

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

**Groundwater Monitoring at  
Sandia National Laboratories/New Mexico  
Long-Term Stewardship Consolidated Groundwater Monitoring Program  
(GMP) (formerly referred to as the Groundwater Protection Program)**

**Conducted by the  
New Mexico Environment Department DOE Oversight Bureau  
for FFY 2013 Q-3**

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**Final Report**

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The purpose of this communication is to transmit groundwater data collected by the New Mexico Environment Department DOE Oversight Bureau from Long-Term Stewardship Consolidated Groundwater Monitoring Program (GMP) (formerly referred to as the Groundwater Protection Program) monitoring wells during third quarter FFY 2013.

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## **Introduction**

The New Mexico Environment Department (NMED) DOE Oversight Bureau (Bureau) has compiled and assessed groundwater data collected during April and May 2013. The Bureau collected groundwater samples from Long-Term Stewardship Consolidated Groundwater Monitoring Program (GMP) (formerly referred to as the Groundwater Protection Program) monitoring wells MRN-2, MRN-3D, SFR-2S, SFR-4T, SWTA3-MW3, and TRE-1. Samples were also collected from Coyote Spring located in Arroyo del Coyote. Split samples were collected using standard Sandia National Laboratories/New Mexico sampling procedures and equipment. The samples were submitted for analysis to an independent analytical laboratory for metals plus uranium, anions, nitrate-nitrite, cyanide, high explosives (HE) compounds, volatile organic compounds (VOCs), gamma-emitting isotopes, gross alpha and beta, radium 226/228, and isotopic uranium. An elevated concentration of beryllium was observed in the sample collected from Coyote Springs.

## **Data Assessment**

All groundwater samples were collected and analyzed in accordance with U.S. Environmental Protection Agency (EPA) protocols. Data results are compared to applicable maximum contaminant levels (MCLs) established by the U.S. EPA National Primary Drinking Water Regulations (40 CFR 141), National Primary Drinking Water Standards, EPA, July 2002.

## **Results**

Analytical results for dissolved metals are presented in Table 1. Samples were analyzed for dissolved metals plus uranium and total mercury. Mercury was analyzed as both a filtered and unfiltered sample. No metal concentrations were detected above established regulatory standards, except for beryllium. Beryllium was detected above the MCL of 0.004 mg/L from the sample collected at Coyote Springs at a concentration of 0.0062mg/L.

Analytical results for anions (bromide, chloride, fluoride, and sulfate), cyanide, and nitrate-nitrite are presented in Table 2. No samples exceeded their associated MCL.

Analytical results for HE compounds are listed in Table 3. Samples were analyzed for HE compounds at monitoring wells SFR-2S, SWTA3-MW3, and TRE-1. The HE compound 4-Amino-2,6-dinitrotoluene was detected above the method detection limit (MDL) at monitoring wells SFR-2S and TRE-1. However,

both samples were detected below the practical quantitation limit (PQL) and “J” flagged as an estimated value. In addition, both samples were also “B” flagged, indicating the compound was also found in the blank sample. No other compounds were detected above the laboratory MDL.

Table 4 summarizes detected VOCs. No VOCs were detected at concentrations above established MCLs. Detected values were below the PQL. As a result, the values reported by the laboratory were “J” qualified as an estimated concentration. The laboratory MDL for the remaining VOCs analyzed from GMP monitoring wells are presented in Table 5.

Analytical results for radionuclides are listed in Table 6. Samples were analyzed for gross alpha and beta, gamma-emitting isotopes, radium 226/228, and isotopic uranium. Unadjusted gross alpha activity ranged from  $3.28 \pm 1.7$  pCi/L at SWTA3-MW3 to  $24.5 \pm 8.1$  pCi/L at TRE-1. The EPA MCL for gross alpha activity of 15 pCi/L is based on a corrected gross alpha value, which excludes both total uranium and radon from initial gross alpha count. When the total uranium activity was subtracted from the gross alpha value, the gross activity was below the MCL. All other gamma emitters and radium isotopes were below established MCLs. The gross beta activity at SFT-4T was 743pCi/L. This value is not supported by the radiological results for beta-emitters. The MCL for gross beta is 4mrem/yr.

