Los Alamos
NATIONAL LABORATORY
EST. 1943

Associate Director for ESH
Environment, Safety, and Health
P.O. Box 1663, MS K491
Los Alamos, New Mexico 87545
505-667-4218/Fax 505-665-3811

Environmental Management
Los Alamos Field Office, MS A316
3747 West Jemez Road
Los Alamos, New Mexico 87544
(505) 665-5658/FAX (505) 606-2132

Date: NOV 17 2015
Refer To: ADESH-15-167
LAUR: 15-28776
Locates Action No.: N/A

RECEIVED
NOV 17 2015
NMED
Hazardous Waste Bureau

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 2015

Dear Mr. Kieling:

This letter is Los Alamos National Laboratory's (LANL's) written submission that meets notification requirements presented in Section IV.A.3.g, Notification, of the Compliance Order on Consent (Consent Order). Members of LANL's Environmental Programs met on November 9, 2015, to review new groundwater data received in October 2015. This report was prepared by comparing the data against groundwater cleanup levels, as defined in Section VIII.A.1 of the Consent Order. For comparison with U.S. Environmental Protection Agency tap water standards, the carcinogenic risk was adjusted to 1×10^{-5}, as specified in the Consent Order.

1-Day Notification

There were no instances of a contaminant detected at a concentration that exceeded the New Mexico Water Quality Control Commission or federal water quality standards for the first time (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,

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

Sincerely,

David S. Rhodes, Supervisor
Environmental Management
Los Alamos Field Office

BR/CG/SP:sm

Enclosure: Two hard copies with electronic files – Summary of Groundwater Data Reviewed in November 2015 That Meet Notification Requirements (EP2015-0196)

Cy: (w/enc.)
Steve Paris, ADEP ER Program, MS M992
emla.docs@em.doe.gov
Public Reading Room (EPRR)
ADESH Records

Cy: (Letter and CD and/or DVD)
Laurie King, EPA Region 6, Dallas, TX
Michelle Hunter, NMED-GWQB
Steve Yanicak, NMED-DOE-OB, MS M894
Raymond Martinez, San Ildefonso Pueblo, NM
Dino Chavarria, Santa Clara Pueblo, NM
Jake Meadows, ADESH-ENV-CP, MS K490
PRS Database

Cy: (w/o enc./date-stamped letter emailed)
Pete Padilla, Los Alamos County Utility Department, Los Alamos, NM
lasomailbox@nnsa.doe.gov
Kimberly Davis Lebak, DOE-NA-LA
Peter Maggiore, DOE-NA-LA
Hai Shen, DOE-EM-LA
David Rhodes, DOE-EM-LA
Mei Ding, EES-14
Tim Goering, ADEP ER Program
Stanislaw Marczak, ADEP ER Program
Robert Cygnarowicz, ADEP ER Program
Bruce Robinson, ADEP ER Program
Randy Erickson, ADEP
Jocelyn Buckley, ADESH-ENV-CP
Mike Saladen, ADESH-ENV-CP
Alison Dorries, ADESH-ENV-DO
Michael Brandt, ADESH
Amy De Palma, PADOPS
Craig Leasure, PADOPS

SUMMARY OF GROUNDWATER DATA REVIEWED IN NOVEMBER 2015 THAT MEET NOTIFICATION REQUIREMENTS

INTRODUCTION

This report provides preliminary information to the New Mexico Environment Department (NMED) concerning recent groundwater monitoring data obtained by the 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 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 10-15 Groundwater Report*. This table contains some values that are reported when they are detected for the first time since June 14, 2007, or are greater than other data collected since that time (as specified in the 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 or based on consideration of monitoring data acquired before the current result (using statistics described below)
- Supplemental information summarizing monitoring results obtained before the current result
- 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 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 Consent Order.

