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NMED
Hazardous Waste Bureau

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Date: OCT 28 2015
Refer To: ADESH-15-152
LAUR: 15-27795
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 October 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 October 14, 2015, to review new groundwater data received in September 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 (EPA) tap water standards, the carcinogenic risk was adjusted to 1×10^{-5}, as specified in the Consent Order.

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, between the U.S. Department of Energy, National Nuclear Security Administration, Los Alamos Field Office, and San Ildefonso Pueblo.

1-Day Notification

One instance of a contaminant detected in a well screen interval or spring 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) is as follows:

- In an unfiltered sample collected July 21, 2015, from regional well CdV-R-37-2 S2 (screen 2), Chloroform was measured at 90.9 µg/L, above the 80-µg/L EPA maximum contaminant level. Concentrations in 26 previous samples collected from this well since 2002 were all nondetects.

One-day notification of this result by telephone occurred on October 15, 2015.

15-Day Notification

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

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,

Douglas E. Hintze, Manager
Environmental Management
Los Alamos Field Office

BR/DH/SP:sm

Attachment: Two hard copies with electronic files – Summary of Groundwater Data Reviewed in October 2015 That Meet Notification Requirements (EP2015-0181)

Cy: (w/att.)
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 att./date-stamped letter emailed)
Pete Padilla, Los Alamos County Utility Department, Los Alamos, NM
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Kimberly Davis Lebak, DOE-NA-LA
Peter Maggiore, DOE-NA-LA
Hai Shen, DOE-EM-LA
David Rhodes, DOE-EM-LA
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Tim Goering, ADEP ER Program
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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 OCTOBER 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 9-15 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 Water Quality Control Commission (NMWQCC) 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 most recent NMED-approved 95% upper tolerance limits for background for each groundwater zone as set forth in the "Groundwater Background Investigation Report," 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 table. 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 NMWQCC water quality standard or the EPA 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 by

telephone 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 9-15 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
C1	23	27	01/28/02	16.2	16.2	16.2	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	CdV-R-37-2 S2	1188.7	07/21/15	REG	UF	INIT	VOC	Bromodichloromethane	75-27-4	16.2	1	EPA MCL	80	0.2	0.3	ug/L	1		NQ	NQ	SW-846:8260B	GELC	
C1	23	27	01/28/02	4.15	4.15	4.15	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	CdV-R-37-2 S2	1188.7	07/21/15	REG	UF	INIT	VOC	Chlorodibromomethane	124-48-1	4.15	1	EPA MCL	80	0.1	0.3	ug/L	1		NQ	NQ	SW-846:8260B	GELC	
C1	23	27	01/28/02	90.9	90.9	90.9	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	CdV-R-37-2 S2	1188.7	07/21/15	REG	UF	INIT	VOC	Chloroform	67-66-3	90.9	1	EPA MCL	80	1.1	0.3	ug/L	1		NQ	NQ	SW-846:8260B	GELC	Prior 26 samples collected from the same location since 2002 are ND
C1	23	27	01/28/02	1.97	2.97	2.47	2	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	CdV-R-37-2 S2	1188.7	07/21/15	REG	UF	INIT	VOC	Methylene Chloride	75-09-2	1.97	0.8	EPA MCL	5	0.4	1	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C2	22	26	08/27/07	0.0323	0.0683	0.0445	3	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-33 S1	995.5	08/06/15	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.0683	1.5	LANL Reg BG LVL	0.05	1.4	0.017	mg/L	1		NQ	NQ	EPA:350.1	GELC	
