



Associate Directorate for Environmental Management

P.O. Box 1663, MS M992

Los Alamos, New Mexico 87545

(505) 606-2337

Environmental Management 1900 Diamond Drive, MS M984 Los Alamos, New Mexico 87544

(505) 665-5658/FAX (505) 606-2132

Date: JUL 2 1 2017

Refer To: ADEM-17-0166

LAUR: 17-25819

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 July 2017

This letter is Los Alamos National Laboratory's (LANL's) written submission in accordance with Section XXVI of the 2016 Compliance Order on Consent (Consent Order). Members of LANL's Associate Directorate for Environmental Management met on July 13, 2017, to review groundwater data received in June 2017. This report was prepared by comparing the data against groundwater notification criteria as defined in Section IX of the 2016 Consent Order. These criteria consider New Mexico Water Quality Control Commission (NMWQCC) groundwater standards, U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs), New Mexico Environment Department (NMED) screening levels for tap water, EPA regional screening levels for tap water, and NMED-approved background values for hydrogeological zones as set forth in the "Groundwater Background Investigation Report, Revision 5." For comparison with EPA tap water standards, the standard's carcinogenic risk value was adjusted to 1 × 10<sup>-5</sup>, as specified in the Consent Order. This report was prepared using the May 2016 EPA regional screening levels for tap water.

### 1-Day Notification

There were no instances of a contaminant detected at a concentration that exceeded the NMWQCC groundwater 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).

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

## 15-Day Notification

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

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

July 2017 That Meet Notification Requirements (EP2017-0108)

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

emla.docs@em.doe.gov

Steve Paris, ADEM ER Program

Brian Iacona, ADESH-EPC-CP

Public Reading Room (EPRR)

ADESH Records

PRS Database

Cy: (w/o enc./date-stamped letter emailed)

Wayne Witten, Los Alamos County Utility Department, Los Alamos, NM

lasomailbox@nnsa.doe.gov

Peter Maggiore, DOE-NA-LA

Kimberly Davis Lebak, DOE-NA-LA

Karen Armijo, DOE-NA-LA

Hai Shen, DOE-EM-LA

Cheryl Rodriguez, DOE-EM-LA

David Rhodes, DOE-EM-LA

Mei Ding, EES-14

Bruce Robinson, ADEM ER Program

Randy Erickson, ADEM

Jake Meadows, ADESH-EPC-CP

Jocelyn Buckley, ADESH-EPC-CP

Leslie Dale, ADESH-EPC-CP

John Bretzke, ADESH-EPC-DO

Michael Brandt, ADESH

William Mairson, PADOPS

Craig Leasure, PADOPS

# SUMMARY OF GROUNDWATER DATA REVIEWED IN JULY 2017 THAT MEET NOTIFICATION REQUIREMENTS

### INTRODUCTION

This report provides information to the New Mexico Environment Department (NMED) concerning recent groundwater monitoring data obtained by Los Alamos National Laboratory (the Laboratory) under its annual "Interim Facility-Wide Groundwater Monitoring Plan" for the 2017 Monitoring Year and contains results for contaminants and other chemical constituents that meet the five screening criteria described in Section XXVI of the 2016 Compliance Order on Consent modified February 2017 (2016 Consent Order). The report covers groundwater samples collected from wells or springs (listed in the accompanying tables) that provide surveillance of the hydrogeological zones indicated in the tables.

The report includes two tables. Table 1, NMED 06-17 Groundwater Report, presents results since June 14, 2007, that met the five reporting criteria as specified in the 2016 Consent Order. Table 2, NMED 06-17 Groundwater Report Addendum, presents results that are exceeding the 95<sup>th</sup> percentile of those results in the data set defined in the "Groundwater Background Investigation Report, Revision 5." Only contaminants and other chemical constituents lacking a calculated groundwater background value (i.e., the frequency of detections was too low to calculate a background value at the 95% upper tolerance level) are listed in this table. Table 2 is a voluntary submission by the Laboratory to NMED to identify the potential risk resulting from contaminants and other chemical constituents without defined background values.

These tables include the following:

- Comments on results that appear to be exceptional based on consideration of monitoring data acquired from previous analyses (using statistics described below)
- Supplemental information summarizing monitoring results obtained from previous analyses
- 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.

This report was prepared by comparing the data against groundwater notification criteria as defined in Section IX of the 2016 Consent Order. These criteria consider New Mexico Water Quality Control Commission (NMWQCC) groundwater standards, U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs), NMED screening levels for tap water, EPA regional screening levels for tap water, and NMED-approved background values for hydrogeological zones as set forth in the "Groundwater Background Investigation Report, Revision 5." For comparison EPA tap water standards, the standard's carcinogenic risk value was adjusted to 1 × 10<sup>-5</sup>, as specified in the Consent Order. This report was prepared using the May 2016 EPA regional screening levels for tap water.

Background values applied in Table 1 notification criteria C2 and C4 are the background values for hydrogeological zones as set forth in the NMED-approved "Groundwater Background Investigation Report, Revision 5."

Screening values applied in Table 2 criteria XC2scr and XC4scr are the 95<sup>th</sup> percentile of the data set used to establish background as defined in the "Groundwater Background Investigation Report, Revision 5."

#### **DESCRIPTION OF TABLE**

### **15-Day Notification Requirement**

Table 1 is divided into separate categories that correspond to the five screening criteria in Section XXVI of the 2016 Consent Order. Some data met more than one of the notification criteria and appear in the table multiple times.

