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Date: NOV 16 2016
Refer To: ADEM-16-5310
LAUR: 16-28700
Locates Action No.: n/a

John Kieling, Bureau Chief
Hazardous Waste Bureau
New Mexico Environment Department
2905 Rodeo Park Drive East, Building 1
Santa Fe, NM 87505-6303

Subject: Monthly Notification of Groundwater Data Reviewed in November 2016

This letter is Los Alamos National Laboratory's (LANL's) written submission in accordance with Section XXVI of the June 2016 Compliance Order on Consent (Consent Order). LANL is working towards updating its data screening procedures to incorporate the screening requirements in Section IX of the 2016 Consent Order. Therefore, the screening levels used in this report are those specified in Section IV.A.3.g of the March 2005 Consent Order. Members of LANL's Associate Directorate for Environmental Management met on November 9, 2016, to review new groundwater data received in October 2016. This report was prepared by comparing the data against groundwater cleanup levels as defined in Section VIII.A.1 of the March 2005 Consent Order. For comparison with U.S. Environmental Protection Agency (EPA) tap water standards, the carcinogenic risk was adjusted to 1×10^{-5}, as specified in the Consent Order. This report was prepared using the May 2016 EPA regional screening levels.

This report also includes analytical data from samples collected in San Ildefonso Pueblo, which are subject to reporting at this time. These data have been reviewed by San Ildefonso Pueblo, as required under the Memorandum of Agreement dated May 28, 2014, between the U.S. Department of Energy, National Nuclear Security Administration Los Alamos Field Office and San Ildefonso Pueblo.

1-Day Notification

There were no instances of a contaminant detected at a concentration that exceeded the New Mexico Water Quality Control Commission standard or federal maximum contaminant level at locations where contaminants have not been previously detected above the respective standard (based on samples collected since June 14, 2007).

Notification was not required because there were no cases of a contaminant detected in a well screen interval or spring at a concentration that exceeded a water quality standard for the first time.

15-Day Notification

The required information for the contaminants and other chemical parameters that meet the six reporting criteria requiring written notification within 15 days is given in the accompanying report and table.

If you have questions, please contact Steve Paris at (505) 606-0915 (smparis@lanl.gov) or Hai Shen at (505) 665-5046 (hai.shen@em.doe.gov).

Sincerely,

Stephanie Swickley for

Bruce Robinson, Program Director
Environmental Remediation Program
Los Alamos National Laboratory

Sincerely,

David S. Rhodes, Director
Office of Quality and Regulatory Compliance
Environmental Management
Los Alamos Field Office

BR/DR/SP:sm

Enclosure: Two hard copies with electronic files – Summary of Groundwater Data Reviewed in November 2016 That Meet Notification Requirements (EP2016-0142)

Cy: (Letter and CD and/or DVD)
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SUMMARY OF GROUNDWATER DATA REVIEWED IN NOVEMBER 2016 THAT MEET NOTIFICATION REQUIREMENTS

INTRODUCTION

This report provides preliminary information to the New Mexico Environment Department (NMED) concerning recent groundwater monitoring data obtained by Los Alamos National Laboratory (the Laboratory) under its interim monitoring plan and contains results for chemical constituents that meet the six screening criteria laid out in the March 2005 Compliance Order on Consent (Consent Order). The report covers groundwater samples taken from wells or springs (listed in the accompanying table) that provide surveillance of the groundwater zones indicated in the table.

The report includes one table, *Table 1: NMED 10-16 Groundwater Report*. This table contains values which are detected for the first time since June 14, 2007, or detections of concentrations meeting other screening criteria since that time (as specified in the March 2005 Consent Order). These reported data may be similar to data gathered before June 14, 2007.

This table includes the following:

- Additional comments on results that appear to be exceptional based on consideration of monitoring data acquired before the current results (using statistics described below)
- Supplemental information summarizing monitoring results obtained before the current results
- Sampling date, name of the well or spring, location of the well or spring, depth of the screened interval, groundwater zone sampled, analytical result, detection limit, values for regulatory standards or screening levels, and analytical and secondary validation qualifiers. Additional information describing the locations and analytical data is also included. All data have been through secondary validation.

In accordance with the March 2005 Consent Order, the screening levels used include the U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs), the New Mexico groundwater standards, and the EPA regional screening levels for tap water (for compounds having no other regulatory standard). The EPA regional screening levels for tap water are either for cancer (10^{-6} excess risk) or noncancer risk values. The data were screened using 10 times the EPA's 10^{-6} excess cancer risk values to achieve 10^{-5} excess cancer risk as indicated in Section VIII.A.1 of the March 2005 Consent Order. This report was prepared using the May 2016 EPA regional screening levels.