C2	26	28	10/09/08	4.65	4.65	4.65	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	F	INIT	METALS	Tin	Sn	4.65	1	LANL Reg BG LVL	3.26	1.4	2.5	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C2	37	40	09/01/05	4.34	4.34	4.34	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	08/12/15	REG	F	INIT	METALS	Tin	Sn	4.34	1	LANL Reg BG LVL	3.26	1.3	2.5	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C2	23	25	03/11/10	0.17	1.43	0.499	25	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S2	1185	08/05/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	1.43	2.9	LANL Reg BG LVL	0.89	1.6	0.017	mg/L	1		NQ	NQ	EPA:353.2	GELC	Highest so far
C2	18	18	08/02/01	3.84	3.84	3.84	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/12/15	REG	F	INIT	METALS	Tin	Sn	3.84	1	LANL Avl BG LVL	3.26	1.2	2.5	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C2	15	18	05/12/04	15.3	68.3	41.8	2	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-16 S2	863.4	08/19/15	REG	F	INIT	METALS	Aluminum	Al	68.3	1.6	LANL Reg BG LVL	68	1	68	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C2	21	22	08/07/01	3.47	3.47	3.47	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	METALS	Tin	Sn	3.47	1	LANL Avl BG LVL	3.26	1.1	2.5	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C2	7	7	04/01/08	0.0695	0.0695	0.0695	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-25 S5	1294.7	07/30/15	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.0695	1	LANL Reg BG LVL	0.05	1.4	0.017	mg/L	1		NQ	NQ	EPA:350.1	GELC	
C2	14	14	02/08/07	0.0234	0.076	0.0497	2	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-25 S6	1404.7	07/29/15	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.076	1.5	LANL Reg BG LVL	0.05	1.5	0.017	mg/L	1		NQ	NQ	EPA:350.1	GELC	
C2	13	19	03/26/12	120	290	144	19	Sandia Canyon	Regional	R-62	1158.4	08/13/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	290	2	LANL Reg BG LVL	191.7	1.5	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C2	27	30	11/05/08	132	211	169.5	30	Sandia Canyon	Regional	R-43 S1	903.9	08/19/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	211	1.2	LANL Reg BG LVL	191.7	1.1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C2	27	29	11/05/08	0.0177	0.335	0.0388	12	Sandia Canyon	Regional	R-43 S1	903.9	08/19/15	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	0.335	8.6	LANL Reg BG LVL	0.16	2.1	0.017	mg/L	1		NQ	NQ	EPA:365.4	GELC	
C2	22	24	10/12/06	124	197	153.5	24	Sandia Canyon	Regional	R-10 S1	874	09/02/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	197	1.3	LANL Reg BG LVL	191.7	1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C2	24	24	06/29/06	2.24	2.24	2.24	1	Sandia Canyon	Regional	R-10 S2	1042	09/02/15	REG	F	INIT	METALS	Antimony	Sb	2.24	1	LANL Reg BG LVL	1	2.2	1	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C2	24	24	06/29/06	2.71	3.74	3.145	24	Sandia Canyon	Regional	R-10 S2	1042	09/02/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	3.74	1.2	LANL Reg BG LVL	3.57	1	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C3	23	27	01/28/02	90.9	90.9	90.9	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	CdV-R-37-2 S2	1188.7	07/21/15	REG	UF	INIT	VOC	Chloroform	67-66-3	90.9	1	EPA MCL	80	1.1	0.3	ug/L	1		NQ	NQ	SW-846:8260B	GELC	Prior 26 samples collected from the same location since 2002 are ND
C5	31	36	07/03/06	0.0204	0.308	0.08	9	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-15	958.6	08/13/15	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.122	1.5	LANL Reg BG LVL	0.05	2.4	0.017	mg/L	1		NQ	NQ	EPA:350.1	GELC	
C5	34	40	05/25/05	5.34	8.93	7.015	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-15	958.6	08/13/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	8.93	1.3	LANL Reg BG LVL	0.46	19.4	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	Highest so far