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 (1) exceeds the lower of either one-half the NMWQCC water quality standard or one-half the federal MCL, or, if there is no such standard for the contaminant, (2) exceeds one-half the tap water screening levels in Table A-1 of NMED's "Risk Assessment Guidance for Site Investigations and Remediation" (March 2017 or updates, as appropriate), or, if there is no NMED tap water screening level available for a contaminant, (3) exceeds one-half the EPA regional human health medium-specific screening level 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 a contaminant that is a metal or other inorganic compound in a spring or screened interval of a well at a concentration that exceeds two times the background level for the third consecutive sampling of the spring or screened interval.
- C5. Detection of a contaminant in a spring or screened interval of a well at a concentration that exceeds either one-half the NMWQCC water quality standard or one-half the federal MCL, and which has increased for the third consecutive sampling of that spring or screened interval.

Table 2 is divided into two categories that correspond to two screening criteria. They mirror criteria C2 and C4 in Table 1, respectively.

The two criteria are as follows:

XC2scr. Detection of a contaminant that is a metal or other inorganic compound at a concentration above the 95<sup>th</sup> percentile in a spring or screened interval of a well if that contaminant has not previously exceeded the 95<sup>th</sup> percentile of the data set used to establish background in the spring or screened interval as defined in the "Groundwater Background Investigation Report, Revision 5."

XC4scr. 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 for the third consecutive sampling exceeds 2 times the 95<sup>th</sup> percentile of the data set used to establish background as defined in the "Groundwater Background Investigation Report, Revision 5."

Columns two through eight in both tables provide summary statistics for metals or inorganic compounds by field preparation code (e.g., filtered aluminum) for samples collected since January 1, 2000, including the currently reported data The statistics include the date of the first sampling event; the number 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—hydrogeological zone from which the groundwater sample was collected (e.g., 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 05-17 Groundwater Report

			D 03-17 (																											•		
Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fid 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		1 !	5/31/2017	0.0975	0.0975	0.0975	1		Intermediate Perched	CDV-9-1(i) S1	937.4	5/31/2017	REG	UF I	NIT	HEXP	Trinitrotol	uene[2,4,6-]	118-96-7	0.0975	1	NMED A1 TAP SCRN LVL	9.8	0	0.086	μg/L	2 J	J	J_LAB	SW-846:8330B	GELC	
C2	2 2	2 (	3/20/2017	12.8	18.5	15.65	2	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Regional	R-68	1340	6/2/2017	REG	F I	NIT	GENINORG	Sodium		Na	18.5	1.2	LANL Reg BG LVL	16	1.2	0.1	mg/L	1	NQ	NQ	SW-846:6010C	GELC	
C2	2 2	2	3/20/2017	4.01	5.39	4.7	2	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Regional	R-68	1340	6/2/2017	REG	FI	NIT	GENINORG	Sulfate		SO4(-2)	5.39	1.1	LANL Reg BG LVL	4.59	1.2	0.133	mg/L	1	NQ	NQ	EPA:300.0	GELC	
C4	19 2	25 4	4/20/2010	41.3	119	53.1	25	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	16-26644	130	5/31/2017	FD	F I	NIT	METALS	Barium		Ва	92.7	1.7	LANL Int BG LVL	13.5	6.9	1	μg/L	1	NQ	NQ	SW-846:6010C	GEL C	
C4	19 2	25 4	4/20/2010	41.3	119	53.1	25	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	16-26644	130	5/31/2017	REG	F I	NIT	METALS	Barium		Ва	90.9	1.7	LANL Int BG LVL	13.5	6.7	1	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4	16 2	21 4	4/20/2010	15.2	38.7	19.8	21	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	16-26644	130	5/31/2017	FD	F	NIT	GENINORG	Chloride		CI(-1)	20.7	1	LANL Int BG LVL	3.11	6.7	0.335	mg/L	5	NQ	NQ	EPA:300.0	GELC	
C4	16 2	21 4	4/20/2010	15.2	38.7	19.8	21	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	16-26644	130	5/31/2017	REG	F I	NIT	GENINORG	Chloride		CI(-1)	21.1	1.1	LANL Int BG LVL	3.11	6.8	0.335	mg/L	5	NQ	NQ	EPA:300.0	GELC	
C4	41	46	6/9/2005	16.7	32.2	20.35	46	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F I	NIT	GENINORG	Calcium		Са	30.4	1.5	LANL Int BG LVL	10.7	2.8	0.05	mg/L	1	NQ	NQ	SW-846:6010C	GELC	

