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**Groundwater Monitoring at Sandia National Laboratories/New Mexico Technical Area-V  
Conducted by NMED DOE OB for FFY 2012 Q-4**

The New Mexico Environment Department (NMED) DOE Oversight Bureau (Bureau) has compiled and assessed groundwater data collected during July and August 2012. The Bureau collected groundwater samples from Technical Area-V (TAV) groundwater monitoring wells AVN-1, LWDS-MW2, TAV-MW6, TAV-MW10, TAV-MW12, and TAV-MW13. Split samples were collected using standard Sandia National Laboratories/New Mexico (SNL/NM) sampling procedures and equipment. Bureau samples were submitted to an independent analytical laboratory where they were analyzed for metals, inorganics, organics and radiochemistry. Nitrate-nitrite was detected above the EPA MCL of 10 mg/L at monitoring well TAV-MW10. Trichloroethylene (TCE) was also detected above the EPA MCL of 5 µg/L at monitoring wells TAV-MW6, TAV-MW10 and TAV-MW12.

Data Assessment

Data results are compared to applicable Maximum Contaminant Levels (MCLs) established by the U.S. Environmental Protection Agency (EPA) National Primary Drinking Water Regulations (40 CFR 141), National Primary Drinking Water Standards, EPA, July 2002.

Results

Analytical results for total (unfiltered) target analyte list (TAL) metals plus uranium and dissolved (filtered) TAL metals plus uranium are presented in Table-1 and Table-2, respectively. All metal concentrations were below established MCLs.

Analytical results for major anions (as bromide, chloride, fluoride, and sulfate) and nitrate-nitrite are presented in Table-3. No anions were detected above their associated EPA MCL. Nitrate-nitrite was detected above the EPA drinking water standard of 10 mg/L at monitoring well TAV-MW10 at a concentration of 11.6 mg/L.

Analytical results for volatile organic compounds (VOCs) detected above the method detection limits (MDLs) are presented in Table-4. Trichloroethylene (TCE) was detected above the EPA MCL of 5 µg/L at monitoring wells TAV-MW6 (16 µg/L), TAV-MW10 (16 µg/L) and TAV-MW12 (6.1 µg/L). All other VOCs detected above the laboratory MDLs were below established EPA MCLs. The laboratory MDLs for the remaining VOCs analyzed from TAV monitoring wells are presented in Table-5.

Analytical results for radiochemistry samples are listed in Table-6. Samples were analyzed for gross alpha, gross beta, gamma emitting isotopes and tritium. No isotopes were detected above EPA MCLs.

Response

Questions or comments should be addressed to Chris Armijo by phone at (505) 383-2070, by e-mail at [chris.armijo1@state.nm.us](mailto:chris.armijo1@state.nm.us), or to the address in the letterhead.

Enclosure: (1) Table-1 Total Target Analyte List Metals plus Uranium Results  
(2) Table-2 Dissolved Target Analyte List Metals plus Uranium Results  
(3) Table-3 Anions and Nitrate-Nitrite Results  
(4) Table-4 Detected Volatile Organic Compounds Results  
(5) Table-5 Method Detection Limits for Volatile Organic Compounds  
(6) Table-6 Gross Alpha, Gross Beta, Gamma Spectroscopy and Tritium Results

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File: SGE42.Groundwater Monitoring. TAV. FFY 2012 Q-4