C5	26	28	10/09/08	0.102	0.364	0.215	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.282	1.3	LANL Reg BG LVL	0.1	2.8	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	26	28	10/09/08	40.6	56.9	50.9	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	F	INIT	GENINORG	Calcium	Ca	56.9	1.1	LANL Reg BG LVL	24.88	2.3	0.05	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	26	28	10/09/08	28.7	48.3	38.15	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	47.4	1.2	LANL Reg BG LVL	3.57	13.3	0.67	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C5	26	37	10/09/08	744	1240	894	37	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	F	INIT	METALS	Chromium	Cr	835	0.9	LANL Reg BG LVL	5.75	145.2	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	26	28	10/09/08	11.1	16.1	14.25	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	F	INIT	GENINORG	Magnesium	Mg	16.1	1.1	LANL Reg BG LVL	4.15	3.9	0.11	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	26	28	10/09/08	8.8	34	23.6	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	F	INIT	METALS	Nickel	Ni	30.1	1.3	LANL Reg BG LVL	3.09	9.7	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	26	28	10/09/08	0.057	7.03	5.925	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.75	0.8	LANL Reg BG LVL	0.89	5.3	0.17	mg/L	10		NQ	NQ	EPA:353.2	GELC	
C5	26	28	10/09/08	1.08	1.46	1.275	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	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	26	28	10/09/08	60.6	83.2	74.2	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	80.9	1.1	LANL Reg BG LVL	7.2	11.2	1.33	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C5	26	28	10/09/08	0.631	2.84	1.1	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	08/12/15	REG	UF	INIT	GENINORG	Total Organic Carbon	TOC	0.864	0.8	LANL Reg BG LVL	0.33	2.6	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C5	39	42	05/20/05	0.113	0.33	0.224	39	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	08/12/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.295	1.3	LANL Reg BG LVL	0.1	2.9	0.067	mg/L	1		NQ	NQ	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
C5	39	42	05/20/05	21.1	39.3	29.7	42	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	08/12/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	38.5	1.3	LANL Reg BG LVL	3.57	10.8	0.67	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C5	40	44	05/20/05	310	472	399.5	44	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	08/12/15	REG	F	INIT	METALS	Chromium	Cr	407	1	LANL Reg BG LVL	5.75	70.8	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	39	42	05/20/05	8.68	12.5	10.8	42	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	08/12/15	REG	F	INIT	GENINORG	Magnesium	Mg	12.5	1.2	LANL Reg BG LVL	4.15	3	0.11	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	39	42	05/20/05	6.1	34	14.5	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	08/12/15	REG	F	INIT	METALS	Nickel	Ni	14.9	1	LANL Reg BG LVL	3.09	4.8	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	37	39	05/20/05	3.1	5.39	4.02	39	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	08/12/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.53	0.9	LANL Reg BG LVL	0.89	4	0.17	mg/L	10		NQ	NQ	EPA:353.2	GELC	
C5	37	39	09/01/05	0.802	1.13	0.978	39	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	08/12/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	1	1	LANL Reg BG LVL	0.46	2.2	0.1	ug/L	2		NQ	NQ	SW-846:6850	GELC	
C5	39	42	05/20/05	38.1	56.4	44.85	42	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	08/12/15	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	55.1	1.2	LANL Reg BG LVL	7.2	7.7	1.33	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C5	21	25	02/28/09	8.4	35.7	17.6	25	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-45 S1	880	08/05/15	REG	F	INIT	METALS	Chromium	Cr	35.7	2	LANL Reg BG LVL	5.75	6.2	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	maximum value, concentrations have gradually increased since 2009.
C5	21	21	02/28/09	0.256	3.47	2.3	21	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-45 S1	880	08/05/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.75	1.2	LANL Reg BG LVL	0.89	3.1	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C5	21	26	03/05/09	6.1	18.4	9.86	25	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-45 S2	974.9	08/05/15	REG	F	INIT	METALS	Chromium	Cr	18.4	1.9	LANL Reg BG LVL	5.75	3.2	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	maximum value, concentrations have gradually increased since 2009.