Background levels applied in Criteria 2 and 5 are the NMED-approved 95% upper tolerance limits for background for each groundwater zone as set forth in the "Groundwater Background Investigation Report, Rev 3," prepared under Section IV.A.3.d of the March 2005 Consent Order.

DESCRIPTION OF TABLE

15-Day Notification Requirement

The table is divided into separate categories that correspond to the six screening criteria in the March 2005 Consent Order. Some data meet more than one of the criteria and appear in the table multiple times. The table also presents only the instances where the results exceed criteria; therefore, all six criteria may not appear in the table.

The criteria are as follows:

C1. Detection of a contaminant that is an organic compound in a spring or screened interval of a well if that contaminant has not previously been detected in the spring or screened interval.

C2. Detection of a contaminant that is a metal or other inorganic compound at a concentration above the background level in a spring or screened interval of a well if that contaminant has not previously exceeded the background level in the spring or screened interval.

C3. Detection of a contaminant in a spring or screened interval of a well at a concentration that exceeds either one-half the New Mexico water quality standard or one-half the federal maximum contaminant level, or if there is no such standard for the contaminant, one-half the EPA Region 6 human health medium-specific screening level for tap water (now the EPA Regional Screening Levels for tap water), if that contaminant has not previously exceeded one-half such standard or screening level in the spring or screened interval.

C4. Detection of perchlorate in a spring or screened interval of a well at a concentration of 2 µg/L or greater if perchlorate at such concentration has not previously been detected in the spring or screened interval.

C5. Detection of a contaminant that is a metal or other inorganic compound in a spring or screened interval of a well at a concentration that exceeds 2 times the background level for the third consecutive sampling of the spring or screened interval.

C6. Detection of a contaminant in a spring or screened interval of a well at a concentration that exceeds either one-half the New Mexico water quality standard or one-half the federal MCL and that has increased for the third consecutive sampling of that spring or screened interval.

The next seven columns of the table give information on monitoring results obtained before the current result. The columns provide summary statistics for the samples collected since January 1, 2000, for the same analyte and field preparation (for example, filtered samples). The information includes the date of the first sampling event included in the statistics, the numbers of sampling events and samples analyzed, the number of detections, and the minimum, maximum, and median concentration for detections. This information indicates whether the new result is consistent with the range of earlier data.

The subsequent columns contain location and sampling information:

Hdr 1—canyon where monitoring location is found

Zone—groundwater zone sampled by monitoring location (such as alluvial spring)

Location—monitoring location name

Screen Depth—depth of top of well screen in feet (0 for springs, –1 if unknown)

Start Date—sample date

Fld QC Type Code—identifies regular samples (REG) or field duplicates (FD)

Fld Prep Code—identifies whether samples are filtered or unfiltered

Lab Sample Type Code—indicates whether result is a primary sample (INIT) or reanalysis (RE)

Anyl Suite Code—analytical suite (such as volatile organic compounds) for analyzed compound

Analyte Desc—name of analyte

Analyte—chemical symbol for analyte or CAS (Chemical Abstracts Service) number for organic compounds

Std Result—analytical result in standard measurement units

Result/Median—ratio of the Std Result to the median of all detections since 2000

LVL Type/Risk Code—type of regulatory standard, screening level, or background value (indicating groundwater zone) used for comparison

Screen Level—value of the LVL Type/Risk Code

Exceedance Ratio—ratio of Std Result to LVL Type/Risk Code. In earlier versions of this report, the ratio was divided by the basis for comparison in the criterion, but that is no longer the case. For example, for a criterion (such as C3) that compares the value with one-half the standard, a value equal to a standard previously had an exceedance ratio of 2. The current report shows this ratio as 1.

