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

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FEB 29 2024
NMED Hazardous Waste Bureau

EMLA-24-BF169-2-1

February 29, 2024

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

Subject: Monthly Notification of Groundwater Data Reviewed in February 2024

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 February 15, 2024, 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 was adjusted to 1×10^{-5}, as specified in the Consent Order.

The enclosed report was prepared using the November 2023 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 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

No constituents were 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).

15-Day Notification

The information required for constituents that meet at least one of 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) or Hai Shen at (505) 709-7600 (hai.shen@em.doe.gov).

Sincerely,

ARTURO DURAN

Digitally signed by ARTURO DURAN
Date: 2024.02.29 08:39:08 -07'00'

Arturo Q. Duran
Compliance and Permitting Manager
U.S. Department of Energy
Environmental Management
Los Alamos Field Office

Enclosure(s):

1. Summary of Groundwater Data Reviewed in February 2024 that Meet Notification Requirements (EM2024-0139)

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 FEBRUARY 2024
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 2024 monitoring year (N3B 2023, 702924.11). The report contains results for contaminants and other chemical constituents that meet at least one of 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 1-24 Groundwater Report, presents categorical results since June 14, 2007, that meet one or more of the five reporting criteria as specified in the Consent Order. Table 2, NMED 1-24 Groundwater Report Addendum, presents results that exceed the 95th 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 and 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 1×10^{-5}, as specified in the Consent Order. This report uses the November 2023 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 95th 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, 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

The data in Table 1 is sorted by 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. Some criteria may not appear in Table 1, if no samples in the current reporting period exceed the requirements of those criteria.

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, at a concentration above the background level, 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

The data in Table 2 is sorted by two screening criteria that 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 in a spring or screened interval of a well, at a concentration above the 95th percentile in a spring or screened interval of a well, if that contaminant has not previously exceeded the 95th 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 95th 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:

CA—Criterion Code A

CFA—Cape Fear Analytical, LLC

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

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

MDL—method detection limit

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

PCB—polychlorinated biphenyl

REG—regular sample

SVOC—semivolatile organic compound

UF—unfiltered

UOM—unit of measurement

VOC—volatile organic compound

Analytical Laboratory Codes and Qualifiers

I4a (validation reason code)—The detected sample result is >=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 >=5 times and <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.

I10fa (validation reason code)—The sample or field duplicate result is <5 times the reporting limit and the absolute difference between sample and duplicate result exceeds the limits.

I10fr (validation reason code)— The sample and field duplicate results are >=5 times the reporting limit and the relative percent difference exceeds the limits.

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.

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.

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), October 2023. "Interim Facility-Wide Groundwater Monitoring Plan for the 2024 Monitoring Year, October 2023–September 2024, Revision 1," Newport News Nuclear BWXT-Los Alamos, LLC, document EM2023-0634, Los Alamos, New Mexico. (N3B 2023, 702924.11)