C5	23	27	03/06/10	4.68	9.46	7.14	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	08/05/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	8.13	1.1	LANL Reg BG LVL	3.57	2.3	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	23	29	03/06/10	49.8	126	87.4	29	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	08/05/15	REG	F	INIT	METALS	Chromium	Cr	103	1.2	LANL Reg BG LVL	5.75	17.9	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	down from 5/14 high of 126 ug/L
C5	23	27	03/06/10	1.51	9.85	5.04	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	08/05/15	REG	F	INIT	METALS	Nickel	Ni	8.34	1.7	LANL Reg BG LVL	3.09	2.7	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	23	27	02/17/09	7.34	18.7	14.1	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-44 S1	895	08/06/15	REG	F	INIT	METALS	Chromium	Cr	15.6	1.1	LANL Reg BG LVL	5.75	2.7	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	29	36	04/21/05	3.3	44.3	16	36	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-4B	8.9	08/12/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	5.03	0.3	LANL Avl BG LVL	0.05	100.6	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	
C5	38	45	05/24/01	248	736	306	45	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-4B	8.9	08/12/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	287	0.9	LANL Avl BG LVL	139	2.1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	24	28	05/24/01	0.136	0.542	0.262	21	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-4B	8.9	08/12/15	REG	F	INIT	GENINORG	Total Kjeldahl Nitrogen	TKN	0.179	0.7	LANL Avl BG LVL	0.04	4.5	0.033	mg/L	1		NQ	NQ	EPA:351.2	GELC	
C5	19	19	08/02/01	0.638	1.18	0.919	19	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/12/15	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.826	0.9	LANL Avl BG LVL	0.27	3.1	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	18	18	08/02/01	20.6	81.3	40.4	18	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/12/15	REG	F	INIT	METALS	Molybdenum	Mo	30.6	0.8	LANL Avl BG LVL	2	15.3	0.165	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	14	14	05/03/05	5.57	24.4	12.35	14	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/12/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	7.13	0.6	LANL Avl BG LVL	0.05	142.6	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	
C5	18	18	08/02/01	11.3	15.7	13.85	18	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/12/15	REG	F	INIT	GENINORG	Potassium	K	13.9	1	LANL Avl BG LVL	5.21	2.7	0.05	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	18	18	08/02/01	46.3	77.4	58.05	18	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/12/15	REG	F	INIT	GENINORG	Sodium	Na	63.4	1.1	LANL Avl BG LVL	15.54	4.1	0.1	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	19	19	08/02/01	251	493	308	19	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/12/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	457	1.5	LANL Avl BG LVL	139	3.3	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	16	19	05/12/04	2.14	146	12.7	19	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-16 S2	863.4	08/19/15	REG	F	INIT	METALS	Manganese	Mn	5.99	0.5	LANL Reg BG LVL	2.94	2	2	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	15	17	03/19/04	3.74	68	18.2	17	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-16 S4	1237	08/19/15	REG	F	INIT	METALS	Manganese	Mn	62.4	3.4	LANL Reg BG LVL	2.94	21.2	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	53	61	03/12/01	0.11	1.51	1.05	61	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	08/12/15	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.842	0.8	LANL Avl BG LVL	0.27	3.1	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	37	43	04/27/05	3.23	31.7	14.7	43	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	08/12/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	8.91	0.6	LANL Avl BG LVL	0.05	178.2	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	
