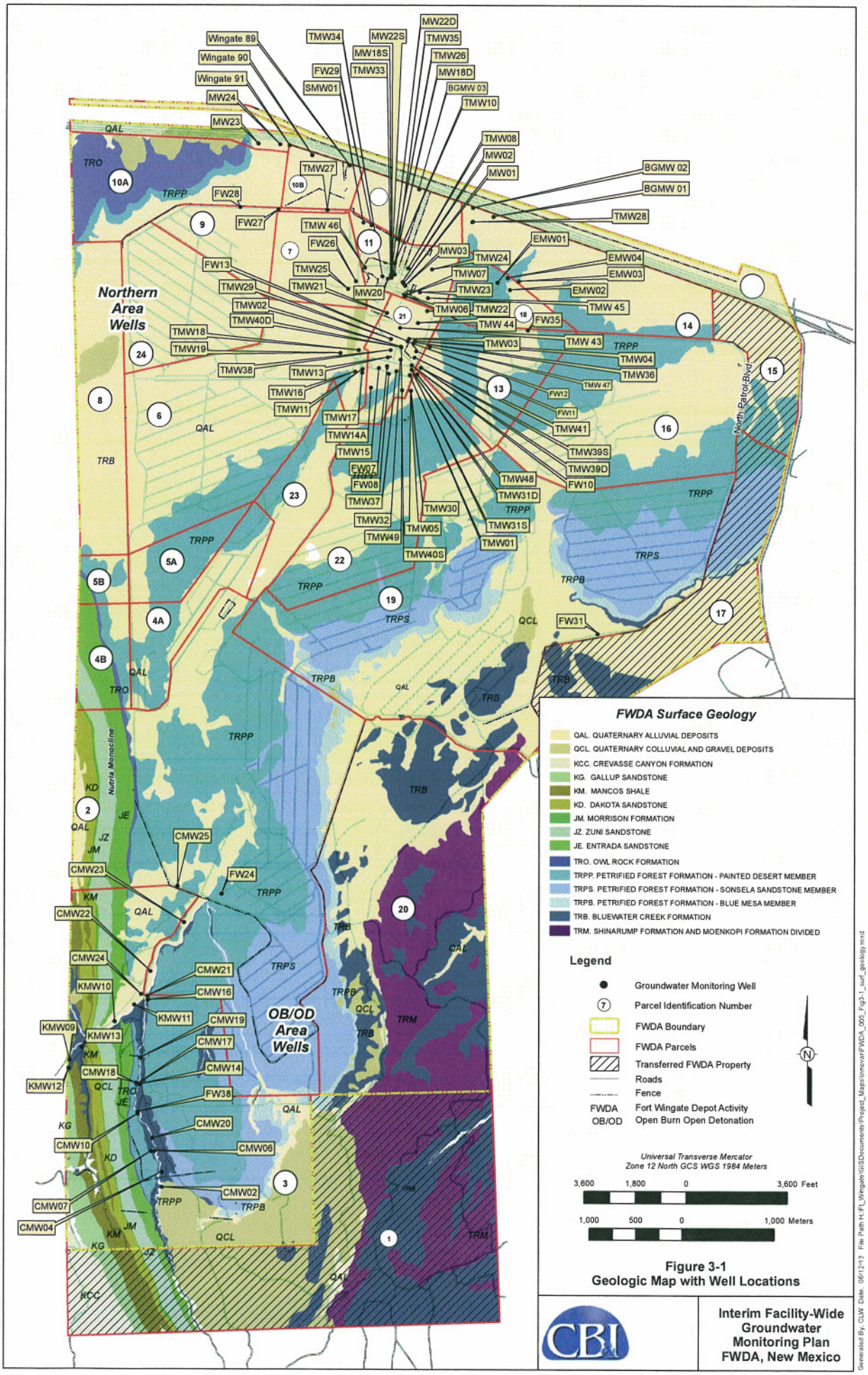

Figure 3-1
Geologic Map with Well Locations

CBI

Interim Facility-Wide Groundwater Monitoring Plan FWDA, New Mexico

Generated By: CLW Date: 06/12/13 File Path: H:\FL_Wingate\GIS\Documents\Project_Maps\Interim\FWDA_005_Fig3-1_surf_geology.mxd

