM
PANTEX ISB O&M, PO 5293

	Pure Amendment (gal)			Mixed Amendment (gal)		Flush Water (gal)		Total Volume (gal)		Amendment Concentration (%)	
Well ID	***2008 DBD Specification***	***Design Target***	**Actual**	***Operational Target***	**Actual**	***Operational Target***	**Actual**	***Design Target***	**Actual**	***Operational Target***	**Actual**
PTX06-ISB055	*3,474*	*4,279*	4,279	*61,906*	61,907	*6,878*	6,887	*68,784*	68,794	*6.9%*	6.9%
PTX06-ISB056A	*3,752*	*4,621*	4,622	*66,856*	66,785	*7,428*	7,501	*74,284*	74,286	*6.9%*	6.9%
PTX06-ISB057	*3,369*	*3,945*	3,945	*60,043*	59,947	*6,671*	6,789	*66,714*	66,736	*6.6%*	6.6%
PTX06-ISB058	*3,339*	*3,656*	3,656	*59,507*	59,719	*6,611*	6,671	*66,118*	66,390	*6.1%*	6.1%
PTX06-ISB059	*3,357*	*3,675*	3,687	*59,819*	61,545	*6,646*	4,973	*66,465*	66,518	*6.1%*	6.0%
PTX06-ISB060A	*2,812*	*3,079*	3,078	*50,118*	52,144	*5,568*	5,574	*55,687*	57,718	*6.1%*	5.9%
PTX06-ISB061	*3,117*	*3,413*	3,413	*55,553*	58,281	*6,172*	3,443	*61,725*	61,724	*6.1%*	5.9%
PTX06-ISB062	*2,828*	*2,828*	2,829	*50,400*	49,889	*5,600*	6,120	*56,000*	56,009	*5.6%*	5.7%
PTX06-ISB063	*2,809*	*2,809*	2,811	*50,049*	50,781	*5,561*	4,833	*55,609*	55,614	*5.6%*	5.5%
PTX06-ISB064	*3,255*	*3,255*	4,265	*58,007*	63,314	*6,445*	6,456	*64,452*	69,770	*5.6%*	6.7%
PTX06-ISB065	*2,407*	*2,407*	2,407	*42,893*	42,893	*4,766*	4,771	*47,659*	47,664	*5.6%*	5.6%
PTX06-ISB066	*2,448*	*2,448*	2,447	*43,623*	43,630	*4,847*	6,505	*48,470*	50,135	*5.6%*	5.6%
PTX06-ISB067	*2,391*	*2,391*	2,388	*42,615*	42,619	*4,735*	4,739	*47,349*	47,358	*5.6%*	5.6%
PTX06-ISB068	*2,622*	*2,880*	2,880	*46,725*	47,859	*5,191*	5,199	*51,917*	53,058	*6.2%*	6.0%
PTX06-ISB069A	*2,533*	*2,782*	2,782	*45,138*	46,397	*5,015*	3,777	*50,153*	50,174	*6.2%*	6.0%
PTX06-ISB070	*2,431*	*3,163*	3,163	*49,815*	55,085	*5,535*	2,510	*55,350*	57,595	*6.3%*	5.7%
PTX06-ISB071	*2,764*	*3,783*	3,789	*56,647*	66,450	*6,294*	2,006	*62,941*	68,456	*6.7%*	5.7%
PTX06-ISB072	*3,165*	*4,331*	4,331	*64,855*	64,855	*5,735*	5,735	*70,590*	70,590	*6.7%*	6.7%
PTX06-ISB073	*3,145*	*4,304*	4,625	*64,447*	74,449	*7,160*	7,169	*71,607*	81,618	*6.7%*	6.2%
PTX06-ISB074	*3,424*	*4,687*	4,696	*70,174*	80,551	*7,797*	7,799	*77,971*	88,350	*6.7%*	5.8%
PTX06-ISB075	*2,769*	*3,602*	5,904	*56,741*	86,618	*6,304*	6,400	*63,045*	93,018	*6.3%*	6.8%
PTX06-ISB076A	*3,039*	*3,954*	3,954	*62,287*	69,278	*6,920*	6,914	*69,207*	76,192	*6.3%*	5.7%
PTX06-ISB077	*2,788*	*3,627*	3,627	*57,134*	73,471	*6,348*	6,299	*63,482*	79,770	*6.3%*	4.9%
PTX06-ISB078	*4,178*	*4,575*	4,580	*74,460*	76,540	*8,273*	6,206	*82,733*	82,746	*6.1%*	6.0%
PTX06-ISB079	*4,849*	*5,309*	5,342	*86,405*	86,424	*9,600*	9,601	*96,004*	96,025	*6.1%*	6.2%
PTX06-ISB080	*4,156*	*4,550*	4,528	*74,060*	66,368	*8,228*	16,861	*82,288*	83,229	*6.1%*	6.8%
PTX06-ISB081	*3,908*	*4,279*	4,975	*69,637*	77,243	*7,737*	8,241	*77,374*	85,484	*6.1%*	6.4%
PTX06-ISB082	*No Injection*	*No Injection*	No Injection	*No Injection*	No Injection	*No Injection*	No Injection	*No Injection*	No Injection	*No Injection*	No Injection
PTX06-ISB083	*2,390*	*3,109*	3,786	*48,975*	61,044	*5,441*	2,006	*54,416*	63,050	*6.3%*	6.2%
PTX06-ISB084	*2,571*	*3,518*	3,518	*52,682*	54,801	*5,853*	3,747	*58,535*	58,548	*6.7%*	6.4%
PTX06-ISB085A	*2,237*	*2,991*	2,992	*39,867*	42,634	*4,429*	4,324	*44,296*	46,958	*7.3%*	7.0%
PTX06-ISB086	*2,494*	*3,244*	3,244	*44,438*	44,448	*4,937*	4,957	*49,376*	49,405	*7.3%*	7.3%
PTX06-ISB087	*3,247*	*4,225*	4,225	*57,862*	57,861	*6,429*	6,436	*64,291*	64,297	*7.3%*	7.3%
PTX06-ISB088	*3,349*	*4,357*	4,377	*59,679*	59,690	*6,631*	6,642	*66,310*	66,332	*7.3%*	7.3%
TOTAL	***101,418***	***120,076***	**125,145**	***1,883,416***	**2,005,520**	***207,784***	**198,091**	***2,091,200***	**2,203,611**	-	**-**

Note: Targets shown in italics, actual injected volumes in plain text. Amendment concentration calculated by dividing the volume of pure amendment by the volume of mixed amendment.

TABLE 3. INJECTION WELL PERFORMANCE DATA
POST INJECTION REPORT - ZONE 11 ISB SYSTEM
PANTEX ISB O&M, CONTRACT 5293

	2009 Injection Data			2010 Injection Data			2011 Injection Data			2012 Injection Data			2013 Injection Data			2014 Injection Data						
Well ID	**Flow Rate (gpm)**	**Displace. Observed (ft)**	***Specific Capacity (gpm/ft)***	**Flow Rate (gpm)**	**Displace. Observed (ft)**	***Specific Capacity (gpm/ft)***	**Flow Rate (gpm)**	**Displac. Observed (ft)**	***Specific Capacity (gpm/ft)***	**Flow Rate (gpm)**	**Displac. Observed (ft)**	***Specific Capacity (gpm/ft)***	**Flow Rate (gpm)**	**Displac. Observed (ft)**	***Specific Capacity (gpm/ft)***	**Flow Rate (gpm)**	**Displac. Observed (ft)**	***Specific Capacity (gpm/ft)***	**Flow Rate (gpm)**	**Displac. Observed (ft)**	***Specific Capacity (gpm/ft)***	***Average Specific Capacity (gpm/ft)***
PTX06-ISB055	32	107	*0.30*	38	111	*0.34*	32	70	*0.46*	19	88	*0.22*	26	134	*0.19*	16	125	*0.13*				*0.13*
PTX06-ISB056A	31	82	*0.38*	35	131	*0.27*	30	134	*0.22*	30	134	*0.22*	15	158	*0.09*	11	180	*0.06*	12	184	*0.07*	*0.06*
PTX06-ISB057*	32	197	*0.16*	35	165	*0.21*	13.5	168	*0.08*	38	115	*0.33*	20	198	*0.10*	9	164	*0.05*				*0.05*
PTX06-ISB058	37	78	*0.47*	28	135	*0.21*	20	129	*0.16*	25	140	*0.18*	27	172	*0.16*	6	147	*0.04*	6.5	175	*0.04*	*0.04*
PTX06-ISB059	37	82	*0.45*	36	>30	*NA*	21	120	*0.18*	19	140	*0.14*	23	160	*0.14*	10	184	*0.05*				*0.05*
PTX06-ISB060A	35	198	*0.18*	38	155	*0.25*	20	143	*0.14*	11	171	*0.06*	12	200	*0.06*	8	199	*0.04*				*0.04*
PTX06-ISB061	32	202	*0.16*	16	199	*0.08*	15	153	*0.10*	33	202	*0.16*	20	173	*0.12*	12	155	*0.08*				*0.08*
PTX06-ISB062	31	198	*0.16*	44	77	*0.57*	34	70	*0.49*	35	108	*0.32*	31	149	*0.21*	16	162	*0.10*				*0.10*
PTX06-ISB063	32	201	*0.16*	31	94	*0.33*	31	143	*0.22*	20	117	*0.17*	25	110	*0.23*	17	91	*0.19*				*0.19*
PTX06-ISB064	34	115	*0.30*	38	99	*0.38*	18	118.5	*0.15*	20	141	*0.14*	30	150	*0.20*	25	157	*0.16*				*0.16*
PTX06-ISB065	34	199	*0.17*	38	124	*0.31*	34	157	*0.22*	30	170	*0.18*	25	161	*0.16*	7	94	*0.07*				*0.07*
PTX06-ISB066	7	204	*0.03*	25	204	*0.12*	33	NA	*NA*	30	NA	*NA*	35	102	*0.34*	27	142	*0.19*				*0.19*
PTX06-ISB067	15	150	*0.10*	32	173	*0.19*	21	185	*0.11*	20	150	*0.13*	26	184	*0.14*	13	138	*0.09*	9	122	*0.07*	*0.08*
PTX06-ISB068	34	137	*0.25*	30	117	*0.26*	17.5	64	*0.27*	25	109	*0.23*	31	154	*0.20*	22	149	*0.15*				*0.15*
PTX06-ISB069A	31	204	*0.15*	25	>45	*NA*	31	115	*0.27*	30	32	*0.93*	16	119	*0.13*	28	117	*0.24*				*0.24*
PTX06-ISB070	28	125	*0.22*	38	<200	*NA*	18	106	*0.17*	33	116	*0.28*	20	145	*0.14*	26	142	*0.18*				*0.18*
PTX06-ISB071	25	190	*0.13*	38	181	*0.21*	31	191	*0.16*	21	147	*0.14*	26	185	*0.14*	17	187	*0.09*				*0.09*
PTX06-ISB072	13	216	*0.06*	34	>104	*NA*	20	70	*0.29*	23	172	*0.13*	14	187	*0.07*	8	189	*0.04*				*0.04*
PTX06-ISB073*	22	194	*0.11*	38	167	*0.23*	18	214	*0.08*	32	175	*0.18*	30	165	*0.18*	15	109	*0.14*				*0.14*
PTX06-ISB074	15	180	*0.08*	32	210	*0.15*	20	159	*0.13*	21	172	*0.12*	11	190	*0.06*	7	174	*0.04*				*0.04*
PTX06-ISB075	10	207	*0.05*	38	158	*0.24*	30	195	*0.15*	33	42	*0.79*	16	161	*0.10*	15	159	*0.09*				*0.09*
PTX06-ISB076A	17	199	*0.09*	36	>78	*NA*	34.5	206	*0.17*	31	176	*0.18*	24	153	*0.16*	21	150	*0.14*				*0.14*
PTX06-ISB077	16	117	*0.14*	24	158	*0.15*	25	188	*0.13*	17	205	*0.08*	15	183	*0.08*	11	207	*0.05*				*0.05*
PTX06-ISB078	35	39	*0.90*	40	75	*0.53*	39	96	*0.41*	30	86	*0.35*	32	109	*0.29*	25	111	*0.23*				*0.23*
PTX06-ISB079	36	163	*0.22*	40	81	*0.49*	35	72	*0.49*	38	92	*0.41*	36	107	*0.34*	29	110	*0.26*				*0.26*
PTX06-ISB080	34	159	*0.21*	40	74	*0.54*	36	67	*0.54*	38	86	*0.44*	38	101	*0.38*	21	58	*0.36*				*0.36*
PTX06-ISB081	36	43	*0.84*	45	>33	*NA*	38	22	*1.73*	52	101	*0.51*	38	87	*0.44*	38	76	*0.50*				*0.50*
PTX06-ISB082	30	161	*0.19*	36	135	*0.27*	38	163	*0.23*	17	160	*0.11*	12	153	*0.08*	No Injection			No Injection			-
PTX06-ISB083	36	148	*0.24*	29	75	*0.39*	33	59	*0.56*	32	68	*0.47*	24	93	*0.26*	25	64	*0.39*				*0.39*
PTX06-ISB084	27	183	*0.15*	33	41	*0.81*	31	22	*1.41*	31	148	*0.21*	33	158	*0.21*	26	165	*0.16*				*0.16*
PTX06-ISB085A	31	181	*0.17*	29	61	*0.47*	31	45	*0.69*	29	52	*0.56*	31	193	*0.16*	27	98	*0.28*				*0.28*
PTX06-ISB086	27	181	*0.15*	35	56	*0.62*	30	47	*0.64*	34	80	*0.43*	36	87	*0.41*	30	82	*0.37*				*0.37*
ISB06-ISB087	NA	NA	*NA*	NA	NA	*NA*	NA	NA	*NA*	NA	NA	*NA*	NA	NA	*NA*	31	111	*0.28*				*0.28*
PTX06-ISB088	NA	NA	*NA*	NA	NA	*NA*	NA	NA	*NA*	NA	NA	*NA*	NA	NA	*NA*	36	11	*3.27*				*3.27*

Notes:

Well Capacity calculated by dividing steady-state flow rate by mounding observed. In some cases steady-state flow was measured at more than one flow rate.

When one flow rate was used, other cells are blank. Average well performance calculated from multiple data pairs by taking average of well performance calculated from each data pair.

* = the original wells were replaced in 2011 so specific capacity data may not comparable from year to year.

NA = not applicable (i.e. because mounding data did not produce conclusive depth (e.g. >33 ft), or because of packer used at ISB066 in 2011 and 2012).

Well PTX06-ISB088 is 6-inch diameter well that was used as recovery well in pump test conducted in 2013. The well designation was PTX06-1163 at that time. All other wells are 4-inch diameter.

TABLE 4. INJECTION WELL SPECIFIC CAPACITY OVER TIME
POST INJECTION REPORT - ZONE 11 ISB SYSTEM
PANTEX ISB O&M, PO 5293

Summary Statistic	2009	2010	2011	2012	2013	2014
Specific Capacity (gpm / ft displacement)						
Minimum	0.034	0.081	0.080	0.062	0.058	0.038
Q1	0.14	0.21	0.15	0.14	0.11	0.07
Median	0.17	0.27	0.22	0.21	0.16	0.14
Q3	0.24	0.45	0.47	0.38	0.21	0.24
Maximum	0.90	0.81	1.73	0.93	0.44	3.3
Flow Rate (gpm)						
Minimum	7	16	14	11	11	6
Q1	24	31	20	20	19	11
Median	31	36	31	30	26	17
Q3	34	38	33	33	31	26
Maximum	37	45	39	52	38	38

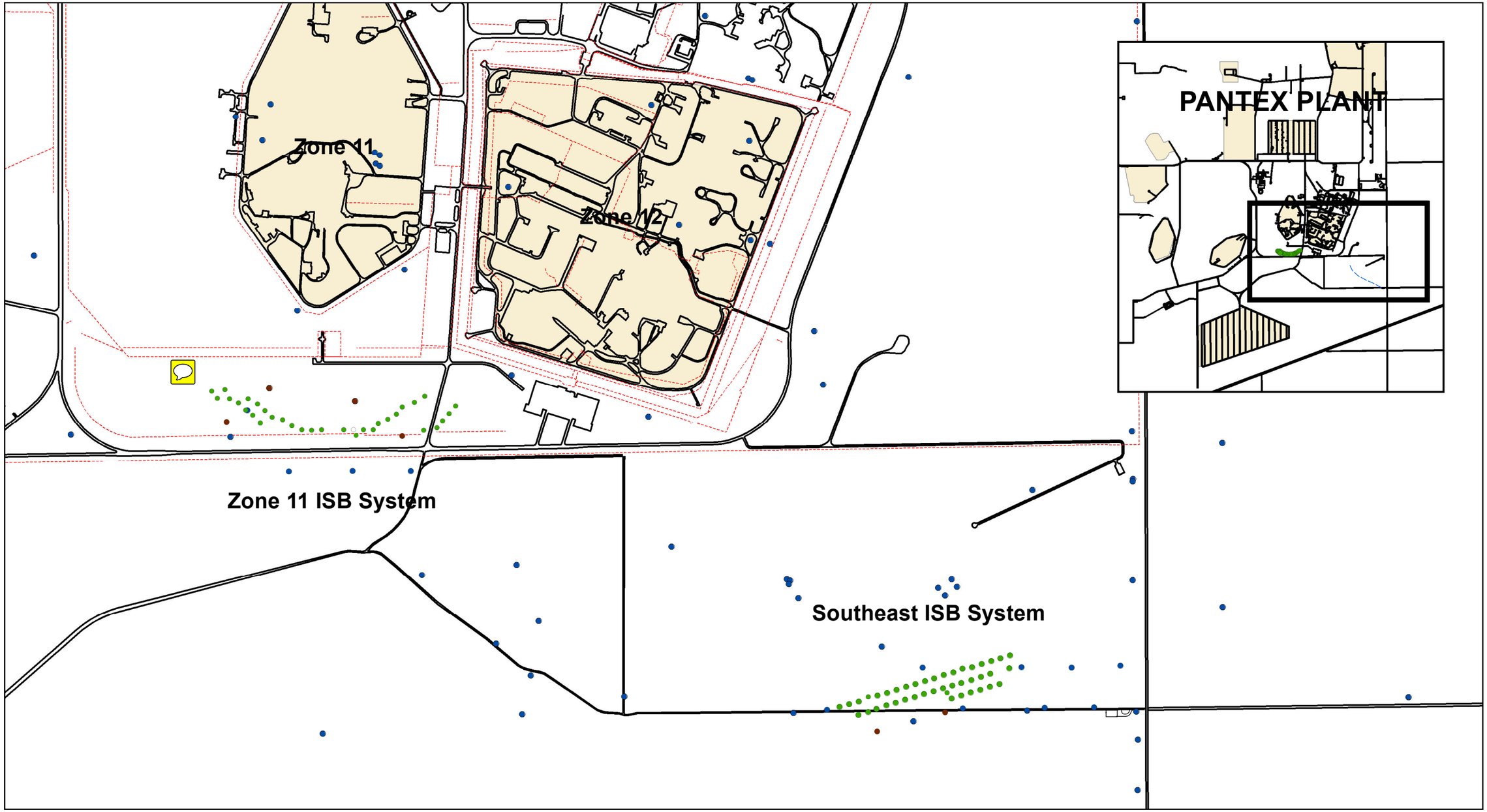
Notes:
Tabulated data show specific capacity (gpm/ft of displacement) and flow rate from each injection event.
Q1 = 25th percentile, Q3 = 75th percentile

TABLE 5. AMENDMENT SHIPPING AND QUALITY ASSURANCE SUMMARY
POST INJECTION REPORT - ZONE 11 ISB SYSTEM
PANTEX ISB O&M, PO 5293

Tanker Number	Agmark Container Number	Seal Numbers	Date Delivered	Lot Number	Mass Delivered (lbs)	Volume Delivered (gal)	Supplier Laboratory Testing (pass/fail)	Secondary Parameters (in/out of range)	Truck Number	Notes and Initials of Field Personnel
(internal tracking)	(printed on tanker)	(printed on seals)		(printed on bill of lading)	(per scales at production facility)	(calculated from mass delivered)	(QAPP Table 1)	(QAPP Table 2)	(from delivery receipt)	
1	580618	0068677, 0068778, 0068779	5/2/2014	172599	45100	5467	Pass	In Range	N220D	JRS
2	580372	0068327, 0068328, 0068337	5/7/2014	172599	45700	5539	Pass	In Range	N220D	JRS
3	580306	0068392, 0068393, 0068394	5/14/2014	173214	44980	5452	Pass	In Range	Tractor 243 (DVORAK)	EGG
4	580048	0068395, 0068396, 0068397	5/14/2014	173214	45140	5472	Pass	In Range	Tractor 244 (ROBISON)	EGG
5	580451	0068230, 0068231, 0068232	5/19/2014	173214	45080	5464	Pass	In Range	281	EGG
6	580394	0068282, 0068283, 0068284	5/21/2014	173527	45060	5462	Pass	In Range	281	EGG
7	580016	0068233, 0068234, 0068235	5/19/2014	173214	44980	5452	Pass	In Range	281	EGG
8	580473	0068285, 0068286, 0068287	5/28/2014	173527	45260	5486	Pass	In Range	11513	FJK
9	580034	0067802, 0067922, 0067923	5/30/2014	173916	44680	5416	Pass	In Range	11513	FJK
10	580372	0067926, 0067927	6/2/2014	173916	43640	5290	Pass	In Range	11513	FJK
11	580048	0067980, 0067981, 0067982	6/4/2014	174079	45080	5464	Pass	In Range	11513	FJK
12	580364	0067983, 0067984, 0067985	6/6/2014	174079	45380	5501	Pass	In Range	11513	FJK
13	580605	0067851, 0067852, 0067853	6/10/2014	174509	45080	5464	Pass	In Range	2249	CR
14	580460	0067848, 0067849, 0067850	6/11/2014	174509	44740	5423	Pass	In Range	2499	CGR
15	580400	0067858, 0067859, 0067860	6/16/2014	174509	45180	5476	Pass	In Range	2499	CGR
16	580007	0067861, 0067862, 0067863	6/18/2014	174509	38580	4676	Pass	In Range	2499	CGR
17	580451	0065375, 0065376, 0065377	6/23/2014	174735	46460	5632	Pass	In Range	11513	FJK
18	580702	0065372, 0065384, 0065385	6/25/2014	174735	46240	5605	Pass	In Range	11513	FJK
19	580051	0067894, 0067895, 0067896	6/27/2013	175298	45060	5462	Pass	In Range	11513	FJK
20	580320	0067899, 0069790, 0069791	6/30/2014	175298	45060	5462	Pass	In Range	11513	FJK
21	580507	0069797, 0069798, 0069799	7/2/2014	175298	46760	5668	Pass	In Range	11513	FJK
22	580423	0069794, 0069795, 0069796	7/7/2014	175298	46800	5673	Pass	In Range	2499	JRS
			Total Received On-Site		**990,040**	**120,005**				

Note: Documentation of testing and shipping documents submitted with each amendment tanker/tote QA submittal and approved by Pantex prior to use. Another copy of these documents will be provided to Pantex during project close-out.

FIGURES



EXPLANATION

- ISB INJECTION WELLS
- PANTEX MONITORING WELLS
- FENCES
- ROADS
- PANTEX PLANT ZONES

N

0 1,000'

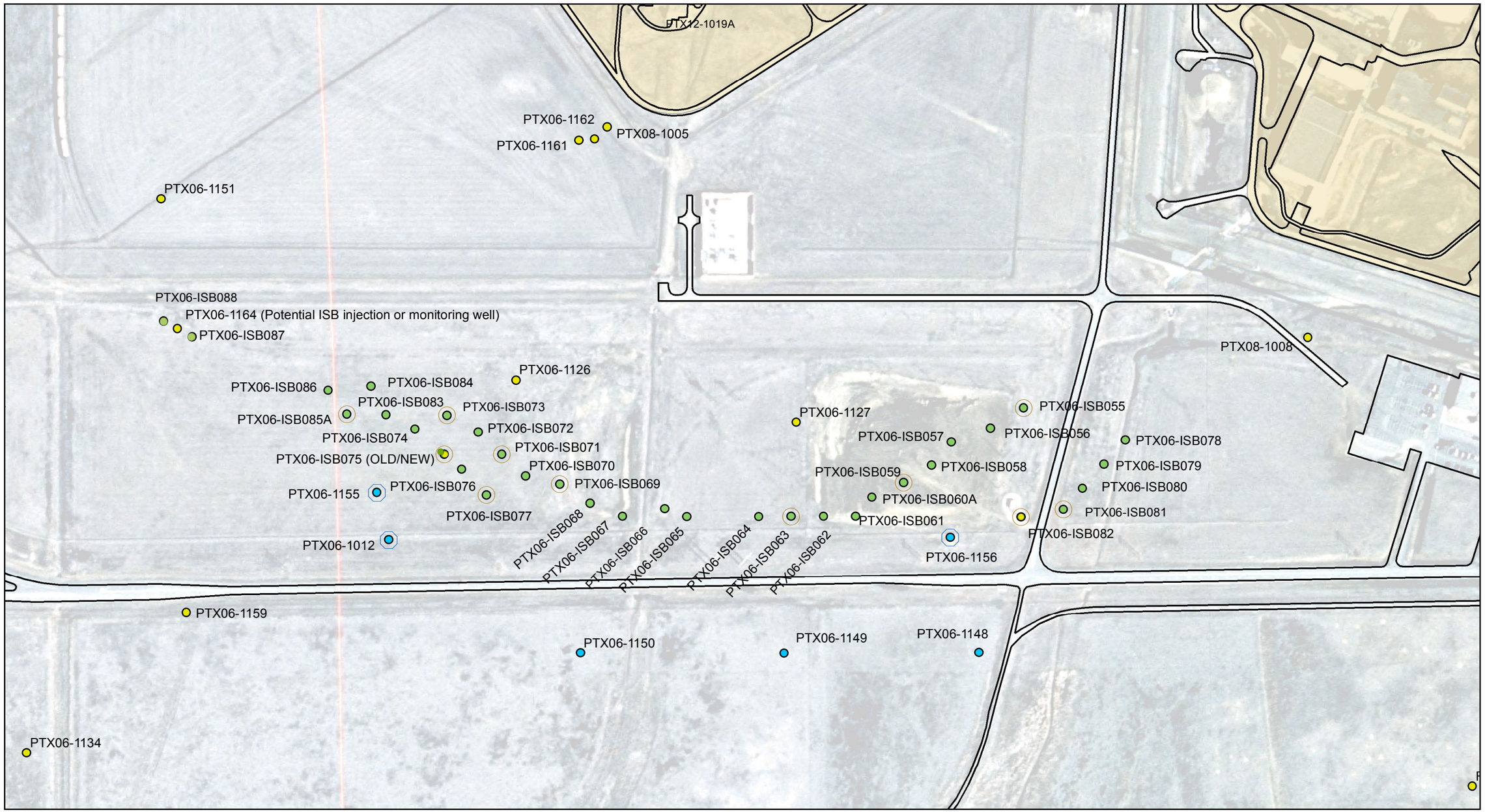
Trihydro CORPORATION
1252 Commerce Drive
Laramie, WY 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 1

PANTEX PLANT OVERVIEW

B&W PANTEX
IN SITU BIOREMEDIATION O&M
PANTEX PLANT, AMARILLO, TEXAS

Drawn By: SJS	Checked By: FJK	Scale: 1" = 1,000'	Date: 01/30/13	File: Fig1_ISB_Layout.mxd



EXPLANATION

- SAMPLED INJECTION WELLS
- ISB PERFORMANCE MONITORING WELLS
- ROADS
- PANTEX PLANT ZONES
- EXTRACTION WELL
- INJECTION WELL
- ISB INJECTION WELL
- ISPM WELL
- INVESTIGATION WELL
- PIEZOMETER

N

0 250'

Trihydro CORPORATION
1252 Commerce Drive
Laramie, WY 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 2

ZONE 11 ISB SYSTEM

B&W PANTEX
IN SITU BIOREMEDIATION O&M
PANTEX PLANT, AMARILLO, TEXAS

Drawn By: SJS	Checked By: JS	Scale: 1" = 250'	Date: 03/14/14	File: Fig3_Z11_ISBLayout.mxd

APPENDIX A

REVISED PLC PROGRAMMING DOCUMENTATION

APPENDIX A. REVISED PLC PROGRAMMING DOCUMENTATION

This appendix presents additional details on the programming changes that were made to the PLC when the new PC was installed. The specific changes, their purpose, and intended use are listed below.

- **Pure Amendment Set Point and Actual**. Set point and actual values were added for the pure amendment on each leg. The purpose of adding these was to shut down injection if the pure amendment target volume is reached. Adding this set point greatly reduces the possibility of injecting too much pure amendment at a well. The setpoint is manually input by the Operator for each injection well, and is based on the pure amendment target for that well. The actual is calculated based on flow meter readings, and can be reset by the user similar to mixed amendment actual computer totals.
- **Pulse Flow Deadband**. During previous injection events, the computer totalizer readings for pure amendment flow meters (FIQ-20x) were biased high because of the pulsed nature of amendment flow through the dosmatic mixers and therefore the flow meter (i.e. the amendment flows, then stop, flows again etc.). This pulsed flow caused the meter to sometimes send duplicate electronic pulses to the PLC. The pulse flow deadband tells the PLC to ignore erroneous flow readings. Specifically, if the meter tells the PLC that fluids are flowing at a rate that is not physically possible, the computer ignores the second pulse and produces a correct reading. Pulse flow deadband settings should be kept at the settings currently in place. These are 0 seconds for FIQ-10x (no pulse deadband correction), 12 seconds for FIQ-20x, and 1 second for FIQ-40x. The function of the pulse deadband setting was verified in the field in 2014. With the correct settings, the FIQ-20x computer and mechanical readings agree within 1%. The pulse flow deadband should be checked if computer and mechanical totals do not agree in future injection events.
- **Duration Remaining Until Set Point Reached**. This is an item that was added to the display. It shows the hours and minutes remaining until the mixed amendment setpoint is reached, and is calculated by dividing the gallons remaining until the mixed amendment setpoint is reached by the flow rate of mixed amendment (from FIQ-40x). This feature was added to assist the Operator's with planning, and does not require any input from the Operator.

APPENDIX B

WASTE TRACKING FORMS

B&W Pantex

Inventory Of Container At Waste Accumulation Site

(Reference WI 02.01.04.05.04, WI 02.01.04.05.05, WI 02.01.04.05.06, WI 02.01.04.05.07)

To have the container removed after container is full or when accumulation of waste has ended:
Plant personnel contact Waste Operations Department (WOD) at ext. 5449 and
fax completed form to fax ext. 7669.
Sub-Contractor personnel contact WOD Point of Contact at ext. 5534 and
fax completed form to ext. 6384
A copy of this form should accompany the container when picked up by WOD.

Complete the following:

Drum ID # 2014051113	Date Accumulation Started 5/8/14
Container Type ~~Roll Off~~ 55 gallon DT drum	Date Accumulation Ended 5/23/14
Phone # 303-570-9930	Location Z-11 Well Field
Mail Drop	Contact Sara Seitz

DATE	WASTE DESCRIPTION	35 ACCOUNT # OR MSDS # OR PEELABLE BARCODE #	BADGE #
5/8/14	Waste amendment cuttings 10 gal		64873
5/23/14	" " " 40 gal		64873
		emptied 5/23/14	

B&W Pantex

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Page No. 1 of 2
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Inventory Of Container At Waste Accumulation Site

(Reference WI 02.01.04.05.04, WI 02.01.04.05.05, WI 02.01.04.05.06, WI 02.01.04.05.07)

To have the container removed after container is full or when accumulation of waste has ended:
Plant personnel contact Waste Operations Department (WOD) at ext. 5449 and
fax completed form to fax ext. 7669.
Sub-Contractor personnel contact WOD Point of Contact at ext. 5534 and
fax completed form to ext. 6384
A copy of this form should accompany the container when picked up by WOD.

Complete the following:

Drum ID # 201405/112	Date Accumulation Started 5/23/14
Container Type Roll Off 55 gal OT drum	Date Accumulation Ended 5/23/14
Phone # 303 570 9930	Location Z-11 Well Field
Mail Drop	Contact Sara Seitz

DATE	WASTE DESCRIPTION	35 ACCOUNT # OR MSDS # OR PEELABLE BARCODE #	BADGE #
5/23/14	waste accumulated 4 Dgal		61873
"	" " 5 gal		"

enabled 5/23/14

B&W Pantex

Index No. PX-2844
Page No. 1 of 2
Issue No. 011

Inventory Of Container At Waste Accumulation Site

(Reference WI 02.01.04.05.04, WI 02.01.04.05.05, WI 02.01.04.05.06, WI 02.01.04.05.07)

To have the container removed after container is full or when accumulation of waste has ended:
Plant personnel contact Waste Operations Department (WOD) at ext. 5449 and
fax completed form to fax ext. 7669.
Sub-Contractor personnel contact WOD Point of Contact at ext. 5534 and
fax completed form to ext. 6384
A copy of this form should accompany the container when picked up by WOD.

Complete the following:

Drum ID # 2014051307	Date Accumulation Started 5/29/14
Container Type ~~Roll Off~~ 55 gal or Drum	Date Accumulation Ended 6/9/14
Phone # 307-745-7444	Location Z-11 Well Field
Mail Drop	Contact Sara Seitz

DATE	WASTE DESCRIPTION	35 ACCOUNT # OR MSDS # OR PEELABLE BARCODE #	BADGE #
5/29/14	Waste Amendment & water 15 gal		35744
5/30/14	" " 4 gal		35744
6/9/14	STORM WATER + AMENDMENT 35 GAL		33876
	TOTAL = 54 GAL		

B&W Pantex

Inventory Of Container At Waste Accumulation Site

(Reference WI 02.01.04.05.04, WI 02.01.04.05.05, WI 02.01.04.05.06, WI 02.01.04.05.07)

To have the container removed after container is full or when accumulation of waste has ended:
Plant personnel contact Waste Operations Department (WOD) at ext. 5449 and
fax completed form to fax ext. 7669.
Sub-Contractor personnel contact WOD Point of Contact at ext. 5534 and
fax completed form to ext. 6384
A copy of this form should accompany the container when picked up by WOD.

Complete the following:

Drum ID # 2014051306	Date Accumulation Started 6/9/14
Container Type Roll Off 55 GAL DRUM	Date Accumulation Ended 6/23/14
Phone # 307-745-7474	Location Z-11 Well Field
Mail Drop	Contact Sara Seitz

DATE	WASTE DESCRIPTION	35 ACCOUNT # OR MSDS # OR PEELABLE BARCODE #	BADGE #
6/9/14	AMENDMENT + STORM WATER 20 GAL		33876
6/20/14	AMENDMENT + STORM WATER 20 GAL		33876
6/23/14	Amendment + Stormwater 15 gal		65131

B&W Pantex

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Inventory Of Container At Waste Accumulation Site

(Reference WI 02.01.04.05.04, WI 02.01.04.05.05, WI 02.01.04.05.06, WI 02.01.04.05.07)

To have the container removed after container is full or when accumulation of waste has ended:
Plant personnel contact Waste Operations Department (WOD) at ext. 5449 and
fax completed form to fax ext. 7669.
Sub-Contractor personnel contact WOD Point of Contact at ext. 5534 and
fax completed form to ext. 6384
A copy of this form should accompany the container when picked up by WOD.

Complete the following:

Drum ID # 2014061495	Date Accumulation Started 6/25/14
Container Type 55 GAL BARREL ~~(POLY)~~	Date Accumulation Ended 6/25/14
Phone # 307-399-3471 / 307-745-7474	Location Z11 ISB
Mail Drop	Contact Sarah Seitz

DATE	WASTE DESCRIPTION	35 ACCOUNT # OR MSDS # OR PEELABLE BARCODE #	BADGE #
6/13/14	DELIVERED	—	—
6/25/14	40 Gal Amendment + Stormwater		36589
6/25/14	15 gal amendment and stormwater		65131
~~7/9/14~~	~~55 gal Waste Amdmt~~		64143

B&W Pantex

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Inventory Of Container At Waste Accumulation Site

(Reference WI 02.01.04.05.04, WI 02.01.04.05.05, WI 02.01.04.05.06, WI 02.01.04.05.07)

To have the container removed after container is full or when accumulation of waste has ended:
Plant personnel contact Waste Operations Department (WOD) at ext. 5449 and
fax completed form to fax ext. 7669.
Sub-Contractor personnel contact WOD Point of Contact at ext. 5534 and
fax completed form to ext. 6384
A copy of this form should accompany the container when picked up by WOD.

Complete the following:

Drum ID #	201406162 1	Date Accumulation Started	6/27
Container Type	55-gal open top steel	Date Accumulation Ended	7/9/14
Phone #	303.679.3134	Location	Z11-15B
Mail Drop		Contact	Sarah Seitz

DATE	WASTE DESCRIPTION	35 ACCOUNT # OR MSDS # OR PEELABLE BARCODE #	BADGE #
6/27/14	Stormwater and Bioamendment 35 gal	—	65131
7/9/14	Waste Amendment		64143

APPENDIX C

AMENDMENT QA CHECKLIST AND DOCUMENTATION

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
2014 ISB O&M

Field Inspection Summary										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parmeters (in/out[2] of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
1	580618	0068677, 0068778, 0068779	5/2/2014	172599	45100	5466.67	Pass	In Range	N220D	JRS
2	580372	0068327, 0068328, 0068337	5/7/2014	7/22/2372	45700	5539.39	Pass	In Range	N220D	JRS
3	580306	0068392, 0068393, 0068394	5/14/2014	173214	44980	5452.12	Pass	In Range	Tractor 243 (DVORAK)	EGG
4	580048	0068395, 0068396, 0068397	5/14/2014	173214	45140	5471.52	Pass	In Range	Tractor 244 (ROBISON)	EGG
5	580451	0068230, 0068231, 0068232	5/19/2014	173214	45080	5464.24	Pass	In Range	281	EGG
6	580394	0068282, 0068283, 0068284	5/21/2014	173527	45060	5461.82	Pass	In Range	281	EGG
7	580016	0068233, 0068234, 0068235	5/19/2014	173214	44980	5452.12	Pass	In Range	281	EGG
8	580473	0068285, 0068286, 0068287	5/28/2014	173527	45260	5486.06	Pass	In Range	11513	FJK
9	580034	0067802, 0067922, 0067923	5/30/2014	173916	44680	5415.76	Pass	In Range	11513	FJK
10	580372	0067926, 0067927	6/2/2014	173916	43640	5289.70	Pass	In Range	11513	FJK
11	580048	0067980, 0067981, 0067982	6/4/2014	174079	45080	5464.24	Pass	In Range	11513	FJK
12	580364	0067983, 0067984, 0067985	6/6/2014	174079	45380	5500.61	Pass	In Range	11513	FJK
13	580605	0067851, 0067852, 0067853	6/10/2014	174509	45080	5464.24	Pass	In Range	2249	CR
14	580460	0067848, 0067849, 0067850	6/11/2014	174509	44740	5423.03	Pass	In Range	2499	CGR
15	580400	0067858, 0067859, 0067860	6/16/2014	174509	45180	5476.36	Pass	In Range	2499	CGR
16	580007	0067861, 0067862, 0067863	6/18/2014	174509	38580	4676.36	Pass	In Range	2499	CGR
17	580451	0065375, 0065376, 0065377	6/23/2014	174735	46,460	5631.52	Pass	In Range	11513	FJK
18	580702	0065372, 0065384, 0065385	6/25/2014	174735	46240	5604.85	Pass	In Range	11513	FJK
19	580051	0067894, 0067895, 0067896	6/27/2013	175298	45060	5461.82	Pass	In Range	11513	FJK
20	580320	0067899, 0069790, 0069791	6/30/2014	175298	45060	5461.82	Pass	In Range	11513	FJK/JRS
21	580507	006799, 0069797, 0069798	7/2/2014	175298	46760	5667.88	Pass	In Range	11513	FJK/JRS
22	580423	0069794, 0069795, 0069796	7/7/2014	175298	46800	5672.73	Pass	In Range	2499	FJK/JRS
			Total Received On-Site		***990,040***	***120004.85***				

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1] Tanker bill of lading included seventh digit, which is not typically how data are presented. However, the truck ID is correct

[2] Out of range discuss with PSTR

[3] QA/QC was within acceptable ranges, but amendment had to be transferred en route due to driping valve issue on original tanker.

TBD = To be determined when delivered

Reviewer S. Seitz
name signature

Project Manager D. Gravelding
name

Trihydro CORPORATION

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	**AGMARK CONTAINER #**	**SEAL #s (from bill of lading)**	**DATE DELIVERED**	**LOT # (from lading)**	**MASS DELIVERED (lbs)**	**MASS DELIVERED (gals)**	**SUPPLIER LABORATORY TESTING (pass/fail)**	**Secondary Parmeters (in/out[2] of range)**	**TRUCK ID # (from Delivery Receipt)**	**Notes and Initials of Field Personnel**
1	580618	0068677, 0068778, 0068779	5/2/2014	172599	45100	5,467	Pass	In Range	N220D	JRS

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

	name	signature	date
Reviewer	S. Seitz		2014May5
Project Manager	D. Gravelding		2014May5

Ship note: 493801
Ship Run: 443721
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473407
Printed: 04/29/2014 11:31:49

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 664-1
Scheduled Ship: 4/29/14 11:00 am
Delivery: 5/6/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 04/23/14	172599 Kilograms: 20,457.23	45,100.00	LBS

Seal Numbers: 0068677,0068778,0068779
Seals verified and attached by: TM

Scale Tkt:	**39031**				
Gross Wgt:	**75,460**	**Out** : 04/29/2014	11:30 AM		
Tare Wgt:	**30,360**	**In** : 04/29/2014	9:51 AM	**Tank:**	T65
Net Wgt:	**45,100**	**Tmp:** 40 F			
Trailer:	**580618**	**Last Haul:** white grap			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** TM

Loaded by: TM
Date: 4-29-14
Carrier: AgMark
Driver: Grady Truett

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number: 172599
Date Processed: 4/23/2014
Formulation: 190-6730

Truck Numbers: 580618
Date of Load Out: 4/29/2014
Net Emulsion Weight: 45,100

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	46.90%	Mojonnier
Total Solids % weight	52.50-56.50%	53.47%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than .584	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than .115	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3110	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3070	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.67	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

4/30/14 Jerome A Rausch CFO - RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO Remediation and Natural Attenuation Services, Inc.

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parmeters (in/out[2] of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
2	580372	0068327, 0068328, 0068337	5/7/2014	172599	45700	5,539	Pass	In Range	N220D	JRS

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

	name	signature	date
Reviewer	S. Seitz		2014May7
Project Manager	D. Gravelding		2014May7

Ship note: 493813
Ship Run: 443733
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473408
Printed: 04/30/2014 11:45:09

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 664-2
Scheduled Ship: 4/30/14 11:00 am
Delivery: 5/6/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 04/23/14	172599 Kilograms: 20,729.38	45,700.00	LBS

Seal Numbers: 0068327,0068328,0068337
Seals verified and attached by: TM

Scale Tkt:	**39059**				
Gross Wgt:	**74,940**	**Out** : 04/30/2014	11:38 AM		
Tare Wgt:	**29,240**	**In** : 04/30/2014	9:53 AM	**Tank:**	T65
Net Wgt:	**45,700**	**Tmp:** 40 F			
Trailer:	**580372**	**Last Haul:** white grape			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** TM

Loaded by: TM **Date:** 4-30-14
Carrier: Agmark **Driver:** Tom

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REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	172599	**Truck Numbers:**	580372
Date Processed:	4/23/2014	**Date of Load Out:**	4/30/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,700

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.12%	Mojonnier
Total Solids % weight	52.50-56.50%	53.80%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than .584	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than .115	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3110	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3070	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.62	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

5/1/14 Jerome C Rausch CFO - RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO Remediation and Natural Attenuation Services, Inc.

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	**AGMARK CONTAINER #**	**SEAL #s (from bill of lading)**	**DATE DELIVERED**	**LOT # (from lading)**	**MASS DELIVERED (lbs)**	**MASS DELIVERED (gals)**	**SUPPLIER LABORATORY TESTING (pass/fail)**	**Secondary Parmeters (in/out[2] of range)**	**TRUCK ID # (from Delivery Receipt)**	**Notes and Initials of Field Personnel**
3	580306	0068392, 0068393, 0068394	5/14/2014	173214	44,980	5,452	Pass	In Range	Tractor 243 (DVORAK)	EGG
4	580048	0068395, 0068396, 0068397	5/14/2014	173214	45,140	5,472	Pass	In Range	Tractor 244 (ROBISON)	EGG

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

Reviewer S. Seitz (name) 2014May14 (date)

Project Manager D. Gravelding (name) 2014May14 (date)

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	173214	**Truck Numbers:**	580306
Date Processed:	5/7/2014	**Date of Load Out:**	5/8/2014
Formulation:	190-6730	**Net Emulsion Weight:**	44,980

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.04%	Mojonnier
Total Solids % weight	52.50-56.50%	53.82%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.131	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3072	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3005	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.65	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

5/13/2014 William A Newman

Date William Newman - President - Remediation and Natural Attenuation Services, Inc.

Ship note: 493916
Ship Run: 443836
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473599
Printed: 05/08/2014 14:09:46

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 670-1
Scheduled Ship: 5/8/14 11:00 am
Delivery: 5/8/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/07/14	173214 Kilograms: 20,402.79	44,980.00	LBS

Seal Numbers: 0068392,0068393,0068394
Seals verified and attached by:_____

Scale Tkt:	**39296**				
Gross Wgt:	**76,940**	**Out** : 05/08/2014	2:08 PM		
Tare Wgt:	**31,960**	**In** : 05/08/2014	10:39 AM	**Tank:**	T65
Net Wgt:	**44,980**	**Tmp:** 40 F			
Trailer:	**580306**	**Last Haul:** white grape			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:**_____

Loaded by:_____ **Date:** 5·8·14
Carrier: Agmark **Driver:**_____

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	173214	**Truck Numbers:**	580048
Date Processed:	5/7/2014	**Date of Load Out:**	5/8/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,140

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.03%	Mojonnier
Total Solids % weight	52.50-56.50%	53.82%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.131	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3072	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3005	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.65	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

5/13/2014 William A. Newman

Date William Newman - President - Remediation and Natural Attenuation Services, Inc.

Ship note: 493920
Ship Run: 443840
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473600
Printed: 05/08/2014 15:53:27

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 670-2
Scheduled Ship: 5/8/14 1:00 pm
Delivery: 5/8/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF		FOODSTUFF	FOODSTUFF	
Item	**Description**	**Lot Number**	**Ship Qty**	**UOM**
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/07/14	173214 Kilograms: 20,475.37	45,140.00	LBS

Seal Numbers: 0068395,0068396,0068397
Seals verified and attached by:_____

Scale Tkt:	**39297**				
Gross Wgt:	**76,300**	**Out** : 05/08/2014	3:51 PM		
Tare Wgt:	**31,160**	**In** : 05/08/2014	2:03 PM	**Tank:**	T65
Net Wgt:	**45,140**	**Tmp:** 41 F			
Trailer:	**580048**	**Last Haul:** white grape juice			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:**_____

Loaded by:_____ **Date:** 5-8-14
Carrier: Agmark **Driver:**_____

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out[2] of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
5	580451	0068230, 0068231, 0068232	5/19/2014	173214	45,080	5,464	Pass	In Range	281	EGG

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range - Notified PSTR on May 21, 2013 that SPC is just above the criteria for CFU. QA/QC plan does not require NCR until 25% of product is out of range. Advise using as-is.

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014May20
Project Manager	D. Gravelding		2014May20

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REMEDIATION & NATURAL ATTENUATION SERVICES, INC

Innovative Remediation Products and Services

Lot Number:	173214	**Truck Numbers:**	580451
Date Processed:	5/7/2014	**Date of Load Out:**	5/9/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,080

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.19%	Mojonnier
Total Solids % weight	52.50-56.50%	53.87%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.131	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3072	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3005	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.7	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

5/13/2014 [signature]

Date William Newman - President - Remediation and Natural Attenuation Services, Inc.

Ship note: 493931

Ship Run: 443851

Warehouse: GC

Galloway Company

601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473601

Printed: 05/09/2014 14:46:16

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588

Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.

Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 670-3

Scheduled Ship: 5/9/14 11:00 am
Delivery: 5/9/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/07/14	173214 Kilograms: 20,448.15	45,080.00	LBS

Seal Numbers: 0068230,0068231,0068232
Seals verified and attached by:_____

Scale Tkt:	**39303**				
Gross Wgt:	**76,160**	**Out** : 05/09/2014	2:43 PM		
Tare Wgt:	**31,080**	**In** : 05/09/2014	12:41 PM	**Tank:**	T65
Net Wgt:	**45,080**	**Tmp:** 41 F			
Trailer:	**580451**	**Last Haul:** white grape juice			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:**_____

Loaded by:_____ **Date:** 5-9-14

Carrier: Agmark **Driver:** _____

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	**AGMARK CONTAINER #**	**SEAL #s (from bill of lading)**	**DATE DELIVERED**	**LOT # (from lading)**	**MASS DELIVERED (lbs)**	**MASS DELIVERED (gals)**	**SUPPLIER LABORATORY TESTING (pass/fail)**	**Secondary Parameters (in/out[2] of range)**	**TRUCK ID # (from Delivery Receipt)**	**Notes and Initials of Field Personnel**
6	580394	0068282, 0068283, 0068284	5/21/2014	173527	45,060	5,462	Pass	In Range	281	EGG

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range - Notified PSTR on May 21, 2013 that SPC is just above the criteria for CFU. QA/QC plan does not require NCR until 25% of product is out of range. Advise using as-is.

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014May21
Project Manager	D. Gravelding		2014May21

Ship note: 493996
Ship Run: 443912
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473604
Printed: 05/15/2014 12:44:30

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 671-1
Scheduled Ship: 5/15/14 11:00 am
Delivery: 5/15/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/13/14	173527 Kilograms: 20,439.08	45,060.00	LBS

Seal Numbers: 0068282,0068283,0068284
Seals verified and attached by: JB

Scale Tkt:	39459				
Gross Wgt:	77,020	Out :	05/15/2014 12:42 PM		
Tare Wgt:	31,960	In :	05/15/2014 10:31 AM	Tank:	T65
Net Wgt:	45,060	Tmp:	41 F		
Trailer:	580394	Last Haul:	red wine		

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** JB

Loaded by: JB / GT
Carrier: Agmark

Date: 5-19-14
Driver: [signature]

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	173527	**Truck Numbers:**	580394
Date Processed:	5/13/2014	**Date of Load Out:**	5/15/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,060

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	**44.00-48.00%**	46.88%	Mojonnier
Total Solids % weight	**52.50-56.50%**	54.93%	Mojonnier
Droplet Size	**99.9% Droplets Smaller than 1.0 microns**	99.9% less than 0.669	Laser Particle Size
Droplet Size	**99.9% Droplets Larger than 0.10 microns**	99.9% larger than 0.131	Laser Particle Size
Mean Droplet Size	**0.20-0.40 microns**	0.3145	Laser Particle Size
Median Droplet Size	**0.20-0.40 microns**	0.3075	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	**7-9**	8.57	pH Meter
Coliform	**less than 5 cfu/ml**	< 5	Plate Count
Standard Plate Count	**less than 100 cfu/ml**	< 100	Plate Count
Yeast	**less than 1 cfu/ml**	< 1	Plate Count
Mold	**less than 100 cfu/ml**	< 1	Plate Count

Certification

5/19/14 Jerome Rausch, CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out[2] of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
7	580016	0068233, 0068234, 0068235	5/23/2014	173214	44,980	5,452	Pass	In Range	281	EGG

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2013May23
Project Manager	D. Gravelding		2013May23

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	173214	**Truck Numbers:**	580016
Date Processed:	5/7/2014	**Date of Load Out:**	5/9/2014
Formulation:	190-6730	**Net Emulsion Weight:**	44,980

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.07%	Mojonnier
Total Solids % weight	52.50-56.50%	53.94%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.131	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3072	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3005	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.65	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

5/13/2014 William A Newman

Date William Newman - President - Remediation and Natural Attenuation Services, Inc.

Ship note: 493933
Ship Run: 443853
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473602
Printed: 05/09/2014 16:30:24

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Carrier Not Scheduled

Phone:

Fax:

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 670-4
Scheduled Ship: 5/9/14 1:00 pm
Delivery: 5/9/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/07/14	173214 Kilograms: 20,402.79	44,980.00	LBS

Seal Numbers: 0068233,0068234,0068235
Seals verified and attached by:_____

Scale Tkt:	**39304**				
Gross Wgt:	**74,820**	**Out** : 05/09/2014	4:28 PM		
Tare Wgt:	**29,840**	**In** : 05/09/2014	2:39 PM	**Tank:**	T65
Net Wgt:	**44,980**	**Tmp:** 41 F			
Trailer:	**580016**	**Last Haul:** white grape juice			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:**_____

Loaded by:_____ **Date:** 5-9-14
Carrier: Agmark **Driver:**_____

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	**AGMARK CONTAINER #**	**SEAL #s (from bill of lading)**	**DATE DELIVERED**	**LOT # (from lading)**	**MASS DELIVERED (lbs)**	**MASS DELIVERED (gals)**	**SUPPLIER LABORATORY TESTING (pass/fail)**	**Secondary Parameters (in/out[2] of range)**	**TRUCK ID # (from Delivery Receipt)**	**Notes and Initials of Field Personnel**
8	580473	0068285, 0068286, 0068287	5/28/2014	173527	45,260	5,486	Pass	In Range	11513	FJK

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

[3] Field confirmation with FJK/JWR on May 31, 2013 confirmed that the tanker actually had 3 seals, not just two as BOL indicates. Numbers are numerical in order and verbal confirmation with RNAS on May 31, 2013 agreed that it is an omission on the BOL.

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014May28
Project Manager	D. Gravelding		2014May28

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	173527	**Truck Numbers:**	580473
Date Processed:	5/13/2014	**Date of Load Out:**	5/15/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,260

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.30%	Mojonnier
Total Solids % weight	52.50-56.50%	55.08%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.131	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3145	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3075	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.55	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

5/19/14 — CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.

Ship note: 493999
Ship Run: 443915
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473605
Printed: 05/15/2014 14:24:20

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 671-2
Scheduled Ship: 5/15/14 1:00 pm
Delivery: 5/15/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/13/14	173527 Kilograms: 20,529.80	45,260.00	LBS

Seal Numbers: 0068285,0068286,0068287
Seals verified and attached by: TM

Scale Tkt:	39460				
Gross Wgt:	75,580	Out :	05/15/2014 2:22 PM		
Tare Wgt:	30,320	In :	05/15/2014 12:47 PM	Tank:	T65
Net Wgt:	45,260	Tmp:	41 F		
Trailer:	580473	Last Haul:	red wine		

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** TM

Loaded by: TM
Date: 5-15-14
Carrier: Agmark
Driver: Tony Pendleton

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range[2])	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
9	580034	0067802, 0067922, 0067923	5/30/2014	173916	44,680	5,416	Pass	In Range	11513	FJK

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014May30
Project Manager	D. Gravelding		2014May30

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC

Innovative Remediation Products and Services

Lot Number:	173916	**Truck Numbers:**	580034
Date Processed:	5/19/2014	**Date of Load Out:**	5/21/2014
Formulation:	190-6730	**Net Emulsion Weight:**	44,680

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	**44.00-48.00%**	47.50%	Mojonnier
Total Solids % weight	**52.50-56.50%**	54.18%	Mojonnier
Droplet Size	**99.9% Droplets Smaller than 1.0 microns**	99.9% less than 0.669	Laser Particle Size
Droplet Size	**99.9% Droplets Larger than 0.10 microns**	99.9% larger than 0.115	Laser Particle Size
Mean Droplet Size	**0.20-0.40 microns**	0.3090	Laser Particle Size
Median Droplet Size	**0.20-0.40 microns**	0.3130	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	**7-9**	8.63	pH Meter
Coliform	**less than 5 cfu/ml**	< 5	Plate Count
Standard Plate Count	**less than 100 cfu/ml**	< 100	Plate Count
Yeast	**less than 1 cfu/ml**	< 1	Plate Count
Mold	**less than 100 cfu/ml**	< 1	Plate Count

Certification

5/26/14 Jerome Rausch, CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.

Ship note: 494057
Ship Run: 443973
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473607
Printed: 05/21/2014 14:13:13

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 672-1
Scheduled Ship: 5/21/14 11:00 am
Delivery: 5/21/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/19/14	173916 Kilograms: 20,266.72	44,680.00	LBS

Seal Numbers: 0067802,0067922,0067923
Seals verified and attached by:_____

Scale Tkt:	**39615**				
Gross Wgt:	**76,020**	**Out** : 05/21/2014	2:11 PM		
Tare Wgt:	**31,340**	**In** : 05/21/2014	11:46 AM	**Tank:**	T64
Net Wgt:	**44,680**	**Tmp:** 40 F			
Trailer:	**580034**	**Last Haul:** white grape			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:**_____

Loaded by:_____ **Date:** 5-21-14
Carrier: Agmark **Driver:**_____

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)[3]	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range[2])	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
10	580372	0067926, 0067927	6/2/2014	173916	43,640	5,290	Pass	In Range	11513	FJK

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range

[3]Only two custody seals on this particular tanker configuration. The chain of custody is still in tact.

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June02
Project Manager	D. Gravelding		2014June02

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	173916	**Truck Numbers:**	580372
Date Processed:	5/19/2014	**Date of Load Out:**	5/21/2014
Formulation:	190-6730	**Net Emulsion Weight:**	43,640

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	**44.00-48.00%**	47.37%	Mojonnier
Total Solids % weight	**52.50-56.50%**	54.38%	Mojonnier
Droplet Size	**99.9% Droplets Smaller than 1.0 microns**	99.9% less than 0.669	Laser Particle Size
Droplet Size	**99.9% Droplets Larger than 0.10 microns**	99.9% larger than 0.115	Laser Particle Size
Mean Droplet Size	**0.20-0.40 microns**	0.3090	Laser Particle Size
Median Droplet Size	**0.20-0.40 microns**	0.3130	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	**7-9**	8.63	pH Meter
Coliform	**less than 5 cfu/ml**	< 5	Plate Count
Standard Plate Count	**less than 100 cfu/ml**	< 100	Plate Count
Yeast	**less than 1 cfu/ml**	< 1	Plate Count
Mold	**less than 100 cfu/ml**	< 1	Plate Count

Certification

5/26/14 Jerome Rausch, CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.

Ship note: 494062
Ship Run: 443978
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473608
Printed: 05/21/2014 18:46:32

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 672-2
Scheduled Ship: 5/21/14 1:00 pm
Delivery: 5/21/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/19/14	173916 Kilograms: 19,794.97	43,640.00	LBS

Seal Numbers: 0067926,0067927
Seals verified and attached by:_____

Scale Tkt:	**39617**				
Gross Wgt:	**75,100**	**Out** : 05/21/2014	6:45 PM		
Tare Wgt:	**31,460**	**In** : 05/21/2014	4:42 PM	**Tank:**	T64
Net Wgt:	**43,640**	**Tmp:** 41 F			
Trailer:	**580372**	**Last Haul:** food oil			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:**_____

Loaded by:_____ **Date:** 5-21-14
Carrier: Agmark **Driver:** Nelson

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
11	580048	0067980, 0067981, 0067982	6/4/2014	174079	45,080	5,464	Pass	In Range	11513	FJK

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June04
Project Manager	D. Gravelding		2014June04

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	174079	**Truck Numbers:**	580048
Date Processed:	5/27/2014	**Date of Load Out:**	5/29/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,080

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.80%	Mojonnier
Total Solids % weight	52.50-56.50%	55.59%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669 microns	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115 microns	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3080	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3130	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.72	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/2/14 James Piegat

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494135
Ship Run: 444041
Warehouse: GC

Galloway Company
601 S. Commercial St
Neenah, WI 54956-

Order Number: 473610
Printed: 05/29/2014 13:48:12

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Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 673-1
Scheduled Ship: 5/29/14 11:00 am
Delivery: 5/29/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/26/14	174079 Kilograms: 20,448.15	45,080.00	LBS

Seal Numbers: 0067980,0067981,0067982
Seals verified and attached by:_____

Scale Tkt:	**39818**				
Gross Wgt:	**73,920**	**Out** : 05/29/2014	1:46 PM		
Tare Wgt:	**28,840**	**In** : 05/29/2014	11:48 AM	**Tank:**	T64
Net Wgt:	**45,080**	**Tmp:** 41 F			
Trailer:	**580048**	**Last Haul:** food gr.oil			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:**_____

Loaded by:_____ **Date:** 5·29·14
Carrier: Agmark **Driver:**_____

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
12	580364	0067983, 0067984, 0067985	6/6/2014	174079	45,380	5,501	Pass	In Range	11513	FJK

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June06
Project Manager	D. Gravelding		2014June06

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	174079	**Truck Numbers:**	580364
Date Processed:	5/27/2014	**Date of Load Out:**	5/29/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,380

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	45.34%	Mojonnier
Total Solids % weight	52.50-56.50%	55.78%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669 microns	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115 microns	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3080	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3130	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.71	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/2/14
Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494137
Ship Run: 444043
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473611
Printed: 05/29/2014 18:09:05

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 673-2
Scheduled Ship: 5/29/14 1:00 pm
Delivery: 5/29/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 05/26/14	174079 Kilograms: 20,584.23	45,380.00	LBS

Seal Numbers: 0067983,0067984,0067985
Seals verified and attached by: 03/GT

Scale Tkt:	**39819**				
Gross Wgt:	**74,920**	**Out** : 05/29/2014	6:07 PM		
Tare Wgt:	**29,540**	**In** : 05/29/2014	4:22 PM	**Tank:**	T64
Net Wgt:	**45,380**	**Tmp:** 42 F			
Trailer:	**580364**	**Last Haul:** wine			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** 03

Loaded by: 03/GT
Carrier: AGMARK
Date: 5-29-14
Driver: [illegible]

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
13	580605	0067851, 0067852, 0067853	6/10/2014	174509	45,080	5,464	Pass	In Range	2249	CR

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June10
Project Manager	D. Gravelding		2014 June 10

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC

Innovative Remediation Products and Services

Lot Number:	174509	**Truck Numbers:**	580605
Date Processed:	6/5/2014	**Date of Load Out:**	6/5/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,080

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.70%	Mojonnier
Total Solids % weight	52.50-56.50%	54.90%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669 microns	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115 microns	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3140	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3090	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.62	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/9/14 Jerome Rausch, CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494203

Ship Run: 444108

Warehouse: GC

Galloway Company

601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473674

Printed: 06/05/2014 14:40:45

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588

Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.

Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 674-2
Scheduled Ship: 6/5/14 1:00 pm
Delivery: 6/5/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 06/02/14	174509 Kilograms: 20,448.15	45,080.00	LBS

Seal Numbers: 0067851,0067852,0067853
Seals verified and attached by: TM

Scale Tkt:	39998				
Gross Wgt:	77,260	Out :	06/05/2014 2:39 PM		
Tare Wgt:	32,180	In :	06/05/2014 12:54 PM	Tank:	T64
Net Wgt:	45,080	Tmp:	41 F		
Trailer:	580605	Last Haul:	lemon conc.		

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** TM

Loaded by: TM **Date:** 5-5-14

Carrier: Agmark **Driver:** [illegible]

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
14	580460	0067848, 0067849, 0067850	6/11/2014	174509	44,740	5,423	Pass	In Range	2499	CGR

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June11
Project Manager	D. Gravelding		2014June11

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC

Innovative Remediation Products and Services

Lot Number:	174509	**Truck Numbers:**	580460
Date Processed:	6/5/2014	**Date of Load Out:**	6/5/2014
Formulation:	190-6730	**Net Emulsion Weight:**	44,740

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.81%	Mojonnier
Total Solids % weight	52.50-56.50%	54.88%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669 microns	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115 microns	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3140	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3090	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.62	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/9/14 Jerome Rausch, CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494201
Ship Run: 444106
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473673
Printed: 06/05/2014 12:48:14

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 674-1
Scheduled Ship: 6/5/14 11:00 am
Delivery: 6/5/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 06/02/14	174509 Kilograms: 20,293.93	44,740.00	LBS

Seal Numbers: 0067848,0067849,0067850
Seals verified and attached by: JB

Scale Tkt:	**39997**				
Gross Wgt:	**74,200**	**Out** : 06/05/2014	12:46 PM		
Tare Wgt:	**29,460**	**In** : 06/05/2014	11:16 AM	**Tank:**	T64
Net Wgt:	**44,740**	**Tmp:** 41 F			
Trailer:	**580460**	**Last Haul:** white grape juice			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** JB

Loaded by: JB
Date: 6-5-14
Carrier: Agmark
Driver:

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
15	580400	0067858, 0067859, 0067860	6/16/2014	174509	45,180	5,476	Pass	In Range	2499	CGR

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June16
Project Manager	D. Gravelding		2014June16

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	174509	**Truck Numbers:**	580400
Date Processed:	6/6/2014	**Date of Load Out:**	6/6/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,180

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.58%	Mojonnier
Total Solids % weight	52.50-56.50%	54.81%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669 microns	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115 microns	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3140	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3090	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.55	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/9/14 Jerome Rausch CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494206
Ship Run: 444111
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473675
Printed: 06/06/2014 11:38:00

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Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 674-3
Scheduled Ship: 6/6/14 11:00 am
Delivery: 6/6/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 06/02/14	174509 Kilograms: 20,493.51	45,180.00	LBS

Seal Numbers: 0067858,0067859,0067860
Seals verified and attached by: TM

Scale Tkt:	40021				
Gross Wgt:	75,140	Out :	06/06/2014 11:36 AM		
Tare Wgt:	29,960	In :	06/06/2014 9:40 AM	Tank:	T64
Net Wgt:	45,180	Tmp:	41 F		
Trailer:	580400	Last Haul:	lemon juice		

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** TM

Loaded by: TM
Date: 6-6-14
Carrier: AGMARK
Driver: [signature]

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
16	580007	0067861, 0067862, 0067863	6/18/2014	174509	38,580	4,676	Pass	In Range	2499	CGR

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June18
Project Manager	D. Gravelding		2014June18

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES INC

Innovative Remediation Products and Services

Lot Number:	174509	**Truck Numbers:**	580007
Date Processed:	6/6/2014	**Date of Load Out:**	6/6/2014
Formulation:	190-6730	**Net Emulsion Weight:**	38,580

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.72%	Mojonnier
Total Solids % weight	52.50-56.50%	54.82%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.669 microns	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115 microns	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3140	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3090	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.57	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/9/14 Jerome Rausch CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494212

Ship Run: 444117

Warehouse: GC

Galloway Company

601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473676

Printed: 06/06/2014 14:18:48

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Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588

Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.

Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 674-4
Scheduled Ship: 6/6/14 1:00 pm
Delivery: 6/6/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 06/02/14	174509 Kilograms: 17,499.77	38,580.00	LBS

Seal Numbers: 0067861,0067862,0067863
Seals verified and attached by: TM

Scale Tkt:	**40022**				
Gross Wgt:	**68,600**	**Out** : 06/06/2014	2:16 PM		
Tare Wgt:	**30,020**	**In** : 06/06/2014	12:42 PM	**Tank:**	T64
Net Wgt:	**38,580**	**Tmp:** 41 F			
Trailer:	**580007**	**Last Haul:** white grape			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** TM

Loaded by: TM **Date:** 6-6-14

Carrier: Agmark **Driver:** [illegible]

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES INC.

Innovative Remediation Products and Services

Lot Number:	174735	**Truck Numbers:**	580451
Date Processed:	6/9/2014	**Date of Load Out:**	6/12/2014
Formulation:	190-6730	**Net Emulsion Weight:**	46,460

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	46.69%	Mojonnier
Total Solids % weight	52.50-56.50%	55.09%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.766	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3190	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3140	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.66	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/16/14 Jerome Rausch CFO RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494281
Ship Run: 444182
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473757
Printed: 06/12/2014 13:50:17

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 675-2
Scheduled Ship: 6/12/14 1:00 pm
Delivery: 6/12/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF FOODSTUFF FOODSTUFF

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 06/09/14	174735 Kilograms: 21,074.12	46,460.00	LBS

Seal Numbers: 0065375,0065376,0065377
Seals verified and attached by: TM

Scale Tkt:	40183				
Gross Wgt:	76,120	Out :	06/12/2014 1:48 PM		
Tare Wgt:	29,660	In :	06/12/2014 10:31 AM	Tank:	T65
Net Wgt:	46,460	Tmp:	40 F		
Trailer:	580451	Last Haul:	wine		

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** TM

Loaded by: TM
Date: 6-12-13
Carrier: Agmark
Driver: [illegible]

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
17	580451	0065375, 0065376, 0065377	6/23/2014	174735	46,460	5,632	Pass	In Range	11513	FJK

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz	S/Seitz	2014June23
Project Manager	D. Gravelding		2014June23

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
18	580702	0065372, 0065384, 0065385	6/25/2014	174735	46240	5,605	Pass	In Range	11513	FKJ

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June25
Project Manager	D. Gravelding		2014June25

Trihydro CORPORATION

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES INC

Innovative Remediation Products and Services

Lot Number:	174735	**Truck Numbers:**	580702
Date Processed:	6/9/2014	**Date of Load Out:**	6/12/2014
Formulation:	190-6730	**Net Emulsion Weight:**	46,240

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.57%	Mojonnier
Total Solids % weight	52.50-56.50%	55.01%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.766	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3190	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3140	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.66	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/16/14 Jerome C Rausch CFO, RNAS
Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494278
Ship Run: 444180
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473754
Printed: 06/12/2014 12:38:35

gal_rsr_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rates that have been established by the carrier and are available to the shipper, on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement.

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 675-1
Scheduled Ship: 6/12/14 11:00 am
Delivery: 6/12/14 12:00 am

The property described below in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained whether agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF FOODSTUFF FOODSTUFF

Item	Description	Lot Number	Ship Qty	UOM
190-6730	KEYMAN ZONE NIB Bulk Mfg Date: 06/09/14	174735 Kilograms: 20,974.33	46,240.00	LBS

Seal Numbers: 0065372,0065384,0065385
Seals verified and attached by: B / TM

Scale Tkt:	40182				
Gross Wgt:	74,940	Out : 06/12/2014	12:11 PM		
Tare Wgt:	28,700	In : 06/12/2014	10:12 AM	Tank:	T65
Net Wgt:	46,240	Tmp: 40 F			
Trailer:	580702	Last Haul: GRAPE JUICE			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** TM

Loaded by: TM
Date: 6·12·14
Carrier: Agmark
Driver: [signature]

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
19	580051	0067894, 0067895, 0067896	6/27/2013	175298	45060	5,462	Pass	In Range	11513	FJK

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June27
Project Manager	D. Gravelding		2014June27

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES INC.

Innovative Remediation Products and Services

Lot Number:	175298	**Truck Numbers:**	580051
Date Processed:	6/16/2014	**Date of Load Out:**	6/18/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,060

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	**44.00-48.00%**	46.76%	Mojonnier
Total Solids % weight	**52.50-56.50%**	52.73%	Mojonnier
Droplet Size	**99.9% Droplets Smaller than 1.0 microns**	99.9% less than 0.766	Laser Particle Size
Droplet Size	**99.9% Droplets Larger than 0.10 microns**	99.9% larger than 0.115	Laser Particle Size
Mean Droplet Size	**0.20-0.40 microns**	0.3160	Laser Particle Size
Median Droplet Size	**0.20-0.40 microns**	0.3120	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	**7-9**	8.72	pH Meter
Coliform	**less than 5 cfu/ml**	< 5	Plate Count
Standard Plate Count	**less than 100 cfu/ml**	< 100	Plate Count
Yeast	**less than 1 cfu/ml**	< 1	Plate Count
Mold	**less than 100 cfu/ml**	< 1	Plate Count

Certification

6/23/14 Jerome A Rausch, CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494334

Ship Run: 444235

Warehouse: GC

Galloway Company

601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473972

Printed: 06/18/2014 14:17:30

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588

Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.

Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 676-1
Scheduled Ship: 6/18/14 11:00 am
Delivery: 6/18/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 06/16/14	175298 Kilograms: 20,439.08	45,060.00	LBS

Seal Numbers: 0067894,0067895,0067896
Seals verified and attached by: GT/DS

Scale Tkt:	**40366**				
Gross Wgt:	**76,300**	**Out** : 06/18/2014	2:16 PM		
Tare Wgt:	**31,240**	**In** : 06/18/2014	11:34 AM	**Tank:**	T64
Net Wgt:	**45,060**	**Tmp:** 43 F			
Trailer:	**580051** ✓	**Last Haul:** white grape juice			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** GT/DS

Loaded by: GT/DS **Date:** 6-18-14

Carrier: Agmark **Driver:** [illegible]

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
20	580320	0067899, 0069790, 0069791	6/30/2014	175298	45,060	5,462	Pass	In Range	11513	FJK/JRS

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014June30
Project Manager	D. Gravelding		2014June30

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC

Innovative Remediation Products and Services

Lot Number:	175298	**Truck Numbers:**	580320
Date Processed:	6/16/2014	**Date of Load Out:**	6/18/2014
Formulation:	190-6730	**Net Emulsion Weight:**	45,060

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.03%	Mojonnier
Total Solids % weight	52.50-56.50%	52.89%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.766	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3160	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3120	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.72	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

June 25, 2014 CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.

Ship note: 494336
Ship Run: 444237
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473973
Printed: 06/18/2014 15:44:19

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 676-2
Scheduled Ship: 6/18/14 1:00 pm
Delivery: 6/18/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 06/16/14	175298 Kilograms: 20,439.08	45,060.00	LBS

Seal Numbers: 0067899,0069790,0069791
Seals verified and attached by: GT/03

Scale Tkt:	40368				
Gross Wgt:	75,040	Out :	06/18/2014 3:41 PM		
Tare Wgt:	29,980	In :	06/18/2014 12:43 PM	Tank:	T64
Net Wgt:	45,060	Tmp:	43 F		
Trailer:	580320	Last Haul:	wine		

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** GT/03

Loaded by: GT/03
Date: 6-18-14
Carrier: Agmark
Driver: [signature]

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
21	580507	006799, 0069797, 0069798	7/2/2014	175298	46,760	5,668	Pass	In Range	11513	FJK/JRS

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014July02
Project Manager	D. Gravelding		2014July02

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	175298	**Truck Numbers:**	580507
Date Processed:	6/16/2014	**Date of Load Out:**	6/19/2014
Formulation:	190-6730	**Net Emulsion Weight:**	46,760

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.10%	Mojonnier
Total Solids % weight	52.50-56.50%	53.80%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.766	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3160	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3120	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.73	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/23/14 Jerome Rausch CFO, RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494350
Ship Run: 444251
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473975
Printed: 06/19/2014 15:13:44

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 676-4
Scheduled Ship: 6/19/14 1:00 pm
Delivery: 6/19/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 06/16/14	175298 Kilograms: 21,210.20	46,760.00	LBS

Seal Numbers: 006799,0069797,0069798
Seals verified and attached by: JB

Scale Tkt:	**40395**				
Gross Wgt:	**76,840**	**Out** : 06/19/2014	3:11 PM		
Tare Wgt:	**30,080**	**In** : 06/19/2014	1:13 PM	**Tank:**	T64
Net Wgt:	**46,760**	**Tmp:** 40 F			
Trailer:	**580507**	**Last Haul:** juice			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** JB

Loaded by: JB
Carrier: Agmark
Date: 6-19-14
Driver:

AMENDMENT SUPPLY QUALITY ASSURANCE CHECKLIST
ISB O&M

Field Inspection										
TANKER #	AGMARK CONTAINER #	SEAL #s (from bill of lading)	DATE DELIVERED	LOT # (from lading)	MASS DELIVERED (lbs)	MASS DELIVERED (gals)	SUPPLIER LABORATORY TESTING (pass/fail)	Secondary Parameters (in/out of range)	TRUCK ID # (from Delivery Receipt)	Notes and Initials of Field Personnel
22	580423	0069794, 0069795, 0069796	7/7/2014	175298	46,800	5,673	Pass	In Range	2499	JRS

Notes: This QA audit was performed by evaluating the suppliers internal QA data, the shippers bill of lading, and the shipping company's delivery receipt received by Trihydro in the field. All of these supporting documents are attached. The QA checks included review that the supplier's product met their internal standards (Supplier Laboratory Testing column), review that the truck number from the supplier matched that of the shipper's delivery receipt (Truck ID # column), and that the mass of amendment loaded out equaled that ordered.

[1]Detect above detection limit, but within acceptable range.

[2]Out of range discuss with PSTR

TBD = To be determined when delivered

	name	signature	date
Reviewer	S. Seitz		2014July07
Project Manager	D. Gravelding		2014July07

RNAS
REMEDIATION & NATURAL ATTENUATION SERVICES, INC.

Innovative Remediation Products and Services

Lot Number:	175298	**Truck Numbers:**	580423
Date Processed:	6/16/2014	**Date of Load Out:**	6/19/2014
Formulation:	190-6730	**Net Emulsion Weight:**	46,800

AMENDMENT PASS/FAIL CRITERIA

Test Parameter	Specification	Results	Method
Total Fat % weight	44.00-48.00%	47.19%	Mojonnier
Total Solids % weight	52.50-56.50%	53.81%	Mojonnier
Droplet Size	99.9% Droplets Smaller than 1.0 microns	99.9% less than 0.766	Laser Particle Size
Droplet Size	99.9% Droplets Larger than 0.10 microns	99.9% larger than 0.115	Laser Particle Size
Mean Droplet Size	0.20-0.40 microns	0.3160	Laser Particle Size
Median Droplet Size	0.20-0.40 microns	0.3120	Laser Particle Size

SECONDARY AMENDMENT PARAMETERS

Test Parameter	Specification	Results	Method
pH	7-9	8.74	pH Meter
Coliform	less than 5 cfu/ml	< 5	Plate Count
Standard Plate Count	less than 100 cfu/ml	< 100	Plate Count
Yeast	less than 1 cfu/ml	< 1	Plate Count
Mold	less than 100 cfu/ml	< 1	Plate Count

Certification

6/23/14 Jerome O Rausch CFO RNAS

Date

William Newman - President - Remediation and Natural Attenuation Services, Inc.
Jerome Rausch - CFO - Remediation and Natural Attenuation Services, Inc.
James Piegat - Senior Scientist - Remediation and Natural Attenuation Services, Inc.

Ship note: 494346
Ship Run: 444247
Warehouse: GC

Galloway Company
601 S. Commercial St.
Neenah, WI 54956-

Order Number: 473974
Printed: 06/19/2014 12:13:46

gal_rsi_so_bol_print2.rpt

Uniform Straight Bill of Lading (& Packing Slip)

Received, subject to individually determined rates or contracts that have been agreed upon in writing between the carrier and shipper, if applicable, otherwise to the rates, classifications, and rules that have been established by the carrier and are available to the shipper on request.

Subject to Section 7 of Conditions of applicable bill of lading. If this shipment is to be delivered to the consignee without recourse on the consignor, the consignor shall sign the following statement:

The carrier may decline to make delivery of this shipment without payment of freight and all other lawful charges.

Carrier ID: Agmark Logistics LLC
222 2nd North Avenue
Suite 311
Nashville, TN 37201-

Phone: (615) 313-6588
Fax: (615) 313-6592

Freight charges are prepaid unless marked collect.

Received $_____ to apply in prepayment of the charges on the property described herein.
Collect

Consign to

D.O.E PANTEX PLANT
FM 2373 and Highway 60
Amarillo, TX 79120-
US

Customer Number: 11056
Ship-to-Address: 39
Customer Phone:
Customer PO: 676-3
Scheduled Ship: 6/19/14 11:00 am
Delivery: 6/19/14 12:00 am

The property described below, in apparent good order, except as noted, (contents and condition of contents of packages unknown) marked, consigned, and destined as shown below, which said carrier agrees to carry to destination, if on its route, or otherwise to deliver to another carrier on the route to destination. Every service to be performed hereunder shall be subject to all the conditions not prohibited by law, whether printed or written, herein contained which are hereby agreed to by the shipper and accepted for himself and his assigns.

FOODSTUFF **FOODSTUFF** **FOODSTUFF**

Item	Description	Lot Number	Ship Qty	UOM
190-6730	NEWMAN ZONE NIB Bulk Mfg Date: 06/16/14	175298 Kilograms: 21,228.34	46,800.00	LBS

Seal Numbers: 0069794,0069795,0069796
Seals verified and attached by: OF/JG

Scale Tkt:	**40394**				
Gross Wgt:	**75,900**	**Out** : 06/19/2014	12:11 PM		
Tare Wgt:	**29,100**	**In** : 06/19/2014	9:44 AM	**Tank:**	T64
Net Wgt:	**46,800**	**Tmp:** 40 F			
Trailer:	**580423**	**Last Haul:** orange juice			

Plant Number: 55-0469
Prior to loading, this trailer was CIP washed at Galloway Company via turbulent force using these parameters: **Rinse:** 3 water 'burst' at 65-85 degrees F
Wash: 30% caustic at 140-150 degrees F, min of 20 minutes
Rinse: 3 water 'burst' at 90-110 degrees F
Sanitize: Mandate plus acid at 75-95 degrees F, min of 2 minutes
The tank interior, dome, lids, vents, pumps, valves, hoses, caps, fittings, and all gaskets have been cleaned, sanitized, and inspected. **INITIALS:** OF/JG

Loaded by: OF/JG
Carrier: Agmark

Date: 06/19/2014
Driver: [illegible]

WELL DRILLING BASIC ORDERING AGREEMENT RELEASE 4

IMPLEMENTATION REPORT

CONSOLIDATED NUCLEAR SECURITY, LLC

PURCHASE ORDER NO. 34122 / BOA 52, RELEASE #4

PANTEX PLANT, AMARILLO TEXAS

December 18, 2014

Project #: 18A-094-002

SUBMITTED BY: Trihydro Corporation

1252 Commerce Drive, Laramie, WY 82070

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List of Acronyms

AHA	Activity Hazard Analysis
ARCH	Air Rotary Casing Hammer
ASTM	American Society of Testing and Materials
bgs	Below Ground Surface
BOA	Basic Ordering Agreement
CWMP	Contractor Waste Management Plan
ft	Feet
ft/day	Feet per Day
ft^2/day	Feet Squared per Day
FGZ	Fine-Grained Zone
GEFCO	George E. Failing Company
HASP	Health and Safety Plan
ISB	*In Situ* Bioremediation
Pantex	Consolidated Nuclear Security, LLC, Pantex Plant
P&A	Plugging and Abandonment
PM	Project Manager
PSTR	Project Subcontract Technical Representative
PVC	Polyvinyl Chloride
PO	Purchase Order
SOW	Statement of Work
SS	Stainless Steel
SSO	Site Safety Officer

List of Acronyms (cont.)

TAC	Texas Administrative Code
Trihydro	Trihydro Corporation

1.0 INTRODUCTION

This Implementation Report prepared by Trihydro Corporation (Trihydro) documents the results of field activities for Release 4 of Basic Ordering Agreement (BOA) 52. The work was performed as described in the statement of work (SOW) titled *Pantex BOA 52 (Well Drilling), Release 4 SOW* Consolidated Nuclear Security, LLC, Pantex Plant (Pantex) Purchase Order (PO) No. 34122.

The work activities included the following:

1. Installation of 18 perched aquifer *In Situ* Bioremediation (ISB) injection wells designated PTX06-ISB087 through PTX06-ISB106 (**Figure 1-1**) in the Zone 11 expansion area to extend the treatment area of the contaminated groundwater plume. The expansion area wells were installed northwest of the existing ISB system.
2. Installation of nine perched aquifer monitor wells designated PTX06-1169 through PTX06-1177 (**Figure 1-1**). Monitor wells were installed within the northwestern portion of the existing Zone 11ISB system and within the Zone 11 expansion area wells.
3. Plugging and abandonment (P&A) of two new ISB injection wells (PTX06-ISB088 and PTX06-ISB100) due to well failure. These two wells were re-drilled and replaced by wells PTX06-ISB088A and PTX06-ISB100A.
4. Perched aquifer monitor and injection wells were drilled using both Air Rotary Casing Hammer (ARCH) and mud rotary drilling methods. Six new perched aquifer wells (two monitor wells and four injection wells) were drilled using mud rotary; the remaining 21 wells were drilled using ARCH. The six wells were drilled using mud rotary drilling methods to limit the introduction of air into the existing ISB treatment zone.

The team of subcontractors that assisted Trihydro in completing this project included:

- Yellow Jacket Drilling Services – Drilling, development, and plugging and abandonment
- Apex Geoscience – Geotechnical Analysis
- Davis Geomatics – Professional Land Surveying
- Jet West Geophysical Services – Geophysical Deviation Logging

The activities discussed in this report were based on the following approved planning document:

- *Well Drilling Basic Ordering Agreement Release 4 Work Plan* that included the project Health and Safety Plan (HASP) and Contractor Waste Management Plan (CWMP), dated May 30, 2014

2.0 MOBILIZATION

Mobilization included the physical mobilization to the site as well as associated coordination efforts to initiate field activities. Drilling mobilization included the deployment of drill rigs used for well installation, and transportation of the required equipment and materials. In addition to the drill rigs, two drill tenders (pipe and water trucks), three pump service rigs, two forklifts, two mud rotary systems, and support vehicles were mobilized to the site throughout project work.

2.1 PERMITS

An activity hazard analysis (AHA) was submitted before initiation of fieldwork. Pantex Construction Safety personnel issued the AHA/Safe Work Permit (**Appendix A**) following review and approval of the submitted AHA. Seven AHA addenda were also submitted and approved throughout the project to address equipment and activities not initially covered in the original AHA/Safe Work Permit (**Appendix A**).

Two Excavation Permits were obtained from the Pantex Project Subcontract Technical Representative (PSTR) during project execution (**Appendix B**). The original Excavation Permit covered the anticipated drilling area before well installation. A second Excavation Permit was issued to extend the original expansion area to the northwest based on analytical results from a newly constructed well. The Trihydro Site Safety Officer (SSO) walked down the locations described in the permits with the PSTR prior to drilling or other ground penetration activities.

Hot Work Permits (PX-5394) for welding, grinding, and cutting operations were obtained to support this work on a monthly basis. Four permits were issued in total; copies are included in **Appendix C**.

2.2 SECURITY

Trihydro coordinated work activities with the PSTR on at least a daily basis. Pantex provided badges and site access for field personnel at the request of Trihydro.

As part of personnel accountability at the project site, the PSTR requested that Trihydro provide a daily roster of on-site personnel. Roster were verbally provided to the PSTR each morning shortly after work commenced, and updated if personnel changed.

2.3 EQUIPMENT INSPECTIONS

Equipment inspections were performed before commencement of field activities. The drill rigs were inspected by a Pantex-provided third party on two occasions (results previously provided to Pantex) and by the drillers on a daily basis (**Appendix D**). Pump service rigs, forklifts and the skid steer were inspected by the operator and/or the Trihydro SSO on a daily basis; checklists are presented in **Appendices E**, **F**, and **G**, respectively.

3.0 FIELD ACTIVITIES

This section presents a summary of drilling and well construction activities and results. Also included are associated sections describing surface completions, geophysical logging, well development, equipment decontamination, and well plugging and abandonment procedures. Finally, a section has been included that lists general and specific boring/well conditions that were identified during the project. Pertinent information including borehole and well construction details, safety issues and observations, and on-site personnel is documented in field logbooks included in **Appendix H**.

3.1 SAFETY MEETINGS

Safety briefings, also referred to as tailgate safety meetings, were held each day and attended by all personnel prior to commencement of work. These meetings included reviewing a plan of the day which specified the activities anticipated to be performed by the crew(s) each day. A special topic(s) discussion that was often a result of SSO and/or Construction Safety observations from the previous day(s) was incorporated into the safety meetings. Copies of safety meeting documentation are included in **Appendix I**.

3.2 DRILLING ACTIVITIES

Drilling and well construction activities commenced on June 16, 2014 and were completed on September 25, 2014. Drilling and well completion, and well development start and end dates are presented in **Table 3-1**. The drilling was primarily accomplished with one drill rig, however a second rig was brought on site and drilled six mud wells and three ARCH wells. Well type and drilling methods are listed in **Table 3-2**.

Copies of Daily Drill Reports generated by drillers and well development operators are located in **Appendix J**.

3.2.1 ARCH DRILLING

ARCH drilling was performed using a George E. Failing Co. (GEFCO) Speedstar 50K drill rig. An auxiliary air compressor provided additional air capacity during drilling. The diameter of the borehole for perched aquifer monitor and injection wells was 9 5/8 inches. Prior to leveling the drill rig, visqueen was placed under the drill rig and the auxiliary air compressor.

ARCH drilling involved continual advancement of threaded drive casing immediately behind the drill bit to keep the borehole open. ARCH drilled boreholes were advanced from the ground surface to approximately 290 feet (ft) below grade.

Cuttings removed from the unsaturated portions of ARCH-drilled boreholes from the ground surface to approximately 250 feet ft below ground surface (bgs) were spread on the ground surface in the general vicinity of the borings. Cuttings from just above and within the saturated portions of ARCH-drilled boreholes (greater than approximately 250 ft bgs) were collected and placed into waste containers (sludge bins) provided by Pantex. **Section 5** presents waste-related information.

Soils were logged by inspection of cyclone-discharged cuttings and observation of drilling conditions. The boring logs describe lithologic name, color, and moisture content. Soil classifications were logged in accordance with the Unified Soil Classification System, American Society for Testing and Materials (ASTM) D-2488-84. **Appendix K** presents borehole logs and well completion information for the 27 newly-installed monitor and injection wells.

3.2.2 MUD ROTARY DRILLING

Mud rotary drilling was performed using a second GEFCO Speedstar 50K drill rig. Prior to leveling the drill rig, visqueen was placed under the drill rig and the shaker. The shaker and mud pump were the primary components of the mud system.

Mud rotary drilling for this project involved continual advancement of a tricone bit. Drilling fluid (mud) was prepared inside the shaker using variable quantities of soda ash, Quik-Gel, and EZ Mud Gold and pumped down the drill stem. The drilling mud creates a “mud cake” that lines the borehole and the weight of the drilling mud serves to keep the borehole open. Cuttings were brought to the surface suspended in the drill mud. The cuttings and drill mud were pumped to the shaker where they were separated. Cuttings were collected in hoppers and the drilling mud recycled back down the borehole. Make-up water (Plant potable water) was added to the drilling mud as needed.

Cuttings removed from the ground surface to approximately 250 ft bgs were spread on the ground surface in the general vicinity of the borings. Cuttings from approximately 250 ft bgs to the total depth of the borehole were collected and placed into waste containers (sludge bins) provided by Pantex. **Section 5** presents waste-related information.

Soils were logged by inspection of drill cuttings strained from the drilling mud and observation of drilling conditions. The boring logs describe lithologic name and color. Soil classifications were logged in accordance with the Unified Soil Classification System ASTM D-2488-84.

3.2.3 SOIL SAMPLING

Once the borehole was advanced to near the target depth, Pantex personnel were notified so they could elect to be present for identification of the top of the fine-grained zone (FGZ). The FGZ was identified in each boring at the depths shown in the boring logs (**Appendix K**). Depth to the top of the FGZ was observed between 282 and 287 ft bgs, and typically varied by less than a few feet between borings.

Split spoon samples of FGZ material were collected from each boring location at the depth intervals listed in **Table 3-3** with two exceptions. At re-drilled borings PTX06-ISB088A and PTX06-ISB100A, FGZ samples from the original borings were used with concurrence from the Pantex Project Manager (PM). The split spoon samples were prepared and submitted for laboratory hydraulic conductivity testing using ASTM D-5084; results are included in **Appendix L** and summarized in **Table 3-3**. Hydraulic conductivities ranged from 8.96^{-8} centimeters per second (cm/sec) at PTX06-1173 to 1.22^{-4} cm/sec at PTX06-1171. With the exception of the hydraulic conductivity result from PTX06-1171, the average FGZ hydraulic conductivity from the other 26 wells was 2.19^{-7}. The result from PTX06-1171 appears to be anomalous and is likely not representative of the hydraulic conductivity of the FGZ at this location.

3.3 WELL CONSTRUCTION

A summary of borehole and FGZ depths, and well casing, screen, and sump materials and intervals is provided in **Table 3-4**. Each of the 18 perched aquifer injection wells were constructed using 4-inch diameter Schedule 10 316 stainless steel (SS) casing. Seventeen of the injection wells were constructed using flush-threaded casing and screen; well PTX06-ISB088A was built using both flush-threaded and welded SS casing. Well screens were 0.02-inch slotted, wire-wrapped SS in 20-foot lengths except at wells PTX06-ISB094 and PTX06-ISB096, which consisted of 19-foot screen intervals. Injection well screens were set at or near the top of the FGZ. Injection well sumps were 1foot in length and arrived factory welded to the screen bottom.

The nine monitor wells were constructed using flush-threaded 4-inch diameter Schedule 80 polyvinyl chloride (PVC) casing, screen, and sumps. Well screens consisted of 0.02-inch slotted PVC in 10-feet lengths, and set at or near the top of the FGZ. Monitor well sumps were 1 ft in length and attached to the bottom of the well screen.

Both SS and PVC well casing and screen materials arrived in factory sealed plastic and therefore did not require steam cleaning. SS centralizers were installed around the top and bottom of the screens and around casing in 40-foot intervals. Well construction materials were inspected by Trihydro and the PSTR prior to use.

Filter pack surrounding the screened intervals consisted of 10/20 mesh silica sand. **Table 3-4** lists pertinent annular space well construction materials, quantities, and associated depth intervals. The filter pack extended approximately five feet above the top of the well screen. After placement of the filter pack, the well was swabbed using a surge block. Additional filter pack material was then added to the annulus as needed.

A bentonite plug composed of 3/8 inch bentonite chips and/or ¼ inch coated bentonite pellets was placed above the filter pack. The depth interval of the plug constructed at each well is listed in **Table 3-4**. Water was added to the bentonite and allowed to hydrate a minimum of 1 hour and usually overnight prior to grout placement.

The remaining annular space was grouted with a slurry that depended on the well type. Injection well grout consisted of approximately 95% Portland Type I/II cement and 5% granular bentonite. Monitor well grout consisted of hydrated granular bentonite. Grout was pumped into the remaining well annular space to within a few feet of the ground surface, and then topped off repeatedly as needed to accommodate grout settlement. **Table 3-4** lists the type and quantities of grout used by well.

In addition to the information presented in **Table 3-4**, the *Table of Well Construction Details – Appendix B* forms were completed and included herein as **Appendix M** per contract specifications.

State of Texas required Well Reports were completed, reviewed by Pantex for approval, and submitted to the State, the Panhandle Groundwater Conservation District, and Pantex according to 16 Texas Administrative Code (TAC) Chapter 76.70 (**Appendix N**).

3.4 SURFACE COMPLETIONS

Well pads were approximately 8-inches thick (4 to 5 inches below ground surface with 3 to 4 inches above ground surface) with surface dimensions of 5 ft by 5 ft, and were constructed of concrete and reinforced with steel mesh. Well pads were domed slightly to promote drainage.

The well-head consisted of a 10-inch inside diameter steel surface (protective) casing buried approximately 18 inches into the ground. The top of the surface casing included a 10-inch diameter aluminum locking well cap with hasps located on the southeast side of the well casing. A weep hole was drilled on the south side of the protective casing approximately 6 inches above the top of the well pads. Several of the well-head structures were inspected by the Sampling and Analysis crew prior to pouring the concrete pad.

Four protective bollards were placed near each corner of the well pad to protect the well-head structures. The bollards were constructed of 3-inch diameter steel pipe buried approximately 18 inches below ground and completely filled with concrete.

A 2-inch brass well marker was set in the north quadrant of the well pads and physically stamped with the Pantex assigned well name, and geographical location (northing and easting).

3.5 GEOPHYSICAL LOGGING

Deviation surveys were performed within each completed well to measure the amount of well offset from vertical. Pantex specifications used as guidance state that the total deviation from vertical should not exceed 2% in any 20 ft length of well casing or over the entire depth of the well.

The magnetic deviation probe used was manufactured by Mt Sopris Instruments. The WellCad program was used to generate the deviation logs using the balanced tangential method to produce the bullseye plot and the closure view plot for each well. Pantex Plant had a magnetic declination of 6 degrees during September 2014, which was taken into consideration to obtain true north. Deviation data were acquired on the “down” log for repeatability and backup, whereas the “up” log was used for data presentation. Data were acquired every foot for both down and up logs; however the tabular data presented in **Appendix O** are presented in 10-foot intervals.

Appendix O also includes two deviation plots for each well – bullseye and closure view plots. Bullseye plots illustrate the cumulative deviation or departure from the origin throughout the well’s length. The plots show both the azimuth (direction in degrees) and the amount of deviation (in feet).

The closure view plot illustrates the well’s departure from true vertical, but is not direction limited.

A dotted line referred to as "allowable tilt" has been added to the bullseye and closure view plots as a reference. The allowable tilt for the 27 new injection and monitor wells was calculated to be 1.15 degrees by the subcontractor. This allowable tilt value was derived from the following:

For calculation purposes, the true vertical depth of each well was assumed to be 280 ft. The specifications allow for a 2% deviation. Thus,

280 ft X 0.02 = 5.60 ft (maximum departure distance)
sin^{-1} (5.60/280) = 1.15 degrees

Therefore, the 2% specification equates to approximately 1.15 degrees total vertical deviation or approximately 5.6 feet over the 280 ft depth. The small dotted line shown on the bullseye and closure view plots (**Appendix O**) is 1.15 degrees; however, this value is not labeled on the plots. The closure view plots illustrate what well or portions of the well are within specifications and what is out of specifications.

Inspection of the bullseye and closure view plots, and the tabulated data in **Appendix O** indicates that only well PTX06-ISB087 deviates greater than the 2% specification over the entire well. Inspection of these same plots and data indicates that within one or more 20 ft interval, six wells (PTX06-ISB087, PTX06-ISB094, PTX06-ISB095, PTX06-ISB097, PTX06-ISB105, and PTX06-1176) deviate greater than the 2% specification, the greatest deviation being 3.5% at well PTX06-ISB087. Specific exceedance intervals are presented in **Table 3-5**. It should be noted that the inclination accuracy of the deviation sensor is +/- 0.5 degrees.

3.6 WELL DEVELOPMENT

Following installation, wells were developed to facilitate proper well performance. Well development start and end dates are presented in **Table 3-6**. Well development utilized a combination of brushes, surge blocks, bailers, water jetting, and pumping.

ARCH-drilled wells were typically surged for approximately 30 minutes followed by fluid removal using a bailer. This process was repeated at least once or until water removed by a bailer began to clear. A submersible pump was then placed near the bottom of the well and pumped at the highest sustainable discharge rate. After the turbidity of the discharge water lessened, the pump was shut off and water in the drop pipe allowed to fall back into the well and filter pack at several of the wells and/or the submersible pump raised several feet to stress the formation at higher screened areas. Well development was deemed complete based on turbidity measurements of the groundwater discharge. Individual well development records are included in **Appendix P**.

Development of the mud-rotary drilled wells was much more extensive and included multiple development techniques due to the inherent differences in mud-rotary wells versus ARCH wells where drilling mud was not introduced. The

mud-rotary drilled wells contained tens of feet of heavy mud sediment inside the screen and casing. The sediment inside the well was originally removed using a bailer at PTX06-1169 or using a downward discharging low-pressure water-jetting tool at the other five mud wells. After the majority of the sediments were initially removed, various techniques were employed to increase hydraulic communication with the formation. These included several days of surging using Aqua-Clear (a drilling mud dispersant), surging using a combination of Dry Acid (a dispersant and sequestering agent) and Mud-Nox (a surfactant), additional bailing and pumping, and additional water jetting using a high-pressure side-discharging tool. Non-formation water (i.e., potable water) was required to aid in the development of the mud-drilled wells.

The six mud wells were observed to exhibit improvement as observed by a combination of increasing pumping rates and response to changes in water levels vs. time. To quantify the differences in hydraulic conductivity of the mud wells versus the ARCH wells, Trihydro performed an injection test similar to the injection tests currently being performed to establish changes in hydraulic conductivity both prior to ISB well maintenance and after ISB well maintenance. This testing and results are presented in **Section 3.7**.

Following development, Pantex videoed the injection and monitor wells. Three wells (PTX06-ISB094, PTX06-1176, and PTX06-1169) showed visible debris on the well screen and were re-developed.

Well development water and sediments were considered potentially contaminated and were contained in Pantex provided sludge bins. The volume of development water purged from each well is included in **Table 3-6**.

3.7 HYDRAULIC TESTING

Hydraulic testing was performed at a representative sample of the ARCH-drilled wells and each of the six mud-drilled wells. Hydraulic testing data were used to calculate hydraulic conductivities of ARCH and mud-drilled wells. Hydraulic conductivity values from newly installed wells were compared with historical data from wells installed in the same area using the same two drilling methods.

Hydraulic conductivity values provide an additional line of evidence with which to evaluate the hydraulic communication between the wells and the surrounding perched groundwater unit. As discussed in the preceding sections, development data, such as pumping rates collected from the wells installed by each drilling method indicated even after extensive development work on the mud-drilled wells, they were less communicative than the ARCH-drilled wells. Hydraulic testing was performed using two methods: injection testing and slug testing.

3.7.1 INJECTION TESTING

Injection testing has been used to calculate hydraulic properties under various Pantex projects since about 2010 because this type of testing may be more representative of ISB well maintenance performance and a better predictor of bioamendment injection rates as opposed to slug testing.

Injection testing completed under this project included pumping approximately 40 to 150 gallons of potable water at a constant flow rate, with the injection rate and water levels recorded using a pressure transducer. The injection tests were analyzed using AQTESOLV for Windows Version 4.50 Professional software using the Papadopulos-Cooper confined aquifer solution. Injection testing results are summarized in **Table 3-7** with the test outputs presented in **Appendix Q**. Water levels used as input to determine saturated thicknesses are presented in **Table 3-8**.

After injection testing mud-drilled wells PTX06-ISB087, PTX06-ISB088A, PTX06-ISB105, PTX06-ISB106, PTX06-1169, and PTX06-1170, approximately 125% to 200% of the water injected into the wells was removed due to possible detrimental effects of chlorine in the potable water supply on the established ISB treatment zone.

Hydraulic conductivity values from the injection tested ARCH-drilled wells ranged between 17 and 48 feet/day and averaged 31 feet/day with a median value of 32 ft/day. Hydraulic conductivity values from the mud wells ranged between 1.9 and 12 feet/day and averaged 5.2 feet/day with a median value of 3.8 ft/day.

Current data were compared to historical hydraulic conductivity data from wells installed by both mud rotary and ARCH in 2009 as part of the Z11ISB System. **Figure 3-1** presents hydraulic conductivity data for 2009 and 2014 well installation with both mud rotary and ARCH techniques. While these data are comparable, it should be noted that 2009 results were performed using slug testing, and 2014 results using injection testing. The following similarities and differences are noted in the data.

- Hydraulic conductivity values are lower in wells installed with mud rotary methods relative to ARCH wells in both the 2009 and 2014 data set.
- The range of hydraulic conductivity values are similar for mud rotary wells in 2009 and 2014. The median value among the 2009 and 2014 mud rotary wells are considered comparable considering that hydraulic conductivity values can span multiple orders of magnitude.
- The range and median of hydraulic conductivity values among ARCH wells are similar among the 2009 and 2014 data.

- The wells installed in 2009 have performed well for their intended purpose, which is to support injection of bioremediation amendment that has been performed annually since 2009. The wells with the lowest 2009 hydraulic testing values, PTX06-ISB069A, PTX06-ISB073, and PTX06-ISB075 (old) have performed better than some other injection wells in the Z11ISB system with respect to injection flow rates observed during bioremediation injection events.

Because the 2009 results were completed using slug tests, an additional round of hydraulic testing utilizing this same method with similar equipment was completed and discussed below.

3.7.2 SLUG TESTING

Slug testing of the six mud-drilled wells and three randomly selected ARCH-drilled wells was completed to more accurately compare 2014 results to historical results. Slug testing was completed between November 20th and 21st, 2014. Slug testing included installation of a pressure transducer near the well screen bottom and lowering a 2-inch diameter by 10-ft long slug into the water column and recording the water level change vs. time (slug in test). Following water level equilibration, the slug was pulled out of the water column while additional data were collected with the transducer (slug out test).

Slug tests were analyzed using AQTESOLV for Windows Version 4.50 Professional software using three unconfined solutions: Bouwer-Rice, Hvorslev, and Kansas Geological Survey (without skin) to duplicate the 2009 data analyses. In keeping with historical analyses, hydraulic conductivity values from the three solutions were averaged.

Average and median 2014 slug testing results are summarized in **Table 3.9** with the test outputs presented in **Appendix R**. The 2014 results were found be lower when compared to the 2009 results. There were slight differences between these two slug test methods that may account for the lower observed hydraulic conductivites: the size of the slug and the speed of slug installation and removal. The 2009 slug tests were performed using a 3-inch diameter by 20-ft long slug that was installed and removed using a pump service rig (Smeal rig). The 2014 slug tests were performed using a 2-inch diameter by 10-ft long slug that was lowered and raised using a small winch that operates at a slower speed that a pump service rig's sand line.

Due to these differences, other hydraulic testing events completed at Pantex by Trihydro were investigated. In 2011, slug testing of several wells near the Zone 11 ISB system was performed on both ARCH and mud rotary-drilled wells using the same field methods used in 2014. The 2011 event was completed in support of conceptual site model

updating; specifically to quantify hydraulic conductivities near wells located outside of the injection well network. Test outputs from select wells obtained from the 2011 event are included in **Appendix S**. The results from the 2011 event were found to be more comparable to the 2014 results as discussed below.

Slug testing results from the 2009, 2011, and 2014 events are summarized in **Table 3-10** and graphically displayed on **Figure 3-2**. The following similarities and differences are noted in the data.

- When comparing data collected with the identical slug testing method (2-inch slug used in 2011 and 2014), the data do not show any strong differences between ARCH and mud rotary drilling methods, or between those collected in 2011 vs. 2014.
    - Median values of one drilling method vs. the other vary by a factor of 2 or less. In the 2011 data, the median mud value is higher than the median value for ARCH wells, while in 2014 data, the opposite is true.
    - Hydraulic conductivity values from individual mud rotary wells installed as part of this project (2014 data) are similar to 2011 mud rotary and ARCH results.
    - Hydraulic conductivity values for 2014 ARCH wells are similar to the higher end of hydraulic conductivity values for 2011 mud rotary and ARCH results.
- Results from 2009 slug tests appear to be slightly greater than those from 2011 and 2014 tests. Though theory predicts that slug testing results are not influenced by the amount of displacement (Butler 1997), the difference between the 2009 data and other data suggest that the slug testing method employed had some influence on the results under field conditions.

Based on the results of slug testing performed as part of this work as well as previous slug testing in the Z11 area, results from wells installed in 2014 as part of this work are comparable to other wells with respect to hydraulic conductivity. There appears to be slightly higher hydraulic conductivity values in ARCH wells relative to mud rotary wells in the 2014 data. However, hydraulic conductivity values were slightly greater in ARCH wells relative to mud rotary wells in the 2009 data set as well. Hydraulic conductivity values from mud rotary wells installed in 2014 are similar to hydraulic conductivity values of both mud rotary and ARCH wells tested in 2011 with identical test methods.

3.8 WELL PLUGGING AND ABANDONMENT

Two newly completed injection wells (PTX06-ISB088 and PTX06-ISB100) required P&A due to cement/bentonite grout infiltration into the well screen during construction. As noted earlier, these were replaced by wells drilled and completed approximately 20 ft away from the original well and designated as PTX06-ISB088A and PTX06-ISB100A. P&A activities adhered to Texas regulations 16 TAC Chapter 76.70 16 and TAC Chapter 76.104(a)(4), and Pantex guidelines. The primary P&A activities included:

- Removal of well casing material to the extent practicable. The casing at well PTX06-ISB088 was cut approximately 1 ft bgs. A section of well casing 110 ft in length was extracted from PTX06-ISB100.
- Pumping cement/bentonite grout from the well's total depth to within a few feet of the ground surface.
- Backfilling the uppermost interval with native soil.
- Returning the areas to existing pre-well conditions and seeding areas with approved grass mix.
- Completion of State of Texas Plugging Reports (**Appendix T**).
- State of Texas required Plugging Reports were submitted to the State, the Panhandle Groundwater Conservation District, and Pantex.

3.9 EQUIPMENT DECONTAMINATION

Prior to arrival at Pantex, drilling equipment was decontaminated. The drill rigs, down-hole equipment, and tools were decontaminated approximately half way through the project and again prior to equipment demobilization. Decontamination took place within an existing structure located north of the Zone 10 laydown yard. As required, water and sediments were pumped into drums and turned over to the Waste Operations Department. Details and waste forms are provided in **Section 5**.

3.10 LAND SURVEYING

Each of the 27 new wells was surveyed for elevation and geographic location. Davis Geomatics, a registered State of Texas-licensed surveying firm, performed the surveying. Elevations referenced to North America Datum 1983 were surveyed at both the top of the well casing and at the brass marker on the north side of the surface pad, and geographic location (northing and easting) was determined at the brass marker. The well ID and associated northing and easting coordinates were stamped onto the brass markers set into the well pad. Land surveying results are included in **Appendix U**.

3.11 WELL TURNOVER CHECKLISTS AND PUNCH LIST ACTIVITIES

During the final few days of fieldwork, STR Well Turnover Checklists were jointly prepared by the PSTR and Trihydro. Completed checklists are located in **Appendix V**.

After the checklists were compiled, a punch list of remaining activities was created by the PSTR. Activities that Trihydro was directly responsible for included final debris removal, completely filling several bollard posts with cement, stamping surveyed coordinates on brass markers at select locations, and final grading and seeding around well pads. These activities were addressed prior to demobilization, but not updated on the STR Well Turnover Checklists. There were also cracks in the concrete pad at PTX06-1176 noted during the punch list walk down. Trihydro filled the cracks in the surface pad at PTX06-1176 with a silicone-based concrete sealer. It should be noted that the Pantex PM requested that seeding operations be performed only in the disturbed areas surrounding the well pads, as infrastructure construction activities in the Zone 11 well expansion area will be commencing in the near future. Grass seed specifications are included in **Appendix W**.

3.12 OBSERVATIONS NOTED DURING WELL DRILLING AND CONSTRUCTION

This section summarizes observations that were unique to specific wells or to the drilling program along with the resolution if applicable.

3.12.1 PTX06-ISB088

After drilling muds were removed during development, PTX06-ISB088 was found to have approximately 5 ft of cement/bentonite grout above the top of the well screen. Because grout removal was not possible, this well was P&A and a replacement well (PTX06-ISB088A) installed nearby in its place. A Nonconformance Report (**Appendix X**) was completed to document the issue.

3.12.2 PTX06-ISB088A

As noted above, this was a replacement mud well and the last well drilled and completed. A new 20-ft long SS screen was sourced and used during well construction. Casing included 80 ft of previously used threaded casing removed from PTX06-ISB100, 70 ft of new threaded casing in lengths of 5 ft, 10 ft, and 20 ft, and approximately 100 ft of new casing in 21 ft lengths that was welded together during well construction.

3.12.3 PTX06-ISB094 AND PTX06-ISB096

The well casing and screen manufacturer incorrectly built and shipped injection well screens and sumps with an overall length of 20 feet with 19 feet of screen and a 1-foot sump. The SOW called for 20-foot screens. The Pantex PM allowed use of two 19 ft screens in two wells (PTX06-ISB094 and PTX06-ISB096) while replacements for the remaining 20 ft screens were being constructed and shipped to the Plant.

3.12.4 PTX06-ISB097

Three observations were noted during construction at PTX06-ISB097; the presence of utilities, a damaged well screen, and drive casing removal. This well was not initially planned, but was installed after analytical results from PTX06-ISB096 were received indicating TCE presence in groundwater in that area. As a result, Pantex elected to install two additional wells northwest of PTX06-ISB096 (PTX06-ISB097 and PTX06-ISB098). The location of PTX06-ISB097 identified by Pantex was within 10 ft of two underground communications lines. Both utilities were located via potholing before the well was drilled.

During filter pack surging the well screen was observed to be obstructed. The well casing and screen were pulled and approximately half of the screen was found to have collapsed or flattened. The affected portion of the boring was redrilled and the well set with a new SS screen.

Also during well construction at PTX06-ISB097, removal of drive casing between approximately 280 ft and 230 ft bgs was extremely difficult due to a thick interval of gravel and sandy gravel. Approximately 1 ½ days were required before the drive casing was removed from this interval.

3.12.5 PTX06-ISB100

PTX06-ISB100 was found to have approximately 6 ft of cement/bentonite grout within the well screen. Because grout removal was not possible, this well was P&A and a nearby replacement well (PTX06-ISB100A) installed in its place. Review of the drilling log indicated that an extensive gravel layer at this location may have contributed to grout movement and infiltration into the well screen. ARCH wells constructed following this observation were completed using a much thicker bentonite plug, a greater water volume used for hydration, allowing additional time (overnight) before grout installation, and changing the tremie method to include a side-discharging tremie pipe . A Nonconformance Report (**Appendix X**) was completed to document this observation.

During P&A of PTX06-ISB100, 110 ft of casing was salvaged and reused at PTX06-ISB088A (80 ft) and PTX06-ISB100A (30 ft).

3.12.6 PTX06-1169

During well construction of this mud well, the well casing and screen were observed to be "floating" in the borehole. The assembly was removed and the screen observed to be clogged with formation sand, which was the cause of the observed floating. Drilling fluids were re-circulated to remove the formation sand, the well screen pressure washed to remove the trapped sand, and the well casing and screen reset. Well construction met work plan requirements at this location.

3.12.7 DRILL RIG HYDRAULIC LEAKS

Four hydraulic leaks were documented during the project. Three of the leaks were attributed to the two GEFCO drill rigs and one to a pump service rig. In each case, the leaked hydraulic fluids were fully or mostly contained by the containment system below the drill rigs or the bed of the pump service rig and addressed immediately after the incident. The amount of hydraulic fluids that reached the ground surface was estimated to be less than a gallon, if any.

3.12.8 DRILL RIG CLUTCH FAILURE

The air compressor clutch failed on one of the GEFCO drill rigs and required replacement in the field. Clutch replacement was successfully completed within two days of the failure.

3.12.9 DEVELOPMENT OF MUD-DRILLED WELLS

Each of the original six mud wells proved difficult to develop. Between approximately 10 and 25 ft of thick, dense drilling mud was encountered upon initial development in and above the screened interval. Most of the six wells took up to a couple of months of on- and off-again efforts to develop (**Table 3-6**). The cause(s) of difficult well development at these wells remain uncertain, but several contributing factors may be involved. These include the long time interval between construction and development, improper quantities of mud additives, loss or dilution of mud additives, and improper thinning of drilling fluids during and following well construction.

The wells were developed using a combination of low-pressure water jetting, surging, bailing, pumping, high-pressure side-discharging water jetting, and addition of development chemicals including Aqua-Clear, Dry Acid, and Mud-Nox. Individually, none of the above methods or chemicals proved superior.

3.12.10 SKID STEER INCIDENT

On October 20, 2014, an incident involving a skid steer occurred resulting in stop work. During routine augering of bollard holes for well completions, the skid steer's auger attachment became unattached and swung into the cab nicking the operator's shin. Before resuming use of the skid steer, Pantex requested that Trihydro develop an updated AHA, complete training, review the Bobcat Operations and Maintenance Manual, and document these activities in a training roster (**Appendix Y**).

4.0 DEMOBILIZATION

Demobilization included the removal of unused materials that were not government owned, and the removal of equipment from the project site and laydown yard. Yellow Jacket Drilling Services returned several pallets of surplus materials to vendors.

5.0 WASTE MANAGEMENT

During performance of the project, waste materials were managed according to the CWMP. The main sources of wastes included:

- Construction debris and packing materials from well supplies.
- Drill cuttings from the installation of injection and monitor wells.
- Decontamination water from cleaning of the drill rig, support vehicles, drill stems, drive casing, tools, etc.
- Class I wastes from routine operations.
- Development water removed from the newly installed wells.

Construction debris, packing materials, and other non-hazardous wastes were removed from the work site and disposed as follows:

- Wood pallets and crates were transported to the Pantex landfill and the net weight provided to Waste Operations.
- Cardboard was segregated and placed in Pantex cardboard recycling bins.
- Scrap metal was delivered to Pantex for recycling and the net weight provided to Waste Operations.
- Other miscellaneous construction debris such as plastic wrap, and empty bags and pails of well construction materials were placed in Pantex waste containers.

The handling of waste drill cuttings was dependent on borehole depth. Cuttings removed from the unsaturated portions of each injection and monitor well borings were spread out on the ground surface near the borings, while cuttings from just above and within the saturated portions of these borings were collected and loaded into Pantex-provided waste containers (sludge bins). Copies of submitted contractor waste accumulation forms (PX-2844) for drilling and other wastes are located in **Appendix Z**.

Decontamination wastewater and sediments were collected in the sump of the existing large equipment decontamination facility located north of the Zone 10 laydown yard. Periodically, the accumulated liquid and sediments were pumped out of the sump and into 55-gallon drums and turned over to Waste Operations. Decontamination-related waste accumulation forms are located in **Appendix Z**.

Waste Operations provided a Class I roll-off container that was used to contain waste visqueen that was placed below the drill rigs, auxiliary air compressors, and mud systems. Waste concrete generated from well pad construction and small quantities of hydraulic oil-impacted soils form leaks were also placed into the roll-off container (**Appendix Z**).

Well development water and sediments were containerized in sludge bins. Pantex Waste Operations relocated the sludge bins during the development phase. Waste accumulation forms for this waste stream are also located in **Appendix Z**.

6.0 QUALITY ASSURANCE

Throughout the project, technical activities were completed under the guidance of the WP (which includes the project quality assurance project plan), HASP, CWMP, and the Pantex well construction specifications. Permission to deviate from these documents was obtained from the PM or PSTR prior to making changes and documented in Contractor Daily Inspection Logs (PX-4785) submitted electronically each workday and in field logbooks.

New well materials were inspected prior to use by Trihydro to verify conformance to specifications. Documentation was included in one or more of the following:

- Field logbooks (**Appendix H**)
- Contractor Daily Inspection Logs (PX-4785)
- Receiving and Inspection Reports (**Appendix AA**)
- Nonconformance Reports (**Appendix X**)

Commonly used well materials (e.g., Portland Cement and filter pack sand) were not subject to the same level of detailed inspection for subsequent deliveries. Rather, the quantities and conformance with specifications was documented in the Contractor Daily Inspection Logs (PX-4785).

Inspection points occurred at significant junctures during the project and listed below:

1. Contractor conferred with PSTR/PM prior to selection of final well location within excavation boundaries for each well.
2. Contractor contacted Pantex Sampling & Analysis Department, through the PSTR, for approval of protective surface casing and bollards prior to permanent placement in concrete.
3. Contractor walked down each well location with the PSTR and mutually complete the “SRT Well Turnover Checklist” (**Appendix V**).
4. Contractor contacted PSTR and received approval of site cleanup activities during and following demobilization from the Pantex Plant.

7.0 LESSONS LEARNED

This section presents lessons learned associated with the drilling BOA project.

7.1 WELL PLUG THICKNESS

Cement/bentonite grout was encountered in two well screens during construction which required P&A. One potential explanation was that grout flowed around the plug through the sandy and gravely interval encountered in most borings at approximately 235 ft bgs to the FGZ. To minimize this occurrence, subsequent injection wells were constructed using a much thicker plug (from the top of the filter pack to a few ft above the top of the gravely interval). Other changes included additional water to hydrate the bentonite plug, allowing for a longer hydration time (typically overnight), and use of bentonite chips with bentonite pellets. The initial lift of cement/bentonite grout was also placed above the plug using a side discharging tremie pipe and allowed to sit overnight before additional grout was installed.

7.2 USE OF CHIPS IN ARCH WELLS

Pantex well construction specifications state that either granular or pellet forms of bentonite should be used for perched aquifer well plugs. Each mud well and many ARCH wells were completed using bentonite pellets to form the plug. Pellets are needed in mud well completions so they can sink through drilling fluids without complete hydration and then settle above the filter pack to fully hydrate thus creating the plug.

However, for ARCH wells, pellets have limited benefits other than the potential for bridging between the well and drive casing may be reduced. Trihydro believes that the use of bentonite chips is sufficient and may be even more beneficial in establishing a plug above the filter pack because they hydrate quicker. For example, the distance to plugs constructed in perched aquifer wells (approximately 250 ft bgs) could result in preferential hydration of only a portion of the plug. Furthermore, pellets are designed to resist hydrating for a period of time (manufacturer specific) to allow them to fall though a water column without swelling. Above a saturated zone, pellets would require continual hydration over much longer time intervals than chips, which begin swelling immediately with proper hydration. Full hydration of either type of plug material is difficult to ensure during construction and cannot readily be measured.

The type of bentonite plug for future ARCH well completions above the water table should be evaluated in greater detail.

7.3 DEVELOPMENT OF MUD-DRILLED WELLS

The six mud wells proved difficult to develop due to the presence of a thick layer of drilling mud encountered in and above the screened interval. This drilling mud was also likely present in the filter pack.

Several contributing factors may have been involved in the level of effort required for mud well development. These include the time interval between construction and development, improper quantities of mud additives, loss, or dilution of mud additives, and improper thinning of drilling fluids during and following well construction.

Mud well PTX06-ISB088 was found to contain cement/bentonite grout after the drilling mud was initially removed and was therefore P&A. A new well, PTX06-ISB088A, was drilled and constructed in its place. Drilling mud additives at the replacement well were carefully mixed and the drilling fluid consistency continually monitored. Drilling fluids in this replacement well were also thinned before and during well installation to break down the mud cake. Finally, well development occurred within days of well completion (**Table 3-6**).

Future mud wells should be drilled, completed, and developed using the above techniques.

7.4 BRUSHING DURING WELL DEVELOPMENT

Several wells were found to have formation materials on the casing and screens following initial development based on well videoing. Well PTX06-ISB094 was completely re-developed using a combination of surging, bailing, and pumping. Two additional wells, PTX06-1169 and PTX06-1176 were brushed, surged, bailed, and pumped following the initial development. Use of a brush to develop future wells would likely prove beneficial.

7.5 HEAVY EQUIPMENT TRAINING AND INSPECTIONS

Due to the skid steer incident discussed earlier, procedures for safe use should be employed. Review of the operation manual will be required before use by each operator and the equipment thoroughly inspected. Additionally, if attaching implements to heavy equipment is required, at least two individuals will need to independently verify proper attachment.

TABLES

TABLE 3-1. DRILLING, WELL COMPLETION, AND WELL DEVELOPMENT START AND END DATES

Well ID	Drilling Start Date	Well Completion End Date	Well Develop-ment Start Date	Well Develop-ment End Date
PTX06-ISB087	7/15/2014	7/24/2014	8/11/2014	10/21/2014
PTX06-ISB088A	9/18/2014	9/25/2014	10/1/2014	10/18/2014
PTX06-ISB089	7/10/2014	7/13/2014	7/15/2014	7/15/2014
PTX06-ISB090	7/7/2014	7/10/2014	7/16/2014	7/16/2014
PTX06-ISB093	7/13/2014	7/16/2014	9/19/2014	9/19/2014
PTX06-ISB094	6/26/2014	7/7/2014	8/14/2014	9/17/2014
PTX06-ISB095	7/16/2014	7/24/2014	8/13/2014	8/13/2014
PTX06-ISB096	6/20/2014	6/22/2014	7/14/2014	7/14/2014
PTX06-ISB097	8/26/2014	9/5/2014	10/7/2014	10/8/2014
PTX06-ISB098	8/19/2014	8/21/2014	10/14/2014	10/14/2014
PTX06-ISB099	8/11/2014	8/14/2014	9/22/2014	9/22/2014
PTX06-ISB100A	9/10/2014	9/18/2014	10/2/2014	10/2/2014
PTX06-ISB101	8/5/2014	8/7/2014	9/30/2014	9/30/2014
PTX06-ISB102	7/29/2014	7/31/2014	9/10/2014	9/10/2014
PTX06-ISB103	8/27/2014	9/4/2014	10/1/2014	10/1/2014
PTX06-ISB104	8/19/2014	8/21/2014	9/17/2014	9/18/2014
PTX06-ISB105	7/30/2014	8/6/2014	8/26/2014	10/17/2014
PTX06-ISB106	7/27/2014	7/30/2014	9/2/2014	10/18/2014
PTX06-1169	8/9/2014	8/13/2014	9/18/2014	9/20/2014
PTX06-1170	8/6/2014	8/9/2014	9/11/2014	10/19/2014
PTX06-1171	7/26/2014	7/28/2014	8/13/2014	8/13/2014
PTX06-1172	7/24/2014	7/26/2014	8/12/2014	8/12/2014
PTX06-1173	9/5/2014	9/9/2014	10/3/2014	10/3/2014
PTX06-1174	6/18/2014	6/20/2014	7/14/2014	7/15/2014
PTX06-1175	8/21/2014	8/23/2014	10/4/2014	10/4/2014
PTX06-1176	8/22/2014	8/27/2014	10/4/2014	10/4/2014
PTX06-1177	8/23/2014	8/25/2014	10/5/2014	10/5/2014

Notes:

Wells PTX06-ISB091 and PTX06-ISB092 are existing wells converted to injection wells

Wells PTX06-ISB088A and PTX06-ISB094 were developed twice

TABLE 3-2. WELL DRILLING METHODS

Well ID	Monitor or Injection Well	Drilling Method
PTX06-ISB087	Injection	Mud Rotary
PTX06-ISB088A	Injection	Mud Rotary
PTX06-ISB089	Injection	ARCH
PTX06-ISB090	Injection	ARCH
PTX06-ISB093	Injection	ARCH
PTX06-ISB094	Injection	ARCH
PTX06-ISB095	Injection	ARCH
PTX06-ISB096	Injection	ARCH
PTX06-ISB097	Injection	ARCH
PTX06-ISB098	Injection	ARCH
PTX06-ISB099	Injection	ARCH
PTX06-ISB100A	Injection	ARCH
PTX06-ISB101	Injection	ARCH
PTX06-ISB102	Injection	ARCH
PTX06-ISB103	Injection	ARCH
PTX06-ISB104	Injection	ARCH
PTX06-ISB105	Injection	Mud Rotary
PTX06-ISB106	Injection	Mud Rotary
PTX06-1169	Monitor	Mud Rotary
PTX06-1170	Monitor	Mud Rotary
PTX06-1171	Monitor	ARCH
PTX06-1172	Monitor	ARCH
PTX06-1173	Monitor	ARCH
PTX06-1174	Monitor	ARCH
PTX06-1175	Monitor	ARCH
PTX06-1176	Monitor	ARCH
PTX06-1177	Monitor	ARCH

TABLE 3-3. FINE-GRAINED ZONE HYDRAULIC CONDUCTIVITY RESULTS

Well ID	Monitor or Injection Well	Fine-Grained Zone Sample Interval (ft bgs)	Date of Report	Hydraulic Conductivity (cm/sec)
PTX06-ISB087	Injection	286-289.5	8/22/2014	1.97E-07
PTX06-ISB088A	Injection	292-293	8/22/2014	1.04E-07
PTX06-ISB089	Injection	288-289.5	11/4/2014	4.76E-08
PTX06-ISB090	Injection	289-290.5	8/13/2014	2.63E-06
PTX06-ISB093	Injection	289-290.5	8/13/2014	3.48E-07
PTX06-ISB094	Injection	289-290.5	8/13/2014	3.05E-07
PTX06-ISB095	Injection	289-290.5	8/13/2014	1.83E-07
PTX06-ISB096	Injection	289-291	7/8/2014	8.26E-08
PTX06-ISB097	Injection	285-286.5	11/4/2014	4.79E-08
PTX06-ISB098	Injection	287-288.5	10/30/2014	1.89E-07
PTX06-ISB099	Injection	287-288.5	10/29/2014	2.50E-07
PTX06-ISB100A	Injection	286-287.5	10/30/2014	5.97E-08
PTX06-ISB101	Injection	286-287.5	10/21/2014	3.17E-08
PTX06-ISB102	Injection	286-287.7	11/10/2014	5.29E-08
PTX06-ISB103	Injection	289-290.5	10/29/2014	2.76E-08
PTX06-ISB104	Injection	291-282.5	11/4/2014	1.74E-07
PTX06-ISB105	Injection	287-289	10/21/2014	2.39E-08
PTX06-ISB106	Injection	289-290.5	9/26/2014	4.34E-08
PTX06-1169	Monitor	285-286.5	11/10/2014	3.62E-08
PTX06-1170	Monitor	287-288	11/10/2014	1.77E-08
PTX06-1171	Monitor	288-289.5	8/26/2014	1.22E-04
PTX06-1172	Monitor	288-289	9/26/2014	2.20 E-07
PTX06-1173	Monitor	288-289.5	10/30/2014	8.96E-08
PTX06-1174	Monitor	287-288.5	8/13/2014	2.40E-07
PTX06-1175	Monitor	287-288.5	10/29/2014	1.38E-07
PTX06-1176	Monitor	288.5-290	10/29/2014	6.43E-08
PTX06-1177	Monitor	287-288.5	10/30/2014	8.80E-08

Note:

The original sample results from PTX06-ISB088 and PTX06-ISB100 were used for PTX06-ISB088A and PTX06-ISB100A

TABLE 3-4. BOREHOLE AND WELL COMPLETION SPECIFICATIONS

Well ID	TD Boring (ft bgs)	Top FGZ (ft bgs)	Well Casing, Screen, and Sump Material	Bottom of Sump (ft bgs)	Bottom Well Screen (ft bgs)	Top Well Screen (ft bgs)	Slot size (inches)	Blank Casing Interval (ft bgs + 2 ft stickup)	Filter Pack Interval (ft bgs)	Filter Pack Gradation	Total No. Bags	Seal/Plug Interval (ft bgs)	No. Buckets 1/4" bentonite pellets + sacks bentonite chips	Grout Interval (ft bgs)	Grout Type (95% Portland Type I/II and 5% bentonite or 100% Bentonite)	Total No. Bags Cement Grout, Bentonite Grout, or Chips	Bags Portland Type I/II Cement	Bags Bentonite Grout + Chips
PTX06-ISB087	289	286	4" Sch. 10 316 SS	287	286	266	0.02	266	289-261	10/20	12	261-251	2	251-2	Port/bent	42	40	2
PTX06-ISB088A	292	285	4" Sch. 10 316 SS	286	285	265	0.02	265	292-262	10/20	14	262-229	14	229-2	Port/bent	43	40	3
PTX06-ISB089	288	287	4" Sch. 10 316 SS	288	287	267	0.02	267	263-288	10/20	24	263-250	20	250-2	Port/bent	189	180	9
PTX06-ISB090	289	287	4" Sch. 10 316 SS	288	287	267	0.02	267	265-289	10/20	23	265-253	12	253-2	Port/bent	217	207	10
PTX06-ISB093	289	285	4" Sch. 10 316 SS	286	285	265	0.02	265	289-262	10/20	24	262-247.5	12	247.5-2	Port/bent	168	160	8
PTX06-ISB094	289	284	4" Sch. 10 316 SS	285	284	265	0.02	265	289-262	10/20	27	262-250	11	250-2	Port/bent	256	244	12
PTX06-ISB095	289	287	4" Sch. 10 316 SS	288	287	267	0.02	267	288-264	10/20	21	250-264	12	250-2	Port/bent	189	180	9
PTX06-ISB096	289	286	4" Sch. 10 316 SS	287	286	267	0.02	267	289-264	10/20	20	264-250	9	250-2	Port/bent	147	140	7
PTX06-ISB097	285	284	4" Sch. 10 316 SS	284	283	263	0.02	263	285-260	10/20	26	260-230	5	230-2	Port/bent	151	140	11
PTX06-ISB098	287	285	4" Sch. 10 316 SS	286	285	265	0.02	265	287-262	10/20	21	262-230	4 + 18 chips	230-2	Port/bent	231	220	11
PTX06-ISB099	287	285	4" Sch. 10 316 SS	286	285	265	0.02	265	287-262	10/20	28	262-230	26	230-2	Port/bent	171	160	11
PTX06-ISB100A	286	285	4" Sch. 10 316 SS	286	285	265	0.02	265	286-262	10/20	21	262-235	19	235-2	Port/bent	185	180	5
PTX06-ISB101	286	285	4" Sch. 10 316 SS	286	285	265	0.02	265	286-262	10/20	21	262-250	13	250-2	Port/bent	154	147	7
PTX06-ISB102	287	286	4" Sch. 10 316 SS	286	285	265	0.02	265	287-262	10/20	22	262-250	11	250-2	Port/bent	210	200	10
PTX06-ISB103	289	284	4" Sch. 10 316 SS	285	284	264	0.02	264	289-261	10/20	24	261-230	4 + 25 chips	230-2	Port/bent	231	220	11
PTX06-ISB104	291	287	4" Sch. 10 316 SS	288	287	267	0.02	267	291-262	10/20	26	262-234	4 + 12 chips	234-2	Port/bent	189	180	9
PTX06-ISB105	287	286	4" Sch. 10 316 SS	287	286	266	0.02	266	287-262	10/20	15	262-248	5	248-2	Port/bent	42	40	2
PTX06-ISB106	289	285	4" Sch. 10 316 SS	286	285	265	0.02	265	289-262	10/20	13	262-250	5	250-2	Port/bent	42	40	2
PTX06-1169	285	282	4" Sch. 80 PVC	283	282	272	0.02	272	285-268	10/20	10	268-252	5	252-2	Bentonite	51	0	6 + 45 chips
PTX06-1170	287	285	4" Sch. 80 PVC	286	285	275	0.02	275	287-272	10/20	6	272-258	5	252-2	Bentonite	26	0	5+21 chips
PTX06-1171	288	285	4" Sch. 80 PVC	286	285	275	0.02	275	288-272	10/20	14	272-258	10	258-2	Bentonite	42	0	42
PTX06-1172	289	286	4" Sch. 80 PVC	287	286	276	0.02	276	289-268	10/20	13	268-257	16	257-2	Bentonite	36	0	36
PTX06-1173	288	285	4" Sch. 80 PVC	286	285	275	0.02	275	288-271	10/20	15	271-230	5+25 chips	230-2	Bentonite	49	0	32 + 17 chips
PTX06-1174	287	285	4" Sch. 80 PVC	287	286	276	0.02	276	287-273	10/20	10	273-260	10	260-5	Bentonite	96	0	48+48 chips
PTX06-1175	287	286	4" Sch. 80 PVC	286	285	275	0.02	275	287-272	10/20	10	272-225	5 + 29 chips	225-2	Bentonite	31	0	31
PTX06-1176	289	288	4" Sch. 80 PVC	288	287	277	0.02	277	289-274	10/20	12	274-258	4 + 15 chips	258-5	Bentonite	54	0	54
PTX06-1177	287	283	4" Sch. 80 PVC	283	282	272	0.02	272	287-270	10/20	14	270-238	4 + 16 chips	238-2	Bentonite	32	0	10 + 22 chips

TABLE 3-5. SUMMARY OF DEVIATION SURVEY RESULTS

Well ID	Monitor or Injection Well	Well Deviation Date	Within Specifications (2%)	Approximate Intervals Outside Specifications (> 2%)
PTX06-ISB087	Injection	9/25/2014	No	140 ft - 280 ft, total well
PTX06-ISB088A	Injection	9/25/2014	Yes	
PTX06-ISB089	Injection	9/24/2014	Yes	
PTX06-ISB090	Injection	9/24/2014	Yes	
PTX06-ISB093	Injection	9/23/2014	Yes	
PTX06-ISB094	Injection	9/23/2014	No	180 ft - 220 ft
PTX06-ISB095	Injection	9/23/2014	No	220 ft - 260 ft
PTX06-ISB096	Injection	9/23/2014	Yes	
PTX06-ISB097	Injection	9/23/2014	No	120 ft -140 ft
PTX06-ISB098	Injection	9/23/2014	Yes	
PTX06-ISB099	Injection	9/25/2014	Yes	
PTX06-ISB100A	Injection	9/24/2014	Yes	
PTX06-ISB101	Injection	9/24/2014	Yes	
PTX06-ISB102	Injection	9/24/2014	Yes	
PTX06-ISB103	Injection	9/25/2014	Yes	
PTX06-ISB104	Injection	9/25/2014	Yes	
PTX06-ISB105	Injection	9/25/2014	No	240 ft -280 ft
PTX06-ISB106	Injection	9/24/2014	Yes	
PTX06-1169	Monitor	9/24/2014	Yes	
PTX06-1170	Monitor	9/24/2014	Yes	
PTX06-1171	Monitor	9/23/2014	Yes	
PTX06-1172	Monitor	9/23/2014	Yes	
PTX06-1173	Monitor	9/24/2014	Yes	
PTX06-1174	Monitor	9/24/2014	Yes	
PTX06-1175	Monitor	9/23/2014	Yes	
PTX06-1176	Monitor	9/25/2014	No	140 ft - 180 ft
PTX06-1177	Monitor	9/23/2014	Yes	

TABLE 3-6. WELL DEVELOPMENT START AND END DATES AND REMOVAL QUANTITIES

Well ID	Monitor or Injection Well	Well Development Start Date	Well Development End Date	Total Gallons Removed
PTX06-ISB087	Injection	8/11/2014	10/21/2014	100
PTX06-ISB088A	Injection	10/1/2014	10/18/2014	1680
PTX06-ISB089	Injection	7/15/2014	7/15/2014	470
PTX06-ISB090	Injection	7/16/2014	7/16/2014	405
PTX06-ISB093	Injection	9/19/2014	9/19/2014	1863
PTX06-ISB094	Injection	8/14/2014	9/17/2014	4835
PTX06-ISB095	Injection	8/13/2014	8/13/2014	350
PTX06-ISB096	Injection	7/14/2014	7/14/2014	422
PTX06-ISB097	Injection	10/7/2014	10/8/2014	522
PTX06-ISB098	Injection	10/14/2014	10/14/2014	1520
PTX06-ISB099	Injection	9/22/2014	9/22/2014	1537
PTX06-ISB100A	Injection	10/2/2014	10/2/2014	1014
PTX06-ISB101	Injection	9/30/2014	9/30/2014	1636
PTX06-ISB102	Injection	9/10/2014	9/10/2014	1090
PTX06-ISB103	Injection	10/1/2014	10/1/2014	1907
PTX06-ISB104	Injection	9/17/2014	9/18/2014	1960
PTX06-ISB105	Injection	8/26/2014	10/17/2014	105
PTX06-ISB106	Injection	9/2/2014	10/18/2014	294
PTX06-1169	Monitor	9/18/2014	9/20/2014	675
PTX06-1170	Monitor	9/11/2014	10/19/2014	60
PTX06-1171	Monitor	8/13/2014	8/13/2014	341
PTX06-1172	Monitor	8/12/2014	8/12/2014	350
PTX06-1173	Monitor	10/3/2014	10/3/2014	409
PTX06-1174	Monitor	7/14/2014	7/15/2014	455
PTX06-1175	Monitor	10/4/2014	10/4/2014	1042
PTX06-1176	Monitor	10/4/2014	10/4/2014	675
PTX06-1177	Monitor	10/5/2014	10/5/2014	850

Note: development records missing from 095 and 1172; quantities estimated

TABLE 3-7. SUMMARY OF INJECTION TESTING RESULTS

Well ID	Monitor or Injection Well	Drilling Method	Injection Testing Date	Injection Testing Hydraulic Conductivity (ft/day)
PTX06-ISB087	Injection	Mud Rotary	10/22/2014	1.9
PTX06-ISB088A	Injection	Mud Rotary	10/21/2014	12
PTX06-ISB089	Injection	ARCH	9/30/2014	37
PTX06-ISB090	Injection	ARCH	10/1/2014	31
PTX06-ISB093	Injection	ARCH	10/1/2014	48
PTX06-ISB094	Injection	ARCH	10/1/2014	19
PTX06-ISB095	Injection	ARCH	10/1/2014	17
PTX06-ISB096	Injection	ARCH	9/30/2014	37
PTX06-ISB097	Injection	ARCH		
PTX06-ISB098	Injection	ARCH		
PTX06-ISB099	Injection	ARCH	9/30/2014	40
PTX06-ISB100A	Injection	ARCH		
PTX06-ISB101	Injection	ARCH	10/1/2014	34
PTX06-ISB102	Injection	ARCH	9/30/2014	23
PTX06-ISB103	Injection	ARCH		
PTX06-ISB104	Injection	ARCH	9/30/2014	26
PTX06-ISB105	Injection	Mud Rotary	10/21/2014	2.7
PTX06-ISB106	Injection	Mud Rotary	10/21/2014	4.3
PTX06-1169	Monitor	Mud Rotary	10/15/2014	7.6
PTX06-1170	Monitor	Mud Rotary	10/21/2014	3.4
PTX06-1171	Monitor	ARCH		
PTX06-1172	Monitor	ARCH	10/1/2014	32
PTX06-1173	Monitor	ARCH		
PTX06-1174	Monitor	ARCH		
PTX06-1175	Monitor	ARCH	10/1/2014	26
PTX06-1176	Monitor	ARCH		
PTX06-1177	Monitor	ARCH		

Note: All mud wells and 12 of the 18 ARCH wells were injection tested.

