

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

**Groundwater Monitoring at  
Sandia National Laboratories/New Mexico**

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

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**Draft Report for U.S. DOE Review**

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The purpose of this communication is to transmit groundwater data collected by New Mexico Environment Department DOE Oversight Bureau from Burn Site Groundwater monitoring wells during the third quarter of FFY 2013.

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### **Introductory remarks**

The New Mexico Environment Department (NMED) DOE Oversight Bureau (DOE OB or the Bureau) has compiled and assessed groundwater data collected during April 2013. The Bureau collected groundwater samples from Burn Site Groundwater monitoring wells CYN-MW4, CYN-MW7, CYN-MW8, CYN-MW9, CYN-MW10, CYN-MW11, CYN-MW12, and CYN-MW13. Monitoring well CYN-MW6 was purged dry and never fully recovered to be sampled. Monitoring well CYN-MW13 was sampled for the first time during FFY2013 Q-3. Monitoring well CYN-MW13 replaced monitoring well CYN-MW1D, which was plugged and abandoned.

Split samples were collected using standard Sandia National Laboratories/New Mexico sampling procedures and equipment. The samples were submitted to an independent analytical laboratory, where they were analyzed for total metals, general chemistry (anions and nitrate-nitrite), high explosives, volatile organic compounds, diesel and gasoline range organics, and radionuclides. Several samples analyzed for nitrate-nitrite were detected above the U.S. Environmental Protection Agency (EPA) maximum contaminant level (MCL) of 10 mg/L.

### **Data Assessment**

All groundwater samples were collected and analyzed in accordance with EPA 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.

### **Results**

Analytical results for target analyte list (TAL) metals are presented in Table-1. Samples were analyzed for total TAL metals plus uranium. All metal concentrations were detected below established U.S. EPA MCLs.

Analytical results for anions (bromide, chloride, fluoride and sulfate) and nitrate-nitrite are presented in Table-2. No anions were detected above established EPA MCLs. Nitrate concentrations were detected above the EPA MCL of 10 mg/L at monitoring wells CYN-MW9 (29 mg/L), CYN-MW12 (12 mg/L), and CYN-MW13 (30 mg/L).

Analytical results for high explosives (HE) are listed in Table-3. No compounds were detected above the laboratory method detection limit (MDL).

Volatile organic compounds (VOCs) detected above their MDL are listed in Table-4. Ethylbenzene and total xylenes were detected slightly above their associated MDL at monitoring well CYN-MW12, but below the practical quantitation limit. Concentrations were 0.14 µg/L and 0.19 µg/L, respectively, and both compounds were "J" flagged as an estimated value. The laboratory method

detection limits for the remaining VOCs analyzed from Burn Site monitoring wells are presented in Table-5.

Analytical results for diesel and gasoline range organics are listed in Table-6. Diesel range organics ranged from 25 µg/L at monitoring well CYN-MW4 to 43 µg/L at CYN-MW13. All detected values were “J” flagged as an estimated value. Gasoline range organics (GRO) were detected at CYN-MW8. The GRO concentration was detected at the MDL of 15 µg/L and “J” flagged as an estimated value.

Analytical results for radionuclides are listed in Table-7. Samples were analyzed for gross alpha, gross beta, gamma-emitting isotopes, isotopic uranium, and tritium. No isotopes were detected above EPA MCLs.

**Table-1 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Total TAL Metals + U**

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
CYN-MW4 9-Apr-13	Aluminum	0.047	NE	0.05	0.025	J,B	SW-846:6020
	Antimony	0.00024	0.006	0.002	0.0002	J	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW-846:6020
	Barium	0.046	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	74	NE	0.05	0.03	B	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	0.0011	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	36	NE	0.05	0.025		SW-846:6020
	Manganese	0.0048	NE	0.001	0.0004		SW-846:6020
	Mercury	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	6.9	NE	0.05	0.025		SW-846:6020
	Selenium	0.019	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	49	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	0.014	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.0065	NE	0.005	0.004		SW-846:6020	

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Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
CYN-MW7 3-Apr-13	Aluminum	0.036	NE	0.05	0.025	J,B	SW-846:6020
	Antimony	0.00026	0.006	0.002	0.0002	J	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW-846:6020
	Barium	0.11	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	100	NE	0.05	0.03	B	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	0.0012	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	21	NE	0.05	0.025		SW-846:6020
	Manganese	0.0016	NE	0.001	0.0004		SW-846:6020
	Mercury	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	2.8	NE	0.05	0.025		SW-846:6020
	Selenium	0.0051	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	49	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	0.0069	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.014	NE	0.005	0.004		SW-846:6020	

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Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
CYN-MW8 8-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	0.06	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	120	NE	0.05	0.03	B	SW-846:6020
	Chromium	0.0011	0.1	0.002	0.001	J	SW-846:6020
	Cobalt	0.00083	NE	0.001	0.0006	J	SW-846:6020
	Copper	0.0014	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	26	NE	0.05	0.025		SW-846:6020
	Manganese	0.0048	NE	0.001	0.0004		SW-846:6020
	Mercury	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	2.5	NE	0.05	0.025		SW-846:6020
	Selenium	0.0079	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	50	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	0.0083	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.0081	NE	0.005	0.004		SW-846:6020	

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CYN-MW9 17-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	0.058	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	150	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	0.0014	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	41	NE	0.05	0.025		SW-846:6020
	Manganese	0.00059	NE	0.001	0.0004	J	SW-846:6020
	Mercury	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	2.3	NE	0.05	0.025		SW-846:6020
	Selenium	0.0097	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	36	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	0.0069	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.004	NE	0.005	0.004	U	SW-846:6020	

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CYN-MW9 17-Apr-13 Dup	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	0.058	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	140	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	0.0013	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	40	NE	0.05	0.025		SW-846:6020
	Manganese	0.00069	NE	0.001	0.0004	J	SW-846:6020
	Mercury	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	2.2	NE	0.05	0.025		SW-846:6020
	Selenium	0.01	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	35	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	0.0069	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.004	NE	0.005	0.004	U	SW-846:6020	

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CYN-MW10 10-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	0.058	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	110	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	0.002	1.3	0.002	0.001		SW-846:6020
	Iron	0.025	NE	0.05	0.025	U,L	SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	31	NE	0.05	0.025		SW-846:6020
	Manganese	0.0009	NE	0.001	0.0004	J	SW-846:6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.0001	NE	0.002	0.0001	U,L	SW-846:6020
	Potassium	1.8	NE	0.05	0.025		SW-846:6020
	Selenium	0.01	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	37	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	0.0053	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.004	NE	0.005	0.004	U	SW-846:6020	

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CYN-MW11 11-Apr-13	Aluminum	0.025	NE	0.05	0.025	U	SW-846:6020
	Antimony	0.0005	0.006	0.002	0.0002	J	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW-846:6020
	Barium	0.083	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	130	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	0.0013	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	38	NE	0.05	0.025		SW-846:6020
	Manganese	0.31	NE	0.001	0.0004		SW-846:6020
	Mercury	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	3.1	NE	0.05	0.025		SW-846:6020
	Selenium	0.0063	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	38	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	0.0055	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.039	NE	0.005	0.004		SW-846:6020	

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CYN-MW12 16-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	0.037	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	150	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	0.0015	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	40	NE	0.05	0.025		SW-846:6020
	Manganese	0.059	NE	0.001	0.0004		SW-846:6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.0057	NE	0.002	0.0001		SW-846:6020
	Potassium	3.2	NE	0.05	0.025		SW-846:6020
	Selenium	0.01	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	42	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	0.0083	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.016	NE	0.005	0.004		SW-846:6020	

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.