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

DESCRIPTION OF TABLE

The table is divided into separate categories that correspond to the six screening criteria in the 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 prior to 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 to 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 10-15 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	Comment
C2	7	7	08/29/08	3.41	3.41	3.41	1	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	09/21/15	REG	F	INIT	METALS	Tin	Sn	3.41	1	LANL Int BG LVL	3.26	1	2.5	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C2	10	10	11/14/01	14.1	14.1	14.1	1	Pueblo Canyon (includes Acid Canyon)	Regional	R-5 S3	676.9	09/11/15	REG	F	INIT	METALS	Copper	Cu	14.1	1	LANL Reg BG LVL	3	4.7	3	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C2	11	11	11/14/01	48	53.7	50.85	2	Pueblo Canyon (includes Acid Canyon)	Regional	R-5 S3	676.9	09/11/15	REG	F	INIT	METALS	Iron	Fe	48	0.9	LANL Reg BG LVL	21	2.3	30	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C2	7	7	07/26/06	2.6	3.99	3.295	2	Pueblo Canyon (includes Acid Canyon)	Regional	R-5 S3	676.9	09/11/15	REG	F	INIT	METALS	Tin	Sn	3.99	1.2	LANL Reg BG LVL	3.26	1.2	2.5	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	13	13	08/04/06	0.167	0.31	0.207	13	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LAOI(a)-1.1	295.2	09/15/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.31	1.5	LANL Int BG LVL	0.05	6.2	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	13	13	01/20/00	4.7	45.6	9.175	8	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LAOI(a)-1.1	295.2	09/15/15	REG	F	INIT	METALS	Zinc	Zn	4.89	0.5	LANL Int BG LVL	2	2.4	3.3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	18	24	08/24/05	15.7	18	16.75	24	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-6i	602	09/10/15	FD	F	INIT	GENINORG	Chloride	Cl(-1)	16.4	1	LANL Int BG LVL	7.78	2.1	0.268	mg/L	4		NQ	NQ	EPA:300.0	GELC	
C5	18	24	08/24/05	15.7	18	16.75	24	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-6i	602	09/10/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	16.5	1	LANL Int BG LVL	7.78	2.1	0.268	mg/L	4		NQ	NQ	EPA:300.0	GELC	
C5	15	19	08/24/05	1.7	6.08	2.8	15	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-6i	602	09/10/15	FD	F	INIT	METALS	Chromium	Cr	2.21	0.8	LANL Int BG LVL	1	2.2	2	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C5	15	19	08/24/05	1.7	6.08	2.8	15	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-6i	602	09/10/15	REG	F	INIT	METALS	Chromium	Cr	2.11	0.8	LANL Int BG LVL	1	2.1	2	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C5	18	24	08/24/05	0.575	0.899	0.6755	24	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-6i	602	09/10/15	FD	F	INIT	GENINORG	Fluoride	F(-1)	0.745	1.1	LANL Int BG LVL	0.23	3.2	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	18	24	08/24/05	0.575	0.899	0.6755	24	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-6i	602	09/10/15	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.754	1.1	LANL Int BG LVL	0.23	3.3	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	14	20	07/26/06	5.72	8.32	6.55	20	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-6i	602	09/10/15	FD	F	INIT	GENINORG	Perchlorate	ClO4	5.76	0.9	LANL Int BG LVL	0.05	115.2	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	
C5	14	20	07/26/06	5.72	8.32	6.55	20	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-6i	602	09/10/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	5.72	0.9	LANL Int BG LVL	0.05	114.4	0.5	ug/L	10		J+	PE12f	SW-846:6850	GELC	