Std Mdl—method detection limit in standard measurement units

Std Uom—standard units of measurement

Dilution Factor—amount by which the sample was diluted to measure the concentration

Lab Qual Code—analytical laboratory qualifiers indicating analytical quality of the sample

Validation Flag—secondary validation qualifier

Validation Reason Code—concatenated secondary validation codes explaining assignment of qualifiers

Anyl Meth Code—analytical method number

Lab Code—analytical laboratory name

Comment—comment on the analytical result

Table 1: NMED 10-16 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std Mdl	Std Uom	Dilution Factor	Lab Qual Code	Validation Flag	Validation Reason Code	Anyl Meth Code	Lab Code
C2	24	29	38593	13.9	13.9	13.9	1	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-02656	3	9/9/2016	REG	F	INIT	METALS	Tin	Sn	13.9	1	LANL Avl BG LVL	3.26	4.3	2.5	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C2	26	31	38593	3.3	3.3	3.3	1	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-02659	1.7	9/22/2016	FD	F	INIT	METALS	Tin	Sn	3.3	1	LANL Avl BG LVL	3.26	1	2.5	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC
C2	15	23	40270	0.47	3.59	0.835	8	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-611923	3.2	9/22/2016	REG	F	INIT	METALS	Copper	Cu	3.59	4.3	LANL Avl BG LVL	3	1.2	3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC
C2	10	10	39198	0.036	0.114	0.05515	4	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LADP-3	316	9/8/2016	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	0.114	2.1	LANL Int BG LVL	0.08	1.4	0.02	mg/L	1		NQ	NQ	EPA:365.4	GELC
C2	23	28	38455	37.5	94.5	46.7	28	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 S1	651.8	9/20/2016	REG	F	INIT	GENINORG	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	94.5	2	LANL Int BG LVL	52	1.8	0.33	mg/L	1		NQ	NQ	EPA:310.1	GELC
C2	23	29	38455	0.0388	0.111	0.07535	10	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 S1	651.8	9/20/2016	FD	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	0.108	1.4	LANL Int BG LVL	0.08	1.3	0.02	mg/L	1		NQ	NQ	EPA:365.4	GELC
C2	23	29	38455	0.0388	0.111	0.07535	10	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 S1	651.8	9/20/2016	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	0.0878	1.2	LANL Int BG LVL	0.08	1.1	0.02	mg/L	1		NQ	NQ	EPA:365.4	GELC
C2	27	35	38590	12.2	12.2	12.2	1	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Burning Ground Spring	0	9/9/2016	REG	F	INIT	METALS	Tin	Sn	12.2	1	LANL Int BG LVL	3.26	3.7	2.5	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C2	19	24	39111	0.0349	0.0867	0.06	11	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Burning Ground Spring	0	9/9/2016	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	0.0867	1.4	LANL Int BG LVL	0.08	1.1	0.02	mg/L	1		NQ	NQ	EPA:365.4	GELC
C2	12	12	38590	13	13	13	1	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	SWSC Spring	0	9/9/2016	REG	F	INIT	METALS	Tin	Sn	13	1	LANL Int BG LVL	3.26	4	2.5	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C2	8	9	41968	2.26	6.64	3.225	6	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Regional	R-47	1322	9/13/2016	REG	F	INIT	METALS	Chromium	Cr	6.64	2.1	LANL Reg BG LVL	5.75	1.2	3	ug/L	1	J	J	J_LAB	SW-846:6020	GELC
C2	4	5	42388	0.951	0.951	0.951	1	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Regional	R-58	1257	9/16/2016	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.951	1	LANL Reg BG LVL	0.05	19	0.017	mg/L	1		J	I4a	EPA:350.1	GELC
C2	15	17	40645	2.91	7.12	3.9	3	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Regional	R-63	1325	9/12/2016	FD	F	INIT	METALS	Chromium	Cr	7.12	1.8	LANL Reg BG LVL	5.75	1.2	3	ug/L	1	J	J	J_LAB	SW-846:6020	GELC
C2	15	17	40645	4.76	4.76	4.76	1	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Regional	R-63	1325	9/12/2016	REG	F	INIT	METALS	Copper	Cu	4.76	1	LANL Reg BG LVL	3	1.6	3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std Mdl	Std Uom	Dilution Factor	Lab Qual Code	Validation Flag	Validation Reason Code	Anyl Meth Code	Lab Code
C2	15	17	40645	4.86	4.86	4.86	1	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Regional	R-63	1325	9/12/2016	REG	F	INIT	METALS	Zinc	Zn	4.86	1	LANL Reg BG LVL	3.89	1.2	3.3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC
C5	45	50	36608	2030	5150	3100	50	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-02656	3	9/9/2016	REG	F	INIT	METALS	Barium	Ba	2550	0.8	LANL Avl BG LVL	68.57	37.2	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	15	17	39105	0.14	0.935	0.395	17	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-02656	3	9/9/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.14	0.4	LANL Avl BG LVL	0.05	2.8	0.05	ug/L	1	J	J	J_LAB	SW-846:6850	GELC
C5	48	58	36613	4580	13600	6270	58	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-02659	1.7	9/22/2016	FD	F	INIT	METALS	Barium	Ba	5650	0.9	LANL Avl BG LVL	68.57	82.4	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	48	58	36613	4580	13600	6270	58	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-02659	1.7	9/22/2016	REG	F	INIT	METALS	Barium	Ba	5640	0.9	LANL Avl BG LVL	68.57	82.3	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	8	10	40933	0.0706	0.185	0.0996	9	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-611923	3.2	9/22/2016	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.185	1.9	LANL Avl BG LVL	0.04	4.6	0.017	mg/L	1		J	I4a	EPA:350.1	GELC
