

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

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

**Conducted by the  
New Mexico Environment Department DOE Oversight Bureau  
for FFY 2015 Q-4**

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**Final Report**

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The purpose of this communication is to transmit groundwater quality data collected by New Mexico Environment Department DOE Oversight Bureau from Tijeras Arroyo Groundwater monitoring wells during fourth quarter FFY 2015.

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## **Introduction**

The New Mexico Environment Department (NMED) DOE Oversight Bureau (DOE-OB or Bureau) has compiled and assessed groundwater data collected during August and September 2015. The Bureau collected groundwater samples from Tijeras Arroyo Groundwater (TAG) Area of Concern (AOC) monitoring wells TA1-W-01, TA1-W-04, TA1-W-06, TA1-W-08, TA2-NW1-595, TA2-W-01 (plus duplicate), TA2-W-27, TJA-2 and TJA-6. 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 metals plus uranium, anions, nitrate-nitrite, volatile organic compounds (VOCs), gross alpha, gross beta, gamma emitting isotopes and tritium. Nitrate levels exceeded the U.S. Environmental Protection Agency (EPA) maximum contaminant level (MCL), or drinking water standard of 10 mg/L in the sample collected from TAG monitoring well TJA-2.

## **Data Assessment**

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

## **Results**

Analytical results for total Target Analyte List (TAL) metals plus uranium are presented in Table-1. All metal concentrations were below established MCLs.

Analytical results for major anions (as bromide, chloride, fluoride, and sulfate) and nitrate-nitrite as nitrogen are listed in Table-2. Nitrate-nitrite as nitrogen results did not detect any samples above the EPA MCL of 10 mg/L. However, nitrate concentrations at monitoring well TJA-2 have historically been detected at or above the EPA MCL. The sample collected from TJA-2 was reported at a concentration of 1.1 mg/L by EPA method 353.2, with a dilution factor (DF) of 10. The sample collected from TJA-2 could not be re-analyzed by EPA 353.2, but nitrate as nitrogen was analyzed on the ion chromatograph (IC) by EPA method 300.0 and was reported at 11 mg/L. The nitrate as nitrogen data on the IC was acquired after the hold time for nitrates had expired, but confirms that the result reported by method 353.2 was off by a factor of ten and suggests there may have been a DF error made in the calculation.

Volatile organic compounds detected at concentrations above the method detection limits (MDLs) are presented in Table-3. The VOCs detected at low concentrations include: dichloroethene[cis-1,2-], dichloroethene[1,1-], tetrachloroethene and trichloroethene (TCE). Concentrations of TCE ranged from 0.37 µg/L at monitoring well TA1-W-06 to 3.9 µg/L at TJA-2. No VOCs were

detected above their associated drinking water standards. Table-4 summarize the laboratory MDLs for the remaining VOCs analyzed from the samples collected at TAG monitoring wells.

Analytical results for radiochemistry samples are listed in Table-5. Samples were analyzed for gross alpha, gross beta, gamma emitting isotopes and tritium. No isotopes were detected above U.S. EPA drinking water standards.

### **Conclusion**

The DOE-OB collected split groundwater samples from a total of nine (9) TAG AOC monitoring wells during FFY 2015 Q-4. No parameters were detected above EPA drinking water standards, except for nitrate as nitrogen at monitoring well TJA-2. Although the nitrate data was acquired after the hold time, the result of 11 mg/L analyzed by EPA method 300.0 is consistent with historical concentrations.

The DOE-OB will continue to collect split samples with SNL/NM from TAG groundwater monitoring wells and continue to independently monitor TAG wells for contaminants of concern.

### **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 Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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
TA1-W-01 12-Aug-15	Aluminum	0.019	NE	0.05	0.019	J	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00059	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.05	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	74	NE	1	0.094		SW-846:6020
	Chromium	0.00074	0.1	0.01	0.00074	U	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	0.06	NE	0.1	0.013	J	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	13	NE	0.1	0.039		SW-846:6020
	Manganese	0.00084	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	2.3	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	25	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		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