C5	54	62	03/12/01	241	601	312.5	62	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	08/12/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	386	1.2	LANL Avl BG LVL	139	2.8	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	34	41	03/12/01	0.014	0.49	0.182	31	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	08/12/15	REG	F	INIT	GENINORG	Total Kjeldahl Nitrogen	TKN	0.131	0.7	LANL Avl BG LVL	0.04	3.3	0.033	mg/L	1		NQ	NQ	EPA:351.2	GELC	
C5	55	62	01/10/00	570	2840	1620	62	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0	07/23/15	REG	F	INIT	METALS	Boron	B	892	0.6	LANL Int BG LVL	15.12	59	15	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	15	20	01/30/07	18	44.2	22.6	20	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0	07/23/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	18	0.8	LANL Int BG LVL	7.78	2.3	0.268	mg/L	4		NQ	NQ	EPA:300.0	GELC	
C5	13	17	01/30/07	0.459	0.707	0.558	17	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0	07/23/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.544	1	LANL Int BG LVL	0.05	10.9	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	59	66	01/10/00	17	50.2	34.15	66	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0	07/23/15	REG	F	INIT	GENINORG	Sodium	Na	26.1	0.8	LANL Int BG LVL	12.19	2.1	0.1	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	21	22	08/07/01	154	394	194	22	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	METALS	Barium	Ba	323	1.7	LANL Avl BG LVL	68.57	4.7	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	58	65	03/12/01	0.726	1.79	1.275	64	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.845	0.7	LANL Avl BG LVL	0.27	3.1	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	21	22	08/07/01	21.8	92.1	59.7	22	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	METALS	Molybdenum	Mo	26.2	0.4	LANL Avl BG LVL	2	13.1	0.165	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	57	65	03/12/01	0.685	10.9	1.995	64	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	1.05	0.5	LANL Avl BG LVL	0.57	1.8	0.017	mg/L	1		NQ	NQ	EPA:353.2	GELC	
C5	40	45	04/28/05	6.23	47.5	12	45	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	9.58	0.8	LANL Avl BG LVL	0.05	191.6	1	ug/L	20		NQ	NQ	SW-846:6850	GELC	
C5	21	22	08/07/01	11.5	23	16.7	22	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	GENINORG	Potassium	K	21	1.3	LANL Avl BG LVL	5.21	4	0.05	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	21	22	08/07/01	43.1	80	59.65	22	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	GENINORG	Sodium	Na	75.1	1.3	LANL Avl BG LVL	15.54	4.8	0.1	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	58	65	03/12/01	220	556	307	65	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	407	1.3	LANL Avl BG LVL	139	2.9	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	31	32	08/07/01	0.04	0.432	0.282	32	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/20/15	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	0.173	0.6	LANL Avl BG LVL	0.05	3.5	0.017	mg/L	1		NQ	NQ	EPA:365.4	GELC	
C5	58	65	03/12/01	0.726	1.79	1.275	64	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/17/15	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.858	0.7	LANL Avl BG LVL	0.27	3.2	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	57	65	03/12/01	0.685	10.9	1.995	64	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/17/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	1.44	0.7	LANL Avl BG LVL	0.57	2.5	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C5	40	45	04/28/05	6.23	47.5	12	45	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/17/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	11.4	1	LANL Avl BG LVL	0.05	228	1	ug/L	20		NQ	NQ	SW-846:6850	GELC	
C5	58	65	03/12/01	220	556	307	65	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/17/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	430	1.4	LANL Avl BG LVL	139	3.1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	38	45	03/12/01	0.051	1.74	0.172	31	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	08/17/15	REG	F	INIT	GENINORG	Total Kjeldahl Nitrogen	TKN	0.104	0.6	LANL Avl BG LVL	0.04	2.6	0.033	mg/L	1		NQ	NQ	EPA:351.2	GELC	