L = A negative instrument reading had an absolute value greater than the reporting limit

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 Burn Site Groundwater Quality Results: Total TAL Metals + U**

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
CYN-MW13 4-Apr-13	Aluminum	0.026	NE	0.05	0.025	J,B	SW-846:6020
	Antimony	0.00021	0.006	0.002	0.0002	J	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW-846:6020
	Barium	0.11	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	110	NE	0.05	0.03	B	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	0.0011	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	22	NE	0.05	0.025		SW-846:6020
	Manganese	0.21	NE	0.001	0.0004		SW-846:6020
	Mercury	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	NE	0.05	0.025		SW-846:6020
	Selenium	0.0034	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	26	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	0.0063	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.003	NE	0.01	0.003	U	SW-846:6020	
Zinc	0.12	NE	0.005	0.004		SW-846:6020	

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.

L = A negative instrument reading had an absolute value greater than the reporting limit

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 Burn Site Groundwater Quality Results: Anions and Nitrate -Nitrite

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
CYN-MW4 9-Apr-13	Bromide	0.4	NE	0.5	0.088	J	SW-846:9056
	Chloride	27	NE	5	0.19	D	SW-846:9056
	Fluoride	0.77	4	0.5	0.059		SW-846:9056
	Nitrate Nitrite as N	0.13	10	0.05	0.0053		EPA:353.2
	Sulfate	140	NE	5	0.25	D	SW-846:9056
CYN-MW7 3-Apr-13	Bromide	0.62	NE	0.5	0.088		SW-846:9056
	Chloride	46	NE	5	0.19	D	SW-846:9056
	Fluoride	1.3	4	0.5	0.059		SW-846:9056
	Nitrate Nitrite as N	2.1	10	0.1	0.011	D	EPA:353.2
	Sulfate	89	NE	5	0.25	D	SW-846:9056
CYN-MW8 8-Apr-13	Bromide	0.75	NE	0.5	0.088		SW-846:9056
	Chloride	64	NE	5	0.19	D	SW-846:9056
	Fluoride	1.4	4	0.5	0.059		SW-846:9056
	Nitrate Nitrite as N	4.6	10	0.2	0.021	D	EPA:353.2
	Sulfate	130	NE	5	0.25	D	SW-846:9056
CYN-MW9 17-Apr-13	Bromide	1	NE	0.5	0.088		SW-846:9056
	Chloride	81	NE	10	0.37	D	SW-846:9056
	Fluoride	0.6	4	0.5	0.059		SW-846:9056
	Nitrate Nitrite as N	<b>29</b>	10	2.5	0.27	D	EPA:353.2
	Sulfate	180	NE	10	0.49	D	SW-846:9056
CYN-MW9 17-Apr-13 Dup	Bromide	1	NE	0.5	0.088		SW-846:9056
	Chloride	80	NE	10	0.37	D	SW-846:9056
	Fluoride	0.61	4	0.5	0.059		SW-846:9056
	Nitrate Nitrite as N	<b>29</b>	10	2.5	0.27	D	EPA:353.2
	Sulfate	180	NE	10	0.49	D	SW-846:9056
CYN-MW10 10-Apr-13	Bromide	0.7	NE	0.5	0.088		SW-846:9056
	Chloride	52	NE	5	0.19	D	SW-846:9056
	Fluoride	0.64	4	0.5	0.059		SW-846:9056
	Nitrate Nitrite as N	5.2	10	0.25	0.027	D	EPA:353.2
	Sulfate	180	NE	5	0.25	D	SW-846:9056
CYN-MW11 11-Apr-13	Bromide	1	NE	0.5	0.088		SW-846:9056
	Chloride	86	NE	5	0.19	D	SW-846:9056
	Fluoride	0.7	4	0.5	0.059		SW-846:9056
	Nitrate Nitrite as N	7.5	10	0.5	0.053	D	EPA:353.2
	Sulfate	180	NE	5	0.25	D	SW-846:9056

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

Table-2 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Anions and Nitrate -Nitrite

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
CYN-MW12 16-Apr-13	Bromide	0.92	NE	0.5	0.088		SW-846:9056
	Chloride	88	NE	10	0.37	D	SW-846:9056
	Fluoride	1.1	4	0.5	0.059		SW-846:9056
	Nitrate Nitrite as N	<b>12</b>	10	1	0.11	D	EPA:353.2
	Sulfate	210	NE	10	0.49	D	SW-846:9056
CYN-MW13 4-Apr-13	Bromide	0.28	NE	0.5	0.088	J	SW-846:9056
	Chloride	20	NE	2	0.074	D	SW-846:9056
	Fluoride	1.6	4	0.5	0.059		SW-846:9056
	Nitrate Nitrite as N	<b>30</b>	10	1	0.11	D	EPA:353.2
	Sulfate	82	NE	2	0.098	D	SW-846:9056