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 1-24 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth (ft)	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
C2	3	3	10/10/2023	0.296	0.408	0.364	3	Mortandad Canyon	Regional	CRPZ-1	1122.9	12/4/2023	REG	F	INIT	General Chemistry	Fluoride	F(-1)	0.408	1	LANL Reg BG LVL	0.377	1.1	0.0330	mg/L	1.00	__[a]	NQ	NQ	SW-846:9056A	GELC	
C2	11	12	11/10/2021	1.99	2.47	2.12	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	Metals	Potassium	K	2.47	1	LANL Reg BG LVL	2.39	1	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C2	11	11	11/22/2021	0.692	1.25	1.07	11	Mortandad Canyon	Regional	CRPZ-5	976	12/13/2023	REG	F	INIT	Metals	Uranium	U	1.25	1	LANL Reg BG LVL	1.19	1.1	0.0670	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C2	3	4	10/20/2023	0.362	0.556	0.456	4	Sandia Canyon	Regional	R-35a	1013.1	12/15/2023	REG	F	INIT	General Chemistry	Fluoride	F(-1)	0.546	1	LANL Reg BG LVL	0.377	1.4	0.0330	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	3	4	10/20/2023	0.362	0.556	0.456	4	Sandia Canyon	Regional	R-35a	1013.1	12/15/2023	FD	F	INIT	General Chemistry	Fluoride	F(-1)	0.556	1	LANL Reg BG LVL	0.377	1.5	0.0330	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	3	3	10/12/2023	0.297	0.513	0.301	3	Mortandad Canyon	Regional	R-50 S1[b]	1077.0	12/5/2023	REG	F	INIT	General Chemistry	Fluoride	F(-1)	0.513	2	LANL Reg BG LVL	0.377	1.4	0.0330	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	3	4	10/16/2023	0.293	0.489	0.3635	4	Sandia Canyon	Regional	R-71 S1[c]	1285.0	11/29/2023	REG	F	INIT	General Chemistry	Fluoride	F(-1)	0.489	1	LANL Reg BG LVL	0.377	1.3	0.0330	mg/L	1.00	—	J	I10fa	SW-846:9056A	GELC	
C2	12	15	1/30/2022	59.8	69.6	63.7	15	Sandia Canyon	Regional	R-71 S1[c]	1285.0	11/29/2023	REG	F	INIT	GENINORG	Hardness	Hardness	69.6	1	LANL Reg BG LVL	67.1	1	0.453	mg/L	1.00	—	NQ	NQ	SM:A2340B	GELC	
C2	3	5	10/16/2023	0.285	0.472	0.3265	4	Sandia Canyon	Regional	R-71 S2[c,d]	1349.7	11/29/2023	FD	F	INIT	General Chemistry	Fluoride	F(-1)	0.472	1	LANL Reg BG LVL	0.377	1.3	0.0330	mg/L	1.00	—	J	I10fa,I4g	SW-846:9056A	GELC	
C2	3	3	10/16/2023	0.274	0.423	0.322	3	Mortandad Canyon	Regional	R-72 S1	1220.0	12/12/2023	REG	F	INIT	General Chemistry	Fluoride	F(-1)	0.423	1	LANL Reg BG LVL	0.377	1.1	0.0330	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	3	3	10/16/2023	0.248	0.416	0.25	3	Mortandad Canyon	Regional	R-72 S2	1290	12/12/2023	REG	F	INIT	General Chemistry	Fluoride	F(-1)	0.416	2	LANL Reg BG LVL	0.377	1.1	0.0330	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	1	2	10/10/2023	3.03	3.06	3.045	2	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	3.06	1	LANL Reg BG LVL	2.7	1.1	0.0670	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	1	2	10/10/2023	3.03	3.06	3.045	2	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	FD	F	INIT	General Chemistry	Chloride	Cl(-1)	3.03	1	LANL Reg BG LVL	2.7	1.1	0.0670	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	1	2	10/10/2023	0.542	0.566	0.554	2	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	REG	F	INIT	General Chemistry	Fluoride	F(-1)	0.542	1	LANL Reg BG LVL	0.377	1.4	0.0330	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	1	2	10/10/2023	0.542	0.566	0.554	2	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	FD	F	INIT	General Chemistry	Fluoride	F(-1)	0.566	1	LANL Reg BG LVL	0.377	1.5	0.0330	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	1	2	10/10/2023	6.54	6.56	6.55	2	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	FD	F	INIT	General Chemistry	Sulfate	SO4(-2)	6.54	1	LANL Reg BG LVL	4.59	1.4	0.133	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C2	1	2	10/10/2023	6.54	6.56	6.55	2	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	6.56	1	LANL Reg BG LVL	4.59	1.4	0.133	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	3	3	10/10/2023	10.9	12.5	12.1	3	Mortandad Canyon	Regional	CRPZ-1	1122.9	12/4/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	12.5	1	LANL Reg BG LVL	2.7	4.6	0.134	mg/L	2.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	11	11	11/4/2021	68.8	129	102	11	Mortandad Canyon	Regional	CRPZ-1	1122.9	12/4/2023	REG	F	INIT	Metals	Chromium	Cr	127	1	LANL Reg BG LVL	7.48	17	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	11	11	11/4/2021	2.49	3.15	2.79	11	Mortandad Canyon	Regional	CRPZ-1	1122.9	12/4/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.83	1	LANL Reg BG LVL	0.769	3.7	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	11	11	11/4/2021	10.5	24.6	15.4	11	Mortandad Canyon	Regional	CRPZ-1	1122.9	12/4/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	24.2	2	LANL Reg BG LVL	0.414	58.5	0.250	µg/L	5.00	—	NQ	NQ	SW-846:6850	GELC	
C4	3	3	10/10/2023	17	19.4	18.9	3	Mortandad Canyon	Regional	CRPZ-1	1122.9	12/4/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	19.4	1	LANL Reg BG LVL	4.59	4.2	0.133	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	11	12	11/10/2021	65.6	90.1	77	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	Metals	Barium	Ba	89.8	1	LANL Reg BG LVL	38.1	2.4	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	11	12	11/10/2021	48.1	64.7	58.9	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	Metals	Calcium	Ca	64.7	1	LANL Reg BG LVL	17.03	3.8	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	3	3	10/12/2023	56.3	57.3	56.9	3	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	57.3	1	LANL Reg BG LVL	2.7	21.2	0.670	mg/L	10.0	—	NQ	NQ	SW-846:9056A	GELC	
C4	11	12	11/10/2021	179	269	210	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	Metals	Chromium	Cr	216	1	LANL Reg BG LVL	7.48	28.9	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	11	12	11/10/2021	168	228	205.5	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	GENINORG	Hardness	Hardness	228	1	LANL Reg BG LVL	67.1	3.4	0.453	mg/L	1.00	—	NQ	NQ	SM:A2340B	GELC	
C4	11	12	11/10/2021	11.7	16.2	14.05	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	Metals	Magnesium	Mg	16.2	1	LANL Reg BG LVL	4.18	3.9	0.11	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	11	12	11/10/2021	5.98	8.24	6.87	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	Metals	Nickel	Ni	7.38	1	LANL Reg BG LVL	2.9	2.5	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	