### **References**

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

Table-1 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Dissolved 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
COYOTE SPRING 2-May-13	Aluminum	0.22	NE	0.05	0.025		SW-846:6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW-846:6020
	Arsenic	0.0022	0.01	0.002	0.001		SW-846:6020
	Barium	0.046	2	0.001	0.0005		SW-846:6020
	Beryllium	<b>0.0062</b>	0.004	0.001	0.0001		SW-846:6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW-846:6020
	Calcium	240	NE	0.25	0.15	D	SW-846:6020
	Chromium	0.001	0.1	0.002	0.001	U	SW-846:6020
	Cobalt	0.0096	NE	0.001	0.0006		SW-846:6020
	Copper	0.0016	1.3	0.002	0.001	J	SW-846:6020
	Iron	0.037	NE	0.05	0.025	J	SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	57	NE	0.05	0.025		SW-846:6020
	Manganese	1.2	NE	0.001	0.0004		SW-846:6020
	Mercury (Filtered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Mercury (Unfiltered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.021	NE	0.002	0.0001	B	SW-846:6020
	Potassium	27	NE	0.05	0.025		SW-846:6020
	Selenium	0.001	0.05	0.002	0.001	U	SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	410	NE	0.25	0.13	D	SW-846:6020
	Thallium	0.0015	0.002	0.001	0.0005		SW-846:6020
	Tin	0.005	NE	0.02	0.005	U	SW-846:6010B
Uranium	0.0071	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.04	NE	0.005	0.004		SW-846:6020	

B = Compound was found in the blank and sample.

D = Dilution

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NE = Not Established

U = Not detected at the reporting limit (or MDL or EDL if shown)

**Table-1 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Dissolved 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
MRN-2 14-May-13	Aluminum	0.025	NE	0.05	0.025	U	SW-846:6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW-846:6020
	Barium	0.054	2	0.001	0.0005		SW-846:6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW-846:6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW-846:6020
	Calcium	48	NE	0.05	0.03		SW-846:6020
	Chromium	0.0017	0.1	0.002	0.001	J	SW-846:6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW-846:6020
	Copper	0.001	1.3	0.002	0.001	U	SW-846:6020
	Iron	0.025	NE	0.05	0.025	U	SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	16	NE	0.05	0.025		SW-846:6020
	Manganese	0.0004	NE	0.001	0.0004	U	SW-846:6020
	Mercury (Unfiltered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Mercury (Filtered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.0001	NE	0.002	0.0001	U	SW-846:6020
	Potassium	3.3	NE	0.05	0.025		SW-846:6020
	Selenium	0.0019	0.05	0.002	0.001	J	SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	25	NE	0.05	0.025		SW-846:6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020
	Tin	0.005	NE	0.02	0.005	U	SW-846:6010B
Uranium	0.0028	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.006	NE	0.01	0.003	J	SW-846:6020	
Zinc	0.0066	NE	0.005	0.004		SW-846:6020	

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NE = Not Established

U = Not detected at the reporting limit (or MDL or EDL if shown)

**Table-1 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Dissolved 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
MRN-3D 13-May-13	Aluminum	0.025	NE	0.05	0.025	U	SW-846:6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW-846:6020
	Barium	0.13	2	0.001	0.0005		SW-846:6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW-846:6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW-846:6020
	Calcium	59	NE	0.05	0.03		SW-846:6020
	Chromium	0.0018	0.1	0.002	0.001	J	SW-846:6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW-846:6020
	Copper	0.001	1.3	0.002	0.001	U	SW-846:6020
	Iron	0.025	NE	0.05	0.025	U	SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	15	NE	0.05	0.025		SW-846:6020
	Manganese	0.013	NE	0.001	0.0004		SW-846:6020
	Mercury (Filtered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Mercury (Unfiltered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.0001	NE	0.002	0.0001	U	SW-846:6020
	Potassium	4.5	NE	0.05	0.025		SW-846:6020
	Selenium	0.0015	0.05	0.002	0.001	J	SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	30	NE	0.05	0.025		SW-846:6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020
	Tin	0.005	NE	0.02	0.005	U	SW-846:6010B
Uranium	0.0035	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.0046	NE	0.01	0.003	J	SW-846:6020	
Zinc	0.055	NE	0.005	0.004		SW-846:6020	

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NE = Not Established

U = Not detected at the reporting limit (or MDL or EDL if shown)

**Table-1 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Dissolved 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
SFR-2S 29-Apr-13	Aluminum	0.025	NE	0.05	0.025	U	SW-846:6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW-846:6020
	Barium	0.062	2	0.001	0.0005		SW-846:6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW-846:6020
	Cadmium	0.00053	0.005	0.001	0.0005	J	SW-846:6020
	Calcium	130	NE	0.05	0.03		SW-846:6020
	Chromium	0.0016	0.1	0.002	0.001	J	SW-846:6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW-846:6020
	Copper	0.0011	1.3	0.002	0.001	J	SW-846:6020
	Iron	0.025	NE	0.05	0.025	U	SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	37	NE	0.05	0.025		SW-846:6020
	Manganese	0.003	NE	0.001	0.0004		SW-846:6020
	Mercury (Filtered)	0.00015	0.002	0.0002	0.0001	J	SW-846:7470A
	Mercury (Unfiltered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.015	NE	0.002	0.0001		SW-846:6020
	Potassium	7.7	NE	0.05	0.025		SW-846:6020
	Selenium	0.0029	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	86	NE	0.05	0.025		SW-846:6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020
	Tin	0.005	NE	0.02	0.005	U	SW-846:6010B
Uranium	0.016	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.0055	NE	0.005	0.004		SW-846:6020	