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

**Table-3 NMED DOE OB FFY 2013 Q-3 Burn Site 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
CYN-MW4 9-Apr-13	1,3,5-trinitrobenzene	0.019	0.24	0.019	U	SW-846:8321A
	1,3-Dinitrobenzene	0.021	0.24	0.021	U	SW-846:8321A
	2,4,6-Trinitrotoluene	0.012	0.24	0.012	U	SW-846:8321A
	2,4-Dinitrotoluene	0.022	0.24	0.022	U	SW-846:8321A
	2,6-Dinitrotoluene	0.017	0.24	0.017	U	SW-846:8321A
	2-Amino-4,6-dinitrotoluene	0.031	0.24	0.031	U	SW-846:8321A
	4-Amino-2,6-dinitrotoluene	0.019	0.24	0.019	U	SW-846:8321A
	HMX	0.057	0.24	0.057	U	SW-846:8321A
	m-Nitrotoluene	0.028	0.24	0.028	U	SW-846:8321A
	Nitrobenzene	0.015	0.24	0.015	U	SW-846:8321A
	o-Nitrotoluene	0.02	0.24	0.02	U	SW-846:8321A
	p-Nitrotoluene	0.028	0.24	0.028	U	SW-846:8321A
	RDX	0.024	0.24	0.024	U	SW-846:8321A
	Tetryl	0.021	0.24	0.021	U	SW-846:8321A
CYN-MW7 3-Apr-13	1,3,5-trinitrobenzene	0.017	0.22	0.017	U	SW-846:8321A
	1,3-Dinitrobenzene	0.019	0.22	0.019	U	SW-846:8321A
	2,4,6-Trinitrotoluene	0.011	0.22	0.011	U	SW-846:8321A
	2,4-Dinitrotoluene	0.02	0.22	0.02	U	SW-846:8321A
	2,6-Dinitrotoluene	0.016	0.22	0.016	U	SW-846:8321A
	2-Amino-4,6-dinitrotoluene	0.028	0.22	0.028	U	SW-846:8321A
	4-Amino-2,6-dinitrotoluene	0.017	0.22	0.017	U	SW-846:8321A
	HMX	0.051	0.22	0.051	U	SW-846:8321A
	m-Nitrotoluene	0.025	0.22	0.025	U	SW-846:8321A
	Nitrobenzene	0.014	0.22	0.014	U	SW-846:8321A
	o-Nitrotoluene	0.018	0.22	0.018	U	SW-846:8321A
	p-Nitrotoluene	0.025	0.22	0.025	U	SW-846:8321A
	RDX	0.021	0.22	0.021	U	SW-846:8321A
	Tetryl	0.019	0.22	0.019	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 Burn Site 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
CYN-MW8 8-Apr-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	0.055	0.23	0.055	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
CYN-MW9 17-Apr-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	0.055	0.23	0.055	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 Burn Site 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
CYN-MW9 17-Apr-13 Dup	1,3,5-trinitrobenzene	0.019	0.23	0.019	U	SW-846:8321A
	1,3-Dinitrobenzene	0.021	0.23	0.02	J,B	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	0.018	0.23	0.018	U	SW-846:8321A
	HMX	0.055	0.23	0.055	U	SW-846:8321A
	m-Nitrotoluene	0.027	0.23	0.027	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
CYN-MW10 10-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	0.018	0.23	0.018	U	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

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 Burn Site 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
CYN-MW11 11-Apr-13	1,3,5-trinitrobenzene	0.02	0.25	0.02	U	SW-846:8321A
	1,3-Dinitrobenzene	0.022	0.25	0.022	U	SW-846:8321A
	2,4,6-Trinitrotoluene	0.013	0.25	0.013	U	SW-846:8321A
	2,4-Dinitrotoluene	0.023	0.25	0.023	U	SW-846:8321A
	2,6-Dinitrotoluene	0.018	0.25	0.018	U	SW-846:8321A
	2-Amino-4,6-dinitrotoluene	0.032	0.25	0.032	U	SW-846:8321A
	4-Amino-2,6-dinitrotoluene	0.019	0.25	0.019	U	SW-846:8321A
	HMX	0.059	0.25	0.059	U	SW-846:8321A
	m-Nitrotoluene	0.028	0.25	0.028	U	SW-846:8321A
	Nitrobenzene	0.016	0.25	0.016	U	SW-846:8321A
	o-Nitrotoluene	0.021	0.25	0.021	U	SW-846:8321A
	p-Nitrotoluene	0.029	0.25	0.029	U	SW-846:8321A
	RDX	0.024	0.25	0.024	U	SW-846:8321A
	Tetryl	0.022	0.25	0.022	U	SW-846:8321A
CYN-MW12 16-Apr-13	1,3,5-trinitrobenzene	0.018	0.22	0.018	U	SW-846:8321A
	1,3-Dinitrobenzene	0.02	0.22	0.02	U	SW-846:8321A
	2,4,6-Trinitrotoluene	0.012	0.22	0.012	U	SW-846:8321A
	2,4-Dinitrotoluene	0.021	0.22	0.021	U	SW-846:8321A
	2,6-Dinitrotoluene	0.016	0.22	0.016	U	SW-846:8321A
	2-Amino-4,6-dinitrotoluene	0.029	0.22	0.029	U	SW-846:8321A
	4-Amino-2,6-dinitrotoluene	0.018	0.22	0.018	U	SW-846:8321A
	HMX	0.053	0.22	0.053	U	SW-846:8321A
	m-Nitrotoluene	0.026	0.22	0.026	U	SW-846:8321A
	Nitrobenzene	0.014	0.22	0.014	U	SW-846:8321A
	o-Nitrotoluene	0.019	0.22	0.019	U	SW-846:8321A
	p-Nitrotoluene	0.026	0.22	0.026	U	SW-846:8321A
	RDX	0.022	0.22	0.022	U	SW-846:8321A
	Tetryl	0.02	0.22	0.02	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 Burn Site 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
CYN-MW13 4-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	0.03	0.23	0.03	U	SW-846:8321A
	4-Amino-2,6-dinitrotoluene	0.018	0.23	0.018	U	SW-846:8321A
	HMX	0.054	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

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 Burn Site Groundwater Quality Results: Volatile Organic Compounds**

<b>Monitoring Well/ Sample Date</b>	<b>Analyte</b>	<b>Result (µg/L)</b>	<b>EPA MCL</b>	<b>Quantitation Limit (µg/L)</b>	<b>MDL (µg/L)</b>	<b>Laboratory Qualifier</b>	<b>Analytical Method</b>
CYN-MW12 16-Apr-13	Ethylbenzene	0.14	700	1	0.1	J	SW-846:8260B
	Xylenes, Total	0.19	10000	1	0.18	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 Burn Site Groundwater Quality Results: Method Detection Limits for Volatile Organic Compounds**

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

**Table-6 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Diesel and Gasoline Range Organics**

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
CYN-MW4 9-Apr-13	Diesel Range Organics	25	56	18	J,*	SW-846:8015M_EXTRACTABLE
	Diesel Range Organics	18	55	18	U,H	SW-846:8015M_EXTRACTABLE
	Gasoline Range Organics (GRO)	15	50	15	U	SW-846:8260B
CYN-MW7 3-Apr-13	Diesel Range Organics	35	49	16	J	SW-846:8015M_EXTRACTABLE
	Gasoline Range Organics (GRO)	15	50	15	U	SW-846:8260B
CYN-MW8 8-Apr-13	Diesel Range Organics	19	58	19	U,*	SW-846:8015M_EXTRACTABLE
	Diesel Range Organics	18	56	18	U,H	SW-846:8015M_EXTRACTABLE
	Gasoline Range Organics (GRO)	15	50	15	J	SW-846:8260B
CYN-MW9 17-Apr-13	Diesel Range Organics	17	54	17	U	SW-846:8015M_EXTRACTABLE
	Gasoline Range Organics (GRO)	15	50	15	U	SW-846:8260B
CYN-MW9 17-Apr-13 Dup	Diesel Range Organics	18	55	18	U	SW-846:8015M_EXTRACTABLE
	Gasoline Range Organics (GRO)	15	50	15	U	SW-846:8260B
CYN-MW10 10-Apr-13	Diesel Range Organics	17	54	17	U	SW-846:8015M_EXTRACTABLE
	Gasoline Range Organics (GRO)	15	50	15	U	SW-846:8260B
CYN-MW11 11-Apr-13	Diesel Range Organics	32	53	17	J	SW-846:8015M_EXTRACTABLE
	Gasoline Range Organics (GRO)	15	50	15	U	SW-846:8260B
CYN-MW12 16-Apr-13	Diesel Range Organics	17	54	17	U	SW-846:8015M_EXTRACTABLE
	Gasoline Range Organics (GRO)	15	50	15	U	SW-846:8260B
CYN-MW13 4-Apr-13	Diesel Range Organics	43	56	18	J	SW-846:8015M_EXTRACTABLE
	Gasoline Range Organics (GRO)	15	50	15	U	SW-846:8260B