C5	15	23	40270	7070	49400	12200	23	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-611923	3.2	9/22/2016	REG	F	INIT	METALS	Barium	Ba	8880	0.7	LANL Avl BG LVL	68.57	129.5	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	15	23	40270	2.2	33.4	5.45	18	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-611923	3.2	9/22/2016	REG	F	INIT	METALS	Cobalt	Co	5.16	0.9	LANL Avl BG LVL	0.5	10.3	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	15	23	40270	111	7510	679	23	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-611923	3.2	9/22/2016	REG	F	INIT	METALS	Manganese	Mn	314	0.5	LANL Avl BG LVL	2	157	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	20	22	37105	251	991	301	22	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	7/29/2016	REG	F	RE	GENINORG	Total Dissolved Solids	TDS	280	0.9	LANL Avl BG LVL	139	2	3.4	mg/L	1	H	NQ	NQ	EPA:160.1	GELC
C5	13	17	40288	15.2	30.1	19.8	17	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	16-26644	130	9/19/2016	REG	F	INIT	GENINORG	Chloride	Cl(-1)	30.1	1.5	LANL Int BG LVL	7.78	3.9	0.335	mg/L	5		NQ	NQ	EPA:300.0	GELC
C5	12	16	40288	0.401	0.762	0.466	16	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	16-26644	130	9/19/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.401	0.9	LANL Int BG LVL	0.05	8	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC
C5	17	21	40421	60.3	115	66.9	21	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	CDV-16-4ip S1	815.6	9/6/2016	REG	F	INIT	METALS	Boron	B	66.9	1	LANL Int BG LVL	15.12	4.4	15	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	16	20	40421	0.331	0.397	0.3625	20	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	CDV-16-4ip S1	815.6	9/6/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.356	1	LANL Int BG LVL	0.05	7.1	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std Mdl	Std Uom	Dilution Factor	Lab Qual Code	Validation Flag	Validation Reason Code	Anyl Meth Code	Lab Code
C5	11	11	39198	0.127	0.161	0.137	11	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LADP-3	316	9/8/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.135	1	LANL Int BG LVL	0.05	2.7	0.05	ug/L	1	J	J	J_LAB	SW-846:6850	GELC
C5	18	23	39114	0.204	0.262	0.226	23	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 S1	651.8	9/20/2016	FD	F	INIT	GENINORG	Perchlorate	ClO4	0.219	1	LANL Int BG LVL	0.05	4.4	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC
C5	18	23	39114	0.204	0.262	0.226	23	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 S1	651.8	9/20/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.232	1	LANL Int BG LVL	0.05	4.6	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC
C5	23	28	38455	2.31	19.6	12.8	18	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 S1	651.8	9/20/2016	FD	F	INIT	METALS	Zinc	Zn	9.66	0.8	LANL Int BG LVL	2	4.8	3.3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC
C5	23	28	38455	2.31	19.6	12.8	18	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 S1	651.8	9/20/2016	REG	F	INIT	METALS	Zinc	Zn	15.1	1.2	LANL Int BG LVL	2	7.5	3.3	ug/L	1		J	I10b	SW-846:6010C	GELC
C5	11	14	40168	0.222	0.272	0.247	14	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-47i	840	9/12/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.254	1	LANL Int BG LVL	0.05	5.1	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC
C5	14	15	36783	0.122	0.181	0.15	9	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	9/7/2016	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.122	0.8	LANL Int BG LVL	0.03	4.1	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC
C5	14	15	36783	24	42.2	38.15	14	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	9/7/2016	REG	F	INIT	GENINORG	Chloride	Cl(-1)	37.3	1	LANL Int BG LVL	7.78	4.8	0.67	mg/L	10		NQ	NQ	EPA:300.0	GELC
C5	12	12	36783	9.49	1000	247.5	12	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	9/7/2016	REG	F	INIT	METALS	Manganese	Mn	253	1	LANL Int BG LVL	2	126.5	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	12	12	36783	7.45	21	12.3	12	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	9/7/2016	REG	F	INIT	METALS	Molybdenum	Mo	7.45	0.6	LANL Int BG LVL	2	3.7	0.3	ug/L	1		NQ	NQ	SW-846:6020	GELC
C5	12	12	36783	37.2	179	113.5	12	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	9/7/2016	REG	F	INIT	METALS	Nickel	Ni	179	1.6	LANL Int BG LVL	1	179	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC
C5	23	25	38239	12.1	27.5	17.5	25	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate Spring	Bulldog Spring	0	9/15/2016	REG	F	INIT	GENINORG	Chloride	Cl(-1)	23	1.3	LANL Int BG LVL	7.78	3	0.335	mg/L	5		NQ	NQ	EPA:300.0	GELC
C5	21	23	38525	0.537	0.947	0.721	23	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate Spring	Bulldog Spring	0	9/15/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.632	0.9	LANL Int BG LVL	0.05	12.6	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC
C5	67	82	36535	145	266	181	76	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Burning Ground Spring	0	9/9/2016	REG	F	INIT	METALS	Barium	Ba	179	1	LANL Int BG LVL	71.83	2.5	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	18	23	39111	0.518	0.717	0.592	23	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Burning Ground Spring	0	9/9/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.548	0.9	LANL Int BG LVL	0.05	11	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC
C5	59	66	36535	570	2840	1410	66	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0	9/15/2016	REG	F	INIT	METALS	Boron	B	1070	0.8	LANL Int BG LVL	15.12	70.8	15	ug/L	1		NQ	NQ	SW-846:6010C	GELC