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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
TA1-W-04 25-Aug-15	Aluminum	0.29	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	0.059	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	67	NE	1	0.094		SW-846:6020
	Chromium	0.00074	0.1	0.01	0.00074	U	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	0.021	NE	0.1	0.013	J	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	SW-846:6020
	Magnesium	11	NE	0.1	0.039		SW-846:6020
	Manganese	0.00079	NE	0.002	0.00074	J	SW-846:6020
	Mercury	0.00006	0.002	0.0001	0.00006	U	SW-846:7470A
	Nickel	0.0036	NE	0.005	0.0023	J	SW-846:6020
	Potassium	2.1	NE	1	0.2		SW-846:6020
	Selenium	0.002	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	24	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0029	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0051	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
TA1-W-06 1-Sep-15	Aluminum	0.035	NE	0.05	0.019	J	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.0008	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.025	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	120	NE	1	0.094		SW-846:6020
	Chromium	0.00074	0.1	0.01	0.00074	U	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	0.56	NE	0.1	0.013		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	0.0014	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	1.8	NE	1	0.2		SW-846:6020
	Selenium	0.0086	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	29	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0011	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.004	NE	0.001	0.00027		SW-846:6020	
Zinc	0.008	NE	0.02	0.0071	J	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
TA1-W-08 14-Aug-15	Aluminum	0.019	NE	0.05	0.019	J	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00069	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.021	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	370	NE	1	0.094		SW-846:6020
	Chromium	0.0023	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	42	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	3	NE	1	0.2	B	SW-846:6020
	Selenium	0.03	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	85	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.0017	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0029	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
TA2-NW1-595 13-Aug-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	0.00053	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.05	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	120	NE	1	0.094		SW-846:6020
	Chromium	0.00074	0.1	0.01	0.00074	U	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	2.4	NE	1	0.2	B	SW-846:6020
	Selenium	0.0079	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	31	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	0.0034	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
TA2-W-01 9-Sep-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	0.00059	0.01	0.002	0.00036	J	SW-846:6020
	Barium	0.077	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	81	NE	1	0.094		SW-846:6020
	Chromium	0.00074	0.1	0.01	0.00074	U	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	11	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	1.5	NE	1	0.2		SW-846:6020
	Selenium	0.0058	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	21	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.001	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0039	NE	0.001	0.00027		SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

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TA2-W-01 9-Sep-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	0.0007	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	79	NE	1	0.094		SW-846:6020
	Chromium	0.00074	0.1	0.01	0.00074	U	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	11	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	0.0026	NE	0.005	0.0023	J	SW-846:6020
	Potassium	1.6	NE	1	0.2		SW-846:6020
	Selenium	0.0066	0.05	0.001	0.00042		SW-846:6020
	Silver	0.00005	NE	0.0001	0.000041	J	SW-846:6020
	Sodium	20	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.001	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0041	NE	0.001	0.00027		SW-846:6020	
Zinc	0.0071	NE	0.02	0.0071	U	SW-846:6020	

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TA2-W-27 8-Sep-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	0.0004	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	110	NE	1	0.094		SW-846:6020
	Chromium	0.00078	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	1.8	NE	1	0.2		SW-846:6020
	Selenium	0.0058	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	26	NE	1	0.84		SW-846:6020
Thallium	0.00005	0.002	0.0002	0.000034	J	SW-846:6020	
Uranium	0.0011	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0037	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 Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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
TJA-2 17-Sep-15	Aluminum	0.17	NE	0.05	0.019		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	0.047	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	79	NE	1	0.094		SW-846:6020
	Chromium	0.00075	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	11	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	1.6	NE	1	0.2		SW-846:6020
	Selenium	0.0064	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	22	NE	1	0.84		SW-846:6020
Thallium	0.000034	0.002	0.0002	0.000034	U	SW-846:6020	
Uranium	0.002	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0046	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 Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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
TJA-6 13-Aug-15	Aluminum	0.045	NE	0.05	0.019	J	SW-846:6020
	Antimony	0.00023	0.006	0.0003	0.00023	U	SW-846:6020
	Arsenic	0.00052	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	58	NE	1	0.094		SW-846:6020
	Chromium	0.00074	0.1	0.01	0.00074	U	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	0.025	NE	0.1	0.013	J	SW-846:6020
	Lead	0.0002	NE	0.0005	0.0002	U	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	0.0026	NE	0.005	0.0023	J	SW-846:6020
	Potassium	1.9	NE	1	0.2		SW-846:6020
	Selenium	0.0014	0.05	0.001	0.00042		SW-846:6020
	Silver	0.000041	NE	0.0001	0.000041	U	SW-846:6020
	Sodium	21	NE	1	0.84		SW-846:6020
Thallium	0.00004	0.002	0.0002	0.000034	J	SW-846:6020	
Uranium	0.0029	0.03	0.0001	0.000046		SW-846:6020	
Vanadium	0.0057	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 Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo Groundwater Quality Results: Anions and Nitrate-Nitrite as Nitrogen**