\* = LCS or LCSD exceeds the control limits

H = Sample was prepped or analyzed beyond the specified holding time

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-7 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
CYN-MW4 9-Apr-13	Actinium-228	-5.58 ± 9.3	11.6	U	EPA:901.1M
	Americium-241	0.467 ± 3.4	5.46	U	EPA:901.1M
	Antimony-124	-1.25 ± 1.6	2.63	U	EPA:901.1M
	Antimony-125	-0.777 ± 3.4	5.73	U	EPA:901.1M
	Beryllium-7	-0.46 ± 13	22.5	U	EPA:901.1M
	Bismuth-212	16.8 ± 18	32.3	U	EPA:901.1M
	Bismuth-214	-55.8 ± 20	16.6	U	EPA:901.1M
	Cadmium-109	7.14 ± 35	29.8	U	EPA:901.1M
	Cerium-139	0.0864 ± 0.96	1.6	U	EPA:901.1M
	Cerium-144	0.0803 ± 5.8	9.77	U	EPA:901.1M
	Cesium-134	2.33 ± 1.5	2.75	U	EPA:901.1M
	Cesium-137	-0.402 ± 1.3	2.26	U	EPA:901.1M
	Chromium-51	-1.78 ± 16	26.2	U	EPA:901.1M
	Cobalt-56	0.72 ± 1.6	2.79	U	EPA:901.1M
	Cobalt-57	0.722 ± 6.1	10.2	U	EPA:901.1M
	Cobalt-58	-0.302 ± 1.5	2.64	U	EPA:901.1M
	Cobalt-60	0.599 ± 1.3	2.38	U	EPA:901.1M
	Europium-152	-0.0782 ± 3.5	5.95	U	EPA:901.1M
	Europium-154	-1.34 ± 3.9	6.64	U	EPA:901.1M
	Europium-155	2.06 ± 2.7	4.71	U	EPA:901.1M
	Gross Alpha	37.5 ± 9.6	3.9		EPA:900.0
	Gross Beta	8.08 ± 1.5	1.36		EPA:900.0
	Iodine-131	0.249 ± 7.6	13	U	EPA:901.1M
	Iron-59	0.217 ± 3.5	6.11	U	EPA:901.1M
	Lead-212	-2.16 ± 3.7	4.02	U	EPA:901.1M
	Lead-212	-4.17 ± 4.9	4.87	U	EPA:901.1M
	Manganese-54	0.15 ± 1.4	2.35	U	EPA:901.1M
	Niobium-94	0.22 ± 1.3	2.22	U	EPA:901.1M
	Niobium-95	-0.351 ± 1.8	3.12	U	EPA:901.1M
	Potassium-40	-201 ± 47	48.1	U	EPA:901.1M
	Protactinium-234m	14.2 ± 160	282	U	EPA:901.1M
	Ruthenium-106	2.73 ± 12	20.3	U	EPA:901.1M
	Scandium-46	0.0523 ± 1.5	2.64	U	EPA:901.1M
	Silver-108M	0.54 ± 1.1	1.91	U	EPA:901.1M
	Sodium-22	-0.357 ± 1.4	2.37	U	EPA:901.1M
	Strontium-85	1.69 ± 2.6	4.4	U	EPA:901.1M
	Tallium-208	0.554 ± 3.2	2.86	U	EPA:901.1M
	Thorium-227	-31.4 ± 8.9	12	U	EPA:901.1M
	Thorium-234	14.2 ± 160	282	U	EPA:901.1M
	Tritium	-63.2 ± 130	289	U	EPA:906.0
Uranium-234	35.5 ± 4.9	0.00929		HASL-300:ISOU	
Uranium-235	0.665 ± 5.9	9.95	U	EPA:901.1M	
Uranium-235	0.401 ± 0.066	0.00476		HASL-300:ISOU	
Uranium-238	4.37 ± 0.61	0.00835		HASL-300:ISOU	
Zinc-65	1.42 ± 3	5.35	U	EPA:901.1M	

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-7 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)		MDA (pCi/L)	Laboratory Qualifier	Analytical Method
CYN-MW7 3-Apr-13	Actinium-228	5.6	± 4.4	5.01	U	EPA:901.1M
	Americium-241	-0.0786	± 0.54	0.914	U	EPA:901.1M
	Antimony-124	0.417	± 0.95	1.54	U	EPA:901.1M
	Antimony-125	-0.371	± 1.6	2.77	U	EPA:901.1M
	Beryllium-7	19.7	± 12	11		EPA:901.1M
	Bismuth-212	0.882	± 9.3	16	U	EPA:901.1M
	Bismuth-214	1.46	± 5.8	10.7	U	EPA:901.1M
	Cadmium-109	-0.414	± 6.2	10.3	U	EPA:901.1M
	Cerium-139	-0.0363	± 0.42	0.714	U	EPA:901.1M
	Cerium-144	1.1	± 2.4	4.23	U	EPA:901.1M
	Cesium-134	0.332	± 0.76	1.38	U	EPA:901.1M
	Cesium-137	0.332	± 0.76	1.17	U	EPA:901.1M
	Chromium-51	-3.75	± 8.8	14.5	U	EPA:901.1M
	Cobalt-56	0.241	± 0.91	1.61	U	EPA:901.1M
	Cobalt-57	-0.854	± 2.5	4.26	U	EPA:901.1M
	Cobalt-58	0.299	± 0.83	1.5	U	EPA:901.1M
	Cobalt-60	0.0471	± 0.72	1.31	U	EPA:901.1M
	Europium-152	0.816	± 1.8	3.03	U	EPA:901.1M
	Europium-154	0.495	± 2.4	4.23	U	EPA:901.1M
	Europium-155	0.754	± 1	1.87	U	EPA:901.1M
	Gross Alpha	17.6	± 5.3	3.14		EPA:900.0
	Gross Beta	5.25	± 1.2	1.4		EPA:900.0
	Iodine-131	1.26	± 6.1	10.1	U	EPA:901.1M
	Iron-59	-1.31	± 2.2	3.76	U	EPA:901.1M
	Lead-212	1.18	± 0.83	1.48	U	EPA:901.1M
	Lead-212	-4.69	± 2.4	2.48	U	EPA:901.1M
	Manganese-54	-0.128	± 0.69	1.19	U	EPA:901.1M
	Niobium-94	0.0592	± 0.69	1.21	U	EPA:901.1M
	Niobium-95	0.54	± 1.2	1.88	U	EPA:901.1M
	Potassium-40	-39.5	± 23	26.6	U	EPA:901.1M
	Protactinium-234m	56.6	± 89	160	U	EPA:901.1M
	Ruthenium-106	0.693	± 6.3	11	U	EPA:901.1M
	Scandium-46	0.101	± 0.84	1.48	U	EPA:901.1M
	Silver-108M	-0.292	± 1	0.92	U	EPA:901.1M
	Sodium-22	0.134	± 0.85	1.5	U	EPA:901.1M
	Strontium-85	-9.64	± 1.9	1.91	U	EPA:901.1M
	Tallium-208	0.249	± 0.65	1.16	U	EPA:901.1M
	Thorium-227	-1.69	± 3.1	5.3	U	EPA:901.1M
	Thorium-234	56.6	± 89	160	U	EPA:901.1M
	Tritium	-21.3	± 130	288	U	EPA:906.0
Uranium-234	17.9	± 2.5	0.0119		HASL-300:ISOU	
Uranium-235	2	± 2.4	4.23	U	EPA:901.1M	
Uranium-235	0.099	± 0.024	0.00634		HASL-300:ISOU	
Uranium-238	2.23	± 0.32	0.0143		HASL-300:ISOU	
Zinc-65	0.00417	± 1.6	2.75	U	EPA:901.1M	

