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Date: DEC 13 2016
Refer To: ADEM-16-5358
LAUR: 16-29286
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 December 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 December 8, 2016, to review new groundwater data received in November 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.

1-Day Notification

There was one instance 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).

In an unfiltered sample collected October 26, 2016, from regional well R-39, Bis(2-ethylhexyl)phthalate was measured at 9.8 µg/L, above the 6 µg/L EPA maximum contaminant level.

One-day notification of this result by telephone occurred on December 8, 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, 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 December 2016 That Meet Notification Requirements (EP2016-0156)

Cy: (Letter and CD and/or DVD)
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John Bretzke, ADESH-EPC-DO
Michael Brandt, ADESH
William Mairson, PADOPS
Craig Leasure, PADOPS

SUMMARY OF GROUNDWATER DATA REVIEWED IN DECEMBER 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 11-16 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

1-Day Notification Requirement

The CA value is used in the Criteria Code column of the table. The CA value 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 maximum contaminant level (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 1 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 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 11-16 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	28	34	39001	1.33	1.57	1.45	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i S3	524	10/26/2016	REG	UF	INIT	VOC	Acetone	67-64-1	1.57	1.1	EPA TAP SCR N LVL	14000	0	1.5	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	31	38	39863	1.69	1.69	1.69	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-39	859	10/26/2016	REG	UF	INIT	VOC	Acetone	67-64-1	1.69	1	EPA TAP SCR N LVL	14000	0	1.5	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	18	24	39863	9.8	9.8	9.8	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-39	859	10/26/2016	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	9.8	1	EPA MCL	6	1.6	3.23	ug/L	1	J	J	J_LAB	SW-846:8270D	GELC	Focused validation find that the sample has a very high concentration of Bisphenol A, a common chemical in plastic which typically also has bis(2-ethylhexyl)phthalate, commonly used as plasticizer. High concentration of bis(2-ethylhexyl)phthalate is likely from analytical laboratory or sample contamination. Continued monitoring of R-39 for bis(2-ethlylhexyl)phthalate will assist in the proper assessment of this first-time exceedance.
C1	6	6	40360	0.00000549	0.00000549	0.00000549	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-57 S1	910	10/24/2016	REG	UF	INIT	DIOXINS FURANS	Heptachlorodibenzofurans (Total)	38998-75-3	0.00000549	1					ug/L	1	J	J	J_LAB	SW-846:8290A	CFA	
C1	6	6	40360	0.0000114	0.0000114	0.0000114	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-57 S1	910	10/24/2016	REG	UF	INIT	DIOXINS FURANS	Octachlorodibenzofuran [1,2,3,4,6,7,8,9-]	39001-02-0	0.0000114	1				3.6E-05	ug/L	1	J	J	J_LAB	SW-846:8290A	CFA	
C1	14	14	38978	0.265	0.31	0.2875	2	White Rock Canyon and Rio Grande	Regional Spring	Spring 4B	0	10/12/2016	REG	UF	INIT	VOC	Toluene	108-88-3	0.31	1.1	NM GW STD	750	0	0.3	ug/L	1	J	J	J_LAB	SW-846:8260B	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
C1	11	11	37902	0.42	0.44	0.43	2	White Rock Canyon and Rio Grande	Regional Spring	Spring 9A	0	10/13/2016	REG	UF	INIT	VOC	Toluene	108-88-3	0.44	1	NM GW STD	750	0	0.3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C2	9	10	40354	0.763	3.14	1.41	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-57 S2	971.5	10/24/2016	REG	F	INIT	METALS	Nickel	Ni	3.14	2.2	LANL Reg BG LVL	3.09	1	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C2	12	14	38978	0.023	0.0731	0.04805	2	White Rock Canyon and Rio Grande	Regional Spring	Spring 4	0	10/11/2016	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.0731	1.5	LANL Reg BG LVL	0.05	1.5	0.017	mg/L	1		NQ	NQ	EPA:350.1	GELC	
C2	12	12	38979	0.0384	0.18	0.1092	2	White Rock Canyon and Rio Grande	Regional Spring	Spring 5	0	10/12/2016	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.18	1.6	LANL Reg BG LVL	0.05	3.6	0.017	mg/L	1		NQ	NQ	EPA:350.1	GELC	
C2	10	10	36795	298	298	298	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 8A	0	10/13/2016	REG	F	INIT	METALS	Aluminum	Al	298	1	LANL Reg BG LVL	68	4.4	68	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C3	18	24	39863	9.8	9.8	9.8	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-39	859	10/26/2016	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	9.8	1	EPA MCL	6	1.6	3.23	ug/L	1	J	J	J_LAB	SW-846:8270D	GELC	Focused validation find that the sample has a very high concentration of Bisphenol A, a common chemical in plastic which typically also has bis(2-ethylhexyl)phthalate, commonly used as plasticizer. High concentration of bis(2-ethylhexyl)phthalate is likely from analytical laboratory or sample contamination.Continued monitoring of R-39 for bis(2-ethlylhexyl)phthalate will assist in the proper assessment of this first-time exceedance.
C5	33	44	38891	12.4	77.6	40.8	39	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	11/1/2016	REG	F	INIT	METALS	Boron	B	37	0.9	LANL Int BG LVL	15.12	2.4	15	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	33	44	38891	0.075	0.904	0.1175	16	Pajarito Canyon (includes	Intermediate	03-B-13	21.5	11/1/2016	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.114	1	LANL Int	0.03	3.8	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	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
								Twomile and Threemile Canyons)													BG LVL											
C5	33	44	38891	13.8	610	92.7	44	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	11/1/2016	REG	F	INIT	GENINORG	Chloride	Cl(-1)	81.4	0.9	LANL Int BG LVL	7.78	10.5	1.34	mg/L	20		NQ	NQ	EPA:300.0	GELC	