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**Table-1 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Total Target Analyte List 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
AVN-1 31-Jul-12	Aluminum	0.093	NE	0.05	0.025		SW-846:6020
	Antimony	0.00023	0.006	0.002	0.0002	B	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	40.6	NE	0.05	0.03		SW-846:6020
	Chromium	0.0084	0.1	0.002	0.001	J	SW-846:6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW-846:6020
	Copper	0.0015	1.3	0.002	0.001	B	SW-846:6020
	Iron	0.077	NE	0.05	0.025		SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	9.5	NE	0.05	0.025		SW-846:6020
	Manganese	0.0034	NE	0.001	0.0004		SW-846:6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.0017	NE	0.002	0.0001	B	SW-846:6020
	Potassium	3.4	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	37.5	NE	0.05	0.025		SW-846:6020
Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020	
Uranium	0.0022	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.0044	NE	0.01	0.003	B	SW-846:6020	
Zinc	0.0077	NE	0.005	0.004		SW-846:6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-1 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Total Target Analyte List 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
LWDS-MW2 30-Jul-12	Aluminum	0.033	NE	0.05	0.025	B	SW-846:6020
	Antimony	0.0003	0.006	0.002	0.0002	B	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW-846:6020
	Barium	0.074	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	43.7	NE	0.05	0.03		SW-846:6020
	Chromium	0.0066	0.1	0.002	0.001	J	SW-846:6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW-846:6020
	Copper	0.0015	1.3	0.002	0.001	B	SW-846:6020
	Iron	0.03	NE	0.05	0.025	B	SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	13.2	NE	0.05	0.025		SW-846:6020
	Manganese	0.0012	NE	0.001	0.0004		SW-846:6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.00021	NE	0.002	0.0001	B	SW-846:6020
	Potassium	2.9	NE	0.05	0.025		SW-846:6020
	Selenium	0.003	0.05	0.002	0.001		SW-846:6020
	Silver	0.0019	NE	0.001	0.0003		SW-846:6020
	Sodium	43.4	NE	0.05	0.025		SW-846:6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020
Uranium	0.0032	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.0047	NE	0.01	0.003	B	SW-846:6020	
Zinc	0.004	NE	0.005	0.004	U	SW-846:6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-1 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Total Target Analyte List 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
TAV-MW6 6-Aug-12	Aluminum	0.29	NE	0.05	0.025		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	0.071	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	60.4	NE	0.05	0.03		SW-846:6020
	Chromium	0.0035	0.1	0.002	0.001		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	0.25	NE	0.05	0.025		SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	20.4	NE	0.05	0.025		SW-846:6020
	Manganese	0.0049	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	3.8	NE	0.05	0.025		SW-846:6020
	Selenium	0.0036	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	63	NE	0.25	0.12	D	SW-846:6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020
Uranium	0.0035	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.0042	NE	0.01	0.003	B	SW-846:6020	
Zinc	0.004	NE	0.005	0.004	U	SW-846:6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-1 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Total Target Analyte List 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
TAV-MW10 7-Aug-12	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	0.065	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	59.8	NE	0.05	0.03		SW-846:6020
	Chromium	0.0029	0.1	0.002	0.001		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	18.2	NE	0.05	0.025		SW-846:6020
	Manganese	0.0004	NE	0.001	0.0004	U	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	4.5	NE	0.05	0.025		SW-846:6020
	Selenium	0.0031	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	61.3	NE	0.25	0.12	D	SW-846:6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020
Uranium	0.0032	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.0039	NE	0.01	0.003	B	SW-846:6020	
Zinc	0.004	NE	0.005	0.004	U	SW-846:6020	

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**Table-1 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Total Target Analyte List 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
TAV-MW12 1-Aug-12	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	0.07	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	56	NE	0.05	0.03	J	SW-846:6020
	Chromium	0.006	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	0.055	NE	0.05	0.025		SW-846:6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW-846:6020
	Magnesium	18.5	NE	0.05	0.025		SW-846:6020
	Manganese	0.002	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	4	NE	0.05	0.025		SW-846:6020
	Selenium	0.0028	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	58.6	NE	0.25	0.12	D	SW-846:6020
Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020	
Uranium	0.0045	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	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

