

DOE Oversight Bureau, New Mexico Environment Department

**Groundwater Monitoring at
Sandia National Laboratories/New Mexico
Technical Area V**

**Conducted by the
New Mexico Environment Department DOE Oversight Bureau
for FFY 2015 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 Technical Area V groundwater monitoring wells during third quarter FFY 2015.

Acknowledgment:

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Introduction

The New Mexico Environment Department (NMED) DOE Oversight Bureau (DOE-OB or the Bureau) has compiled and assessed groundwater data collected during April and May 2015. The Bureau collected groundwater samples from Technical Area V (TAV) groundwater monitoring wells AVN-1, LWDS-MW1, LWDS-MW2, TAV-MW2, TAV-MW4, TAV-MW6, TAV-MW10, TAV-MW11, TAV-MW12, TAV-MW13, and TAV-MW14 (see Figure 1.) Both trichloroethylene (TCE) and nitrates have been identified as the constituents of concern in groundwater at the Technical Area V groundwater monitoring wells (Sandia 2014).

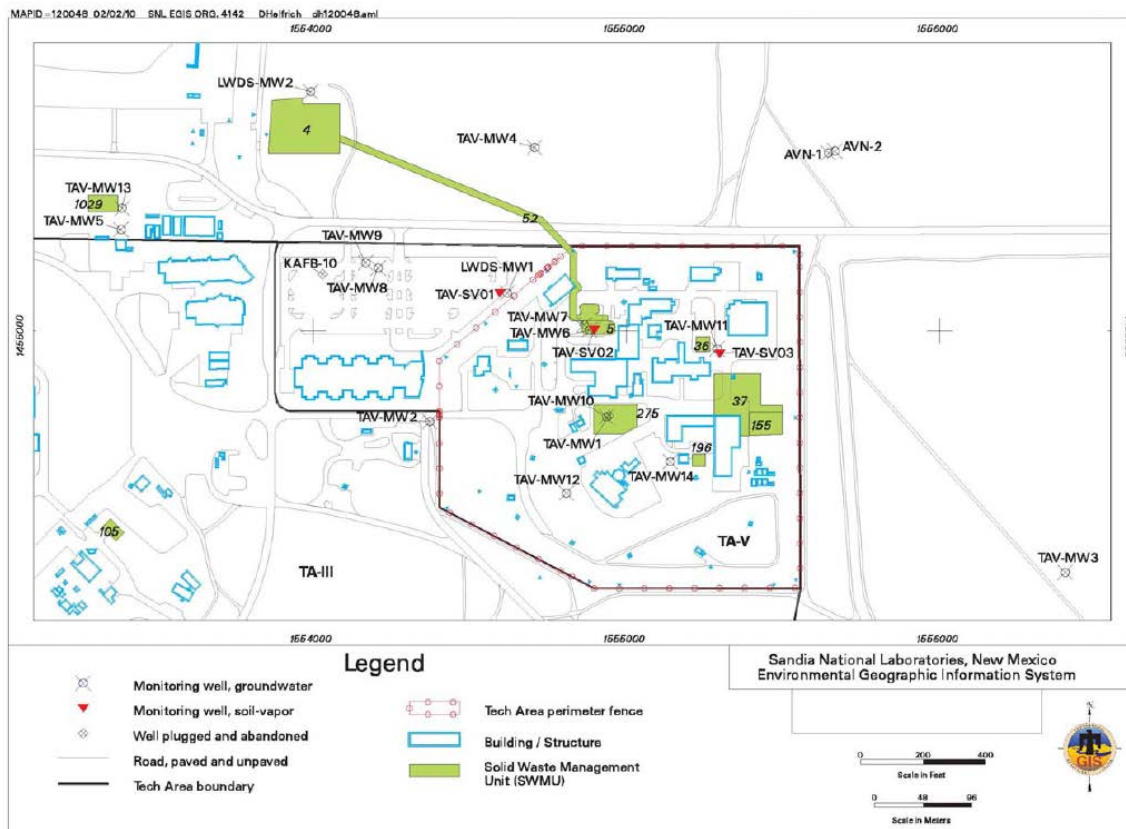


Figure 1. TAV Monitoring Well Locations (16 Active Groundwater Monitoring Wells)
(SNL/NM Annual Groundwater Monitoring Report, Calendar Year 2014)

Split samples were collected using standard Sandia National Laboratories/New Mexico (SNL/NM) sampling procedures and equipment. The samples were submitted to an independent analytical laboratory for analysis of total and dissolved target analyte list (TAL) metals plus uranium, anions, nitrate-nitrite volatile organic compounds (VOCs), gross alpha, gross beta, gamma-emitting isotopes and tritium. Nitrate-nitrite levels exceeded the U.S. Environmental Protection Agency (EPA) maximum contaminant level (MCL) at monitoring wells LWDS-MW2 and TAV-MW10. Trichloroethylene (TCE) also exceeded the EPA MCL at monitoring wells LWDS-MW1, TAV-MW6, TAV-MW10, and TAV-MW14.

Data Assessment

All groundwater samples were collected and analyzed in accordance with U.S. 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 total and dissolved 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 listed in Table 3. No major anions were detected above established MCLs. Nitrate-nitrite concentrations at LWDS-MW1 (12 mg/L) and TAV-MW10 (12 mg/L) exceeded the MCL of 10 mg/L. All other nitrate-nitrite samples were detected below the MCL.

VOCs detected at concentrations above the method detection limits (MDLs) are presented in Table 4. No VOCs were detected above their associated MCL, except for TCE. TCE was detected above the EPA MCL of 5 µg/L at TAV monitoring wells LWDS-MW1 (17 µg/L), TAV-MW6 (14 µg/L), TAV-MW10 (14 µg/L), TAV-MW12 (8.6 µg/L), and TAV-MW14 (5.9 µg/L). Table 5 summarizes the laboratory MDLs for the remaining VOCs analyzed from the samples collected at TAV monitoring wells.

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 U.S. EPA MCLs.

Conclusions

Groundwater samples were collected from eleven (11) monitoring wells during this sampling event at TAV. All metal concentrations were below established MCLs. Nitrate-nitrite exceeded the EPA MCL of 10 mg/L at monitoring wells LWDS-MW1 and TAV-MW10. The nitrates values at these wells compare well to historical data and have typically exceeded the EPA MCL (see Figures 2 and 2.1).

TCE also exceeded the EPA MCL of 5 µg/L at monitoring wells LWDS-MW1, TAV-MW6, TAV-MW10, TAV-MW12, and TAV-MW14. Historically, these wells have exceeded the EPA MCL (See Figures 3, 3.1, 3.2, 3.3 and 3.4).

All radionuclide results were below established MCLs.

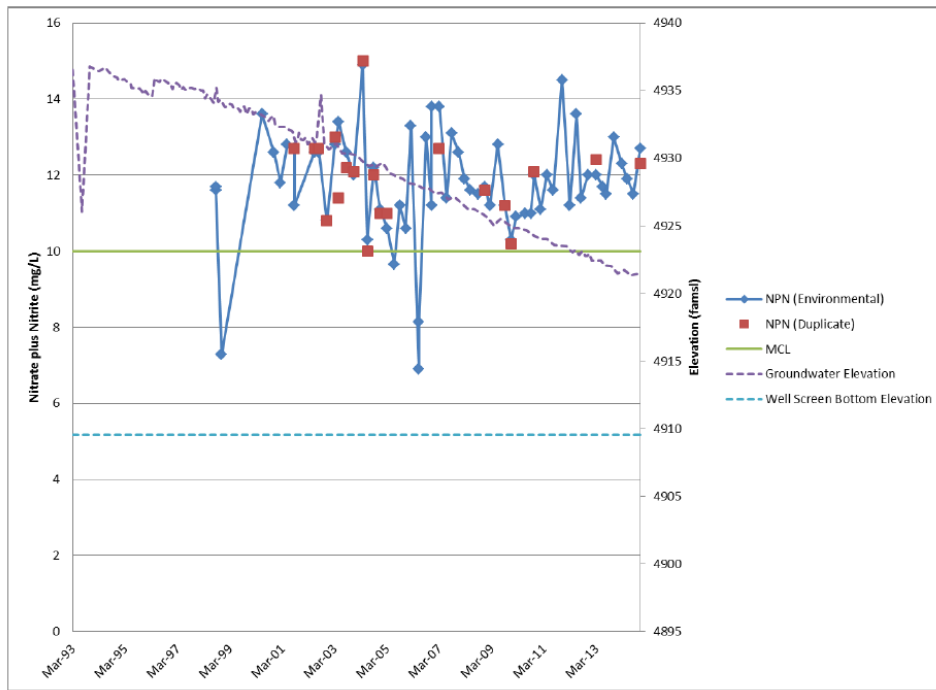


Figure 2. SNL/NM Nitrate plus Nitrite Concentrations, LWDS-MW1.
(SNL/NM Annual Groundwater Monitoring Report, Calendar Year 2014)