Table 1: NMED 05-17 Groundwater Report

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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 Flac	Validation Reason Code	Anyl Meth Code	Lab Code	Comment
C4 4	46	6/9/2005	4.89	13.7	6.805	46	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F	INIT	GENINORG	Chloride	CI(-1)	12.7	I	ANL nt BG .VL	3.11	4.1	0.134	mg/L	2	NQ	NQ	EPA:300.0	GELC	
C4 4	46	6/9/2005	54.4	105	66.55	46	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F	INIT	GENINORG	Hardness	HARDNESS	98.8	li li	ANL nt BG .VL	37.8	2.6	0.453	mg/L	1	NG	NQ NQ	SM:A2340B	GELC	
C4 4	46	6/9/2005	3.17	11.4	4.805	46	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	11.4	I	ANL nt BG .VL	0.459	24.8	0.425	mg/L	25	NQ	NQ	EPA:353.2	GELC	The result is the highest value.
C4 4	46	6/9/2005	68.7	188	92.8	46	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F	INIT	GENINORG	Perchlorate	CIO4	188	I.	ANL nt BG .VL	0.27	696.3	10	μg/L	200	NQ	. NQ	SW-846:6850	GELC	The result is the highest value.
C4 4	46	6/9/2005	68.6	145	92.65	46	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F	INIT	METALS	Strontium	Sr	145	II.	ANL nt BG .VL	59.6	2.4	1	μg/L	1	NQ	NQ	SW-846:6010C	GELC	The result is the highest value.
C4 4	46	6/9/2005	10.1	25.5	13.75	46	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	25.5	II.	ANL nt BG .VL	7.1	3.6	0.266	mg/L	2	NQ	NQ	EPA:300.0	GELC	The result is the highest value.
C4 4	7 67	6/15/2005	30.1	48.2	40.5	67	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	FD	F	INIT	METALS	Barium	Ва	37.6	I	ANL nt BG .VL	13.5	2.8	1	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4 4	7 67	6/15/2005	30.1	48.2	40.5		Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	REG	F	INIT	METALS	Barium	Ва	37.4	li li	ANL nt BG .VL	13.5	2.8	1	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4 4	7 67	6/15/2005	42.8	75.5	63.9	67	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	FD	F	INIT	GENINORG	Calcium	Ca	61.3	li	ANL nt BG .VL	10.7	5.7	0.05	mg/L	1	NQ	. NQ	SW-846:6010C	GELC	
C4 4	67	6/15/2005	42.8	75.5	63.9	67	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	REG	F	INIT	GENINORG	Calcium	Ca	60.3	I	ANL nt BG .VL	10.7	5.6	0.05	mg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4 4	67	6/15/2005	21.2	64.8	55.7		Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	FD	F	INIT	GENINORG	Chloride	CI(-1)	59.4	li li	ANL nt BG .VL	3.11	19.1	0.67	mg/L	10	NQ	NQ	EPA:300.0	GELC	

Table 1: NMED 05-17 Groundwater Report

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Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1 Zone	Location	Screen Depth	Start Date	FId QC Type Code	Prep Code	Lab Sample I ype 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
C4	47 6	67 6	8/15/2005	21.2	64.8	55.7	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	REG	F IN	IT GENINORG	Chloride	CI(-1)	60.1	1.1	LANL Int BG LVL	3.11	19.3	0.67	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C4	47 6	67 6	8/15/2005	142	253	213	67	Mortandad Canyon Intermediate (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	FD	F IN	IT GENINORG	Hardness	HARDNESS	201	0.9	LANL Int BG LVL	37.8	5.3	0.453	mg/L	1		NQ	NQ	SM:A2340B	GELC	
C4	47 6	67 6	8/15/2005	142	253	213	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	REG	F IN	IT GENINORG	Hardness	HARDNESS	198	0.9	LANL Int BG LVL	37.8	5.2	0.453	mg/L	1		NQ	NQ	SM:A2340B	GELC	
C4	47 6	67 6	8/15/2005	8.49	15.7	13	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	FD	F IN	IT GENINORG	Magnesium	Mg	11.6	0.9	LANL Int BG LVL	3.14	3.7	0.11	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C4	47 6	67 6	8/15/2005	8.49	15.7	13	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	REG	F IN	IT GENINORG	Magnesium	Mg	11.6	0.9	LANL Int BG LVL	3.14	3.7	0.11	mg/L	1		NQ	NQ	SW-846:6010C	GELC	
C4	47 6	67 6	6/15/2005	2.9	41.8	21.9	67	Mortandad Canyon Intermediate (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	FD	F IN	IT METALS	Nickel	Ni	21.4	1	LANL Int BG LVL	3.65	5.9	0.6	μg/L	1		NQ	NQ	SW-846:6020	GELC	
C4	47 6	67 6	6/15/2005	2.9	41.8	21.9	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	REG	F IN	IT METALS	Nickel	Ni	21.5	1	LANL Int BG LVL	3.65	5.9	0.6	μg/L	1		NQ	NQ	SW-846:6020	GELC	
C4	47 6	67 6	6/15/2005	7.62	20.4	9.73	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	FD	F IN	IT GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	9.58	1	LANL Int BG LVL		20.9	0.425	mg/L	25		NQ	NQ	EPA:353.2	GELC	
C4	47 6	67 6	6/15/2005	7.62	20.4	9.73	67	Mortandad Canyon Intermediate (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	REG	F IN	IT GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	9.53	1	LANL Int BG LVL		20.8	0.425	mg/L	25		NQ	NQ	EPA:353.2	GELC	
C4	47 6	67 6	6/15/2005	56.3	246	75.8	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	FD	F IN	IT GENINORG	Perchlorate	CIO4	72.7	1	LANL Int BG LVL		269.3	5	μg/L	100		NQ	NQ	SW-846:6850	GELC	
C4	47 6	67 6	6/15/2005	56.3	246	75.8	67	Mortandad Canyon Intermediate (includes Ten Site Canyon and Canada del Buey)	MCOI-6	686	5/11/2017	REG	F IN	IT GENINORG	Perchlorate	CIO4	82.9	1.1	LANL Int BG LVL		307	5	μg/L	100		NQ	NQ	SW-846:6850	GELC	

July 2017

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Table 1: NMED 05-17 Groundwater Report