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TA1-W-01 12-Aug-15	Bromide	0.21	NE	0.2	0.06		EPA:300.0
	Chloride	16	NE	0.2	0.06		EPA:300.0
	Fluoride	0.37	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	2.6	10	0.05	0.015		EPA:353.2
	Sulfate	78	NE	1	0.3		EPA:300.0
TA1-W-04 25-Aug-15	Bromide	0.06	NE	0.2	0.06	U	EPA:300.0
	Chloride	15	NE	0.2	0.06		EPA:300.0
	Fluoride	0.38	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	1.9	10	0.05	0.015		EPA:353.2
	Sulfate	65	NE	1	0.3		EPA:300.0
TA1-W-06 1-Sep-15	Bromide	1.2	NE	0.2	0.06		EPA:300.0
	Chloride	100	NE	2	0.6		EPA:300.0
	Fluoride	0.31	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	3.7	10	0.05	0.015		EPA:353.2
	Sulfate	200	NE	10	3		EPA:300.0
TA1-W-08 14-Aug-15	Bromide	2.7	NE	0.4	0.12		EPA:300.0
	Chloride	240	NE	4	1.2		EPA:300.0
	Fluoride	0.29	4	0.2	0.06		EPA:300.0
	Nitrate-Nitrite as Nitrogen	7.3	10	0.05	0.015		EPA:353.2
	Sulfate	710	NE	20	6		EPA:300.0
TA2-NW1-595 13-Aug-15	Bromide	1.2	NE	0.2	0.06		EPA:300.0
	Chloride	100	NE	2	0.6		EPA:300.0
	Fluoride	0.31	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	3.7	10	0.05	0.015		EPA:353.2
	Sulfate	94	NE	10	3		EPA:300.0
TA2-W-01 9-Sep-15	Bromide	1.4	NE	0.2	0.06		EPA:300.0
	Chloride	110	NE	2	0.6		EPA:300.0
	Fluoride	0.31	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	4.5	10	0.05	0.015		EPA:353.2
	Sulfate	56	NE	10	3		EPA:300.0
TA2-W-01 9-Sep-15 DUP	Bromide	1.4	NE	0.2	0.06		EPA:300.0
	Chloride	110	NE	10	3		EPA:300.0
	Fluoride	0.31	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	4.5	10	0.1	0.03		EPA:353.2
	Sulfate	58	NE	1	0.3		EPA:300.0

H = Analytical holding time exceeded.

NE = Not Established

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

**Table-2 NMED DOE Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo Groundwater Quality Results: Anions and Nitrate-Nitrite as Nitrogen**

Monitoring Well/ Sample Date	Analyte	Result (mg/L)	EPA MCL (mg/L)	Quantitation Limit (mg/L)	MDL (mg/L)	Laboratory Qualifier	Analytical Method
TA2-W-27 8-Sep-15	Bromide	1.5	NE	0.2	0.06		EPA:300.0
	Chloride	120	NE	2	0.6		EPA:300.0
	Fluoride	0.29	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	4	10	0.05	0.015		EPA:353.2
	Sulfate	140	NE	10	3		EPA:300.0
TJA-2 17-Sep-15	Bromide	0.82	NE	0.2	0.06		EPA:300.0
	Chloride	70	NE	2	0.6		EPA:300.0
	Fluoride	0.32	4	0.1	0.03		EPA:300.0
	NITRATE AS N	<b>11</b>	10	0.2	0.06	H	EPA:300.0
	NITRITE AS N	0.03	1	0.1	0.03	HU	EPA:300.0
	Nitrate-Nitrite as Nitrogen	1.1	10	0.1	0.03		EPA:353.2
	Sulfate	55	NE	1	0.3		EPA:300.0
TJA-6 31-Aug-15	Bromide	0.06	NE	0.2	0.06	U	EPA:300.0
	Chloride	15	NE	0.2	0.06		EPA:300.0
	Fluoride	0.38	4	0.1	0.03		EPA:300.0
	Nitrate-Nitrite as Nitrogen	2.7	10	0.05	0.015		EPA:353.2
	Sulfate	64	NE	1	0.3		EPA:300.0

H = Analytical holding time exceeded.