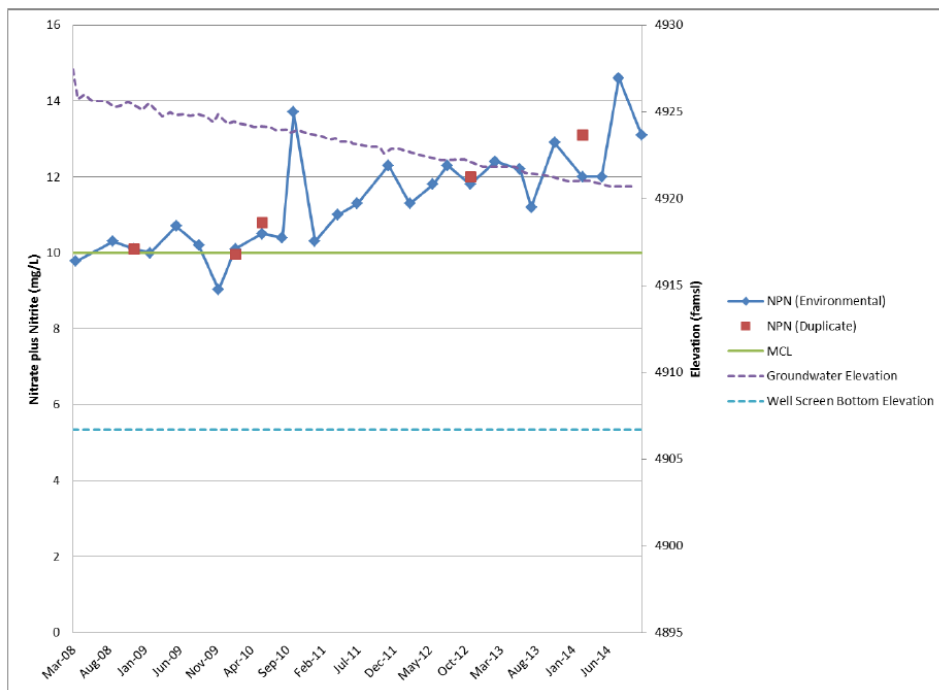


Figure 2.1. SNL/NM Nitrate plus Nitrite Concentrations, TAV-MW10.
(SNL/NM Annual Groundwater Monitoring Report, Calendar Year 2014)

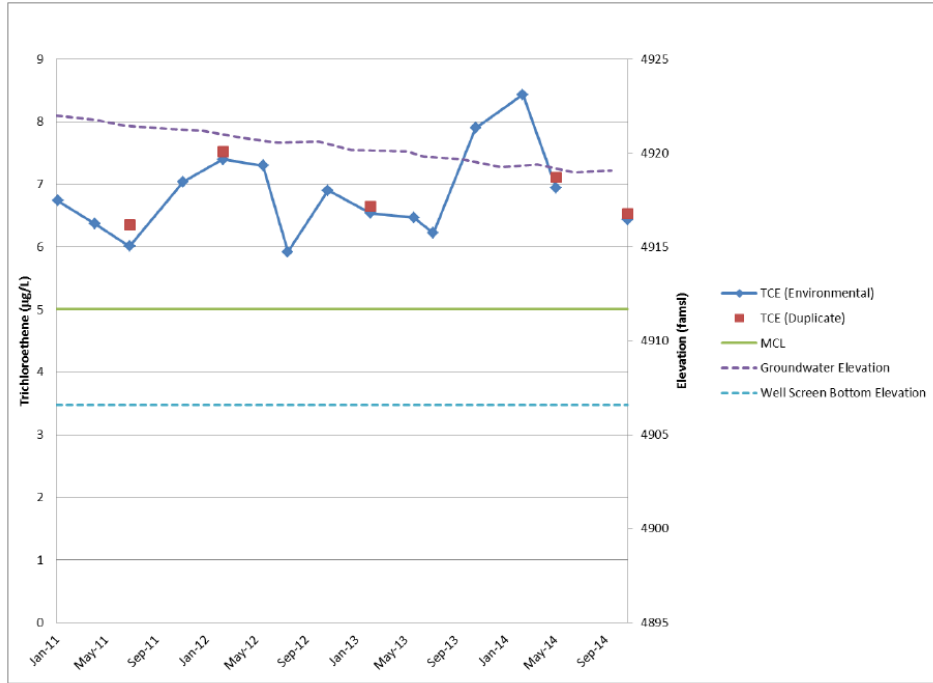


Figure 3. SNL/NM Trichloroethylene Concentrations, TAV-MW14.
 (SNL/NM Annual Groundwater Monitoring Report, Calendar Year 2014)

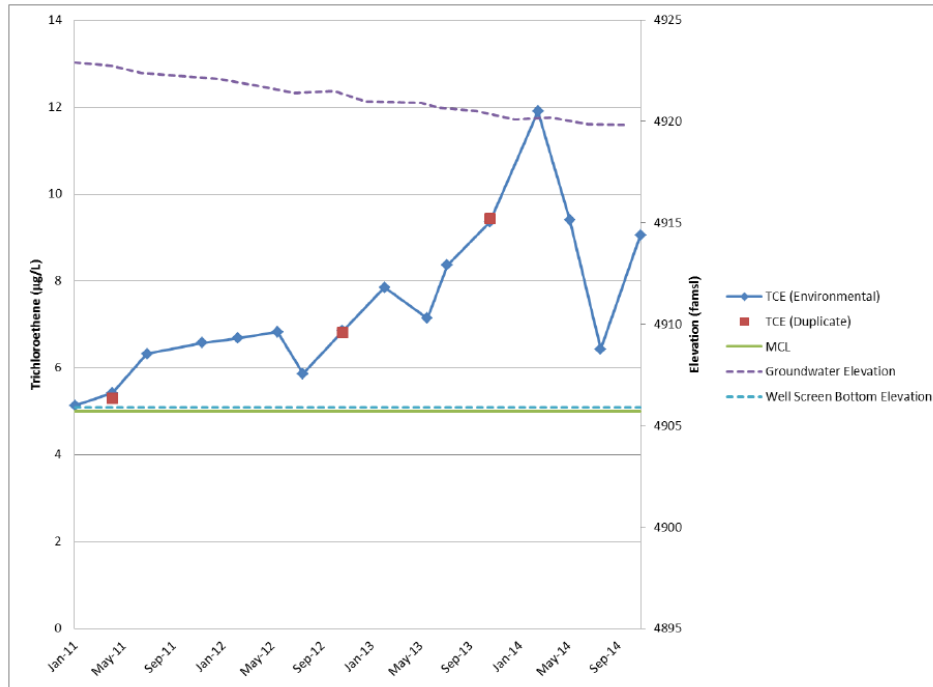


Figure 3.1 SNL/NM Trichloroethylene Concentrations, TAV-MW12.
 (SNL/NM Annual Groundwater Monitoring Report, Calendar Year 2014)