C5	33	44	38891	23.6	347	73.15	44	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	11/1/2016	REG	F	INIT	GENINORG	Sodium	Na	49.4	0.7	LANL Int BG LVL	12.19	4.1	0.1	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	33	46	38891	107	1230	300	46	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	11/1/2016	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	273	0.9	LANL Int BG LVL	127	2.1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	16	19	39975	0.145	0.202	0.174	19	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	PCI-2	512	10/31/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.202	1.2	LANL Int BG LVL	0.05	4	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	21	23	39331	0.086	0.151	0.111	17	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i S1	400.3	10/25/2016	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.112	1	LANL Int BG LVL	0.03	3.7	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	21	23	39331	3.66	36.8	21.1	23	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i S1	400.3	10/25/2016	REG	F	INIT	GENINORG	Chloride	Cl(-1)	32.4	1.5	LANL Int BG LVL	7.78	4.2	0.335	mg/L	5		NQ	NQ	EPA:300.0	GELC	
C5	20	21	39331	0.11	0.333	0.2745	20	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i S1	400.3	10/25/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.29	1.1	LANL Int BG LVL	0.05	5.8	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	Comment
C5	26	29	38993	0.067	0.123	0.0798	10	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i S2	470.2	10/25/2016	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.0717	0.9	LANL Int BG LVL	0.03	2.4	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	25	28	38993	0.146	0.294	0.234	28	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i S2	470.2	10/25/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.292	1.2	LANL Int BG LVL	0.05	5.8	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	23	27	39001	0.0686	0.129	0.08905	12	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i S3	524	10/26/2016	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.0729	0.8	LANL Int BG LVL	0.03	2.4	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	24	27	39001	0.186	0.31	0.259	27	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i S3	524	10/26/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.296	1.1	LANL Int BG LVL	0.05	5.9	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	17	19	40007	0.232	0.735	0.524	19	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	R-37 S1	929.3	10/21/2016	FD	F	INIT	GENINORG	Fluoride	F(-1)	0.489	0.9	LANL Int BG LVL	0.23	2.1	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	17	19	40007	0.232	0.735	0.524	19	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	R-37 S1	929.3	10/21/2016	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.481	0.9	LANL Int BG LVL	0.23	2.1	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	16	18	40007	0.4	0.615	0.4975	18	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	R-37 S1	929.3	10/21/2016	FD	F	INIT	GENINORG	Perchlorate	ClO4	0.457	0.9	LANL Int BG LVL	0.05	9.1	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	Comment
C5	16	18	40007	0.4	0.615	0.4975	18	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	R-37 S1	929.3	10/21/2016	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.4	0.8	LANL Int BG LVL	0.05	8	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	17	19	40007	1.32	1.84	1.52	19	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	R-37 S1	929.3	10/21/2016	FD	F	INIT	GENINORG	Uranium	U	1.52	1	LANL Int BG LVL	0.72	2.1	0.067	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	17	19	40007	1.32	1.84	1.52	19	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	R-37 S1	929.3	10/21/2016	REG	F	INIT	GENINORG	Uranium	U	1.49	1	LANL Int BG LVL	0.72	2.1	0.067	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	13	14	39841	60.2	132	115.5	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40 Si	649.67	10/28/2016	REG	F	INIT	GENINORG	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	116	1	LANL Int BG LVL	52	2.2	1.45	mg/L	1		NQ	NQ	EPA:310.1	GELC	
C5	13	14	39841	106	398	269.5	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40 Si	649.67	10/28/2016	REG	F	INIT	METALS	Manganese	Mn	219	0.8	LANL Int BG LVL	2	109.5	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	13	14	39841	9.7	22	15.3	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40 Si	649.67	10/28/2016	REG	F	INIT	METALS	Molybdenum	Mo	15.8	1	LANL Int BG LVL	2	7.9	0.3	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	23	23	38057	11	28.5	18.5	23	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20 S1	904.6	10/27/2016	REG	F	INIT	METALS	Manganese	Mn	25.8	1.4	LANL Reg BG LVL	2.94	8.8	2	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	31	37	38047	3.1	103	37.2	33	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-32 S1	867.5	10/25/2016	REG	F	INIT	METALS	Zinc	Zn	8.81	0.2	LANL Reg BG LVL	3.89	2.3	3.3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	17	25	39850	4.9	69	9.645	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-38	821.2	10/17/2016	REG	F	INIT	METALS	Zinc	Zn	8.13	0.8	LANL Reg BG LVL	3.89	2.1	3.3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	13	13	38621	7.19	9.11	7.77	13	White Rock Canyon and Rio Grande	Regional Spring	Spring 4B	0	10/12/2016	REG	F	INIT	GENINORG	Chloride	Cl(-1)	9.11	1.2	LANL Reg BG LVL	3.57	2.6	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
CA	18	24	39863	9.8	9.8	9.8	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-39	859	10/26/2016	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	9.8	1	EPA MCL	6	1.6	3.23	ug/L	1	J	J	J_LAB	SW-846:8270D	GELC	Focused validation find that the sample has a very high concentration of Bisphenol A, a common chemical in plastic which typically also has bis(2-ethylhexyl)phthalate, commonly used as plasticizer. High concentration of bis(2-ethylhexyl)phthalate is likely from analytical laboratory or sample contamination.Continued monitoring of R-39 for bis(2-ethlylhexyl)phthalate will assist in the proper assessment of this first-time exceedance.