C5	10	13	05/21/09	0.894	1.9	1.6	13	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	TA-53i	600	09/08/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	1.81	1.1	LANL Int BG LVL	0.03	60.3	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	9	12	05/21/09	32.5	40	35.1	12	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	TA-53i	600	09/08/15	REG	F	INIT	GENINORG	Calcium	Ca	40	1.1	LANL Int BG LVL	17.31	2.3	0.05	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	10	13	05/21/09	25.3	38.1	29.2	13	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	TA-53i	600	09/08/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	38.1	1.3	LANL Int BG LVL	7.78	4.9	0.335	mg/L	5		NQ	NQ	EPA:300.0	GELC	
C5	9	12	05/21/09	76.9	175	95.55	12	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	TA-53i	600	09/08/15	REG	F	INIT	METALS	Molybdenum	Mo	160	1.7	LANL Int BG LVL	2	80	0.33	ug/L	2		NQ	NQ	SW-846:6020	GELC	
C5	9	12	05/21/09	8.45	21.9	12.05	12	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	TA-53i	600	09/08/15	REG	F	INIT	METALS	Nickel	Ni	15.7	1.3	LANL Int BG LVL	1	15.7	0.5	ug/L	1		NQ	NQ	SW-846:6020	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	Comment
C5	10	13	05/21/09	0.579	0.68	0.632	13	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	TA-53i	600	09/08/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.604	1	LANL Int BG LVL	0.05	12.1	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	9	12	05/21/09	3.44	14.8	8.75	11	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	TA-53i	600	09/08/15	REG	F	INIT	METALS	Zinc	Zn	4.93	0.6	LANL Int BG LVL	2	2.5	3.3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	17	17	11/15/05	0.069	0.695	0.117	8	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LAOI-3.2	153.3	09/18/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.695	5.9	LANL Int BG LVL	0.03	23.2	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	17	17	11/15/05	5.15	31.8	18.2	17	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LAOI-3.2	153.3	09/18/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	31.8	1.7	LANL Int BG LVL	7.78	4.1	0.335	mg/L	5		NQ	NQ	EPA:300.0	GELC	
C5	15	15	07/25/06	3.01	7.63	5.32	15	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LAOI-3.2	153.3	09/18/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	4.75	0.9	LANL Int BG LVL	0.05	95	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	
C5	16	16	07/26/06	0.162	0.664	0.312	16	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LAOI-3.2a	181.4	09/17/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.664	2.1	LANL Int BG LVL	0.03	22.1	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	16	16	07/26/06	19.1	23.4	20.65	16	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LAOI-3.2a	181.4	09/17/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	23.4	1.1	LANL Int BG LVL	7.78	3	0.335	mg/L	5		NQ	NQ	EPA:300.0	GELC	
C5	16	16	07/26/06	2.27	4.65	2.985	16	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LAOI-3.2a	181.4	09/17/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	2.27	0.8	LANL Int BG LVL	0.05	45.4	0.25	ug/L	5		NQ	NQ	SW-846:6850	GELC	
C5	15	15	07/26/06	1.1	2.1	1.5	15	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	LAOI-3.2a	181.4	09/17/15	REG	F	INIT	GENINORG	Uranium	U	1.57	1	LANL Int BG LVL	0.72	2.2	0.067	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	13	14	09/14/00	0.125	0.181	0.151	8	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	09/21/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.134	0.9	LANL Int BG LVL	0.03	4.5	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	13	14	09/14/00	24	42.2	39	13	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	09/21/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	39.1	1	LANL Int BG LVL	7.78	5	0.67	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C5	11	11	09/14/00	9.49	1000	244	11	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	09/21/15	REG	F	INIT	METALS	Manganese	Mn	9.49	0	LANL Int BG LVL	2	4.7	2	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	11	11	09/14/00	8.09	21	13.6	11	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	09/21/15	REG	F	INIT	METALS	Molybdenum	Mo	8.09	0.6	LANL Int BG LVL	2	4	0.165	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	11	11	09/14/00	37.2	141	110	11	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	09/21/15	REG	F	INIT	METALS	Nickel	Ni	141	1.3	LANL Int BG LVL	1	141	2.5	ug/L	5		NQ	NQ	SW-846:6020	GELC	