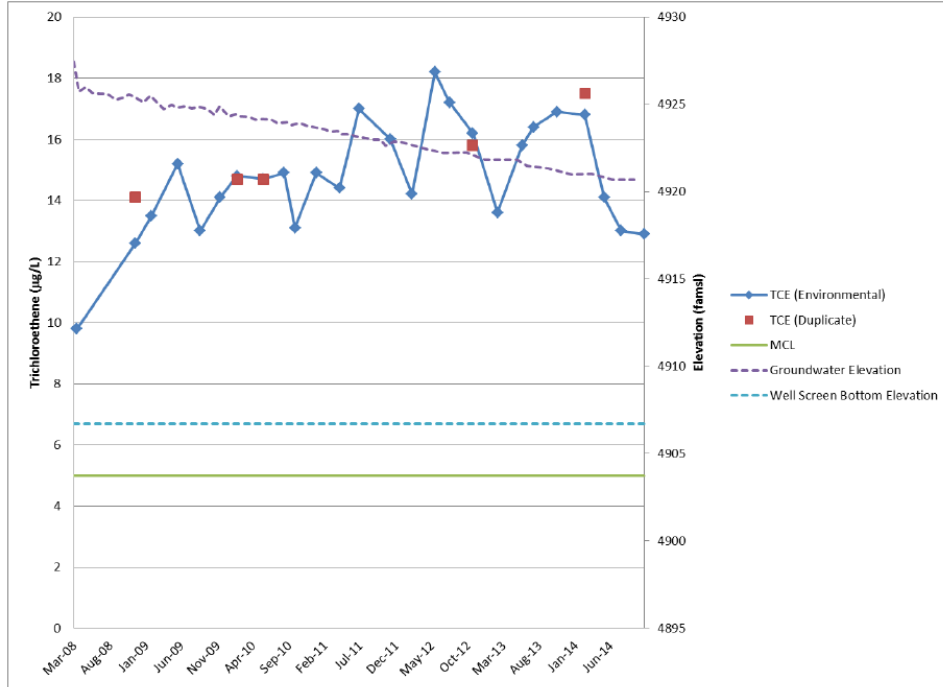


Figure 3.2 SNL/NM Trichloroethylene Concentrations, TAV-MW10.
 (SNL/NM Annual Groundwater Monitoring Report, Calendar Year 2014)

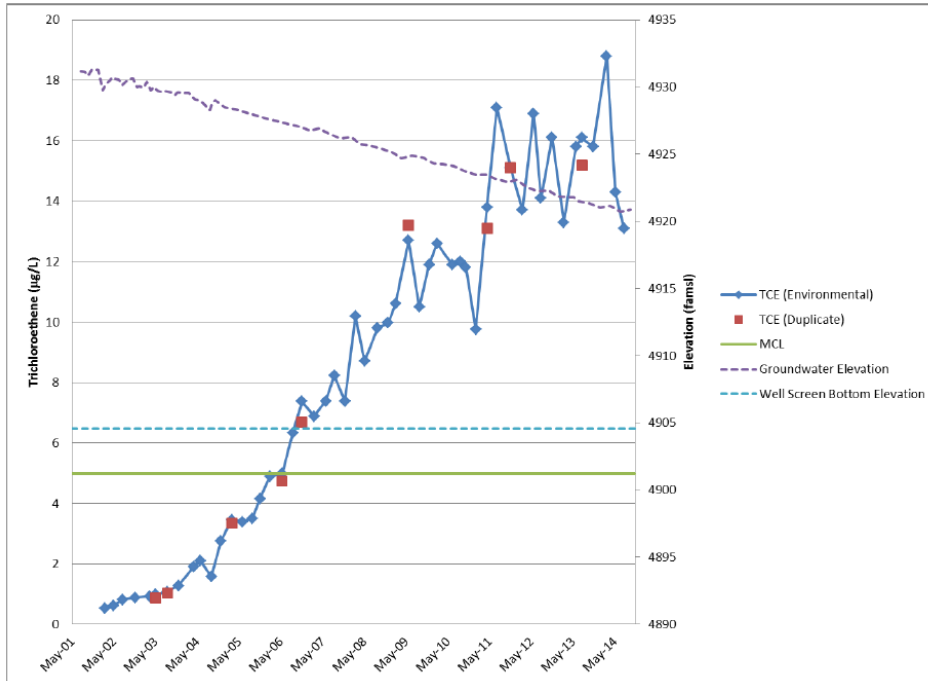


Figure 3.3 SNL/NM Trichloroethylene Concentrations, TAV-MW6.
 (SNL/NM Annual Groundwater Monitoring Report, Calendar Year 2014)

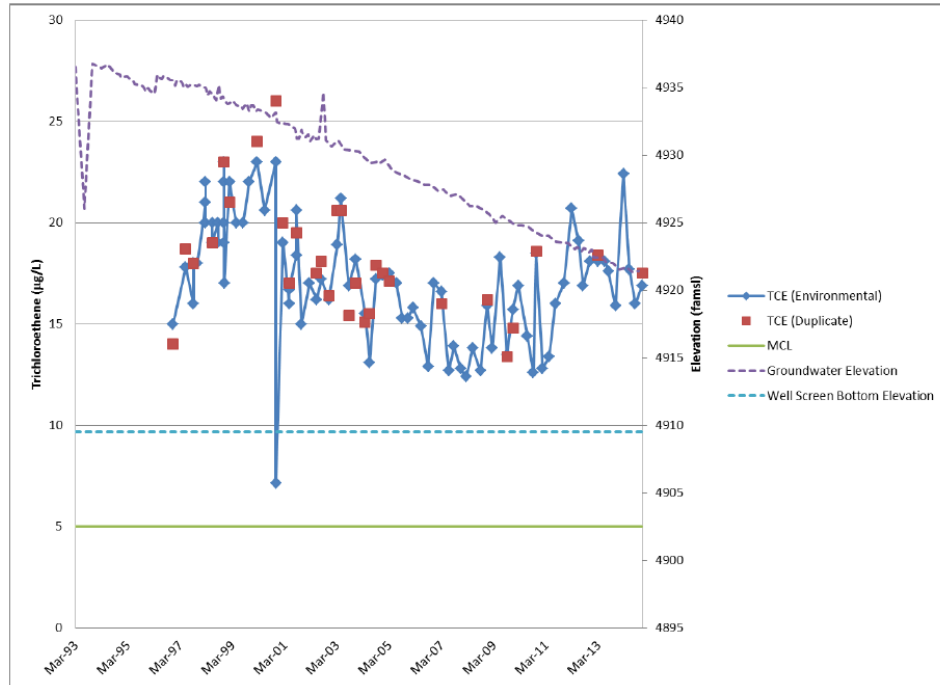


Figure 3.4 SNL/NM Trichloroethylene Concentrations, LWDS-MW1.
(SNL/NM Annual Groundwater Monitoring Report, Calendar Year 2014)

References

Sandia National Laboratories/New Mexico, Annual Groundwater Monitoring Report, Calendar Year 2014.