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D = Dilution

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NE = Not Established

U = Not detected at the reporting limit (or MDL or EDL if shown)



**Table-1 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Dissolved 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
SFR-4T 30-Apr-13	Aluminum	0.025	NE	0.05	0.025	U	SW-846:6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW-846:6020
	Arsenic	0.0026	0.01	0.002	0.001		SW-846:6020
	Barium	0.011	2	0.001	0.0005		SW-846:6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW-846:6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW-846:6020
	Calcium	64	NE	0.05	0.03		SW-846:6020
	Chromium	0.0036	0.1	0.002	0.001		SW-846:6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW-846:6020
	Copper	0.0069	1.3	0.002	0.001		SW-846:6020
	Iron	0.22	NE	0.05	0.025		SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	3.7	NE	0.05	0.025		SW-846:6020
	Manganese	0.0084	NE	0.001	0.0004		SW-846:6020
	Mercury (Unfiltered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Mercury (Filtered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.0019	NE	0.002	0.0001	J	SW-846:6020
	Potassium	2.7	NE	0.05	0.025		SW-846:6020
	Selenium	0.0039	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	1000	NE	1	0.5	D	SW-846:6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020
	Tin	0.005	NE	0.02	0.005	U	SW-846:6010B
Uranium	0.00026	0.03	0.001	0.0002	J	SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.045	NE	0.005	0.004		SW-846:6020	

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**Table-1 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Dissolved 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
SWTA3-MW3 7-May-13	Aluminum	0.025	NE	0.05	0.025	U	SW-846:6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW-846:6020
	Barium	0.063	2	0.001	0.0005		SW-846:6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW-846:6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW-846:6020
	Calcium	36	NE	0.05	0.03		SW-846:6020
	Chromium	0.0012	0.1	0.002	0.001	J	SW-846:6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW-846:6020
	Copper	0.001	1.3	0.002	0.001	U	SW-846:6020
	Iron	0.025	NE	0.05	0.025	U	SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	11	NE	0.05	0.025		SW-846:6020
	Manganese	0.0004	NE	0.001	0.0004	U	SW-846:6020
	Mercury (Unfiltered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Mercury (Filtered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.0001	NE	0.002	0.0001	U	SW-846:6020
	Potassium	4.7	NE	0.05	0.025		SW-846:6020
	Selenium	0.0013	0.05	0.002	0.001	J	SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	51	NE	0.05	0.025		SW-846:6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020
	Tin	0.005	NE	0.02	0.005	U	SW-846:6010B
Uranium	0.0025	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.0062	NE	0.01	0.003	J	SW-846:6020	
Zinc	0.0061	NE	0.005	0.004		SW-846:6020	

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Table-1 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Dissolved 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
TRE-1 1-May-13	Aluminum	0.025	NE	0.05	0.025	U	SW-846:6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW-846:6020
	Arsenic	0.0012	0.01	0.002	0.001	J	SW-846:6020
	Barium	0.05	2	0.001	0.0005		SW-846:6020
	Beryllium	0.00014	0.004	0.001	0.0001	J	SW-846:6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW-846:6020
	Calcium	160	NE	0.05	0.03		SW-846:6020
	Chromium	0.001	0.1	0.002	0.001	U	SW-846:6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW-846:6020
	Copper	0.001	1.3	0.002	0.001	J	SW-846:6020
	Iron	0.025	NE	0.05	0.025	U	SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	34	NE	0.05	0.025		SW-846:6020
	Manganese	0.0004	NE	0.001	0.0004	U	SW-846:6020
	Mercury (Filtered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Mercury (Unfiltered)	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.0001	NE	0.002	0.0001	U	SW-846:6020
	Potassium	7	NE	0.05	0.025		SW-846:6020
	Selenium	0.0042	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	100	NE	0.25	0.13	D	SW-846:6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020
	Tin	0.005	NE	0.02	0.005	U	SW-846:6010B
Uranium	0.018	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	J	SW-846:6020	
Zinc	0.004	NE	0.005	0.004	U	SW-846:6020	

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**Table-2 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Anions, Cyanide and Nitrate-Nitrite**

