

**DOE Oversight Bureau, New Mexico Environment Department**

**Groundwater Monitoring at  
Sandia National Laboratories/New Mexico  
Solid Waste Management Unit (SWMU) 68**

**Conducted by the  
New Mexico Environment Department DOE Oversight Bureau  
for FFY 2014 Q-2**

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**Final Report**

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The purpose of this communication is to transmit groundwater data collected by NMED DOE Oversight Bureau from Solid Waste Management Unit (SWMU) 68 groundwater monitoring well OBS-MW3 during second quarter FFY 2014.

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### **Introductory remarks**

The New Mexico Environment Department (NMED) DOE Oversight Bureau (Bureau) has compiled and assessed groundwater data collected during January 2014. The Bureau collected groundwater samples from Solid Waste Management Unit (SWMU) 68 Old Burn Site (OBS) groundwater monitoring well OBS-MW3 (See Figure 1). Split samples were collected using standard Sandia sampling procedures and equipment. Bureau samples were submitted to an independent analytical laboratory where they were analyzed for total metals, anions, nitrate-nitrite, total cyanide, perchlorate, hexavalent chromium, high explosive compounds, volatile and semi-volatile organic compounds, gross alpha and beta, gamma-emitting isotopes, and isotopic uranium. No samples exceeded associated U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs) during this sampling event.

### **Data Assessment**

All groundwater samples were collected and analyzed in accordance with U.S. EPA-specified protocols. Data results are compared to applicable MCLs established by the U.S. EPA National Primary Drinking Water Regulations (40 CFR 141), National Primary Drinking Water Standards, EPA, July 2002. Perchlorate results are compared to the *Compliance Order on Consent (COOC) Pursuant to the New Mexico Hazardous Waste Act 74-4-10: Sandia National Laboratories Consent Order*, New Mexico Environment Department, April 19, 2004.

### **Results**

Analytical results for total target analyte list (TAL) metals plus uranium are listed in Table-1. All metal concentrations were below established MCLs.

Analytical results for major anions (as bromide, chloride, fluoride, and sulfate), nitrate-nitrite as nitrogen, hexavalent chromium, perchlorate, and total cyanide are listed in Table-2. All analytes were below established MCLs. Perchlorate was not detected above the laboratory method detection limit (MDL).

Analytical results for high explosive (HE) compounds are listed in Table-3. No HE compounds were detected above their associated method detection limits (MDL).

Analytical results for volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) are presented in Table-4 and Table-5, respectively. No compounds were detected above the laboratory MDL.

Analytical results for radiochemistry samples are listed in Table-6. Samples were analyzed for gross alpha, gross beta, gamma emitting isotopes, and isotopic uranium. Uncorrected gross alpha activity in OBS-MW3 was  $19 \pm 1.7$  pCi/L, which exceeds the MCL of 15 pCi/L. When gross alpha was corrected by

subtracting the activity for total uranium the value dropped below the MCL. No further isotopes were detected above EPA MCLs.