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

NE = Not Established

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



**Table-1 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Total Target Analyte List 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
TAV-MW13 23-Jul-12	Aluminum	0.033	NE	0.05	0.025	B	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	B	SW-846:6020
	Barium	0.065	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	50.4	NE	0.05	0.03		SW-846:6020
	Chromium	0.0028	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	14.7	NE	0.05	0.025		SW-846:6020
	Manganese	0.012	NE	0.001	0.0004		SW-846:6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.0002	NE	0.002	0.0001	B	SW-846:6020
	Potassium	3.5	NE	0.05	0.025		SW-846:6020
	Selenium	0.0024	0.05	0.002	0.001		SW-846:6020
	Silver	0.0003	NE	0.001	0.0003	U	SW-846:6020
	Sodium	49.1	NE	0.05	0.025		SW-846:6020
Thallium	0.0005	0.002	0.001	0.0005	U	SW-846:6020	
Uranium	0.0041	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.0056	NE	0.01	0.003	B	SW-846:6020	
Zinc	0.004	NE	0.005	0.004	U	SW-846:6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-1 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Total Target Analyte List 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
TAV-MW13 23-Jul-12 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	B	SW-846:6020
	Barium	0.065	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	49.7	NE	0.05	0.03		SW-846:6020
	Chromium	0.003	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	14.6	NE	0.05	0.025		SW-846:6020
	Manganese	0.0093	NE	0.001	0.0004		SW-846:6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7470A
	Nickel	0.00022	NE	0.002	0.0001	B	SW-846:6020
	Potassium	3.5	NE	0.05	0.025		SW-846:6020
	Selenium	0.0023	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	
Uranium	0.004	0.03	0.001	0.0002		SW-846:6020	
Vanadium	0.0059	NE	0.01	0.003	B	SW-846:6020	
Zinc	0.004	NE	0.005	0.004	U	SW-846:6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-2 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Dissolved Target Analyte List 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
AVN-1 31-Jul-12	Aluminum	0.025	NE	0.05	0.025	U	SW846-6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW846-6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW846-6020
	Barium	0.084	2	0.001	0.0005		SW846-6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW846-6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW846-6020
	Calcium	41.1	NE	0.05	0.03		SW846-6020
	Chromium	0.0076	0.1	0.002	0.001		SW846-6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW846-6020
	Copper	0.0011	1.3	0.002	0.001	B	SW846-6020
	Iron	0.025	NE	0.05	0.025	U	SW846-6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW846-6020
	Magnesium	9.8	NE	0.05	0.025		SW846-6020
	Manganese	0.0004	NE	0.001	0.0004	U	SW846-6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7471A
	Nickel	0.00053	NE	0.002	0.0001	B,J	SW846-6020
	Potassium	3.5	NE	0.05	0.025		SW846-6020
	Selenium	0.0079	0.05	0.002	0.001		SW846-6020
	Silver	0.0003	NE	0.001	0.0003	U	SW846-6020
	Sodium	38.4	NE	0.05	0.025		SW846-6020
Thallium	0.0005	0.002	0.001	0.0005	U	SW846-6020	
Uranium	0.0022	0.03	0.001	0.0002		SW846-6020	
Vanadium	0.0036	NE	0.01	0.003	B	SW846-6020	
Zinc	0.004	NE	0.005	0.004	U	SW846-6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-2 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Dissolved Target Analyte List 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
LWDS-MW2 30-Jul-12	Aluminum	0.025	NE	0.05	0.025	U	SW846-6020
	Antimony	0.00038	0.006	0.002	0.0002	B	SW846-6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW846-6020
	Barium	0.071	2	0.001	0.0005		SW846-6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW846-6020
	Cadmium	0.00055	0.005	0.001	0.0005	B	SW846-6020
	Calcium	43	NE	0.05	0.03		SW846-6020
	Chromium	0.0053	0.1	0.002	0.001		SW846-6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW846-6020
	Copper	0.0015	1.3	0.002	0.001	B	SW846-6020
	Iron	0.025	NE	0.05	0.025	U	SW846-6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW846-6020
	Magnesium	13.1	NE	0.05	0.025		SW846-6020
	Manganese	0.0004	NE	0.001	0.0004	U	SW846-6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7471A
	Nickel	0.0001	NE	0.002	0.0001	U	SW846-6020
	Potassium	2.8	NE	0.05	0.025		SW846-6020
	Selenium	0.0029	0.05	0.002	0.001		SW846-6020
	Silver	0.0011	NE	0.001	0.0003		SW846-6020
	Sodium	42.9	NE	0.05	0.025		SW846-6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW846-6020
Uranium	0.003	0.03	0.001	0.0002		SW846-6020	
Vanadium	0.0053	NE	0.01	0.003	B	SW846-6020	
Zinc	0.004	NE	0.005	0.004	U	SW846-6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-2 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Dissolved Target Analyte List 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
TAV-MW6 6-Aug-12	Aluminum	0.025	NE	0.05	0.025	U	SW846-6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW846-6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW846-6020
	Barium	0.07	2	0.001	0.0005		SW846-6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW846-6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW846-6020
	Calcium	60.5	NE	0.05	0.03		SW846-6020
	Chromium	0.0033	0.1	0.002	0.001		SW846-6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW846-6020
	Copper	0.001	1.3	0.002	0.001	U	SW846-6020
	Iron	0.025	NE	0.05	0.025	U	SW846-6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW846-6020
	Magnesium	19.8	NE	0.05	0.025		SW846-6020
	Manganese	0.0004	NE	0.001	0.0004	U	SW846-6020
	Mercury	0.00021	0.002	0.0002	0.0001		SW-846:7471A
	Nickel	0.0001	NE	0.002	0.0001	U	SW846-6020
	Potassium	3.7	NE	0.05	0.025		SW846-6020
	Selenium	0.0038	0.05	0.002	0.001		SW846-6020
	Silver	0.0003	NE	0.001	0.0003	U	SW846-6020
	Sodium	65	NE	0.25	0.12	D	SW846-6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW846-6020
Uranium	0.0035	0.03	0.001	0.0002		SW846-6020	
Vanadium	0.004	NE	0.01	0.003	B	SW846-6020	
Zinc	0.004	NE	0.005	0.004	U	SW846-6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-2 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Dissolved Target Analyte List 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
TAV-MW10 7-Aug-12	Aluminum	0.025	NE	0.05	0.025	U	SW846-6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW846-6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW846-6020
	Barium	0.067	2	0.001	0.0005		SW846-6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW846-6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW846-6020
	Calcium	60.3	NE	0.05	0.03		SW846-6020
	Chromium	0.0032	0.1	0.002	0.001		SW846-6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW846-6020
	Copper	0.001	1.3	0.002	0.001	U	SW846-6020
	Iron	0.025	NE	0.05	0.025	U	SW846-6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW846-6020
	Magnesium	18.5	NE	0.05	0.025		SW846-6020
	Manganese	0.0004	NE	0.001	0.0004	U	SW846-6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7471A
	Nickel	0.0001	NE	0.002	0.0001	U	SW846-6020
	Potassium	4.5	NE	0.05	0.025		SW846-6020
	Selenium	0.0032	0.05	0.002	0.001		SW846-6020
	Silver	0.0003	NE	0.001	0.0003	U	SW846-6020
	Sodium	61.7	NE	0.25	0.12	D	SW846-6020
Thallium	0.0005	0.002	0.001	0.0005	U	SW846-6020	
Uranium	0.0032	0.03	0.001	0.0002		SW846-6020	
Vanadium	0.0035	NE	0.01	0.003	B	SW846-6020	
Zinc	0.004	NE	0.005	0.004	U	SW846-6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-2 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Dissolved Target Analyte List 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
TAV-MW12 1-Aug-12	Aluminum	0.025	NE	0.05	0.025	U	SW846-6020
	Antimony	0.00025	0.006	0.002	0.0002	B,J	SW846-6020
	Arsenic	0.001	0.01	0.002	0.001	U	SW846-6020
	Barium	0.068	2	0.001	0.0005		SW846-6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW846-6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW846-6020
	Calcium	55.9	NE	0.05	0.03	J	SW846-6020
	Chromium	0.0051	0.1	0.002	0.001	J	SW846-6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW846-6020
	Copper	0.001	1.3	0.002	0.001	U	SW846-6020
	Iron	0.049	NE	0.05	0.025	B	SW846-6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW846-6020
	Magnesium	19.3	NE	0.05	0.025		SW846-6020
	Manganese	0.00059	NE	0.001	0.0004	B	SW846-6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7471A
	Nickel	0.0001	NE	0.002	0.0001	U	SW846-6020
	Potassium	3.9	NE	0.05	0.025		SW846-6020
	Selenium	0.0033	0.05	0.002	0.001		SW846-6020
	Silver	0.0003	NE	0.001	0.0003	U	SW846-6020
	Sodium	56.9	NE	0.25	0.12	D	SW846-6020
Thallium	0.0005	0.002	0.001	0.0005	U	SW846-6020	
Uranium	0.0044	0.03	0.001	0.0002		SW846-6020	
Vanadium	0.003	NE	0.01	0.003	U	SW846-6020	
Zinc	0.004	NE	0.005	0.004	U	SW846-6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-2 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Dissolved Target Analyte List 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
TAV-MW13 23-Jul-12	Aluminum	0.025	NE	0.05	0.025	U	SW846-6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW846-6020
	Arsenic	0.0011	0.01	0.002	0.001	B	SW846-6020
	Barium	0.061	2	0.001	0.0005		SW846-6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW846-6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW846-6020
	Calcium	48.7	NE	0.05	0.03		SW846-6020
	Chromium	0.0021	0.1	0.002	0.001		SW846-6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW846-6020
	Copper	0.001	1.3	0.002	0.001	U	SW846-6020
	Iron	0.025	NE	0.05	0.025	U	SW846-6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW846-6020
	Magnesium	14.4	NE	0.05	0.025		SW846-6020
	Manganese	0.0004	NE	0.001	0.0004	U	SW846-6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7471A
	Nickel	0.0001	NE	0.002	0.0001	U	SW846-6020
	Potassium	3.4	NE	0.05	0.025		SW846-6020
	Selenium	0.0024	0.05	0.002	0.001		SW846-6020
	Silver	0.0003	NE	0.001	0.0003	U	SW846-6020
	Sodium	48.1	NE	0.05	0.025		SW846-6020
Thallium	0.0005	0.002	0.001	0.0005	U	SW846-6020	
Uranium	0.0039	0.03	0.001	0.0002		SW846-6020	
Vanadium	0.006	NE	0.01	0.003	B	SW846-6020	
Zinc	0.004	NE	0.005	0.004	U	SW846-6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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