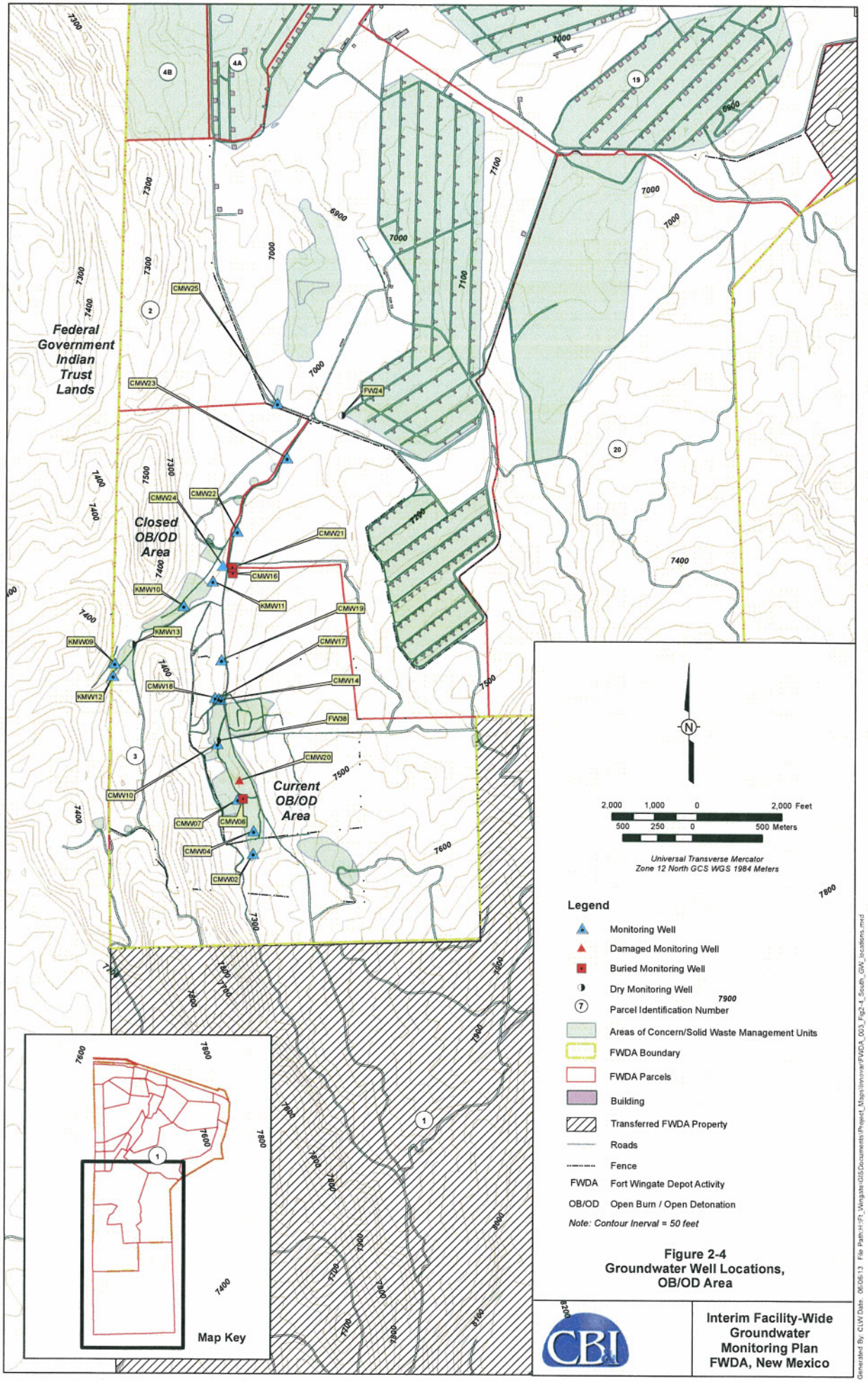

Figure 2-4
Groundwater Well Locations, OB/OD Area

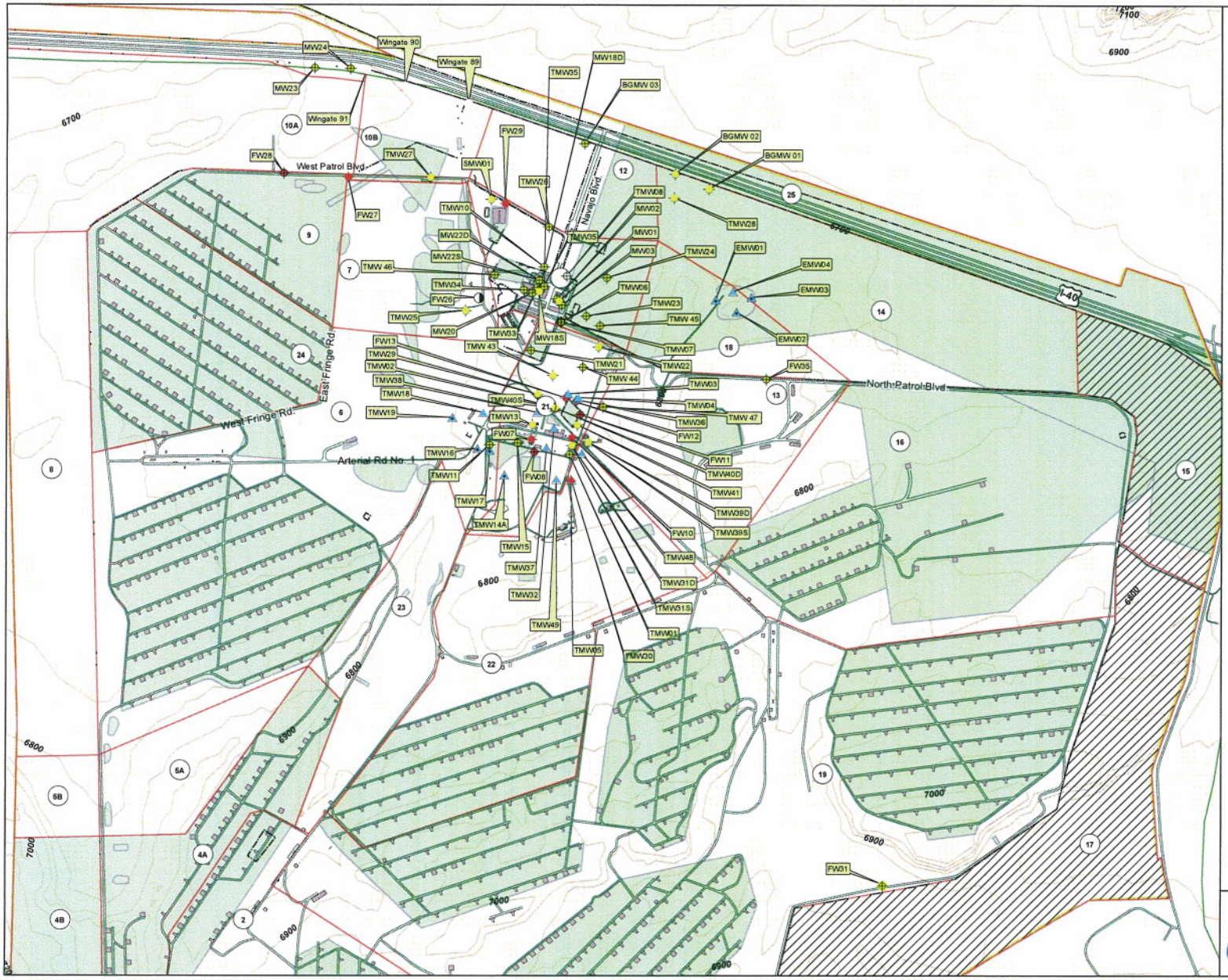

Figure 2-5
Groundwater Well Locations, Northern Area

Interim Facility-Wide Groundwater Monitoring Plan
FWDA, New Mexico

Table 5-1A Summary of 40 CFR 264 Appendix IX Analytes Detected in Groundwater for OB/OD[a]