TABLE 3-8. WATER LEVELS AND SATURATED THICKNESSES

Well ID	Depth to Water Date	Depth to Water (ft btoc)	Approximate Saturated Thickness
PTX06-ISB087	10/18/2014	271.98	16.1
PTX06-ISB088A	10/17/2014	272.13	15.0
PTX06-ISB089	9/30/2014	272.42	16.7
PTX06-ISB090	10/1/2014	273.12	16.0
PTX06-ISB093	10/1/2014	273.35	13.8
PTX06-ISB094	10/1/2014	273.44	12.7
PTX06-ISB095	10/1/2014	273.30	15.8
PTX06-ISB096	9/30/2014	273.22	14.9
PTX06-ISB097	10/14/2014	273.55	12.6
PTX06-ISB098	10/16/2014	275.2	11.9
PTX06-ISB099	9/30/2014	273.95	13.2
PTX06-ISB100A	10/14/2014	273.73	13.4
PTX06-ISB101	10/1/2014	273.40	13.7
PTX06-ISB102	9/30/2014	272.93	15.2
PTX06-ISB103	10/14/2014	272.63	13.5
PTX06-ISB104	9/30/2014	272.88	16.2
PTX06-ISB105	10/16/2014	271.22	16.9
PTX06-ISB106	10/16/2014	271.59	15.5
PTX06-1169	9/30/2014	267.30	16.8
PTX06-1170	10/17/2014	271.11	16.0
PTX06-1171	10/14/2014	272.20	14.9
PTX06-1172	10/1/2014	274.45	13.7
PTX06-1173	10/14/2014	271.40	15.7
PTX06-1174	10/1/2014	272.60	14.5
PTX06-1175	10/1/2014	272.20	15.9
PTX06-1176	9/30/2014	273.81	16.3
PTX06-1177	10/14/2014	273.34	11.8

Note:
Approximate saturated thicknesses based on a 26" well casing stickup and not on land surveyed top of casing elevations.

TABLE 3-9. SUMMARY OF SLUG TESTING RESULTS

Well ID	Monitor or Injection Well	Drilling Method	Average Slug Testing Hydraulic Conductivity (ft/day)	Median Slug Testing Hydraulic Conductivity (ft/day)
PTX06-ISB087	Injection	Mud Rotary	0.92	0.86
PTX06-ISB088A	Injection	Mud Rotary	2.92	3
PTX06-ISB089	Injection	ARCH		
PTX06-ISB090	Injection	ARCH		
PTX06-ISB093	Injection	ARCH		
PTX06-ISB094	Injection	ARCH		
PTX06-ISB095	Injection	ARCH		
PTX06-ISB096	Injection	ARCH	6.33	5.52
PTX06-ISB097	Injection	ARCH		
PTX06-ISB098	Injection	ARCH		
PTX06-ISB099	Injection	ARCH		
PTX06-ISB100A	Injection	ARCH		
PTX06-ISB101	Injection	ARCH	6.26	6.18
PTX06-ISB102	Injection	ARCH		
PTX06-ISB103	Injection	ARCH		
PTX06-ISB104	Injection	ARCH	6.79	6.24
PTX06-ISB105	Injection	Mud Rotary	1.33	1.39
PTX06-ISB106	Injection	Mud Rotary	3.55	3.86
PTX06-1169	Monitor	Mud Rotary	3.53	3.66
PTX06-1170	Monitor	Mud Rotary	0.97	0.83
PTX06-1171	Monitor	ARCH		
PTX06-1172	Monitor	ARCH		
PTX06-1173	Monitor	ARCH		
PTX06-1174	Monitor	ARCH		
PTX06-1175	Monitor	ARCH		
PTX06-1176	Monitor	ARCH		
PTX06-1177	Monitor	ARCH		

Note: All mud wells and 3 randomly selected ARCH wells were slug tested.

TABLE 3-10. COMPARISON OF 2009, 2011, AND 2014 SLUG TESTING RESULTS

2009 Baseline Data (3" x 20' slug w/ Smeal Rig)

	K (ft/day)	No. wells	K Range (ft/day)
Average **Mud** Wells:	12.69	12	1.9-28
Average **ARCH** Wells:	56.11	9	14-209
Median **Mud** Wells:	11.6	12	1.9-28
Median **ARCH** Wells:	42.0	9	14-209

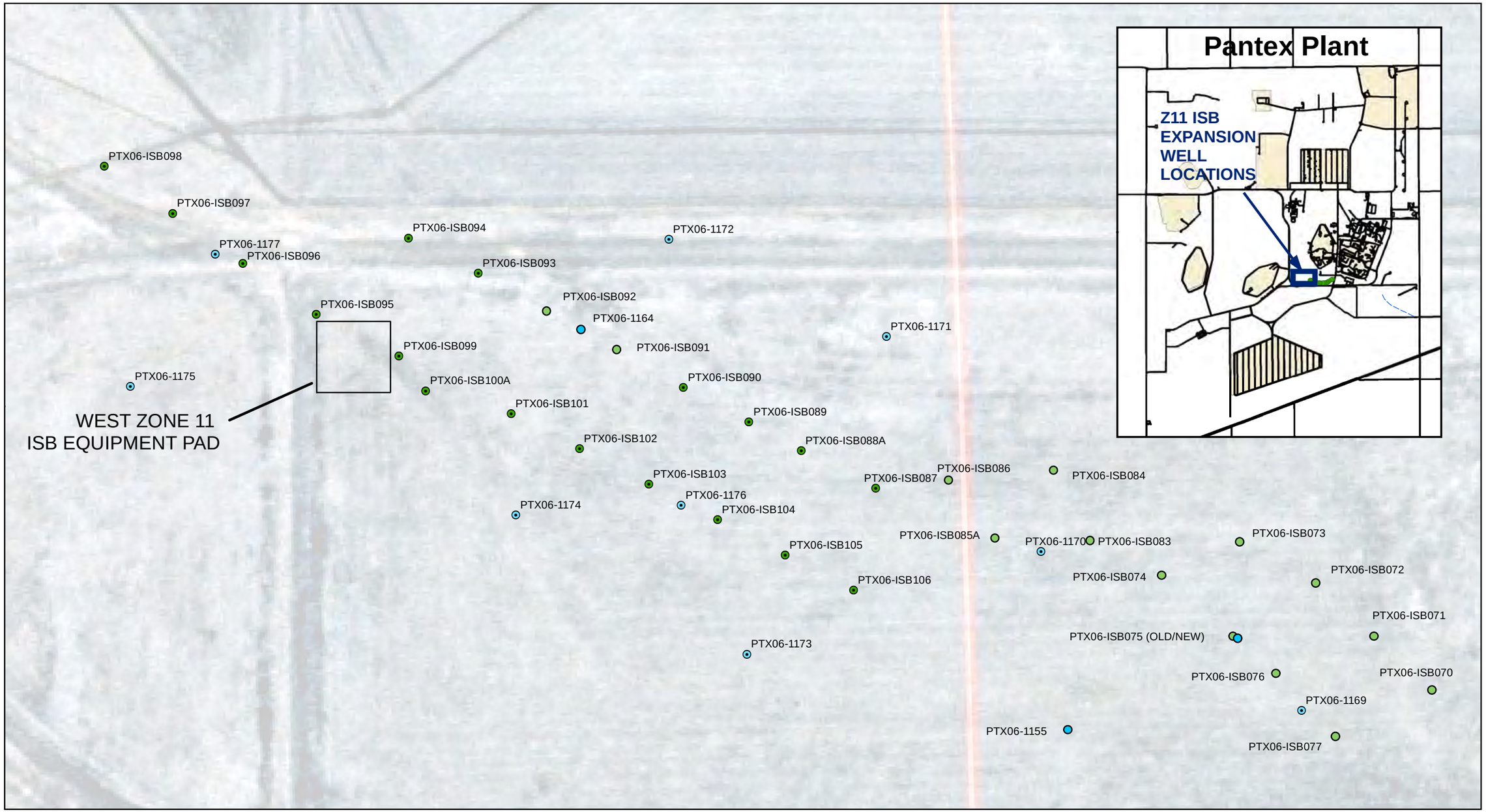
2011 Data (2" x 10' slug w/ Crane Truck)

	K (ft/day)	No. wells	K Range (ft/day)
Average **Mud** Wells:	4.0	3	2.8-5.0
Average **ARCH** Wells:	3.54	8	0.6-8.3
Median **Mud** Wells:	4.3	3	2.8-5.0
Median **ARCH** Wells:	1.9	8	0.6-8.3

2014 Baseline Data (2" x 10' slug w/ Crane Truck)

	K (ft/day)	No. wells	K Range (ft/day)
Average **Mud** Wells:	2.14	6	0.83-3.66
Average **ARCH** Wells:	6.46	3	6.26-6.79
Median **Mud** Wells:	1.93	6	0.83-3.66
Median **ARCH** Wells:	6.18	3	6.26-6.79

FIGURES



EXPLANATION

- Equipment Pad
- 2014 NEW ISB INJECTION WELL
- 2014 NEW MONITORING WELL
- EXISTING ISB INJECTION WELL
- EXISTING ISPM WELL

N

0 250'

Trihydro CORPORATION
1252 Commerce Drive
Laramie, WY 82070
www.trihydro.com
(P) 307/745.7474 (F) 307/745.7729

FIGURE 1-1

ZONE 11 ISB EXPANSION WELL LOCATIONS

CONSOLIDATED NUCLEAR SERVICES
2014 DRILLING BOA RELEASE 4
PANTEX PLANT, AMARILLO, TEXAS

Drawn By: SJS	Checked By: EGG	Scale: 1 inch = 125 feet	Date: 11/12/14	File: Fig1_2014Z11EXP_ISB.mxd

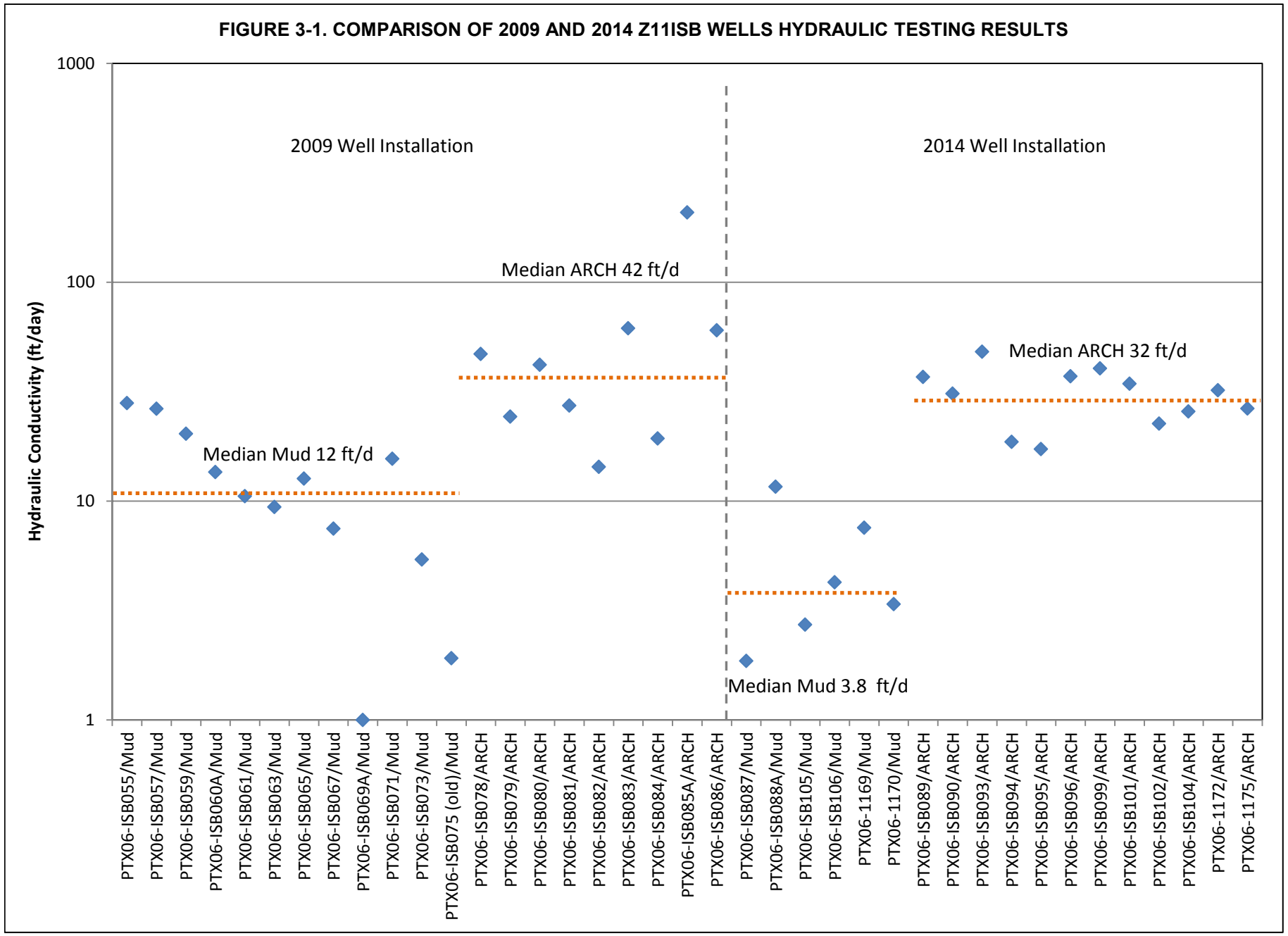
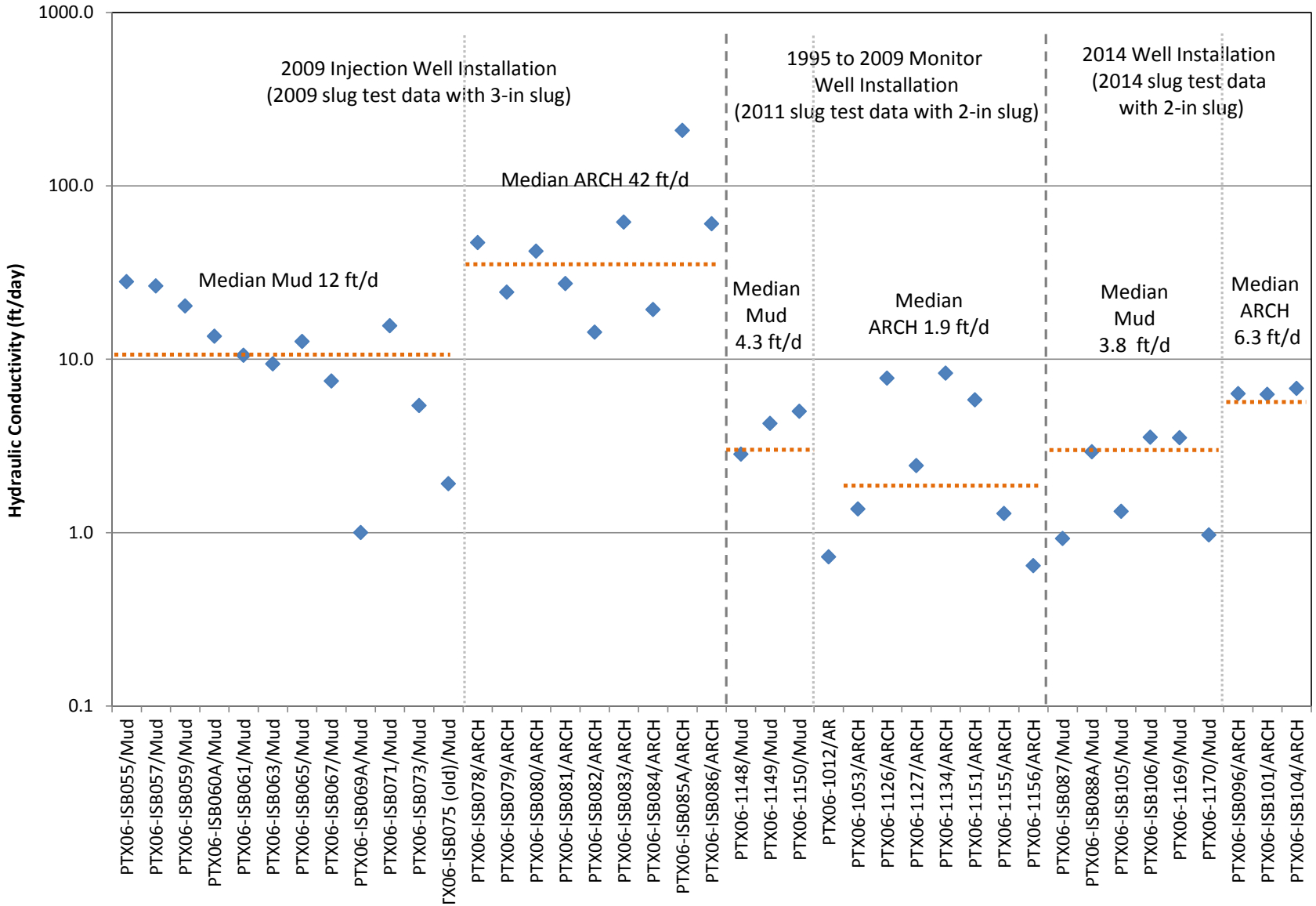


FIGURE 3-1. COMPARISON OF 2009 AND 2014 Z11ISB WELLS HYDRAULIC TESTING RESULTS
Hydraulic Conductivity (ft/day)
1000
100
10
1
2009 Well Installation
2014 Well Installation
Median ARCH 42 ft/d
Median ARCH 32 ft/d
Median Mud 12 ft/d
Median Mud 3.8 ft/d
PTX06-ISB055/Mud
PTX06-ISB057/Mud
PTX06-ISB059/Mud
PTX06-ISB060A/Mud
PTX06-ISB061/Mud
PTX06-ISB063/Mud
PTX06-ISB065/Mud
PTX06-ISB067/Mud
PTX06-ISB069A/Mud
PTX06-ISB071/Mud
PTX06-ISB073/Mud
PTX06-ISB075 (old)/Mud
PTX06-ISB078/ARCH
PTX06-ISB079/ARCH
PTX06-ISB080/ARCH
PTX06-ISB081/ARCH
PTX06-ISB082/ARCH
PTX06-ISB083/ARCH
PTX06-ISB084/ARCH
PTX06-ISB085A/ARCH
PTX06-ISB086/ARCH
PTX06-ISB087/Mud
PTX06-ISB088A/Mud
PTX06-ISB105/Mud
PTX06-ISB106/Mud
PTX06-1169/Mud
PTX06-1170/Mud
PTX06-ISB089/ARCH
PTX06-ISB090/ARCH
PTX06-ISB093/ARCH
PTX06-ISB094/ARCH
PTX06-ISB095/ARCH
PTX06-ISB096/ARCH
PTX06-ISB099/ARCH
PTX06-ISB101/ARCH
PTX06-ISB102/ARCH
PTX06-ISB104/ARCH
PTX06-1172/ARCH
PTX06-1175/ARCH

FIGURE 3-2. COMPARISON OF 2009, 2011, AND 2014 Z11ISB WELLS SLUG TESTING RESULTS



Appendix A-J available in the Pantex Administrative Record
Copies are available upon request

APPENDIX K

BOREHOLE AND WELL COMPLETION LOGS

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB087
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-15-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.6
End Date:	7-24-2014	**Method:**	Mud Rotary	**Northing:**	3755523.1
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634360.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-25	SILT: reddish yellow, 7.5 YR 6/4, with some clay, moderately sorted, high plasticity. Trace caliche nodules above 8'.		CL			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
	25-30	SILT: strong brown, 7.5YR 5/6, moderately sorted, low plasticity, compressible.		ML				
30	30-50	SILTY SAND: brown, 7.5 YR 4/4, moderately sorted, low plasticity, compressible.		SM				30
40								40
50	50-77	SILT: reddish brown, 5 YR 4/4,with some fg-mg sand, moderately sorted, low plasticity, compressible.		ML				50
60								60
70								70
80	77-87	SANDY SILT: pink, 7.5 YR 8/3, fg-mg sand, moderately sorted, caliche present.		ML				80
90	87-108	SANDY SILT: reddish yellow, 7.5 YR 7/6, fg sand, moderately sorted.		ML				90
100								100
110	108-132							110

State Well Report No.: **375735**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB087
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-15-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.6
End Date:	7-24-2014	**Method:**	Mud Rotary	**Northing:**	3755523.1
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634360.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/T. Aseltyne	**Note:**	New Injection Well

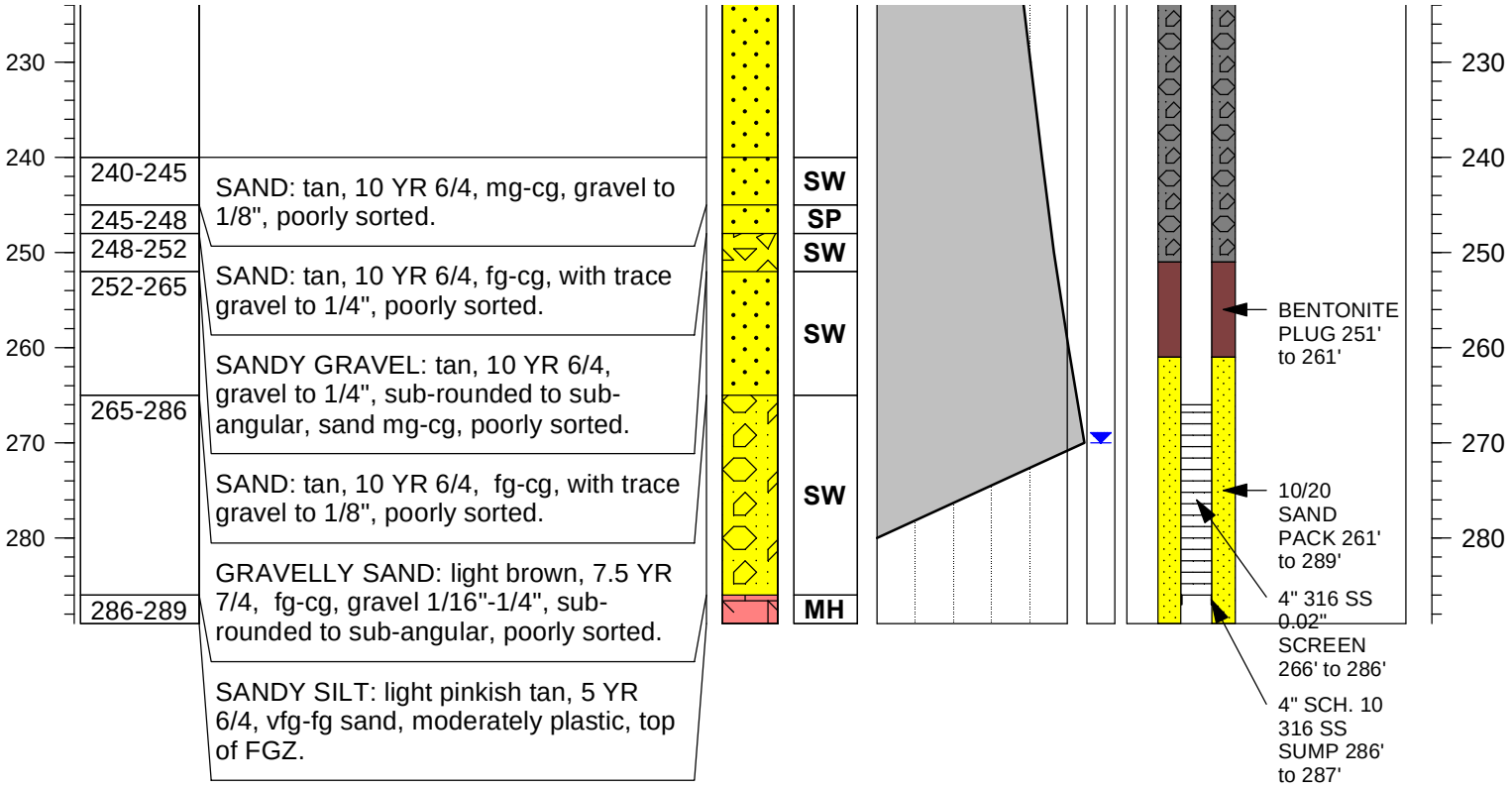
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–130		SAND: light brown, 7.5 YR 6/4, vfg-fg, well sorted.		SP			GROUTED ANNULUS 2' to 251'; 4" SCH.10 316 SS CASING 2' to 266'	110–130
130–190	132-190	SILTY SAND: reddish yellow, 7.5 YR 7/6, mg-fg, moderately sorted, low plasticity, slightly compressible.		SM				130–190
190–220	190-240	SAND: yellowish brown, 10 YR 5/6, fg-mg, well sorted.		SP				190–220

State Well Report No.: 375735

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB087
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-15-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.6
End Date:	7-24-2014	**Method:**	Mud Rotary	**Northing:**	3755523.1
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634360.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	240-245	SAND: tan, 10 YR 6/4, mg-cg, gravel to 1/8", poorly sorted.	SW
	245-248		SP
	248-252		SW
	252-265	SAND: tan, 10 YR 6/4, fg-cg, with trace gravel to 1/4", poorly sorted.	SW
	265-286	SANDY GRAVEL: tan, 10 YR 6/4, gravel to 1/4", sub-rounded to sub-angular, sand mg-cg, poorly sorted.	SW
		SAND: tan, 10 YR 6/4, fg-cg, with trace gravel to 1/8", poorly sorted.	
	286-289	GRAVELLY SAND: light brown, 7.5 YR 7/4, fg-cg, gravel 1/16"-1/4", sub-rounded to sub-angular, poorly sorted.	MH
		SANDY SILT: light pinkish tan, 5 YR 6/4, vfg-fg sand, moderately plastic, top of FGZ.	



State Well Report No.: 375735

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB088A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.8
Start Date:	9-18-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.0
End Date:	9-23-2014	**Method:**	Mud Rotary	**Northing:**	3755569.1
Total Depth:	292 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634266.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-72	SILT: orangish brown, 5 YR 6/6, dry, hard, with trace vfg sand.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50								50
60								60
70	72-75			CH				70
80	75-97	CLAY: white, 2.5 YR 8/1, soft, rollable, caliche. CLAYEY SILT: orangish brown, 5 YR 5/6, slightly rollable, trace vfg sand.		ML				80
90								90
100	97-105	CLAY: brown, 5 YR 5/3, hard, stiff.		CL				100
110	105-155	SAND: tan, 5 YR 6/4, vfg, well sorted,						110

State Well Report No.: **378963**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB088A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.8
Start Date:	9-18-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.0
End Date:	9-23-2014	**Method:**	Mud Rotary	**Northing:**	3755569.1
Total Depth:	292 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634266.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
110–150		trace silt.	SM
150–160	155-162	SAND: brown, 7.5 YR 5/4, vfg, with some gravel 1/4"-1/2", angular, poorly sorted.	SW
160–170	162-166		SP
170–190	166-190	SAND: medium brown, 5 YR 6/4, vfg-fg, well sorted.	ML
180–190		SANDY SILT: medium brown, 5 YR 6/4, sand vfg-fg, rollable, moderately well sorted.	
190–200	190-205	SILTY SAND: brown, 5 YR 6/4, vfg-fg, some caliche gravel, moderately well sorted.	SM
200–220	205-235	SAND: medium brown, 7.5 YR 6/4, fg-vfg, well sorted.	SP

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction:
- GROUTED ANNULUS 2' to 229'
- 4" SCH.10 316 SS CASING 2' to 265'

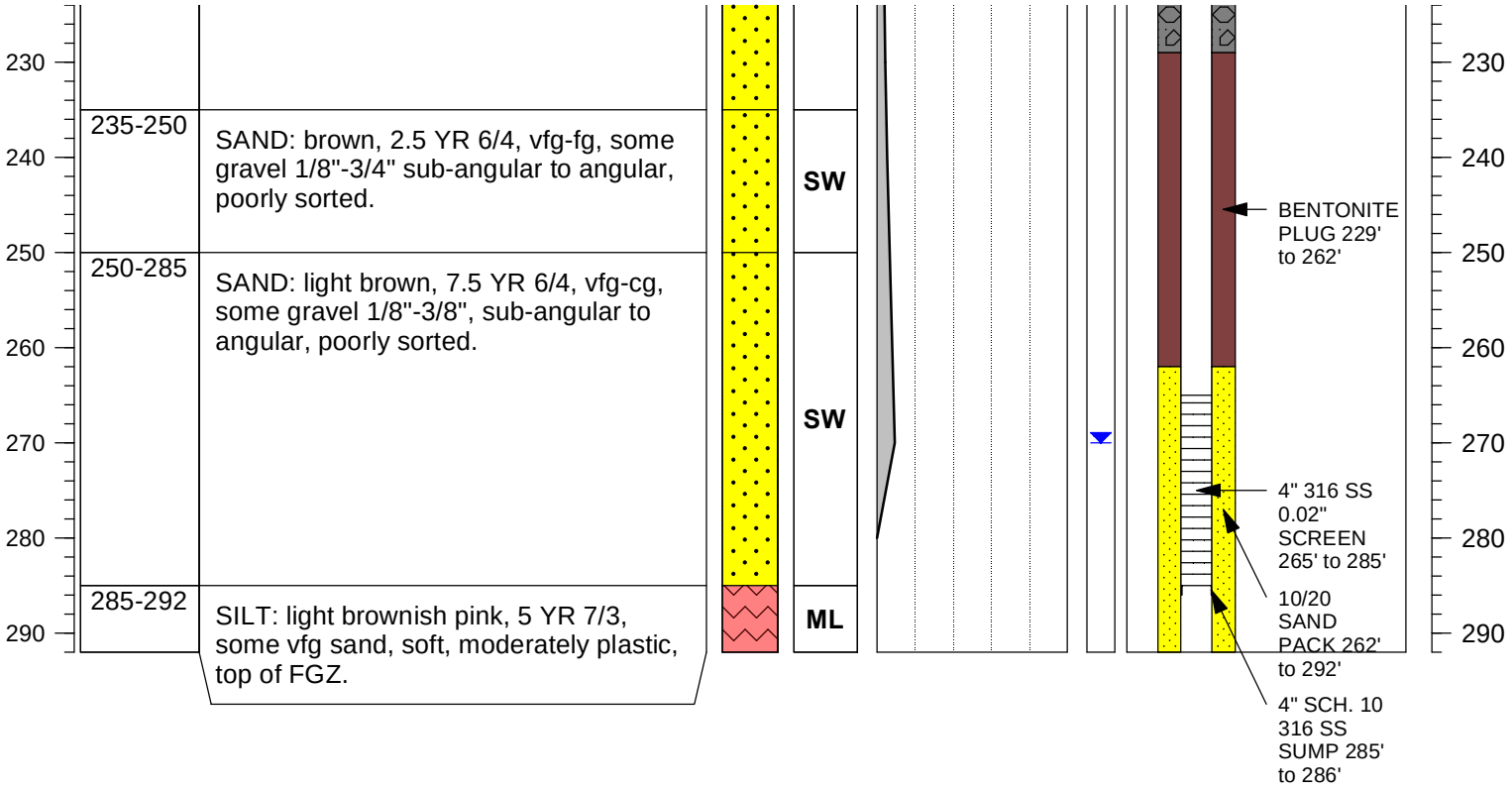
Depth (ft bgs): 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220

State Well Report No.: 378963

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB088A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.8
Start Date:	9-18-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.0
End Date:	9-23-2014	**Method:**	Mud Rotary	**Northing:**	3755569.1
Total Depth:	292 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634266.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	235-250	SAND: brown, 2.5 YR 6/4, vfg-fg, some gravel 1/8"-3/4" sub-angular to angular, poorly sorted.	SW
	250-285	SAND: light brown, 7.5 YR 6/4, vfg-cg, some gravel 1/8"-3/8", sub-angular to angular, poorly sorted.	SW
	285-292	SILT: light brownish pink, 5 YR 7/3, some vfg sand, soft, moderately plastic, top of FGZ.	ML



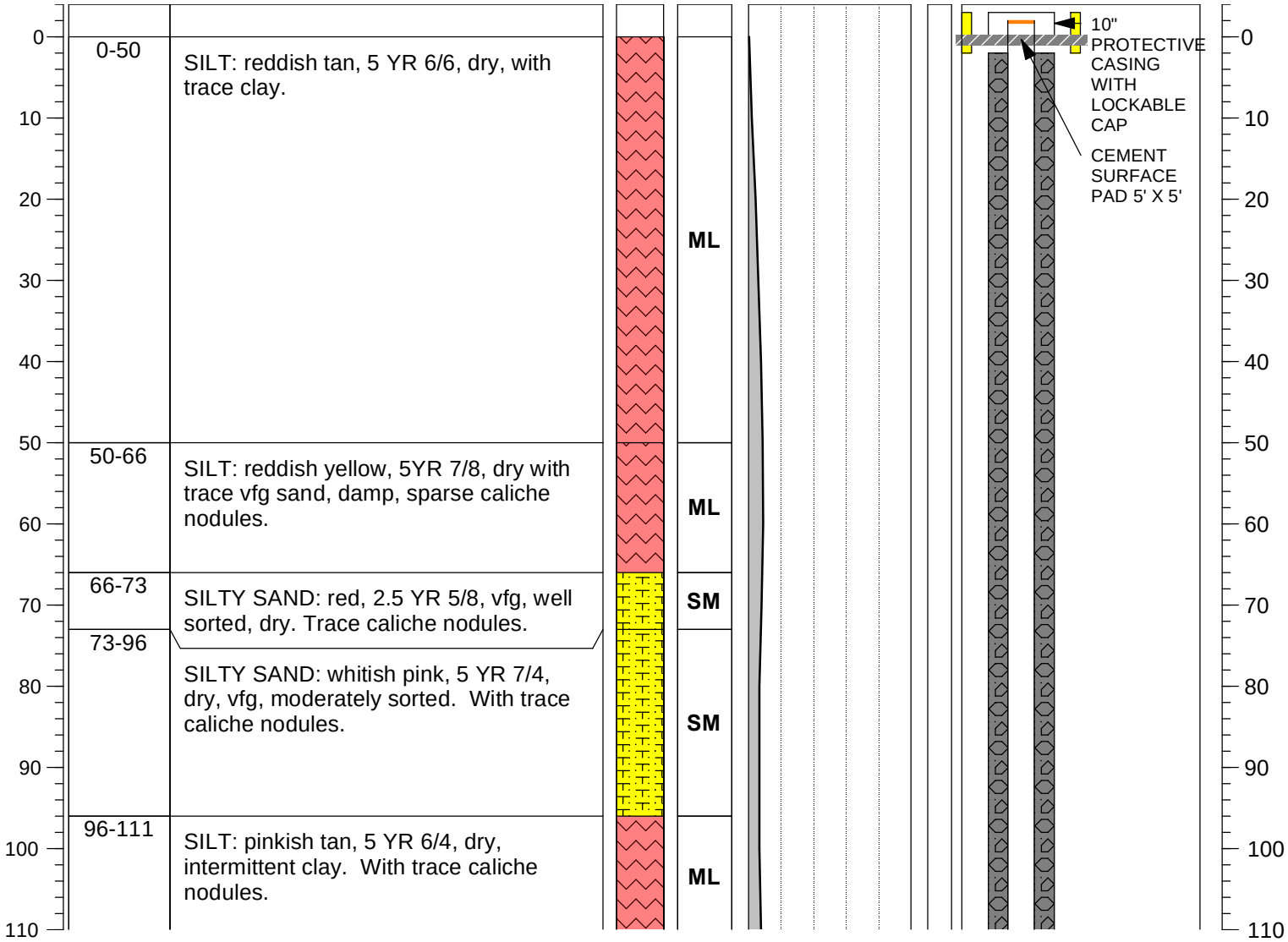
State Well Report No.: 378963

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB089
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.4
Start Date:	7-10-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3544.6
End Date:	7-12-2014	**Method:**	ARCH	**Northing:**	3755606.5
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634200.3
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-50	SILT: reddish tan, 5 YR 6/6, dry, with trace clay.	ML
	50-66	SILT: reddish yellow, 5YR 7/8, dry with trace vfg sand, damp, sparse caliche nodules.	ML
	66-73	SILTY SAND: red, 2.5 YR 5/8, vfg, well sorted, dry. Trace caliche nodules.	SM
	73-96	SILTY SAND: whitish pink, 5 YR 7/4, dry, vfg, moderately sorted. With trace caliche nodules.	SM
	96-111	SILT: pinkish tan, 5 YR 6/4, dry, intermittent clay. With trace caliche nodules.	ML

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)

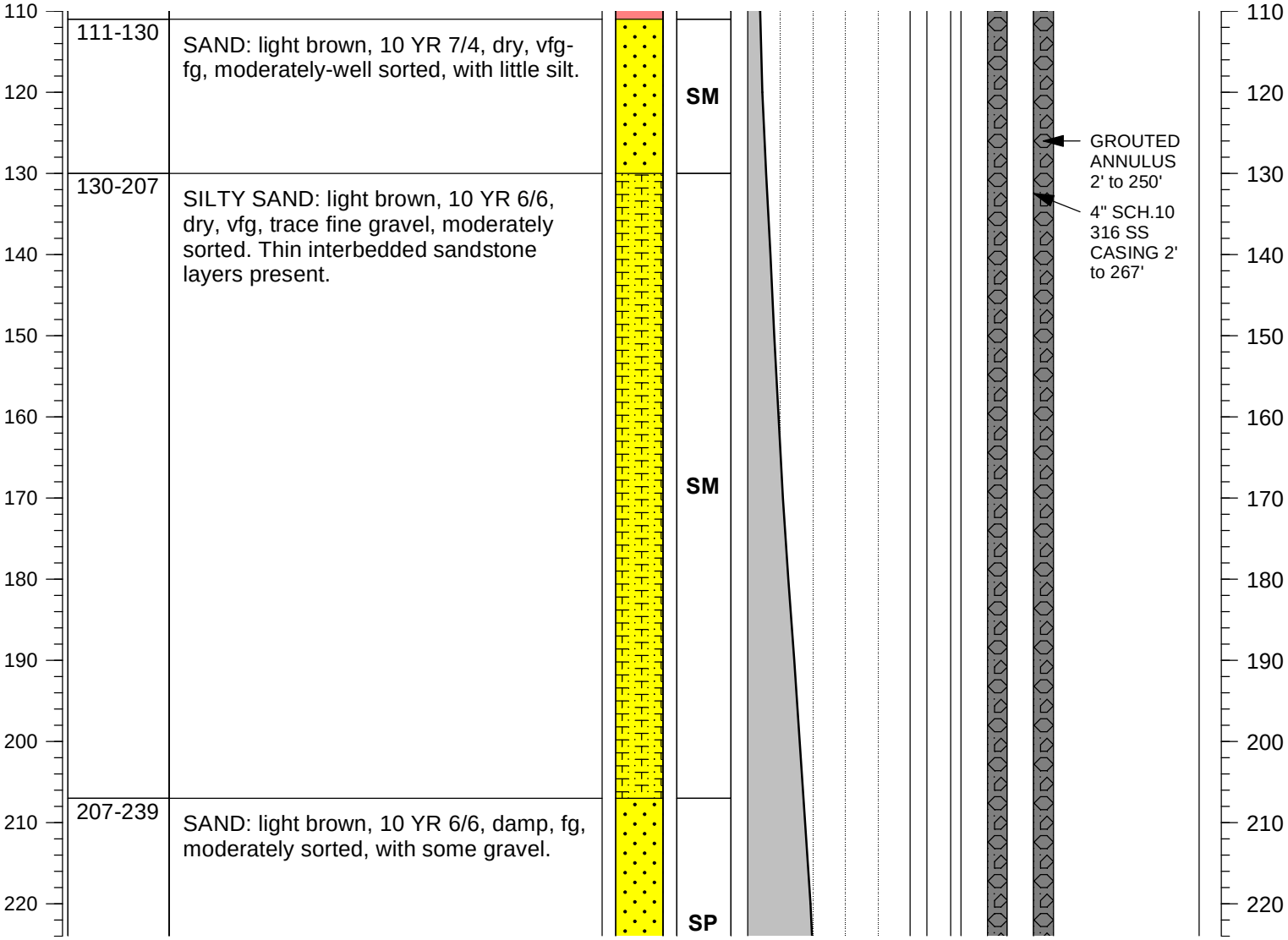


State Well Report No.: 375886

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB089
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.4
Start Date:	7-10-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3544.6
End Date:	7-12-2014	**Method:**	ARCH	**Northing:**	3755606.5
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634200.3
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
	111-130	SAND: light brown, 10 YR 7/4, dry, vfg-fg, moderately-well sorted, with little silt.		SM			GROUTED ANNULUS 2' to 250'	
	130-207	SILTY SAND: light brown, 10 YR 6/6, dry, vfg, trace fine gravel, moderately sorted. Thin interbedded sandstone layers present.		SM			4" SCH.10 316 SS CASING 2' to 267'	
	207-239	SAND: light brown, 10 YR 6/6, damp, fg, moderately sorted, with some gravel.		SP				



State Well Report No.: **375886**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB089
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.4
Start Date:	7-10-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3544.6
End Date:	7-12-2014	**Method:**	ARCH	**Northing:**	3755606.5
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634200.3
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230								230
240	239-251	SANDY GRAVEL: brown, 7.5 YR 5/6, dry, gravel fg, dand fg, poorly sorted.		GW				240
250	251-287	SAND: brown, 10 YR 5/4, damp, fg, well sorted.		SW			BENTONITE PLUG 250' to 263'; 10/20 SAND PACK 263' to 288'; 4" 316 SS 0.02" SCREEN 267 to 287'; 4" SCH. 10 316 SS SUMP 287' to 288'	250
260								260
270								270
280	287-288	SILT: pink, 2.5 YR 8/3, dry, very hard, top FGZ.		ML				280

State Well Report No.: **375886**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB090
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	7-7-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.1
End Date:	7-10-2014	**Method:**	ARCH	**Northing:**	3755650.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634117.3
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

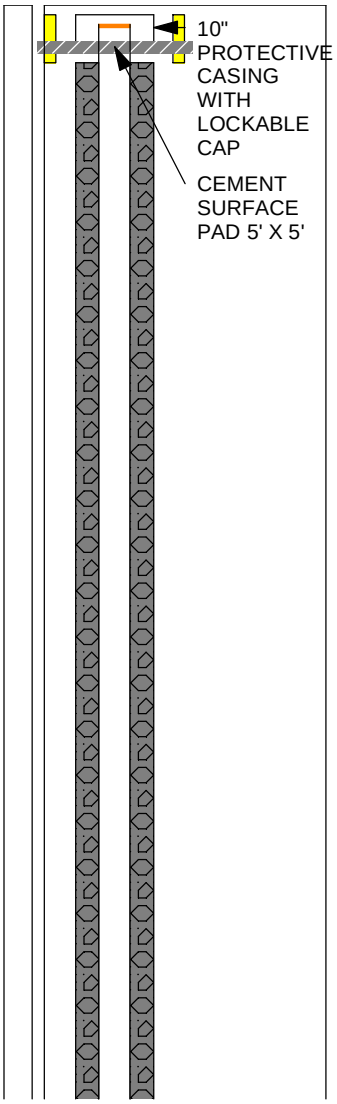
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-50	SILT: reddish yellow, 5 YR 6/6, dry, compressible, low plasticity. With trace clay.	ML
	50-63	SILT: reddish yellow, 5YR 7/8, dry, moderately sorted, with trace caliche nodules, slightly compressible.	ML
	63-72	SILT: red, 2.5 YR 5/8, with trace fine sand. Well sorted, dry, compressible.	ML
	72-88	SILT: pink, 5 YR 7/4, dry. With caliche nodules.	ML
	88-112	SANDY SILT: reddish yellow, 5 YR 7/8, dry, sand fg, moderately sorted, compressible.	ML

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **375887**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB090
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	7-7-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.1
End Date:	7-10-2014	**Method:**	ARCH	**Northing:**	3755650.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634117.3
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

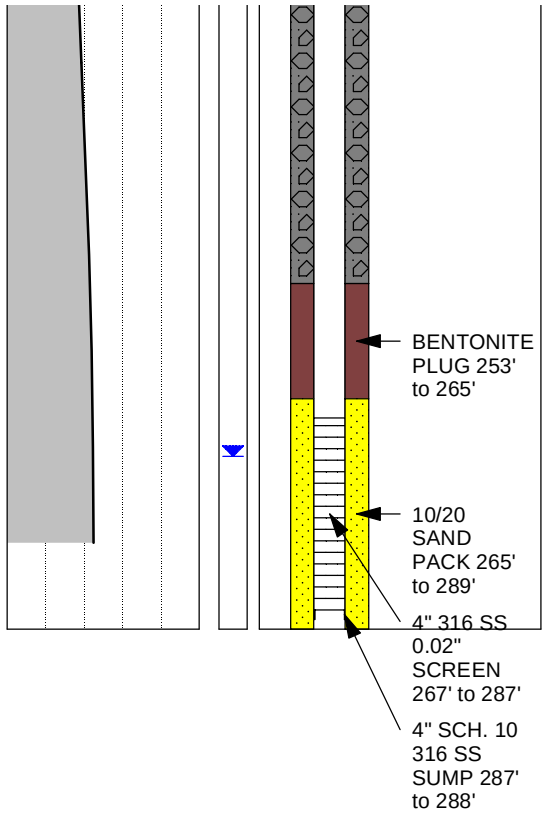
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110	112-118	SAND: light yellowish brown,10f YR 6/4, dry, fg-mg, with some silt, moderately sorted.		SM				110
120	118-148	SILT: reddish yellow, 7.5 YR 4/6, dry, well sorted, compressible.		ML			GROUTED ANNULUS 2' to 253'; 4" SCH.10 316 SS CASING 2' to 267'	120
130								130
140								140
150	148-204	SANDY SILT: yellowish brown, 10 YR 6/6, dry, fg-mg, moderatley sorted, slightly compressible.		SM				150
160								160
170								170
180								180
190								190
200								200
210	204-225	SAND: strong brown, 7.5 YR 5/6, fg-mg, dry, with some rounded to sub-rounded gravel.		SW				210
220								220

State Well Report No.: 375887

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB090
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	7-7-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.1
End Date:	7-10-2014	**Method:**	ARCH	**Northing:**	3755650.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634117.3
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
230	225-238	SAND: strong brown, 7.5 YR 5/6, dry, mg, decreasing gravel content.		SW
240	238-248	SANDY GRAVEL: strong brown, 7.5 YR 5/6, dry, gravel fg-cg, sub-rounded , sand mg, poorly sorted.		GW
250	248-287	SAND: strong brown, 7.5 YR 4/6, damp to saturated, mg, with trace gravel, moderately sorted, slightly compressible.		SP
280	287-289	SILT: pink, 2.5 YR 8/3, top of FGZ.		ML



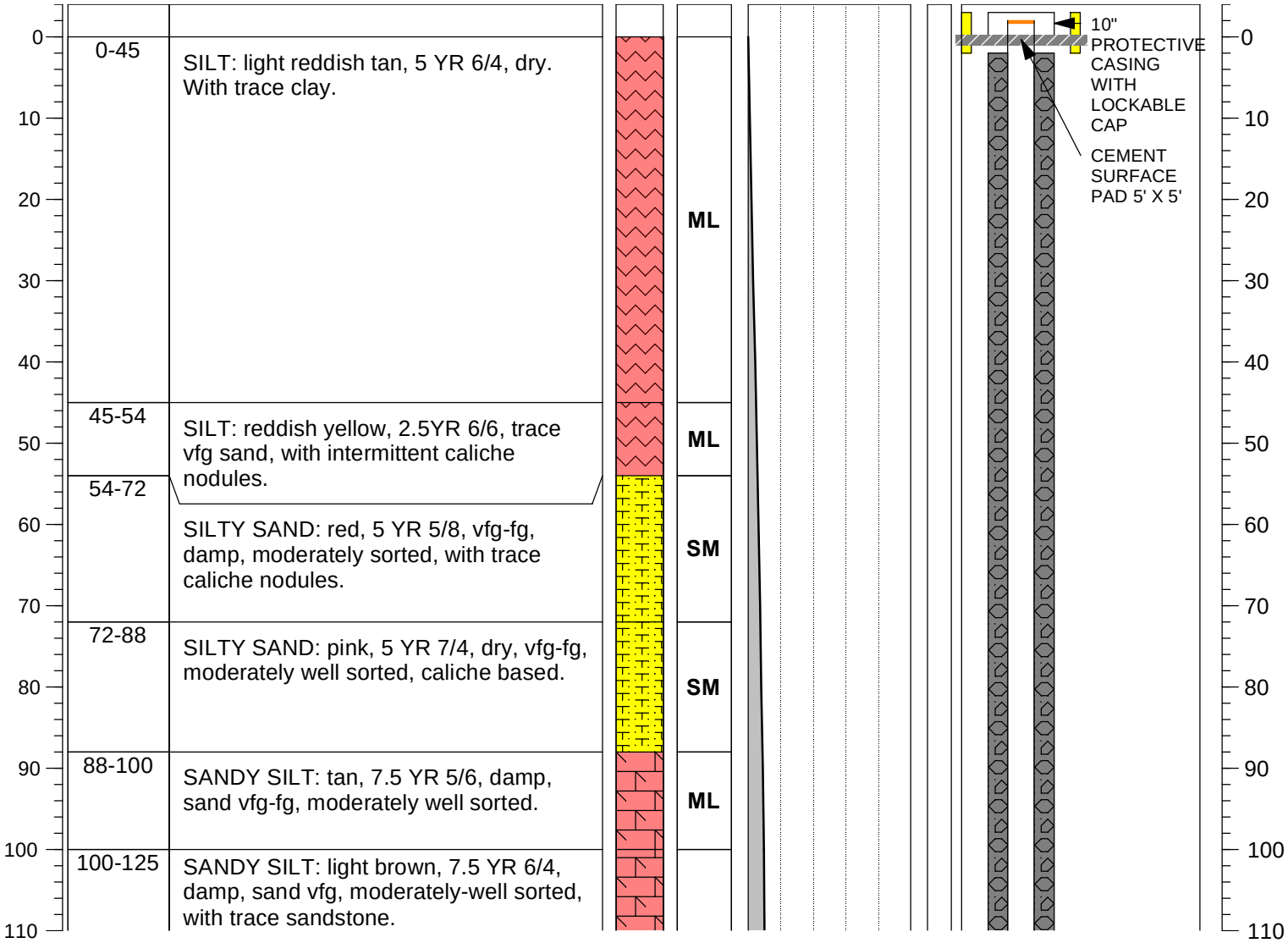
State Well Report No.: **375887**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB093
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.5
Start Date:	7-13-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.6
End Date:	7-16-2014	**Method:**	ARCH	**Northing:**	3755794.3
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633857.2
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-45	SILT: light reddish tan, 5 YR 6/4, dry. With trace clay.	ML
	45-54	SILT: reddish yellow, 2.5YR 6/6, trace vfg sand, with intermittent caliche nodules.	ML
	54-72	SILTY SAND: red, 5 YR 5/8, vfg-fg, damp, moderately sorted, with trace caliche nodules.	SM
	72-88	SILTY SAND: pink, 5 YR 7/4, dry, vfg-fg, moderately well sorted, caliche based.	SM
	88-100	SANDY SILT: tan, 7.5 YR 5/6, damp, sand vfg-fg, moderately well sorted.	ML
	100-125	SANDY SILT: light brown, 7.5 YR 6/4, damp, sand vfg, moderately-well sorted, with trace sandstone.	

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)



State Well Report No.: 375889

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB093
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.5
Start Date:	7-13-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.6
End Date:	7-16-2014	**Method:**	ARCH	**Northing:**	3755794.3
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633857.2
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

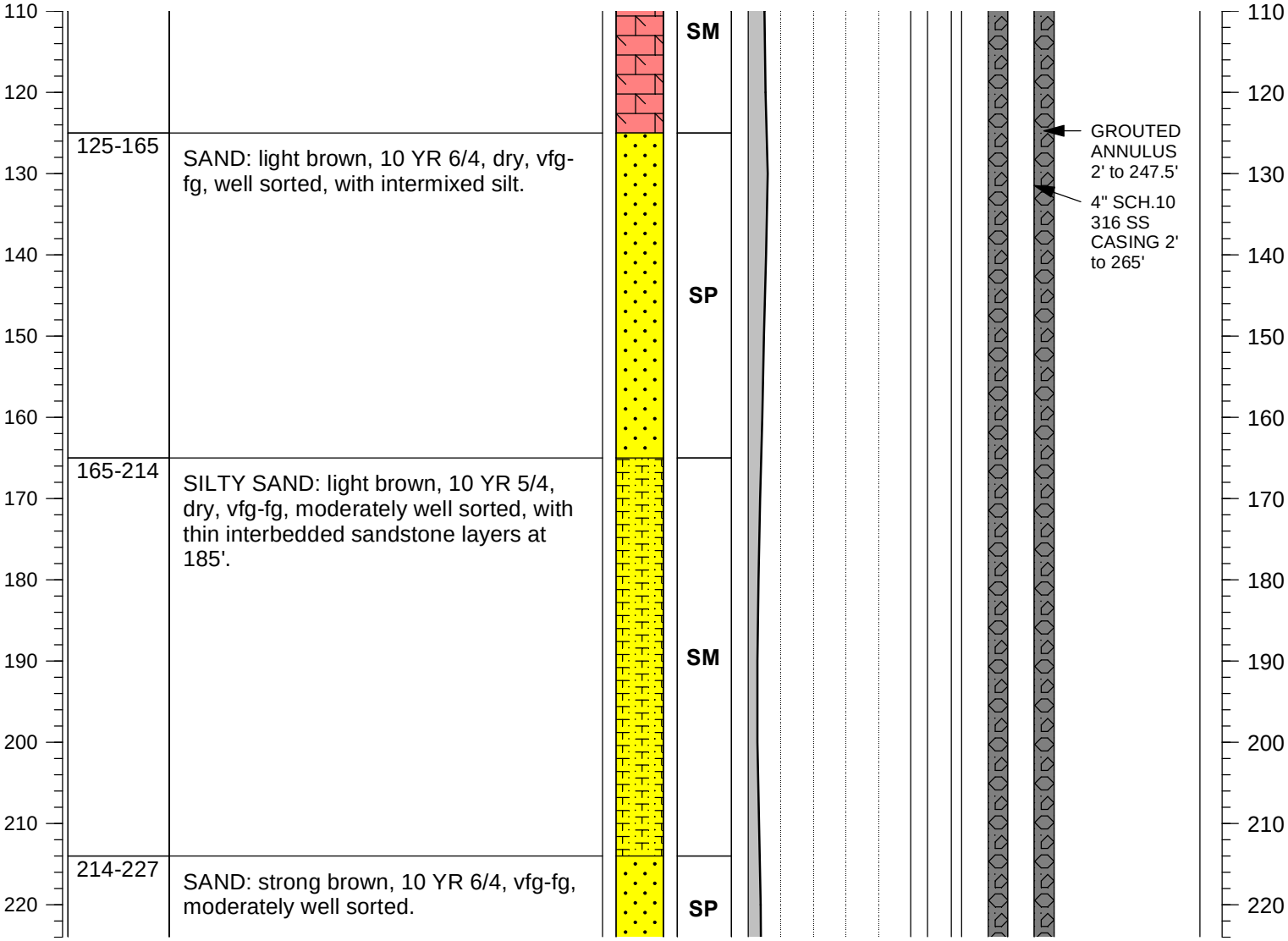
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
			SM
	125-165	SAND: light brown, 10 YR 6/4, dry, vfg-fg, well sorted, with intermixed silt.	SP
	165-214	SILTY SAND: light brown, 10 YR 5/4, dry, vfg-fg, moderately well sorted, with thin interbedded sandstone layers at 185'.	SM
	214-227	SAND: strong brown, 10 YR 6/4, vfg-fg, moderately well sorted.	SP

Lithology

Deviation Survey Closure Distance (ft)
0 ft — 5 ft

Water Level

Well Construction



Depth (ft bgs)

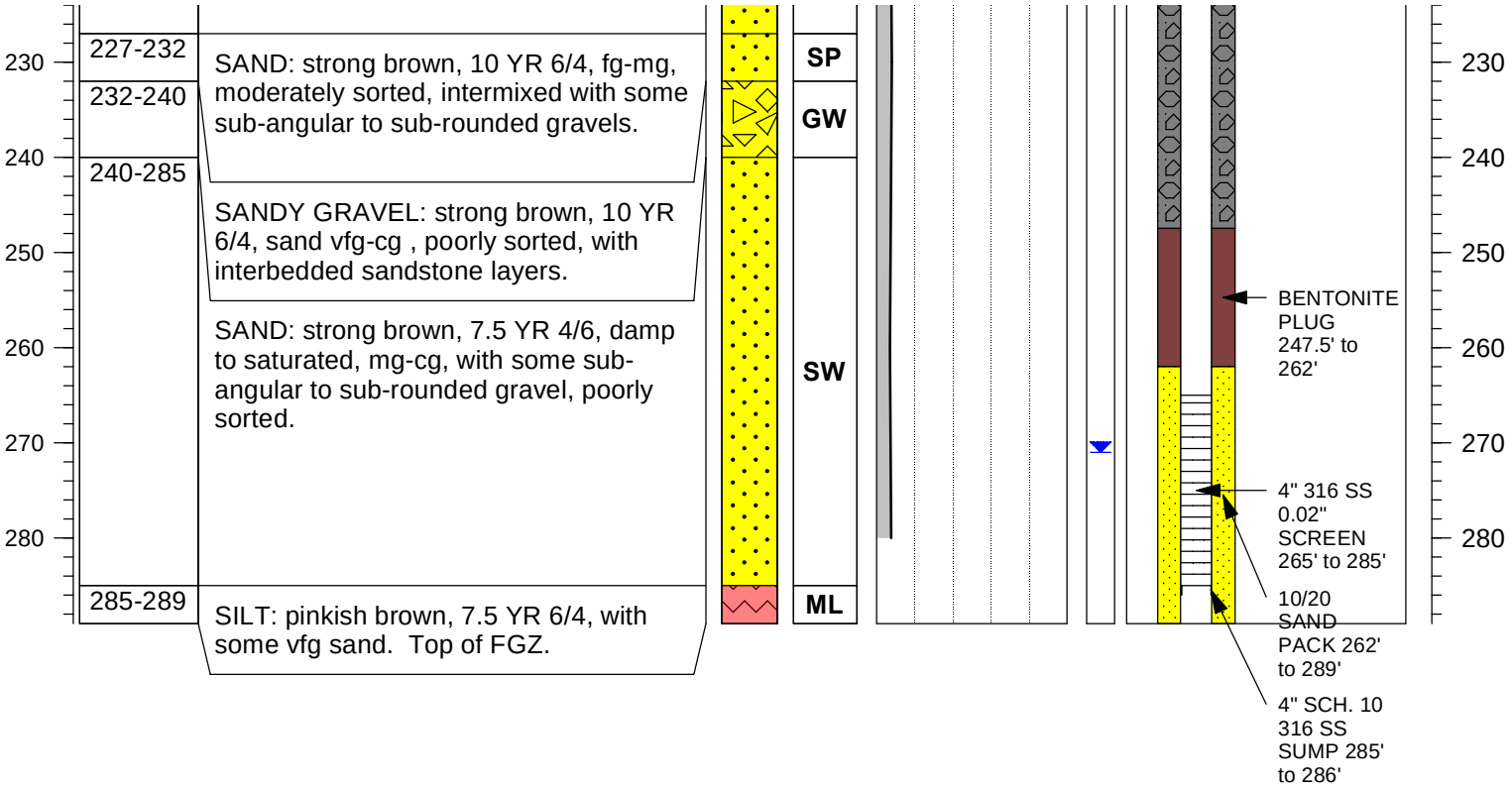
State Well Report No.: 375889

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB093
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.5
Start Date:	7-13-2014	**Driller:**	W. Bludworth	**TOC Elevation (ft):**	3545.6
End Date:	7-16-2014	**Method:**	ARCH	**Northing:**	3755794.3
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633857.2
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	227-232	SAND: strong brown, 10 YR 6/4, fg-mg, moderately sorted, intermixed with some sub-angular to sub-rounded gravels.	SP
	232-240		GW
240	240-285	SANDY GRAVEL: strong brown, 10 YR 6/4, sand vfg-cg , poorly sorted, with interbedded sandstone layers.	
250		SAND: strong brown, 7.5 YR 4/6, damp to saturated, mg-cg, with some sub-angular to sub-rounded gravel, poorly sorted.	SW
260			
270			
280	285-289	SILT: pinkish brown, 7.5 YR 6/4, with some vfg sand. Top of FGZ.	ML

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)



State Well Report No.: **375889**

Boring and Well Log

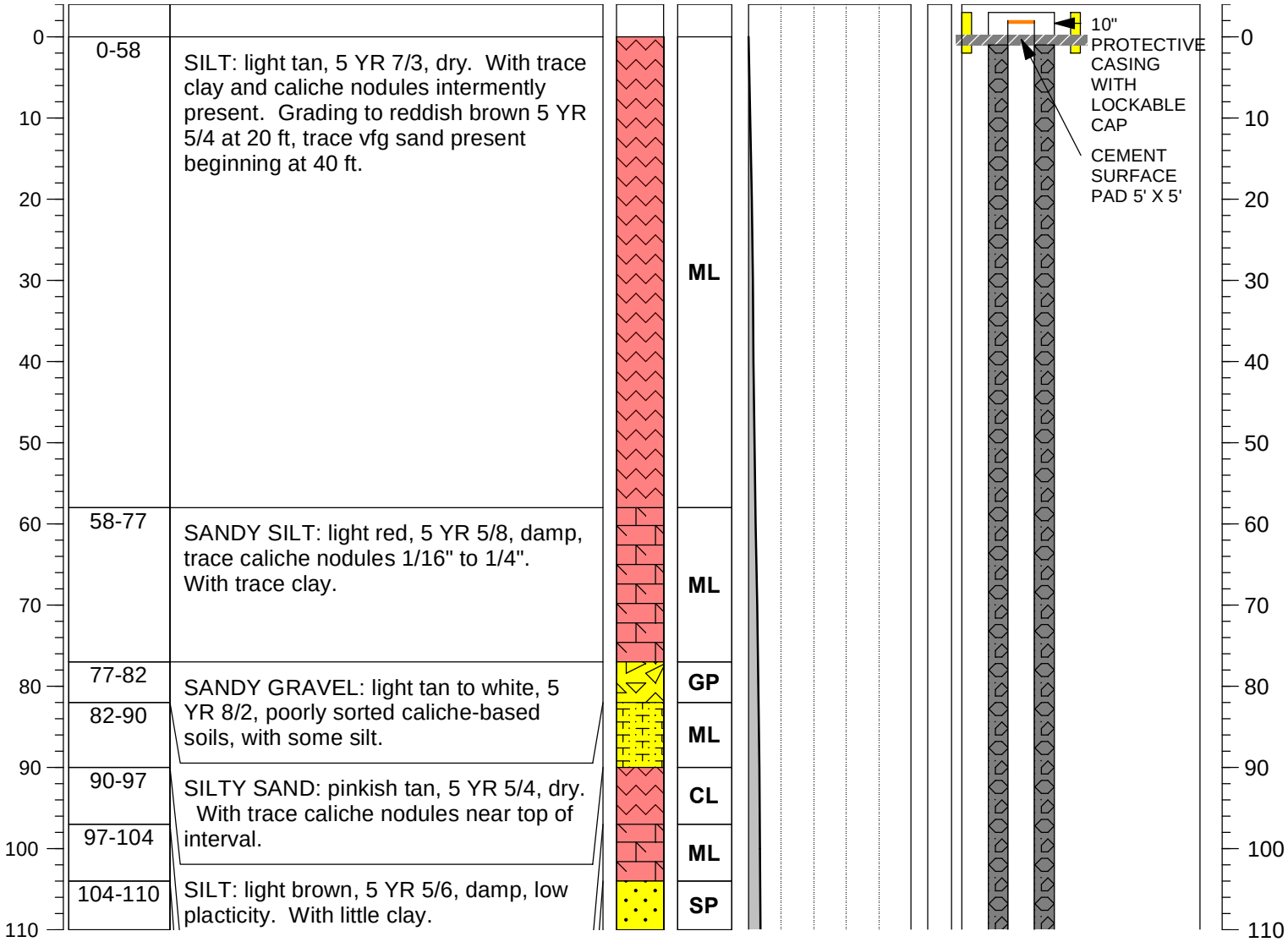
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB094
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	6-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	7-7-2014	**Method:**	ARCH	**Northing:**	3755839.0
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633769.2
FGZ Depth:	284 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-58	SILT: light tan, 5 YR 7/3, dry. With trace clay and caliche nodules intermently present. Grading to reddish brown 5 YR 5/4 at 20 ft, trace vfg sand present beginning at 40 ft.	ML
	58-77	SANDY SILT: light red, 5 YR 5/8, damp, trace caliche nodules 1/16" to 1/4". With trace clay.	ML
	77-82	SANDY GRAVEL: light tan to white, 5 YR 8/2, poorly sorted caliche-based soils, with some silt.	GP
	82-90		ML
	90-97	SILTY SAND: pinkish tan, 5 YR 5/4, dry. With trace caliche nodules near top of interval.	CL
	97-104		ML
	104-110	SILT: light brown, 5 YR 5/6, damp, low placticity. With little clay.	SP

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



State Well Report No.: 375736

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB094
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	6-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	7-7-2014	**Method:**	ARCH	**Northing:**	3755839.0
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633769.2
FGZ Depth:	284 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–120–130–140–150–160–170–180–190–200–210–220	110-125	SANDY SILT: light brown, 7.5YR 6/4, damp, sand vfg.		SM				
	125-152	SAND: light brown, 10 YR 5/4, damp, fg, well sorted.					GROUTED ANNULUS 1' to 250'	
		SILTY SAND: tan, 10 YR 6/4, damp, vfg-fg, moderately sorted.		SP			4" SCH.10 316 SS CASING 2' to 265'	
		SILTY SAND: tan, 7.5 YR 6/4, vfg to fg, damp, moderately sorted.						
	152-175	SAND: light brown, 10 YR 6/4, damp, fg-mg, moderately well sorted.		SM				
	175-200	SILTY SAND: light brown, 10 YR 6/6, damp, vfg-fg, moderately well sorted.		SP				
	200-217	SAND: light brown, 10 YR 5/6, damp, fg, moderately well sorted. With trace fg to cg gravel, 1/16" to 1-1/2".		SP				
	217-221	GRAVEL: light brown, 10 YR 5/6, dry, fg-vcg, subangular to subrounded. With		GW				
	221-241							

State Well Report No.: 375736

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB094
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	6-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	7-7-2014	**Method:**	ARCH	**Northing:**	3755839.0
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633769.2
FGZ Depth:	284 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

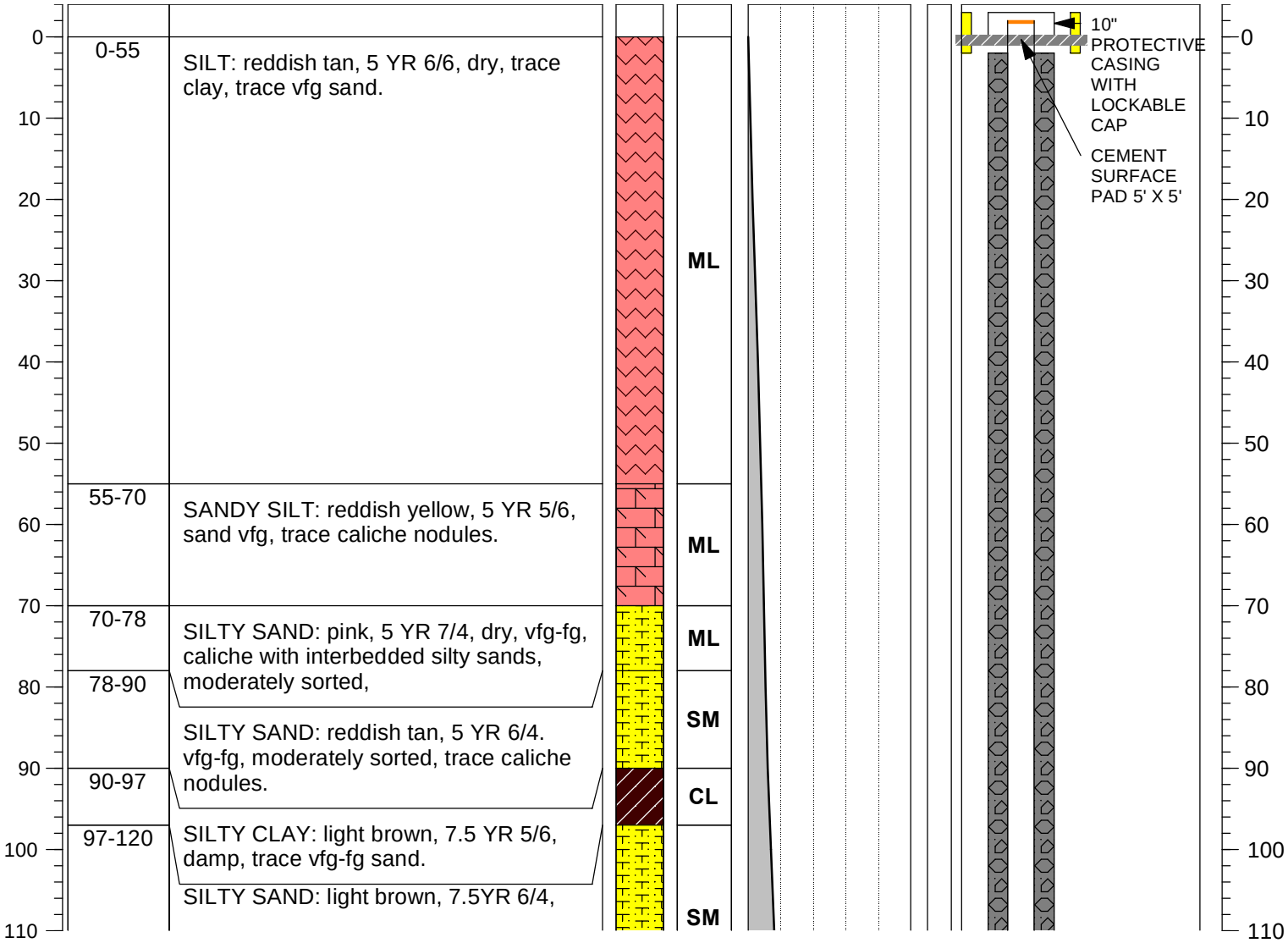
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
		little sand.						
230		SAND: light brown, 10 YR 5/6, damp, fg, well sorted. With trace silt and gravel. Sand coarsening with depth.		SP				230
240	241-245			GW				240
	245-284	GRAVEL: damp, fg-vcg, subangular to subrounded, poorly sorted. With little sand.						
250								250
260		SAND: light brown, 10 YR 6/4, fg-mg, moderately sorted, with little gravel 1/4"-1 1/2".		SP/SW			BENTONITE PLUG 250' to 262'	260
270								270
280							4" 316 SS 0.02" SCREEN 265' to 284'	280
	284-289	SANDY CLAY: light pinkish brown, 7.5 YR 6/4, sand vfg-fg. Top of FGZ.		ML			10/20 SAND PACK 262' to 289'	
							4" SCH. 10 316 SS SUMP 284' to 285'	

State Well Report No.: **375736**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB095
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.7
Start Date:	7-16-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.9
End Date:	7-24-2014	**Method:**	ARCH	**Northing:**	3755742.7
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633652.6
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-55	SILT: reddish tan, 5 YR 6/6, dry, trace clay, trace vfg sand.	ML
	55-70	SANDY SILT: reddish yellow, 5 YR 5/6, sand vfg, trace caliche nodules.	ML
	70-78	SILTY SAND: pink, 5 YR 7/4, dry, vfg-fg, caliche with interbedded silty sands, moderately sorted,	ML
	78-90	SILTY SAND: reddish tan, 5 YR 6/4. vfg-fg, moderately sorted, trace caliche nodules.	SM
	90-97	SILTY CLAY: light brown, 7.5 YR 5/6, damp, trace vfg-fg sand.	CL
	97-120	SILTY SAND: light brown, 7.5YR 6/4,	SM



State Well Report No.: **375738**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB095
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.7
Start Date:	7-16-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.9
End Date:	7-24-2014	**Method:**	ARCH	**Northing:**	3755742.7
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633652.6
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
		vfg-fg, moderately well sorted. With trace sandstone.						
120	120-130	SAND: light brown, 7.5 YR 6/6, dry, vfg-fg, moderately sorted, with little intermixed silt.		SM			GROUTED ANNULUS 2' to 250'	120
130	130-150	SILTY SAND: light redish brown, 7.5 YR 5/6, dry, vfg-fg, moderately well sorted.		SM			4" SCH.10 316 SS CASING 2' to 267'	130
150	150-168	SAND: tan, 10 YR 6/6, damp, vfg, well graded with trace sub-rounded to sub-angular <1/4" gravel.		SW				150
170	168-185	SILTY SAND: light brown, 7.5 YR 6/4, damp, vfg, well sorted.		SM				170
190	185-220	SAND: tan, 7.5 YR 6/6, damp, vfg-fg, well sorted. Trace gravel to 1/4".		SP				190
220	220-255	SAND: tan, 10 YR 6/3, dry, vfg-cg,						220

State Well Report No.: 375738

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB095
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.7
Start Date:	7-16-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.9
End Date:	7-24-2014	**Method:**	ARCH	**Northing:**	3755742.7
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633652.6
FGZ Depth:	287 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230, 240, 250		poorly sorted, intermixed sub-angular to sub-rounded gravel.		SW				230, 240, 250
260, 270, 280	255-281	SAND: tan, 10 YR 6/4, damp, fg-cg, poorly sorted, sub-angular to sub-rounded, with trace fg rounded gravel.		SW			BENTONITE PLUG 250' to 264'; 10/20 SAND PACK 264' to 289'; 4" 316 SS 0.02" SCREEN 267' to 287'; 4" SCH. 10 316 SS SUMP 287' to 288'	260, 270, 280
	281-287	CLAYEY SAND: light brown, 10 YR 7/3, saturated, vfg-fg, moderately sorted, trace pinkish clay nodules.		SC				
	287-289	SANDY SILT: pinkish tan, 2.5 YR 6/6, damp, moderate plasticity, rollable. Sand, vfg. Top of FGZ.		ML				

State Well Report No.: 375738

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB096
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	6-20-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	6-22-2014	**Method:**	ARCH	**Northing:**	3755807.1
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633559.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-64	SILT: tan, 5 YR 6/4, dry, moderately stiff, slightly rollable. With trace clay and caliche nodules intermently present. Grading to reddish brown 5 TYR 5/6 at 25 ft, trace vfg sand present beginning at 40 ft.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50								50
60								60
70	64-85	SANDY SILT: light red, 5 YR 5/8, damp, some caliche nodules 1/16" to 1/2". With trace clay.		ML				70
80								80
90	85-90	SILTY SAND: light red, 5 YR 6/6, damp, vfg-fg, some caliche noduels 1/16" to 3/4", moderately well sorted.		SM				90
	90-101			ML				
100	101-102	SILT: reddish brown, 7.5 YR 5/4. With little clay and trace vfg sand.		CL				100
	102-120	CLAY: brown, 5 YR 3/4, damp, stiff.						
110								110

State Well Report No.: 375739

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB096
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	6-20-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	6-22-2014	**Method:**	ARCH	**Northing:**	3755807.1
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633559.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–120		SAND: light brown, 5YR 3/4, vfg, moderately well sorted. With trace silt.		SP				110–120
120–130	120-135	SILT: light brown, 7.5 YR 5/6, damp. With some vfg-fg sand, moderately sorted.		ML			GROUTED ANNULUS 2' to 250'; 4" SCH.10 316 SS CASING 2' to 267'	120–130
130–150	135-150	SILTY SAND: light brown, 7.5 YR 5/6, damp, vfg, moderately well sorted.		SM				130–150
150–170	150-170	SAND: light brown, 2.5 YR 6/6, damp, vfg-fg, well sorted. Increasing silt content with depth.		SP/SW				150–170
170–215	170-215	SILTY SAND: light brown, 7.5 YR 5/4, damp, vfg-fg, moderately well sorted, sligtly rollabe.		SM				170–215
215–220	215-237	SAND: light brown, 10 YR 6/4, damp, vfg-fg, moderately well sorted, with trace						215–220

State Well Report No.: **375739**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB096
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	6-20-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	6-22-2014	**Method:**	ARCH	**Northing:**	3755807.1
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633559.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Kruse	**Note:**	New Injection Well

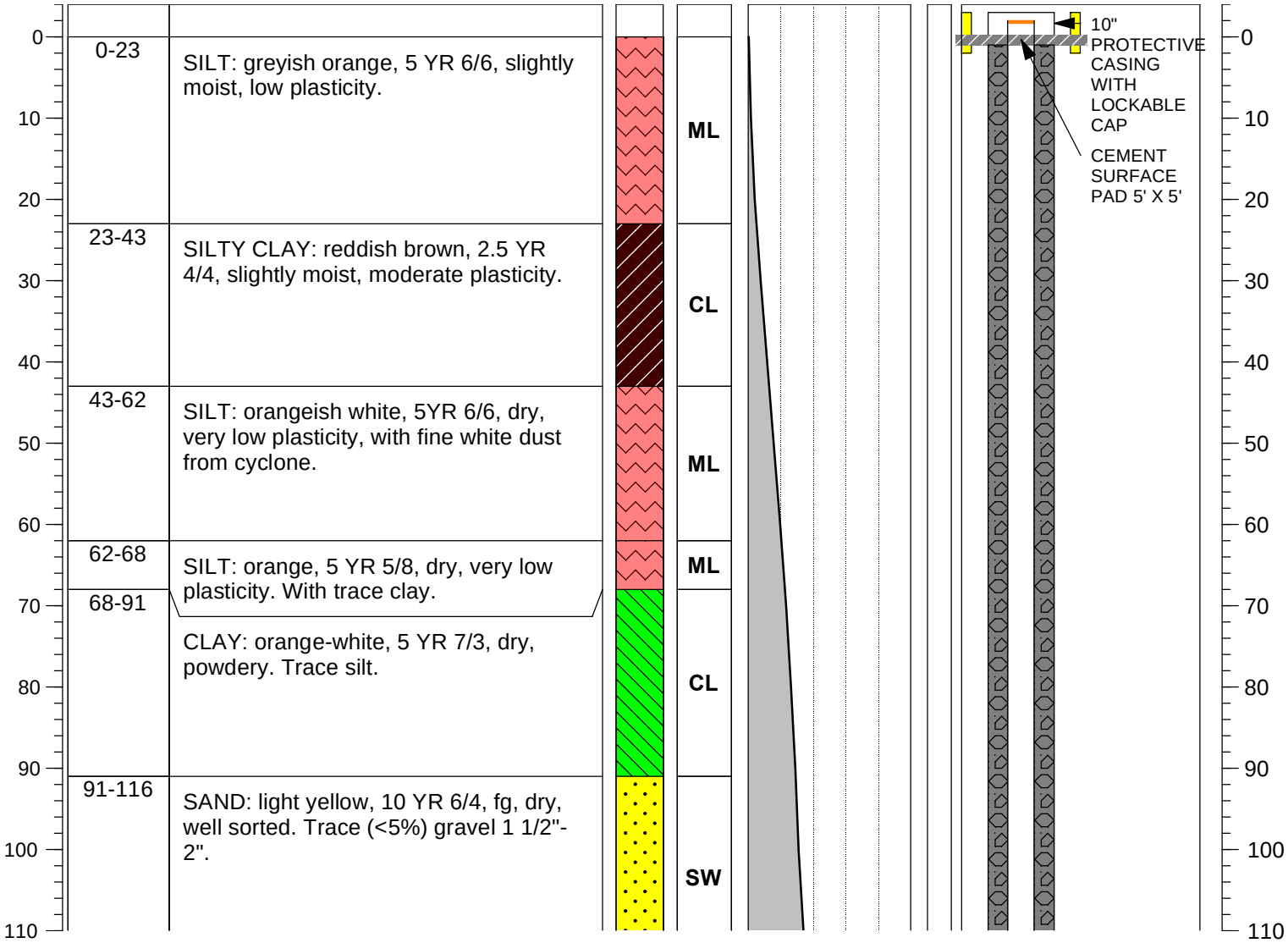
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230		silt.		SP/SW				230
240	237-245	SANDY GRAVEL: light brown, 10 YR 5/4, dry, gravel 1/4"-1", sand vfg-fg, poorly sorted.		GW				240
250	245-286	SAND: light brown, 10 YR 5/4, fg-cg, with little gravel 1 1/2"-2 1/2", damp to saturated, poorly sorted.		SW			BENTONITE PLUG 250' to 264'	250
260								260
270								270
280							10/20 SAND PACK 264' to 289'	280
	286-289	CLAYEY SILT: light pinkish brown, 7.5 YR 5/4, dry, with trace vfg sand. Top of FGZ.		ML			4" 316 SS 0.02" SCREEN 267' to 286' 4" SCH. 10 316 SS SUMP 286' to 287'	

State Well Report No.: **375739**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB097
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	8-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	8-27-2014	**Method:**	ARCH	**Northing:**	3755870.3
Total Depth:	285 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633470.5
FGZ Depth:	284 ft.	**Logged by:**	T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-23	SILT: greyish orange, 5 YR 6/6, slightly moist, low plasticity.	ML
	23-43	SILTY CLAY: reddish brown, 2.5 YR 4/4, slightly moist, moderate plasticity.	CL
	43-62	SILT: orangeish white, 5YR 6/6, dry, very low plasticity, with fine white dust from cyclone.	ML
	62-68	SILT: orange, 5 YR 5/8, dry, very low plasticity. With trace clay.	ML
	68-91	CLAY: orange-white, 5 YR 7/3, dry, powdery. Trace silt.	CL
	91-116	SAND: light yellow, 10 YR 6/4, fg, dry, well sorted. Trace (<5%) gravel 1 1/2"-2".	SW



State Well Report No.: **378962**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB097
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	8-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	8-27-2014	**Method:**	ARCH	**Northing:**	3755870.3
Total Depth:	285 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633470.5
FGZ Depth:	284 ft.	**Logged by:**	T. Moloney	**Note:**	New Injection Well

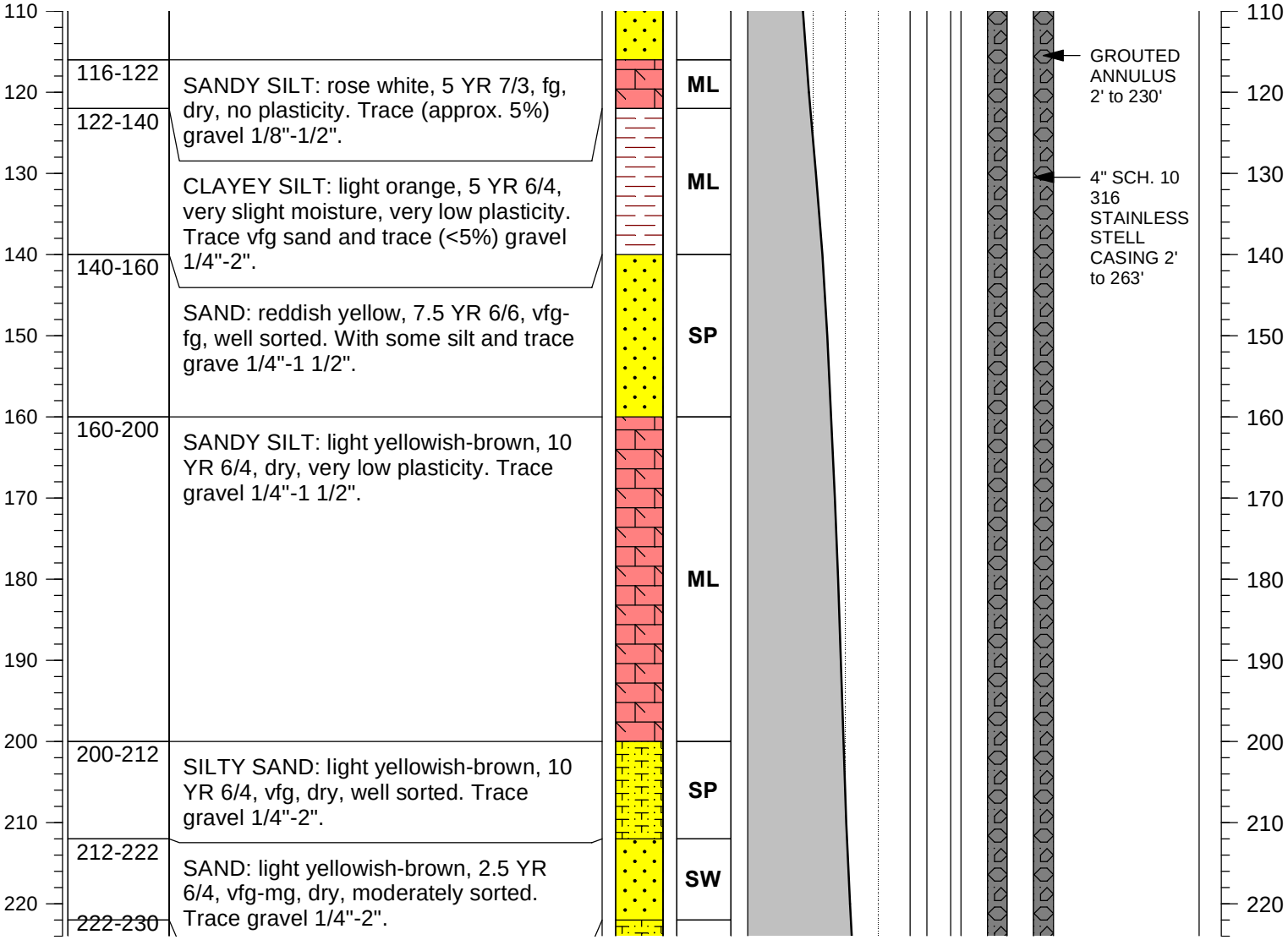
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	116-122	SANDY SILT: rose white, 5 YR 7/3, fg, dry, no plasticity. Trace (approx. 5%) gravel 1/8"-1/2".	ML
	122-140	CLAYEY SILT: light orange, 5 YR 6/4, very slight moisture, very low plasticity. Trace vfg sand and trace (<5%) gravel 1/4"-2".	ML
	140-160	SAND: reddish yellow, 7.5 YR 6/6, vfg-fg, well sorted. With some silt and trace grave 1/4"-1 1/2".	SP
	160-200	SANDY SILT: light yellowish-brown, 10 YR 6/4, dry, very low plasticity. Trace gravel 1/4"-1 1/2".	ML
	200-212	SILTY SAND: light yellowish-brown, 10 YR 6/4, vfg, dry, well sorted. Trace gravel 1/4"-2".	SP
	212-222	SAND: light yellowish-brown, 2.5 YR 6/4, vfg-mg, dry, moderately sorted. Trace gravel 1/4"-2".	SW
	222-230		

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 378962

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB097
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.8
Start Date:	8-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.9
End Date:	8-27-2014	**Method:**	ARCH	**Northing:**	3755870.3
Total Depth:	285 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633470.5
FGZ Depth:	284 ft.	**Logged by:**	T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230	230-232	SILTY SAND: light yellowish-brown, 10 YR 6/4, vfg-mg, dry, moderately well sorted. Trace gravel 1/4"-2".		SP				230
	232-244	SANDY SILT: light grey, 2.5 YR 7/2, mg-cg sand, very dry, poorly sorted. Some gravel 1/8"-1/4".		ML				
240	244-260	GRAVEL: grey, 2.5 YR 5/1, 1/16"- 1 1/2", dry, poorly sorted. Some fg-cg sand. Slow drilling.		GW			BENTONITE PLUG 230' to 260'	240
250				SP				250
260	260-284	SILTY SAND: light yellowish-brown, 2.5 YR 6/4, fg, slightly moist, well sorted. Trace gravel 1/8"-1/4".						260
270		SAND: light yellowish-brown, 2.5 YR 6/4, fg-cg, slighly moist, poorly sorted. With some silt and trace gravel 1/16"-1/2". Saturated at/below 266' bgs.		SP			10/20 SAND PACK 260' to 285'	270
280	284-285	CLAY: reddish brown, 5 YR 5/3, moist, moderate plasticity. Top of FGZ.		CL			4" SCH. 10 316 STAINLESS STEEL 0.02" SCREEN 263' to 283' 4" SCH. 10 STAINLESS STEEL SUMP 283' to 284'	280

State Well Report No.: 378962

Boring and Well Log

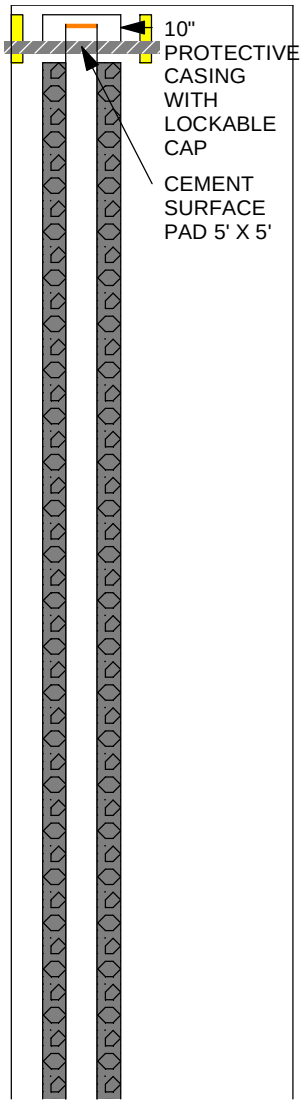
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB098
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3544.5
Start Date:	8-19-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3546.6
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755923.0
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633384.1
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove/T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
0	0-65	SILT: medium brown, 5 YR 5/8, dry, hard. Trace vfg-mg sand.		ML
	65-80	SILT: brownish-orange, 2.5 YR 4/8, slightly damp.		ML
80	80-83	SANDY GRAVEL: tannish-white, 5 YR 8/2, dry, 1/8"-3/4", subrounded to rounded, poorly sorted, caliche based. Sand fg-cg.		GW
	83-110	SILT: light tan, 7.5 YR 8/2, dry, with trace vfg sand.		ML

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



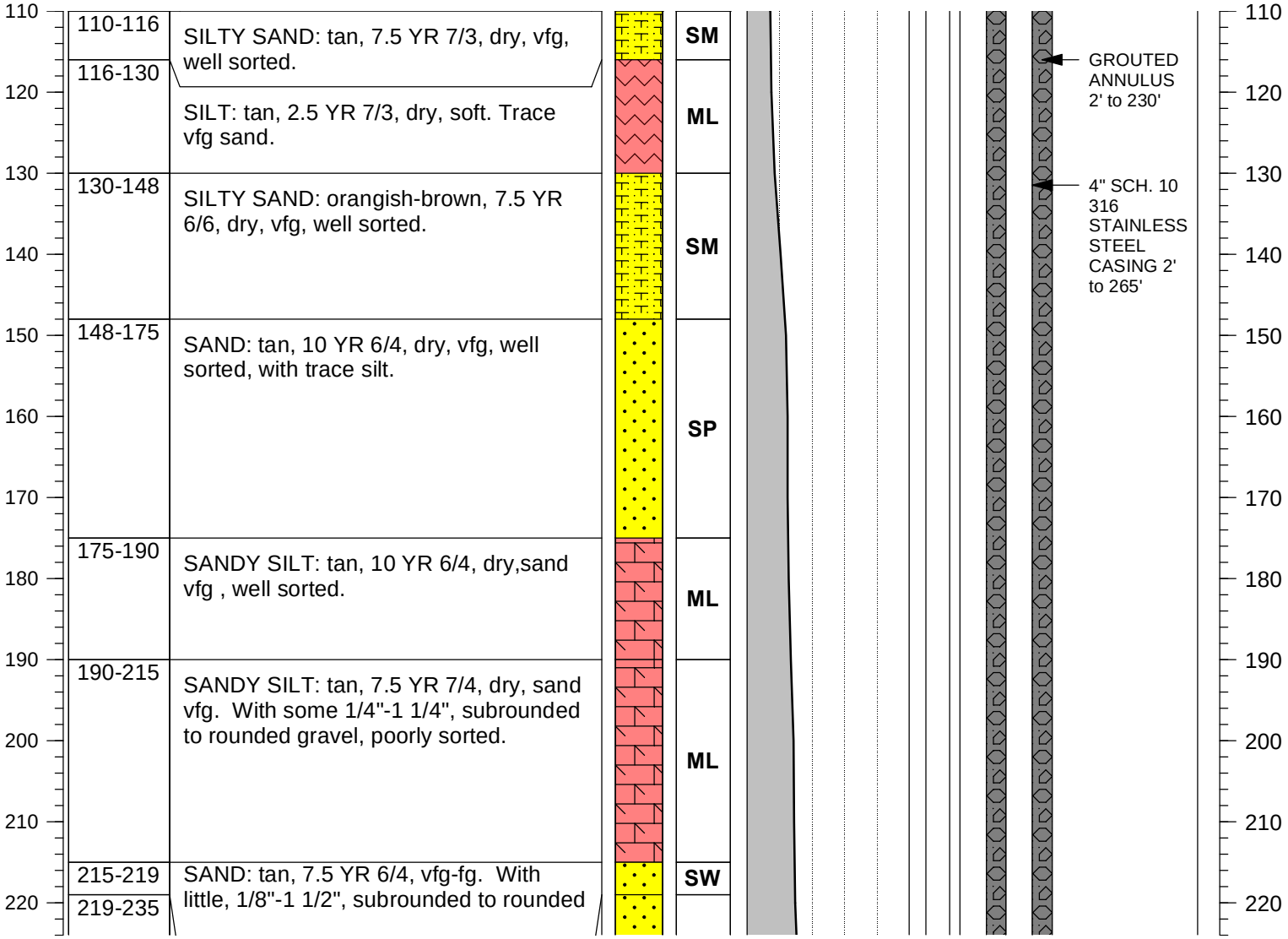
Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **378955**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB098
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3544.5
Start Date:	8-19-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3546.6
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755923.0
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633384.1
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove/T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	110-116	SILTY SAND: tan, 7.5 YR 7/3, dry, vfg, well sorted.	SM
	116-130	SILT: tan, 2.5 YR 7/3, dry, soft. Trace vfg sand.	ML
	130-148	SILTY SAND: orangish-brown, 7.5 YR 6/6, dry, vfg, well sorted.	SM
	148-175	SAND: tan, 10 YR 6/4, dry, vfg, well sorted, with trace silt.	SP
	175-190	SANDY SILT: tan, 10 YR 6/4, dry,sand vfg , well sorted.	ML
	190-215	SANDY SILT: tan, 7.5 YR 7/4, dry, sand vfg. With some 1/4"-1 1/4", subrounded to rounded gravel, poorly sorted.	ML
	215-219	SAND: tan, 7.5 YR 6/4, vfg-fg. With little, 1/8"-1 1/2", subrounded to rounded	SW
	219-235		

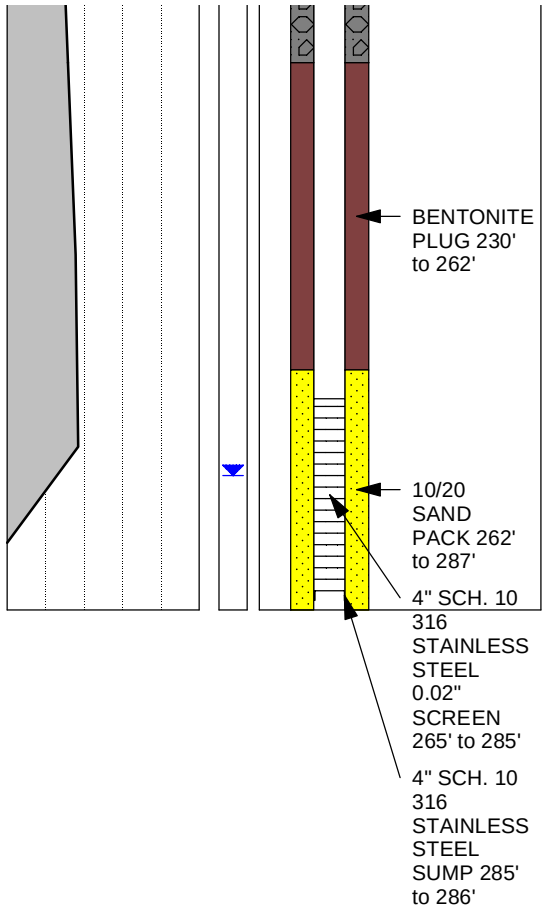


State Well Report No.: 378955

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB098
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3544.5
Start Date:	8-19-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3546.6
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755923.0
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633384.1
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove/T. Moloney	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
		gravel, poorly sorted.	
230		SAND: tan, 10 YR 7/3, dry, vfg-fg, well sorted.	SP
240	235-250	SANDY GRAVEL: tan, 10 YR 6/4, dry, 1/4"- 1 1/8", subangular to rounded, poorly sorted. Vfg-cg sand.	GW
250	250-271	SAND: orangish-tan, 10 YR 6/4, damp, vfg-fg, well sorted. Trace 3/4", subrounded to rounded gravel.	SP
260			
270	271-282	GRAVELLY SAND: tan, 7.5 YR 7/4, saturated, vfg-cg, poorly sorted. Gravel 1/4"-1", subangular to subrounded.	SW
280	282-285		SP
	285-287	SAND: tan, 7.5 YR 6/4, saturated, fg-cg, moderately sorted.	ML
		SANDY SILT: pinkish-tan, 5 YR 6/4, moist, medium plasticity. Top of FGZ.	



State Well Report No.: 378955

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB099
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.4
Start Date:	8-11-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.6
End Date:	8-11-2014	**Method:**	ARCH	**Northing:**	3755690.1
Total Depth:	287 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633757.6
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

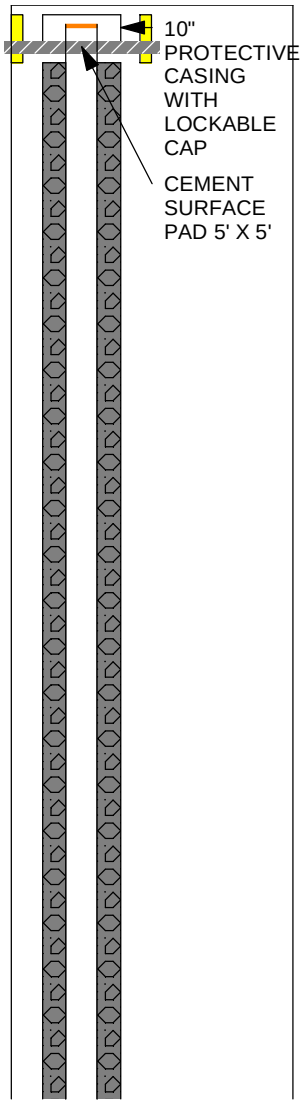
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
0	0-43	SILT: reddish tan, 5 YR 6/4, dry, trace clay.	ML
50	43-65	SANDY SILT: yellowish red, 5 YR 5/6, dry, vfg sand, trace clay.	ML
70	65-76	SILTY SAND: yellowish red, 5 YR 5/6, vfg, trace caliche nodules.	SM
80	76-87	SANDY SILT: pinkish white, 5 YR 7/4, dry.	
90	87-106	SILTY SAND: pinkish tan, 7.5 YR 7/3, dry, vfg sand, well sorted.	SM
110	106-111	SILT: light brown, 7.5 YR 6/4, with trace	ML

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **378951**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB099
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.4
Start Date:	8-11-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.6
End Date:	8-11-2014	**Method:**	ARCH	**Northing:**	3755690.1
Total Depth:	287 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633757.6
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–140	111-139	vf sand. SILTY SAND: light brown, 7.5 YR 6/4, damp, vfg-fg sand, trace poorly cemented sandstone .		SM			GROUTED ANNULUS 2' to 230' 4" SCH.10 316 SS CASING 2' to 265'	110–140
140–163	139-163	SAND: light brown, 10 YR 6/4, damp, vfg-mg, moderately sorted, with trace interbedded sandstone.		SW				140–163
163–212	163-212	SILTY SAND: light brown, 10 YR 5/4, damp, vfg-fg, well sorted.		SM				163–212
212–220	212-238	SAND: tan, 10 YR 6/4, dry, vfg-cg, subangular to subrounded, poorly sorted, with trace sandstone.						212–220

State Well Report No.: **378951**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB099
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.4
Start Date:	8-11-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.6
End Date:	8-11-2014	**Method:**	ARCH	**Northing:**	3755690.1
Total Depth:	287 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633757.6
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230				SW				230
240	238-251	SANDY GRAVEL: light brown, 10 YR 5/3, moist, 1/8"-3, subangular to subrounded, poorly sorted. Sand vfg-cg.		GW			BENTONITE PLUG 230' to 262'	240
250	251-269	SAND: light brown, 10 YR 6/4, damp, fg-cg, poorly sorted.		SW				250
260								260
270	269-274	SANDY GRAVEL: light tan, 10 YR 8/2, dry, very cemented.						270
	274-285	SAND: light brown, 10 YR 5/4, fg-cg, some gravel 1/4"-1 1/2", poorly sorted.		SW			10/20 SAND PACK 262' to 287'	
280	285-287	SANDY SILT: pinkish brown, 2.5 YR 6/6, damp, moderate plasticity, rollable. Sand, vfg. Top of FGZ.		ML			4" 316 SS 0.02" SCREEN 265' to 285' 4" SCH. 10 316 SS SUMP 285' to 286'	280

State Well Report No.: 378951

Boring and Well Log

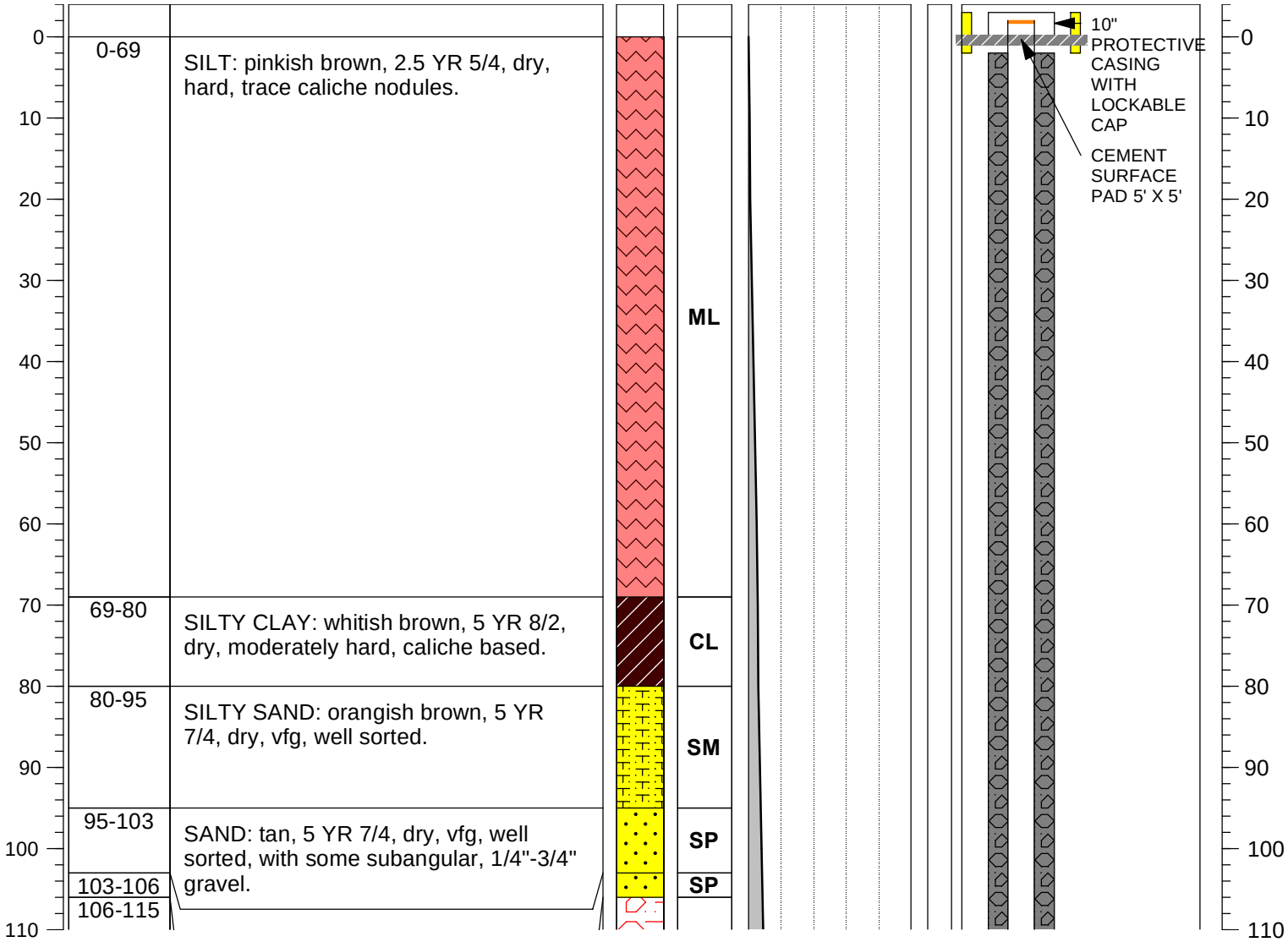
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB100A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.1
Start Date:	9-10-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	9-16-2014	**Method:**	ARCH	**Northing:**	3755646.0
Total Depth:	286 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633791.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-69	SILT: pinkish brown, 2.5 YR 5/4, dry, hard, trace caliche nodules.	ML
	69-80	SILTY CLAY: whitish brown, 5 YR 8/2, dry, moderately hard, caliche based.	CL
	80-95	SILTY SAND: orangish brown, 5 YR 7/4, dry, vfg, well sorted.	SM
	95-103	SAND: tan, 5 YR 7/4, dry, vfg, well sorted, with some subangular, 1/4"-3/4" gravel.	SP
	103-106		SP
	106-115		

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



State Well Report No.: 378948

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB100A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.1
Start Date:	9-10-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	9-16-2014	**Method:**	ARCH	**Northing:**	3755646.0
Total Depth:	286 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633791.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
110–115		SAND: tan, 5 YR 7/4, dry, vfg, well sorted.	ML
115–195	115-195	GRAVELLY SILT: orangish brown, 5 YR 7/3, dry. Gravel subangular to subrounded, 1/4"-1/2".	ML
115–195	115-195	SILT: orangish brown, 5 YR 6/4, dry, moderately plastic, intermixed trace gravel 1/4"-3/4".	ML
195–208	195-208	GRAVELLY SILT: orangish brown, 5 YR 6/4, damp. Gravel subangular to subrounded, 1/2"-1 1/2".	ML
208–218	208-218	SAND: orangish brown, 7.5 YR 6/4, dry, vfg, well sorted.	SP
218–237	218-237	GRAVELLY SAND: orangish brown, 7.5	

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction:
- GROUTED ANNULUS 2' to 235'
- 4" SCH.10 316 SS CASING 2' to 265'

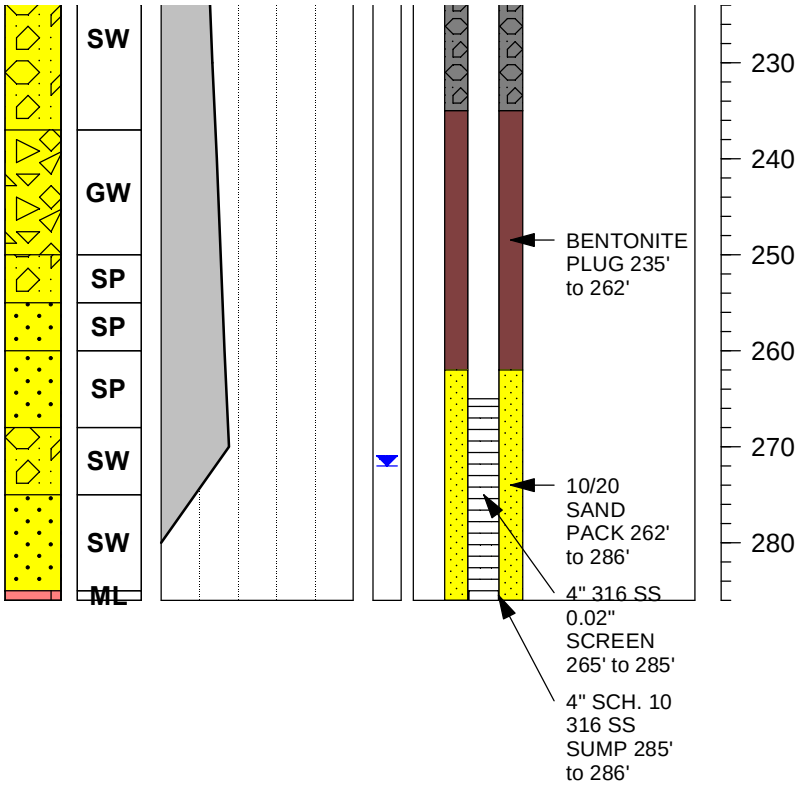
Depth (ft bgs): 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220

State Well Report No.: 378948

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB100A
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.1
Start Date:	9-10-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	9-16-2014	**Method:**	ARCH	**Northing:**	3755646.0
Total Depth:	286 ft.	**Borehole Diameter:**	9-5/8"	**Easting:**	633791.3
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230		YR 6/4, dry, vfg. Gravel 1/2"-2", poorly sorted.	SW
240	237-250	SANDY GRAVEL: orangish brown, 7.5 YR 6/4, 1/4"-1", rounded to subrounded, sand vfg-cg, poorly sorted.	GW
250	250-255	GRAVELLY SAND: orangish tan, 7.5 YR 6/6, damp, vfg, gravel 1/2"-1 1/2" subrounded to rounded, moderately well sorted.	SP
	255-260		SP
260	260-268		SP
270	268-275	SAND: orangish tan, 7.5 YR 6/6, damp-wet, fg-mg, gravel 1/4"-1" subrounded to rounded, moderately well sorted.	SW
	275-285	SAND: orangish tan, 7.5 YR 6/6, wet, fg-mg, gravel 1/4"-1" surounded to rounded, well sorted.	SW
280	285-286	GRAVELLY SAND: orangish tan, 7.5 YR 7/6, saturated, vfg-mg sand, gravel 1/4"-1", subdrounded to rounded, poorly sorted.	ML
		SAND: pinkish tan, 7.5 YR 6/6, saturated, vfg-cg, trace gravel 1/2"-1 1/2", poorly sorted.	
		SANDY SILT: pinkish brown, 2.5 YR 6/6, damp, moderate plasticity, rollable. Sand vfg. Top FGZ.	



State Well Report No.: 378948

Boring and Well Log

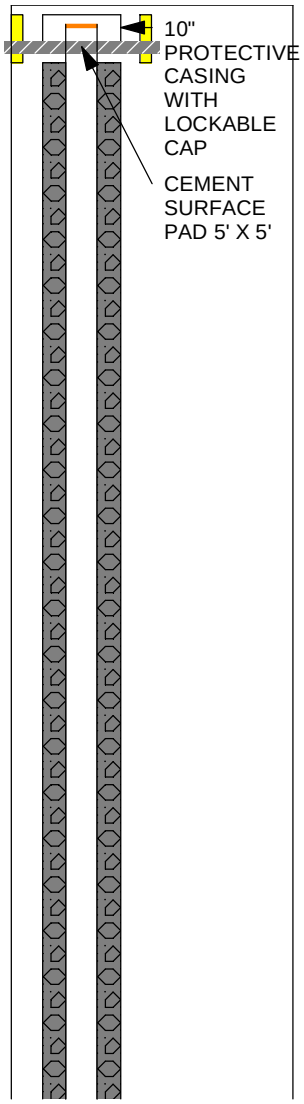
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB101
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	8-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	8-7-2014	**Method:**	ARCH	**Northing:**	3755616.9
Total Depth:	286 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633899.7
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
0	0-5	CLAY: dark brown, 10 YR 4/3, stiff, highly organic, topsoil.		OL
10	5-20	SILT: reddish brown, 5 YR 5/6, dry, stiff, with little mg-cg sand.		ML
20	20-35	SILT: medium brown/tan, 5 YR 4/6, dry, moderately hard.		ML
30				
40	35-65	SILT: reddish brown, 5 YR 5/6, with trace mg-cg sand and trace subrounded to rounded gravel to 1/2".		ML
50				
60				
70	65-70	GRAVELLY SILT: whitish tan, 5 YR 8/1, dry, soft, caliche based.		ML
	70-85	SANDY SILT: reddish brown, 5YR 6/6, dry, soft, vfg sand.		ML
80				
90	85-100	SAND: light brown, 5 YR 4/6, dry, vfg-fg, with trace 1/4" subrounded to rounded gravel, moderately sorted.		ML
100	100-110	SAND: tan , 10 YR 7/3, dry, vfg, trace subrounded gravel 1/8" to 3/8", well sorted.		SP
110				

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **375882**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB101
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	8-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	8-7-2014	**Method:**	ARCH	**Northing:**	3755616.9
Total Depth:	286 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633899.7
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110	110-140	GRAVELLY SAND: light brown, 7.5 YR 6/4, dry, vfg. Gravel 1/8"-1 1/4" rounded to subangular, poorly sorted.		SP			GROUTED ANNULUS 2' to 250'; 4" SCH.10 316 SS CASING 2' to 265'	110
120								120
130								130
140	140-170	SAND: tan, 10 YR 6/4, dry, vfg-fg, well sorted.		SP				140
150								150
160								160
170	170-230	SAND: tan, 10 YR 6/4, dry, vfg-cg, with some 1/8" to 1", subrounded to subangular gravel, poorly sorted.		SW				170
180								180
190								190
200								200
210								210
220								220

State Well Report No.: 375882

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB101
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.0
Start Date:	8-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.2
End Date:	8-7-2014	**Method:**	ARCH	**Northing:**	3755616.9
Total Depth:	286 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633899.7
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230	230-245	SANDY GRAVEL: brown, 10 YR 5/3, damp, 1/8" to 1 1/4" rounded to subangular. Sand fg-cg, poorly sorted.		GW				230
240								240
250	245-285	SAND: tan, 5 YR 6/4, damp to wet, fg-mg. With little gravel to 3/8", subrounded, poorly sorted.		SW			BENTONITE PLUG 250' to 262'	250
260								260
270							10/20 SAND PACK 262' to 286'	270
280	285-286	SANDY SILT: tan, 5 YR 4/4, vfg sand, poor plasticity. Top of FGZ.		ML			4" 316 SS 0.02" SCREEN 265' to 285' 4" SCH. 10 316 SS SUMP 285' to 286'	280

State Well Report No.: **375882**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB102
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.5
Start Date:	7-29-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.7
End Date:	7-31-2014	**Method:**	ARCH	**Northing:**	3755572.7
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633985.5
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Schaffarzick	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-73	SILT: light pinkish brown, 2.5 YR 6/4, dry, stiff, slightly plastic. Increasing sand/gravel at 65-70'.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50								50
60								60
70								70
	73-80	SANDY SILT: light yellow/tan, 2.5 YR 8/2, dry, vfg-cg, caliche based sand with some gravel 1/8"-1/2", poorly sorted.		ML				
80	80-105	SILTY SAND: pinkish tan, 5 YR 6/4, dry, vfg-cg, with trace subrounded, 1/8"-3/4" gravel, poorly sorted.		SM				80
90								90
100								100
	105-115	SAND: tan, 5 YR 7/3, dry, fg. With trace		SW				
110								110

State Well Report No.: **375883**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB102
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.5
Start Date:	7-29-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.7
End Date:	7-31-2014	**Method:**	ARCH	**Northing:**	3755572.7
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633985.5
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Schaffarzick	**Note:**	New Injection Well

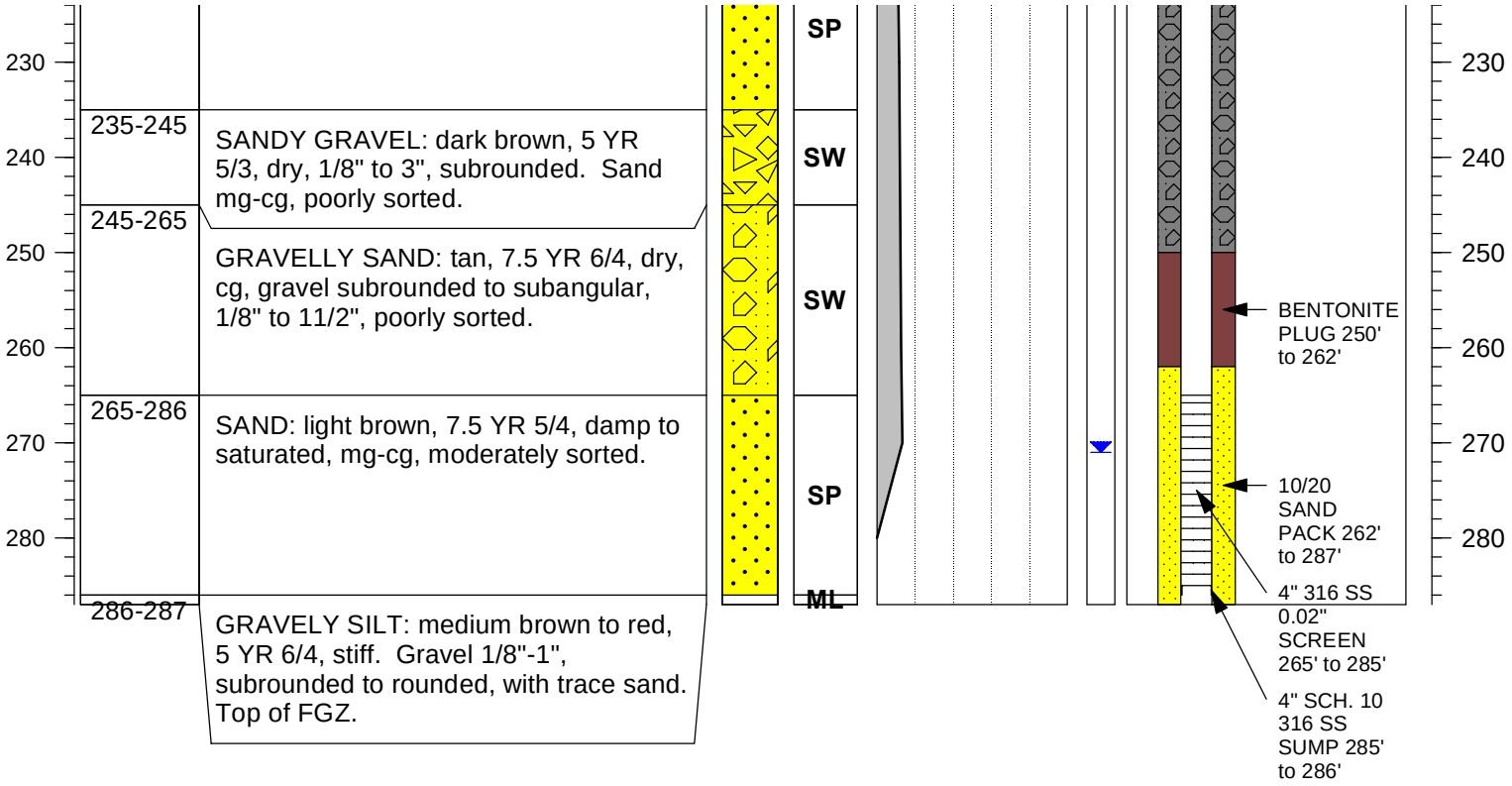
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
		1/8" to 1/4", subrounded to subangular gravel, poorly sorted.						
	115-130	SILT: light reddish brown, 5 YR 5/6, trace coarse sub-rounded sand and fine sub-rounded gravel.		ML				
	130-160	SAND: light brown, 5YR 5/6, dry, fg-mg, subrounded, well sorted.		SP			GROUTED ANNULUS 2' to 250'; 4" SCH.10 316 SS CASING 2' to 265'	
	160-170	SAND: tan, 5 YR 4/6, dry, fg-mg, with some subrounded gravel 1/8" to 1 1/2", poorly sorted.		SP				
	170-215	SAND: light brown, 5 YR 4/6, dry, fg, well sorted.		SP				
	215-235	SAND: light brown, 5 YR 4/6, dry, mg, becoming damp at 230'.						

State Well Report No.: 375883

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB102
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.5
Start Date:	7-29-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.7
End Date:	7-31-2014	**Method:**	ARCH	**Northing:**	3755572.7
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633985.5
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove/J. Schaffarzick	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	235-245	SANDY GRAVEL: dark brown, 5 YR 5/3, dry, 1/8" to 3", subrounded. Sand mg-cg, poorly sorted.	SW
	245-265	GRAVELLY SAND: tan, 7.5 YR 6/4, dry, cg, gravel subrounded to subangular, 1/8" to 11/2", poorly sorted.	SW
	265-286	SAND: light brown, 7.5 YR 5/4, damp to saturated, mg-cg, moderately sorted.	SP
	286-287	GRAVELY SILT: medium brown to red, 5 YR 6/4, stiff. Gravel 1/8"-1", subrounded to rounded, with trace sand. Top of FGZ.	ML



State Well Report No.: 375883

Boring and Well Log

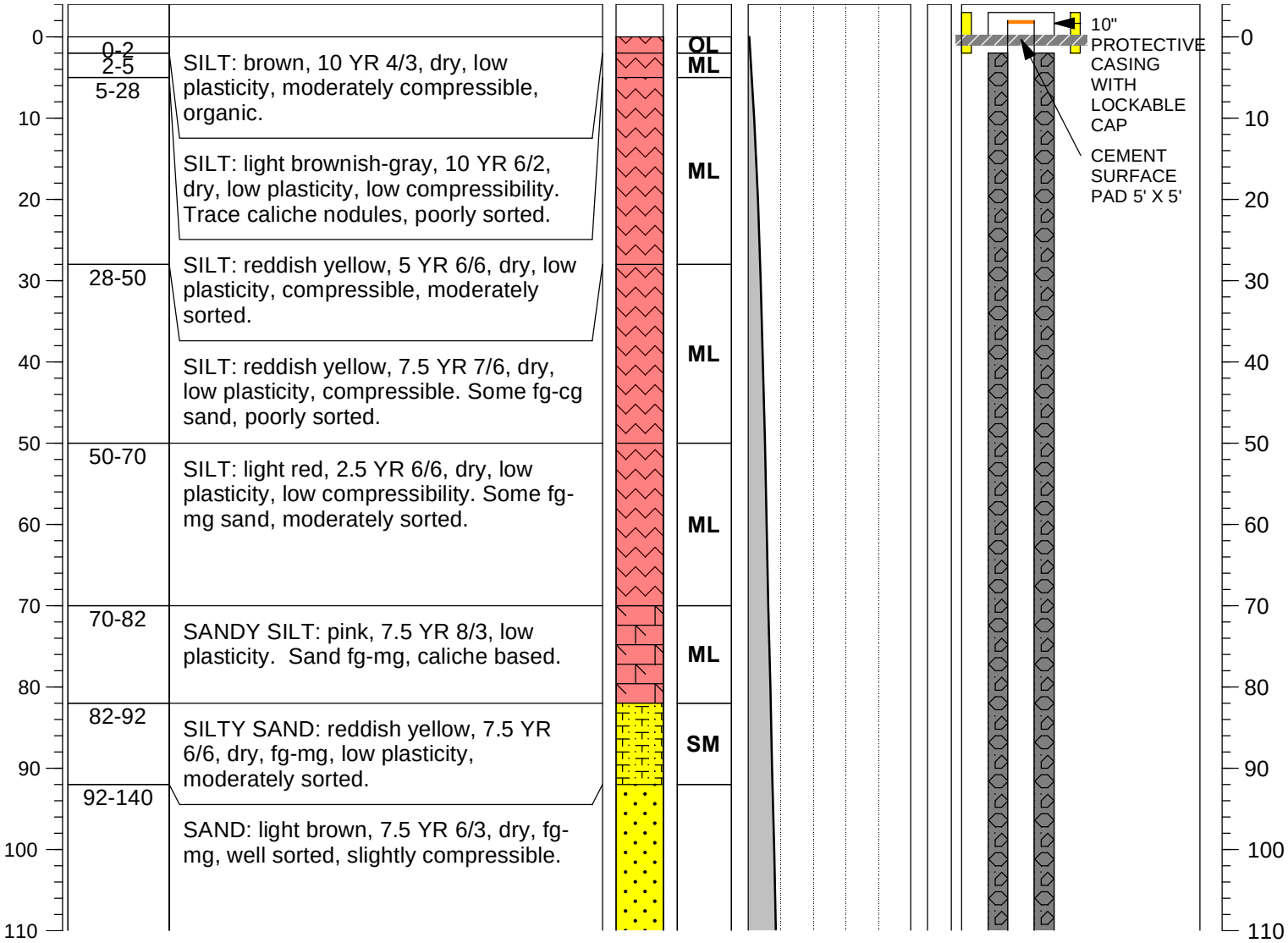
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB103
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.2
Start Date:	8-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.4
End Date:	9-2-2014	**Method:**	ARCH	**Northing:**	3755527.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634073.5
FGZ Depth:	284 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-2	SILT: brown, 10 YR 4/3, dry, low plasticity, moderately compressible, organic.	OL
	2-5		ML
	5-28	SILT: light brownish-gray, 10 YR 6/2, dry, low plasticity, low compressibility. Trace caliche nodules, poorly sorted.	ML
	28-50	SILT: reddish yellow, 5 YR 6/6, dry, low plasticity, compressible, moderately sorted.	ML
		SILT: reddish yellow, 7.5 YR 7/6, dry, low plasticity, compressible. Some fg-cg sand, poorly sorted.	
	50-70	SILT: light red, 2.5 YR 6/6, dry, low plasticity, low compressibility. Some fg-mg sand, moderately sorted.	ML
	70-82	SANDY SILT: pink, 7.5 YR 8/3, low plasticity. Sand fg-mg, caliche based.	ML
	82-92	SILTY SAND: reddish yellow, 7.5 YR 6/6, dry, fg-mg, low plasticity, moderately sorted.	SM
	92-140	SAND: light brown, 7.5 YR 6/3, dry, fg-mg, well sorted, slightly compressible.	