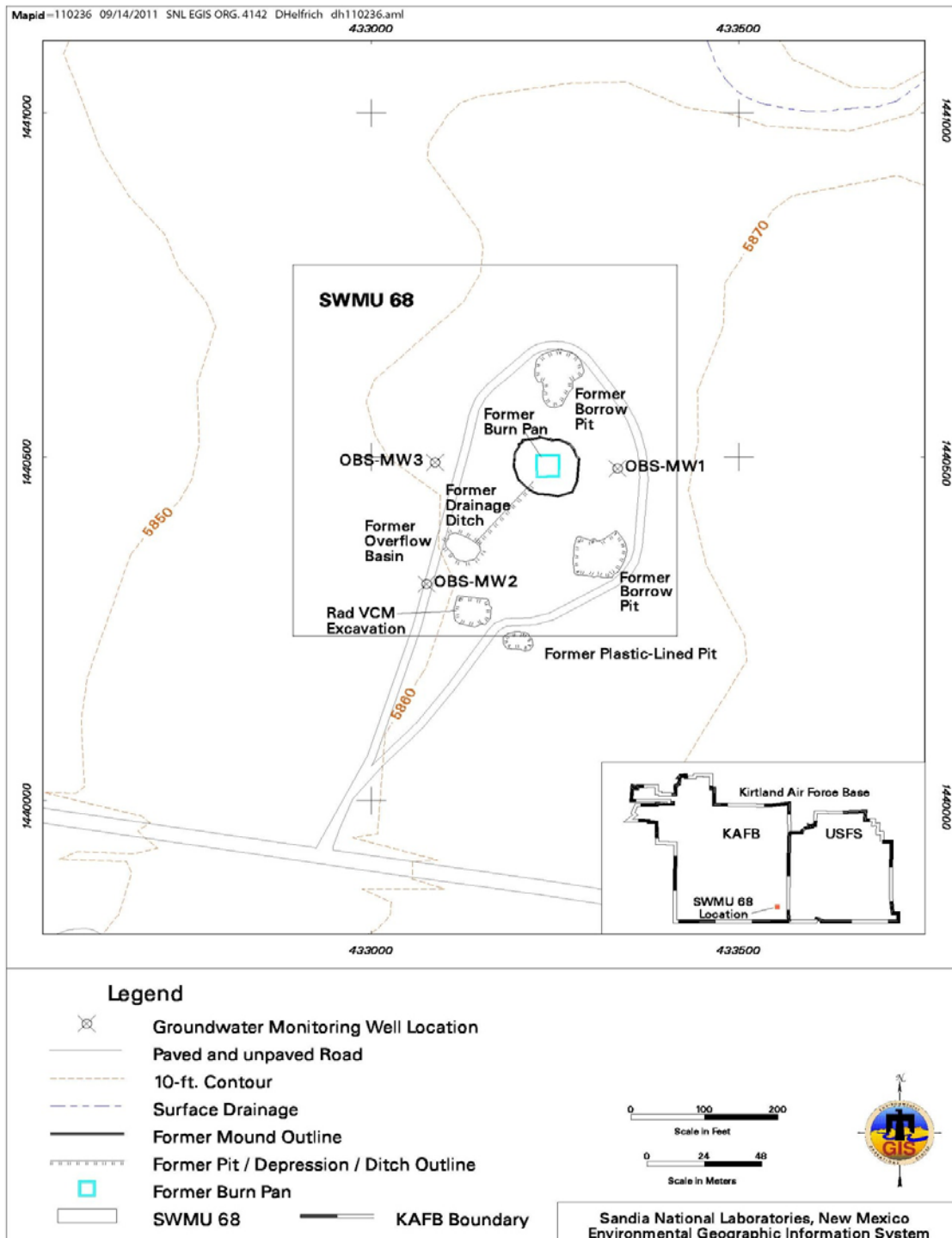


Figure 1. SWMU 68 Groundwater Monitoring Wells  
*(Sandia National Laboratories, New Mexico Environmental Geographic Information System, Annual Groundwater Monitoring Report, Calendar Year 2012)*

**Conclusion**

Analytical parameters included TAL metals plus uranium, major anions, nitrate-nitrite as nitrogen, hexavalent chromium, perchlorate, total cyanide, HE compounds, VOCs, SVOCs, gross alpha beta activity, radionuclides by gamma spectroscopy, and isotopic uranium. No parameters were detected above established MCLs.

**References**

Sandia National Laboratories, New Mexico Environmental Geographic Information System, Annual Groundwater Monitoring Report, Calendar Year 2012

U.S. EPA National Primary Drinking Water Regulations (40 CFR 141), National Primary Drinking Water Standards, EPA, July 2002.

New Mexico Environment Department, Compliance Order on Consent (COOC) Pursuant to the New Mexico Hazardous Waste Act 74-4-10: Sandia National Laboratories Consent Order, April 19, 2004.