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std Mdl	Std Uom	Dilution Factor	Lab Qual Code	Validation Flag	Validation Reason Code	Anyl Meth Code	Lab Code
C5	19	24	39112	0.0773	0.234	0.114	19	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0	9/15/2016	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.0913	0.8	LANL Int BG LVL	0.03	3	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC
C5	19	24	39112	18	44.2	22.15	24	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0	9/15/2016	REG	F	INIT	GENINORG	Chloride	Cl(-1)	22.1	1	LANL Int BG LVL	7.78	2.8	0.335	mg/L	5		NQ	NQ	EPA:300.0	GELC
C5	17	21	39112	0.459	0.707	0.558	21	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0	9/15/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.463	0.8	LANL Int BG LVL	0.05	9.3	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC
C5	63	70	36535	17	50.2	33.95	70	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0	9/15/2016	REG	F	INIT	GENINORG	Sodium	Na	30.8	0.9	LANL Int BG LVL	12.19	2.5	0.1	mg/L	1		NQ	NQ	SW-846:6010C	GELC
C5	31	31	36535	209	371	268	31	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	SWSC Spring	0	9/9/2016	REG	F	INIT	METALS	Barium	Ba	250	0.9	LANL Int BG LVL	71.83	3.5	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	9	9	39212	13.4	24	18.1	9	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	SWSC Spring	0	9/9/2016	REG	F	INIT	GENINORG	Chloride	Cl(-1)	18	1	LANL Int BG LVL	7.78	2.3	0.335	mg/L	5		NQ	NQ	EPA:300.0	GELC
C5	32	32	36535	4.79	85	10.1	20	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	SWSC Spring	0	9/9/2016	REG	F	INIT	METALS	Manganese	Mn	16.3	1.6	LANL Int BG LVL	2	8.2	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC
C5	9	9	39212	0.511	0.721	0.574	9	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	SWSC Spring	0	9/9/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.539	0.9	LANL Int BG LVL	0.05	10.8	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC
C5	8	9	41968	8.7	30.1	20.3	9	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Regional	R-47	1322	9/13/2016	REG	F	INIT	METALS	Zinc	Zn	8.7	0.4	LANL Reg BG LVL	3.89	2.2	3.3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC
C5	12	12	38037	119	198	166.5	12	Upper Los Alamos Canyon (includes DP Canyon)	Regional	R-8 S2	821	9/1/2016	REG	F	INIT	METALS	Barium	Ba	161	1	LANL Reg BG LVL	56.83	2.8	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC