



**DEPARTMENT OF ENERGY**  
Environmental Management Los Alamos Field Office (EM-LA)  
Los Alamos, New Mexico 87544

EMLA-23-BF334-2-1

Mr. Rick Shean  
Designated Agency Manager  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6313

Received

SEP 29 2023

NMED Hazardous Waste Bureau

September 29, 2023

Subject: Monthly Notification of Groundwater Data Reviewed in September 2023

Reference(s): 1. N3B (Newport News Nuclear BWXT-Los Alamos, LLC), September 2022.  
“Interim Facility-Wide Groundwater Monitoring Plan for the 2022 Monitoring Year, October 2021–September 2022, Revision 1,” Newport News Nuclear BWXT-Los Alamos, LLC, document EM2021-0535, Los Alamos, New Mexico.

Dear Mr. Shean:

This letter is the written submission of the U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA) and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) in accordance with Section XXVI.D of the 2016 Compliance Order on Consent modified February 2017 (Consent Order). Members of EM-LA and N3B met on September 14, 2023, to review groundwater data loaded or released in the EIM (Environmental Information Management) system during the previous calendar month. The enclosed report was prepared by comparing the data against groundwater notification criteria as defined in Section IX of the 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.” The EPA’s tap water standard for carcinogenic risk values were adjusted to  $1 \times 10^{-5}$ , as specified in the Consent Order.

The enclosed report was prepared using the November 2022 EPA regional screening levels for tap water; the NMWQCC groundwater standards published December 21, 2018; and the June 2022 Table A-1 of “Risk Assessment Guidance for Site Investigations and Remediation” for NMED tap water screening levels.

This report also includes analytical data from samples collected at a location within the Pueblo de San Ildefonso, which are subject to reporting at this time. These data have been reviewed by the Pueblo, as required under the 2014 Memorandum of Agreement (as amended in 2015) between the DOE National Nuclear Security Administration Los Alamos Field Office, EM-LA, and the Pueblo de San Ildefonso.

### **1-Day Notification**

One constituent was detected at a concentration that exceeded an NMWQCC groundwater standard or EPA MCL at a location where the constituent had not previously been detected above the respective standard as defined in the 2016 Consent Order (based on samples collected since June 14, 2007).

EM-LA notified NMED orally within one business day of the review of the analytical data that showed detection of this contaminant, on September 15, 2022 (per Section XXVI.C of the Consent Order).

Analysis of a filtered water sample collected from CrPZ-4 on July 5, 2023, resulted in the measurement of a perchlorate concentration of 40.3 µg/L, exceeding the 13.8-µg/L NMED A-1 tap water screening level. This result is reported under the Criterion Code A (CA) category not necessarily because it was a newly discovered value, but because this well, like other CrPZ wells, has more recently become reportable following incorporation under the “Interim Facility-Wide Groundwater Monitoring Plan for the 2022 Monitoring Year, October 2021–September 2022, Revision 1” (MY 2022 IFGMP; Reference 1).

Further discussion on the incorporation of the CrPZ wells is provided in section 3.3 of the MY 2022 IFGMP. Results of historical CrPZ-4 perchlorate samples were reviewed against this report’s result. The historical data set includes results from several samples collected from 2015 to 2018 that were similar in value to this currently reported value.

### **15-Day Notification**

The information required for constituents that meet the five reporting criteria requiring written notification within 15 days is provided in the enclosed report and tables.

If you have questions, please contact Amanda White at (505) 309-1366 ([amanda.white@em-la.doe.gov](mailto:amanda.white@em-la.doe.gov)) or Hai Shen at (505) 709-7600 ([hai.shen@em.doe.gov](mailto:hai.shen@em.doe.gov)).

Sincerely,

Digitally signed by BRIAN  
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Date: 2023.09.28  
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Arturo Q. Duran                  For  
Compliance and Permitting Manager  
U.S. Department of Energy  
Environmental Management  
Los Alamos Field Office

Enclosure(s):

1. Summary of Groundwater Data Reviewed in September 2023 that Meet Notification Requirements (EM2023-0631)

cc (letter with CD/DVD enclosure[s]):

Steven Lynne, Los Alamos County, Los Alamos, NM (2 copies)

cc (letter and enclosure[s] emailed):

Laurie King, EPA Region 6, Dallas, TX

Raymond Martinez, San Ildefonso Pueblo, NM

Dino Chavarria, Santa Clara Pueblo, NM

David Gomez, Los Alamos County, Los Alamos, NM

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## **SUMMARY OF GROUNDWATER DATA REVIEWED IN SEPTEMBER 2023 THAT MEET NOTIFICATION REQUIREMENTS**

### **INTRODUCTION**

This report provides information to the New Mexico Environment Department (NMED) concerning recent groundwater monitoring data obtained by Newport News Nuclear BWXT-Los Alamos, LLC (N3B) under the annual "Interim Facility-Wide Groundwater Monitoring Plan, Revision 1" (IFGMP) for the 2023 monitoring year (N3B 2022, 702346). The report contains results for contaminants and other chemical constituents that meet the five screening criteria described in Section XXVI.D of the 2016 Compliance Order on Consent, modified February 2017 (Consent Order). The report covers groundwater samples collected from wells or springs (listed in the accompanying tables) that provide surveillance of the hydrogeological zones at Los Alamos National Laboratory (LANL or the Laboratory), as indicated in the tables.

The report includes two tables. Table 1, NMED 8-23 Groundwater Report, presents categorical results since June 14, 2007, that meet the five reporting criteria as specified in the Consent Order. Table 2, NMED 8-23 Groundwater Report Addendum, presents results that exceed the 95<sup>th</sup> percentile of the results in the data set defined in the "Groundwater Background Investigation Report, Revision 5" (GBIR) (LANL 2016, 601920). Only the contaminants and other chemical constituents that lack 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 N3B to NMED that identifies the potential risk resulting from contaminants and other chemical constituents that are 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; and
- 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 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 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 GBIR. The EPA's tap water standard carcinogenic risk values were adjusted to  $1 \times 10^{-5}$ , as specified in the Consent Order. This report was prepared using the November 2022 EPA regional screening levels for tap water; the NMWQCC groundwater standards published December 21, 2018; and the NMED tap water screening levels specified in the June 2022 Table A-1 of "Risk Assessment Guidance for Site Investigations and Remediation" (Risk Assessment Guidance) (NMED 2022, 702141, Table A-1).

Background values applied in Table 1 notification criterion C4 are the background values for hydrogeological zones as set forth in the GBIR.

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 GBIR.

## **DESCRIPTION OF TABLES**

### **1-Day Notification Requirement**

One-day notification is required upon the 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 either of these standards at that location. N3B, under the direction of the U.S. Department of Energy Environmental Management Los Alamos Field Office (DOE EM-LA), notifies NMED of any such data orally within 1 business day following the review of monthly analytical data. Data in the 1-day notification is also included in the 15-day notification table. Such exceedance data are identified under the Criterion Code A (CA) in notifications.