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 378942

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB103
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.2
Start Date:	8-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.4
End Date:	9-2-2014	**Method:**	ARCH	**Northing:**	3755527.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634073.5
FGZ Depth:	284 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
				SP			GROUTED ANNULUS 2' to 230'; 4" SCH.10 316 SS CASING 2' to 264'	
	140-152	SILTY SAND: light brown, 7.5 YR 6/4, dry, fg-mg, medium sorting, low plasticity, compressible.		SM				
	152-176	SAND: brownish yellow, 10 YR 6/6, dry, fg-mg, well sorted, compressible.		SP				
	176-195	SILT: brownish yellow, 10 YR 6/8, dry, low plasticity, compressible. Some fg-mg sand, moderately sorted.		ML				
	195-234	SAND: pale brown, 10 YR 7/4, dry, fg-mg, well sorted, low plasticity, not compressible.		SP				

State Well Report No.: 378942

Boring and Well Log

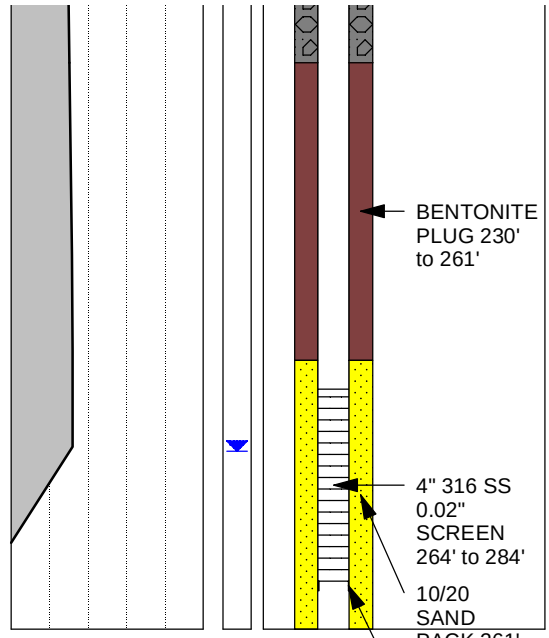
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB103
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.2
Start Date:	8-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.4
End Date:	9-2-2014	**Method:**	ARCH	**Northing:**	3755527.4
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634073.5
FGZ Depth:	284 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230			
240	234-240	GRAVELLY SAND: grayish brown, 10 YR 5/2, mg-cg, poorly sorted. Gravel, fg-mg pebble, subrounded to rounded.	SW
	240-250		GW
250	250-262	SANDY GRAVEL: orangish brown, 7.5 YR 6/4, damp, 1/4"-1 1/2", subangular to rounded, poorly sorted. Sand, vfg-mg.	SP
260	262-284	SAND: orangish brown, 2.5 YR 6/4, damp, vfg, well sorted.	
270		SAND: orangish brown, 2.5 YR 6/4, wet, vfg-cg, poorly sorted. Trace gravel, <= 1 1/4", subrounded.	SW
280	284-289	SILT: brownish pink, 5 YR 6/6, dry, stiff. Trace sand, vfg. Top of FGZ.	ML

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 230, 240, 250, 260, 270, 280

State Well Report No.: 378942

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB104
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.6
Start Date:	8-19-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.8
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755482.4
Total Depth:	291 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634160.4
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

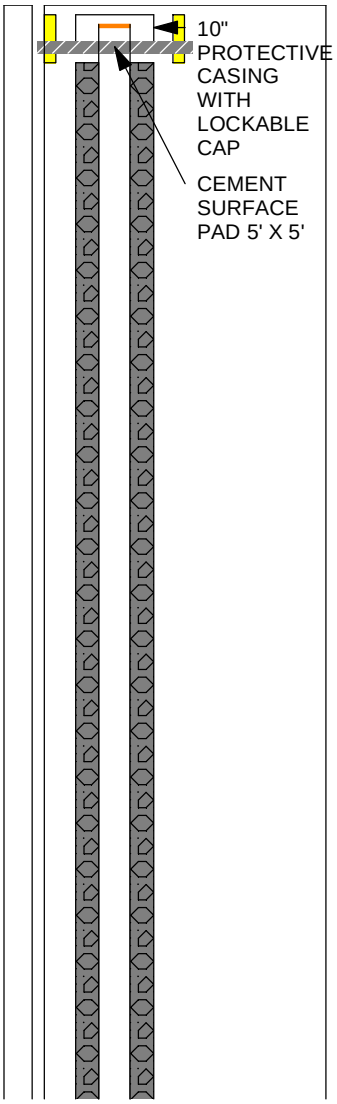
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-3	SILT: brown, 7.5 YR 4/3, dry, trace organic matter, low plasticity, some clay.	OL
	3-15	SILT: light brown, 7.5 YR 6/3, dry, trace caliche nodules, moderately sorted, low plasticity.	ML
	15-30	SILT: reddish yellow, 7.5 YR 6/6, dry, moderately sorted, compressible, low plasticity.	ML
	30-50	SILT: yellowish red, 5 YR 5/6, dry, moderately sorted, some fg-mg sand, low plasticity.	ML
	50-74	SILT: reddish brown, 5 YR 4/4, dry, compressible, low plasticity, moderately sorted.	ML
	74-88	SANDY SILT: pink, 7.5 YR 8/3, mg-fg sand, medium-poor sorting, trace caliche.	ML
	88-110	SILTY SAND: reddish yellow, 5 YR 6/6, dry, fg-mg, low plasticity, moderately sorted.	SM

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.: **378940**

Boring and Well Log

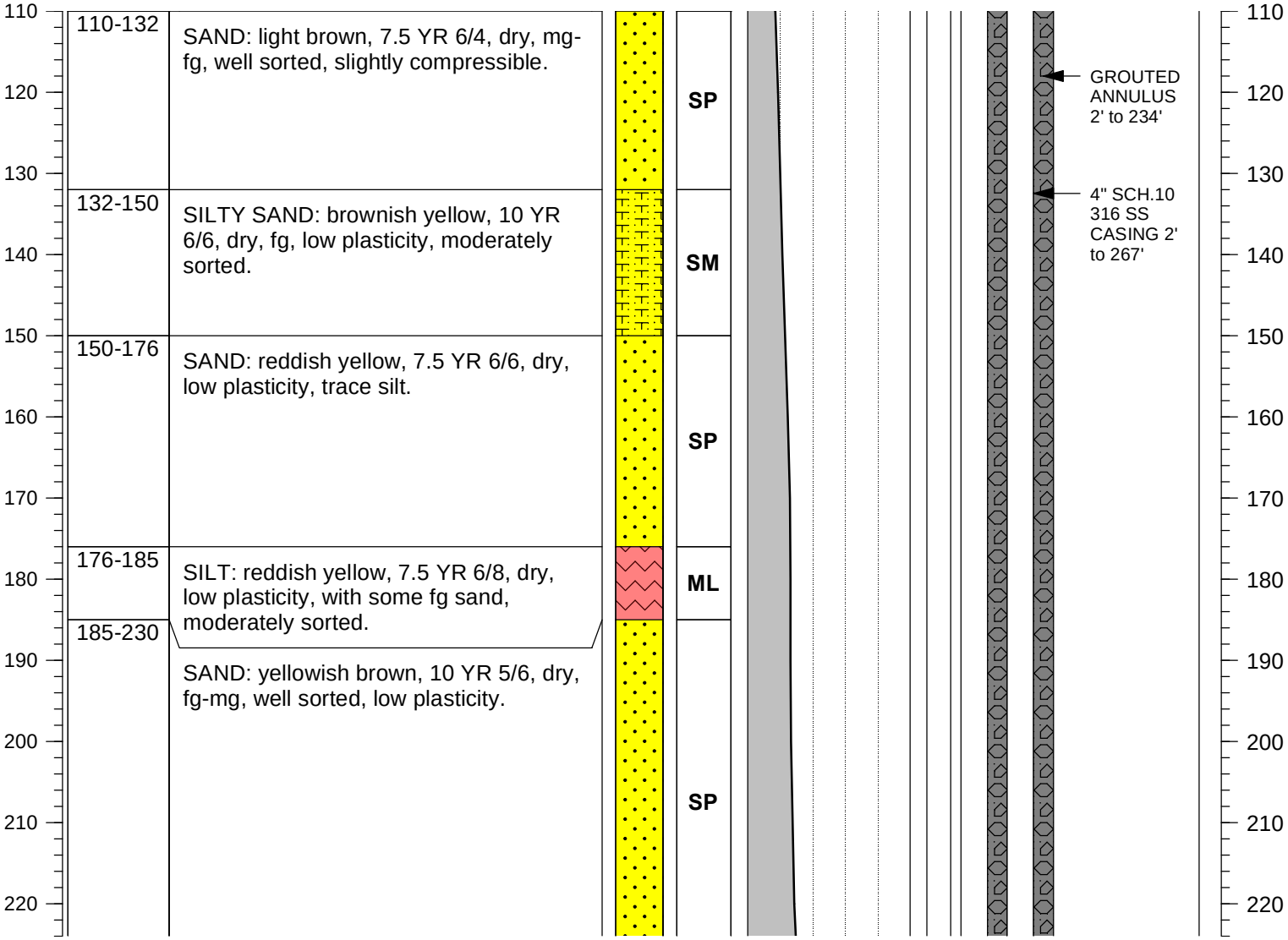
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB104
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.6
Start Date:	8-19-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.8
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755482.4
Total Depth:	291 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634160.4
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
	110-132	SAND: light brown, 7.5 YR 6/4, dry, mg-fg, well sorted, slightly compressible.		SP
	132-150	SILTY SAND: brownish yellow, 10 YR 6/6, dry, fg, low plasticity, moderately sorted.		SM
	150-176	SAND: reddish yellow, 7.5 YR 6/6, dry, low plasticity, trace silt.		SP
	176-185	SILT: reddish yellow, 7.5 YR 6/8, dry, low plasticity, with some fg sand, moderately sorted.		ML
	185-230	SAND: yellowish brown, 10 YR 5/6, dry, fg-mg, well sorted, low plasticity.		SP

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



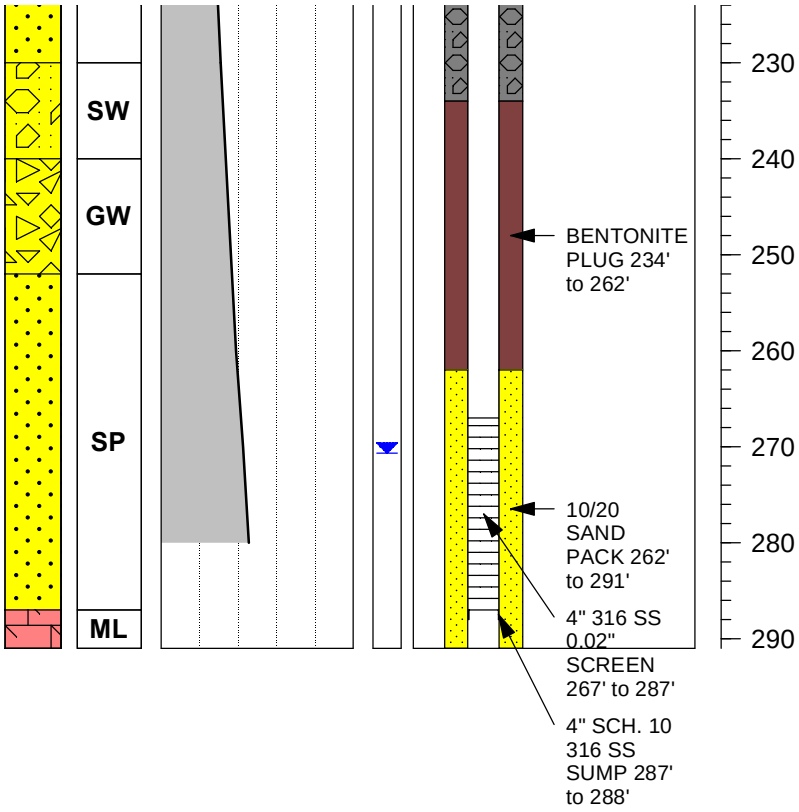
Depth (ft bgs)

State Well Report No.: 378940

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB104
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.6
Start Date:	8-19-14	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.8
End Date:	8-19-2014	**Method:**	ARCH	**Northing:**	3755482.4
Total Depth:	291 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634160.4
FGZ Depth:	287 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	230-240	GRAVELLY SAND: brownish yellow, 10 YR 6/6, dry, mg-cg, with fine pebble gravel, poorly sorted.	SW
240	240-252	SANDY GRAVEL: brown, 10 YR 5/3, dry, fine pebble gravel, mg sand, poorly sorted.	GW
250	252-287	SAND: brown, 10 YR 5/3, dry to wet, mg, with trace fine pebble gravel, moderately sorted.	SP
260			
270			
280			
290	287-291	SANDY SILT: pink, 5 YR 7/4, sand fg, rollable, high placticity, compressible. Top of FGZ.	ML



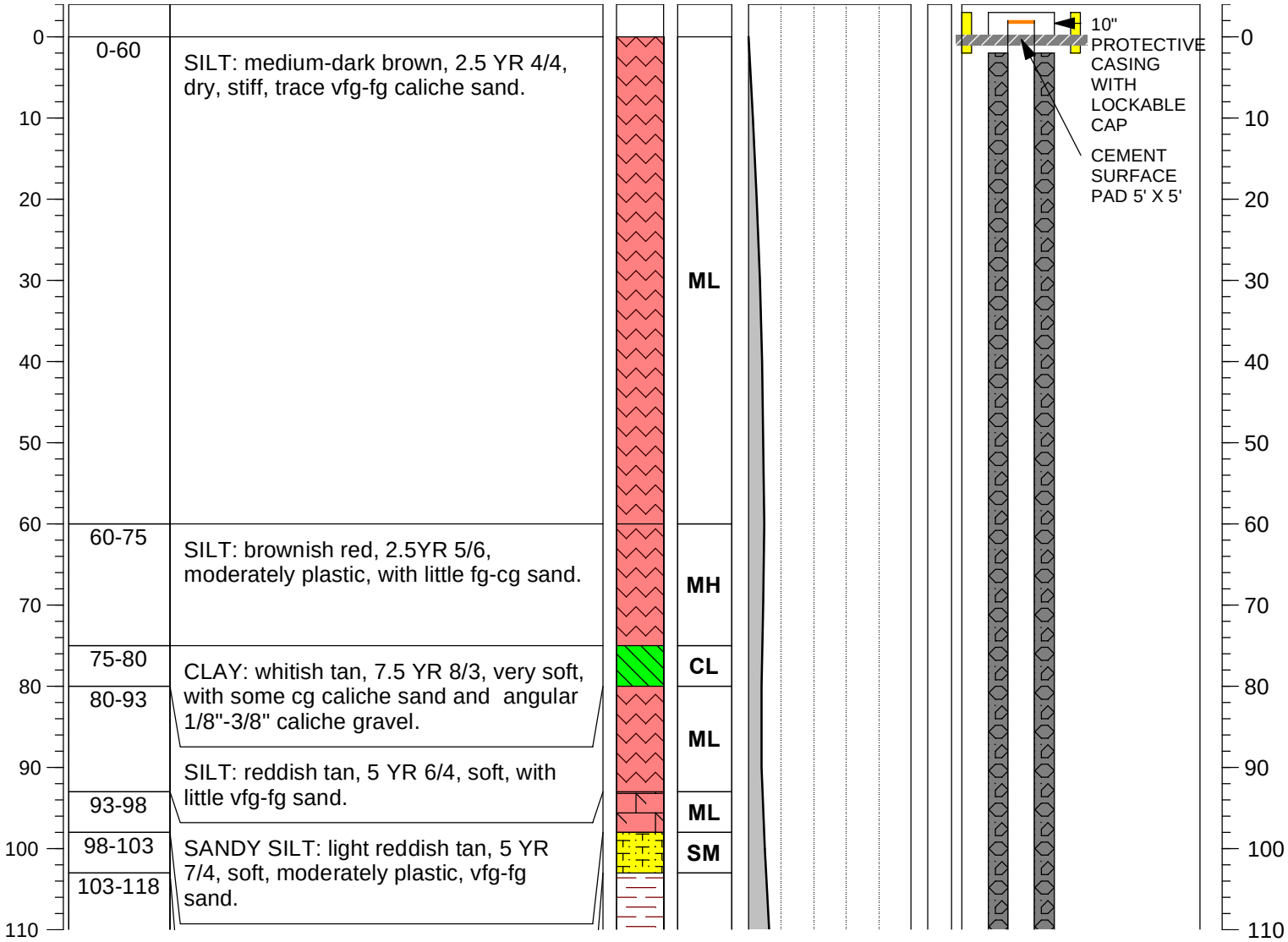
State Well Report No.: 378940

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB105
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-30-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.5
End Date:	8-6-2014	**Method:**	Mud Rotary	**Northing:**	3755438.2
Total Depth:	287 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634245.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-60	SILT: medium-dark brown, 2.5 YR 4/4, dry, stiff, trace vfg-fg caliche sand.	ML
	60-75	SILT: brownish red, 2.5YR 5/6, moderately plastic, with little fg-cg sand.	MH
	75-80	CLAY: whitish tan, 7.5 YR 8/3, very soft, with some cg caliche sand and angular 1/8"-3/8" caliche gravel.	CL
	80-93	SILT: reddish tan, 5 YR 6/4, soft, with little vfg-fg sand.	ML
	93-98		ML
	98-103	SANDY SILT: light reddish tan, 5 YR 7/4, soft, moderately plastic, vfg-fg sand.	SM
	103-118		

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)



State Well Report No.: 375884

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB105
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-30-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.5
End Date:	8-6-2014	**Method:**	Mud Rotary	**Northing:**	3755438.2
Total Depth:	287 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634245.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

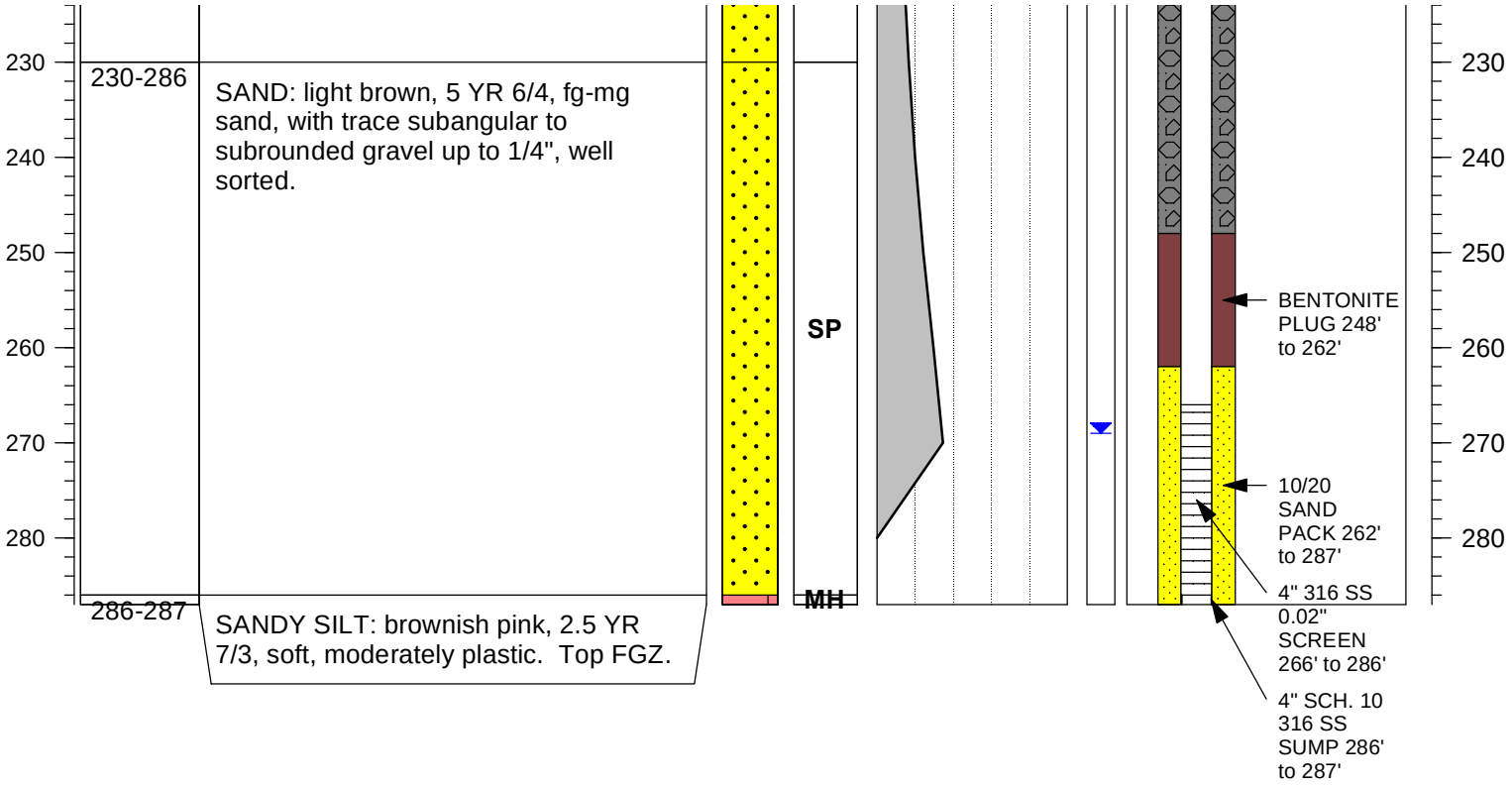
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–120		SILTY SAND: tan/reddish brown, 5 YR 7/4, soft, vfg-cg sand, poorly sorted.		MH				110–120
120–130	118-132	CLAYEY SILT: light brown, 10 YR 6/4, soft, rollable, moderately plastic, sand mg-cg , becoming less plastic with depth.		MH			GROUTED ANNULUS 2' to 248'	120–130
130–140	132-170	SANDY SILT: light brown, 2.5 YR 7/6, rollable, moderately soft, sand vfg-fg.					4" SCH.10 316 SS CASING 2' to 266'	130–140
140–150		SILTY SAND: light brown, 7.5 YR 7/6, fg-cg, with trace to 1/4" subangular to subrounded gravel, poorly sorted.		SM				140–150
150–160								150–160
160–170								160–170
170–180	170-210	SAND: light brown, 5 YR 6/4, vfg-mg, with little silt and trace gravel at varying intervals, moderately sorted.		SM				170–180
180–190								180–190
190–200								190–200
200–210								200–210
210–220	210-230	SAND: light brown, 5 TR 6/4, vfg-fg. Trace subangular to subrounded gravel up to 1/4", well sorted.		SP				210–220

State Well Report No.: **375884**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB105
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.4
Start Date:	7-30-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.5
End Date:	8-6-2014	**Method:**	Mud Rotary	**Northing:**	3755438.2
Total Depth:	287 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634245.6
FGZ Depth:	286 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230	230-286	SAND: light brown, 5 YR 6/4, fg-mg sand, with trace subangular to subrounded gravel up to 1/4", well sorted.		SP			BENTONITE PLUG 248' to 262'; 10/20 SAND PACK 262' to 287'; 4" 316 SS 0.02" SCREEN 266' to 286'; 4" SCH. 10 316 SS SUMP 286' to 287'	230
240								240
250								250
260								260
270								270
280	286-287	SANDY SILT: brownish pink, 2.5 YR 7/3, soft, moderately plastic. Top FGZ.		MH				280



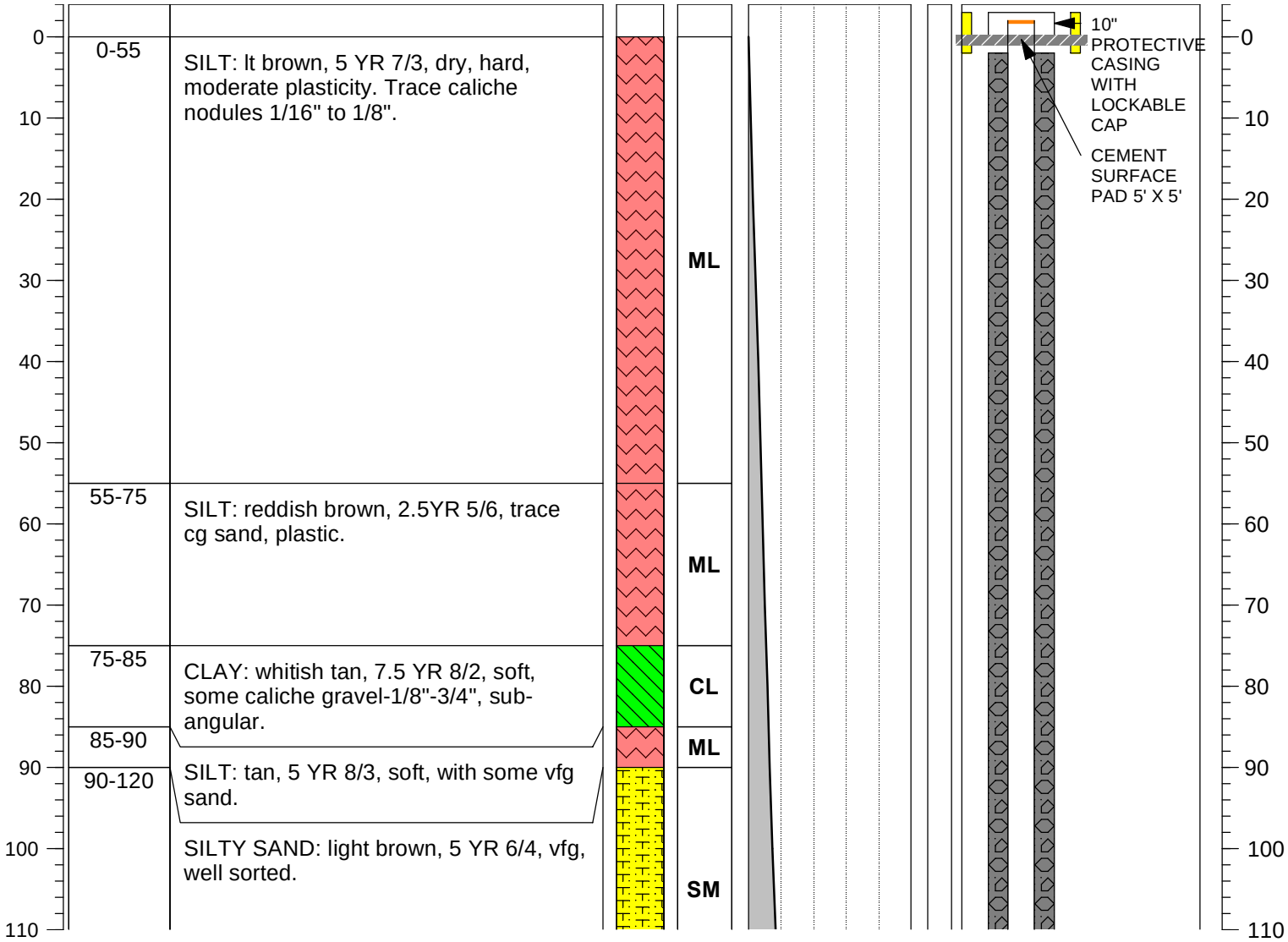
State Well Report No.: 375884

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB106
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.0
Start Date:	7-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.1
End Date:	7-29-2014	**Method:**	Mud Rotary	**Northing:**	3755393.4
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634332.5
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-55	SILT: lt brown, 5 YR 7/3, dry, hard, moderate plasticity. Trace caliche nodules 1/16" to 1/8".	ML
	55-75	SILT: reddish brown, 2.5YR 5/6, trace cg sand, plastic.	ML
	75-85	CLAY: whitish tan, 7.5 YR 8/2, soft, some caliche gravel-1/8"-3/4", sub-angular.	CL
	85-90	SILT: tan, 5 YR 8/3, soft, with some vfg sand.	ML
	90-120	SILTY SAND: light brown, 5 YR 6/4, vfg, well sorted.	SM

Lithology | Deviation Survey Closure Distance (ft) 0 ft – 5 ft | Water Level | Well Construction | Depth (ft bgs)



State Well Report No.: 375885

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB106
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.0
Start Date:	7-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.1
End Date:	7-29-2014	**Method:**	Mud Rotary	**Northing:**	3755393.4
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634332.5
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
120	120-126	SILT: light brown, 5 YR 6/4, soft, easily rollable, with some vfg sand, well sorted.		ML			GROUTED ANNULUS 2' to 250'; 4" SCH.10 316 SS CASING 2' to 265'	120
130	126-175	SILTY SAND: light brown, 5 YR 6/4, vfg, with trace subrounded to rounded gravel to 1/8", well sorted.		SM				130
140								140
150								150
160								160
170								170
180	175-178			SM				180
	178-225	SILTY SAND: light brown, 5 YR 6/4, mg-cg, with some clay, moderately sorted.						
190		SAND: light brown, 5 YR 6/4, vfg-fg, with trace silt, moderately well sorted.		SP				190
200								200
210								210
220								220

State Well Report No.: 375885

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-ISB106
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.0
Start Date:	7-27-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.1
End Date:	7-29-2014	**Method:**	Mud Rotary	**Northing:**	3755393.4
Total Depth:	289 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634332.5
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Injection Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230	225-285	SAND: light brown, 5 YR 6/4, vfg-cg,, with little subrounded to subangular gravel, 1/16"-1/4", poorly sorted.		SW			BENTONITE PLUG 250' to 262'; 4" 316 SS 0.02" SCREEN 265' to 285'; 10/20 SAND PACK 262' to 289'; 4" SCH. 10 316 SS SUMP 285' to 286'	230
240								240
250								250
260								260
270								270
280	285-289	SILT: brownish pink, 2.5 YR 6/6, soft, with some fg sand. Topof FGZ.		ML				280

State Well Report No.: **375885**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1169
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3537.6
Start Date:	8-9-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3539.7
End Date:	8-11-2014	**Method:**	Mud Rotary	**Northing:**	3755241.7
Total Depth:	285 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634899.6
FGZ Depth:	282 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-48	SILT: reddish brown, 2.5 YR 6/6, dry, hard, stiff.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50	48-70	SILT: reddish brown, 2.5 YR 5/6, trace mg-cg sand and trace 1/2"-3/8", angular gravel, some caliche.		ML				50
60								60
70	70-77	CLAYEY SILT: whitish grey, 5 YR 7/2, saturated caliche with trace vfg sand, rollable.		ML				70
80	77-85			ML				80
	85-105	SANDY SILT: pinkish brown, 5 YR 6/4, soft, rollable, with some vfg sand.						
90		SILT: pinkish brown, 5YR 6/6, wth little vfg sand, moderately stiff.		ML				90
100								100
	105-116	SAND: light brown, 7.5 YR 6/4, vfg with						
110								110

State Well Report No.: 379053

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1169
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3537.6
Start Date:	8-9-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3539.7
End Date:	8-11-2014	**Method:**	Mud Rotary	**Northing:**	3755241.7
Total Depth:	285 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634899.6
FGZ Depth:	282 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

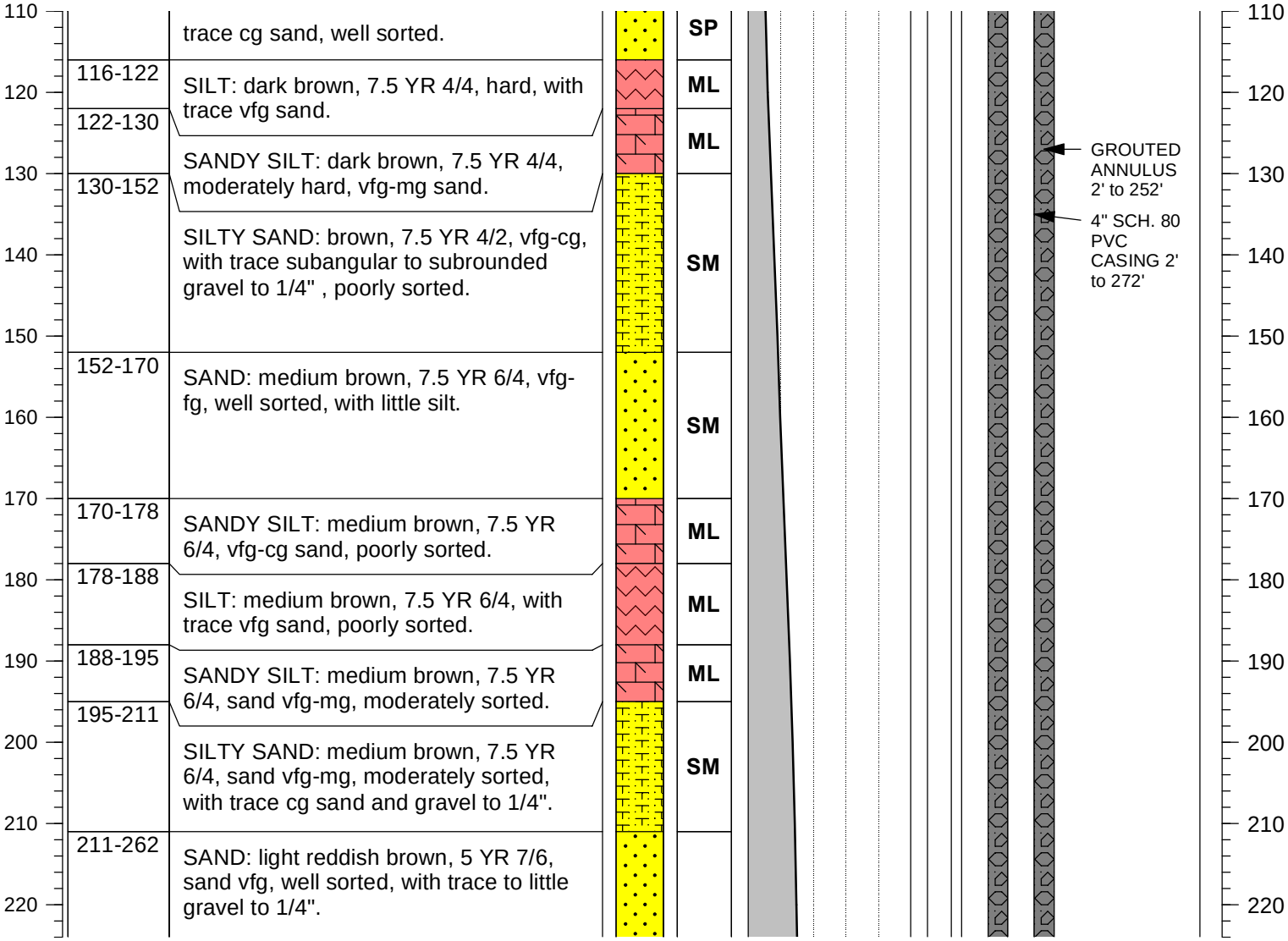
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
		trace cg sand, well sorted.	SP
	116-122	SILT: dark brown, 7.5 YR 4/4, hard, with trace vfg sand.	ML
	122-130	SANDY SILT: dark brown, 7.5 YR 4/4, moderately hard, vfg-mg sand.	ML
	130-152	SILTY SAND: brown, 7.5 YR 4/2, vfg-cg, with trace subangular to subrounded gravel to 1/4" , poorly sorted.	SM
	152-170	SAND: medium brown, 7.5 YR 6/4, vfg-fg, well sorted, with little silt.	SM
	170-178	SANDY SILT: medium brown, 7.5 YR 6/4, vfg-cg sand, poorly sorted.	ML
	178-188	SILT: medium brown, 7.5 YR 6/4, with trace vfg sand, poorly sorted.	ML
	188-195	SANDY SILT: medium brown, 7.5 YR 6/4, sand vfg-mg, moderately sorted.	ML
	195-211	SILTY SAND: medium brown, 7.5 YR 6/4, sand vfg-mg, moderately sorted, with trace cg sand and gravel to 1/4".	SM
	211-262	SAND: light reddish brown, 5 YR 7/6, sand vfg, well sorted, with trace to little gravel to 1/4".	

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 379053

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1169
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3537.6
Start Date:	8-9-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3539.7
End Date:	8-11-2014	**Method:**	Mud Rotary	**Northing:**	3755241.7
Total Depth:	285 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634899.6
FGZ Depth:	282 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

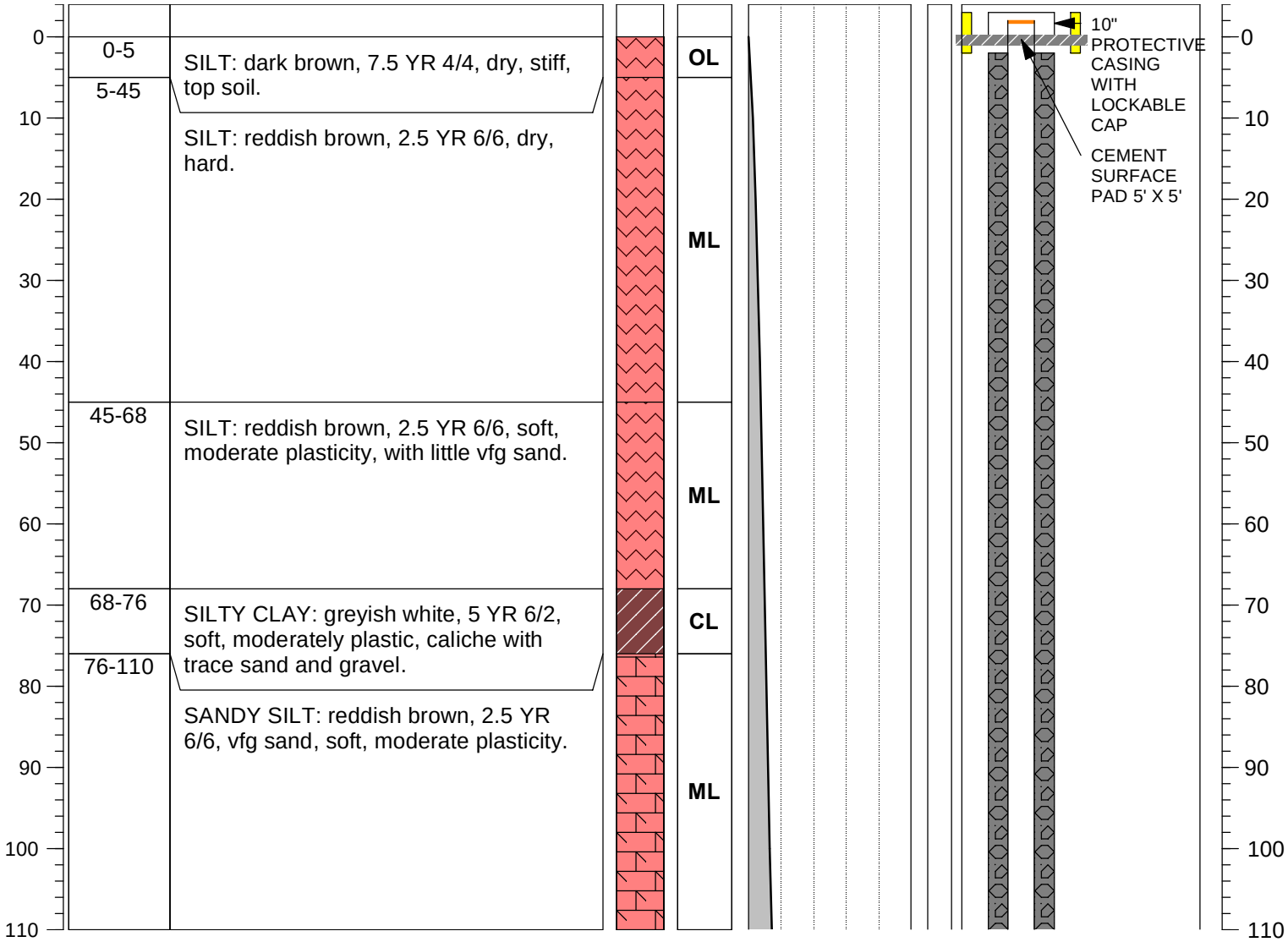
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230, 240, 250, 260, 270, 280	262-282	SAND: light brown, 5 YR 6/4, vfg-cg, predominatly vfg-fg, poorly sorted.		SP, SW			BENTONITE PLUG 252' to 268'; 10/20 SAND PACK 268' to 285'; 4" SCH. 80 PVC 0.02" SCREEN 272' to 282'; 4" SCH. 80 PVC SUMP 282' to 283'	230, 240, 250, 260, 270, 280
	282-285	SANDY SILT: light pinkish brown, 5 YR 6/6, soft, rollable. Top of FGZ.		ML				

State Well Report No.: 379053

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1170
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3540.6
Start Date:	8-6-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3542.7
End Date:	8-9-2014	**Method:**	Mud Rotary	**Northing:**	3755442.7
Total Depth:	287 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634569.7
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-5	SILT: dark brown, 7.5 YR 4/4, dry, stiff, top soil.	OL
	5-45	SILT: reddish brown, 2.5 YR 6/6, dry, hard.	ML
	45-68	SILT: reddish brown, 2.5 YR 6/6, soft, moderate plasticity, with little vfg sand.	ML
	68-76	SILTY CLAY: greyish white, 5 YR 6/2, soft, moderately plastic, caliche with trace sand and gravel.	CL
	76-110	SANDY SILT: reddish brown, 2.5 YR 6/6, vfg sand, soft, moderate plasticity.	ML



State Well Report No.: **375729**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1170
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3540.6
Start Date:	8-6-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3542.7
End Date:	8-9-2014	**Method:**	Mud Rotary	**Northing:**	3755442.7
Total Depth:	287 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634569.7
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

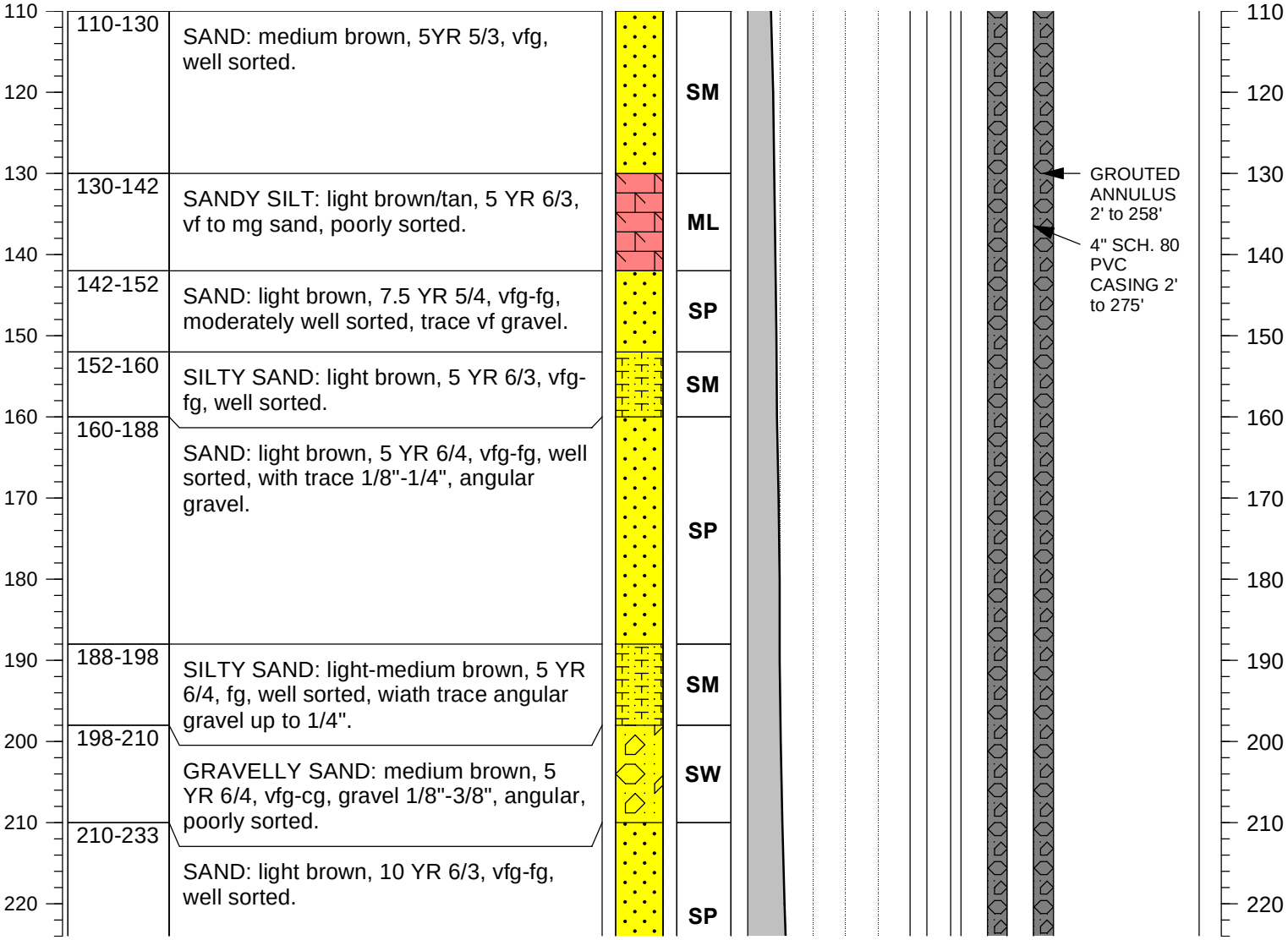
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	110-130	SAND: medium brown, 5YR 5/3, vfg, well sorted.	SM
	130-142	SANDY SILT: light brown/tan, 5 YR 6/3, vf to mg sand, poorly sorted.	ML
	142-152	SAND: light brown, 7.5 YR 5/4, vfg-fg, moderately well sorted, trace vf gravel.	SP
	152-160	SILTY SAND: light brown, 5 YR 6/3, vfg-fg, well sorted.	SM
	160-188	SAND: light brown, 5 YR 6/4, vfg-fg, well sorted, with trace 1/8"-1/4", angular gravel.	SP
	188-198	SILTY SAND: light-medium brown, 5 YR 6/4, fg, well sorted, wiath trace angular gravel up to 1/4".	SM
	198-210	GRAVELLY SAND: medium brown, 5 YR 6/4, vfg-cg, gravel 1/8"-3/8", angular, poorly sorted.	SW
	210-233	SAND: light brown, 10 YR 6/3, vfg-fg, well sorted.	SP

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 375729

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1170
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3540.6
Start Date:	8-6-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3542.7
End Date:	8-9-2014	**Method:**	Mud Rotary	**Northing:**	3755442.7
Total Depth:	287 ft.	**Borehole Diameter:**	8 3/4"	**Easting:**	634569.7
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230								230
240	233-245	GRAVELLY SAND: medium brown, 5 YR 6/4, fg-cg, gravel 1/8"-1/2", angular to sub-ounded, poorly sorted.		SW				240
250	245-285	SAND: medium brown, 5YR 6/4, fg-cg, with trace fg, subangular to subrounded gravel, poorly sorted.		SW				250
260								260
270							BENTONITE PLUG 258' to 272'	270
280							10/20 SAND PACK 272' to 287'	280
	285-287	SANDY SILT: tannish-pink, sandy silt, soft. Top of FGZ.		ML			4" SCH. 80 PVC 0.02" SCREEN 275' to 285' 4" SCH. 80 PVC SUMP 285' to 286'	

State Well Report No.: **375729**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1171
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.4
Start Date:	7-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.5
End Date:	7-28-2014	**Method:**	ARCH	**Northing:**	3755715.1
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634374.0
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-47	SILT: reddish brown 2.5 YR 6/3, dry, dense, with little clayand trace fg sand.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50	47-64	SANDY SILT: reddish yellow, 7.5 YR 6/6, dry, sand vfg-fg.		ML				50
60								60
70	64-73	SILTY SAND: reddish brown, 2.5 YR 4/8, damp, vfg-fg, with trace clay and caliche nodules.		SM				70
	73-79			ML				
80	79-88	SILTY CLAY: whitish pink, 5 YR 7/4, dry, calich based.		SM				80
90	88-103	SANDY SILT: pinkish tan, 5 YR 5/4, dry, vfg-fg sand, with little caliche nodules.		ML				90
100		SILT: tan, 5YR 6/4, dry, trace caliche nodules.						100
	103-175	SAND: light brown, 10 YR 6/4, dry, fg,						
110								110

State Well Report No.: **375732**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1171
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.4
Start Date:	7-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.5
End Date:	7-28-2014	**Method:**	ARCH	**Northing:**	3755715.1
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634374.0
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–175		well sorted with little silt. Interbedded poorly cemented sandstone at 130'.		SP			GROUTED ANNULUS 2' to 258'; 4" SCH. 80 PVC CASING 2' to 275'	110–175
175–214	175-214	SILTY SAND: light brown, 10 YR 6/4, dry, vfg, well sorted.		SM				175–214
214–220	214-241	SAND: light brown, 10 YR 5/6, dry, vfg-mg, with trace gravel, poorly sorted.						214–220

State Well Report No.: 375732

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1171
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.4
Start Date:	7-26-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.5
End Date:	7-28-2014	**Method:**	ARCH	**Northing:**	3755715.1
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634374.0
FGZ Depth:	285 ft.	**Logged by:**	J. Kruse	**Note:**	New Monitor Well

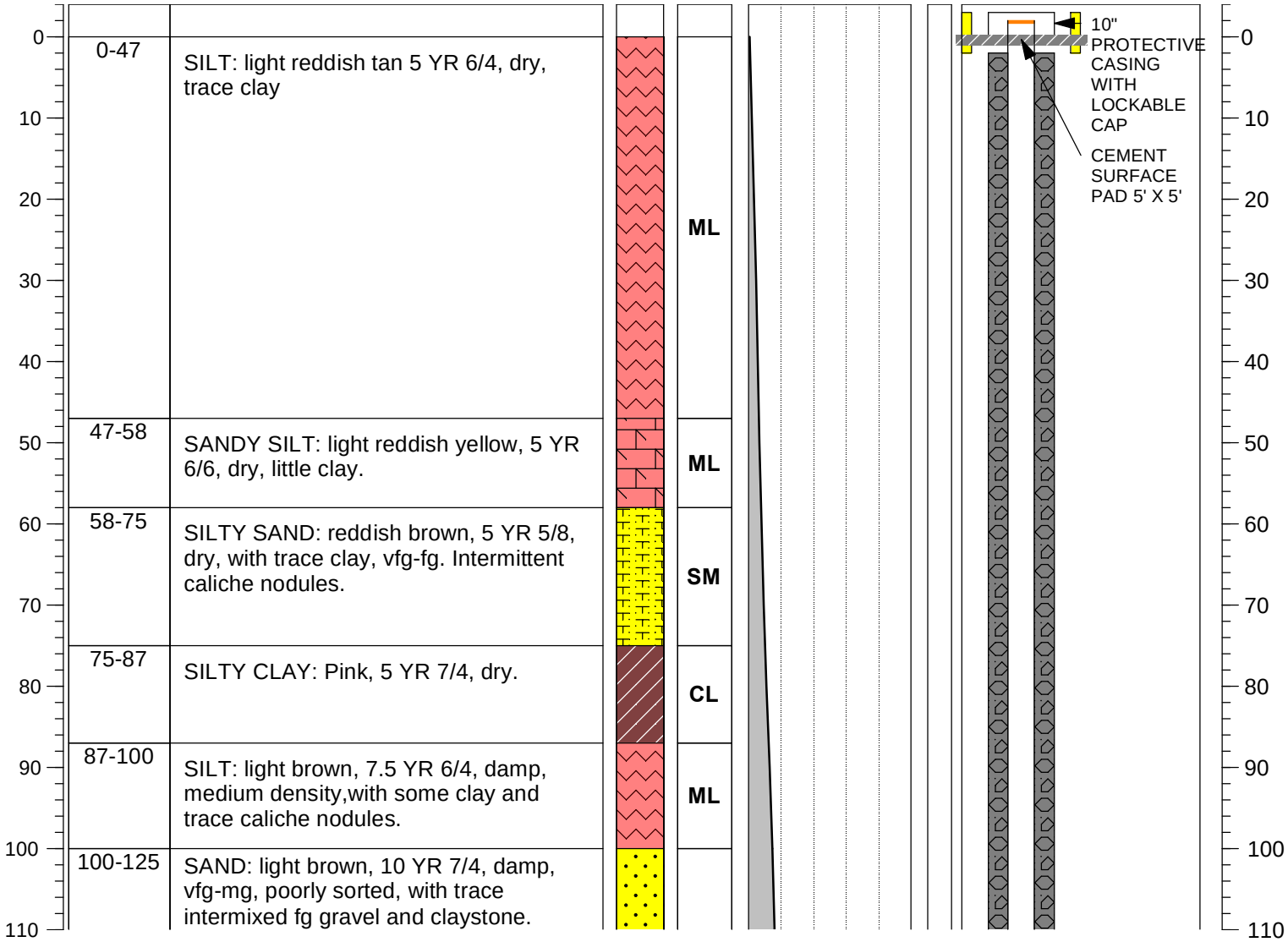
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230				SW				230
240	241-248	GRAVEL: grayish tan, fg-vcg, subrounded to rounded. With little sand and some cobbles, poorly sorted.		GW				240
250	248-253							250
260	253-285	SANDSTONE: tan, 10 YR 6/2, very hard, medium-high cementation, trace intermittent fg gravel.					BENTONITE PLUG 258' to 272'	260
270		SAND: brown, 10 YR 5/4, damp to saturated, fg-mg, moderately sorted, with trace gravel.		SP				270
280							10/20 SAND PACK 272' to 288'	280
	285-288	SANDY SILT: tannish-pink, sandy silt, soft. Top of FGZ.		ML			4" SCH. 80 PVC 0.02" SCREEN 275' to 285' 4" SCH. 80 PVC SUMP 285' to 286'	

State Well Report No.: 375732

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1172
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.3
Start Date:	7-24-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.4
End Date:	7-26-2014	**Method:**	ARCH	**Northing:**	3755837.8
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634098.6
FGZ Depth:	286 ft.	**Logged by:**	J. Kruse	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-47	SILT: light reddish tan 5 YR 6/4, dry, trace clay	ML
	47-58	SANDY SILT: light reddish yellow, 5 YR 6/6, dry, little clay.	ML
	58-75	SILTY SAND: reddish brown, 5 YR 5/8, dry, with trace clay, vfg-fg. Intermittent caliche nodules.	SM
	75-87	SILTY CLAY: Pink, 5 YR 7/4, dry.	CL
	87-100	SILT: light brown, 7.5 YR 6/4, damp, medium density,with some clay and trace caliche nodules.	ML
	100-125	SAND: light brown, 10 YR 7/4, damp, vfg-mg, poorly sorted, with trace intermixed fg gravel and claystone.	



State Well Report No.: **375733**

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1172
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.3
Start Date:	7-24-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.4
End Date:	7-26-2014	**Method:**	ARCH	**Northing:**	3755837.8
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634098.6
FGZ Depth:	286 ft.	**Logged by:**	J. Kruse	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
110–125				SM				110–125
125–174	125-174	SAND: tan, 10 YR 6/4, dry, vfg-fg, moderately well sorted, with little intermixed silt.		SP			GROUTED ANNULUS 2' to 257'; 4" SCH. 80 PVC CASING 2' to 276'	125–174
174–220	174-220	SAND: light brown, 10 YR 6/3, dry, vfg-cg, poorly-moderately sorted, with well cemented interbedded sandstone.		SW				174–220
220–260	220-260	GRAVELLY SAND: light brown, 10 YR						220–260

State Well Report No.: 375733

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1172
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.3
Start Date:	7-24-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.4
End Date:	7-26-2014	**Method:**	ARCH	**Northing:**	3755837.8
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634098.6
FGZ Depth:	286 ft.	**Logged by:**	J. Kruse	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230		6/4, vfg-cg, gravel fg-cg, subrounded to rounded, poorly sorted.		GW				230
240								240
250								250
260	260-286	SAND: tan, 10 YR 5/6, mg-cg, moderately well sorted, with trace subangular to subrounded fg gravel.		SP			BENTONITE PLUG 257' to 268'; 10/20 SAND PACK 268' to 289'; 4" SCH. 80 PVC 0.02" SCREEN 276' to 286'; 4" SCH. 80 PVC SUMP 286' to 287'	260
270								270
280	286-289	SANDY SILT: tannish-pink, soft. Top of FGZ.		ML				280

State Well Report No.: 375733

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1173
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3540.9
Start Date:	9-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.0
End Date:	9-7-2014	**Method:**	ARCH	**Northing:**	3755312.4
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634197.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

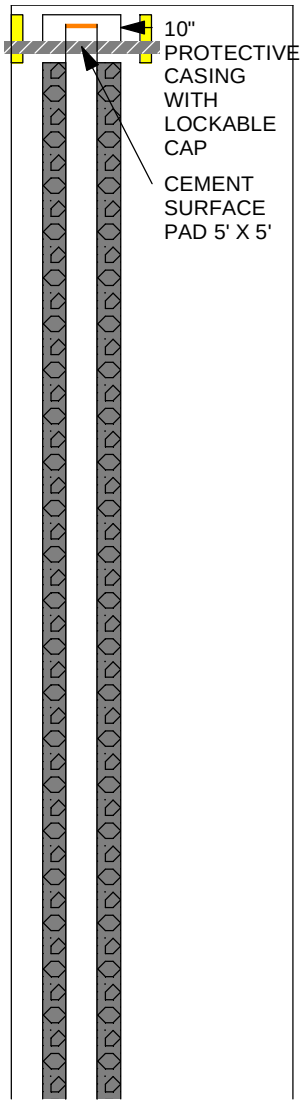
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
0	0-5	SILT: dark brownish red, 2.5 YR 5/4, dry, hard, topsoil.	ML
10	5-53	SILT: orangish brown, 5 YR 6/6, dry, hard, with trace sand vfg.	ML
20			
30			
40			
50	53-58	SILT: oangish brown, 2.5 YR 4/8, dry, stiff, with some subangular to subrounded, 1/4"-1/2" gravel.	ML
60	58-77	SILT: orangish red, 2.5 YR 4/8, damp, stiff, low plasticity.	ML
70			
80	77-83	GRAVELLY SILT: tannish white, 7.5YR 8/1, damp, low plasticity, gravel 1/8"-3/4" subangular to subrounded caliche.	ML
	83-86		SW
90	86-95	GRAVELLY SAND: tan, 5 YR 7/3, dry, vfg, gravel 1/8"-1/2" subrounded to rounded, caliche based, poorly sorted.	ML
100	95-101		ML
110	101-115	SILT: tan, 5 YR 7/3, dry, low plasticity, with some caliche gravel 1/4"-3/4".	SM

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 379052

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1173
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3540.9
Start Date:	9-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.0
End Date:	9-7-2014	**Method:**	ARCH	**Northing:**	3755312.4
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634197.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

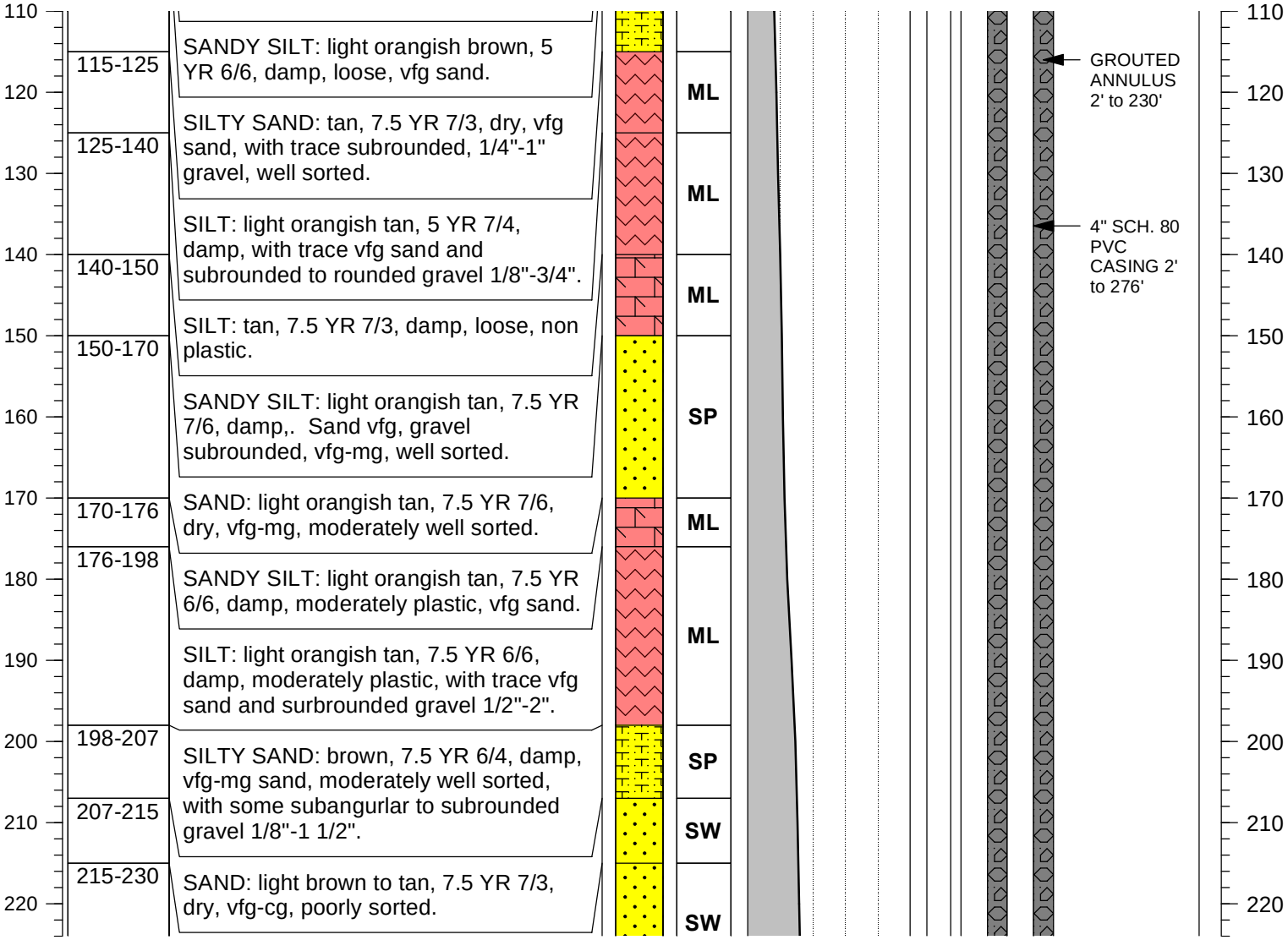
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	115-125	SANDY SILT: light orangish brown, 5 YR 6/6, damp, loose, vfg sand.	ML
	125-140	SILTY SAND: tan, 7.5 YR 7/3, dry, vfg sand, with trace subrounded, 1/4"-1" gravel, well sorted.	ML
	140-150	SILT: light orangish tan, 5 YR 7/4, damp, with trace vfg sand and subrounded to rounded gravel 1/8"-3/4".	ML
	150-170	SILT: tan, 7.5 YR 7/3, damp, loose, non plastic.	SP
		SANDY SILT: light orangish tan, 7.5 YR 7/6, damp,. Sand vfg, gravel subrounded, vfg-mg, well sorted.	
	170-176	SAND: light orangish tan, 7.5 YR 7/6, dry, vfg-mg, moderately well sorted.	ML
	176-198	SANDY SILT: light orangish tan, 7.5 YR 6/6, damp, moderately plastic, vfg sand.	ML
		SILT: light orangish tan, 7.5 YR 6/6, damp, moderately plastic, with trace vfg sand and surbrounded gravel 1/2"-2".	
	198-207	SILTY SAND: brown, 7.5 YR 6/4, damp, vfg-mg sand, moderately well sorted, with some subangurlar to subrounded gravel 1/8"-1 1/2".	SP
	207-215		SW
	215-230	SAND: light brown to tan, 7.5 YR 7/3, dry, vfg-cg, poorly sorted.	SW

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.: 379052

Boring and Well Log

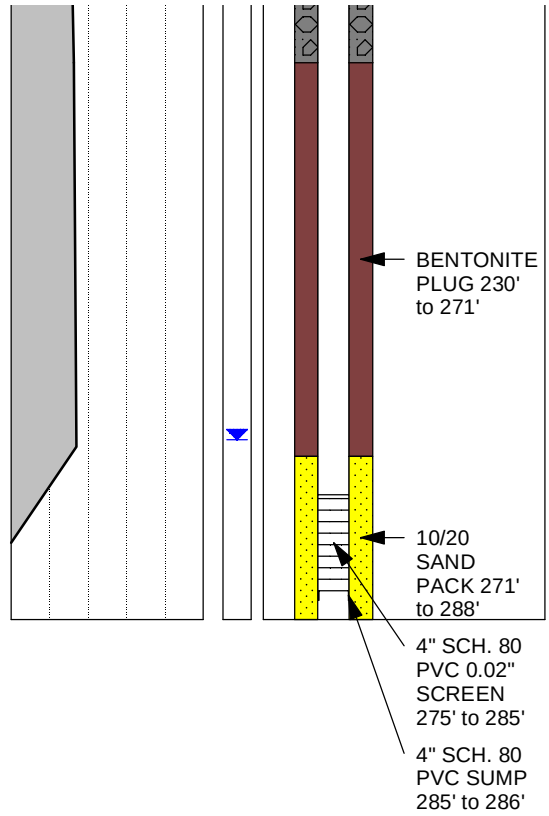
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1173
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3540.9
Start Date:	9-5-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3543.0
End Date:	9-7-2014	**Method:**	ARCH	**Northing:**	3755312.4
Total Depth:	288 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634197.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	230-238	SAND: orangish brown, 7.5 YR 5/6, damp, vfg-cg sand, poorly sorted, with some silt and trace subrounded to rounded gravel 1/4"-3/4".	SW
240	238-242	GRAVELLY SAND: orangish brown, 7.5 YR 6/6, dry, mg-cg sand, gravel 1/4"-1" subrounded to rounded, poorly sorted	GW
	242-248		SW
250	248-285	GRAVEL: brownish grey, 7.5 YR 6/2, dry, gravel 1/4"-1 1/2", subangular to subrounded, with some fg-cg, sand, poorly sorted.	SP
260			
270		GRAVELLY SAND: orangish brown, 7.5 YR 7/3, dry, sand fg-cg, gravel 1/4"-2" angular to subrounded, poorly sorted.	
280	285-288	SAND: light orangish tan, 7.5 YR 7/3, damp to saturated, vfg, well sorted, with trace subrounded gravel to 2".	ML
		SILT: light brownish pink, 5 YR 7/4, moderately stiff. Top of FGZ.	

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 230, 240, 250, 260, 270, 280

State Well Report No.: 379052

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1174
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.1
Start Date:	6-18-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.3
End Date:	6-20-2014	**Method:**	ARCH	**Northing:**	3755489.1
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633904.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
0	0-74	SILT: light pink 5 YR 6/4, damp, hard.		ML			10" PROTECTIVE CASING WITH LOCKABLE CAP; CEMENT SURFACE PAD 5' X 5'	0
10								10
20								20
30								30
40								40
50								50
60								60
70								70
80	74-85	GRAVELLY SAND: tan to white, 5 YR 8/1, hard, vfg-cg, poorly sorted.		SW				80
90	85-110	GRAVELLY SILT: tan, 7.5 YR 8/4, gravel is caliche, 1/16"-1/2", subrounded to well rounded.		CL				90
100								100
110								110

State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1174
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.1
Start Date:	6-18-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.3
End Date:	6-20-2014	**Method:**	ARCH	**Northing:**	3755489.1
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633904.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

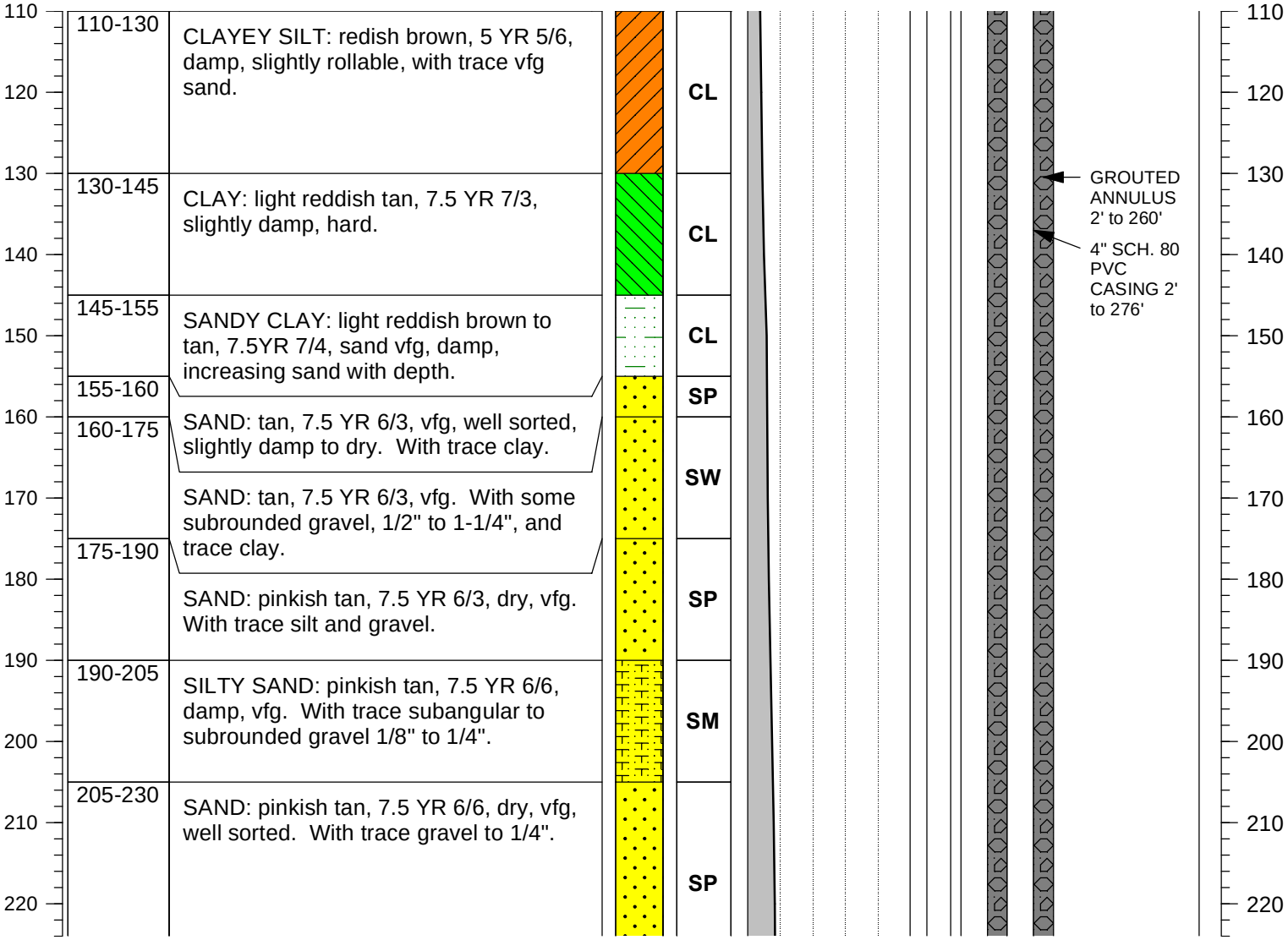
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	110-130	CLAYEY SILT: redish brown, 5 YR 5/6, damp, slightly rollable, with trace vfg sand.	CL
	130-145	CLAY: light reddish tan, 7.5 YR 7/3, slightly damp, hard.	CL
	145-155	SANDY CLAY: light reddish brown to tan, 7.5YR 7/4, sand vfg, damp, increasing sand with depth.	CL
	155-160	SAND: tan, 7.5 YR 6/3, vfg, well sorted, slightly damp to dry. With trace clay.	SP
	160-175	SAND: tan, 7.5 YR 6/3, vfg. With some subrounded gravel, 1/2" to 1-1/4", and trace clay.	SW
	175-190	SAND: pinkish tan, 7.5 YR 6/3, dry, vfg. With trace silt and gravel.	SP
	190-205	SILTY SAND: pinkish tan, 7.5 YR 6/6, damp, vfg. With trace subangular to subrounded gravel 1/8" to 1/4".	SM
	205-230	SAND: pinkish tan, 7.5 YR 6/6, dry, vfg, well sorted. With trace gravel to 1/4".	SP

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1174
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.1
Start Date:	6-18-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.3
End Date:	6-20-2014	**Method:**	ARCH	**Northing:**	3755489.1
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633904.6
FGZ Depth:	285 ft.	**Logged by:**	E. Gorove	**Note:**	New Monitor Well

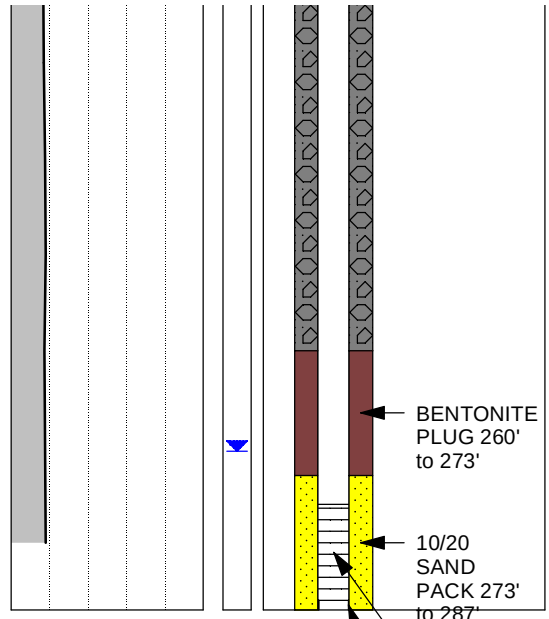
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	230-235	GRAVELLY SAND: tan, 10 YR 7/2, dry, vfg-fg. Gravel subangular to subrounded, 1/16" to 1/4", poorly sorted.	SW
	235-238	GRAVEL: tan, 10 YR 7/2, dry, subangular, 1/4" to 1".	GW
240	238-250	GRAVELLY SAND: tan, 10 YR 7/2, dry, vfg to fg, poorly sorted. Gravel subangular to subrounded, 1/16" to 1/4".	SW
250	250-285	GRAVELLY SAND: tan, 10YR 6/4, fg, dry, poorly sorted. Gravel subrounded to subangular, 1/4" to 1". Sand becoming vfg and damp with depth. Becoming wet at 275' with decreasing gravel content and increasing sand grain size.	SW
260			
270			
280	285-286	SILT: pink, 5 YR 7/3, dry. Grading to sandy silt at 288' based on split spoon samples. Top of FGZ.	ML

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 230, 240, 250, 260, 270, 280

State Well Report No.:

Boring and Well Log

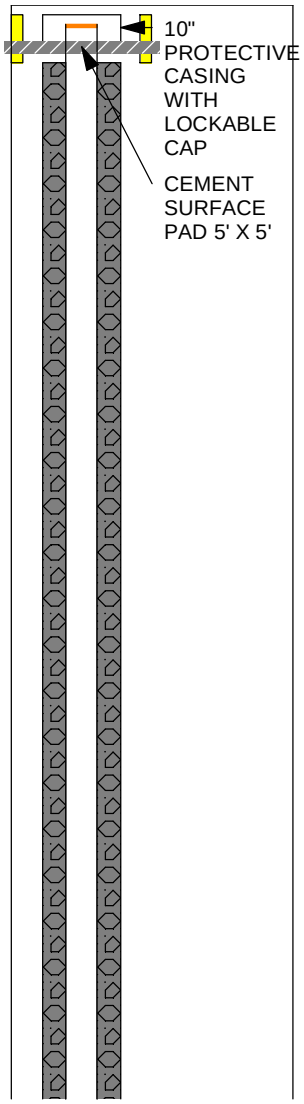
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1175
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	8-21-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.3
End Date:	8-22-2014	**Method:**	ARCH	**Northing:**	3755650.3
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633417.2
FGZ Depth:	286 ft.	**Logged by:**	T. Maloney	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
0	0-40	SILT: brown, 5 YR 3/2, dry, low plasticity.		ML
40	40-62	SILT: reddish orange, 2.5 YR 5/8, dry, low plasticity.		ML
60	62-71	CLAYEY SILT: orangish red, 2.5 YR 4/8, damp, moderate plasticity.		ML
70	71-78	SILTY CLAY: white, 2.5 YR 8/1, damp, low plasticity.		CL
80	78-85	SILT: light tan, 5 YR 6/4, damp, low plasticity, some caliche present.		ML
90	85-95	SANDY SILT: tan, 5 YR 6/4, damp, non-plastic.		ML
	95-99			ML
100	99-103	SILT: light grey, 5 YR 7/2, non-plastic, primarily caliche.		SP
	103-105			SM
	105-120			
110				

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 0, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 110

State Well Report No.:

Boring and Well Log

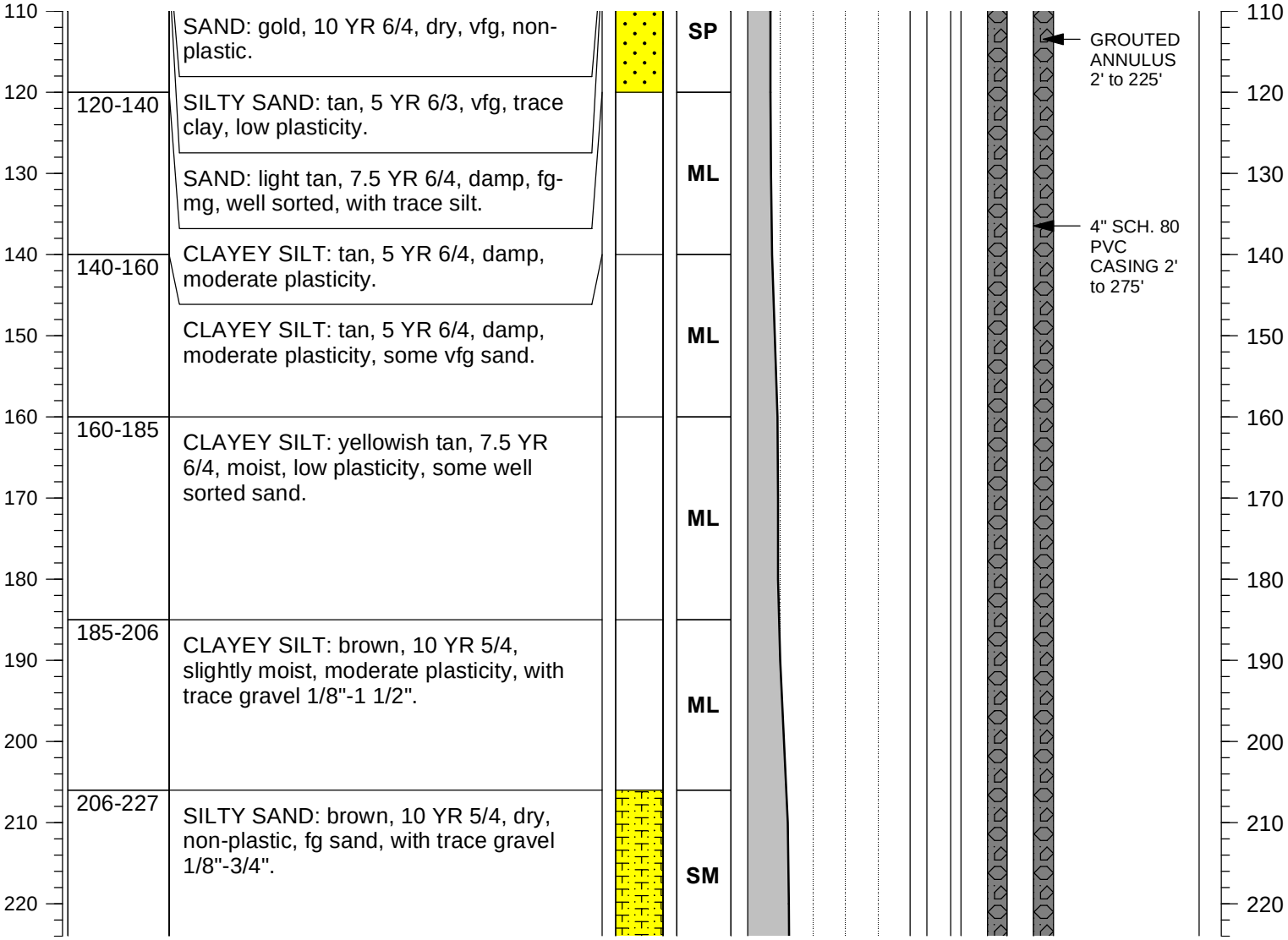
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1175
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	8-21-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.3
End Date:	8-22-2014	**Method:**	ARCH	**Northing:**	3755650.3
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633417.2
FGZ Depth:	286 ft.	**Logged by:**	T. Maloney	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
		SAND: gold, 10 YR 6/4, dry, vfg, non-plastic.		SP
	120-140	SILTY SAND: tan, 5 YR 6/3, vfg, trace clay, low plasticity.		ML
		SAND: light tan, 7.5 YR 6/4, damp, fg-mg, well sorted, with trace silt.		
	140-160	CLAYEY SILT: tan, 5 YR 6/4, damp, moderate plasticity.		ML
		CLAYEY SILT: tan, 5 YR 6/4, damp, moderate plasticity, some vfg sand.		
	160-185	CLAYEY SILT: yellowish tan, 7.5 YR 6/4, moist, low plasticity, some well sorted sand.		ML
	185-206	CLAYEY SILT: brown, 10 YR 5/4, slightly moist, moderate plasticity, with trace gravel 1/8"-1 1/2".		ML
	206-227	SILTY SAND: brown, 10 YR 5/4, dry, non-plastic, fg sand, with trace gravel 1/8"-3/4".		SM

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1175
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3543.2
Start Date:	8-21-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3545.3
End Date:	8-22-2014	**Method:**	ARCH	**Northing:**	3755650.3
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633417.2
FGZ Depth:	286 ft.	**Logged by:**	T. Maloney	**Note:**	New Monitor Well

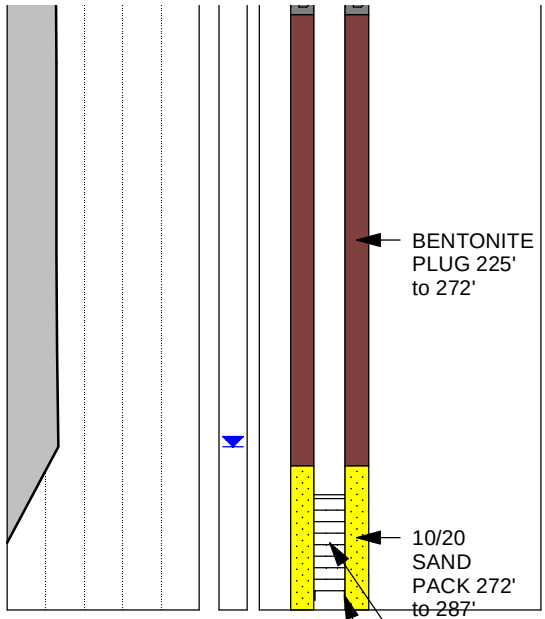
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230	227-247	GRAVEL: grey, 10 YR 6/2, dry, 1/8"-1". With some silt and trace sand, non-plastic.	GW
240			
250	247-259	SANDY GRAVEL: brown, 10 YR 5/4, dry, 1/8"-3/4", sand fg-cg, non-plastic, poorly sorted.	GW
260	259-269	SANDY SILT: tan, 2.5 YR 6/4, moist, low plasticity, moldable, sand fg, with trace gravel	ML
270	269-275		SM
280	275-286	SILTY SAND: tan, 2.5 YR 6/4, saturated, fg, moderate plasticity, with trace gravel.	SW
	286-287	SAND: tan, 10 YR 5/6, saturated, fg-cg. With trace gravel and silt, poorly sorted.	CL
		SANDY CLAY: pink, 10 YR 6/4, high plasticity. Sand fg-cg. With trace silt and gravel. Top of FGZ.	

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 230, 240, 250, 260, 270, 280

State Well Report No.:

Boring and Well Log

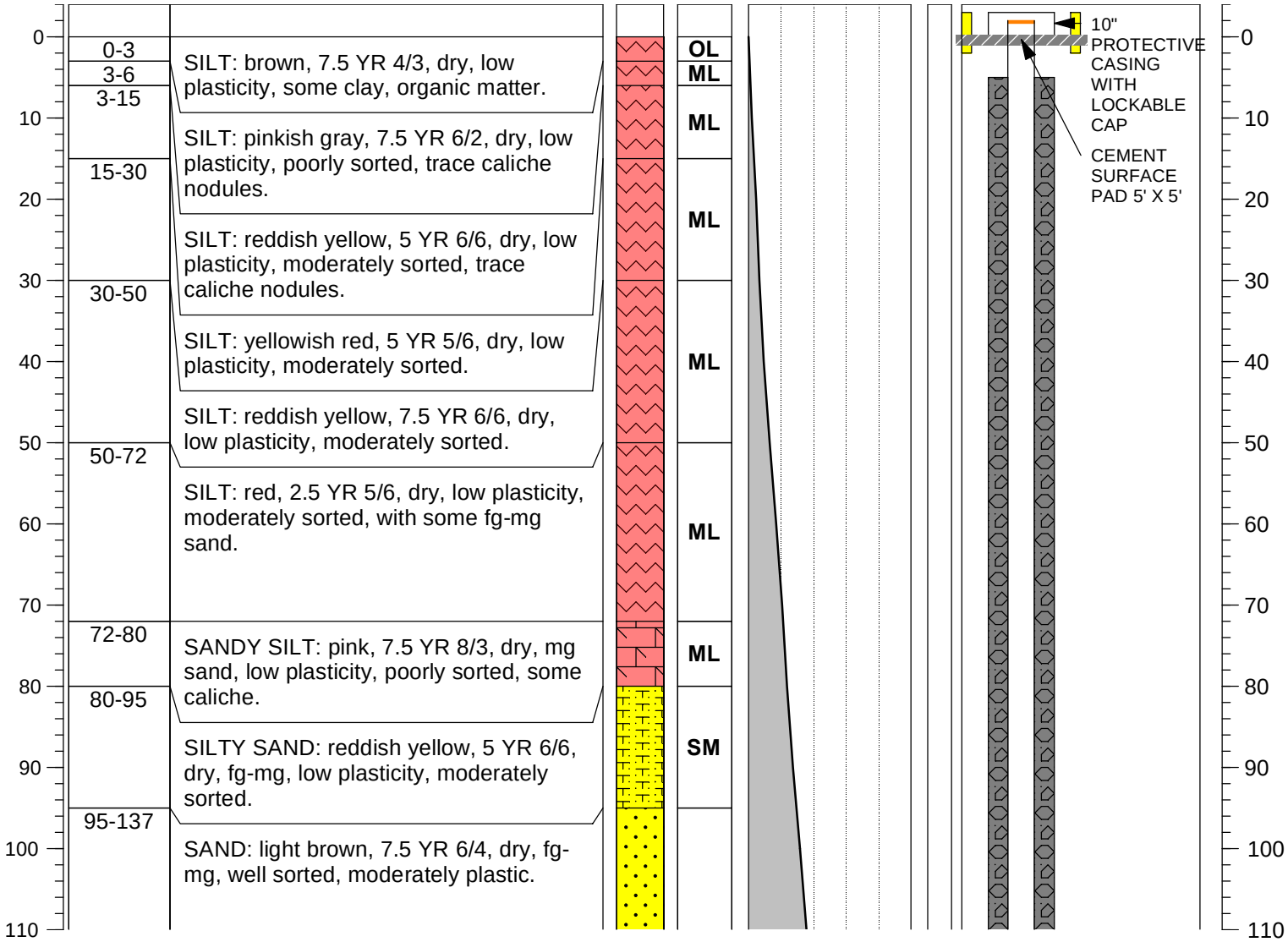
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1176
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.9
Start Date:	8-22-2014	**Driller:**	R. Hatfield	**TOC Elevation (ft):**	3544.1
End Date:	8-27-2014	**Method:**	ARCH	**Northing:**	3755500.5
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634114.1
FGZ Depth:	288 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-3	SILT: brown, 7.5 YR 4/3, dry, low plasticity, some clay, organic matter.	OL
	3-6		ML
	3-15	SILT: pinkish gray, 7.5 YR 6/2, dry, low plasticity, poorly sorted, trace caliche nodules.	ML
	15-30	SILT: reddish yellow, 5 YR 6/6, dry, low plasticity, moderately sorted, trace caliche nodules.	ML
	30-50	SILT: yellowish red, 5 YR 5/6, dry, low plasticity, moderately sorted.	ML
		SILT: reddish yellow, 7.5 YR 6/6, dry, low plasticity, moderately sorted.	
	50-72	SILT: red, 2.5 YR 5/6, dry, low plasticity, moderately sorted, with some fg-mg sand.	ML
	72-80	SANDY SILT: pink, 7.5 YR 8/3, dry, mg sand, low plasticity, poorly sorted, some caliche.	ML
	80-95	SILTY SAND: reddish yellow, 5 YR 6/6, dry, fg-mg, low plasticity, moderately sorted.	SM
	95-137	SAND: light brown, 7.5 YR 6/4, dry, fg-mg, well sorted, moderately plastic.	

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1176
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.9
Start Date:	8-22-2014	**Driller:**	R. Hatfield	**TOC Elevation (ft):**	3544.1
End Date:	8-27-2014	**Method:**	ARCH	**Northing:**	3755500.5
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634114.1
FGZ Depth:	288 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Monitor Well

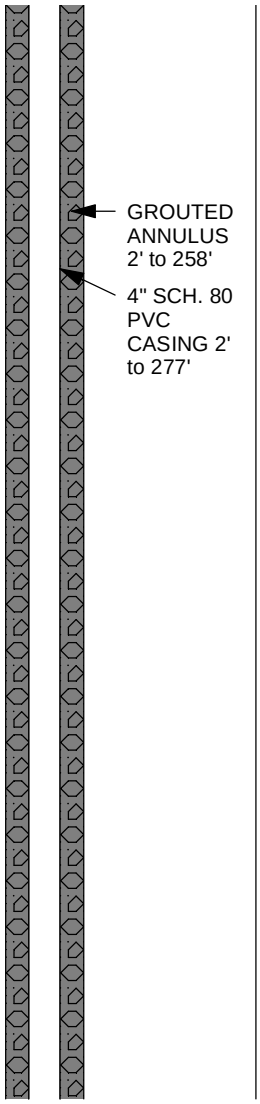
Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
			SP
	137-155	SILTY SAND: yellowish brown, 10 YR 5/8, dry, fg, low plasticity, moderately sorted.	SM
	155-178	SAND: yellowish brown, 10 YR 5/4, dry, fg-mg, well sorted.	SP
	178-194	SILT: reddish yellow, 7.5 YR 6/6, dry, low plasticity, moderately sorted, with some fg sand.	ML
	194-195		ML
	195-235	SILT: light gray, 5 YR 7/1, caliche nodules present.	
		SAND: brownish yellow, 10 YR 6/4, dry, fg-mg, low plasticity, well sorted.	SP

Lithology

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs): 110, 120, 130, 140, 150, 160, 170, 180, 190, 200, 210, 220

State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1176
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3541.9
Start Date:	8-22-2014	**Driller:**	R. Hatfield	**TOC Elevation (ft):**	3544.1
End Date:	8-27-2014	**Method:**	ARCH	**Northing:**	3755500.5
Total Depth:	289 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	634114.1
FGZ Depth:	288 ft.	**Logged by:**	T. Aseltyne	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol	Deviation Survey Closure Distance (ft) 0 ft – 5 ft	Water Level	Well Construction	Depth (ft bgs)
230								230
240	235-246	SANDY GRAVEL: greyish brown, 10 YR 5/2, dry, fg-mg pebble sized, sand mg, poorly sorted.		GW				240
250	246-288	SAND: pale brown, 10 YR 7/3, fg-mg, well sorted.		SP				250
260								260
270							BENTONITE PLUG 258' to 274'	270
280							10/20 SAND PACK 274' to 289'	280
	288-289	SILT: light pinkish tan, 5 YR 6/4, wet, moderately plastic, well sorted. Top of FGZ.		ML			4" SCH. 80 PVC 0.02" SCREEN 277' to 287' 4" SCH. 80 PVC SUMP 287' to 288'	

State Well Report No.:

Boring and Well Log

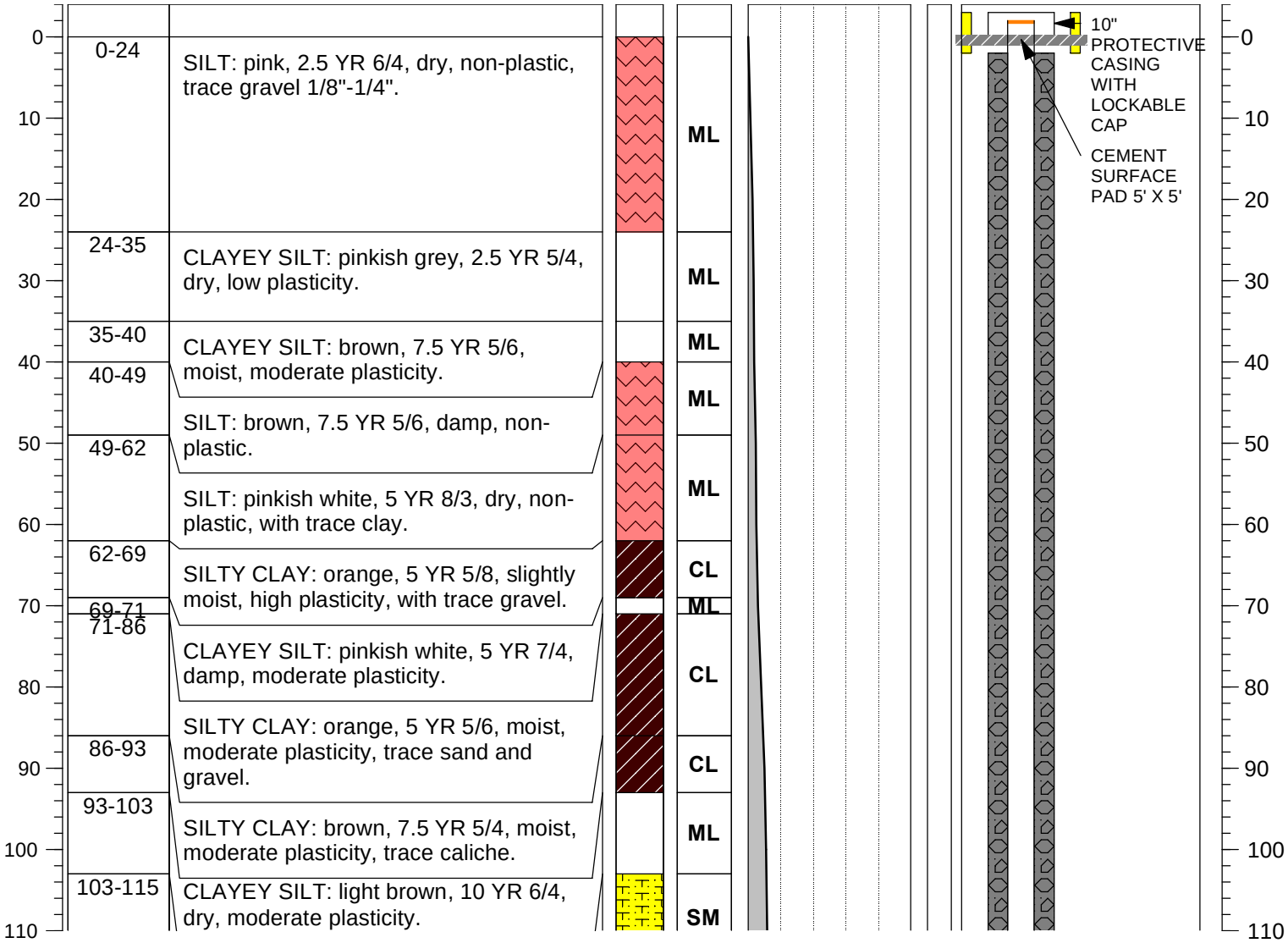
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1177
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.7
Start Date:	8-23-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.7
End Date:	8-23-2014	**Method:**	ARCH	**Northing:**	3755818.6
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633524.6
FGZ Depth:	283 ft.	**Logged by:**	T. Moloney	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
	0-24	SILT: pink, 2.5 YR 6/4, dry, non-plastic, trace gravel 1/8"-1/4".	ML
	24-35	CLAYEY SILT: pinkish grey, 2.5 YR 5/4, dry, low plasticity.	ML
	35-40	CLAYEY SILT: brown, 7.5 YR 5/6, moist, moderate plasticity.	ML
	40-49	SILT: brown, 7.5 YR 5/6, damp, non-plastic.	ML
	49-62	SILT: pinkish white, 5 YR 8/3, dry, non-plastic, with trace clay.	ML
	62-69	SILTY CLAY: orange, 5 YR 5/8, slightly moist, high plasticity, with trace gravel.	CL
	69-71		ML
	71-86	CLAYEY SILT: pinkish white, 5 YR 7/4, damp, moderate plasticity.	CL
	86-93	SILTY CLAY: orange, 5 YR 5/6, moist, moderate plasticity, trace sand and gravel.	CL
	93-103	SILTY CLAY: brown, 7.5 YR 5/4, moist, moderate plasticity, trace caliche.	ML
	103-115	CLAYEY SILT: light brown, 10 YR 6/4, dry, moderate plasticity.	SM

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



Depth (ft bgs)

State Well Report No.:

Boring and Well Log

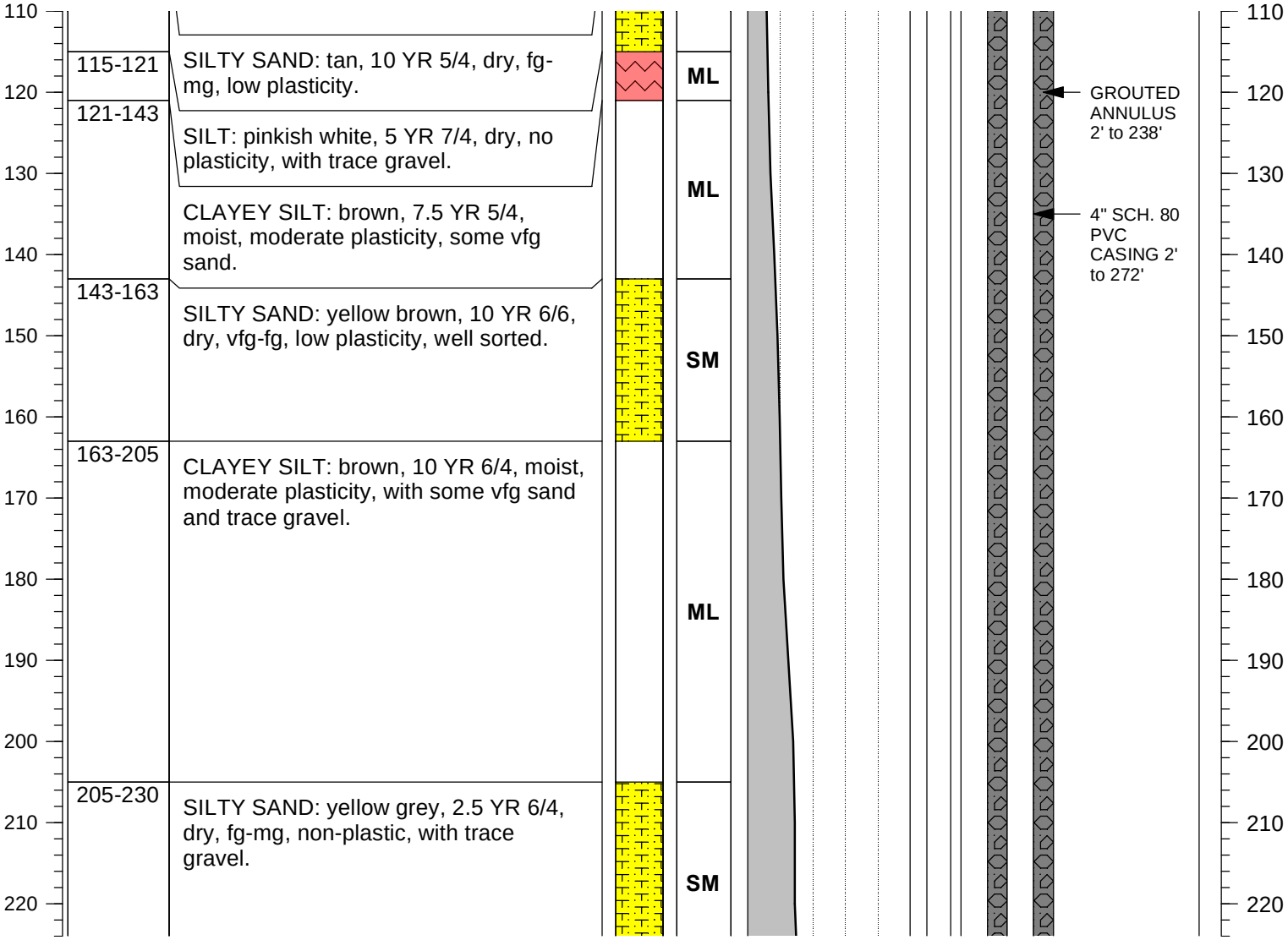
Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1177
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.7
Start Date:	8-23-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.7
End Date:	8-23-2014	**Method:**	ARCH	**Northing:**	3755818.6
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633524.6
FGZ Depth:	283 ft.	**Logged by:**	T. Moloney	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	Lithology	USCS Symbol
	115-121	SILTY SAND: tan, 10 YR 5/4, dry, fg-mg, low plasticity.		ML
	121-143	SILT: pinkish white, 5 YR 7/4, dry, no plasticity, with trace gravel.		ML
		CLAYEY SILT: brown, 7.5 YR 5/4, moist, moderate plasticity, some vfg sand.		
	143-163	SILTY SAND: yellow brown, 10 YR 6/6, dry, vfg-fg, low plasticity, well sorted.		SM
	163-205	CLAYEY SILT: brown, 10 YR 6/4, moist, moderate plasticity, with some vfg sand and trace gravel.		ML
	205-230	SILTY SAND: yellow grey, 2.5 YR 6/4, dry, fg-mg, non-plastic, with trace gravel.		SM

Deviation Survey Closure Distance (ft): 0 ft – 5 ft

Water Level

Well Construction



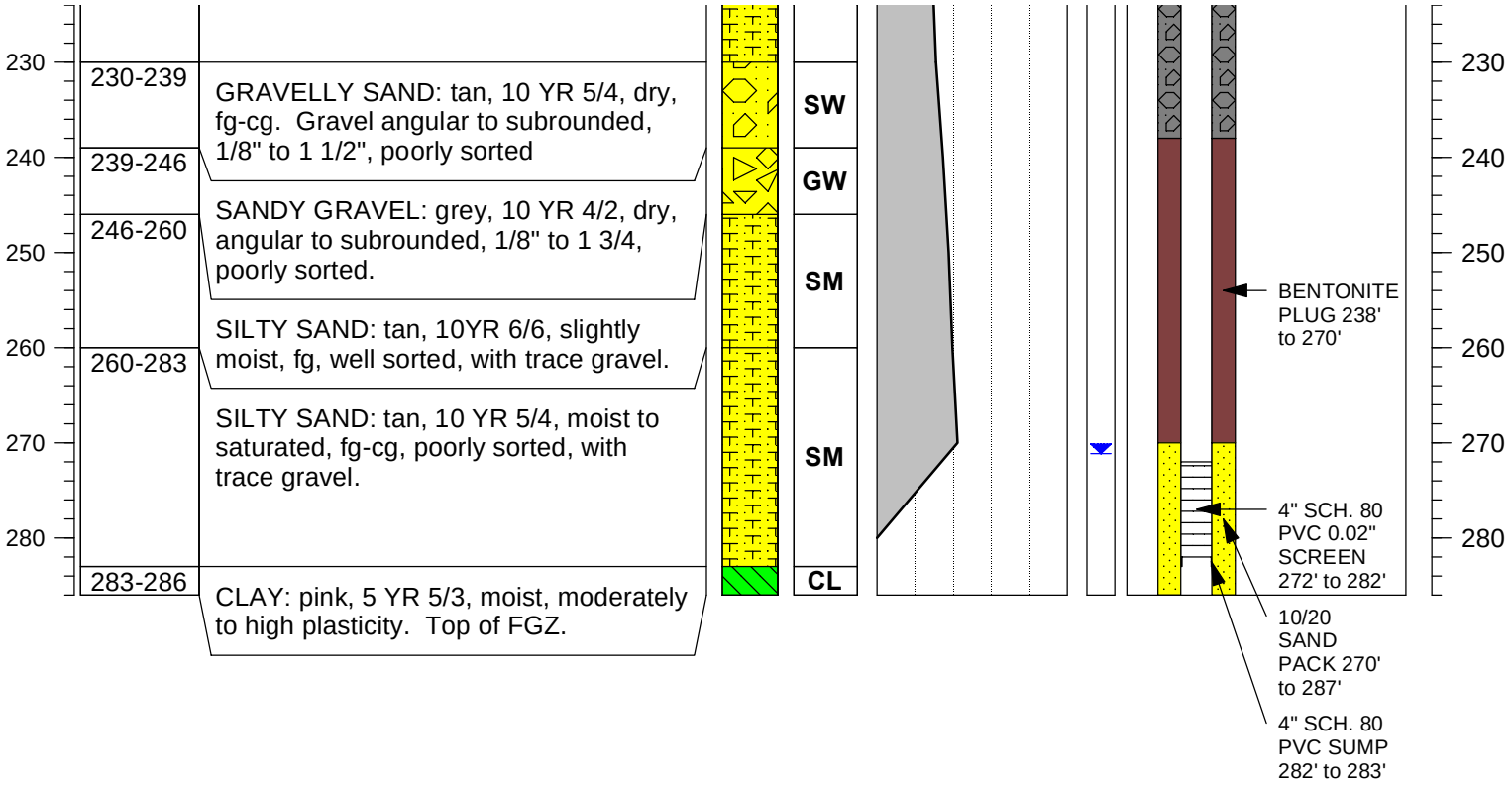
Depth (ft bgs)

State Well Report No.:

Boring and Well Log

Project:	BOA 52, Release 4	**Project No.:**	18A-094-002	**Borehole/Well ID:**	PTX06-1177
Location:	Zone 11 ISB	**Drilling Co:**	Yellow Jacket Drilling Svc.	**Surface Elevation (ft):**	3542.7
Start Date:	8-23-2014	**Driller:**	Q. Stevens	**TOC Elevation (ft):**	3544.7
End Date:	8-23-2014	**Method:**	ARCH	**Northing:**	3755818.6
Total Depth:	287 ft.	**Borehole Diameter:**	9 5/8"	**Easting:**	633524.6
FGZ Depth:	283 ft.	**Logged by:**	T. Moloney	**Note:**	New Monitor Well

Depth (ft bgs)	Interval (ft bgs)	Lithologic Description	USCS Symbol
230–240	230-239	GRAVELLY SAND: tan, 10 YR 5/4, dry, fg-cg. Gravel angular to subrounded, 1/8" to 1 1/2", poorly sorted	SW
240–250	239-246	SANDY GRAVEL: grey, 10 YR 4/2, dry, angular to subrounded, 1/8" to 1 3/4, poorly sorted.	GW
250–260	246-260	SILTY SAND: tan, 10YR 6/6, slightly moist, fg, well sorted, with trace gravel.	SM
260–270	260-283	SILTY SAND: tan, 10 YR 5/4, moist to saturated, fg-cg, poorly sorted, with trace gravel.	SM
280	283-286	CLAY: pink, 5 YR 5/3, moist, moderately to high plasticity. Top of FGZ.	CL



State Well Report No.:

APPENDIX L

GEOTECHNICAL RESULTS

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB087

Boring No.:
Boring Depth (ft):

Date: 8/7/2014
Cell No.: 2

Apex Sample ID:
Sample Description: Lt. Brown
Remarks Remolded sample using: PTX 06-1SB087 289.0'-290.5' (1 of 3) (2 of 3), (3 of 3)

Pan No.: 63
Pan Weight (gm) = 130.7

Pan + wet (gm) = 368.6
Pan + dry (gm) = 314.2
Initial Moisture Content (%) = 29.6

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	567.2	525.0
Diameter (in) =	2.80	2.80
Height (in) =	3.10	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	312.8	302.7
Moisture Content (%) =	33.2	23.3
Void Ratio (%) =	98.3	91.9
Porosity (%) =	49.6	47.9
Degree of Saturation (%) =	91.2	68.4
Wet Unit Weight (pcf) =	113.2	108.3
Dry Unit Weight (pcf) =	85.0	87.8
Specific Gravity =	2.70	
Dried Weight (gm) =	425.8	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
8/9/2014 18:37	1.40	9.66	8/10/2014 13:10	8.24	2.60	14.1	66780	183.5	111.6	18.7	6.84	7.06	1.03	1.42E-07
8/10/2014 13:11	1.80	9.86	8/10/2014 21:31	6.86	4.66	13.7	30000	182.5	129.4	19.8	5.06	5.20	1.03	2.19E-07
8/11/2014 17:30	0.70	9.84	8/12/2014 8:07	9.02	1.40	14.6	52620	188.1	101.4	18.4	8.32	8.44	1.01	2.24E-07
8/12/2014 8:09	0.40	9.82	8/12/2014 17:25	6.00	4.44	14.6	33360	189.5	132.7	20.5	5.60	5.38	0.96	2.04E-07

Hydraulic Conductivity (cm/s) = 1.97E-07

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB088

Boring No.:
Boring Depth (ft):

Date: 8/7/2014
Cell No.: 1

Apex Sample ID:
Sample Description: Lt. Brown
Remarks Remolded sample using: PTX 06-1SB088 (1 of 3) (2 of 3), (3 of 3)

Pan No.: 58
Pan Weight (gm) = 134.4

Pan + wet (gm) = 356.1
Pan + dry (gm) = 309.3
Initial Moisture Content (%) = 26.8

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	597.3	598.0
Diameter (in) =	2.80	2.80
Height (in) =	3.10	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	312.8	302.7
Moisture Content (%) =	27.3	27.4
Void Ratio (%) =	80.0	74.2
Porosity (%) =	44.4	42.6
Degree of Saturation (%) =	92.1	99.8
Wet Unit Weight (pcf) =	119.2	123.3
Dry Unit Weight (pcf) =	93.7	96.8
Specific Gravity =	2.70	
Dried Weight (gm) =	469.3	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
8/10/2014 13:09	1.16	9.66	8/10/2014 21:30	3.78	6.88	13.8	30060	184.7	156.8	21.7	2.62	2.78	1.06	1.04E-07
8/10/2014 21:31	1.30	9.86	8/11/2014 9:02	4.94	6.22	14.0	41460	185.1	147.4	21.1	3.64	3.64	1.00	1.05E-07
8/11/2014 9:05	1.26	9.90	8/11/2014 17:30	3.90	7.24	14.2	30300	185.5	158.1	21.8	2.64	2.66	1.01	1.01E-07
8/11/2014 17:30	1.74	9.90	8/12/2014 8:05	6.22	5.40	14.2	52500	183.0	136.6	20.3	4.48	4.50	1.00	1.07E-07
8/12/2014 8:06	1.80	9.80	8/12/2014 17:50	4.84	6.64	14.2	35040	182.2	150.1	21.1	3.04	3.16	1.04	1.06E-07

Hydraulic Conductivity (cm/s) = 1.04E-07

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB089

Boring No.:
Boring Depth (ft):

Date: 10/29/2014
Cell No.: 3

Apex Sample ID: 8068-2-3
Sample Description:
Remarks Remolded sample using: PTX 06-1SB089

Pan No.: 93
Pan Weight (gm) = 150.8

Pan + wet (gm) = 314.5
Pan + dry (gm) = 286.9
Initial Moisture Content (%) = 20.3

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	642.4	644.5
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	20.2	20.6
Void Ratio (%) =	53.0	53.0
Porosity (%) =	34.6	34.6
Degree of Saturation (%) =	103.1	105.1
Wet Unit Weight (pcf) =	132.5	132.9
Dry Unit Weight (pcf) =	110.2	110.2
Specific Gravity =	2.70	
Dried Weight (gm) =	534.3	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/31/2014 15:05	2.40	10.00	11/1/2014 9:32	5.52	6.72	12.9	66420	180.1	147.0	21.5	3.12	3.28	1.05	5.66E-08
11/1/2014 9:33	2.62	10.00	11/1/2014 17:20	4.00	8.50	12.9	28020	179.0	164.1	22.5	1.38	1.50	1.09	5.74E-08
11/1/2014 17:20	4.00	8.50	11/2/2014 11:47	7.28	5.26	12.9	66420	164.1	130.4	19.3	3.28	3.24	0.99	6.41E-08
11/2/2014 11:48	2.74	9.94	11/2/2014 21:02	3.80	8.72	12.9	33240	178.0	166.2	22.6	1.06	1.22	1.15	3.81E-08
11/2/2014 21:02	3.80	8.72	11/3/2014 10:18	5.26	7.34	12.9	47760	166.2	151.6	20.9	1.46	1.38	0.95	3.58E-08
11/3/2014 10:18	5.26	7.34	11/3/2014 16:20	5.84	6.78	12.9	21720	151.6	145.7	19.5	0.58	0.56	0.97	3.38E-08

Hydraulic Conductivity (cm/s) = 4.76E-08

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB090

Boring No.:
Boring Depth (ft):

Date: 7/28/2014
Cell No.: 1

Apex Sample ID:
Sample Description: Lt. Brown Sand
Remarks Remolded sample using: PTX 06-1SB090 (289.0'-289.5')
Tube 1/3; 2/3; 3/3

Pan No.: MS
Pan Weight (gm) = 635.2

Pan + wet (gm) = 2195.3
Pan + dry (gm) = 1943.0
Initial Moisture Content (%) = 19.3

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	582.8	609.1
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	17.7	23.1
Void Ratio (%) =	65.1	65.1
Porosity (%) =	39.4	39.4
Degree of Saturation (%) =	73.5	95.6
Wet Unit Weight (pcf) =	120.2	125.6
Dry Unit Weight (pcf) =	102.1	102.1
Specific Gravity =	2.70	
Dried Weight (gm) =	495.0	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	99.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
7/30/2014 9:29	1.90	10.00	7/30/2014 10:55	6.70	5.36	13.5	5160	112.3	63.5	11.5	4.80	4.64	0.97	2.05E-06
7/30/2014 11:57	2.20	10.00	7/30/2014 12:53	7.94	5.00	13.6	3360	110.7	55.2	10.9	5.74	5.00	0.87	3.83E-06
7/31/2014 8:00	1.80	10.00	7/31/2014 11:00	10.20	1.82	14.0	10800	112.8	27.1	9.2	8.40	8.18	0.97	2.45E-06
7/31/2014 11:00	2.20	10.00	7/31/2014 13:30	9.36	2.82	14.0	9000	110.7	36.6	9.7	7.16	7.18	1.00	2.28E-06
8/1/2014 8:10	1.90	10.00	8/1/2014 10:25	9.24	2.72	14.0	8100	112.3	36.7	9.8	7.34	7.28	0.99	2.56E-06

Hydraulic Conductivity (cm/s) = 2.63E-06

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB093

Boring No.:
Boring Depth (ft):

Date: 8/13/2014
Cell No.: 2

Apex Sample ID:
Sample Description: Lt. Brown
Remarks Remolded sample using: PTX 06-1SB093 289.0'-289.5' (1 of 3) (2 of 3), (3 of 3)

Pan No.: 52
Pan Weight (gm) = 150.2

Pan + wet (gm) = 648.8
Pan + dry (gm) = 566.0
Initial Moisture Content (%) = 19.9

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	628.7	633.1
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	20.0	20.9
Void Ratio (%) =	56.0	56.0
Porosity (%) =	35.9	35.9
Degree of Saturation (%) =	96.5	100.5
Wet Unit Weight (pcf) =	129.7	130.6
Dry Unit Weight (pcf) =	108.0	108.0
Specific Gravity =	2.70	
Dried Weight (gm) =	523.8	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
8/20/2014 8:55	0.00	10.00	8/20/2014 12:05	3.86	6.00	10.3	11400	192.5	151.9	22.6	3.86	4.00	1.04	3.85E-07
8/20/2014 12:05	3.86	6.00	8/20/2014 14:05	5.66	4.18	10.3	7200	151.9	133.1	18.7	1.80	1.82	1.01	3.38E-07
8/21/2014 8:06	0.68	10.00	8/21/2014 16:37	7.54	3.14	10.3	30660	189.0	118.1	20.1	6.86	6.86	1.00	2.84E-07
8/22/2014 8:20	1.24	10.00	8/22/2014 13:22	6.52	4.64	10.5	18120	186.1	131.1	20.8	5.28	5.36	1.02	3.58E-07
8/22/2014 13:23	1.52	9.66	8/22/2014 17:03	5.62	5.46	10.3	13200	182.9	140.0	21.2	4.10	4.20	1.02	3.75E-07

Hydraulic Conductivity (cm/s) = 3.48E-07

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB094

Boring No.:
Boring Depth (ft):

Date: 7/28/2014
Cell No.: 2

Apex Sample ID:
Sample Description: Lt. Brown
Remarks Remolded sample using: PTX 06-1SB094 (286.0'-286.5') (286.5'-287.0'), (287.0'-287.5')

Pan No.: TT
Pan Weight (gm) = 750.9

Pan + wet (gm) = 2331.7
Pan + dry (gm) = 2069.2
Initial Moisture Content (%) = 19.9

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	589.6	603.7
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	18.6	21.4
Void Ratio (%) =	64.4	64.4
Porosity (%) =	39.2	39.2
Degree of Saturation (%) =	77.9	89.8
Wet Unit Weight (pcf) =	121.6	124.5
Dry Unit Weight (pcf) =	102.5	102.5
Specific Gravity =	2.70	
Dried Weight (gm) =	497.2	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
7/30/2014 8:21	1.40	10.00	7/30/2014 12:56	5.36	6.00	13.1	16500	185.3	144.1	21.6	3.96	4.00	1.01	2.82E-07
7/30/2014 12:57	1.60	10.00	7/30/2014 17:04	5.24	6.14	12.9	14820	184.2	145.5	21.6	3.64	3.86	1.06	2.95E-07
7/31/2014 8:12	1.90	10.00	7/31/2014 13:33	6.64	5.38	13.7	19260	182.7	134.3	20.8	4.74	4.62	0.97	2.96E-07
7/31/2014 13:34	2.20	10.00	7/31/2014 17:47	6.14	6.04	13.5	15180	181.1	140.3	21.1	3.94	3.96	1.01	3.12E-07
8/1/2014 8:10	2.42	10.00	8/1/2014 15:00	8.76	3.72	14.2	24600	180.0	114.7	19.3	6.34	6.28	0.99	3.39E-07

Hydraulic Conductivity (cm/s) = 3.05E-07

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB095

Boring No.:
Boring Depth (ft):

Date: 8/13/2014
Cell No.: 1

Apex Sample ID:
Sample Description: Reddish Yellow
Remarks Remolded sample using: PTX 06-1SB095 289.0'-289.5' (1 of 3) (2 of 3), (3 of 3)

Pan No.: 55
Pan Weight (gm) = 131.5

Pan + wet (gm) = 622.0
Pan + dry (gm) = 512.2
Initial Moisture Content (%) = 28.8

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	567.7	565.6
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	26.4	25.9
Void Ratio (%) =	82.0	82.0
Porosity (%) =	45.1	45.1
Degree of Saturation (%) =	87.0	85.4
Wet Unit Weight (pcf) =	117.1	116.6
Dry Unit Weight (pcf) =	92.6	92.6
Specific Gravity =	2.70	
Dried Weight (gm) =	449.1	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
8/20/2014 8:50	0.20	10.00	8/20/2014 14:00	3.10	6.90	17.7	18600	191.5	160.4	23.1	2.90	3.10	1.07	1.76E-07
8/21/2014 8:05	0.72	9.96	8/21/2014 16:36	5.34	5.04	17.2	30660	188.6	139.2	21.5	4.62	4.92	1.06	1.83E-07
8/22/2014 8:20	1.30	10.00	8/22/2014 13:22	4.30	7.10	17.8	18120	185.8	155.3	22.4	3.00	2.90	0.97	1.83E-07
8/22/2014 13:23	1.46	9.84	8/22/2014 17:03	3.66	7.50	17.0	13200	184.1	160.7	22.6	2.20	2.34	1.06	1.91E-07

Hydraulic Conductivity (cm/s) = 1.83E-07

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB096

Boring No.:
Boring Depth (ft):

Date: 7/8/2014
Cell No.: 1

Apex Sample ID:
Sample Description: Lt. Brown Sand
Remarks Remolded sample using: PTX 06-1SB096 (290.5'-291.0'), PTX 06-1SB096 (291.0'-291.5'), Tube 2/3

Pan No.: MS
Pan Weight (gm) = 636.3

Pan + wet (gm) = 822.7
Pan + dry (gm) = 779.5
Initial Moisture Content (%) = 30.2

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	587.8	558.3
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	32.4	25.7
Void Ratio (%) =	84.1	84.1
Porosity (%) =	45.7	45.7
Degree of Saturation (%) =	104.0	82.7
Wet Unit Weight (pcf) =	121.2	115.1
Dry Unit Weight (pcf) =	91.6	91.6
Specific Gravity =	2.70	
Dried Weight (gm) =	444.0	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	97.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
7/9/2014 8:40	1.24	9.42	7/9/2014 10:54	2.10	8.56	17.5	8040	253.5	244.6	32.7	0.86	0.86	1.00	8.22E-08
7/9/2014 10:54	2.40	8.56	7/9/2014 17:20	4.32	6.24	17.6	23160	243.0	221.1	30.5	1.92	2.32	1.21	7.55E-08
7/9/2014 17:21	1.56	9.82	7/10/2014 8:10	7.12	4.22	18.8	53340	253.9	196.2	29.5	5.56	5.60	1.01	8.95E-08
7/10/2014 8:10	7.12	4.22	7/10/2014 10:43	7.88	3.52	19.8	9180	196.2	188.7	25.3	0.76	0.70	0.92	7.91E-08
7/10/2014 10:43	7.88	3.52	7/10/2014 15:15	9.18	2.14	19.5	16320	188.7	174.8	23.8	1.30	1.38	1.06	8.65E-08

Hydraulic Conductivity (cm/s) = 8.26E-08

Apex geoscience inc.
215 S. Fannin
Amarillo, TX 79106 (806) 677-0600

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB097

Boring No.:
Boring Depth (ft):

Date: 10/29/2014
Cell No.: 1

Apex Sample ID: 8068-2-1
Sample Description:
Remarks Remolded sample using: PTX 06-1SB097

Pan No.: G7
Pan Weight (gm) = 187.6

Pan + wet (gm) = 441.8
Pan + dry (gm) = 377.2
Initial Moisture Content (%) = 34.1

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	559.4	500.5
Diameter (in) =	2.80	2.80
Height (in) =	3.00	2.66
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	268.4
Moisture Content (%) =	34.1	20.0
Void Ratio (%) =	96.0	73.7
Porosity (%) =	49.0	42.4
Degree of Saturation (%) =	96.0	73.2
Wet Unit Weight (pcf) =	115.4	116.4
Dry Unit Weight (pcf) =	86.0	97.0
Specific Gravity =	2.70	
Dried Weight (gm) =	417.1	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/31/2014 15:00	2.04	10.00	11/1/2014 9:30	4.88	7.02	33.0	66600	182.0	151.9	21.9	2.84	2.98	1.05	5.02E-08
11/1/2014 9:35	2.38	9.86	11/1/2014 17:20	3.50	8.66	33.0	27900	179.5	167.5	22.8	1.12	1.20	1.07	4.59E-08
11/1/2014 17:20	3.50	8.66	11/2/2014 11:46	6.26	5.96	33.0	66360	167.5	139.2	20.1	2.76	2.70	0.98	5.15E-08
11/2/2014 11:46	2.44	9.88	11/2/2014 21:01	3.82	8.40	33.0	33300	179.3	164.5	22.6	1.38	1.48	1.07	4.79E-08
11/2/2014 21:01	3.82	8.40	11/3/2014 10:17	5.64	6.64	33.0	47760	164.5	146.0	20.4	1.82	1.76	0.97	4.63E-08
11/3/2014 10:21	2.62	9.92	11/3/2014 16:15	3.46	9.00	33.0	21240	178.5	169.4	22.8	0.84	0.92	1.10	4.56E-08

Hydraulic Conductivity (cm/s) = 4.79E-08

Apex geoscience inc.
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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB098

Boring No.:
Boring Depth (ft):

Date: 10/24/2014
Cell No.: 2

Apex Sample ID: 8068-1-2
Sample Description:
Remarks Remolded sample using: PTX 06-1SB098

Pan No.: 93
Pan Weight (gm) = 150.8

Pan + wet (gm) = 384.0
Pan + dry (gm) = 335.2
Initial Moisture Content (%) = 26.5

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	587.3	570.8
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	26.2	22.6
Void Ratio (%) =	75.6	75.6
Porosity (%) =	43.1	43.1
Degree of Saturation (%) =	93.5	80.9
Wet Unit Weight (pcf) =	121.1	117.7
Dry Unit Weight (pcf) =	96.0	96.0
Specific Gravity =	2.70	
Dried Weight (gm) =	465.4	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/26/2014 18:17	2.48	9.76	10/27/2014 7:51	8.92	3.50	12.7	48840	178.4	112.8	19.1	6.44	6.26	0.97	1.74E-07
10/27/2014 7:53	2.84	9.82	10/27/2014 16:45	7.78	4.80	13.0	31920	176.9	125.4	19.8	4.94	5.02	1.02	2.00E-07
10/27/2014 16:50	0.70	10.00	10/28/2014 8:10	8.60	1.96	13.6	55200	188.9	106.5	19.4	7.90	8.04	1.02	1.92E-07
10/28/2014 8:12	1.20	10.00	10/28/2014 17:47	6.38	4.76	13.5	34500	186.3	132.4	20.9	5.18	5.24	1.01	1.83E-07
10/28/2014 17:47	1.40	10.00	10/29/2014 8:46	9.20	2.26	13.8	53940	185.3	104.9	19.0	7.80	7.74	0.99	1.95E-07

Hydraulic Conductivity (cm/s) = 1.89E-07

Apex geoscience inc.
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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB099

Boring No.:
Boring Depth (ft):

Date: 10/16/2014
Cell No.: 2

Apex Sample ID: 8068-2
Sample Description:
Remarks Remolded sample using: PTX 06-1SB099: 287'-288'

Pan No.: 12
Pan Weight (gm) = 303.8

Pan + wet (gm) = 506.4
Pan + dry (gm) = 463.3
Initial Moisture Content (%) = 27.0

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	564.6	559.5
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	26.5	25.3
Void Ratio (%) =	83.1	83.1
Porosity (%) =	45.4	45.4
Degree of Saturation (%) =	86.0	82.3
Wet Unit Weight (pcf) =	116.4	115.4
Dry Unit Weight (pcf) =	92.1	92.1
Specific Gravity =	2.70	
Dried Weight (gm) =	446.5	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/21/2014 9:05	3.50	10.00	10/21/2014 16:37	8.38	4.90	11.4	27120	174.4	122.8	19.5	4.88	5.10	1.05	2.39E-07
10/21/2014 16:42	0.72	9.76	10/22/2014 8:36	10.82	0.34	12.0	57240	187.5	86.6	18.0	10.10	9.42	0.93	2.50E-07
10/23/2014 8:27	0.70	10.00	10/23/2014 16:25	6.40	3.86	12.7	28680	188.9	127.7	20.8	5.70	6.14	1.08	2.53E-07
10/24/2014 8:16	2.00	10.00	10/24/2014 10:40	3.84	7.84	13.0	8640	182.2	161.5	22.5	1.84	2.16	1.17	2.58E-07

Hydraulic Conductivity (cm/s) = 2.50E-07

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB100

Boring No.:
Boring Depth (ft):

Date: 10/24/2014
Cell No.: 4

Apex Sample ID: 8068-1-4
Sample Description:
Remarks Remolded sample using: PTX 06-1SB100

Pan No.: 87
Pan Weight (gm) = 143.1

Pan + wet (gm) = 346.4
Pan + dry (gm) = 301.8
Initial Moisture Content (%) = 28.1

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	576.9	549.7
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	26.1	20.1
Void Ratio (%) =	78.6	78.6
Porosity (%) =	44.0	44.0
Degree of Saturation (%) =	89.5	69.1
Wet Unit Weight (pcf) =	119.0	113.4
Dry Unit Weight (pcf) =	94.4	94.4
Specific Gravity =	2.70	
Dried Weight (gm) =	457.6	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/26/2014 18:18	0.90	9.66	10/27/2014 7:52	3.40	7.36	19.0	48840	186.1	161.3	22.8	2.50	2.30	0.92	5.42E-08
10/27/2014 7:52	3.40	7.36	10/27/2014 16:55	4.56	6.14	19.0	32580	161.3	149.0	20.4	1.16	1.22	1.05	4.51E-08
10/27/2014 16:57	1.20	10.00	10/28/2014 8:17	3.80	7.42	19.3	55200	186.3	159.5	22.7	2.60	2.58	0.99	5.20E-08
10/28/2014 8:17	3.80	7.42	10/28/2014 17:49	5.70	5.54	19.3	34320	159.5	140.0	19.7	1.90	1.88	0.99	7.05E-08
10/28/2014 17:50	1.40	10.00	10/29/2014 8:49	4.98	6.40	19.3	53940	185.3	148.1	21.9	3.58	3.60	1.01	7.67E-08

Hydraulic Conductivity (cm/s) = 5.97E-08

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB101

Boring No.:
Boring Depth (ft):

Date: 10/7/2014
Cell No.: 4

Apex Sample ID:
Sample Description:
Remarks Remolded sample using: PTX 06-1SB101: 1 of 3 and 2 of 3
3 of 3

Pan No.: 63
Pan Weight (gm) = 131.0

Pan + wet (gm) = 975.5
Pan + dry (gm) = 800.0
Initial Moisture Content (%) = 26.2

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	597.2	575.4
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	24.5	20.0
Void Ratio (%) =	70.4	70.4
Porosity (%) =	41.3	41.3
Degree of Saturation (%) =	94.0	76.6
Wet Unit Weight (pcf) =	123.2	118.7
Dry Unit Weight (pcf) =	98.9	98.9
Specific Gravity =	2.70	
Dried Weight (gm) =	479.6	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	97.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/9/2014 9:42	2.24	9.76	10/9/2014 17:11	3.22	8.56	13.2	26940	250.1	238.8	32.1	0.98	1.20	1.22	3.17E-08
10/9/2014 17:11	3.22	8.56	10/10/2014 8:21	5.20	6.64	13.3	54600	238.8	218.6	30.0	1.98	1.92	0.97	2.99E-08
10/13/2014 9:25	2.60	10.00	10/14/2014 8:21	5.80	6.46	13.8	82560	249.5	214.6	30.5	3.20	3.54	1.11	3.37E-08
10/14/2014 8:21	5.80	6.46	10/14/2014 17:19	6.82	5.26	13.8	32280	214.6	203.1	27.4	1.02	1.20	1.18	3.15E-08

Hydraulic Conductivity (cm/s) = 3.17E-08

Apex geoscience inc.
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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB102

Boring No.:
Boring Depth (ft):

Date: 11/4/2014
Cell No.: 3

Apex Sample ID: 8068-2-5
Sample Description:
Remarks Remolded sample using: PTX 06-1SB102

Pan No.: LOL
Pan Weight (gm) = 242.8

Pan + wet (gm) = 650.0
Pan + dry (gm) = 566.8
Initial Moisture Content (%) = 25.7

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	551.3	543.6
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	25.8	24.1
Void Ratio (%) =	86.6	86.6
Porosity (%) =	46.4	46.4
Degree of Saturation (%) =	80.6	75.1
Wet Unit Weight (pcf) =	113.7	112.1
Dry Unit Weight (pcf) =	90.3	90.3
Specific Gravity =	2.70	
Dried Weight (gm) =	438.1	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
11/5/2014 8:07	0.28	9.70	11/5/2014 18:00	1.90	8.22	17.0	35580	189.5	173.5	23.8	1.62	1.48	0.91	4.60E-08
11/5/2014 18:00	1.90	8.22	11/6/2014 8:40	3.96	6.06	17.0	52800	173.5	151.7	21.3	2.06	2.16	1.05	4.71E-08
11/6/2014 8:40	3.96	6.06	11/6/2014 16:55	5.06	4.80	17.0	29700	151.7	139.5	19.1	1.10	1.26	1.15	5.23E-08
11/6/2014 16:56	1.50	10.00	11/7/2014 8:19	4.00	7.36	17.0	55380	184.7	158.2	22.5	2.50	2.64	1.06	5.19E-08
11/7/2014 8:19	4.00	7.36	11/7/2014 17:29	5.66	5.56	17.0	33000	158.2	140.3	19.6	1.66	1.80	1.08	6.73E-08

Hydraulic Conductivity (cm/s) = 5.29E-08

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB103

Boring No.:
Boring Depth (ft):

Date: 10/16/2014
Cell No.: 3

Apex Sample ID: 8068-3
Sample Description:
Remarks Remolded sample using: PTX 06-1SB103

Pan No.: 16
Pan Weight (gm) = 302.4

Pan + wet (gm) = 473.8
Pan + dry (gm) = 442.0
Initial Moisture Content (%) = 22.8

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	634.3	626.8
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	22.9	21.5
Void Ratio (%) =	58.4	58.4
Porosity (%) =	36.9	36.9
Degree of Saturation (%) =	106.0	99.3
Wet Unit Weight (pcf) =	130.8	129.3
Dry Unit Weight (pcf) =	106.4	106.4
Specific Gravity =	2.70	
Dried Weight (gm) =	516.0	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/21/2014 9:07	2.60	10.00	10/21/2014 16:43	3.34	9.22	14.0	27360	179.1	171.2	23.0	0.74	0.78	1.05	3.04E-08
10/21/2014 16:43	3.34	9.22	10/22/2014 8:32	4.66	7.98	14.2	56940	171.2	158.0	21.6	1.32	1.24	0.94	2.62E-08
10/22/2014 8:32	4.66	7.98	10/23/2014 8:28	6.46	6.20	14.5	86160	158.0	139.5	19.5	1.80	1.78	0.99	2.68E-08
10/23/2014 16:27	1.40	8.68	10/24/2014 8:05	2.90	7.46	14.8	56280	178.4	164.4	22.5	1.50	1.22	0.81	2.70E-08

Hydraulic Conductivity (cm/s) = 2.76E-08

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB104

Boring No.:
Boring Depth (ft):

Date: 10/29/2014
Cell No.: 2

Apex Sample ID: 8068-2-2
Sample Description:
Remarks Remolded sample using: PTX 06-1SB104

Pan No.: WWII
Pan Weight (gm) = 303.5

Pan + wet (gm) = 485.9
Pan + dry (gm) = 447.4
Initial Moisture Content (%) = 26.8

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	579.8	556.1
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	27.2	22.0
Void Ratio (%) =	79.4	79.4
Porosity (%) =	44.2	44.2
Degree of Saturation (%) =	92.7	75.0
Wet Unit Weight (pcf) =	119.6	114.7
Dry Unit Weight (pcf) =	94.0	94.0
Specific Gravity =	2.70	
Dried Weight (gm) =	455.7	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
11/1/2014 9:31	2.44	9.64	11/1/2014 17:20	7.40	4.46	16.7	28140	178.0	125.6	19.9	4.96	5.18	1.04	2.29E-07
11/2/2014 11:47	2.80	9.82	11/2/2014 21:02	7.06	5.50	16.7	33300	177.1	132.7	20.3	4.26	4.32	1.01	1.60E-07
11/2/2014 21:07	0.26	9.92	11/3/2014 10:17	6.30	4.00	16.7	47400	190.7	128.9	21.0	6.04	5.92	0.98	1.53E-07
11/3/2014 10:20	1.48	10.00	11/3/2014 16:17	4.30	7.02	16.7	21420	184.8	154.9	22.3	2.82	2.98	1.06	1.53E-07

Hydraulic Conductivity (cm/s) = 1.74E-07

Apex geoscience inc.
215 S. Fannin
Amarillo, TX 79106 (806) 677-0600

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB105

Boring No.:
Boring Depth (ft):

Date: 10/7/2014
Cell No.: 3

Apex Sample ID:
Sample Description:
Remarks Remolded sample using: PTX 06-1SB105: 1 of 2 and 2 of 2

Pan No.: 58
Pan Weight (gm) = 134.5

Pan + wet (gm) = 560.1
Pan + dry (gm) = 479.5
Initial Moisture Content (%) = 23.4

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	579.2	565.7
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	21.2	18.3
Void Ratio (%) =	71.0	71.0
Porosity (%) =	41.5	41.5
Degree of Saturation (%) =	80.5	69.8
Wet Unit Weight (pcf) =	119.4	116.7
Dry Unit Weight (pcf) =	98.6	98.6
Specific Gravity =	2.70	
Dried Weight (gm) =	478.0	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	97.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/9/2014 9:40	1.60	9.80	10/9/2014 17:07	2.34	8.98	7.8	26820	253.6	245.5	32.8	0.74	0.82	1.11	2.23E-08
10/9/2014 17:07	2.34	8.98	10/10/2014 8:20	4.16	7.30	8.2	54780	245.5	227.4	31.0	1.82	1.68	0.92	2.59E-08
10/10/2014 8:20	4.16	7.30	10/13/2014 8:13	10.20	1.60	9.7	258780	227.4	166.7	25.9	6.04	5.70	0.94	2.22E-08
10/13/2014 8:13	10.20	1.60	10/13/2014 17:20	10.78	0.96	10.0	32820	166.7	160.4	21.5	0.58	0.64	1.10	2.17E-08
10/14/2014 8:25	2.00	10.00	10/16/2014 8:15	7.36	4.30	9.8	172200	252.6	195.4	29.4	5.36	5.70	1.06	2.76E-08

Hydraulic Conductivity (cm/s) = 2.39E-08

Apex geoscience inc.
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Amarillo, TX 79106 (806) 677-0600

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1SB106

Boring No.:
Boring Depth (ft):

Date: 8/29/2014
Cell No.: 2

Apex Sample ID:
Sample Description: Lt. Brown
Remarks Remolded sample using: PTX 06-1SB106 (1 of 3) (2 of 3), (3 of 3)

Pan No.: 58
Pan Weight (gm) = 134.5

Pan + wet (gm) = 525.5
Pan + dry (gm) = 435.2
Initial Moisture Content (%) = 30.0

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	556.6	538.4
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	30.4	26.2
Void Ratio (%) =	91.5	91.5
Porosity (%) =	47.8	47.8
Degree of Saturation (%) =	89.8	77.2
Wet Unit Weight (pcf) =	114.8	111.0
Dry Unit Weight (pcf) =	88.0	88.0
Specific Gravity =	2.70	
Dried Weight (gm) =	426.7	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
9/4/2014 8:12	2.40	10.00	9/4/2014 18:20	3.90	8.20	21.0	36480	180.1	163.0	22.5	1.50	1.80	1.20	5.05E-08
9/4/2014 18:20	3.90	8.20	9/5/2014 9:21	6.36	5.82	21.3	54060	163.0	138.0	19.8	2.46	2.38	0.97	5.71E-08
9/5/2014 7:21	2.80	10.00	9/5/2014 17:10	3.90	8.86	21.4	35340	178.0	166.4	22.6	1.10	1.14	1.04	3.52E-08
9/5/2014 17:10	3.90	8.86	9/8/2014 8:15	10.10	2.98	22.5	227100	166.4	104.0	17.7	6.20	5.88	0.95	3.83E-08
9/8/2014 8:20	0.80	10.00	9/10/2014 8:55	7.00	3.60	22.7	174900	188.4	123.2	20.4	6.20	6.40	1.03	4.49E-08
9/10/2014 8:55	7.00	3.60	9/12/2014 8:11	10.60	0.24	23.0	170160	123.2	87.2	13.8	3.60	3.36	0.93	3.76E-08
9/12/2014 8:13	1.20	10.00	9/12/2014 17:05	2.30	8.70	24.0	31920	186.3	173.9	23.6	1.10	1.30	1.18	4.00E-08

Hydraulic Conductivity (cm/s) = 4.34E-08

Apex geoscience inc.
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Amarillo, TX 79106 (806) 677-0600

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1169

Boring No.:
Boring Depth (ft):

Date: 11/4/2014
Cell No.: 1

Apex Sample ID: 8068-2-4
Sample Description:
Remarks Remolded sample using: PTX 06-1169

Pan No.: 22
Pan Weight (gm) = 306.1

Pan + wet (gm) = 632.3
Pan + dry (gm) = 558.4
Initial Moisture Content (%) = 29.3

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	593.3	567.4
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	28.7	23.1
Void Ratio (%) =	77.3	77.3
Porosity (%) =	43.6	43.6
Degree of Saturation (%) =	100.3	80.7
Wet Unit Weight (pcf) =	122.4	117.0
Dry Unit Weight (pcf) =	95.1	95.1
Specific Gravity =	2.70	
Dried Weight (gm) =	460.9	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
11/5/2014 8:00	0.20	9.74	11/5/2014 17:58	1.34	8.54	21.0	35880	190.1	178.0	24.2	1.14	1.20	1.05	3.39E-08
11/5/2014 17:58	1.34	8.54	11/6/2014 8:40	3.00	6.98	21.0	52920	178.0	161.4	22.3	1.66	1.56	0.94	3.43E-08
11/6/2014 8:40	3.00	6.98	11/6/2014 16:51	3.84	6.02	21.0	29460	161.4	152.1	20.6	0.84	0.96	1.14	3.73E-08
11/6/2014 16:52	2.40	10.00	11/7/2014 8:15	4.28	8.14	21.0	55380	180.1	160.8	22.4	1.88	1.86	0.99	3.80E-08
11/7/2014 8:15	4.28	8.14	11/7/2014 17:25	5.24	7.10	21.0	33000	160.8	150.4	20.4	0.96	1.04	1.08	3.73E-08

Hydraulic Conductivity (cm/s) = 3.62E-08

Apex geoscience inc.
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Amarillo, TX 79106 (806) 677-0600

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1170

Boring No.:
Boring Depth (ft):

Date: 11/4/2014
Cell No.: 4

Apex Sample ID: 8068-2-6
Sample Description:
Remarks Remolded sample using: PTX 06-1170

Pan No.: USA
Pan Weight (gm) = 189.8

Pan + wet (gm) = 374.3
Pan + dry (gm) = 331.6
Initial Moisture Content (%) = 30.1

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	587.7	559.3
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	29.8	23.6
Void Ratio (%) =	80.6	80.6
Porosity (%) =	44.6	44.6
Degree of Saturation (%) =	100.0	79.0
Wet Unit Weight (pcf) =	121.2	115.3
Dry Unit Weight (pcf) =	93.3	93.3
Specific Gravity =	2.70	
Dried Weight (gm) =	452.6	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
11/5/2014 8:08	0.26	9.58	11/5/2014 18:01	0.96	8.76	28.0	35580	189.0	181.1	24.3	0.70	0.82	1.17	2.21E-08
11/5/2014 18:01	0.96	8.76	11/6/2014 8:42	2.00	7.94	28.0	52860	181.1	171.5	23.1	1.04	0.82	0.79	1.91E-08
11/6/2014 16:58	1.20	10.00	11/7/2014 8:20	2.10	9.10	28.0	55320	186.3	177.0	23.8	0.90	0.90	1.00	1.71E-08
11/7/2014 8:20	2.10	9.10	11/7/2014 17:30	2.44	8.70	28.0	33000	177.0	173.2	23.0	0.34	0.40	1.18	1.23E-08

Hydraulic Conductivity (cm/s) = 1.77E-08

Apex geoscience inc.
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Amarillo, TX 79106 (806) 677-0600

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1171

Boring No.:
Boring Depth (ft):

Date: 8/26/2014
Cell No.: 2

Apex Sample ID:
Sample Description: Lt. Brown
Remarks Remolded sample using: PTX 06-1171 289.0'-290.0' (1 of 2)
(2 of 2)

Pan No.: TW-31
Pan Weight (gm) = 230.7

Pan + wet (gm) = 652.1
Pan + dry (gm) = 584.0
Initial Moisture Content (%) = 19.3

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	574.9	584.6
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	19.2	21.2
Void Ratio (%) =	69.4	69.4
Porosity (%) =	41.0	41.0
Degree of Saturation (%) =	74.5	82.3
Wet Unit Weight (pcf) =	118.6	120.6
Dry Unit Weight (pcf) =	99.5	99.5
Specific Gravity =	2.70	
Dried Weight (gm) =	482.5	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	99.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
8/28/2014 13:25	1.00	9.76	8/28/2014 13:25	2.80	8.00	13.7	30	115.7	97.3	14.0	1.80	1.76	0.98	1.07E-04
8/28/2014 13:25	2.80	8.00	8/28/2014 13:26	4.40	6.40	13.7	30	97.3	80.7	11.7	1.60	1.60	1.00	1.15E-04
8/28/2014 13:27	1.10	9.90	8/28/2014 13:27	2.10	8.80	13.7	15	115.9	105.0	14.5	1.00	1.10	1.10	1.21E-04
8/28/2014 13:27	2.10	8.80	8/28/2014 13:28	5.00	6.00	13.7	60	105.0	75.6	11.9	2.90	2.80	0.97	1.02E-04
8/29/2014 8:15	4.34	8.60	8/29/2014 8:15	7.50	5.40	13.7	55	92.4	59.5	10.0	3.16	3.20	1.01	1.48E-04
8/29/2014 8:17	1.70	10.00	8/29/2014 8:18	6.40	5.28	13.7	75	113.3	64.6	11.7	4.70	4.72	1.00	1.39E-04

Hydraulic Conductivity (cm/s) = 1.22E-04

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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1172

Boring No.:
Boring Depth (ft):

Date: 8/26/2014
Cell No.: 1

Apex Sample ID:
Sample Description: Lt. Brown
Remarks Remolded sample using: PTX 06-1172 288.5' - 289.5' (1 of 2)
(2 of 2)

Pan No.: TW-32
Pan Weight (gm) = 235.4

Pan + wet (gm) = 717.9
Pan + dry (gm) = 642.1
Initial Moisture Content (%) = 18.6

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	636.6	632.8
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	18.6	17.9
Void Ratio (%) =	52.3	52.3
Porosity (%) =	34.3	34.3
Degree of Saturation (%) =	96.1	92.4
Wet Unit Weight (pcf) =	131.3	130.5
Dry Unit Weight (pcf) =	110.7	110.7
Specific Gravity =	2.70	
Dried Weight (gm) =	536.8	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
8/28/2014 23:16	1.52	9.80	8/29/2014 7:53	7.32	4.08	17.2	31020	183.6	124.0	20.2	5.80	5.72	0.99	2.34E-07
8/29/2014 7:54	2.04	9.90	8/29/2014 17:00	8.90	2.90	18.0	32760	181.4	109.8	19.1	6.86	7.00	1.02	2.84E-07
9/2/2014 8:05	2.23	10.00	9/2/2014 17:45	7.92	4.34	18.5	34800	181.0	122.3	19.9	5.69	5.66	0.99	2.08E-07
9/5/2014 9:20	3.40	10.00	9/5/2014 17:10	7.92	5.42	19.5	28200	174.9	127.9	19.9	4.52	4.58	1.01	2.06E-07
9/8/2014 8:45	1.80	10.00	9/8/2014 18:15	6.98	4.66	20.0	34200	183.2	128.8	20.5	5.18	5.34	1.03	1.91E-07
9/9/2014 10:30	1.88	10.00	9/10/2014 8:25	11.82	0.00	20.0	78900	182.8	79.7	17.2	9.94	10.00	1.01	1.95E-07

Hydraulic Conductivity (cm/s) = 2.20E-07

Apex geoscience inc.
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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1173

Boring No.:
Boring Depth (ft):

Date: 10/24/2014
Cell No.: 1

Apex Sample ID: 8068-1-1
Sample Description:
Remarks Remolded sample using: PTX 06-1173

Pan No.: VRY
Pan Weight (gm) = 145.1

Pan + wet (gm) = 325.4
Pan + dry (gm) = 285.4
Initial Moisture Content (%) = 28.5

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	587.8	548.2
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	30.6	21.8
Void Ratio (%) =	81.5	81.5
Porosity (%) =	44.9	44.9
Degree of Saturation (%) =	101.2	72.1
Wet Unit Weight (pcf) =	121.2	113.1
Dry Unit Weight (pcf) =	92.8	92.8
Specific Gravity =	2.70	
Dried Weight (gm) =	450.2	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/26/2014 18:16	1.00	9.74	10/27/2014 7:50	5.00	5.80	15.2	48840	186.0	144.9	21.7	4.00	3.94	0.99	9.45E-08
10/27/2014 7:54	1.20	10.00	10/27/2014 16:45	3.80	7.32	15.4	31860	186.3	159.0	22.7	2.60	2.68	1.03	9.21E-08
10/27/2014 17:21	1.46	9.80	10/28/2014 8:10	5.46	5.88	17.2	53340	183.9	143.0	21.4	4.00	3.92	0.98	8.74E-08
10/28/2014 8:10	5.46	5.88	10/28/2014 17:45	7.46	3.80	17.3	34500	143.0	121.9	17.4	2.00	2.08	1.04	8.56E-08
10/28/2014 17:46	1.70	10.00	10/29/2014 8:45	5.76	5.98	17.5	53940	183.7	141.9	21.4	4.06	4.02	0.99	8.85E-08

Hydraulic Conductivity (cm/s) = 8.96E-08

Apex geoscience inc.
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FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1174

Boring No.:
Boring Depth (ft):

Date: 7/28/2014
Cell No.: 3

Apex Sample ID:
Sample Description: Lt. Brown
Remarks Remolded sample using: PTX 06-1174 (86.0'-86.5') (87.0'-87.5'), (87.5'-88.0')

Pan No.: 17
Pan Weight (gm) = 753.5

Pan + wet (gm) = 2178.5
Pan + dry (gm) = 1924.8
Initial Moisture Content (%) = 21.7

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	640.3	622.7
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	19.9	16.6
Void Ratio (%) =	53.0	53.0
Porosity (%) =	34.6	34.6
Degree of Saturation (%) =	101.2	84.4
Wet Unit Weight (pcf) =	132.0	128.4
Dry Unit Weight (pcf) =	110.2	110.2
Specific Gravity =	2.70	
Dried Weight (gm) =	534.2	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
7/29/2014 17:15	2.04	10.00	7/29/2014 21:10	6.16	5.80	17.6	14100	182.0	138.9	21.1	4.12	4.20	1.02	3.54E-07
7/30/2014 8:23	1.20	10.00	7/30/2014 17:07	6.42	4.52	17.8	31440	186.3	131.0	20.8	5.22	5.48	1.05	2.07E-07
7/31/2014 8:15	1.30	10.00	7/31/2014 17:49	6.68	4.20	18.2	34440	185.8	128.0	20.6	5.38	5.80	1.08	2.00E-07
8/1/2014 8:13	1.60	10.00	8/1/2014 14:58	5.62	5.92	18.7	24300	184.2	142.4	21.4	4.02	4.08	1.01	1.96E-07

Hydraulic Conductivity (cm/s) = 2.40E-07

Apex geoscience inc.
215 S. Fannin
Amarillo, TX 79106 (806) 677-0600

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1175

Boring No.:
Boring Depth (ft):

Date: 10/16/2014
Cell No.: 1

Apex Sample ID: 8068-1
Sample Description:
Remarks Remolded sample using: PTX 06-1175

Pan No.: 93
Pan Weight (gm) = 150.7

Pan + wet (gm) = 250.0
Pan + dry (gm) = 227.1
Initial Moisture Content (%) = 30.0

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	524.7	507.9
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	29.0	24.9
Void Ratio (%) =	100.9	100.9
Porosity (%) =	50.2	50.2
Degree of Saturation (%) =	77.5	66.5
Wet Unit Weight (pcf) =	108.2	104.7
Dry Unit Weight (pcf) =	83.9	83.9
Specific Gravity =	2.70	
Dried Weight (gm) =	406.8	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/21/2014 9:04	3.24	10.00	10/21/2014 16:36	6.24	6.78	11.1	27120	175.7	143.6	21.0	3.00	3.22	1.07	1.38E-07
10/21/2014 16:37	0.64	9.80	10/22/2014 8:30	7.38	3.40	11.7	57180	188.2	120.2	20.2	6.74	6.40	0.95	1.45E-07
10/22/2014 8:31	1.20	10.00	10/23/2014 8:20	9.86	1.80	12.3	85740	186.3	99.1	18.7	8.66	8.20	0.95	1.36E-07
10/23/2014 8:25	0.40	10.00	10/23/2014 16:25	3.64	6.36	12.4	28800	190.4	154.9	22.7	3.24	3.64	1.12	1.33E-07
10/24/2014 8:15	1.00	10.00	10/24/2014 10:35	2.02	8.80	12.5	8400	187.3	175.9	23.8	1.02	1.20	1.18	1.39E-07

Hydraulic Conductivity (cm/s) = 1.38E-07

Apex geoscience inc.
215 S. Fannin
Amarillo, TX 79106 (806) 677-0600

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1176

Boring No.:
Boring Depth (ft):

Date: 10/16/2014
Cell No.: 4

Apex Sample ID: 8068-4
Sample Description:
Remarks Remolded sample using: PTX 06-1176

Pan No.: TW-24
Pan Weight (gm) = 235.1

Pan + wet (gm) = 427.6
Pan + dry (gm) = 390.5
Initial Moisture Content (%) = 23.9

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	548.8	544.9
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	22.2	21.3
Void Ratio (%) =	82.0	82.0
Porosity (%) =	45.0	45.0
Degree of Saturation (%) =	73.1	70.2
Wet Unit Weight (pcf) =	113.2	112.4
Dry Unit Weight (pcf) =	92.6	92.6
Specific Gravity =	2.70	
Dried Weight (gm) =	449.2	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/21/2014 9:08	2.80	10.00	10/21/2014 16:43	4.96	7.58	16.2	27300	178.0	154.3	21.8	2.16	2.42	1.12	9.68E-08
10/21/2014 16:43	4.96	7.58	10/22/2014 8:33	7.70	4.90	16.2	57000	154.3	126.3	18.4	2.74	2.68	0.98	6.51E-08
10/22/2014 8:34	3.00	10.00	10/23/2014 8:29	7.36	5.50	16.3	86100	177.0	131.2	20.2	4.36	4.50	1.03	6.44E-08
10/23/2014 8:31	1.00	10.00	10/23/2014 16:27	2.34	8.42	16.3	28560	187.3	172.2	23.6	1.34	1.58	1.18	5.45E-08
10/23/2014 16:27	2.34	8.42	10/24/2014 8:07	4.30	6.50	16.3	56400	172.2	152.2	21.3	1.96	1.92	0.98	4.06E-08

Hydraulic Conductivity (cm/s) = 6.43E-08

Apex geoscience inc.
215 S. Fannin
Amarillo, TX 79106 (806) 677-0600

FALLING HEAD RISING TAILWATER FLEXIBLE WALL PERMEABILITY TEST (ASTM D 5084)

Customer: Trihydro
Project: Pantex - PTX06-1177

Boring No.:
Boring Depth (ft):

Date: 10/24/2014
Cell No.: 3

Apex Sample ID: 8068-1-3
Sample Description:
Remarks Remolded sample using: PTX 06-1177

Pan No.: 90
Pan Weight (gm) = 149.8

Pan + wet (gm) = 345.3
Pan + dry (gm) = 310.8
Initial Moisture Content (%) = 21.4

ABOUT THE SAMPLE:

	Initial	Final
Weight (gm) =	633.1	627.5
Diameter (in) =	2.80	2.80
Height (in) =	3.00	3.00
Minus #200 (%) =		
LL =		
PL =		
PI =		
Opt. Moisture Cont. (%) =		
Opt. Dry Unit Weight, (pcf) =		

CALCULATED PROPERTIES:

	Initial	Final
Volume (cc) =	302.7	302.7
Moisture Content (%) =	21.1	20.0
Void Ratio (%) =	56.4	56.4
Porosity (%) =	36.0	36.0
Degree of Saturation (%) =	101.2	96.0
Wet Unit Weight (pcf) =	130.6	129.4
Dry Unit Weight (pcf) =	107.8	107.8
Specific Gravity =	2.70	
Dried Weight (gm) =	522.7	

OTHER PARAMETERS:

Inflow pressure (psi) =	100.0
Outflow pressure (psi) =	98.0
Cell pressure (psi) =	105.0
Inflow burette area (cm^2) =	0.193
Outflow burette area (cm^2) =	0.193

Initial Date & Time	Initial BASE Reading	Initial TOP Reading	Final Date & Time	Final BASE Reading	Final TOP Reading	CELL Reading	Elapsed Time (sec)	Initial Head Differ.	Final Head Differ.	Ave. Hyd. Grad.	Inflow	Outflow	Out/ In Ratio	Hydraulic Conductivity (cm/s)
10/26/2014 18:17	1.38	9.74	10/27/2014 7:51	5.22	5.96	20.7	48840	184.0	144.6	21.6	3.84	3.78	0.98	9.13E-08
10/27/2014 7:52	1.60	9.74	10/27/2014 16:51	4.14	7.06	21.0	32340	182.9	155.9	22.2	2.54	2.68	1.06	9.14E-08
10/27/2014 16:53	1.72	10.00	10/28/2014 8:14	5.90	5.90	21.4	55260	183.6	140.8	21.3	4.18	4.10	0.98	8.89E-08
10/28/2014 8:15	2.00	10.00	10/28/2014 17:48	4.42	7.46	22.3	34380	182.2	156.5	22.2	2.42	2.54	1.05	8.17E-08
10/28/2014 17:48	4.42	7.46	10/29/2014 9:47	8.02	3.90	22.3	57540	156.5	119.5	18.1	3.60	3.56	0.99	8.68E-08

Hydraulic Conductivity (cm/s) = 8.80E-08

Apex geoscience inc.
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APPENDIX M

"APP B" LOGS

Table Of Well Construction Details – Appendix B

Well number	PTX06-1174	PTX06-1380	PTX06-1390	DTX06-1390	PTX06-089
Hole diameter (in)	9 5/8"	9 5/8	9 5/8	9 5/8	9 5/8
Well diameter (in)	4	4"	4"	4"	4"
Total borehole depth (ft)	287	289	289	289	~~292~~ ~~288~~ 288
Constructed well depth (ft)	287	287	~~287~~ 285	288	288
Well location available (Y/N)	Y	Y	Y	Y	Y
Intended Use of Well (sampling, recovery, etc.)	Monitor	Injection	Injection	Injection	Injection
Drilling & lithologic logs available (Y/N)	Y	Y	Y	Y	Y
Drill method	ARCH	ARCH	ARCH	ARCH	ARCH
Date drilled	6/18-6/19	6/20-6/21	6/26	7/7	7/10/14-7/11/14
Casing I.D.(in)	4	4	4	4	4"
Casing type/materials	580 PVC	316 SS	316 SS	316 SS	316 SS
How joined	Threaded	Threaded	threaded	Threaded	Threaded
Stick-up length	26"	26"	26"	26"	26"
Top of casing (+0.01 MSL)					
Ground surface elevation (+0.01 MSL)					
Capped/lockable	Y	Y	Y	Y	Y
Surface pad size(ft)	5x5	5x5	5x5	5x5	5x5
Detailed drawing of well (include dimensions) Y/N	Y	Y	Y	Y	Y
Depth to surface seal(ft)	~~250~~ 5	5	~~5~~ 5	~~252.5~~ 6	~~250~~ 6
Surface seal design & construction available (Y/N)	Y	Y	Y	Y	Y
Well development procedure available (Y/N)	Y	Y	Y	Y	Y