NE = Not Established

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



**Table-3 NMED DOE Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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
TA1-W-06 1-Sep-15	Dichloroethene[1,1-]	1.1	7	1	0.3		SW-846:8260B_25
	Trichloroethene	0.37	5	1	0.3	J	SW-846:8260B_25
TA2-W-01 9-Sep-15	Tetrachloroethene	0.48	5	1	0.2	J	SW-846:8260B_25
	Trichloroethene	1.4	5	1	0.3		SW-846:8260B_25
TA2-W-01 9-Sep-15 DUP	Trichloroethene	1.3	5	1	0.3		SW-846:8260B_25
	Tetrachloroethene	0.45	5	1	0.2	J	SW-846:8260B_25
TA2-W-27 8-Sep-15	Tetrachloroethene	1.6	5	1	0.2		SW-846:8260B_25
	Trichloroethene	1.2	5	1	0.3		SW-846:8260B_25
TJA-2 17-Sep-15	Dichloroethane[1,1-]	0.46	NE	1	0.3	J	SW-846:8260B_25
	Dichloroethene[cis-1,2-]	0.52	70	1	0.3	J	SW-846:8260B_25
	Trichloroethene	3.9	5	1	0.3		SW-846:8260B_25

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).

NE = Not Established

**Table-4 NMED DOE Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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-5 NMED DOE Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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
TA1-W-01 12-Aug-15	Actinium-228	18 ± 5.5	17		EPA:901.1
	Americium-241	-7.8 ± 11	39	U	EPA:901.1
	Beryllium-7	2.5 ± 13	43	U	EPA:901.1
	Bismuth-212	12 ± 19	65	U	EPA:901.1
	Bismuth-214	-0.31 ± 6.9	23	U	EPA:901.1
	Cesium-134	-1.1 ± 1.9	6.5	U	EPA:901.1
	Cesium-137	0.72 ± 1.4	4.7	U	EPA:901.1
	Cobalt-60	0.022 ± 1.4	4.8	U	EPA:901.1
	Gross alpha	3.2 ± 0.88	2.8		EPA:900
	Gross beta	4.4 ± 0.86	3		EPA:900
	Iodine-131	3 ± 9.4	32	U	EPA:901.1
	Lead-212	2.7 ± 4.8	16	U	EPA:901.1
	Lead-214	1.2 ± 2.9	9.8	U	EPA:901.1
	Potassium-40	-75 ± 48	160	U	EPA:901.1
	Protactinium-234m	24 ± 230	780	U	EPA:901.1
	Sodium-22	1.9 ± 1.5	4.9	U	EPA:901.1
	Thallium-208	3.2 ± 1.5	4.8	U	EPA:901.1
	Thorium-234	-12 ± 33	110	U	EPA:901.1
	Tritium	20 ± 99	330	U	EPA:906.0
TA1-W-04 25-Aug-15	Actinium-228	12 ± 4.5	14	U	EPA:901.1
	Americium-241	-4.2 ± 3.6	12	U	EPA:901.1
	Beryllium-7	-9.8 ± 8.7	30	U	EPA:901.1
	Bismuth-212	-10 ± 17	57	U	EPA:901.1
	Bismuth-214	2.9 ± 5.4	18	U	EPA:901.1
	Cesium-134	-1.3 ± 1.1	3.7	U	EPA:901.1
	Cesium-137	-0.22 ± 1.1	3.7	U	EPA:901.1
	Cobalt-60	1.1 ± 1.3	4.3	U	EPA:901.1
	Gross alpha	2.6 ± 0.49	1.3		EPA:900
	Gross beta	3.1 ± 0.64	1.9		EPA:900
	Iodine-131	5.8 ± 3.2	10	U	EPA:901.1
	Lead-212	-2.1 ± 3.3	11	U	EPA:901.1
	Lead-214	8.8 ± 4.6	15	U	EPA:901.1
	Potassium-40	-88 ± 30	100	U	EPA:901.1
	Protactinium-234m	310 ± 190	630	U	EPA:901.1
	Sodium-22	1.3 ± 1.2	4.1	U	EPA:901.1
	Thallium-208	0.64 ± 2.1	7	U	EPA:901.1
	Thorium-234	9.3 ± 22	72	U	EPA:901.1
	Tritium	75 ± 73	240	U	EPA:906.0

TI - Nuclide identification is tentative.