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

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

The criterion (C) codes and their definitions 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, 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 2 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 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 GBIR
- 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 GBIR

Columns 2 through 8 in both tables provide summary statistics for metals or organic/inorganic compounds by field preparation code (e.g., filtered [F] 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 as follows:

Canyon—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—date the sample was collected

Fld QC Type Code—identifies regular samples (REG) or field duplicates (FD)

Fld Prep Code—identifies whether samples are filtered (F) or unfiltered (UF)

Lab Sample Type Code—indicates whether result is a primary sample (INIT) or reanalysis (RE)

Analytical Suite Code—analytical suite (such as volatile organic compounds) for analyzed compound

Analyte Description—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 Qualifier—analytical laboratory qualifier indicating analytical quality of the sample data

Validation Qualifier—the qualifier that indicates the effects of all processes associated with the sample (e.g., sample collection, additional quality control samples such as field duplicates) on the quality of the sample data

Validation Reason Code—an explanation of the reason for validation of the qualifiers

Analytical Method Code—analytical method number

Lab Code—analytical laboratory name

Comment—N3B comment regarding the analytical result

## **Acronyms and Abbreviations**

The tables may include the following acronyms, abbreviations, and analytical laboratory codes and qualifiers:

CFA—Cape Fear Analytical, LLC

DOECAP—Department of Energy Consolidated Audit Program

DNX—hexahydro-1,3-dinitro-5-nitro-1,3,5-triazine

EPA MCL—U.S. Environmental Protection Agency maximum contaminant level

F—filtered

FD—field duplicate

GELC—GEL Laboratories, LLC, Division of the GEL Group, Charleston, SC

GENINORG—General inorganic

HEXP—high explosive

HMX—octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine

HRGC/HRMS—high-resolution gas chromatography/high-resolution mass spectrometry

ICP-AES—inductively coupled plasma atomic emission spectroscopy

ICP-MS—inductively coupled plasma mass spectrometry

IFGMP—Interim Facility-Wide Groundwater Monitoring Plan

INIT—primary sample

LANL Int BG LV—Los Alamos National Laboratory intermediate background level

LANL Reg BG LV—Los Alamos National Laboratory regional background level

LCMS/MS—liquid chromatography mass spectrometry/mass spectrometry

LCS—laboratory control sample

MDL—method detection limit

MNX—hexahydro-1-nitroso-3,5-dinitro-1,3,5-triazine

MS—matrix spike

MSD—matrix spike duplicate

n/a—not applicable

NM GW STD—New Mexico Water Quality Control Commission groundwater standard

NMED A1 TAP SCRN LVL—New Mexico Environment Department Table A-1 screening level for tap water

NTU—nephelometric turbidity unit

PETN—pentaerythritol tetranitrate

PFAS—per- and polyfluoroalkyl substances

PQL—practical quantitation limit

RDX—Royal Demolition Explosive (hexahydro-1,3,5-trinitro-1,3,5-triazine)

RE—reanalysis

REG—regular sample

RL—reporting limit

RPD—relative percent difference

SIM—selected ion monitoring

SVOC—semivolatile organic compound

SwRI—Southwest Research Institute

RI—Reissue

TDS—total dissolved solids

TNX—2,4,6-trinitroxylen

UAL—upper acceptance limit

UF—unfiltered

UOM—unit of measurement

VOC—volatile organic compound

### **Analytical Laboratory Codes and Qualifiers**

I4a (validation reason code)—The detected sample result is  $\geq 5$  times and  $< 100$  times the detected concentration of the same analyte in the method blank.

I4g (validation reason code)—The detected sample result is greater than or equal to 5 times and less than 100 times the detected concentration of the same analyte in the associated blank.

I6a (validation reason code)—The associated matrix spike percent recovery is less than the lower acceptance limit.

I6b (validation reason code)—The associated matrix spike percent recovery is greater than the upper acceptance limit.

J (lab qualifier)— The associated numerical value is an estimated quantity.

J (validation qualifier)—The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual.

J+ (validation qualifier)—The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential positive bias.

J- (validation qualifier)—The analyte is classified as detected but the reported concentration value is expected to be more uncertain than usual with a potential negative bias.

J\_LAB (validation reason code)—The analytical laboratory qualified the detected result as estimated (J) because the result was less the practical quantitation limit but greater than the method detection limit.

PE12f (validation reason code)— The matrix spike percent recovery is greater than the upper acceptance limit.

NQ (validation qualifier)—No validation qualifier flag is associated with this result, and the analyte is classified as detected.

NQ (validation reason code)— The analytical laboratory did not qualify the analyte as not detected and/or any other standard qualifier. The analyte is detected in the sample.

SV9 (validation reason code)— The holding time was greater than the applicable holding time requirement and was less than or equal to 2 times the applicable holding time requirement.

## **REFERENCES**

*The following reference list includes documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ERID, ESHID, or EMID. ERIDs were assigned by the Laboratory's Associate Directorate for Environmental Management (IDs through 599999); ESHIDs were assigned by the Laboratory's Associate Directorate for Environment, Safety, and Health (IDs 600000 through 699999); and EMIDs are assigned by N3B (IDs 700000 and above).*

LANL (Los Alamos National Laboratory), October 27, 2016. "Groundwater Background Investigation Report, Revision 5," Los Alamos National Laboratory document LA-UR-16-27907, Los Alamos, New Mexico. (LANL 2016, 601920)

N3B (Newport News Nuclear BWXT-Los Alamos, LLC), September 2022. "Interim Facility-Wide Groundwater Monitoring Plan for the 2023 Monitoring Year, October 2022–September 2023, Revision 1," Newport News Nuclear BWXT-Los Alamos, LLC, document EM2022-0656, Los Alamos, New Mexico. (N3B 2022, 702346)

NMED (New Mexico Environment Department), June 2022. "Risk Assessment Guidance for Site Investigations and Remediation, Volume 1, Soil Screening Guidance for Human Health Risk Assessments," Hazardous Waste Bureau and Ground Water Quality Bureau, Santa Fe, New Mexico. (NMED 2022, 702141)



Table 1: NMED 8-23 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Analyte Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std MDL	Std UOM	Dilution Factor	Lab Qualifier	Validation Reason Code	Analy Meth Code	Lab Code	Comment	
CA	8	9	11/10/2021	2.78	40.3	3.27	9	Mortandad Canyon	Regional	CRPZ-4	957	7/5/2023	REG	F	INIT	LCMS/MS	Perchlorate	CIO4	40.3	12.3	NMED A1 TAP SCRNL VLV	13.8	2.9	1.00	µg/L	20.0	— <sup>a</sup>	NQ	SW-846:6850	GELC	Result was similar in value to several results near the beginning of sampling at this well in the mid-2010s. Those results preceded consideration in this review because they preceded the 2022 inclusion of the location into the Interim Facility-Wide Groundwater Monitoring Plan.	
C1	1	1	7/13/2023	0.36	0.36	0.36	1	Sandia Canyon	Regional	R-71 S1 <sup>b,c</sup>	1285.0	7/13/2023	REG	UF	INIT	VOC	Naphthalene	91-20-3	0.360	1	NMED A1 TAP SCRNL VLV	1.17	0.3	0.333	µg/L	1.00	J	J	J_LAB	SW-846:8260D	GELC	
C1	3	3	12/15/2022	7.82	7.82	7.82	1	Sandia Canyon	Regional	R-71 S2 <sup>b,d</sup>	1349.7	7/13/2023	REG	UF	INIT	SVOC	Benzoic Acid	65-85-0	7.82	1	EPA TAP SCRNL VLV	75000	0	6.29	µg/L	1.00	J	J-	SV9	SW-846:8270E	GELC	
C4	8	8	11/4/2021	6.02	9.73	7.01	8	Mortandad Canyon	Regional	CRPZ-1	1122.9	7/18/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	7.18	1	LANL Reg BG VLV	2.7	2.7	0.0670	mg/L	1.00	—	J+	I6b	EPA:300.0	GELC	
C4	8	8	11/4/2021	68.8	128	80.5	8	Mortandad Canyon	Regional	CRPZ-1	1122.9	7/18/2023	REG	F	INIT	Metals	Chromium	Cr	82.3	1	LANL Reg BG VLV	7.48	11	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	8	8	11/4/2021	2.49	3.15	2.83	8	Mortandad Canyon	Regional	CRPZ-1	1122.9	7/18/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.54	0.9	LANL Reg BG VLV	0.769	3.3	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	8	8	11/4/2021	10.5	18.2	13.3	8	Mortandad Canyon	Regional	CRPZ-1	1122.9	7/18/2023	REG	F	INIT	LCMS/MS	Perchlorate	CIO4	18.2	1.4	LANL Reg BG VLV	0.414	44	0.250	µg/L	5.00	—	NQ	NQ	SW-846:6850	GELC	
C4	8	8	11/4/2021	9.98	15.5	11.2	8	Mortandad Canyon	Regional	CRPZ-1	1122.9	7/18/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	11.2	1	LANL Reg BG VLV	4.59	2.4	0.133	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
C4	8	9	11/10/2021	48.1	62.1	57.5	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Metals	Calcium	Ca	54.8	1	LANL Reg BG VLV	17.03	3.2	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	8	9	11/10/2021	41	54.7	47.5	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	52.8	1.1	LANL Reg BG VLV	2.7	19.6	0.670	mg/L	10.0	—	NQ	NQ	EPA:300.0	GELC	
C4	8	9	11/10/2021	179	269	204	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Metals	Chromium	Cr	204	1	LANL Reg BG VLV	7.48	27.3	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	8	9	11/10/2021	168	221	201	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Geninorg	Hardness	Hardness	193	1	LANL Reg BG VLV	67.1	2.9	0.453	mg/L	1.00	—	NQ	NQ	SM:A2340B	GELC	
C4	8	9	11/10/2021	11.7	16.1	13.8	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Metals	Magnesium	Mg	13.7	1	LANL Reg BG VLV	4.18	3.3	0.11	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	8	9	11/10/2021	5.98	8.24	6.85	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Metals	Nickel	Ni	6.40	0.9	LANL Reg BG VLV	2.9	2.2	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	8	9	11/10/2021	3.8	5.2	4.44	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.13	0.9	LANL Reg BG VLV	0.769	5.4	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	8	9	11/10/2021	0.854	1.08	0.971	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	LCMS/MS	Perchlorate	CIO4	0.884	0.9	LANL Reg BG VLV	0.414	2.1	0.0500	µg/L	1.00	—	J+	PE12f	SW-846:6850	GELC	
C4	8	9	11/10/2021	53.7	64.5	58.6	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	63.4	1.1	LANL Reg BG VLV	4.59	13.8	1.33	mg/L	10.0	—	NQ	NQ	EPA:300.0	GELC	
C4	8	9	11/10/2021	2.68	3.9	3.51	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Metals	Uranium	U	3.30	0.9	LANL Reg BG VLV	1.19	2.8	0.0670	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	8	8	11/9/2021	17.1	23	19.05	8	Mortandad Canyon	Regional	CRPZ-3	939.4	7/5/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	22.6	1.2	LANL Reg BG VLV	2.7	8.4	0.335	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC	
C4	8	8	11/9/2021	297	468	364	8	Mortandad Canyon	Regional	CRPZ-3	939.4	7/5/2023	REG	F	INIT	Metals	Chromium	Cr	439	1.2	LANL Reg BG VLV	7.48	58.7	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	

Table 1: NMED 8-23 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Analyte Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std MDL	Std UOM	Dilution Factor	Lab Qualifier	Validation Reason Code	Analy Meth Code	Lab Code	Comment		
C4	8	8	11/9/2021	7.24	9.63	8.325	8	Mortandad Canyon	Regional	CRPZ-3	939.4	7/5/2023	REG	F	INIT	Metals	Magnesium	Mg	8.84	1.1	LANL Reg BG LVL	4.18	2.1	0.11	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC		
C4	8	8	11/9/2021	5.2	5.65	5.37	8	Mortandad Canyon	Regional	CRPZ-3	939.4	7/5/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.53	1	LANL Reg BG LVL	0.769	7.2	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC		
C4	8	8	11/9/2021	0.958	1.18	1.145	8	Mortandad Canyon	Regional	CRPZ-3	939.4	7/5/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	1.16	1	LANL Reg BG LVL	0.414	2.8	0.0500	µg/L	1.00	—	NQ	NQ	SW-846:6850	GELC		
C4	8	8	11/9/2021	27.9	39	31.2	8	Mortandad Canyon	Regional	CRPZ-3	939.4	7/5/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	39.0	1.3	LANL Reg BG LVL	4.59	8.5	0.665	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC		
C4	8	9	11/10/2021	6.31	10.7	6.88	9	Mortandad Canyon	Regional	CRPZ-4	957	7/5/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	10.7	1.6	LANL Reg BG LVL	2.7	4	0.134	mg/L	2.00	—	NQ	NQ	EPA:300.0	GELC		
C4	8	9	11/10/2021	88.4	164	92.5	9	Mortandad Canyon	Regional	CRPZ-4	957	7/5/2023	REG	F	INIT	Metals	Chromium	Cr	140	1.5	LANL Reg BG LVL	7.48	18.7	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC		
C4	8	8	11/10/2021	4.77	5.3	4.975	8	Mortandad Canyon	Regional	CRPZ-4	957	7/5/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.88	1	LANL Reg BG LVL	0.769	6.3	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC		
C4	8	9	11/10/2021	2.78	40.3	3.27	9	Mortandad Canyon	Regional	CRPZ-4	957	7/5/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	40.3	12.3	LANL Reg BG LVL	0.414	97.3	1.00	µg/L	20.0	—	NQ	NQ	SW-846:6850	GELC		
C4	8	9	11/10/2021	12.3	17.8	12.7	9	Mortandad Canyon	Regional	CRPZ-4	957	7/5/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	17.6	1.4	LANL Reg BG LVL	4.59	3.8	0.133	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC		
C4	8	8	11/22/2021	14.9	16.9	16.4	8	Mortandad Canyon	Regional	CRPZ-5	976	7/19/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	16.4	1	LANL Reg BG LVL	2.7	6.1	0.335	mg/L	5.00	—	J+	I6b	EPA:300.0	GELC		
C4	8	8	11/22/2021	411	479	466	8	Mortandad Canyon	Regional	CRPZ-5	976	7/19/2023	REG	F	INIT	Metals	Chromium	Cr	470	1	LANL Reg BG LVL	7.48	62.8	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC		
C4	8	8	11/22/2021	2.88	3.62	3.16	8	Mortandad Canyon	Regional	CRPZ-5	976	7/19/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.31	1	LANL Reg BG LVL	0.769	4.3	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC		
C4	8	8	11/22/2021	25.8	30	28.7	8	Mortandad Canyon	Regional	CRPZ-5	976	7/19/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	29.3	1	LANL Reg BG LVL	4.59	6.4	0.665	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC		
C4	70	93	6/15/2005	30.1	48.2	39.2	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Metals	Barium	Ba	35.9	0.9	LANL Int BG LVL	13.5	2.7	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC		
C4	70	93	6/15/2005	30.1	48.2	39.2	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Metals	Barium	Ba	36.3	0.9	LANL Int BG LVL	13.5	2.7	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC		
C4	70	91	6/15/2005	42.8	75.5	61	91	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Metals	Calcium	Ca	55.8	0.9	LANL Int BG LVL	10.7	5.2	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC		
C4	70	91	6/15/2005	42.8	75.5	61	91	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Metals	Calcium	Ca	55.8	0.9	LANL Int BG LVL	10.7	5.2	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC		
C4	72	93	6/15/2005	21.2	64.8	51.6	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Geninorg	Chloride	Cl(-1)	46.0	0.9	LANL Int BG LVL	3.11	14.8	0.670	mg/L	10.0	—	NQ	NQ	EPA:300.0	GELC		
C4	72	93	6/15/2005	21.2	64.8	51.6	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	45.4	0.9	LANL Int BG LVL	3.11	14.6	0.670	mg/L	10.0	—	NQ	NQ	EPA:300.0	GELC		
C4	72	93	6/15/2005	0.412	0.672	0.528	90	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Geninorg	Fluoride	F(-1)	0.654	1.2	LANL Int BG LVL	0.234	2.8	0.0330	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC		
C4	72	93	6/15/2005	0.412	0.672	0.528	90	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Geninorg	Fluoride	F(-1)	0.634	1.2	LANL Int BG LVL	0.234	2.7	0.0330	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC		
C4	70	91	6/15/2005	142	253	204	91	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Geninorg	Hardness	Hardness	Hardness	186	0.9	LANL Int BG LVL	37.8	4.9	0.453	mg/L	1.00	—	NQ	NQ	SM:A2340B	GELC	

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Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Analyte Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std MDL	Std UOM	Dilution Factor	Lab Qualifier	Validation Reason Code	Analy Meth Code	Lab Code	Comment	
C4	70	91	6/15/2005	142	253	204	91	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Geninorg	Hardness	Hardness	186	0.9	LANL Int BG LVL	37.8	4.9	0.453	mg/L	1.00	—	NQ	SM:A2340B	GELC		
C4	70	91	6/15/2005	8.49	15.7	12.6	91	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Metals	Magnesium	Mg	11.4	0.9	LANL Int BG LVL	3.14	3.6	0.11	mg/L	1.00	—	NQ	SW-846:6010D	GELC		
C4	70	91	6/15/2005	8.49	15.7	12.6	91	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Metals	Magnesium	Mg	11.3	0.9	LANL Int BG LVL	3.14	3.6	0.11	mg/L	1.00	—	NQ	SW-846:6010D	GELC		
C4	70	93	6/15/2005	2.9	41.8	21.4	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Metals	Nickel	Ni	11.4	0.5	LANL Int BG LVL	3.65	3.1	0.600	µg/L	1.00	—	NQ	SW-846:6020B	GELC		
C4	70	93	6/15/2005	2.9	41.8	21.4	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Metals	Nickel	Ni	11.8	0.6	LANL Int BG LVL	3.65	3.2	0.600	µg/L	1.00	—	NQ	SW-846:6020B	GELC		
C4	72	93	6/15/2005	7.62	27.7	11.2	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	13.9	1.2	LANL Int BG LVL	0.459	30.3	0.170	mg/L	10.0	—	NQ	EPA:353.2	GELC		
C4	72	93	6/15/2005	7.62	27.7	11.2	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	14.0	1.3	LANL Int BG LVL	0.459	30.5	0.170	mg/L	10.0	—	NQ	EPA:353.2	GELC		
C4	66	83	2/26/2007	56.3	190	82.9	83	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	LCMS/MS	Perchlorate	ClO4	113	1.4	LANL Int BG LVL	0.27	418.5	1.00	µg/L	20.0	—	NQ	SW-846:6850	GELC		
C4	66	83	2/26/2007	56.3	190	82.9	83	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	116	1.4	LANL Int BG LVL	0.27	429.6	1.00	µg/L	20.0	—	NQ	SW-846:6850	GELC		
C4	70	91	6/15/2005	196	339	272	91	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Metals	Strontium	Sr	256	0.9	LANL Int BG LVL	59.6	4.3	1.00	µg/L	1.00	—	NQ	SW-846:6010D	GELC		
C4	70	91	6/15/2005	196	339	272	91	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Metals	Strontium	Sr	256	0.9	LANL Int BG LVL	59.6	4.3	1.00	µg/L	1.00	—	NQ	SW-846:6010D	GELC		
C4	71	94	6/15/2005	34.7	77.6	56.5	94	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Geninorg	Sulfate	SO4(-2)	44.5	0.8	LANL Int BG LVL	7.1	6.3	1.33	mg/L	10.0	—	NQ	EPA:300.0	GELC		
C4	71	94	6/15/2005	34.7	77.6	56.5	94	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	44.5	0.8	LANL Int BG LVL	7.1	6.3	1.33	mg/L	10.0	—	NQ	EPA:300.0	GELC		
C4	43	53	11/30/2005	5.62	7.09	6.39	53	Sandia Canyon	Regional	R-10a	690.0	5/11/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.69	1	LANL Reg BG LVL	2.7	2.5	0.0670	mg/L	1.00	—	J+	I6b	EPA:300.0	GELC	
C4	43	53	11/30/2005	9.36	12.9	10.3	53	Sandia Canyon	Regional	R-10a	690.0	5/11/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	10.6	1	LANL Reg BG LVL	4.59	2.3	0.133	mg/L	1.00	—	NQ	EPA:300.0	GELC		
C4	110	133	5/17/2005	2.27	9.25	5.61	133	Sandia Canyon	Regional	R-11	855.0	8/1/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	8.49	1.5	LANL Reg BG LVL	0.769	11	0.170	mg/L	10.0	—	NQ	EPA:353.2	GELC		
C4	110	133	5/17/2005	2.27	9.25	5.61	133	Sandia Canyon	Regional	R-11	855.0	7/5/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	7.93	1.4	LANL Reg BG LVL	0.769	10.3	0.170	mg/L	10.0	—	NQ	EPA:353.2	GELC		
C4	103	121	6/13/2007	0.664	1.55	0.785	121	Sandia Canyon	Regional	R-11	855.0	8/1/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	0.864	1.1	LANL Reg BG LVL	0.414	2.1	0.0500	µg/L	1.00	—	NQ	SW-846:6850	GELC		
C4	103	121	6/13/2007	0.664	1.55	0.785	121	Sandia Canyon	Regional	R-11	855.0	7/5/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	0.834	1.1	LANL Reg BG LVL	0.414	2	0.0500	µg/L	1.00	—	NQ	SW-846:6850	GELC		
C4	110	133	5/17/2005	5.95	20.2	9.82	133	Sandia Canyon	Regional	R-11	855.0	8/1/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	11.6	1.2	LANL Reg BG LVL	4.59	2.5	0.133	mg/L	1.00	—	NQ	EPA:300.0	GELC		
C4	110	133	5/17/2005	5.95	20.2	9.82	133	Sandia Canyon	Regional	R-11	855.0	7/5/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	11.3	1.2	LANL Reg BG LVL	4.59	2.5	0.133	mg/L	1.00	—	NQ	EPA:300.0	GELC		
C4	27	34	9/19/2000	2.23	8.36	6.42	34	Sandia Canyon	Intermediate	R-12 S2	504.5	7/25/2023	FD	F	INIT	Geninorg	Chloride	Cl(-1)	7.73	1.2	LANL Int BG LVL	3.11	2.5	0.0670	mg/L	1.00	—	J+	I4g	EPA:300.0	GELC	

