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FEB 25 2016
NMED
Hazardous Waste Bureau

Environmental Management
Los Alamos Field Office, MS A316
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(505) 665-5658/FAX (505) 606-2132

Date: FEB 25 2016
Refer To: ADESH-16-023
LAUR: 16-20953
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

RECEIVED
FEB 26 2016
NMED
Hazardous Waste Bureau

Subject: Monthly Notification of Groundwater Data Reviewed in February 2016

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 Associate Directorate for Environmental Management met on February 11, 2016, to review new groundwater data received in January 2016. 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 (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 November 2015 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. This review is required under the Memorandum of Agreement dated May 28, 2014, among the U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Field Office, and San Ildefonso Pueblo.

37462

1-Day Notification

There were three 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). These three instances are as follows:

- In a filtered sample collected December 3, 2015, from intermediate well R-26 PZ-2, cobalt was measured at 95 µg/L, above the 50 µg/L New Mexico groundwater standard; iron was measured at 3150 µg/L, above the 1000 µg/L New Mexico groundwater standard; and manganese was measured at 1380 µg/L, above the 200 µg/L New Mexico groundwater standard. The source(s) of these analytes will be investigated further.

One-day notification of these results by telephone occurred on February 12, 2016.

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/DR/SP:sm

Enclosure: Two hard copies with electronic files – Summary of Groundwater Data Reviewed in February 2016 That Meet Notification Requirements (EP2016-0023)

Cy: (w/enc.)
Steve Paris, ADEM 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
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Cy: (w/o enc./date-stamped letter emailed)
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John McCann, ADESH-EPC-DO
Michael Brandt, ADESH
Amy De Palma, PADOPS
Craig Leasure, PADOPS

SUMMARY OF GROUNDWATER DATA REVIEWED IN FEBRUARY 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 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 01-16 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. This report was prepared using the November 2015 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, Revision 3," prepared under Section IV.A.3.d of the Consent Order.

DESCRIPTION OF TABLE

1-Day Notification Requirement

The "CA" value is used in the "Criteria Code" column of the report. The CA represents the data that show detection of a contaminant in a well screen interval or spring at a concentration that exceeds either the New Mexico Water Quality Control Commission water quality standard or the federal MCL if that contaminant has not previously exceeded such water quality standard or MCL in the well screen interval

or spring. The Laboratory notifies NMED orally within one business day after review of such analytical data and also includes the data in the 15-day notification table.

15-Day Notification Requirement

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 01-16 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	Comment
C1	19	27	06/07/05	0.05	0.05	0.05	1	Mortandad Canyon (includes Ten Site Canyon and Cañada del Buey)	Regional	R-34	883.7	09/03/15	REG	UF	INIT	SVOC	Benzo(g,h,i)perylene	191-24-2	0.05	1				0.03	ug/L	1	J	J	J_LAB	SW-846:8270DGCMS_SIM	GELC	
C2	8	8	11/14/00	4.23	8.6	6.415	2	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06293	2	12/11/15	REG	F	INIT	METALS	Copper	Cu	4.23	0.7	LANL Avl BG LVL	3	1.4	3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C2	8	8	04/15/09	1200	1200	1200	1	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Aluminum	Al	1200	1	LANL Int BG LVL	1066	1.1	68	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C2	8	8	04/15/09	2.49	76.5	30.25	8	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Barium	Ba	76.5	2.5	LANL Int BG LVL	71.83	1.1	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C2	8	8	04/15/09	4.18	8.11	6.145	2	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Copper	Cu	8.11	1.3	LANL Int BG LVL	5.32	1.5	3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C2	8	8	04/15/09	34.2	3150	54.8	3	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Iron	Fe	3150	57.5	LANL Int BG LVL	840	3.8	30	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C2	8	8	04/15/09	0.968	0.968	0.968	1	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Lead	Pb	0.968	1	LANL Int BG LVL	0.5	1.9	0.5	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C2	8	8	04/15/09	9.37	12.9	10.02	8	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	GENINORG	Sodium	Na	12.9	1.3	LANL Int BG LVL	12.19	1.1	0.1	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C2	13	14	10/23/01	31.3	163	33	3	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	10/14/15	FD	F	INIT	METALS	Iron	Fe	163	4.9	LANL Reg BG LVL	21	7.8	30	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C3	8	8	04/15/09	2.15	95	5.02	8	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Cobalt	Co	95	18.9	NM GW STD	50	1.9	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	The sample Turbidity was greater than 1350 NTU, abnormally high value. The source of this analyte will be investigated further
C3	8	8	04/15/09	34.2	3150	54.8	3	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Iron	Fe	3150	57.5	NM GW STD	1000	3.1	30	ug/L	1		NQ	NQ	SW-846:6010C	GELC	The sample Turbidity was greater than 1350 NTU, abnormally high value. The source of this analyte will be investigated further