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**Table-1 NMED DOE OB FFY 2014 Q-2 SWMU 68 Groundwater Quality Results: Total TAL Metals plus Uranium**

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
OBS-MW3 21-Jan-14	Aluminum	0.056	NE	0.2	0.026	JB	SW-846:6010B_3005A
	Antimony	0.003	0.006	0.02	0.003	U	SW-846:6010B_3005A
	Arsenic	0.004	0.01	0.01	0.004	U	SW-846:6010B_3005A
	Barium	0.028	2	0.1	0.0012	J	SW-846:6010B_3005A
	Beryllium	0.00038	0.004	0.005	0.00028	J	SW-846:6010B_3005A
	Cadmium	0.0005	0.005	0.005	0.0005	U	SW-846:6010B_3005A
	Calcium	82	NE	1	0.06		SW-846:6010B_3005A
	Chromium	0.0006	0.1	0.01	0.0006	U	SW-846:6010B_3005A
	Cobalt	0.0006	NE	0.01	0.0006	U	SW-846:6010B_3005A
	Copper	0.001	1.3	0.01	0.001	U	SW-846:6010B_3005A
	Iron	0.024	NE	0.1	0.015	J	SW-846:6010B_3005A
	Lead	0.002	0.015	0.003	0.002	U	SW-846:6010B_3005A
	Magnesium	17	NE	1	0.06	B	SW-846:6010B_3005A
	Manganese	0.0003	NE	0.01	0.0003	U	SW-846:6010B_3005A
	Mercury	0.00006	0.002	0.0002	0.00006	U	SW-846:7470A
	Nickel	0.001	NE	0.02	0.001	U	SW-846:6010B_3005A
	Potassium	1.6	NE	1	0.2		SW-846:6010B_3005A
	Selenium	0.0037	0.05	0.005	0.003	J	SW-846:6010B_3005A
	Silver	0.0024	NE	0.01	0.0024	U	SW-846:6010B_3005A
	Sodium	21	NE	1	0.09		SW-846:6010B_3005A
Thallium	0.004	0.002	0.01	0.004	U	SW-846:6010B_3005A	
Vanadium	0.0015	NE	0.01	0.0015	U	SW-846:6010B_3005A	
Zinc	0.0032	NE	0.02	0.0032	U	SW-846:6010B_3005A	

B = Compound was found in the blank and sample.

J = the reported value was obtained from a reading that was less than the Reporting Limit but greater than or equal to the Method Detection Limit (MDL).

NE = Not Established

U = Not Detected at or above the client requested detection limit.

**Table-2 NMED DOE OB FFY 2014 Q-2 SWMU 68 Groundwater Quality Results: Inorganics**

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
OBS-MW3 21-Jan-14	Bromide	0.34	NE	0.2	0.06		EPA:300
	Chloride	25	NE	1	0.3		EPA:300
	Fluoride	2.4	4	0.1	0.03		EPA:300
	Sulfate	88	NE	1	0.3		EPA:300
	Nitrate-Nitrite as Nitrogen	1.8	10	0.01	0.003		EPA:353.2
	Perchlorate	0.0012	NE	0.004	0.0012	U	EPA314.0
	Chromium hexavalent ion	0.003	0.1	0.01	0.003	U	SW7196
	Cyanide (Total)	0.003	200	0.01	0.003	U	SW-846:9014

NE = Not Established

U = Not Detected at or above the client requested detection limit.