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C4	27	34	9/19/2000	2.23	8.36	6.42	34	Sandia Canyon	Intermediate	R-12 S2	504.5	7/25/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	7.70	1.2	LANL Int BG LVL	3.11	2.5	0.0670	mg/L	1.00	—	J+	I4g	EPA:300.0	GELC	
C4	26	31	9/19/2000	0.051	1.55	1.19	30	Sandia Canyon	Intermediate	R-12 S2	504.5	7/25/2023	FD	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	1.04	0.9	LANL Int BG LVL	0.459	2.3	0.0170	mg/L	1.00	—	NQ	NQ	EPA:353.2	GELC	
C4	26	31	9/19/2000	0.051	1.55	1.19	30	Sandia Canyon	Intermediate	R-12 S2	504.5	7/25/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	1.03	0.9	LANL Int BG LVL	0.459	2.2	0.0170	mg/L	1.00	—	NQ	NQ	EPA:353.2	GELC	
C4	69	84	2/24/2000	1.35	3.31	2.115	84	Mortandad Canyon	Regional	R-15	958.6	7/7/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.10	1	LANL Reg BG LVL	0.769	2.7	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	60	72	2/28/2007	5.34	13.2	8.895	70	Mortandad Canyon	Regional	R-15	958.6	7/7/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	13.2	1.5	LANL Reg BG LVL	0.414	31.9	0.100	µg/L	2.00	—	NQ	NQ	SW-846:6850	GELC	
C4	97	113	8/30/2007	68	408	347	113	Sandia Canyon	Regional	R-35a	1013.1	7/21/2023	REG	F	INIT	Metals	Barium	Ba	342	1	LANL Reg BG LVL	38.1	9	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	96	113	8/30/2007	5.97	7.31	6.58	113	Sandia Canyon	Regional	R-35a	1013.1	7/21/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.44	1	LANL Reg BG LVL	2.7	2.4	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
C4	57	65	3/12/2008	4.05	6.83	6.12	65	Sandia Canyon	Regional	R-36	766.9	7/14/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.46	1.1	LANL Reg BG LVL	2.7	2.4	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
C4	57	66	3/12/2008	1.25	6.8	2.455	66	Sandia Canyon	Regional	R-36	766.9	7/14/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.66	1.1	LANL Reg BG LVL	0.769	3.5	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	56	64	3/12/2008	0.845	1.74	1.46	64	Sandia Canyon	Regional	R-36	766.9	7/14/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	1.33	0.9	LANL Reg BG LVL	0.414	3.2	0.0500	µg/L	1.00	—	NQ	NQ	SW-846:6850	GELC	
C4	32	34	10/9/2008	0.057	7.03	5.79	34	Mortandad Canyon	Regional	R-42	931.8	7/24/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.74	0.8	LANL Reg BG LVL	0.769	6.2	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	32	34	10/9/2008	0.908	1.46	1.255	34	Mortandad Canyon	Regional	R-42	931.8	7/24/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	0.908	0.7	LANL Reg BG LVL	0.414	2.2	0.0500	µg/L	1.00	—	J+	PE12f	SW-846:6850	GELC	
C4	32	34	10/9/2008	180	394	339.5	34	Mortandad Canyon	Regional	R-42	931.8	7/24/2023	REG	F	INIT	Geninorg	Total Dissolved Solids	TDS	339	1	LANL Reg BG LVL	161	2.1	2.38	mg/L	1.00	—	NQ	NQ	EPA:160.1	GELC	
C4	58	68	11/5/2008	3.6	9.39	7.765	68	Sandia Canyon	Regional	R-43 S1	903.9	7/7/2023	FD	F	INIT	Geninorg	Chloride	Cl(-1)	6.13	0.8	LANL Reg BG LVL	2.7	2.3	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
C4	58	68	11/5/2008	3.6	9.39	7.765	68	Sandia Canyon	Regional	R-43 S1	903.9	7/7/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.20	0.8	LANL Reg BG LVL	2.7	2.3	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
C4	58	73	11/5/2008	2.35	223	149.5	70	Sandia Canyon	Regional	R-43 S1	903.9	7/7/2023	FD	F	INIT	Metals	Chromium	Cr	146	1	LANL Reg BG LVL	7.48	19.5	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	58	73	11/5/2008	2.35	223	149.5	70	Sandia Canyon	Regional	R-43 S1	903.9	7/7/2023	REG	F	INIT	Metals	Chromium	Cr	144	1	LANL Reg BG LVL	7.48	19.3	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	58	67	11/5/2008	4.63	6.15	5.315	66	Sandia Canyon	Regional	R-43 S1	903.9	7/7/2023	FD	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.69	0.9	LANL Reg BG LVL	0.769	6.1	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	58	67	11/5/2008	4.63	6.15	5.315	66	Sandia Canyon	Regional	R-43 S1	903.9	7/7/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.76	0.9	LANL Reg BG LVL	0.769	6.2	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	58	68	11/5/2008	8.77	21	16.2	68	Sandia Canyon	Regional	R-43 S1	903.9	7/7/2023	FD	F	INIT	Geninorg	Sulfate	SO4(-2)	13.3	0.8	LANL Reg BG LVL	4.59	2.9	0.133	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
C4	58	68	11/5/2008	8.77	21	16.2	68	Sandia Canyon	Regional	R-43 S1	903.9	7/7/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	13.3	0.8	LANL Reg BG LVL	4.59	2.9	0.133	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
C4	57	63	11/10/2008	3.37	8.66	5.36	63	Sandia Canyon	Regional	R-43 S2	969.1	7/6/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.25	1.2	LANL Reg BG LVL	2.7	2.3	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	

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Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Analyte Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std MDL	Std UOM	Dilution Factor	Lab Qualifier	Validation Reason Code	Analy Meth Code	Lab Code	Comment	
C4	57	68	11/10/2008	1.8	49.1	14.3	58	Sandia Canyon	Regional	R-43 S2	969.1	7/6/2023	REG	F	INIT	Metals	Chromium	Cr	26.5	1.9	LANL Reg BG LVL	7.48	3.5	3.00	µg/L	1.00	—	NQ	SW-846:6020B	GELC		
C4	57	62	11/10/2008	0.389	5.4	3.495	62	Sandia Canyon	Regional	R-43 S2	969.1	7/6/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.57	1	LANL Reg BG LVL	0.769	4.6	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	94	99	2/17/2009	1.99	21.6	16.3	99	Mortandad Canyon	Regional	R-44 S1	895.0	7/11/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	21.0	1.3	LANL Reg BG LVL	2.7	7.8	0.335	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC	
C4	94	99	2/17/2009	0.536	109	32.2	72	Mortandad Canyon	Regional	R-44 S1	895.0	7/11/2023	REG	F	INIT	Metals	Nickel	Ni	23.3	0.7	LANL Reg BG LVL	2.9	8	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	94	99	2/17/2009	2.76	21.4	14.8	99	Mortandad Canyon	Regional	R-44 S1	895.0	7/11/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	19.9	1.3	LANL Reg BG LVL	4.59	4.3	0.665	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC	
C4	98	105	2/28/2009	3	21.5	5.88	105	Mortandad Canyon	Regional	R-45 S1	880.0	8/2/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	20.5	3.5	LANL Reg BG LVL	2.7	7.6	0.335	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC	
C4	98	105	2/28/2009	3	21.5	5.88	105	Mortandad Canyon	Regional	R-45 S1	880.0	7/20/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.30	1.1	LANL Reg BG LVL	2.7	2.3	0.335	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC	
C4	98	105	2/28/2009	0.535	13.8	1.55	90	Mortandad Canyon	Regional	R-45 S1	880.0	8/2/2023	REG	F	INIT	Metals	Nickel	Ni	9.61	6.2	LANL Reg BG LVL	2.9	3.3	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	98	105	2/28/2009	0.535	13.8	1.55	90	Mortandad Canyon	Regional	R-45 S1	880.0	7/20/2023	REG	F	INIT	Metals	Nickel	Ni	8.49	5.5	LANL Reg BG LVL	2.9	2.9	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	98	105	2/28/2009	0.256	4.1	2.88	105	Mortandad Canyon	Regional	R-45 S1	880.0	8/2/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.13	1.1	LANL Reg BG LVL	0.769	4.1	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	98	105	2/28/2009	0.256	4.1	2.88	105	Mortandad Canyon	Regional	R-45 S1	880.0	7/20/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.07	1.1	LANL Reg BG LVL	0.769	4	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	97	105	3/5/2009	2.74	8.15	5.11	105	Mortandad Canyon	Regional	R-45 S2	974.9	8/2/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	7.24	1.4	LANL Reg BG LVL	2.7	2.7	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
C4	97	105	3/5/2009	2.74	8.15	5.11	105	Mortandad Canyon	Regional	R-45 S2	974.9	7/20/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	7.04	1.4	LANL Reg BG LVL	2.7	2.6	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
C4	97	110	3/5/2009	6.1	69.1	32.6	109	Mortandad Canyon	Regional	R-45 S2	974.9	8/2/2023	REG	F	INIT	Metals	Chromium	Cr	57.5	1.8	LANL Reg BG LVL	7.48	7.7	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	97	110	3/5/2009	6.1	69.1	32.6	109	Mortandad Canyon	Regional	R-45 S2	974.9	7/20/2023	REG	F	INIT	Metals	Chromium	Cr	54.9	1.7	LANL Reg BG LVL	7.48	7.3	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	99	108	3/6/2010	4.68	22.4	15.8	108	Mortandad Canyon	Regional	R-50 S1	1077.0	8/2/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	22.2	1.4	LANL Reg BG LVL	2.7	8.2	0.335	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC	
C4	99	108	3/6/2010	4.68	22.4	15.8	108	Mortandad Canyon	Regional	R-50 S1	1077.0	7/11/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	21.9	1.4	LANL Reg BG LVL	2.7	8.1	0.335	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC	
C4	100	109	3/6/2010	1.51	26.5	6.725	109	Mortandad Canyon	Regional	R-50 S1	1077.0	8/2/2023	REG	F	INIT	Metals	Nickel	Ni	23.3	3.5	LANL Reg BG LVL	2.9	8	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	100	109	3/6/2010	1.51	26.5	6.725	109	Mortandad Canyon	Regional	R-50 S1	1077.0	7/11/2023	REG	F	INIT	Metals	Nickel	Ni	20.2	3	LANL Reg BG LVL	2.9	7	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	100	110	3/6/2010	0.398	3.21	2.35	110	Mortandad Canyon	Regional	R-50 S1	1077.0	8/2/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.02	1.3	LANL Reg BG LVL	0.769	3.9	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	100	110	3/6/2010	0.398	3.21	2.35	110	Mortandad Canyon	Regional	R-50 S1	1077.0	7/11/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.05	1.3	LANL Reg BG LVL	0.769	4	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	99	108	3/6/2010	7.22	21.5	17.6	108	Mortandad Canyon	Regional	R-50 S1	1077.0	8/2/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	20.8	1.2	LANL Reg BG LVL	4.59	4.5	0.665	mg/L	5.00	—	NQ	NQ	EPA:300.0	GELC	

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C4	99	108	3/6/2010	7.22	21.5	17.6	108	Mortandad Canyon	Regional	R-50 S1	1077.0	7/11/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	20.9	1.2	LANL Reg BG LVL	4.59	4.6	0.665	mg/L	5.00	—	NQ	EPA:300.0	GELC		
C4	84	96	5/20/2011	2.03	66.1	29.6	95	Mortandad Canyon	Regional	R-61 S1	1125.0	8/1/2023	REG	F	INIT	Metals	Chromium	Cr	56.0	1.9	LANL Reg BG LVL	7.48	7.5	3.00	µg/L	1.00	—	NQ	SW-846:6020B	GELC		
C4	84	96	5/20/2011	2.03	66.1	29.6	95	Mortandad Canyon	Regional	R-61 S1	1125.0	7/17/2023	REG	F	INIT	Metals	Chromium	Cr	57.4	1.9	LANL Reg BG LVL	7.48	7.7	3.00	µg/L	1.00	—	NQ	SW-846:6020B	GELC		
C4	84	96	5/20/2011	0.427	3.3	2.34	96	Mortandad Canyon	Regional	R-61 S1	1125.0	8/1/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.50	1.1	LANL Reg BG LVL	0.769	3.3	0.170	mg/L	10.0	—	NQ	EPA:353.2	GELC		
C4	84	96	5/20/2011	0.427	3.3	2.34	96	Mortandad Canyon	Regional	R-61 S1	1125.0	7/17/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.43	1	LANL Reg BG LVL	0.769	3.2	0.0850	mg/L	5.00	—	NQ	EPA:353.2	GELC		
C4	83	95	5/20/2011	2.96	17	12.1	95	Mortandad Canyon	Regional	R-61 S1	1125.0	8/1/2023	REG	F	INIT	LCMS/MS	Perchlorate	CIO4	12.1	1	LANL Reg BG LVL	0.414	29.2	0.100	µg/L	2.00	—	NQ	SW-846:6850	GELC		
C4	83	95	5/20/2011	2.96	17	12.1	95	Mortandad Canyon	Regional	R-61 S1	1125.0	7/17/2023	REG	F	INIT	LCMS/MS	Perchlorate	CIO4	12.2	1	LANL Reg BG LVL	0.414	29.5	0.100	µg/L	2.00	—	NQ	SW-846:6850	GELC		
C4	42	50	3/26/2012	1.64	21.3	11.75	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	FD	F	INIT	Geninorg	Chloride	Cl(-1)	13.9	1.2	LANL Reg BG LVL	2.7	5.1	0.335	mg/L	5.00	—	J+	I4g	EPA:300.0	GELC	
C4	42	50	3/26/2012	1.64	21.3	11.75	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	13.5	1.1	LANL Reg BG LVL	2.7	5	0.335	mg/L	5.00	—	J+	I4g	EPA:300.0	GELC	
C4	42	50	3/26/2012	104	351	224.5	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	FD	F	INIT	Metals	Chromium	Cr	224	1	LANL Reg BG LVL	7.48	29.9	3.00	µg/L	1.00	—	NQ	SW-846:6020B	GELC		
C4	42	50	3/26/2012	104	351	224.5	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	REG	F	INIT	Metals	Chromium	Cr	225	1	LANL Reg BG LVL	7.48	30.1	3.00	µg/L	1.00	—	NQ	SW-846:6020B	GELC		
C4	42	50	3/26/2012	0.0685	2.37	1.51	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	FD	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	1.86	1.2	LANL Reg BG LVL	0.769	2.4	0.0850	mg/L	5.00	—	NQ	EPA:353.2	GELC		
C4	42	50	3/26/2012	0.0685	2.37	1.51	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	1.90	1.3	LANL Reg BG LVL	0.769	2.5	0.0850	mg/L	5.00	—	NQ	EPA:353.2	GELC		
C4	42	50	3/26/2012	0.719	0.937	0.8285	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	FD	F	INIT	LCMS/MS	Perchlorate	CIO4	0.902	1.1	LANL Reg BG LVL	0.414	2.2	0.0500	µg/L	1.00	—	NQ	SW-846:6850	GELC		
C4	42	50	3/26/2012	0.719	0.937	0.8285	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	REG	F	INIT	LCMS/MS	Perchlorate	CIO4	0.909	1.1	LANL Reg BG LVL	0.414	2.2	0.0500	µg/L	1.00	—	NQ	SW-846:6850	GELC		
C4	42	50	3/26/2012	2.56	37.4	20.8	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	FD	F	INIT	Geninorg	Sulfate	SO4(-2)	24.2	1.2	LANL Reg BG LVL	4.59	5.3	0.665	mg/L	5.00	—	NQ	EPA:300.0	GELC		
C4	42	50	3/26/2012	2.56	37.4	20.8	50	Sandia Canyon	Regional	R-62	1158.4	7/6/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	23.6	1.1	LANL Reg BG LVL	4.59	5.1	0.665	mg/L	5.00	—	NQ	EPA:300.0	GELC		
C4	36	40	8/4/2020	0.208	2.92	2.42	40	Mortandad Canyon	Regional	R-70 S1 <sup>b</sup>	963.0	7/12/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.31	1	LANL Reg BG LVL	0.769	3	0.0850	mg/L	5.00	—	NQ	EPA:353.2	GELC		
C4	35	37	8/4/2020	10.7	19.3	14.2	37	Mortandad Canyon	Regional	R-70 S2 <sup>b</sup>	1048.0	7/12/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	13.7	1	LANL Reg BG LVL	2.7	5.1	0.335	mg/L	5.00	—	NQ	EPA:300.0	GELC		
C4	35	37	8/4/2020	131	272	183	37	Mortandad Canyon	Regional	R-70 S2 <sup>b</sup>	1048.0	7/12/2023	REG	F	INIT	Metals	Chromium	Cr	183	1	LANL Reg BG LVL	7.48	24.5	3.00	µg/L	1.00	—	NQ	SW-846:6020B	GELC		
C4	35	37	8/4/2020	2.59	4.06	3.49	37	Mortandad Canyon	Regional	R-70 S2 <sup>b</sup>	1048.0	7/12/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.73	1.1	LANL Reg BG LVL	0.769	4.9	0.0850	mg/L	5.00	—	NQ	EPA:353.2	GELC		
C4	35	37	8/4/2020	17.5	32.6	22.8	37	Mortandad Canyon	Regional	R-70 S2 <sup>b</sup>	1048.0	7/12/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	22.1	1	LANL Reg BG LVL	4.59	4.8	0.665	mg/L	5.00	—	NQ	EPA:300.0	GELC		

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C4	6	7	1/30/2022	5.24	5.76	5.5	7	Sandia Canyon	Regional	R-71 S1 <sup>b</sup>	1285.0	7/13/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.67	1	LANL Reg BG LVL	0.769	7.4	0.170	mg/L	10.0	—	NQ	EPA:353.2	GELC		
C4	7	8	1/23/2022	3.87	5.13	4.74	8	Sandia Canyon	Regional	R-71 S2 <sup>b</sup>	1349.7	7/13/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.96	1	LANL Reg BG LVL	0.769	6.4	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	58	73	10/21/2008	56.1	84.1	69.5	73	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Metals	Barium	Ba	73.3	1.1	LANL Int BG LVL	13.5	5.4	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	58	73	10/21/2008	59.5	76.3	68.9	73	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Metals	Calcium	Ca	74.5	1.1	LANL Int BG LVL	10.7	7	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	58	71	10/21/2008	53.4	93	69.5	71	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Geninorg	Chloride	Cl(-1)	80.2	1.2	LANL Int BG LVL	3.11	25.8	1.68	mg/L	25.0	—	NQ	NQ	EPA:300.0	GELC	
C4	58	73	10/21/2008	204	263	237	72	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Geninorg	Hardness	Hardness	256	1.1	LANL Int BG LVL	37.8	6.8	0.453	mg/L	1.00	—	NQ	NQ	SM:A2340B	GELC	
C4	57	71	10/21/2008	13.1	17.9	16	71	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Metals	Magnesium	Mg	17	1.1	LANL Int BG LVL	3.14	5.4	0.11	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	58	73	10/21/2008	12.6	19.6	16.2	73	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Metals	Nickel	Ni	12.6	0.8	LANL Int BG LVL	3.65	3.5	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	58	71	10/21/2008	2.89	5.1	4.05	71	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.95	0.7	LANL Int BG LVL	0.459	6.4	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	58	71	10/21/2008	0.725	1.12	0.942	71	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	0.831	0.9	LANL Int BG LVL	0.27	3.1	0.0500	µg/L	1.00	—	NQ	NQ	SW-846:6850	GELC	
C4	58	73	10/21/2008	264	378	331	73	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Metals	Strontium	Sr	349	1.1	LANL Int BG LVL	59.6	5.9	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	58	71	10/21/2008	77.9	103	88.2	71	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	79.2	0.9	LANL Int BG LVL	7.1	11.2	3.33	mg/L	25.0	—	NQ	NQ	EPA:300.0	GELC	
C4	58	73	10/21/2008	1.2	2.77	1.94	73	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Metals	Uranium	U	2.56	1.3	LANL Int BG LVL	0.992	2.6	0.0670	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C5	8	9	11/10/2021	2.78	40.3	3.27	9	Mortandad Canyon	Regional	CRPZ-4	957	7/5/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	40.3	12.3	NMED A1 TAP SCRN LVL	13.8	2.9	1.00	µg/L	20.0	—	NQ	NQ	SW-846:6850	GELC	
C5	60	72	2/28/2007	5.34	13.2	8.895	70	Mortandad Canyon	Regional	R-15	958.6	7/7/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	13.2	1.5	NMED A1 TAP SCRN LVL	13.8	1	0.100	µg/L	2.00	—	NQ	NQ	SW-846:6850	GELC	
C5	35	37	8/4/2020	131	272	183	37	Mortandad Canyon	Regional	R-70 S2 <sup>b</sup>	1048.0	7/12/2023	REG	F	INIT	Metals	Chromium	Cr	183	1	NM GW STD	50	3.7	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	

<sup>a</sup> — = Lab qualifier not applicable.<sup>b</sup> Data pertaining to a well drilled at a target angle from the vertical. Depth value represents linear feet along (down) the borehole.<sup>c</sup> S1 = Screen 1.<sup>d</sup> S2 = Screen 2.