Criteria Code	Visits	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 Flaq	Validation Reason Code	Anyl Meth Code	Lab Code	Comment
C4 47		6/15/2005	196	339	283	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	FD	F	INIT	METALS	Strontium	Sr	264		LANL Int BG LVL	59.6	4.4	1	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4 47	67	6/15/2005	196	339	283	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	REG	F	INIT	METALS	Strontium	Sr	265		LANL Int BG LVL	59.6	4.4	1	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4 47	67	6/15/2005	34.7	77.6	59.7	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	FD	F	INIT	GENINORG	Sulfate	SO4(-2)	59.2		LANL Int BG LVL	7.1	8.3	1.33	mg/L	10	NQ	NQ	EPA:300.0	GELC	
C4 47	67	6/15/2005	34.7	77.6	59.7	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	60		LANL Int BG LVL	7.1	8.5	1.33	mg/L	10	NQ	NQ	EPA:300.0	GELC	
C4 34	46	10/21/2008	56.1	76.7	65.45	46	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT	METALS	Barium	Ва	71.2		LANL Int BG LVL	13.5	5.3	1	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4 34	46	10/21/2008	59.5	73.6	67.55	46	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT	GENINORG	Calcium	Са	67.6		LANL Int BG LVL	10.7	6.3	0.05	mg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4 34	44	10/21/2008	53.4	93	63.35	44	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT	GENINORG	Chloride	CI(-1)	70.5		LANL Int BG LVL	3.11	22.7	0.67	mg/L	10	NQ	NQ	EPA:300.0	GELC	
C4 34	46	10/21/2008	204	255	232	46	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT	GENINORG	Hardness	HARDNESS	233		LANL Int BG LVL	37.8	6.2	0.453	mg/L	1	NQ	NQ	SM:A2340B	GELC	
C4 33	44	10/21/2008	13.1	17.3	15.6	44	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT	GENINORG	Magnesium	Mg	15.5		LANL Int BG LVL	3.14	4.9	0.11	mg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4 34	46	10/21/2008	14.5	19.6	16.9	46	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT	METALS	Nickel	Ni	16.6		LANL Int BG LVL	3.65	4.5	0.6	μg/L	1	NQ	NQ	SW-846:6020	GELC	
C4 34	44	10/21/2008	2.89	5.1	4.285	44	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT		Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.8		LANL Int BG LVL	0.459	8.3	0.17	mg/L	10	NQ	NQ	EPA:353.2	GELC	
C4 34	44	10/21/2008	0.899	1.12	0.9735	44	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT	GENINORG	Perchlorate	CIO4	0.942		LANL Int BG LVL	0.27	3.5	0.05	μg/L	1	NQ	NQ	SW-846:6850	GELC	
C4 34	46	10/21/2008	264	353	325	46	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT	METALS	Strontium	Sr	334		LANL Int BG LVL	59.6	5.6	1	μg/L	1	NQ	NQ	SW-846:6010C	GELC	

Table 1: NMED 05-17 Groundwater Report

		ED 09-17 (	Jiouilai	water it	eport																									
Criteria Code	Visits	First Event	Min Detect	Max Detect	Median Detect	Num Detect	1	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	La	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	Validat	Anyl Meth Code	Lab Code	Comment
C4 3	44	10/21/2008	77.9	103	88.7	44	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	88.6		LANL Int BG LVL	7.1	12.5	1.33	mg/L	10	NQ	NQ	EPA:300.0	GELC	
C4 7	11	5/21/2015	9.11	66.5	12.7	11		Intermediate Perched	CDV-9-1(i) S1	937.4	5/31/2017	REG	F	INIT	GENINORG	Chloride	CI(-1)	66.5		LANL Int BG LVL	3.11	21.4	0.67	mg/L	10	NQ	NQ	EPA:300.0	GELC	
C4 7	11	5/21/2015	1.03	2.63	1.06	11	-	Intermediate Perched	CDV-9-1(i) S1	937.4	5/31/2017	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	1.05		LANL Int BG LVL	0.459	2.3	0.017	mg/L	1	NG	NQ	EPA:353.2	GELC	
C4 4	9 60	5/17/2005	13.5	34.9	21	60	Sandia Canyon	Regional	R-11	855	5/5/2017	REG	F	INIT	METALS	Chromium	Cr	16.4		LANL Reg BG LVL	7.48	2.2	3	μg/L	1	NQ	NQ	SW-846:6020	GELC	
C4 4	8 57	5/17/2005	2.27	7.43	5.2	57	Sandia Canyon	Regional	R-11	855	5/5/2017	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	5.2		LANL Reg BG LVL	0.769	6.8	0.425	mg/L	25	NQ	NQ	EPA:353.2	GELC	
C4 4	8 57	5/17/2005	5.95	15.4	9.31	57	Sandia Canyon	Regional	R-11	855	5/5/2017	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	11.6		LANL Reg BG LVL	4.59	2.5	0.133	mg/L	1	NQ	NQ	EPA:300.0	GELC	
C4 4	5 52	2/24/2000	1.35	3.31	2.2	52	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-15	958.6	5/15/2017	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	1.91		LANL Reg BG LVL	0.769	2.5	0.085	mg/L	5	NQ	NQ	EPA:353.2	GELC	
C4 4	1 47	5/25/2005	5.34	10.8	7.07	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-15	958.6	5/15/2017	REG	F	INIT	GENINORG	Perchlorate	CIO4	9.95		LANL Reg BG LVL	0.414	24	0.5	μg/L	10	NQ	NQ	SW-846:6850	GELC	
C4 4	5 49	5/20/2005	34.5	51.7	44.2	49	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	5/10/2017	REG	F	INIT	GENINORG	Calcium	Са	51.7		LANL Reg BG LVL	17.03	3	0.05	mg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4 4	5 49	5/20/2005	21.1	43.8	30.8	49	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	5/10/2017	REG	F	INIT	GENINORG	Chloride	CI(-1)	43.8		LANL Reg BG LVL	2.7	16.2	0.67	mg/L	10	NQ	NQ	EPA:300.0	GELC	
C4 4	5 51	5/20/2005	310	550	404	51	Mortandad Canyon (includes Ten Site	Regional	R-28	934.3	5/10/2017	REG	F	INIT	METALS	Chromium	Cr	501		LANL Reg	7.48	67	3	μg/L	1	NQ	NQ	SW-846:6020	GELC	Was 550 μg/L on 2/9/2017.