Analyte	Sample Analysis						Regulatory Standard			
	Total Samples	No. Detects	Frequency of Detection	Minimum Detected Concentration (µg/L)	Maximum Detected Concentration (µg/L)	Arithmetic Mean (µg/L)	NMW QCC[b] (µg/L)	EPA MCL[c] (µg/L)	EPA HHMS SL[d] (µg/L)	Max. Detect Conc. > Min. Screening Level?
Explosives										
Dinitrobenzene, 1,3	144	10	6.9 %	0.30	12	6.17	NE	NE	1.50	YES
Dinitrotoluene, 2,4	138	3	2.1%	0.0856	0.58	0.35	NE	NE	30.0	NO
Nitrobenzene	144	4	2.8%	0.098	2.7	1.03	NE	NE	0.12	YES
Trinitrobenzene, 1,3,5	145	1	0.69%	1.8	1.8	1.8	NE	NE	460	NO
Pesticides (µg/L)										
DDD, 4,4'	85	1	1.2%	0.0096	0.0096	0.0096	NE	NE	0.027	NO
Chlordane, alpha	85	1	1.2%	0.025	0.025	0.025	NE	2.00	0.19	NO
Delta-BHC	85	3	3.5%	0.014	0.050	0.036	NE	NE	NE	NO
Heptachlor	85	2	2.4%	0.0085	0.038	0.023	NE	0.40	0.0018	NO
Methoxychlor	85	1	1.2%	0.011	0.011	0.011	NE	40.0	27.0	NO
Semivolatile Organic Compounds										
Acetophenone	91	2	2.2%	1.15	2.2	1.68	NE	NE	1,500	NO
Bis(2-ethylhexyl)phthalate	101	20	19.8%	0.28	8.5	1.91	NE	6.00	4.80	YES
Diethyl phthalate	102	1	0.98%	0.36	0.36	0.36	NE	NE	11,000	NO
Di-n-butyl phthalate	6	1	16.7%	1.7	1.7	1.7	NE	NE	NE	NO
Di-n-octyl phthalate	102	1	0.98%	0.25	0.25	0.25	NE	NE	NE	NO
Nitrosodiphenylamine, N	102	5	4.9%	0.44	1.2	0.70	NE	NE	14.0	NO
Phenol	103	5	4.9%	0.20	3.14	2.0	NE	NE	4,500	NO
Volatile Organic Compounds										
Acetone	177	20	11.3%	1.4	28	9.92	NE	NE	12,000	NO
Benzene	178	13	7.3%	0.11	1.6	0.82	10.0	5.00	0.39	NO
Bromomethane	178	5	2.8%	0.088	0.2	0.15	NE	NE	7.00	NO
Butanone, 2	178	4	2.2%	1.1	3.2	2.1	NE	NE	4900	NO
Carbon disulfide	179	47	26.3%	0.12	940	41.6	NE	NE	720	NO
Chlorobenzene	178	3	1.7	0.10	0.13	0.11	NE	100	72	NO
Chloroform	178	2	1.1%	0.071	0.16	0.12	100	80.0	0.19	NO

Analyte	Sample Analysis						Regulatory Standard			
	Total Samples	No. Detects	Frequency of Detection	Minimum Detected Concentration (µg/L)	Maximum Detected Concentration (µg/L)	Arithmetic Mean (µg/L)	NMW QCC[b] (µg/L)	EPA MCL[c] (µg/L)	EPA HHMS SL[d] (µg/L)	Max. Detect Conc. > Min. Screening Level?
Chloromethane	178	21	11.8%	0.082	3.1	1.02	NE	NE	190	NO
Dichloroethane, 1,2	178	2	1.1%	0.051	0.057	0.054	10.0	5.00	0.15	NO
Dichloroethene, cis-1,2	178	1	0.56%	0.68	0.68	0.68	NE	70	28	NO
Dicholorethene, trans-1,2	178	1	0.56%	0.20	0.20	0.20	NE	100	86	NO
Dioxane, 1,4	89	6	6.7%	16	32	24.7	NE	NE	0.67	YES
Hexanone, 2	178	3	1.7%	0.19	0.67	0.43	NE	NE	34.0	NO
Methylene chloride	178	2	1.1%	0.10	0.2	0.15	100	5.00	5.00	NO
Methyl isobutyl ketone	113	3	2.7%	0.21	3.2	1.36	NE	NE	1,000	NO
Tetrachloroethene	178	14	7.9%	0.21	3.1	1.69	20.0	5.00	9.9	NO
Toluene	178	9	5.1%	0.21	18	3.07	750	1,000	860	NO
Anions										
Cyanide	58	1	1.7%	0.010	0.010	0.010	200	200	1.40	NO

Note: If both a NMWQCC standard and an EPA MCL have been established for a contaminant, the more conservative value will be compared against. If no NMWQCC standard or EPA MCL have been established, the EPA HHMSSL will be compared against.

[a] Table summarizes groundwater data collected at FWDA from April 2008 through October 2012.

[b] New Mexico Water Quality Control Commission (NMWQCC), 2001. 20.6.2.7(ww) New Mexico Administrative Code (NMAC), Definitions – toxic pollutant.

[c] U.S. Environmental Protection Agency (EPA), 2012. Regions 3, 6, and 9 Regional Screening Levels for Chemical Contaminants at Superfund Sites, updated November.

[d] U.S. Environmental Protection Agency (EPA), 2012. Regional Screening Level Tapwater Supporting Table, updated November.

[e] For perchlorate, a value of 6 µg/L is used per the FWDA RCRA Permit

> = Greater than

EPA = Environmental Protection Agency

FWDA = Fort Wingate Depot Activity

HHMSSL = Human Health Medium-Specific Screening Level

MCL = Maximum Contaminant Level

µg/L = Microgram per liter

NE = Not established

NMED = New Mexico Environment Department

NMWQCC = New Mexico Water Quality Control Commission

No. = Number

OB/OD = Open Burn/Open Detonation

RCRA = Resource Conservation and Recovery Act