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 2015 Q-3 Technical Area-V Groundwater Quality Results: Total TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
AVN-1 4-May-15	Aluminum	0.058	NE	0.05	0.019		SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0022	0.01	0.002	0.00036		SW-846:6020
	Barium	0.086	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	49	NE	1	0.094	B	SW-846:6020
	Chromium	0.031	0.1	0.01	0.00074		SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.17	NE	0.1	0.013		SW-846:6020
	Lead	0.0003	NE	0.0005	0.0002	JB	SW-846:6020
	Magnesium	10	NE	0.1	0.039		SW-846:6020
	Manganese	0.00077	NE	0.002	0.00074	JB	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0034	NE	0.005	0.0023	J	SW-846:6020
	Potassium	3.6	NE	1	0.2	B	SW-846:6020
	Selenium	0.0027	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.00005	NE	0.0001	0.000041	J	SW-846:6020
	Sodium	41	NE	1	0.84		SW-846:6020
Thallium	0.00008	0.002	0.0002	0.000034	J	SW-846:6020	
Uranium	0.0021	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0089	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.014	NE	0.02	0.0071	JB	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
LWDS-MW1 11-May-15	Aluminum	0.025	NE	0.05	0.019	J	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0015	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.075	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	61	NE	1	0.094		SW-846:6020
	Chromium	0.0041	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.054	NE	0.1	0.013	J	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	17	NE	0.1	0.039		SW-846:6020
	Manganese	0.00083	NE	0.002	0.00074	J	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	2.7	NE	1	0.2	B	SW-846:6020
	Selenium	0.0054	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	57	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0026	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.003	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.01	NE	0.02	0.0071	JB	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
LWDS-MW2 30-Apr-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0011	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.065	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	46	NE	1	0.094		SW-846:6020
	Chromium	0.0024	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.0025	NE	0.01	0.002	JB	SW-846:6020
	Iron	0.092	NE	0.1	0.013	JB	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	12	NE	0.1	0.039		SW-846:6020
	Manganese	0.00076	NE	0.002	0.00074	J	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	2.8	NE	1	0.2	B	SW-846:6020
	Selenium	0.0018	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	43	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0026	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0077	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	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
TAV-MW2 28-Apr-15	Aluminum	0.11	NE	0.05	0.019		SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00097	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.062	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	73	NE	1	0.094		SW-846:6020
	Chromium	0.0013	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.18	NE	0.1	0.013	B	SW-846:6020
	Lead	0.00026	NE	0.0005	0.0002	J	SW-846:6020
	Magnesium	22	NE	0.1	0.039		SW-846:6020
	Manganese	0.0071	NE	0.002	0.00074		SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	3.9	NE	1	0.2	B	SW-846:6020
	Selenium	0.004	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	68	NE	1	0.84		SW-846:6020
Thallium	0.00009	0.002	0.0002	0.000034	J	SW-846:6020	
Uranium	0.006	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0064	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

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Table-1 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Total TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW4 27-Apr-15	Aluminum	0.023	NE	0.05	0.019	J	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00075	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.082	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	51	NE	1	0.094		SW-846:6020
	Chromium	0.026	0.1	0.01	0.00074		SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.031	NE	0.1	0.013	J	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	15	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	2.9	NE	1	0.2		SW-846:6020
	Selenium	0.0042	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	44	NE	1	0.84		SW-846:6020
Thallium	0.00004	0.002	0.0002	0.000034	J	SW-846:6020	
Uranium	0.0027	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0058	NE	0.001	0.00027		SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	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
TAV-MW4 27-Apr-15 DUP	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0011	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.081	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	51	NE	1	0.094		SW-846:6020
	Chromium	0.024	0.1	0.01	0.00074		SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.027	NE	0.1	0.013	J	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	14	NE	0.1	0.039		SW-846:6020
	Manganese	0.00096	NE	0.002	0.00074	J	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	2.9	NE	1	0.2		SW-846:6020
	Selenium	0.0034	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	43	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0026	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0059	NE	0.001	0.00027		SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

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TAV-MW6 12-May-15	Aluminum	0.13	NE	0.05	0.019		SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00053	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.061	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	58	NE	1	0.094		SW-846:6020
	Chromium	0.0015	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.15	NE	0.1	0.013		SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	17	NE	0.1	0.039		SW-846:6020
	Manganese	0.0019	NE	0.002	0.00074	J	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	3	NE	1	0.2	B	SW-846:6020
	Selenium	0.0035	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	54	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.003	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0045	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-1 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Total TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW10 13-May-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0009	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.051	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	54	NE	1	0.094		SW-846:6020
	Chromium	0.0013	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.053	NE	0.1	0.013	J	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	14	NE	0.1	0.039		SW-846:6020
	Manganese	0.00078	NE	0.002	0.00074	J	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	3.5	NE	1	0.2	B	SW-846:6020
	Selenium	0.0025	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	50	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0026	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0042	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.16	NE	0.02	0.0071	B	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-1 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Total TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW11 5-May-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.001	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.079	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	65	NE	1	0.094	B	SW-846:6020
	Chromium	0.0031	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.017	NE	0.1	0.013	J	SW-846:6020
	Lead	0.00028	NE	0.0005	0.0002	JB	SW-846:6020
	Magnesium	17	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	4	NE	1	0.2	B	SW-846:6020
	Selenium	0.0048	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	59	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0031	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0068	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-1 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Total TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW12 7-May-15	Aluminum	0.15	NE	0.05	0.019		SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00051	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.088	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	69	NE	1	0.094	B	SW-846:6020
	Chromium	0.0014	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.19	NE	0.1	0.013		SW-846:6020
	Lead	0.00031	NE	0.0005	0.0002	JB	SW-846:6020
	Magnesium	20	NE	0.1	0.039		SW-846:6020
	Manganese	0.018	NE	0.002	0.00074	B	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	4.1	NE	1	0.2	B	SW-846:6020
	Selenium	0.0025	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.00008	NE	0.0001	0.000041	J	SW-846:6020
	Sodium	64	NE	1	0.84		SW-846:6020
	Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020
Uranium	0.0048	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0043	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0093	NE	0.02	0.0071	JB	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-1 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Total TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW13 20-Apr-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00043	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.06	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	52	NE	1	0.094		SW-846:6020
	Chromium	0.0018	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.015	NE	0.1	0.013	J	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	15	NE	0.1	0.039		SW-846:6020
	Manganese	0.0028	NE	0.002	0.00074		SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	3.2	NE	1	0.2		SW-846:6020
	Selenium	0.0024	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	49	NE	1	0.84		SW-846:6020
Thallium	0.00004	0.002	0.0002	0.000034	J	SW-846:6020	
Uranium	0.0033	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0055	NE	0.001	0.00027		SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-1 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Total TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW14 6-May-15	Aluminum	0.052	NE	0.05	0.019		SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00053	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.071	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	68	NE	1	0.094	B	SW-846:6020
	Chromium	0.0016	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.057	NE	0.1	0.013	J	SW-846:6020
	Lead	0.00033	NE	0.0005	0.0002	JB	SW-846:6020
	Magnesium	19	NE	0.1	0.039		SW-846:6020
	Manganese	0.00084	NE	0.002	0.00074	JB	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0026	NE	0.005	0.0023	J	SW-846:6020
	Potassium	4.5	NE	1	0.2	B	SW-846:6020
	Selenium	0.0016	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	67	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.004	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0059	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
AVN-1 4-May-15	Aluminum	0.02	NE	0.05	0.019	J	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0015	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.085	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	49	NE	1	0.094	B	SW-846:6020
	Chromium	0.0027	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.026	NE	0.1	0.013	J	SW-846:6020
	Lead	0.00032	NE	0.0005	0.0002	JB	SW-846:6020
	Magnesium	10	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	3.5	NE	1	0.2	B	SW-846:6020
	Selenium	0.0021	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	41	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0021	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0071	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.03	NE	0.02	0.0071	B	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
LWDS-MW1 11-May-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0014	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.074	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	59	NE	1	0.094		SW-846:6020
	Chromium	0.0012	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.013	NE	0.1	0.013	U	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	17	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	2.6	NE	1	0.2	B	SW-846:6020
	Selenium	0.0063	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	57	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0026	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0034	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0086	NE	0.02	0.0071	JB	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
LWDS-MW2 30-Apr-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0014	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.07	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	47	NE	1	0.094		SW-846:6020
	Chromium	0.0027	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.0028	NE	0.01	0.002	JB	SW-846:6020
	Iron	0.073	NE	0.1	0.013	JB	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	12	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	2.4	NE	1	0.2	B	SW-846:6020
	Selenium	0.0032	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	42	NE	1	0.84		SW-846:6020
	Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020
Uranium	0.0026	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0073	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW2 28-Apr-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00036	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.058	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	71	NE	1	0.094		SW-846:6020
	Chromium	0.0013	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.24	NE	0.1	0.013	B	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	22	NE	0.1	0.039		SW-846:6020
	Manganese	0.00075	NE	0.002	0.00074	J	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	3.7	NE	1	0.2	B	SW-846:6020
	Selenium	0.0024	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	68	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0052	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0065	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW4 27-Apr-15	Aluminum	0.12	NE	0.05	0.019		SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0012	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.096	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	51	NE	1	0.094		SW-846:6020
	Chromium	0.025	0.1	0.01	0.00074		SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.013	NE	0.1	0.013	U	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	14	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	2.7	NE	1	0.2		SW-846:6020
	Selenium	0.0039	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	44	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0026	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0058	NE	0.001	0.00027		SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW4 27-Apr-15 DUP	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00089	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.086	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	52	NE	1	0.094		SW-846:6020
	Chromium	0.025	0.1	0.01	0.00074		SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.013	NE	0.1	0.013	U	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	14	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	2.9	NE	1	0.2		SW-846:6020
	Selenium	0.0018	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	45	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0026	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0059	NE	0.001	0.00027		SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW6 12-May-15	Aluminum	0.021	NE	0.05	0.019	J	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00057	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.06	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	57	NE	1	0.094		SW-846:6020
	Chromium	0.0015	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.1	NE	0.1	0.013		SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	17	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	3	NE	1	0.2	B	SW-846:6020
	Selenium	0.0028	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	54	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.003	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0044	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW10 13-May-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00083	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.051	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	53	NE	1	0.094		SW-846:6020
	Chromium	0.0011	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.013	NE	0.1	0.013	U	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	14	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	3.5	NE	1	0.2	B	SW-846:6020
	Selenium	0.0023	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	51	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0026	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0044	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.036	NE	0.02	0.0071	B	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW11 5-May-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0011	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.076	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	62	NE	1	0.094	B	SW-846:6020
	Chromium	0.0032	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.013	NE	0.1	0.013	J	SW-846:6020
	Lead	0.00025	NE	0.0005	0.0002	JB	SW-846:6020
	Magnesium	17	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	4	NE	1	0.2	B	SW-846:6020
	Selenium	0.0037	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	57	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.003	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0067	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0077	NE	0.02	0.0071	JB	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW12 7-May-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0007	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.09	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	66	NE	1	0.094	B	SW-846:6020
	Chromium	0.0013	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.013	NE	0.1	0.013	U	SW-846:6020
	Lead	0.00022	NE	0.0005	0.0002	JB	SW-846:6020
	Magnesium	20	NE	0.1	0.039		SW-846:6020
	Manganese	0.013	NE	0.002	0.00074	B	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	4.2	NE	1	0.2	B	SW-846:6020
	Selenium	0.0022	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	65	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0048	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0042	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW13 20-Apr-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00073	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.057	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	53	NE	1	0.094		SW-846:6020
	Chromium	0.001	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.013	NE	0.1	0.013	U	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	15	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	3.1	NE	1	0.2		SW-846:6020
	Selenium	0.0025	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	49	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0034	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0056	NE	0.001	0.00027		SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-2 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Dissolved TAL Metals plus Uranium