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
C3	8	8	04/15/09	12	1380	31.2	7	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Manganese	Mn	1380	44.2	NM GW STD	200	6.9	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	The sample Turbidity was greater than 1350 NTU, abnormally high value. The source of this analyte will be investigated further
C3	13	20	10/23/01	36.3	778	110.5	18	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/14/15	REG	F	INIT	METALS	Iron	Fe	778	7	NM GW STD	1000	0.8	30	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	12	19	04/02/10	9090	49400	15400	19	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-611923	3.2	12/11/15	REG	F	INIT	METALS	Barium	Ba	9090	0.6	LANL Avl BG LVL	68.57	132.6	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	12	19	04/02/10	111	7510	734	19	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-611923	3.2	12/11/15	REG	F	INIT	METALS	Manganese	Mn	313	0.4	LANL Avl BG LVL	2	156.5	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	12	19	04/02/10	2.34	4.88	3.55	7	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-611923	3.2	12/11/15	REG	F	INIT	METALS	Vanadium	V	2.34	0.7	LANL Avl BG LVL	1	2.3	1	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	45	54	03/28/00	4580	13600	6405	54	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-02659	1.7	12/16/15	REG	F	INIT	METALS	Barium	Ba	4660	0.7	LANL Avl BG LVL	68.57	68	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	8	8	11/14/00	102	283	166.5	6	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06293	2	12/11/15	REG	F	INIT	METALS	Barium	Ba	148	0.9	LANL Avl BG LVL	68.57	2.2	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	7	7	11/14/00	623	2250	1310	7	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06293	2	12/11/15	REG	F	INIT	METALS	Boron	B	1310	1	LANL Avl BG LVL	51.89	25.2	15	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	8	8	11/14/00	19.2	182	36.4	7	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06293	2	12/11/15	REG	F	INIT	METALS	Manganese	Mn	35.2	1	LANL Avl BG LVL	2	17.6	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	8	8	11/14/00	2.24	2.9	2.43	5	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06293	2	12/11/15	REG	F	INIT	METALS	Nickel	Ni	2.24	0.9	LANL Avl BG LVL	1	2.2	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	8	8	11/14/00	23.9	55	44.2	8	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06293	2	12/11/15	REG	F	INIT	GENINORG	Sodium	Na	42.9	1	LANL Avl BG LVL	15.54	2.8	0.1	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	8	8	11/14/00	35.4	413	220	7	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06293	2	12/11/15	REG	F	INIT	METALS	Zinc	Zn	157	0.7	LANL Avl BG LVL	2	78.5	3.3	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	22	22	11/14/00	123	283	197	20	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06294	2.5	12/10/15	REG	F	INIT	METALS	Barium	Ba	192	1	LANL Avl BG LVL	68.57	2.8	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	18	18	11/14/00	149	502	303	18	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06294	2.5	12/10/15	REG	F	INIT	METALS	Boron	B	273	0.9	LANL Avl BG LVL	51.89	5.3	15	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	22	22	11/14/00	11.2	1300	221.5	22	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06294	2.5	12/10/15	REG	F	INIT	METALS	Manganese	Mn	118	0.5	LANL Avl BG LVL	2	59	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	22	22	11/14/00	2.17	7.5	3.61	17	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06294	2.5	12/10/15	REG	F	INIT	METALS	Nickel	Ni	2.44	0.7	LANL Avl BG LVL	1	2.4	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	22	22	11/14/00	1.6	14.8	4.29	16	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06294	2.5	12/10/15	REG	F	INIT	METALS	Vanadium	V	3.86	0.9	LANL Avl BG LVL	1	3.9	1	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	22	22	11/14/00	5.04	36.8	15.65	18	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	MSC-16-06294	2.5	12/10/15	REG	F	INIT	METALS	Zinc	Zn	6.73	0.4	LANL Avl BG LVL	2	3.4	3.3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	64	79	01/10/00	146	266	189	73	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Burning Ground Spring	0	12/12/15	REG	F	INIT	METALS	Barium	Ba	178	0.9	LANL Int BG LVL	71.83	2.5	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	15	20	01/29/07	0.518	0.717	0.604	20	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Burning Ground Spring	0	12/12/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.716	1.2	LANL Int BG LVL	0.05	14.3	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	8	8	04/15/09	2.15	95	5.02	8	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Cobalt	Co	95	18.9	LANL Int BG LVL	0.5	190	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	The sample Turbidity was greater than 1350 NTU, abnormally high value. The source of this analyte will be investigated further
C5	8	8	04/15/09	12	1380	31.2	7	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Manganese	Mn	1380	44.2	LANL Int BG LVL	2	690	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	The sample Turbidity was greater than 1350 NTU, abnormally high value. The source of this analyte will be investigated further
C5	8	8	04/15/09	2.17	7.35	4.65	8	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Nickel	Ni	7.35	1.6	LANL Int BG LVL	1	7.3	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	8	8	04/15/09	4.08	31.5	7.775	6	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Zinc	Zn	8.86	1.1	LANL Int BG LVL	2	4.4	3.3	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	Comment