	PTX06-1174	PTX06-ISB~~093~~ 096 cement	PTX06-ISB094 cement	PTX06-ISB090	PTX06-ISB089 cement
Annulus fill	Bent. grout	Bentonite grout	Bentonite grout	cement/bentonite grout	Bentonite Grout
Depth to annulus seal(ft)	260	250	250	253	250
Depth to gravel pack(ft)	273	264	262	265	263
Depth to 1st saturated zone	269 ~~275~~ 89	269	269	269	270
Length of gravel pack(ft)	13	25	27	24	25
Size-gravel pack	10-20	10-20	10-20	10-20	10-20
Filter pack volume (how many bags, buckets, etc.)	10 bags	20 bags	27 bags	23 bags	24 bags
Filter pack placement method	Pour	pour	Pour	pour	pour
Depth to screen(ft)	276	267	265	267	267
Sealant materials	Bent. pellets	Bentonite pellets	Bentonite Pellets	Bentonite pellets	Bentonite Pellets
Sealant volume (how many bags, buckets, etc.)	10 buckets	9 buckets	11 buckets	12 buckets	20 buckets

Table Of Well Construction Details – Appendix B

Well number	PTX06-ISB095	PTX06-1172	PTX06-ISB102	PTX06-ISB101	PTX06-ISB100 A
Hole diameter (in)	9 5/8	9 5/8	9 5/8	9 5/8	9 5/8
Well diameter (in)	4"	4"	4	4	4
Total borehole depth (ft)	289 ~~288.5~~ 56	289 ~~288.5~~ 56	287	286	~~287~~ 56 286'
Constructed well depth (ft)	288	287	286	286	~~287~~ 56 286
Well location available (Y/N)	Y	Y	Y	Y	Y
Intended Use of Well (sampling, recovery, etc.)	Injection	Monitor	Injection	Injection	Injection
Drilling & lithologic logs available (Y/N)	Y	Y	Y	Y	Y
Drill method	ARCH	ARCH	ARCH	ARCH	ARCH
Date drilled	7/16/14 7/24/14	7/24/14	7/29/14	8/5/14	~~8/6/14~~ 9/16/14
Casing I.D.(in)	4	4	4	4	4
Casing type/materials	316 SS	sch 80 PVC	316 SS	316 SS	316 SS
How joined	Threaded	Threaded	Threaded	Threaded	Threaded
Stick-up length	26"	26"	26"	26"	26"
Top of casing (+0.01 MSL)					
Ground surface elevation (+0.01 MSL)					
Capped/lockable	Y	Y	Y	Y	Y
Surface pad size(ft)	5X5	5X5	5X5	5X5	5X5
Detailed drawing of well (include dimensions) Y/N	Y	Y	Y	Y	Y
Depth to surface seal(ft)	~~249.5~~ 5	~~257~~ 56 2	~~280~~ 56 5	~~250~~ 56 5	~~250~~ 2
Surface seal design & construction available (Y/N)	Y	Y	Y	Y	Y
Well development procedure available (Y/N)	Y	Y	Y	Y	Y

	PTX06-SB075	PTX06-1172	PTX06-SB102	PTX06-SB101	PTX06-SB100 A
Annulus fill	cement/bentonite grout	bentonite grout	cement/bentonite grout	cement/bentonite grout	cement/bentonite grout
Depth to annulus seal(ft)	250	257	250	250	235
Depth to gravel pack(ft)	263 ~~264.5~~ 46	268	262	262	262
Depth to 1st saturated zone	270	268	270	270	277
Length of gravel pack(ft)	25 ~~24.2~~ 46	21 ~~20.5~~ 46	25	24	26
Size-gravel pack	10-20	10-20	10/20	10-20	10-20
Filter pack volume (how many bags, buckets, etc.)	21 bags	15 bags	22 bags	21 bags	21 ~~22~~ bags
Filter pack placement method	pour	pour	pour	pour	pour
Depth to screen(ft)	267	276	265	265	262
Sealant materials	pellets	pellets	pellets	pellets	pellets
Sealant volume (how many bags, buckets, etc.)	12 buckets	16 buckets	11 buckets	13 buckets	19 buckets

Table Of Well Construction Details – Appendix B

Well number	PTX06-ISB087	PTX06-ISB088A	PTX06-ISB097	PTX06-ISB098	PTX06-ISB103
Hole diameter (in)	8 3/4"	8 3/4"	9 5/8	9 5/8	9 5/8
Well diameter (in)	4"	4	4	4	4
Total borehole depth (ft)	289	290	285	287	289
Constructed well depth (ft)	287	287	284	286	285
Well location available (Y/N)	Y	Y	Y	Y	Y
Intended Use of Well (sampling, recovery, etc.)	ISB Injection	ISB Injection	Inj	Inj	Inj
Drilling & lithologic logs available (Y/N)	Y	Y	Y	Y	Y
Drill method	mud	mud	ARCH	ARCH	ARCH
Date drilled	7/15/14 – 7/22/14	7/24 ~~9/15/14~~ 9/23/14	8/27/14	8/19/14	9/2/14
Casing I.D.(in)	4	4	4	4	4
Casing type/materials	316 SS	316 SS	316 SS	316 SS	316 SS
How joined	Threaded	Welded + Threaded	Threaded	Threaded	Threaded
Stick-up length	26"	26"	26"	26"	26"
Top of casing (+0.01 MSL)					
Ground surface elevation (+0.01 MSL)					
Capped/lockable	Y	Y	Y	Y	Y
Surface pad size(ft)	5x5	5x5	5x5	5x5	5x5
Detailed drawing of well (include dimensions) Y/N	Y	Y	Y	Y	Y
Depth to surface seal(ft)	~~Y 15~~ 2	2	6	5	5
Surface seal design & construction available (Y/N)	Y	Y	Y	Y	Y
Well development procedure available (Y/N)	Y	Y	Y	Y	Y

	PTX06-15B087	PTX06-15B088A	PTX06-15B097	PTX06-15B092	PTX06-15B103
Annulus fill	cement/ bent. grout	cement/ bent. grout	cement/ bent. grout	cement/ bent. grout	Cement/ bent. grout
Depth to annulus seal(ft)	257	229	230	230	230
Depth to gravel pack(ft)	261	262	260	260	261
Depth to 1st saturated zone					
Length of gravel pack(ft)	28	~~27~~ 30	25	25	27
Size-gravel pack	10/20	10/20	10/20	10/20	10/20
Filter pack volume (how many bags, buckets, etc.)	12 bags	14 bags	26 bags	26 bags	24
Filter pack placement method	tremie	tremie	Pour	Pour	Pour
Depth to screen(ft)	266	~~265~~	263	265	264
Sealant materials	Bent. Pellets	Bentonite pellets	Bent. pellets	~~4 bent pellets~~ + ~~18~~ chips bag	Bent pellets Bent chips
Sealant volume (how many bags, buckets, etc.)	2 buckets	14 buckets	5 buckets	4 pellets + 18 chips	4 buckets pellets + 25 bags chips

Table Of Well Construction Details – Appendix B

Well number	PTX06-ISL099	PTX06-ISB104	PTX06-ISB105	PTX06-ISB106	PTX06-1169
Hole diameter (in)	9 5/8"	9 5/8"	8 3/4	8 3/4	8 3/4
Well diameter (in)	4"	4	4	4	4
Total borehole depth (ft)	287	291	287	289	285
Constructed well depth (ft)	286	288	287	286	283
Well location available (Y/N)	Y	Y	Y	Y	Y
Intended Use of Well (sampling, recovery, etc.)	Injection	Inj	Inj	Inj	Monitor
Drilling & lithologic logs available (Y/N)	Y	Y	Y	Y	Y
Drill method	ARCH	ARCH	Mud	Mud	Mud
Date drilled	8/11/14	8/19/14	8/5/14	7/28/14	8/11/14
Casing I.D.(in)	4	4	4	4	4
Casing type/materials	316 stainless	316 SS	316 SS	316 SS	Sch 80 PVC
How joined	Threaded	Threaded	Threaded	Threaded	Threaded
Stick-up length	26"	26"	26"	26"	26"
Top of casing (+0.01 MSL)					
Ground surface elevation (+0.01 MSL)					
Capped/lockable	Y	Y	Y	Y	Y
Surface pad size(ft)	5X5	5x5	5x5	5x5	5x5
Detailed drawing of well (include dimensions) Y/N	Y	Y	Y	Y	Y
Depth to surface seal(ft)	~~235~~	5	2	2	2
Surface seal design & construction available (Y/N)	Y	Y	Y	Y	Y
Well development procedure available (Y/N)	Y	Y	Y	Y	Y

	PTX06-15B99	PTX06-15B104	PTX06-15B105	PTX06-15B106	PTX06-1169
Annulus fill	Cement/ Bentonite/ Grout	Cement/ bent. grout	Cement/ bent. grout	Cement/ bent. grout	Bentonite grout
Depth to annulus seal(ft)	230	234	248	250	252
Depth to gravel pack(ft)	262	262	262	262	268
Depth to 1st saturated zone	273.95' btoc	?			
Length of gravel pack(ft)	15	29	25	27	17
Size-gravel pack	10-20	10/20	10/20	10/20	10/20
Filter pack volume (how many bags, buckets, etc.)	28 bags	26 bags	15 bags	13 bags	10 bags
Filter pack placement method	pour	Pour	Tremie	Tremie	Tremie
Depth to screen(ft)	265	267	266	265	272
Sealant materials	Bentonite Pellets	bent. pellets + bent. chips	Bent. Pellets	Bent. Pellets	bent. pellets + bent. chips
Sealant volume (how many bags, buckets, etc.)	26 pellets buckets	4 buckets pell + 12 bag chips	5 buckets	5 buckets	6 buckets + 45 bags chips

Table Of Well Construction Details – Appendix B

Well number	PTX06-1170	PTX06-1171	PTX06-1173	PTX06-1175	PTX06-1176
Hole diameter (in)	8 3/4	9 5/8	9 5/8	9 5/8	9 5/8
Well diameter (in)	4	4	4	4	4
Total borehole depth (ft)	287	288	288	287	289
Constructed well depth (ft)	286	286	286	286	288
Well location available (Y/N)	Y	Y	Y	Y	Y
Intended Use of Well (sampling, recovery, etc.)	monitor	monitor ~~trap~~	Monitor	monitor	monitor
Drilling & lithologic logs available (Y/N)	Y	Y	Y	Y	Y
Drill method	Mud	ARCH	ARCH	ARCH	ARCH
Date drilled	8/7/14	7/26/14	9/7/14	8/22/14	8/26/14
Casing I.D.(in)	4	4	4	4	4
Casing type/materials	Sch. 80 PVC	~~3/4 Sch. 80~~ PVC	Sch 80 PVC	Sch. 80 PVC	Sch 80 PVC
How joined	Threaded	Threaded	Threaded	Threaded	Threaded
Stick-up length	26"	26"	26"	26"	26"
Top of casing (+0.01 MSL)					
Ground surface elevation (+0.01 MSL)					
Capped/lockable	Y	Y	Y	Y	Y
Surface pad size(ft)	5x5	5x5	5x5	5x5	5x5
Detailed drawing of well (include dimensions) Y/N	Y	Y	Y	Y	Y
Depth to surface seal(ft)	2	2	2	2	3
Surface seal design & construction available (Y/N)	Y	Y	Y	Y	Y
Well development procedure available (Y/N)	Y	Y	Y	Y	Y

	PTX06-1170	PTX06-1171	PTX06-1173	PTX06-1175	PTX06-1176
Annulus fill	Bentonite grout	Bent. Grout	Bent. grout	Bent. grout	Bentonite Grout
Depth to annulus seal(ft)	258	257	230	225	258
Depth to gravel pack(ft)	272	278	271	272	274
Depth to 1st saturated zone	~~15~~				
Length of gravel pack(ft)	15	16	17	15	15
Size-gravel pack	10/20	10/20	10/20	10/20	10/20
Filter pack volume (how many bags, buckets, etc.)	6 bags	14 bags	15 bags	10 bags	12 bags
Filter pack placement method	Tremie	Pour	Pour	Pour	Pour
Depth to screen(ft)	275	275	275	277	277
Sealant materials	Bent. pellets + Bent. chips	Bent. Pellets	Bent. pellets + Bent. chips	Bent. pellets + Bent. chips	54 buckets pellets
Sealant volume (how many bags, buckets, etc.)	5 buck pellets + 21 bags chips	10 buckets	5 buckets + 25 bags chips	5 buckets + 21 bags chips	Bentonite Pellets

Table Of Well Construction Details – Appendix B

Well number	PTMW-1177	PTMW-158093			
Hole diameter (in)	9 5/8	9 5/8			
Well diameter (in)	4	4			
Total borehole depth (ft)	287	289			
Constructed well depth (ft)	283	286			
Well location available (Y/N)	Y	Y			
Intended Use of Well (sampling, recovery, etc.)	monitor	Injection			
Drilling & lithologic logs available (Y/N)	Y	Y			
Drill method	ARCH	ARCH			
Date drilled	8/23/14	7/14/14			
Casing I.D.(in)	4	4			
Casing type/materials	PVC Sch. 80	316SS			
How joined	Threaded	Threaded			
Stick-up length	26"	26"			
Top of casing (+0.01 MSL)					
Ground surface elevation (+0.01 MSL)					
Capped/lockable	Y	Y			
Surface pad size(ft)	5x5	5x5			
Detailed drawing of well (include dimensions) Y/N	Y	Y			
Depth to surface seal(ft)	2	2			
Surface seal design & construction available (Y/N)	Y	Y			
Well development procedure available (Y/N)	Y	Y			

	PTX06-1177	PTX06-153093			
Annulus fill	Bentonite Grout	Cement/bent grout			
Depth to annulus seal(ft)	238	247.5			
Depth to gravel pack(ft)	270	262			
Depth to 1st saturated zone	~~17~~				
Length of gravel pack(ft)	17	27			
Size-gravel pack	10/20	10/20			
Filter pack volume (how many bags, buckets, etc.)	14 bags	24 bags			
Filter pack placement method	Pour	Pour			
Depth to screen(ft)	272	265			
Sealant materials	Bent. Pellets + Bent. chips	Bentonite pellets			
Sealant volume (how many bags, buckets, etc.)	4 buckets + 16 bags chips	12 buckets			

APPENDIX N

STATE WELL REPORTS

STATE OF TEXAS WELL REPORT for Tracking #375735

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB087**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 15" N**
Well County:	**Carson**	Longitude:	**101° 34' 23" W**
Elevation:	**3526 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **7/15/2014** Completed: **7/24/2014**
Diameter of Hole:	Diameter: **8 3/4 in From Surface To 289 ft**
Drilling Method:	**Mud Rotary**
Borehole Completion:	Gravel Packed From: **289 ft to 261 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 289 ft to 261 ft with 12 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 261 ft to 251 ft with 2 - Pellets (#sacks and material)** 3rd Interval: **From 251 ft to 2 ft with 42 - Cement (#sacks and material)** Method Used: **Tremie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **No Data** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **No Data** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**375735**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 25 Silt, Reddish Yellow
25 - 30 Silt, Strong Brown
30 - 50 Silty Sand, Brown
50 - 77 Silt, Reddish Brown
77 - 87 Sandy Silt, Pink
87 - 108 Silty Sand, Reddish Yellow
108 - 132 Sand, Light Brown
132 - 190 Silty Sand, Reddish Yellow
190 - 240 Sand, Yellowish Brown
240 - 245 Sand, Light Brown
245 - 248 Sand, Tan
248 - 252 Gravely Sand, Tan
252 - 265 Sand, Tan
265 - 286 Gravel & Sand, Light Tan
286 - 289 Sandy Silt, Light Pinkish Tan

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316SS Casing, +2' to 266'
4" New - 316SS Screen .020, 266' to 286'
4" New - 316SS Casing, 286' to 287'

STATE OF TEXAS WELL REPORT for Tracking #378963

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB088A**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 16" N**
Well County:	**Carson**	Longitude:	**101° 34' 24" W**
Elevation:	**3539 ft.**	GPS Brand Used:	**Phone App**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:
Started: **9/18/2014**
Completed: **9/23/2014**

Diameter of Hole:
Diameter: **8 3/4 in From Surface To 292 ft**

Drilling Method:
Mud Rotary

Borehole Completion:
Gravel Packed From: **292 ft to 262 ft**
Gravel Pack Size: **10/20 Sand**

Annular Seal Data:
1st Interval: **From 292 ft to 262 ft with 14 - 10/20 Sand (#sacks and material)**
2nd Interval: **From 262 ft to 229 ft with 14 - Pellets (#sacks and material)**
3rd Interval: **From 229 ft to 2 ft with 43 - Cement (#sacks and material)**
Method Used: **Tremmie**
Cemented By: **Yellow Jacket Drilling**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion:
Surface Slab Installed

Water Level:
Static level: **270 ft. below land surface on 10/17/2014**
Artesian flow: **No Data**

Packers:
N/A

Plugging Info:

Casing left in well:		Cement/Bentonite left in well:		
From (ft)	To (ft)	From (ft)	To (ft)	Cem/Bent Sacks Used
N/A				

Type Of Pump:
No Data

Well Tests:
No Data

Water Quality:
Type of Water: **Perched**
Depth of Strata: **285 to 270 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:
The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:

Yellow Jacket Drilling
3922 E. University Dr, Suite 1
Phoenix , AZ 85034

Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking **#378963**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 72 Silt, Orangish Brown
72 - 75 Clay, White
75 - 97 Clayey Silt, Orangish Brown
97 - 105 Clay, Brown
105 - 155 Sand w/Little Silt, Tan
155 - 162 Sand w/Some Gravel, Brown
162 - 166 Sand, Medium Brown
166 - 190 Sandy Silt, Medium Brown
190 - 205 Silty Sand, Brown
205 - 235 Sand, Medium Brown
235 - 250 Sand w/Some Gravel
250 - 285 Sand w/Little Gravel & Silt, Lt Brown
285 - 292 Silt w/Some Sand, Lt Brownish Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316 SS Casing, 0' to 265'
4" New - 316 SS Screen .020", 265' to 285'
4" New - 316 SS Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #375886

Owner:	**US Department of Energy**	Owner Well #:	**PTX06-ISB089**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Panhandle , TX 79120**	Latitude:	**35° 18' 16" N**
Well County:	**Carson**	Longitude:	**101° 34' 25" W**
Elevation:	**3533 ft.**	GPS Brand Used:	**Google Earth**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **7/10/2014** Completed: **7/12/2014**
Diameter of Hole:	Diameter: **9.625 in From Surface To 288 ft**
Drilling Method:	**Air Rotary** Other: **Casing Hammer**
Borehole Completion:	Gravel Packed From: **263 ft to 288 ft** Gravel Pack Size: **10/20**
Annular Seal Data:	1st Interval: **From 288 ft to 263 ft with 24-10/20 Sand (#sacks and material)** 2nd Interval: **From 263 ft to 250 ft with 20/Bent.Pellets (#sacks and material)** 3rd Interval: **From 250 ft to 6 ft with 189/ Portland (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **270 ft. below land surface on 7/11/2014** Artesian flow: **No Data**
Packers:	**No Data**
Plugging Info:	Casing or Cement/Bentonite left in well: **No Data**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **270'-287' ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling Services** **3922 E.University Drive,Suite1** **Phoenix , AZ 85034**
Driller License Number:	**4885**
Licensed Well Driller Signature:	**William B. Bludworth**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 50 Silt, Reddish Tan
50 - 66 Sandy Silt, Reddish Yellow
66 - 73 Silty Sand, Red
73 - 96 Caliche, Whitish Pink
96 - 111 Silt, Pinkish Tan
111-130 Sand, Light Brown
130-207 Silty Sand, Light Brown
207-239 Sand, Light Brown
239-251 Sandy Gravel, Strong Brown
251-287 Sand, Brown
287-288 Sand, Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 N 316 Stainless Steel Casing +2-267 Sch#10
4 N 316 SS Wire Wrap Screen 267-287 .020" slot
4 N 316 SS Sump 287-288 Sch#10

STATE OF TEXAS WELL REPORT for Tracking #375887

Owner:	**US Department of Energy**	Owner Well #:	**PTX06-ISB090**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Panhandle , TX 79120**	Latitude:	**35° 18' 16" N**
Well County:	**Carson**	Longitude:	**101° 34' 24" W**
Elevation:	**3530 ft.**	GPS Brand Used:	**Google Earth**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **7/7/2014** Completed: **7/10/2014**
Diameter of Hole:	Diameter: **9.625 in From Surface To 289 ft**
Drilling Method:	**Air Rotary** Other: **Casing Hammer**
Borehole Completion:	Gravel Packed From: **265 ft to 289 ft** Gravel Pack Size: **10/20**
Annular Seal Data:	1st Interval: **From 289 ft to 265 ft with 23-10/20 Sand (#sacks and material)** 2nd Interval: **From 265 ft to 253 ft with 12/Bent.Pellets (#sacks and material)** 3rd Interval: **From 253 ft to 6 ft with 217/ Portland (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **271 ft. below land surface on 9/4/2014** Artesian flow: **No Data**
Packers:	**No Data**
Plugging Info:	Casing or Cement/Bentonite left in well: **No Data**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **271'-287' ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling Services** **3922 E.University Drive,Suite1** **Phoenix , AZ 85034**
Driller License Number:	**4885**
Licensed Well Driller Signature:	**William B. Bludworth**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**375887**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 63 Silt, reddish yellow
63 - 72 Silt, Red
72 - 88 Caliche, Pink
88 - 112 Sandy Silt, Reddish Yellow
112 - 118 Sand, Light Yellowish Brown
118 - 148 Silt, Reddish Yellow
148 - 204 Silty Sand, Yellowish Brown
204 - 238 Sand, Strong Brown
238 - 248 Sandy Gravel, Strong Brown
248 - 287 Sand, Strong Brown
287 - 289 Silt, Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 N 316 Stainless Steel Casing +2-267 Sch#10
4 N 316 SS Wire Wrap Screen 267-287 .020" slot
4 N 316 SS Sump 287-288 Sch#10

STATE OF TEXAS WELL REPORT for Tracking #375889

Owner:	**US Department of Energy**	Owner Well #:	**PTX06-ISB093**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Panhandle , TX 79120**	Latitude:	**35° 18' 18" N**
Well County:	**Carson**	Longitude:	**101° 34' 29" W**
Elevation:	**3527 ft.**	GPS Brand Used:	**Google Earth**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **7/13/2014** Completed: **7/16/2014**
Diameter of Hole:	Diameter: **9.625 in From Surface To 289 ft**
Drilling Method:	**Air Rotary** Other: **Casing Hammer**
Borehole Completion:	Gravel Packed From: **262 ft to 289 ft** Gravel Pack Size: **10/20**
Annular Seal Data:	1st Interval: **From 289 ft to 262 ft with 24-10/20 Sand (#sacks and material)** 2nd Interval: **From 262 ft to 248 ft with 12/Bent.Pellets (#sacks and material)** 3rd Interval: **From 248 ft to 2 ft with 168/Portland (#sacks and material)** Method Used: **Tremie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **269 ft. below land surface on 7/15/2014** Artesian flow: **No Data**
Packers:	**No Data**
Plugging Info:	Casing or Cement/Bentonite left in well: **No Data**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **269'-285' ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling Services** **3922 E.University Drive,Suite1** **Phoenix , AZ 85034**
Driller License Number:	**4885**
Licensed Well Driller Signature:	**William B. Bludworth**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**375889**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 45 Silt, Light Reddish Tan
45 - 54 Silt, Reddish Yellow
54 - 72 Silty sand, Red
72 - 88 Caliche, Pink
88 - 100 Sandy silt, Tan
100 - 125 Silty Sand, Light Brown
125 - 165 Sand, Light Brown
165 - 214 Silty Sand, Light Brown
214 - 285 Sand, Light Brown
285 - 289 Silt, Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4 N 316 Stainless Steel Casing +2-265 Sch#10
4 N 316 SS Wire Wrap Screen 265-285 .020" slot
4 N 316 SS Sump 285-286 Sch#10

STATE OF TEXAS WELL REPORT for Tracking #375736

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB094**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 18" N**
Well County:	**Carson**	Longitude:	**101° 34' 30" W**
Elevation:	**3536 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **6/26/2014** Completed: **7/7/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 289 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **289 ft to 262 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 289 ft to 262 ft with 27 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 262 ft to 250 ft with 11 - Pellets (#sacks and material)** 3rd Interval: **From 250 ft to 5 ft with 256 - Cement (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **269 ft. below land surface on 6/27/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **284 - 269 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**375736**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 58 Silt, Light Tan
58 - 77 Sandy Silt, Light Red
77 - 82 Caliche, Light Tan to White
82 - 90 Silty Sand, Pinkish Tan
90 - 104 Sandy Silt, Light Tan
104 - 110 Sand, Light Brown
110 - 152 Silty Sand, Tan
152 - 175 Sand, Light Brown
175 - 200 Silty Sand, Light Brown
200 - 217 Sand, Light Brown
217 - 221 Gravel, Light Brown
221 - 241 Sand, Light Brown
241 - 245 Gravel, Light Brown
245 - 289 Sand, Light Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316SS Casing, +2' to 265'
4" New - 316SS Screen .020, 265' to 284'
4" New - 316SS Casing, 284' to 285'

STATE OF TEXAS WELL REPORT for Tracking #375738

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB095**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 17" N**
Well County:	**Carson**	Longitude:	**101° 34' 32" W**
Elevation:	**3528 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **7/16/2014** Completed: **7/24/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 289 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **289 ft to 264 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 289 ft to 264 ft with 21 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 264 ft to 250 ft with 12 - Pellets (#sacks and material)** 3rd Interval: **From 250 ft to 5 ft with 189 - Cement (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **271 ft. below land surface on 7/22/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **287 - 271 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking #**375738**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 55 Silt, Reddish Tan
55 - 70 Sandy Silt, Reddish Yellow
70 - 78 Silty Sand, Pink
78 - 90 Silty Sand, Reddish Tan
90 - 97 Clay & Silt, Light Brown
97 - 120 Silty Sand, Light Brown
120 - 130 Sand, Light Brown
130 - 150 Silty Sand, Light Reddish Brown
150 - 168 Sand, Tan
168 - 185 Silty Sand, Light Brown
185 - 220 Sand, Tan
220 - 255 Sand, Tan
255 - 281 Sand, Tan
281 - 289 Clayey Sand, Light Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316SS Casing, +2' to 267'
4" New - 316SS Screen .020, 267' to 287'
4" New - 316SS Casing, 287' to 288'

STATE OF TEXAS WELL REPORT for Tracking #375739

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB096**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 17" N**
Well County:	**Carson**	Longitude:	**101° 34' 33" W**
Elevation:	**3523 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **6/20/2014** Completed: **6/22/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 289 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **289 ft to 264 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 289 ft to 264 ft with 20 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 264 ft to 250 ft with 9 - Pellets (#sacks and material)** 3rd Interval: **From 250 ft to 5 ft with 147 - Cement (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **269 ft. below land surface on 6/22/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **286 - 269 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 64 Silt, Tan
64 - 85 Sandy Silt, Light Red
85 - 90 Silty Sand, Light Red
90 - 101 Silt, Reddish Brown
101 - 120 Sand, Light Brown
120 - 135 Silt, Light Brown
135 - 150 Silty Sand, Light Brown
150 - 170 Sand, Light Brown
170 - 215 Silty Sand, Light Brown
215 - 258 Sand, Light Brown
258 - 277 Sandy Gravel, Light Pink/Brown
277 - 289 Gravel, Light Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316SS Casing, +2' to 267'
4" New - 316SS Screen .020, 267' to 286'
4" New - 316SS Casing, 286' to 287'

STATE OF TEXAS WELL REPORT for Tracking #378962

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB097**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 18" N**
Well County:	**Carson**	Longitude:	**101° 34' 39" W**
Elevation:	**3548 ft.**	GPS Brand Used:	**Phone App**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:
Started: **8/26/2014**
Completed: **8/27/2014**

Diameter of Hole:
Diameter: **9 5/8 in From Surface To 285 ft**

Drilling Method:
Other: **ARCH**

Borehole Completion:
Gravel Packed From: **285 ft to 260 ft**
Gravel Pack Size: **10/20 Sand**

Annular Seal Data:
1st Interval: **From 285 ft to 260 ft with 26 - 10/20 Sand (#sacks and material)**
2nd Interval: **From 260 ft to 230 ft with 5 - Pellets (#sacks and material)**
3rd Interval: **From 230 ft to 6 ft with 151 - Cement (#sacks and material)**
Method Used: **Tremmie**
Cemented By: **Yellow Jacket Drilling**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion:
Surface Slab Installed

Water Level:
Static level: **272 ft. below land surface on 10/14/2014**
Artesian flow: **No Data**

Packers:
N/A

Plugging Info:
Casing left in well: Cement/Bentonite left in well:
From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used
N/A

Type Of Pump:
No Data

Well Tests:
No Data

Water Quality:
Type of Water: **Perched**
Depth of Strata: **284 to 272 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:
The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:

	Yellow Jacket Drilling **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 23 Silt, Gray Orange
23 - 43 Silty Clay, Reddish Brown
43 - 62 Silt, Orange to White
62 - 68 Silt w/Trace of Clay, Orange
68 - 91 Caliche, Orange-White
91 - 116 Sand, Light Yellow
116 - 122 Sandy Silt, Rose White
122 - 140 Clayey Silt w/Sand, Light Orange
140 - 160 Sand w/Some Silt, Reddish Yellow
160 - 200 Sandy Silt, Light Yellowish Brown
200 - 212 Silty Sand, Light Yellowish Brown
212 - 222 Sand, Light Yellowish Brown
222 - 230 Silty Sand, Light Yellowish Brown
230 - 232 Sandy Silt w/Some Gravel, Light Gray
232 - 244 Gravel w/Some Sand, Gray
244 - 260 Silty Sand, Light Yellowish Brown
260 - 284 Sand w/Some Silt, Light Yellowish Brown
284 - 285 Clay, Reddish Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316 SS Casing, 0' to 263'
4" New - 316 SS Screen .020", 263' to 283'
4" New - 316 SS Casing, 283' to 284'

STATE OF TEXAS WELL REPORT for Tracking #378955

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB098**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 19" N**
Well County:	**Carson**	Longitude:	**101° 34' 35" W**
Elevation:	**3551 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:
Started: **8/19/2014**
Completed: **8/19/2014**

Diameter of Hole:
Diameter: **9 5/8 in From Surface To 287 ft**

Drilling Method:
Other: **ARCH**

Borehole Completion:
Gravel Packed From: **287 ft to 262 ft**
Gravel Pack Size: **10/20 Sand**

Annular Seal Data:
1st Interval: **From 287 ft to 262 ft with 21 - 10/20 Sand (#sacks and material)**
2nd Interval: **From 262 ft to 230 ft with 22 - Pellets (#sacks and material)**
3rd Interval: **From 230 ft to 5 ft with 231 - Cement (#sacks and material)**
Method Used: **Tremmie**
Cemented By: **Yellow Jacket Drilling**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion:
Surface Slab Installed

Water Level:
Static level: **273 ft. below land surface on 10/16/2014**
Artesian flow: **No Data**

Packers:
N/A

Plugging Info:
Casing left in well: Cement/Bentonite left in well:
From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used
N/A

Type Of Pump:
No Data

Well Tests:
No Data

Water Quality:
Type of Water: **Perched**
Depth of Strata: **285 to 273 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:
The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:

	Yellow Jacket Drilling **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking **#378955**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 65 Silt, Medium Brown
65 - 80 Silt, Brownish Orange
80 - 83 Sandy Gravel, Tannish White
83 - 110 Silt, Light Tan
110 - 116 Silty Sand, Tan
116 - 130 Silt, Tan
130 - 148 Silty Sand, Orangish Brown
148 - 175 Sand w/Trace of Silt, Tan
175 - 190 Sandy Silt, Tan
190 - 215 Sandy Silt w/Some Gravel, Tan
215 - 219 Sand w/Little Gravel, Tan
219 - 235 Sand, Tan
235 - 250 Sandy Gravel, Tan
250 - 271 Sand, Orangish Tan
271 - 282 Gravely Sand, Tan
282 - 285 Sand, Tan
285 - 287 Sandy Silt, Pinkish Tan

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316 SS Casing, 0' to 265'
4" New - 316 SS Screen .020", 265' to 285'
4" New - 316 SS Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #378951

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB099**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 17" N**
Well County:	**Carson**	Longitude:	**101° 34' 30" W**
Elevation:	**3543 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:
Started: **8/11/2014**
Completed: **8/11/2014**

Diameter of Hole:
Diameter: **9 5/8 in From Surface To 287 ft**

Drilling Method:
Other: **ARCH**

Borehole Completion:
Gravel Packed From: **287 ft to 262 ft**
Gravel Pack Size: **10/20 Sand**

Annular Seal Data:
1st Interval: **From 287 ft to 262 ft with 28 - 10/20 Sand (#sacks and material)**
2nd Interval: **From 262 ft to 230 ft with 26 - Pellets (#sacks and material)**
3rd Interval: **From 230 ft to 5 ft with 171 - Cement (#sacks and material)**
Method Used: **Tremmie**
Cemented By: **Yellow Jacket Drilling**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion:
Surface Slab Installed

Water Level:
Static level: **272 ft. below land surface on 9/3/2014**
Artesian flow: **No Data**

Packers:
N/A

Plugging Info:
Casing left in well: Cement/Bentonite left in well:
From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used
N/A

Type Of Pump:
No Data

Well Tests:
No Data

Water Quality:
Type of Water: **Perched**
Depth of Strata: **285 to 272 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:
The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:

	Yellow Jacket Drilling **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 43 Silt, Reddish Tan
43 - 65 Sandy Silt, Yellowish Red
65 - 76 Silty Sand, Yellowish Red
76 - 87 Caliche, Pinkish White
87 - 106 Silty Sand, Pinkish Tan
106 - 111 Silt, Light Brown
111 - 139 Silty Sand, Light Brown
139 - 163 Sand, Light Brown
163 - 212 Silty Sand, Light Brown
212 - 238 Sand, Tan
238 - 251 Sandy Gravel, Light Brown
251 - 269 Sand, Light Brown
269 - 274 Conglomerate, Light Tan
274 - 281 Sand, Light Brown
281 - 287 Little Intermixed Clay

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316 SS Casing, 0' to 265'
4" New - 316 SS Screen .020", 265' to 285'
4" New - 316 SS Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #378948

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB100A**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 54" N**
Well County:	**Carson**	Longitude:	**101° 33' 22" W**
Elevation:	**3545 ft.**	GPS Brand Used:	**Phone App**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:
Started: **9/10/2014**
Completed: **9/16/2014**

Diameter of Hole:
Diameter: **9 5/8 in From Surface To 286 ft**

Drilling Method:
Other: **ARCH**

Borehole Completion:
Gravel Packed From: **286 ft to 262 ft**
Gravel Pack Size: **10/20 Sand**

Annular Seal Data:
1st Interval: **From 286 ft to 262 ft with 21 - 10/20 Sand (#sacks and material)**
2nd Interval: **From 262 ft to 235 ft with 19 - Pellets (#sacks and material)**
3rd Interval: **From 235 ft to 2 ft with 185 - Cement (#sacks and material)**
Method Used: **Tremmie**
Cemented By: **Yellow Jacket Drilling**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion:
Surface Slab Installed

Water Level:
Static level: **272 ft. below land surface on 10/1/2014**
Artesian flow: **No Data**

Packers:
N/A

Plugging Info:
Casing left in well: Cement/Bentonite left in well:
From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used
N/A

Type Of Pump:
No Data

Well Tests:
No Data

Water Quality:
Type of Water: **Perched**
Depth of Strata: **285 to 272 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:
The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:

	Yellow Jacket Drilling **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 69 Silt, Pinkish Brown
69 - 80 Silty Clay, Whitish Brown
80 - 95 Silty Sand, Orangish Brown
95 - 103 Sand, Tan
103 - 106 Sand, Tan
106 - 115 Gravelly Silt w/Some Sand, Orangish Brown
115 - 195 Silt, Orangish Brown
195 - 208 Gravely Silt, Orangish Brown
208 - 218 Sand, Orangish Brown
218 - 237 Gravely Sand, Orangish Brown
237 - 250 Sandy Gravel, Orangish Brown
250 - 255 Gravely Sand, Orangish Tan
255 - 260 Sand w/Little Gravel, Orangish Tan
260 - 268 Sand, Tan
268 - 275 Gravely Sand, Orangish Tan
275 - 285 Sand w/Little Gravel, Light Tan
285 - 286 Sandy Silt, Pinkish Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316 SS Casing, 0' to 265'
4" New - 316 SS Screen .020", 265' to 285'
4" New - 316 SS Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #375882

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB101**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 16" N**
Well County:	**Carson**	Longitude:	**101° 34' 29" W**
Elevation:	**3521 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **8/5/2014** Completed: **8/7/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 286 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **286 ft to 262 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 286 ft to 262 ft with 21 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 262 ft to 250 ft with 13 - Pellets (#sacks and material)** 3rd Interval: **From 250 ft to 5 ft with 154 - Cement (#sacks and material)** Method Used: **Tremie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **270 ft. below land surface on 8/5/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **285 - 270 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking #**375882**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 5 Clay, Dark Brown
5 - 20 Silt, Reddish Brown
20 - 35 Silt, Red Brown
35 - 65 Sand, Reddish Brown
65 - 70 Gravely Sand, Whitish Tan
70 - 85 Sandy Silt, Reddish Brown
85 - 100 Sand, Tan
100 - 110 Sand, Tan
110 - 140 Gravely Sand, Light Brown
140 - 170 Sand, Tan
170 - 230 Gravely Sand, Tan
230 - 245 Sandy Gravel, Brown
245 - 285 Sand, Light Tan
285 - 286 Sandy Silt, Pinkish Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316SS Casing, +2' to 265'
4" New - 316SS Screen .020, 265' to 285'
4" New - 316SS Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #375883

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB102**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 16" N**
Well County:	**Carson**	Longitude:	**101° 34' 28" W**
Elevation:	**3524 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **7/29/2014** Completed: **7/31/2014**
Diameter of Hole:	Diameter: **9.625 in From Surface To 287 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **287 ft to 262 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 287 ft to 262 ft with 22 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 262 ft to 250 ft with 11 - Pellets (#sacks and material)** 3rd Interval: **From 250 ft to 5 ft with 210 - Cement (#sacks and material)** Method Used: **Tremie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **270 ft. below land surface on 7/29/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **285 - 270 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking #**375883**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 73 Silt, Light Pinkish Brown
73 - 80 Sandy Silt, Light Yellowish Tan
80 - 105 Silty Sand, Pinkish Tan
105 - 115 Sand, Tan
115 - 130 Silt, Light Reddish Brown
130 - 160 Sand, Light Brown
160 - 170 Sand, Tan
170 - 215 Sand, Light Brown
215 - 235 Sand, Light Brown
235 - 245 Silt, Brown
245 - 265 Gravely Sand, Light Tan/Grey
265 - 287 Sand, Light Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316SS Casing, +2' to 265'
4" New - 316SS Screen .020, 265' to 285'
4" New - 316SS Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #378942

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB103**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 16" N**
Well County:	**Carson**	Longitude:	**101° 34' 25" W**
Elevation:	**3544 ft.**	GPS Brand Used:	**Phone App**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:
Started: **8/27/2014**
Completed: **9/2/2014**

Diameter of Hole:
Diameter: **9 5/8 in From Surface To 289 ft**

Drilling Method:
Other: **ARCH**

Borehole Completion:
Gravel Packed From: **289 ft to 261 ft**
Gravel Pack Size: **10/20 Sand**

Annular Seal Data:
1st Interval: **From 289 ft to 261 ft with 24 - 10/20 Sand (#sacks and material)**
2nd Interval: **From 261 ft to 230 ft with 29 - Pellets (#sacks and material)**
3rd Interval: **From 230 ft to 5 ft with 231 - Cement (#sacks and material)**
Method Used: **Tremmie**
Cemented By: **Yellow Jacket Drilling**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion:
Surface Slab Installed

Water Level:
Static level: **271 ft. below land surface on 10/14/2014**
Artesian flow: **No Data**

Packers:
N/A

Plugging Info:
Casing left in well: Cement/Bentonite left in well:
From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used
N/A

Type Of Pump:
No Data

Well Tests:
No Data

Water Quality:
Type of Water: **Perched**
Depth of Strata: **284 to 271 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:
The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:

Yellow Jacket Drilling
3922 E. University Dr, Suite 1
Phoenix , AZ 85034

Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 2 Silt, Brown
2 - 5 Silt w/Trace of Caliche, Lt Brownish Gray
5 - 28 Silt, Reddish Yellow
28 - 50 Silt w/Some Sand, Reddish Yellow
50 - 70 Silt w/Some Sand, Light Red
70 - 82 Sandy Silt, Pink
82 - 92 Silty Sand, Reddish Yellow
92 - 140 Sand, Light Brown
140 - 152 Silty Sand, Light Brown
152 - 176 Sand, Brownish Yellow
176 - 195 Silt w/Some Sand, Brownish Yellow
195 - 234 Sand, Very Pale Brown
234 - 240 Gravelly Sand, Grayish Brown
240 - 250 Sandy Gravel, Orangish Brown
250 - 262 Sand, Orangish Brown
262 - 284 Sand w/Trace Gravel, Orangish Brwn
284 - 289 Silt w/Trace of Sand, Brownish Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316 SS Casing, 0' to 264'
4" New - 316 SS Screen .020", 264' to 284'
4" New - 316 SS Casing, 284' to 285'

STATE OF TEXAS WELL REPORT for Tracking #378940

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB104**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 15" N**
Well County:	**Carson**	Longitude:	**101° 34' 26" W**
Elevation:	**3529 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **8/19/2014** Completed: **8/19/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 291 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **291 ft to 262 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 291 ft to 262 ft with 26 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 262 ft to 234 ft with 16 - Pellets (#sacks and material)** 3rd Interval: **From 234 ft to 5 ft with 189 - Cement (#sacks and material)** Method Used: **Tremmie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**
Water Level:	Static level: **271 ft. below land surface on 9/30/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**
Water Quality:	Type of Water: **Perched** Depth of Strata: **287 to 271 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**
Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	

	Yellow Jacket Drilling **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 3 Silt w/Some Clay, Brown
3 - 15 Silt w/Some Caliche, Light Brown
15 - 30 Silt, Reddish Yellow
30 - 50 Silt w/Some Sand, Yellowish Red
50 - 74 Silt w/Some Sand, Reddish Brown
74 - 88 Sandy Silt, Pink
88 - 110 Silty Sand, Reddish Yellow
110 - 132 Sand, Light Brown
132 - 150 Silty Sand, Brownish Yellow
150 -176 Sand w/Trace of Silt, Brownish Yellow
176 - 185 Silt w/Some Sand, Reddish Yellow
185 - 230 Sand, Yellowish Brown
230 - 240 Gravelly Sand, Brownish Yellow
240 - 252 Sandy Gravel, Brown
252 - 287 Sand w/Trace of Gravel, Brown
287 - 291 Sandy Silt, Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316 SS Casing, 0' to 267'
4" New - 316 SS Screen .020", 267' to 287'
4" New - 316 SS Casing, 287' to 288'

STATE OF TEXAS WELL REPORT for Tracking #375884

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB105**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**Fm 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 14" N**
Well County:	**Carson**	Longitude:	**101° 34' 24" W**
Elevation:	**3517 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **7/30/2014** Completed: **8/6/2014**
Diameter of Hole:	Diameter: **8 3/4 in From Surface To 287 ft**
Drilling Method:	**Mud Rotary**
Borehole Completion:	Gravel Packed From: **287 ft to 262 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 287 ft to 262 ft with 15 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 262 ft to 248 ft with 5 - Pellets (#sacks and material)** 3rd Interval: **From 248 ft to 2 ft with 42 - Cement (#sacks and material)** Method Used: **Tremie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **No Data** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **No Data** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 60 Silt, Dark Brown
60 - 75 Silt, Brownish Red
75 - 80 Clay, Whitish Tan
80 - 93 Silt, Reddish Tan
93 - 98 Sandy Silt, Light Reddish Tan
98 - 103 Silty Sand, Reddish Brown
103 - 118 Clay & Silt, Light Brown
118 - 132 Sandy Silt, Light Brown
132 - 170 Silty Sand, Light Brown
170 - 210 Silty Sand, Light Brown
210 - 230 Sand, Light Brown
230 - 286 Sand, Light Brown
286 - 288 Sandy Silt, Brownish Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316SS Casing, +2' to 266'
4" New - 316SS Screen .020, 266' to 286'
4" New - 316SS Casing, 286' to 287'

STATE OF TEXAS WELL REPORT for Tracking #375885

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB106**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 14" N**
Well County:	**Carson**	Longitude:	**101° 34' 23" W**
Elevation:	**3525 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Injection**

Drilling Date:	Started: **7/27/2014** Completed: **7/29/2014**
Diameter of Hole:	Diameter: **8 3/4 in From Surface To 289 ft**
Drilling Method:	**Mud Rotary**
Borehole Completion:	Gravel Packed From: **289 ft to 262 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 289 ft to 262 ft with 13 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 262 ft to 250 ft with 5 - Pellets (#sacks and material)** 3rd Interval: **From 250 ft to 2 ft with 42 - Cement (#sacks and material)** Method Used: **Tremie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **No Data** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **No Data** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 55 Silt, Light Brown
55 - 75 Silt, Reddish Brown
75 - 85 Clay, Whitish Tan
85 - 90 Silt, Tan
90 - 120 Silty Sand, Light Brown
120 - 126 Silt, Light Brown
126 - 175 Silty Sand, Light Brown
175 - 178 Silty Sand, Light Brown
178 - 225 Sand, Light Brown
225 - 285 Sand, Light Brown
285 - 289 Sandy Silt, Brownish Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - 316SS Casing, +2' to 265'
4" New - 316SS Screen .020, 265' to 285'
4" New - 316SS Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #379053

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1169**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 12" N**
Well County:	**Carson**	Longitude:	**101° 34' 17" W**
Elevation:	**3535 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date:	Started: **8/9/2014** Completed: **8/11/2014**
Diameter of Hole:	Diameter: **8 3/4 in From Surface To 285 ft**
Drilling Method:	**Mud Rotary**
Borehole Completion:	Gravel Packed From: **285 ft to 268 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 285 ft to 268 ft with 10 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 268 ft to 252 ft with 5 - Pellets (#sacks and material)** 3rd Interval: **From 252 ft to 2 ft with 51 - Bent Grout (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**
Water Level:	Static level: **265 ft. below land surface on 9/30/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**
Water Quality:	Type of Water: **Perched** Depth of Strata: **282 to 265 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**
Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 48 Silt, Reddish Brown
48 - 70 Silt w/Trace Sand, Reddish Brown
70 - 77 Clayey Silt, Whitish Grey
77 - 85 Sandy Silt, Pinkish Brown
85 - 105 Silt w/Little Sand, Pinkish Brown
105 - 116 Sand, Light Brown
116 - 122 Silt, Dark Brown
122 - 130 Sandy Silt, Dark Brown
130 - 152 Silty Sand w/Trace of Gravel
152 - 170 Sand w/Little Silt, Medium Brown
170 - 178 Sandy Silt, Medium Brown
178 - 188 Silt, Brown
188 - 195 Sandy Silt, Brown
195 - 211 Silty Sand, Brown
211 - 262 Sand w/Some Silt, Light Reddish Brown
262 - 287 Sand w/Trace Silt, Light Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - Sch80 PVC Casing, 0' to 272'
4" New - Sch80 PVC Screen .020", 272' to 282'
4" New - Sch80 PVC Casing, 282' to 283'

STATE OF TEXAS WELL REPORT for Tracking #375729

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1170**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 14" N**
Well County:	**Carson**	Longitude:	**101° 34' 30" W**
Elevation:	**3533 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date:	Started: **8/6/2014** Completed: **8/9/2014**
Diameter of Hole:	Diameter: **8 3/4 in From Surface To 287 ft**
Drilling Method:	**Mud Rotary**
Borehole Completion:	Gravel Packed From: **287 ft to 272 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 287 ft to 272 ft with 6 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 272 ft to 258 ft with 5 - 1/4" Pellet (#sacks and material)** 3rd Interval: **From 258 ft to 2 ft with 26 - Bentonite (#sacks and material)** Method Used: **Tremie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **No Data** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **No Data** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 5 Silt, Dark Brown
5 - 45 Silt, Reddish Brown
45 - 68 Sandy Silt, Reddish Brown
68 - 76 Silty Clay, Greyish White
76 - 110 Sandy Silt, Reddish Brown
110 - 130 Silty Sand, Medium Brown
130 - 142 Sandy Silt, Light Brown/Tan
142 - 152 Sand, Light Brown
152 - 160 Silty Sand, Light Brown
160 - 188 Sand, Light Brown
188 - 198 Silty Sand, Light/Medium Brown
198 - 210 Gravely Sand, Medium Brown
210 - 233 Sand, Light Brown
233 - 245 Gravely Sand, Medium Brown
245 - 285 Sand, Medium Brown
285 - 287 Sandy Silt, Tan/Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - Sch80 PVC Casing, +2' to 275'
4" New - Sch80 PVC Screen .020, 275' to 285'
4" New - Sch80 PVC Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #375732

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1171**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**Fm 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 18" N**
Well County:	**Carson**	Longitude:	**101° 34' 26" W**
Elevation:	**3526 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date:	Started: **7/26/2014** Completed: **7/28/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 288 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **288 ft to 272 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 288 ft to 272 ft with 14 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 272 ft to 258 ft with 10 - Pellets (#sacks and material)** 3rd Interval: **From 258 ft to 2 ft with 42 - Bentonite (#sacks and material)** Method Used: **Tremie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **270 ft. below land surface on 7/30/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **285 - 270 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking #**375732**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 47 Silt, Reddish Brown
47 - 64 Sandy Silt, Reddish Yellow
64 - 73 Silty Sand, Reddish Brown
73 - 79 Caliche, Whitish Pink
79 - 88 Silty Sand, Pinkish Tan
88 - 103 Silt, Tan
103 - 175 Sand, Light Brown
175 - 214 Silty Sand, Light Brown
214 - 241 Sand, Light Brown
241 - 248 Gravel, Greyish Tan
248 - 253 Sandstone, Tan
253 - 288 Sand, Brown

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - Sch80 PVC Casing, +2 to 275'
4" New - Sch80 PVC Screen .020, 275' to 285'
4" New - Sch80 PVC Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #375733

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1172**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 17" N**
Well County:	**Carson**	Longitude:	**101° 34' 23" W**
Elevation:	**3525 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date:	Started: **7/24/2014** Completed: **7/26/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 289 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **289 ft to 268 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 289 ft to 268 ft with 13 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 268 ft to 257 ft with 16 - Pellets (#sacks and material)** 3rd Interval: **From 257 ft to 2 ft with 36 - Bentonite (#sacks and material)** Method Used: **Tremie** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **271 ft. below land surface on 7/30/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **286 - 271 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No Data**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 47 Silt, Light Reddish Tan
47 - 58 Sandy Silt, Light Red/Yellow
58 - 75 Sandy Silt, Reddish Brown
75 - 87 Caliche, Pink
87 - 100 Silt, Light Brown
100 - 125 Sand, Light Brown
125 - 220 Sand, Tan
220 - 260 Gravely Sand, Light Brown
260 - 289 Sand, Tan

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - Sch80 PVC Casing, +2 to 276'
4" New - Sch80 PVC Screen .020, 276' to 286'
4" New - Sch80 PVC Casing, 286' to 287'

STATE OF TEXAS WELL REPORT for Tracking #379052

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1173**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 15" N**
Well County:	**Carson**	Longitude:	**101° 34' 38" W**
Elevation:	**3550 ft.**	GPS Brand Used:	**Phone App**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date: Started: **9/5/2014**
Completed: **9/7/2014**

Diameter of Hole: Diameter: **9 5/8 in From Surface To 288 ft**

Drilling Method: Other: **ARCH**

Borehole Completion: Gravel Packed From: **288 ft to 271 ft**
Gravel Pack Size: **10/20 Sand**

Annular Seal Data: 1st Interval: **From 288 ft to 271 ft with 15 - 10/20 Sand (#sacks and material)**
2nd Interval: **From 271 ft to 230 ft with 30 - Pellets (#sacks and material)**
3rd Interval: **From 230 ft to 2 ft with 49 - Bent Grout (#sacks and material)**
Method Used: **Tremmie**
Cemented By: **Yellow Jacket Drilling**
Distance to Septic Field or other Concentrated Contamination: **No Data**
Distance to Property Line: **No Data**
Method of Verification: **No Data**
Approved by Variance: **No Data**

Surface Completion: **Surface Slab Installed**

Water Level: Static level: **268 ft. below land surface on 9/18/2014**
Artesian flow: **No Data**

Packers: **N/A**

Plugging Info: Casing left in well: Cement/Bentonite left in well:
From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used
N/A

Type Of Pump: **No Data**

Well Tests: **No Data**

Water Quality: Type of Water: **Perched**
Depth of Strata: **285 to 268 ft.**
Chemical Analysis Made: **No**
Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data: The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking **#379052**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 5 Silt, Dark Brown
5 - 53 Silt w/Trace of Sand, Orangish Brown
53 - 58 Silt w/Some Gravel, Orangish Brown
58 - 77 Silt, Orangish Red
77 - 83 Gravely Silt, Tannish White
83 - 86 Gravely Sand, Tan
86 - 95 Silt w/Some Caliche Gravel, Tan
95 - 101 Sandy Silt, Light Orangish Brown
101 - 115 Silty Sand, Tan
115 - 125 Silt w/Trace of Sand & Gravel, Orangish Tan
125 - 140 Silt, Tan
140 - 150 Sandy Silt w/Trace of Gravel, Light Orangish Tan
150 - 170 Sand, Light Orangish Tan
170 - 176 Sandy Silt, Light Orangish Tan
176 - 198 Silt, Light Orangish Tan
198 - 207 Silty Sand, Brown
207 - 215 Sand, Light Brown to Tan
215 - 220 Sand w/Some Silt, Orangish Brown
220 - 238 Gravely Sand, Orangish Brown
238 - 242 Sandy Gravel, Brownish Grey
242 - 248 Gravely Sand, Orangish Brown
248 - 285 Sand, Light Orangish Tan
285 - 288 Silty Sand, Light Brownish Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - Sch80 PVC Casing, 0' to 275'
4" New - Sch80 PVC Screen .020", 275' to 285'
4" New - Sch80 PVC Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #375734

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1174**
Address:	**PO Box 30030** **Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**Fm 2373 & Hwy 60** **Amarillo , TX 79120**	Latitude:	**35° 18' 15" N**
Well County:	**Carson**	Longitude:	**101° 34' 28" W**
Elevation:	**3524 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date:	Started: **6/18/2014** Completed: **6/20/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 287 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **287 ft to 273 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 287 ft to 273 ft with 10 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 273 ft to 260 ft with 10 - Pellets (#sacks and material)** 3rd Interval: **From 260 ft to 5 ft with 96 - Bentonite (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**

Water Level:	Static level: **269 ft. below land surface on 6/19/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**

Water Quality:	Type of Water: **Perched** Depth of Strata: **286' - 269' ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**

Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking #**375734**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 74 Silt, Light Pink
74 - 85 Caliche, Tan to White
85 - 110 Gravely Silt, Tan
110 - 130 Clayey Silt, Reddish Brown
130 - 145 Clay, Light Reddish Brown
145 - 155 Sandy Clay, Light Reddish Brown
155 - 190 Sand, Tan to Light Pinkish Tan
190 - 205 Silty Sand, Pinkish Tan
205 - 230 Sand, Pinkish Tan
230 - 250 Gravely Sand, Tan
250 - 285 Gravely Sand, Tan
285 - 287 Clayey Silt, Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - Sch80 PVC Casing, +2' to 276'
4" New - Sch80 PVC Screen .020, 276' to 286'
4" New - Sch80 PVC Casing, 286' to 287'

STATE OF TEXAS WELL REPORT for Tracking #379051

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1175**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 16" N**
Well County:	**Carson**	Longitude:	**101° 34' 35" W**
Elevation:	**3549 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date:	Started: **8/21/2014** Completed: **8/22/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 287 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **287 ft to 272 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 287 ft to 272 ft with 10 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 272 ft to 225 ft with 34 - Pellets (#sacks and material)** 3rd Interval: **From 225 ft to 2 ft with 31 - Bent Grout (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**
Water Level:	Static level: **269 ft. below land surface on 10/1/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**
Water Quality:	Type of Water: **Perched** Depth of Strata: **285 to 269 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**
Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr, Suite 1** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Please include the report's Tracking number (Tracking **#379051**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 5 Silt, Brown
5 - 20 Silt, Tan
20 - 40 Silt, Darker Tan
40 - 62 Silt, Reddish Orange
62 - 71 Clayey Silt, Orange-Red
71 - 78 Caliche, White
78 - 85 Silt & Caliche
85 - 95 Sandy Silt
95 - 99 Caliche & Silt, White-Grey
99 - 103 Very Fine Sand, Golden
103 - 105 Silty, Very Fine Sand, Clay
105 - 120 Sand, Trace of Silt
120 - 160 Clayey Silt, Tan
160 - 163 Silty Sand w/Trace of Clay, Yellowish Tan
163 - 185 Clayey Silt
185 - 206 Clayey Silt, Sand, Brown
206 - 227 Silty Sand, Gravel, Brown
227 - 247 Gravel, Silt, Grey
247 - 259 Sandy Gravel, Trace of Silt, Brown
259 - 269 Sandy Silt, Gravel, Tan
269 - 275 Silty Sand, Gravel, Tan
275 - 286 Sand, Gravel
286 - 287 Sandy Clay, Gravel, Pink

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - Sch80 PVC Casing, 0' to 275'
4" New - Sch80 PVC Screen .020", 275' to 285'
4" New - Sch80 Casing, 285' to 286'

STATE OF TEXAS WELL REPORT for Tracking #379050

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1176**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**Fm 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 15" N**
Well County:	**Carson**	Longitude:	**101° 34' 26" W**
Elevation:	**3531 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date:	Started: **8/22/2014** Completed: **8/26/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 289 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **289 ft to 274 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 289 ft to 274 ft with 12 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 274 ft to 258 ft with 19 - Pellets (#sacks and material)** 3rd Interval: **From 258 ft to 5 ft with 54 - Bent Grout (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**
Water Level:	Static level: **272 ft. below land surface on 9/30/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**
Water Quality:	Type of Water: **Perched** Depth of Strata: **288 to 272 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**
Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr., Suite** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

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Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 3 Silt w/Some Clay, Brown
3 - 6 Silt w/Trace Caliche, Pinkish Grey
6 - 15 Silt w/Trace Caliche, Reddish Yellow
15 - 30 Silt, Yellowish Red
30 - 50 Silt w/Some Sand, Reddish Yellow
50 - 72 Silt w/Some Sand, Red
72 - 80 Sandy Silt, Caliche, Pink
80 - 95 Silty Sand, Reddish Yellow
95 - 137 Sand, Light Brown
137 - 155 Silty Sand, Yellowish Brown
155 - 178 Sand, Yellowish Brown
178 - 194 Silt w/Some Sand, Reddish Yellow
194 - 195 Silt, Caliche, Light Grey
195 - 235 Sand, Brownish Yellow
235 - 246 Sandy Gravel, Greyish Brown
246 - 287 Sand, Very Pale Brown
287 - 289 Silt, Light Pinkish Tan

CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - Sch80 PVC Casing, 0' to 277'
4" New - Sch80 PVC Screen .020", 277' to 287'
4" New - Sch80 PVC Casing, 287' to 288'

STATE OF TEXAS WELL REPORT for Tracking #379048

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-1177**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM 2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 18" N**
Well County:	**Carson**	Longitude:	**101° 34' 33" W**
Elevation:	**3539 ft.**	GPS Brand Used:	**Garmin**
Type of Work:	**New Well**	Proposed Use:	**Monitor**

Drilling Date:	Started: **8/23/2014** Completed: **8/23/2014**
Diameter of Hole:	Diameter: **9 5/8 in From Surface To 287 ft**
Drilling Method:	Other: **ARCH**
Borehole Completion:	Gravel Packed From: **287 ft to 270 ft** Gravel Pack Size: **10/20 Sand**
Annular Seal Data:	1st Interval: **From 287 ft to 270 ft with 14 - 10/20 Sand (#sacks and material)** 2nd Interval: **From 270 ft to 238 ft with 20 - Pellets (#sacks and material)** 3rd Interval: **From 238 ft to 2 ft with 32 - Bent Grout (#sacks and material)** Method Used: **High Pressure** Cemented By: **Yellow Jacket Drilling** Distance to Septic Field or other Concentrated Contamination: **No Data** Distance to Property Line: **No Data** Method of Verification: **No Data** Approved by Variance: **No Data**
Surface Completion:	**Surface Slab Installed**
Water Level:	Static level: **271 ft. below land surface on 10/14/2014** Artesian flow: **No Data**
Packers:	**N/A**
Plugging Info:	Casing left in well: Cement/Bentonite left in well: From (ft) To (ft) From (ft) To (ft) Cem/Bent Sacks Used **N/A**
Type Of Pump:	**No Data**
Well Tests:	**No Data**
Water Quality:	Type of Water: **Perched** Depth of Strata: **283 to 271 ft.** Chemical Analysis Made: **No** Did the driller knowingly penetrate any strata which contained undesirable constituents: **No**
Certification Data:	The driller certified that the driller drilled this well (or the well was drilled under the driller's direct supervision) and that each and all of the statements herein are true and correct. The driller understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.

Company Information:	**Yellow Jacket Drilling** **3922 E. University Dr., Suite** **Phoenix , AZ 85034**
Driller License Number:	**59375**
Licensed Well Driller Signature:	**Quentin Stevens**
Registered Driller Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Comments:	**No Data**

IMPORTANT NOTICE FOR PERSONS HAVING WELLS DRILLED CONCERNING CONFIDENTIALITY

TEX. OCC. CODE Title 12, Chapter 1901.251, authorizes the owner (owner or the person for whom the well was drilled) to keep information in Well Reports confidential. The Department shall hold the contents of the well log confidential and not a matter of public record if it receives, by certified mail, a written request to do so from the owner.

Please include the report's Tracking number (Tracking **#379048**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

DESC. & COLOR OF FORMATION MATERIAL

From (ft) To (ft) Description
0 - 24 Silt, Pink
24 - 35 Clayey Silt, Pinkish Grey
35 - 40 Clayey Silt, Brown
40 - 49 Silty Clay, Brown
49 - 62 Silt w/Trace of Clay, White
62 - 69 Silty Clay & Gravel, Orange
69 - 71 Caliche, Rose White
71 - 86 Silty Clay, Orange
86 - 93 Silty Clay, Caliche Gravel, Brown
93 - 103 Clayey Silt VF Sand
103 - 115 Silt Sand, Clay, Gravel
115 - 121 Silt, Gravel, Pink-White
121 - 143 Clayey Silt, Brown
143 - 163 Silty Sand, Yellow Brown
163 - 205 Clayey Silt, Brown
205 - 230 Clayey Silt, Brown
230 - 239 Gravelly Sand, Tan
239 - 246 Sandy Gravel, Grey
246 - 260 Silty Sand, Trace of Gravel, Tan
260 - 283 Silty Sand, Gravel, Tan
283 - 286 Clay, Pink

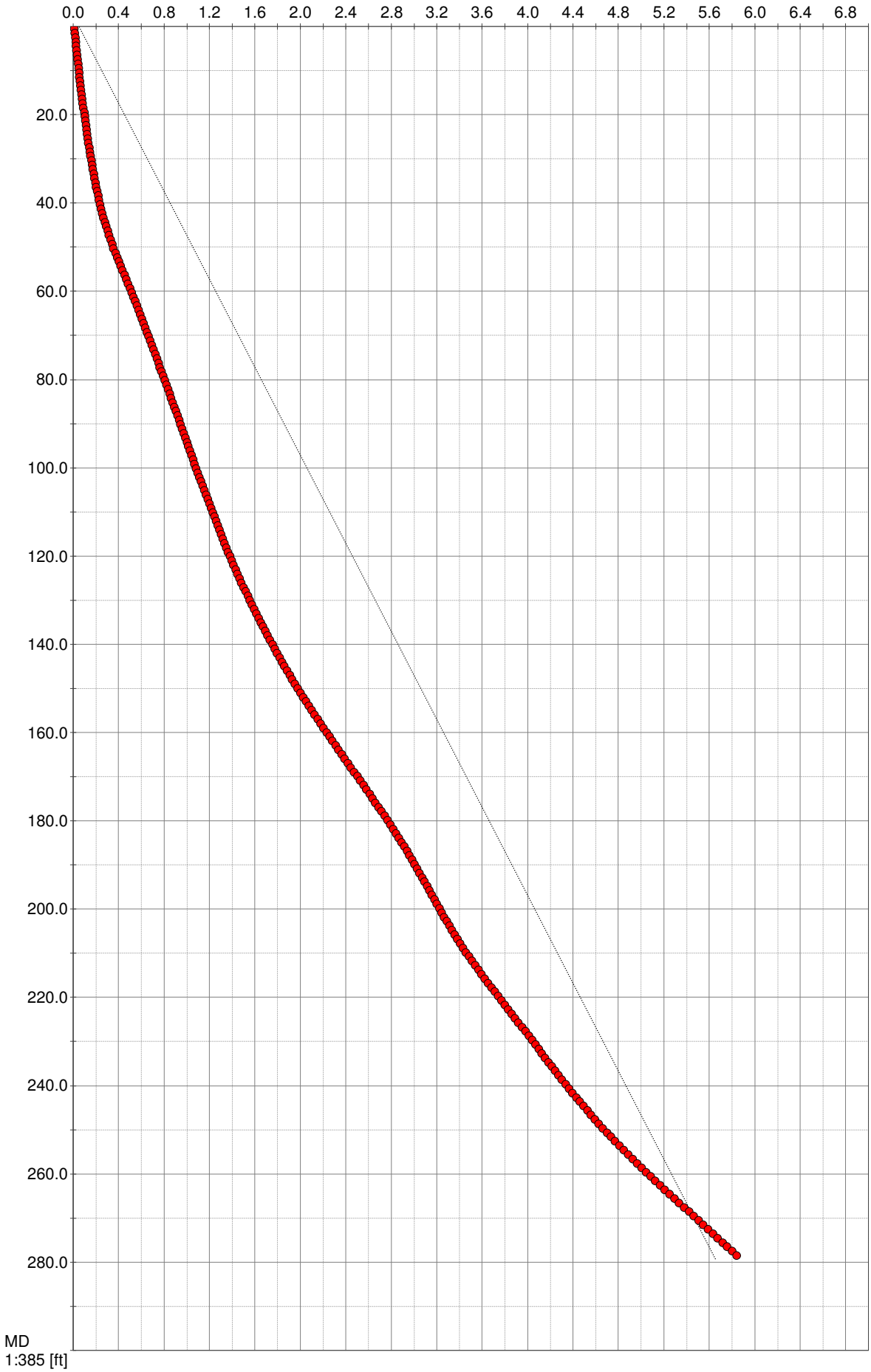
CASING, BLANK PIPE & WELL SCREEN DATA

Dia. New/Used Type Setting From/To
4" New - Sch80 PVC Casing, 0' to 272'
4" New - Sch80 PVC Screen .020", 272' to 282'
4" New - Sch80 PVC Casing, 282' to 283'

APPENDIX O

DEVIATION SURVEY RESULTS

Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]		Closure Angle deg	DLS [deg/100ft]
0.00	49.26	0.22	0.01	0.01	0.49	0.01		49.82	0.42
10.00	74.22	0.26	0.05	0.02	10.46	0.05	0.41	65.95	0.12
20.00	77.36	0.31	0.10	0.03	20.42	0.10	0.49	74.25	0.15
30.00	82.46	0.39	0.16	0.03	30.39	0.16	0.59	78.65	0.17
40.00	82.85	0.55	0.23	0.03	40.35	0.24	0.76	82.73	0.93
50.00	78.74	0.84	0.35	0.04	50.32	0.36	1.20	83.82	1.00
60.00	78.26	0.91	0.51	0.06	60.28	0.51	1.59	83.79	0.27
70.00	80.92	0.83	0.66	0.07	70.25	0.67	1.51	84.13	0.23
80.00	92.14	0.83	0.80	0.06	80.21	0.81	1.41	85.48	0.66
90.00	108.76	0.88	0.95	0.02	90.17	0.95	1.40	88.61	0.91
100.00	114.96	0.92	1.08	-0.05	100.14	1.08	1.37	92.83	0.36
110.00	114.66	0.93	1.22	-0.14	110.10	1.23	1.44	96.36	0.15
120.00	117.38	1.02	1.36	-0.22	120.07	1.38	1.52	99.26	0.26
130.00	119.26	1.19	1.52	-0.33	130.03	1.56	1.76	102.30	0.49
140.00	122.04	1.29	1.69	-0.46	139.99	1.75	1.98	105.16	0.55
150.00	125.66	1.50	1.88	-0.62	149.96	1.98	2.23	108.14	0.55
160.00	127.01	1.60	2.08	-0.80	159.92	2.23	2.53	111.02	0.50
170.00	127.92	1.68	2.29	-1.00	169.88	2.50	2.70	113.53	0.28
180.00	128.59	1.58	2.50	-1.19	179.84	2.77	2.67	115.59	0.17
190.00	129.28	1.33	2.67	-1.37	189.80	3.01	2.39	117.21	0.29
200.00	132.03	1.32	2.83	-1.54	199.77	3.22	2.17	118.51	1.15
210.00	134.95	1.62	2.99	-1.73	209.73	3.46	2.36	120.01	1.45
220.00	136.12	1.85	3.18	-1.97	219.69	3.74	2.82	121.75	1.23
230.00	136.60	1.80	3.37	-2.22	229.65	4.04	2.99	123.34	0.52
240.00	139.13	1.85	3.57	-2.46	239.61	4.33	2.95	124.63	7.06
250.00	134.41	2.09	3.77	-2.74	249.57	4.66	3.28	125.93	0.91
260.00	136.70	2.37	4.03	-3.04	259.53	5.04	3.81	127.00	1.50
270.00	132.76	2.50	4.32	-3.35	269.49	5.46	4.19	127.79	0.80
280.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00		-999.00	-999.00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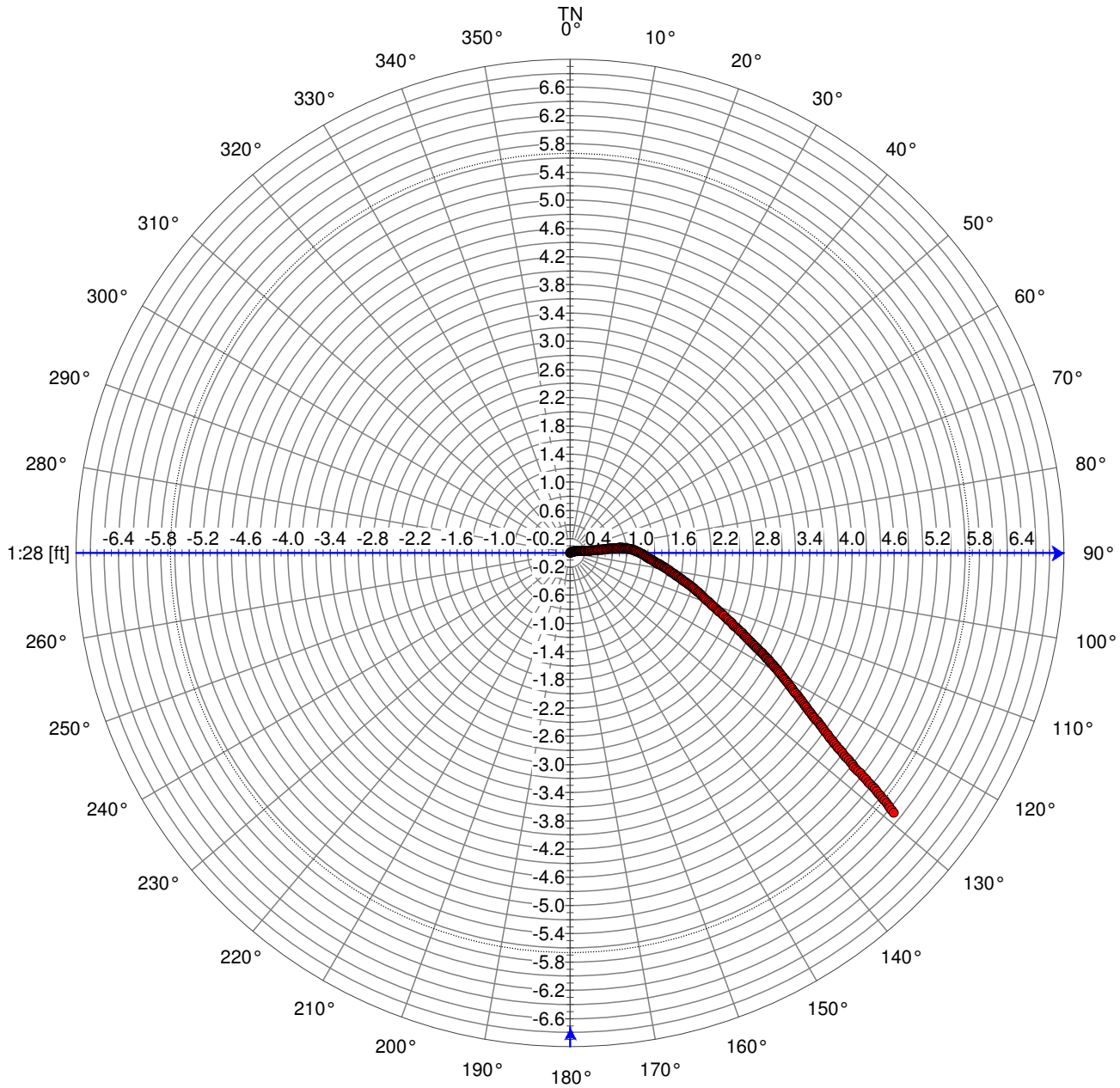
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Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	99.72	0.16	0.01	0.00	-0.21	0.01	105.69	0.05
10.00	91.59	0.15	0.03	-0.01	9.76	0.03	103.54	0.16
20.00	70.08	0.13	0.06	-0.01	19.72	0.06	96.92	0.33
30.00	44.42	0.13	0.08	0.00	29.69	0.08	87.11	0.11
40.00	44.77	0.13	0.09	0.02	39.65	0.09	77.97	0.05
50.00	193.47	0.16	0.10	0.01	49.62	0.11	85.85	1.21
60.00	317.15	0.28	0.07	0.01	59.58	0.08	82.18	0.38
70.00	269.86	0.29	0.04	0.05	69.55	0.06	43.73	0.25
80.00	254.97	0.19	0.00	0.05	79.51	0.05	3.11	0.29
90.00	230.96	0.16	-0.03	0.04	90.48	0.05	323.34	1.34
100.00	96.04	0.15	-0.02	0.02	100.44	0.03	305.99	1.04
110.00	90.96	0.12	0.00	0.03	110.41	0.03	354.78	0.94
120.00	201.80	0.08	0.00	0.01	120.37	0.01	15.95	0.35
130.00	214.80	0.08	-0.01	0.00	130.34	0.01	295.20	0.40
140.00	164.62	0.12	-0.01	-0.01	140.31	0.02	212.95	0.29
150.00	149.42	0.09	0.00	-0.03	150.27	0.03	184.70	0.13
160.00	139.65	0.09	0.00	-0.04	160.24	0.04	174.60	0.27
170.00	112.25	0.18	0.02	-0.06	170.20	0.06	160.41	0.51
180.00	95.79	0.18	0.05	-0.07	180.17	0.08	142.07	0.35
190.00	130.46	0.12	0.07	-0.08	190.13	0.11	136.53	0.24
200.00	159.03	0.14	0.08	-0.10	200.10	0.13	139.13	0.20
210.00	174.31	0.18	0.09	-0.12	210.06	0.15	144.92	0.29
220.00	184.50	0.25	0.08	-0.16	220.03	0.18	152.78	0.20
230.00	190.73	0.33	0.07	-0.21	229.99	0.22	161.26	0.35
240.00	190.73	0.37	0.05	-0.27	239.96	0.27	168.90	0.15
250.00	188.33	0.41	0.03	-0.33	249.93	0.34	174.07	0.20
260.00	182.61	0.39	0.02	-0.40	259.89	0.40	177.36	0.73
270.00	177.91	0.39	0.01	-0.47	269.86	0.47	178.54	0.10
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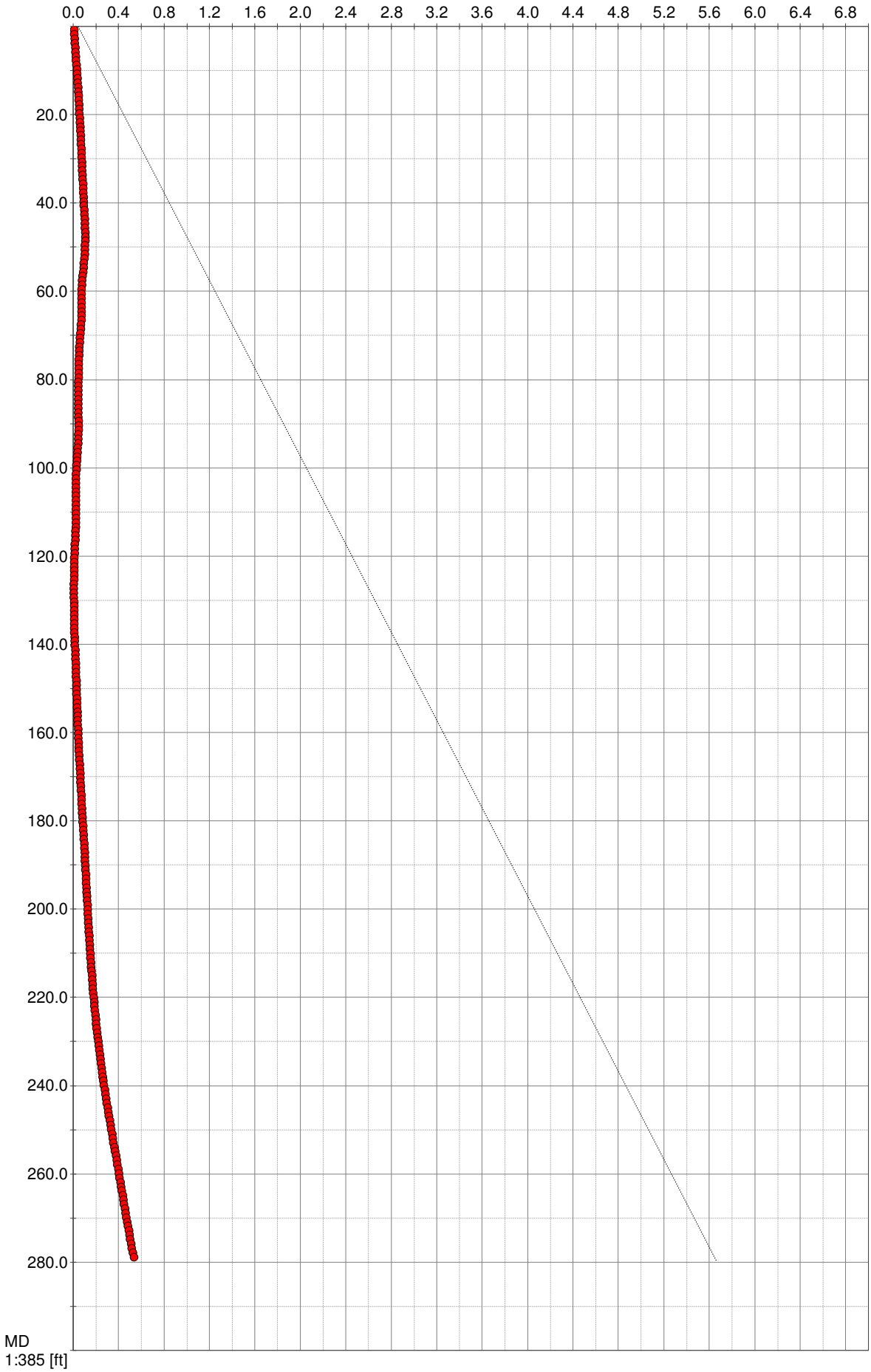
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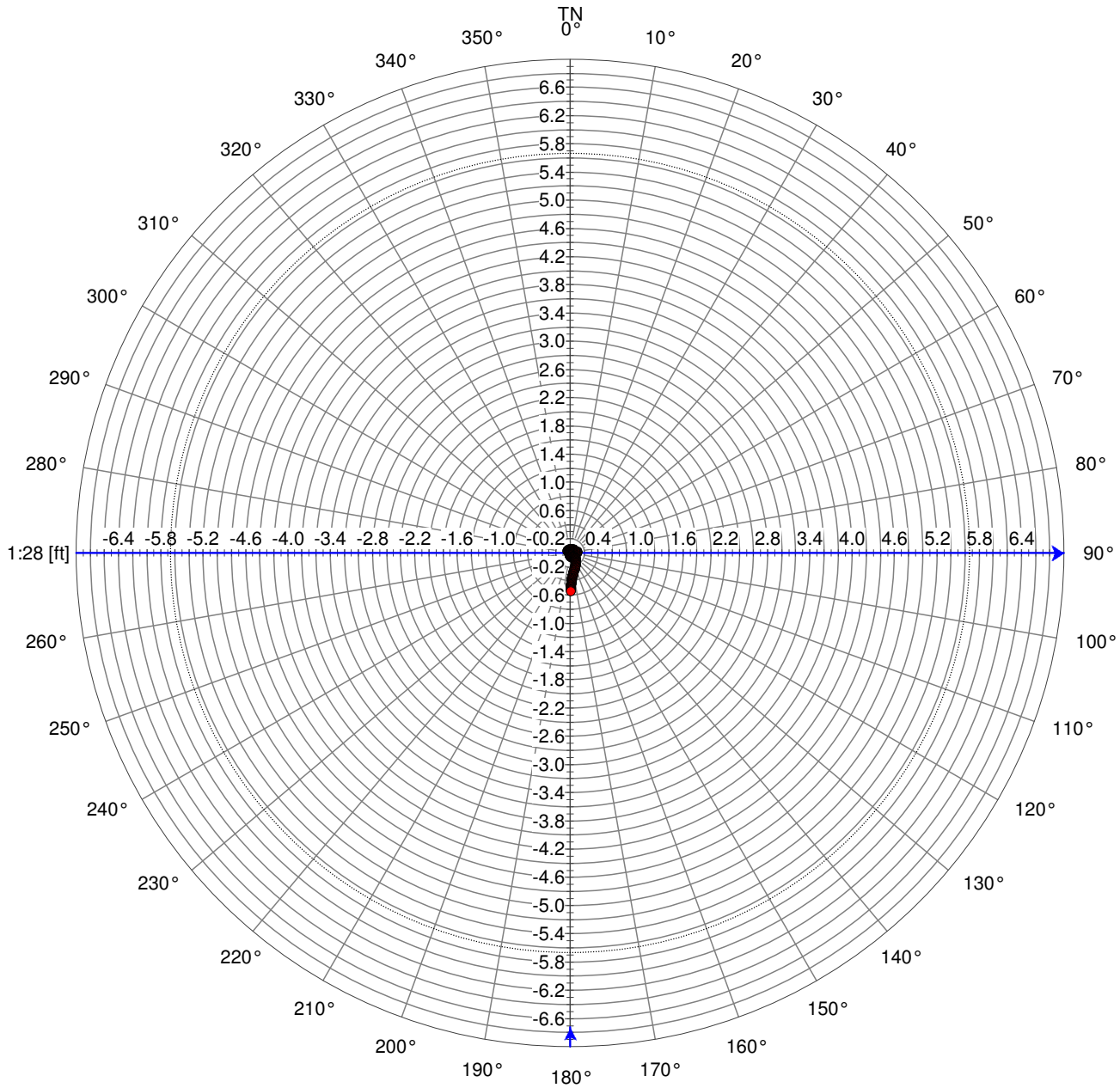
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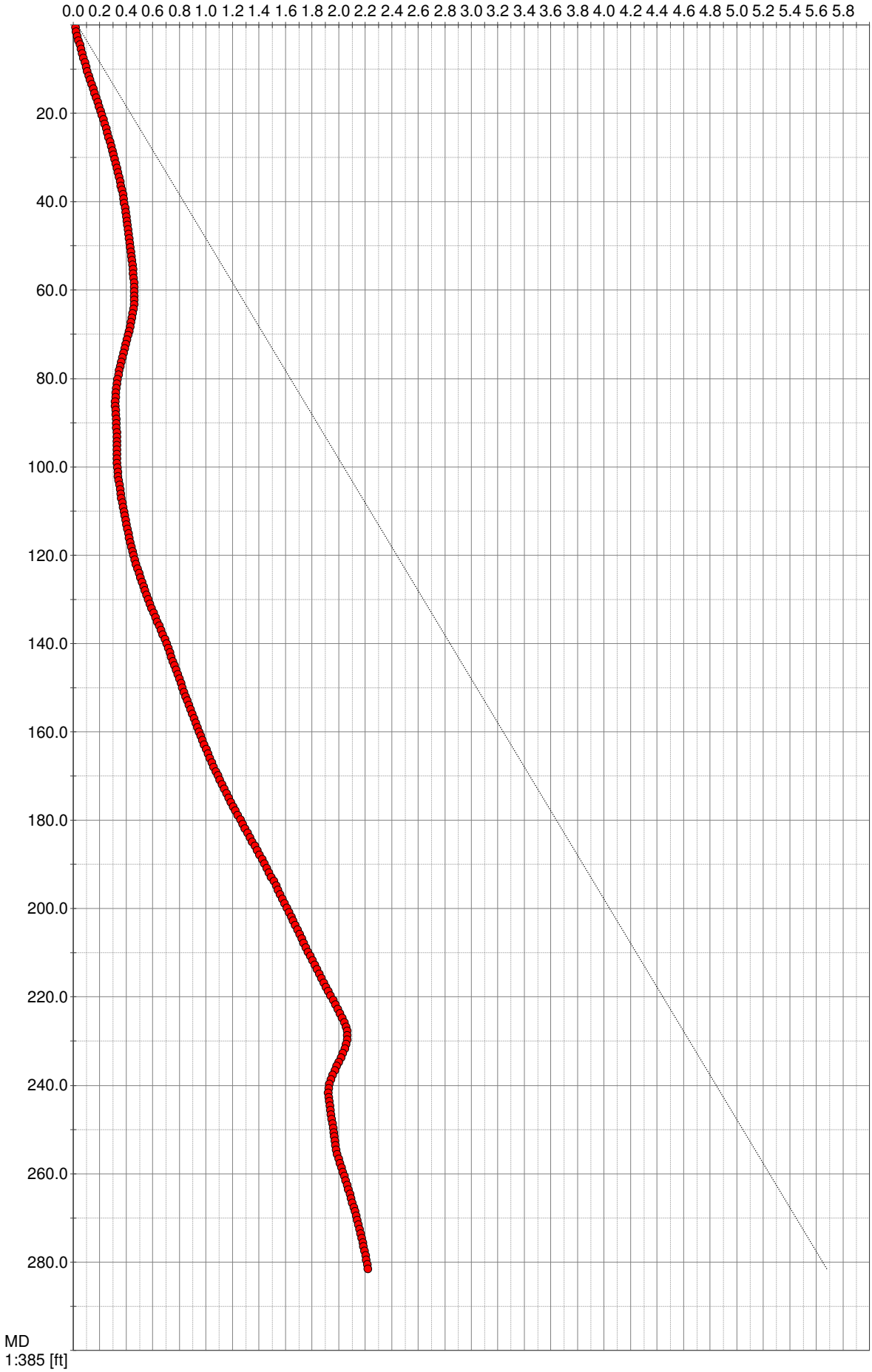
Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	317.65	0.45	-0.01	0.01	0.49	0.02	321.86	0.60
10.00	332.68	0.60	-0.05	0.09	10.46	0.11	331.73	0.37
20.00	331.74	0.61	-0.09	0.20	20.42	0.22	335.36	0.28
30.00	328.37	0.50	-0.13	0.29	30.39	0.31	335.58	0.42
40.00	316.53	0.32	-0.16	0.35	40.35	0.38	334.66	0.88
50.00	323.58	0.23	-0.19	0.39	50.32	0.43	333.65	0.22
60.00	233.37	0.30	-0.22	0.40	60.28	0.46	331.37	2.92
70.00	113.19	0.49	-0.22	0.35	70.25	0.41	328.56	0.63
80.00	181.10	0.52	-0.19	0.28	80.21	0.33	326.25	2.44
90.00	236.45	0.29	-0.23	0.23	90.18	0.33	315.00	1.33
100.00	258.19	0.21	-0.26	0.21	100.14	0.33	308.84	0.87
110.00	322.84	0.39	-0.30	0.23	110.11	0.38	307.77	1.34
120.00	341.77	0.58	-0.33	0.32	120.07	0.45	313.94	0.48
130.00	331.36	0.77	-0.38	0.42	130.04	0.57	317.97	0.66
140.00	348.38	0.83	-0.43	0.56	140.00	0.70	322.16	7.81
150.00	343.49	0.75	-0.45	0.69	149.97	0.82	326.80	0.13
160.00	344.75	0.81	-0.47	0.82	159.93	0.95	329.93	0.35
170.00	346.83	0.95	-0.50	0.97	169.90	1.09	332.96	0.40
180.00	329.36	1.05	-0.54	1.14	179.86	1.26	334.57	0.25
190.00	330.76	1.03	-0.61	1.30	189.83	1.44	334.73	0.25
200.00	351.32	1.00	-0.65	1.47	199.79	1.61	336.17	0.37
210.00	350.65	0.98	-0.66	1.64	209.75	1.77	338.16	0.11
220.00	331.85	1.03	-0.70	1.81	219.72	1.94	338.81	0.66
230.00	223.96	0.96	-0.81	1.90	229.68	2.06	336.87	9.37
240.00	97.04	0.89	-0.77	1.77	239.65	1.93	336.38	8.71
250.00	45.21	0.81	-0.65	1.85	249.61	1.96	340.54	0.48
260.00	10.82	0.74	-0.58	1.95	259.57	2.03	343.53	0.11
270.00	16.35	0.64	-0.54	2.06	269.54	2.13	345.40	0.41
280.00	24.09	0.51	-0.49	2.15	279.50	2.21	347.09	0.51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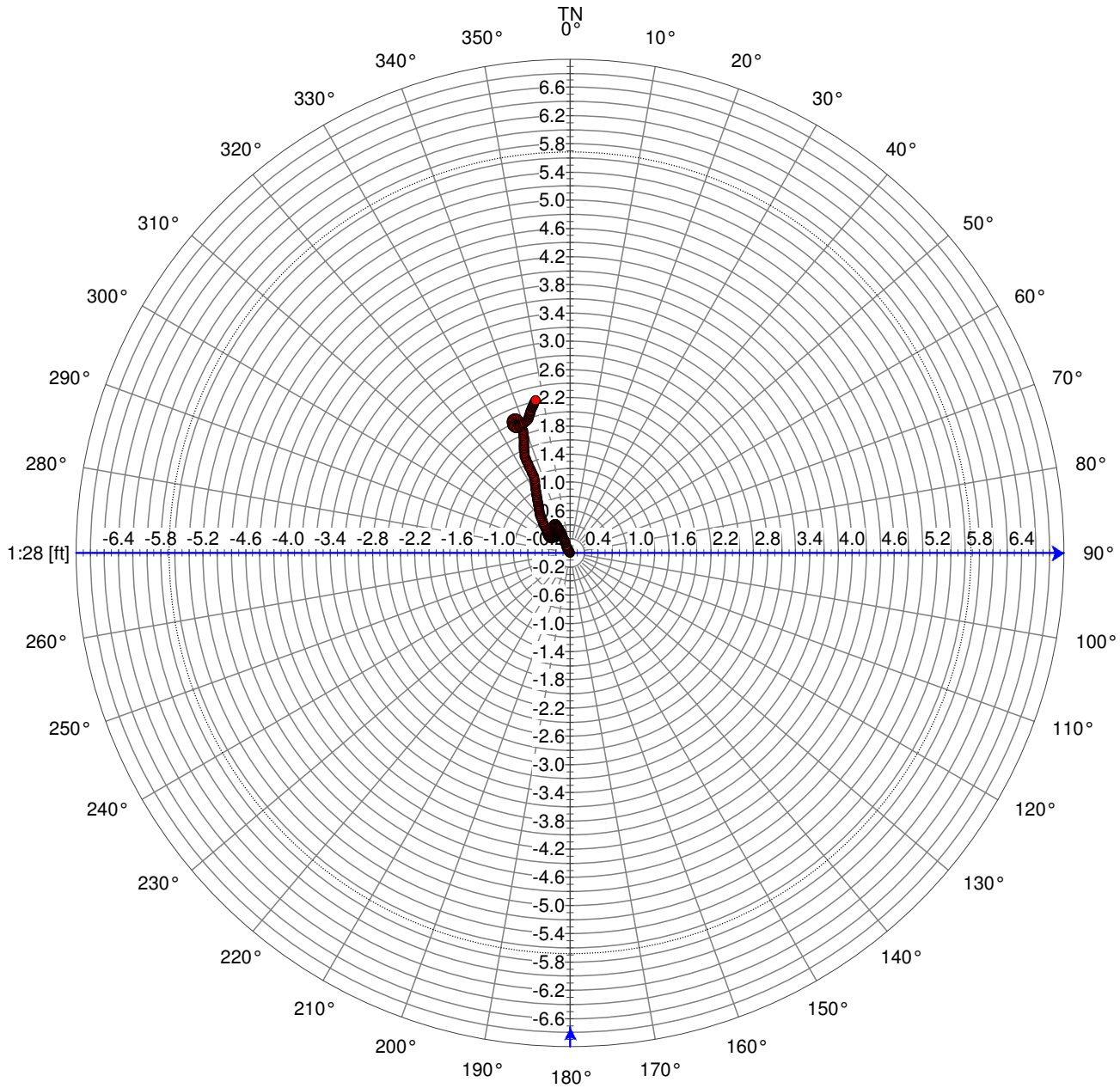
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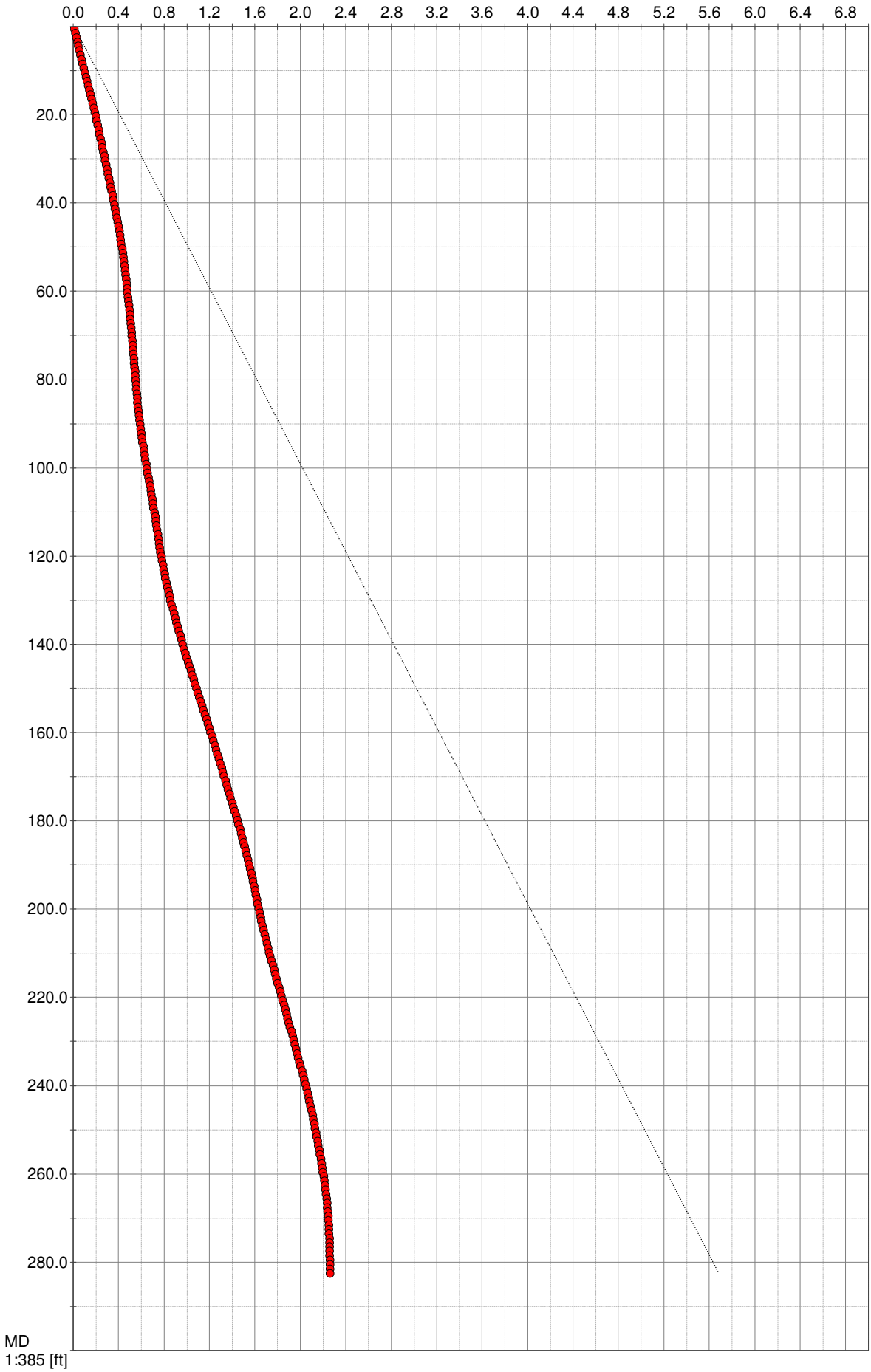
Depth ft	Tilt Deg.	Azimuth Deg	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	0.53	183.02	0.00	-0.01	0.49	0.01	189.53	0.79
10.00	0.57	162.48	0.00	-0.10	10.46	0.10	179.76	0.39
20.00	0.51	150.11	0.03	-0.20	20.42	0.20	171.85	0.67
30.00	0.49	146.60	0.07	-0.27	30.39	0.28	166.07	0.04
40.00	0.46	147.32	0.11	-0.35	40.35	0.36	163.10	0.06
50.00	0.36	125.72	0.15	-0.40	50.32	0.43	159.70	0.45
60.00	0.29	122.20	0.19	-0.44	60.28	0.48	156.17	0.50
70.00	0.22	117.98	0.23	-0.46	70.25	0.52	153.78	0.18
80.00	0.22	118.11	0.26	-0.48	80.21	0.55	151.83	0.08
90.00	0.30	126.96	0.29	-0.51	90.18	0.59	150.14	0.48
100.00	0.39	134.15	0.34	-0.56	100.14	0.65	148.75	0.46
110.00	0.37	133.08	0.38	-0.61	110.11	0.72	148.06	0.40
120.00	0.39	130.51	0.42	-0.65	120.07	0.77	147.06	0.69
130.00	0.56	147.42	0.47	-0.72	130.04	0.86	146.73	1.05
140.00	0.67	156.34	0.51	-0.82	140.01	0.96	148.24	0.27
150.00	0.73	157.17	0.54	-0.94	149.97	1.08	149.90	0.10
160.00	0.73	157.58	0.58	-1.06	159.93	1.21	151.32	0.43
170.00	0.69	159.79	0.61	-1.18	169.90	1.33	152.50	0.22
180.00	0.68	162.49	0.64	-1.30	179.86	1.45	153.82	0.54
190.00	0.54	155.16	0.67	-1.40	189.83	1.55	154.54	0.48
200.00	0.48	157.13	0.69	-1.48	199.79	1.63	154.84	0.58
210.00	0.61	162.54	0.72	-1.57	209.76	1.73	155.45	0.36
220.00	0.65	164.00	0.74	-1.68	219.72	1.83	156.26	0.29
230.00	0.63	168.57	0.75	-1.79	229.69	1.94	157.17	0.23
240.00	0.61	172.31	0.76	-1.90	239.65	2.04	158.19	0.19
250.00	0.48	176.66	0.76	-1.99	249.62	2.13	159.07	0.42
260.00	0.49	199.30	0.74	-2.07	259.58	2.20	160.20	1.12
270.00	0.70	233.02	0.67	-2.14	269.55	2.24	162.57	1.11
280.00	0.88	246.38	0.54	-2.19	279.51	2.26	166.07	0.46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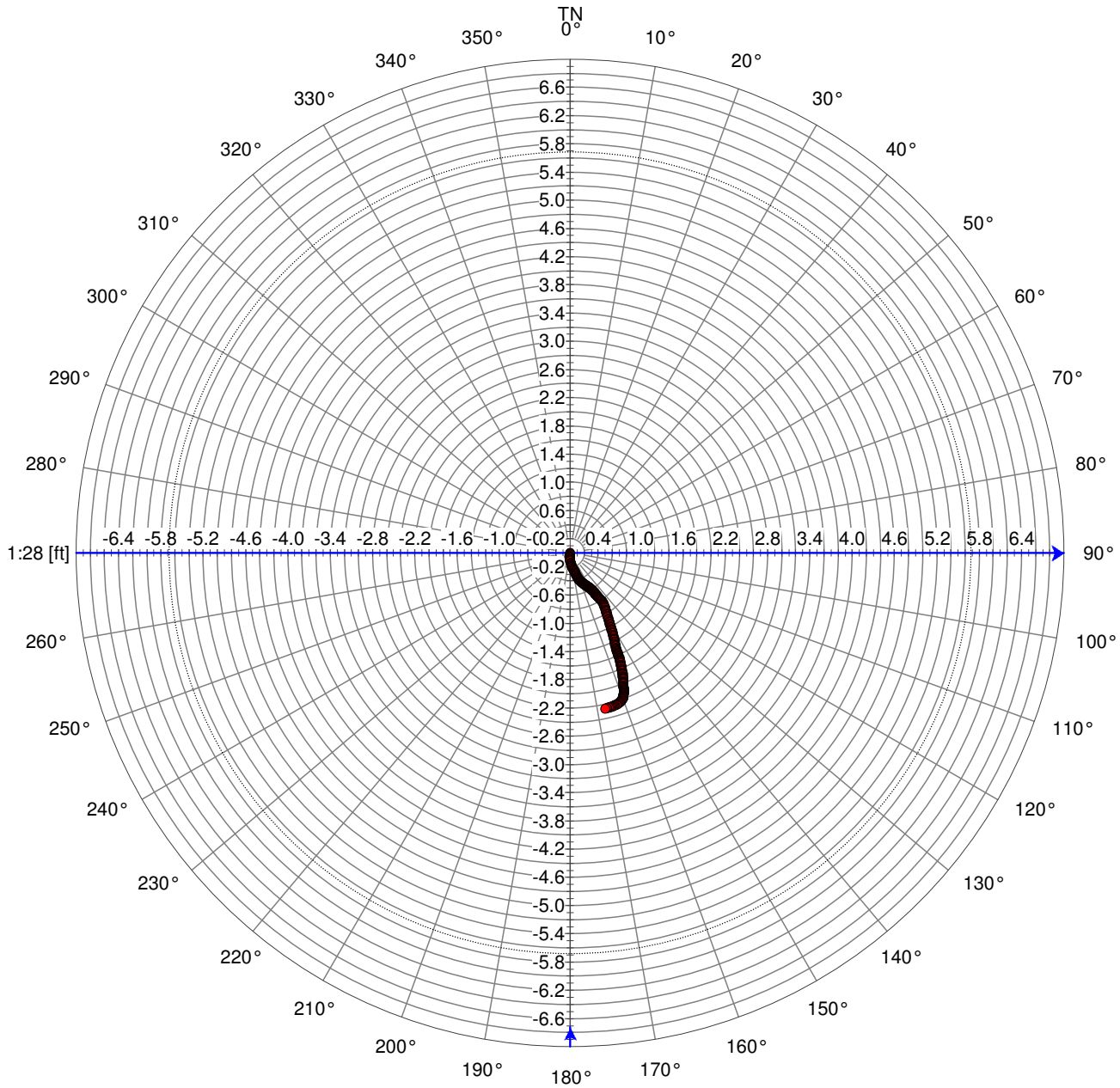
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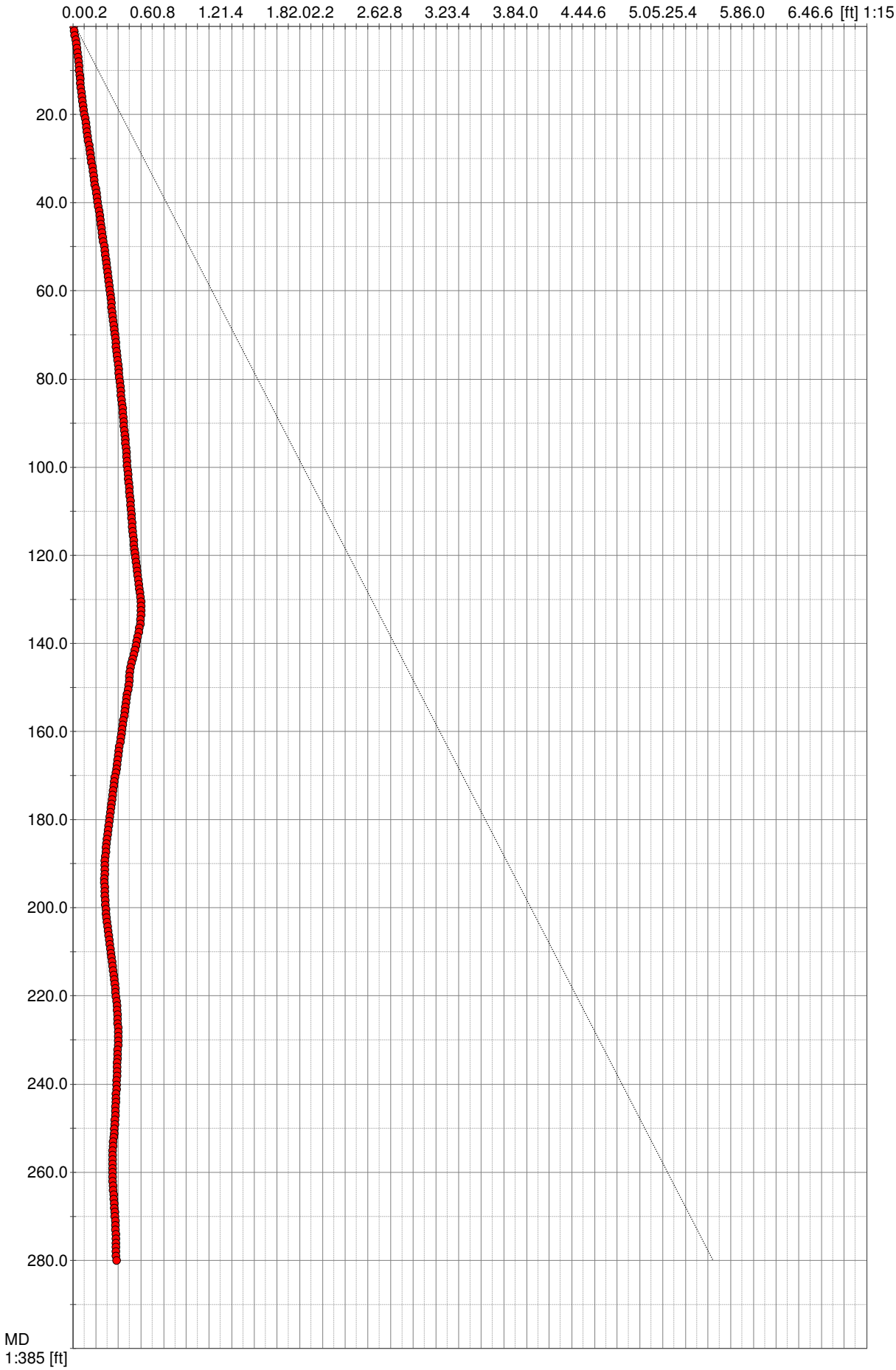
Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	230.20	0.33	0.00	0.00	-0.01	0.01	231.16	1.78
10.00	321.63	0.34	-0.06	0.01	9.96	0.06	278.98	1.62
20.00	323.39	0.34	-0.08	0.06	19.92	0.10	308.53	0.30
30.00	308.38	0.34	-0.12	0.11	29.89	0.16	313.01	0.29
40.00	290.74	0.34	-0.16	0.14	39.85	0.22	311.05	0.34
50.00	273.48	0.34	-0.22	0.16	49.82	0.27	306.16	0.30
60.00	256.77	0.34	-0.28	0.16	59.79	0.32	300.09	0.42
70.00	246.94	0.33	-0.34	0.15	69.75	0.37	293.90	0.14
80.00	243.25	0.29	-0.39	0.13	79.72	0.41	288.59	0.27
90.00	249.18	0.23	-0.43	0.12	89.68	0.45	285.08	0.41
100.00	276.67	0.18	-0.47	0.12	99.65	0.48	283.89	0.25
110.00	305.64	0.20	-0.49	0.13	109.61	0.51	284.75	0.29
120.00	308.37	0.27	-0.52	0.16	119.58	0.54	287.21	2.08
130.00	229.86	0.36	-0.57	0.17	129.54	0.60	286.68	2.85
140.00	85.80	0.52	-0.55	0.12	139.51	0.56	282.12	4.15
150.00	40.72	0.65	-0.46	0.16	150.47	0.48	289.70	0.96
160.00	56.20	0.67	-0.36	0.23	160.44	0.43	302.54	0.51
170.00	71.27	0.64	-0.25	0.27	170.40	0.37	316.69	0.50
180.00	81.63	0.67	-0.14	0.28	180.37	0.32	333.19	0.30
190.00	88.16	0.78	-0.02	0.28	190.33	0.28	356.41	0.54
200.00	93.63	0.73	0.12	0.26	200.29	0.29	23.73	0.51
210.00	94.81	0.55	0.23	0.24	210.26	0.33	42.92	0.62
220.00	98.65	0.36	0.30	0.23	220.23	0.38	53.18	0.67
230.00	155.55	0.17	0.34	0.21	230.19	0.40	58.90	1.03
240.00	248.27	0.09	0.33	0.19	240.16	0.38	60.34	0.44
250.00	236.99	0.18	0.31	0.19	250.12	0.37	58.48	1.19
260.00	132.60	0.20	0.31	0.16	260.09	0.35	62.77	0.82
270.00	107.91	0.17	0.34	0.15	270.05	0.37	66.38	0.57
280.00	138.12	0.16	0.36	0.13	280.02	0.38	69.99	0.11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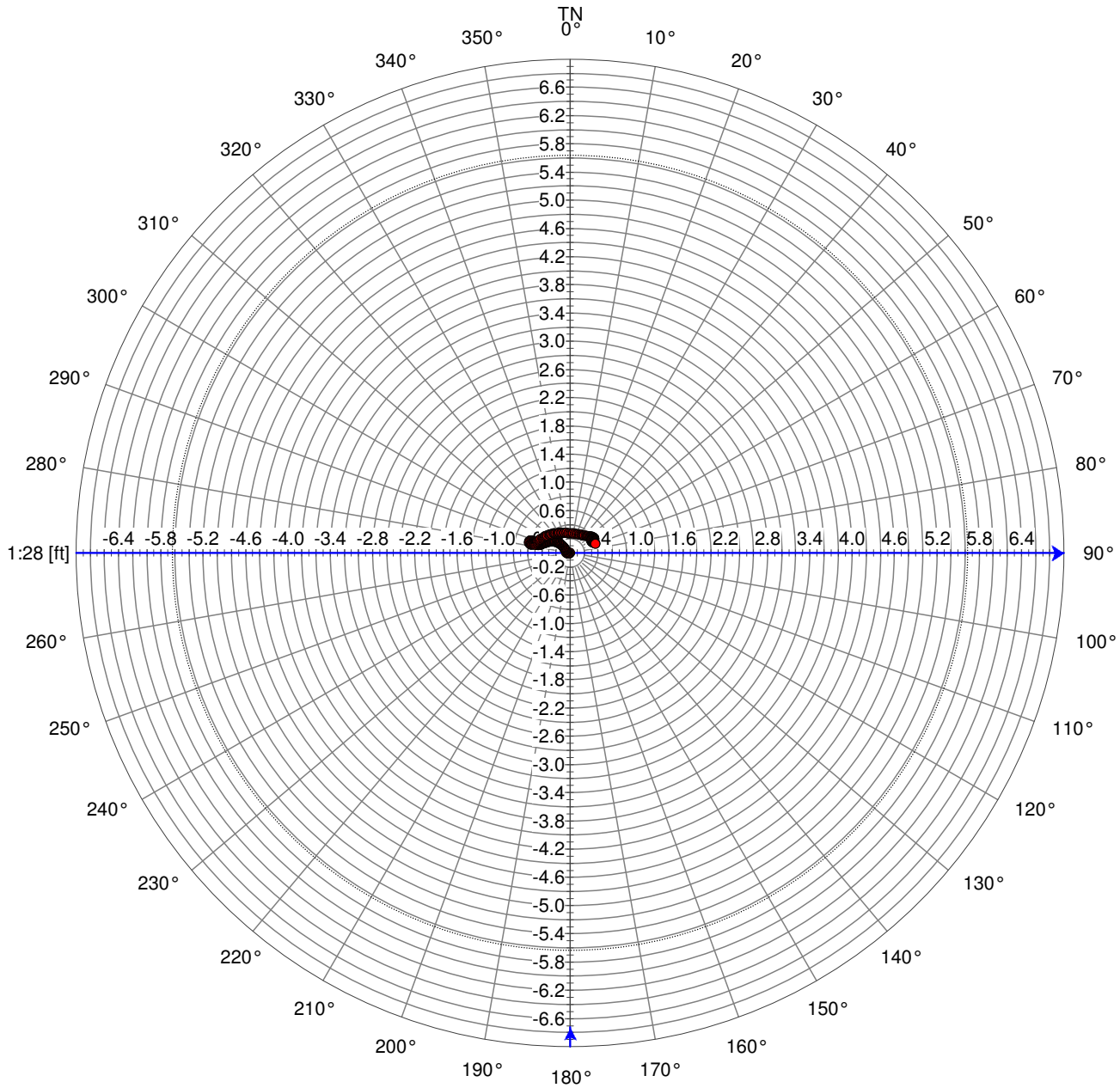
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Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	84.31	0.31	0.01	0.00	-0.01	0.01	91.10	0.26
10.00	94.17	0.26	0.06	0.00	9.96	0.06	93.73	0.17
20.00	122.70	0.24	0.10	-0.02	19.92	0.10	101.94	0.50
30.00	156.12	0.22	0.12	-0.05	29.89	0.13	113.94	0.46
40.00	184.00	0.23	0.12	-0.09	39.85	0.16	126.76	0.30
50.00	187.87	0.35	0.11	-0.14	49.82	0.18	141.14	0.56
60.00	198.78	0.40	0.09	-0.20	59.78	0.22	155.20	0.10
70.00	210.49	0.34	0.06	-0.26	69.75	0.27	167.01	0.27
80.00	203.18	0.27	0.03	-0.30	79.71	0.30	174.30	0.63
90.00	205.75	0.23	0.01	-0.34	89.68	0.34	178.42	0.34
100.00	233.41	0.20	-0.02	-0.36	99.64	0.36	182.47	0.36
110.00	272.27	0.18	-0.04	-0.37	109.61	0.37	186.82	0.41
120.00	300.69	0.25	-0.08	-0.35	119.58	0.36	192.50	0.18
130.00	317.68	0.36	-0.11	-0.31	129.54	0.33	200.03	0.26
140.00	325.50	0.44	-0.15	-0.25	139.51	0.30	210.72	0.41
150.00	319.61	0.65	-0.20	-0.17	150.47	0.26	230.09	0.98
160.00	307.00	1.02	-0.30	-0.06	160.43	0.30	258.25	1.39
170.00	300.87	1.38	-0.46	0.07	170.40	0.46	278.86	1.04
180.00	304.26	1.46	-0.66	0.23	180.36	0.70	288.96	0.63
190.00	312.07	1.38	-0.84	0.40	190.32	0.93	295.44	0.60
200.00	316.92	1.38	-0.99	0.58	200.28	1.15	300.50	0.35
210.00	322.92	1.36	-1.12	0.78	210.25	1.37	304.74	0.54
220.00	334.77	1.26	-1.22	0.98	220.21	1.57	308.87	0.97
230.00	346.21	1.14	-1.27	1.19	230.17	1.74	313.09	0.57
240.00	348.74	1.09	-1.29	1.37	240.14	1.88	316.90	0.26
250.00	341.46	1.26	-1.32	1.57	250.10	2.05	320.11	1.09
260.00	331.40	1.42	-1.38	1.80	260.06	2.27	322.44	1.20
270.00	323.35	1.36	-1.50	2.02	270.03	2.51	323.40	0.45
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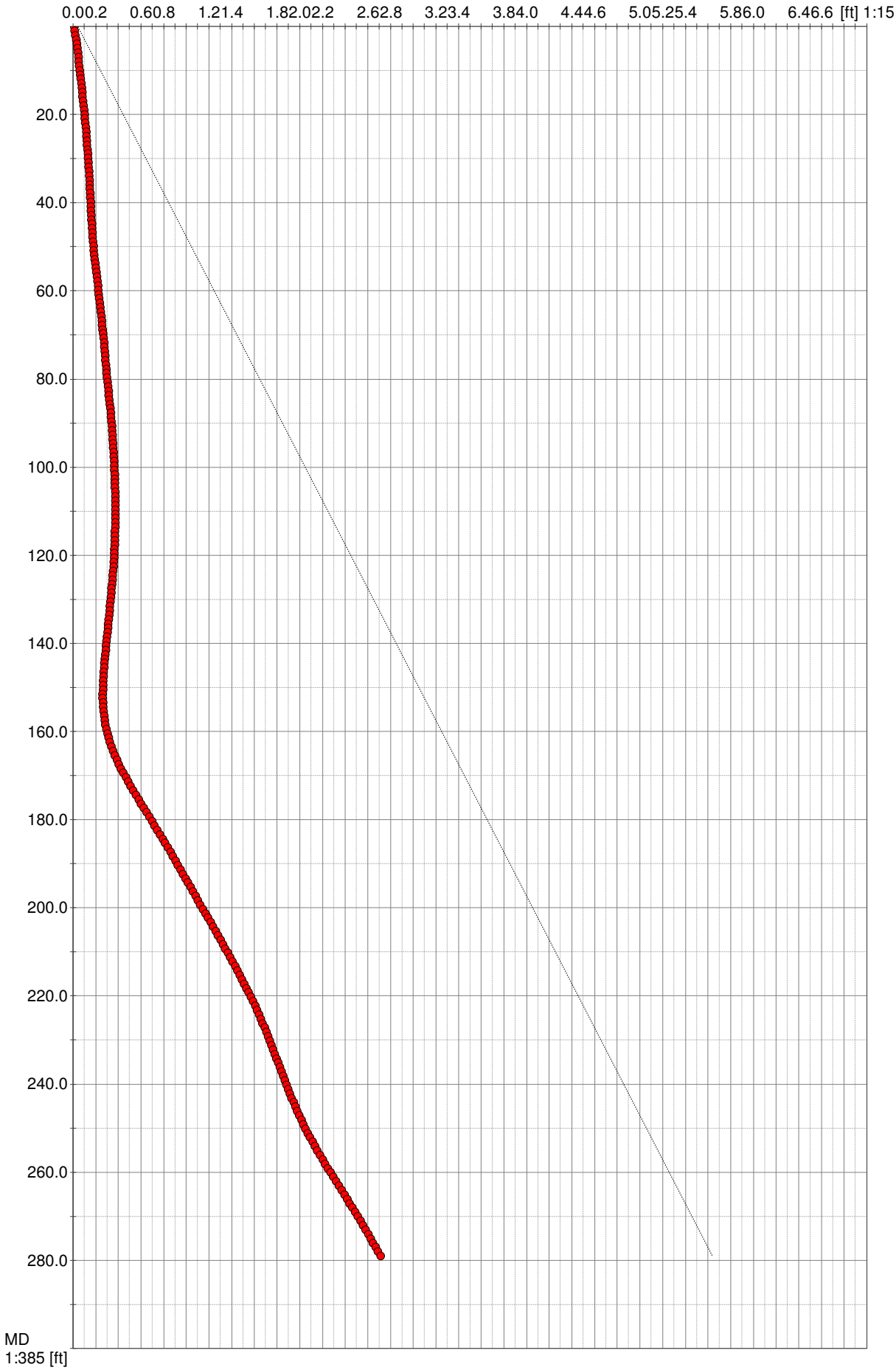
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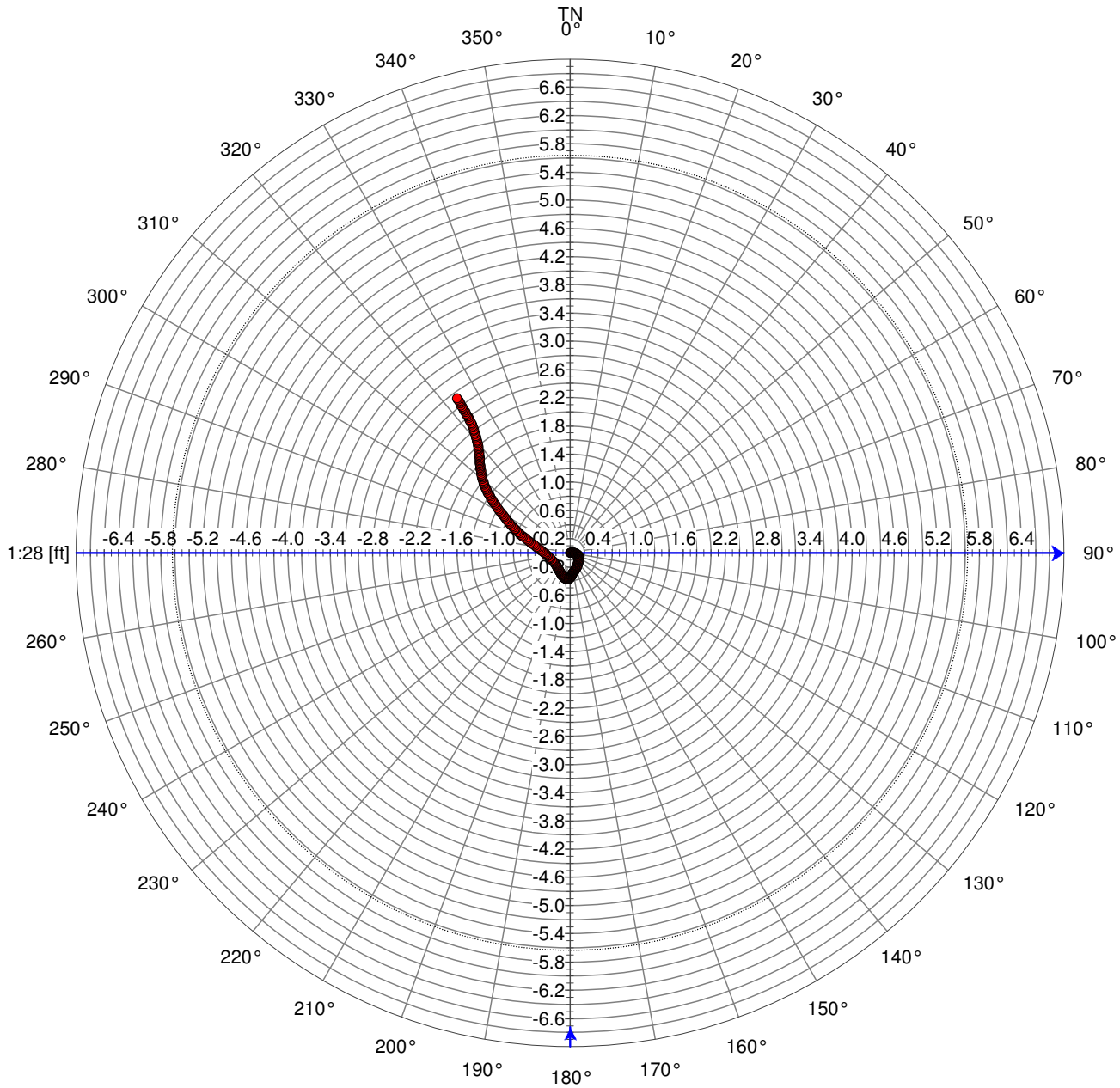
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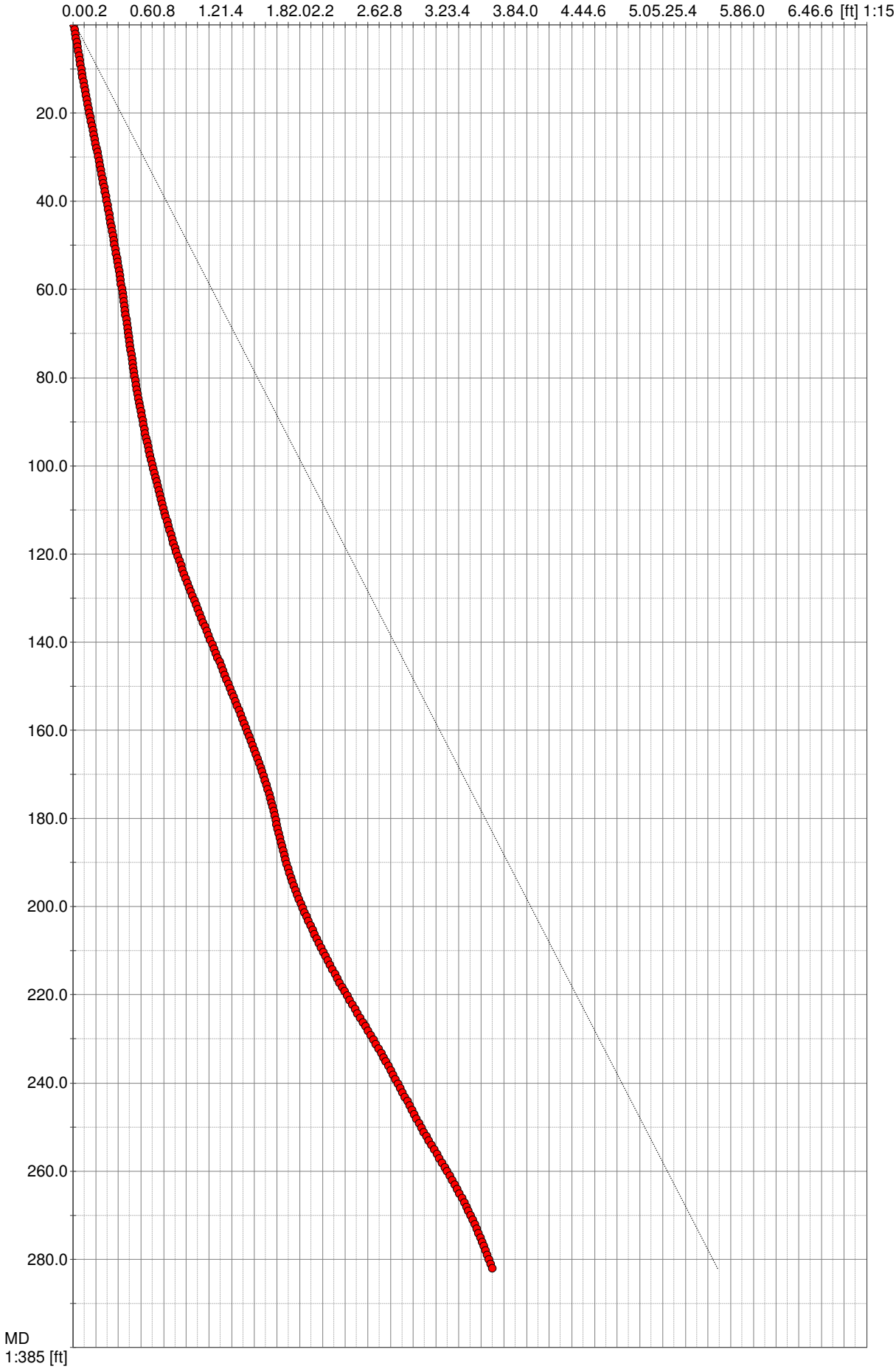
Depth ft	Tilt Deg.	Azimuth Deg	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	0.39	159.05	0.00	-0.01	-0.01	0.01	166.25	0.50
10.00	0.38	144.87	0.03	-0.07	9.96	0.07	158.99	0.28
20.00	0.45	136.09	0.07	-0.13	19.92	0.14	152.99	0.27
30.00	0.46	128.01	0.12	-0.19	29.89	0.22	147.73	0.19
40.00	0.43	119.92	0.18	-0.24	39.85	0.30	143.22	0.20
50.00	0.41	112.75	0.24	-0.28	49.82	0.37	139.14	0.24
60.00	0.38	103.05	0.30	-0.31	59.78	0.43	135.33	0.21
70.00	0.35	100.24	0.36	-0.32	69.75	0.49	131.79	0.08
80.00	0.37	105.56	0.42	-0.34	79.72	0.54	129.11	0.27
90.00	0.44	114.16	0.48	-0.38	89.68	0.61	127.77	0.26
100.00	0.54	117.29	0.56	-0.42	99.65	0.70	127.08	0.28
110.00	0.60	120.51	0.64	-0.48	109.61	0.80	126.74	0.39
120.00	0.73	126.99	0.73	-0.55	119.58	0.91	127.15	0.59
130.00	0.89	131.93	0.83	-0.65	129.54	1.05	128.40	0.23
140.00	0.93	133.53	0.93	-0.78	139.51	1.21	129.78	0.17
150.00	0.91	135.73	1.04	-0.91	150.47	1.38	131.14	0.12
160.00	0.88	135.20	1.14	-1.03	160.43	1.54	132.22	0.48
170.00	0.73	126.41	1.24	-1.14	170.39	1.68	132.68	0.76
180.00	0.52	112.68	1.32	-1.20	180.36	1.79	132.26	0.32
190.00	0.68	112.81	1.41	-1.25	190.32	1.88	131.50	0.79
200.00	0.96	120.39	1.53	-1.33	200.29	2.02	130.92	0.74
210.00	1.13	118.45	1.68	-1.43	210.25	2.21	130.50	0.64
220.00	1.30	114.10	1.86	-1.55	220.22	2.42	129.78	0.47
230.00	1.34	111.86	2.06	-1.66	230.18	2.65	128.82	0.43
240.00	1.22	108.78	2.26	-1.76	240.14	2.86	127.86	0.23
250.00	1.28	105.56	2.46	-1.84	250.11	3.07	126.85	0.52
260.00	1.37	101.41	2.68	-1.92	260.07	3.30	125.66	0.60
270.00	1.14	95.75	2.89	-1.98	270.03	3.51	124.35	0.82
280.00	0.94	93.98	3.07	-2.01	280.00	3.67	123.21	0.22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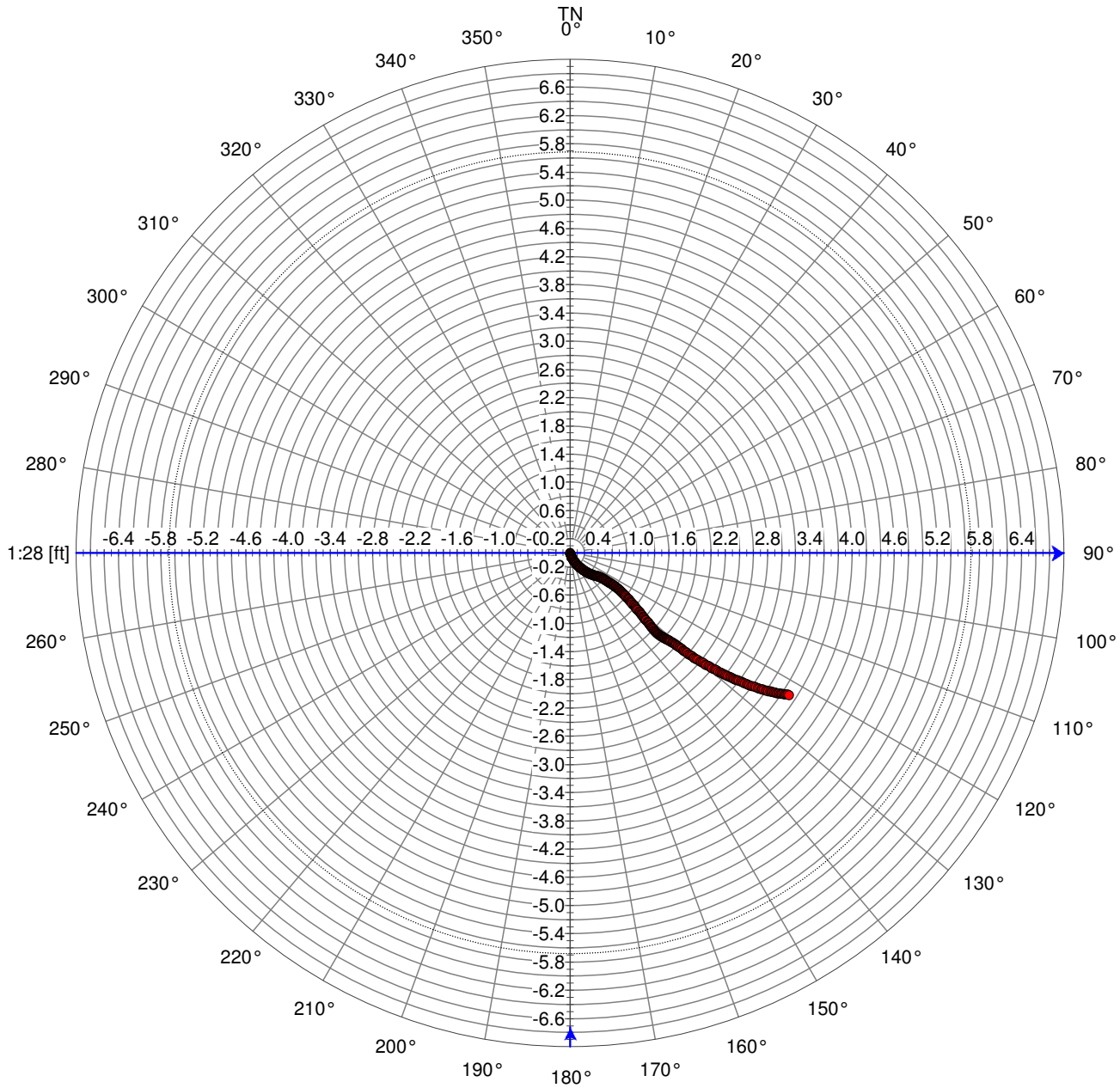
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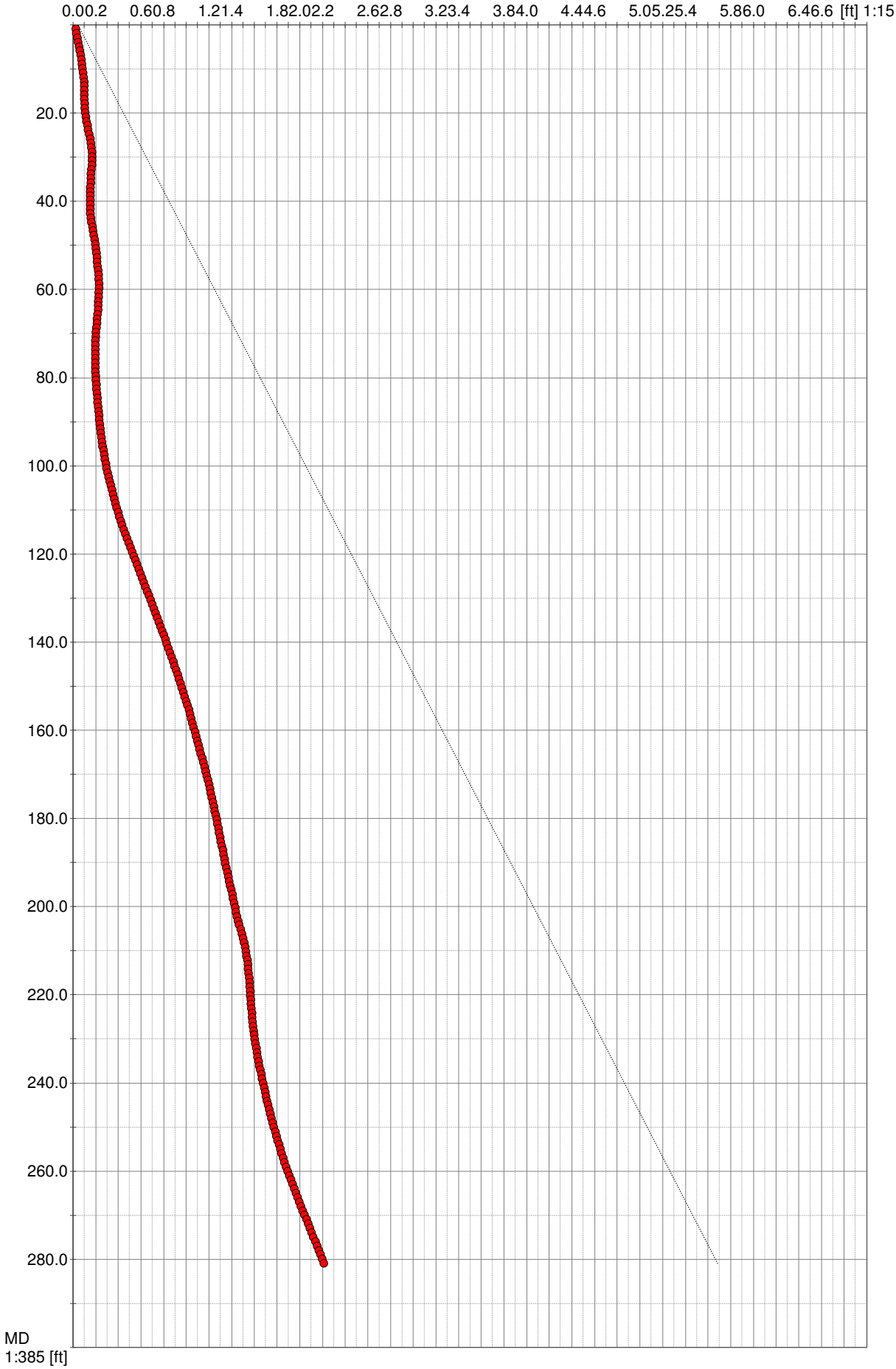
Depth ft	Tilt Deg.	Azimuth Deg	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	0.43	231.57	-0.01	-0.01	-0.11	0.01	241.99	1.99
10.00	0.51	142.40	-0.03	-0.08	9.86	0.09	201.15	3.45
20.00	0.53	72.57	0.05	-0.09	19.82	0.11	150.41	4.68
30.00	0.46	232.88	0.08	-0.15	29.79	0.17	152.28	4.04
40.00	0.42	265.97	0.00	-0.15	39.75	0.15	178.92	0.11
50.00	0.41	156.92	-0.04	-0.19	49.72	0.20	192.57	3.49
60.00	0.47	73.86	0.02	-0.23	59.68	0.23	175.26	3.54
70.00	0.53	38.10	0.09	-0.18	69.65	0.20	153.03	0.16
80.00	0.38	55.41	0.15	-0.13	79.62	0.20	129.39	0.99
90.00	0.28	76.54	0.21	-0.11	89.58	0.23	117.87	0.40
100.00	0.44	94.79	0.27	-0.11	99.55	0.29	113.39	0.77
110.00	0.66	100.59	0.36	-0.14	109.51	0.38	110.94	0.68
120.00	0.84	99.29	0.50	-0.18	120.47	0.53	109.70	0.24
130.00	0.87	93.30	0.65	-0.21	130.44	0.68	108.06	0.25
140.00	0.82	87.91	0.80	-0.23	140.40	0.83	105.99	0.56
150.00	0.74	84.00	0.93	-0.23	150.37	0.96	104.05	0.27
160.00	0.65	76.14	1.05	-0.23	160.33	1.07	102.19	0.59
170.00	0.70	55.72	1.16	-0.19	170.30	1.18	99.28	0.74
180.00	0.79	33.56	1.26	-0.11	180.26	1.27	94.97	1.12
190.00	1.03	20.42	1.34	0.02	190.22	1.34	88.96	0.85
200.00	0.95	15.70	1.42	0.19	200.19	1.43	82.29	1.15
210.00	0.47	112.31	1.51	0.24	210.15	1.52	80.98	1.57
220.00	0.23	122.10	1.55	0.21	220.12	1.57	82.18	0.35
230.00	0.33	63.85	1.59	0.20	230.08	1.60	82.76	0.86
240.00	0.51	95.00	1.66	0.20	240.05	1.68	83.08	0.46
250.00	0.64	95.50	1.76	0.18	250.01	1.77	84.15	0.40
260.00	0.80	90.81	1.88	0.16	259.98	1.89	85.12	0.61
270.00	0.90	79.34	2.04	0.16	269.94	2.04	85.59	0.64
280.00	0.87	68.09	2.19	0.19	279.91	2.20	85.14	0.37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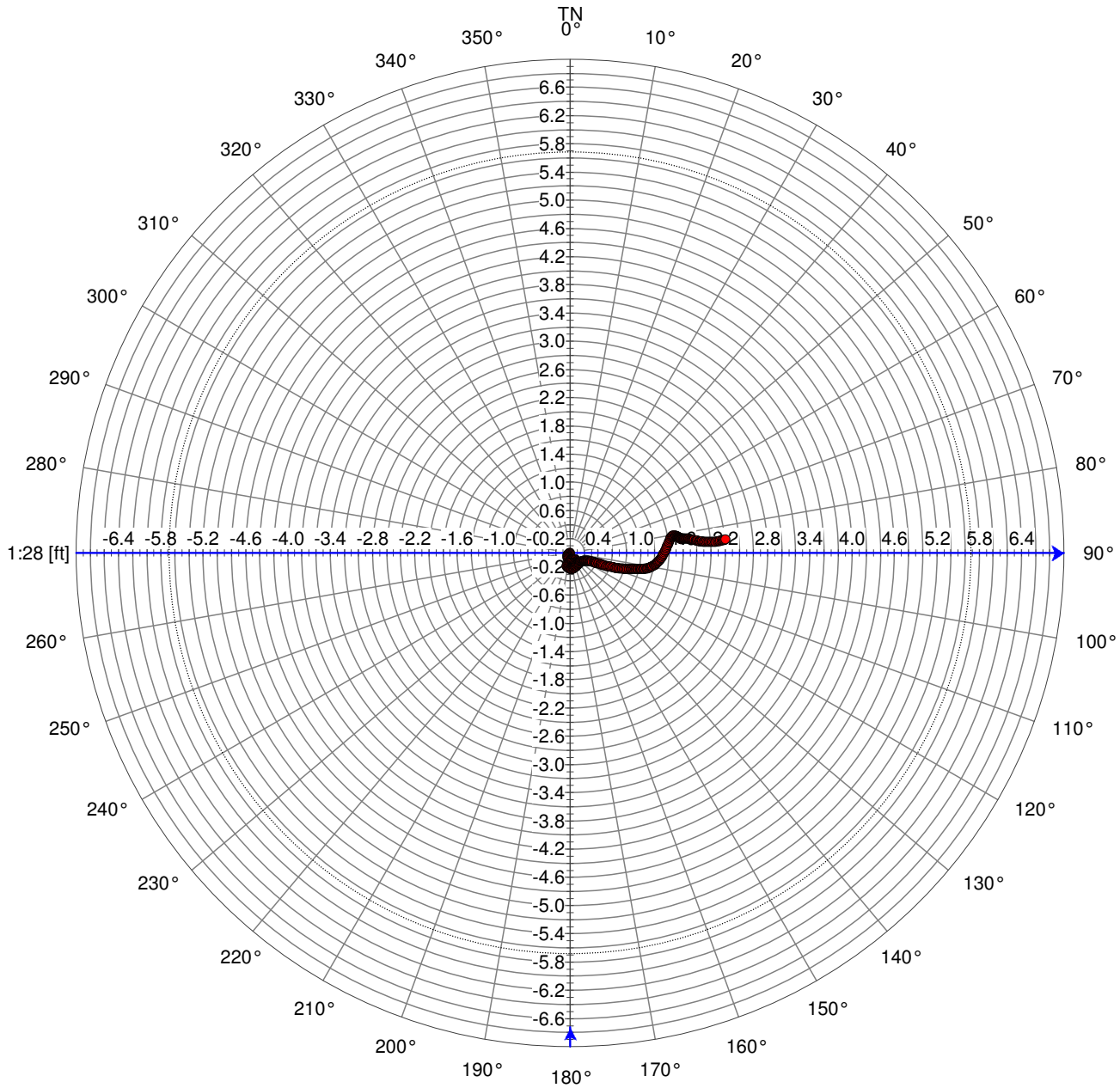
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Depth ft	Tilt Deg.	Azimuth Deg	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	0.37	248.87	-0.02	-0.01	0.49	0.02	241.16	1.86
10.00	0.54	318.91	-0.08	0.02	10.46	0.08	287.03	1.04
20.00	0.86	292.72	-0.17	0.10	20.42	0.20	300.36	1.49
30.00	1.17	282.66	-0.34	0.17	30.38	0.38	296.34	0.55
40.00	1.19	287.39	-0.53	0.24	40.35	0.58	294.47	0.33
50.00	1.15	288.25	-0.72	0.33	50.31	0.79	294.52	0.26
60.00	1.13	279.89	-0.90	0.39	60.28	0.98	293.58	0.46
70.00	1.01	273.96	-1.08	0.43	70.24	1.17	291.82	0.52
80.00	0.85	266.61	-1.25	0.45	80.20	1.32	289.92	0.69
90.00	0.68	262.38	-1.37	0.45	90.17	1.45	288.11	0.31
100.00	0.73	273.82	-1.49	0.46	100.13	1.56	287.02	0.66
110.00	0.96	288.93	-1.63	0.50	110.10	1.71	287.14	0.68
120.00	1.20	297.99	-1.79	0.60	120.06	1.89	288.35	1.01
130.00	1.39	308.12	-1.97	0.74	130.02	2.11	290.59	0.89
140.00	1.22	322.26	-2.11	0.92	139.99	2.31	293.46	1.09
150.00	0.99	334.40	-2.20	1.09	149.95	2.45	296.34	1.38
160.00	0.86	336.49	-2.24	1.24	159.92	2.57	298.98	0.42
170.00	0.75	327.98	-2.30	1.38	169.88	2.68	300.94	0.60
180.00	0.60	319.20	-2.36	1.48	179.84	2.78	302.07	0.40
190.00	0.49	316.60	-2.41	1.55	189.81	2.87	302.76	0.37
200.00	0.48	299.53	-2.47	1.61	199.77	2.95	303.12	0.63
210.00	0.61	277.00	-2.55	1.65	209.74	3.04	302.84	0.82
220.00	0.83	268.36	-2.68	1.66	219.70	3.15	301.82	0.70
230.00	0.92	273.15	-2.83	1.68	229.67	3.29	300.68	0.30
240.00	0.93	278.22	-2.99	1.71	239.63	3.44	299.80	0.21
250.00	0.86	284.30	-3.14	1.76	249.60	3.59	299.24	0.33
260.00	0.74	291.97	-3.26	1.81	259.56	3.73	299.05	0.36
270.00	0.63	296.39	-3.37	1.87	269.53	3.85	299.09	0.31
280.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00