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TAV-MW14 6-May-15	Aluminum	0.019	NE	0.05	0.019	U	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00078	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.061	2	0.001	0.00094		SW-846:6020
	Beryllium	0.00014	0.004	0.0005	0.00014	U	SW-846:6020
	Cadmium	0.00013	0.005	0.0003	0.00013	U	SW-846:6020
	Calcium	68	NE	1	0.094	B	SW-846:6020
	Chromium	0.0019	0.1	0.01	0.00074	J	SW-846:6020
	Cobalt	0.00021	NE	0.001	0.00021	U	SW-846:6020
	Copper	0.002	NE	0.01	0.002	U	SW-846:6020
	Iron	0.07	NE	0.1	0.013	J	SW-846:6020
	Lead	0.00026	NE	0.0005	0.0002	JB	SW-846:6020
	Magnesium	20	NE	0.1	0.039		SW-846:6020
	Manganese	0.00074	NE	0.002	0.00074	U	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0023	NE	0.005	0.0023	U	SW-846:6020
	Potassium	4.5	NE	1	0.2	B	SW-846:6020
	Selenium	0.0035	0.05	0.001	0.00042	B	SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	68	NE	1	0.84		SW-846:6020
	Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020
Uranium	0.0041	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0062	NE	0.001	0.00027	B	SW-846:6020	
Zinc	0.011	NE	0.02	0.0071	JB	SW-846:6020	

B = Compound was found in the blank and sample.

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

NE = Not Established

U = the analyte was analyzed for but not detected

Table-3 NMED DOE OB FFY 2015 Q-3 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 4-May-15	Bromide	0.06	NE	0.2	0.06	U	EPA:300.0
	Chloride	11	NE	0.2	0.06		EPA:300.0
	Fluoride	1.1	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	8.5	10	0.05	0.015		EPA:353.2
	Sulfate	31	NE	1	0.3		EPA:300.0
LWDS-MW1 11-May-15	Bromide	0.72	NE	0.2	0.06		EPA:300.0
	Chloride	91	NE	2	0.6		EPA:300.0
	Fluoride	0.59	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	12	10	0.1	0.03		EPA:353.2
	Sulfate	39	NE	1	0.3		EPA:300.0
LWDS-MW2 30-Apr-15	Bromide	0.3	NE	1	0.3	U	EPA:300.0
	Chloride	13	NE	1	0.3		EPA:300.0
	Fluoride	1.3	4	0.5	0.15		EPA:300.0
	Nitrate-Nitrite as Nitrogen	7.3	10	0.05	0.015		EPA:353.2
	Sulfate	39	NE	5	1.5		EPA:300.0
TAV-MW2 28-Apr-15	Bromide	0.37	NE	0.2	0.06		EPA:300.0
	Chloride	66	NE	1	0.3		EPA:300.0
	Fluoride	0.96	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	3.4	10	0.05	0.015		EPA:353.2
	Sulfate	62	NE	1	0.3		EPA:300.0
TAV-MW4 27-Apr-15	Bromide	0.43	NE	0.2	0.06		EPA:300.0
	Chloride	42	NE	1	0.3		EPA:300.0
	Fluoride	1.1	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	4.8	10	0.05	0.015		EPA:353.2
	Sulfate	35	NE	1	0.3		EPA:300.0
TAV-MW4 27-Apr-15 DUP	Bromide	0.45	NE	0.2	0.06		EPA:300.0
	Chloride	43	NE	1	0.3		EPA:300.0
	Fluoride	1.1	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	4.9	10	0.05	0.015		EPA:353.2
	Sulfate	36	NE	1	0.3		EPA:300.0
TAV-MW6 12-May-15	Bromide	0.74	NE	0.2	0.06		EPA:300.0
	Chloride	78	NE	2	0.6		EPA:300.0
	Fluoride	1.1	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	7.6	10	0.1	0.03		EPA:353.2
	Sulfate	41	NE	1	0.3		EPA:300.0

NE = Not Established

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

Table-3 NMED DOE OB FFY 2015 Q-3 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
TAV-MW10 13-May-15	Bromide	0.32	NE	0.2	0.06		EPA:300.0
	Chloride	49	NE	2	0.6		EPA:300.0
	Fluoride	1.4	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	12	10	0.1	0.03		EPA:353.2
	Sulfate	46	NE	1	0.3		EPA:300.0
TAV-MW11 5-May-15	Bromide	0.5	NE	0.2	0.06		EPA:300.0
	Chloride	51	NE	1	0.3		EPA:300.0
	Fluoride	1.3	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	5.9	10	0.05	0.015		EPA:353.2
	Sulfate	44	NE	1	0.3		EPA:300.0
TAV-MW12 7-May-15	Bromide	0.23	NE	0.2	0.06		EPA:300.0
	Chloride	44	NE	1	0.3		EPA:300.0
	Fluoride	1.2	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	6.4	10	0.1	0.03		EPA:353.2
	Sulfate	48	NE	1	0.3		EPA:300.0
TAV-MW13 20-Apr-15	Bromide	0.2	NE	0.2	0.06		EPA:300.0
	Chloride	21	NE	1	0.3		EPA:300.0
	Fluoride	1.2	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	5.5	10	0.05	0.015		EPA:353.2
	Sulfate	53	NE	1	0.3		EPA:300.0
TAV-MW14 6-May-15	Bromide	0.31	NE	0.2	0.06		EPA:300.0
	Chloride	54	NE	1	0.3		EPA:300.0
	Fluoride	1.3	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	7.7	10	0.1	0.03		EPA:353.2
	Sulfate	55	NE	1	0.3		EPA:300.0