**Table-3 NMED DOE OB FFY 2014 Q-2 SWMU 68 Groundwater Quality Results: High Explosives**

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
OBS-MW3 21-Jan-14	1,3,5-trinitrobenzene	0.019	0.11	0.019	U	SW-846:8321A
	1,3-Dinitrobenzene	0.016	0.11	0.016	U	SW-846:8321A
	2,4,6-Trinitrotoluene	0.025	0.11	0.025	U	SW-846:8321A
	2,4-Dinitrotoluene	0.022	0.11	0.022	U	SW-846:8321A
	2,6-Dinitrotoluene	0.025	0.11	0.025	U	SW-846:8321A
	2-Amino-4,6-dinitrotoluene	0.024	0.11	0.024	U	SW-846:8321A
	4-Amino-2,6-dinitrotoluene	0.022	0.11	0.022	U	SW-846:8321A
	HMX	0.022	0.11	0.022	U	SW-846:8321A
	m-Nitrotoluene	0.029	0.11	0.029	U	SW-846:8321A
	Nitrobenzene	0.038	0.11	0.038	U	SW-846:8321A
	Nitroglycerin	0.052	0.16	0.052	U	SW-846:8321A
	o-Nitrotoluene	0.025	0.11	0.025	U	SW-846:8321A
	PETN	0.021	0.11	0.021	U	SW-846:8321A
	p-Nitrotoluene	0.03	0.11	0.03	U	SW-846:8321A
	RDX	0.024	0.11	0.024	U	SW-846:8321A
Tetryl	0.024	0.11	0.024	U	SW-846:8321A	

U = Not Detected at or above the client requested detection limit.

Table-4 NMED DOE OB FFY 2014 Q-2 SWMU 68 Groundwater Quality Results: Volatile Organic Compounds

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
OBS-MW3 21-Jan-14	Acetone	3	10	3	U	SW-846:8260B_25
	Benzene	0.3	1	0.3	U	SW-846:8260B_25
	Bromobenzene	0.3	1	0.3	U	SW-846:8260B_25
	Bromochloromethane	0.3	1	0.3	U	SW-846:8260B_25
	Bromodichloromethane	0.3	1	0.3	U	SW-846:8260B_25
	Bromoform	0.3	1	0.3	U	SW-846:8260B_25
	Bromomethane	0.3	1	0.3	U	SW-846:8260B_25
	Butanone[2-]	3	10	3	U	SW-846:8260B_25
	Butylbenzene[n-]	0.3	1	0.3	U	SW-846:8260B_25
	Butylbenzene[sec-]	0.3	1	0.3	U	SW-846:8260B_25
	Butylbenzene[tert-]	0.3	1	0.3	U	SW-846:8260B_25
	Carbon Disulfide	0.3	1	0.3	U	SW-846:8260B_25
	Carbon Tetrachloride	0.3	1	0.3	U	SW-846:8260B_25
	Chlorobenzene	0.3	1	0.3	U	SW-846:8260B_25
	Chlorodibromomethane	0.3	1	0.3	U	SW-846:8260B_25
	Chloroethane	0.3	1	0.3	U	SW-846:8260B_25
	Chloroform	0.3	1	0.3	U	SW-846:8260B_25
	Chlorohexane[1-]	0.3	1	0.3	U	SW-846:8260B_25
	Chloromethane	0.3	1	0.3	U	SW-846:8260B_25
	Chlorotoluene[2-]	0.3	1	0.3	U	SW-846:8260B_25
	Chlorotoluene[4-]	0.3	1	0.3	U	SW-846:8260B_25
	Dibromo-3-Chloropropane[1,2-]	0.6	2	0.6	U	SW-846:8260B_25
	Dibromoethane[1,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Dibromomethane	0.3	1	0.3	U	SW-846:8260B_25
	Dichlorobenzene[1,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichlorobenzene[1,3-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichlorobenzene[1,4-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichlorodifluoromethane	0.3	1	0.3	U	SW-846:8260B_25
	Dichloroethane[1,1-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloroethane[1,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloroethene[1,1-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloroethene[cis-1,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloroethene[trans-1,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloropropane[1,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloropropane[1,3-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloropropane[2,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloropropene[1,1-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloropropene[cis-1,3-]	0.3	1	0.3	U	SW-846:8260B_25
	Dichloropropene[trans-1,3-]	0.3	1	0.3	U	SW-846:8260B_25
	Ethylbenzene	0.3	1	0.3	U	SW-846:8260B_25
Hexachlorobutadiene	0.3	1	0.3	U	SW-846:8260B_25	
Hexanone[2-]	3	10	3	U	SW-846:8260B_25	
Iodomethane	0.3	1	0.3	U	SW-846:8260B_25	
Isopropylbenzene	0.3	1	0.3	U	SW-846:8260B_25	

U = Not Detected at or above the client requested detection limit.

Table-4 NMED DOE OB FFY 2014 Q-2 SWMU 68 Groundwater Quality Results: Volatile Organic Compounds

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
OBS-MW3 21-Jan-14	Isopropyltoluene[4-]	0.3	1	0.3	U	SW-846:8260B_25
	Methyl tert-Butyl Ether	0.3	1	0.3	U	SW-846:8260B_25
	Methyl-2-pentanone[4-]	3	10	3	U	SW-846:8260B_25
	Methylene Chloride	0.34	1	0.34	U	SW-846:8260B_25
	Naphthalene	0.3	1	0.3	U	SW-846:8260B_25
	Propylbenzene[1-]	0.3	1	0.3	U	SW-846:8260B_25
	Styrene	0.3	1	0.3	U	SW-846:8260B_25
	Tetrachloroethane[1,1,1,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Tetrachloroethane[1,1,2,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Tetrachloroethene	0.21	1	0.21	U	SW-846:8260B_25
	Toluene	0.3	1	0.3	U	SW-846:8260B_25
	Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Trichlorobenzene[1,2,3-]	0.3	1	0.3	U	SW-846:8260B_25
	Trichlorobenzene[1,2,4-]	0.3	1	0.3	U	SW-846:8260B_25
	Trichloroethane[1,1,1-]	0.3	1	0.3	U	SW-846:8260B_25
	Trichloroethane[1,1,2-]	0.3	1	0.3	U	SW-846:8260B_25
	Trichloroethene	0.3	1	0.3	U	SW-846:8260B_25
	Trichlorofluoromethane	0.3	1	0.3	U	SW-846:8260B_25
	Trichloropropane[1,2,3-]	0.3	1	0.3	U	SW-846:8260B_25
	Trimethylbenzene[1,2,4-]	0.3	1	0.3	U	SW-846:8260B_25
	Trimethylbenzene[1,3,5-]	0.3	1	0.3	U	SW-846:8260B_25
	Vinyl acetate	0.6	2	0.6	U	SW-846:8260B_25
	Vinyl Chloride	0.3	1	0.3	U	SW-846:8260B_25
	Xylene[1,2-]	0.3	1	0.3	U	SW-846:8260B_25
Xylene[1,3-]+Xylene[1,4-]	0.3	1	0.3	U	SW-846:8260B_25	

U = Not Detected at or above the client requested detection limit.

Table-5 NMED DOE OB FFY 2014 Q-2 SWMU 68 Groundwater Quality Results: Semi-Volatile Organic Compounds