Table 1: NMED 1-24 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth (ft)	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
C4	11	12	11/10/2021	3.56	5.2	4.28	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.59	1	LANL Reg BG LVL	0.769	4.7	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	11	12	11/10/2021	0.854	1.08	0.96	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	0.886	1	LANL Reg BG LVL	0.414	2.1	0.0500	µg/L	1.00	—	NQ	NQ	SW-846:6850	GELC	
C4	3	3	10/12/2023	66.1	69.4	68.1	3	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	69.4	1	LANL Reg BG LVL	4.59	15.1	1.33	mg/L	10.0	—	NQ	NQ	SW-846:9056A	GELC	
C4	11	12	11/10/2021	309	393	350	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	356	1	LANL Reg BG LVL	161	2.2	2.38	mg/L	1.00	—	NQ	NQ	EPA:160.1	GELC	
C4	11	12	11/10/2021	2.68	3.99	3.74	12	Mortandad Canyon	Regional	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	Metals	Uranium	U	3.99	1	LANL Reg BG LVL	1.19	3.4	0.0670	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	3	3	10/19/2023	22	22.4	22	3	Mortandad Canyon	Regional	CRPZ-3	939.4	12/19/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	22.0	1	LANL Reg BG LVL	2.7	8.1	0.268	mg/L	4.00	—	J+	I4a	SW-846:9056A	GELC	
C4	11	11	11/9/2021	297	499	416	11	Mortandad Canyon	Regional	CRPZ-3	939.4	12/19/2023	REG	F	INIT	Metals	Chromium	Cr	455	1	LANL Reg BG LVL	7.48	60.8	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	11	11	11/9/2021	7.24	9.63	8.53	11	Mortandad Canyon	Regional	CRPZ-3	939.4	12/19/2023	REG	F	INIT	Metals	Magnesium	Mg	9.16	1	LANL Reg BG LVL	4.18	2.2	0.11	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	11	11	11/9/2021	5.2	5.85	5.53	11	Mortandad Canyon	Regional	CRPZ-3	939.4	12/19/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.75	1	LANL Reg BG LVL	0.769	7.5	0.850	mg/L	50.0	—	NQ	NQ	EPA:353.2	GELC	
C4	11	11	11/9/2021	0.958	1.25	1.15	11	Mortandad Canyon	Regional	CRPZ-3	939.4	12/19/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	1.25	1	LANL Reg BG LVL	0.414	3	0.0500	µg/L	1.00	—	NQ	NQ	SW-846:6850	GELC	
C4	3	3	10/19/2023	37.1	38.3	37.2	3	Mortandad Canyon	Regional	CRPZ-3	939.4	12/19/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	37.2	1	LANL Reg BG LVL	4.59	8.1	0.532	mg/L	4.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	3	3	10/17/2023	16.4	17.8	17.3	3	Mortandad Canyon	Regional	CRPZ-5	976	12/13/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	17.3	1	LANL Reg BG LVL	2.7	6.4	0.134	mg/L	2.00	—	J+	I4a	SW-846:9056A	GELC	
C4	11	11	11/22/2021	411	516	470	11	Mortandad Canyon	Regional	CRPZ-5	976	12/13/2023	REG	F	INIT	Metals	Chromium	Cr	516	1	LANL Reg BG LVL	7.48	69	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	11	11	11/22/2021	3.19	10.4	8.39	11	Mortandad Canyon	Regional	CRPZ-5	976	12/13/2023	REG	F	INIT	Metals	Nickel	Ni	9.16	1	LANL Reg BG LVL	2.9	3.2	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	11	11	11/22/2021	2.88	3.86	3.21	11	Mortandad Canyon	Regional	CRPZ-5	976	12/13/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.86	1	LANL Reg BG LVL	0.769	5	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	3	3	10/17/2023	29.4	30.2	29.7	3	Mortandad Canyon	Regional	CRPZ-5	976	12/13/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	29.7	1	LANL Reg BG LVL	4.59	6.5	0.266	mg/L	2.