NE = Not Established

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

Table-4 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Detected Volatile Organic Compounds

Monitoring Well/ Sample Date	Analyte	Result (µg/L)	EPA MCL (µg/L)	Quantitation Limit (µg/L)	MDL (µg/L)	Laboratory Qualifier	Analytical Method
LWDS-MW1 11-May-15	Dichloroethene[cis-1,2-]	4	70	1	0.3		SW-846:8260B_25
	Trichloroethene	17	5	1	0.3		SW-846:8260B_25
TAV-MW2 28-Apr-15	Trichloroethene	1.3	5	1	0.3		SW-846:8260B_25
TAV-MW4 27-Apr-15	Chloroform	0.87	NE	1	0.3	J	SW-846:8260B_25
	Trichloroethene	3	5	1	0.3		SW-846:8260B_25
TAV-MW4 27-Apr-15 DUP	Chloroform	0.86	NE	1	0.3	J	SW-846:8260B_25
	Trichloroethene	3.2	5	1	0.3		SW-846:8260B_25
TAV-MW6 12-May-15	Dichloroethene[cis-1,2-]	2.9	70	1	0.3		SW-846:8260B_25
	Trichloroethene	14	5	1	0.3		SW-846:8260B_25
TAV-MW10 13-May-15	Chloromethane	0.57	NE	1	0.3	J	SW-846:8260B_25
	Dichloroethene[cis-1,2-]	2.8	70	1	0.3		SW-846:8260B_25
	Trichloroethene	14	5	1	0.3		SW-846:8260B_25
TAV-MW11 5-May-15	Dichloroethene[cis-1,2-]	0.43	70	1	0.3	J	SW-846:8260B_25
	Trichloroethene	3	5	1	0.3		SW-846:8260B_25
TAV-MW12 7-May-15	Dichloroethene[cis-1,2-]	0.77	70	1	0.3	J	SW-846:8260B_25
	Trichloroethene	8.6	5	1	0.3		SW-846:8260B_25
TAV-MW14 6-May-15	Dichloroethene[cis-1,2-]	0.98	70	1	0.3	J	SW-846:8260B_25
	Trichloroethene	5.9	5	1	0.3		SW-846:8260B_25

NE = Not Established

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

Table-5 NMED DOE OB FFY 2015 Q-3 Technical Area-V Groundwater Quality Results: Method Detection Limits for Volatile Organic Compounds by Method SW-846:8260B_25

Analyte	MDL (µg/L)
Acetone	3
Benzene	0.3
Bromobenzene	0.3
Bromochloromethane	0.3
Bromodichloromethane	0.3
Bromoform	0.3
Bromomethane	0.3
Butanone[2-]	3
Butylbenzene[n-]	0.3
Butylbenzene[sec-]	0.3
Butylbenzene[tert-]	0.3
Carbon Disulfide	0.3
Carbon Tetrachloride	0.3
Chlorobenzene	0.3
Chlorodibromomethane	0.3
Chloroethane	0.3
Chloroform	0.3
Chlorohexane[1-]	0.3
Chloromethane	0.3
Chlorotoluene[2-]	0.3
Chlorotoluene[4-]	0.3
Dibromo-3-Chloropropane[1,2-]	0.3
Dibromoethane[1,2-]	0.3
Dibromomethane	0.3
Dichlorobenzene[1,2-]	0.3
Dichlorobenzene[1,3-]	0.3
Dichlorobenzene[1,4-]	0.3
Dichlorodifluoromethane	0.3
Dichloroethane[1,1-]	0.3
Dichloroethane[1,2-]	0.3
Dichloroethene[1,1-]	0.3
Dichloroethene[cis-1,2-]	0.3
Dichloroethene[trans-1,2-]	0.3
Dichloropropane[1,2-]	0.3
Dichloropropane[1,3-]	0.3
Dichloropropane[2,2-]	0.3
Dichloropropene[1,1-]	0.3
Dichloropropene[cis-1,3-]	0.3
Dichloropropene[trans-1,3-]	0.3
Ethylbenzene	0.3
Hexachlorobutadiene	0.3

Analyte	MDL (µg/L)
Hexanone[2-]	3
Iodomethane	0.3
Isopropylbenzene	0.3
Isopropyltoluene[4-]	0.3
Methyl tert-Butyl Ether	0.3
Methyl-2-pentanone[4-]	3
Methylene Chloride	0.44
Naphthalene	0.3
Propylbenzene[1-]	0.3
Styrene	0.3
Tetrachloroethane[1,1,1,2-]	0.3
Tetrachloroethane[1,1,2,2-]	0.3
Tetrachloroethene	0.2
Toluene	0.3
Trichloro-1,2,2-trifluoroethane[1,1,2-]	0.3
Trichlorobenzene[1,2,3-]	0.3
Trichlorobenzene[1,2,4-]	0.3
Trichloroethane[1,1,1-]	0.3
Trichloroethane[1,1,2-]	0.3
Trichloroethene	0.3
Trichlorofluoromethane	0.3
Trichloropropane[1,2,3-]	0.3
Trimethylbenzene[1,2,4-]	0.3
Trimethylbenzene[1,3,5-]	0.3
Vinyl acetate	0.52
Vinyl Chloride	0.3
Xylene[1,2-]	0.3
Xylene[1,3-]+Xylene[1,4-]	0.3

Table-6 NMED DOE OB FFY 2015 Q-3 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 4-May-15	Actinium-228	11	± 3.7	15	U	EPA:901.1
	Americium-241	57	± 27	89	U	EPA:901.1
	Beryllium-7	-2.3	± 11	37	U	EPA:901.1
	Bismuth-212	13	± 17	57	U	EPA:901.1
	Bismuth-214	7.5	± 4.7	19	UJ	EPA:901.1
	Cesium-134	-2.3	± 1.2	4.3	U	EPA:901.1
	Cesium-137	-1.2	± 1.1	3.9	U	EPA:901.1
	Cobalt-60	-1.8	± 1.2	4.4	U	EPA:901.1
	Gross alpha	2.6	± 0.37	0.8		EPA:900
	Gross beta	4.3	± 0.48	1		EPA:900
	Iodine-131	0.43	± 6.6	22	U	EPA:901.1
	Lead-212	2.6	± 4.3	14	U	EPA:901.1
	Lead-214	-1.8	± 4.4	15	UJ	EPA:901.1
	Potassium-40	-66	± 39	130	U	EPA:901.1
	Protactinium-234m	520	± 190	610	U	EPA:901.1
	Sodium-22	2.5	± 1.2	3.9	U	EPA:901.1
	Thallium-208	0.63	± 2.3	7.6	U	EPA:901.1
	Thorium-234	23	± 69	230	U	EPA:901.1
Tritium	-44	± 120	390	U	EPA:906.0	
LWDS-MW1 11-May-15	Actinium-228	13	± 5.2	16	U	EPA:901.1
	Americium-241	7	± 11	37	U	EPA:901.1
	Beryllium-7	21	± 12	40	U	EPA:901.1
	Bismuth-212	33	± 20	67	U	EPA:901.1
	Bismuth-214	-2	± 6.5	22	UJ	EPA:901.1
	Cesium-134	-3.9	± 1.4	4.9	U	EPA:901.1
	Cesium-137	1	± 1.4	4.6	U	EPA:901.1
	Cobalt-60	-1.8	± 1.4	5.1	U	EPA:901.1
	Gross alpha	5.2	± 0.63	1.2		EPA:900
	Gross beta	6.6	± 0.72	1.5		EPA:900
	Iodine-131	1.7	± 7.8	26	U	EPA:901.1
	Lead-212	3.6	± 3.8	12	U	EPA:901.1
	Lead-214	-4.7	± 5.7	19	UJ	EPA:901.1
	Potassium-40	-17	± 47	160	U	EPA:901.1
	Protactinium-234m	-530	± 220	790	U	EPA:901.1
	Sodium-22	-2.9	± 1.5	5.3	U	EPA:901.1
	Thallium-208	5.9	± 1.5	4.4		EPA:901.1
	Thorium-234	58	± 21	66	U	EPA:901.1
Tritium	-95	± 110	370	U	EPA:906.0	

J = The activity is an estimated value.