**Table-2 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Dissolved Target Analyte List 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
TAV-MW13 23-Jul-12 DUP	Aluminum	0.025	NE	0.05	0.025	U	SW846-6020
	Antimony	0.0002	0.006	0.002	0.0002	U	SW846-6020
	Arsenic	0.0011	0.01	0.002	0.001	B	SW846-6020
	Barium	0.064	2	0.001	0.0005		SW846-6020
	Beryllium	0.0001	0.004	0.001	0.0001	U	SW846-6020
	Cadmium	0.0005	0.005	0.001	0.0005	U	SW846-6020
	Calcium	50	NE	0.05	0.03		SW846-6020
	Chromium	0.0024	0.1	0.002	0.001		SW846-6020
	Cobalt	0.0006	NE	0.001	0.0006	U	SW846-6020
	Copper	0.001	1.3	0.002	0.001	U	SW846-6020
	Iron	0.025	NE	0.05	0.025	U	SW846-6020
	Lead	0.0006	0.015	0.001	0.0006	U	SW846-6020
	Magnesium	14.5	NE	0.05	0.025		SW846-6020
	Manganese	0.0004	NE	0.001	0.0004	U	SW846-6020
	Mercury	0.0001	0.002	0.0002	0.0001	U	SW-846:7471A
	Nickel	0.00014	NE	0.002	0.0001	B	SW846-6020
	Potassium	3.5	NE	0.05	0.025		SW846-6020
	Selenium	0.002	0.05	0.002	0.001		SW846-6020
	Silver	0.0003	NE	0.001	0.0003	U	SW846-6020
	Sodium	48.7	NE	0.05	0.025		SW846-6020
	Thallium	0.0005	0.002	0.001	0.0005	U	SW846-6020
Uranium	0.004	0.03	0.001	0.0002		SW846-6020	
Vanadium	0.0055	NE	0.01	0.003	B	SW846-6020	
Zinc	0.004	NE	0.005	0.004	U	SW846-6020	

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

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

NE = Not Established

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

**Table-3 NMED DOE OB FFY 2012 Q-4 Technical Area-V 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
AVN-1 31-Jul-12	Bromide	0.19	NE	0.5	0.088	B	EPA:300.0
	Chloride	9.6	NE	1	0.037		EPA:300.0
	Fluoride	1.3	4	0.5	0.059		EPA:300.0
	Nitrate-Nitrite	9.3	10	0.5	0.053	D	EPA:353.2
	Sulfate	30.5	NE	1	0.049		EPA:300.0
LWDS-MW2 30-Jul-12	Bromide	0.21	NE	0.5	0.088	B	EPA:300.0
	Chloride	13.1	NE	1	0.037		EPA:300.0
	Fluoride	1.4	4	0.5	0.059		EPA:300.0
	Nitrate-Nitrite	7.8	10	0.5	0.053	D	EPA:353.2
	Sulfate	39.2	NE	1	0.049		EPA:300.0
TAV-MW6 6-Aug-12	Bromide	0.77	NE	0.5	0.088		EPA:300.0
	Chloride	72.2	NE	5	0.18	D,Q	EPA:300.0
	Fluoride	1.2	4	0.5	0.059		EPA:300.0
	Nitrate-Nitrite	8	10	0.5	0.053	D,Q	EPA:353.2
	Sulfate	44.3	NE	1	0.049		EPA:300.0
TAV-MW10 7-Aug-12	Bromide	0.37	NE	0.5	0.088	B	EPA:300.0
	Chloride	48.9	NE	5	0.18	D,Q	EPA:300.0
	Fluoride	1.4	4	0.5	0.059		EPA:300.0
	Nitrate-Nitrite	<b>11.6</b>	10	0.5	0.053	D,Q	EPA:353.2
	Sulfate	46.5	NE	1	0.049		EPA:300.0
TAV-MW12 1-Aug-12	Bromide	0.28	NE	0.5	0.088	B	EPA:300.0
	Chloride	38.2	NE	5	0.18	D,Q	EPA:300.0
	Fluoride	1.3	4	0.5	0.059		EPA:300.0
	Nitrate-Nitrite	5.9	10	0.5	0.053	D	EPA:353.2
	Sulfate	48	NE	1	0.049		EPA:300.0
TAV-MW13 23-Jul-12	Bromide	0.24	NE	0.5	0.088	B	EPA:300.0
	Chloride	18.8	NE	2	0.074	D,G	EPA:300.0
	Fluoride	1.3	4	0.5	0.059		EPA:300.0
	Nitrate-Nitrite	5.5	10	0.5	0.053	D	EPA:353.2
	Sulfate	51.1	NE	2	0.098	D,Q	EPA:300.0
TAV-MW13 23-Jul-12 DUP	Bromide	0.22	NE	0.5	0.088	B	EPA:300.0
	Chloride	19.7	NE	1	0.037		EPA:300.0
	Fluoride	1.3	4	0.5	0.059		EPA:300.0
	Nitrate-Nitrite	5.7	10	0.5	0.053	D	EPA:353.2
	Sulfate	51.2	NE	2	0.098	D,Q	EPA:300.0