C5	11	11	09/14/00	3.32	15.2	6.9	7	Upper Los Alamos Canyon (includes DP Canyon)	Intermediate	R-9i S1	189.1	09/21/15	REG	F	INIT	METALS	Zinc	Zn	15.2	2.2	LANL Int BG LVL	2	7.6	3.3	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	14	14	11/14/01	7.16	8.98	7.92	14	Pueblo Canyon (includes Acid Canyon)	Regional	R-5 S3	676.9	09/11/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	8.71	1.1	LANL Reg BG LVL	3.57	2.4	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	15	15	11/14/01	1.79	2.54	2.09	15	Pueblo Canyon (includes Acid Canyon)	Regional	R-5 S3	676.9	09/11/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.54	1.2	LANL Reg BG LVL	0.89	2.9	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C5	10	10	07/26/06	1.19	1.36	1.22	10	Pueblo Canyon (includes Acid Canyon)	Regional	R-5 S3	676.9	09/11/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	1.24	1	LANL Reg BG LVL	0.46	2.7	0.1	ug/L	2		NQ	NQ	SW-846:6850	GELC	
C5	14	14	11/14/01	15.3	18.2	16.4	14	Pueblo Canyon (includes Acid Canyon)	Regional	R-5 S3	676.9	09/11/15	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	18.1	1.1	LANL Reg BG LVL	7.2	2.5	0.133	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	11	11	02/20/04	119	198	169	11	Upper Los Alamos Canyon (includes DP Canyon)	Regional	R-8 S2	821	09/25/15	REG	F	INIT	METALS	Barium	Ba	194	1.1	LANL Reg BG LVL	56.83	3.4	1	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	Comment
C5	15	20	02/28/00	99	209	182.5	20	Upper Los Alamos Canyon (includes DP Canyon)	Regional	R-9	683	09/16/15	REG	F	INIT	METALS	Barium	Ba	176	1	LANL Reg BG LVL	56.83	3.1	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	12	17	07/31/06	0.884	1.34	0.976	17	Upper Los Alamos Canyon (includes DP Canyon)	Regional	R-9	683	09/16/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	1.05	1.1	LANL Reg BG LVL	0.46	2.3	0.1	ug/L	2		NQ	NQ	SW-846:6850	GELC	
C5	13	15	05/10/10	6.91	214	16.9	15	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-29	1170	09/21/15	FD	F	INIT	METALS	Manganese	Mn	8.17	0.5	LANL Reg BG LVL	2.94	2.8	2	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	13	15	05/10/10	6.91	214	16.9	15	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-29	1170	09/21/15	REG	F	INIT	METALS	Manganese	Mn	8.11	0.5	LANL Reg BG LVL	2.94	2.8	2	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	10	10	02/23/04	187	204	197	10	Pueblo Canyon (includes Acid Canyon)	Intermediate	R-5 S2	372.8	09/10/15	REG	F	INIT	METALS	Barium	Ba	203	1	LANL Int BG LVL	71.83	2.8	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	13	13	02/23/04	0.088	0.152	0.1215	10	Pueblo Canyon (includes Acid Canyon)	Intermediate	R-5 S2	372.8	09/10/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.115	0.9	LANL Int BG LVL	0.03	3.8	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	10	10	02/23/04	3.7	8.22	4.5	9	Pueblo Canyon (includes Acid Canyon)	Intermediate	R-5 S2	372.8	09/10/15	REG	F	INIT	METALS	Chromium	Cr	4.51	1	LANL Int BG LVL	1	4.5	2	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C5	13	13	02/23/04	1.01	1.13	1.06	13	Pueblo Canyon (includes Acid Canyon)	Intermediate	R-5 S2	372.8	09/10/15	REG	F	INIT	GENINORG	Fluoride	F(-1)	1.08	1	LANL Int BG LVL	0.23	4.7	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	10	10	07/25/06	1.24	1.65	1.355	10	Pueblo Canyon (includes Acid Canyon)	Intermediate	R-5 S2	372.8	09/10/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	1.26	0.9	LANL Int BG LVL	0.05	25.2	0.1	ug/L	2		NQ	NQ	SW-846:6850	GELC	
C5	10	10	02/23/04	2.6	2.9	2.805	10	Pueblo Canyon (includes Acid Canyon)	Intermediate	R-5 S2	372.8	09/10/15	REG	F	INIT	GENINORG	Uranium	U	2.9	1	LANL Int BG LVL	0.72	4	0.067	ug/L	1		NQ	NQ	SW-846:6020	GELC	