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	114	138	5/17/2005	2.27	9.25	5.655	138	Sandia Canyon	Regional	R-11	855.0	12/8/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	8.10	1	LANL Reg BG LVL	0.769	10.5	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	107	126	6/13/2007	0.664	1.55	0.7895	126	Sandia Canyon	Regional	R-11	855.0	12/8/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	0.834	1	LANL Reg BG LVL	0.414	2	0.0500	µg/L	1.00	—	NQ	NQ	SW-846:6850	GELC	
C4	3	4	10/13/2023	10.7	11.4	11.2	4	Sandia Canyon	Regional	R-11	855.0	12/8/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	10.7	1	LANL Reg BG LVL	4.59	2.3	0.133	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	102	121	8/30/2007	68	408	348	120	Sandia Canyon	Regional	R-35a	1013.1	12/15/2023	FD	F	RE	Metals	Barium	Ba	345	1	LANL Reg BG LVL	38.1	9.1	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	102	121	8/30/2007	68	408	348	120	Sandia Canyon	Regional	R-35a	1013.1	12/15/2023	REG	F	INIT	Metals	Barium	Ba	358	1	LANL Reg BG LVL	38.1	9.4	1.00	µg/L	1.00	—	J	I10fa	SW-846:6010D	GELC	
C4	3	4	10/20/2023	6.33	6.5	6.43	4	Sandia Canyon	Regional	R-35a	1013.1	12/15/2023	FD	F	INIT	General Chemistry	Chloride	Cl(-1)	6.44	1	LANL Reg BG LVL	2.7	2.4	0.0670	mg/L	1.00	—	J+	I4a	SW-846:9056A	GELC	
C4	3	4	10/20/2023	6.33	6.5	6.43	4	Sandia Canyon	Regional	R-35a	1013.1	12/15/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	6.33	1	LANL Reg BG LVL	2.7	2.3	0.0670	mg/L	1.00	—	J+	I4a	SW-846:9056A	GELC	
C4	35	37	10/9/2008	44.2	106	93.7	37	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	Metals	Barium	Ba	103	1	LANL Reg BG LVL	38.1	2.7	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	35	37	10/9/2008	22.2	59.9	51.4	37	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	Metals	Calcium	Ca	59.5	1	LANL Reg BG LVL	17.03	3.5	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	3	3	10/19/2023	50.5	52.8	51.7	3	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	50.5	1	LANL Reg BG LVL	2.7	18.7	0.670	mg/L	10.0	—	J+	I4a	SW-846:9056A	GELC	
C4	35	46	10/9/2008	622	1240	885.5	46	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	Metals	Chromium	Cr	681	1	LANL Reg BG LVL	7.48	91	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	35	37	10/9/2008	94.3	221	188	37	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	GENINORG	Hardness	Hardness	220	1	LANL Reg BG LVL	67.1	3.3	0.453	mg/L	1.00	—	NQ	NQ	SM:A2340B	GELC	
C4	35	37	10/9/2008	9.45	17.3	14.4	37	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	Metals	Magnesium	Mg	17.2	1	LANL Reg BG LVL	4.18	4.1	0.11	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	35	37	10/9/2008	8.8	34	23.4	37	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	Metals	Nickel	Ni	23.6	1	LANL Reg BG LVL	2.9	8.1	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	35	37	10/9/2008	0.057	7.03	5.75	37	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.65	1	LANL Reg BG LVL	0.769	7.3	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	