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
OBS-MW3 21-Jan-14	Acenaphthene	3.1	10	3.1	U	SW-846:8270C
	Acenaphthylene	3.1	10	3.1	U	SW-846:8270C
	Aniline	3.1	10	3.1	U	SW-846:8270C
	Anthracene	3.1	10	3.1	U	SW-846:8270C
	Azobenzene	3.1	10	3.1	U	SW-846:8270C
	Benzo(a)anthracene	3.1	10	3.1	U	SW-846:8270C
	Benzo(a)pyrene	3.1	10	3.1	U	SW-846:8270C
	Benzo(b)fluoranthene	3.1	10	3.1	U	SW-846:8270C
	Benzo(g,h,i)perylene	3.1	10	3.1	U	SW-846:8270C
	Benzo(k)fluoranthene	3.1	10	3.1	U	SW-846:8270C
	Benzoic Acid	28	52	28	U	SW-846:8270C
	Benzyl Alcohol	3.1	10	3.1	U	SW-846:8270C
	Bis(2-chloroethoxy)methane	3.1	10	3.1	U	SW-846:8270C
	Bis(2-chloroethyl)ether	3.1	10	3.1	U	SW-846:8270C
	Bis(2-ethylhexyl)phthalate	3.1	10	3.1	U	SW-846:8270C
	Bromophenyl-phenylether[4-]	3.1	10	3.1	U	SW-846:8270C
	Butylbenzylphthalate	3.1	10	3.1	U	SW-846:8270C
	Carbazole	3.1	10	3.1	U	SW-846:8270C
	Chloro-3-methylphenol[4-]	3.1	10	3.1	U	SW-846:8270C
	Chloroaniline[4-]	3.1	10	3.1	U	SW-846:8270C
	Chloronaphthalene[2-]	3.1	10	3.1	U	SW-846:8270C
	Chlorophenol[2-]	3.1	10	3.1	U	SW-846:8270C
	Chlorophenyl-phenyl[4-] Ether	3.1	10	3.1	U	SW-846:8270C
	Chrysene	3.1	10	3.1	U	SW-846:8270C
	Dibenz(a,h)anthracene	3.1	10	3.1	U	SW-846:8270C
	Dibenzofuran	3.1	10	3.1	U	SW-846:8270C
	Dichlorobenzene[1,2-]	3.1	10	3.1	U	SW-846:8270C
	Dichlorobenzene[1,3-]	3.1	10	3.1	U	SW-846:8270C
	Dichlorobenzene[1,4-]	3.1	10	3.1	U	SW-846:8270C
	Dichlorobenzidine[3,3'-]	3.1	10	3.1	U	SW-846:8270C
	Dichlorophenol[2,4-]	3.1	10	3.1	U	SW-846:8270C
	Diethylphthalate	3.1	10	3.1	U	SW-846:8270C
	Dimethyl Phthalate	3.1	10	3.1	U	SW-846:8270C
	Dimethylphenol[2,4-]	3.1	10	3.1	U	SW-846:8270C
	Di-n-butylphthalate	3.1	10	3.1	U	SW-846:8270C
	Dinitro-2-methylphenol[4,6-]	6.2	21	6.2	U	SW-846:8270C
Dinitrophenol[2,4-]	5.1	21	5.1	U	SW-846:8270C	
Dinitrotoluene[2,4-]	3.1	10	3.1	U	SW-846:8270C	
Dinitrotoluene[2,6-]	3.1	10	3.1	U	SW-846:8270C	

U = Not Detected at or above the client requested detection limit.