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-7 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
CYN-MW8 8-Apr-13	Actinium-228	1.20 ± 4.1	7.06	U	EPA:901.1M
	Americium-241	-2.52 ± 3.1	5.18	U	EPA:901.1M
	Antimony-124	1.20 ± 1.5	2.60	U	EPA:901.1M
	Antimony-125	-0.74 ± 2.8	4.67	U	EPA:901.1M
	Beryllium-7	3.66 ± 11	18.9	U	EPA:901.1M
	Bismuth-212	-0.252 ± 14	24	U	EPA:901.1M
	Bismuth-214	-0.174 ± 6.8	12	U	EPA:901.1M
	Cadmium-109	-13 ± 19	31.5	U	EPA:901.1M
	Cerium-139	-0.119 ± 0.80	1.34	U	EPA:901.1M
	Cerium-144	0.814 ± 5.1	8.52	U	EPA:901.1M
	Cesium-134	-0.214 ± 1.2	1.98	U	EPA:901.1M
	Cesium-137	0.353 ± 1.1	1.97	U	EPA:901.1M
	Chromium-51	-2.42 ± 14	23.5	U	EPA:901.1M
	Cobalt-56	1.24 ± 1.4	2.43	U	EPA:901.1M
	Cobalt-57	-7.02 ± 5.7	9.12	U	EPA:901.1M
	Cobalt-58	-0.374 ± 1.2	2.05	U	EPA:901.1M
	Cobalt-60	0.65 ± 1	1.81	U	EPA:901.1M
	Europium-152	0.941 ± 3	5.13	U	EPA:901.1M
	Europium-154	2.34 ± 2.9	5.22	U	EPA:901.1M
	Europium-155	-3.89 ± 2.6	4.03	U	EPA:901.1M
	Gross Alpha	27.7 ± 7.9	3.26		EPA:900.0
	Gross Beta	7.69 ± 2.3	3.04		EPA:900.0
	Iodine-131	0.024 ± 6.9	11.7	U	EPA:901.1M
	Iron-59	-0.583 ± 2.5	4.34	U	EPA:901.1M
	Lead-212	1.45 ± 1.6	2.78	U	EPA:901.1M
	Lead-212	0.938 ± 2.2	3.68	U	EPA:901.1M
	Manganese-54	0.0639 ± 1.1	1.87	U	EPA:901.1M
	Niobium-94	1.39 ± 0.99	1.78	U	EPA:901.1M
	Niobium-95	-0.172 ± 1.5	2.52	U	EPA:901.1M
	Potassium-40	-7.40 ± 23	27	U	EPA:901.1M
	Protactinium-234m	-0.924 ± 120	204	U	EPA:901.1M
	Ruthenium-106	1.06 ± 10	17.8	U	EPA:901.1M
	Scandium-46	0.841 ± 1.2	2.1	U	EPA:901.1M
	Silver-108M	0.641 ± 0.94	1.61	U	EPA:901.1M
	Sodium-22	0.843 ± 1	1.85	U	EPA:901.1M
	Strontium-85	15.5 ± 2.8	4.06	U	EPA:901.1M
	Tallium-208	1.38 ± 1.1	1.91	U	EPA:901.1M
	Thorium-227	3.45 ± 6.1	10.4	U	EPA:901.1M
	Thorium-234	-0.924 ± 120	204	U	EPA:901.1M
	Tritium	82.5 ± 130	289	U	EPA:906.0
Uranium-234	24.90 ± 3.4	0.00611		HASL-300:ISOU	
Uranium-235	-13.20 ± 5.4	8.15	U	EPA:901.1M	
Uranium-235	0.147 ± 0.03	0.00503		HASL-300:ISOU	
Uranium-238	2.61 ± 0.37	0.00503		HASL-300:ISOU	
Zinc-65	-0.581 ± 2.2	3.70	U	EPA:901.1M	

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-7 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
CYN-MW9 17-Apr-13	Actinium-228	7.70 ± 4.3	7.83	U	EPA:901.1M
	Americium-241	0.685 ± 1.1	1.84	U	EPA:901.1M
	Antimony-124	0.653 ± 1.2	2.03	U	EPA:901.1M
	Antimony-125	0.464 ± 2.6	4.39	U	EPA:901.1M
	Beryllium-7	4.31 ± 8.7	15	U	EPA:901.1M
	Bismuth-212	4.73 ± 15	25.9	U	EPA:901.1M
	Bismuth-214	-19.7 ± 13	15.6	U	EPA:901.1M
	Cadmium-109	-30.7 ± 22	19.8	U	EPA:901.1M
	Cerium-139	-0.384 ± 0.68	1.14	U	EPA:901.1M
	Cerium-144	1.72 ± 4.5	7.46	U	EPA:901.1M
	Cesium-134	-0.0741 ± 1.1	1.88	U	EPA:901.1M
	Cesium-137	-0.407 ± 1	1.8	U	EPA:901.1M
	Chromium-51	-4.17 ± 9.7	16.4	U	EPA:901.1M
	Cobalt-56	0.442 ± 1.2	2.09	U	EPA:901.1M
	Cobalt-57	-4.42 ± 4.6	7.39	U	EPA:901.1M
	Cobalt-58	-0.0622 ± 1	1.76	U	EPA:901.1M
	Cobalt-60	-0.343 ± 1.10	1.86	U	EPA:901.1M
	Europium-152	-1.02 ± 2.6	4.42	U	EPA:901.1M
	Europium-154	-0.995 ± 3	5.21	U	EPA:901.1M
	Europium-155	-0.755 ± 1.8	3.03	U	EPA:901.1M
	Gross Alpha	4.20 ± 3.8	5.82	U	EPA:900.0
	Gross Beta	1.34 ± 2	3.27	U	EPA:900.0
	Iodine-131	0.258 ± 2.7	4.7	U	EPA:901.1M
	Iron-59	0.631 ± 2.5	4.42	U	EPA:901.1M
	Lead-212	0.863 ± 1.5	2.61	U	EPA:901.1M
	Lead-212	4.89 ± 2.1	3.63	U	EPA:901.1M
	Manganese-54	0.29 ± 1	1.74	U	EPA:901.1M
	Niobium-94	-0.708 ± 0.98	1.63	U	EPA:901.1M
	Niobium-95	0.127 ± 1.2	2.08	U	EPA:901.1M
	Potassium-40	-39.1 ± 34	49.7	U	EPA:901.1M
	Protactinium-234m	14.7 ± 130	218	U	EPA:901.1M
	Ruthenium-106	7.15 ± 9	15.9	U	EPA:901.1M
	Scandium-46	-0.515 ± 1.1	1.87	U	EPA:901.1M
	Silver-108M	0.0542 ± 0.83	1.41	U	EPA:901.1M
	Sodium-22	-0.191 ± 1.1	1.85	U	EPA:901.1M
	Strontium-85	-14.1 ± 2.5	2.28	U	EPA:901.1M
	Tallium-208	1.94 ± 1.1	1.92	U	EPA:901.1M
	Thorium-227	-9.77 ± 5.9	9.21	U	EPA:901.1M
	Thorium-234	14.7 ± 130	218	U	EPA:901.1M
	Tritium	28.2 ± 130	289	U	EPA:906.0
Uranium-234	8.37 ± 1.2	0.0107		HASL-300:ISOU	
Uranium-235	0.499 ± 4.4	7.32	U	EPA:901.1M	
Uranium-235	0.146 ± 0.031	0.00828		HASL-300:ISOU	
Uranium-238	2.28 ± 0.33	0.00766		HASL-300:ISOU	
Zinc-65	-0.941 ± 2.3	3.86	U	EPA:901.1M	