Table 1: NMED 1-24 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth (ft)	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
C4	35	37	10/9/2008	0.873	1.46	1.24	37	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	0.982	1	LANL Reg BG LVL	0.414	2.4	0.0500	µg/L	1.00	—	NQ	NQ	SW-846:6850	GELC	
C4	3	3	10/19/2023	85.5	89.3	88.4	3	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	85.5	1	LANL Reg BG LVL	4.59	18.6	1.33	mg/L	10.0	—	NQ	NQ	SW-846:9056A	GELC	
C4	35	37	10/9/2008	180	394	341	37	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	371	1	LANL Reg BG LVL	161	2.3	2.38	mg/L	1.00	—	NQ	NQ	EPA:160.1	GELC	
C4	35	37	10/9/2008	1.95	31	5.12	34	Mortandad Canyon	Regional	R-42	931.8	12/13/2023	REG	F	INIT	Metals	Vanadium	V	30.1	6	LANL Reg BG LVL	11.4	2.6	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	3	4	10/11/2023	20.3	20.5	20.4	4	Mortandad Canyon	Regional	R-44 S1	895.0	12/11/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	20.3	1	LANL Reg BG LVL	2.7	7.5	0.335	mg/L	5.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	99	105	2/17/2009	0.536	109	32.45	78	Mortandad Canyon	Regional	R-44 S1	895.0	12/11/2023	REG	F	INIT	Metals	Nickel	Ni	49.0	2	LANL Reg BG LVL	2.9	16.9	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	99	105	2/17/2009	0.123	3.86	2.32	104	Mortandad Canyon	Regional	R-44 S1	895.0	12/11/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.81	1	LANL Reg BG LVL	0.769	3.7	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	3	4	10/11/2023	19.1	19.5	19.3	4	Mortandad Canyon	Regional	R-44 S1	895.0	12/11/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	19.5	1	LANL Reg BG LVL	4.59	4.2	0.665	mg/L	5.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	3	4	10/11/2023	11.5	21	17.8	4	Mortandad Canyon	Regional	R-45 S1	880.0	12/6/2023	FD	F	INIT	General Chemistry	Chloride	Cl(-1)	11.5	1	LANL Reg BG LVL	2.7	4.3	0.335	mg/L	5.00	—	J	I10fr	SW-846:9056A	GELC	
C4	3	4	10/11/2023	11.5	21	17.8	4	Mortandad Canyon	Regional	R-45 S1	880.0	12/6/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	15.6	1	LANL Reg BG LVL	2.7	5.8	0.335	mg/L	5.00	—	J	I10fr	SW-846:9056A	GELC	
C4	102	110	2/28/2009	0.535	13.8	3.22	95	Mortandad Canyon	Regional	R-45 S1	880.0	12/6/2023	FD	F	INIT	Metals	Nickel	Ni	10.7	3	LANL Reg BG LVL	2.9	3.7	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	102	110	2/28/2009	0.535	13.8	3.22	95	Mortandad Canyon	Regional	R-45 S1	880.0	12/6/2023	REG	F	INIT	Metals	Nickel	Ni	10.5	3	LANL Reg BG LVL	2.9	3.6	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	102	110	2/28/2009	0.256	4.1	2.915	110	Mortandad Canyon	Regional	R-45 S1	880.0	12/6/2023	FD	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.95	1	LANL Reg BG LVL	0.769	3.8	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	102	110	2/28/2009	0.256	4.1	2.915	110	Mortandad Canyon	Regional	R-45 S1	880.0	12/6/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.99	1	LANL Reg BG LVL	0.769	3.9	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	3	4	10/11/2023	17.9	26.6	20.3	4	Mortandad Canyon	Regional	R-45 S1	880.0	12/6/2023	FD	F	INIT	General Chemistry	Sulfate	SO4(-2)	17.9	1	LANL Reg BG LVL	4.59	3.9	0.665	mg/L	5.00	—	J	I10fr	SW-846:9056A	GELC	