Table 1: NMED 05-17 Groundwater Report

Tab	ie 1:	NIVIE	D 05-17 C	rouna	water K	eport		<del> </del>																						
Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	エ	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
								Canyon and Canada del Buey)												BG LVL										
C4	43	47 9	9/1/2005	125	183	157	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	nal R-28	934.3	5/10/2017	REG	F	INIT GE	NINORG	Hardness	Hardness	183 1	F	LANL Reg BG LVL	67.1	2.7	0.453	mg/L	1	NQ	NQ	SM:A2340B	GELC	
C4	45	49 (	5/20/2005	8.68	13.1	11.1	49	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	nal R-28	934.3	5/10/2017	REG	F	INIT GE	NINORG	Magnesium	Mg	13.1 1	E	LANL Reg BG LVL	4.18	3.1	0.11	mg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4	45	49 5	5/20/2005	6.1	34	14.6	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	nal R-28	934.3	5/10/2017	REG	F	INIT ME	ETALS	Nickel	Ni	15.9 1	F	LANL Reg BG LVL	2.9	5.5	0.6	μg/L	1	NQ	NQ	SW-846:6020	GELC	
C4	43	46	5/20/2005	3.1	5.39	4.025	46	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	nal R-28	934.3	5/10/2017	REG	F	INIT GE		Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	4.26 1	F	LANL Reg BG LVL	0.769	5.5	0.17	mg/L	10	NQ	NQ	EPA:353.2	GELC	
C4	43	46	9/1/2005	0.802	1.13	0.978	5 46	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	nal R-28	934.3	5/10/2017	REG	F	INIT GE	NINORG	Perchlorate	CIO4	1.13	F	LANL Reg BG LVL	0.414	2.7	0.05	μg/L	1	NQ	NQ	SW-846:6850	GELC	
C4	45	49	5/20/2005	38.1	64.5	46.3	49	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	nal R-28	934.3	5/10/2017	REG	F	INIT GE	NINORG	Sulfate	SO4(-2)	64.5	F	LANL Reg BG LVL	4.59	14.1	1.33	mg/L	10	NQ	NQ	EPA:300.0	GELC	The result is the highest value.
C4	33	37	3/12/2008	4.05	6.63	5.89	37	Sandia Canyon Regio	nal R-36	766.9	5/5/2017	REG	F	INIT GE	NINORG	Chloride	CI(-1)	6.63 1	F	LANL Reg BG LVL	2.7	2.5	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC	
C4	33	38 3	3/12/2008	1.25	6.8	2.375	38	Sandia Canyon Regio	nal R-36	766.9	5/5/2017	REG	F	INIT GE		Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	2.3 1	F	LANL Reg BG LVL	0.769	3	0.17	mg/L	10	NQ	NQ	EPA:353.2	GELC	
C4	32	36	3/12/2008	0.845	1.74	1.55	36	Sandia Canyon Regio	nal R-36	766.9	5/5/2017	REG	F	INIT GE	ENINORG	Perchlorate	CIO4	1.57 1	F	LANL Reg BG LVL	0.414	3.8	0.05	μg/L	1	J	PE12e	SW-846:6850	GELC	
C4	30	32	10/9/2008	28.7	52.4	38.9	32	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	nal R-42	931.8	5/10/2017	REG	F	INIT GE	NINORG	Chloride	CI(-1)	52.4 1	E	LANL Reg BG LVL	2.7	19.4	0.67	mg/L	10	NQ	NQ	EPA:300.0	GELC	