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

**Table-5 NMED DOE Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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
TA1-W-06 1-Sep-15	Actinium-228	-1.1 ± 7	24	U	EPA:901.1
	Americium-241	8.7 ± 9	30	U	EPA:901.1
	Beryllium-7	39 ± 16	52	U	EPA:901.1
	Bismuth-212	18 ± 24	79	U	EPA:901.1
	Bismuth-214	0.099 ± 8.6	29	U	EPA:901.1
	Cesium-134	0.66 ± 2.7	8.9	U	EPA:901.1
	Cesium-137	-1.4 ± 1.7	5.8	U	EPA:901.1
	Cobalt-60	1.5 ± 2.3	7.6	U	EPA:901.1
	Gross alpha	0.84 ± 0.58	1.9	U	EPA:900
	Gross beta	1.2 ± 0.85	2.8	U	EPA:900
	Iodine-131	23 ± 8.4	27	U	EPA:901.1
	Lead-212	-3.1 ± 4.2	14	U	EPA:901.1
	Lead-214	-1.4 ± 6.9	23	U	EPA:901.1
	Potassium-40	-16 ± 49	170	U	EPA:901.1
	Protactinium-234m	270 ± 310	1000	U	EPA:901.1
	Sodium-22	-0.85 ± 2.1	7.4	U	EPA:901.1
	Thallium-208	4.6 ± 1.7	5.5	U	EPA:901.1
	Thorium-234	30 ± 47	150	U	EPA:901.1
	Tritium	92 ± 73	240	U	EPA:906.0
TA1-W-08 14-Aug-15	Actinium-228	17 ± 7.2	23	U	EPA:901.1
	Americium-241	3.3 ± 9.2	31	U	EPA:901.1
	Beryllium-7	28 ± 16	52	U	EPA:901.1
	Bismuth-212	11 ± 24	82	U	EPA:901.1
	Bismuth-214	0.14 ± 7.8	26	U	EPA:901.1
	Cesium-134	0.3 ± 2.8	9.4	U	EPA:901.1
	Cesium-137	-2.5 ± 1.6	5.7	U	EPA:901.1
	Cobalt-60	-0.17 ± 2.2	7.5	U	EPA:901.1
	Gross alpha	1.6 ± 1.5	4.9	U	EPA:900
	Gross beta	4.2 ± 1.9	6.2	U	EPA:900
	Iodine-131	-3.8 ± 8.2	28	U	EPA:901.1
	Lead-212	-3.2 ± 4.4	15	U	EPA:901.1
	Lead-214	-2.9 ± 6.8	23	U	EPA:901.1
	Potassium-40	-65 ± 59	200	U	EPA:901.1
	Protactinium-234m	210 ± 310	1100	U	EPA:901.1
	Sodium-22	-1.8 ± 2.2	7.6	U	EPA:901.1
	Thallium-208	8 ± 1.9	5.7	U	EPA:901.1
	Thorium-234	5.6 ± 46	150	U	EPA:901.1
	Tritium	20 ± 99	330	U	EPA:906.0

TI - Nuclide identification is tentative.