U = Result is less than the sample specific MDC or less than the associated TPU.

Table-6 NMED DOE OB FFY 2015 Q-3 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
LWDS-MW2 30-Apr-15	Actinium-228	5.3	± 14	47	U	EPA:901.1
	Americium-241	5.9	± 9.1	30	U	EPA:901.1
	Beryllium-7	-20	± 16	55	U	EPA:901.1
	Bismuth-212	1	± 24	83	U	EPA:901.1
	Bismuth-214	3.2	± 8	27	UJ	EPA:901.1
	Cesium-134	0.33	± 1.9	6.4	U	EPA:901.1
	Cesium-137	-1.6	± 1.6	5.7	U	EPA:901.1
	Cobalt-60	-2	± 2.3	7.9	U	EPA:901.1
	Gross alpha	2.8	± 0.42	0.95		EPA:900
	Gross beta	3.9	± 0.53	1.3		EPA:900
	Iodine-131	-3	± 7.5	25	U	EPA:901.1
	Lead-212	-0.14	± 4.1	14	U	EPA:901.1
	Lead-214	2.8	± 7.3	24	UJ	EPA:901.1
	Potassium-40	44	± 55	180	U	EPA:901.1
	Protactinium-234m	400	± 320	1100	U	EPA:901.1
	Sodium-22	1.8	± 2.2	7.2	U	EPA:901.1
	Thallium-208	5.7	± 1.9	5.9	U	EPA:901.1
	Thorium-234	-17	± 43	140	U	EPA:901.1
	Tritium	-29	± 110	370	U	EPA:906.0
TAV-MW2 28-Apr-15	Actinium-228	13	± 5.2	16	U	EPA:901.1
	Americium-241	25	± 11	36	U	EPA:901.1
	Beryllium-7	-8.5	± 13	44	U	EPA:901.1
	Bismuth-212	24	± 19	62	U	EPA:901.1
	Bismuth-214	6	± 6	20	UJ	EPA:901.1
	Cesium-134	-0.92	± 1.3	4.4	U	EPA:901.1
	Cesium-137	-2.2	± 1.3	4.7	U	EPA:901.1
	Cobalt-60	-1.3	± 1.5	5.3	U	EPA:901.1
	Gross alpha	7.4	± 0.83	1.3		EPA:900
	Gross beta	6	± 0.67	1.4		EPA:900
	Iodine-131	8.7	± 7.4	25	U	EPA:901.1
	Lead-212	4.9	± 3.5	12	U	EPA:901.1
	Lead-214	-3.1	± 5.7	19	UJ	EPA:901.1
	Potassium-40	-27	± 40	140	U	EPA:901.1
	Protactinium-234m	730	± 230	700		EPA:901.1
	Sodium-22	-0.26	± 1.5	5.3	U	EPA:901.1
	Thallium-208	4.3	± 1.4	4.4	U	EPA:901.1
	Thorium-234	66	± 36	130	U	EPA:901.1
	Tritium	94	± 110	370	U	EPA:906.0

J = The activity is an estimated value.

U = Result is less than the sample specific MDC or less than the associated TPU.

Table-6 NMED DOE OB FFY 2015 Q-3 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-MW4 27-Apr-15	Actinium-228	20	± 7.1	22	U	EPA:901.1
	Americium-241	2.8	± 13	42	U	EPA:901.1
	Beryllium-7	15	± 16	54	U	EPA:901.1
	Bismuth-212	33	± 25	83	U	EPA:901.1
	Bismuth-214	13	± 2.8	8	J	EPA:901.1
	Cesium-134	-5	± 2.6	10	U	EPA:901.1
	Cesium-137	0.97	± 1.7	5.7	U	EPA:901.1
	Cobalt-60	-2.2	± 2.3	7.9	U	EPA:901.1
	Gross alpha	3.2	± 0.52	1.2		EPA:900
	Gross beta	3.3	± 0.56	1.6		EPA:900
	Iodine-131	-12	± 9	31	U	EPA:901.1
	Lead-212	5.1	± 2.2	7.2	U	EPA:901.1
	Lead-214	11	± 3.2	9.9	J	EPA:901.1
	Potassium-40	35	± 54	180	U	EPA:901.1
	Protactinium-234m	89	± 320	1100	U	EPA:901.1
	Sodium-22	-0.43	± 2.1	7.2	U	EPA:901.1
	Thallium-208	5.9	± 1.9	5.8		EPA:901.1
	Thorium-234	39	± 43	150	U	EPA:901.1
	Tritium	-63	± 110	370	U	EPA:906.0
TAV-MW4 27-Apr-15 DUP	Actinium-228	13	± 3.7	16	U	EPA:901.1
	Americium-241	-9.7	± 11	37	U	EPA:901.1
	Beryllium-7	26	± 13	43	U	EPA:901.1
	Bismuth-212	46	± 19	59	U	EPA:901.1
	Bismuth-214	4.6	± 6.2	20	UJ	EPA:901.1
	Cesium-134	0.82	± 1.9	6.4	U	EPA:901.1
	Cesium-137	0.27	± 1.4	4.6	U	EPA:901.1
	Cobalt-60	-0.79	± 1.5	5.2	U	EPA:901.1
	Gross alpha	3.5	± 0.45	0.88		EPA:900
	Gross beta	3.6	± 0.53	1.4		EPA:900
	Iodine-131	-9.4	± 7.7	27	U	EPA:901.1
	Lead-212	0.86	± 3.5	12	U	EPA:901.1
	Lead-214	-1.8	± 5.6	19	UJ	EPA:901.1
	Potassium-40	8.4	± 40	130	U	EPA:901.1
	Protactinium-234m	320	± 230	770	U	EPA:901.1
	Sodium-22	-2.1	± 1.5	5.3	U	EPA:901.1
	Thallium-208	3.2	± 1.4	4.4	U	EPA:901.1
	Thorium-234	-1.1	± 40	130	U	EPA:901.1
	Tritium	60	± 110	370	U	EPA:906.0

J = The activity is an estimated value.

U = Result is less than the sample specific MDC or less than the associated TPU.