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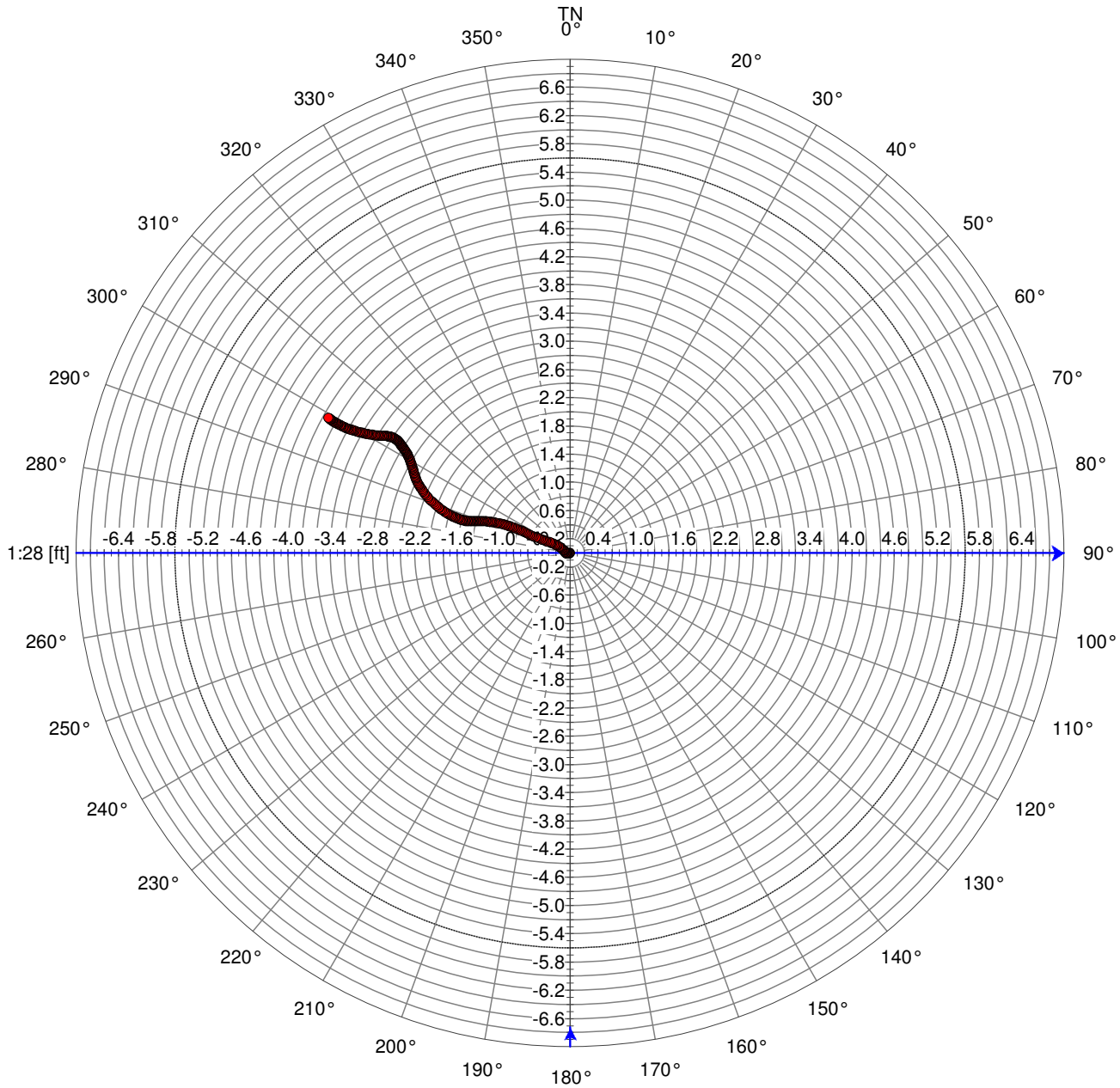
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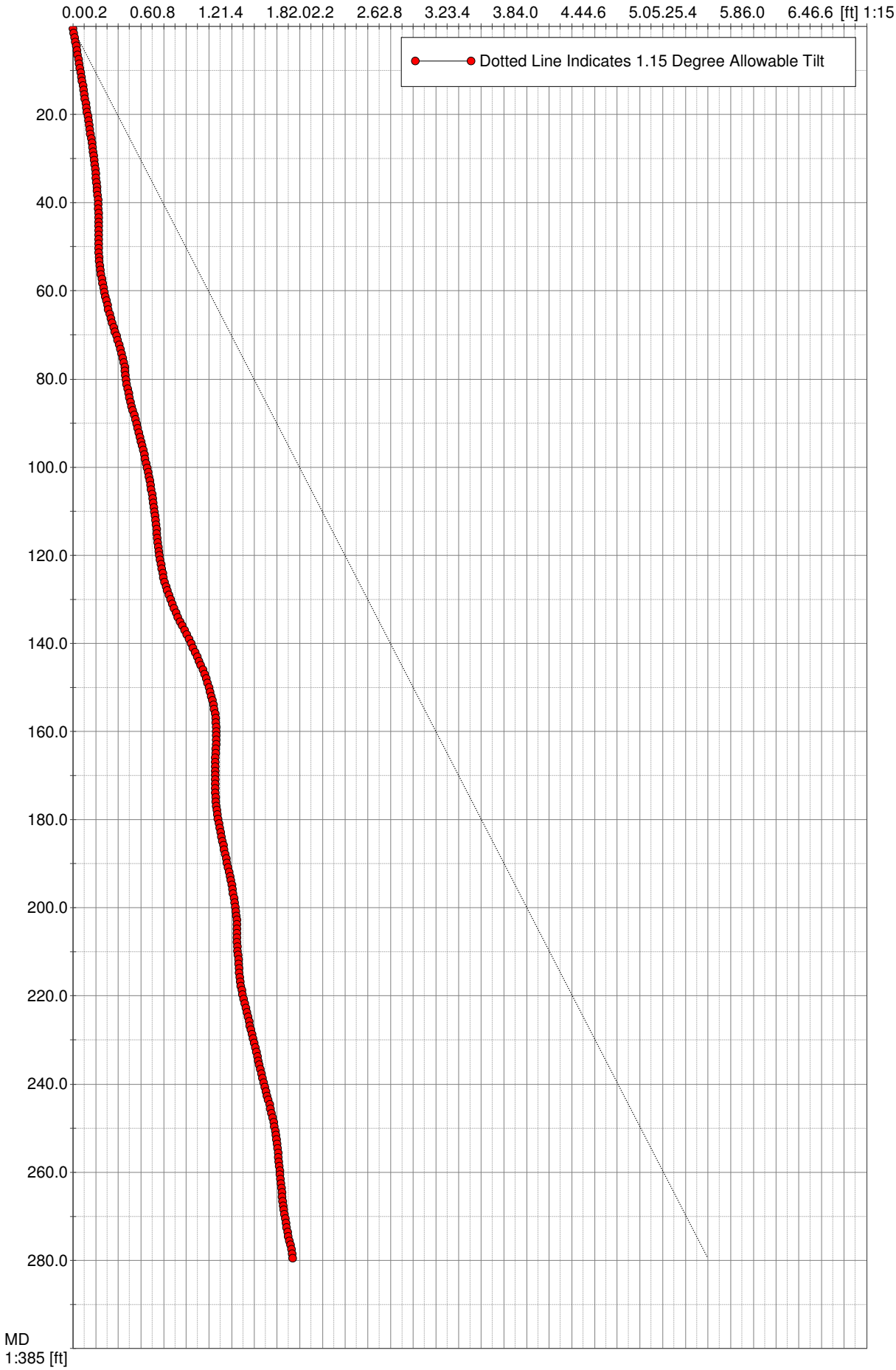
Depth ft	Tilt Deg.	Azimuth Deg	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0	-999	-999	-999	-999	-999	-999	-999	-999
10	0.38	184.53	0	-0.07	10.46	0.07	178.85	0.44
20	0.36	192.17	-0.01	-0.13	20.42	0.13	186.34	0.36
30	0.3	210.17	-0.04	-0.18	30.39	0.19	192.82	0.47
40	0.24	256.41	-0.08	-0.21	40.35	0.22	200.99	0.69
50	0.31	295.36	-0.12	-0.19	50.32	0.23	211.92	1.6
60	0.48	229.32	-0.18	-0.21	60.28	0.28	220.58	0.85
70	0.76	218.87	-0.27	-0.27	70.25	0.38	224.08	1.19
80	0.84	299.26	-0.39	-0.25	80.21	0.47	237.37	1.67
90	0.69	269.4	-0.52	-0.21	90.18	0.56	248.03	0.79
100	0.49	261.5	-0.62	-0.21	100.14	0.65	251.27	0.49
110	0.36	288.91	-0.69	-0.2	110.11	0.72	253.89	0.7
120	0.56	307.38	-0.75	-0.16	120.07	0.76	258.24	1.11
130	0.99	289.58	-0.85	-0.08	130.04	0.86	264.95	2.19
140	0.98	263.64	-1.04	-0.04	140	1.04	267.93	1.43
150	0.75	237	-1.2	-0.07	149.97	1.2	266.54	1.57
160	0.34	175.63	-1.26	-0.13	159.93	1.26	263.94	1.99
170	0.29	164.73	-1.24	-0.18	169.9	1.25	261.74	0.8
180	0.42	226.24	-1.26	-0.23	179.86	1.28	259.44	2.23
190	0.49	253.5	-1.34	-0.24	189.83	1.36	259.65	0.77
200	0.39	213.13	-1.4	-0.28	199.79	1.43	258.71	2.27
210	0.35	187.52	-1.41	-0.34	209.76	1.45	256.53	0.86
220	0.54	216.73	-1.44	-0.41	219.72	1.49	254.17	3.55
230	0.76	291.55	-1.54	-0.38	229.69	1.59	255.98	1.14
240	0.73	288.93	-1.65	-0.31	239.65	1.68	259.24	1.4
250	0.45	280.8	-1.75	-0.28	249.62	1.78	260.81	1.11
260	0.22	269.34	-1.8	-0.27	259.58	1.82	261.52	0.44
270	0.38	285.02	-1.85	-0.25	269.55	1.86	262.2	0.9
280	-999	-999	-999	-999	-999	-999	-999	-999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5.86.0
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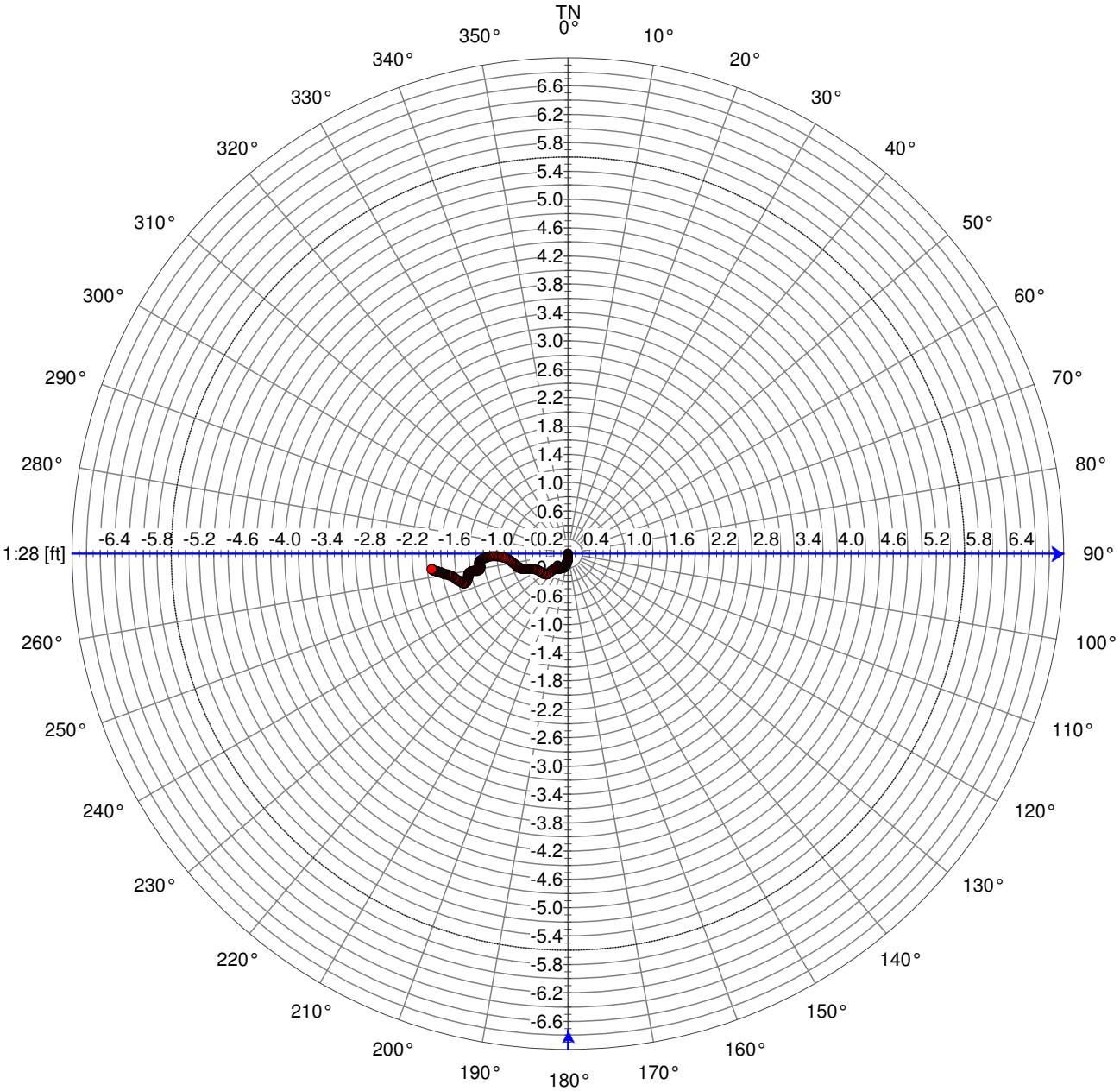
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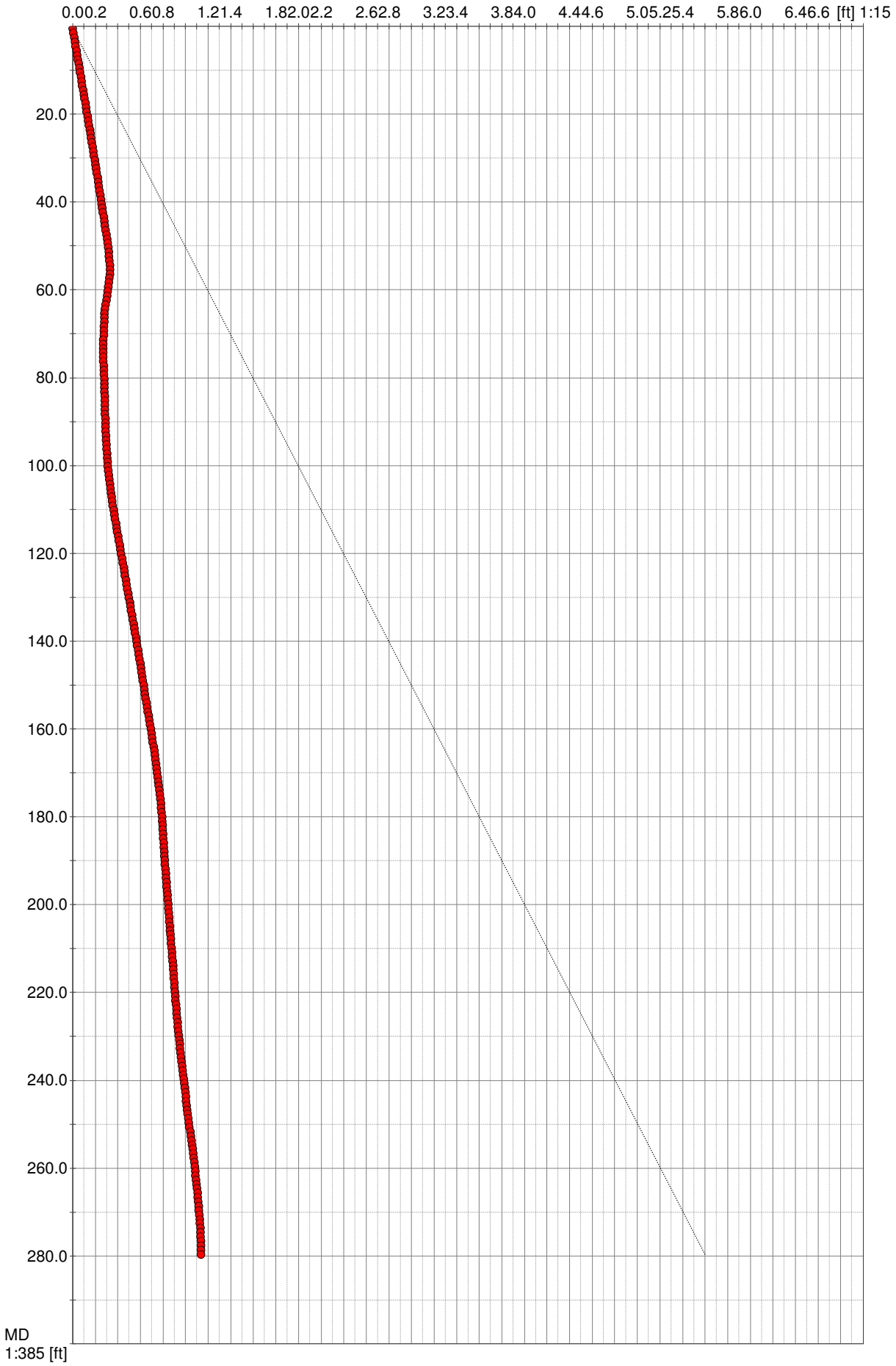
Depth ft	Tilt Deg.	Azimuth Deg	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00
10.00	0.38	60.81	0.06	0.02	9.52	0.06	70.18	0.19
20.00	0.38	47.34	0.12	0.06	20.48	0.13	64.77	0.28
30.00	0.38	34.39	0.17	0.10	30.45	0.19	58.86	0.27
40.00	0.38	22.45	0.20	0.15	40.41	0.26	52.75	0.25
50.00	0.38	92.86	0.24	0.20	50.38	0.31	50.70	3.16
60.00	0.37	215.75	0.27	0.15	60.34	0.31	60.27	3.04
70.00	0.39	300.06	0.21	0.17	70.31	0.27	51.70	0.35
80.00	0.46	310.23	0.17	0.22	80.27	0.28	36.80	0.72
90.00	0.64	287.94	0.09	0.27	90.24	0.29	17.94	0.68
100.00	0.74	274.43	-0.03	0.31	100.20	0.31	354.90	0.29
110.00	0.64	275.68	-0.15	0.33	110.17	0.36	335.70	0.72
120.00	0.50	283.09	-0.24	0.36	120.13	0.43	325.69	0.39
130.00	0.48	278.15	-0.32	0.38	130.10	0.50	320.10	0.66
140.00	0.62	254.79	-0.41	0.39	140.06	0.57	312.98	0.91
150.00	0.74	235.34	-0.52	0.35	150.03	0.63	303.44	0.78
160.00	0.80	224.11	-0.64	0.27	159.99	0.69	292.88	0.44
170.00	0.74	210.33	-0.73	0.17	169.96	0.75	283.16	0.62
180.00	0.58	197.46	-0.79	0.07	179.92	0.79	275.30	0.41
190.00	0.52	189.06	-0.82	-0.02	189.89	0.82	268.82	0.03
200.00	0.51	187.01	-0.84	-0.10	199.85	0.84	262.95	0.17
210.00	0.48	183.99	-0.86	-0.19	209.82	0.88	257.62	0.11
220.00	0.43	180.53	-0.87	-0.27	219.78	0.90	252.97	0.07
230.00	0.40	186.26	-0.88	-0.34	229.75	0.94	248.97	0.23
240.00	0.36	198.28	-0.90	-0.40	239.71	0.98	245.94	0.39
250.00	0.31	214.12	-0.93	-0.45	249.68	1.03	244.16	0.24
260.00	0.28	220.85	-0.97	-0.48	259.65	1.08	243.37	0.48
270.00	0.27	186.71	-0.99	-0.52	269.61	1.12	242.11	0.50
280.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00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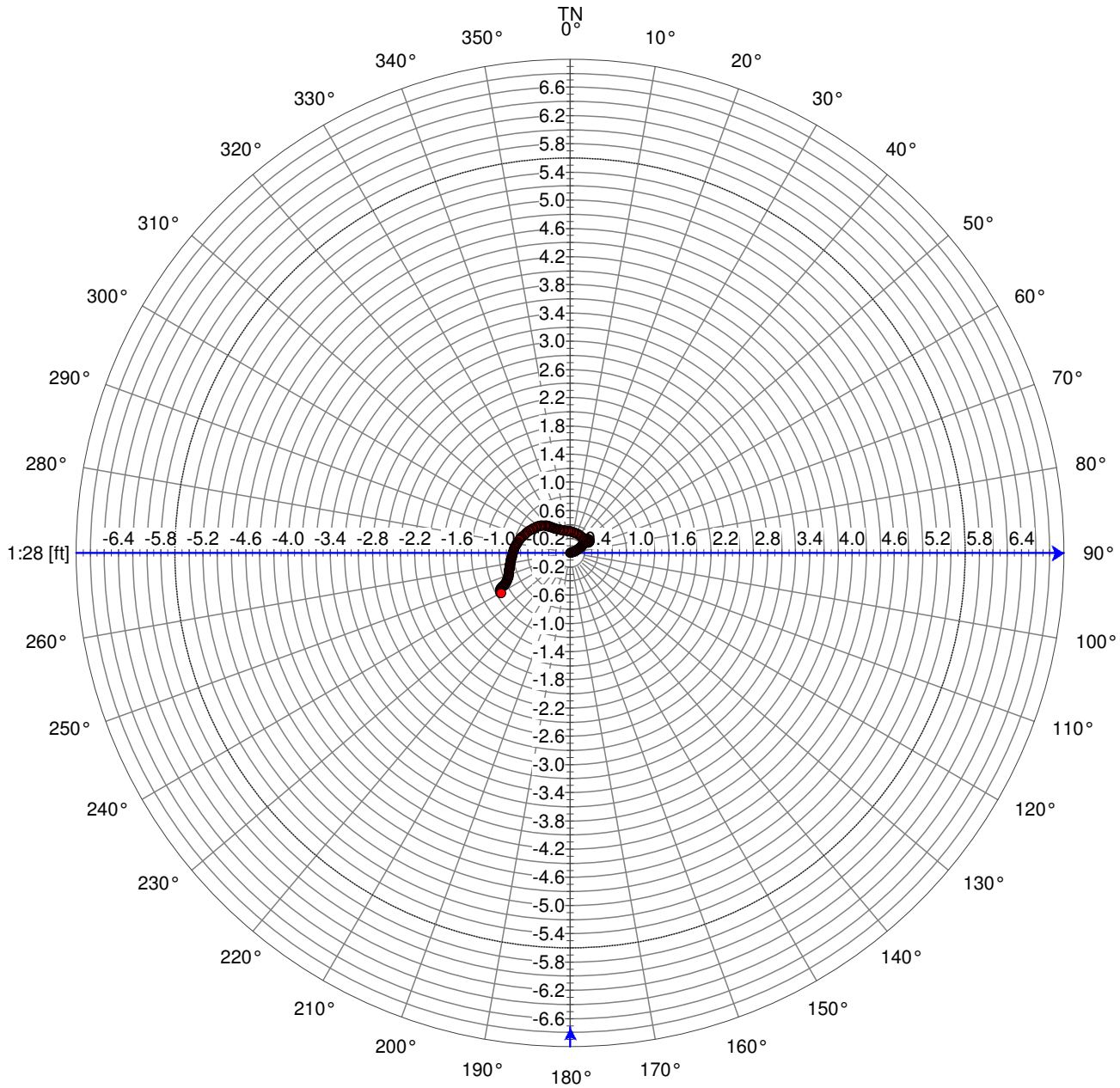
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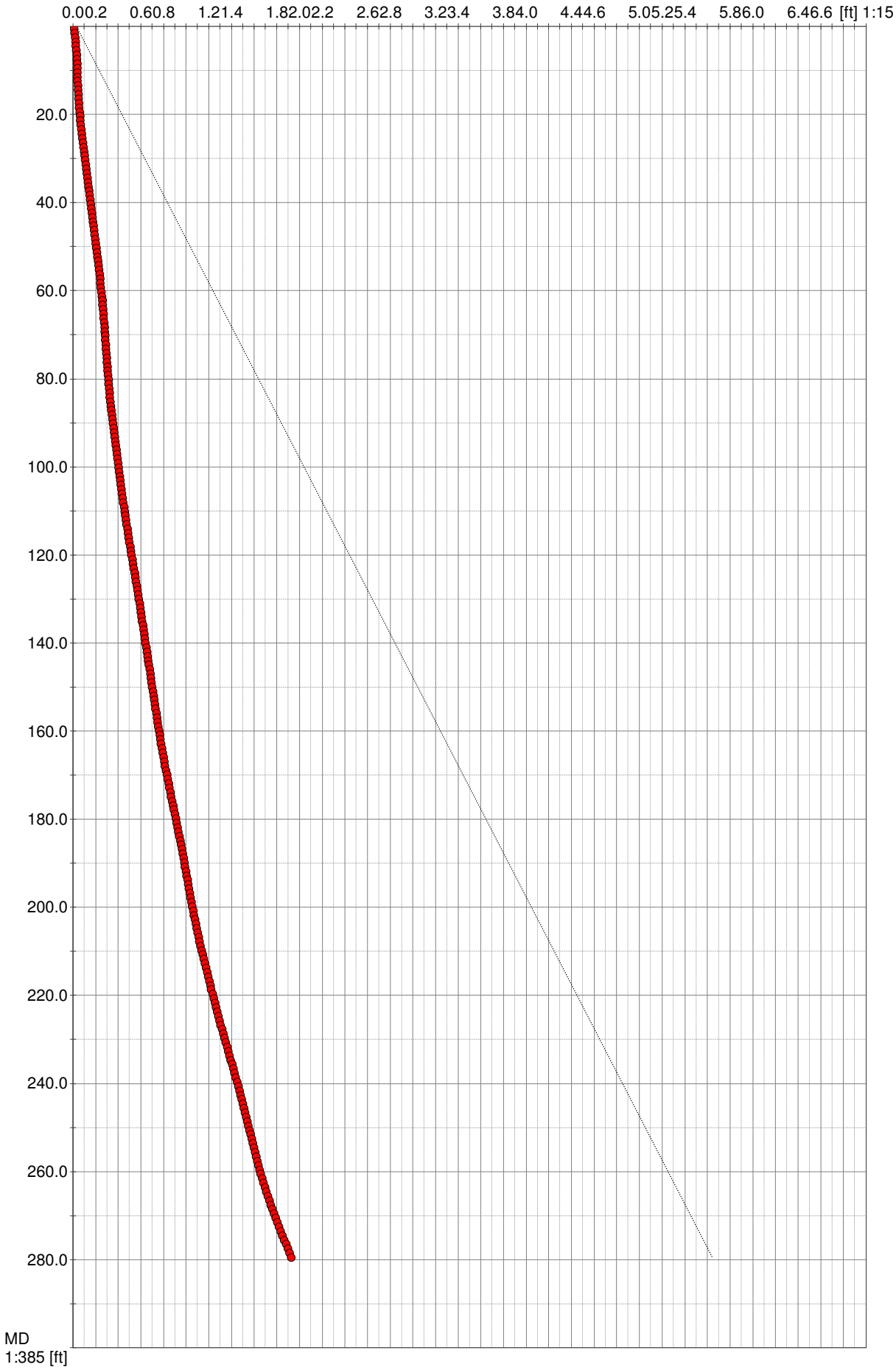
Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	159.83	0.29	0.00	-0.01	0.49	0.01	150.30	2.38
10.00	304.29	0.29	-0.03	-0.03	10.46	0.04	224.19	2.23
20.00	313.12	0.29	-0.06	0.01	20.42	0.06	277.14	0.38
30.00	292.29	0.29	-0.10	0.04	30.39	0.11	290.93	0.32
40.00	272.98	0.30	-0.15	0.05	40.35	0.16	290.20	0.32
50.00	252.54	0.31	-0.20	0.05	50.32	0.21	284.98	0.36
60.00	226.07	0.31	-0.25	0.03	60.28	0.25	277.36	0.51
70.00	197.65	0.37	-0.28	-0.01	70.25	0.28	267.27	0.60
80.00	186.51	0.41	-0.30	-0.08	80.21	0.31	255.23	0.06
90.00	195.71	0.37	-0.32	-0.15	90.18	0.35	245.50	0.48
100.00	196.84	0.36	-0.35	-0.20	100.15	0.40	239.73	0.17
110.00	194.64	0.40	-0.37	-0.26	110.11	0.46	234.54	0.17
120.00	207.61	0.40	-0.40	-0.33	120.08	0.52	230.58	0.72
130.00	222.28	0.35	-0.44	-0.38	130.04	0.58	229.82	0.11
140.00	212.94	0.34	-0.49	-0.42	140.01	0.64	229.34	0.46
150.00	189.19	0.40	-0.51	-0.48	149.97	0.70	227.22	0.38
160.00	182.22	0.44	-0.53	-0.55	159.94	0.76	224.03	0.24
170.00	180.15	0.53	-0.54	-0.63	169.90	0.83	220.46	0.37
180.00	184.99	0.51	-0.55	-0.72	179.87	0.91	217.29	0.37
190.00	192.32	0.42	-0.57	-0.80	189.83	0.98	215.47	0.31
200.00	196.67	0.43	-0.60	-0.87	199.80	1.05	214.45	0.15
210.00	197.91	0.54	-0.63	-0.95	209.76	1.14	213.65	0.42
220.00	196.13	0.58	-0.67	-1.03	219.73	1.23	212.87	0.34
230.00	189.75	0.66	-0.70	-1.14	229.69	1.34	211.74	0.33
240.00	185.86	0.65	-0.73	-1.25	239.66	1.45	210.37	0.29
250.00	183.04	0.58	-0.75	-1.35	249.62	1.55	209.04	0.30
260.00	177.78	0.71	-0.76	-1.46	259.59	1.65	207.61	0.66
270.00	174.08	0.90	-0.77	-1.60	269.55	1.77	205.67	0.71
280.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00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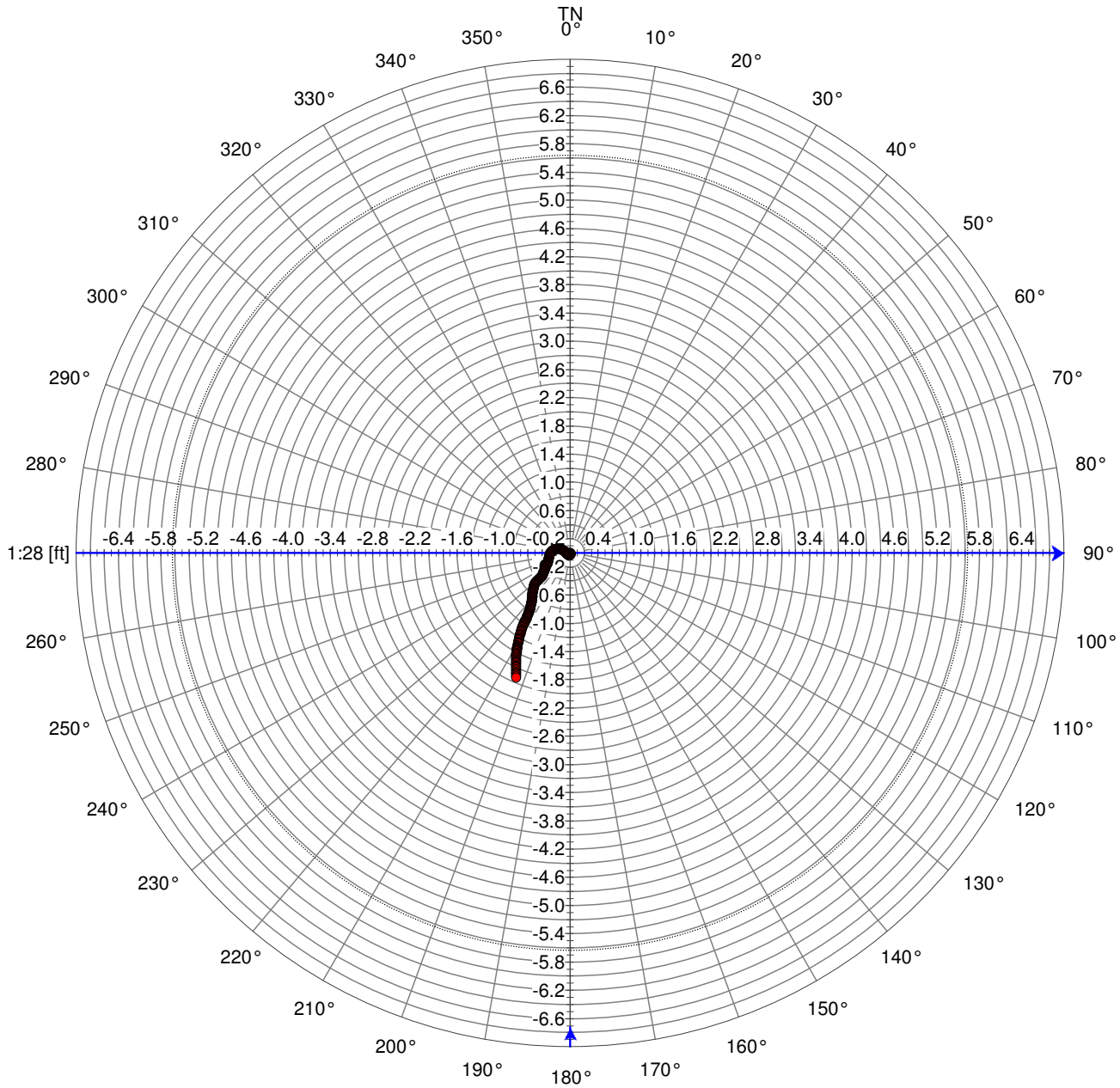
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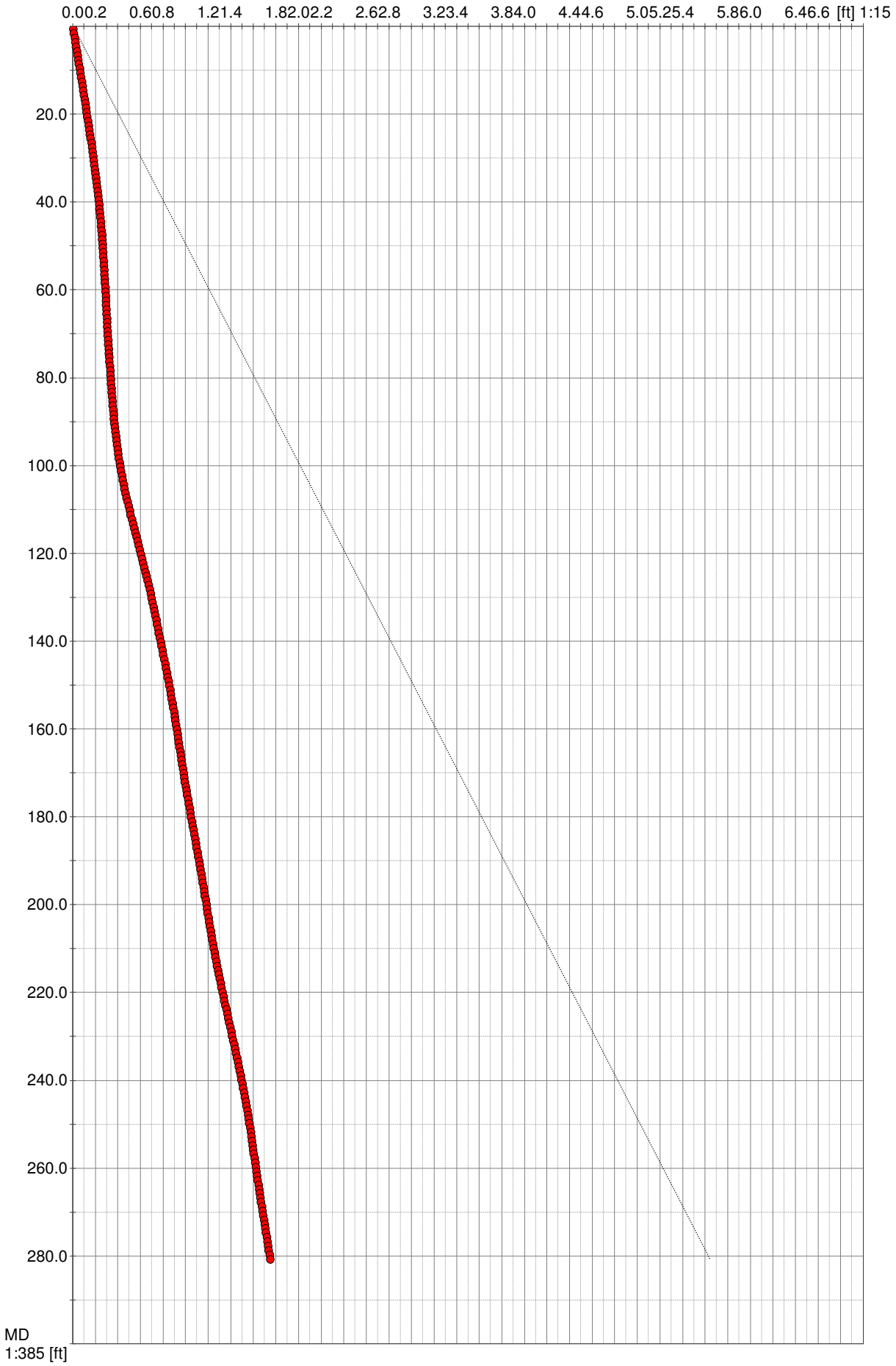
Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	332.27	0.35	0.00	0.00	-0.31	0.00	0.00	-999.00
10.00	325.77	0.37	-0.02	0.06	9.66	0.06	336.56	0.24
20.00	304.85	0.36	-0.06	0.11	19.62	0.12	328.68	0.40
30.00	290.48	0.34	-0.12	0.14	29.59	0.18	320.50	0.34
40.00	273.08	0.29	-0.17	0.16	39.56	0.23	313.25	0.37
50.00	254.09	0.23	-0.21	0.16	49.52	0.26	306.53	0.27
60.00	231.47	0.25	-0.25	0.14	60.48	0.29	299.07	0.31
70.00	224.06	0.27	-0.29	0.11	70.45	0.31	291.00	0.07
80.00	225.34	0.26	-0.33	0.08	80.41	0.34	284.23	0.03
90.00	227.27	0.31	-0.37	0.05	90.38	0.37	278.31	0.37
100.00	245.23	0.41	-0.42	0.02	100.34	0.42	273.20	0.56
110.00	253.85	0.56	-0.50	0.00	110.31	0.50	270.57	0.44
120.00	254.60	0.59	-0.61	-0.01	120.28	0.61	268.71	0.17
130.00	265.19	0.48	-0.70	-0.02	130.24	0.70	268.23	0.70
140.00	274.84	0.46	-0.78	-0.01	140.21	0.78	269.05	0.19
150.00	284.10	0.44	-0.86	0.01	150.17	0.86	270.51	0.32
160.00	291.74	0.39	-0.92	0.04	160.14	0.92	272.35	0.14
170.00	288.25	0.38	-0.98	0.07	170.10	0.98	273.95	0.25
180.00	281.09	0.41	-1.05	0.09	180.07	1.05	274.99	0.10
190.00	278.80	0.40	-1.11	0.11	190.03	1.12	275.63	0.03
200.00	281.90	0.38	-1.18	0.13	200.00	1.18	276.21	0.17
210.00	291.67	0.43	-1.24	0.15	209.96	1.25	277.08	0.46
220.00	302.74	0.55	-1.31	0.20	219.93	1.33	278.76	0.55
230.00	305.36	0.57	-1.39	0.27	229.89	1.41	280.91	0.16
240.00	307.88	0.52	-1.46	0.33	239.86	1.50	282.86	0.40
250.00	312.12	0.42	-1.52	0.39	249.82	1.57	284.48	0.35
260.00	310.19	0.38	-1.56	0.44	259.79	1.62	285.82	0.29
270.00	297.60	0.38	-1.61	0.48	269.75	1.68	286.72	0.20
280.00	304.07	0.37	-1.66	0.52	279.72	1.74	287.39	0.32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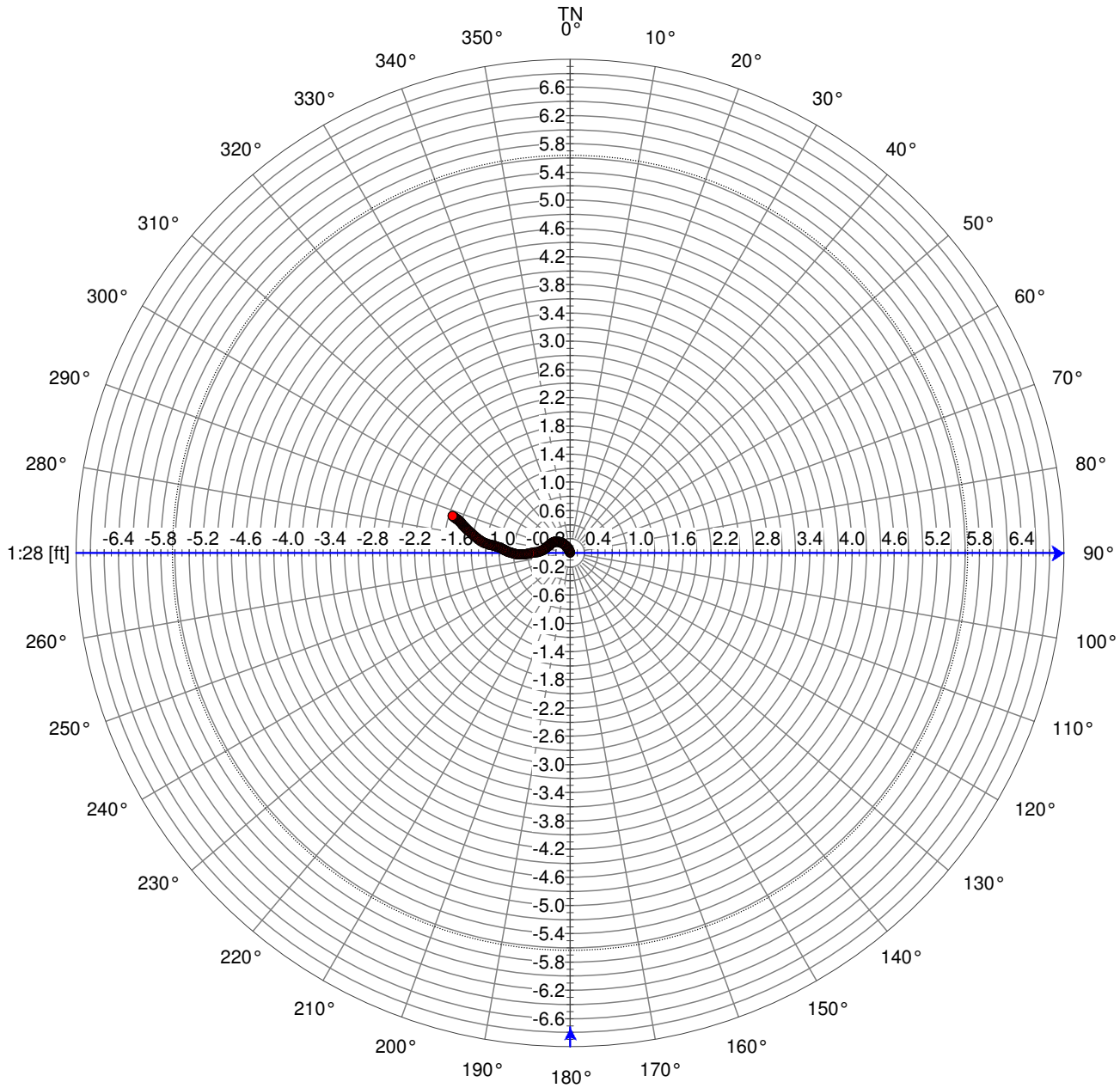
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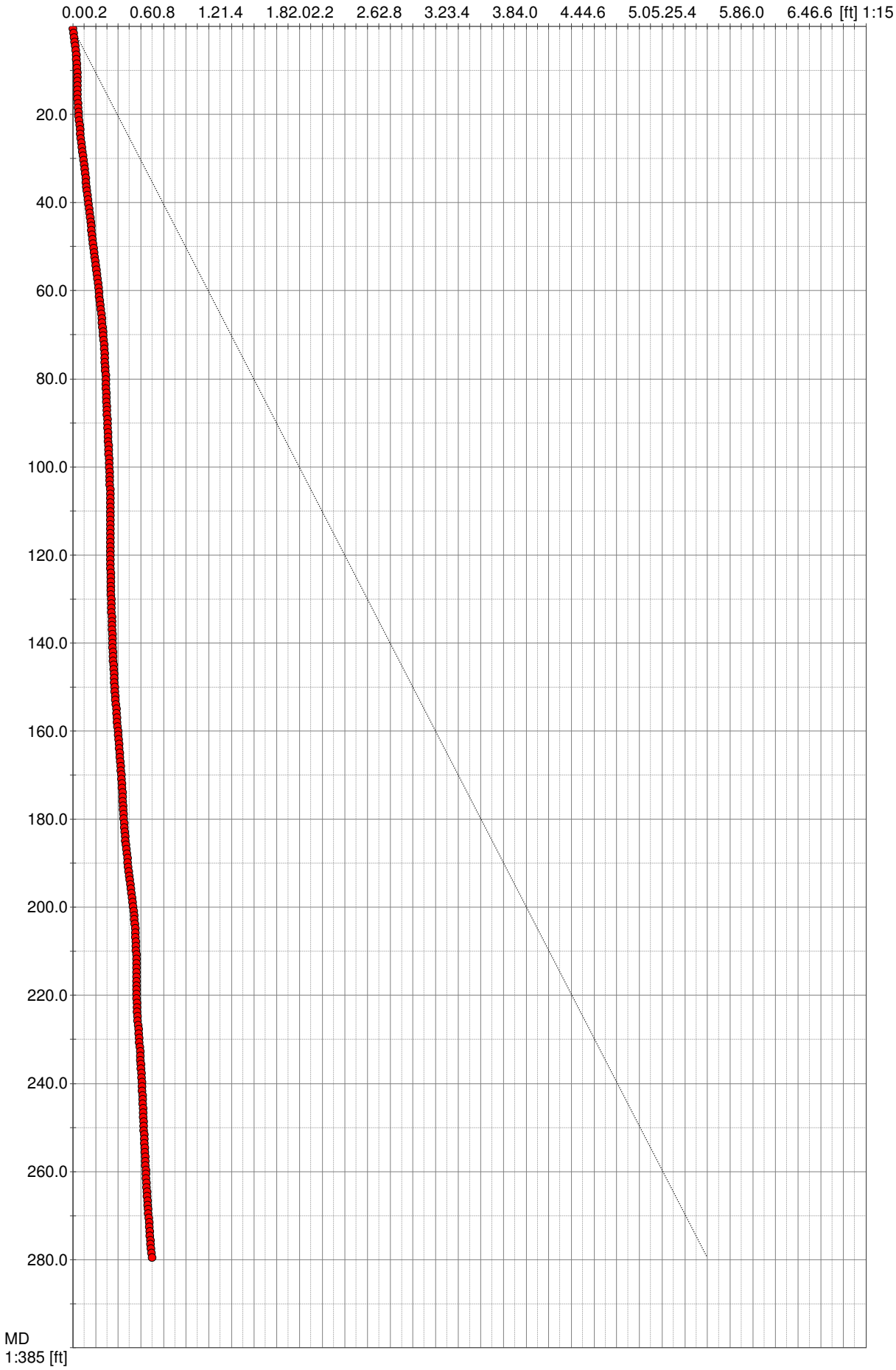
ISB102

Depth	Azimuth	Tilt	Easting	Northing	TVD	Closure Distance	Closure Angle	DLS
ft	Deg	Deg.	[ft]	[ft]	[ft]	[ft]	deg	[deg/100ft]
0.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00
10.00	282.87	0.31	-0.02	-0.03	10.46	0.04	210.01	2.64
20.00	325.68	0.30	-0.05	0.01	20.42	0.05	280.84	0.09
30.00	306.37	0.28	-0.08	0.05	30.39	0.09	304.72	2.42
40.00	311.41	0.26	-0.11	0.09	40.35	0.14	308.32	0.41
50.00	281.55	0.27	-0.15	0.11	50.32	0.18	306.96	0.35
60.00	269.33	0.29	-0.19	0.12	60.28	0.23	302.56	0.25
70.00	257.86	0.21	-0.24	0.12	70.25	0.27	297.55	0.50
80.00	242.28	0.13	-0.26	0.12	80.21	0.29	293.85	0.18
90.00	227.65	0.16	-0.29	0.11	90.18	0.30	290.23	0.19
100.00	214.03	0.20	-0.31	0.08	100.15	0.32	285.31	0.26
110.00	185.05	0.25	-0.33	0.05	110.11	0.33	278.61	0.40
120.00	176.45	0.28	-0.33	0.00	120.08	0.33	270.75	0.15
130.00	179.11	0.31	-0.33	-0.05	130.04	0.34	262.24	0.29
140.00	167.11	0.42	-0.33	-0.11	140.01	0.35	252.22	0.57
150.00	155.93	0.56	-0.32	-0.19	149.97	0.37	238.89	0.57
160.00	145.40	0.60	-0.28	-0.29	159.94	0.40	223.98	0.55
170.00	133.10	0.51	-0.22	-0.36	169.90	0.43	211.14	0.43
180.00	125.29	0.43	-0.16	-0.42	179.87	0.45	200.99	0.25
190.00	134.65	0.41	-0.11	-0.47	189.83	0.48	193.16	0.16
200.00	133.26	0.36	-0.07	-0.53	199.80	0.53	187.69	0.49
210.00	99.27	0.28	-0.03	-0.56	209.76	0.56	182.67	0.59
220.00	98.27	0.20	0.01	-0.56	219.73	0.56	178.49	0.61
230.00	164.71	0.17	0.04	-0.58	229.69	0.58	176.36	0.70
240.00	192.94	0.13	0.03	-0.61	239.66	0.61	177.13	0.27
250.00	203.72	0.11	0.02	-0.62	249.63	0.62	177.93	0.33
260.00	241.35	0.22	0.01	-0.64	259.59	0.64	179.43	1.41
270.00	243.35	0.40	-0.04	-0.66	269.56	0.67	183.78	0.48
280.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00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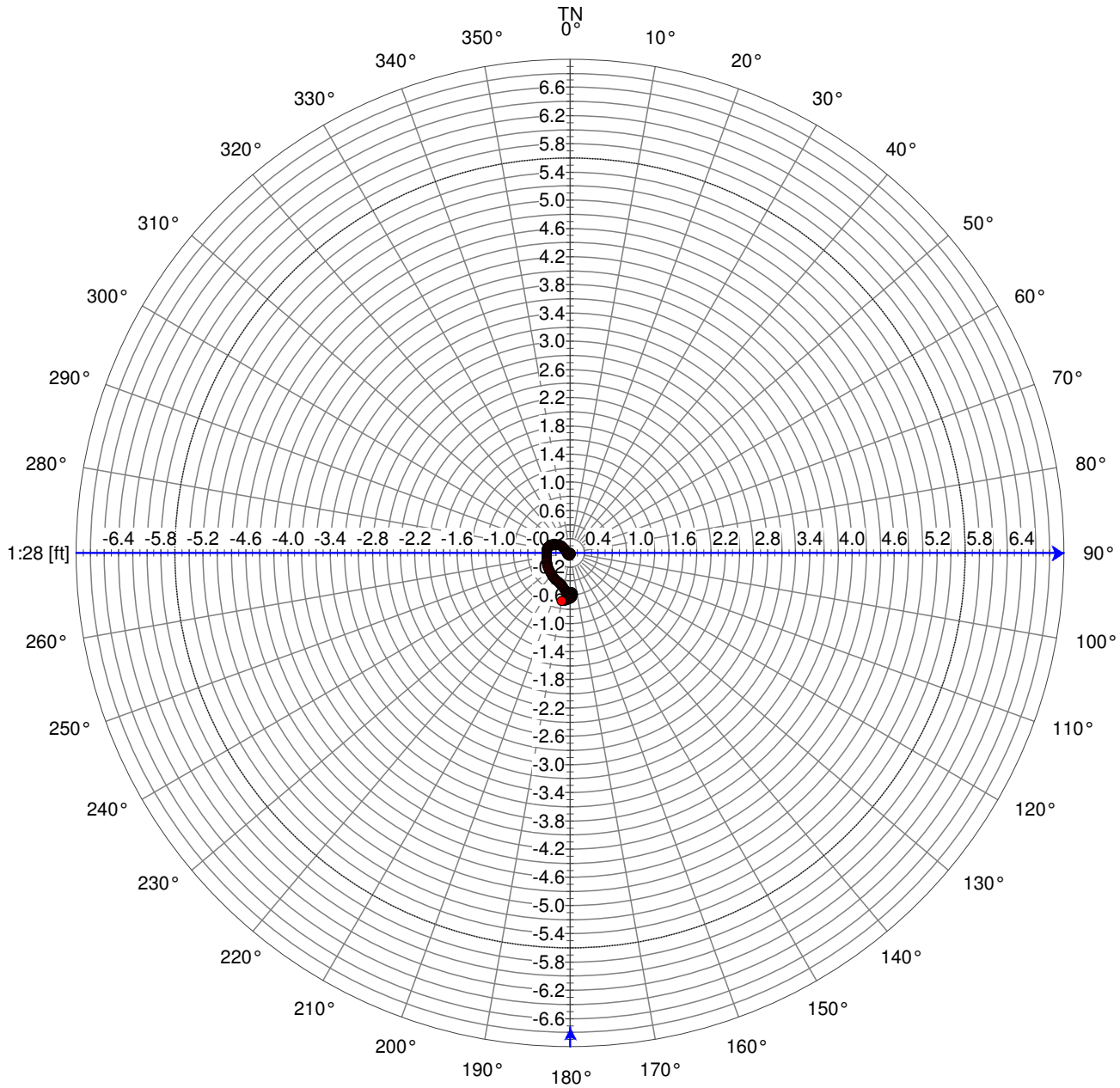
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6.6 6.2 5.8 5.4 5.0 4.6 4.2 3.8 3.4 3.0 2.6 2.2 1.8 1.4 1.0 0.6
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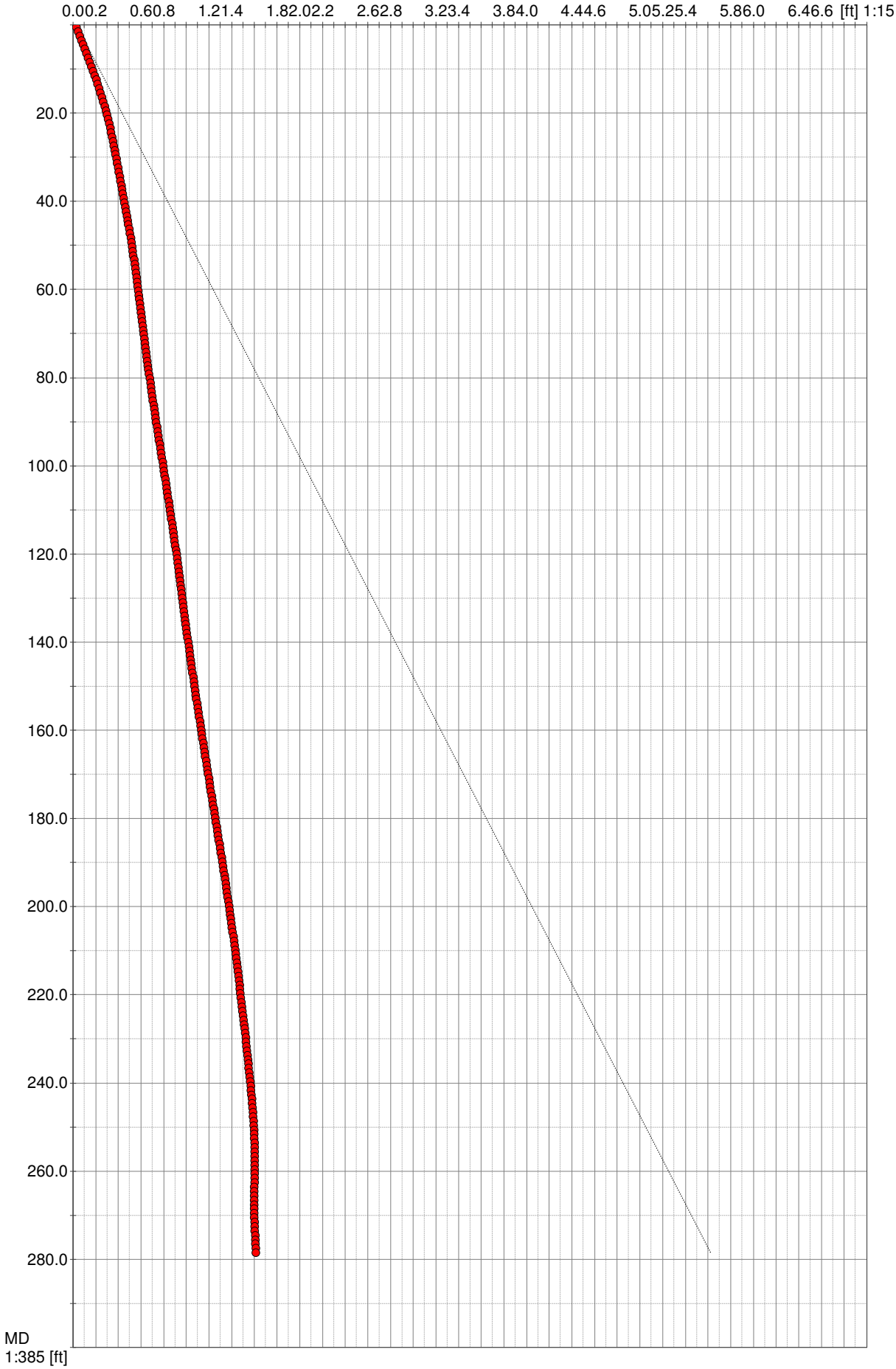
Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	231.64	0.85	-0.02	-0.02	0.49	0.03	237.99	0.38
10.00	224.83	0.80	-0.15	-0.10	10.46	0.18	235.28	0.69
20.00	208.42	0.60	-0.23	-0.19	20.42	0.30	230.89	1.20
30.00	181.61	0.54	-0.27	-0.27	30.38	0.38	224.07	0.88
40.00	167.66	0.54	-0.26	-0.37	40.35	0.45	215.31	0.10
50.00	165.67	0.43	-0.25	-0.46	50.32	0.52	208.92	0.61
60.00	165.90	0.34	-0.24	-0.52	60.28	0.57	205.11	0.11
70.00	167.82	0.33	-0.24	-0.58	70.25	0.62	202.20	0.22
80.00	172.86	0.34	-0.23	-0.64	80.21	0.68	200.05	0.15
90.00	175.43	0.36	-0.23	-0.70	90.18	0.73	198.46	0.06
100.00	175.85	0.36	-0.24	-0.76	100.14	0.80	197.23	0.08
110.00	174.12	0.35	-0.24	-0.82	110.11	0.86	196.04	0.04
120.00	163.90	0.35	-0.23	-0.88	120.07	0.91	194.70	0.18
130.00	153.55	0.34	-0.22	-0.94	130.04	0.96	192.92	0.18
140.00	152.24	0.37	-0.19	-1.00	140.00	1.02	190.91	0.08
150.00	153.16	0.38	-0.17	-1.06	149.97	1.07	189.07	0.14
160.00	158.72	0.38	-0.15	-1.12	159.93	1.13	187.47	0.14
170.00	163.07	0.37	-0.13	-1.18	169.90	1.19	186.39	0.13
180.00	170.52	0.36	-0.12	-1.25	179.87	1.25	185.67	0.19
190.00	183.84	0.36	-0.13	-1.31	189.83	1.32	185.51	0.33
200.00	196.79	0.34	-0.14	-1.37	199.80	1.38	186.02	0.20
210.00	204.89	0.32	-0.17	-1.42	209.76	1.43	186.87	0.12
220.00	212.36	0.31	-0.20	-1.46	219.73	1.48	187.84	0.13
230.00	222.11	0.32	-0.24	-1.50	229.69	1.52	189.03	0.37
240.00	235.88	0.34	-0.29	-1.54	239.66	1.56	190.58	0.19
250.00	257.34	0.40	-0.35	-1.56	249.62	1.59	192.56	0.65
260.00	282.42	0.57	-0.43	-1.54	259.59	1.60	195.48	0.65
270.00	280.57	0.61	-0.53	-1.51	269.55	1.60	199.23	0.32
280.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00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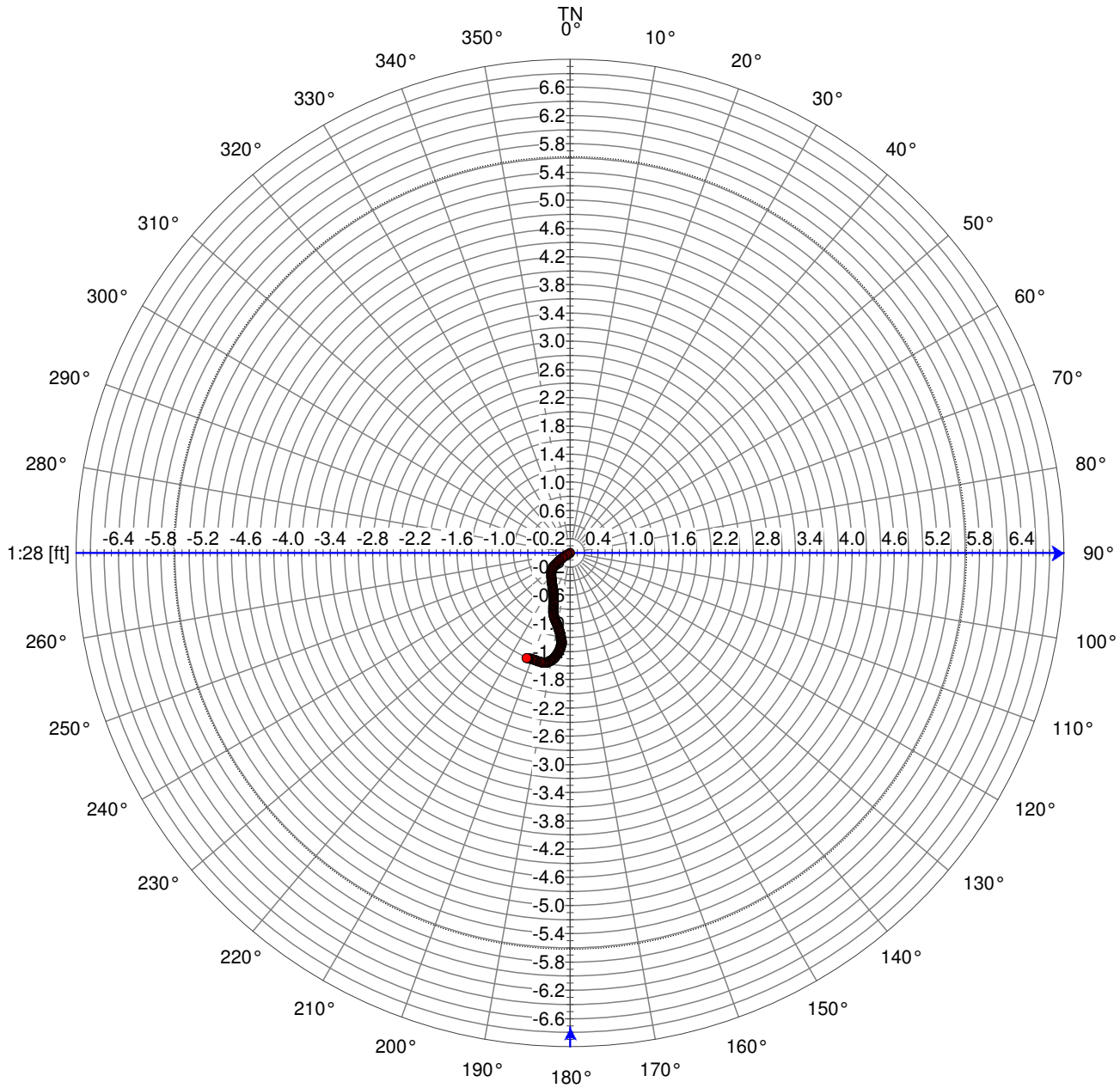
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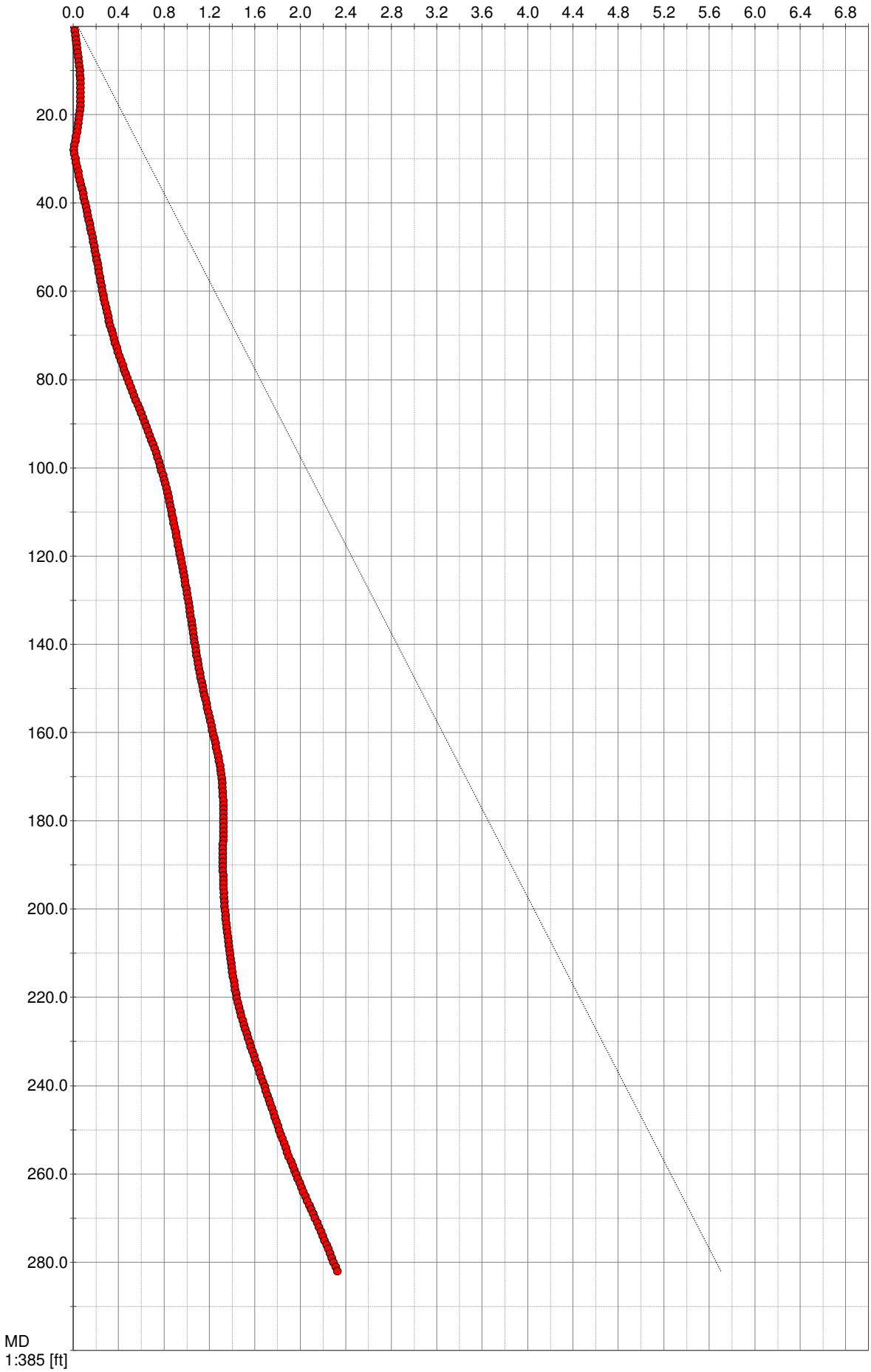
ISB104

Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	59.29	0.30	0.01	0.00	-0.01	0.01	66.46	0.22
10.00	132.15	0.33	0.06	0.01	9.96	0.06	81.79	2.17
20.00	257.22	0.39	0.04	-0.04	19.92	0.06	135.15	2.57
30.00	311.25	0.48	-0.02	0.01	29.89	0.02	295.56	0.54
40.00	294.41	0.51	-0.08	0.06	39.85	0.10	305.67	0.27
50.00	283.81	0.44	-0.16	0.10	49.82	0.19	301.10	0.37
60.00	274.32	0.46	-0.23	0.11	59.78	0.26	296.54	0.67
70.00	270.89	0.65	-0.32	0.13	69.75	0.35	291.41	0.68
80.00	275.68	0.84	-0.45	0.15	79.71	0.48	288.14	0.36
90.00	285.00	0.89	-0.60	0.19	89.68	0.63	287.67	0.54
100.00	302.17	0.70	-0.72	0.26	99.64	0.77	289.62	1.02
110.00	313.84	0.52	-0.80	0.33	109.61	0.86	292.51	0.54
120.00	318.52	0.49	-0.85	0.40	119.57	0.94	295.41	0.91
130.00	319.87	0.41	-0.89	0.47	129.54	1.01	297.67	0.26
140.00	295.41	0.34	-0.94	0.52	139.50	1.07	298.94	2.49
150.00	306.09	0.49	-1.00	0.56	150.46	1.15	299.50	0.55
160.00	307.67	0.53	-1.06	0.63	160.43	1.23	300.83	0.43
170.00	234.13	0.36	-1.12	0.67	170.39	1.31	300.85	3.20
180.00	196.96	0.23	-1.16	0.64	180.36	1.32	298.99	1.06
190.00	219.91	0.23	-1.17	0.61	190.33	1.32	297.37	1.40
200.00	232.29	0.35	-1.21	0.57	200.29	1.34	295.42	0.80
210.00	237.01	0.47	-1.27	0.54	210.26	1.38	293.01	0.22
220.00	240.39	0.66	-1.35	0.50	220.22	1.44	290.23	0.91
230.00	248.95	0.86	-1.48	0.46	230.19	1.55	287.23	0.51
240.00	247.40	0.89	-1.63	0.42	240.15	1.68	284.37	0.34
250.00	245.12	0.90	-1.78	0.37	250.11	1.82	281.79	0.27
260.00	251.25	0.99	-1.94	0.32	260.08	1.96	279.46	0.59
270.00	270.04	0.99	-2.11	0.31	270.04	2.13	278.38	1.15
280.00	288.38	0.92	-2.27	0.36	280.01	2.29	278.95	0.58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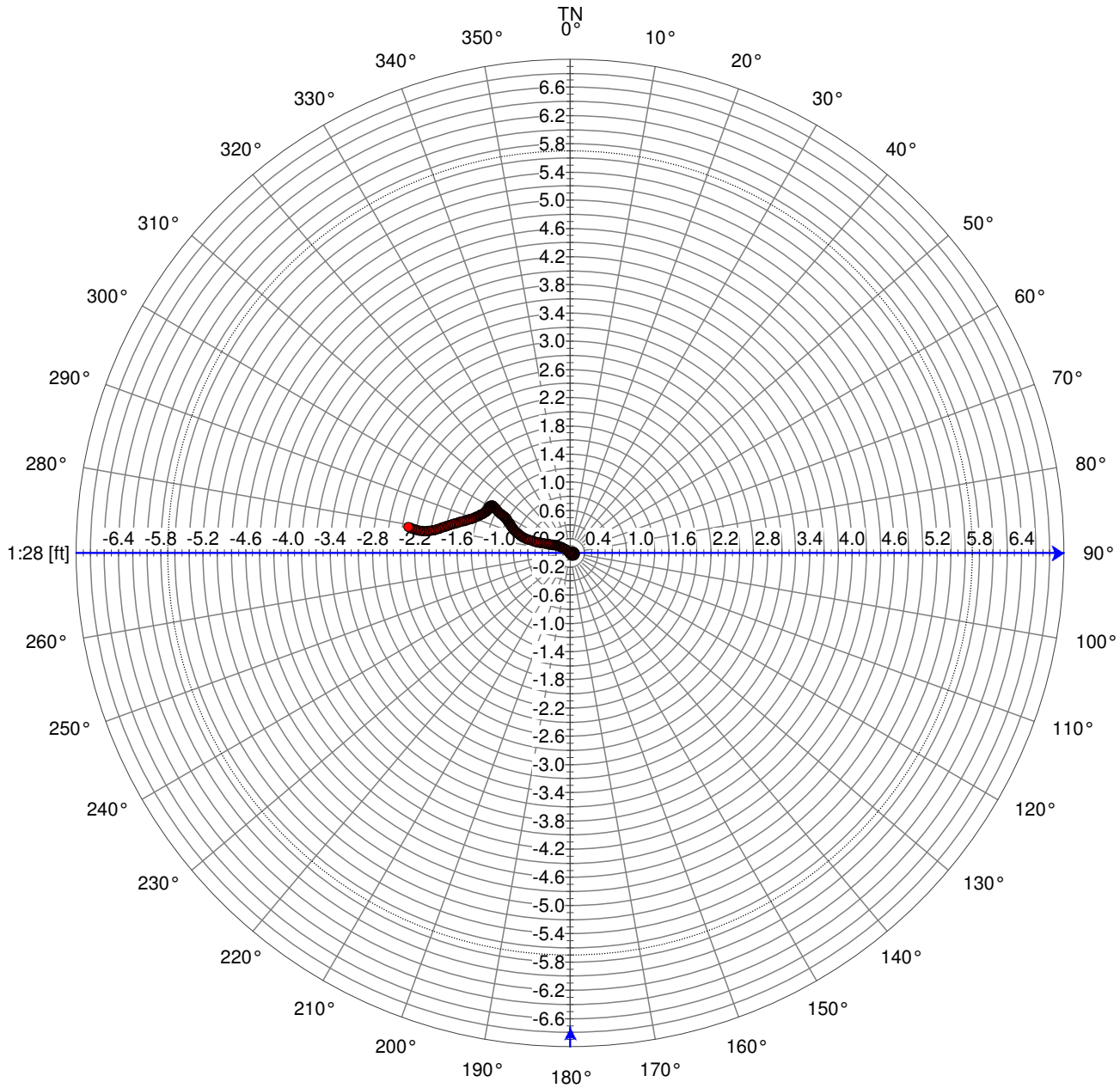
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Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	324.59	0.62	-0.01	0.01	-0.21	0.01	330.80	0.74
10.00	310.23	0.80	-0.08	0.11	9.76	0.14	324.70	0.88
20.00	281.49	0.72	-0.19	0.18	19.72	0.26	313.05	1.21
30.00	267.75	0.50	-0.30	0.20	29.69	0.36	303.67	0.61
40.00	259.08	0.31	-0.37	0.20	39.65	0.42	298.89	1.34
50.00	276.13	0.19	-0.41	0.20	49.62	0.46	296.45	0.37
60.00	219.79	0.18	-0.44	0.20	59.58	0.48	294.93	0.41
70.00	90.56	0.33	-0.43	0.17	69.55	0.46	291.96	2.58
80.00	108.71	0.51	-0.36	0.20	79.51	0.41	298.28	4.34
90.00	269.85	0.68	-0.39	0.12	90.48	0.41	287.07	5.31
100.00	312.70	0.74	-0.47	0.21	100.44	0.51	294.39	1.21
110.00	287.91	0.61	-0.56	0.28	110.41	0.63	296.70	0.93
120.00	256.58	0.43	-0.65	0.30	120.37	0.71	294.73	0.75
130.00	212.27	0.25	-0.70	0.27	130.34	0.75	291.26	0.85
140.00	126.26	0.19	-0.70	0.24	140.30	0.74	289.06	0.58
150.00	73.18	0.28	-0.66	0.24	150.27	0.70	289.66	0.47
160.00	51.34	0.35	-0.61	0.26	160.23	0.66	293.22	0.25
170.00	42.28	0.38	-0.56	0.30	170.20	0.63	298.12	0.24
180.00	62.41	0.41	-0.50	0.34	180.16	0.61	303.96	2.97
190.00	184.35	0.39	-0.46	0.30	190.13	0.55	303.02	2.06
200.00	258.66	0.60	-0.52	0.25	200.09	0.57	295.86	2.98
210.00	203.53	1.15	-0.63	0.16	210.06	0.65	284.20	2.74
220.00	190.00	1.52	-0.71	-0.07	220.02	0.71	264.71	0.83
230.00	183.65	1.52	-0.77	-0.33	229.98	0.84	246.94	0.68
240.00	180.00	1.62	-0.80	-0.59	239.95	1.00	233.56	0.37
250.00	180.98	1.76	-0.84	-0.89	249.91	1.22	223.39	0.62
260.00	186.70	1.63	-0.89	-1.18	259.87	1.48	216.82	0.58
270.00	191.74	1.48	-0.96	-1.44	269.83	1.73	213.51	0.60
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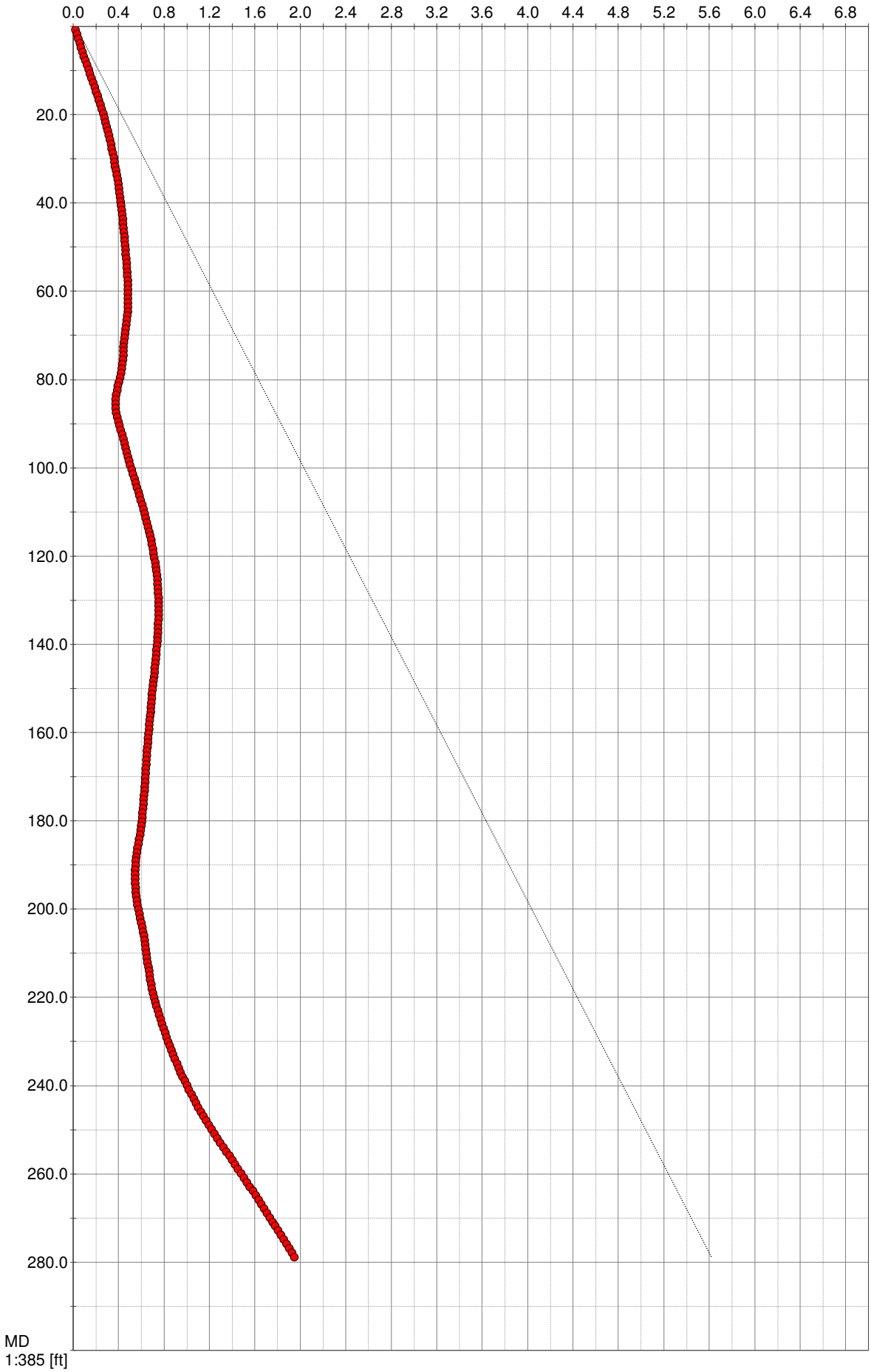
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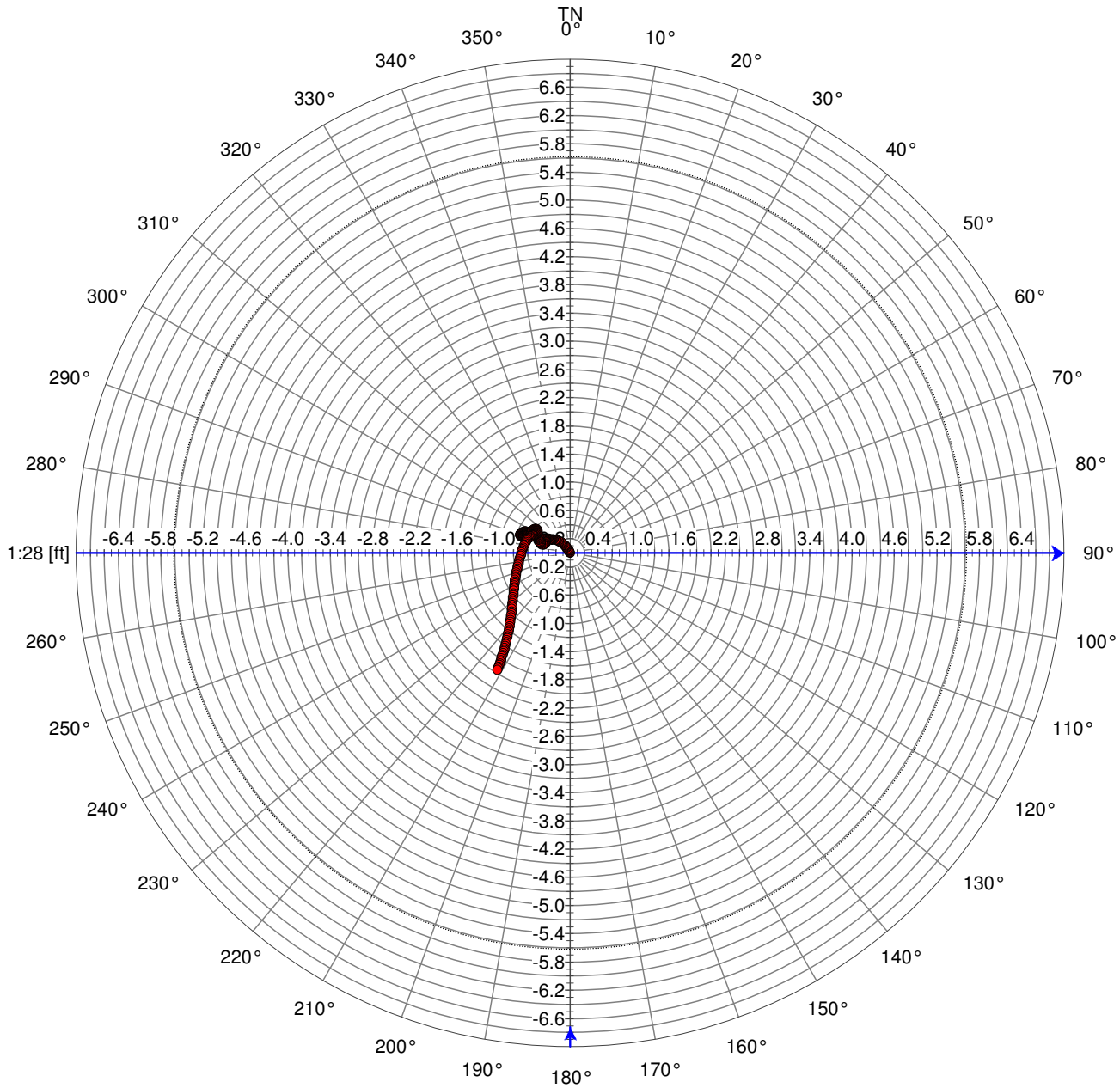
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ISB106

Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	179.76	0.37	0.00	-0.01	0.49	0.01	191.55	0.09
10.00	185.62	0.38	-0.02	-0.07	10.46	0.07	194.06	0.23
20.00	192.26	0.42	-0.04	-0.13	20.42	0.14	197.20	0.28
30.00	201.41	0.47	-0.08	-0.20	30.39	0.22	201.61	0.22
40.00	194.08	0.46	-0.12	-0.27	40.35	0.30	204.41	0.58
50.00	174.64	0.41	-0.14	-0.34	50.32	0.37	202.89	0.43
60.00	167.02	0.40	-0.15	-0.41	60.28	0.44	199.58	0.07
70.00	172.74	0.42	-0.15	-0.48	70.25	0.51	197.13	0.06
80.00	182.40	0.46	-0.16	-0.56	80.21	0.58	196.23	0.10
90.00	186.34	0.47	-0.18	-0.64	90.18	0.66	196.24	0.24
100.00	192.82	0.51	-0.21	-0.71	100.14	0.74	196.71	0.33
110.00	200.37	0.55	-0.26	-0.79	110.11	0.84	198.06	0.16
120.00	200.49	0.56	-0.31	-0.88	120.07	0.93	199.61	0.07
130.00	202.21	0.62	-0.37	-0.96	130.04	1.03	200.97	0.16
140.00	209.64	0.66	-0.44	-1.05	140.00	1.14	202.55	0.39
150.00	221.37	0.65	-0.52	-1.13	149.97	1.24	204.75	0.43
160.00	227.03	0.66	-0.62	-1.19	159.93	1.34	207.38	0.13
170.00	228.76	0.64	-0.71	-1.25	169.90	1.44	209.82	0.27
180.00	233.29	0.81	-0.82	-1.30	179.86	1.54	212.29	1.02
190.00	236.32	1.10	-0.98	-1.37	189.83	1.68	215.53	0.79
200.00	236.87	1.04	-1.16	-1.44	199.79	1.84	218.80	0.61
210.00	238.45	0.82	-1.31	-1.49	209.76	1.99	221.19	0.63
220.00	239.51	0.88	-1.44	-1.54	219.72	2.11	223.15	0.36
230.00	238.72	0.96	-1.60	-1.59	229.68	2.25	225.07	0.15
240.00	238.85	0.94	-1.75	-1.65	239.65	2.41	226.76	0.17
250.00	236.30	0.88	-1.90	-1.70	249.61	2.55	228.18	0.37
260.00	227.15	0.83	-2.03	-1.77	259.58	2.69	229.05	0.60
270.00	214.86	0.94	-2.16	-1.86	269.54	2.85	229.23	0.61
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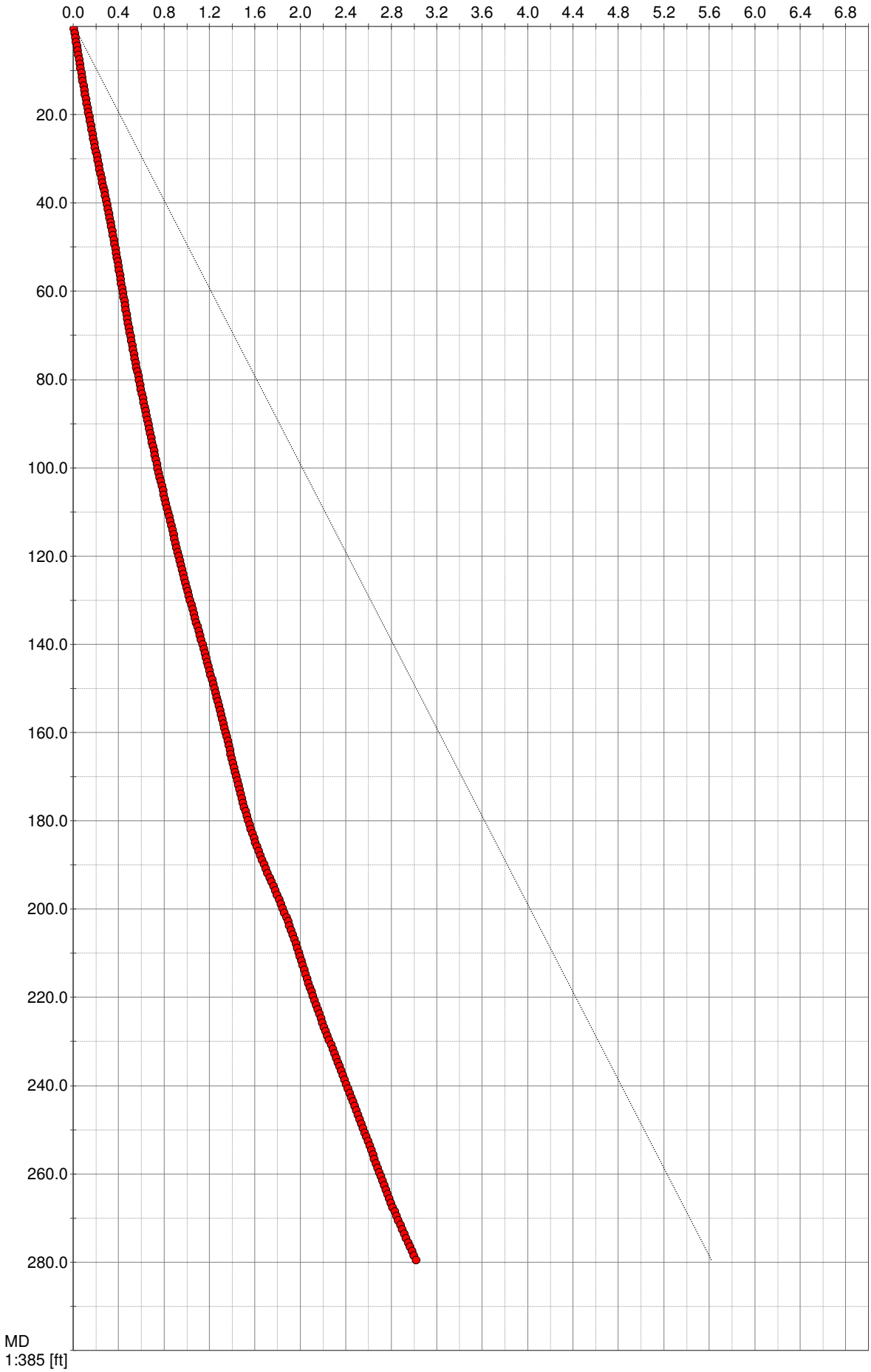
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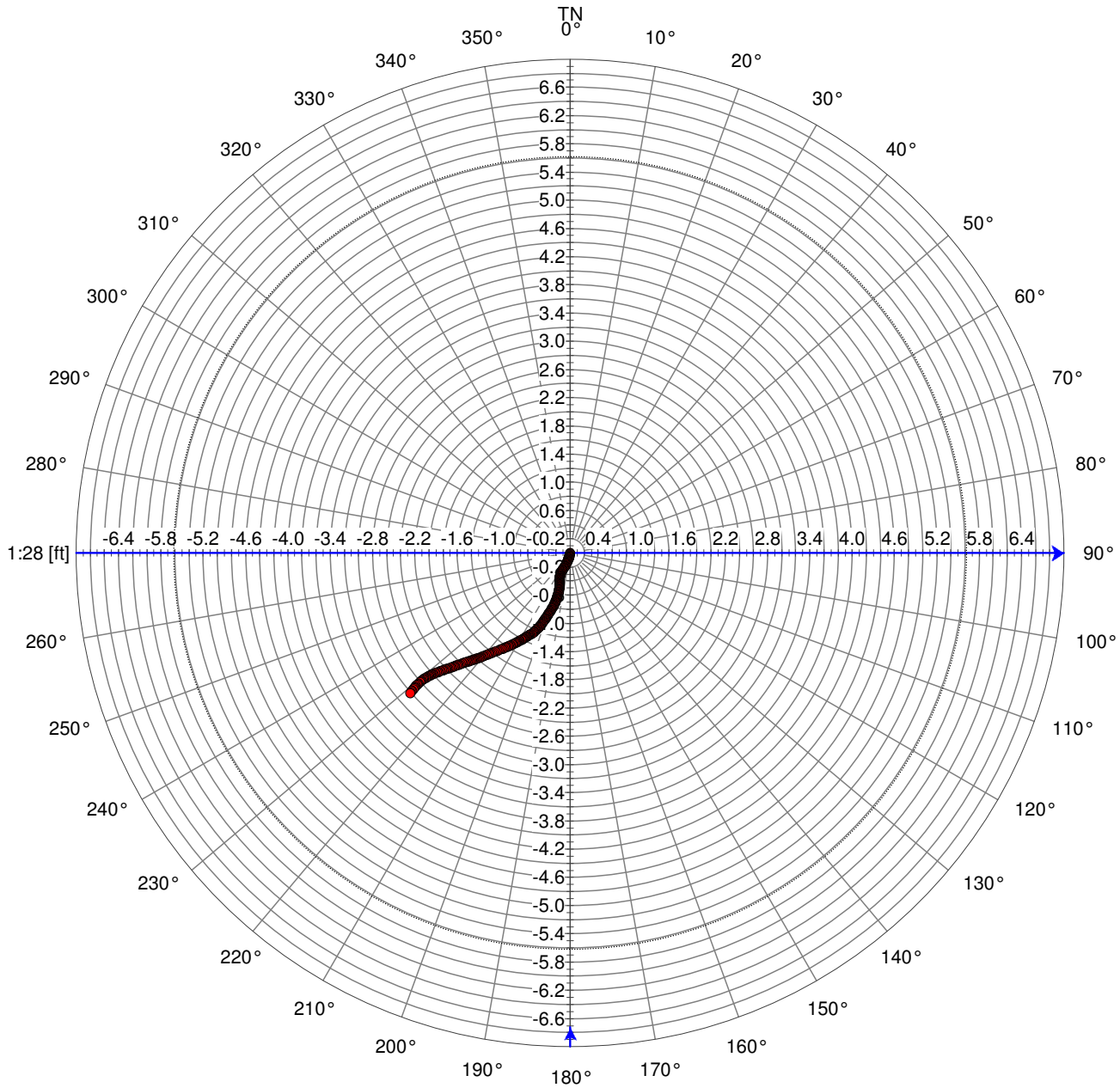
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Depth ft	Tilt Deg.	Azimuth Deg	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00
10.00	0.30	164.12	0.00	-0.05	9.66	0.05	177.62	0.28
20.00	0.26	189.94	0.01	-0.10	19.62	0.10	175.59	0.96
30.00	0.36	256.13	-0.03	-0.13	29.59	0.13	194.39	1.32
40.00	0.36	255.57	-0.10	-0.12	39.56	0.16	219.30	1.10
50.00	0.26	235.39	-0.15	-0.14	49.52	0.20	227.14	0.34
60.00	0.32	252.42	-0.20	-0.16	60.48	0.26	231.49	0.24
70.00	0.26	211.86	-0.24	-0.18	70.45	0.30	232.85	0.73
80.00	0.23	185.98	-0.26	-0.22	80.41	0.34	229.09	0.17
90.00	0.34	225.86	-0.28	-0.26	90.38	0.38	227.13	1.00
100.00	0.45	245.34	-0.35	-0.29	100.34	0.45	230.32	0.20
110.00	0.49	240.56	-0.42	-0.32	110.31	0.53	233.11	0.16
120.00	0.54	237.84	-0.50	-0.36	120.28	0.61	234.64	0.45
130.00	0.57	234.45	-0.59	-0.40	130.24	0.71	235.80	0.32
140.00	0.58	234.24	-0.68	-0.45	140.21	0.81	236.34	0.25
150.00	0.47	234.13	-0.76	-0.50	150.17	0.90	236.70	0.26
160.00	0.51	236.90	-0.83	-0.54	160.14	0.99	237.11	0.51
170.00	0.64	242.14	-0.92	-0.58	170.10	1.09	237.86	0.29
180.00	0.56	247.85	-1.02	-0.61	180.07	1.19	239.05	0.43
190.00	0.51	248.44	-1.11	-0.64	190.03	1.28	240.16	0.20
200.00	0.49	244.36	-1.19	-0.67	200.00	1.37	240.81	0.30
210.00	0.36	249.70	-1.26	-0.68	209.96	1.44	241.58	0.12
220.00	0.25	260.67	-1.32	-0.69	219.93	1.49	242.23	0.36
230.00	0.27	244.11	-1.36	-0.71	229.89	1.54	242.61	0.41
240.00	0.20	228.86	-1.40	-0.73	239.86	1.58	242.56	0.41
250.00	0.23	219.84	-1.42	-0.75	249.82	1.61	242.35	0.70
260.00	0.55	204.89	-1.46	-0.80	259.79	1.67	241.47	1.11
270.00	0.60	216.36	-1.52	-0.88	269.75	1.76	239.96	0.59
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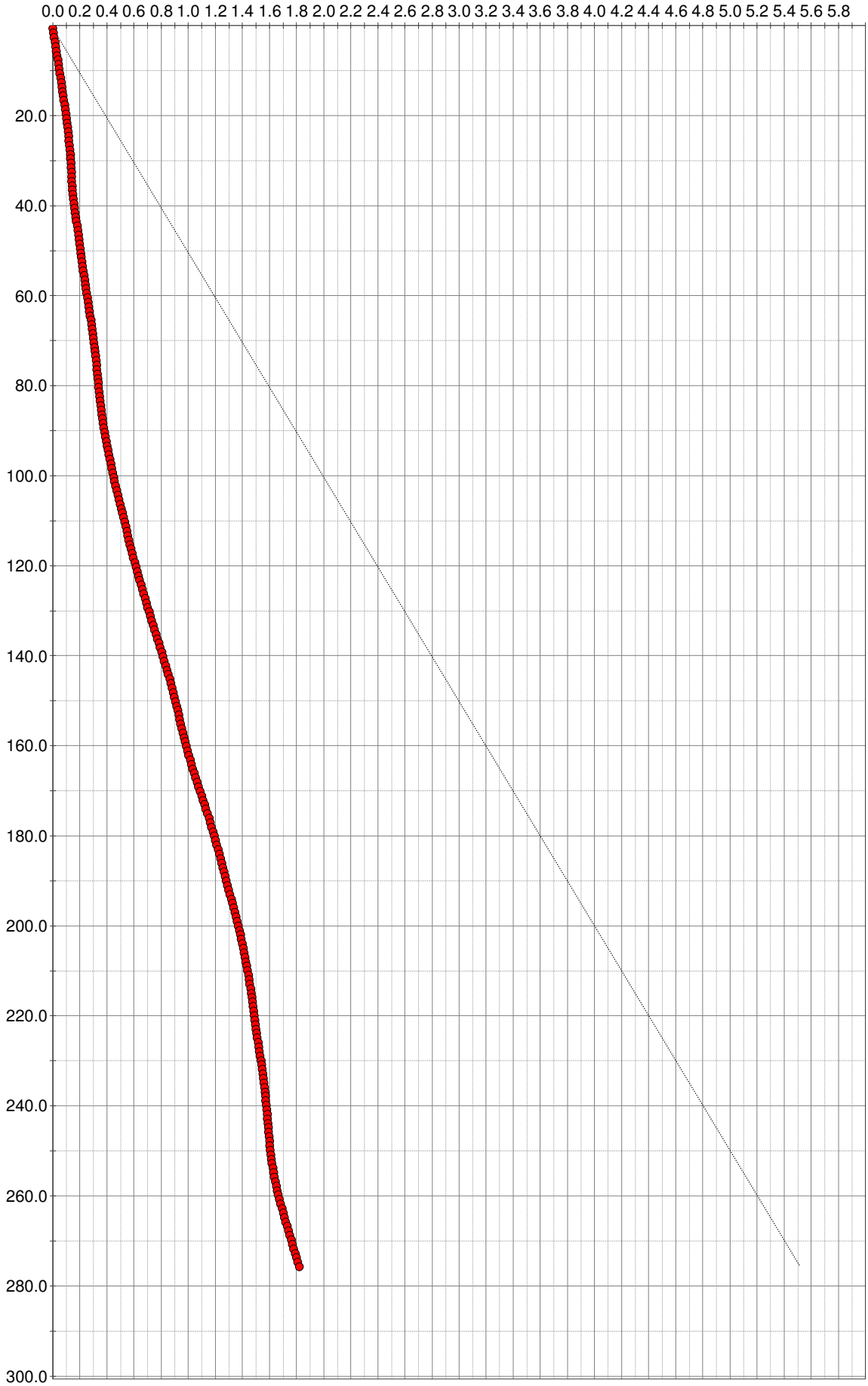
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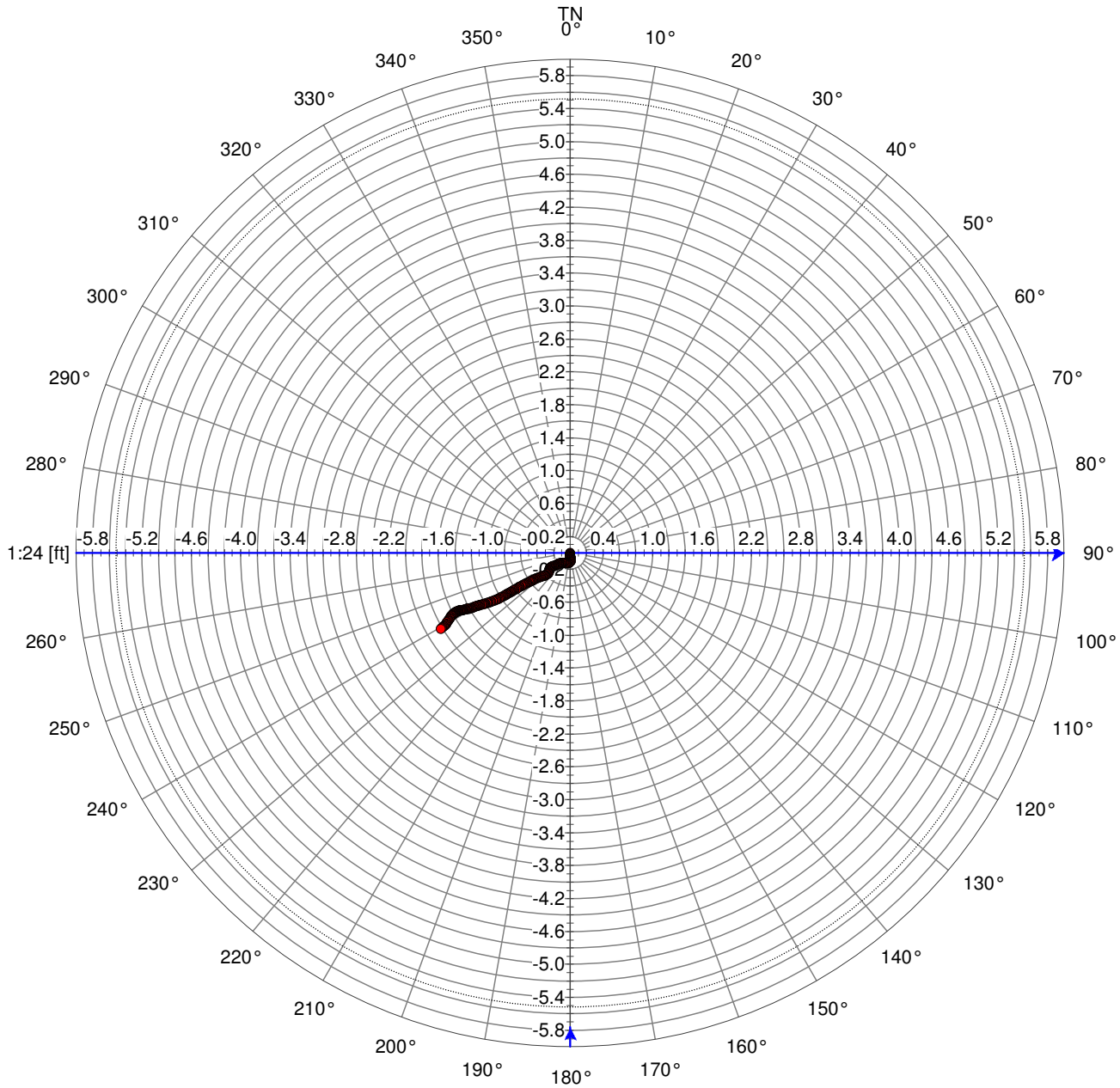
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Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	267.10	0.76	-0.01	0.00	-0.31	0.01	275.63	2.06
10.00	218.88	0.66	-0.13	-0.04	9.66	0.13	251.17	1.59
20.00	217.15	0.47	-0.19	-0.12	19.62	0.22	237.87	0.52
30.00	221.91	0.36	-0.24	-0.17	29.59	0.29	234.90	0.11
40.00	208.17	0.36	-0.28	-0.21	39.55	0.35	232.93	0.44
50.00	182.99	0.38	-0.31	-0.27	49.52	0.41	228.38	0.52
60.00	161.55	0.45	-0.30	-0.35	60.48	0.46	220.68	0.37
70.00	154.30	0.51	-0.28	-0.43	70.45	0.51	212.81	0.36
80.00	144.20	0.48	-0.24	-0.51	80.41	0.56	205.39	0.31
90.00	128.82	0.61	-0.19	-0.58	90.38	0.61	197.75	0.90
100.00	114.40	0.82	-0.08	-0.66	100.34	0.66	187.32	0.40
110.00	113.10	0.72	0.04	-0.72	110.31	0.72	177.07	0.67
120.00	114.01	0.46	0.13	-0.77	120.27	0.78	170.78	0.76
130.00	105.84	0.26	0.18	-0.80	130.24	0.82	167.28	0.28
140.00	102.61	0.28	0.22	-0.82	140.20	0.85	164.66	0.14
150.00	105.73	0.31	0.27	-0.84	150.17	0.88	161.86	0.58
160.00	113.64	0.29	0.32	-0.86	160.13	0.91	159.60	0.35
170.00	114.68	0.34	0.37	-0.89	170.10	0.96	157.57	0.53
180.00	57.71	0.31	0.42	-0.89	180.06	0.98	154.44	1.12
190.00	86.16	0.21	0.46	-0.87	190.03	0.99	152.17	0.78
200.00	173.22	0.29	0.49	-0.90	200.00	1.02	151.64	1.33
210.00	193.67	0.48	0.47	-0.96	209.96	1.07	154.18	0.54
220.00	193.08	0.61	0.44	-1.05	219.93	1.14	157.54	0.39
230.00	191.00	0.63	0.40	-1.16	229.89	1.22	160.86	0.11
240.00	190.27	0.66	0.37	-1.26	239.86	1.32	163.71	0.05
250.00	190.11	0.74	0.34	-1.38	249.82	1.42	166.31	0.37
260.00	194.86	0.68	0.30	-1.50	259.78	1.53	168.81	0.61
270.00	204.05	0.52	0.25	-1.60	269.75	1.62	170.98	0.56
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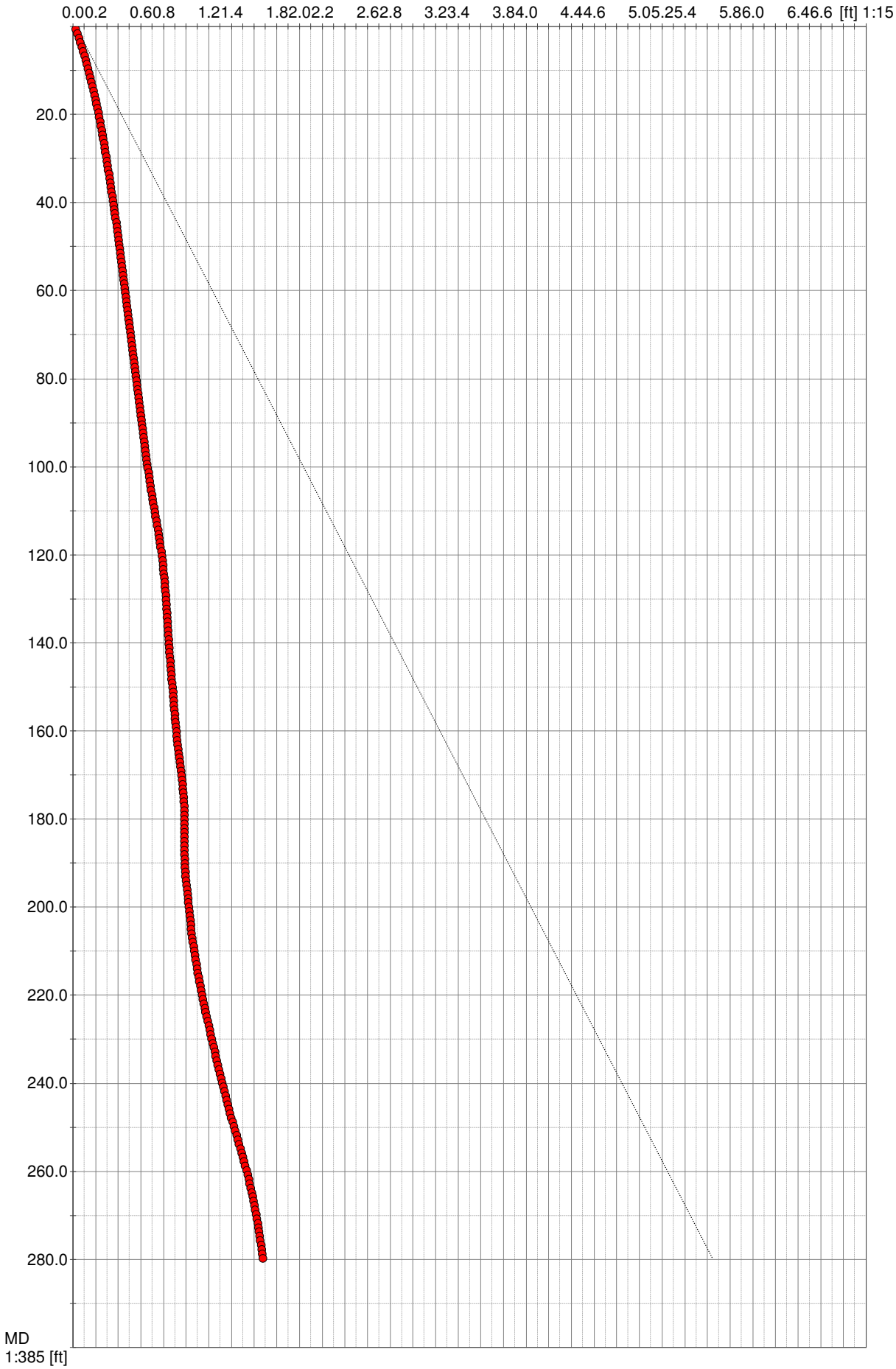
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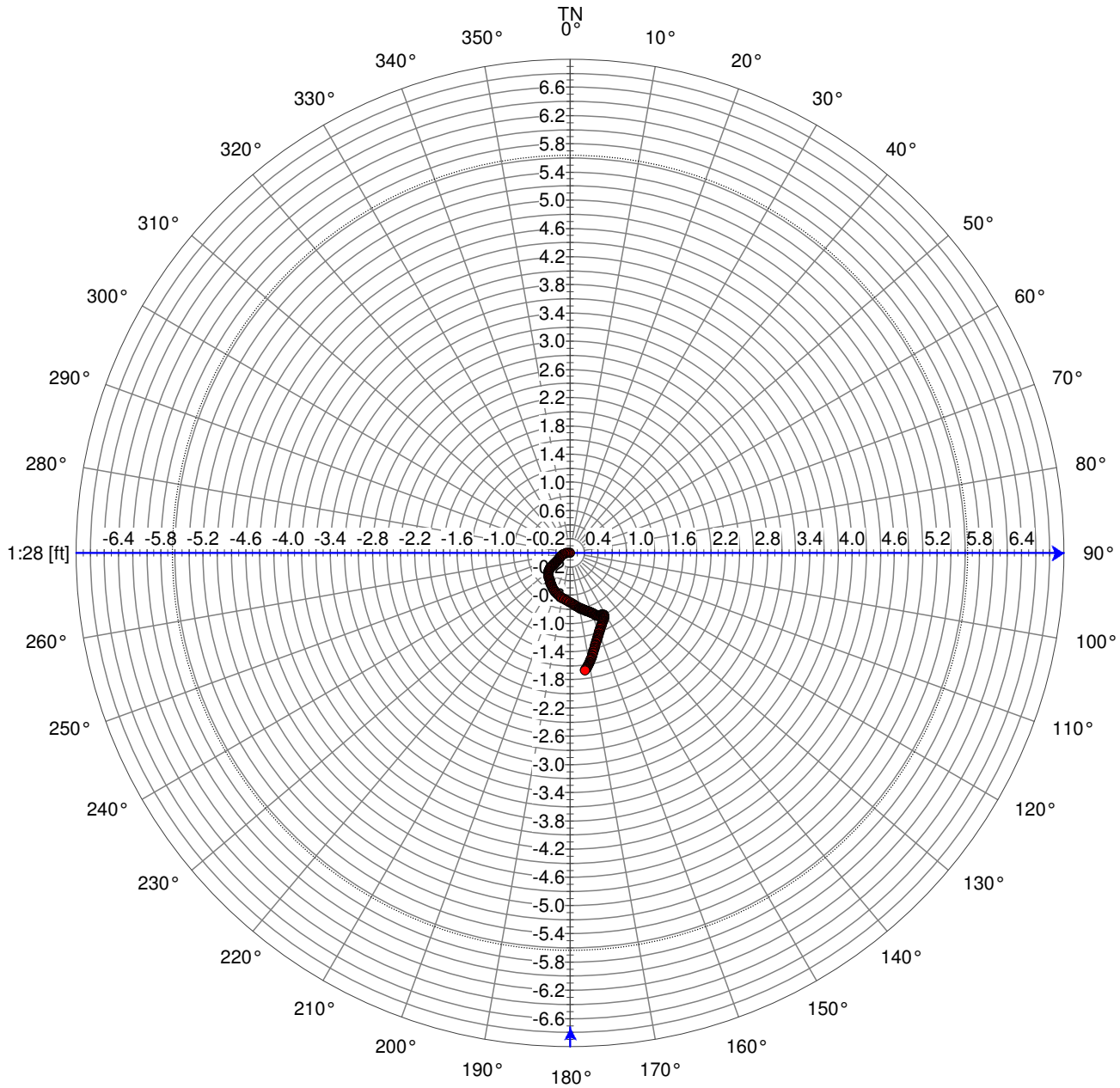
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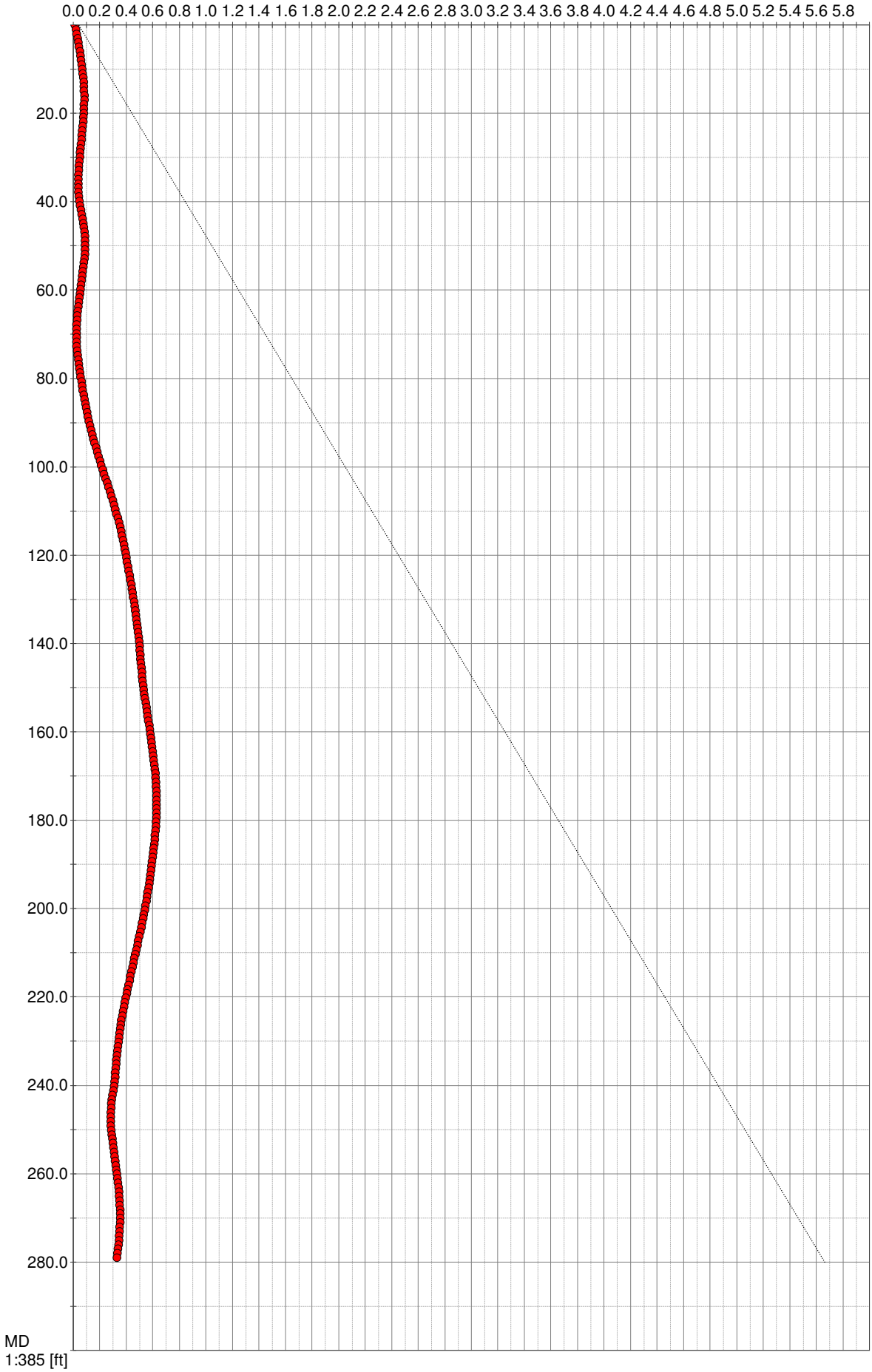
Depth	Tilt	Azimuth	Easting	Northing	TVD	Closure Distance	Closure Angle	DLS
ft	Deg.	Deg	[ft]	[ft]	[ft]	[ft]	deg	[deg/100ft]
0.00	0.50	283.64	-0.01	0.01	-0.01	0.01	293.04	4.17
10.00	0.23	289.74	-0.07	0.04	9.96	0.08	301.55	2.66
20.00	0.32	111.82	-0.05	0.02	19.92	0.05	296.03	1.18
30.00	0.33	71.66	0.01	0.01	29.89	0.02	41.02	0.75
40.00	0.45	29.64	0.06	0.05	39.85	0.08	50.60	1.23
50.00	0.35	345.37	0.08	0.12	49.82	0.14	35.96	1.65
60.00	0.27	300.18	0.06	0.16	59.79	0.17	20.35	0.33
70.00	0.19	288.86	0.03	0.18	69.75	0.18	9.24	0.67
80.00	0.31	257.76	-0.02	0.18	79.72	0.18	354.34	0.06
90.00	0.39	241.92	-0.07	0.17	89.68	0.18	336.30	2.35
100.00	0.73	246.77	-0.16	0.13	99.65	0.21	308.72	1.28
110.00	0.53	239.10	-0.27	0.09	109.61	0.29	288.71	2.65
120.00	0.39	244.17	-0.34	0.06	119.58	0.35	280.78	0.74
130.00	0.36	358.96	-0.38	0.08	129.54	0.38	282.14	1.37
140.00	0.21	340.83	-0.37	0.14	139.51	0.40	289.97	1.32
150.00	0.27	251.51	-0.41	0.15	150.47	0.43	290.81	1.82
160.00	0.33	216.13	-0.45	0.13	160.44	0.47	285.92	0.50
170.00	0.19	214.99	-0.49	0.10	170.40	0.50	281.37	1.61
180.00	0.20	111.75	-0.48	0.07	180.37	0.49	278.02	2.04
190.00	0.26	67.64	-0.45	0.07	190.33	0.45	278.74	0.33
200.00	0.32	50.56	-0.40	0.08	200.30	0.41	281.63	2.12
210.00	0.53	24.41	-0.35	0.15	210.26	0.38	292.29	1.15
220.00	0.62	32.54	-0.29	0.24	220.23	0.38	309.43	0.24
230.00	0.40	37.11	-0.24	0.30	230.19	0.38	322.18	1.63
240.00	0.27	24.70	-0.20	0.35	240.16	0.40	330.07	1.01
250.00	0.27	337.69	-0.19	0.39	250.12	0.43	334.28	1.34
260.00	0.24	271.19	-0.22	0.42	260.09	0.47	332.04	0.81
270.00	0.25	158.94	-0.25	0.40	270.05	0.47	327.71	2.99
280.00	0.30	87.63	-0.21	0.37	280.02	0.43	330.70	1.48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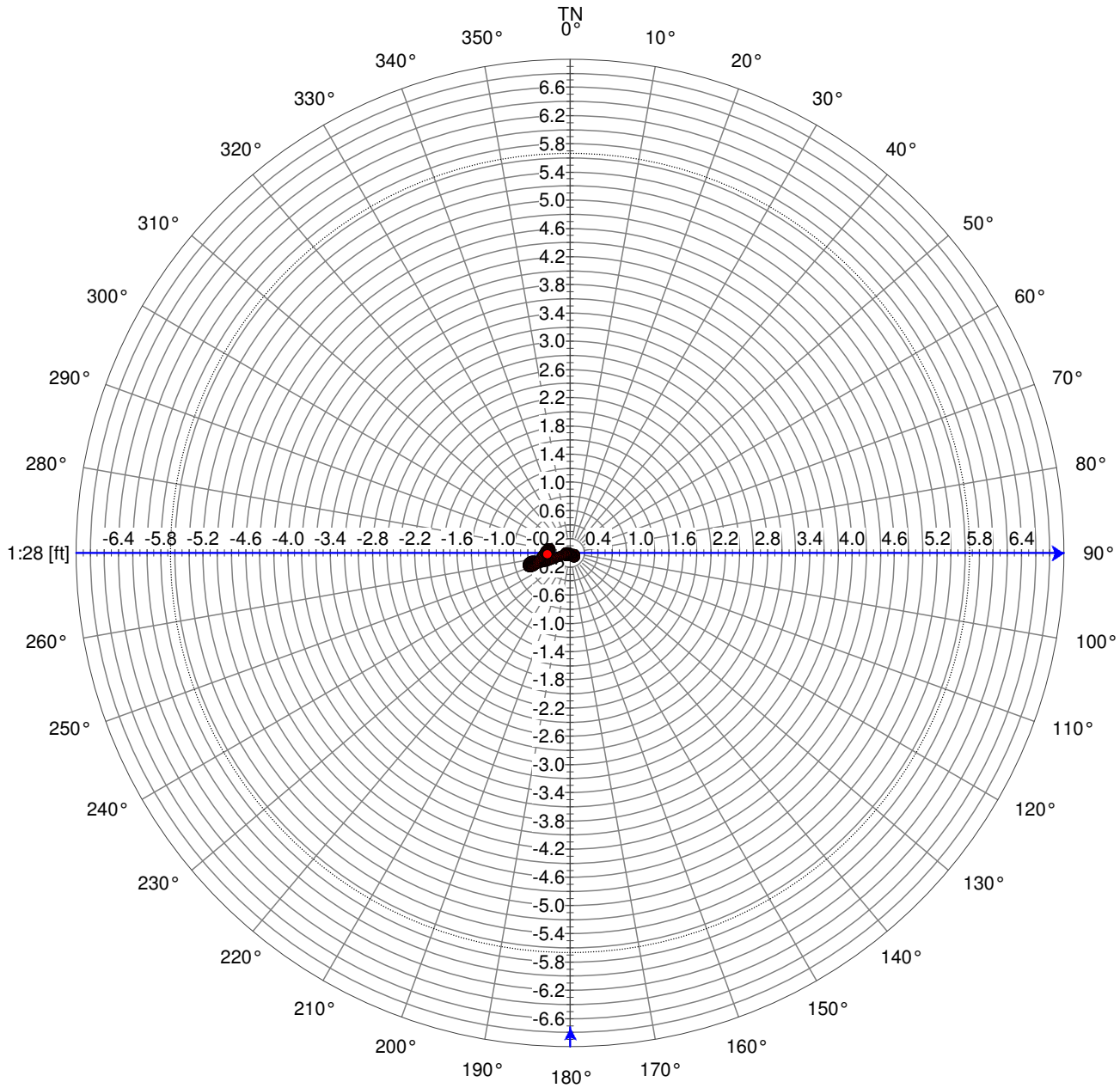
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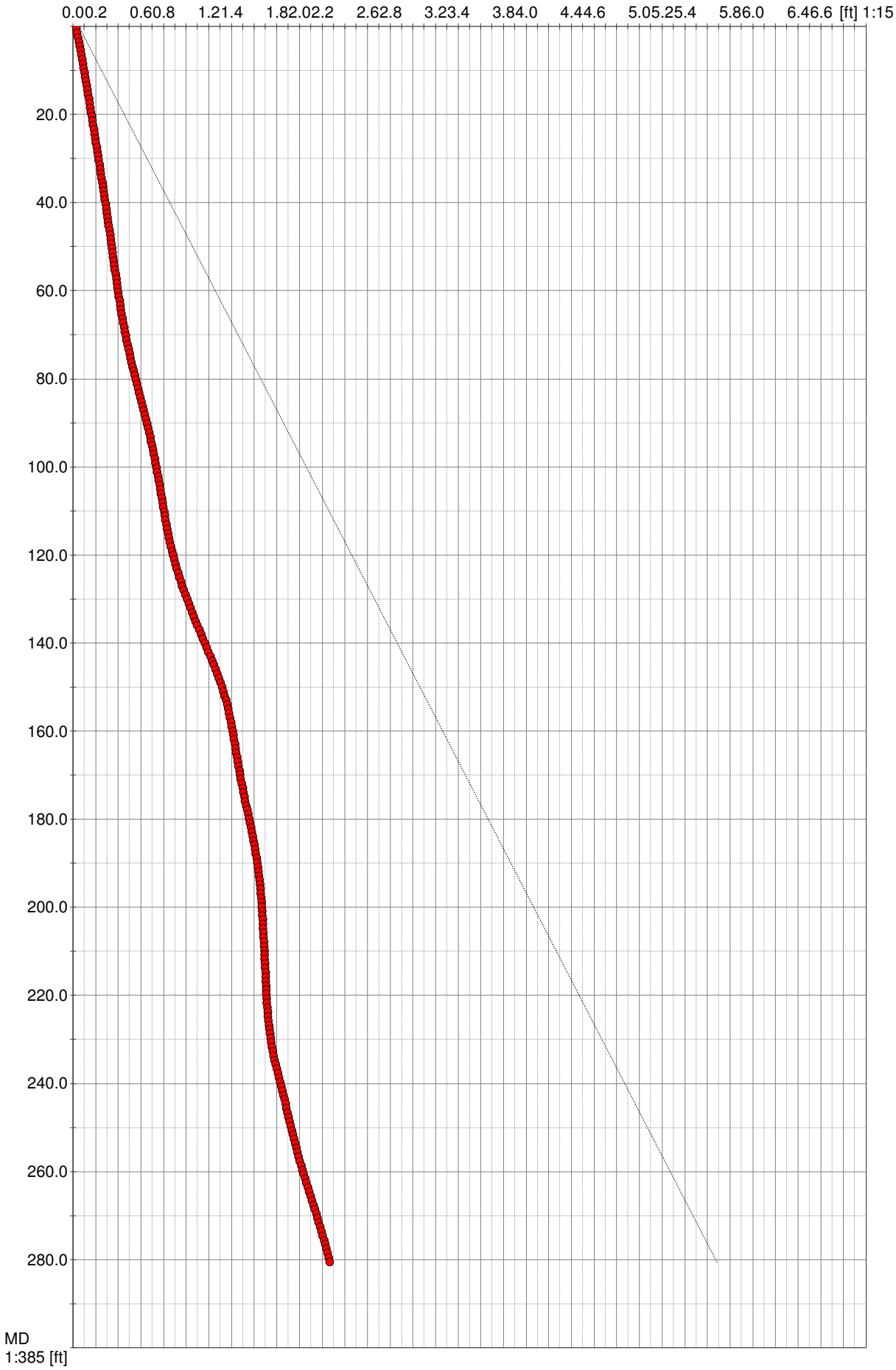
Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	255.55	0.51	-0.03	0.00	0.49	0.03	261.20	0.63
10.00	245.80	0.38	-0.10	-0.02	10.46	0.10	258.81	0.67
20.00	223.76	0.39	-0.16	-0.05	20.42	0.17	251.11	0.31
30.00	218.21	0.38	-0.21	-0.10	30.39	0.23	244.22	0.18
40.00	204.54	0.38	-0.25	-0.15	40.35	0.29	238.43	0.30
50.00	192.02	0.38	-0.27	-0.21	50.32	0.34	232.26	0.22
60.00	187.94	0.39	-0.29	-0.27	60.28	0.40	226.41	0.13
70.00	199.81	0.48	-0.31	-0.35	70.25	0.47	222.16	0.63
80.00	217.28	0.57	-0.37	-0.42	80.21	0.56	221.11	0.36
90.00	227.56	0.54	-0.44	-0.48	90.18	0.65	222.29	0.27
100.00	223.33	0.43	-0.51	-0.54	100.14	0.74	223.43	0.32
110.00	214.76	0.38	-0.55	-0.58	110.11	0.81	223.48	0.02
120.00	235.25	0.60	-0.61	-0.64	120.07	0.88	224.05	1.41
130.00	259.45	1.03	-0.75	-0.67	130.04	1.01	228.26	1.56
140.00	265.95	1.19	-0.95	-0.67	140.00	1.16	234.80	0.30
150.00	273.90	0.94	-1.14	-0.65	149.97	1.32	240.20	1.43
160.00	287.40	0.62	-1.27	-0.62	159.93	1.41	244.05	0.53
170.00	293.33	0.65	-1.36	-0.57	169.90	1.47	247.34	0.46
180.00	294.64	0.72	-1.47	-0.51	179.86	1.56	250.91	0.49
190.00	302.26	0.58	-1.57	-0.44	189.83	1.63	254.15	0.67
200.00	315.51	0.34	-1.62	-0.39	199.79	1.67	256.58	0.84
210.00	280.69	0.14	-1.65	-0.36	209.76	1.69	257.70	0.83
220.00	225.36	0.13	-1.67	-0.37	219.72	1.71	257.66	0.35
230.00	225.49	0.38	-1.70	-0.39	229.69	1.74	256.92	0.99
240.00	234.75	0.58	-1.77	-0.44	239.65	1.83	256.10	0.34
250.00	229.95	0.58	-1.86	-0.49	249.62	1.92	255.14	0.08
260.00	236.06	0.68	-1.95	-0.55	259.58	2.02	254.24	0.99
270.00	252.71	0.67	-2.06	-0.59	269.55	2.15	253.98	0.73
280.00	266.31	0.57	-2.17	-0.60	279.51	2.26	254.57	0.69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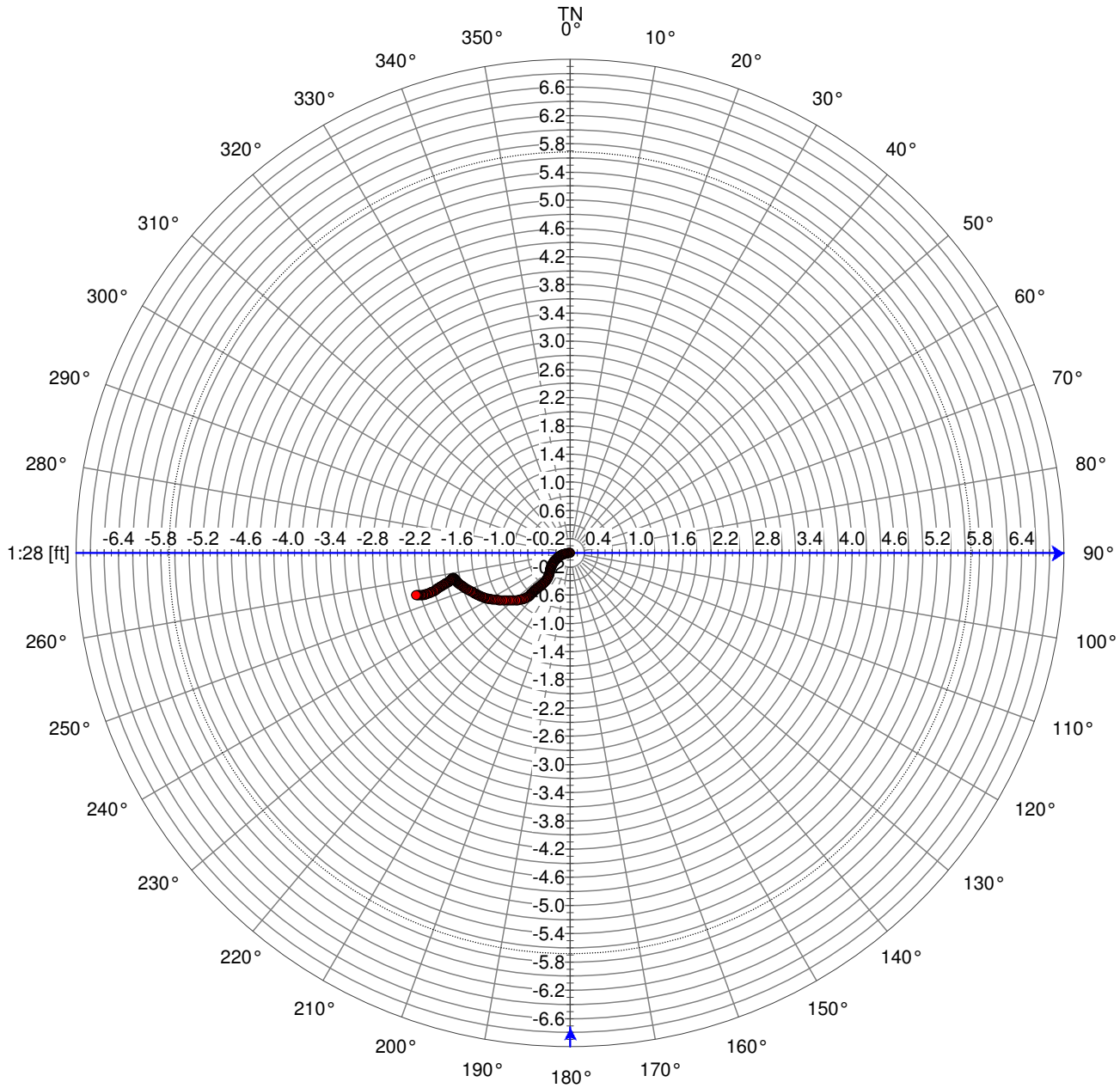
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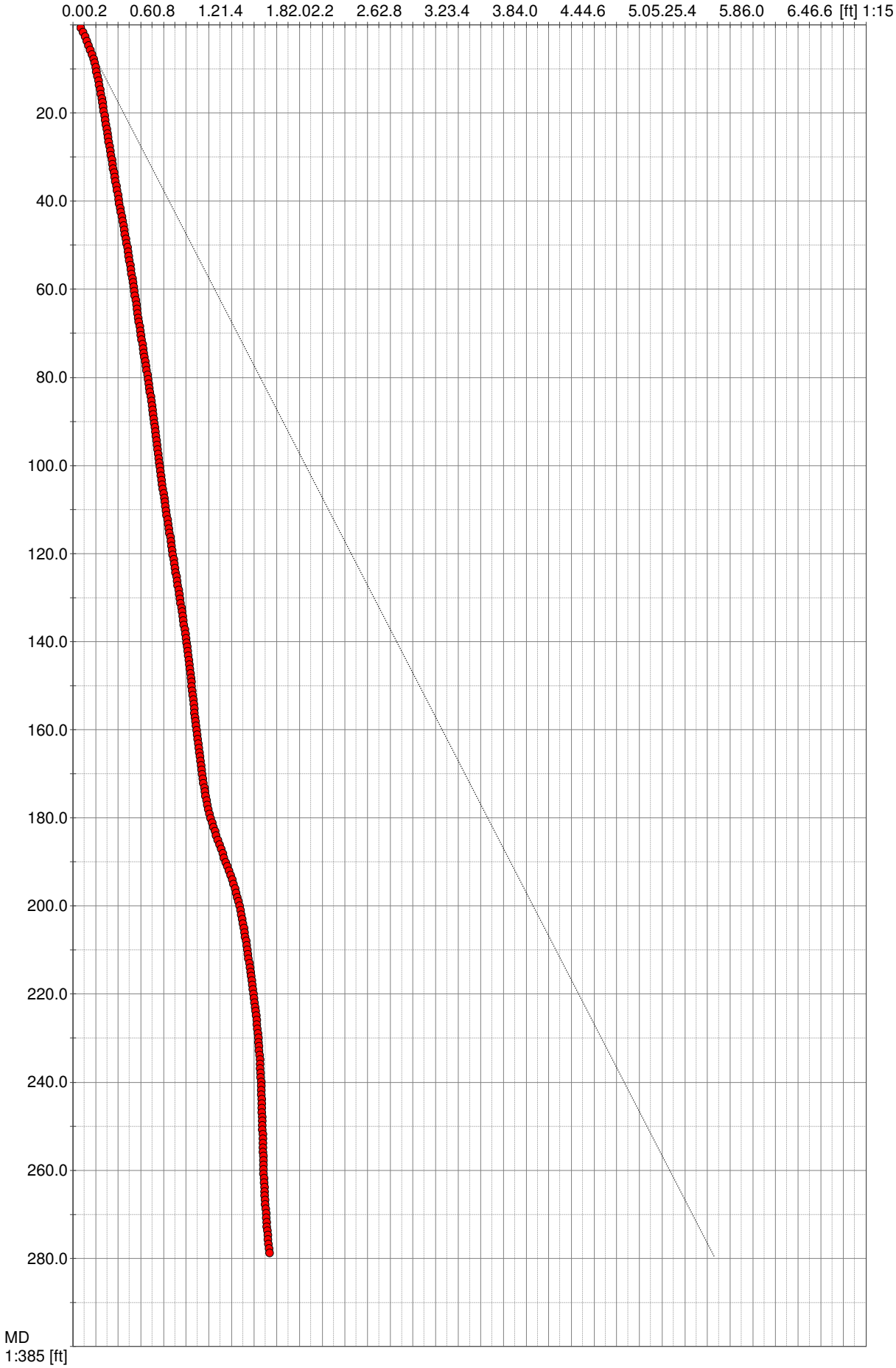
Depth	Azimuth	Tilt	Easting	Northing	TVD	Closure Distance	Closure Angle	DLS
ft	Deg	Deg.	[ft]	[ft]	[ft]	[ft]	deg	[deg/100ft]
0.00	209.77	1.27	-0.03	-0.03	-0.31	0.05	221.75	4.52
10.00	163.96	0.63	-0.07	-0.19	9.66	0.20	199.08	2.20
20.00	183.61	0.36	-0.07	-0.26	19.62	0.27	194.09	0.17
30.00	183.86	0.38	-0.08	-0.33	29.59	0.34	193.32	0.13
40.00	181.41	0.40	-0.09	-0.39	39.55	0.40	192.56	0.11
50.00	174.85	0.39	-0.09	-0.46	49.52	0.47	191.49	0.34
60.00	160.60	0.36	-0.09	-0.53	60.48	0.54	189.14	0.17
70.00	163.30	0.37	-0.07	-0.60	70.45	0.60	186.89	0.10
80.00	161.39	0.37	-0.06	-0.66	80.41	0.66	185.32	0.35
90.00	143.46	0.34	-0.04	-0.72	90.38	0.72	183.04	0.22
100.00	145.39	0.34	-0.01	-0.77	100.34	0.77	180.53	0.24
110.00	156.16	0.35	0.02	-0.82	110.31	0.82	178.85	0.13
120.00	162.14	0.36	0.03	-0.88	120.27	0.88	177.91	0.11
130.00	168.72	0.35	0.04	-0.94	130.24	0.94	177.47	0.23
140.00	184.67	0.31	0.04	-1.00	140.20	1.00	177.70	0.45
150.00	205.33	0.28	0.02	-1.05	150.17	1.05	178.84	0.19
160.00	209.08	0.32	-0.01	-1.09	160.13	1.09	180.42	0.13
170.00	206.23	0.35	-0.04	-1.14	170.10	1.14	182.03	0.02
180.00	193.73	0.65	-0.08	-1.21	180.07	1.22	183.64	1.27
190.00	182.71	0.83	-0.11	-1.34	190.03	1.35	184.50	0.11
200.00	191.92	0.53	-0.13	-1.46	199.99	1.47	185.12	1.12
210.00	202.91	0.37	-0.16	-1.53	209.96	1.54	185.99	0.17
220.00	214.25	0.34	-0.19	-1.58	219.93	1.59	186.99	0.32
230.00	235.27	0.32	-0.24	-1.62	229.89	1.64	188.36	0.37
240.00	256.24	0.32	-0.29	-1.63	239.86	1.66	190.09	0.23
250.00	265.45	0.32	-0.35	-1.64	249.82	1.67	191.95	0.06
260.00	264.02	0.30	-0.40	-1.63	259.79	1.68	193.78	0.27
270.00	238.65	0.26	-0.45	-1.64	269.75	1.70	195.21	0.35
280.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00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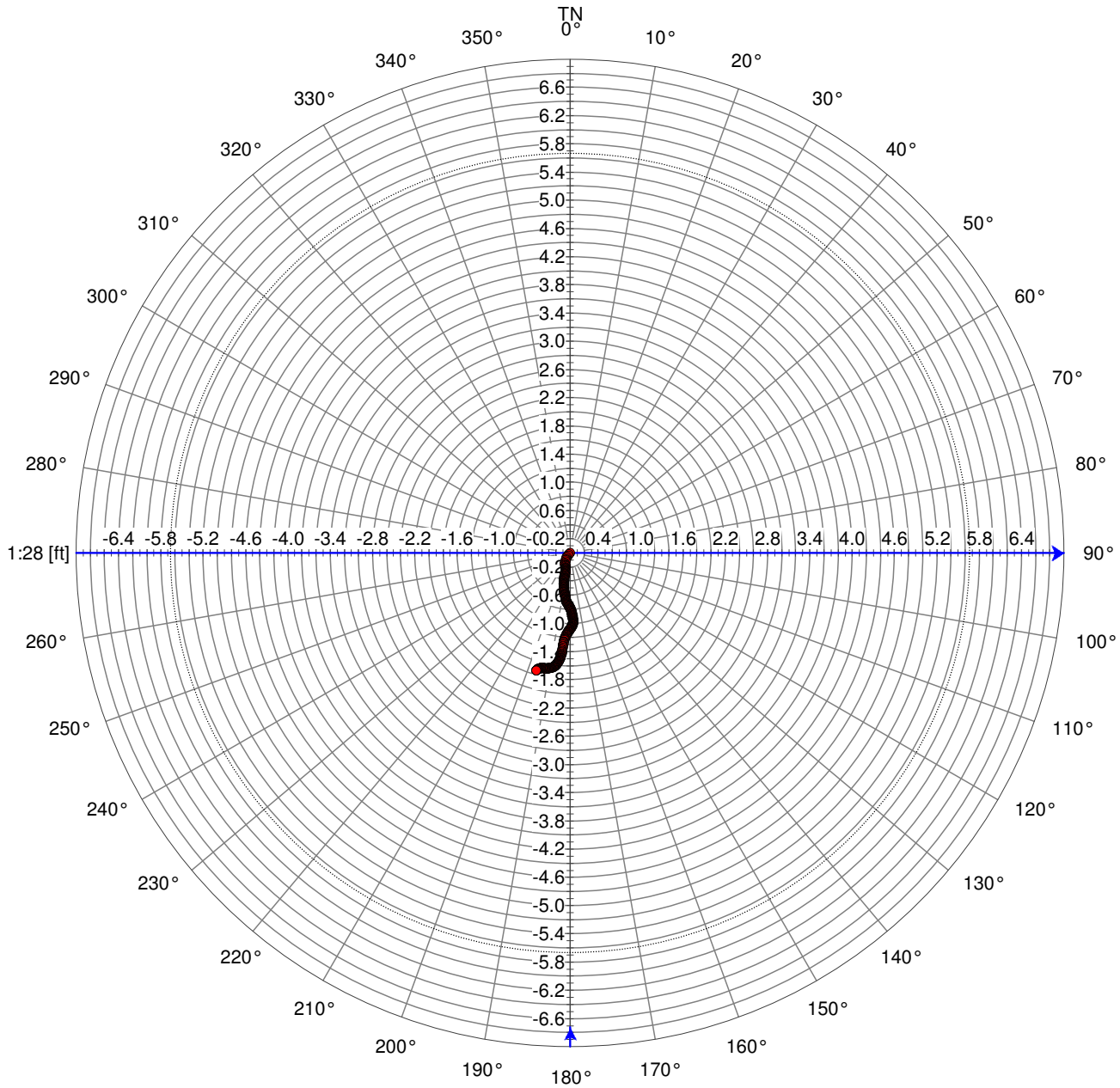
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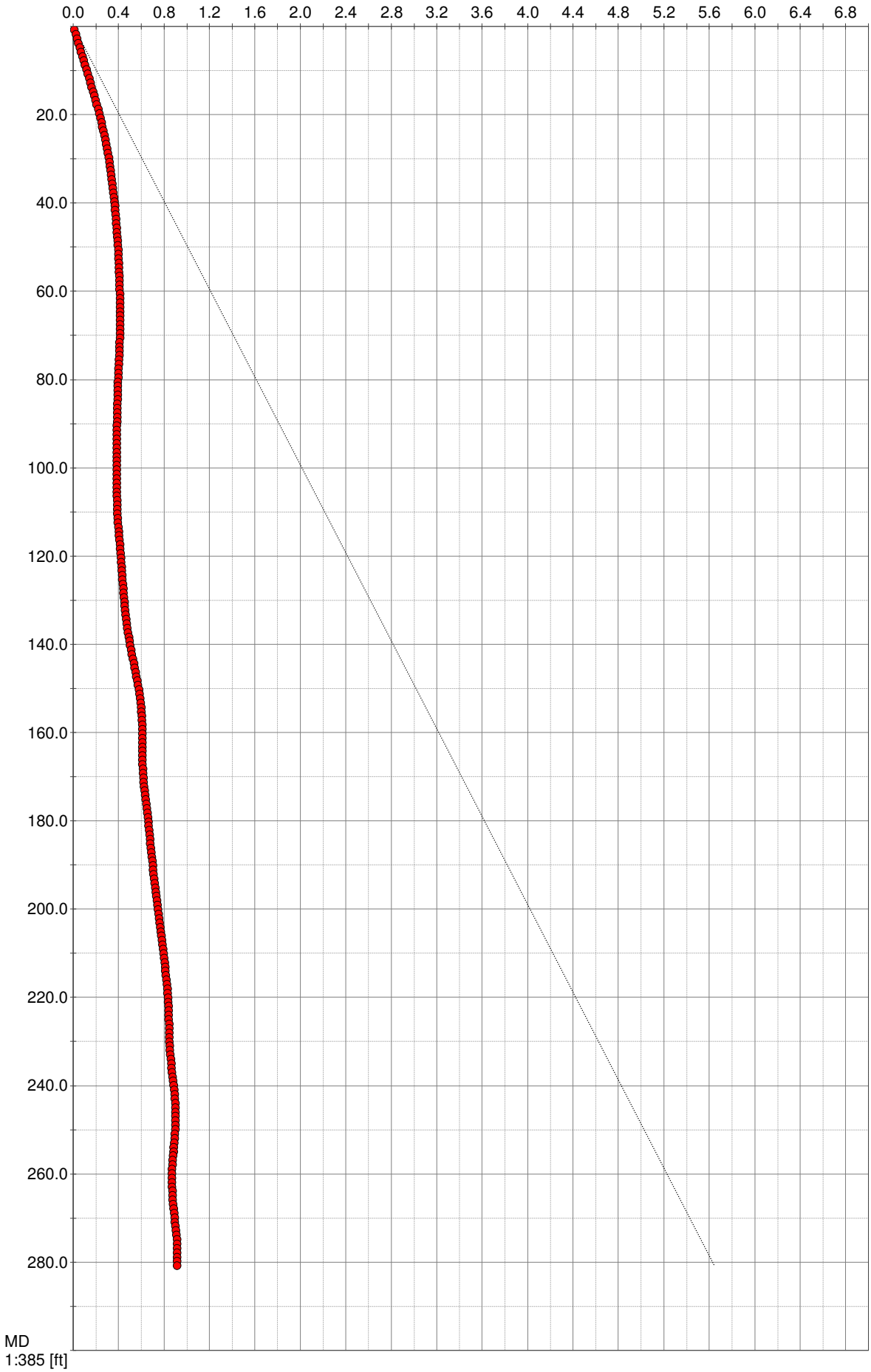
Depth ft	Tilt Deg.	Azimuth Deg	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	0.65	279.63	0.00	0.00	-0.21	0.00	0.00	-999.00
10.00	0.70	249.89	-0.12	0.00	9.76	0.12	271.26	1.20
20.00	0.62	234.48	-0.23	-0.04	19.72	0.23	259.82	0.80
30.00	0.46	210.31	-0.30	-0.10	29.69	0.31	251.12	0.81
40.00	0.35	185.08	-0.32	-0.16	39.65	0.36	243.23	0.52
50.00	0.34	163.61	-0.32	-0.22	49.62	0.39	235.51	0.38
60.00	0.36	140.04	-0.30	-0.28	59.58	0.41	227.31	0.39
70.00	0.30	115.91	-0.26	-0.32	69.55	0.41	219.30	0.60
80.00	0.21	83.61	-0.22	-0.33	79.52	0.40	213.55	0.69
90.00	0.17	89.56	-0.19	-0.34	90.48	0.39	208.77	0.11
100.00	0.19	124.62	-0.16	-0.35	100.44	0.38	204.46	0.65
110.00	0.22	138.47	-0.13	-0.37	110.41	0.39	199.67	0.71
120.00	0.21	148.53	-0.11	-0.41	120.37	0.42	195.51	0.54
130.00	0.23	165.13	-0.10	-0.44	130.34	0.45	193.45	0.69
140.00	0.45	162.36	-0.09	-0.50	140.31	0.50	190.22	0.97
150.00	0.49	137.16	-0.06	-0.58	150.27	0.58	186.21	1.32
160.00	0.34	84.80	0.00	-0.61	160.24	0.61	180.11	1.39
170.00	0.33	112.69	0.05	-0.61	170.20	0.62	174.97	1.50
180.00	0.28	200.78	0.07	-0.66	180.17	0.66	174.03	1.28
190.00	0.34	213.75	0.03	-0.70	190.13	0.70	177.37	0.15
200.00	0.34	207.50	0.00	-0.75	200.10	0.75	180.28	0.24
210.00	0.26	175.25	-0.02	-0.80	210.06	0.80	181.63	0.72
220.00	0.29	115.04	0.00	-0.83	220.03	0.83	180.07	1.01
230.00	0.28	102.63	0.05	-0.85	229.99	0.85	176.79	0.84
240.00	0.26	192.82	0.07	-0.88	239.96	0.89	175.54	1.30
250.00	0.30	283.74	0.03	-0.90	249.92	0.90	178.10	0.81
260.00	0.25	274.34	-0.01	-0.87	259.89	0.87	180.79	1.39
270.00	0.25	171.96	-0.04	-0.89	269.86	0.89	182.55	1.58
280.00	0.45	82.73	0.01	-0.91	279.82	0.91	179.60	0.96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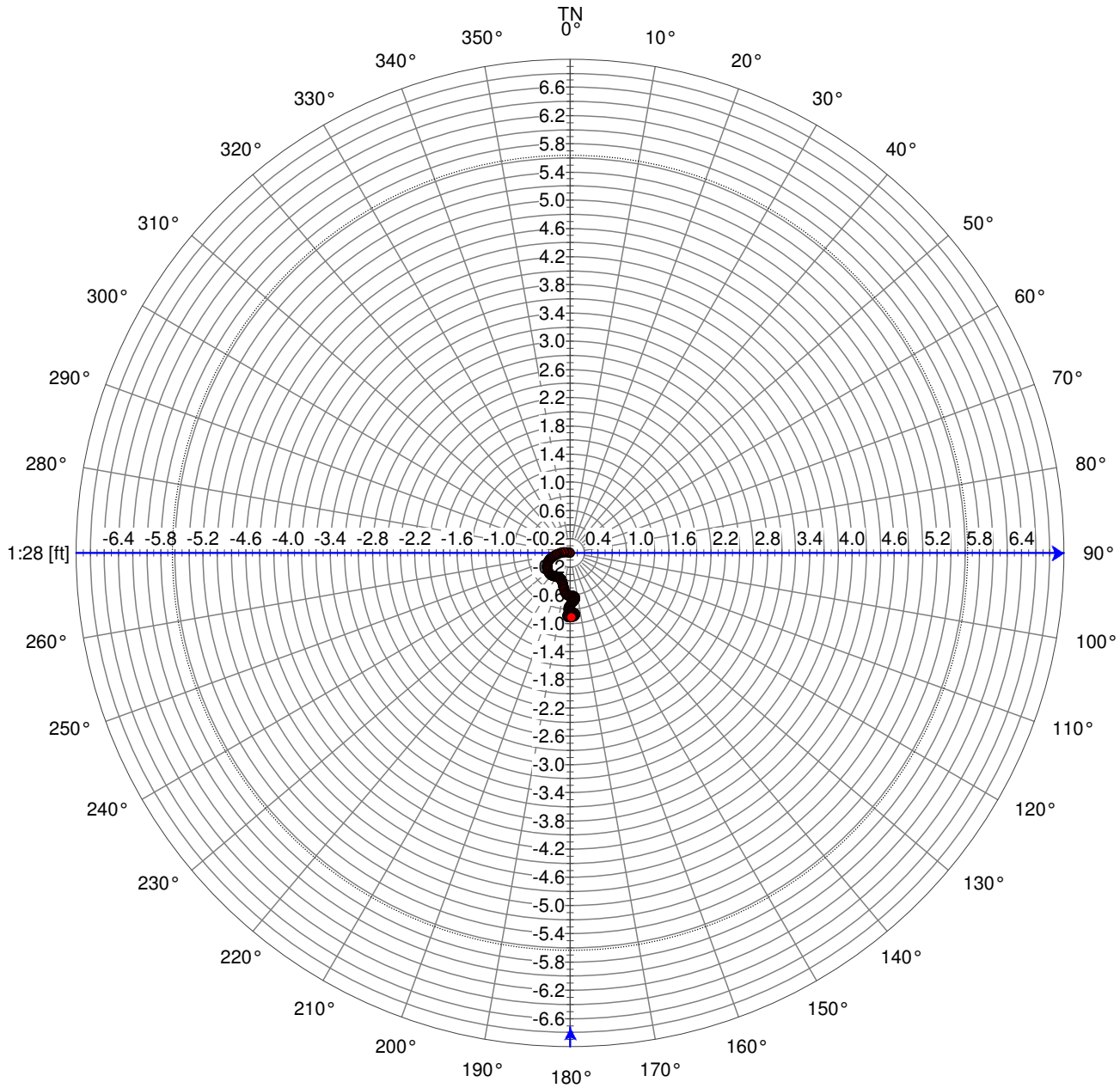
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Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00
10.00	235.87	0.44	-0.06	-0.02	9.96	0.06	252.51	0.56
20.00	212.88	0.47	-0.12	-0.07	19.92	0.14	240.02	0.56
30.00	200.75	0.50	-0.17	-0.14	29.89	0.22	229.77	0.32
40.00	183.53	0.52	-0.20	-0.23	39.85	0.30	221.02	0.61
50.00	161.80	0.54	-0.19	-0.32	49.82	0.37	211.41	0.60
60.00	141.29	0.59	-0.15	-0.41	59.78	0.43	200.89	0.48
70.00	133.47	0.54	-0.09	-0.48	69.75	0.49	190.87	0.27
80.00	154.45	0.47	-0.05	-0.56	79.71	0.56	184.72	0.76
90.00	159.60	0.35	-0.03	-0.63	89.68	0.63	182.69	0.35
100.00	133.98	0.27	-0.01	-0.67	99.64	0.67	180.72	0.63
110.00	92.99	0.24	0.03	-0.69	109.61	0.70	177.59	0.34
120.00	93.79	0.20	0.07	-0.70	119.57	0.70	174.49	0.21
130.00	119.99	0.21	0.10	-0.71	129.54	0.72	172.14	0.50
140.00	122.59	0.45	0.14	-0.75	139.50	0.76	169.38	0.92
150.00	121.63	0.56	0.23	-0.81	150.47	0.84	164.36	3.28
160.00	198.46	0.37	0.24	-0.88	160.43	0.92	164.55	1.56
170.00	283.46	0.25	0.20	-0.90	170.40	0.93	167.24	0.18
180.00	186.77	0.25	0.18	-0.93	180.36	0.94	169.21	0.86
190.00	110.74	0.62	0.21	-0.99	190.33	1.01	168.17	3.51
200.00	133.52	0.86	0.30	-1.08	200.29	1.12	164.74	0.78
210.00	107.22	0.59	0.40	-1.17	210.26	1.23	161.14	1.51
220.00	75.93	0.38	0.48	-1.18	220.22	1.27	157.94	0.64
230.00	62.24	0.35	0.54	-1.16	230.19	1.28	155.19	0.06
240.00	63.55	0.34	0.59	-1.14	240.15	1.28	152.53	0.07
250.00	60.63	0.33	0.64	-1.12	250.12	1.29	149.96	0.06
260.00	69.76	0.33	0.70	-1.10	260.08	1.30	147.45	0.35
270.00	104.94	0.40	0.76	-1.10	270.05	1.33	145.38	0.91
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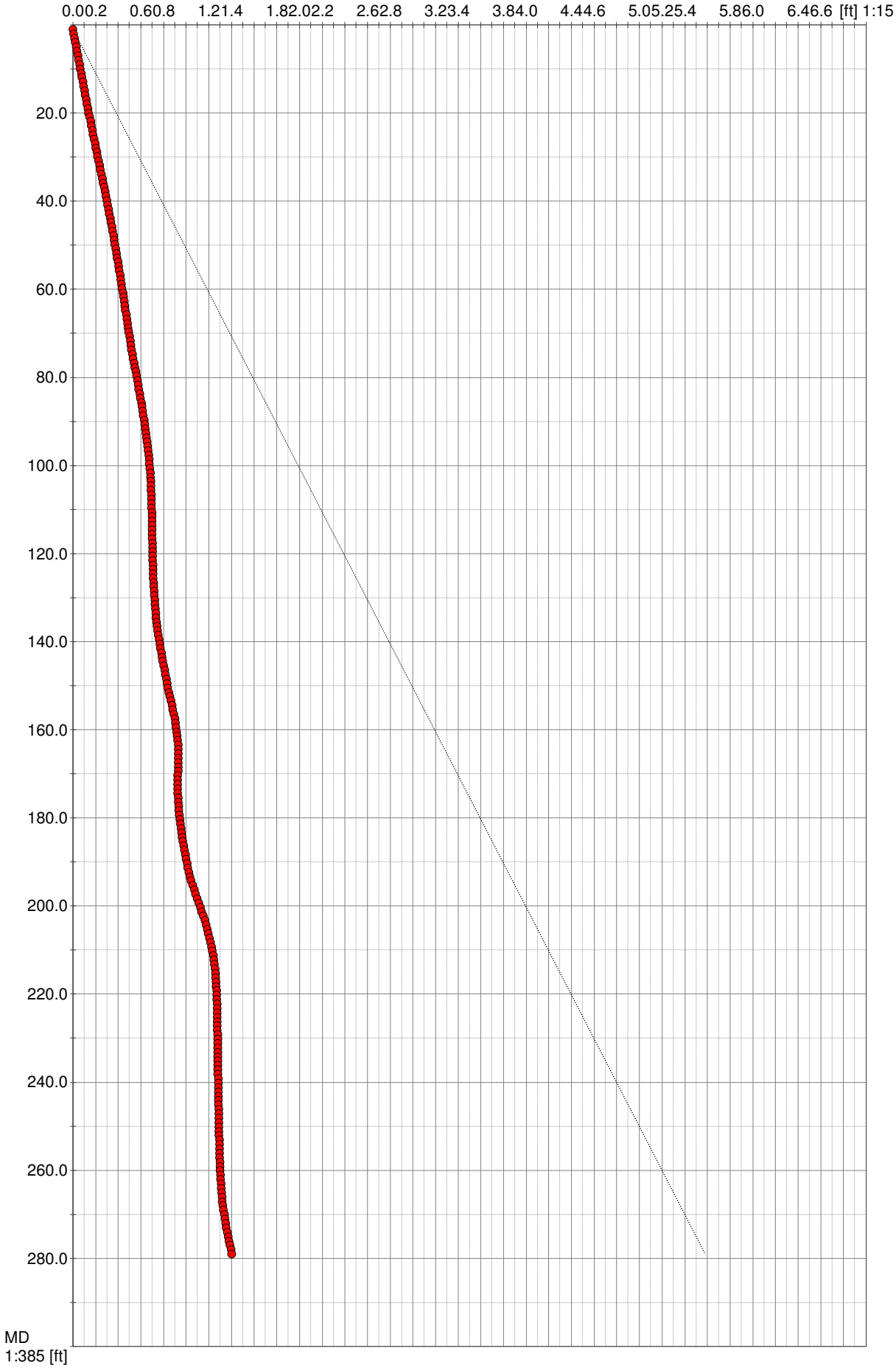
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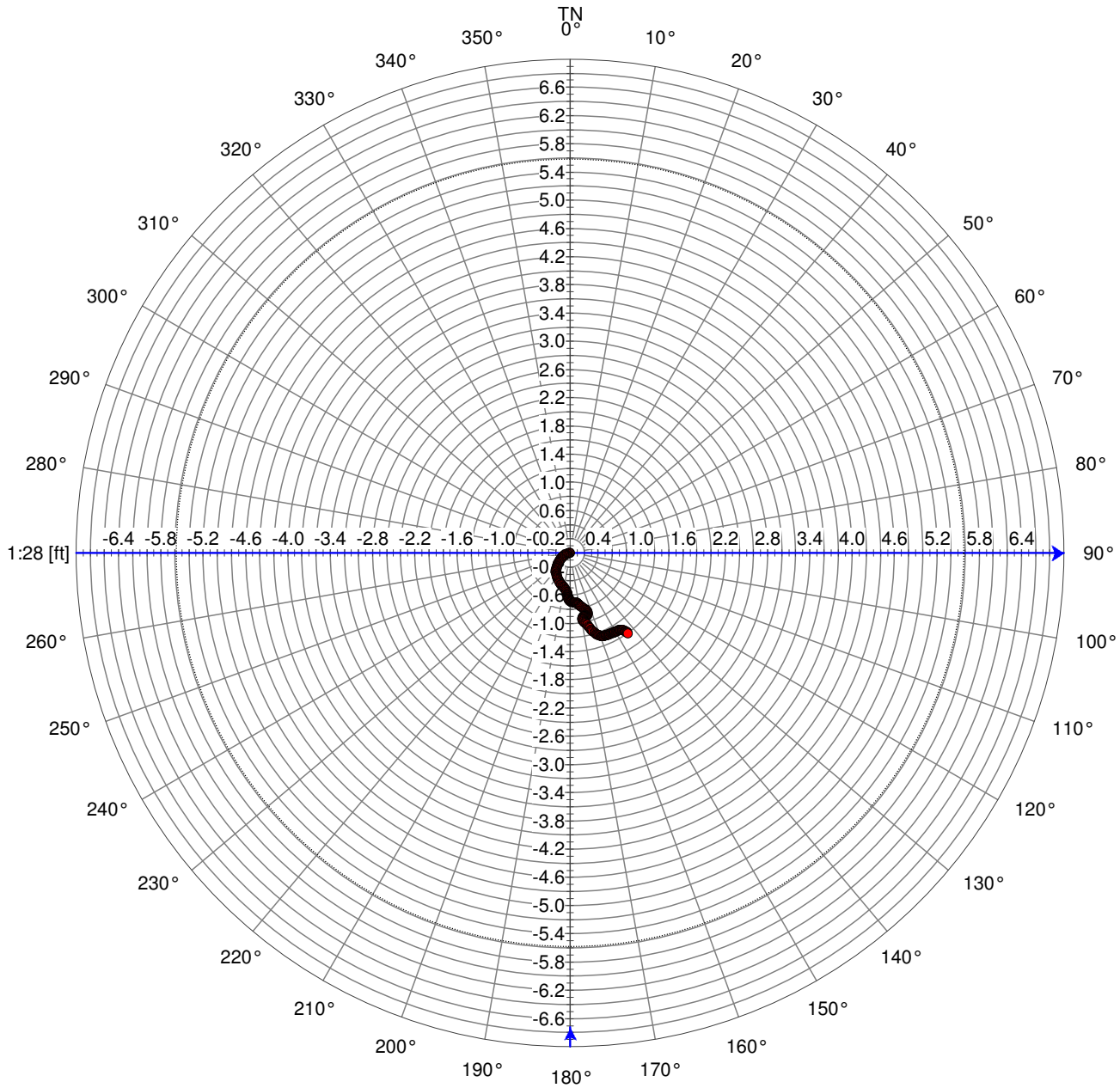
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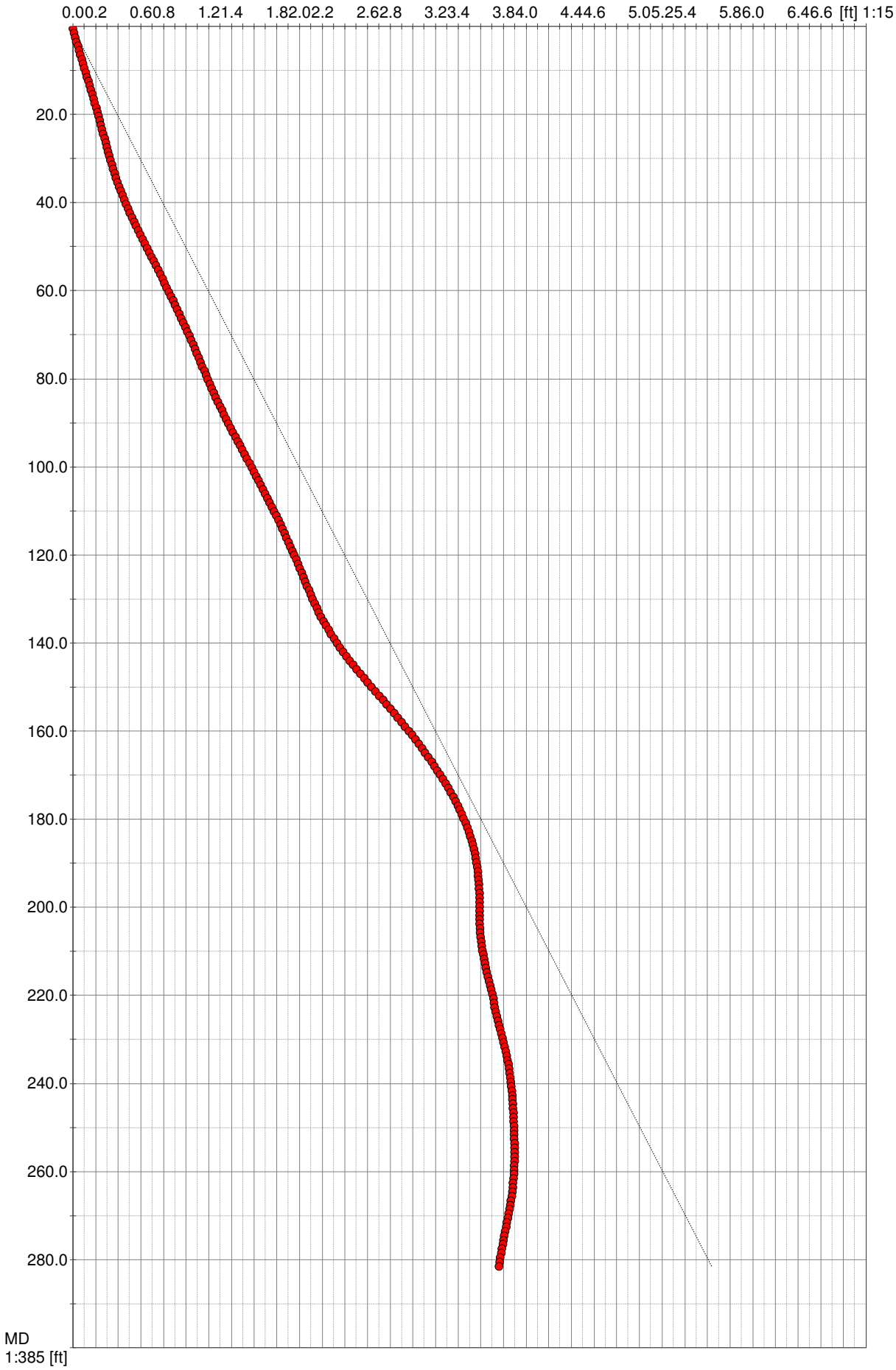
Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distance [ft]		Closure Angle deg	DLS [deg/100ft]
0.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00		-999.00	-999.00
10.00	249.92	0.69	-0.11	-0.01	10.46	0.11	9991.12	264.16	0.64
20.00	245.65	0.61	-0.22	-0.05	20.42	0.23	1.15	258.10	0.49
30.00	238.65	0.66	-0.32	-0.09	30.39	0.33	1.10	255.09	0.65
40.00	226.93	1.00	-0.44	-0.16	40.35	0.47	1.21	250.29	1.35
50.00	222.48	1.16	-0.59	-0.28	50.31	0.65	1.61	244.28	0.09
60.00	223.35	1.09	-0.74	-0.41	60.28	0.85	1.88	240.77	0.39
70.00	223.49	1.01	-0.88	-0.53	70.24	1.03	1.86	238.83	0.34
80.00	223.28	0.97	-1.00	-0.64	80.21	1.19	1.73	237.44	0.50
90.00	226.11	1.13	-1.15	-0.76	90.17	1.37	1.74	236.51	0.60
100.00	227.58	1.17	-1.31	-0.88	100.13	1.58	1.93	236.04	0.31
110.00	231.57	1.10	-1.47	-0.99	110.10	1.78	2.02	235.97	0.54
120.00	246.23	1.00	-1.63	-1.07	120.06	1.95	1.88	236.70	0.73
130.00	260.19	1.09	-1.80	-1.11	130.02	2.12	1.70	238.51	1.41
140.00	262.94	1.72	-2.05	-1.11	139.99	2.33	1.88	241.53	1.80
150.00	255.92	2.02	-2.38	-1.13	149.95	2.63	2.59	244.53	1.07
160.00	246.24	1.77	-2.71	-1.21	159.91	2.96	3.16	245.98	1.55
170.00	237.35	1.43	-2.96	-1.31	169.87	3.24	3.03	246.11	1.44
180.00	218.91	1.02	-3.14	-1.43	179.83	3.45	2.43	245.45	1.46
190.00	183.05	0.59	-3.21	-1.55	189.80	3.56	1.60	244.21	1.65
200.00	149.41	0.36	-3.20	-1.63	199.76	3.59	0.71	242.97	1.44
210.00	211.76	0.40	-3.20	-1.68	209.73	3.61	0.26	242.22	1.67
220.00	278.98	0.68	-3.28	-1.71	219.69	3.70	0.56	242.52	2.52
230.00	250.68	0.62	-3.40	-1.68	229.66	3.79	0.88	243.70	2.14
240.00	197.46	0.32	-3.46	-1.73	239.62	3.87	0.82	243.49	1.27
250.00	163.18	0.32	-3.46	-1.78	249.59	3.89	0.51	242.81	0.28
260.00	130.97	0.38	-3.44	-1.83	259.55	3.89	0.14	241.97	0.96
270.00	89.75	0.53	-3.36	-1.86	269.52	3.85	-0.23	241.02	1.01
280.00	82.44	0.39	-3.28	-1.86	279.48	3.77	-0.60	240.43	0.73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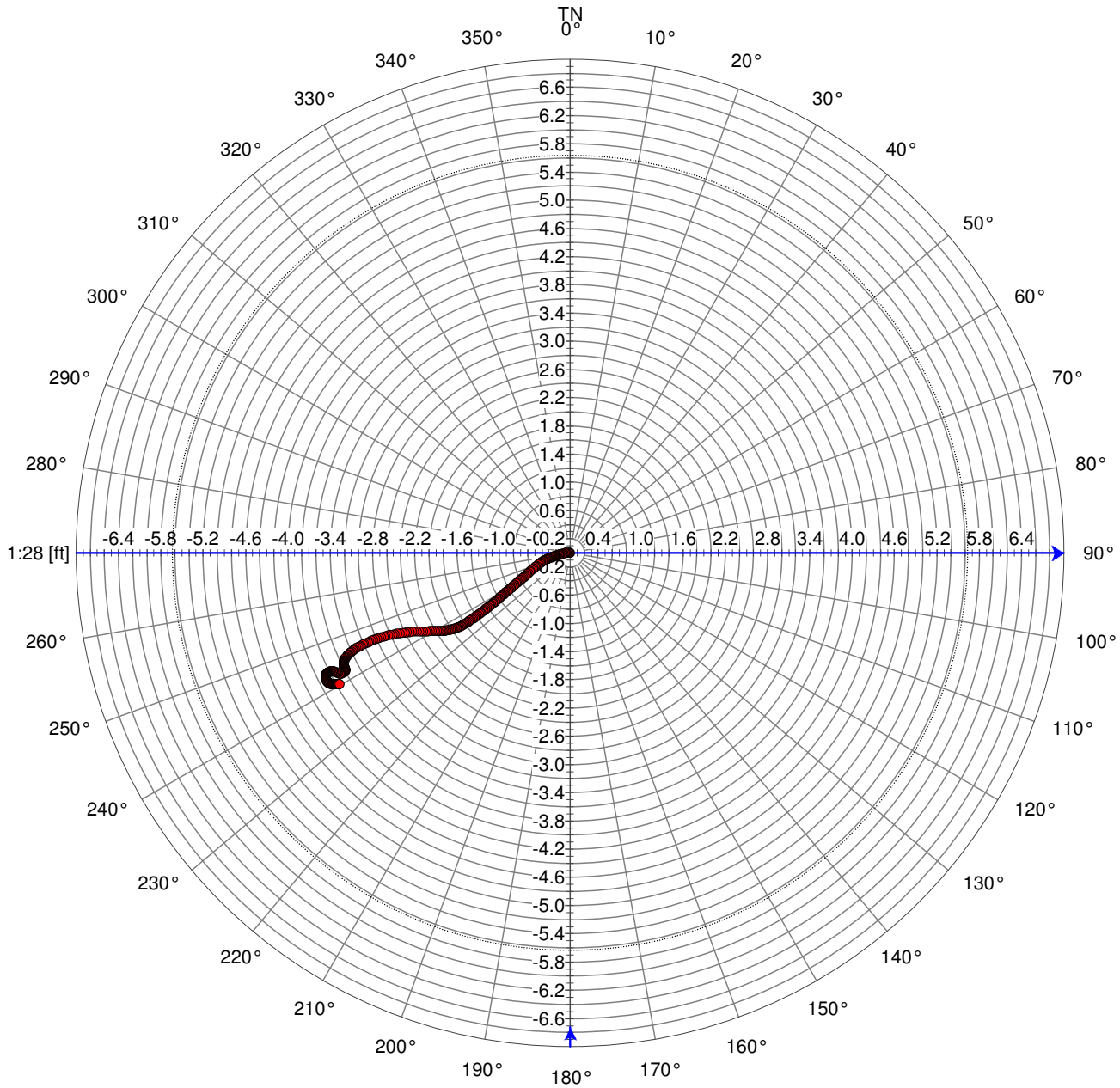
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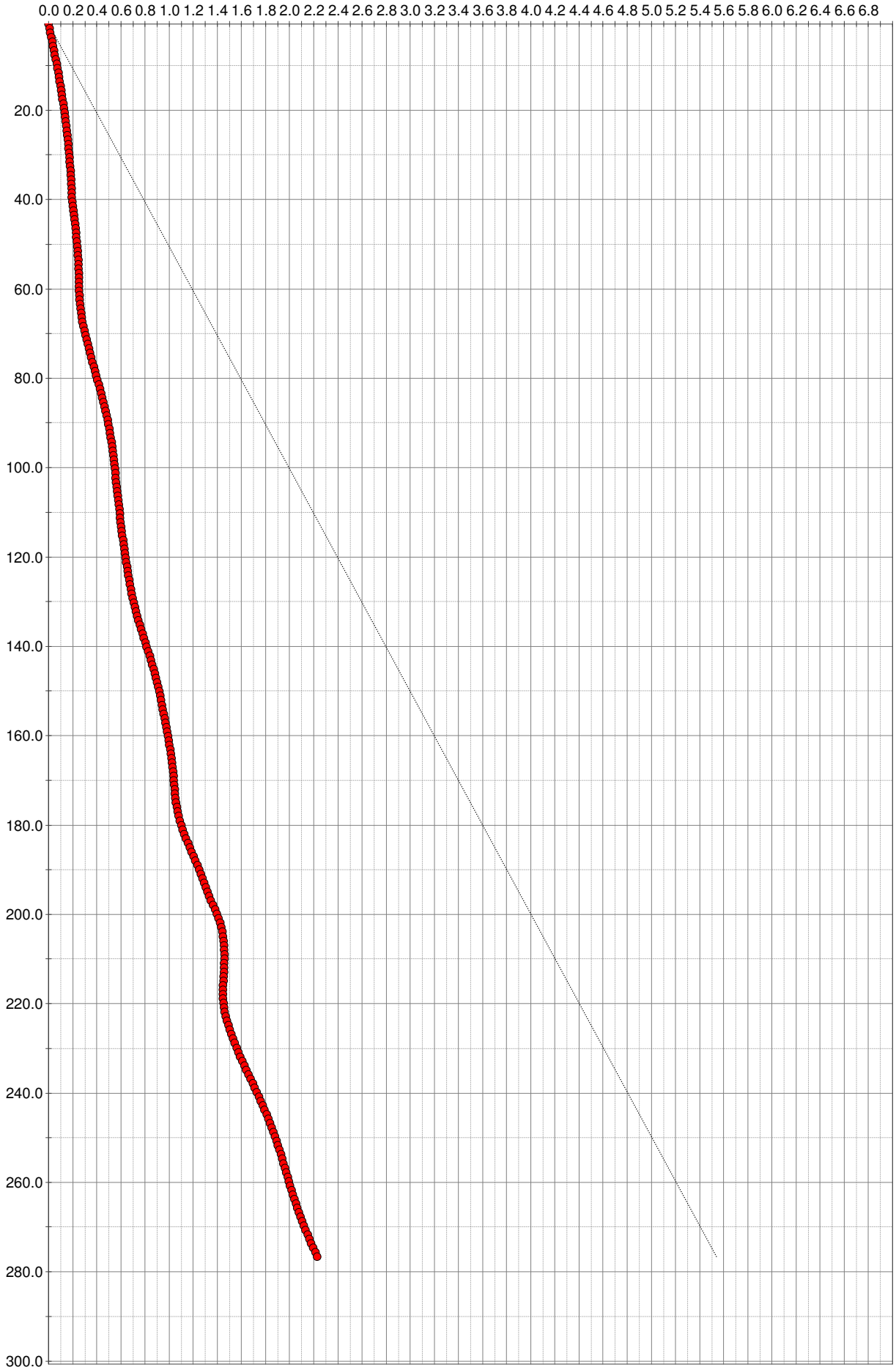
6.6 6.2 5.8 5.4 5.0 4.6 4.2 3.8 3.4 3.0 2.6 2.2 1.8 1.4 1.0 0.6 0.2 -0.2 -0.6 -1.0 -1.4 -1.8 -2.2 -2.6 -3.0 -3.4 -3.8 -4.2 -4.6 -5.0 -5.4 -5.8 -6.2 -6.6