Monitoring Well/ Sample Date	Analyte	Result	EPA MCL	Quantitation Limit	MDL	Units	Laboratory Qualifier	Analytical Method
COYOTE SPRING 2-May-13	Bromide	2.1	NE	2.5	0.44	mg/L	D,J	SW-846:9056
	Chloride	500	NE	50	1.9	mg/L	D	SW-846:9056
	Cyanide, Total	1.5	200	10	1.5	ug/L	U	SW-846:9012A
	Fluoride	2	4	2.5	0.3	mg/L	D,J	SW-846:9056
	Nitrate Nitrite as N	0.43	10	0.05	0.0053	mg/L		EPA:353.2
	Sulfate	140	NE	5	0.25	mg/L	D	SW-846:9056
MRN-2 14-May-13	Bromide	0.17	NE	0.5	0.088	mg/L	J	SW-846:9056
	Chloride	15	NE	1	0.037	mg/L		SW-846:9056
	Cyanide, Total	1.5	200	10	1.5	ug/L	U	SW-846:9012A
	Fluoride	0.58	4	0.5	0.059	mg/L		SW-846:9056
	Nitrate Nitrite as N	4.2	10	0.25	0.027	mg/L	D	EPA:353.2
	Sulfate	55	NE	2	0.098	mg/L	D	SW-846:9056
MRN-3D 13-May-13	Bromide	0.19	NE	0.5	0.088	mg/L	J	SW-846:9056
	Chloride	16	NE	1	0.037	mg/L		SW-846:9056
	Cyanide, Total	1.5	200	10	1.5	ug/L	U	SW-846:9012A
	Fluoride	0.44	4	0.5	0.059	mg/L	J	SW-846:9056
	Nitrate Nitrite as N	2.3	10	0.1	0.011	mg/L	D	EPA:353.2
	Sulfate	81	NE	2	0.098	mg/L	D	SW-846:9056
SFR-2S 29-Apr-13	Bromide	0.68	NE	0.5	0.088	mg/L		SW-846:9056
	Chloride	140	NE	10	0.37	mg/L	D	SW-846:9056
	Cyanide, Total	17	200	10	1.5	ug/L	B	SW-846:9012A
	Fluoride	1.6	4	0.5	0.059	mg/L		SW-846:9056
	Nitrate Nitrite as N	0.97	10	0.05	0.0053	mg/L	B	EPA:353.2
	Sulfate	73	NE	10	0.49	mg/L	D	SW-846:9056
SFR-4T 30-Apr-13	Bromide	1.5	NE	2.5	0.44	mg/L	D,J	SW-846:9056
	Chloride	220	NE	20	0.74	mg/L	D	SW-846:9056
	Cyanide, Total	1.5	200	10	1.5	ug/L	U	SW-846:9012A
	Fluoride	2.9	4	2.5	0.3	mg/L	D	SW-846:9056
	Nitrate Nitrite as N	0.27	10	0.05	0.0053	mg/L	B	EPA:353.2
	Sulfate	2000	NE	100	4.9	mg/L	D	SW-846:9056
SWTA3-MW3 7-May-13	Bromide	0.19	NE	0.5	0.088	mg/L	J	SW-846:9056
	Chloride	15	NE	1	0.037	mg/L		SW-846:9056
	Cyanide, Total	1.5	200	10	1.5	ug/L	U	SW-846:9012A
	Fluoride	1.3	4	0.5	0.059	mg/L		SW-846:9056
	Nitrate Nitrite as N	0.53	10	0.05	0.0053	mg/L		EPA:353.2
	Sulfate	68	NE	2	0.098	mg/L	D	SW-846:9056

B = Compound was found in the blank and sample.

D = Dilution

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NE = Not Established

U = Not detected at the reporting limit (or MDL or EDL if shown)

**Table-2 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Anions, Cyanide and Nitrate-Nitrite**

Monitoring Well/ Sample Date	Analyte	Result	EPA MCL	Quantitation Limit	MDL	Units	Laboratory Qualifier	Analytical Method
TRE-1 1-May-13	Bromide	0.7	NE	1	0.18	mg/L	D,J	SW-846:9056
	Chloride	150	NE	10	0.37	mg/L	D	SW-846:9056
	Cyanide, Total	1.5	200	10	1.5	ug/L	U	SW-846:9012A
	Fluoride	1.6	4	1	0.12	mg/L	D	SW-846:9056
	Nitrate Nitrite as N	2.3	10	0.1	0.011	mg/L	D	EPA:353.2
	Sulfate	110	NE	10	0.49	mg/L	D	SW-846:9056

B = Compound was found in the blank and sample.

D = Dilution

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

NE = Not Established

U = Not detected at the reporting limit (or MDL or EDL if shown)