**Table-5 NMED DOE OB FFY 2014 Q-2 SWMU 68 Groundwater Quality Results: Semi-Volatile Organic Compounds**

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
OBS-MW3 21-Jan-14	Di-n-octylphthalate	3.1	10	3.1	U	SW-846:8270C
	Fluoranthene	3.1	10	3.1	U	SW-846:8270C
	Fluorene	3.1	10	3.1	U	SW-846:8270C
	Hexachlorobenzene	3.1	10	3.1	U	SW-846:8270C
	Hexachlorobutadiene	3.1	10	3.1	U	SW-846:8270C
	Hexachlorocyclopentadiene	3.1	10	3.1	U	SW-846:8270C
	Hexachloroethane	3.1	10	3.1	U	SW-846:8270C
	Indeno(1,2,3-cd)pyrene	3.1	10	3.1	U	SW-846:8270C
	Isophorone	3.1	10	3.1	U	SW-846:8270C
	Methylnaphthalene[1-]	3.1	10	3.1	U	SW-846:8270C
	Methylnaphthalene[2-]	3.1	10	3.1	U	SW-846:8270C
	Methylphenol[2-]	3.1	10	3.1	U	SW-846:8270C
	Methylphenol[3-]	3.1	10	3.1	U	SW-846:8270C
	Naphthalene	3.1	10	3.1	U	SW-846:8270C
	Nitroaniline[2-]	6.2	21	6.2	U	SW-846:8270C
	Nitroaniline[3-]	6.2	21	6.2	U	SW-846:8270C
	Nitroaniline[4-]	6.2	21	6.2	U	SW-846:8270C
	Nitrobenzene	3.1	10	3.1	U	SW-846:8270C
	Nitrophenol[2-]	3.1	10	3.1	U	SW-846:8270C
	Nitrophenol[4-]	6.2	21	6.2	U	SW-846:8270C
	Nitrosodimethylamine[N-]	3.1	10	3.1	U	SW-846:8270C
	Nitroso-di-n-propylamine[N-]	3.1	10	3.1	U	SW-846:8270C
	Nitrosodiphenylamine[N-]	3.1	10	3.1	U	SW-846:8270C
	Oxybis(1-chloropropane)[2,2'-]	3.1	10	3.1	U	SW-846:8270C
	Pentachlorophenol	6.2	21	6.2	U	SW-846:8270C
	Phenanthrene	3.1	10	3.1	U	SW-846:8270C
	Phenol	3.1	10	3.1	U	SW-846:8270C
	Pyrene	3.1	10	3.1	U	SW-846:8270C
	Pyridine	3.1	10	3.1	U	SW-846:8270C
	Tetrachlorophenol[2,3,4,6-]	3.1	10	3.1	U	SW-846:8270C
Trichlorobenzene[1,2,4-]	3.1	10	3.1	U	SW-846:8270C	
Trichlorophenol[2,4,5-]	3.1	10	3.1	U	SW-846:8270C	
Trichlorophenol[2,4,6-]	3.1	10	3.1	U	SW-846:8270C	

U = Not Detected at or above the client requested detection limit.

**Table-6 NMED DOE OB FFY 2014 Q-2 SWMU 68 Groundwater Quality Results: Gross Alpha, Gross Beta, Gamma Emitting Isotopes and Isotopic Uranium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
OBS-MW3 21-Jan-14	Actinium-228	14 ± 6.1	20	U	EPA:901.1
	Americium-241	8.5 ± 2	6.2		EPA:901.1
	Beryllium-7	-9.1 ± 10	36	U	EPA:901.1
	Bismuth-212	30 ± 21	69	U	EPA:901.1
	Bismuth-214	250 ± 16	21	J	EPA:901.1
	Cesium-134	-0.46 ± 1.4	4.7	U	EPA:901.1
	Cesium-137	-0.51 ± 1.4	4.7	U	EPA:901.1
	Cobalt-60	-2.7 ± 1.6	5.8	U	EPA:901.1
	Gross alpha	19 ± 1.7	0.8		EPA:900
	Gross beta	4.8 ± 0.54	1.1		EPA:900
	Iodine-131	-4.3 ± 2.3	7.9	U	EPA:901.1
	Lead-212	2.3 ± 3.5	12	U	EPA:901.1
	Lead-214	280 ± 17	16	J	EPA:901.1
	Potassium-40	31 ± 38	130	U	EPA:901.1
	Protactinium-234m	370 ± 260	840	U	EPA:901.1
	Sodium-22	-0.26 ± 1.7	5.7	U	EPA:901.1
	Thallium-208	-1.5 ± 2.1	7	U	EPA:901.1
	Thorium-234	20 ± 23	77	U	EPA:901.1
	Uranium-234	19 ± 1.7	0.15		HASL-300:ISOU
	Uranium-235	0.26 ± 0.083	0.065		HASL-300:ISOU
Uranium-238	3.8 ± 0.42	0.14		HASL-300:ISOU	

J = Indicating the activity values to be an estimated value.

U = This flag indicates that the compound was analyzed for but not detected.