Depth ft	Azimuth Deg	Tilt Deg.	Easting [ft]	Northing [ft]	TVD [ft]	Closure Distan [ft]	Closure Angle deg	DLS [deg/100ft]
0.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00
10.00	179.50	0.43	-0.03	-0.06	9.66	0.07	206.26	1.19
20.00	127.33	0.44	0.00	-0.13	19.62	0.13	181.21	1.18
30.00	87.27	0.44	0.07	-0.16	29.59	0.17	156.81	0.91
40.00	68.17	0.35	0.13	-0.14	39.55	0.19	136.52	2.46
50.00	154.66	0.21	0.17	-0.16	49.52	0.24	133.38	0.82
60.00	217.34	0.30	0.16	-0.20	60.48	0.25	142.16	1.51
70.00	163.83	0.53	0.14	-0.27	70.45	0.31	151.88	1.29
80.00	121.35	0.65	0.20	-0.36	80.41	0.41	150.98	1.54
90.00	83.56	0.66	0.31	-0.39	90.38	0.50	141.80	1.20
100.00	64.22	0.50	0.41	-0.37	100.34	0.55	132.20	0.62
110.00	87.33	0.30	0.47	-0.35	110.31	0.59	126.76	0.87
120.00	131.20	0.33	0.52	-0.38	120.27	0.64	125.95	0.75
130.00	141.76	0.52	0.56	-0.44	130.24	0.71	128.09	0.70
140.00	110.63	0.70	0.64	-0.51	140.20	0.82	128.76	1.44
150.00	74.06	0.64	0.75	-0.53	150.17	0.92	125.03	1.49
160.00	121.55	0.38	0.83	-0.53	160.13	0.99	122.55	1.45
170.00	171.77	0.33	0.86	-0.58	170.10	1.04	124.18	0.83
180.00	136.72	0.70	0.88	-0.66	180.06	1.10	127.05	2.59
190.00	85.50	1.05	1.02	-0.73	190.03	1.25	125.51	2.88
200.00	131.31	0.88	1.18	-0.74	199.99	1.40	121.93	4.79
210.00	211.25	0.42	1.19	-0.84	209.96	1.46	125.16	1.71
220.00	186.39	0.53	1.15	-0.89	219.92	1.45	127.89	2.69
230.00	118.69	0.88	1.20	-0.99	229.89	1.56	129.64	2.22
240.00	97.48	1.08	1.36	-1.06	239.85	1.73	127.89	0.99
250.00	78.78	0.97	1.54	-1.07	249.82	1.88	124.84	0.83
260.00	79.30	0.80	1.69	-1.05	259.78	1.99	121.85	0.70
270.00	90.30	0.90	1.84	-1.06	269.74	2.12	119.92	0.85
280.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00	-999.00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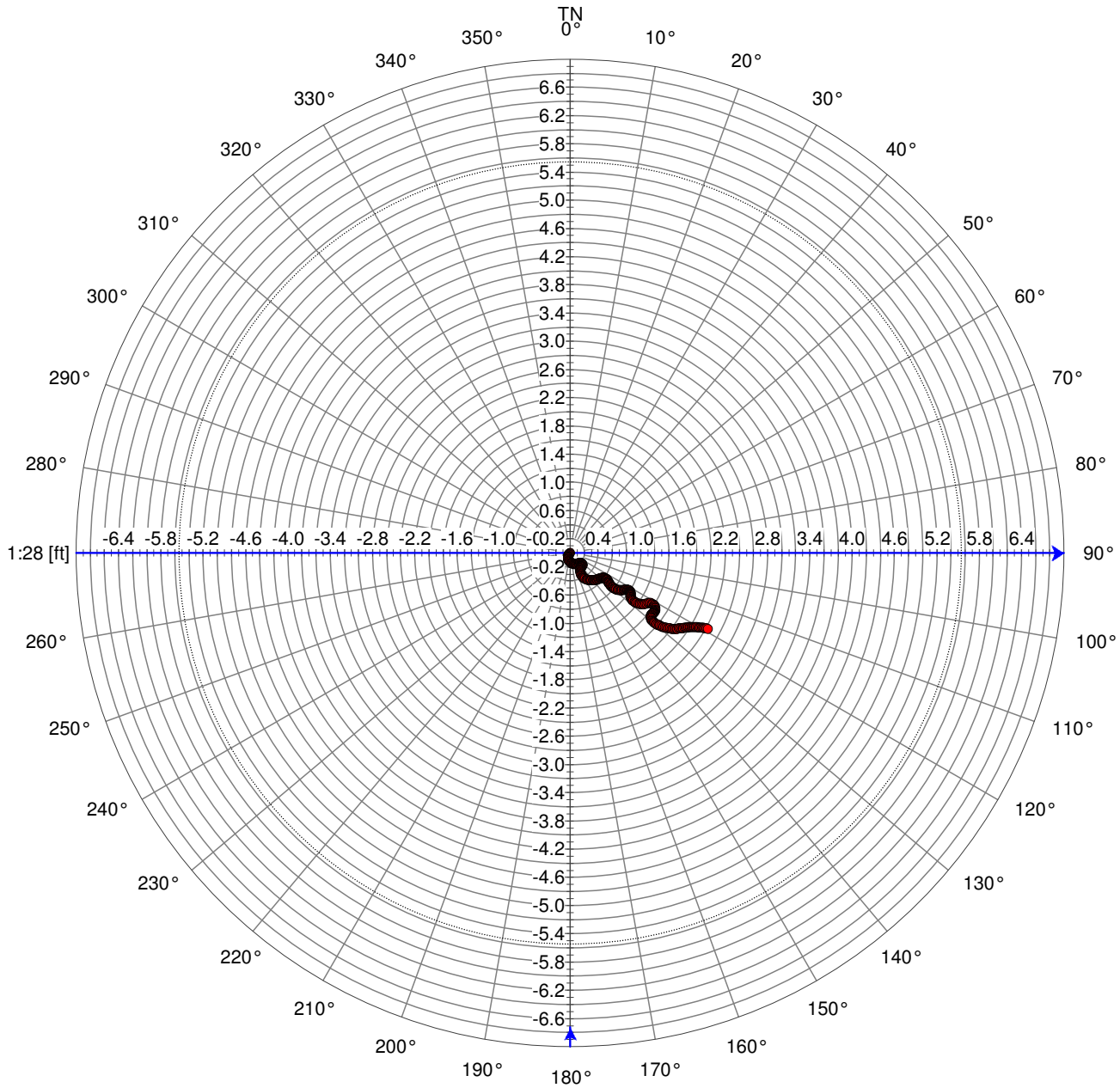
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APPENDIX P

WELL DEVELOPMENT LOGS

Try Hydro
ISB 87

Date: 10-21-14 Sheet _____ of _____

Time	Elapsed Time	Totalizer Meter (x_____)	RATE GPM	Pumping Water Level	Drawdown	Specific Capacity	Discharge Pressure (PSI)	NTU
1:00		387878		271				
1:15			0.6	284				1076
1:30			0.6	284				176
1:45			0.6	284				45.2
2:00			0.6	284				40.1
2:15			0.6	284				36.6
2:30			0.6	284				34.3
2:45			0.6	284				30.1
3:00			0.6	284				26.3
		Bailed 75 gal						
		Pumped 75 gal						

PTX06-1SB088A

Yellow Jacket Drilling	PROJECT NAME:		WELL NUMBER:
WELL DEVELOPMENT LOG	JOB NUMBER;	SITE:	PREPARED BY:
METHOD: Pump / Bailer / Other	DEVELOPMENT CRITERIA:		
	Remarks:		

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
9-23	1:20		267								
10-1	3:15	1gpm	262.45	1gpm				tooo			
	3:45	1gpm	281.26		30			tooo			
	4:00	1gpm	277.2		60			+1000			
	4:15	1gpm	277.2		90			742			
	4:30	1gpm	277.2		120			406			
10-1	1:00	4gpm	273.42	4gpm	4			+1000			
	1:15	4gpm	273.74		60			+1000			
	1:30	4gpm	273.79		120			+1000			
	1:45	4gpm	274.15		180			428			
	2:00	4gpm	274.47		240			205			
	2:15	4gpm	275		300			95.4			
	2:30	4gpm	275.53		360			465			
	2:45	4gpm	276.13	420	420	— ran out of room					
	3:00	4gpm	shut pump off								
	3:30	4gpm		4gpm	60						
	3:45	4gpm	278.1		60			52.2			
	4:00	4gpm	278.94		120			24.5			
	4:15	4gpm	280.62		180			16.8			
	4:30	4gpm	280.9		240			15.6			
	4:45	4gpm	281.15		300			12			
	5:00	4gpm	281.46		360			10.1			
	5:15	4gpm	281.92		395			8.76			pump off

PT406-15B088A

Yellow Jacket Drilling	PROJECT NAME:		WELL NUMBER:
WELL DEVELOPMENT LOG	JOB NUMBER;	SITE:	PREPARED BY:
METHOD:	DEVELOPMENT CRITERIA:		
Pump / Bailer / Other	Remarks:		

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
10-3	10:45	4gpm	270.6		4						
	11:00		278.31	60	~~256~~			256			
	11:15		276.55		120			19.7			
	11:30		279.15		180			5.9			
	11:45		279.57		240			4.7			
	12:00		279.93		300			~~1.20~~	1.22		pump off

Total: 1115 gals

ISB88A
Try Hydro

Date: 10-18-14 Pump set at 285' Sheet _____ of _____

Time	Elapsed Time	Totalizer Meter (x_____)	RATE GPM	Pumping Water Level	Drawdown	Specific Capacity	Discharge Pressure (PSI)
1:30		87500	6	270.5			
~~1:35~~	1:40		5	~~270.00~~ 284.0			
1:45			5	284.5			
2:00		387652	4.4	284.5			
2:15			4	284.5			
2:30		387774	4	284.5			
2:45			4	284.5			
3:00		387885	4	284.5			
		+ 2 Drums bailed water					
		Total 385 gals					

Shaw® Shaw E & I

EXAMPLE
WELL DEVELOPMENT RECORD

Project Name: Tri Hydro

Location: Pantex

Well/Piez. No.: PTX06-ISB 089

Personnel: Curt Carlson

Date Installed: _____

Date (Start/End): 7-15-14

Csg. Diameter (I.D.): 4", SS

Method of Development: _____

Total Depth (ft. TOC): 291.40

☒ Surging ☒ Bailing ☒ Pumping ☐ Other (State Method) _____

☐ Original Development ☐ Redevelopment Development Date: 7-15-14

Depth to water before developing well: 273.45, final 273.60

	Volume (V)	Purge Factor	Volume To Purge
Height of Water Column: _____ feet _____ =	_____ gal.*	_____ =	_____

$V = (B * r_c^2 * L_c * 7.48)+(B*(r_w-r_c)^2*L_s*\phi_s*7.48)=$ _____ gallons (See Notes below)

Depth purging from: 286 feet

Time purging begins: 9:15

Weather: _____

Screened Interval (ft. BGL): _____

Equipment Nos.: pH Meter _____ EC Meter _____ Turbidity Meter La Motte 2020

Equipment decontaminated prior to development Y _____ N _____

Describe Bailed 70 gal. - pumped 400 gal

Date	Time	Water Level (ft. below TOC)	Volume Removed (gal.)	Temp (C or F)	pH	EC	Turbidity	D.O.	Comments
7-16	9:25						57.9		4.5 gpm
	9:45						3.88		
	10:00						3.00		
	10:15						2.46		
	10:30						1.92		
	10:45						1.52		

Notes

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity (EC) – Reported to the nearest 10% mhos/cm or
- µmho/cm @25 C or in mS/cm of instrument set range
- Water temperature – Reported to the nearest 0.1 C or F
- Dissolved oxygen (D.O.) report in 0.1 mg/L
- Turbidity report in NTV nearest whole #

Where

B=3.14

ϕ_s=porosity of the sand pack

r_c =radius of the well casing and screen in feet

L_c=length of water column inside the casing and screen in feet

r_w =radius of the well bore in feet

L_s =length of saturated portion of the sand pack in feet

7.48 gallons/cubic foot=conversion from cubic feet to gallons

Total: 470 gals

Shaw® Shaw E & I

EXAMPLE
WELL DEVELOPMENT RECORD

Project Name: Tri Hydro

Location: Pantex

Well/Piez. No.: PTX06-TSB-090

Personnel: Curt Carlson

Date Installed:

Date (Start/End): 7-16-14

Csg. Diameter (I.D.): 4"

Method of Development:

Total Depth (ft. TOC): 291.50

☒ Surging ☒ Bailing ☒ Pumping ☐ Other (State Method)

☐ Original Development ☐ Redevelopment Development Date: 7-16-14

Depth to water before developing well: 273.75 final 273.75

Height of Water Column: _____ feet _____ = _____ gal.* _____ = _____

Volume (V) Purge Factor Volume To Purge

$V = (B * r_c^2 * L_c * 7.48)+(B*(r_w-r_c)^2*L_s*o_s*7.48)=$ _____ gallons (See Notes below)

Depth purging from: 286 feet

Time purging begins: 1:20

Weather:

Screened Interval (ft. BGL):

Equipment Nos.: pH Meter _____ EC Meter _____ Turbidity Meter La Motte 2020

Equipment decontaminated prior to development Y _____ N _____

Describe Bailed 55 gal ~ pumped 350 gal

Date	Time	Water Level (ft. below TOC)	Volume Removed (gal.)	Temp (C or F)	pH	EC	Turbidity	D.O.	Comments
7-16	1:30						22.9		
	1:45						3.40		
	2:00						1.46		
	2:15						1.25		
	2:30						1.06		

Notes

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity (EC) – Reported to the nearest 10% mhos/cm or
- µmho/cm @25 C or in mS/cm of instrument set range
- Water temperature – Reported to the nearest 0.1 C or F
- Dissolved oxygen (D.O.) report in 0.1 mg/L
- Turbidity report in NTV nearest whole #

Where:

B=3.14

o_s=porosity of the sand pack

r_c =radius of the well casing and screen in feet

L_c=length of water column inside the casing and screen in feet

r_w =radius of the well bore in feet

L_s =length of saturated portion of the sand pack in feet

7.48 gallons/cubic foot=conversion from cubic feet to gallons

Total: 405 gals

Yellow Jacket Drilling	PROJECT NAME:		WELL NUMBER:
WELL DEVELOPMENT LOG	JOB NUMBER; 14-0521+1	SITE: (4 ~~[illegible]~~ 3	PREPARED BY: Shew Nelson
METHOD: Pump 1556E250	DEVELOPMENT CRITERIA: Swab Ball pump	PtX0615B093	
Bailer	Remarks:		
Other			

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~	~~[illegible]~~						
9/19	130		270	74751	76620						
9/19	130	10.5	272					2369			
9/19	145	11 11	272.5					3.54			
	2:00	11 11	11 11					7.02			
	2:15	10.5	272.5					3.92			
	2:30	10.5	272.5					2.15			
	2:45	10.5	272.5					2.23			
	3:00	10.5	273					4.24			
	3:15	10.5	273					5.00			
	330	10.5	273					3.01			
	345	10.5	273	Raised	Pump 5	ft	from 283	3.66			
	400			To 278				~~[illegible]~~	1.09		
	4:15							2.50	2.50		
	430	Shut	off pump								Pulled out 1863 pump

Total: 1863 gals

Yellow Jacket Drilling	PROJECT NAME:		WELL NUMBER: 9106 MW394
WELL DEVELOPMENT LOG	JOB NUMBER; 14-0521 t1	SITE: Penrod	PREPARED BY: Shaw Melsen
METHOD: Pump ____ Bailer ____ Other ____	DEVELOPMENT CRITERIA: Swab Bail Pump		
	Remarks: Grundfos 15SQ290 1.5hp		

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
6/19	12	7	272	68706							
6/19	830	7						11.5			
6/19	845	7						13.5			
	9:00	7						8.71			
	9:15	7						6.86			
	930							9.56			
6/19	Shut Pump off To Dump water 930a.m										
6/19	Turned pump ON At 1030am										
		Increase flow Rate to 11.5									
	1030	11.5						258			
	1045							85.9			
	11							37.9			
	1115							22.6			
	Shut off At 1115 To Dump water										
	Turned ON At 1230										
6/19	1230	11.5						20.9			
	1245	11.5						12.2			
	1:00	11.5						9.8			
	1:15	11.5						15.2			
	130	11.5						~~31.5~~	22.0		
	Shut off pump at 130 To Dump water										
		Turned ON At 145									
	145	11.50						23.8			
	2:00	11.5						14.7			
	2:15	11.5						~~17.5~~	17.5		
	2:30	11.5						13.2			
	Turned pump off At 230				Turned Back ON At 245						
3:00	~~2:45~~	11.5						11.3			
	3:15							14.6			
	330	11.5	Turned off		pump			12.9			Total gal Removed
			271		71942						2834 gal
			BS5								

Pump _____
Bailer _____
Other _____

Remarks: Swan Bell Pump
Pump on well PTX06 15B094 (2nd development)

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
~~8/14/14~~	~~11:5~~		~~Pre 15.4~~ Post	Pump set at 283							
			~~72766~~								
9/17	930		270	72766	74757						
	945	10.5	278					38.7			
9/17	10:00	10.5	"					9.18			
	10:15	10.5	"					10.22			
	10:30	10.5	"					13.1			
	10:45	10.5	"					7.68			
	11:00	10.5	"					2.59			
	11:15	10.5	"					5.53			
	11:30	10.5	"					4.81			
	11:45	10.5	"								
	1245	6.2	Raised	Pump	up 5 ft						
	1245	6.2	water level at 275					30.1			
	1:00	6.2	275					7.25			
	1:15	6.2	"					2.07			
	1:30	6.2	"					1.81			Total Remove 2001

Total: 4835 gals

Well Development Information
PTX06-ISB095

A well development log for this well was not received from Yellow Jacket Drilling. This form is designed to document available information taken from field logbooks, Contractor Daily Construction Logs (PX-4785), and waste records (PX-2844).

Date of Development: 8/13/2014

Approximate Fluids Removed: 350 gallons

Technique: surge, bail, and pump

Shaw® Shaw E & I

EXAMPLE
WELL DEVELOPMENT RECORD

Project Name: Tri Hydro-

Location: Pantex

Well/Piez. No.: PTX06-096

Personnel: Curt Carlson

Date Installed:

Date (Start/End): 7-14-14

Csg. Diameter (I.D.): 4"

Method of Development:

Total Depth (ft. TOC): 290'

☒ Surging ☒ Bailing ☒ Pumping ☐ Other (State Method)

☐ Original Development ☐ Redevelopment Development Date: 7/14/14 JK

Depth to water before developing well: 273.90 Post Development: 274.00

	Volume (V)	Purge Factor	Volume To Purge
Height of Water Column: _____ feet _____ =	_____ gal.*	_____ =	_____

$V = (B * r_c^2 * L_c * 7.48)+(B*(r_w-r_c)^2*L_s*ø_s*7.48)=$ _____ gallons (See Notes below)

Depth purging from: 286 feet

Time purging begins: 3:35

Weather:

Screened Interval (ft. BGL):

Equipment Nos.: pH Meter _____ EC Meter _____ Turbidity Meter _____

Equipment decontaminated prior to development Y X N _____

Describe purged 352, pump, Bailed 70 gal

Date	Time	Water Level (ft. below TOC)	Volume Removed (gal.)	Temp (C or F)	pH	EC	Turbidity	D.O.	Comments
	3:45						9.78		
	3:55						2.03		
	4:15						2.61		
	4:30						2.09		
	4:45						1.35		
	5:00						1.59		

Notes:

- Water levels – Reported to the nearest 0.01 foot.
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity (EC) – Reported to the nearest 10% mhos/cm or µmho/cm @25 C or in mS/cm of instrument set range
- Water temperature – Reported to the nearest 0.1 C or F
- Dissolved oxygen (D.O.) report in 0.1 mg/L
- Turbidity report in NTV nearest whole #

Where:

B=3.14

$ø_s$=porosity of the sand pack

r_c =radius of the well casing and screen in feet

L_c=length of water column inside the casing and screen in feet

r_w =radius of the well bore in feet

L_s =length of saturated portion of the sand pack in feet

7.48 gallons/cubic foot=conversion from cubic feet to gallons

Total: 422 gals

Date: 10/7/14 PtA06 15 B097 Sheet 1 of 1

Time	Elapsed Time	Totalizer Meter (x_____)	RATE GPM	Pumping Water Level	~~Drawdown~~ TOC (DTW)	Specific Capacity	Discharge Pressure (PSI)
~~830~~		85700		270			
1145					~~302~~		
2			2	279	302		
215			2	279.5	12.7		
230			2	279.5	19.9		
10/8/14	845	86017	2.0	270			
	800		2.0	273	100+		
	915		2.0	273.5	146		
	930		2.0	274.5	104.5		
	945		2.0	275	304		
	1000		2.0	274	28.8		
	1015		2.0	274	10.58		
	1030		1.5	274.5	6.70		
	1045		1.5	274.5	6.02		
	1100	86222	1.5	274.5	9.00		

Total: 522 gals

pxd 461 50073 line=8.0579 scale=499.3099 offset=1.4277

Tri Hydro

ISB 98

TD 288'

Date: 10-14-14 Pump set at 286' Sheet _____ of _____

	Time	Elapsed Time	Totalizer Meter (x_____)	RATE GPM	Pumping Water Level	Drawdown	Specific Capacity	Discharge Pressure (PSI)	Turbity NTU
	1:37		76730		275.65				
start	1:40								
	1:42		76740	10	278.70				
	1:44		76770		279.40				
	1:50		76848		280.40			0.22	0.22
	1:55		76900		280.65				
	2:00		76950		281.00				
	2:15		77113		281.80				
	2:30		77275	11	282.35				
	2:45		77440		283.75				0.20
	3:00		77660		283.60				
	3:15		77780		283.00				
	3:30		77930		284.00				
	3:45		78090		284.00				
	4:00		78250		284.00				
				Total:	1520 gals				

Pump 15S2E29A — SWCW BOIL PUMP

Boiler

Other

Remarks: PtX0615B099

9-22-14

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
~~SCHWL~~	~~145~~		~~Pre 157.4~~ Post	76620	78157						
9/22	245		270								
	300	10.5	272					195			
	315	" "	272					25.7			
	330	" "	273.5					7.57			
	345	" "	"					5.42			
	4:00	10.7	274					7.38			
	4:15	10.7	274					2.65			
	4:30		274					1.13			
	4:30	Slowed	Rate	to 6.5 GPM	Raised	Pump	5ft				
			272.5								
	445	6.5	272.5					7.48			
	500	6.5	272.5					0.52			
	515	6.2	272.5					0.74			
	530	6.2	272.5					2.23			
	545		272.5					0.97			
	5:00	6.2	272.5					0.22			
	Shut	off	Pump	at 5:00							

Total: 1537 gals

Pump: Swan Bolt Pump ~~PT-06-15B101A~~

Bailer:

Other:

Remarks: PT106-15B100A

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
~~8/14/19~~	~~115~~		~~Pre 15.4~~ Post	8170	82714						
1012	1	11.5	269								
	115	11.5	273								
	230	Slowed	Rate to	8 gpm	well started	to	go Dry				
	230	8 gpm	279								
	245	8	" "					11.9			
	300	8	" "					3.88			
		Shut pump off at 300 to pump water									
	330	Turned	Pump on								
		8									
	345	8	279					3.6			
	400	3	Raised pump 5ft		to 278	855		4.9			
	415		270					3.78			
	430		270.5					3.54			1014
											Total
											gal. Pump
											out

Total: 1014 gals

Pump: Swan Bail Pump

Bailer:

Other:

Remarks: PTX06-1SB101

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
~~8/11/15~~	~~1115~~		~~Pre 151.4 Post~~	78157	79793						1636
9/30	230	12	270 Bg					120			total
	245	12	274.5					59.7			Pump out
	300	12	274.5					39.9			from Lab
	315	12	" "					18.1			PTX06/SB101
	330	12	" "					10.69			
	345	12	" "					4.39			
	400							6.01	6.01		
	415							5.21			
	Slowed down to 10.6			6 gpm	Raised	6 ft	from 283	to 278			
	430	10.6	274.5					2.38			
	445	10.6	" "					2.39			
	500	10.6	" "					2.26			

Total: 1636 gals

Pump: SWEO BOIL PUMP
Bailer:
Other:
Remarks: WELL PAX06151B102

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
~~8/11/14~~	~~11:5~~		~~PRE 157.4 POST~~								
9/10	~~1251~~	4.5	271	71695				308			
	~~1211~~										
9/10	130	4.5						20.8			
	145	4.5						13.6			
	200							12.7			
	215							6.17			
	230							5.41			
	at 240 increased flow Rate to 6.3 gpm										
	245	6.3						14.9			
	300	6.3						6.76			
		increase flow to 7.7 gpm									
	315	7.7						20.4			
	330	7.7						7.26			
	345	7.7						8.98			
	400	7.7						4.67			
	415	7.7			72785			5.33			

Total 1090 gals

Pump: Swan Bell Pump PtX06 15B103

Bailer:

Other:

Remarks:

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
~~8/11/14~~	115		~~Pre 157.4 Post~~	79793	81700						1907
10/1	1	12	273.5					1000+			total
10/1	115	12	274					402			Set Pump out
	130	12	274					174			
	145	12	274.5					79.5			
	200	12	274.5					105.1			
	215	12	275					79			
	230	12	275.5					61.7			
	245	12	275.5					70.71			
	300	12	276					3.08			
	315	12	276.25					7.81			
	330	12	276.5					8.61			
	345	12	276.5					.99			
	400	Slowed Rate To 5.5 gpm Raised Pump from 263 To 278 BGS									
	400	5.5	272.5					4.34			
	415	5.5	272.5					3.97			
	430	5.5						1.13			

Total: 1907 gals

Yellow Jacket Drilling	PROJECT NAME:		WELL NUMBER: PIX 06-15 B104
WELL DEVELOPMENT LOG	JOB NUMBER;	SITE:	PREPARED BY:
METHOD: Pump / Bailer / Other	DEVELOPMENT CRITERIA:		
	Remarks:		

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
9-17	1:55	7gpm	270.5	70				+1000			
	2:05		272.2	140				212			
	2:15		272.35	210				74.5			
	2:25		272.43	280				36.5			
	2:35		272.59	350				30.5			
	2:45		272.65	420				21.7			
	3:00		272.7	525				13.5			
	3:15		272.82	630				12.8			
	3:30		272.86	735				11.2			
	3:45		272.95	840				9.3			moved pump up
	4:00		273.06	945				9.6			
	4:15		272.05	1050				8.37			
	4:30		272.47	1,155				6.70			
	4:45		272.56	1,260				6.78			lowered pump
	5:00		272.81	1,365				6.8			
	5:15	7gpm	272.17	1,470	1,470						
	5:										
9/18	8:10	7gpm	270.1	70		7		69.8			
	8:25		272.88	175				4.21			
	8:40		273.05	280				4.40			
	8:55		273.18	385				3.71			
	9:10		273.	490				3.42			

Total: 1960 gals

Tri Hydro
ISB-105

Date: 10-17-14 Pump set at 285 Sheet _____ of _____

Time	Elapsed Time	Totalizer Meter (x ~~5737~~)	RATE GPM	Pumping Water Level	Drawdown	Specific Capacity	Discharge Pressure (PSI)	NTU
10:37		~~78258~~		270.35				
Start 11:10		~~87258~~						
11:15				284.30				3650
11:25		78288		~~284.8~~	284.3			150
11:30			2.2	284.3				
11:35			2.2	284.3				
11:40			2.2	284.3				
11:45			2.2	~~284~~.3	284.3			
11:50			2.2	284.3				
11:55			2.2	284.3				
12:00		78302	2.2	284.3				
		+ 2 drums bailed water						
		~150 gals total						

Tri Hydro

ISB 106

Date: 10-18-14 Pump set at 285 Sheet _____ of _____

Time	Elapsed Time	Totalizer Meter (x_____)	RATE GPM	Pumping Water Level	Drawdown	Specific Capacity	Discharge Pressure (PSI)
8:13		387308		270.00			
8:20			2.00	284.5			
8:25			2.00	284.5			
8:30			2.00	284.5			
8:40			2	284.5			
8:50			2	284.5			
9:00		~~387308~~	2	284.5			
		387500					
		+ 2 drums boiled water					
		Total 254 gals					

PTR06-1169

Yellow Jacket Drilling	PROJECT NAME:		WELL NUMBER:
WELL DEVELOPMENT LOG	JOB NUMBER;	SITE:	PREPARED BY:
METHOD: Pump / Bailer / Other	DEVELOPMENT CRITERIA:		
	Remarks:		

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
9-19	2:50	3 gpm	267.52	3 gpm				+1000			
0	~~3:45~~										
	3:15	3 gpm	277.12	3 gpm				+1000			
	3:30	3 gpm	276.76	45							
	3:45	3 gpm	277.51	90							
	4:00	3 gpm	278.06	135							
	4:15	3 gpm	280.56	180				26.3			
	4:30	3 gpm	279.23	225				11.5			
	4:45	3 gpm	280.16	270				12.3			
	5:00		279.23	315				9.5			
	5:15	3 gpm	279.58	360							
9-20	7:50	3 gpm	264.45	5				34.4			
	8:05	3 gpm	284.33	45				22			
	8:20	3 gpm	279.64	90				13.5			
	8:35	3 gpm	279.59	135				~~8.30~~	8.30		
	8:50	3 gpm	279.59	180				8.22			
	9:05	3 gpm	279.55	225				7.16			
	9:20	3 gpm	279.56	270				7.06			
	9:35	3 gpm	279.59	315				7.26			

Total: 675 gals

Tri Hydro

1170

Date: 10-19-14

Sheet _____ of _____

Time	Elapsed Time	Totalizer Meter (x_____)	RATE GPM	Pumping Water Level	Drawdown	Specific Capacity	Discharge Pressure (PSI)	NTU
12:30		38880		270				
12:45			0.5	284				
1:25			0.5	284				50.7
1:45			0.5	284				140
2:00			0.5	284				30.8
2:15			0.5	284				29.4
2:30			0.5	284				25.7
2:45			0.5	284				19.1
3:00			0.5	284				16.2
		Pumped		60 gal				

Yellow Jacket Drilling	PROJECT NAME: Pantex		WELL NUMBER:
WELL DEVELOPMENT LOG	JOB NUMBER; 14-0524 TX	SITE: Pantex	PREPARED BY: Shane Nielson
METHOD: Pump / Bailer / Other	DEVELOPMENT CRITERIA: Swab Ball pump		
	Remarks: Pt-06 117		

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
8/13/14	11	4.0	268.5	676418							
8/13/14	1	4.0	272		67989						

Total: 341 gals

Well Development Information
PTX06-1172

A well development log for this well was not received from Yellow Jacket Drilling. This form is designed to document available information taken from field logbooks, Contractor Daily Construction Logs (PX-4785), and waste records (PX-2844).

Date of Development: 8/12/2014

Approximate Fluids Removed: 350 gallons

Technique: surge, bail, and pump

Pump: Swed Bell Pump
Bailer:
Other:
Remarks: PUMP ON PH ~~06~~ 15/3/13

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
~~8/14/13~~	~~115~~		~~PLEASE CALL POST~~								4/14
1/13	1015		268	82714	83128						Total gal
	1115	4.5	273.5					25.0			Removed
	1145		274.25					4.92			from well
	12	4.5	274.5					2.64			
	1230	4.5	275					.93	.93		
	1245	4.5	275					.19			

Total: 409 gals

Shaw® Shaw E & I

EXAMPLE
WELL DEVELOPMENT RECORD

Project Name: TriHydro

Location: Pantex

Well/Piez. No.: PTX06-1174

Personnel: Curt Carlson

Date Installed:

Date (Start/End): 7-15-14

Csg. Diameter (I.D.): 4" sch 80

Method of Development:

Total Depth (ft. TOC): 289.81

☒ Surging ☒ Bailing ☒ Pumping ☐ Other (State Method)

☐ Original Development ☐ Redevelopment Development Date:

Depth to water before developing well: 272.72, final 272.74

Height of Water Column: _____ feet _____ = _____ gal.* _____ = _____

Volume (V) Purge Factor Volume To Purge

$V = (B * r_c^2 * L_c * 7.48)+(B*(r_w-r_c)^2*L_s*ø_s*7.48)=$ _____ gallons (See Notes below)

Depth purging from: 286 feet

Time purging begins:

Weather:

Screened Interval (ft. BGL):

Equipment Nos.: pH Meter _____ EC Meter _____ Turbidity Meter La Motte 2020

Equipment decontaminated prior to development Y _____ N X

Describe Bailed 55 gal, pumped 400 gal

Date	Time	Water Level (ft. below TOC)	Volume Removed (gal.)	Temp (C or F)	pH	EC	Turbidity	D.O.	Comments
start	12:30								4.5 gpm
	12:40						1.81		
	12:50						1.45		
1:10	1:00						2.53		
	1:15						2.59		
	1:30						1.16		
	1:45						0.52		
	2:00						0.79		

Notes

- Water levels – Reported to the nearest 0.01 foot
- pH – Reading rounded to 0.1 pH units
- Electrical conductivity (EC) – Reported to the nearest 10% mhos/cm or µmho/cm @25 C or in mS/cm of instrument set range
- Water temperature – Reported to the nearest 0.1 C or F
- Dissolved oxygen (D.O.) report in 0.1 mg/L
- Turbidity report in NTV nearest whole #

Where:

B=3.14

$ø_s$=porosity of the sand pack

r_c =radius of the well casing and screen in feet

L_c=length of water column inside the casing and screen in feet

r_w =radius of the well bore in feet

L_s =length of saturated portion of the sand pack in feet

7.48 gallons/cubic foot=conversion from cubic feet to gallons

Pump	Swan Bold Pump PtX06 (5/31/15)
Bailer	Remarks:
Other	

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
6/11/14	715		~~Pre 157.4 Post~~	6324	84170						1042
1014	830		270.5								Total
	53	6.5	272.5					10.44			gal Removed
	9	6.5	272.5					1.71			
	905	10	Increase	Flow				1.52			
			273.5								
	930	10	273.75					2.32			
	945	10	273.75					19.3			
	10	10	273.75					1.32			
	1015	10	273.75					3.08			
	1030	10	273.75					1.82			

Total: 1042 gals

Pump	SWRU BOIL PUMP
Bailer	Remarks: PtX06 1176
Other	

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
8/11/14	115		Pre 157.4 Post	64175	84850						
8/12	3	8.5	270.5								
	330	8.5	273.5					21.6			
	345	8.5	274					5.23			
	400	8.5	274.5					10.66			
	415	8.5	274.3					6.32			
	430	8.5	274.5					8.51			
	1245	8.5	274.75					2.37			

Total: 675 gals

Yellow Jacket Drilling	PROJECT NAME:		WELL NUMBER:
WELL DEVELOPMENT LOG	JOB NUMBER; 14-0521TA	SITE: Pontiac	PREPARED BY: Shea McIsaac
METHOD: Pump ____ Bailer ____ Other ____	DEVELOPMENT CRITERIA: Swab Bail pump		
	Remarks: PtX06-15[illegible]7		

DEVELOPMENT LOG					TOTAL	WATER QUALITY					COMMENTS
DATE	TIME	FLOW RATE (gpm)	DEPTH TO WATER (ft-btoc)	WATER REMOVAL (gal)	WATER REMOVAL (gal)	PH	SPECIFIC Conductivity (mS/cm)	TURBIDITY (NTU)	TEMPERATURE (Degrees C)		
~~8/14/14~~	~~115~~		~~[illegible]~~								
~~8/2[illegible]~~	~~115~~		~~[illegible]~~	~~[illegible]~~				~~[illegible]~~			
	~~130~~							~~[illegible]~~			
10/5	12	10	2[illegible]2685	64850	85700			[illegible]			
	1215	10	275.5					43.4			
	1230	10	277.5					48.5			
	1245	10	277.5					33.6			
	1	10	277.5					1.19			
	115		278					3.84			
	130		279	Shut Pump off				2.27			

Total: 850 gals

Post hydraulic test water removal, mud wells

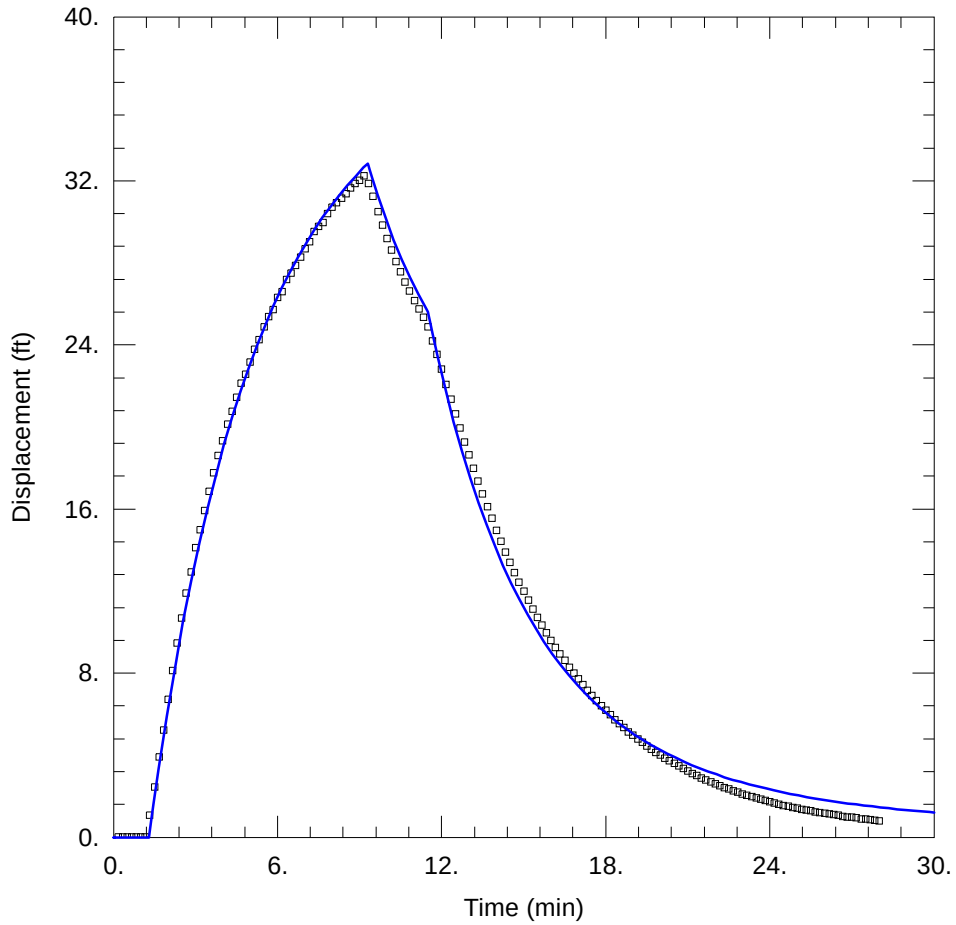
Date: 10-21-14 – 10/23/14 EEB

Sheet _____ of _____

Time	Elapsed Time	Totalizer Meter (x_____)	RATE GPM	Pumping Water Level	Drawdown	Specific Capacity	Discharge Pressure (PSI)
ISB	106	387890	8	pumped	150 gal		
		388050	6	start -	4:05		
				Finish	4:30		
ISB	105	388040	2.5	pumped 130 gal			
7:20	start	388170	2.5				
8:15	finish						
ISB	88	388170					
start	~~9:30~~						
	2:45		3.5	pumped	150 gal		
Finish	3:30	388320					
1170		388310	1.0				
Start	4:45						
stop	6:26	388390	0.8	pumped	80 gal		
ISB	87						
Start	9:20	388380	0.6	pumped	120 gal		
finished	1:00	388400					

APPENDIX Q

INJECTION TESTING OUTPUTS



WELL TEST ANALYSIS

Data Set: M:\...\1170_1inj_PC.aqt
Date: 12/16/14 Time: 16:41:45

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-1170
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 16. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-1170	0	0

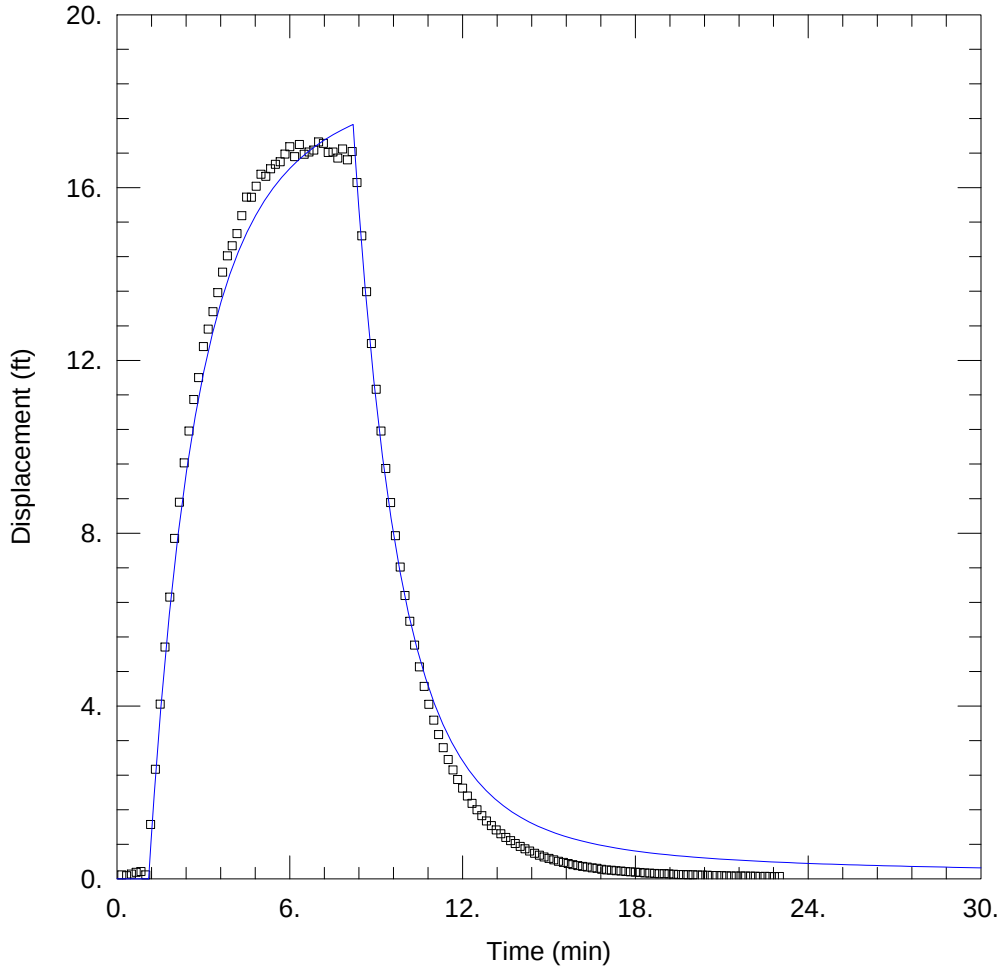
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-1170	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 53.53 ft^2/day S = 7.163E-10
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\1169_1inj_PC.aqt
Date: 10/09/14 Time: 07:24:57

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-1169
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 16.8 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-1169	0	0

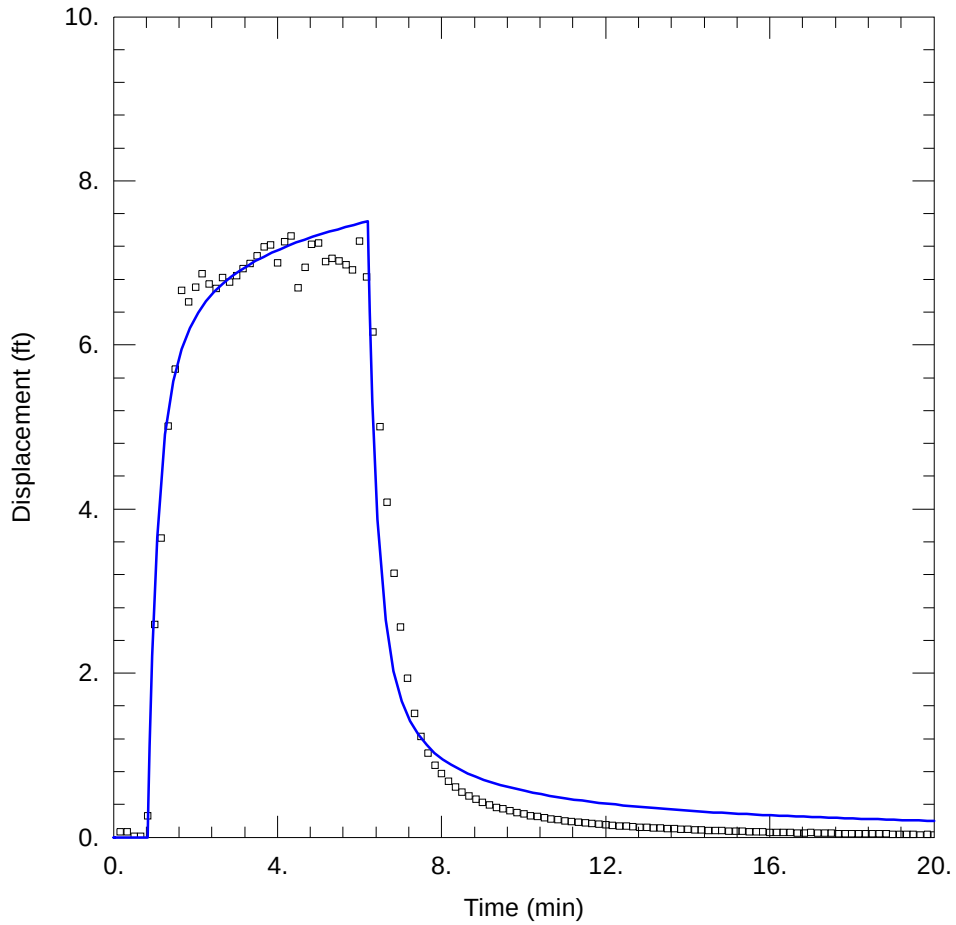
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-1169	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 127.2 ft^2/day S = 7.163E-10
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\1172_1inj_PC.aqt
Date: 12/16/14 Time: 16:45:35

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-1172
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 13.7 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-1172	0	0

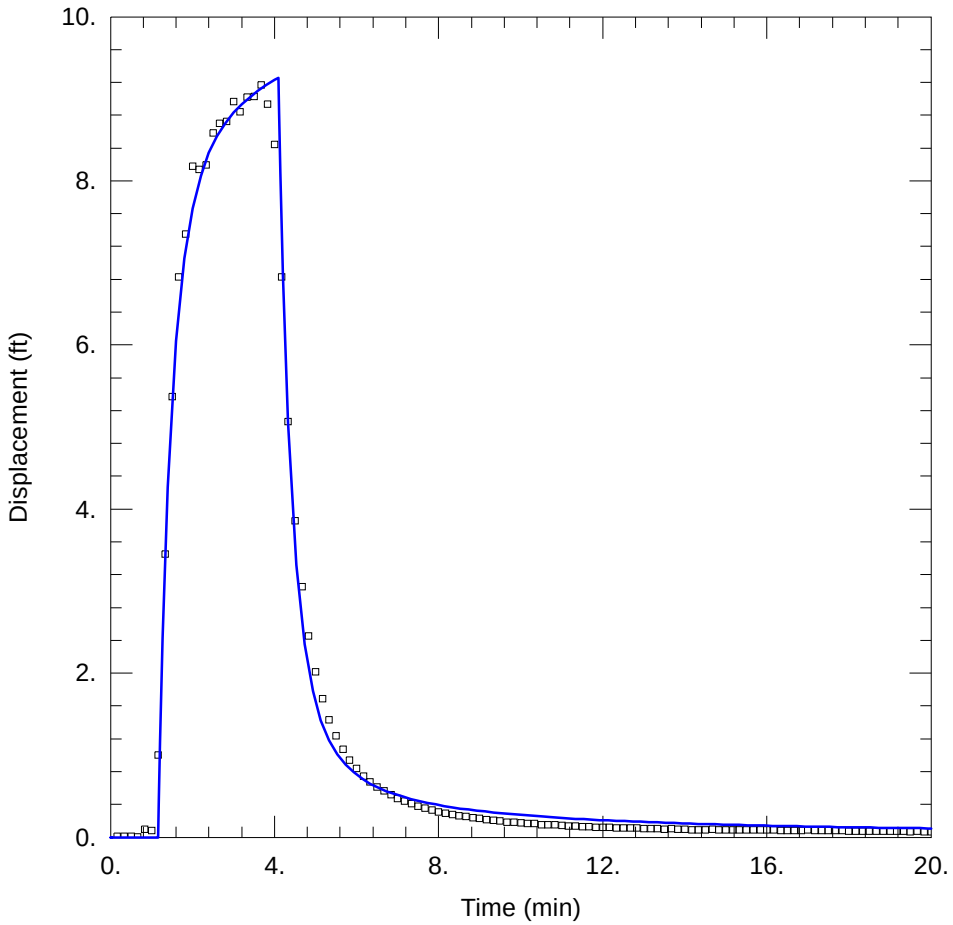
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-1172	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 437.9 ft^2/day S = 5.633E-5
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\1175_1inj_PC.aqt
Date: 12/16/14 Time: 16:46:44

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-1175
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 14.5 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-1175	0	0

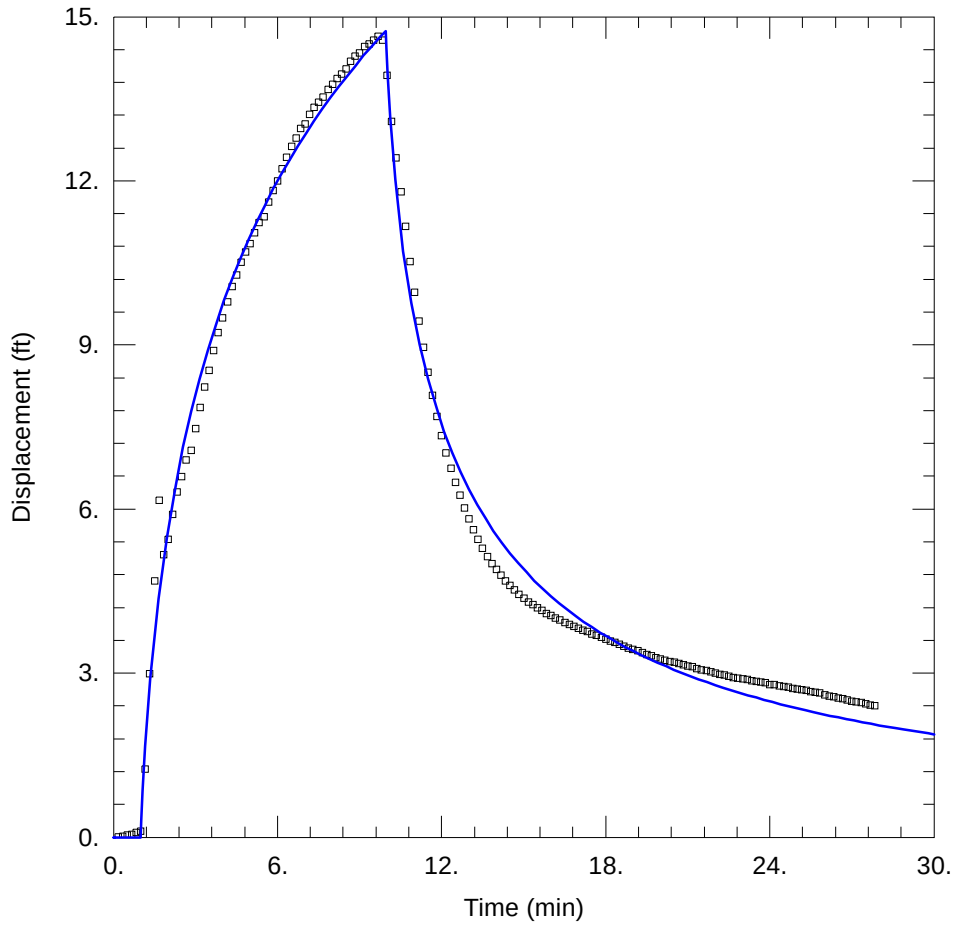
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-1175	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 421. ft^2/day S = 2.327E-6
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB087_1inj_PC.aqt
Date: 12/16/14 Time: 16:47:42

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB087
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 16.5 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB087	0	0

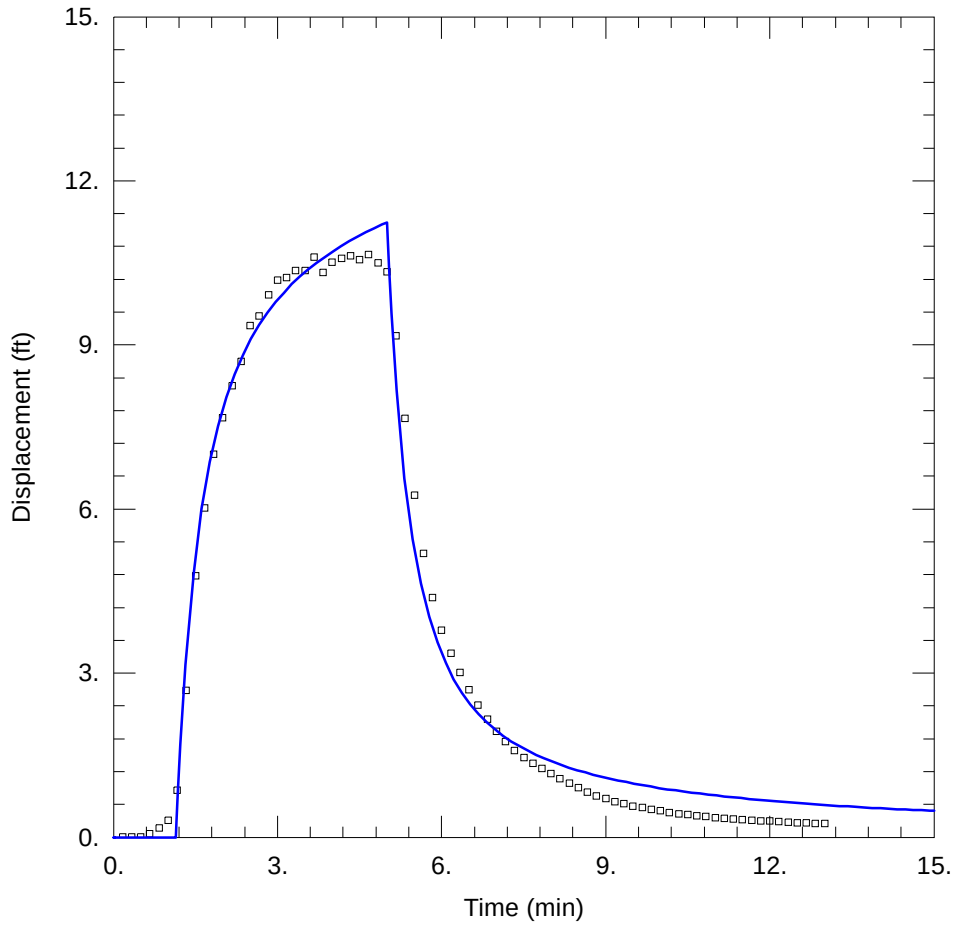
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB087	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 29.95 ft^2/day S = 0.1757
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB088A_1inj_PC.aqt
Date: 12/16/14 Time: 16:48:38

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB088A
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 15. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB088A	0	0

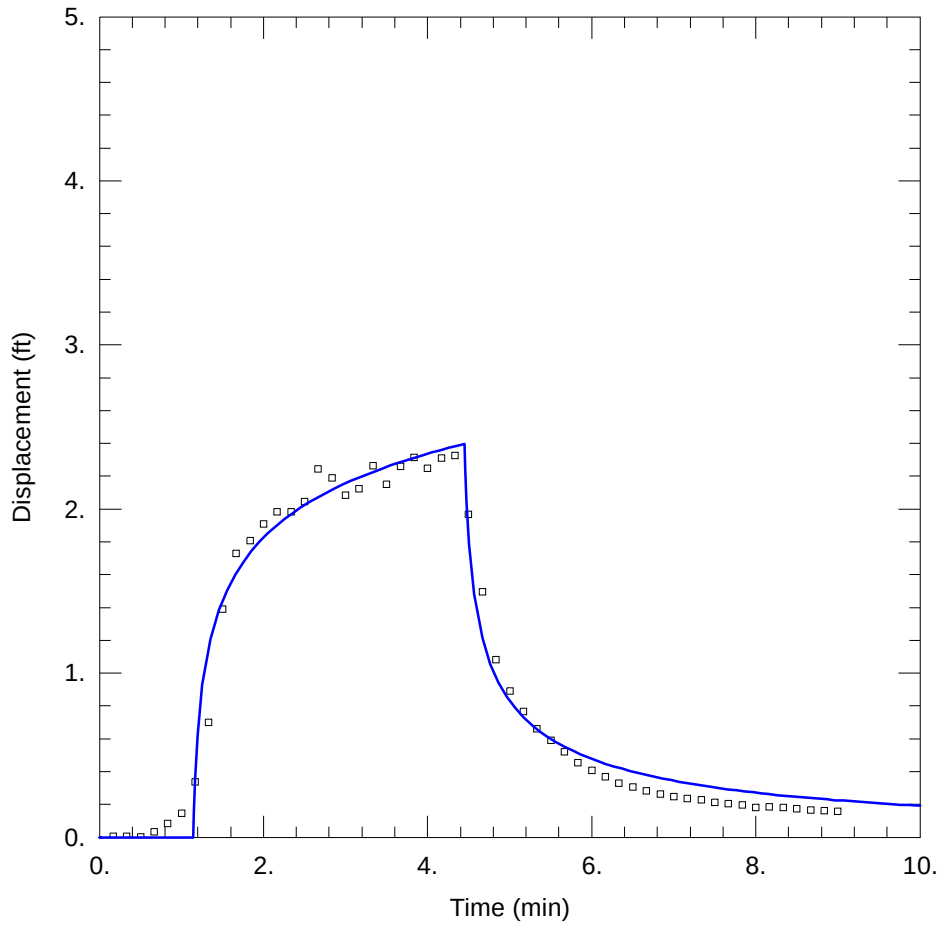
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB088A	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 174.3 ft^2/day S = 0.001297
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB089_1inj_PC.aqt
Date: 12/16/14 Time: 16:49:52

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB089
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 16.7 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB089	0	0

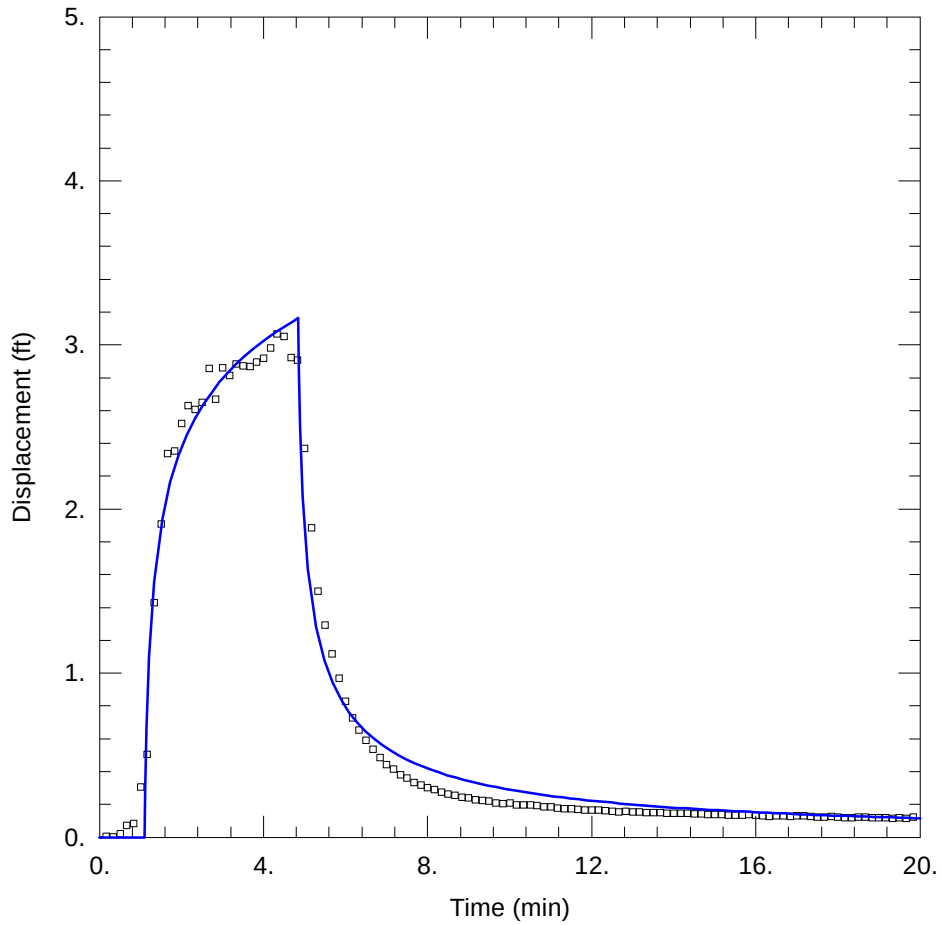
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB089	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 615.5 ft^2/day S = 0.05096
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB090_1inj_PC.aqt
Date: 12/16/14 Time: 16:50:51

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB090
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 16. ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB090	0	0

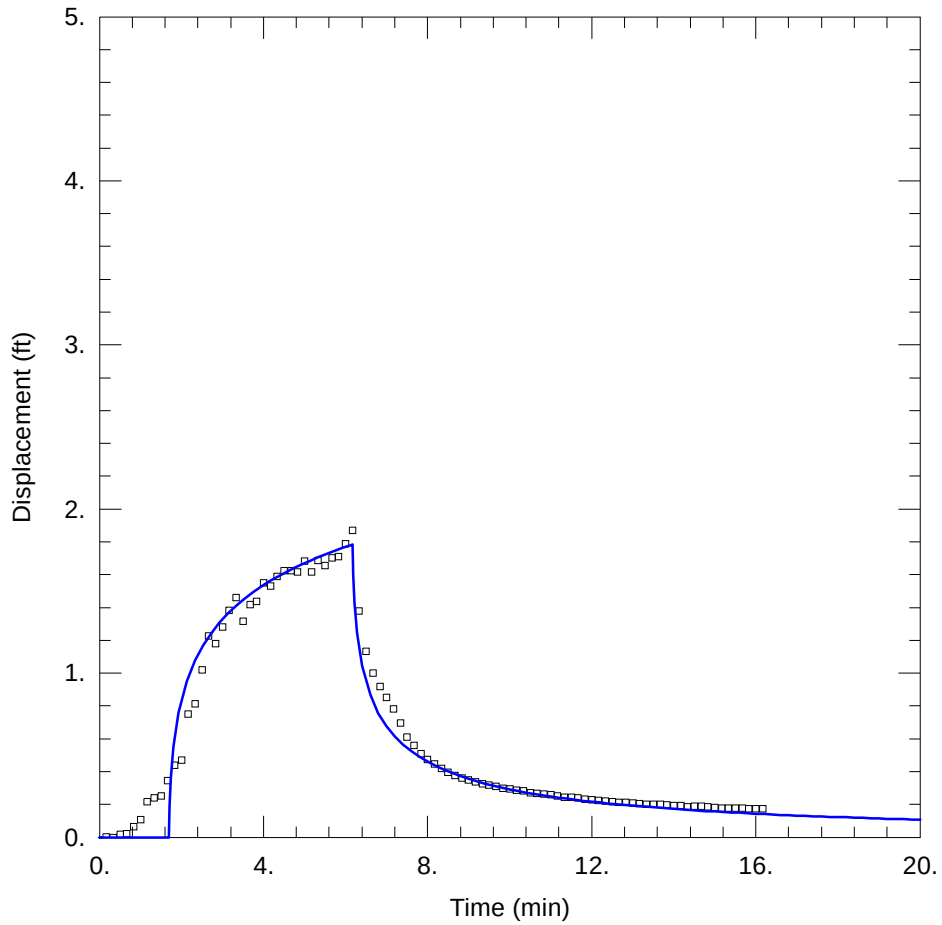
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB090	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 495.2 ft^2/day S = 0.03862
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB093_1inj_PC.aqt
Date: 12/16/14 Time: 16:51:54

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB093
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 13.8 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB093	0	0

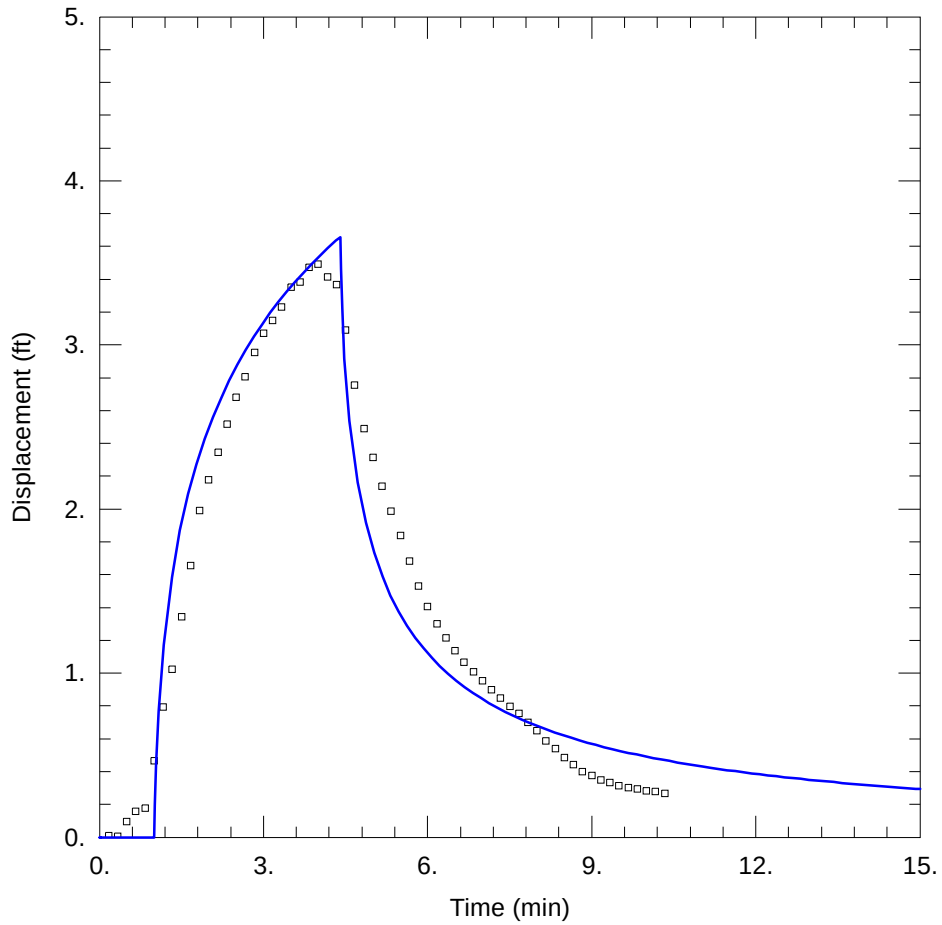
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB093	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 662. ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB094_1inj_PC.aqt
Date: 12/16/14 Time: 16:52:50

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB094
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 12.7 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB094	0	0

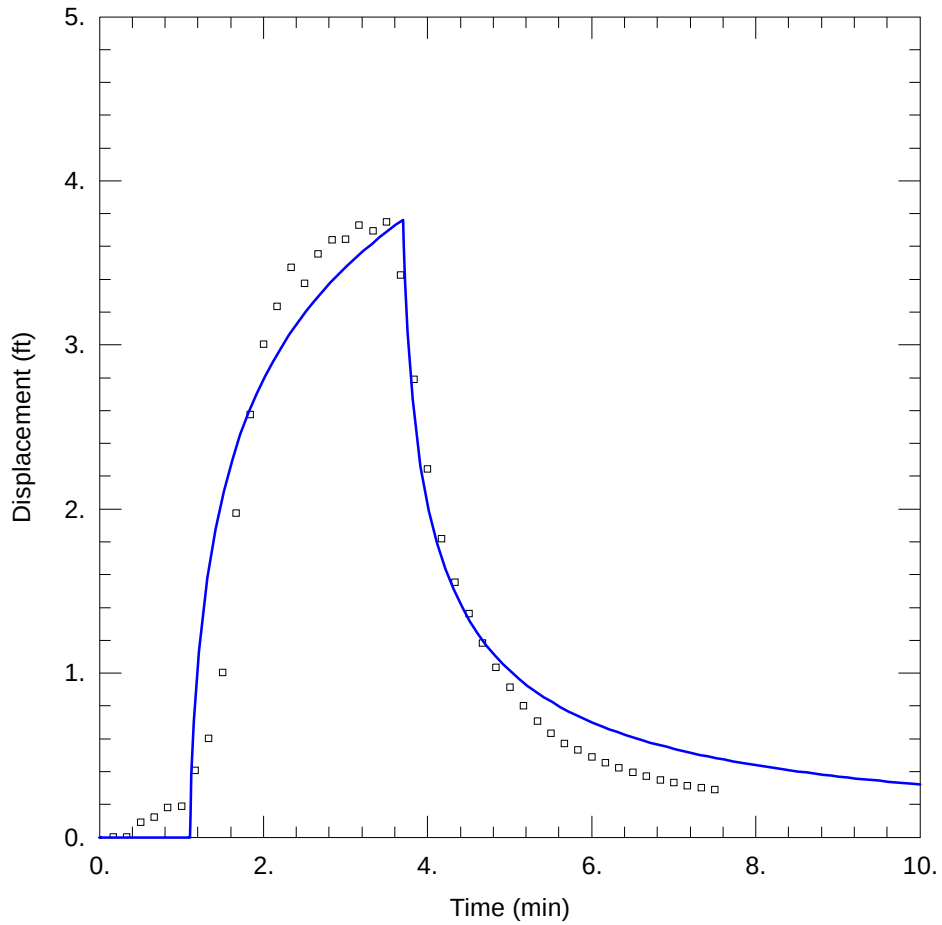
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB094	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 236.1 ft^2/day S = 0.3
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB095_1inj_PC.aqt
Date: 12/16/14 Time: 16:53:48

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB095
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB095	0	0

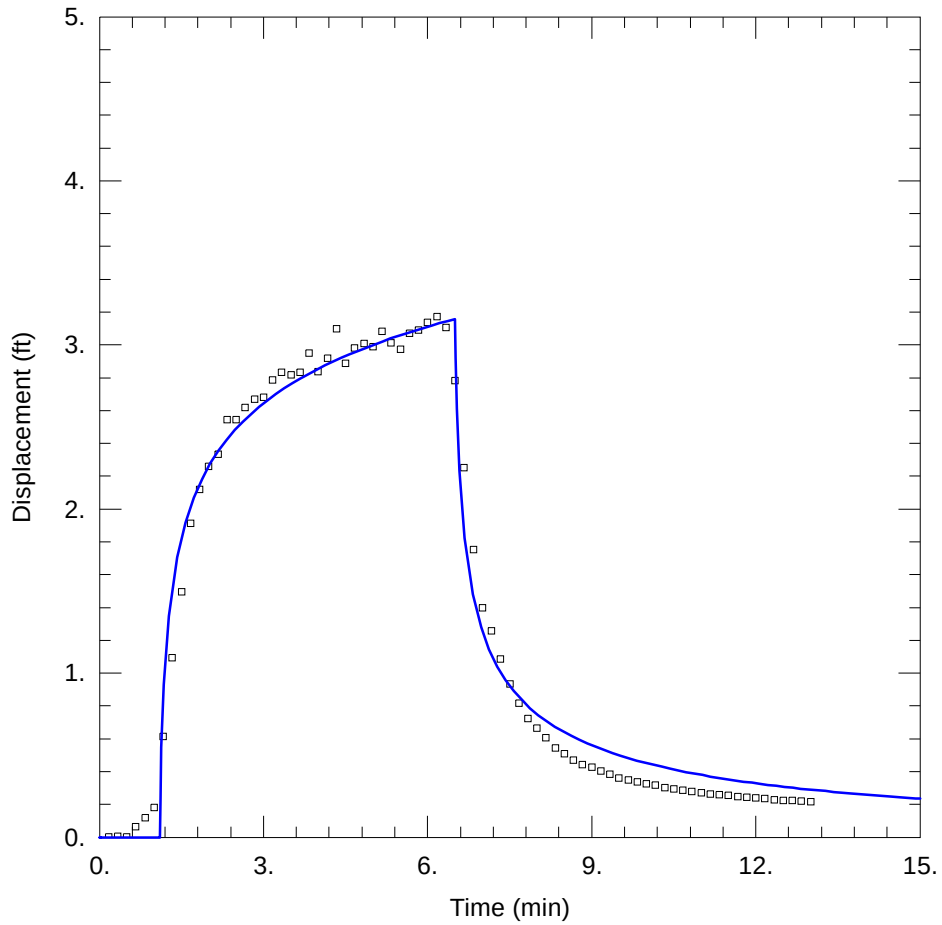
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB095	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 272.8 ft^2/day S = 0.1182
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB096_1inj_PC.aqt
Date: 12/16/14 Time: 16:54:42

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB096
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 14.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB096	0	0

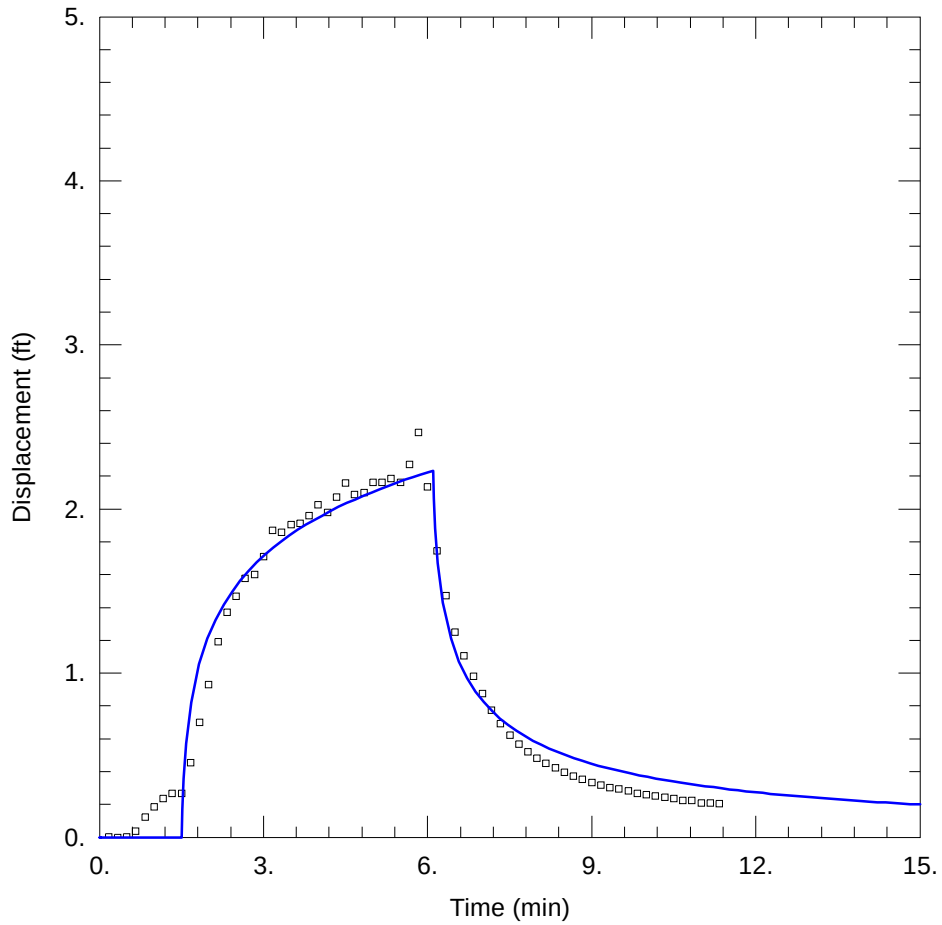
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB096	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 552.7 ft^2/day S = 0.03477
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB099_1inj_PC.aqt
Date: 12/16/14 Time: 16:56:04

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB099
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 13.2 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB099	0	0

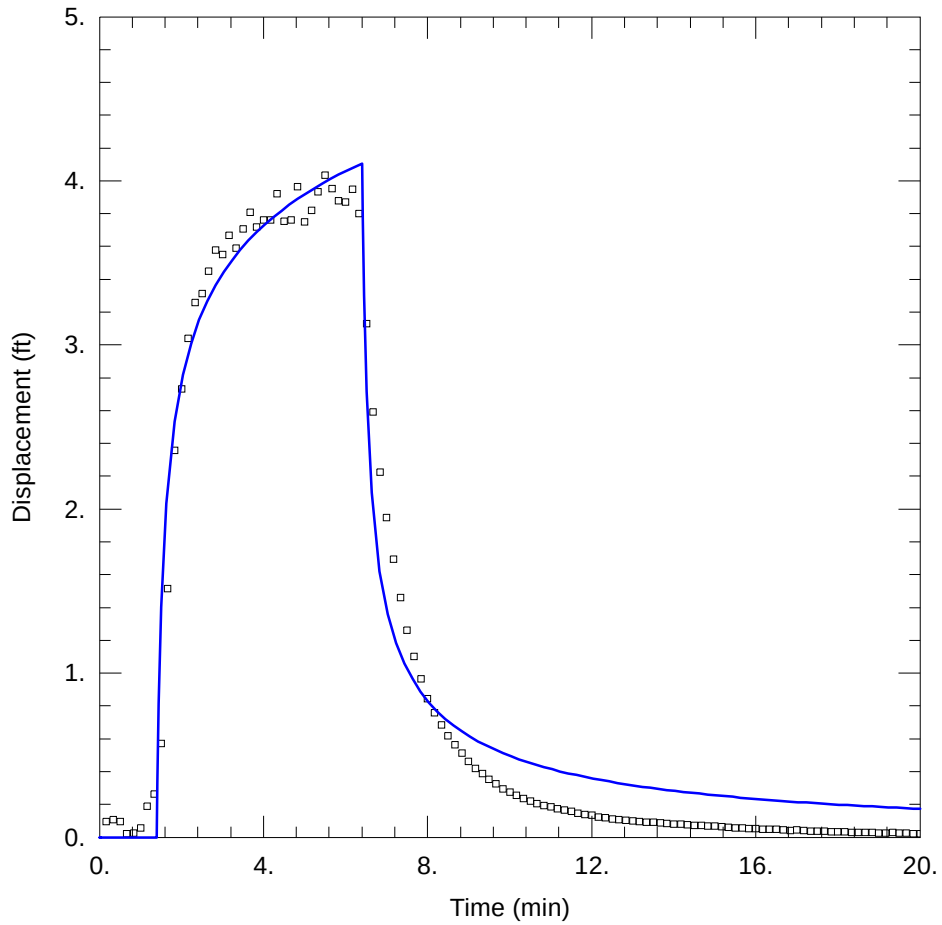
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB099	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 530.7 ft^2/day S = 0.2414
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB101_1inj_PC.aqt
Date: 12/16/14 Time: 16:56:59

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: ISB101
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 13.7 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
ISB101	0	0

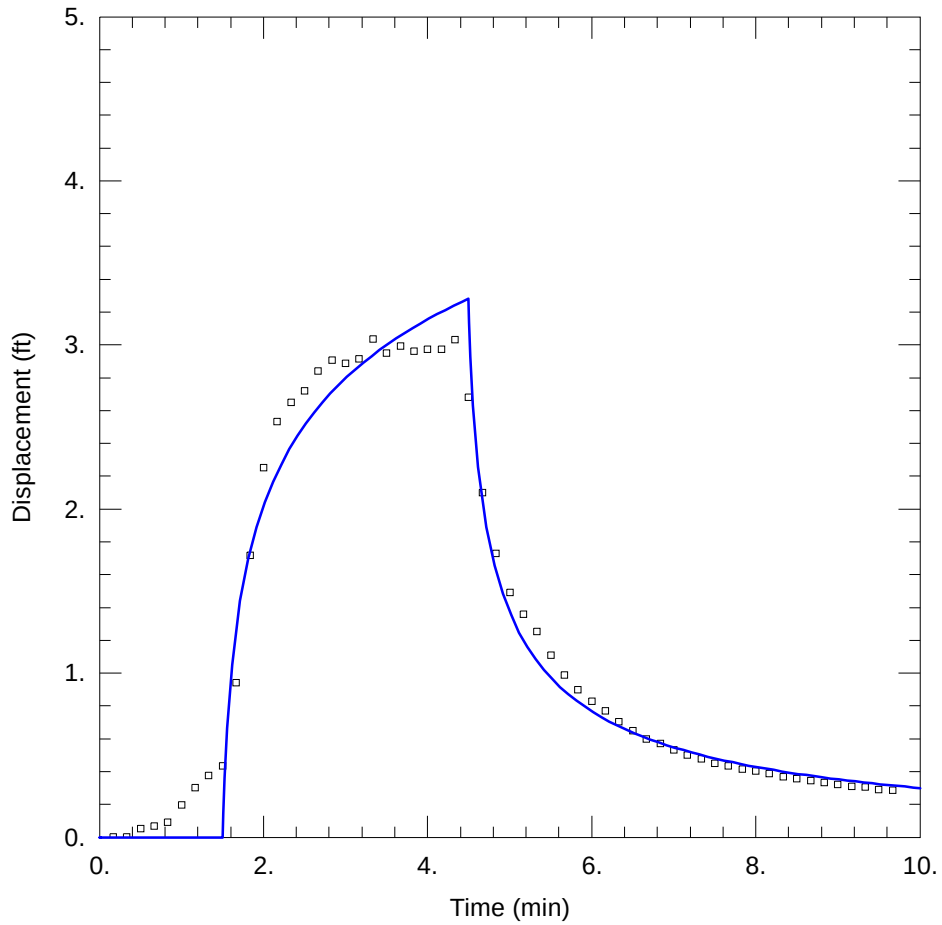
Observation Wells

Well Name	X (ft)	Y (ft)
▫ ISB101	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 471.1 ft^2/day S = 0.01155
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB102_1inj_PC.aqt
Date: 12/16/14 Time: 16:57:59

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB102
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 15.2 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB102	0	0

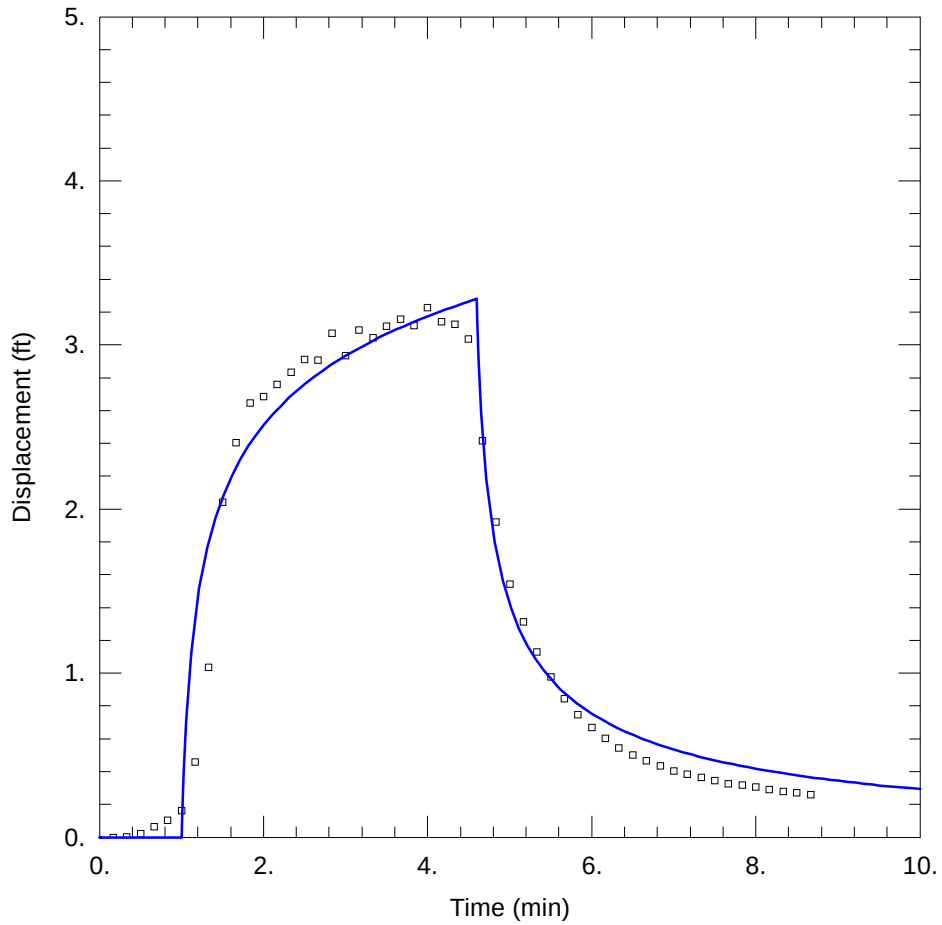
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB102	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 343.2 ft^2/day S = 0.07711
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB104_1inj_PC.aqt
Date: 12/16/14 Time: 16:58:55

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB104
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 16.2 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB104	0	0

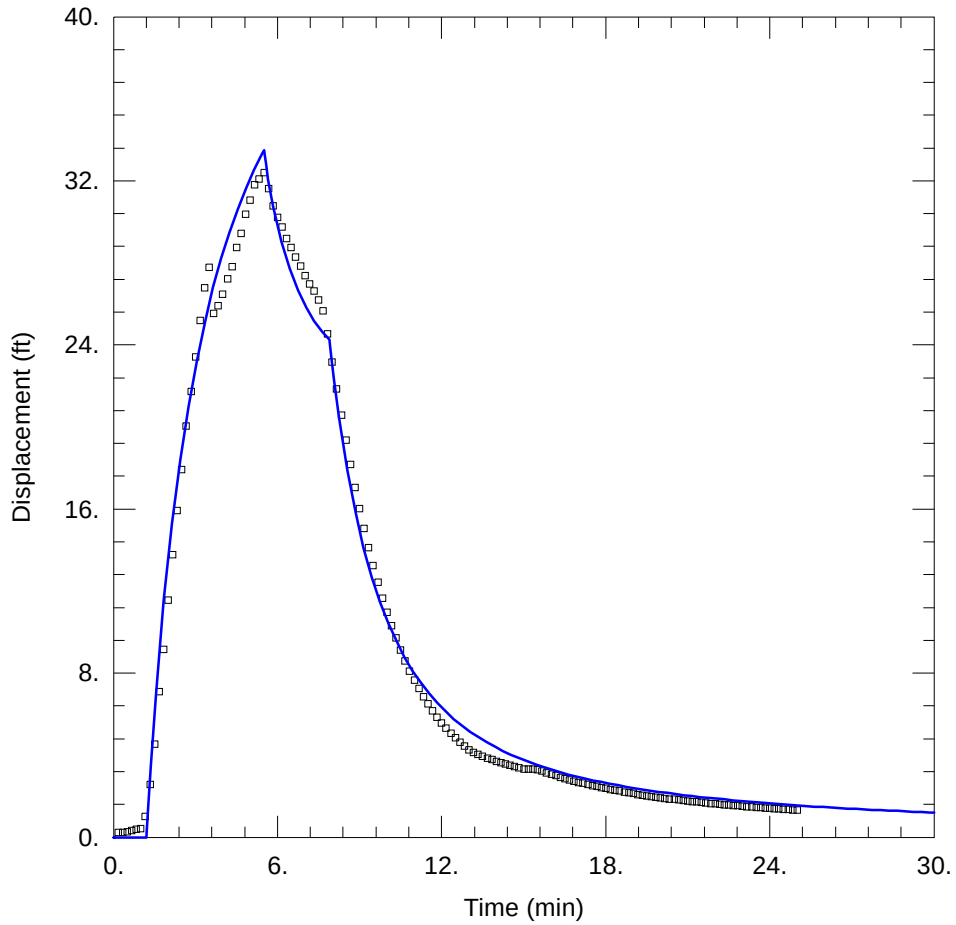
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB104	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 416.8 ft^2/day S = 0.03934
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB105_1inj_PC.aqt
Date: 12/16/14 Time: 16:59:51

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB105
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 16.9 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB105	0	0

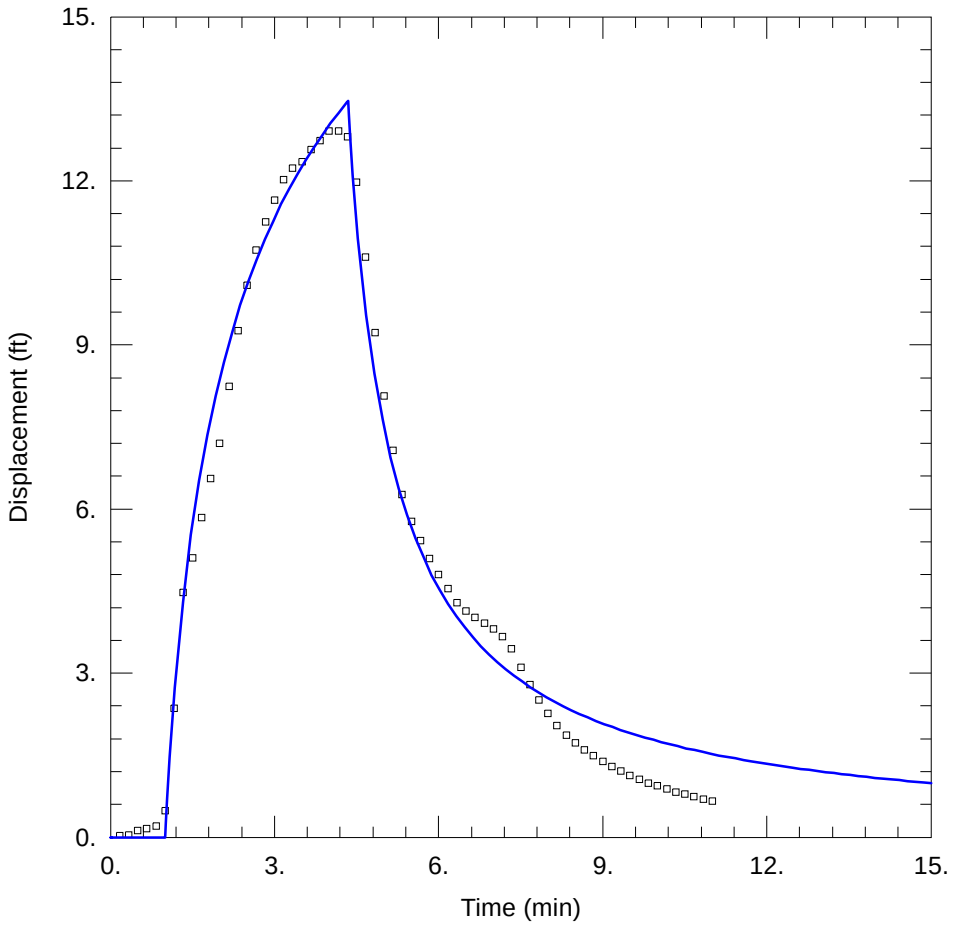
Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB105	0	0

SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 45.54 ft^2/day S = 0.000602
r(w) = 0.4 ft r(c) = 0.167 ft



WELL TEST ANALYSIS

Data Set: M:\...\ISB106_1inj_PC.aqt
Date: 12/16/14 Time: 17:00:40

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-012-001
Location: Zone 11 2014 Expansion
Test Well: PTX06-ISB106
Test Date: 10/1/2014

AQUIFER DATA

Saturated Thickness: 15.5 ft Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA

Pumping Wells

Well Name	X (ft)	Y (ft)
PTX06-ISB106	0	0

Observation Wells

Well Name	X (ft)	Y (ft)
▫ PTX06-ISB106	0	0

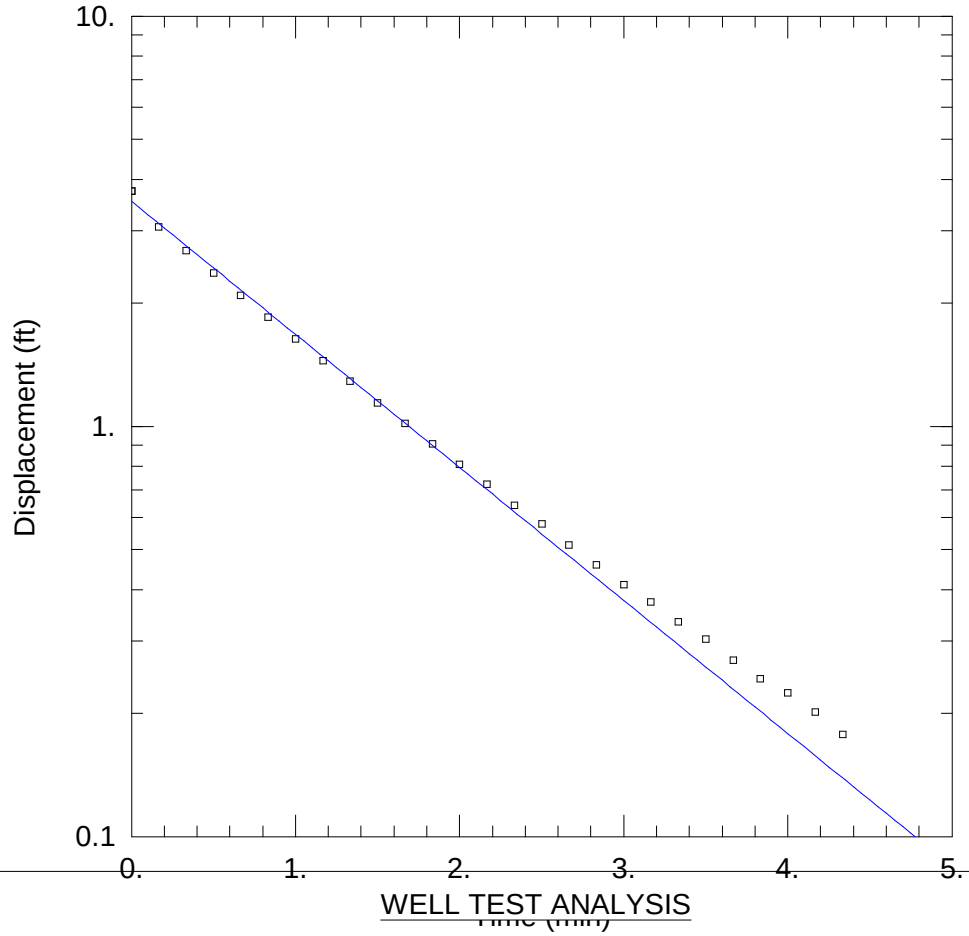
SOLUTION

Aquifer Model: Confined Solution Method: Papadopulos-Cooper

T = 65.63 ft^2/day S = 0.02713
r(w) = 0.4 ft r(c) = 0.167 ft

APPENDIX R

2014 SLUG TESTING OUTPUTS



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-1169.aqt
Date: 12/03/14 Time: 09:37:40

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-1169
Test Date: 11-20-2014

AQUIFER DATA

Saturated Thickness: 16. ft
Anisotropy Ratio (Kz/Kr): 0.1

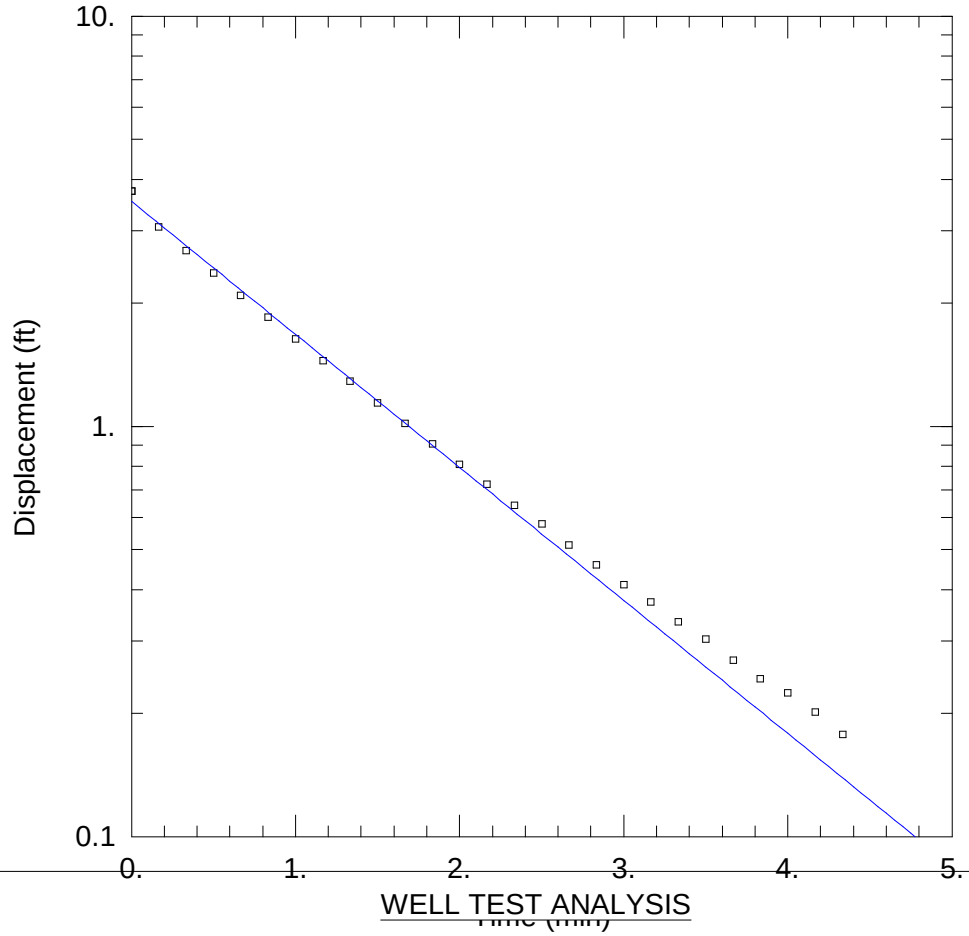
WELL DATA (PTX06-1169)

Initial Displacement: 3.747 ft
Static Water Column Height: 16. ft
Total Well Penetration Depth: 16. ft
Screen Length: 16. ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 2.399 ft/day
y0 = 3.534 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-1169.aqt
Date: 12/03/14 Time: 09:38:55