**Table-3 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: High Explosive Compounds**

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
SFR-2S 29-Apr-13	1,3,5-trinitrobenzene	0.018	0.23	0.018	U	SW-846:8321A
	1,3-Dinitrobenzene	0.02	0.23	0.02	U	SW-846:8321A
	2,4,6-Trinitrotoluene	0.012	0.23	0.012	U	SW-846:8321A
	2,4-Dinitrotoluene	0.021	0.23	0.021	U	SW-846:8321A
	2,6-Dinitrotoluene	0.017	0.23	0.017	U	SW-846:8321A
	2-Amino-4,6-dinitrotoluene	0.029	0.23	0.029	U	SW-846:8321A
	4-Amino-2,6-dinitrotoluene	0.059	0.23	0.018	J,B	SW-846:8321A
	HMX	0.054	0.23	0.054	U	SW-846:8321A
	m-Nitrotoluene	0.026	0.23	0.026	U	SW-846:8321A
	Nitrobenzene	0.014	0.23	0.014	U	SW-846:8321A
	o-Nitrotoluene	0.019	0.23	0.019	U	SW-846:8321A
	p-Nitrotoluene	0.026	0.23	0.026	U	SW-846:8321A
	RDX	0.022	0.23	0.022	U	SW-846:8321A
	Tetryl	0.02	0.23	0.02	U	SW-846:8321A
SWTA3-MW3 7-May-13	1,3,5-trinitrobenzene	0.019	0.23	0.019	U	SW-846:8321A
	1,3-Dinitrobenzene	0.02	0.23	0.02	U	SW-846:8321A
	2,4,6-Trinitrotoluene	0.012	0.23	0.012	U	SW-846:8321A
	2,4-Dinitrotoluene	0.022	0.23	0.022	U	SW-846:8321A
	2,6-Dinitrotoluene	0.017	0.23	0.017	U	SW-846:8321A
	2-Amino-4,6-dinitrotoluene	0.03	0.23	0.03	U	SW-846:8321A
	4-Amino-2,6-dinitrotoluene	0.018	0.23	0.018	U	SW-846:8321A
	HMX	0.056	0.23	0.056	U	SW-846:8321A
	m-Nitrotoluene	0.027	0.23	0.027	U	SW-846:8321A
	Nitrobenzene	0.015	0.23	0.015	U	SW-846:8321A
	o-Nitrotoluene	0.02	0.23	0.02	U	SW-846:8321A
	p-Nitrotoluene	0.027	0.23	0.027	U	SW-846:8321A
	RDX	0.023	0.23	0.023	U	SW-846:8321A
	Tetryl	0.021	0.23	0.021	U	SW-846:8321A

B = Compound was found in the blank and sample.

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte not detected at or above the reporting limit or MDL

**Table-3 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: High Explosive Compounds**

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
TRE-1 1-May-13	1,3,5-trinitrobenzene	0.019	0.23	0.019	U	SW-846:8321A
	1,3-Dinitrobenzene	0.02	0.23	0.02	U	SW-846:8321A
	2,4,6-Trinitrotoluene	0.012	0.23	0.012	U	SW-846:8321A
	2,4-Dinitrotoluene	0.021	0.23	0.021	U	SW-846:8321A
	2,6-Dinitrotoluene	0.017	0.23	0.017	U	SW-846:8321A
	2-Amino-4,6-dinitrotoluene	0.03	0.23	0.03	U	SW-846:8321A
	4-Amino-2,6-dinitrotoluene	0.058	0.23	0.018	J,B	SW-846:8321A
	HMX	0.054	0.23	0.054	U	SW-846:8321A
	m-Nitrotoluene	0.026	0.23	0.026	U	SW-846:8321A
	Nitrobenzene	0.014	0.23	0.014	U	SW-846:8321A
	o-Nitrotoluene	0.019	0.23	0.019	U	SW-846:8321A
	p-Nitrotoluene	0.027	0.23	0.027	U	SW-846:8321A
	RDX	0.023	0.23	0.023	U	SW-846:8321A
	Tetryl	0.021	0.23	0.021	U	SW-846:8321A

B = Compound was found in the blank and sample.

J = Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

U = Analyte not detected at or above the reporting limit or MDL

**Table-4 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Detected Volatile Organic Compounds**

<b>Monitoring Well/ Sample Date</b>	<b>Analyte</b>	<b>Result (µg/L)</b>	<b>EPA MCL (µg/L)</b>	<b>Quantitation Limit (µg/L)</b>	<b>MDL (µg/L)</b>	<b>Laboratory Qualifier</b>	<b>Analytical Method</b>
MRN-2 14-May-13	Acetone	2.1	NE	10	2.1	J	SW-846:8260B
	Bromodichloromethane	0.14	NE	1	0.14	J	SW-846:8260B
	Chloroform	0.13	NE	1	0.12	J	SW-846:8260B
TRE-1 1-May-13	Chloroform	0.63	NE	1	0.12	J	SW-846:8260B

J = Method blank contamination. The associated method blank contains the target analyte at a reportable level.