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

**Table-5 NMED DOE Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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
TA2-NW1-595 13-Aug-15	Actinium-228	5.4 ± 11	35	U	EPA:901.1
	Americium-241	7.9 ± 16	52	U	EPA:901.1
	Beryllium-7	13 ± 13	44	U	EPA:901.1
	Bismuth-212	38 ± 19	60	U	EPA:901.1
	Bismuth-214	-1.2 ± 6.3	21	U	EPA:901.1
	Cesium-134	-3.5 ± 1.4	4.8	U	EPA:901.1
	Cesium-137	-0.71 ± 1.4	4.7	U	EPA:901.1
	Cobalt-60	-1.6 ± 1.6	5.6	U	EPA:901.1
	Gross alpha	0.93 ± 0.49	1.6	U	EPA:900
	Gross beta	2.4 ± 0.63	1.9		EPA:900
	Iodine-131	-2.4 ± 7.9	27	U	EPA:901.1
	Lead-212	1.2 ± 3.5	12	U	EPA:901.1
	Lead-214	5.6 ± 2.6	8.5	U	EPA:901.1
	Potassium-40	-31 ± 39	130	U	EPA:901.1
	Protactinium-234m	-140 ± 360	1200	U	EPA:901.1
	Sodium-22	0.64 ± 1.5	5.2	U	EPA:901.1
	Thallium-208	-0.15 ± 2.9	9.7	U	EPA:901.1
	Thorium-234	28 ± 46	150	U	EPA:901.1
	Tritium	96 ± 100	330	U	EPA:906.0
TA2-W-01 9-Sep-15	Actinium-228	21 ± 5.8	18	TI	EPA:901.1
	Americium-241	-9.6 ± 11	36	U	EPA:901.1
	Beryllium-7	1.9 ± 11	38	U	EPA:901.1
	Bismuth-212	58 ± 19	59	U	EPA:901.1
	Bismuth-214	-4.5 ± 6.5	22	U	EPA:901.1
	Cesium-134	-3.7 ± 1.3	4.6	U	EPA:901.1
	Cesium-137	-1.8 ± 1.3	4.4	U	EPA:901.1
	Cobalt-60	0.075 ± 1.3	4.6	U	EPA:901.1
	Gross alpha	1.5 ± 0.33	0.91		EPA:900
	Gross beta	2.6 ± 0.48	1.4		EPA:900
	Iodine-131	-2.2 ± 4.4	15	U	EPA:901.1
	Lead-212	4.4 ± 3.5	12	U	EPA:901.1
	Lead-214	0.63 ± 5.4	18	U	EPA:901.1
	Potassium-40	-65 ± 37	120	U	EPA:901.1
	Protactinium-234m	370 ± 220	720	U	EPA:901.1
	Sodium-22	-0.67 ± 1.4	4.8	U	EPA:901.1
	Thallium-208	-0.89 ± 2.4	8	U	EPA:901.1
	Thorium-234	7.6 ± 39	130	U	EPA:901.1
	Tritium	190 ± 110	360	U	EPA:906.0

TI - Nuclide identification is tentative.

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

**Table-5 NMED DOE Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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
TA2-W-01 9-Sep-15 DUP	Actinium-228	6	± 9.2	31	U	EPA:901.1
	Americium-241	-0.93	± 1.3	4.5	U	EPA:901.1
	Beryllium-7	16	± 9.1	30	U	EPA:901.1
	Bismuth-212	44	± 17	53	U	EPA:901.1
	Bismuth-214	1.8	± 4.6	15	U	EPA:901.1
	Cesium-134	1.1	± 1.1	3.6	U	EPA:901.1
	Cesium-137	-1.3	± 1.1	3.8	U	EPA:901.1
	Cobalt-60	-1.4	± 1.2	4.4	U	EPA:901.1
	Gross alpha	1.7	± 0.4	1.1		EPA:900
	Gross beta	2.9	± 0.56	1.6		EPA:900
	Iodine-131	2.3	± 3.7	12	U	EPA:901.1
	Lead-212	0.29	± 2.8	9.3	U	EPA:901.1
	Lead-214	7.5	± 4	13	U	EPA:901.1
	Potassium-40	-26	± 32	110	U	EPA:901.1
	Protactinium-234m	130	± 180	610	U	EPA:901.1
	Sodium-22	0.33	± 1.2	4	U	EPA:901.1
	Thallium-208	0.46	± 2.1	6.9	U	EPA:901.1
	Thorium-234	-6.4	± 20	65	U	EPA:901.1
	Tritium	57	± 110	370	U	EPA:906.0
TA2-W-27 8-Sep-15	Actinium-228	15	± 5.1	21	U	EPA:901.1
	Americium-241	-22	± 40	140	U	EPA:901.1
	Beryllium-7	-4.6	± 9.9	34	U	EPA:901.1
	Bismuth-212	11	± 16	55	U	EPA:901.1
	Bismuth-214	4.6	± 5.2	17	U	EPA:901.1
	Cesium-134	-1.4	± 1.2	4.2	U	EPA:901.1
	Cesium-137	-0.78	± 1.1	3.8	U	EPA:901.1
	Cobalt-60	-0.87	± 1.2	4.1	U	EPA:901.1
	Gross alpha	1.1	± 0.42	1.3	U	EPA:900
	Gross beta	2.2	± 0.61	1.9		EPA:900
	Iodine-131	2.5	± 4.2	14	U	EPA:901.1
	Lead-212	3.1	± 3.9	13	U	EPA:901.1
	Lead-214	-2.5	± 4.8	16	U	EPA:901.1
	Potassium-40	-73	± 39	130	U	EPA:901.1
	Protactinium-234m	110	± 300	1000	U	EPA:901.1
	Sodium-22	0.33	± 1.2	3.9	U	EPA:901.1
	Thallium-208	2.9	± 1.2	3.8	U	EPA:901.1
	Thorium-234	-47	± 60	200	U	EPA:901.1
	Tritium	44	± 110	360	U	EPA:906.0