Table-6 NMED DOE OB FFY 2015 Q-3 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 12-May-15	Actinium-228	17	± 4.8	15		EPA:901.1
	Americium-241	28	± 33	110	U	EPA:901.1
	Beryllium-7	-13	± 12	40	U	EPA:901.1
	Bismuth-212	30	± 14	46	U	EPA:901.1
	Bismuth-214	4.9	± 5.8	19	UJ	EPA:901.1
	Cesium-134	-0.82	± 2.1	7	U	EPA:901.1
	Cesium-137	-1.8	± 1.3	4.4	U	EPA:901.1
	Cobalt-60	-0.41	± 1.3	4.5	U	EPA:901.1
	Gross alpha	4.7	± 0.61	1.2		EPA:900
	Gross beta	5.7	± 0.69	1.6		EPA:900
	Iodine-131	0.2	± 5.8	19	U	EPA:901.1
	Lead-212	-0.38	± 4.8	16	U	EPA:901.1
	Lead-214	4.8	± 3.9	13	UJ	EPA:901.1
	Potassium-40	-12	± 36	120	U	EPA:901.1
	Protactinium-234m	-100	± 210	730	U	EPA:901.1
	Sodium-22	0	± 1.3	4.4	U	EPA:901.1
	Thallium-208	2	± 2.8	9.2	U	EPA:901.1
	Thorium-234	16	± 65	220	U	EPA:901.1
Tritium	-29	± 110	370	U	EPA:906.0	
TAV-MW10 13-May-15	Actinium-228	14	± 5.1	16	U	EPA:901.1
	Americium-241	-5.2	± 11	37	U	EPA:901.1
	Beryllium-7	-15	± 12	42	U	EPA:901.1
	Bismuth-212	16	± 18	61	U	EPA:901.1
	Bismuth-214	4.7	± 5.9	20	UJ	EPA:901.1
	Cesium-134	-0.54	± 1.3	4.4	U	EPA:901.1
	Cesium-137	0.77	± 1.4	4.7	U	EPA:901.1
	Cobalt-60	0.44	± 1.5	5.2	U	EPA:901.1
	Gross alpha	5.4	± 0.62	1.1		EPA:900
	Gross beta	5.6	± 0.68	1.6		EPA:900
	Iodine-131	-0.56	± 6	20	U	EPA:901.1
	Lead-212	-0.48	± 3.5	12	U	EPA:901.1
	Lead-214	-0.47	± 5	17	UJ	EPA:901.1
	Potassium-40	-42	± 37	130	U	EPA:901.1
	Protactinium-234m	350	± 220	710	U	EPA:901.1
	Sodium-22	1.5	± 1.5	4.9	U	EPA:901.1
	Thallium-208	-0.47	± 2.5	8.5	U	EPA:901.1
	Thorium-234	19	± 45	150	U	EPA:901.1
Tritium	-24	± 120	400	U	EPA:906.0	

J = The activity is an estimated value.

U = Result is less than the sample specific MDC or less than the associated TPU.

Table-6 NMED DOE OB FFY 2015 Q-3 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-MW11 5-May-15	Actinium-228	18	± 9.7	32	U	EPA:901.1
	Americium-241	3.4	± 7.3	24	U	EPA:901.1
	Beryllium-7	3.5	± 12	41	U	EPA:901.1
	Bismuth-212	18	± 18	60	U	EPA:901.1
	Bismuth-214	0.13	± 5.3	18	UJ	EPA:901.1
	Cesium-134	-4.5	± 1.4	4.8	U	EPA:901.1
	Cesium-137	-2.2	± 1.3	4.4	U	EPA:901.1
	Cobalt-60	1.7	± 1.4	4.8	U	EPA:901.1
	Gross alpha	3.5	± 0.49	1		EPA:900
	Gross beta	5.3	± 0.57	1.1		EPA:900
	Iodine-131	-3.7	± 6.7	23	U	EPA:901.1
	Lead-212	2.1	± 3.6	12	U	EPA:901.1
	Lead-214	2.2	± 4.6	15	UJ	EPA:901.1
	Potassium-40	-33	± 38	130	U	EPA:901.1
	Protactinium-234m	210	± 220	720	U	EPA:901.1
	Sodium-22	-0.091	± 1.5	5	U	EPA:901.1
	Thallium-208	-2.5	± 2.7	8.9	U	EPA:901.1
	Thorium-234	9.1	± 35	120	U	EPA:901.1
Tritium	-230	± 110	390	U	EPA:906.0	
TAV-MW12 7-May-15	Actinium-228	14	± 5	16	U	EPA:901.1
	Americium-241	-3.8	± 6.4	22	U	EPA:901.1
	Beryllium-7	-5.5	± 10	36	U	EPA:901.1
	Bismuth-212	24	± 18	60	U	EPA:901.1
	Bismuth-214	3.4	± 4.4	18	UJ	EPA:901.1
	Cesium-134	-1.6	± 1.3	4.4	U	EPA:901.1
	Cesium-137	-0.98	± 1.2	4.2	U	EPA:901.1
	Cobalt-60	-2.6	± 1.4	5	U	EPA:901.1
	Gross alpha	6.9	± 0.7	0.93		EPA:900
	Gross beta	5.2	± 0.55	1		EPA:900
	Iodine-131	0.94	± 5.3	18	U	EPA:901.1
	Lead-212	-1.1	± 3.8	13	U	EPA:901.1
	Lead-214	-0.54	± 4.8	16	UJ	EPA:901.1
	Potassium-40	-30	± 34	110	U	EPA:901.1
	Protactinium-234m	330	± 210	670	U	EPA:901.1
	Sodium-22	0.5	± 1.2	4.2	U	EPA:901.1
	Thallium-208	3.2	± 1.3	4.1	U	EPA:901.1
	Thorium-234	-9.8	± 37	120	U	EPA:901.1
Tritium	-79	± 120	390	U	EPA:906.0	

J = The activity is an estimated value.

U = Result is less than the sample specific MDC or less than the associated TPU.

Table-6 NMED DOE OB FFY 2015 Q-3 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 20-Apr-15	Actinium-228	19 ±	4.5	16		EPA:901.1
	Americium-241	-1 ±	11	37	U	EPA:901.1
	Beryllium-7	15 ±	12	41	U	EPA:901.1
	Bismuth-212	29 ±	17	54	U	EPA:901.1
	Bismuth-214	1.5 ±	7.1	24	UJ	EPA:901.1
	Cesium-134	-2 ±	1.3	4.6	U	EPA:901.1
	Cesium-137	1.2 ±	1.4	4.7	U	EPA:901.1
	Cobalt-60	0.84 ±	1.5	5.1	U	EPA:901.1
	Gross alpha	3.9 ±	0.49	0.92		EPA:900
	Gross beta	5 ±	0.58	1.3		EPA:900
	Iodine-131	8.6 ±	5.3	17	U	EPA:901.1
	Lead-212	-1.9 ±	3.9	13	U	EPA:901.1
	Lead-214	1.9 ±	5.4	18	UJ	EPA:901.1
	Potassium-40	-18 ±	38	130	U	EPA:901.1
	Protactinium-234m	-89 ±	230	780	U	EPA:901.1
	Sodium-22	1.7 ±	1.5	5	U	EPA:901.1
	Thallium-208	5.2 ±	1.3	4.1		EPA:901.1
	Thorium-234	39 ±	41	140	U	EPA:901.1
Tritium	-65 ±	100	350	U	EPA:906.0	
TAV-MW14 6-May-15	Actinium-228	9.6 ±	3.8	15	U	EPA:901.1
	Americium-241	0.5 ±	2.2	7.5	U	EPA:901.1
	Beryllium-7	-0.8 ±	9	31	U	EPA:901.1
	Bismuth-212	11 ±	17	57	U	EPA:901.1
	Bismuth-214	7 ±	5	16	UJ	EPA:901.1
	Cesium-134	-1.1 ±	1.1	3.7	U	EPA:901.1
	Cesium-137	-1.6 ±	1.1	3.8	U	EPA:901.1
	Cobalt-60	-0.35 ±	1.2	4.3	U	EPA:901.1
	Gross alpha	5 ±	0.6	1.1		EPA:900
	Gross beta	5.7 ±	0.63	1.3		EPA:900
	Iodine-131	-11 ±	9.8	33	U	EPA:901.1
	Lead-212	0.16 ±	3.2	10	U	EPA:901.1
	Lead-214	1.1 ±	3.7	12	UJ	EPA:901.1
	Potassium-40	-47 ±	31	100	U	EPA:901.1
	Protactinium-234m	-300 ±	190	680	U	EPA:901.1
	Sodium-22	-0.067 ±	1.2	4.3	U	EPA:901.1
	Thallium-208	-0.86 ±	2.4	8	U	EPA:901.1
	Thorium-234	21 ±	20	66	U	EPA:901.1
Tritium	46 ±	110	380	U	EPA:906.0	

J = The activity is an estimated value.

U = Result is less than the sample specific MDC or less than the associated TPU.