NE = Not Established



**Table-5 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Method Detection Limits for Volatile Organic Compounds**

Analyte	MDL (µg/L)	Quantitation Limit (µg/L)	Analytical Method
4-Methyl-2-pentanone (MIBK)	0.18	2	SW-846:8260B
Acetone	2.1	10	SW-846:8260B
Benzene	0.13	1	SW-846:8260B
Bromodichloromethane	0.14	1	SW-846:8260B
Bromoform	0.1	1	SW-846:8260B
Bromomethane	0.29	1	SW-846:8260B
Butanone[2-]	0.35	2	SW-846:8260B
Carbon Disulfide	0.16	2	SW-846:8260B
Carbon Tetrachloride	0.15	1	SW-846:8260B
Chlorobenzene	0.12	1	SW-846:8260B
Chloroethane	0.34	1	SW-846:8260B
Chloroform	0.12	1	SW-846:8260B
Chloromethane	0.25	1	SW-846:8260B
Dibromochloromethane	0.13	1	SW-846:8260B
Dichloroethane[1,1-]	0.1	1	SW-846:8260B
Dichloroethane[1,2-]	0.22	1	SW-846:8260B
Dichloroethene[1,1-]	0.14	1	SW-846:8260B
Dichloroethene[cis-1,2-]	0.1	1	SW-846:8260B
Dichloroethene[trans-1,2-]	0.11	1	SW-846:8260B
Dichloropropane[1,2-]	0.15	1	SW-846:8260B
Dichloropropene[cis-1,3-]	0.22	1	SW-846:8260B
Dichloropropene[trans-1,3-]	0.08	1	SW-846:8260B
Ethylbenzene	0.1	1	SW-846:8260B
Hexanone[2-]	0.17	2	SW-846:8260B
Methylene Chloride	0.35	1	SW-846:8260B
Styrene	0.15	1	SW-846:8260B
Tetrachloroethane[1,1,2,2-]	0.09	1	SW-846:8260B
Tetrachloroethene	0.1	1	SW-846:8260B
Toluene	0.25	1	SW-846:8260B
Trichloroethane[1,1,1-]	0.19	1	SW-846:8260B
Trichloroethane[1,1,2-]	0.31	1	SW-846:8260B
Trichloroethene	0.13	1	SW-846:8260B
Vinyl acetate	0.21	2	SW-846:8260B
Vinyl Chloride	0.22	1	SW-846:8260B
Xylenes, Total	0.18	1	SW-846:8260B

**Table-6 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, Radium 226 and Radium 228**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
COYOTE SPRING 2-May-13	Actinium-228	8.06 ± 4.6	5.31	U	EPA:901.1M
	Beryllium-7	-4.07 ± 7	11.4	U	EPA:901.1M
	Bismuth-212	5.53 ± 10	17.7	U	EPA:901.1M
	Bismuth-214	9.57 ± 5.7	12	U	EPA:901.1M
	Cesium-134	0.536 ± 1	1.47	U	EPA:901.1M
	Cesium-137	0.152 ± 0.67	1.18	U	EPA:901.1M
	Cobalt-60	0.276 ± 0.76	1.40	U	EPA:901.1M
	Gross Alpha	19.2 ± 14	18.9		EPA:900.0
	Gross Beta	32.3 ± 8.1	10.1		EPA:900.0
	Lead-212	2.12 ± 1.2	1.41	J	EPA:901.1M
	Lead-212	0.656 ± 3.2	2.44	U	EPA:901.1M
	Potassium-40	-11.1 ± 22	32.3	U	EPA:901.1M
	Protactinium-234m	1.71 ± 88	152	U	EPA:901.1M
	RA-226	-0.126 ± 0.061	0.189	U	EPA:903.1M
	RA-228	0.591 ± 0.26	0.439	J	EPA:904.0M
	Sodium-22	-0.0917 ± 0.80	1.39	U	EPA:901.1M
	Tallium-208	-0.608 ± 1.1	1.23	U	EPA:901.1M
	Thorium-234	1.71 ± 88	152	U	EPA:901.1M
	Uranium-234	10.6 ± 1.5	0.0087		HASL-300:ISOU
	Uranium-235	0.113 ± 0.029	0.00716		HASL-300:ISOU
Uranium-238	2.16 ± 0.32	0.0140		HASL-300:ISOU	

J = No U or < qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U = Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

**Table-6 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, Radium 226 and Radium 228**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
MRN-2 14-May-13	Actinium-228	1.69 ± 12	10.7	U	EPA:901.1M
	Beryllium-7	-11.4 ± 12	19.2	U	EPA:901.1M
	Bismuth-212	22.5 ± 18	32.1	U	EPA:901.1M
	Bismuth-214	-1.03 ± 17	22.9	U	EPA:901.1M
	Cesium-134	0.807 ± 1.4	2.53	U	EPA:901.1M
	Cesium-137	-0.393 ± 1.3	2.18	U	EPA:901.1M
	Cobalt-60	0.168 ± 1.4	2.40	U	EPA:901.1M
	Gross Alpha	3.30 ± 1.9	2.44		EPA:900.0
	Gross Beta	4.46 ± 1.3	1.72		EPA:900.0
	Lead-212	0.812 ± 5	3.35	U	EPA:901.1M
	Lead-212	-4.96 ± 4.30	4.84	U	EPA:901.1M
	Potassium-40	-105 ± 46	62.8	U	EPA:901.1M
	Protactinium-234m	-15.7 ± 160	269	U	EPA:901.1M
	RA-226	0.0991 ± 0.11	0.2	U	EPA:903.1M
	RA-228	0.33 ± 0.23	0.471	U	EPA:904.0M
	Sodium-22	1.26 ± 1.4	2.61	U	EPA:901.1M
	Tallium-208	-2.06 ± 2.6	2.71	U	EPA:901.1M
Thorium-234	-15.7 ± 160	269	U	EPA:901.1M	