B = Estimated result. Result is less than RL and greater than or equal to the IDL

D = Dilution

NE = Not Established

Q = Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

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

**Table-4 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Detected Volatile Organic Compounds**

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	EPA (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
AVN-1 31-Jul-12	Toluene	0.39	1000	1	0.25	J	SW-846:8260B
LWDS-MW2 30-Jul-12	Toluene	0.56	1000	1	0.25	J	SW-846:8260B
TAV-MW6 6-Aug-12	Chloroform	0.19	NE	1	0.12	J	SW-846:8260B
	Dichloroethene[cis-1,2-]	3.2	70	1	0.1		SW-846:8260B
	Toluene	0.54	1000	1	0.25	J	SW-846:8260B
	Trichloroethene	<b>16</b>	5	1	0.13		SW-846:8260B
TAV-MW10 7-Aug-12	Chloroform	0.2	NE	1	0.12	J	SW-846:8260B
	Dichloroethene[cis-1,2-]	3.2	70	1	0.1		SW-846:8260B
	Toluene	0.43	1000	1	0.25	J	SW-846:8260B
	Trichloroethene	<b>16</b>	5	1	0.13		SW-846:8260B
TAV-MW12 1-Aug-12	Chloroform	0.13	NE	1	0.12	J	SW-846:8260B
	Dichloroethene[cis-1,2-]	0.33	70	1	0.1	J	SW-846:8260B
	Toluene	0.56	1000	1	0.25	J	SW-846:8260B
	Trichloroethene	<b>6.1</b>	5	1	0.13		SW-846:8260B
TAV-MW13 23-Jul-12	Toluene	0.51	1000	1	0.25	J	SW-846:8260B
	Trichloroethene	0.23	5	1	0.13	J	SW-846:8260B
TAV-MW13 23-Jul-12 DUP	Toluene	0.45	1000	1	0.25	J	SW-846:8260B
	Trichloroethene	0.16	5	1	0.13	J	SW-846:8260B

J = Estimated result. Result is less than RL.

NE = Not Established

**Table-5 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Method Detection Limits for Volatile Organic Compounds**

Analyte	MDL (µg/L)	Analytical Method
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
Xylene (Total)	0.18	SW-846:8260B

**Table-6 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Gross Alpha, Gross Beta, Gamma Spectroscopy and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
AVN-1 31-Jul-12	Actinium-228	-1.57 ± 6.9	11.7	U	EPA:901.1M
	Beryllium-7	-1.93 ± 11	19.2	U	EPA:901.1M
	Bismuth-212	-6.06 ± 20	33.9	U	EPA:901.1M
	Bismuth-214	-1.23 ± 17	33.8	U	EPA:901.1M
	Cesium-134	0.662 ± 1.4	2.74	U	EPA:901.1M
	Cesium-137	-0.427 ± 1.4	2.53	U	EPA:901.1M
	Cobalt-60	-0.446 ± 1.4	2.62	U	EPA:901.1M
	Gross Alpha	4.25 ± 1.8	1.99		EPA:900.0
	Gross Beta	3.85 ± 1.1	1.43		EPA:900.0
	Lead-212	-0.0555 ± 1.9	2.99	U	EPA:901.1M
	Lead-212	-0.528 ± 2.7	4.64	U	EPA:901.1M
	Potassium-40	-42.1 ± 41	84.7	U	EPA:901.1M
	Protactinium-234m	103 ± 180	342	U	EPA:901.1M
	Sodium-22	0.957 ± 1.4	2.9	U	EPA:901.1M
	Tallium-208	0.599 ± 1.7	2.85	U	EPA:901.1M
	Thorium-234	103 ± 180	342	U	EPA:901.1M
Tritium	90.4 ± 140	293	U	EPA:906.0	
LWDS-MW2 30-Jul-12	Actinium-228	-8.05 ± 15	23.1	U	EPA:901.1M
	Beryllium-7	-21.30 ± 28	45.3	U	EPA:901.1M
	Bismuth-212	6.13 ± 42	74.8	U	EPA:901.1M
	Bismuth-214	-6.61 ± 25	46.9	U	EPA:901.1M
	Cesium-134	-2.76 ± 3.3	5.45	U	EPA:901.1M
	Cesium-137	-3.34 ± 3.1	4.81	U	EPA:901.1M
	Cobalt-60	2.32 ± 3	6.01	U	EPA:901.1M
	Gross Alpha	4.33 ± 2.1	2.63		EPA:900.0
	Gross Beta	4.27 ± 1.3	1.73		EPA:900.0
	Lead-212	-2.85 ± 5.1	7.97	U	EPA:901.1M
	Lead-212	-2.71 ± 6.8	10.7	U	EPA:901.1M
	Potassium-40	-96.6 ± 71	142	U	EPA:901.1M
	Protactinium-234m	9.66 ± 330	595	U	EPA:901.1M
	Sodium-22	1.54 ± 3.1	5.99	U	EPA:901.1M
	Tallium-208	4.14 ± 3	5.79	U	EPA:901.1M
	Thorium-234	9.66 ± 330	595	U	EPA:901.1M
Tritium	-166 ± 140	307	U	EPA:906.0	