C5	13	14	01/05/09	0.208	0.306	0.2875	14	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	R-25b	750	07/28/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.3	1	LANL Int BG LVL	0.05	6	0.05	ug/L	1		J+	PE12f	SW-846:6850	GELC	
C5	19	19	12/04/00	9.7	40.1	27	17	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	R-25 S4	1184.6	07/27/15	REG	F	INIT	METALS	Boron	B	40.1	1.5	LANL Int BG LVL	15.12	2.7	15	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	17	17	12/04/00	0.072	0.13	0.101	9	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	R-25 S4	1184.6	07/27/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.0835	0.8	LANL Int BG LVL	0.03	2.8	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	12	12	08/04/05	0.0521	0.53	0.452	11	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	R-25 S4	1184.6	07/27/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.387	0.9	LANL Int BG LVL	0.05	7.7	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	19	19	12/04/00	2.9	20.1	8.07	16	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	R-25 S4	1184.6	07/27/15	REG	F	INIT	METALS	Zinc	Zn	13.6	1.7	LANL Int BG LVL	2	6.8	3.3	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	27	37	10/21/08	59.5	73.6	66.8	37	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	GENINORG	Calcium	Ca	65.5	1	LANL Int BG LVL	17.31	3.8	0.05	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	27	35	10/21/08	53.4	71.9	60.5	35	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	69.9	1.2	LANL Int BG LVL	7.78	9	0.67	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C5	27	42	10/21/08	368	658	501.5	42	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	METALS	Chromium	Cr	432	0.9	LANL Int BG LVL	1	432	10	ug/L	5		J+	I6b	SW-846:6020	GELC	
C5	26	35	10/21/08	13.1	17.3	15.6	35	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	GENINORG	Magnesium	Mg	15.6	1	LANL Int BG LVL	6.12	2.5	0.11	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	27	37	10/21/08	14.5	19.3	16.9	37	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	METALS	Nickel	Ni	17.2	1	LANL Int BG LVL	1	17.2	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	27	35	10/21/08	0.899	1.12	0.986	35	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.899	0.9	LANL Int BG LVL	0.05	18	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	minimum value
C5	27	37	10/21/08	278	350	325	37	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	METALS	Strontium	Sr	343	1.1	LANL Int BG LVL	154.8	2.2	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	27	35	10/21/08	77.9	103	88.5	35	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	94.4	1.1	LANL Int BG LVL	40.03	2.4	1.33	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C5	27	35	10/21/08	354	451	416	35	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	443	1.1	LANL Int BG LVL	127	3.5	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	27	37	10/21/08	1.2	2.15	1.57	37	Sandia Canyon	Intermediate	SCI-2	548	08/10/15	REG	F	INIT	GENINORG	Uranium	U	1.84	1.2	LANL Int BG LVL	0.72	2.6	0.067	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	20	23	09/19/00	0.072	0.103	0.08735	8	Sandia Canyon	Intermediate	R-12 S2	504.5	08/18/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.0756	0.9	LANL Int BG LVL	0.03	2.5	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	20	21	09/19/00	23.6	180	37.7	21	Sandia Canyon	Intermediate	R-12 S2	504.5	08/18/15	REG	F	INIT	METALS	Manganese	Mn	29	0.8	LANL Int BG LVL	2	14.5	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	16	17	02/01/06	0.838	1.16	0.9555	16	Sandia Canyon	Intermediate	R-12 S2	504.5	08/18/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.863	0.9	LANL Int BG LVL	0.05	17.3	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	11	11	05/08/01	1.08	10.3	4.22	11	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-25 S5	1294.7	07/30/15	REG	UF	INIT	GENINORG	Total Organic Carbon	TOC	1.08	0.3	LANL Reg BG LVL	0.33	3.3	0.33	mg/L	1		NQ	NQ	SW-846:9060	GELC	