J = No U or < qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U = Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

**Table-6 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, Radium 226 and Radium 228**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
MRN-3D 13-May-13	Actinium-228	-3.15 ± 6.8	6.62	U	EPA:901.1M
	Beryllium-7	0.509 ± 7.1	12.4	U	EPA:901.1M
	Bismuth-212	16.9 ± 11	21	U	EPA:901.1M
	Bismuth-214	16.5 ± 7.4	14.8	U	EPA:901.1M
	Cesium-134	-0.384 ± 0.96	1.62	U	EPA:901.1M
	Cesium-137	-0.229 ± 0.81	1.36	U	EPA:901.1M
	Cobalt-60	0.568 ± 0.92	1.70	U	EPA:901.1M
	Gross Alpha	4 ± 2.1	2.63		EPA:900.0
	Gross Beta	3.33 ± 1.3	1.81		EPA:900.0
	Lead-212	-2.36 ± 2	1.79	U	EPA:901.1M
	Lead-212	-5.86 ± 2.6	2.50	U	EPA:901.1M
	Potassium-40	-103 ± 34	45.8	U	EPA:901.1M
	Protactinium-234m	1.97 ± 100	179	U	EPA:901.1M
	RA-226	0.109 ± 0.11	0.187	U	EPA:903.1M
	RA-228	0.0845 ± 0.20	0.459	U	EPA:904.0M
	Sodium-22	0.429 ± 0.98	1.75	U	EPA:901.1M
	Tallium-208	-2.2 ± 1.8	1.51	U	EPA:901.1M
Thorium-234	1.97 ± 100	179	U	EPA:901.1M	

J = No U or < qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U = Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

**Table-6 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, Radium 226 and Radium 228**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
SFR-2S 29-Apr-13	Actinium-228	3.35 ± 10	9.85	U	EPA:901.1M
	Beryllium-7	0.618 ± 12	20.1	U	EPA:901.1M
	Bismuth-212	13.3 ± 16	26.9	U	EPA:901.1M
	Bismuth-214	-9.11 ± 15	20.9	U	EPA:901.1M
	Cesium-134	0.934 ± 1.2	2.18	U	EPA:901.1M
	Cesium-137	1.08 ± 1.1	1.97	U	EPA:901.1M
	Cobalt-60	0.444 ± 1.1	1.97	U	EPA:901.1M
	Gross Alpha	16.1 ± 6.6	7.17		EPA:900.0
	Gross Beta	10.6 ± 2.1	2.26		EPA:900.0
	Lead-212	-4.12 ± 2.8	2.93	U	EPA:901.1M
	Lead-212	-1.83 ± 4.6	4.30	U	EPA:901.1M
	Potassium-40	-100 ± 50	73.9	U	EPA:901.1M
	Protactinium-234m	46.5 ± 130	228	U	EPA:901.1M
	RA-226	0.207 ± 0.12	0.185	J	EPA:903.1M
	RA-228	0.444 ± 0.34	0.701	U	EPA:904.0M
	Sodium-22	-0.431 ± 1.2	2.09	U	EPA:901.1M
	Tallium-208	-1.24 ± 2.3	2.18	U	EPA:901.1M
	Thorium-234	46.5 ± 130	228	U	EPA:901.1M
	Uranium-234	22.8 ± 3.1	0.0101		HASL-300:ISOU
	Uranium-235	0.489 ± 0.081	0.00576		HASL-300:ISOU
Uranium-238	6.09 ± 0.85	0.0107		HASL-300:ISOU	

J = No U or < qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U = Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

**Table-6 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, Radium 226 and Radium 228**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
SFR-4T 30-Apr-13	Actinium-228	-0.124 ± 7.5	8.48	U	EPA:901.1M
	Beryllium-7	10.6 ± 11	19.1	U	EPA:901.1M
	Bismuth-212	10.5 ± 14	25.8	U	EPA:901.1M
	Bismuth-214	-13.5 ± 14	16.7	U	EPA:901.1M
	Cesium-134	0.44 ± 1.2	2.11	U	EPA:901.1M
	Cesium-137	0.0749 ± 1.1	1.88	U	EPA:901.1M
	Cobalt-60	0.54 ± 1.1	1.97	U	EPA:901.1M
	Gross Alpha	4.56 ± 19	33	U	EPA:900.0
	Gross Beta	743 ± 100	12.3		EPA:900.0
	Lead-212	4.16 ± 1.8	2.36	J	EPA:901.1M
	Lead-212	-3.7 ± 3.5	3.58	U	EPA:901.1M
	Potassium-40	-64 ± 38	50.9	U	EPA:901.1M
	Protactinium-234m	86.5 ± 120	212	U	EPA:901.1M
	RA-226	0.0928 ± 0.11	0.191	U	EPA:903.1M
	RA-228	0.417 ± 0.30	0.62	U	EPA:904.0M
	Sodium-22	0.796 ± 1.2	2.09	U	EPA:901.1M
	Tallium-208	2.58 ± 1.1	1.98	U	EPA:901.1M
	Thorium-234	86.5 ± 120	212	U	EPA:901.1M
	Uranium-234	0.47 ± 0.079	0.0194		HASL-300:ISOU
	Uranium-235	0.0175 ± 0.0096	0.0107	J	HASL-300:ISOU
Uranium-238	0.0938 ± 0.025	0.0202		HASL-300:ISOU	