Table 1: NMED 05-17 Groundwater Report

Criteria Code	Visits	Samples	D 05-17 G	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
	30 4	<b>41</b> 1	10/9/2008	718	1240	891	41	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	5/10/2017	REG	F	INIT	METALS	Chromium	Cr	776	F	LANL Reg BG LVL	7.48	103.7	3	μg/L	1	NQ	NQ	SW-846:6020	GELC	Was 1240 μg/L on 2/10/2010.
C4	30 3	32 1	10/9/2008	9.45	16.1	14.3	32	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	5/10/2017	REG	F	INIT	GENINORG	Magnesium	Mg	9.45	F	LANL Reg BG LVL	4.18	2.3	0.11	mg/L	1	NQ	NQ	SW-846:6010C	GELC	
C4	30 3	32 1	10/9/2008	8.8	34	24.05	32	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	5/10/2017	REG	F	INIT	METALS	Nickel	Ni	19.4	F	LANL Reg BG LVL	2.9	6.7	0.6	μg/L	1	NQ	NQ	SW-846:6020	GELC	
C4	30 3	32 1	10/9/2008	0.057	7.03	5.865	32	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	5/10/2017	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	5.4	F	LANL Reg BG LVL	0.769	7	0.17	mg/L	10	NQ	NQ	EPA:353.2	GELC	
C4	30 3	32 1	10/9/2008	1.08	1.46	1.265	32	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	5/10/2017	REG	F	INIT	GENINORG	Perchlorate	CIO4	1.13	F	LANL Reg BG LVL	0.414	2.7	0.05	μg/L	1	NQ	NQ	SW-846:6850	GELC	
C4	30 3	32 1	10/9/2008	60.6	84.3	75.05	32	Mortandad Canyon I (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	5/10/2017	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	84.3	F	LANL Reg BG LVL	4.59	18.4	1.33	mg/L	10	NQ	NQ	EPA:300.0	GELC	The result is the highest value.
C4	30 3	32 1	10/9/2008	180	394	339	32	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	5/10/2017	REG	F	INIT		Total Dissolved Solids	TDS	383	F	LANL Reg BG LVL	161	2.4	3.4	mg/L	1	J	l10b	EPA:160.1	GELC	
C4	34 3	38 1	11/5/2008	3.6	9.39	6.825	38	Sandia Canyon	Regional	R-43 S1	903.9	5/8/2017	REG	F	INIT	GENINORG	Chloride	CI(-1)	9.39	F	LANL Reg BG LVL	2.7	3.5	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC	
C4	34 4	43 1	11/5/2008	2.35	173	50.05	40	Sandia Canyon	Regional	R-43 S1	903.9	5/8/2017	REG	F	INIT	METALS	Chromium	Cr	172	F	LANL Reg BG LVL	7.48	23	15	μg/L	5	NQ	NQ	SW-846:6020	GELC	Was 173 µg/L on 2/13/2017, increasing trend.
C4	34 3	39 1	11/5/2008	0.651	9.97	1.995	38	Sandia Canyon	Regional	R-43 S1	903.9	5/8/2017	REG	F	INIT	METALS	Nickel	Ni	5.95	F	LANL Reg BG LVL	2.9	2.1	0.6	μg/L	1	NQ	NQ	SW-846:6020	GELC	
C4	34 3	37 1	11/5/2008	4.98	6.15	5.42	36	Sandia Canyon	Regional	R-43 S1	903.9	5/8/2017	REG	F	INIT		Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	4.98	F	LANL Reg BG LVL	0.769	6.5	0.425	mg/L	25	NQ	NQ	EPA:353.2	GELC	

Table 1: NMED 05-17 Groundwater Report

rabi	e 1: N	NME	D 05-17 G	roundy	vater K	eport			_	1	1	<b>.</b>	1			1					ı	ı	1	-				1	1	1	
Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect		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	ult/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	WOIF		Dilution Factor	Validation Flag	Validation Reason Code	Anyl Meth Code	Lab Code	Comment
C4	34 3	38 1	1/5/2008	0.678	1.03	0.9395	5 38	Sandia Canyon	Regional	R-43 S1	903.9	5/8/2017	REG	F	INIT	GENINORG	Perchlorate	CIO4	0.878	0.9 LA Re BG LV	g G	414 2	.1 0.0	, μg/	L 1		NQ	NQ	SW-846:6850	GELC	
C4	34 3	38 1	1/5/2008	8.77	21	12.9	38	Sandia Canyon	Regional	R-43 S1	903.9	5/8/2017	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	19 1	I.5 LA Re BG LV	g	59 4	.1 0.13	3 mg/	L 1		NQ	NQ	EPA:300.0	GELC	
C4	33 3	36 1	1/10/2008	3.37	6.3	3.995	36	Sandia Canyon	Regional	R-43 S2	969.1	5/8/2017	REG	F	INIT	GENINORG	Chloride	CI(-1)	6.3	I.6 LA Re BG LV	g G	7 2	.3 0.00	i7 mg/	'L 1		NQ	NQ	EPA:300.0	GELC	
C4	33 3	35 1	1/10/2008	0.389	5.4	1.56	35	Sandia Canyon	Regional	R-43 S2	969.1	5/8/2017	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	3.38 2	2.2 LA Re BG LV	g G	769 4	.4 0.42	.5 mg/	L 25	5	NQ	NQ	EPA:353.2	GELC	
C4	33 3	36 1	1/10/2008	0.411	0.892	0.5355	5 36	Sandia Canyon	Regional	R-43 S2	969.1	5/8/2017	REG	F	INIT	GENINORG	Perchlorate	CIO4	0.892 1	I.7 LA Re BG LV	g G	414 2	.2 0.0	μg/	L 1		NQ	NQ	SW-846:6850	GELC	
C4	28 3	33 2	2/28/2009	8.4	43.4	21.4	33	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)		R-45 S1	880	5/17/2017	REG	F	INIT	METALS	Chromium	Cr	41.7 1	I.9 LA Re BG LV	g G	48 5	.6 3	µg/	L 1		NQ	NQ	SW-846:6020	GELC	Was 43.4 µg/L on 2/13/2017, increasing trend.
C4	28 2	29 2	2/28/2009	0.256	3.47	2.65	29	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	_	R-45 S1	880	5/17/2017	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	3.13 1	I.2 LA Re BG LV	g G	769 4	.1 0.1	' mg/	'L 10	)	NQ	NQ	EPA:353.2	GELC	
C4	28 3	33 3	3/5/2009	6.1	20.6	11.2	32	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)		R-45 S2	974.9	5/17/2017	REG	F	INIT	METALS	Chromium	Cr	20.6 1	I.8 LA Re BG LV	g G	48 2	.8 3	µg/	L 1		NQ	NQ	SW-846:6020	GELC	Highest so far, increasing trend.
C4	30 3	35 3	3/6/2010	4.68	10.1	7.6	35	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)		R-50 S1	1077	5/17/2017	REG	F	INIT	GENINORG	Chloride	CI(-1)	8.48 1	I.1 LA Re BG LV	g G	7 3	.1 0.1	4 mg	'L 2		NQ	NQ	EPA:300.0	GELC	
C4	30 3	37 3	3/6/2010	49.8	146	95.7	37	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)		R-50 S1	1077	5/17/2017	REG	F	INIT	METALS	Chromium	Cr	128 1	I.3 LA Re BG LV	g	48 1	7.1 3	µg/	L 1		NQ	NQ	SW-846:6020	GELC	Was 146 μg/L on 5/12/2016.
C4	30 3	36 3	3/6/2010	0.398	2.72	1.56	36	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)		R-50 S1	1077	5/17/2017	REG	F	INIT		Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	2.07 1	I.3 LA Re BG LV	g	769 2	.7 0.08	5 mg/	L 5		NQ	NQ	EPA:353.2	GELC	