C5	8	8	02/07/02	1.12	3.45	1.91	8	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-25 S5	1294.7	07/30/15	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	1.91	1	LANL Reg BG LVL	0.16	11.9	0.017	mg/L	1		NQ	NQ	EPA:365.4	GELC	
C5	15	15	02/08/02	0.22	4.2	0.741	15	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-25 S6	1404.7	07/29/15	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	0.576	0.8	LANL Reg BG LVL	0.16	3.6	0.017	mg/L	1		NQ	NQ	EPA:365.4	GELC	
C5	13	19	03/26/12	1.64	11.7	8.07	19	Sandia Canyon	Regional	R-62	1158.4	08/13/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	7.87	1	LANL Reg BG LVL	3.57	2.2	0.067	mg/L	1		NQ	NQ	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
C5	13	19	03/26/12	104	240	134	19	Sandia Canyon	Regional	R-62	1158.4	08/13/15	REG	F	INIT	METALS	Chromium	Cr	116	0.9	LANL Reg BG LVL	5.75	20.2	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	27	30	11/05/08	3.6	8.59	6.135	30	Sandia Canyon	Regional	R-43 S1	903.9	08/19/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	8.59	1.4	LANL Reg BG LVL	3.57	2.4	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	maximum value
C5	27	35	11/05/08	2.35	146	35.95	32	Sandia Canyon	Regional	R-43 S1	903.9	08/19/15	REG	F	INIT	METALS	Chromium	Cr	146	4.1	LANL Reg BG LVL	5.75	25.4	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	Highest so far, concentrations have gradually increased since 2010
C5	27	29	11/05/08	5.01	6.03	5.41	28	Sandia Canyon	Regional	R-43 S1	903.9	08/19/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.4	1	LANL Reg BG LVL	0.89	6.1	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C5	27	30	11/05/08	8.77	21	11.75	30	Sandia Canyon	Regional	R-43 S1	903.9	08/19/15	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	16.9	1.4	LANL Reg BG LVL	7.2	2.3	0.133	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	26	28	11/10/08	0.389	5.4	1.25	28	Sandia Canyon	Regional	R-43 S2	969.1	08/18/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.28	1.8	LANL Reg BG LVL	0.89	2.6	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C5	30	35	01/28/02	44	17200	10875	34	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	CdV-R-37-2 S2	1188.7	07/21/15	REG	F	INIT	METALS	Iron	Fe	66.8	0	LANL Reg BG LVL	21	3.2	30	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	30	35	01/28/02	152	3720	1350	35	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	CdV-R-37-2 S2	1188.7	07/21/15	REG	F	INIT	METALS	Manganese	Mn	152	0.1	LANL Reg BG LVL	2.94	51.7	2	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	42	52	05/17/05	13.5	34.9	21.3	52	Sandia Canyon	Regional	R-11	855	08/07/15	REG	F	INIT	METALS	Chromium	Cr	20.8	1	LANL Reg BG LVL	5.75	3.6	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	41	49	05/17/05	2.27	7.43	5.15	49	Sandia Canyon	Regional	R-11	855	08/07/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.65	1.1	LANL Reg BG LVL	0.89	6.3	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C5	41	49	05/17/05	4.62	52.9	10.5	42	Sandia Canyon	Regional	R-11	855	08/07/15	REG	F	INIT	METALS	Zinc	Zn	7.9	0.8	LANL Reg BG LVL	3.89	2	3.3	ug/L	1	J	J	J_LAB	SW-846:6010C	GELC	
C5	29	37	08/29/07	13.8	62.3	30	37	Sandia Canyon	Regional	R-35b	825.4	08/04/15	REG	F	INIT	METALS	Zinc	Zn	16.6	0.6	LANL Reg BG LVL	3.89	4.3	3.3	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	29	30	08/30/07	68	389	345.5	30	Sandia Canyon	Regional	R-35a	1013.1	08/10/15	REG	F	INIT	METALS	Barium	Ba	361	1	LANL Reg BG LVL	56.83	6.4	1	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	26	30	03/12/08	1.25	6.8	2.315	30	Sandia Canyon	Regional	R-36	766.9	08/07/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.45	1.1	LANL Reg BG LVL	0.89	2.8	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C5	25	28	03/12/08	0.845	1.74	1.58	28	Sandia Canyon	Regional	R-36	766.9	08/07/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	1.55	1	LANL Reg BG LVL	0.46	3.4	0.2	ug/L	4		NQ	NQ	SW-846:6850	GELC	