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-1169
Test Date: 11-20-2014

AQUIFER DATA

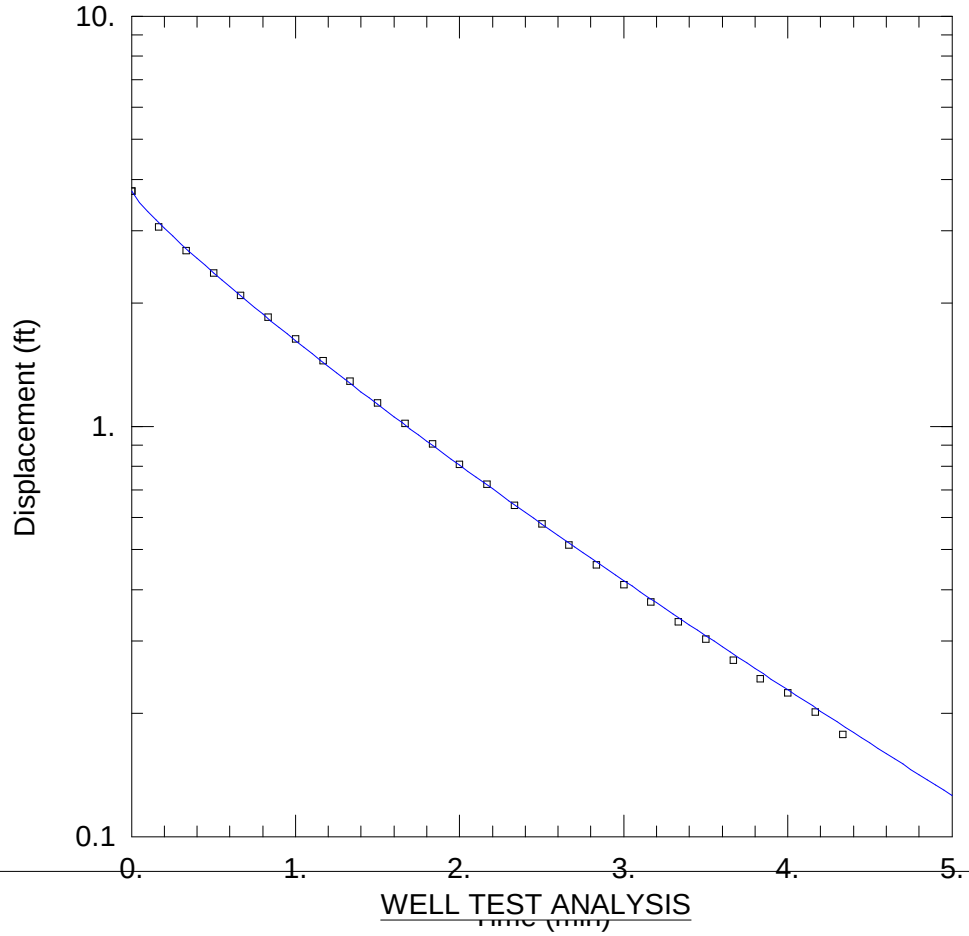
Saturated Thickness: 16. ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PTX06-1169)

Initial Displacement: 3.747 ft
Static Water Column Height: 16. ft
Total Well Penetration Depth: 16. ft
Screen Length: 16. ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 4.52 ft/day
y0 = 3.534 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-1169.aqt
Date: 12/03/14 Time: 09:39:46

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-1169
Test Date: 11-20-2014

AQUIFER DATA

Saturated Thickness: 16. ft

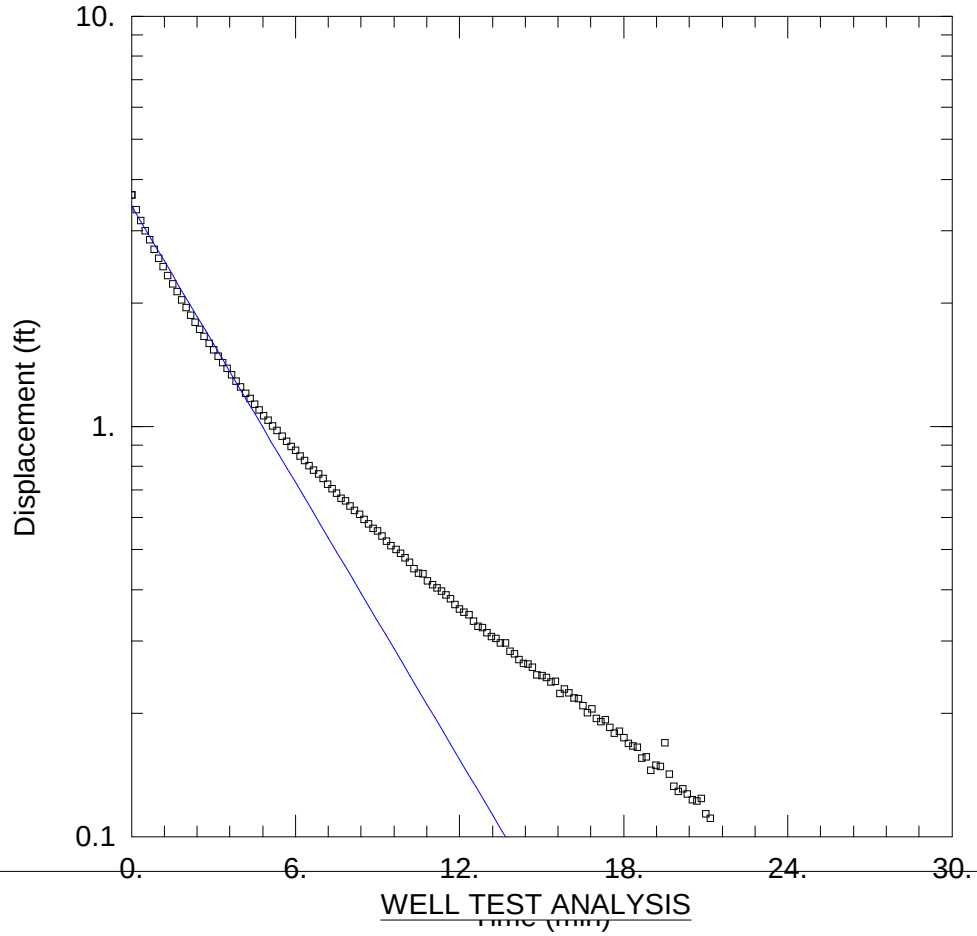
WELL DATA (PTX06-1169)

Initial Displacement: 3.747 ft
Total Well Penetration Depth: 16. ft
Casing Radius: 0.167 ft
Static Water Column Height: 16. ft
Screen Length: 16. ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 3.657 ft/day
Kz/Kr = 0.1
Ss = 5.311E-6 ft^{-1}



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-1170.aqt
Date: 12/03/14 Time: 09:34:32

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-1170
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 18.2 ft
Anisotropy Ratio (Kz/Kr): 0.1

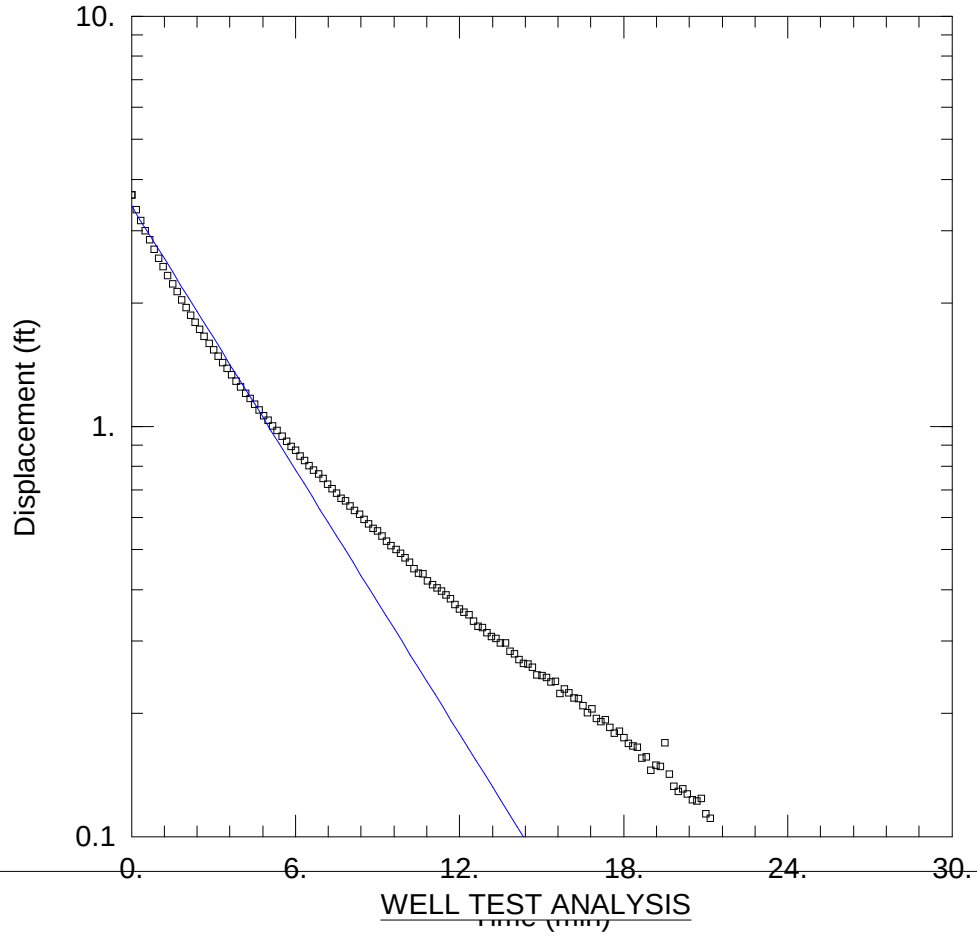
WELL DATA (PTX06-1169)

Initial Displacement: 3.661 ft
Static Water Column Height: 18.2 ft
Total Well Penetration Depth: 18.2 ft
Screen Length: 18.2 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.759 ft/day
y0 = 3.45 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-1170.aqt
Date: 12/03/14 Time: 09:35:43

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-1170
Test Date: 11-21-2014

AQUIFER DATA

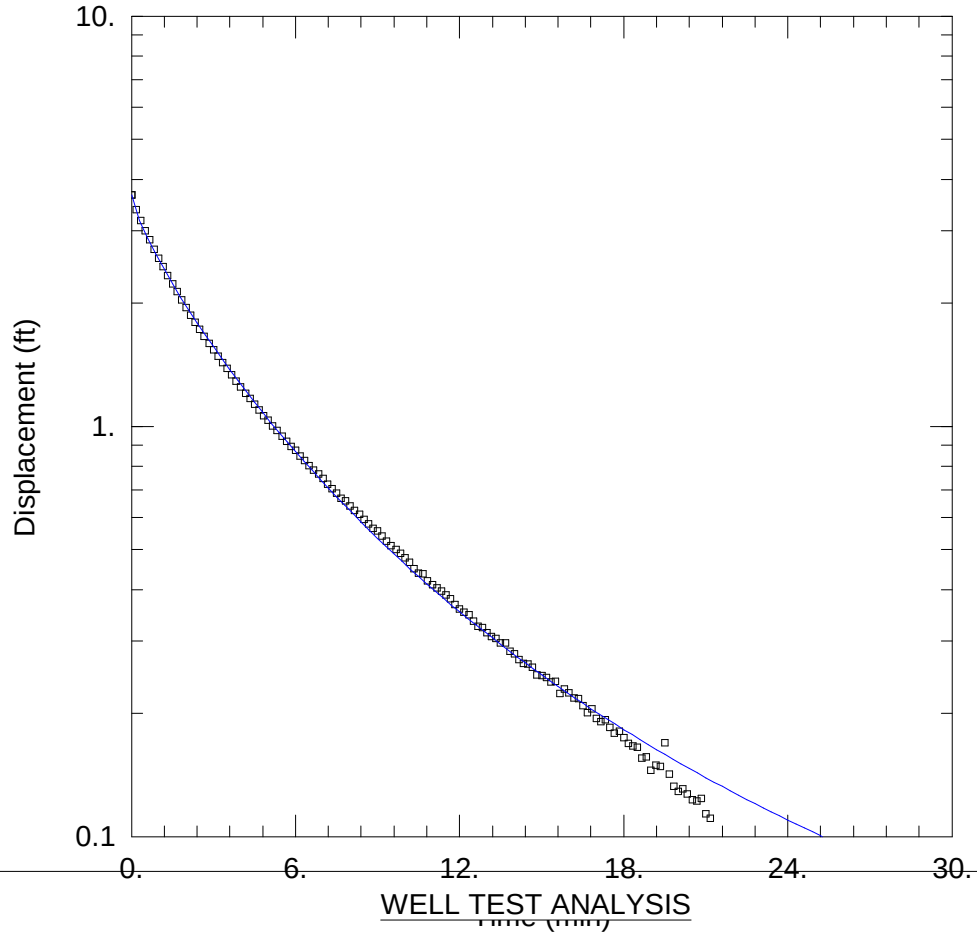
Saturated Thickness: 18.2 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PTX06-1169)

Initial Displacement: 3.661 ft
Static Water Column Height: 18.2 ft
Total Well Penetration Depth: 18.2 ft
Screen Length: 18.2 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.315 ft/day
y0 = 3.447 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-1170.aqt
Date: 12/03/14 Time: 09:36:33

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-1170
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 18.2 ft

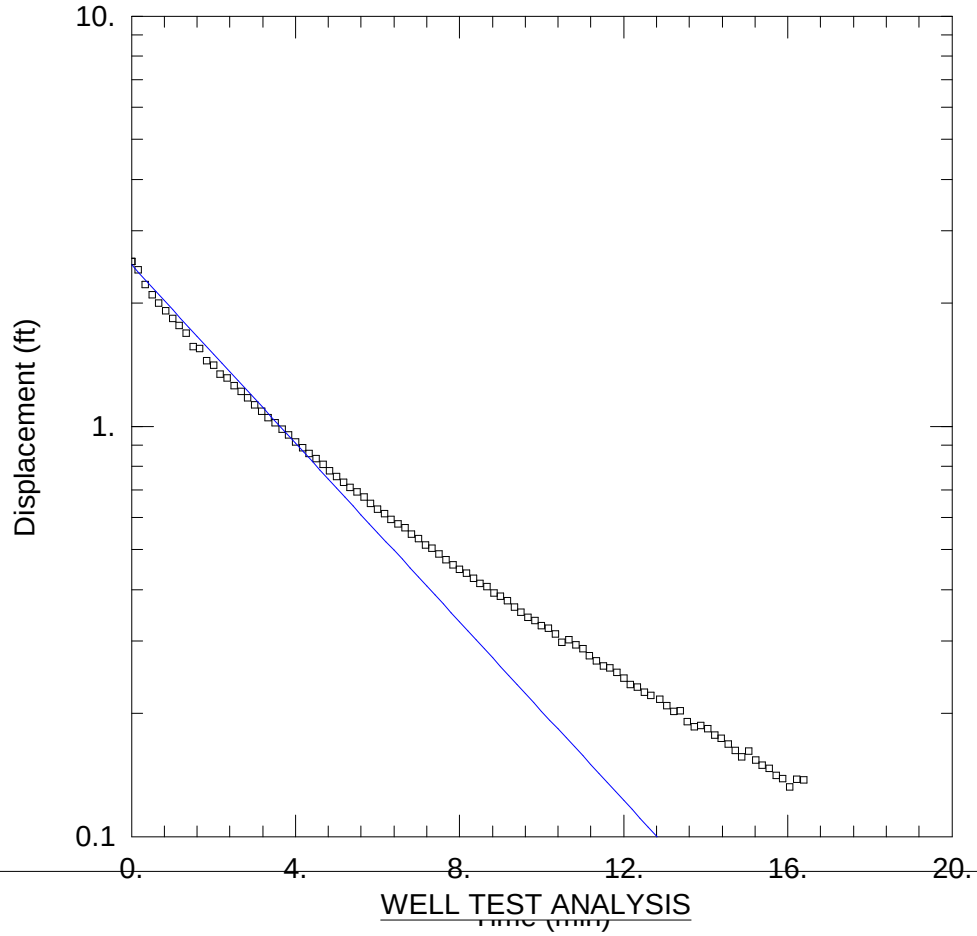
WELL DATA (PTX06-1169)

Initial Displacement: 3.661 ft
Total Well Penetration Depth: 18.2 ft
Casing Radius: 0.167 ft
Static Water Column Height: 18.2 ft
Screen Length: 18.2 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.8349 ft/day
Kz/Kr = 0.1
Ss = 4.37E-5 ft^{-1}



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB-087.aqt
Date: 12/03/14 Time: 09:30:21

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB087
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 18.6 ft
Anisotropy Ratio (Kz/Kr): 0.1

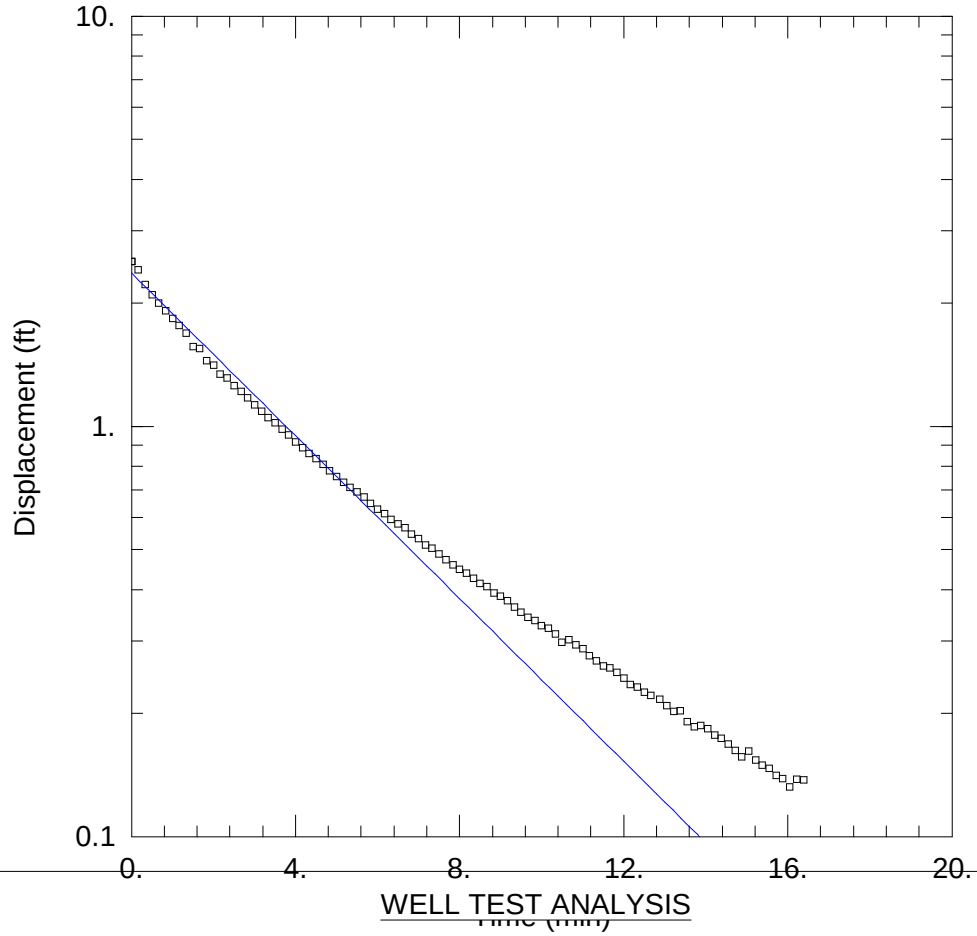
WELL DATA (PTX06-ISB087)

Initial Displacement: 2.524 ft
Static Water Column Height: 18.6 ft
Total Well Penetration Depth: 18.6 ft
Screen Length: 18.6 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.7228 ft/day
y0 = 2.476 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB-087.aqt
Date: 12/03/14 Time: 09:31:57

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB087
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 18.6 ft
Anisotropy Ratio (Kz/Kr): 0.1

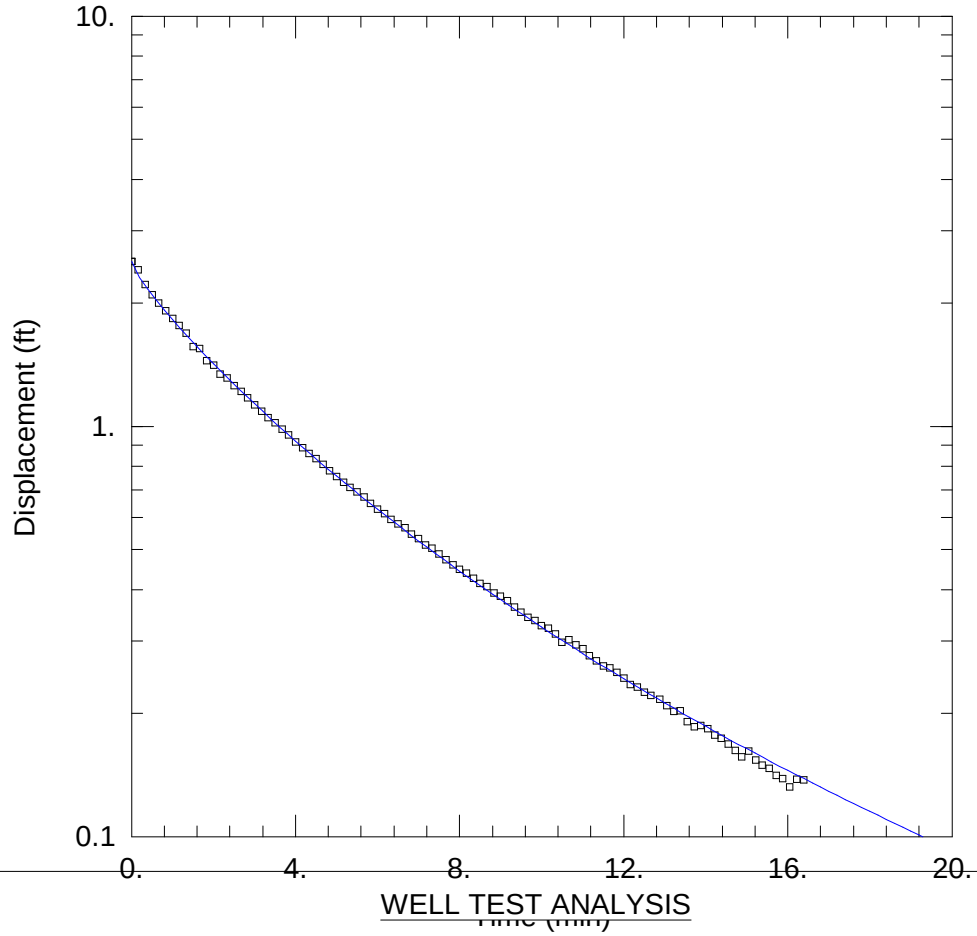
WELL DATA (PTX06-ISB087)

Initial Displacement: 2.524 ft
Static Water Column Height: 18.6 ft
Total Well Penetration Depth: 18.6 ft
Screen Length: 18.6 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 1.189 ft/day
y0 = 2.364 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB-087.aqt
Date: 12/03/14 Time: 09:32:45

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB087
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 18.6 ft

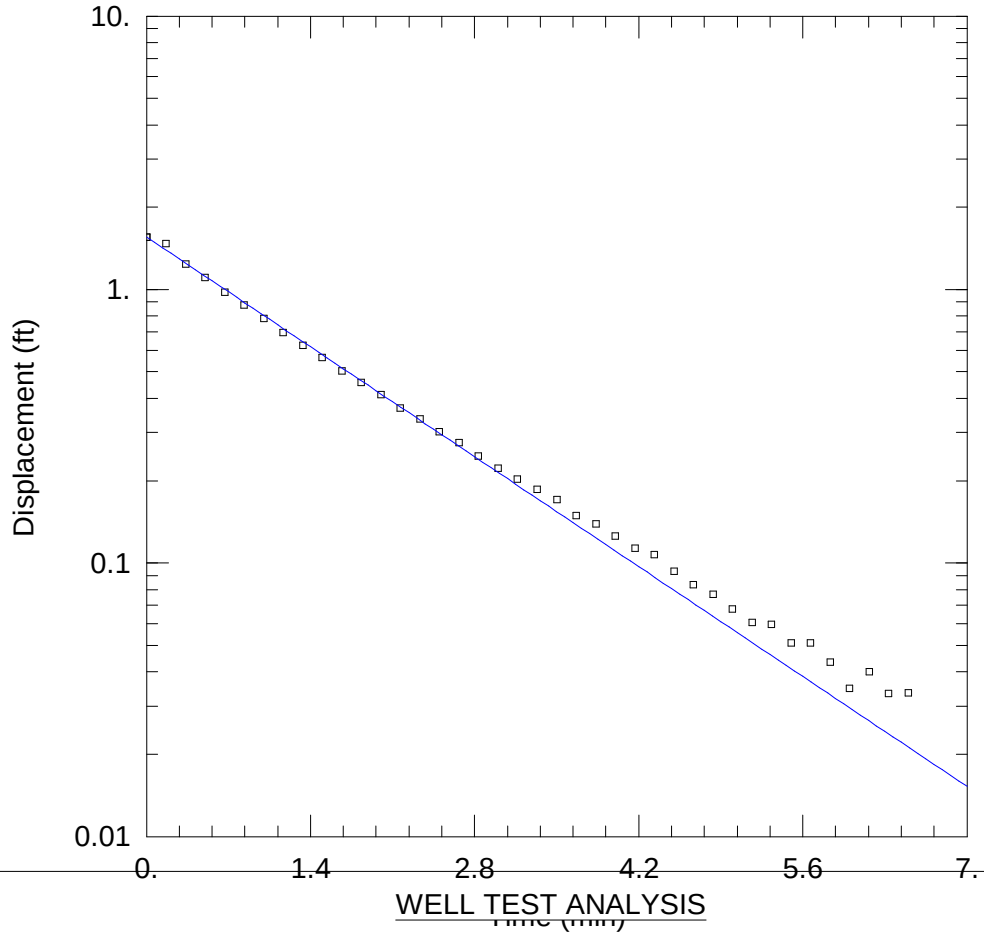
WELL DATA (PTX06-ISB087)

Initial Displacement: 2.524 ft
Total Well Penetration Depth: 18.6 ft
Casing Radius: 0.167 ft
Static Water Column Height: 18.6 ft
Screen Length: 18.6 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.8624 ft/day
Kz/Kr = 0.1
Ss = 1.775E-5 ft^{-1}



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB-088A.aqt
Date: 12/03/14 Time: 09:26:41

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB088A
Test Date: 11-20-2014

AQUIFER DATA

Saturated Thickness: 17.1 ft
Anisotropy Ratio (Kz/Kr): 0.1

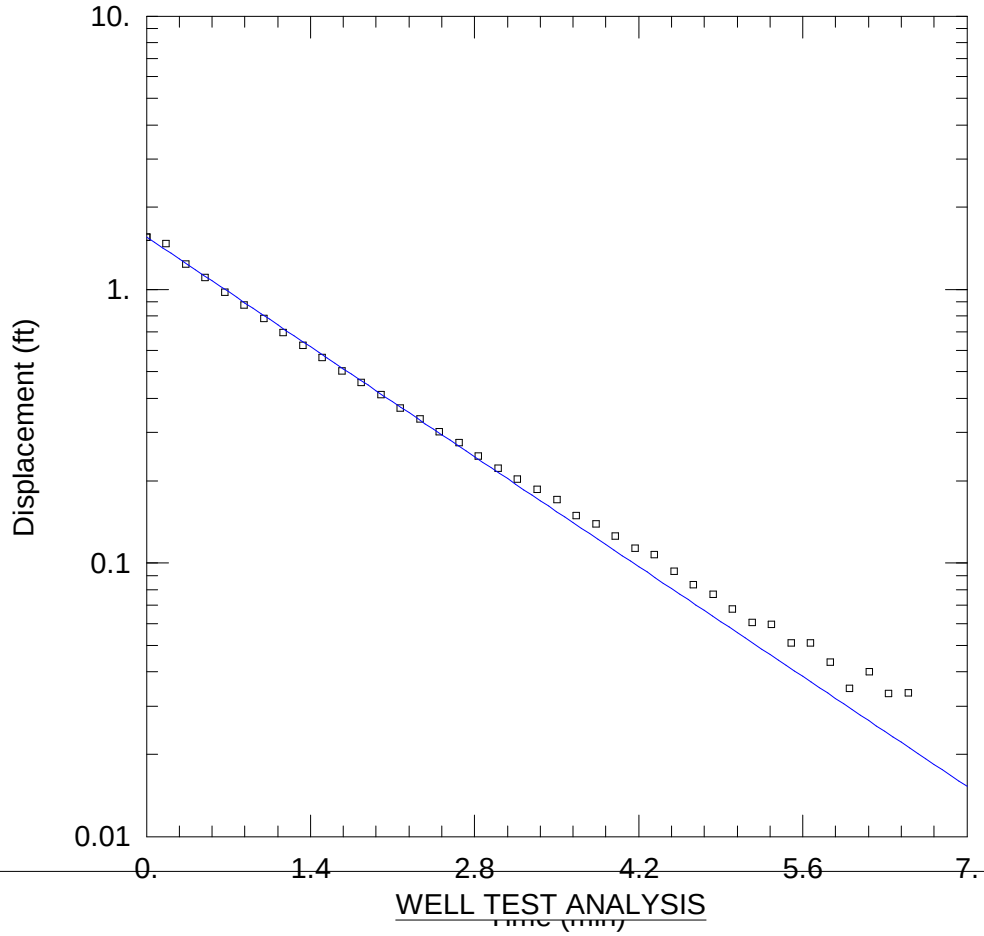
WELL DATA (PTX06-ISB088A)

Initial Displacement: 1.555 ft
Static Water Column Height: 17.1 ft
Total Well Penetration Depth: 17.1 ft
Screen Length: 17.1 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 2.025 ft/day
y0 = 1.557 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB-088A.aqt
Date: 12/03/14 Time: 09:27:26

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB088A
Test Date: 11-20-2014

AQUIFER DATA

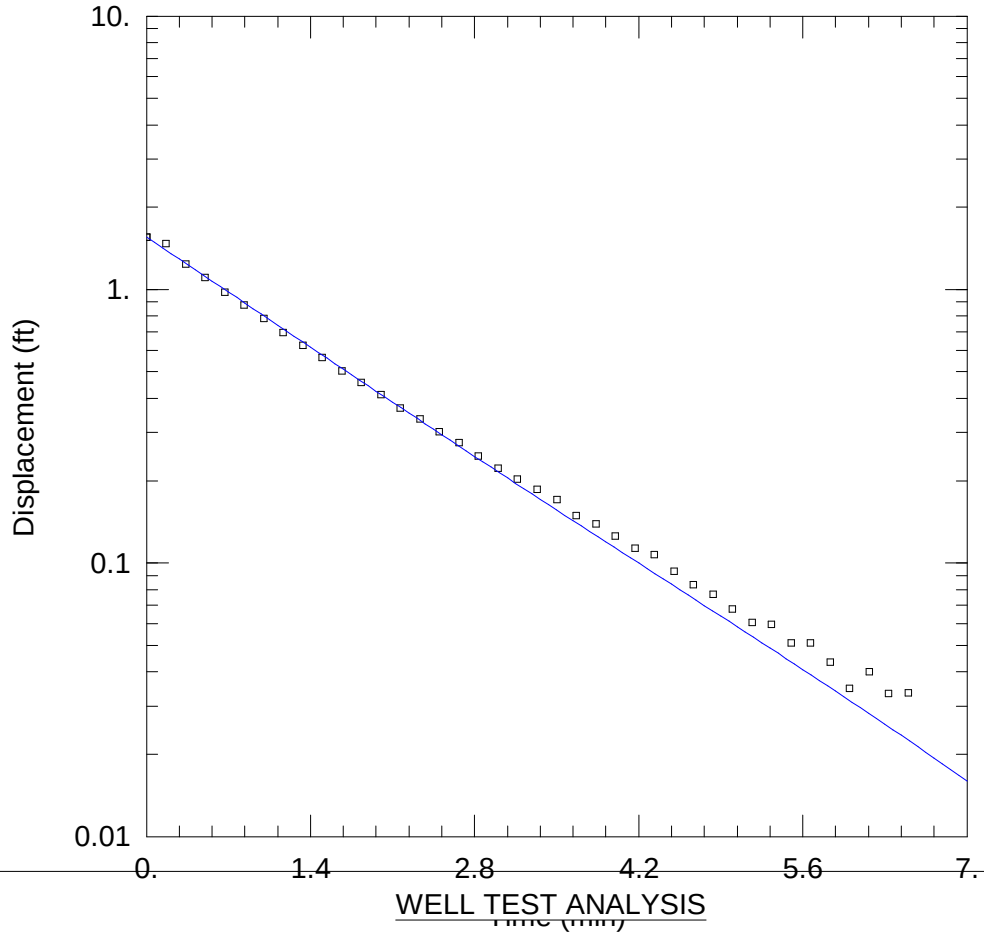
Saturated Thickness: 17.1 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PTX06-ISB088A)

Initial Displacement: 1.555 ft
Static Water Column Height: 17.1 ft
Total Well Penetration Depth: 17.1 ft
Screen Length: 17.1 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 3.743 ft/day
y0 = 1.557 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB-088A.aqt
Date: 12/03/14 Time: 09:28:16

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB088A
Test Date: 11-20-2014

AQUIFER DATA

Saturated Thickness: 17.1 ft

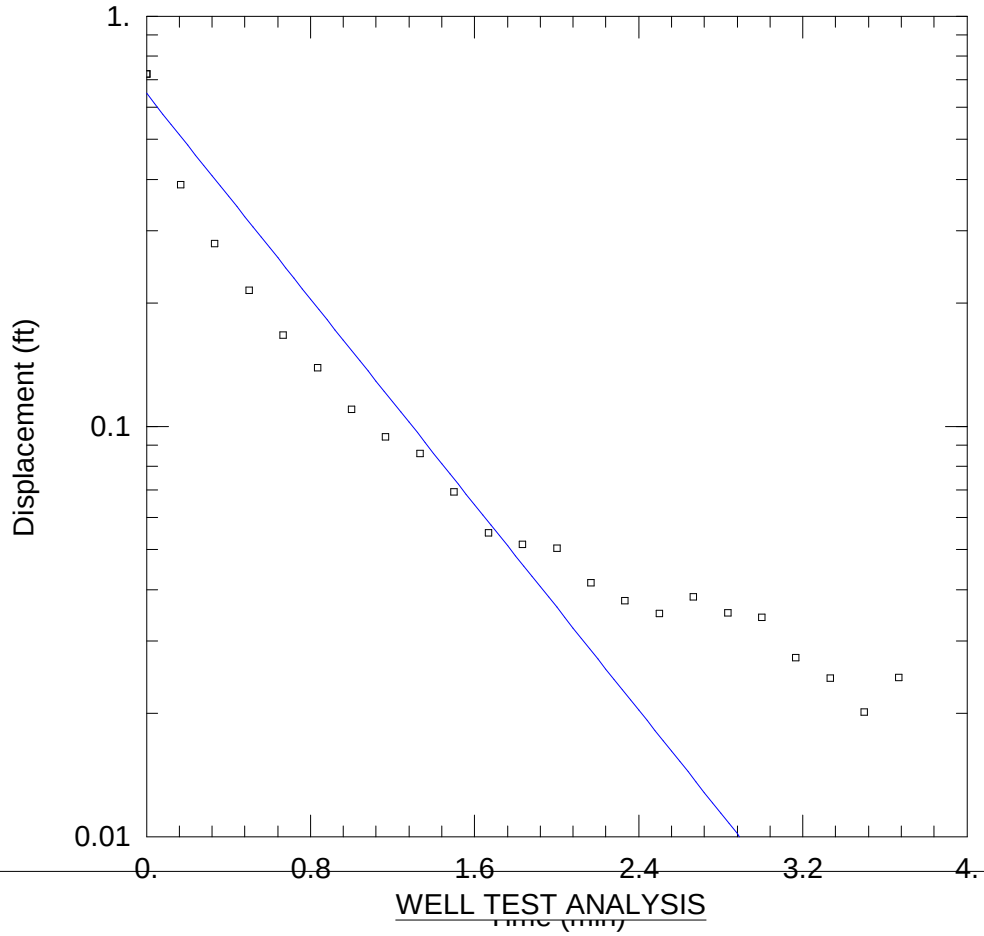
WELL DATA (PTX06-ISB088A)

Initial Displacement: 1.555 ft
Total Well Penetration Depth: 17.1 ft
Casing Radius: 0.167 ft
Static Water Column Height: 17.1 ft
Screen Length: 17.1 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 3.002 ft/day
Kz/Kr = 0.1
Ss = 2.735E-12 ft^{-1}



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB-096.aqt
Date: 12/03/14 Time: 09:23:06

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB096
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 17. ft Anisotropy Ratio (Kz/Kr): 0.1

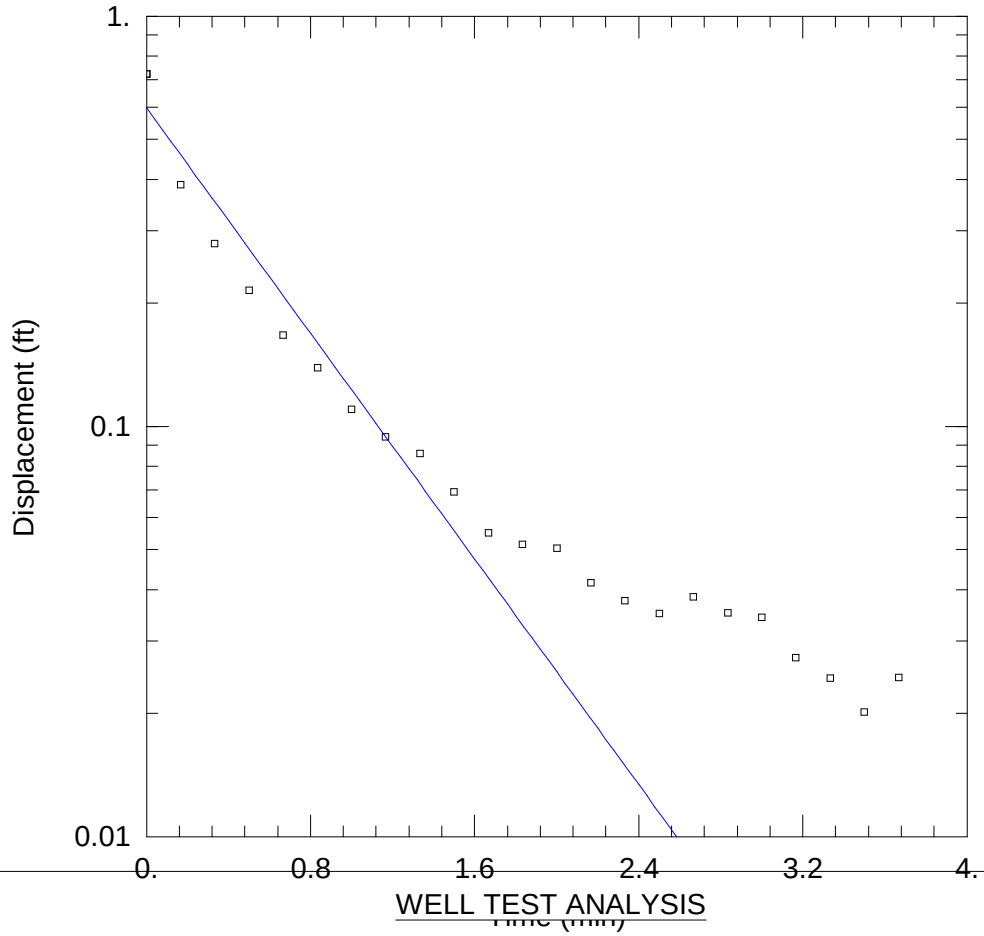
WELL DATA (PTX06-ISB096)

Initial Displacement: 0.7234 ft Static Water Column Height: 17. ft
Total Well Penetration Depth: 17. ft Screen Length: 17. ft
Casing Radius: 0.167 ft Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 4.439 ft/day y0 = 0.6478 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB-096.aqt
Date: 12/03/14 Time: 09:24:10

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB096
Test Date: 11-21-2014

AQUIFER DATA

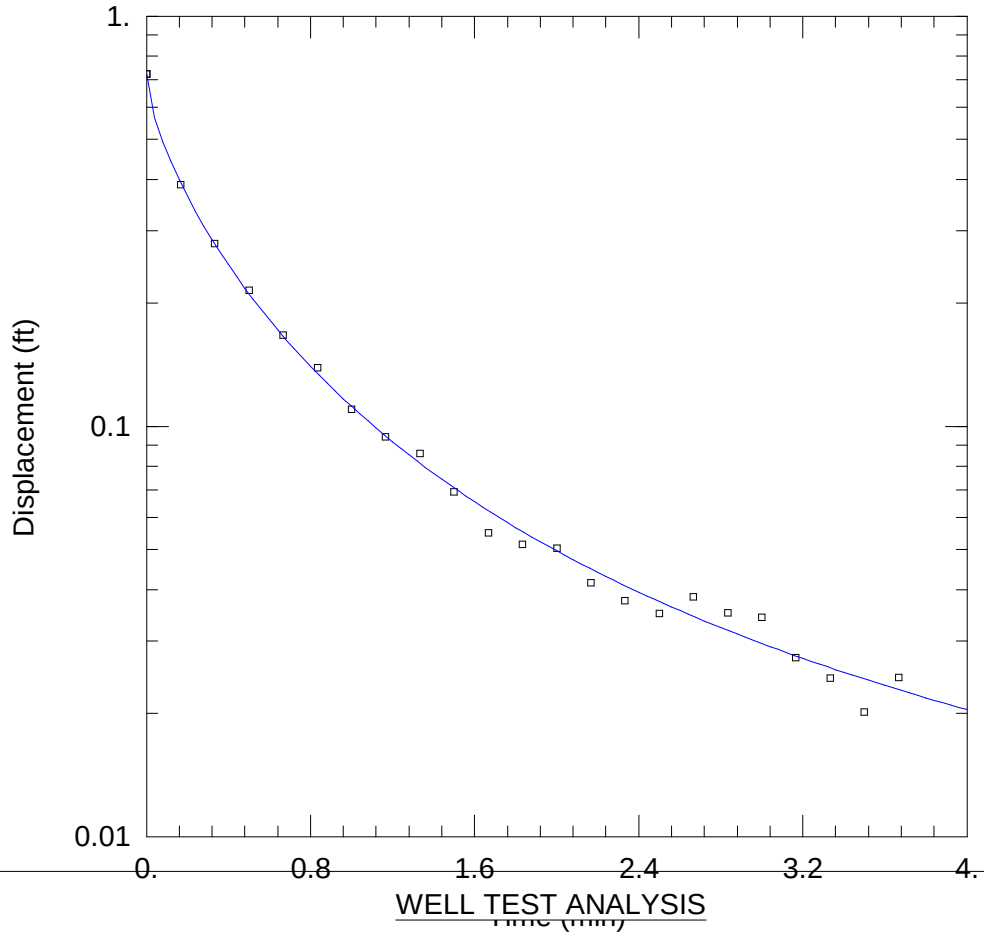
Saturated Thickness: 17. ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PTX06-ISB096)

Initial Displacement: 0.7234 ft
Static Water Column Height: 17. ft
Total Well Penetration Depth: 17. ft
Screen Length: 17. ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 9.017 ft/day
y0 = 0.5976 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB-096.aqt
Date: 12/03/14 Time: 09:25:05

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB096
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 17. ft

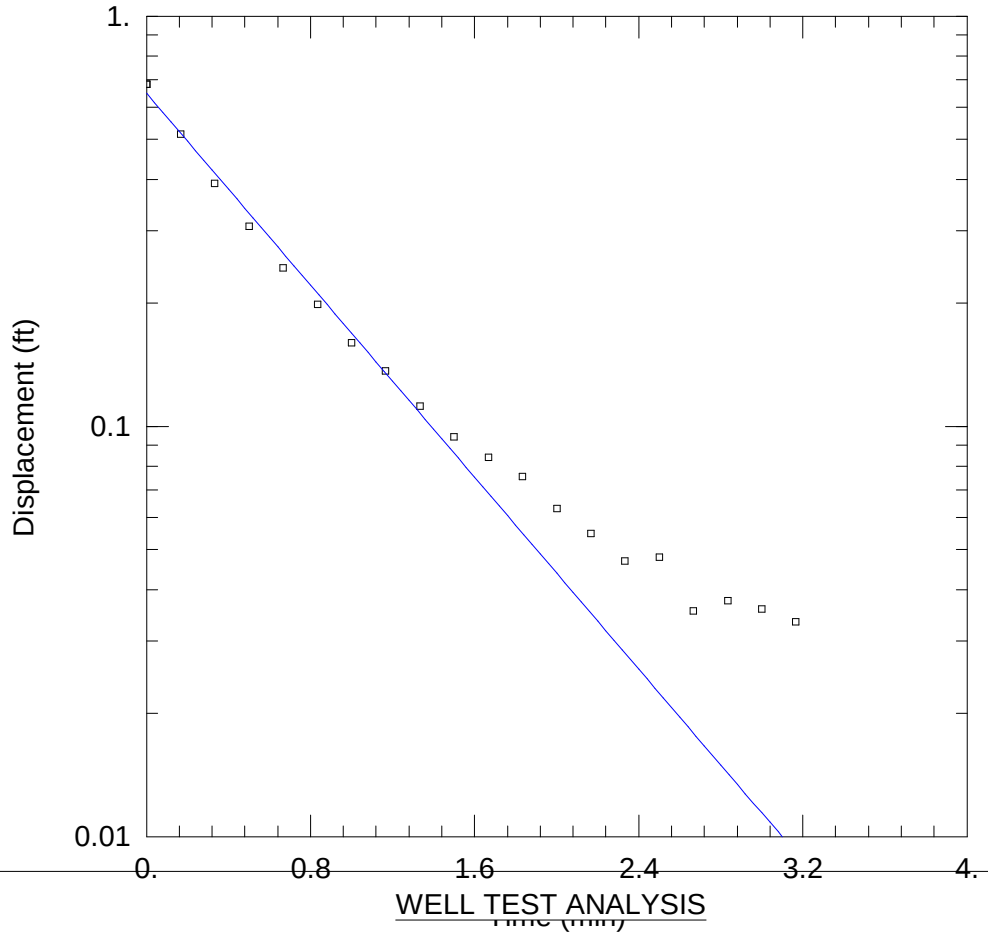
WELL DATA (PTX06-ISB096)

Initial Displacement: 0.7234 ft
Total Well Penetration Depth: 17. ft
Casing Radius: 0.167 ft
Static Water Column Height: 17. ft
Screen Length: 17. ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 5.515 ft/day
Kz/Kr = 0.1
Ss = 0.0005126 ft^{-1}



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB101.aqt
Date: 12/03/14 Time: 09:19:06

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB101
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 0.1

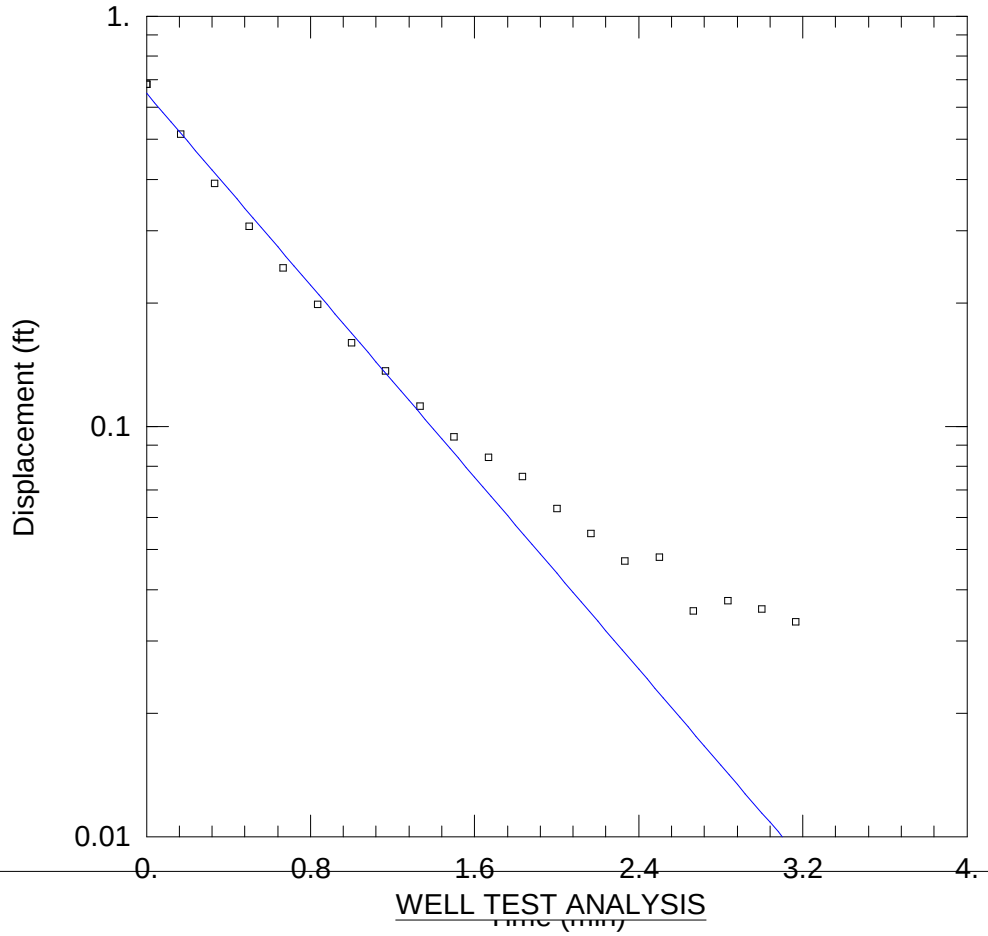
WELL DATA (PTX06-ISB101)

Initial Displacement: 0.6812 ft
Total Well Penetration Depth: 15.8 ft
Casing Radius: 0.167 ft
Static Water Column Height: 15.8 ft
Screen Length: 15.8 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 4.364 ft/day y0 = 0.6485 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB101.aqt
Date: 12/03/14 Time: 09:20:15

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB101
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 15.8 ft Anisotropy Ratio (Kz/Kr): 0.1

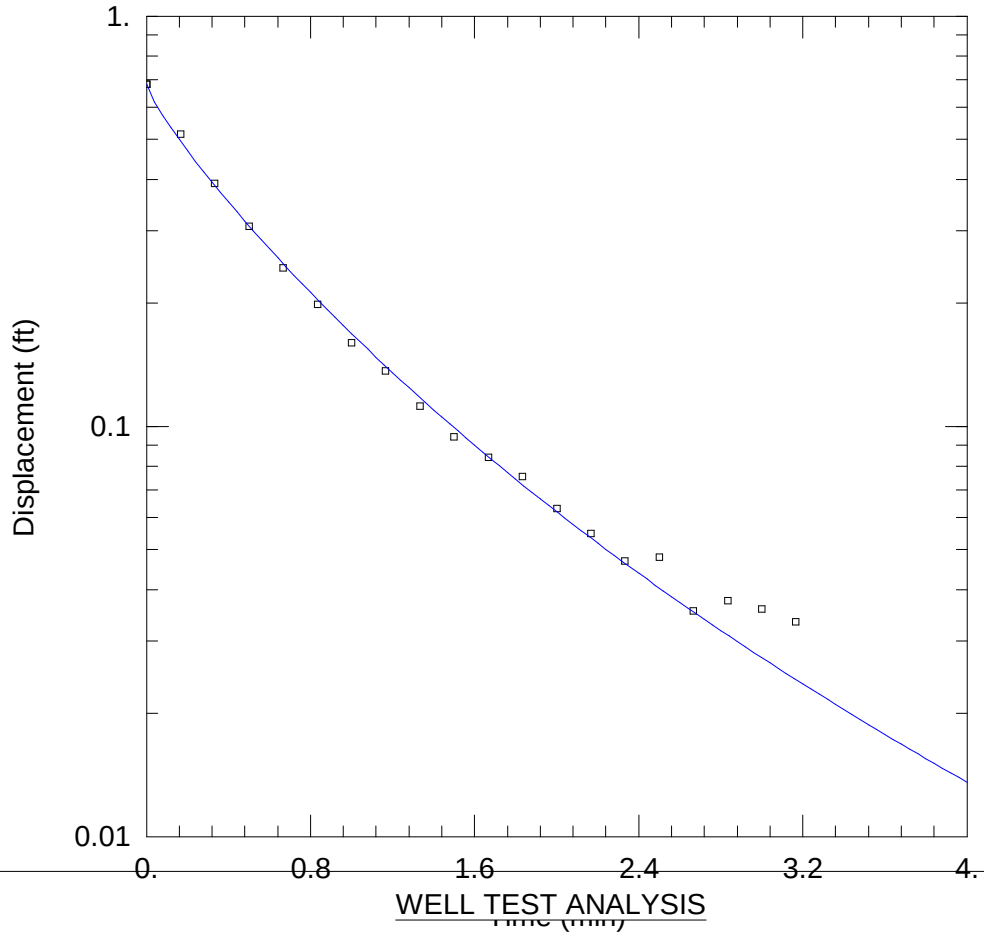
WELL DATA (PTX06-ISB101)

Initial Displacement: 0.6812 ft Static Water Column Height: 15.8 ft
Total Well Penetration Depth: 15.8 ft Screen Length: 15.8 ft
Casing Radius: 0.167 ft Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev

K = 8.253 ft/day y0 = 0.6485 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB101.aqt
Date: 12/03/14 Time: 09:20:59

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB101
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 15.8 ft

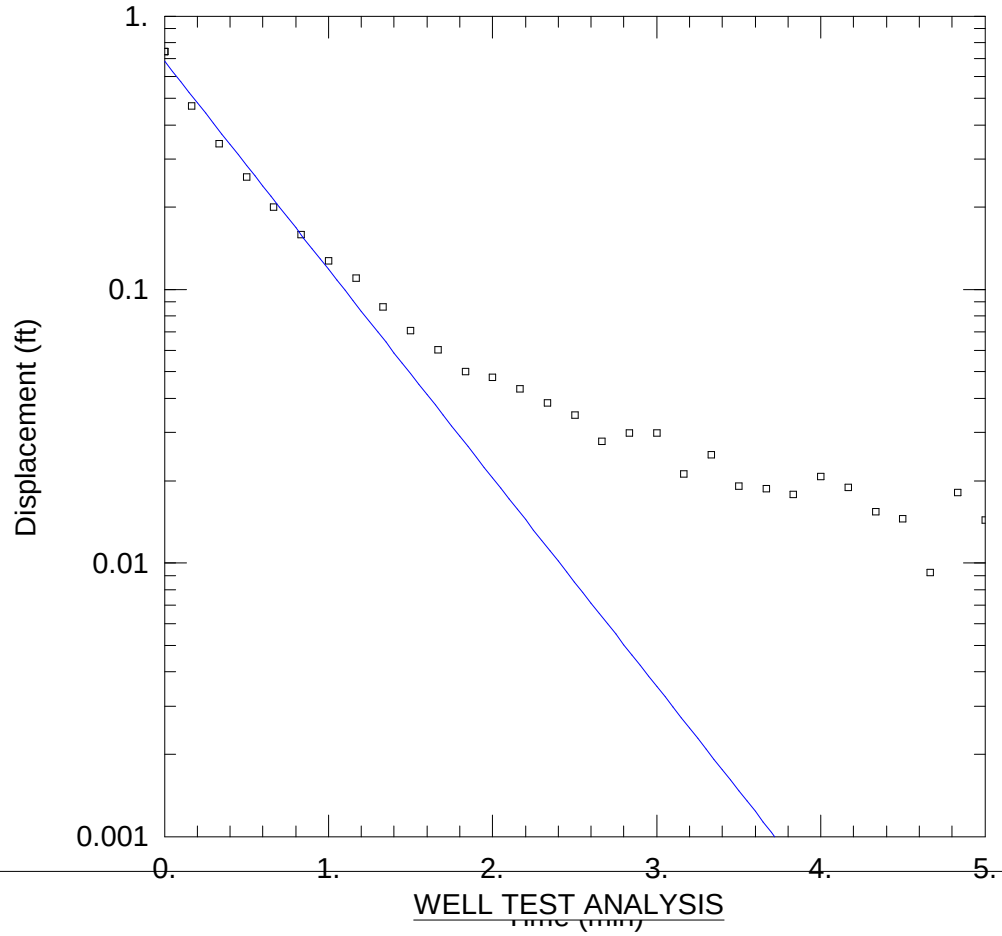
WELL DATA (PTX06-ISB101)

Initial Displacement: 0.6812 ft
Total Well Penetration Depth: 15.8 ft
Casing Radius: 0.167 ft
Static Water Column Height: 15.8 ft
Screen Length: 15.8 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 6.177 ft/day
Kz/Kr = 0.1
Ss = 1.627E-5 ft^{-1}



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB104.aqt
Date: 12/03/14 Time: 09:15:52

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB104
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 18.3 ft
Anisotropy Ratio (Kz/Kr): 0.1

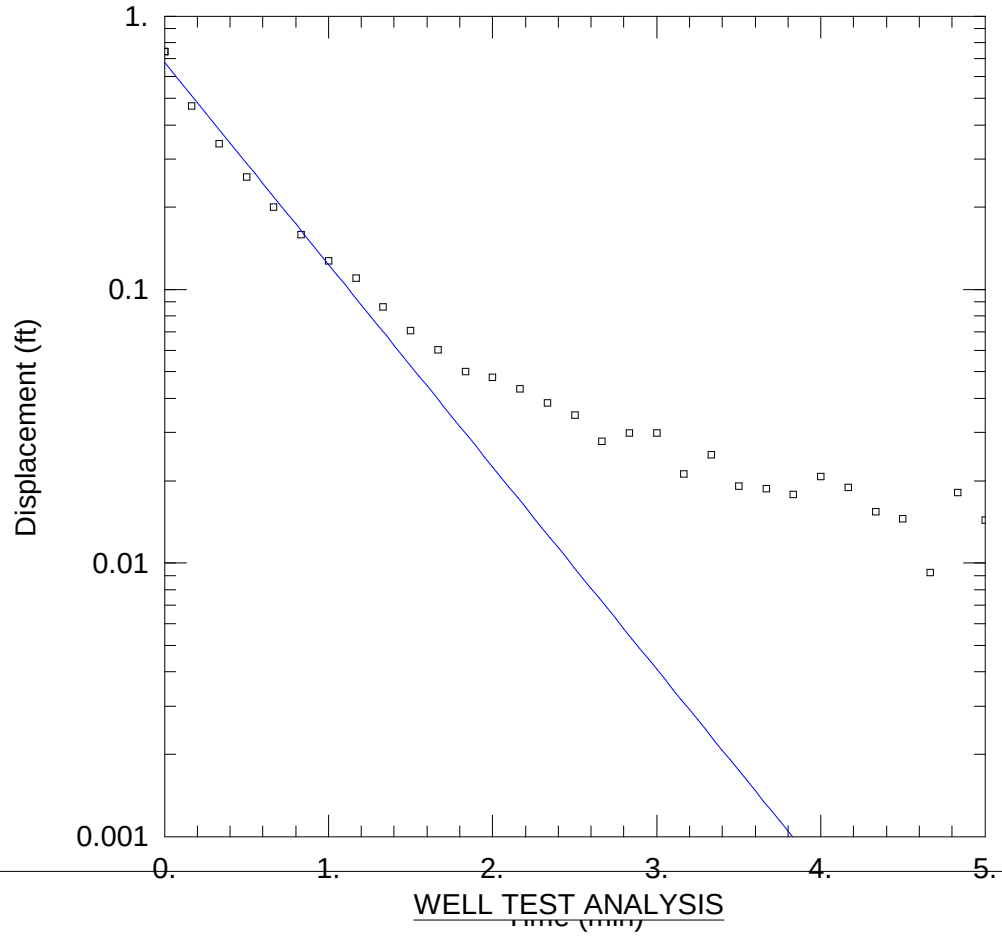
WELL DATA (PTX06-ISB104)

Initial Displacement: 0.7406 ft
Static Water Column Height: 18.3 ft
Total Well Penetration Depth: 18.3 ft
Screen Length: 18.3 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 5.123 ft/day
y0 = 0.6852 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB104.aqt
Date: 12/03/14 Time: 09:17:01

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB104
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 18.3 ft
Anisotropy Ratio (Kz/Kr): 0.1

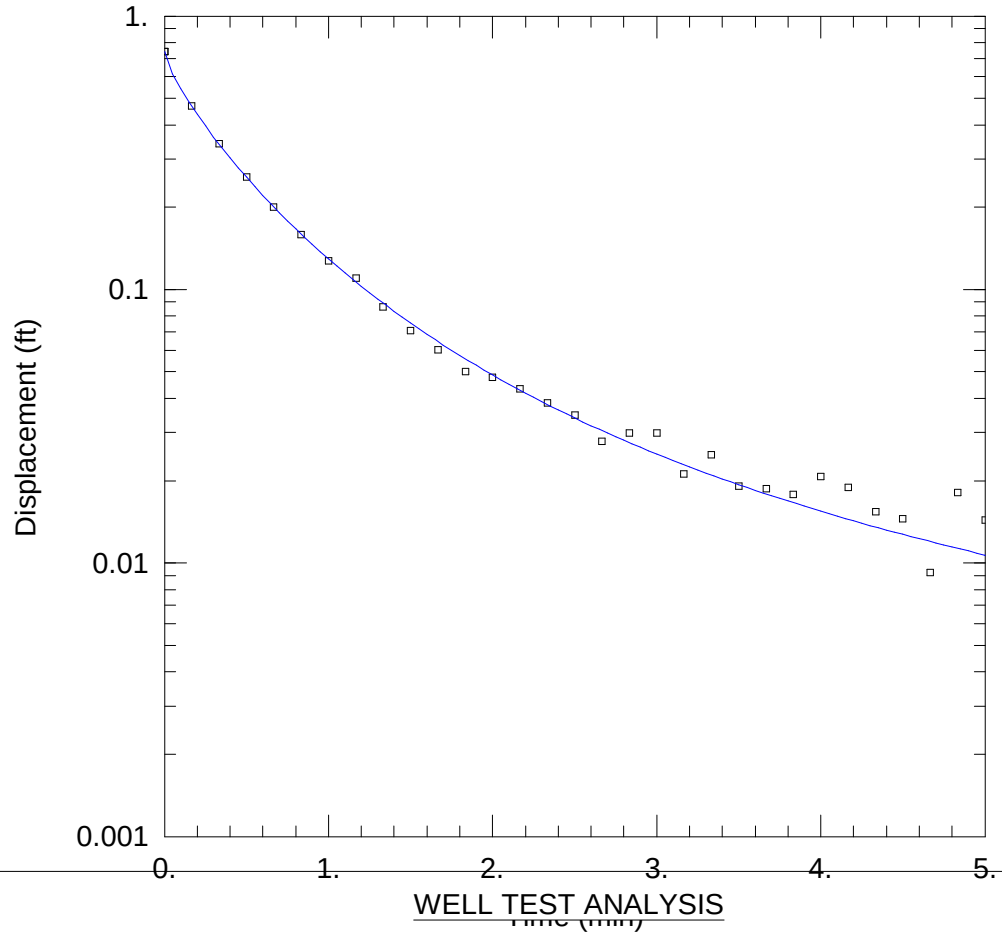
WELL DATA (PTX06-ISB104)

Initial Displacement: 0.7406 ft
Static Water Column Height: 18.3 ft
Total Well Penetration Depth: 18.3 ft
Screen Length: 18.3 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 9.017 ft/day
y0 = 0.6784 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB104.aqt
Date: 12/03/14 Time: 09:18:08

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB104
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 18.3 ft

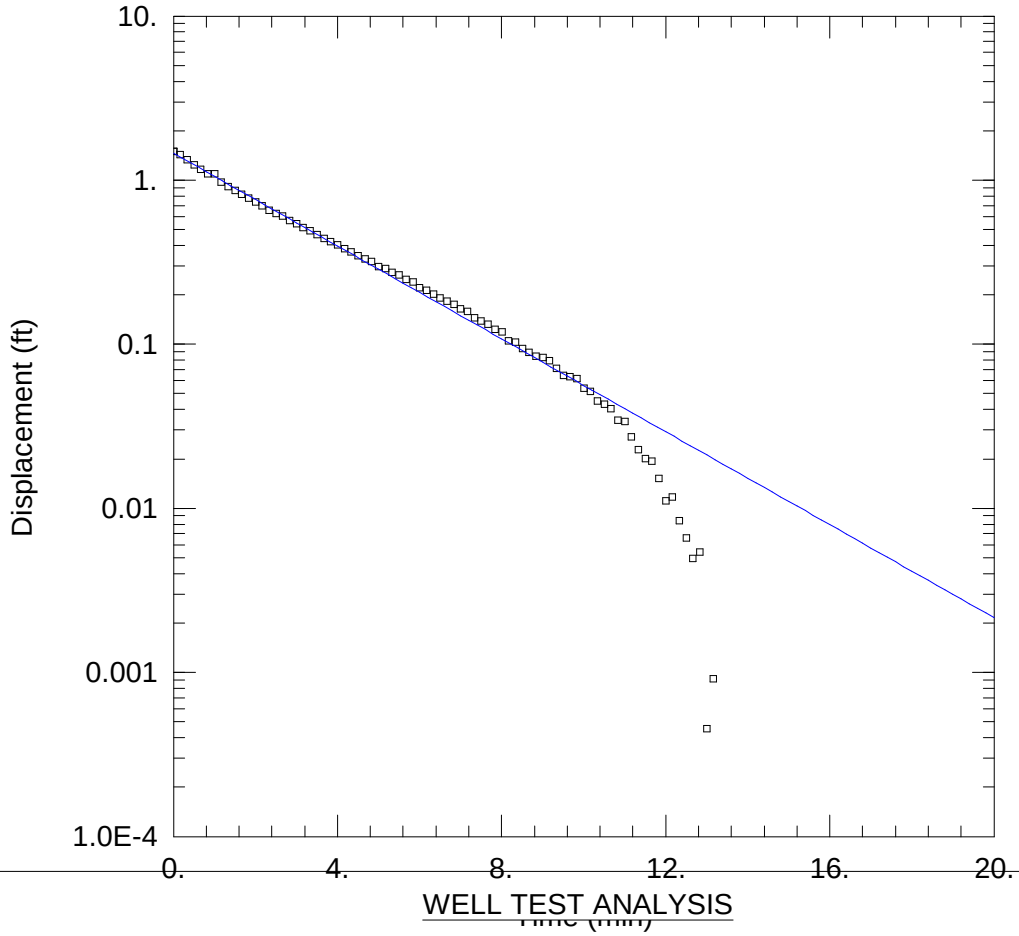
WELL DATA (PTX06-ISB104)

Initial Displacement: 0.7406 ft
Total Well Penetration Depth: 18.3 ft
Casing Radius: 0.167 ft
Static Water Column Height: 18.3 ft
Screen Length: 18.3 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 6.235 ft/day
Kz/Kr = 0.1
Ss = 6.238E-5 ft^{-1}



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB105.aqt
Date: 12/03/14 Time: 09:14:14

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB105
Test Date: 11-21-2014

AQUIFER DATA

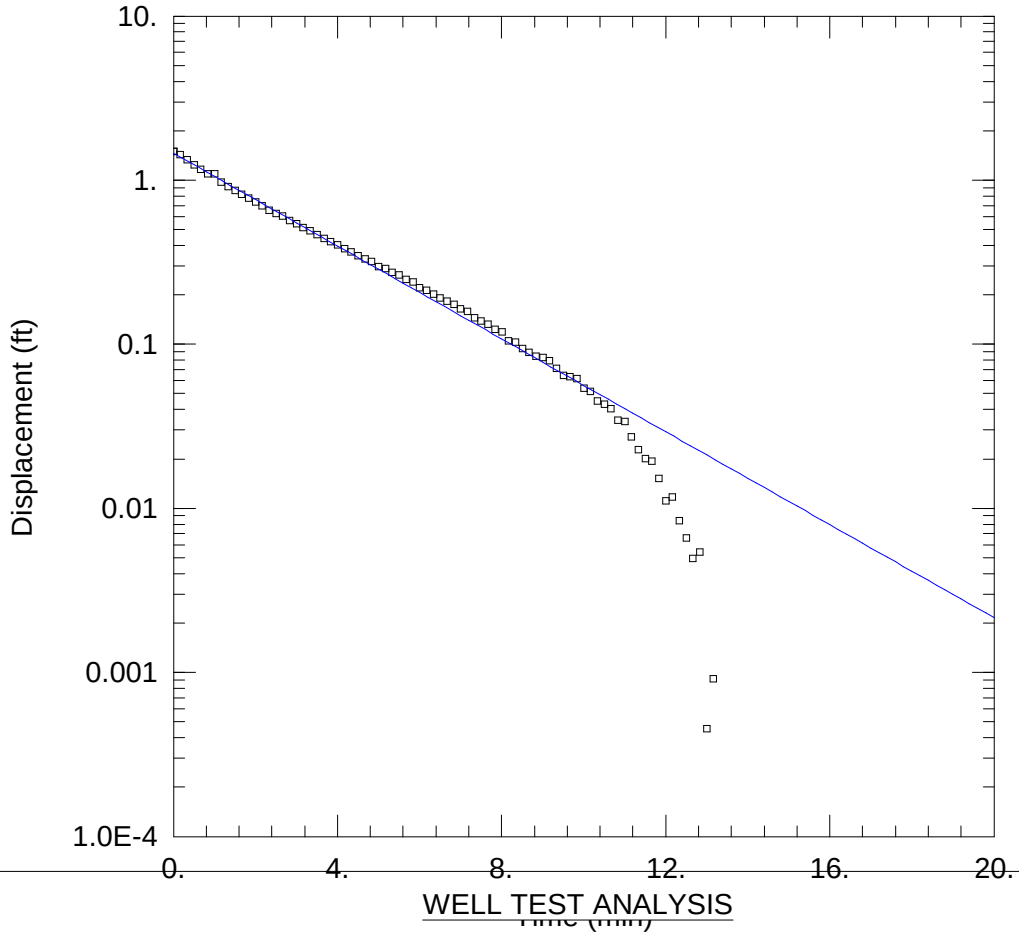
Saturated Thickness: 19. ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PTX06-ISB105)

Initial Displacement: 1.497 ft
Static Water Column Height: 19. ft
Total Well Penetration Depth: 19. ft
Screen Length: 19. ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 0.9256 ft/day
y0 = 1.461 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB105.aqt
Date: 12/03/14 Time: 09:13:08

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB105
Test Date: 11-21-2014

AQUIFER DATA

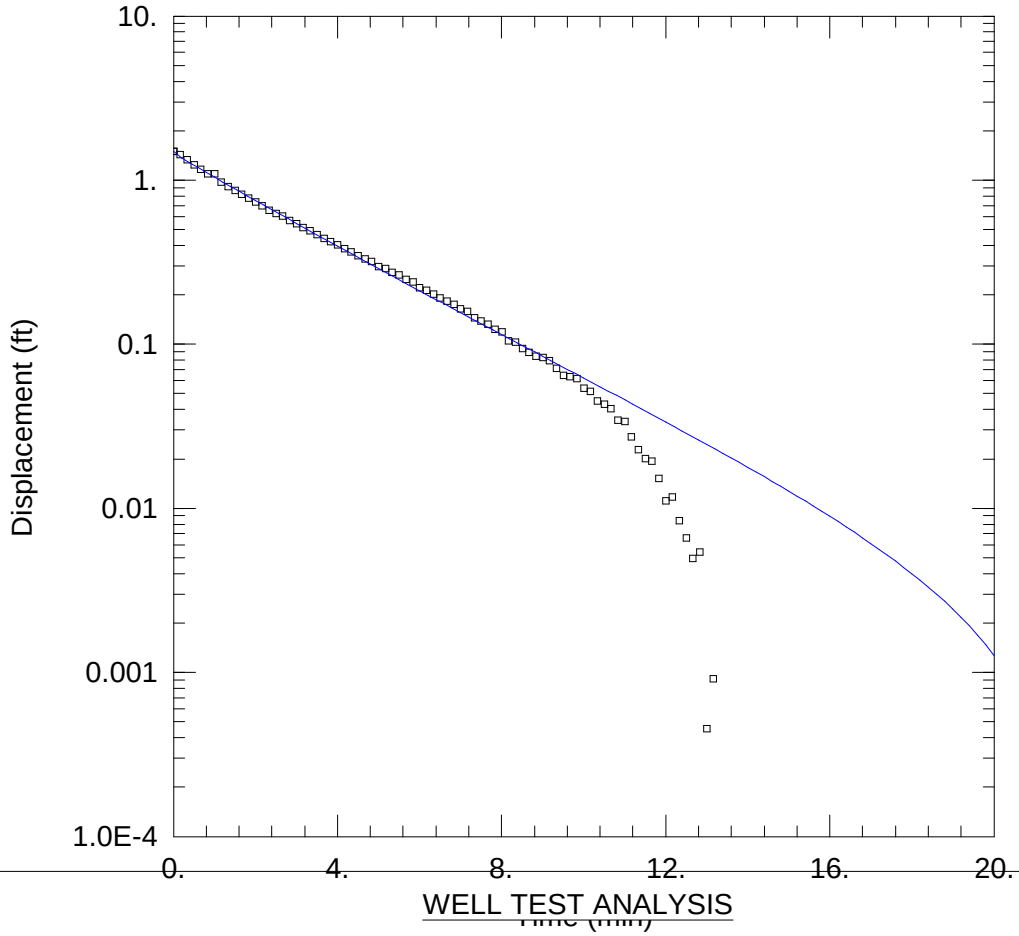
Saturated Thickness: 19. ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PTX06-ISB105)

Initial Displacement: 1.497 ft
Static Water Column Height: 19. ft
Total Well Penetration Depth: 19. ft
Screen Length: 19. ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 1.661 ft/day
y0 = 1.461 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB105.aqt
Date: 12/03/14 Time: 09:12:05

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB105
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 19. ft

WELL DATA (PTX06-ISB105)

Initial Displacement: 1.497 ft
Total Well Penetration Depth: 19. ft
Casing Radius: 0.167 ft

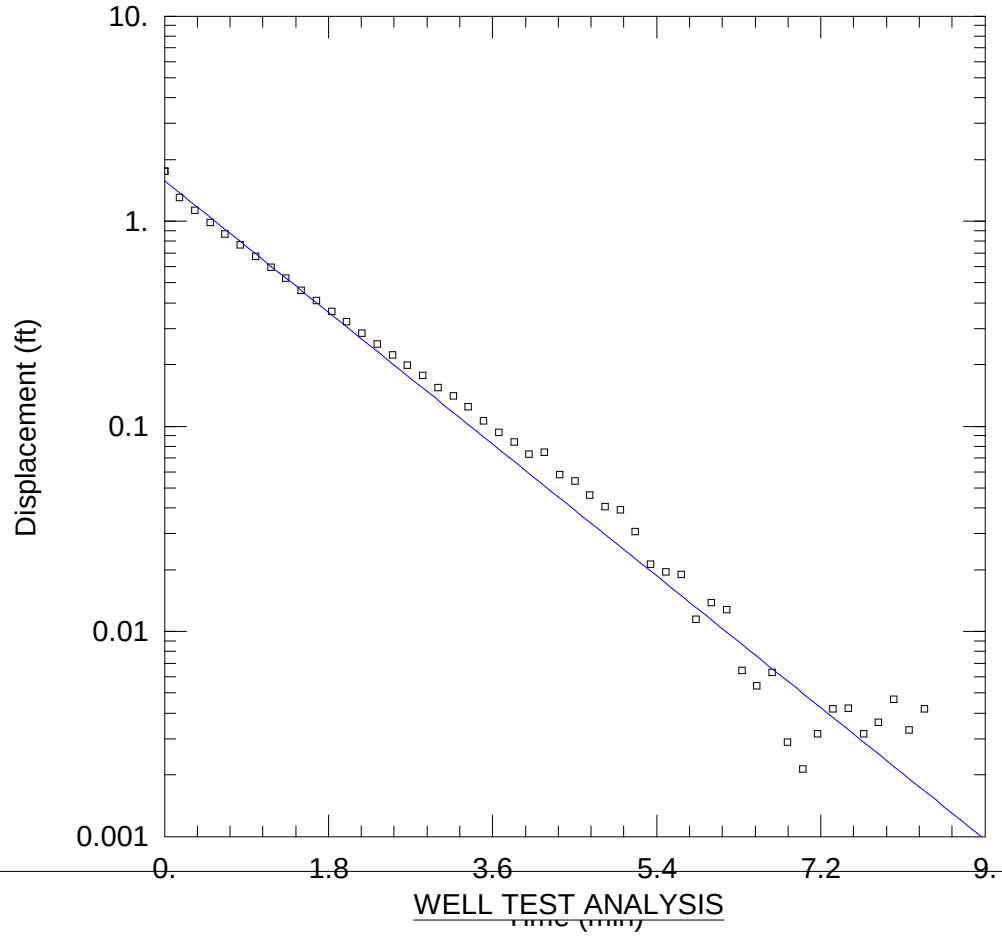
Static Water Column Height: 19. ft
Screen Length: 19. ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 1.393 ft/day
Kz/Kr = 0.1

Ss = 9.07E-7 ft^{-1}



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB106.aqt
Date: 12/03/14 Time: 09:00:09

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB106
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 17.6 ft
Anisotropy Ratio (Kz/Kr): 0.1

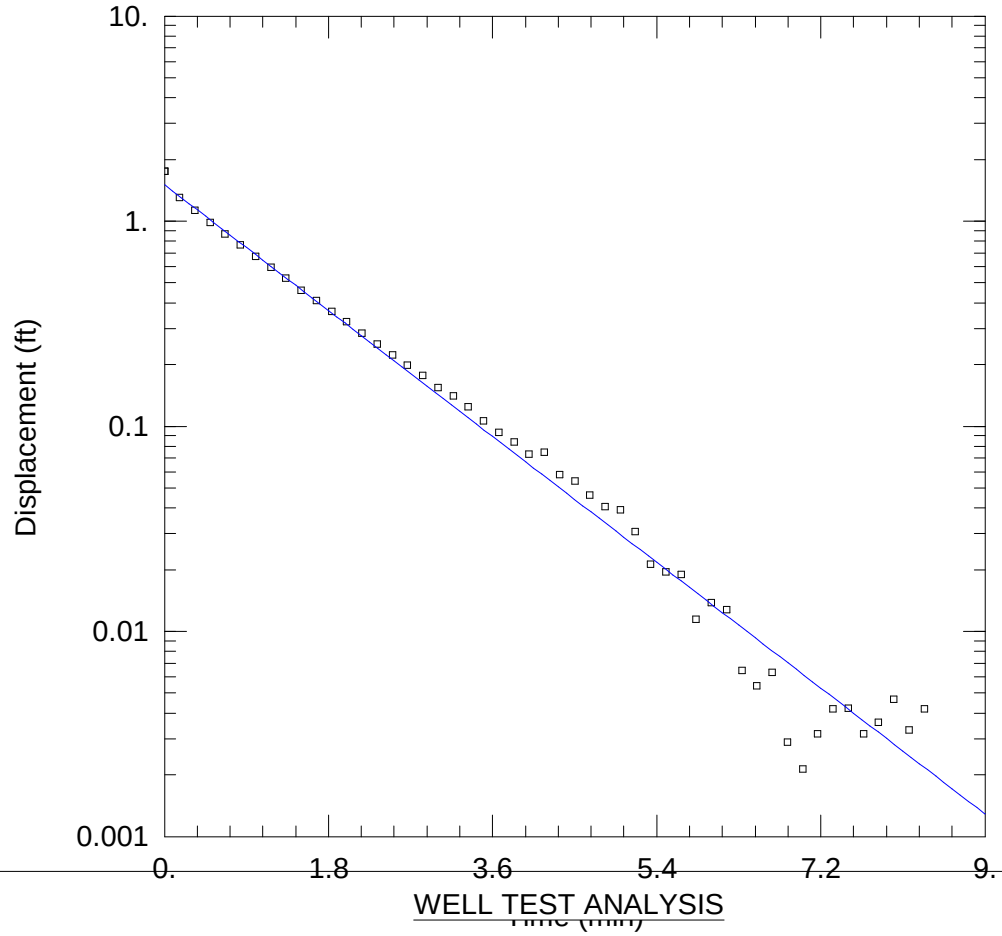
WELL DATA (PTX06-ISB106)

Initial Displacement: 1.747 ft
Static Water Column Height: 17.6 ft
Total Well Penetration Depth: 17.6 ft
Screen Length: 17.6 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 2.467 ft/day
y0 = 1.576 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB106.aqt
Date: 12/03/14 Time: 09:08:57

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB106
Test Date: 11-21-2014

AQUIFER DATA

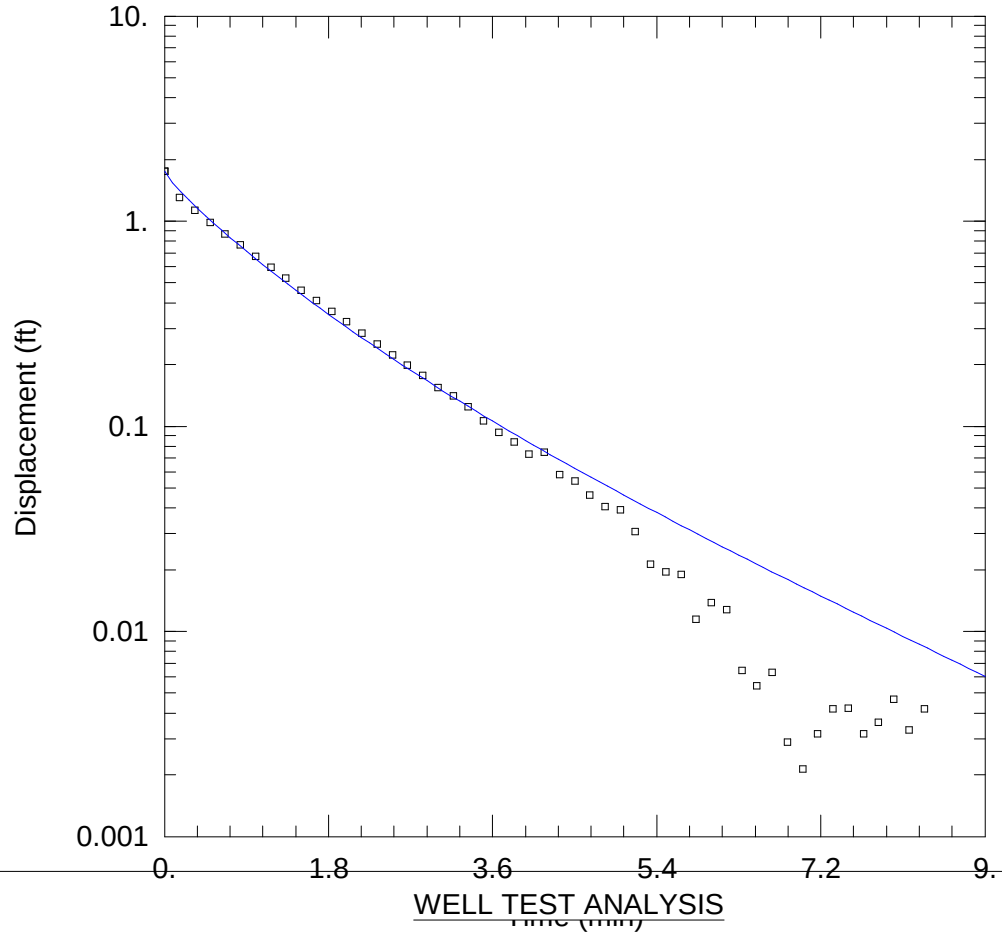
Saturated Thickness: 17.6 ft
Anisotropy Ratio (Kz/Kr): 0.1

WELL DATA (PTX06-ISB106)

Initial Displacement: 1.747 ft
Static Water Column Height: 17.6 ft
Total Well Penetration Depth: 17.6 ft
Screen Length: 17.6 ft
Casing Radius: 0.167 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev
K = 4.319 ft/day
y0 = 1.505 ft



WELL TEST ANALYSIS

Data Set: M:\...\PTX06-ISB106.aqt
Date: 12/03/14 Time: 09:06:37

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 18A-094-002
Location: Zone 11 Expansion Wells
Test Well: PTX06-ISB106
Test Date: 11-21-2014

AQUIFER DATA

Saturated Thickness: 17.6 ft

WELL DATA (PTX06-ISB106)

Initial Displacement: 1.747 ft
Total Well Penetration Depth: 17.6 ft
Casing Radius: 0.167 ft
Static Water Column Height: 17.6 ft
Screen Length: 17.6 ft
Well Radius: 0.4 ft

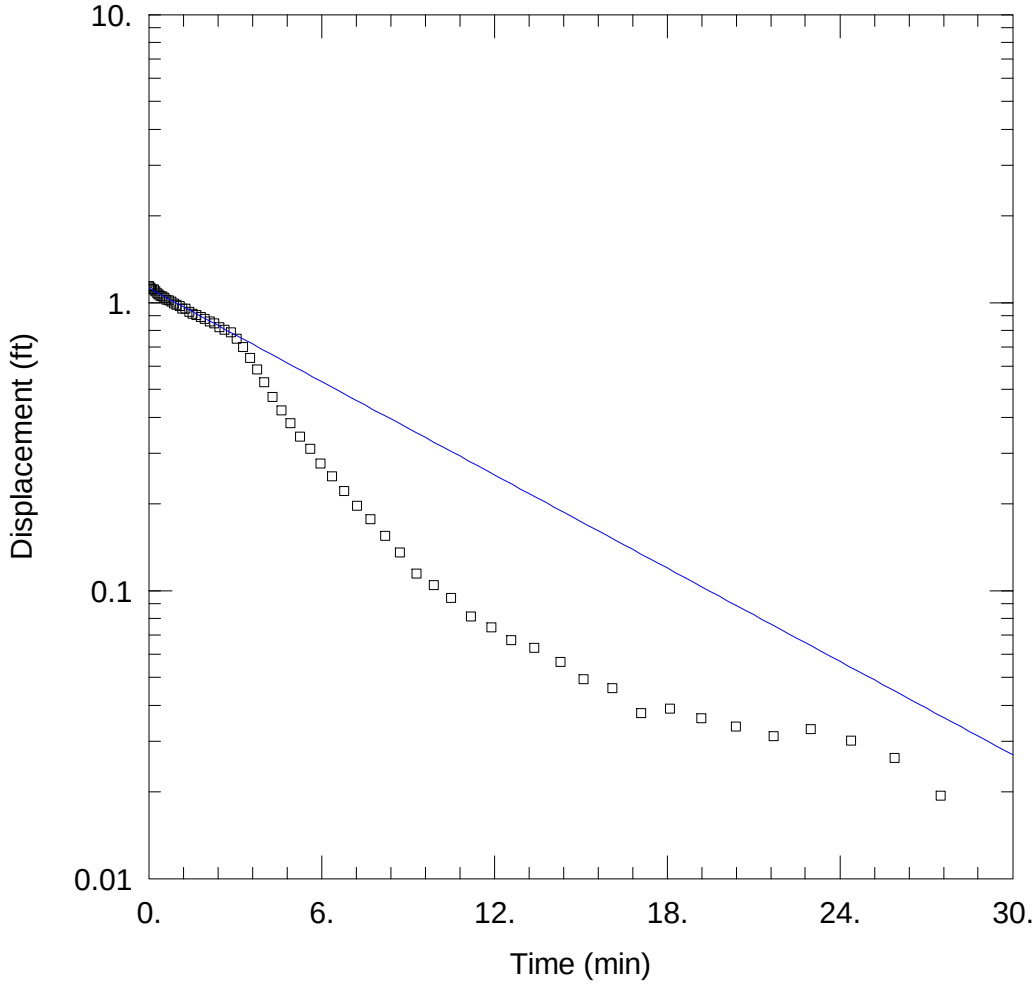
SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 3.859 ft/day
Kz/Kr = 0.1
Ss = 7.749E-6 ft^{-1}

APPENDIX S

2011 SLUG TESTING OUTPUTS



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1012.aqt
Date: 09/29/11 Time: 19:04:55

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1012
Test Date: 9/28/2011

AQUIFER DATA

Saturated Thickness: 14.5 ft Anisotropy Ratio (Kz/Kr): 0.1

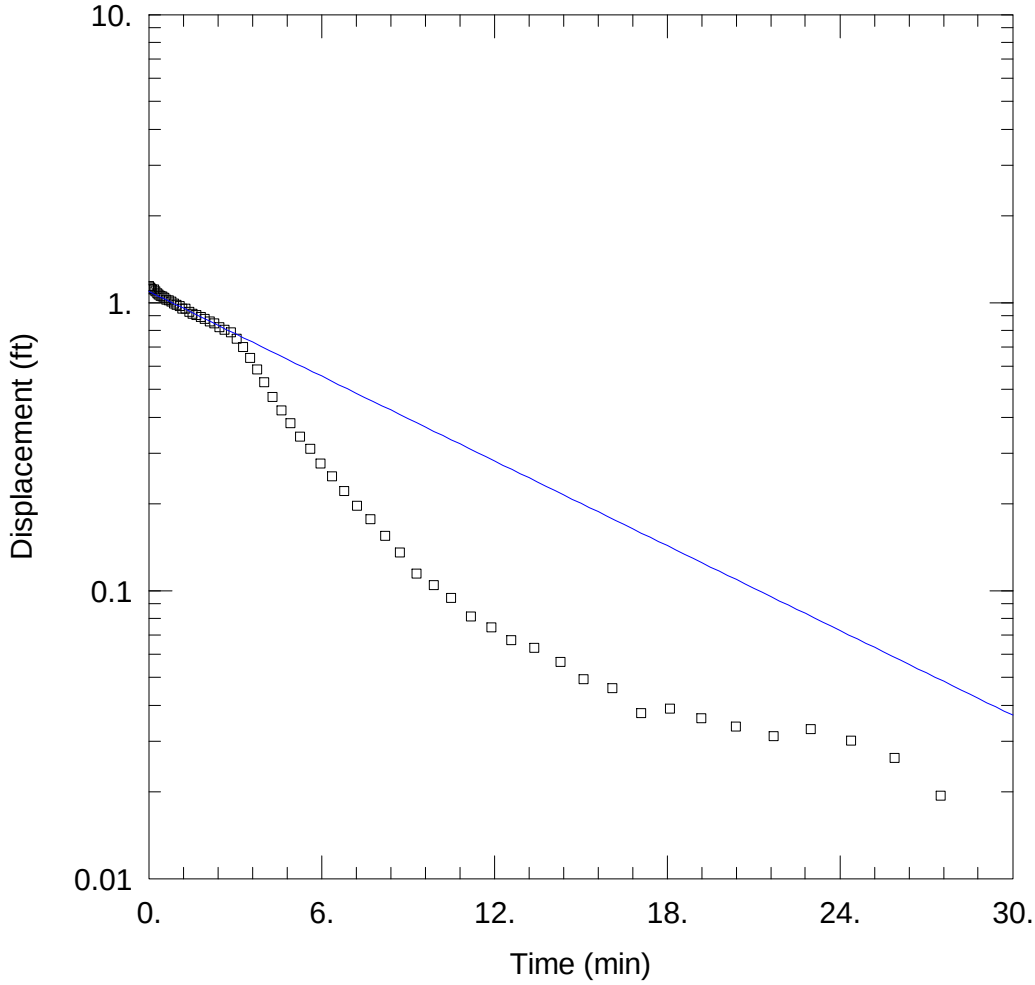
WELL DATA (PTX06-1012)

Initial Displacement: 1.139 ft
Total Well Penetration Depth: 14.5 ft
Casing Radius: 0.167 ft
Static Water Column Height: 14.5 ft
Screen Length: 14.5 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.4281 ft/day y0 = 1.122 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1012.aqt
Date: 09/29/11 Time: 19:04:23

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1012
Test Date: 9/28/2011

AQUIFER DATA

Saturated Thickness: 14.5 ft Anisotropy Ratio (Kz/Kr): 0.1

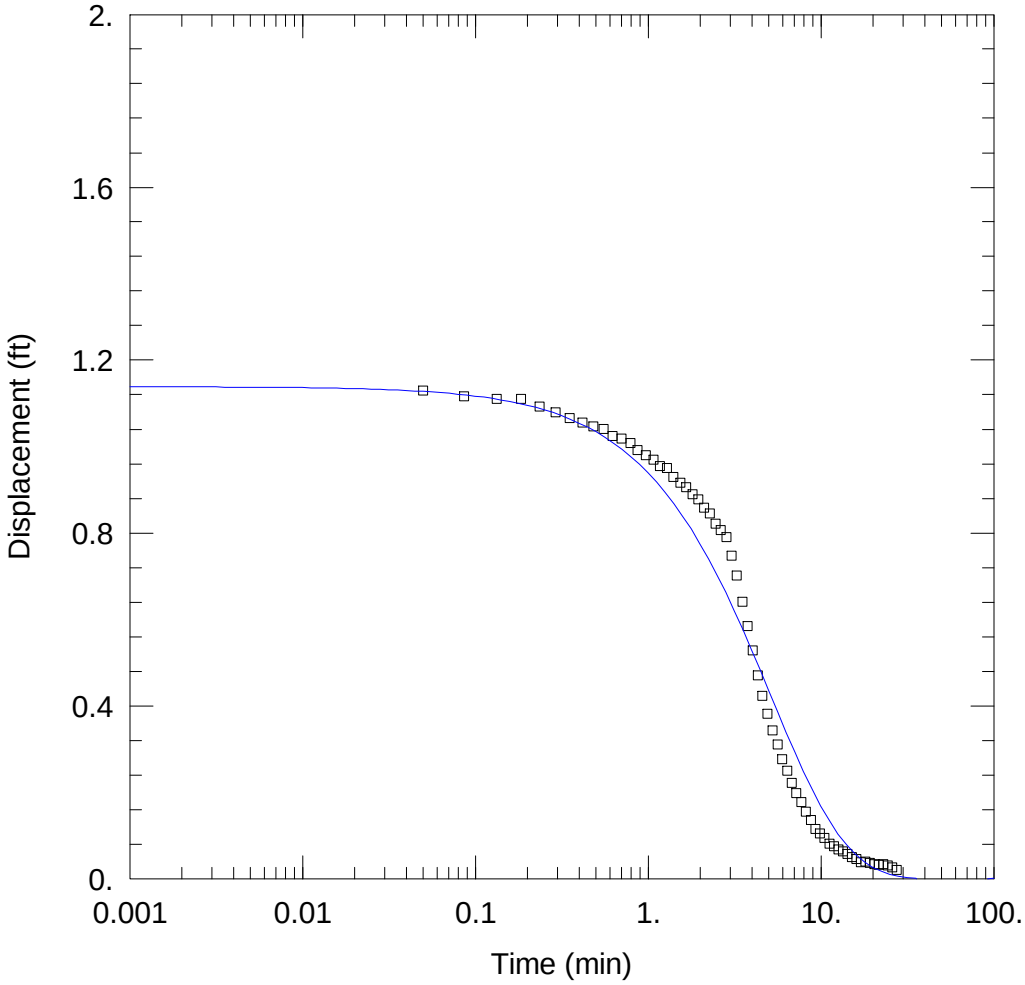
WELL DATA (PTX06-1012)

Initial Displacement: 1.139 ft
Total Well Penetration Depth: 14.5 ft
Casing Radius: 0.167 ft
Static Water Column Height: 14.5 ft
Screen Length: 14.5 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev

K = 0.7546 ft/day y0 = 1.094 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1012.aqt
Date: 09/29/11 Time: 19:02:21

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1012
Test Date: 9/28/2011

AQUIFER DATA

Saturated Thickness: 14.5 ft

WELL DATA (PTX06-1012)

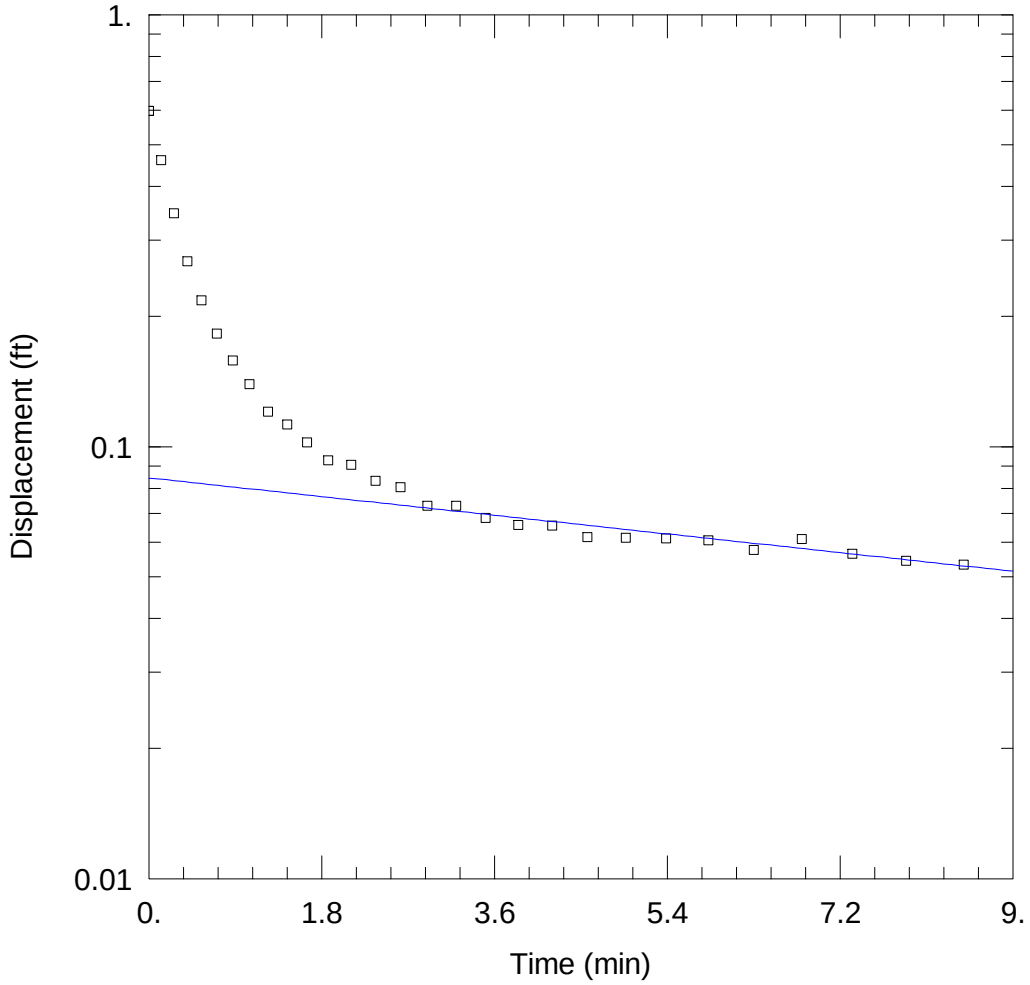
Initial Displacement: 1.139 ft
Total Well Penetration Depth: 14.5 ft
Casing Radius: 0.167 ft

Static Water Column Height: 14.5 ft
Screen Length: 14.5 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.9882 ft/day
Ss = 5.376E-12 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1053.aqt
Date: 09/29/11 Time: 19:16:33

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1053
Test Date: 9/27/2011

AQUIFER DATA

Saturated Thickness: 8.7 ft Anisotropy Ratio (Kz/Kr): 0.1

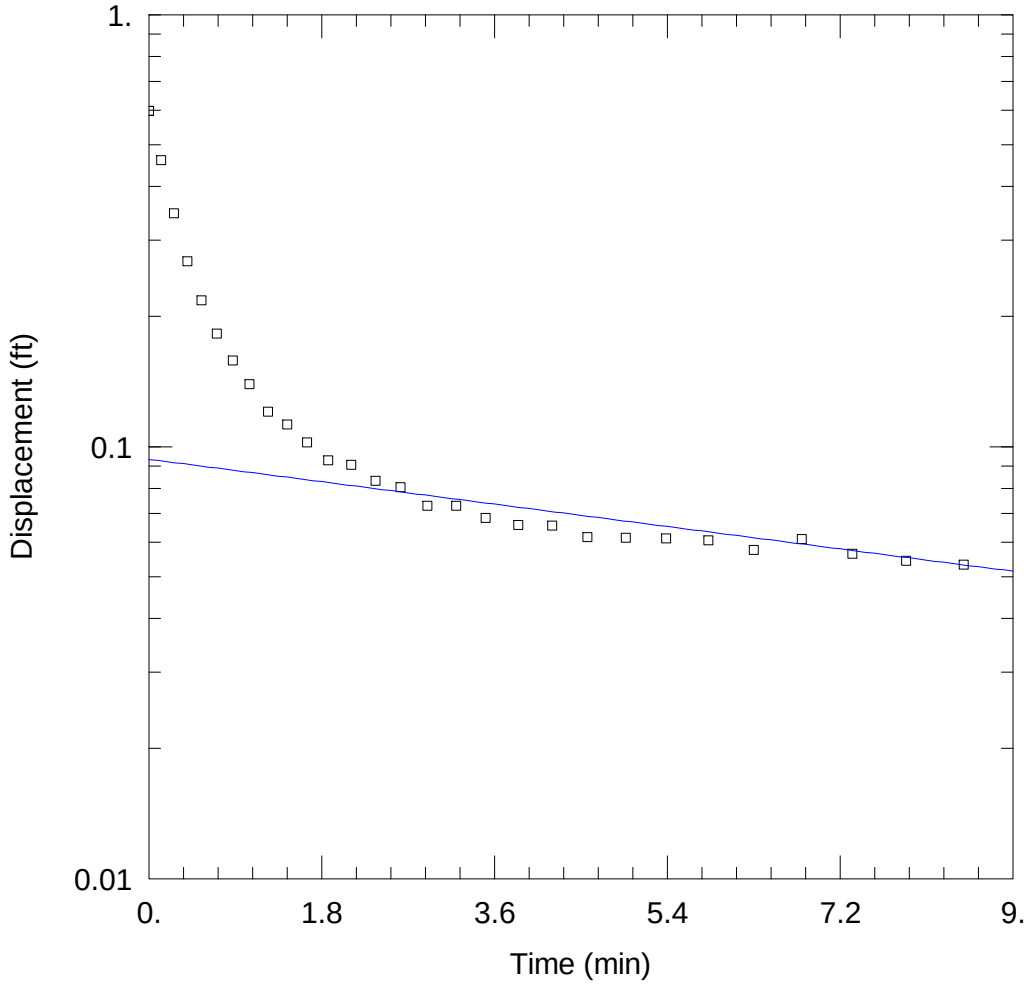
WELL DATA (PTX06-1053)

Initial Displacement: 0.5988 ft
Total Well Penetration Depth: 8.7 ft
Casing Radius: 0.167 ft
Static Water Column Height: 8.7 ft
Screen Length: 8.7 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.2663 ft/day
y0 = 0.0846 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1053.aqt
Date: 09/29/11 Time: 19:16:03

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1053
Test Date: 9/27/2011

AQUIFER DATA

Saturated Thickness: 8.7 ft Anisotropy Ratio (Kz/Kr): 0.1

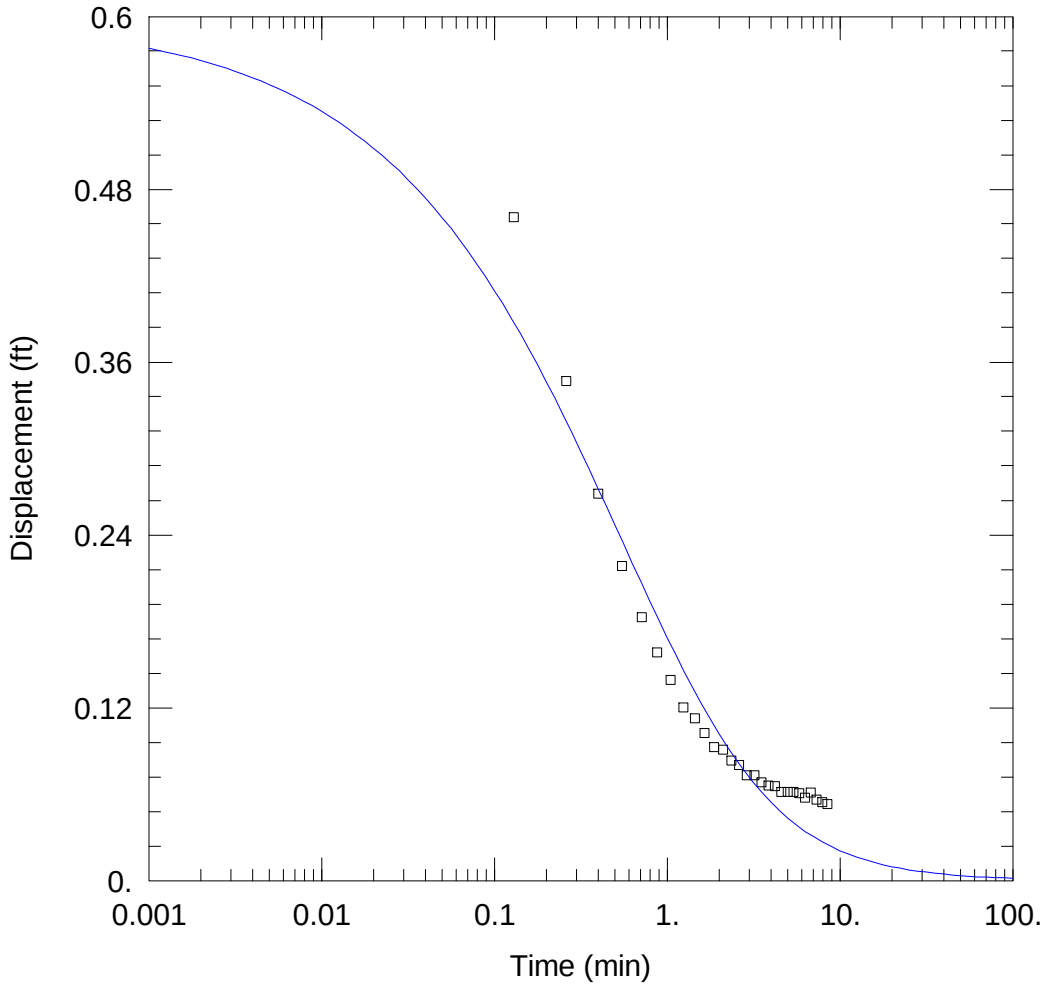
WELL DATA (PTX06-1053)

Initial Displacement: 0.5988 ft
Total Well Penetration Depth: 8.7 ft
Casing Radius: 0.167 ft
Static Water Column Height: 8.7 ft
Screen Length: 8.7 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 0.7373 ft/day
y0 = 0.09341 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1053.aqt
Date: 09/29/11 Time: 19:15:23

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1053
Test Date: 9/27/2011

AQUIFER DATA

Saturated Thickness: 8.7 ft

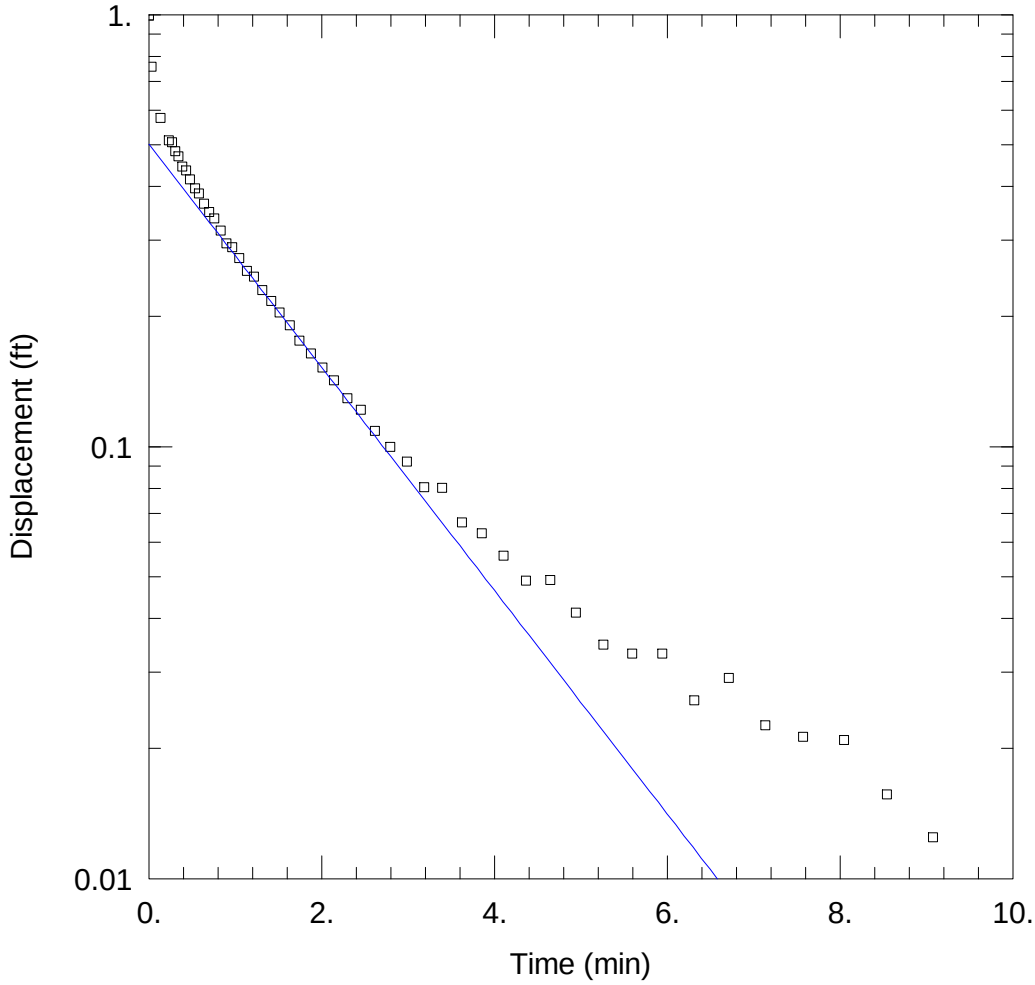
WELL DATA (PTX06-1053)

Initial Displacement: 0.5988 ft
Total Well Penetration Depth: 8.7 ft
Casing Radius: 0.167 ft
Static Water Column Height: 8.7 ft
Screen Length: 8.7 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 3.113 ft/day
Ss = 0.005819 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1126.aqt
Date: 09/29/11 Time: 19:22:15

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1126
Test Date: 9/23/2011

AQUIFER DATA

Saturated Thickness: 21.2 ft Anisotropy Ratio (Kz/Kr): 0.1

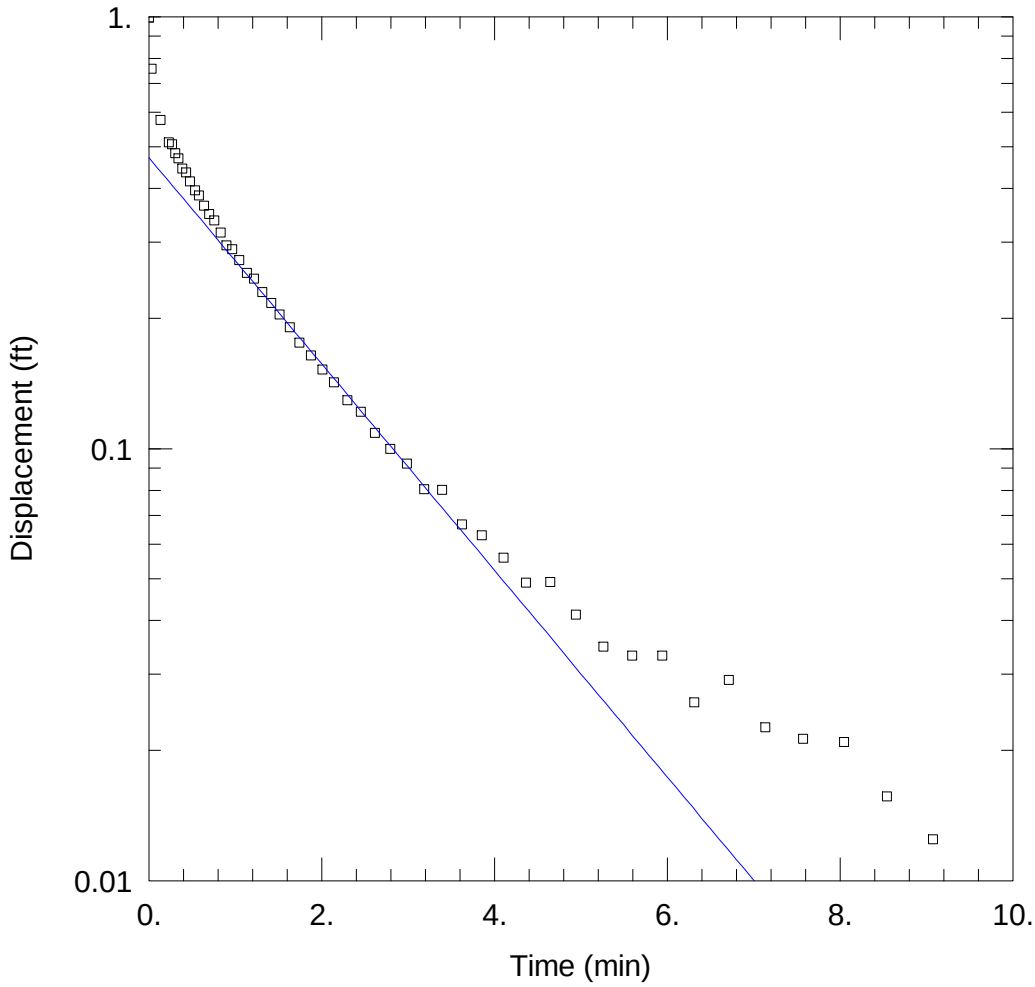
WELL DATA (PTX06-1126)

Initial Displacement: 0.995 ft
Total Well Penetration Depth: 21.2 ft
Casing Radius: 0.333 ft
Static Water Column Height: 21.2 ft
Screen Length: 21.2 ft
Well Radius: 0.8 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 5.393 ft/day
y0 = 0.5012 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1126.aqt
Date: 09/29/11 Time: 19:21:35

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1126
Test Date: 9/23/2011

AQUIFER DATA

Saturated Thickness: 21.2 ft Anisotropy Ratio (Kz/Kr): 0.1

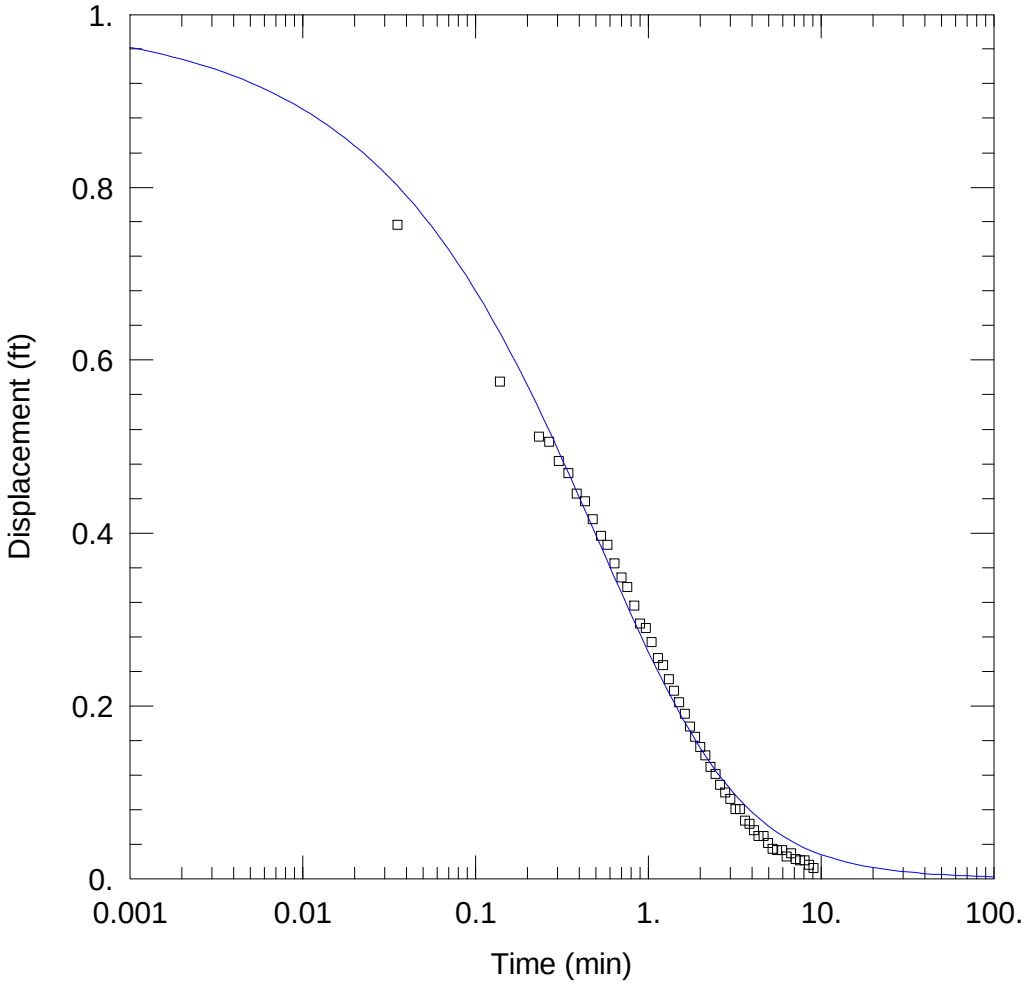
WELL DATA (PTX06-1126)

Initial Displacement: 0.995 ft
Total Well Penetration Depth: 21.2 ft
Casing Radius: 0.333 ft
Static Water Column Height: 21.2 ft
Screen Length: 21.2 ft
Well Radius: 0.8 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev

K = 10.73 ft/day y0 = 0.4721 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1126.aqt
Date: 09/29/11 Time: 19:20:56

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1126
Test Date: 9/23/2011

AQUIFER DATA

Saturated Thickness: 21.2 ft

WELL DATA (PTX06-1126)

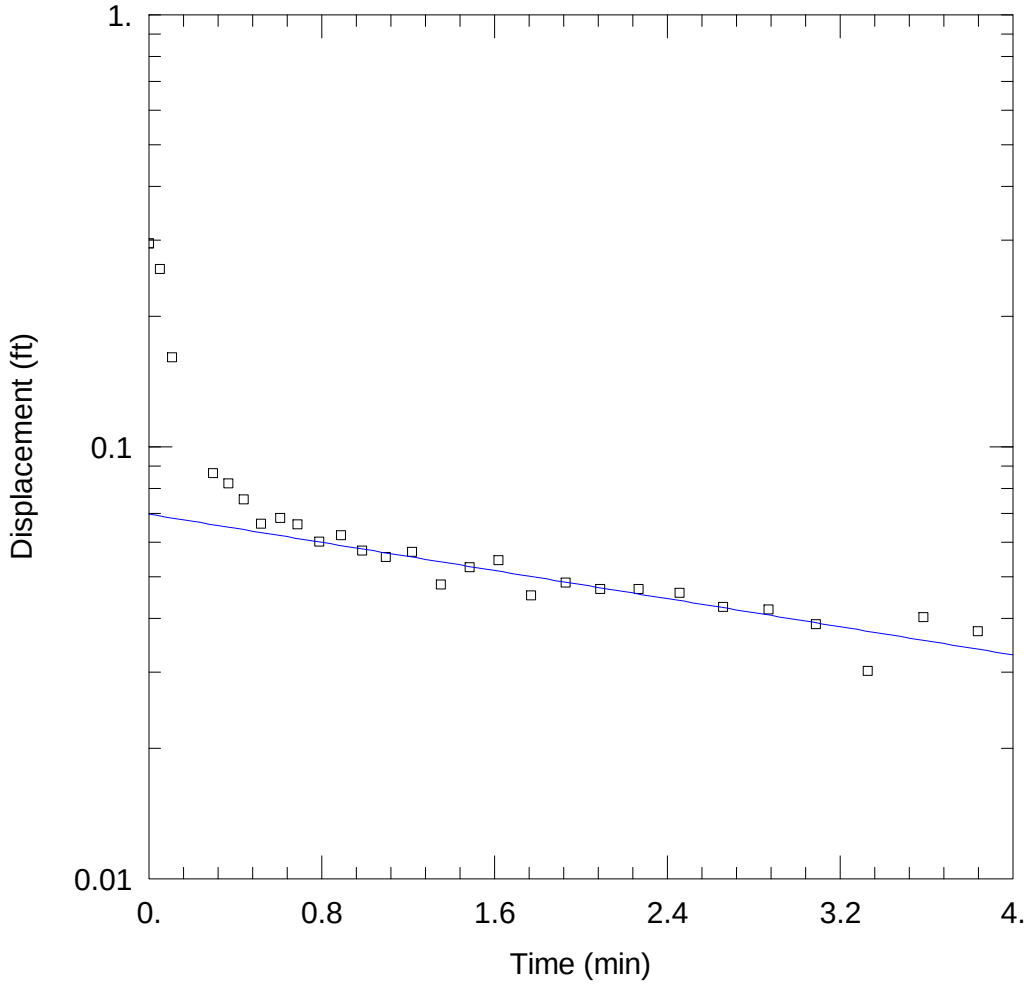
Initial Displacement: 0.995 ft
Total Well Penetration Depth: 21.2 ft
Casing Radius: 0.333 ft

Static Water Column Height: 21.2 ft
Screen Length: 21.2 ft
Well Radius: 0.8 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 6.879 ft/day
Ss = 0.001821 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1127.aqt
Date: 09/29/11 Time: 19:30:10

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1127
Test Date: 9/23/2011

AQUIFER DATA

Saturated Thickness: 24.8 ft Anisotropy Ratio (Kz/Kr): 0.1

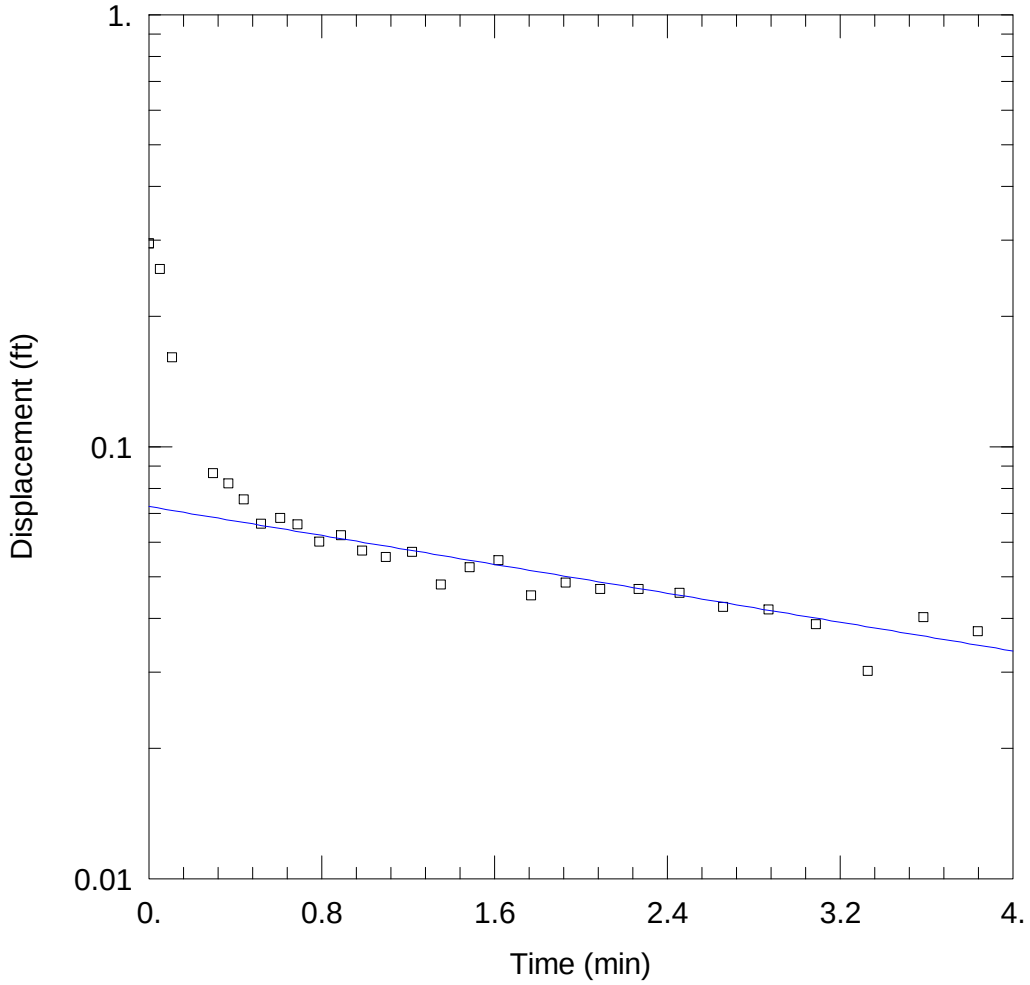
WELL DATA (PTX06-1127)

Initial Displacement: 0.2953 ft
Total Well Penetration Depth: 24.8 ft
Casing Radius: 0.333 ft
Static Water Column Height: 24.8 ft
Screen Length: 24.8 ft
Well Radius: 0.8 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 1.532 ft/day y0 = 0.06971 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1127.aqt
Date: 09/29/11 Time: 19:29:26

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1127
Test Date: 9/23/2011

AQUIFER DATA

Saturated Thickness: 24.8 ft Anisotropy Ratio (Kz/Kr): 0.1

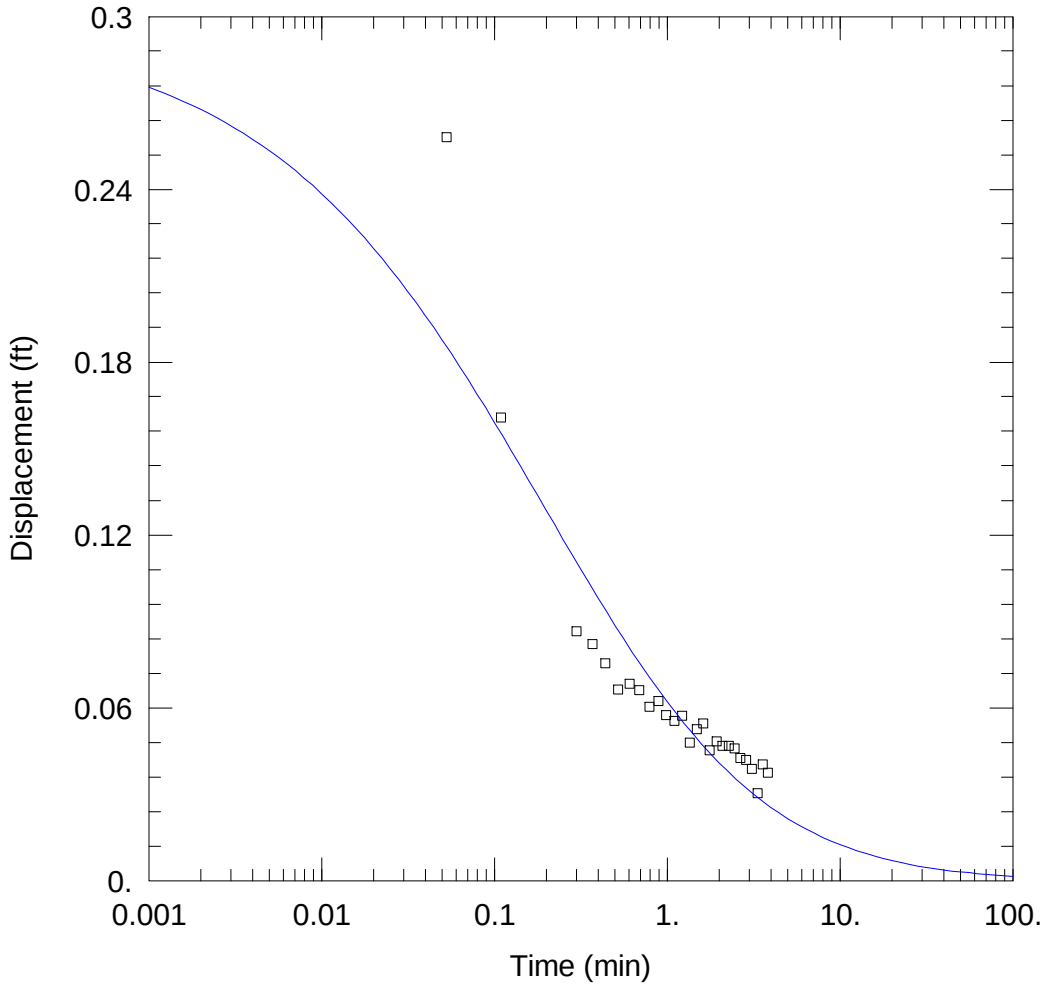
WELL DATA (PTX06-1127)

Initial Displacement: 0.2953 ft
Total Well Penetration Depth: 24.8 ft
Casing Radius: 0.333 ft
Static Water Column Height: 24.8 ft
Screen Length: 24.8 ft
Well Radius: 0.8 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev

K = 3.21 ft/day y0 = 0.07263 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1127.aqt
Date: 09/29/11 Time: 19:28:26

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1127
Test Date: 9/23/2011

AQUIFER DATA

Saturated Thickness: 24.8 ft

WELL DATA (PTX06-1127)

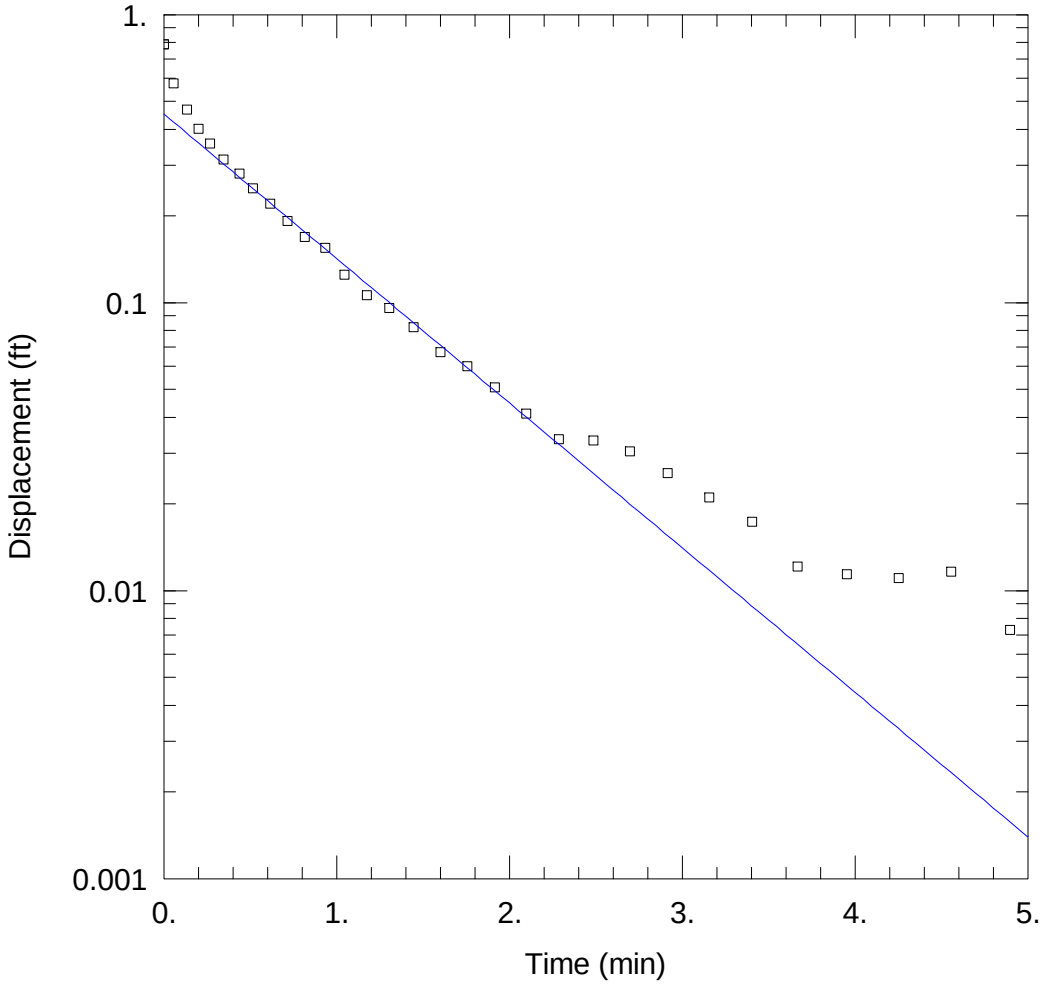
Initial Displacement: 0.2953 ft
Total Well Penetration Depth: 24.8 ft
Casing Radius: 0.333 ft

Static Water Column Height: 24.8 ft
Screen Length: 24.8 ft
Well Radius: 0.8 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 2.694 ft/day
Ss = 0.01536 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1134.aqt
Date: 09/29/11 Time: 19:35:54

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1134
Test Date: 9/26/2011

AQUIFER DATA

Saturated Thickness: 9.1 ft Anisotropy Ratio (Kz/Kr): 0.1

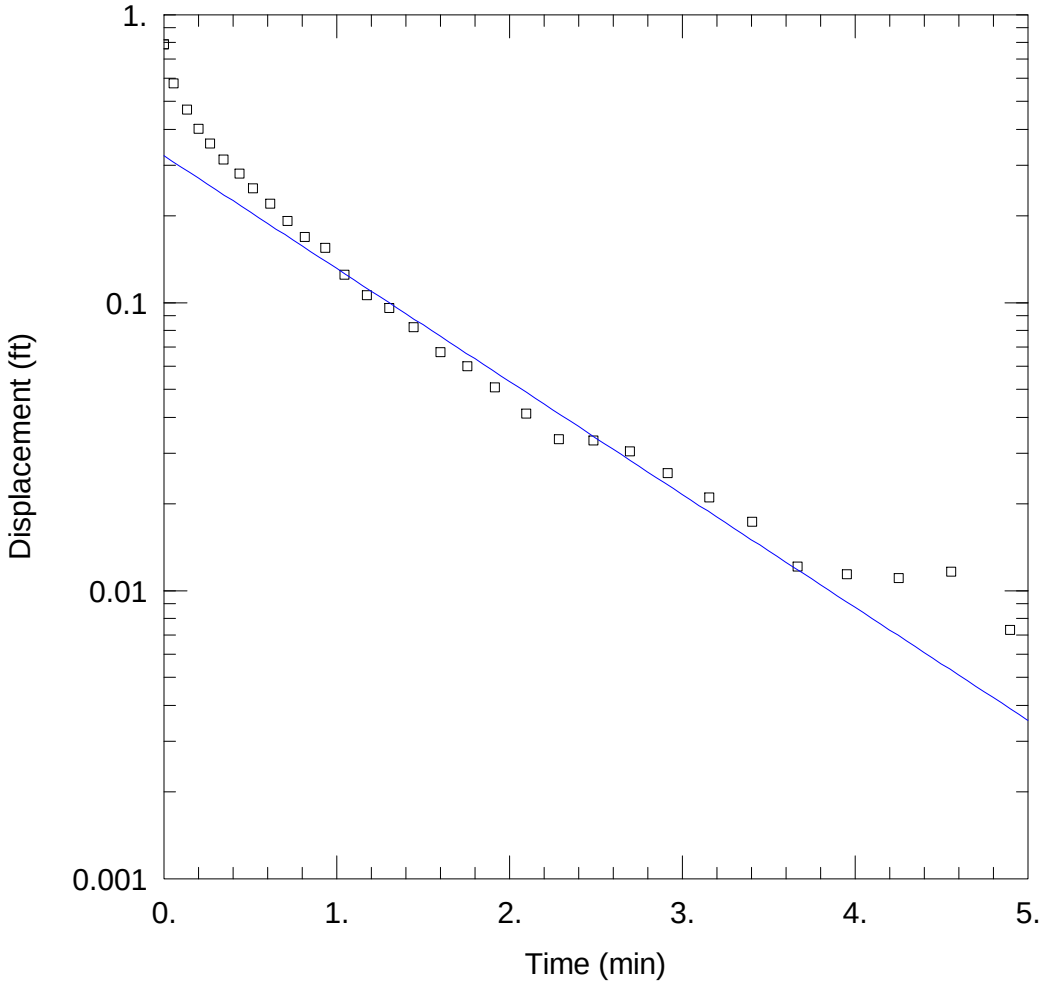
WELL DATA (PTX06-1134)

Initial Displacement: 0.7891 ft
Total Well Penetration Depth: 9.1 ft
Casing Radius: 0.167 ft
Static Water Column Height: 9.1 ft
Screen Length: 9.1 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 5.413 ft/day y0 = 0.4515 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1134.aqt
Date: 09/29/11 Time: 19:35:02

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1134
Test Date: 9/26/2011

AQUIFER DATA

Saturated Thickness: 9.1 ft Anisotropy Ratio (Kz/Kr): 0.1

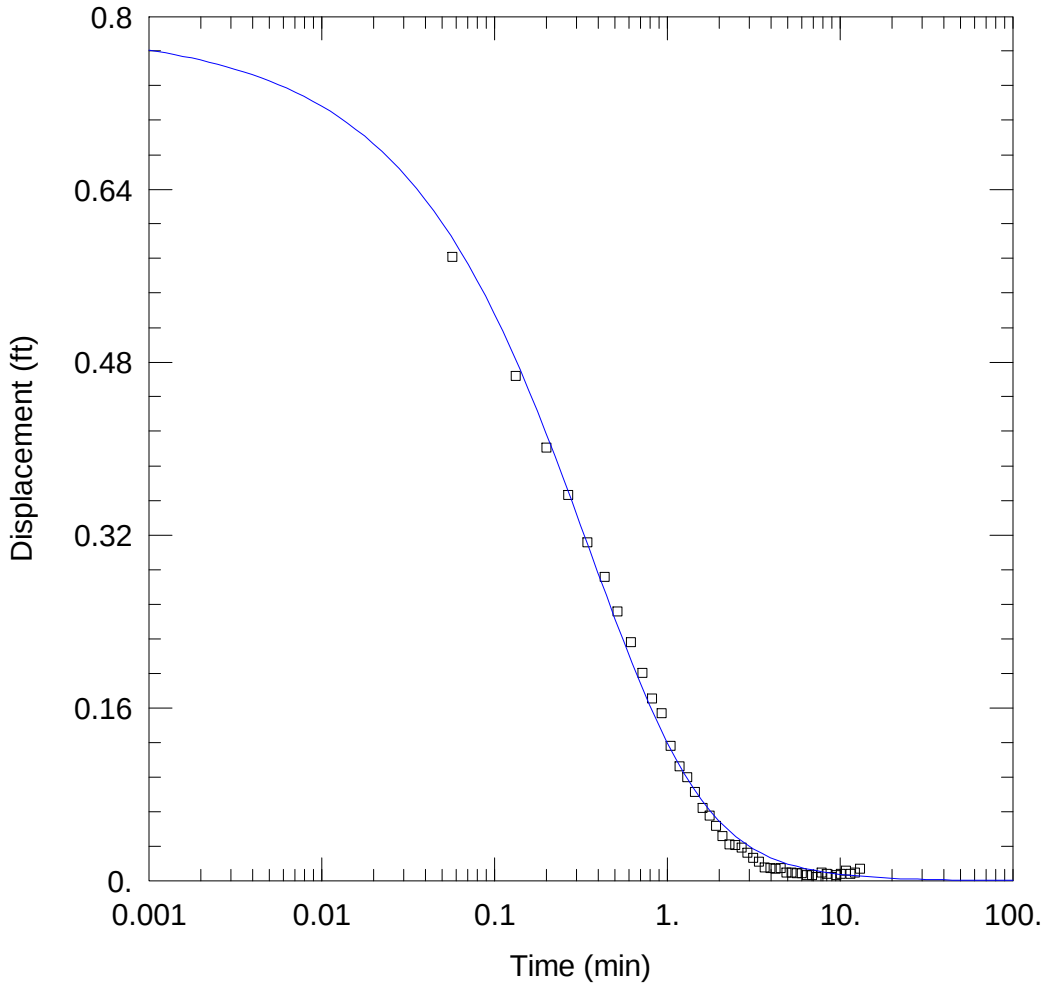
WELL DATA (PTX06-1134)

Initial Displacement: 0.7891 ft
Total Well Penetration Depth: 9.1 ft
Casing Radius: 0.167 ft
Static Water Column Height: 9.1 ft
Screen Length: 9.1 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 9.604 ft/day
y0 = 0.3237 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1134.aqt
Date: 09/29/11 Time: 19:33:24

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1134
Test Date: 9/26/2011

AQUIFER DATA

Saturated Thickness: 9.1 ft

WELL DATA (PTX06-1134)