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-7 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
CYN-MW9 17-Apr-13 Dup	Actinium-228	1.01 ± 2.8	5.02	U	EPA:901.1M
	Americium-241	-0.239 ± 0.58	0.955	U	EPA:901.1M
	Antimony-124	0.16 ± 0.70	1.24	U	EPA:901.1M
	Antimony-125	-0.55 ± 1.7	2.82	U	EPA:901.1M
	Beryllium-7	-4.05 ± 5.8	9.56	U	EPA:901.1M
	Bismuth-212	-4.01 ± 9.9	16.6	U	EPA:901.1M
	Bismuth-214	13.2 ± 6.8	12.7	U	EPA:901.1M
	Cadmium-109	-5.05 ± 6	9.98	U	EPA:901.1M
	Cerium-139	0.0145 ± 0.40	0.671	U	EPA:901.1M
	Cerium-144	0.813 ± 2.6	4.35	U	EPA:901.1M
	Cesium-134	0.529 ± 0.71	1.31	U	EPA:901.1M
	Cesium-137	-0.028 ± 0.70	1.2	U	EPA:901.1M
	Chromium-51	-0.741 ± 6.3	10.6	U	EPA:901.1M
	Cobalt-56	0.898 ± 1.6	1.45	U	EPA:901.1M
	Cobalt-57	-2.33 ± 3	4.34	U	EPA:901.1M
	Cobalt-58	-0.524 ± 0.73	1.22	U	EPA:901.1M
	Cobalt-60	0.0795 ± 0.75	1.33	U	EPA:901.1M
	Europium-152	0.437 ± 1.6	2.87	U	EPA:901.1M
	Europium-154	1.29 ± 2.1	3.93	U	EPA:901.1M
	Europium-155	0.127 ± 1	1.92	U	EPA:901.1M
	Gross Alpha	4.09 ± 4.2	6.67	U	EPA:900.0
	Gross Beta	3.98 ± 2.2	3.32		EPA:900.0
	Iodine-131	0.408 ± 1.7	3	U	EPA:901.1M
	Iron-59	0.254 ± 1.5	2.68	U	EPA:901.1M
	Lead-212	1.35 ± 1.1	1.47	U	EPA:901.1M
	Lead-212	-2.75 ± 2.4	2.75	U	EPA:901.1M
	Manganese-54	-0.293 ± 0.68	1.17	U	EPA:901.1M
	Niobium-94	-0.262 ± 0.67	1.15	U	EPA:901.1M
	Niobium-95	0.424 ± 0.95	1.45	U	EPA:901.1M
	Potassium-40	-27.7 ± 22	28.8	U	EPA:901.1M
	Protactinium-234m	38.2 ± 85	152	U	EPA:901.1M
	Ruthenium-106	3.30 ± 6.2	10.5	U	EPA:901.1M
	Scandium-46	-0.231 ± 0.74	1.26	U	EPA:901.1M
	Silver-108M	-0.542 ± 1	0.896	U	EPA:901.1M
	Sodium-22	0.439 ± 0.74	1.38	U	EPA:901.1M
	Strontium-85	-8.97 ± 1.6	1.39	U	EPA:901.1M
	Tallium-208	0.045 ± 0.71	1.24	U	EPA:901.1M
	Thorium-227	1.4 ± 3.7	5.54	U	EPA:901.1M
	Thorium-234	38.2 ± 85	152	U	EPA:901.1M
	Tritium	-12.6 ± 130	289	U	EPA:906.0
Uranium-234	8.07 ± 1.1	0.00971		HASL-300:ISOU	
Uranium-235	0.288 ± 2.5	4.27	U	EPA:901.1M	
Uranium-235	0.0978 ± 0.024	0.00765		HASL-300:ISOU	
Uranium-238	2.19 ± 0.31	0.00765		HASL-300:ISOU	
Zinc-65	-0.0621 ± 1.7	2.96	U	EPA:901.1M	