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**Table-5 NMED DOE Oversight Bureau FFY 2015 Q-4 Tijeras Arroyo 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
TJA-2 17-Sep-15	Actinium-228	9.4 ± 4.5	14	U	EPA:901.1
	Americium-241	-7.4 ± 11	35	U	EPA:901.1
	Beryllium-7	16 ± 11	37	U	EPA:901.1
	Bismuth-212	26 ± 18	60	U	EPA:901.1
	Bismuth-214	14 ± 6.7	22	U	EPA:901.1
	Cesium-134	-1.2 ± 1.3	4.5	U	EPA:901.1
	Cesium-137	-2.5 ± 1.3	4.5	U	EPA:901.1
	Cobalt-60	-0.69 ± 1.5	5.1	U	EPA:901.1
	Gross alpha	0.29 ± 0.32	1.1	U	EPA:900
	Gross beta	2.1 ± 0.51	1.6		EPA:900
	Iodine-131	3.6 ± 2.5	8.3	U	EPA:901.1
	Lead-212	6.1 ± 3.6	12	U	EPA:901.1
	Lead-214	13 ± 5.6	18	U	EPA:901.1
	Potassium-40	26 ± 39	130	U	EPA:901.1
	Protactinium-234m	460 ± 210	680	U	EPA:901.1
	Sodium-22	2.7 ± 1.5	4.9	U	EPA:901.1
	Thallium-208	-0.035 ± 2.4	8.1	U	EPA:901.1
	Thorium-234	15 ± 37	130	U	EPA:901.1
Tritium	-97 ± 110	380	U	EPA:906.0	
TJA-6 31-Aug-15	Actinium-228	18 ± 4.3	16		EPA:901.1
	Americium-241	-5.2 ± 11	38	U	EPA:901.1
	Beryllium-7	-5.1 ± 13	45	U	EPA:901.1
	Bismuth-212	27 ± 18	59	U	EPA:901.1
	Bismuth-214	-1.7 ± 6.4	21	U	EPA:901.1
	Cesium-134	-1.9 ± 1.3	4.6	U	EPA:901.1
	Cesium-137	-0.33 ± 1.3	4.5	U	EPA:901.1
	Cobalt-60	-0.41 ± 1.6	5.4	U	EPA:901.1
	Gross alpha	2.8 ± 0.46	1.1		EPA:900
	Gross beta	2 ± 0.51	1.5		EPA:900
	Iodine-131	0.72 ± 7.8	26	U	EPA:901.1
	Lead-212	1.6 ± 3.8	13	U	EPA:901.1
	Lead-214	-4.1 ± 5.3	18	U	EPA:901.1
	Potassium-40	-59 ± 38	130	U	EPA:901.1
	Protactinium-234m	430 ± 230	740	U	EPA:901.1
	Sodium-22	-1.2 ± 1.6	5.6	U	EPA:901.1
	Thallium-208	-0.58 ± 2.9	9.7	U	EPA:901.1
	Thorium-234	-6.1 ± 48	160	U	EPA:901.1
Tritium	34 ± 71	240	U	EPA:906.0	

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