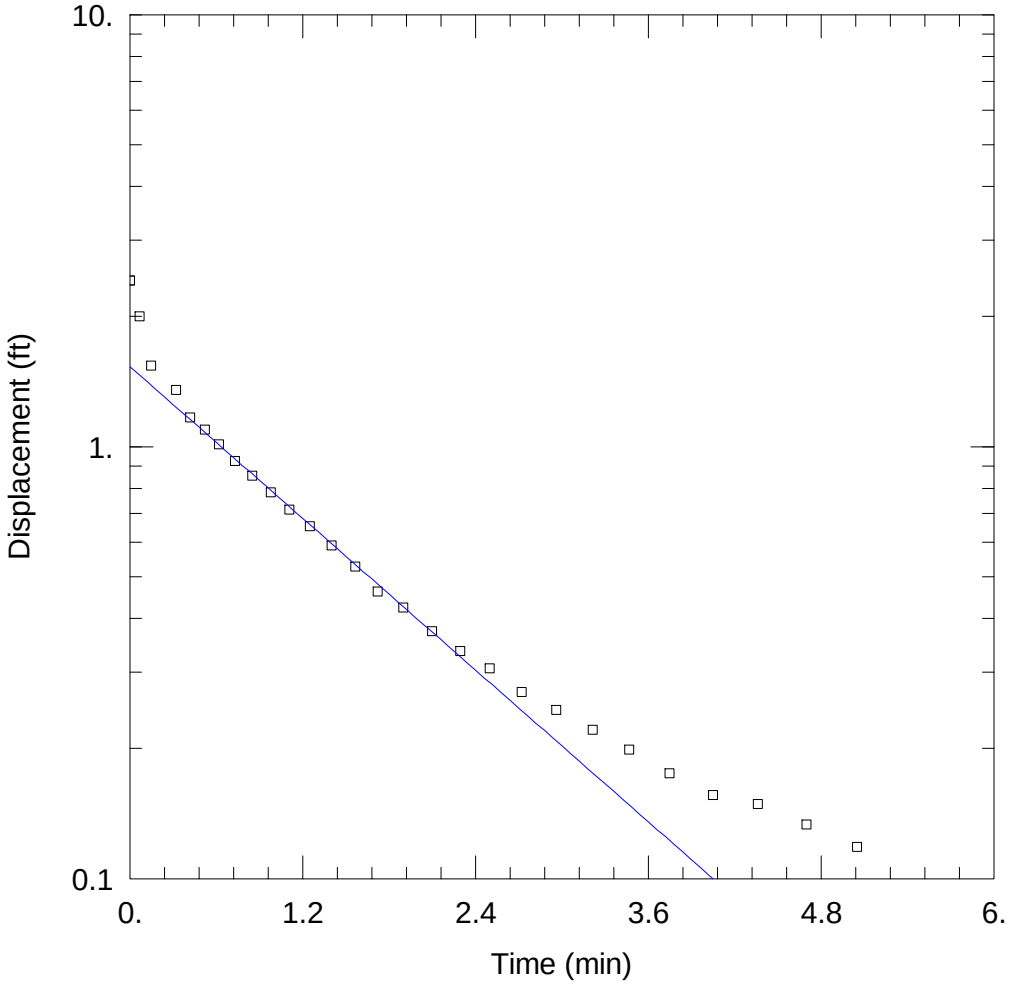
Initial Displacement: 0.7891 ft
Total Well Penetration Depth: 9.1 ft
Casing Radius: 0.167 ft

Static Water Column Height: 9.1 ft
Screen Length: 9.1 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 9.918 ft/day
Ss = 0.0007733 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1148.aqt
Date: 09/29/11 Time: 19:39:54

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1148
Test Date: 9/27/2011

AQUIFER DATA

Saturated Thickness: 16.4 ft Anisotropy Ratio (Kz/Kr): 0.1

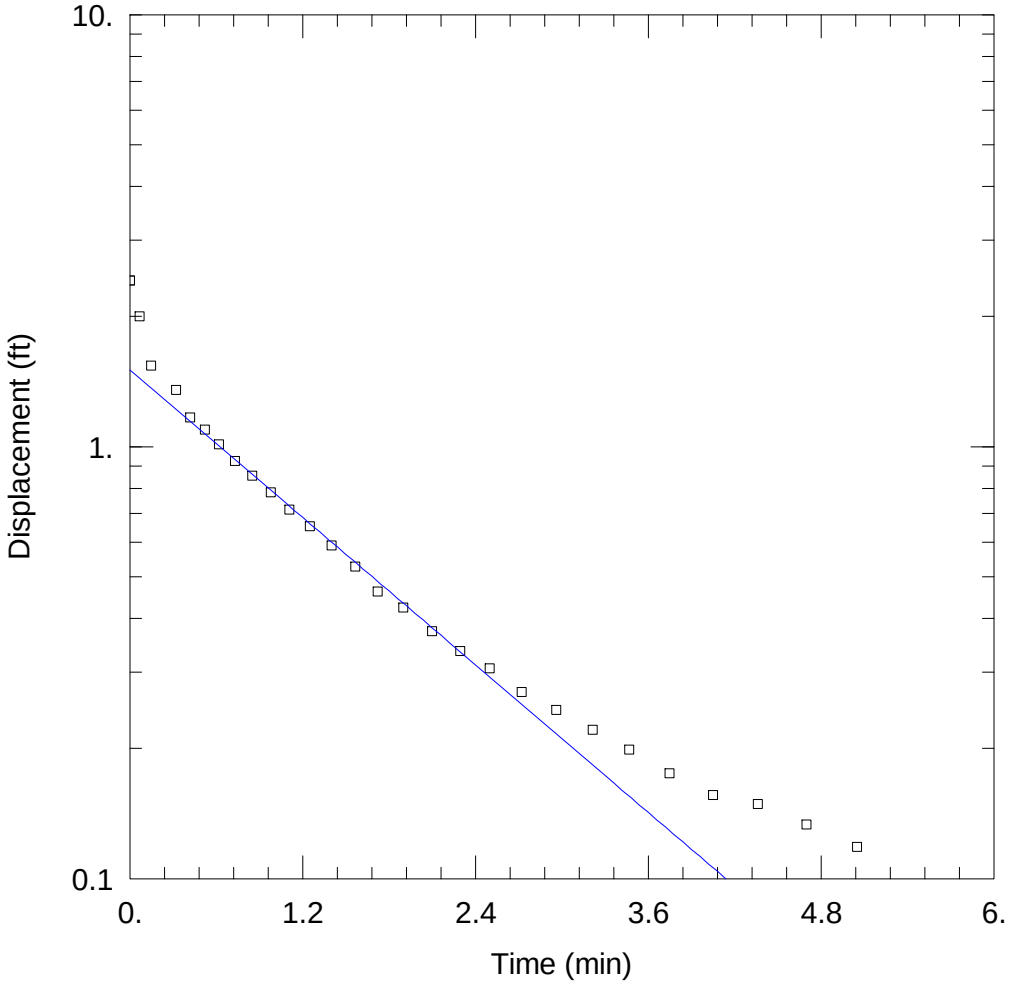
WELL DATA (PTX06-1148)

Initial Displacement: 2.426 ft
Total Well Penetration Depth: 16.4 ft
Casing Radius: 0.167 ft
Static Water Column Height: 16.4 ft
Screen Length: 16.4 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 2.128 ft/day y0 = 1.532 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1148.aqt
Date: 09/29/11 Time: 19:38:53

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1148
Test Date: 9/27/2011

AQUIFER DATA

Saturated Thickness: 16.4 ft Anisotropy Ratio (Kz/Kr): 0.1

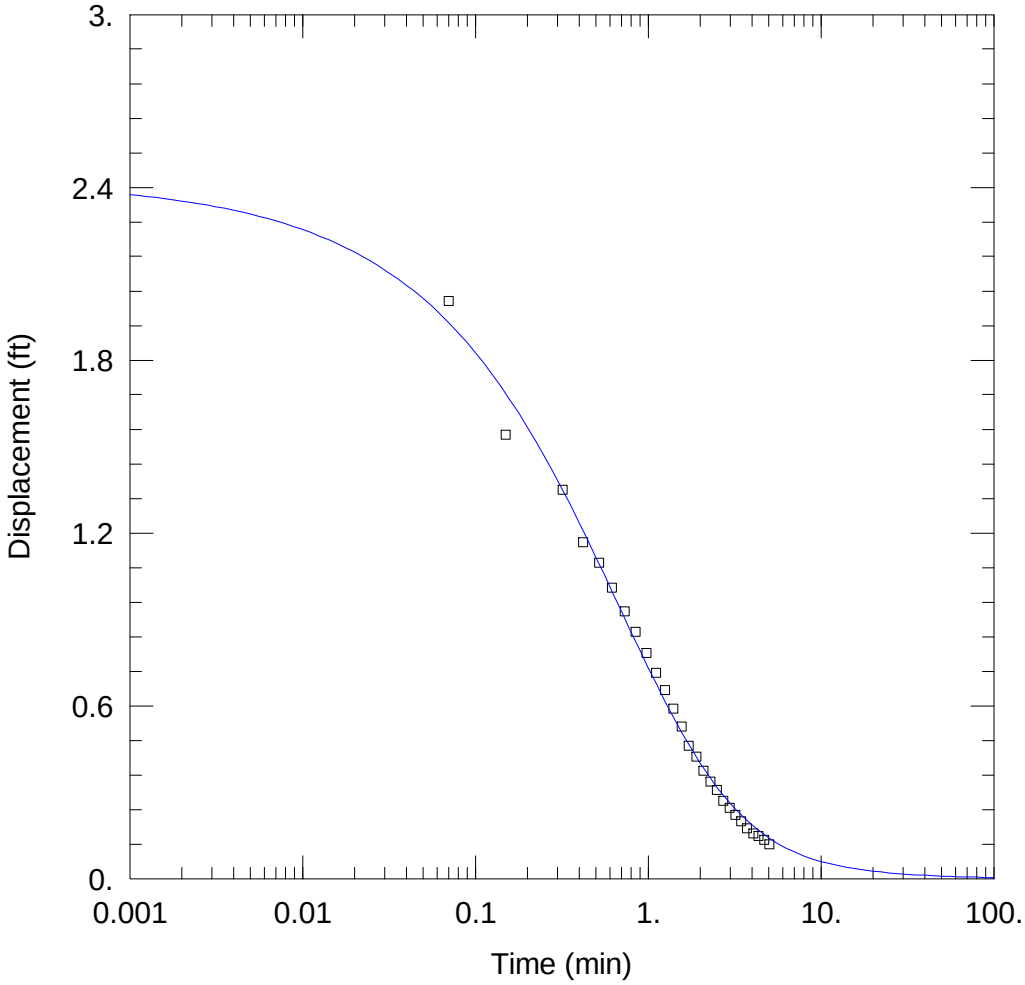
WELL DATA (PTX06-1148)

Initial Displacement: 2.426 ft
Total Well Penetration Depth: 16.4 ft
Casing Radius: 0.167 ft
Static Water Column Height: 16.4 ft
Screen Length: 16.4 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 3.87 ft/day
y0 = 1.506 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1148.aqt
Date: 09/29/11 Time: 19:38:08

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1148
Test Date: 9/27/2011

AQUIFER DATA

Saturated Thickness: 16.4 ft

WELL DATA (PTX06-1148)

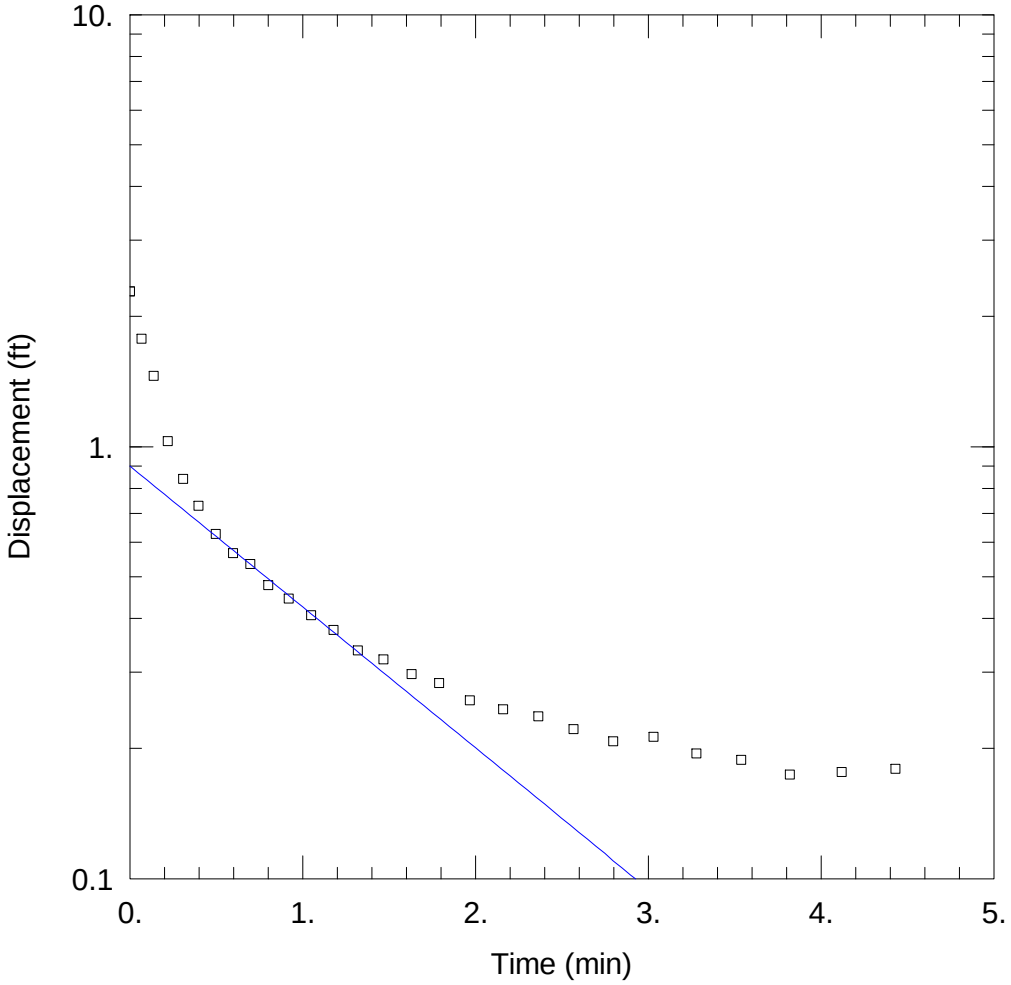
Initial Displacement: 2.426 ft
Total Well Penetration Depth: 16.4 ft
Casing Radius: 0.167 ft

Static Water Column Height: 16.4 ft
Screen Length: 16.4 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 2.538 ft/day
Ss = 0.0006786 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1149.aqt
Date: 09/29/11 Time: 19:46:51

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1149
Test Date: 9/27/2011

AQUIFER DATA

Saturated Thickness: 13.3 ft Anisotropy Ratio (Kz/Kr): 0.1

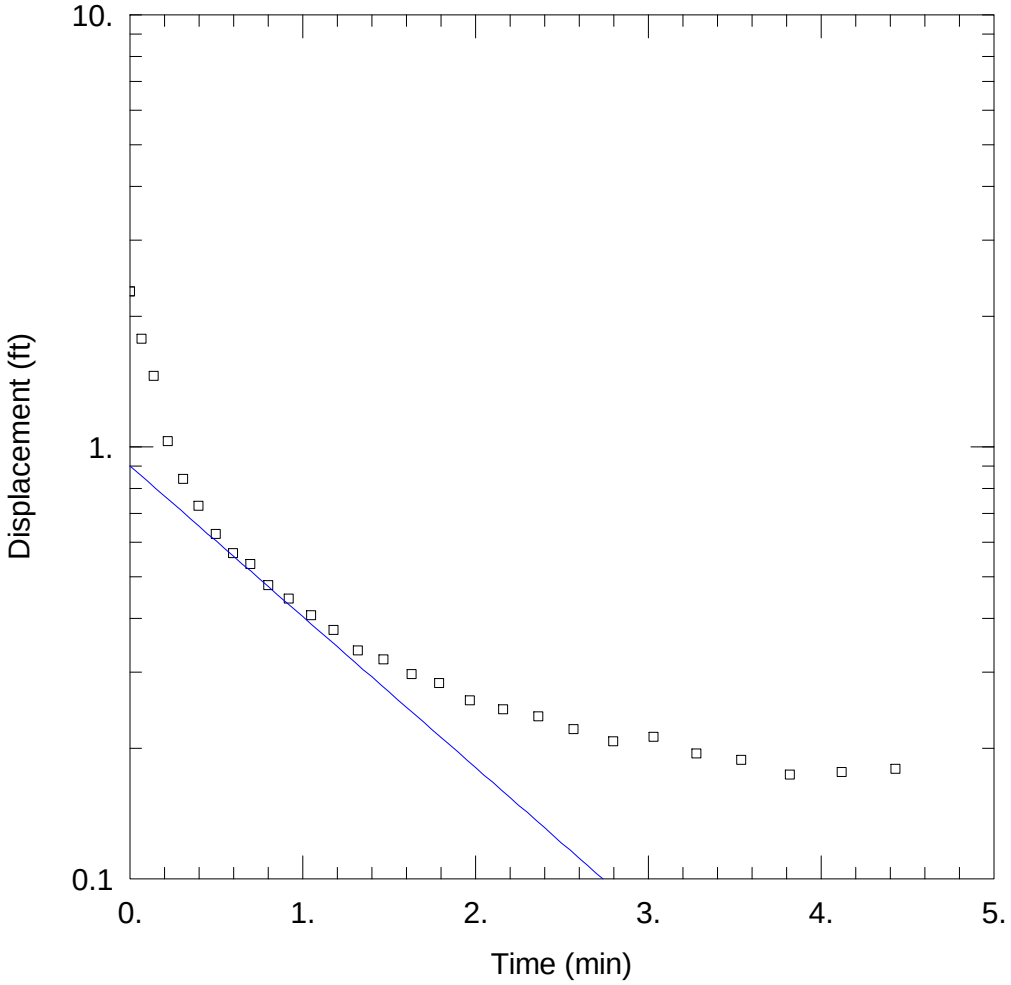
WELL DATA (PTX06-1149)

Initial Displacement: 2.283 ft
Total Well Penetration Depth: 13.3 ft
Casing Radius: 0.167 ft
Static Water Column Height: 13.3 ft
Screen Length: 13.3 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 2.746 ft/day
y0 = 0.9027 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1149.aqt
Date: 09/29/11 Time: 19:44:34

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1149
Test Date: 9/27/2011

AQUIFER DATA

Saturated Thickness: 13.3 ft Anisotropy Ratio (Kz/Kr): 0.1

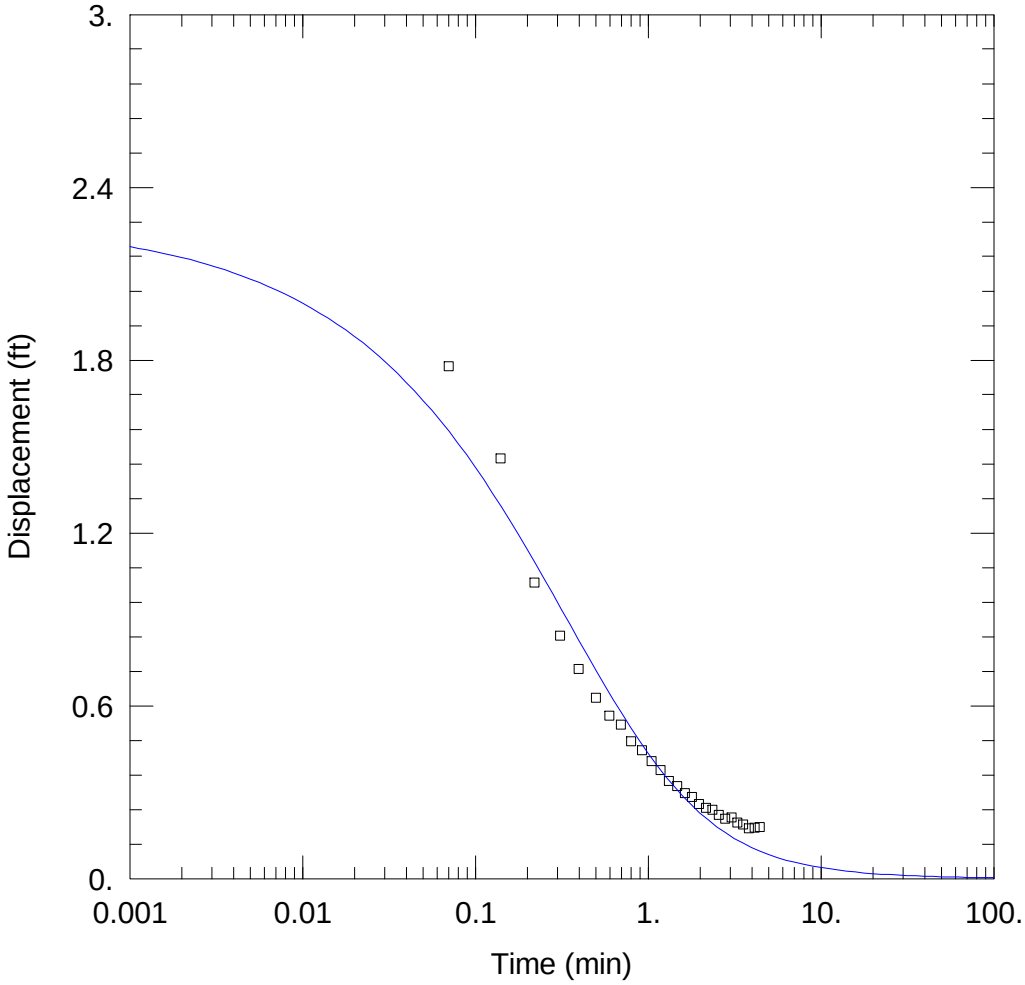
WELL DATA (PTX06-1149)

Initial Displacement: 2.283 ft
Total Well Penetration Depth: 13.3 ft
Casing Radius: 0.167 ft
Static Water Column Height: 13.3 ft
Screen Length: 13.3 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 5.854 ft/day
y0 = 0.9027 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1149.aqt
Date: 09/29/11 Time: 19:42:50

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1149
Test Date: 9/27/2011

AQUIFER DATA

Saturated Thickness: 13.3 ft

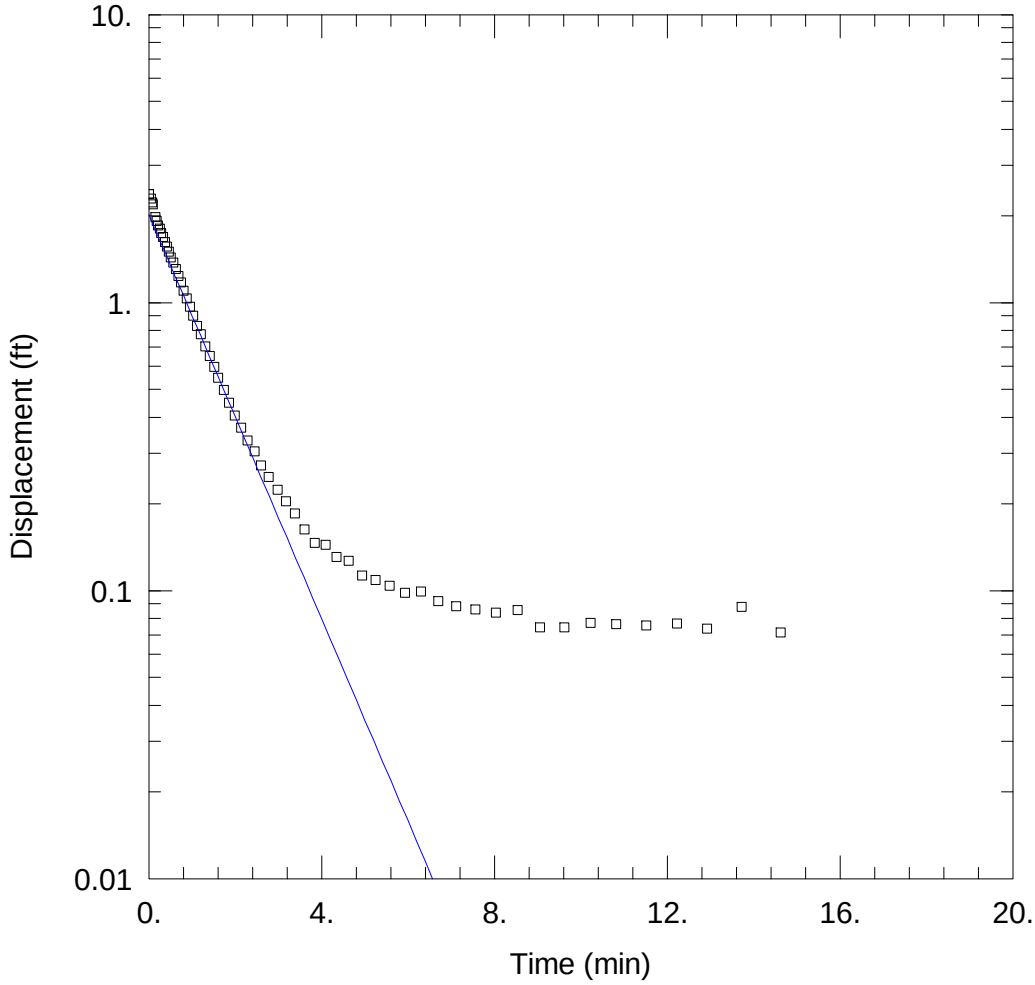
WELL DATA (PTX06-1149)

Initial Displacement: 2.283 ft
Total Well Penetration Depth: 13.3 ft
Casing Radius: 0.167 ft
Static Water Column Height: 13.3 ft
Screen Length: 13.3 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 4.172 ft/day
Ss = 0.002317 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1150.aqt
Date: 09/29/11 Time: 19:51:52

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1150
Test Date: 9/26/2011

AQUIFER DATA

Saturated Thickness: 11.4 ft Anisotropy Ratio (Kz/Kr): 0.1

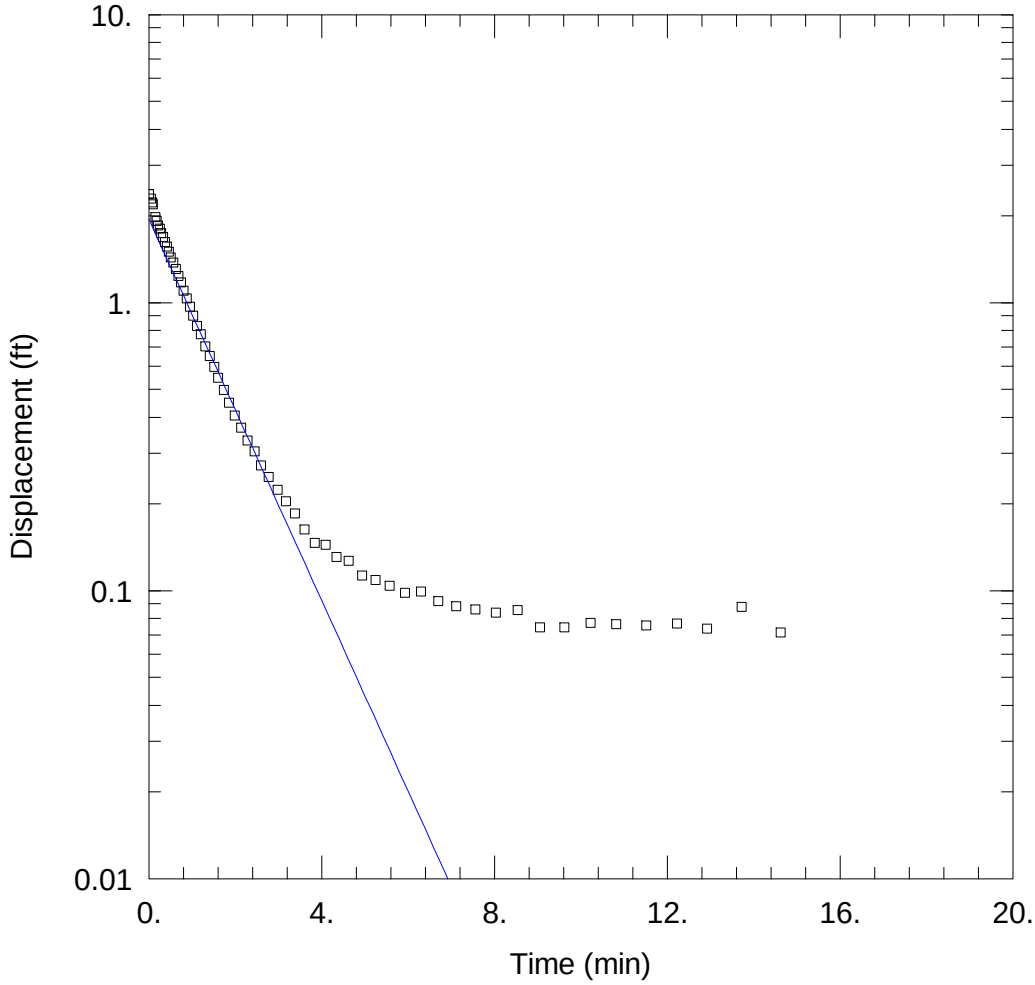
WELL DATA (PTX06-1150)

Initial Displacement: 2.38 ft
Total Well Penetration Depth: 11.4 ft
Casing Radius: 0.167 ft
Static Water Column Height: 11.4 ft
Screen Length: 11.4 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 3.274 ft/day y0 = 2.021 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1150.aqt
Date: 09/29/11 Time: 19:50:54

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1150
Test Date: 9/26/2011

AQUIFER DATA

Saturated Thickness: 11.4 ft Anisotropy Ratio (Kz/Kr): 0.1

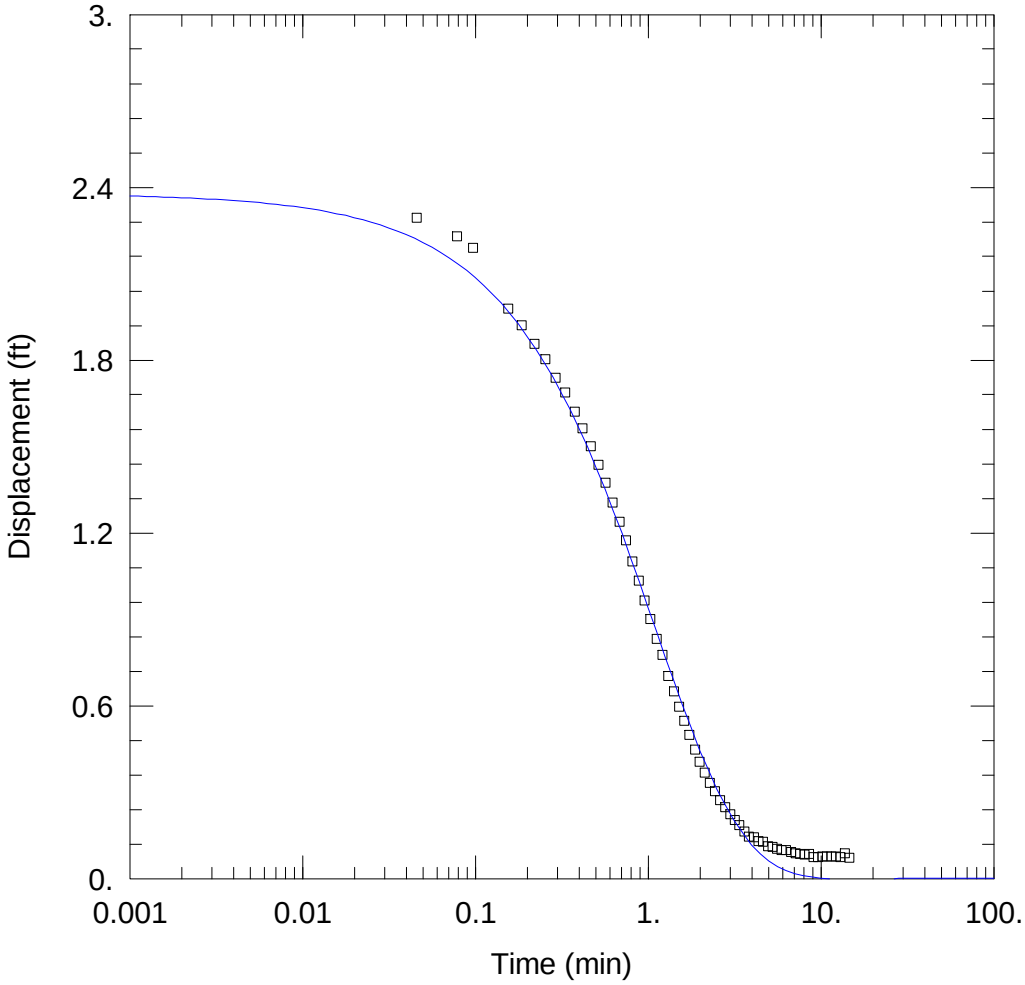
WELL DATA (PTX06-1150)

Initial Displacement: 2.38 ft
Total Well Penetration Depth: 11.4 ft
Casing Radius: 0.167 ft
Static Water Column Height: 11.4 ft
Screen Length: 11.4 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 6.474 ft/day
y0 = 1.95 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1150.aqt
Date: 09/29/11 Time: 19:49:28

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1150
Test Date: 9/26/2011

AQUIFER DATA

Saturated Thickness: 11.4 ft

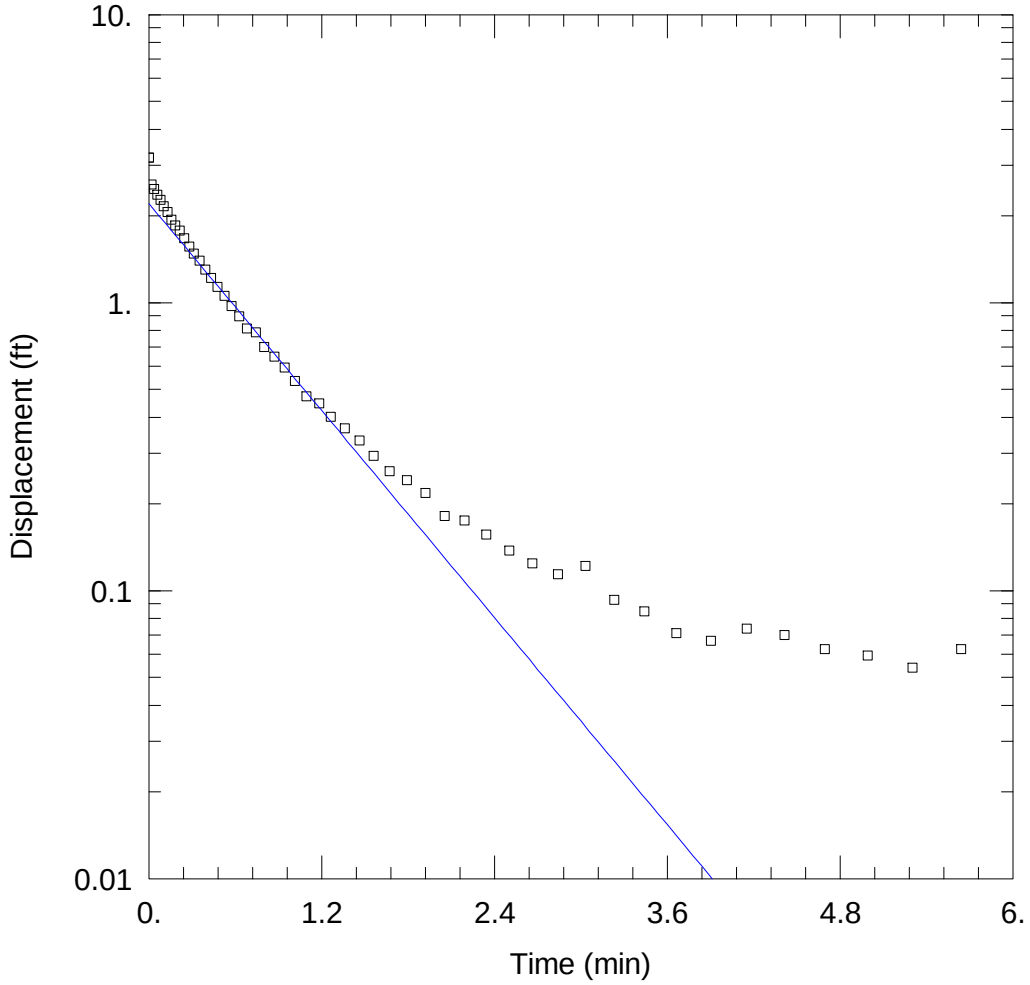
WELL DATA (PTX06-1150)

Initial Displacement: 2.38 ft
Total Well Penetration Depth: 11.4 ft
Casing Radius: 0.167 ft
Static Water Column Height: 11.4 ft
Screen Length: 11.4 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 5.211 ft/day
Ss = 1.437E-5 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: \...\PTX06-1151b.aqt
Date: 05/25/12 Time: 14:08:13

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1151
Test Date: 9/29/2011

AQUIFER DATA

Saturated Thickness: 17. ft Anisotropy Ratio (Kz/Kr): 0.1

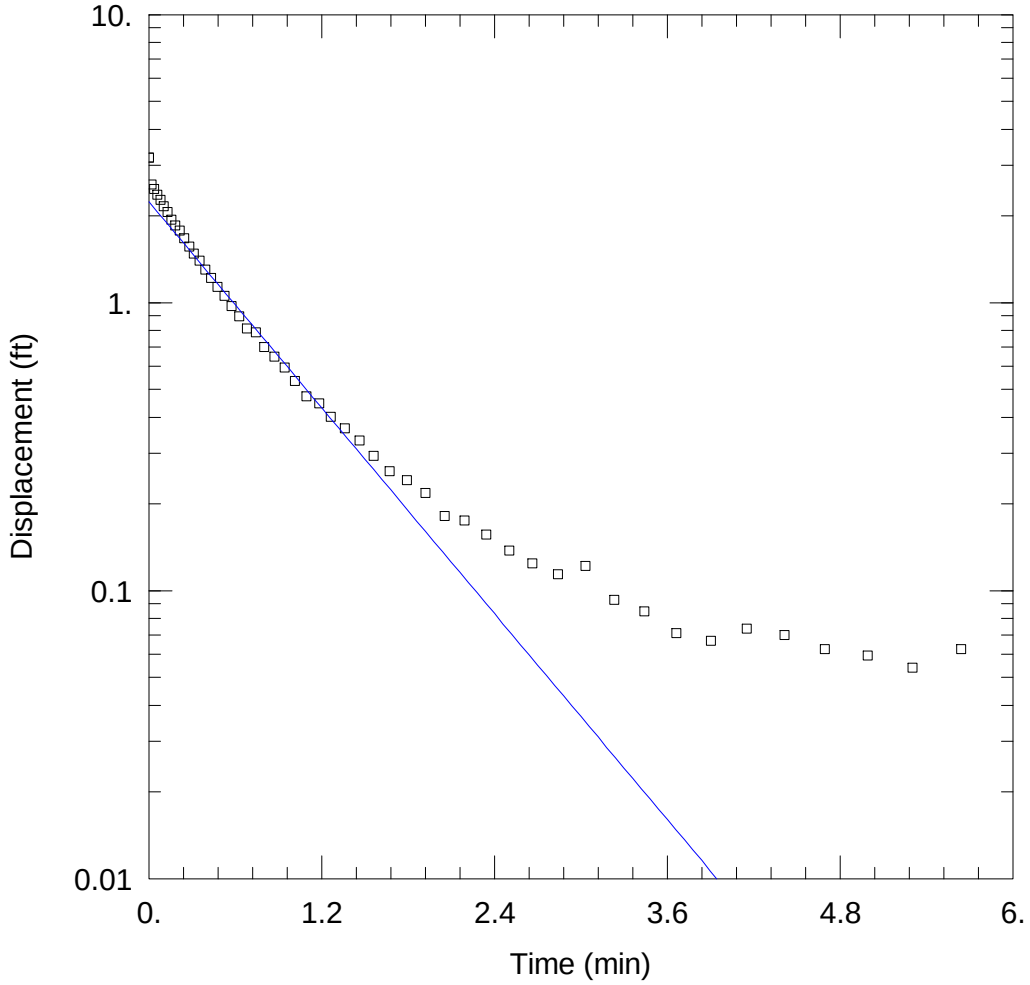
WELL DATA (PTX06-1151)

Initial Displacement: 3.185 ft
Total Well Penetration Depth: 17. ft
Casing Radius: 0.167 ft
Static Water Column Height: 17. ft
Screen Length: 17. ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 4.246 ft/day
y0 = 2.21 ft



WELL TEST ANALYSIS

Data Set: \...\PTX06-1151b.aqt
Date: 05/25/12 Time: 14:09:16

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1151
Test Date: 9/29/2011

AQUIFER DATA

Saturated Thickness: 17. ft Anisotropy Ratio (Kz/Kr): 0.1

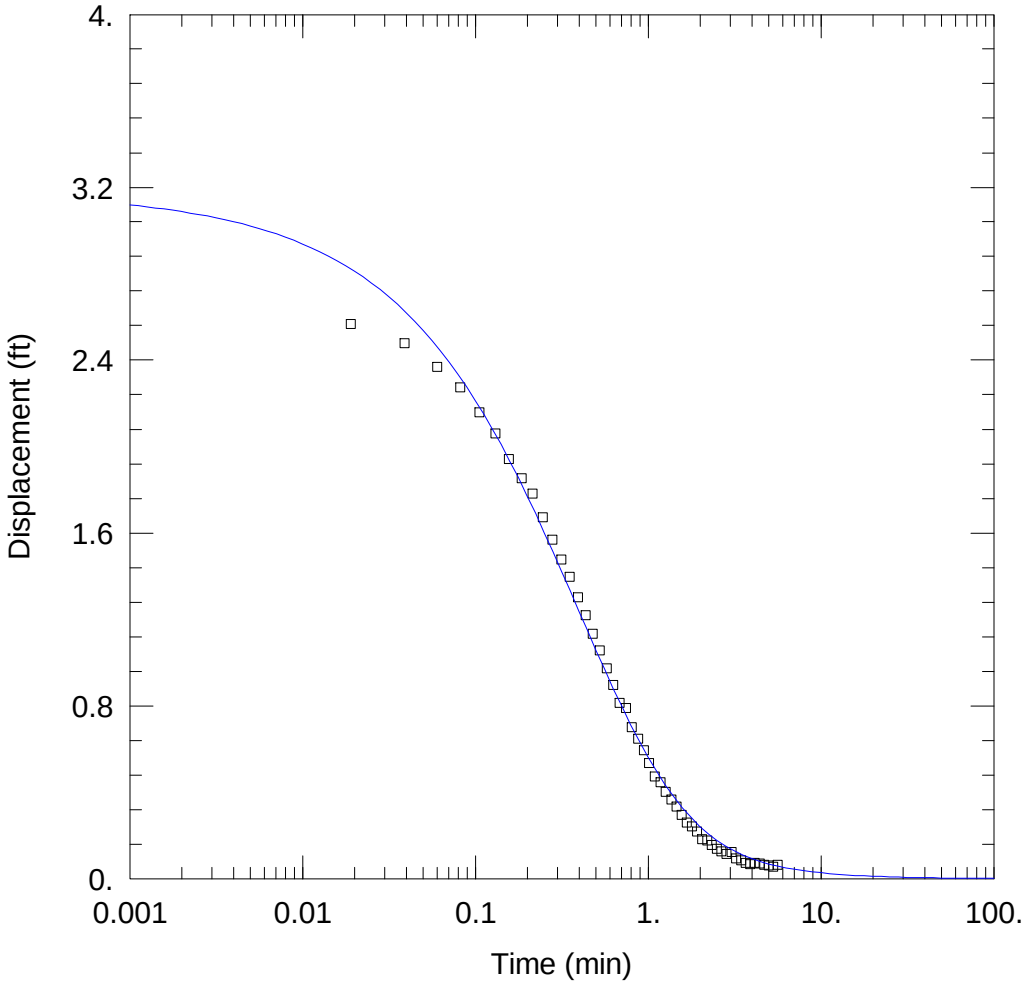
WELL DATA (PTX06-1151)

Initial Displacement: 3.185 ft
Total Well Penetration Depth: 17. ft
Casing Radius: 0.167 ft
Static Water Column Height: 17. ft
Screen Length: 17. ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 7.815 ft/day
y0 = 2.239 ft



WELL TEST ANALYSIS

Data Set: \...\PTX06-1151b.aqt
Date: 05/25/12 Time: 14:10:13

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1151
Test Date: 9/29/2011

AQUIFER DATA

Saturated Thickness: 17. ft

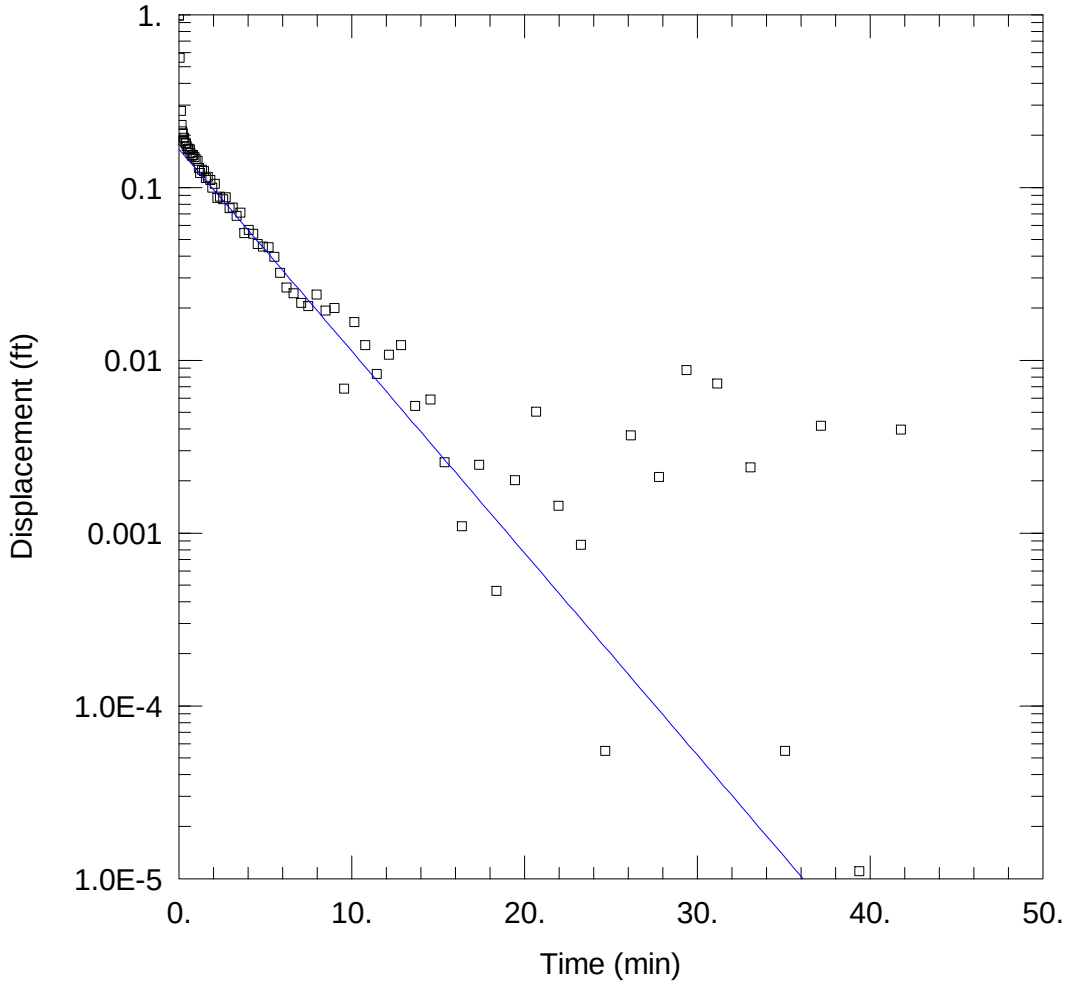
WELL DATA (PTX06-1151)

Initial Displacement: 3.185 ft
Total Well Penetration Depth: 17. ft
Casing Radius: 0.167 ft
Static Water Column Height: 17. ft
Screen Length: 17. ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 5.509 ft/day
Ss = 0.0002485 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1155b.aqt
Date: 09/29/11 Time: 20:23:08

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1155
Test Date: 9/28/2011

AQUIFER DATA

Saturated Thickness: 15.4 ft Anisotropy Ratio (Kz/Kr): 0.1

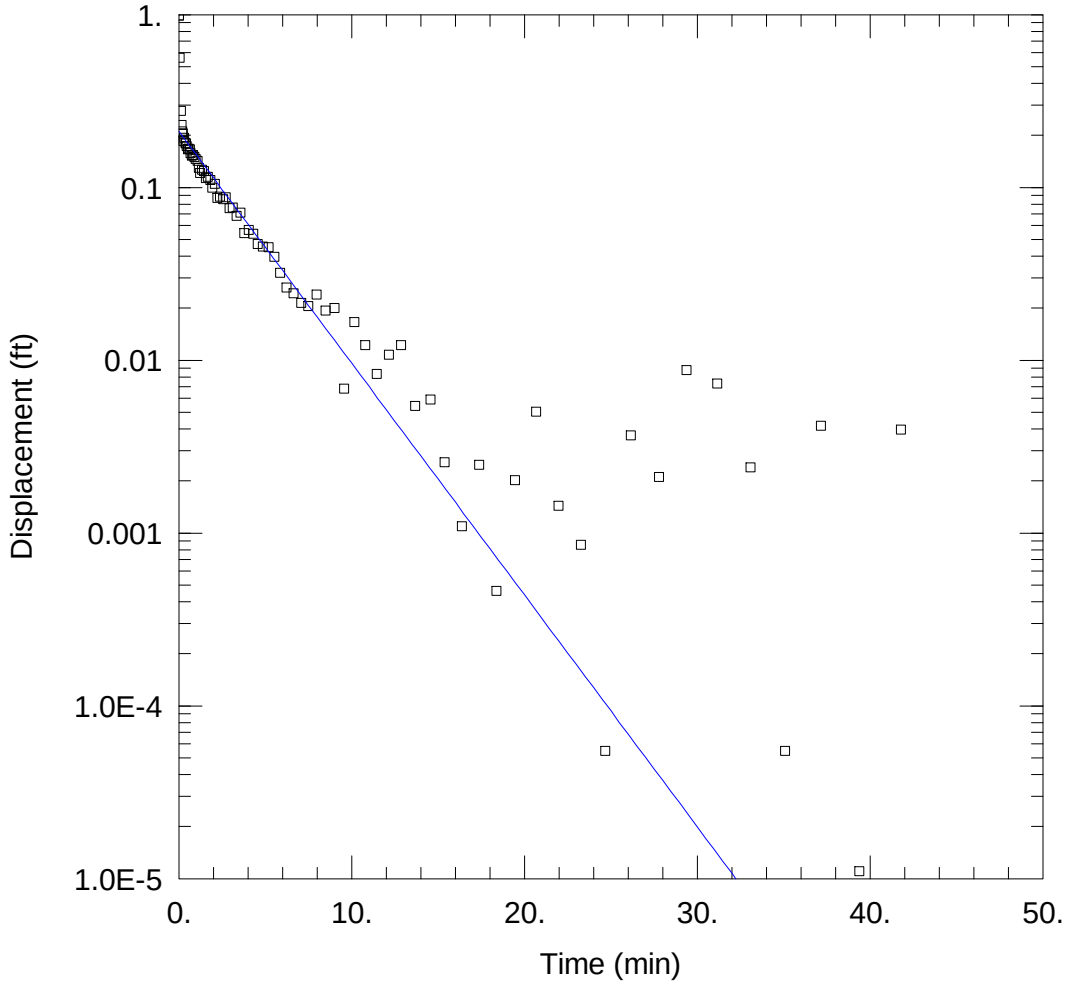
WELL DATA (PTX06-1155)

Initial Displacement: 0.9844 ft
Total Well Penetration Depth: 15.4 ft
Casing Radius: 0.167 ft
Static Water Column Height: 15.4 ft
Screen Length: 15.4 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.8883 ft/day
y0 = 0.1668 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1155b.aqt
Date: 09/29/11 Time: 20:22:03

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1155
Test Date: 9/28/2011

AQUIFER DATA

Saturated Thickness: 15.4 ft Anisotropy Ratio (Kz/Kr): 0.1

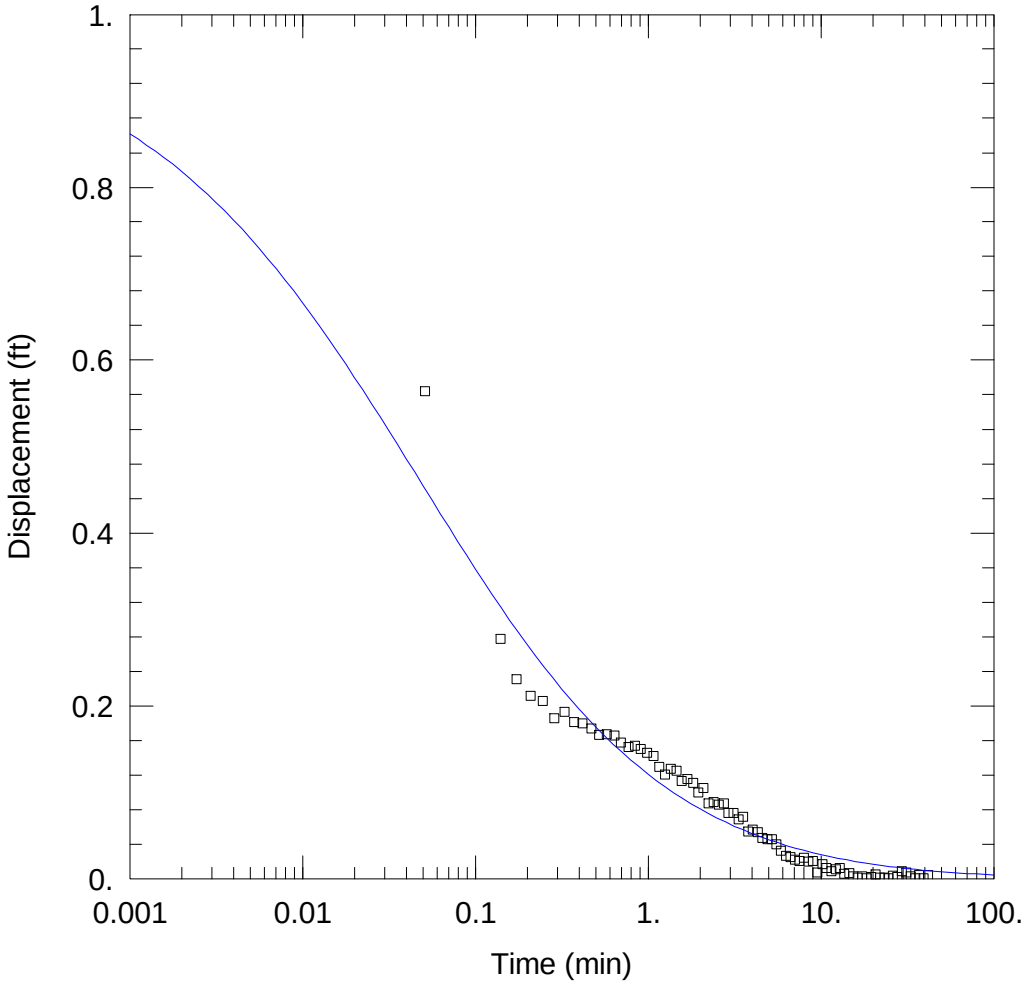
WELL DATA (PTX06-1155)

Initial Displacement: 0.9844 ft
Total Well Penetration Depth: 15.4 ft
Casing Radius: 0.167 ft
Static Water Column Height: 15.4 ft
Screen Length: 15.4 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Hvorslev

K = 1.943 ft/day
y0 = 0.2109 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1155b.aqt
Date: 09/29/11 Time: 20:21:01

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1155
Test Date: 9/28/2011

AQUIFER DATA

Saturated Thickness: 15.4 ft

WELL DATA (PTX06-1155)

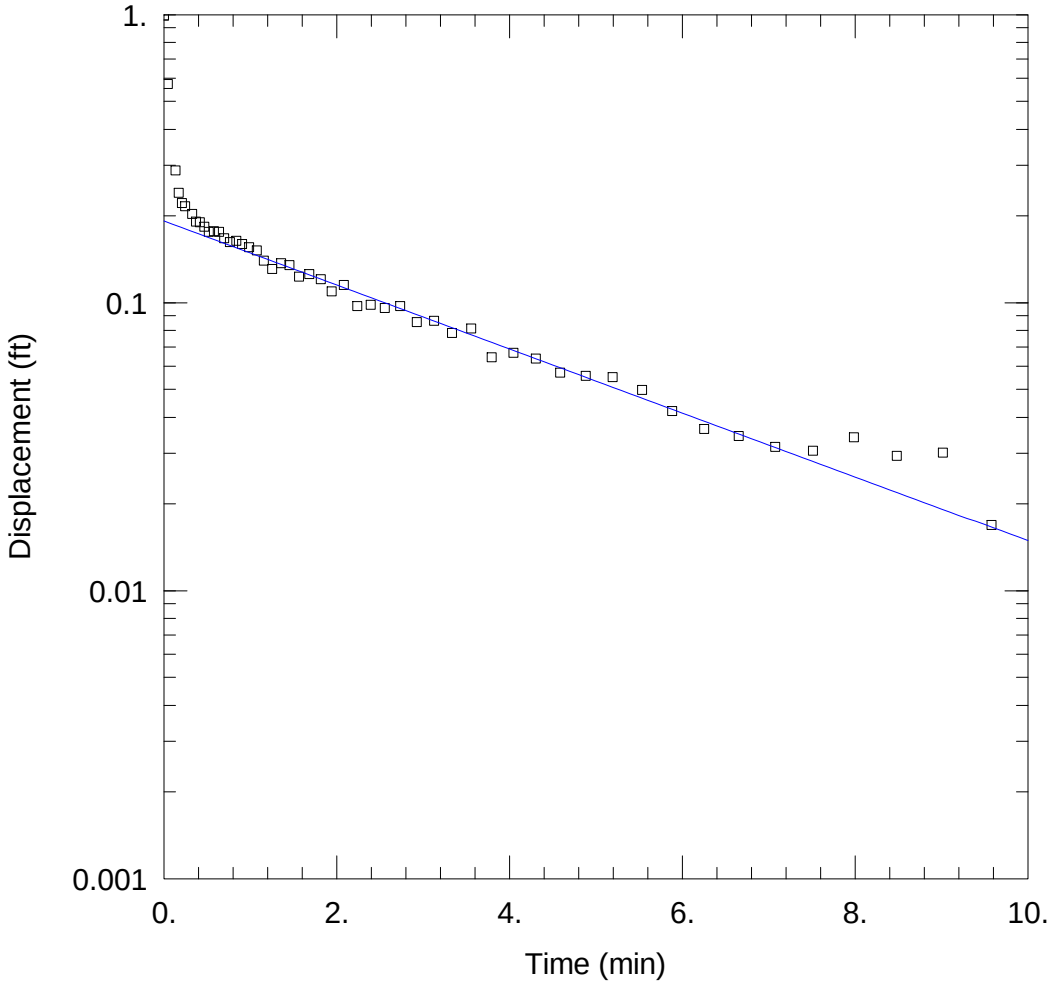
Initial Displacement: 0.9844 ft
Total Well Penetration Depth: 15.4 ft
Casing Radius: 0.167 ft

Static Water Column Height: 15.4 ft
Screen Length: 15.4 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 1.082 ft/day
Ss = 0.08281 ft^{-1}
Kz/Kr = 0.1



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1156.aqt
Date: 09/29/11 Time: 20:46:39

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1156
Test Date: 9/28/2011

AQUIFER DATA

Saturated Thickness: 24.5 ft Anisotropy Ratio (Kz/Kr): 0.1

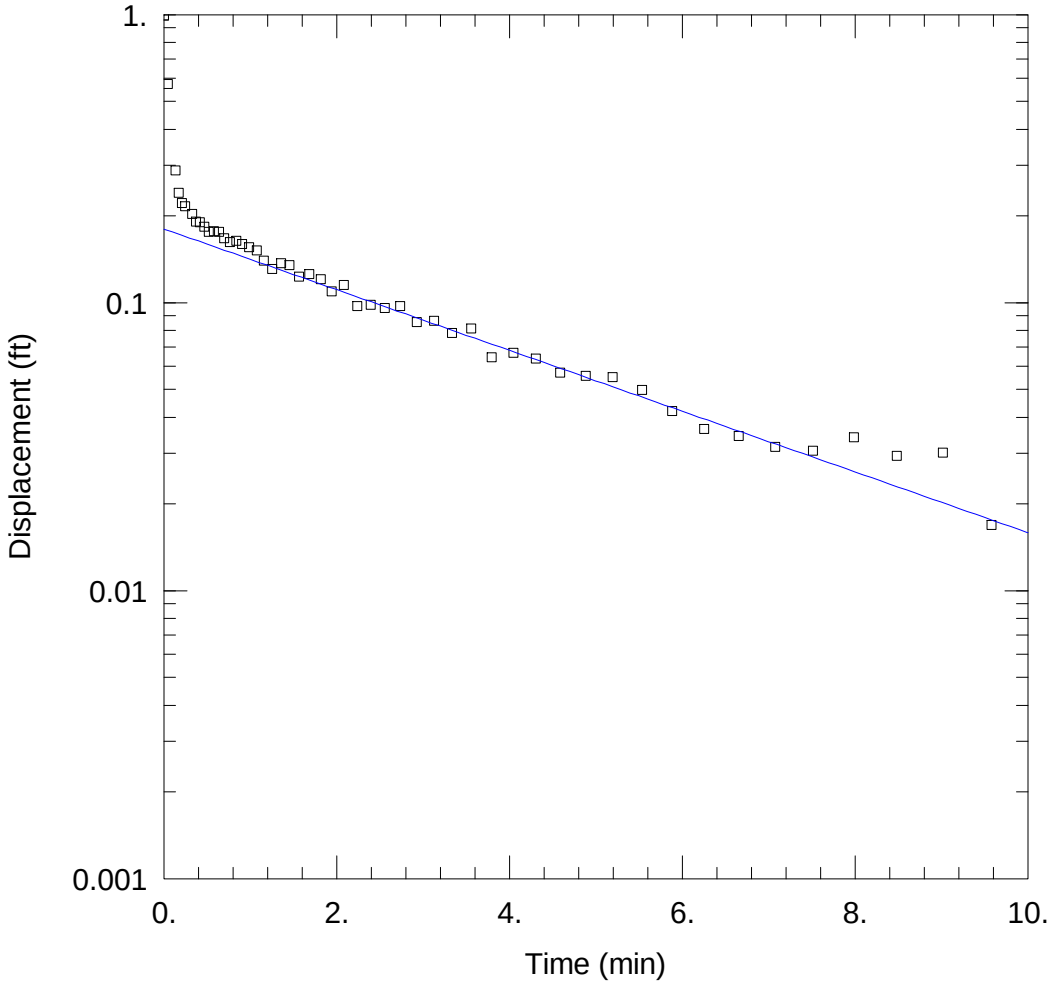
WELL DATA (PTX06-1156)

Initial Displacement: 0.9944 ft
Total Well Penetration Depth: 24.5 ft
Casing Radius: 0.167 ft
Static Water Column Height: 24.5 ft
Screen Length: 24.5 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice

K = 0.6018 ft/day
y0 = 0.192 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1156.aqt
Date: 09/29/11 Time: 20:44:30

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1156
Test Date: 9/28/2011

AQUIFER DATA

Saturated Thickness: 24.5 ft Anisotropy Ratio (Kz/Kr): 0.1

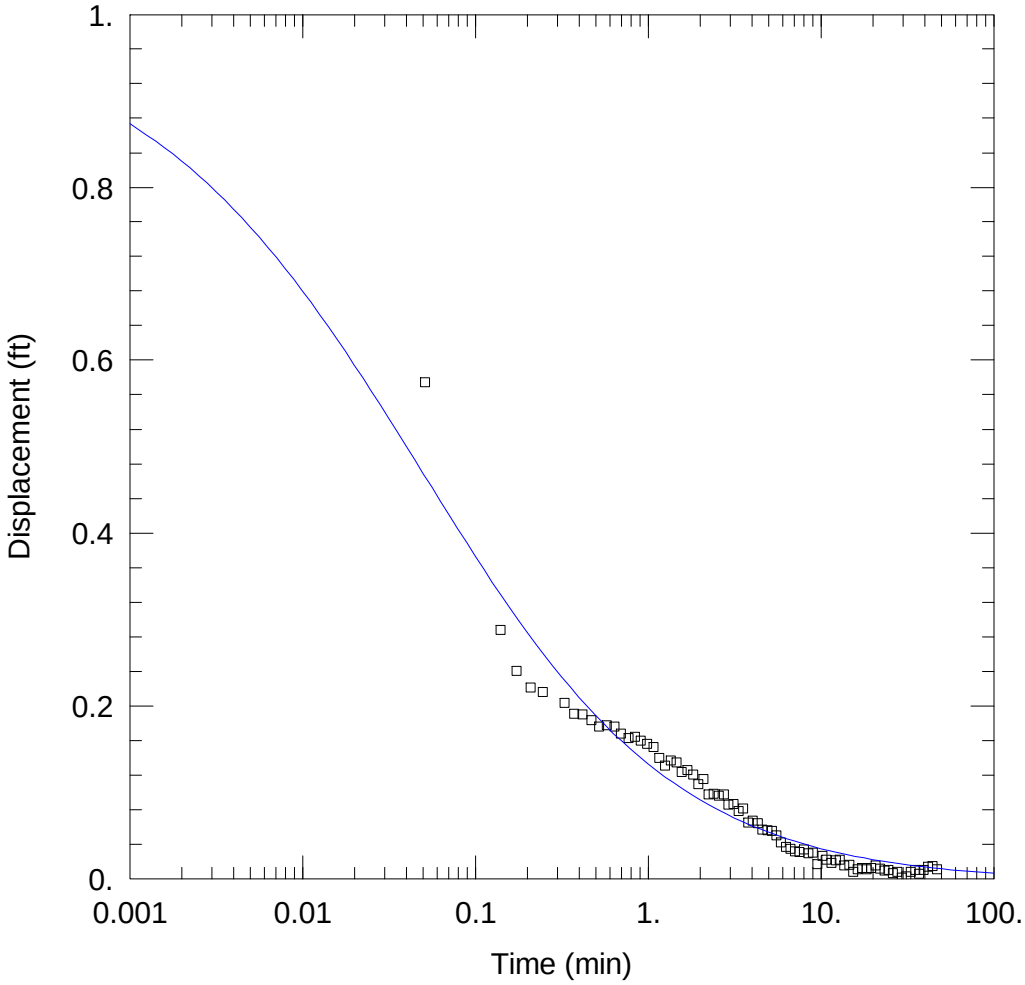
WELL DATA (PTX06-1156)

Initial Displacement: 0.9944 ft
Total Well Penetration Depth: 24.5 ft
Casing Radius: 0.167 ft
Static Water Column Height: 24.5 ft
Screen Length: 24.5 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined Solution Method: Hvorslev

K = 0.9594 ft/day y0 = 0.1801 ft



WELL TEST ANALYSIS

Data Set: C:\...\PTX06-1156.aqt
Date: 09/29/11 Time: 20:42:09

PROJECT INFORMATION

Company: Trihydro
Client: Pantex
Project: 70002
Location: Zone 11
Test Well: PTX06-1156
Test Date: 9/28/2011

AQUIFER DATA

Saturated Thickness: 24.5 ft

WELL DATA (PTX06-1156)

Initial Displacement: 0.9944 ft
Total Well Penetration Depth: 24.5 ft
Casing Radius: 0.167 ft

Static Water Column Height: 24.5 ft
Screen Length: 24.5 ft
Well Radius: 0.4 ft

SOLUTION

Aquifer Model: Unconfined
Solution Method: KGS Model

Kr = 0.3816 ft/day
Ss = 0.0884 ft^{-1}
Kz/Kr = 0.1

APPENDIX T

STATE PLUGGING REPORTS

STATE OF TEXAS PLUGGING REPORT for Tracking #97945

Owner:	**U.S. Department of Energy**	Owner Well #:	**PT06-ISB088**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 16" N**
Well County:	**Carson**	Longitude:	**101° 34' 24" W**
		GPS Brand Used:	**Garmin**

Well Type: **Injection**

HISTORICAL DATA ON WELL TO BE PLUGGED

Original Well Driller:	**Yellow Jacket Drilling**
Driller's License Number of Original Well Driller:	**59375**
Date Well Drilled:	**7/26/2014**
Well Report Tracking Number:	**No Data**
Diameter of Borehole:	**8 3/4" inches**
Total Depth of Borehole:	**290 feet**

Date Well Plugged:	**10/1/2014**
Person Actually Performing Plugging Operation:	**Yellow Jacket Drilling**
License Number of Plugging Operator:	**59375**
Plugging Method:	**Tremmie pipe cement from bottom to top.**
Plugging Variance #:	**No Data**
Casing Left Data:	1st Interval: **4 inches diameter, From 287 ft to 2 ft** 2nd Interval: **No Data** 3rd Interval: **No Data**
Cement/Bentonite Plugs Placed in Well:	1st Interval: **From 290 ft to 0 ft; Sack(s)/type of cement used: 12 - Cement** 2nd Interval: **No Data** 3rd Interval: **No Data** 4th Interval: **No Data** 5th Interval: **No Data**

Certification Data:	The plug installer certified that the plug installer plugged this well (or the well was plugged under the plug installer's direct supervision) and that each and all of the statements herein are true and correct. The plug installer understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling 3922 E. University Dr, Suite 1 Phoenix , AZ 85034**
Plug Installer License Number:	**59375**
Licensed Plug Installer Signature:	**Quentin Stevens**

Registered Plug Installer Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Plugging Method Comments:	**No Data**

Please include the plugging report's tracking number (Tracking **#97945**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

STATE OF TEXAS PLUGGING REPORT for Tracking #97946

Owner:	**U.S. Department of Energy**	Owner Well #:	**PTX06-ISB100**
Address:	**PO Box 30030 Amarillo , TX 79120**	Grid #:	**06-44-5**
Well Location:	**FM2373 & Hwy 60 Amarillo , TX 79120**	Latitude:	**35° 18' 54" N**
Well County:	**Carson**	Longitude:	**101° 33' 22" W**
		GPS Brand Used:	**Garmin**

Well Type: **Injection**

HISTORICAL DATA ON WELL TO BE PLUGGED

Original Well Driller:	**Yellow Jacket Drilling**
Driller's License Number of Original Well Driller:	**59375**
Date Well Drilled:	**8/7/2014**
Well Report Tracking Number:	**No Data**
Diameter of Borehole:	**9 5/8" inches**
Total Depth of Borehole:	**289 feet**

Date Well Plugged:	**9/18/2014**
Person Actually Performing Plugging Operation:	**Yellow Jacket Drilling**
License Number of Plugging Operator:	**59375**
Plugging Method:	**Tremmie pipe cement from bottom to top.**
Plugging Variance #:	**No Data**
Casing Left Data:	1st Interval: **4 inches diameter, From 287 ft to 107 ft** 2nd Interval: **No Data** 3rd Interval: **No Data**
Cement/Bentonite Plugs Placed in Well:	1st Interval: **From 289 ft to 0 ft; Sack(s)/type of cement used: 22 - Cement** 2nd Interval: **No Data** 3rd Interval: **No Data** 4th Interval: **No Data** 5th Interval: **No Data**

Certification Data:	The plug installer certified that the plug installer plugged this well (or the well was plugged under the plug installer's direct supervision) and that each and all of the statements herein are true and correct. The plug installer understood that failure to complete the required items will result in the log(s) being returned for completion and resubmittal.
Company Information:	**Yellow Jacket Drilling 3922 E. University Dr, Suite 1 Phoenix , AZ 85034**
Plug Installer License Number:	**59375**
Licensed Plug Installer Signature:	**Quentin Stevens**

Registered Plug Installer Apprentice Signature:	**No Data**
Apprentice Registration Number:	**No Data**
Plugging Method Comments:	**No Data**

Please include the plugging report's tracking number (Tracking **#97946**) on your written request.

Texas Department of Licensing & Regulation
P.O. Box 12157
Austin, TX 78711
(512) 463-7880

APPENDIX U

LAND SURVEY RESULTS

Davis Geomatics, LLC
Professional Geomatic Consultants
J.D. Davis, RPLS, CFedS
Professional Land Surveyors
Colorado • Kansas • Oklahoma • Texas
Certified Federal Surveyors

TRIHYDRO Corporation

Pantex Plant

POINT DESCRIPTION	NORTHING	EASTING	ELEVATION	CASING ELEVATION
PTX06-ISB087	3755523.08	634360.64	3541.41	
PTX06-ISB087 TOC	3755521.48	634360.30		3543.55
PTX06-ISB088A	3755570.13	634266.60	3541.78	
PTX06-ISB088A TOC	3755569.12	634266.28		3543.99
PTX06-ISB089	3755606.47	634200.34	3542.42	
PTX06-ISB089 TOC	3755605.20	634200.25		3544.62
PTX06-ISB090	3755650.38	634117.26	3542.95	
PTX06-ISB090 TOC	3755649.29	634117.28		3545.11
PTX06-ISB093	3755794.35	633857.23	3543.52	
PTX06-ISB093 TOC	3755793.61	633857.32		3545.57
PTX06-ISB094	3755838.98	633769.25	3543.16	
PTX06-ISB094 TOC	3755838.18	633769.16		3545.22
PTX06-ISB095	3755742.68	633652.63	3543.67	
PTX06-ISB095 TOC	3755741.48	633652.57		3545.87
PTX06-ISB096	3755807.06	633559.57	3542.79	
PTX06-ISB096 TOC	3755806.26	633559.56		3544.89
PTX06-ISB097	3755870.31	633470.54	3542.79	
PTX06-ISB097 TOC	3755869.59	633470.63		3544.92
PTX06-ISB098	3755929.79	633384.06	3544.53	
PTX06-ISB098 TOC	3755929.09	633384.11		3546.63
PTX06-ISB099	3755690.13	633757.56	3543.40	
PTX06-ISB099 TOC	3755688.99	633757.29		3545.62
PTX06-ISB100A	3755646.03	633791.28	3543.07	
PTX06-ISB100A TOC	3755645.06	633791.04		3545.23
PTX06-ISB101	3755616.85	633899.71	3543.02	
PTX06-ISB101 TOC	3755615.86	633899.23		3545.22
PTX06-ISB102	3755572.69	633985.55	3542.49	
PTX06-ISB102 TOC	3755571.61	633985.71		3544.69
PTX06-ISB103	3755527.39	634073.50	3542.20	
PTX06-ISB103 TOC	3755526.65	634073.34		3544.43
PTX06-ISB104	3755482.36	634160.38	3541.64	
PTX06-ISB104 TOC	3755481.47	634160.42		3543.80

PTX06-ISB105	3755438.20	634245.60	3541.38	
PTX06-ISB105 TOC	3755436.96	634245.79		3543.48
PTX06-ISB106	3755393.36	634332.49	3540.98	
PTX06-ISB106 TOC	3755392.61	634332.53		3543.07
PTX06-1169	3755241.66	634899.61	3537.57	
PTX06-1169 TOC	3755240.34	634899.61		3539.72
PTX06-1170	3755442.71	634569.69	3540.59	
PTX06-1170 TOC	3755441.82	634569.87		3542.74
PTX06-1171	3755715.08	634373.95	3542.42	
PTX06-1171 TOC	3755713.54	634374.04		3544.51
PTX06-1172	3755837.77	634098.63	3543.32	
PTX06-1172 TOC	3755836.77	634098.75		3545.43
PTX06-1173	3755312.40	634197.62	3540.86	
PTX06-1173 TOC	3755311.51	634197.51		3542.97
PTX06-1174	3755489.15	633904.63	3542.12	
PTX06-1174 TOC	3755488.07	633905.11		3544.29
PTX06-1175	3755651.06	633416.97	3543.15	
PTX06-1175 TOC	3755650.28	633417.24		3545.29
PTX06-1176	3755500.53	634114.06	3541.94	
PTX06-1176 TOC	3755499.78	634114.35		3544.15
PTX06-1177	3755818.55	633524.62	3542.69	
PTX06-1177 TOC	3755817.96	633524.61		3544.74

NOTE: COORDINATE VALUES ARE TEXAS STATE PLANE, NORTH ZONE, NAD 83 AS DETERMINED FROM OPUS SOLUTION AND RELATIVE TO BOHANNAN HUSTON 108 AND BOHANNAN HUSTON 93. ELEVATIONS ARE NAVD 88 AND RELATIVE TO BOHANNAN HUSTON 108.

J.D. Davis
Registered Professional Land Surveyor
Texas Registration Number 5626
Amarillo, Texas

Appendix V-AA available in the Pantex Administrative Record Copies are available upon request

Appendix H
Hydrologic Evaluation
East and Southeast Zones of the Perched Aquifer at the Pantex Plant

U.S. Department of Energy/

National Nuclear Security Administration

P A N T E X

P L A N T

Hydrologic Evaluation – East and Southeast Zones of the Perched Groundwater at the Pantex Plant

2014 Update

May 2015

Hydrologic Evaluation

East and Southeast Zones of the Perched Aquifer at the Pantex Plant

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Attachments

Attachment 1: Comparison of 2009 and 2014 Perched Aquifer Groundwater Elevation Maps

Attachment 2: 20-year pumping Simulation results

Attachment 3: 20-year Pumping Simulation Results, with Additional Extraction Wells

I. Introduction

This updated evaluation is included in the 2014 Annual Progress Report as a result of key findings in the First Five-Year Review Report (B&W Pantex 2012). The report recognized that perched groundwater COC plumes continue to move and/or expand down-gradient, especially to the east of FM 2373 and in the southeastern lobe of the perched aquifer. As stated in the Groundwater Remedy Effectiveness Evaluation (Trihydro 2012) conducted as part of the First Five-Year Review, portions of these areas are not under the short-term influence of the SEPTS and may not be under the long-term influence due to limited saturated thickness or other limiting hydrogeologic conditions (see Figure 1).

Due to the issues identified, Pantex is evaluating these areas in more detail than prior reporting efforts, which tended to focus more on the operation of installed remedial actions and effects on the perched groundwater system as a whole rather than these areas near the fringe of perched groundwater that may or may not be influenced by the installed remedial actions. This report is the third focusing on these areas, but will be updated and revised yearly as part of the Annual Progress Reporting as additional data is collected and analyzed.

The 2014 update includes discussion of water level and COC concentration data, as well as a discussion of the aquifer testing data collected in 2014.

Even though several high explosive compounds are found in this region, this report focuses on the RDX plume as it is the most widespread at the highest concentrations in these areas and has been consistently used in prior reporting and evaluations to represent the southeast plume. The following sections discuss RDX concentrations, trends, and apparent plume movement in perched groundwater east of FM 2373, as well as effects of pump and treat operations over time.

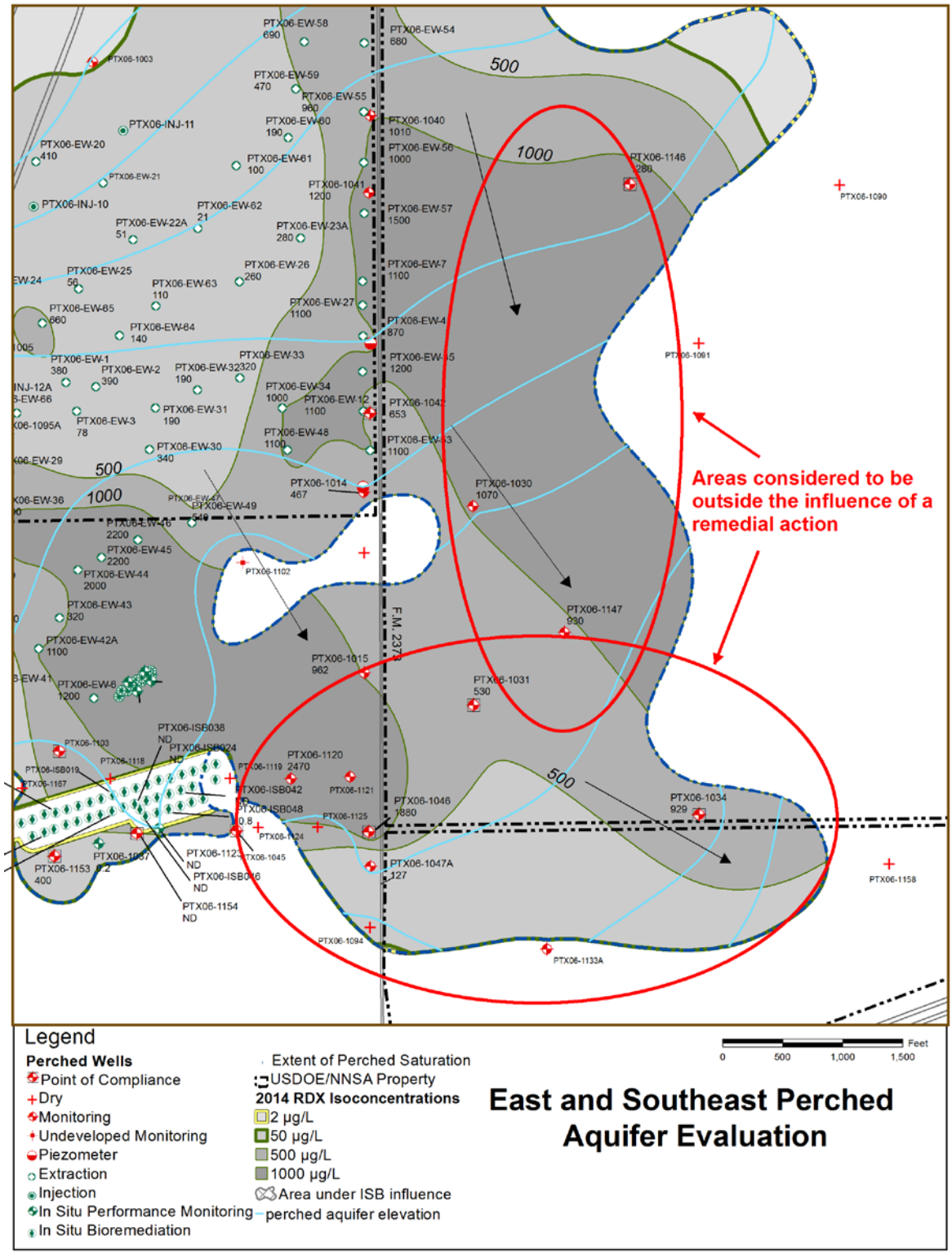


Figure 1. Areas of Perched Groundwater outside the Influence of Remedial Actions

II. Wells Evaluated

Many wells have been installed in the areas identified as currently outside the influence of a remedial action depicted in Figure 1. These wells are discussed in detail below and include:

- PTX06-1015
- PTX06-1030
- PTX06-1031
- PTX06-1034
- PTX06-1046
- PTX06-1047A
- PTX06-1120
- PTX06-1121
- PTX06-1146
- PTX06-1147
- PTX06-1133A

Additionally, six dry wells are installed in this region of perched groundwater and help define the perched extent. These wells are monitored at least twice per year for water levels and will be included in this evaluation if water is observed in these wells. These dry wells include:

- PTX06-1158
- PTX06-1094
- PTX06-1125
- PTX06-1124
- PTX06-1090
- PTX06-1091

PTX06-1015 was installed in 1995 on Texas Tech property approximately 150 feet west of FM 2373 and has had RDX concentrations exceeding GWPS since installation. This is the closest down gradient well to the SEPTS extraction well field so it may be the first well to see effects of extraction.

PTX06-1030 and PTX06-1031 were installed approximately 750-feet east of FM 2373 on the Cockrell property in 1996, which was eventually purchased by DOE in 2008. PTX06-1030 has had RDX concentrations exceeding GWPS since monitoring began in 1996, typically ranging from 500 – 2000 ug/L. However, there does appear to be a recent decreasing trend in RDX. PTX06-1031, which was installed approximately 1700-feet south of PTX06-1030, had non-detect RDX results in 1996 followed by a gradual increasing trend in RDX. Recent concentrations (since 2012) have ranged from approximately 450 - 550 ug/L. Calculated trends are quite variable, depending on the time frame, ranging from increasing considering all data to no trend since the start of remedial actions.

PTX06-1034 was installed 1998 in the southeast lobe of perched groundwater (former Cockrell property) and is currently the furthest down gradient sampled well installed in the area. This well was initially non-detect for RDX, which then began to dramatically increase in 2005. The RDX concentration increased to the all-time high value of 929 ug/L during the second sampling event of 2014. Due to increasing COC trends in this well, Pantex installed an additional well further east of PTX06-1034 (PTX06-1158) in 2012, but the well has been dry since installation.

PTX06-1046 and PTX06-1047A were installed on Texas Tech property in 2000. PTX06-1046 has had RDX concentrations exceeding GWPS since monitoring began in 2000 and has increased from approximately 500 to almost 2000 ug/L. RDX was initially non-detect in PTX06-1047A, which installed approximately 300-feet south of PTX06-1046, until concentrations began consistently exceeding GWPS in 2006, but appear to have peaked in 2012 and are now decreasing. The most recent RDX data indicate concentrations nearing the GWPS. While these trends conflict with the general north-south gradient believed to be driving groundwater movement in the area, additional data are needed to confirm the trending results to date.

PTX06-1120 and PTX06-1121 were installed east of the Southeast ISB system in 2007 and were considered to be dry when completed. Sampling began in 2010 and RDX concentrations have ranged from approximately 2000 – 4000 ug/L in PTX06-1120 and 900 – 1300 ug/L in PTX06-1121. RDX data in PTX06-1120 indicate a decreasing trend. PTX06-1121 has not been sampled since 2012 due to a lack of water.

PTX06-1146 and PTX06-1147 were installed along the eastern edge of the estimated perched extent in 2008. When sampling began in 2009, PTX06-1146 had concentrations around 1400 ug/L, which increased until early 2011, when the concentrations appeared to have peaked, and now may be exhibiting a decreasing trend. PTX06-1147, installed approximately 3800-feet south/southwest of PTX06-1146 had had RDX concentrations increase from approximately 400 ug/L to over 1000 ug/L from 2009 - 2013. RDX concentrations significantly decreased during 2014.

III. Pumping Effects

If the perched groundwater elevation maps are compared from 2009 to 2014 (Attachment 1), positive effects of pump and treat operations are apparent, including the reduction of the mound of groundwater under Playa 1 and a general shift of groundwater contours to the north in the SEPTS well field. However, the elevation contours have not noticeably shifted in the eastern areas of perched groundwater and have actually shifted further south in the southeast lobe of perched groundwater. The other noticeable change in the maps is the apparent spread of the dry zone located south of the SEPTS well field, caused by the water now being measured in the sump of PTX06-1102. This dry zone will likely continue to expand as pump and treat operations continue to reduce saturated thickness of the perched aquifer upgradient of this area.

These observations are also supported by the 2014 Capture Zone analysis results which are depicted in Figure 2. The capture zones represent areas of influence over a five-year pumping period using 2014 well operational data coupled with a single layer groundwater model specifically developed for evaluating remedial options in the perched aquifer. While the area of influence did slightly expand to the east from 2012 to 2015 (likely due to an emphasis on operating the wells along FM 2373 and possible dewatering of the perched aquifer in the extraction well field) there is still a large area to the east that is not affected by SEPTS system operations.

Some of this movement can be explained by a closer examination of the SEPTS extraction well field. As depicted in Figure 3, extraction well pump intake depths are set at elevations ranging from approximately 3245 – 3255 ft amsl in the southeast portion of the SEPTS well field. Intake depths are slightly lower in some wells installed further to the southwest on Texas Tech property, but this region tends to have lower hydraulic conductivity and saturated thickness resulting in reduced well productivity. Therefore, perched aquifer surface contour lines of 3250 – 3255 ft likely represent the extent of "recoverable" area of the perched aquifer with the current configuration of the SEPTS well field.

As pump and treat operations continue to remove head, the unaffected zone of perched groundwater will continue to expand as the current volume of water in this region continues to spread into unsaturated zones. Additionally, water continues to flow into this region from the north caused by the general south/southeast groundwater gradient, which is driven by the general slope of the fine grained zone. It may be possible that, as the pump and treat systems continue to remove head from the perched groundwater system, the water levels will be affected over the entire perched groundwater system, thereby reducing the flux of groundwater into this region. However, these reductions in flux will take many years to take effect. If more immediate corrective action is needed, the SEPTS well field could be expanded to the east across FM 2373 to reduce head and thus groundwater flux before it reaches areas with lower transmissivity where pump and treat technologies are less effective.

In order to analyze pumping effects in more detail, the single layer model used in the capture zone analysis was used to evaluate long-term pumping effects and the possible addition of extraction wells east of FM 2373. The contoured 2012 water level surface was used for initial heads and extraction wells were assigned their 2012 average flow rate used in the capture zone analysis. A 20-year pumping period was simulated and model graphical results at time 0, 5, 10, and 20 years can be seen in Attachment 2. Note the color flood indicates perched water table elevations and the blue contours represent perched aquifer saturated thickness. Additionally, white cells represent simulated dry conditions and the light blue cells at the perched extent represent the general head boundaries that define flow boundaries for the model.

As depicted in Attachment 2, most effects on saturated thickness are observed within the SEPTS well field early in the simulation. Some effects are observed across FM 2373 from the well field but virtually no effects are seen in the southeast lobe of the perched aquifer until over 10 years

of pumping. It is also important to note that, as saturated thickness is reduced, the modeled pumping rate is correspondingly reduced until the flow rate is essentially zero. So, if the 5-ft saturated thickness line represents an effectively dewatered perched zone that can no longer be pumped, approximately half of the SEPTS well field will be inoperable by the end of the simulated pumping period. This reduction in pumping is represented in hydrologic budgets recorded in the model output file and summarized in Table 1. It is important to remember these values represent total extraction of both pump and treat systems and extraction rates at individual wells cannot be determined.

Table 1 - Simulated Extraction Rates

Simulated pumping time	Well Extraction (gpm)	% Reduction in Extraction
< 1 yr (0)	432	--
5 yrs	396	8
10 yrs	267	32
20 yrs	200	54

So the reduction in saturated thickness in the southeast lobe illustrated between 10 and 20 years of the simulation period is not directly due to pumping effects but rather movement of water by expansion of the perched groundwater along the fringes of the model domain as simulated by water moving out of the general head boundaries, as described below.

The 20-year pumping model was also used to simulate addition of two extraction wells in the zone of thicker saturated thickness east of FM 2373 (directly east of EW-57). Attachment 3 contains simulation results. When comparing the simulated results with additional extraction to the simulated results with the current extraction system, reductions in saturated thickness are observed very quickly and the northern area east of FM 2373 is almost effectively dewatered (saturated thickness less than approximately 5 ft) after 10 years of pumping. However, simulated effects to water table elevations and saturated thicknesses in the southeast lobe were much less obvious. Saturated thickness contours with additional extraction were slightly smaller after 20 years of pumping.

These results indicate that the installation of additional extraction wells east of FM 2373 will remove COC mass and limit flux moving into the southeast lobe to a degree, but it appears that the SEPTS well field is already relatively effective in limiting flux into this area. Additionally, water movement in the area is primarily either downward movement through the fine-grained zone or by lateral spread at the fringes of the perched extent as dewatering of the perched aquifer up gradient has little effect on the decreasing water levels in the area.

Given the above discussions above regarding the results of modeling, the limitations and assumptions of numerical modeling must be recognized. All groundwater models will have some degree of assumption regarding aquifer geometry, properties, etc. Some of these

uncertainties can be addressed through model calibration and refinement over time, but some uncertainty and model limitations will always be a part of the modeling process. Two issues were identified that will likely affect the study areas:

- Since this is a single layer model, the model bottom is defined as the top of the fine-grained zone. Therefore, these simulations in no way represent vertical flow downward through the fine grained zone. These effects become more important in the southern portion of the study area where the fine-grained zone thins out and vertical movement is more likely.
- The perched aquifer extent is represented in the model by general head boundaries, which are head-dependent flow boundaries. Essentially, flow into or out of the aquifer is dependent upon the simulated head at adjacent cells, the head defined at the boundary cell, and a conductance term. In this model, the heads defined at the general head boundaries were set at 6-inches above the aquifer bottom so water tends to freely flow out of the aquifer at the defined boundaries, which likely represents the flow conditions relatively well in the areas evaluated.

Even with the issues identified above, the general conclusions gained from the modeling results are believed to be sound. If groundwater models that more accurately represent groundwater flow in these areas are needed to assist in assessing remedial options, a new model could be developed or the current model could be modified to represent vertical movement through the fine-grained zone using multiple layers. Additionally, the active model domain could be expanded to represent variably saturated flow conditions at the perched aquifer fringe rather than defined flow boundaries.

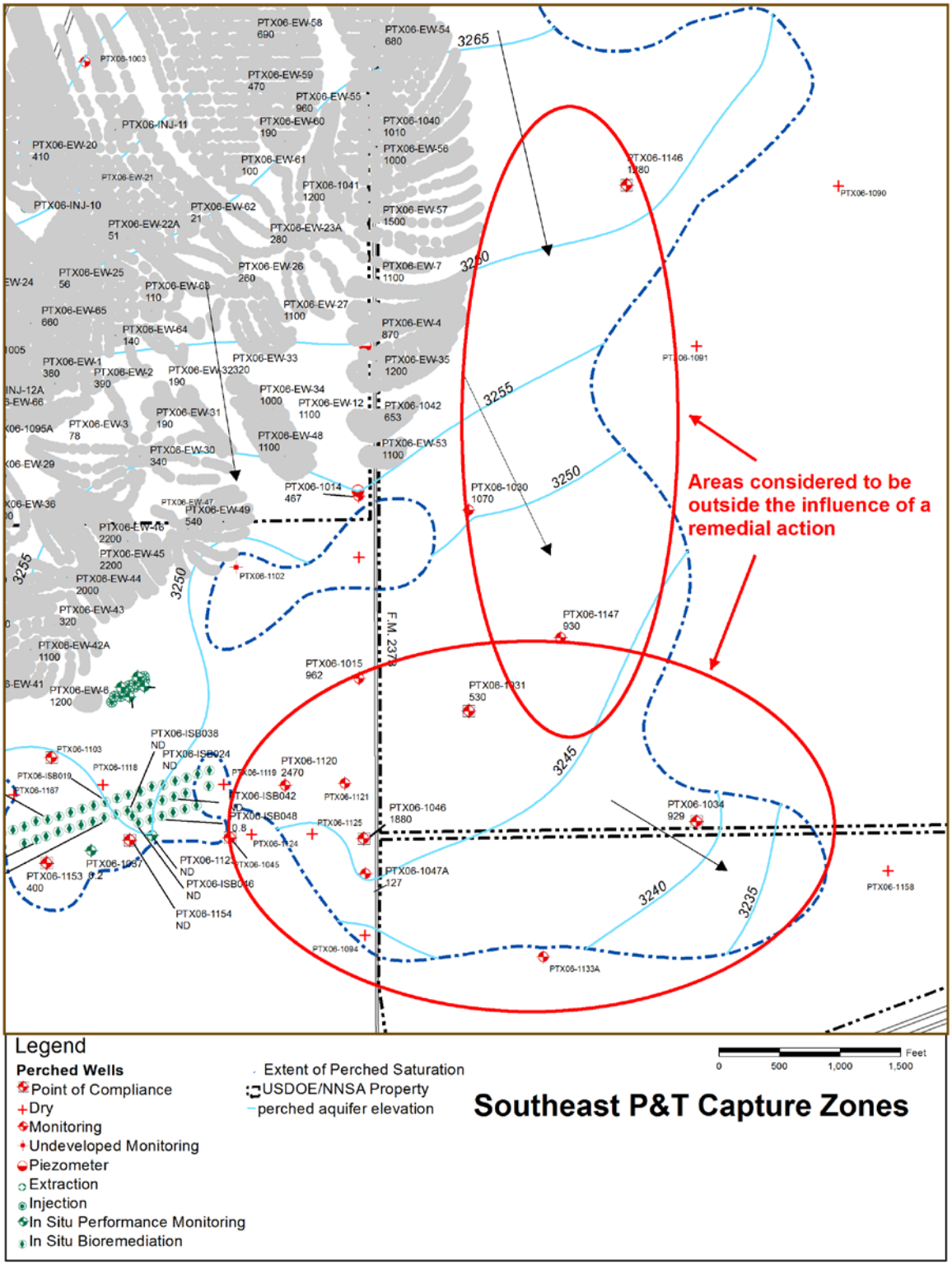


Figure 2. SEPTS Captures Zones

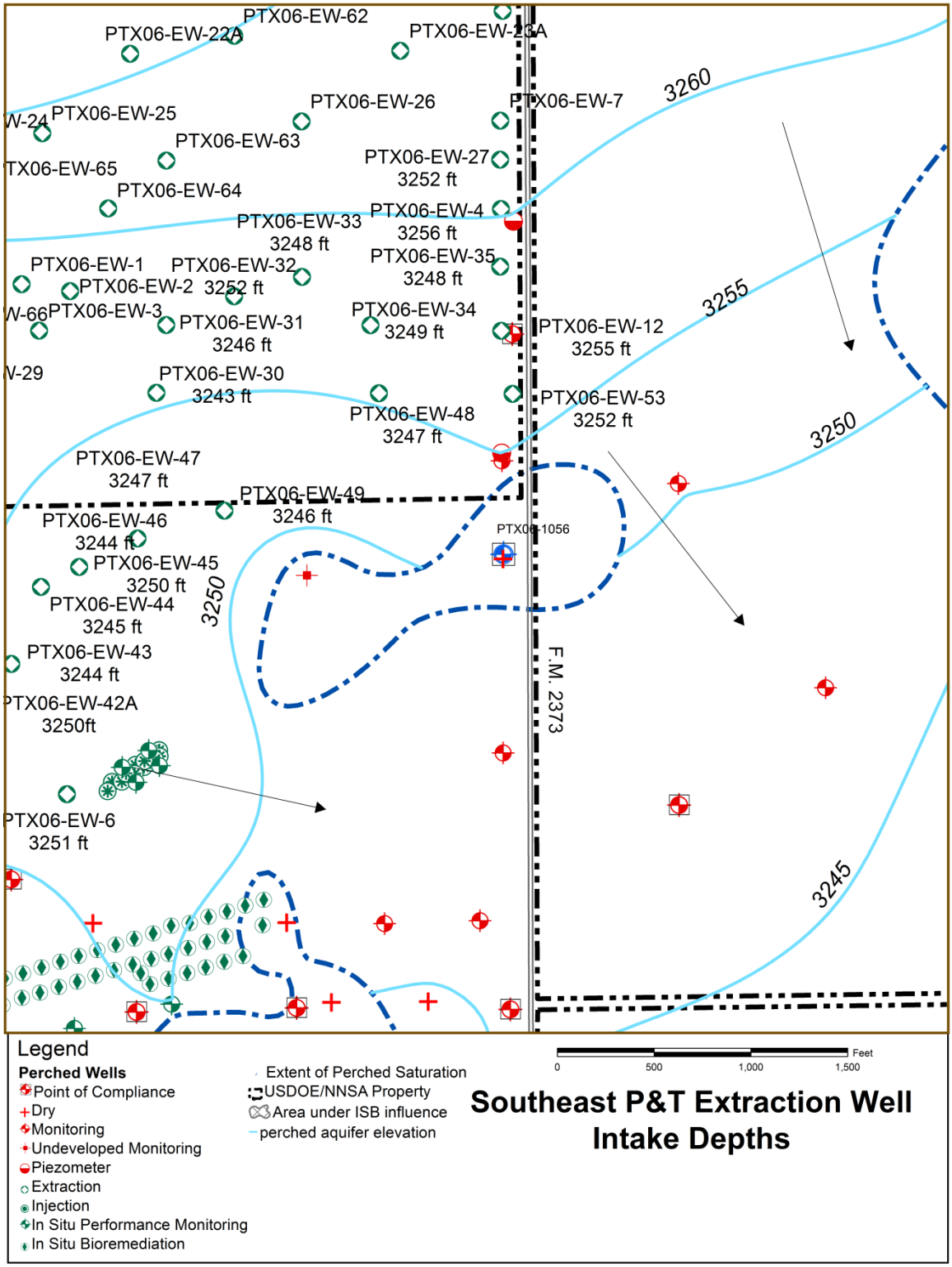


Figure 3. SEPTS intake Depths vs Perched Aquifer Water Surface Elevations

IV. Indicators of Plume Movement

In order to evaluate and attempt to quantify plume movement in the areas that are unlikely affected by pump and treat operations. the RDX concentrations were plotted over time on the same axis for:

- PTX06-1030
- PTX06-1031
- PTX06-1034
- PTX06-1147
- PTX06-1133A

These wells were chosen because in general, they are located in a line following the groundwater gradient in the area, which shifts from south (in the northern region) to southeast (in the southern region).

As depicted in Figure 4, RDX data has been collected in PTX06-1030 and PTX06-1031 since 2006. At that time, the RDX plume had already reached PTX06-1030 as, with the exception of a single data point, the concentrations consistently exceeded 200 ug/L. Concentrations increased to values ranging around 1500 ug/L and are now exhibiting a decreasing trend. RDX concentrations were at or near detection limits in PTX06-1031 until 1998, then began to gradually increase and appear to be stable at concentrations around 500 ug/L.

PTX06-1034, which is currently the furthest down gradient sampled well installed in the area, had relatively consistent low-level detections of RDX from the time it was installed in 1998 until 2004, when concentrations began to gradually increase. Then, in 2010, concentrations began to increase at a much faster rate and are now over 700 ug/L. The rate of increase in concentrations appears to be much faster than the rate at PTX06-1031 and concentrations are now higher than all-time high values at PTX06-1031. Therefore, it appears that the RDX detected in PTX06-1034 is more likely from the perched groundwater to the east represented by PTX06-1147.

High concentrations of RDX had already reached PTX06-1147 when installed in 2009. This well, which was installed between PTX06-1030 and PTX06-1034 had concentrations increase from approximately 400 ug/L to over 1000 ug/L in 2012. Recent data indicate the RDX concentrations are now decreasing in this well.

If the RDX concentration of approximately 400 ug/L depicted on Figure 4 is chosen as the leading edge of the plume and considering the temporal changes in concentration discussed above, the RDX plume appears to moving down gradient at a rate of 100 – 200 ft/yr from PTX06-1030 to PTX06-1034. This appears to be faster than groundwater velocities estimated for the SEISB conceptual site model, but similar to those groundwater velocities estimated for the Zone 11 ISB conceptual site model (Trihydro 2011). Keep in mind these velocities were estimated using slug testing techniques in ISB injection wells, which may or may not be representative of conditions in the surrounding formation.

PTX06-1133A was dry when installed in 2009 and remained dry until 2011, when approximately 3 feet of water entered the well. Since then, the water level trend is decreasing. This well was been sampled from December 2011 through May 2013 and all VOCs and HEs have been non-detect. The water level dropped to a level that could not be sampled and the water is now in the well sump. These water level measurements and analytical results suggested that the perched extent was slowly expanding in the area and "old" perched groundwater unaffected by plant operations had now moved into this well. However, since this well is apparently dry again, it is unknown whether the temporary condition in the well was caused by an expanding extent of perched groundwater or some other unknown phenomena. This well will continue to be monitored and will be sampled if the water rises to a level that supports sampling.

As summarized in Figure 5, all of the wells in the far southeast lobe of perched groundwater, except PTX06-1034 and PTX06-1046 are exhibiting decreasing trends in RDX considering the 2009 – 2014 data. These trends may be caused by mass removal upgradient and some mixing with unaffected water in the region.

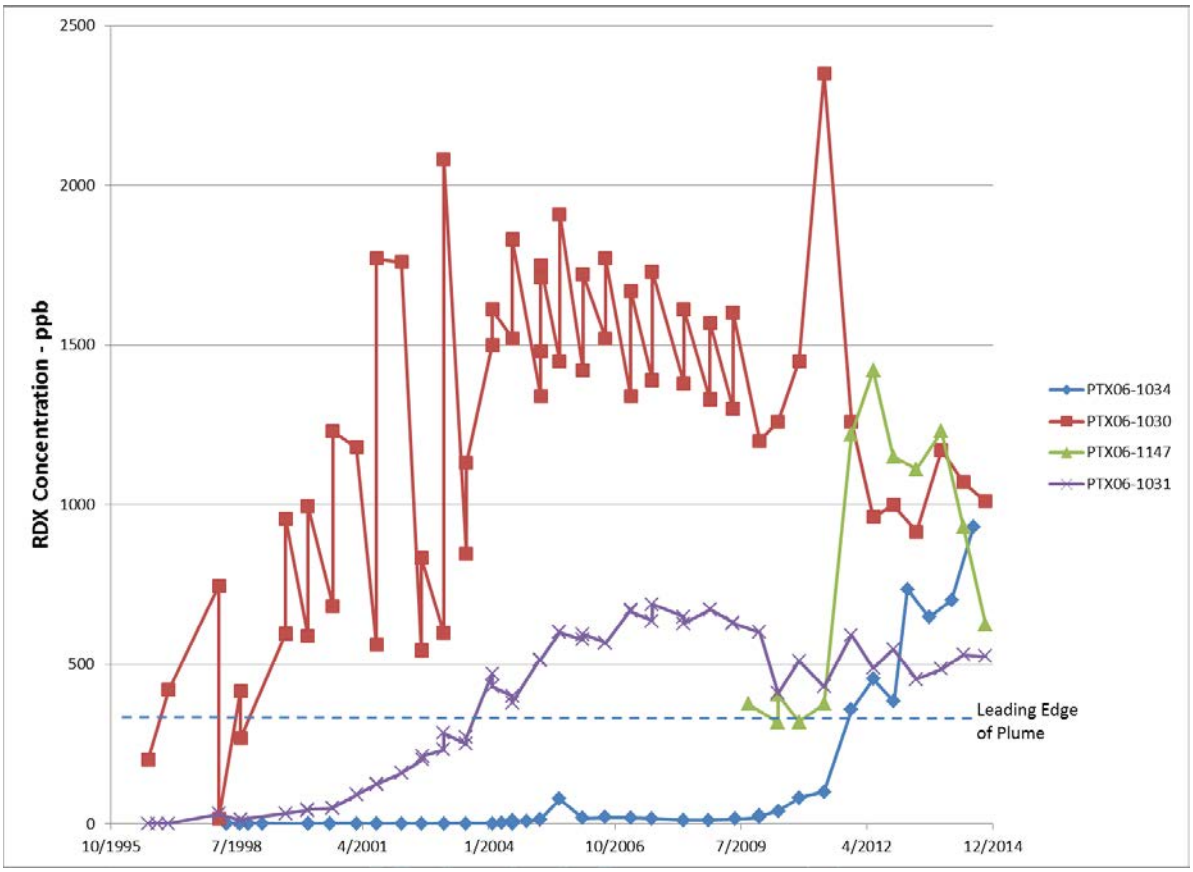


Figure 4. RDX Concentrations over time, Southeast Perched Aquifer Wells

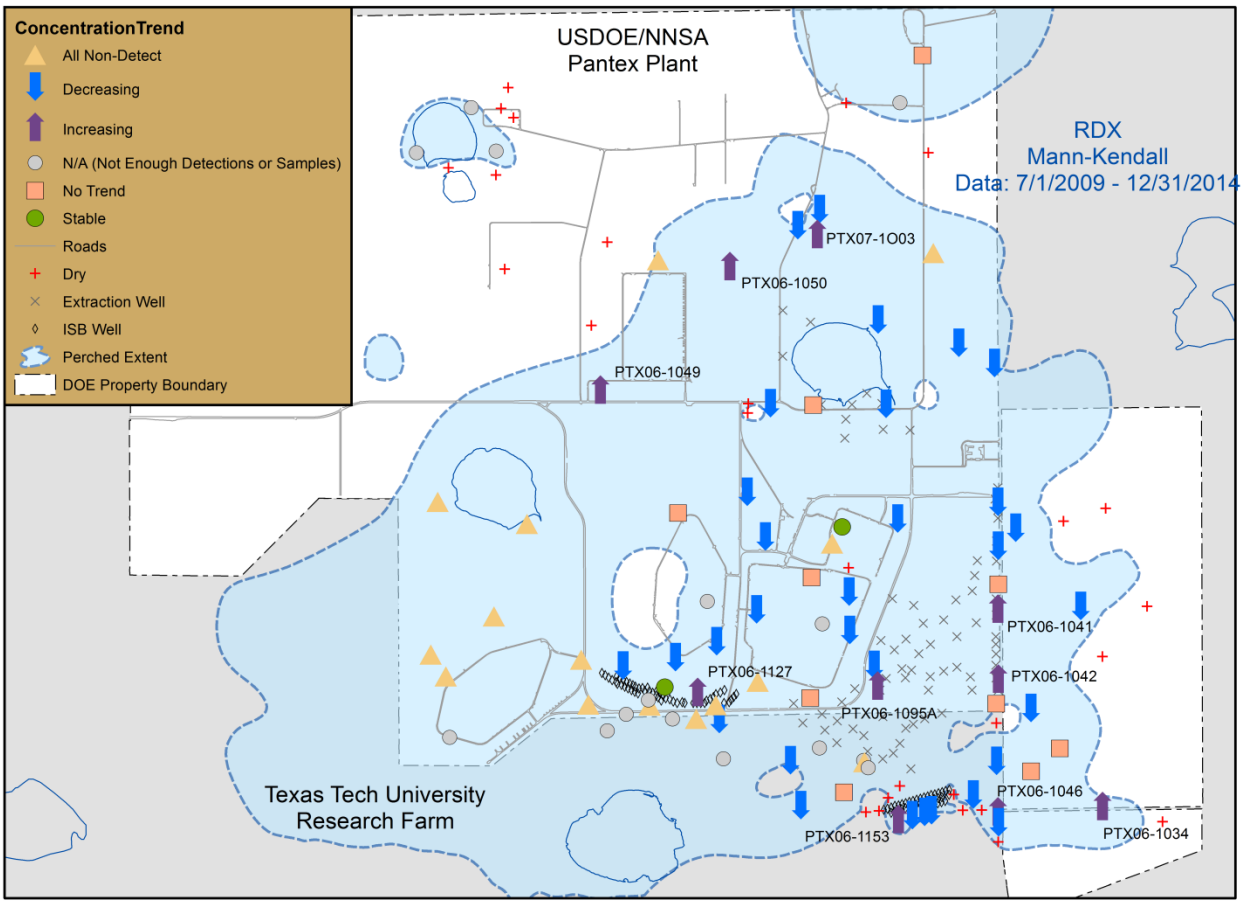


Figure 5. Recent RDX Trends in the Perched Aquifer

V. Results of Pump Testing

Pump Testing was conducted from May – June 2014 at PTX06-1146 and PTX06-1147, located in the eastern portion of the perched aquifer, east of FM 2373. This pump testing was performed to address an issue from the first Five-Year Review Report, which was the plume expansion of high explosives east of FM 2373 and in the southeast lobe of perched groundwater. The goal of this testing was to improve understanding of hydrogeology in this area and assess the effectiveness of potential active remedial alternatives, most likely an expansion of the existing SEPTS well field.

The results indicated the southern zone, represented by PTX06-1147, was more conductive than the northern zone represented by PTX06-1146. The estimated hydraulic conductivities generally fell within the range of values estimated during previous pump testing in the perched aquifer. The aquifer properties estimated during the two constant rate pump tests were also compared to the values given in the generalized ground-water restoration difficulty scale in *Design Guidelines for Conventional Pump-and-Treat Systems* (USEPA 1997). Hydraulic conductivity values fell between the high (<0.0001 cm/s) and low (>0.01 cm/s) difficulties, but were closer to the low difficulty end of the scale. This comparison indicates that the perched aquifer, especially in the southeastern zone of perched groundwater, is conducive to groundwater extraction. However, several issues with the pump testing methods and equipment limiting the quality of the dataset must be acknowleged:

1. **Use of a single well pump test.** Generally, when water level drawdown is observed only in the pumping well, the hydraulic properties estimated are representative of the formation nearer the well and may not represent the formation as a whole. It also limits the reliability of data used for well placement, specifically when estimating the cone of depression/radius of influence. Additionally, any well construction issues, including the formation of a skin during well installation, would have a higher effect on observations in a single well test. The results are typically more representative than short-term in-well hydraulic testing (slug testing), but water level observation points independent of the pumping wells are desirable.
2. **The short pumping period of both tests.** Generally, the pumping period needs to be as long as possible (a minimum of 24-hours according to the EPA guidance) in order to affect as much of the aquifer and obtain representative results. However, the pumping times for both tests were limited to approximately 12 hours. It is unknown whether additional pumping time would have yielded different results, but longer pumping times and extension of the affected area as far as possible may identify possible boundary conditions. In the case of the eastern portion of the perched groundwater, boundary effects could be observed as the saturated thickness thins out to the east.
3. **Limited pumping capacity.** Due to equipment availability and well construction, the maximum pumping capacity was approximately 6.3 gpm. While this did not affect

the outcome of the testing at PTX06-1146, the flow rate used for the PTX06-1147 testing may not have been high enough to effectively stress the formation and obtain representative data.

4. **Well Construction.** Since the testing was conducted on wells installed for monitoring purposes only, several potential issues with well installation and construction were identified that could have limited the effectiveness for aquifer testing purposes.
    a. The 4-inch well diameter limited the pump size and thus pumping capacity, as well as well production rate.
    b. The 1-ft sumps limited the usable water column for the test. In other words, with a longer sump, the pump and transducer could have been lowered further below the screen, resulting in a longer screened interval that could be utilized for the monitoring of drawdown and facilitate continued pumping.
    c. The intended use could have affected choice of well materials, including screen and filter pack sizing.
    d. The intended use could have affected decisions regarding well development.

Therefore, while the limited data does suggest that pump and treat may be viable in the eastern portion of perched groundwater, more aquifer testing may be necessary to determine design of the extraction well field (if it is determined that a pump and treat remedy is needed in this area). In order to address the limitations discussed above, the aquifer testing should include:

- Installation of larger diameter extraction wells (to facilitate extraction equipment, higher flow rates, and possible future use in the extraction well field) and nearby observation points.
- Longer pumping periods (24 – 72 hours)

As a result, Pantex is currently planning to install two wells approximately 50 -ft away from PTX06-1147 and conduct a long-term pump test in 2015. Data acquired from this test will be discussed in the 2015 evaluation.

VI. Conclusions

Based on the data evaluated, several important conclusions can be drawn. Given the current configuration of the SEPTS well field, the system will not be able to affect water levels, spread of the perched aquifer, or COC mass currently in the southeast lobe of the perched aquifer. Considering the observed saturated thicknesses in this area as well as operational data from extraction wells installed west of this area on Texas Tech property, additional extraction wells installed in this area would likely be ineffective. Water will continue to flow into this area from the north (supported by recent data from PTX06-1034) due to the general gradient, increasing

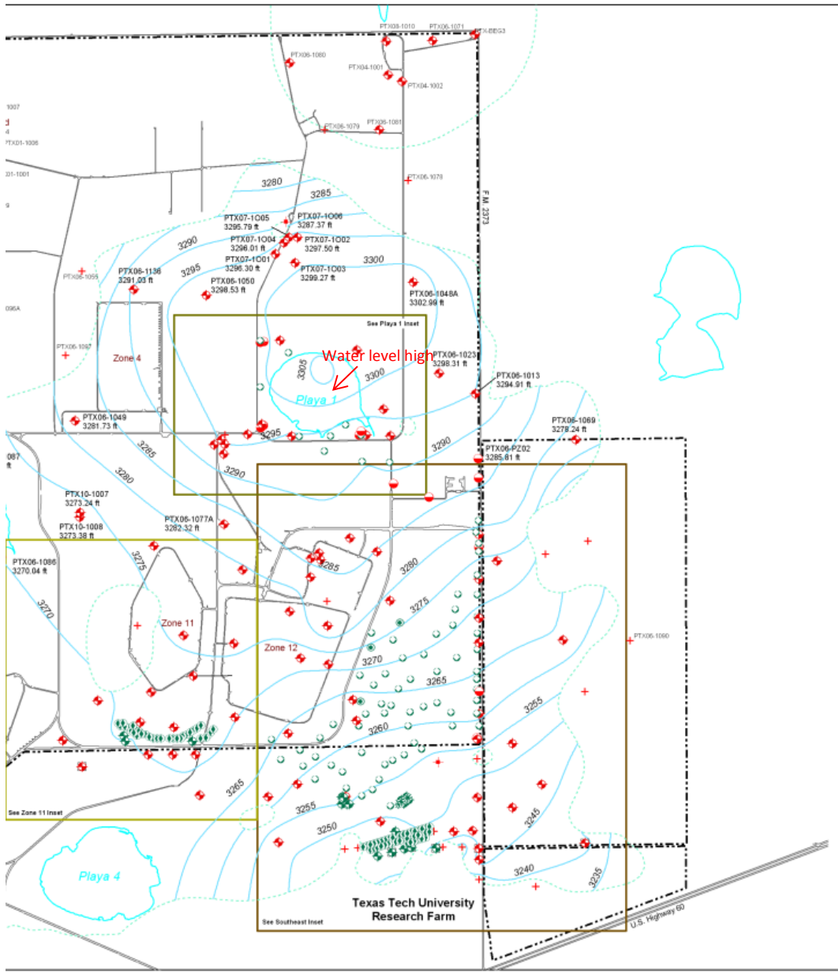
the water volume and COC mass, which will likely continue to slowly spread throughout this zone of perched groundwater.

Therefore, several options could be considered for this region, depending on the risk associated with COCs exceeding the GWPS in this area. An in-situ treatment technology could be utilized to treat the current mass or encourage natural attenuation processes in the area. While modeling results indicate limited effectiveness in reducing water levels in the southeast lobe, the installation of extraction wells east of FM 2373 in areas that have a saturated thickness exceeding 15 feet would remove COC mass and ultimately reduce flux to the south by reducing the gradient and thus the driving head of affected water movement into this area. Pump testing conducted in 2014 indicates that the perched aquifer in the vicinity of PTX06-1147 can support extraction. However, the testing was limited by the wells available and a project is planned for 2015, which includes the installation of two wells and a 24-hour pump test.

The current SEPTS conveyance system would need to be evaluated to determine whether it could handle the additional flow, but if current conveyance lines could be used, cost per mass removal would be significantly lower than installing an in-situ treatment system. Additionally, the Pantex Renewable Energy Project can provide some of the needed infrastructure for power to these extraction wells. However, another factor to consider with the expansion and continued operation of the pump and treatment systems is the anticipated reduced extraction and system effectiveness as saturated thickness is reduced in the well field.

Attachment 1

Comparison of 2009 and 2014 Groundwater Elevation Maps



Legend

Perched Wells

- Point of Compliance
- Extraction
- Injection
- In Situ Bioremediation
- In Situ Performance Monitoring
- Monitoring
- Dry
- Undeveloped Monitoring
- Permeable Reactive Barrier
- Piezometer

Ogallala Wells

- Monitoring
- Pantex Water Supply
- **USDOE/NNSA Property**
- **Playas**
- Water Table Contours - ft
- Appx. Extent of Perched Saturation

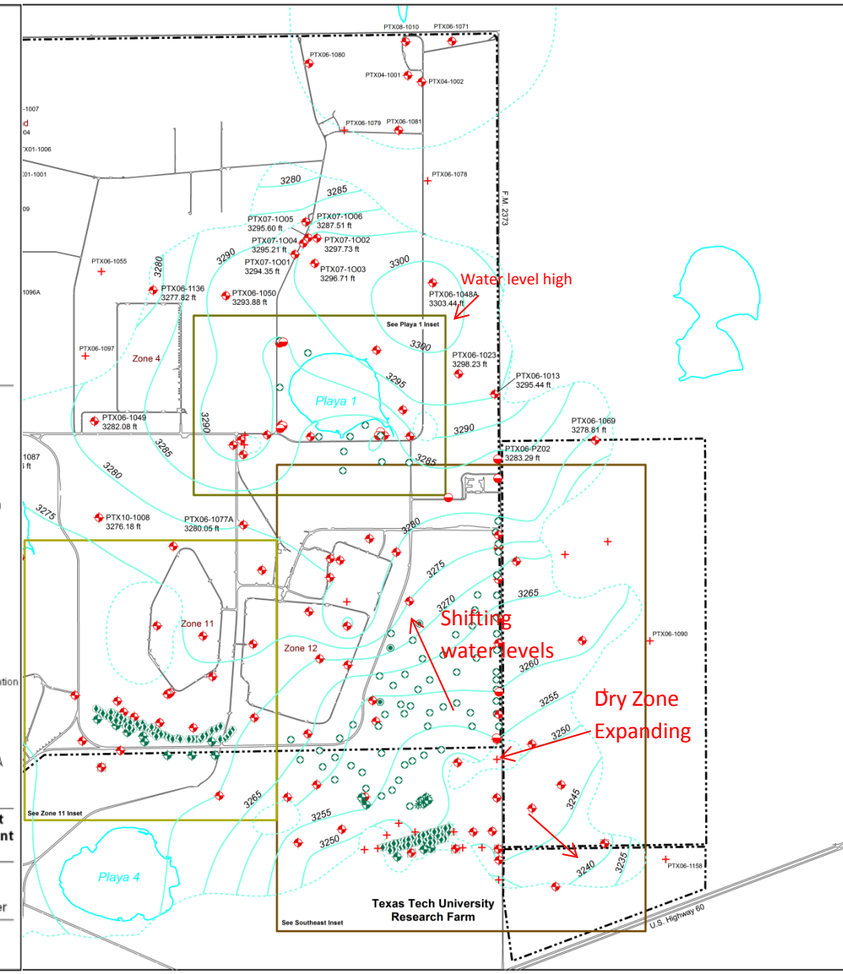
N

0 1,000 2,000 3,000 Feet

Annual Progress Report
USDOE/NNSA Pantex Plant
June 2010

Groundwater Elevations
Site-Wide Perched Aquifer

B&W Pantex



Legend

- Piezometer
- In Situ Performance Monitoring
- Permeable Reactive Barrier
- Monitoring
- Dry
- In Situ Bioremediation
- Injection
- Extraction
- Point of Compliance
- USDOE/NNSA Property
- Playas
- Extent of Perched Saturation
- Water Table Contours - ft

N

0 1,000 2,000 3,000 Feet

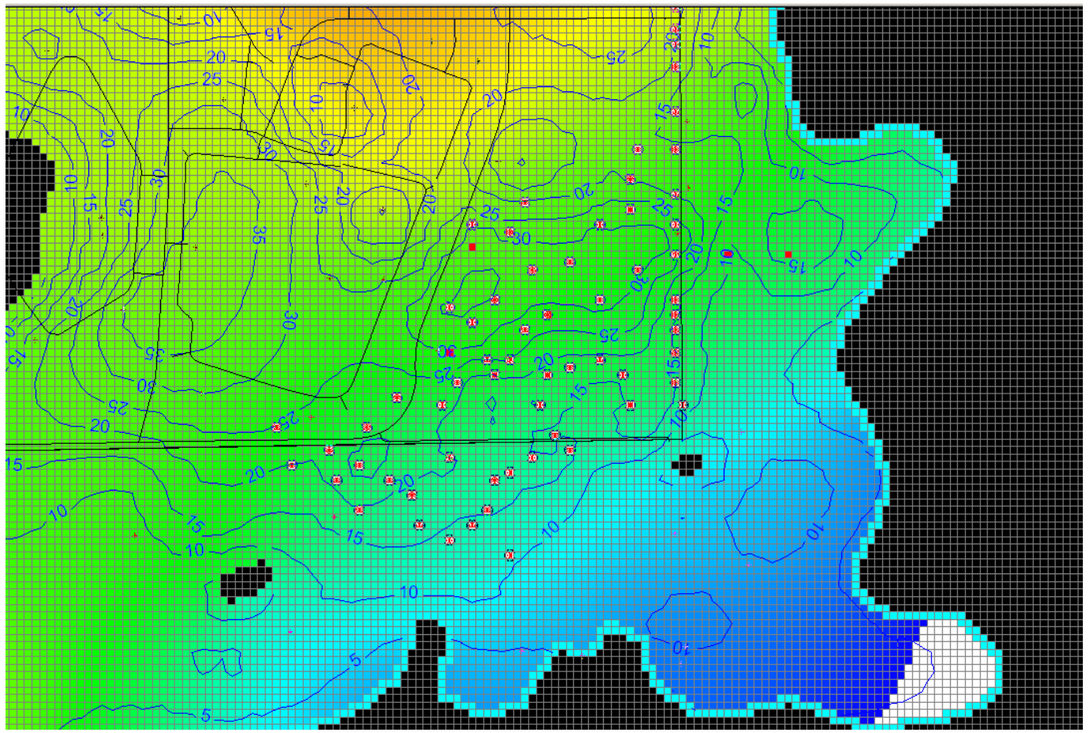
Annual Progress Report
USDOE/NNSA Pantex Plant
June 2015

Groundwater Elevations
Site-Wide Perched Aquifer

Attachment 2

20-year Pumping Simulation Results

Groundwater Vistas/MODFLOW-SURFACT Graphical Output



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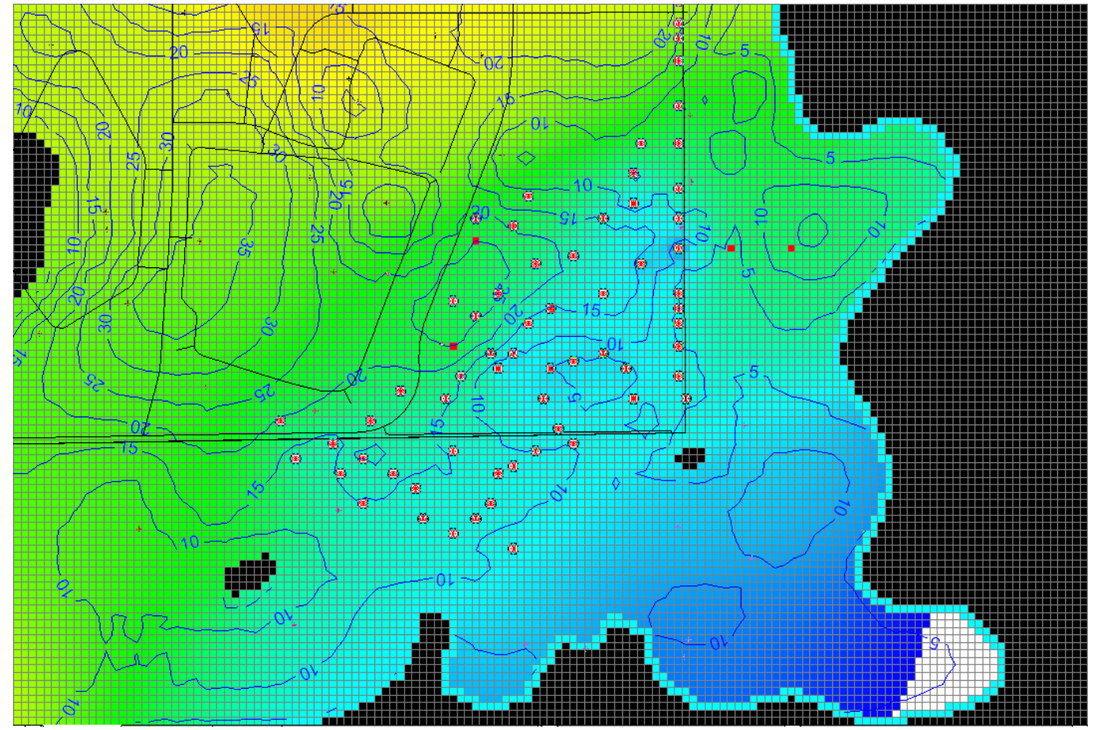

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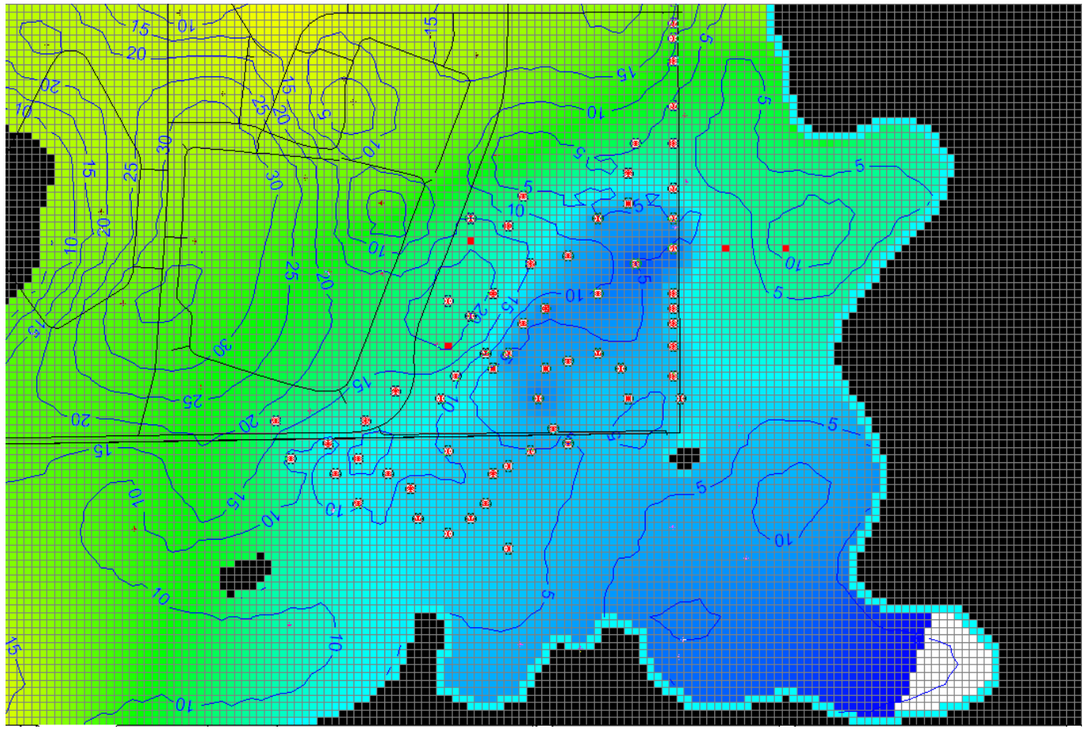

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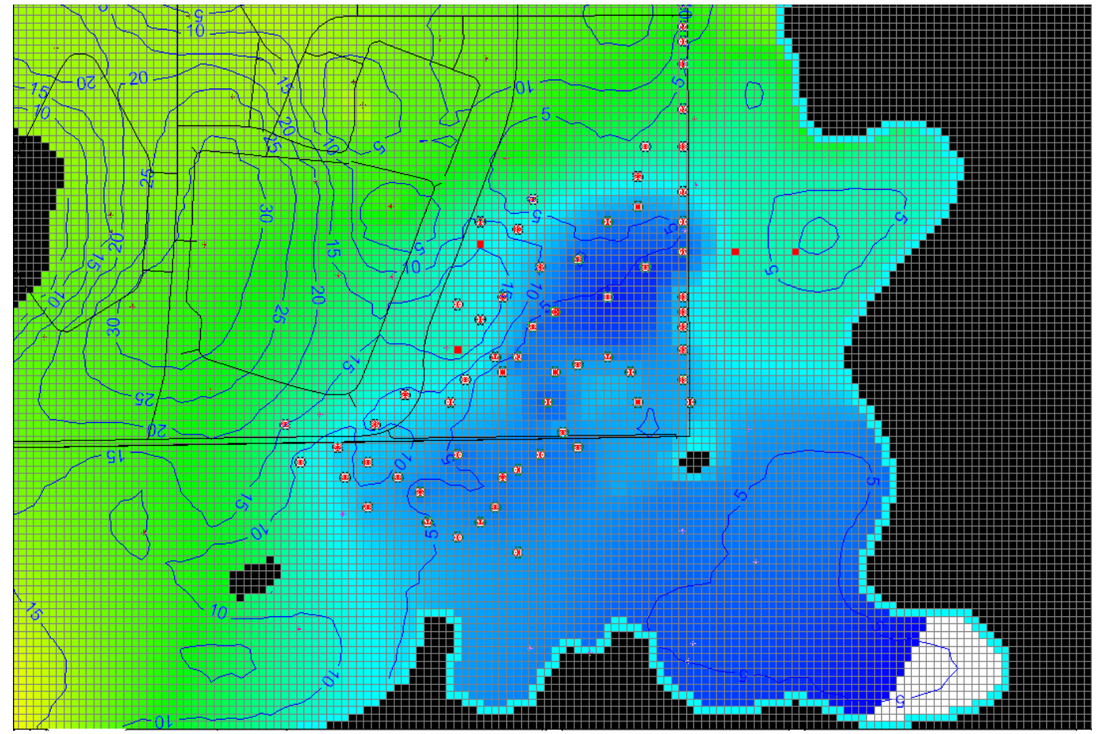
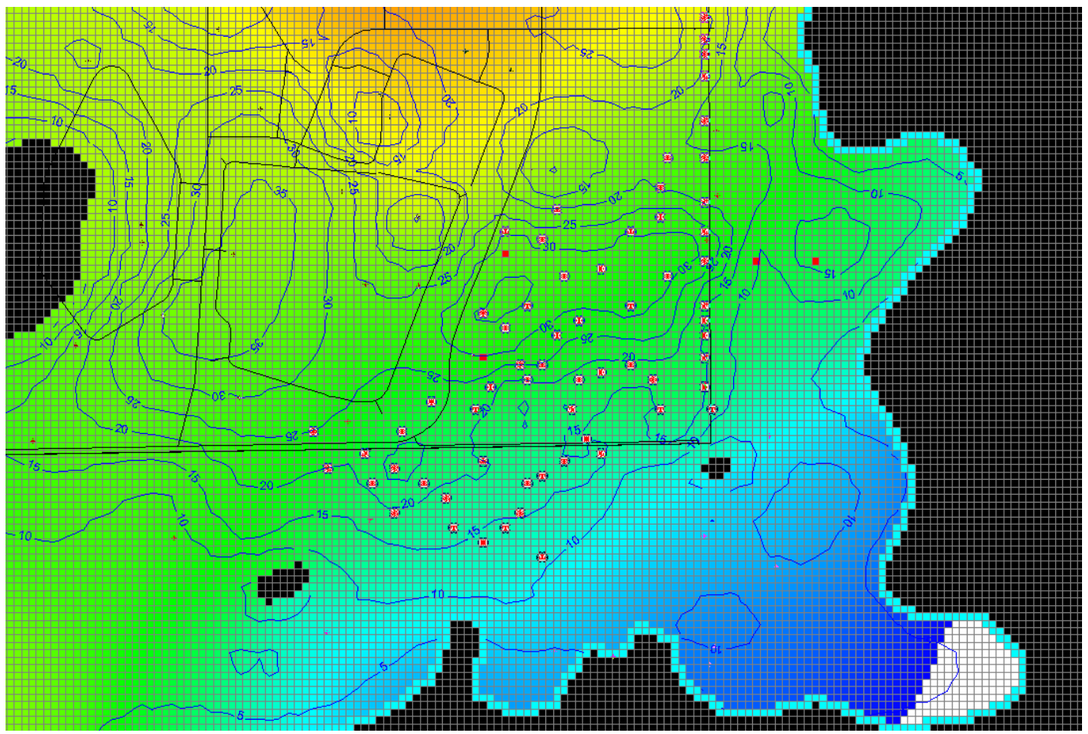


Time: 20 yrs

Attachment 3

20-year Pumping Simulation Results, with additional Extraction Wells

Groundwater Vistas/MODFLOW-SURFACT Graphical Output



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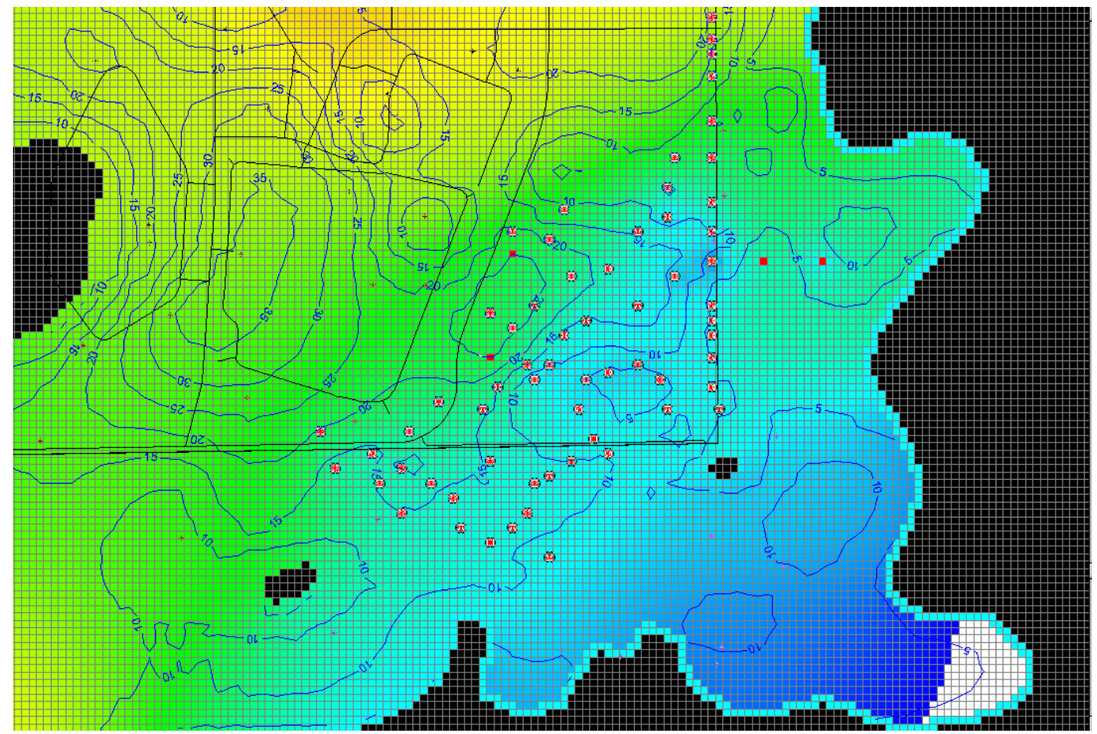

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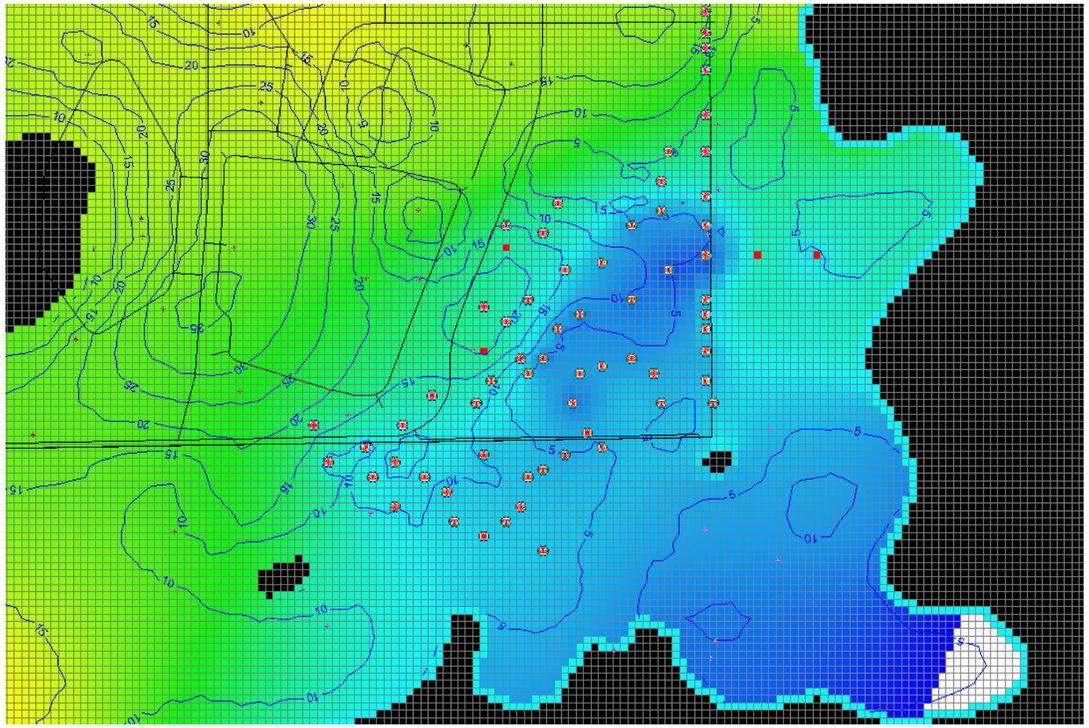

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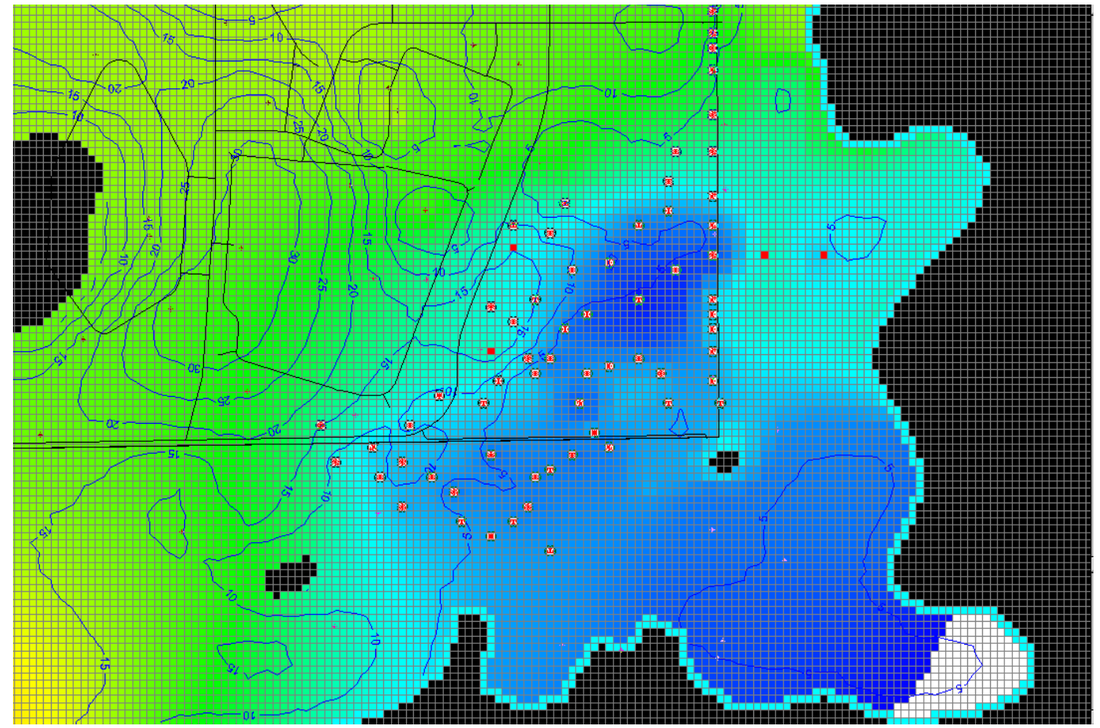

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