Table 1: NMED 05-17 Groundwater Report

				Ground																											
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	Validation Flag	Validation Reason Code	Anyl Meth Code	Lab Code	Comment
		35	3/6/2010	7.22	14.9	11.5	35	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	5/17/2017	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	14.3	1.2	LANL Reg BG LVL	4.59	3.1	0.133	mg/L	1	NQ	NQ	EPA:300.0	GELC	
C4	20	26	3/26/2012	1.64	11.8	8.52	26	Sandia Canyon	Regional	R-62	1158.4	5/8/2017	REG	F	INIT	GENINORG	Chloride	CI(-1)	11.8	1.4	LANL Reg BG LVL	2.7	4.4	0.134	mg/L	2	NQ	NQ	EPA:300.0	GELC	
C4	20	26	3/26/2012	104	240	137.5	26	Sandia Canyon	Regional	R-62	1158.4	5/8/2017	REG	F	INIT	METALS	Chromium	Cr	228	1.7	LANL Reg BG LVL	7.48	30.5	15	μg/L	5	NQ	NQ	SW-846:6020	GELC	
C4	20	26	3/26/2012	2.56	21.4	14.7	26	Sandia Canyon	Regional	R-62	1158.4	5/8/2017	REG	F	NIT	GENINORG	Sulfate	SO4(-2)	21.4	1.5	LANL Reg BG LVL	4.59	4.7	0.266	mg/L	2	NQ	NQ	EPA:300.0	GELC	The result is the highest value.
C5	41	46	6/9/2005	3.17	11.4	4.805	46	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+ NO2-N	11.4	2.4	EPA MCL	10	1.1	0.425	mg/L	25	NQ	NQ	EPA:353.2	GELC	The nitrate concentration is the highest value and has increased for the third consecutive time.
C5	41	46	6/9/2005	68.7	188	92.8	46	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F	INIT	GENINORG	Perchlorate	CIO4	188	2	NMED A1 TAP SCRN LVL	13.8	13.6	10	μg/L	200	NQ	NQ	SW-846:6850	GELC	The perchlorate concentration is the highest value and has increased for the third consecutive time.
C5	47	67	6/15/2005	56.3	246	75.8	67	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	REG	F	INIT	GENINORG	Perchlorate	CIO4	82.9	1.1	NMED A1 TAP SCRN LVL		6	5	μg/L	100	NQ	NQ	SW-846:6850	GELC	
C5	20	26	3/26/2012	104	240	137.5	26	Sandia Canyon	Regional	R-62	1158.4	5/8/2017	REG	F	INIT	METALS	Chromium	Cr	228	1.7	NM GW STD	50	4.6	15	μg/L	5	NQ	NQ	SW-846:6020	GELC	

Table 2: NMED 05-17 Groundwater Report Addendum

Table 2:	NMEL	) 05-1	7 Groundwa	ter Report A	Addendu	m	<del></del>									•													
Criteria Code	Visits		First Event	Min Detect	Max Detect	Median Detect	Num Detect	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Anyl Suite C	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
XC2scr	30	33	2/22/2009	0.019	0.167	0.04515	6 Mortandad Canyon (includes Ten Site Canyon and Canad del Buey)		R-44 S2	985.3	5/18/2017	REG	F INI	GENINORG	Ammonia as Nitrogen	s NH3-N	0.167	3.7	Reg-Scr_95	0.1	1.7	0.017	mg/L	1	J	l4a	EPA:350.1	GELC	
XC2scr	2	2	3/20/2017	10	33	21.5	2 Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Regional	R-68	1340	6/2/2017	REG	F INI	METALS	Manganese	e Mn	33	1.5	Reg-Scr_95	12.1	2.7	2	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
XC4scr	19	25	4/20/2010	34.4	595	138	23 Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	16-26644	130	5/31/2017	FD	F INI	METALS	Iron	Fe	138	1	Int-Scr_95	54.1	2.6	30	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
XC4scr	19	25	4/20/2010	34.4	595	138	23 Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate	16-26644	130	5/31/2017	REG	F INI	METALS	Iron	Fe	147	1.1	Int-Scr_95	54.1	2.7	30	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
XC4scr	41	46	6/9/2005	0.083	0.214	0.137	40 Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F INI	GENINORG	Bromide	Br(-1)	0.202	1.5	Int-Scr_95	0.0716	2.8	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC	
XC4scr	41	51	6/9/2005	1.1	13	4.49	45 Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	5/9/2017	REG	F INI	METALS	Chromium	Cr	5.53	1.2	Int-Scr_95	2.72	2	3	μg/L	1 J	J	J_LAB	SW-846:6020	GELC	
XC4scr	47	67	6/15/2005	25.4	56	44.8	67 Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	FD	F INI	METALS	Boron	В	52.7	1.2	Int-Scr_95	16.2	3.3	15	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
XC4scr	47	67	6/15/2005	25.4	56	44.8	67 Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	REG	F INI	METALS	Boron	В	51	1.1	Int-Scr_95	16.2	3.1	15	μg/L	1	NQ	NQ	SW-846:6010C	GELC	
XC4scr	47	67	6/15/2005	0.212	0.703	0.575	64 Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	FD	F INI	GENINORG	Bromide	Br(-1)	0.584	1	Int-Scr_95	0.0716	8.2	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC	