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-7 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
CYN-MW10 10-Apr-13	Actinium-228	-2.28 ± 5.7	6.54	U	EPA:901.1M
	Americium-241	0.0738 ± 0.59	0.996	U	EPA:901.1M
	Antimony-124	-0.0341 ± 0.92	1.54	U	EPA:901.1M
	Antimony-125	-0.223 ± 1.8	3.02	U	EPA:901.1M
	Beryllium-7	3.18 ± 6.7	11.8	U	EPA:901.1M
	Bismuth-212	4.45 ± 11	19.7	U	EPA:901.1M
	Bismuth-214	23.6 ± 8	16.1	U	EPA:901.1M
	Cadmium-109	-22.9 ± 14	11.4	U	EPA:901.1M
	Cerium-139	0.0215 ± 0.44	0.727	U	EPA:901.1M
	Cerium-144	1.56 ± 2.6	4.42	U	EPA:901.1M
	Cesium-134	0.24 ± 0.87	1.51	U	EPA:901.1M
	Cesium-137	0.175 ± 0.79	1.39	U	EPA:901.1M
	Chromium-51	0.237 ± 7.7	13.3	U	EPA:901.1M
	Cobalt-56	0.0746 ± 0.91	1.6	U	EPA:901.1M
	Cobalt-57	0.505 ± 2.8	4.65	U	EPA:901.1M
	Cobalt-58	-0.797 ± 0.91	1.46	U	EPA:901.1M
	Cobalt-60	0.157 ± 0.88	1.54	U	EPA:901.1M
	Europium-152	1.28 ± 1.8	3.09	U	EPA:901.1M
	Europium-154	2.63 ± 2.6	4.82	U	EPA:901.1M
	Europium-155	-0.262 ± 1.1	1.80	U	EPA:901.1M
	Gross Alpha	4.15 ± 3.3	4.95	U	EPA:900.0
	Gross Beta	3.82 ± 1.2	1.67		EPA:900.0
	Iodine-131	0.766 ± 3.5	6	U	EPA:901.1M
	Iron-59	0.386 ± 2.1	3.66	U	EPA:901.1M
	Lead-212	-0.962 ± 1.5	1.69	U	EPA:901.1M
	Lead-212	-3.89 ± 2.4	2.49	U	EPA:901.1M
	Manganese-54	-0.151 ± 0.80	1.34	U	EPA:901.1M
	Niobium-94	-0.618 ± 0.78	1.29	U	EPA:901.1M
	Niobium-95	-0.591 ± 1.1	1.74	U	EPA:901.1M
	Potassium-40	-67 ± 34	47.6	U	EPA:901.1M
	Protactinium-234m	54.1 ± 90	162	U	EPA:901.1M
	Ruthenium-106	-1.01 ± 6.6	11.1	U	EPA:901.1M
	Scandium-46	-0.176 ± 0.87	1.5	U	EPA:901.1M
	Silver-108M	0.526 ± 0.61	1.05	U	EPA:901.1M
	Sodium-22	0.959 ± 0.92	1.71	U	EPA:901.1M
	Strontium-85	-8.15 ± 1.6	1.75	U	EPA:901.1M
	Tallium-208	1.7 ± 1.2	1.61	U	EPA:901.1M
	Thorium-227	-2.45 ± 3.6	5.98	U	EPA:901.1M
	Thorium-234	54.1 ± 90	162	U	EPA:901.1M
	Tritium	25 ± 130	289	U	EPA:906.0
Uranium-234	4.93 ± 0.69	0.00633		HASL-300:ISOU	
Uranium-235	-2.43 ± 2.7	4.34	U	EPA:901.1M	
Uranium-235	0.114 ± 0.026	0.00521		HASL-300:ISOU	
Uranium-238	1.73 ± 0.25	0.00856		HASL-300:ISOU	
Zinc-65	-1.39 ± 1.8	3.03	U	EPA:901.1M	

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-7 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)		MDA (pCi/L)	Laboratory Qualifier	Analytical Method
CYN-MW11 11-Apr-13	Actinium-228	3.15	± 10	9.67	U	EPA:901.1M
	Americium-241	-0.754	± 5.4	8.83	U	EPA:901.1M
	Antimony-124	0.195	± 1.3	2.13	U	EPA:901.1M
	Antimony-125	-0.0464	± 2.7	4.59	U	EPA:901.1M
	Beryllium-7	3.83	± 10	17.8	U	EPA:901.1M
	Bismuth-212	21.7	± 15	27.4	U	EPA:901.1M
	Bismuth-214	-9.74	± 15	20.8	U	EPA:901.1M
	Cadmium-109	-21.80	± 32	31.6	U	EPA:901.1M
	Cerium-139	-0.0215	± 0.79	1.34	U	EPA:901.1M
	Cerium-144	4.95	± 5.2	8.71	U	EPA:901.1M
	Cesium-134	0.0623	± 1.2	2.07	U	EPA:901.1M
	Cesium-137	1.6	± 1.2	2.07	U	EPA:901.1M
	Chromium-51	7.57	± 12	20.8	U	EPA:901.1M
	Cobalt-56	1.91	± 1.3	2.36	U	EPA:901.1M
	Cobalt-57	3.11	± 5.5	9.16	U	EPA:901.1M
	Cobalt-58	0.469	± 1.2	2.05	U	EPA:901.1M
	Cobalt-60	-0.0953	± 1.2	2.03	U	EPA:901.1M
	Europium-152	-1.66	± 2.9	4.71	U	EPA:901.1M
	Europium-154	-1.43	± 3.5	5.78	U	EPA:901.1M
	Europium-155	1.62	± 2.6	4.4	U	EPA:901.1M
	Gross Alpha	3.74	± 3.8	6	U	EPA:900.0
	Gross Beta	5.62	± 2.4	3.55		EPA:900.0
	Iodine-131	-3.28	± 5.1	8.23	U	EPA:901.1M
	Iron-59	-0.161	± 3	5	U	EPA:901.1M
	Lead-212	0.448	± 3.3	2.69	U	EPA:901.1M
	Lead-212	1.17	± 5.4	3.51	U	EPA:901.1M
	Manganese-54	0.107	± 1.1	1.85	U	EPA:901.1M
	Niobium-94	0.344	± 1.1	1.85	U	EPA:901.1M
	Niobium-95	1.46	± 1.5	2.61	U	EPA:901.1M
	Potassium-40	-87	± 48	74.1	U	EPA:901.1M
	Protactinium-234m	86.6	± 130	232	U	EPA:901.1M
	Ruthenium-106	2.31	± 9.3	15.9	U	EPA:901.1M
	Scandium-46	1.22	± 1.2	2.16	U	EPA:901.1M
	Silver-108M	-0.382	± 0.9	1.5	U	EPA:901.1M
	Sodium-22	-0.56	± 1.2	2.04	U	EPA:901.1M
	Strontium-85	-14.60	± 2.4	2.23	U	EPA:901.1M
	Tallium-208	0.716	± 2.7	2.23	U	EPA:901.1M
	Thorium-227	-0.141	± 7.3	10.4	U	EPA:901.1M
	Thorium-234	86.6	± 130	232	U	EPA:901.1M
	Tritium	47.5	± 130	288	U	EPA:906.0
Uranium-234	5.31	± 0.74	0.00603		HASL-300:ISOU	
Uranium-235	0.789	± 5.2	8.60	U	EPA:901.1M	
Uranium-235	0.088	± 0.021	0.00603		HASL-300:ISOU	
Uranium-238	1.71	± 0.25	0.00816		HASL-300:ISOU	
Zinc-65	-7.84	± 2.9	4.08	U	EPA:901.1M	