U = Result is less than the sample detection limit.

**Table-6 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Gross Alpha, Gross Beta, Gamma Spectroscopy and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
TAV-MW6 6-Aug-12	Actinium-228	-9.3 ± 12	21.9	U	EPA:901.1M
	Beryllium-7	-10.6 ± 22	36.9	U	EPA:901.1M
	Bismuth-212	-5.3 ± 35	61	U	EPA:901.1M
	Bismuth-214	-6.92 ± 25	44.1	U	EPA:901.1M
	Cesium-134	0.558 ± 2.7	4.86	U	EPA:901.1M
	Cesium-137	-2.66 ± 2.5	3.95	U	EPA:901.1M
	Cobalt-60	-0.0415 ± 2	3.8	U	EPA:901.1M
	Gross Alpha	5.71 ± 3	3.82		EPA:900.0
	Gross Beta	6.13 ± 2.3	3.23		EPA:900.0
	Lead-212	-5.05 ± 5.2	7.99	U	EPA:901.1M
	Lead-212	-5.09 ± 6.6	9.95	U	EPA:901.1M
	Potassium-40	-108 ± 68	138	U	EPA:901.1M
	Protactinium-234m	255 ± 270	548	U	EPA:901.1M
	Sodium-22	0.969 ± 2.7	5.1	U	EPA:901.1M
	Tallium-208	-1.08 ± 3.2	5.54	U	EPA:901.1M
	Thorium-234	255 ± 270	548	U	EPA:901.1M
Tritium	23.4 ± 140	294	U	EPA:906.0	
TAV-MW10 7-Aug-12	Actinium-228	-3.93 ± 7	10.9	U	EPA:901.1M
	Beryllium-7	-13.9 ± 12	18.6	U	EPA:901.1M
	Bismuth-212	-2.72 ± 22	39	U	EPA:901.1M
	Bismuth-214	6.72 ± 14	28.1	U	EPA:901.1M
	Cesium-134	-0.991 ± 1.6	2.72	U	EPA:901.1M
	Cesium-137	-0.00192 ± 1.7	3.08	U	EPA:901.1M
	Cobalt-60	1.03 ± 1.7	3.45	U	EPA:901.1M
	Gross Alpha	7.2 ± 3.1	3.34		EPA:900.0
	Gross Beta	4.82 ± 2.7	4.2		EPA:900.0
	Lead-212	-1.04 ± 2.1	3.57	U	EPA:901.1M
	Lead-212	-2.64 ± 3.5	5.37	U	EPA:901.1M
	Potassium-40	-26.3 ± 36	69.6	U	EPA:901.1M
	Protactinium-234m	-150 ± 180	280	U	EPA:901.1M
	Sodium-22	-0.0762 ± 2	3.52	U	EPA:901.1M
	Tallium-208	0.698 ± 1.5	2.75	U	EPA:901.1M
	Thorium-234	-150 ± 180	280	U	EPA:901.1M
Tritium	53.6 ± 140	294	U	EPA:906.0	

U = Result is less than the sample detection limit.