J = No U or < qualifier has been assigned and the result is below the Reporting Limit, RL (CRDL) or Report Value is Estimated.

U = Analyzed for but not detected above limiting criteria. Limit criteria is less than the Mdc/Mda/Mdl, Total Uncert, CRDL, RDL or not identified by gamma scan software.

**Table-6 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, Radium 226 and Radium 228**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
SWTA3-MW3 7-May-13	Actinium-228	6.11 ± 3.8	6.83	U	EPA:901.1M
	Beryllium-7	-9.22 ± 7.5	11.8	U	EPA:901.1M
	Bismuth-212	10.2 ± 11	20.2	U	EPA:901.1M
	Bismuth-214	-14.5 ± 14	16.6	U	EPA:901.1M
	Cesium-134	0.789 ± 0.88	1.59	U	EPA:901.1M
	Cesium-137	0.351 ± 0.82	1.43	U	EPA:901.1M
	Cobalt-60	0.733 ± 0.91	1.66	U	EPA:901.1M
	Gross Alpha	3.28 ± 1.70	2.13		EPA:900.0
	Gross Beta	4.65 ± 1.3	1.66		EPA:900.0
	Lead-212	-2.56 ± 1.7	1.73	U	EPA:901.1M
	Lead-212	-1.36 ± 2.4	2.63	U	EPA:901.1M
	Potassium-40	-67.3 ± 32	47.1	U	EPA:901.1M
	Protactinium-234m	43.3 ± 99	174	U	EPA:901.1M
	RA-226	-0.0819 ± 0.084	0.205	U	EPA:903.1M
	RA-228	0.288 ± 0.22	0.429	U	EPA:904.0M
	Sodium-22	0.0921 ± 0.90	1.58	U	EPA:901.1M
	Tallium-208	-0.0262 ± 1.4	1.63	U	EPA:901.1M
	Thorium-234	43.3 ± 99	174	U	EPA:901.1M
	Uranium-234	2.58 ± 0.37	0.00674		HASL-300:ISOU
	Uranium-235	0.0341 ± 0.014	0.00674		HASL-300:ISOU
Uranium-238	0.868 ± 0.14	0.00674		HASL-300:ISOU	

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**Table-6 NMED DOE OB FFY 2013 Q-3 LTS-GMP (formerly GWPP) Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium, Radium 226 and Radium 228**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
TRE-1 1-May-13	Actinium-228	1.41 ± 2.8	5.03	U	EPA:901.1M
	Beryllium-7	0.926 ± 6.5	11.3	U	EPA:901.1M
	Bismuth-212	7.09 ± 9.7	17.4	U	EPA:901.1M
	Bismuth-214	1.62 ± 5.7	10.5	U	EPA:901.1M
	Cesium-134	0.0559 ± 0.76	1.35	U	EPA:901.1M
	Cesium-137	-0.0395 ± 0.67	1.16	U	EPA:901.1M
	Cobalt-60	-0.141 ± 0.77	1.36	U	EPA:901.1M
	Gross Alpha	24.5 ± 8.1	6.62		EPA:900.0
	Gross Beta	10.3 ± 2.3	2.64		EPA:900.0
	Lead-212	0.0653 ± 1.7	1.29	U	EPA:901.1M
	Lead-212	-0.597 ± 1.8	2.03	U	EPA:901.1M
	Potassium-40	-4.91 ± 17	21.6	U	EPA:901.1M
	Protactinium-234m	90.4 ± 91	167	U	EPA:901.1M
	RA-226	0.165 ± 0.10	0.143	J	EPA:903.1M
	RA-228	0.451 ± 0.33	0.676	U	EPA:904.0M
	Sodium-22	0.318 ± 0.84	1.51	U	EPA:901.1M
	Tallium-208	0.773 ± 0.72	1.28	U	EPA:901.1M
	Thorium-234	90.4 ± 91	167	U	EPA:901.1M
	Uranium-234	23 ± 3.2	0.02		HASL-300:ISOU
	Uranium-235	0.319 ± 0.06	0.0122		HASL-300:ISOU
Uranium-238	5.58 ± 0.78	0.0152		HASL-300:ISOU	

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