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-7 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)		MDA (pCi/L)	Laboratory Qualifier	Analytical Method
CYN-MW12 16-Apr-13	Actinium-228	2.36	± 2.7	4.92	U	EPA:901.1M
	Americium-241	0.0857	± 0.55	0.932	U	EPA:901.1M
	Antimony-124	0.0118	± 0.77	1.32	U	EPA:901.1M
	Antimony-125	0.73	± 1.6	2.76	U	EPA:901.1M
	Beryllium-7	-0.56	± 5.6	9.59	U	EPA:901.1M
	Bismuth-212	2.30	± 9.2	16.3	U	EPA:901.1M
	Bismuth-214	0.327	± 6.3	11.3	U	EPA:901.1M
	Cadmium-109	-19.6	± 13	10.2	U	EPA:901.1M
	Cerium-139	-0.235	± 0.35	0.586	U	EPA:901.1M
	Cerium-144	-2.54	± 2.1	3.3	U	EPA:901.1M
	Cesium-134	-0.114	± 0.77	1.33	U	EPA:901.1M
	Cesium-137	0.333	± 0.74	1.31	U	EPA:901.1M
	Chromium-51	-2.77	± 5.9	9.77	U	EPA:901.1M
	Cobalt-56	0.339	± 0.82	1.46	U	EPA:901.1M
	Cobalt-57	0.406	± 2.3	3.87	U	EPA:901.1M
	Cobalt-58	0.721	± 0.76	1.39	U	EPA:901.1M
	Cobalt-60	0.455	± 0.83	1.53	U	EPA:901.1M
	Europium-152	0.582	± 1.6	2.71	U	EPA:901.1M
	Europium-154	-1.75	± 2.3	3.77	U	EPA:901.1M
	Europium-155	0.127	± 0.94	1.61	U	EPA:901.1M
	Gross Alpha	9.88	± 6.2	8.59		EPA:900.0
	Gross Beta	7.73	± 3.7	5.58		EPA:900.0
	Iodine-131	-0.198	± 1.8	3.01	U	EPA:901.1M
	Iron-59	2.27	± 1.8	3.36	U	EPA:901.1M
	Lead-212	0.947	± 1.7	1.28	U	EPA:901.1M
	Lead-212	0.39	± 1.1	1.89	U	EPA:901.1M
	Manganese-54	-0.125	± 0.72	1.23	U	EPA:901.1M
	Niobium-94	-0.733	± 0.72	1.15	U	EPA:901.1M
	Niobium-95	0.431	± 0.88	1.59	U	EPA:901.1M
	Potassium-40	38	± 12	23.1	U	EPA:901.1M
	Protactinium-234m	-28.9	± 96	165	U	EPA:901.1M
	Ruthenium-106	-1.3	± 6	10.3	U	EPA:901.1M
	Scandium-46	0.0319	± 0.7	1.23	U	EPA:901.1M
	Silver-108M	-0.0427	± 0.5	0.864	U	EPA:901.1M
	Sodium-22	-0.618	± 0.81	1.33	U	EPA:901.1M
	Strontium-85	-7.04	± 1.4	1.55	U	EPA:901.1M
	Tallium-208	0.238	± 0.68	1.21	U	EPA:901.1M
	Thorium-227	-0.854	± 3.4	4.75	U	EPA:901.1M
	Thorium-234	-28.9	± 96	165	U	EPA:901.1M
	Tritium	26.3	± 130	289	U	EPA:906.0
Uranium-234	12.5	± 1.7	0.00798		HASL-300:ISOU	
Uranium-235	1.87	± 2.4	4.03	U	EPA:901.1M	
Uranium-235	0.117	± 0.026	0.00525		HASL-300:ISOU	
Uranium-238	2.57	± 0.37	0.00638		HASL-300:ISOU	
Zinc-65	-0.828	± 1.7	2.88	U	EPA:901.1M	

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**Table-7 NMED DOE OB FFY 2013 Q-3 Burn Site Groundwater Quality Results: Gamma Spectroscopy, Gross Alpha, Gross Beta, Isotopic Uranium and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
CYN-MW13 4-Apr-13	Actinium-228	0.442 ± 7.1	7.62	U	EPA:901.1M
	Americium-241	-0.147 ± 0.74	1.25	U	EPA:901.1M
	Antimony-124	-0.109 ± 1.1	1.82	U	EPA:901.1M
	Antimony-125	-0.216 ± 2	3.35	U	EPA:901.1M
	Beryllium-7	-3.51 ± 8.7	14.4	U	EPA:901.1M
	Bismuth-212	16.5 ± 12	21.4	U	EPA:901.1M
	Bismuth-214	3.78 ± 12	16.7	U	EPA:901.1M
	Cadmium-109	-26.2 ± 14	14.3	U	EPA:901.1M
	Cerium-139	0.311 ± 0.56	0.951	U	EPA:901.1M
	Cerium-144	-1.11 ± 3.4	5.62	U	EPA:901.1M
	Cesium-134	1.2 ± 1	1.82	U	EPA:901.1M
	Cesium-137	0.185 ± 0.87	1.48	U	EPA:901.1M
	Chromium-51	-5.05 ± 11	17.2	U	EPA:901.1M
	Cobalt-56	0.856 ± 1.1	1.98	U	EPA:901.1M
	Cobalt-57	-1.32 ± 3.5	5.91	U	EPA:901.1M
	Cobalt-58	-0.559 ± 1	1.72	U	EPA:901.1M
	Cobalt-60	0.367 ± 0.93	1.68	U	EPA:901.1M
	Europium-152	0.157 ± 2	3.49	U	EPA:901.1M
	Europium-154	-1.59 ± 2.9	4.81	U	EPA:901.1M
	Europium-155	-0.0602 ± 1.4	2.36	U	EPA:901.1M
	Gross Alpha	14.9 ± 4.5	2.66		EPA:900.0
	Gross Beta	5.36 ± 1.2	1.42		EPA:900.0
	Iodine-131	-3.66 ± 6.6	11	U	EPA:901.1M
	Iron-59	-0.736 ± 2.5	4.22	U	EPA:901.1M
	Lead-212	1.43 ± 2.3	1.81	U	EPA:901.1M
	Lead-212	-4.07 ± 3.1	2.93	U	EPA:901.1M
	Manganese-54	0.123 ± 0.91	1.58	U	EPA:901.1M
	Niobium-94	-0.131 ± 0.89	1.51	U	EPA:901.1M
	Niobium-95	-0.492 ± 1.3	2.28	U	EPA:901.1M
	Potassium-40	-91.8 ± 37	52.6	U	EPA:901.1M
	Protactinium-234m	35.7 ± 100	184	U	EPA:901.1M
	Ruthenium-106	-3.13 ± 7.7	12.8	U	EPA:901.1M
	Scandium-46	0.341 ± 0.99	1.73	U	EPA:901.1M
	Silver-108M	0.916 ± 0.66	1.17	U	EPA:901.1M
	Sodium-22	-0.490 ± 1	1.71	U	EPA:901.1M
	Strontium-85	-12.1 ± 2.1	1.94	U	EPA:901.1M
	Tallium-208	0.385 ± 1.9	1.70	U	EPA:901.1M
	Thorium-227	0.535 ± 4.6	6.83	U	EPA:901.1M
	Thorium-234	35.7 ± 100	184	U	EPA:901.1M
	Tritium	97.8 ± 130	289	U	EPA:906.0
Uranium-234	9.98 ± 1.4	0.00696		HASL-300:ISOU	
Uranium-235	-0.105 ± 3.3	5.58	U	EPA:901.1M	
Uranium-235	0.0824 ± 0.021	0.00766		HASL-300:ISOU	
Uranium-238	1.99 ± 0.29	0.00828		HASL-300:ISOU	
Zinc-65	-0.818 ± 2.5	3.51	U	EPA:901.1M	