**Table-6 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Gross Alpha, Gross Beta, Gamma Spectroscopy and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
TAV-MW12 1-Aug-12	Actinium-228	-0.406 ± 7.3	12.1	U	EPA:901.1M
	Beryllium-7	-7.23 ± 14	23.8	U	EPA:901.1M
	Bismuth-212	2.86 ± 20	36.3	U	EPA:901.1M
	Bismuth-214	12.4 ± 13	27.8	U	EPA:901.1M
	Cesium-134	0.355 ± 1.7	3.19	U	EPA:901.1M
	Cesium-137	0.271 ± 1.6	2.82	U	EPA:901.1M
	Cobalt-60	-0.29 ± 1.7	3.19	U	EPA:901.1M
	Gross Alpha	9.34 ± 3.2	2.33		EPA:900.0
	Gross Beta	3.52 ± 1.6	2.37		EPA:900.0
	Lead-212	1.35 ± 2.1	3.92	U	EPA:901.1M
	Lead-212	-2.93 ± 3.3	4.87	U	EPA:901.1M
	Potassium-40	-14 ± 35	70.3	U	EPA:901.1M
	Protactinium-234m	-129 ± 200	328	U	EPA:901.1M
	Sodium-22	0.799 ± 2	3.85	U	EPA:901.1M
	Tallium-208	0.211 ± 1.5	2.73	U	EPA:901.1M
	Thorium-234	-129 ± 200	328	U	EPA:901.1M
Tritium	-30.8 ± 130	292	U	EPA:906.0	
TAV-MW13 23-Jul-12	Actinium-228	-0.652 ± 8.6	13.5	U	EPA:901.1M
	Beryllium-7	-17.9 ± 15	23.1	U	EPA:901.1M
	Bismuth-212	15.8 ± 23	42.3	U	EPA:901.1M
	Bismuth-214	11.3 ± 16	33.1	U	EPA:901.1M
	Cesium-134	1.1 ± 1.6	3.19	U	EPA:901.1M
	Cesium-137	0.881 ± 1.4	2.72	U	EPA:901.1M
	Cobalt-60	0.866 ± 1.7	3.32	U	EPA:901.1M
	Gross Alpha	7.21 ± 2.7	2.5		EPA:900.0
	Gross Beta	4.91 ± 1.4	1.76		EPA:900.0
	Lead-212	-2.14 ± 2.4	3.73	U	EPA:901.1M
	Lead-212	-0.682 ± 3.5	5.75	U	EPA:901.1M
	Potassium-40	-34.3 ± 47	95.5	U	EPA:901.1M
	Protactinium-234m	-161 ± 210	334	U	EPA:901.1M
	Sodium-22	-0.85 ± 1.6	2.64	U	EPA:901.1M
	Tallium-208	-1.13 ± 1.8	3.02	U	EPA:901.1M
	Thorium-234	-161 ± 210	334	U	EPA:901.1M
Tritium	-34.1 ± 140	305	U	EPA:906.0	

U = Result is less than the sample detection limit.

**Table-6 NMED DOE OB FFY 2012 Q-4 Technical Area-V Groundwater Quality Results: Gross Alpha, Gross Beta, Gamma Spectroscopy and Tritium**

Monitoring Well/ Sample Date	Analyte	Activity (pCi/L)	MDA (pCi/L)	Laboratory Qualifier	Analytical Method
TAV-MW13 23-Jul-12 DUP	Actinium-228	11.4 ± 10	20.5	U	EPA:901.1M
	Beryllium-7	-9.65 ± 22	37.1	U	EPA:901.1M
	Bismuth-212	-3.79 ± 30	53.4	U	EPA:901.1M
	Bismuth-214	17.9 ± 23	47.6	U	EPA:901.1M
	Cesium-134	1.3 ± 2.6	4.95	U	EPA:901.1M
	Cesium-137	-0.85 ± 2.4	4.18	U	EPA:901.1M
	Cobalt-60	-0.81 ± 2.1	3.79	U	EPA:901.1M
	Gross Alpha	5.65 ± 2.5	2.89		EPA:900.0
	Gross Beta	4.72 ± 1.3	1.69		EPA:900.0
	Lead-212	0.53 ± 5.2	5.64	U	EPA:901.1M
	Lead-212	-0.42 ± 5.4	9.04	U	EPA:901.1M
	Potassium-40	-61.3 ± 52	106	U	EPA:901.1M
	Protactinium-234m	13.6 ± 260	487	U	EPA:901.1M
	Sodium-22	1.18 ± 2.3	4.66	U	EPA:901.1M
	Tallium-208	0.662 ± 3.1	4.9	U	EPA:901.1M
	Thorium-234	13.6 ± 260	487	U	EPA:901.1M
Tritium	-24.8 ± 140	310	U	EPA:906.0	

U = Result is less than the sample detection limit.