Table 2: NMED 05-17 Groundwater Report Addendum

Table 2.	NINIED	7 03-1	7 Groundwa	ter Report	Addendu	ım																								
Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fid 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	Validation Flag	Validation Reason Code	Anyl Meth Code	Lab Code	Comment
XC4scr	47	67	6/15/2005	0.212	0.703	0.575	( T a	Mortandad Canyon fincludes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	REG	F	INIT GENINORG	Bromide	Br(-1)	0.57	1	Int-Scr_95	0.0716	8	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC	
XC4scr	47	70	6/15/2005	29.4	86.6	56.4	() T a	Mortandad Canyon includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	FD	F	INIT METALS	Chromium	Cr	71	1.3	Int-Scr_95	2.72	26.1	3	μg/L	1	NQ	NQ	SW-846:6020	GELC	
XC4scr	47	70	6/15/2005	29.4	86.6	56.4	( T a	Mortandad Canyon (includes Fen Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	REG	F	INIT METALS	Chromium	Cr	75.1	1.3	Int-Scr_95	2.72	27.6	3	μg/L	1	NQ	NQ	SW-846:6020	GELC	
XC4scr	47	67	6/15/2005	298	497	409	( T a	Mortandad Canyon (includes Fen Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	FD	F	INIT GENINORG	Total Dissolved Solids	TDS	413	1	Int-Scr_95	135	3.1	3.4	mg/L	1	NQ	NQ	EPA:160.1	GELC	
XC4scr	47	67	6/15/2005	298	497	409	() T a	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	5/11/2017	REG	F	INIT GENINORG	Total Dissolved Solids	TDS	386	0.9	Int-Scr_95	135	2.9	3.4	mg/L	1	NQ	NQ	EPA:160.1	GELC	
XC4scr	34	44	10/21/2008	0.194	0.683	0.577	43 5	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT GENINORG	Bromide	Br(-1)	0.664	1.2	Int-Scr_95	0.0716	9.3	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC	
XC4scr	34	51	10/21/2008	354	658	453	51 S	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT METALS	Chromium	Cr	354	8.0	Int-Scr_95	2.72	130.1	3	μg/L	1	NQ	NQ	SW-846:6020	GELC	
XC4scr	24	30	10/21/2008	0.00449	0.304	0.007085	30 8	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	UF	INIT GENINORG	Cyanide (Total)	CN(Total)	0.0074	1	Int-Scr_95	0.0017	4.4	0.0017			NQ	NQ	EPA:335.4	GELC	
XC4scr	34	45	10/21/2008	354	796	424	45 8	Sandia Canyon	Intermediate	SCI-2	548	5/4/2017	REG	F	INIT GENINORG	Total Dissolved Solids	TDS	451	1.1	Int-Scr_95	135	3.3	3.4	mg/L	1	NQ	NQ	EPA:160.1	GELC	
XC4scr	7	11	5/21/2015	0.0745	2.75	0.345	()	Water Canyon (includes Canon de Valle, Potrillo, and Fence Canyons)	Intermediate Perched	CDV-9-1(i) S1	937.4	5/31/2017	REG	F	INIT GENINORG	Bromide	Br(-1)	0.198	0.6	Int-Scr_95	0.0716	2.8	0.067	mg/L	1 J	J	J_LAB	EPA:300.0	GELC	
XC4scr	45	49	5/20/2005	0.113	0.33	0.232	( T a	Mortandad Canyon (includes Fen Site Canyon and Canada del Buey)	Regional	R-28	934.3	5/10/2017	REG	F	INIT GENINORG	Bromide	Br(-1)	0.315	1.4	Reg-Scr_95	0.067	4.7	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC	

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Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	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 UOM	Dilution Factor	Validation Flag	Validation Reason Code	Anyl Meth Code	Lab Code	Comment
XC4scr	33	36	5/20/2005	0.00239	0.00623 0.00	398	29 Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	ional	R-28	934.3	5/10/2017	REG	UF INIT	GENINORG	Cyanide (Total)	CN(Total)	0.00542	1.4	Reg-Scr_95	0.0017	3.2 0.0017	mg/L	1	J+	l6b	EPA:335.4	GELC	
XC4scr	30	32	10/9/2008	0.102	0.364 0.2	17	31 Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	onal	R-42	931.8	5/10/2017	REG	F INIT	GENINORG	Bromide	Br(-1)	0.31	1.4	Reg-Scr_95	0.067	4.6 0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC	
XC4scr	21	21	10/9/2008	0.00188	0.00814 0.00	06755	16 Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	onal	R-42	931.8	5/10/2017	REG	UF INIT	GENINORG	Cyanide (Total)	CN(Total)	0.0077	1.1	Reg-Scr_95	0.0017	4.5 0.0017	mg/L	1	NQ	NQ	EPA:335.4	GELC	