C5	14	18	08/31/10	62.4	115	67	18	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	CDV-16-4ip S1	815.6	12/07/15	FD	F	INIT	METALS	Boron	B	63.6	0.9	LANL Int BG LVL	15.12	4.2	15	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	14	18	08/31/10	62.4	115	67	18	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	CDV-16-4ip S1	815.6	12/07/15	REG	F	INIT	METALS	Boron	B	63.2	0.9	LANL Int BG LVL	15.12	4.2	15	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	13	17	08/31/10	0.337	0.397	0.363	17	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	CDV-16-4ip S1	815.6	12/07/15	FD	F	INIT	GENINORG	Perchlorate	ClO4	0.385	1.1	LANL Int BG LVL	0.05	7.7	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	13	17	08/31/10	0.337	0.397	0.363	17	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	CDV-16-4ip S1	815.6	12/07/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.397	1.1	LANL Int BG LVL	0.05	7.9	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	14	22	02/05/07	0.242	0.333	0.293	22	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	CdV-16-2(i)r	850	12/07/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.333	1.1	LANL Int BG LVL	0.05	6.7	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	20	28	12/15/05	5.6	29.8	13.8	25	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	CdV-16-2(i)r	850	12/07/15	REG	F	INIT	METALS	Zinc	Zn	29.8	2.2	LANL Int BG LVL	2	14.9	3.3	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	11	17	07/13/05	0.0328	0.589	0.106	7	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/14/15	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.104	1	LANL Reg BG LVL	0.05	2.1	0.017	mg/L	1		NQ	NQ	EPA:350.1	GELC	
C5	13	20	10/23/01	36.3	778	110.5	18	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/14/15	REG	F	INIT	METALS	Iron	Fe	778	7	LANL Reg BG LVL	21	37	30	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	13	20	10/23/01	32.8	994	196	18	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/14/15	REG	F	INIT	METALS	Manganese	Mn	298	1.5	LANL Reg BG LVL	2.94	101.4	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	10	16	09/14/06	0.772	4.37	2.15	12	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/14/15	REG	UF	INIT	GENINORG	Total Organic Carbon	TOC	0.885	0.4	LANL Reg BG LVL	0.33	2.7	0.33	mg/L	1	J	J-	I9	SW-846:9060	GELC	
C5	13	14	10/23/01	103	118	115	14	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	10/14/15	FD	F	INIT	METALS	Barium	Ba	118	1	LANL Reg BG LVL	56.83	2.1	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	13	14	10/23/01	103	118	115	14	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	10/14/15	REG	F	INIT	METALS	Barium	Ba	115	1	LANL Reg BG LVL	56.83	2	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	16	17	10/19/00	6.44	8.43	7.01	17	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	10/14/15	FD	F	INIT	GENINORG	Chloride	Cl(-1)	8.39	1.2	LANL Reg BG LVL	3.57	2.4	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	16	17	10/19/00	6.44	8.43	7.01	17	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	10/14/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	8.43	1.2	LANL Reg BG LVL	3.57	2.4	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	12	13	08/24/04	8.47	12.7	11.4	13	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	10/14/15	FD	F	INIT	GENINORG	Uranium	U	8.62	0.8	LANL Reg BG LVL	1.9	4.5	0.067	ug/L	1	E	NQ	NQ	SW-846:6020	GELC	
C5	12	13	08/24/04	8.47	12.7	11.4	13	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	10/14/15	REG	F	INIT	GENINORG	Uranium	U	8.47	0.7	LANL Reg BG LVL	1.9	4.5	0.067	ug/L	1	E	NQ	NQ	SW-846:6020	GELC	
C5	42	47	03/23/00	2030	5150	3180	47	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-02656	3	12/12/15	REG	F	INIT	METALS	Barium	Ba	2620	0.8	LANL Avl BG LVL	68.57	38.2	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	12	14	01/23/07	0.158	0.935	0.401	14	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16-02656	3	12/12/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.647	1.6	LANL Avl BG LVL	0.05	12.9	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C6	13	20	10/23/01	36.3	778	110.5	18	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/14/15	REG	F	INIT	METALS	Iron	Fe	778	7	NM GW STD	1000	0.8	30	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
CA	8	8	04/15/09	2.15	95	5.02	8	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Cobalt	Co	95	18.9	NM GW STD	50	1.9	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	The sample Turbidity was greater than 1350 NTU, abnormally high value. The source of this analyte will be investigated further
CA	8	8	04/15/09	34.2	3150	54.8	3	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Iron	Fe	3150	57.5	NM GW STD	1000	3.1	30	ug/L	1		NQ	NQ	SW-846:6010C	GELC	The sample Turbidity was greater than 1350 NTU, abnormally high value. The source of this analyte will be investigated further
CA	8	8	04/15/09	12	1380	31.2	7	Water Canyon (includes Cañon de Valle, Potrillo, and Fence Canyons)	Intermediate	R-26 PZ-2	150	12/03/15	REG	F	INIT	METALS	Manganese	Mn	1380	44.2	NM GW STD	200	6.9	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	The sample Turbidity was greater than 1350 NTU, abnormally high value. The source of this analyte will be investigated further