C5	26	29	03/12/08	36.5	91.1	56.5	29	Sandia Canyon	Regional	R-36	766.9	08/07/15	REG	F	INIT	METALS	Zinc	Zn	36.5	0.6	LANL Reg BG LVL	3.89	9.4	3.3	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	34	37	06/09/05	0.083	0.157	0.133	31	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	08/14/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.139	1	LANL Int BG LVL	0.03	4.6	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	34	42	06/09/05	1.1	8.06	4.015	36	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	08/14/15	REG	F	INIT	METALS	Chromium	Cr	5.48	1.4	LANL Int BG LVL	1	5.5	2	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C5	34	37	06/09/05	3.17	5.9	4.35	37	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	08/14/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.9	1.4	LANL Int BG LVL	2.41	2.4	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	maximum value
C5	34	37	06/09/05	68.7	132	88.1	37	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	08/14/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	97	1.1	LANL Int BG LVL	0.05	1940	5	ug/L	100		NQ	NQ	SW-846:6850	GELC	
C5	40	58	06/15/05	25.4	56	42.3	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	METALS	Boron	B	56	1.3	LANL Int BG LVL	15.12	3.7	15	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	40	58	06/15/05	0.212	0.703	0.587	55	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.56	1	LANL Int BG LVL	0.03	18.7	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	40	58	06/15/05	42.8	75.5	63.95	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	GENINORG	Calcium	Ca	64	1	LANL Int BG LVL	17.31	3.7	0.05	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	40	58	06/15/05	21.2	64.8	52.75	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	GENINORG	Chloride	Cl(-1)	58	1.1	LANL Int BG LVL	7.78	7.5	0.67	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C5	40	61	06/15/05	29.4	81.3	51.8	61	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	METALS	Chromium	Cr	74.7	1.4	LANL Int BG LVL	1	74.7	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	40	58	06/15/05	0.412	0.635	0.529	55	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.513	1	LANL Int BG LVL	0.23	2.2	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	40	58	06/15/05	8.49	15.7	13	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	GENINORG	Magnesium	Mg	12.9	1	LANL Int BG LVL	6.12	2.1	0.11	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	40	58	06/15/05	2.9	41.8	17.4	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	METALS	Nickel	Ni	31.8	1.8	LANL Int BG LVL	1	31.8	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	40	58	06/15/05	7.62	20.4	10.8	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	7.95	0.7	LANL Int BG LVL	2.41	3.3	0.425	mg/L	25		NQ	NQ	EPA:353.2	GELC	
C5	40	58	06/15/05	56.3	246	80.3	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	GENINORG	Perchlorate	ClO4	61.8	0.8	LANL Int BG LVL	0.05	1236	5	ug/L	100		NQ	NQ	SW-846:6850	GELC	
C5	40	58	06/15/05	19.5	29.4	25.6	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	GENINORG	Sodium	Na	27.3	1.1	LANL Int BG LVL	12.19	2.2	0.1	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C5	40	58	06/15/05	298	497	402	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	396	1	LANL Int BG LVL	127	3.1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	40	58	06/15/05	15.9	288	30.8	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/04/15	REG	F	INIT	METALS	Zinc	Zn	22	0.7	LANL Int BG LVL	2	11	3.3	ug/L	1		NQ	NQ	SW-846:6010C	GELC	
C6	27	35	11/05/08	2.35	146	35.95	32	Sandia Canyon	Regional	R-43 S1	903.9	08/19/15	REG	F	INIT	METALS	Chromium	Cr	146	4.1	NM GW STD	50	2.9	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	Highest so far, concentrations have gradually increased since 2010
CA	23	27	01/28/02	90.9	90.9	90.9	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	CdV-R-37-2 S2	1188.7	07/21/15	REG	UF	INIT	VOC	Chloroform	67-66-3	90.9	1	EPA MCL	80	1.1	0.3	ug/L	1		NQ	NQ	SW-846:8260B	GELC	Prior 26 samples collected from the same location since 2002 are ND