Table 2: NMED 8-23 Groundwater Report Addendum

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	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 Qualifier	Validation Qualifier	Validation Reason Code	Anyl Meth Code	Lab Code	Comment
XC2scr	8	8	11/4/2021	0.00188	0.00188	0.00188	1	Mortandad Canyon	Regional	CRPZ-1	1122.9	7/18/2023	REG	UF	INIT	Inorganic	Cyanide (Total)	CN(TOTAL)	0.00188	1	Reg-Scr_95	0.0017	1.1	0.00167	mg/L	1.00	J	J-	I6a	EPA:335.4	GELC	
XC2scr	86	93	1/27/2010	0.00585	0.00585	0.00585	1	Mortandad Canyon	Regional	R-45 S2 <sup>a</sup>	974.9	7/20/2023	REG	UF	INIT	Inorganic	Cyanide (Total)	CN(TOTAL)	0.00585	1	Reg-Scr_95	0.0017	3.4	0.00167	mg/L	1.00	— <sup>b</sup>	J-	I6a	EPA:335.4	GELC	
XC4scr	8	9	11/10/2021	0.372	0.57	0.505	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Geninorg	Bromide	Br(-1)	0.505	1	Reg-Scr_95	0.067	7.5	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
XC4scr	8	9	11/10/2021	204	256	225	9	Mortandad Canyon	Regional	CrPZ-2a	909.8	7/24/2023	REG	F	INIT	Metals	Strontium	Sr	243	1	Reg-Scr_95	74.4	3.3	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	8	8	11/9/2021	0.0998	0.16	0.144	8	Mortandad Canyon	Regional	CRPZ-3	939.4	7/5/2023	REG	F	INIT	Geninorg	Bromide	Br(-1)	0.160	1	Reg-Scr_95	0.067	2.4	0.0670	mg/L	1.00	J	J	J_LAB	EPA:300.0	GELC	
XC4scr	8	8	11/9/2021	28.5	35.6	31.35	8	Mortandad Canyon	Regional	CRPZ-3	939.4	7/5/2023	REG	F	INIT	Metals	Calcium	Ca	35.2	1	Reg-Scr_95	14.5	2.4	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	8	8	11/9/2021	101	128	112.5	8	Mortandad Canyon	Regional	CRPZ-3	939.4	7/5/2023	REG	F	INIT	Geninorg	Hardness	Hardness	124	1	Reg-Scr_95	51	2.4	0.453	mg/L	1.00	—	NQ	NQ	SM:A2340B	GELC	
XC4scr	70	93	6/15/2005	25.4	64.6	48.65	92	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Metals	Boron	B	50.1	1	Int-Scr_95	16.2	3.1	15.0	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	70	93	6/15/2005	25.4	64.6	48.65	92	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Metals	Boron	B	52.3	1	Int-Scr_95	16.2	3.2	15.0	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	70	91	6/15/2005	0.212	0.73	0.5475	88	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Geninorg	Bromide	Br(-1)	0.439	1	Int-Scr_95	0.0716	6.1	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
XC4scr	70	91	6/15/2005	0.212	0.73	0.5475	88	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Geninorg	Bromide	Br(-1)	0.433	1	Int-Scr_95	0.0716	6	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
XC4scr	70	96	6/15/2005	29.4	86.6	58.2	96	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Metals	Chromium	Cr	51.2	1	Int-Scr_95	2.72	19	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
XC4scr	70	96	6/15/2005	29.4	86.6	58.2	96	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Metals	Chromium	Cr	50.8	1	Int-Scr_95	2.72	19	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
XC4scr	72	93	6/15/2005	298	527	397	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	FD	F	INIT	Geninorg	Total Dissolved Solids	TDS	369	1	Int-Scr_95	135	2.7	2.38	mg/L	1.00	—	NQ	NQ	EPA:160.1	GELC	
XC4scr	72	93	6/15/2005	298	527	397	93	Mortandad Canyon	Intermediate	MCOI-6	686.0	7/12/2023	REG	F	INIT	Geninorg	Total Dissolved Solids	TDS	349	1	Int-Scr_95	135	2.6	2.38	mg/L	1.00	—	NQ	NQ	EPA:160.1	GELC	
XC4scr	43	53	11/30/2005	161	244	195	53	Sandia Canyon	Regional	R-10a	690.0	5/11/2023	REG	F	INIT	Metals	Strontium	Sr	182	1	Reg-Scr_95	74.4	2.4	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	27	32	9/19/2000	23.6	180	33.9	32	Sandia Canyon	Intermediate	R-12 S2	504.5	7/25/2023	FD	F	INIT	Metals	Manganese	Mn	33.0	1	Int-Scr_95	8.39	3.9	2.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	27	32	9/19/2000	23.6	180	33.9	32	Sandia Canyon	Intermediate	R-12 S2	504.5	7/25/2023	REG	F	INIT	Metals	Manganese	Mn	32.8	1	Int-Scr_95	8.39	3.9	2.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	69	85	2/24/2000	2.6	18.2	11.65	82	Mortandad Canyon	Regional	R-15	958.6	7/7/2023	REG	F	INIT	Metals	Chromium	Cr	15.6	1	Reg-Scr_95	6.6	2.4	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
XC4scr	24	27	5/12/2004	56.4	211	185	27	Mortandad Canyon	Regional	R-16 S2	863.4	7/10/2023	REG	F	INIT	Metals	Strontium	Sr	204	1	Reg-Scr_95	74.4	2.7	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	23	30	3/19/2004	3.74	68	41.6	30	Mortandad Canyon	Regional	R-16 S4 <sup>c</sup>	1237.0	7/10/2023	FD	F	INIT	Metals	Manganese	Mn	35.9	1	Reg-Scr_95	12.1	3	2.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	23	30	3/19/2004	3.74	68	41.6	30	Mortandad Canyon	Regional	R-16 S4	1237.0	7/10/2023	REG	F	INIT	Metals	Manganese	Mn	34.7	1	Reg-Scr_95	12.1	2.9	2.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	23	30	3/19/2004	205	613	230.5	30	Mortandad Canyon	Regional	R-16 S4	1237.0	7/10/2023	FD	F	INIT	Metals	Strontium	Sr	250	1	Reg-Scr_95	74.4	3.4	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	23	30	3/19/2004	205	613	230.5	30	Mortandad Canyon	Regional	R-16 S4	1237.0	7/10/2023	REG	F	INIT	Metals	Strontium	Sr	249	1	Reg-Scr_95	74.4	3.3	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	36	49	12/19/2005	152	206	189	49	Mortandad Canyon	Regional	R-16r	600.0	7/18/2023	REG	F	INIT	Metals	Strontium	Sr	189	1	Reg-Scr_95	74.4	2.5	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	97	113	8/30/2007	137	199	169	113	Sandia Canyon	Regional	R-35a	1013.1	7/21/2023	REG	F	INIT																	

**Table 2: NMED 8-23 Groundwater Report Addendum**

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	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 Qualifier	Validation Qualifier	Validation Reason Code	Anyl Meth Code	Lab Code	Comment
XC4scr	58	71	10/21/2008	0.194	0.956	0.6545	70	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Geninorg	Bromide	Br(-1)	0.749	1	Int-Scr_95	0.0716	11	0.0670	mg/L	1.00	—	NQ	NQ	EPA:300.0	GELC	
XC4scr	58	78	10/21/2008	184	658	417	78	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Metals	Chromium	Cr	184	0	Int-Scr_95	2.72	68	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
XC4scr	58	72	10/21/2008	354	796	427.5	72	Sandia Canyon	Intermediate	SCI-2	548.0	7/6/2023	REG	F	INIT	Geninorg	Total Dissolved Solids	TDS	424	1	Int-Scr_95	135	3.1	2.38	mg/L	1.00	—	NQ	NQ	EPA:160.1	GELC	

<sup>a</sup> S2 = Screen 2.

<sup>b</sup> — = Lab qualifier not applicable.

<sup>c</sup> S4 = Screen 4.

<sup>d</sup> S1 = Screen 1.