C4	3	4	10/11/2023	17.9	26.6	20.3	4	Mortandad Canyon	Regional	R-45 S1	880.0	12/6/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	26.6	1	LANL Reg BG LVL	4.59	5.8	0.665	mg/L	5.00	—	J	I10fr	SW-846:9056A	GELC	
C4	3	3	10/11/2023	7.1	7.29	7.15	3	Mortandad Canyon	Regional	R-45 S2	974.9	12/6/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	7.15	1	LANL Reg BG LVL	2.7	2.6	0.0670	mg/L	1.00	—	J	I10fr	SW-846:9056A	GELC	
C4	101	114	3/5/2009	6.1	69.1	35.2	113	Mortandad Canyon	Regional	R-45 S2	974.9	12/6/2023	REG	F	INIT	Metals	Chromium	Cr	59.4	2	LANL Reg BG LVL	7.48	7.9	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	3	3	10/12/2023	19.3	20.9	20.6	3	Mortandad Canyon	Regional	R-50 S1	1077.0	12/5/2023	REG	F	INIT	General Chemistry	Chloride	Cl(-1)	19.3	1	LANL Reg BG LVL	2.7	7.1	0.335	mg/L	5.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	104	113	3/6/2010	1.51	39.3	6.81	113	Mortandad Canyon	Regional	R-50 S1	1077.0	12/5/2023	REG	F	INIT	Metals	Nickel	Ni	36.1	5	LANL Reg BG LVL	2.9	12.4	0.600	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	104	114	3/6/2010	0.398	3.21	2.44	114	Mortandad Canyon	Regional	R-50 S1	1077.0	12/5/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.81	1	LANL Reg BG LVL	0.769	3.7	0.170	mg/L	10.0	—	J-	I6a	EPA:353.2	GELC	
C4	3	3	10/12/2023	19.4	20.2	20	3	Mortandad Canyon	Regional	R-50 S1	1077.0	12/5/2023	REG	F	INIT	General Chemistry	Sulfate	SO4(-2)	19.4	1	LANL Reg BG LVL	4.59	4.2	0.665	mg/L	5.00	—	NQ	NQ	SW-846:9056A	GELC	
C4	88	100	5/20/2011	2.03	69.4	32.8	99	Mortandad Canyon	Regional	R-61 S1	1125.0	12/8/2023	REG	F	INIT	Metals	Chromium	Cr	64.2	2	LANL Reg BG LVL	7.48	8.6	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C4	88	100	5/20/2011	0.427	3.3	2.36	100	Mortandad Canyon	Regional	R-61 S1	1125.0	12/8/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.62	1	LANL Reg BG LVL	0.769	3.4	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	87	99	5/20/2011	2.96	17	12.2	99	Mortandad Canyon	Regional	R-61 S1	1125.0	12/8/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	12.8	1	LANL Reg BG LVL	0.414	30.9	0.100	µg/L	2.00	—	NQ	NQ	SW-846:6850	GELC	
C4	41	45	8/4/2020	0.208	3.19	2.43	45	Mortandad Canyon	Regional	R-70 S1[c]	963.0	12/6/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.66	1	LANL Reg BG LVL	0.769	3.5	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	40	43	8/4/2020	2.59	4.44	3.57	43	Mortandad Canyon	Regional	R-70 S2[c]	1048.0	12/6/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.28	1	LANL Reg BG LVL	0.769	5.6	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	39	42	8/4/2020	0.607	1.04	0.8025	42	Mortandad Canyon	Regional	R-70 S2[c]	1048.0	12/6/2023	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	1.04	1	LANL Reg BG LVL	0.414	2.5	0.0500	µg/L	1.00	—	NQ	NQ	SW-846:6850	GELC	

Table 1: NMED 1-24 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth (ft)	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
C4	11	14	1/30/2022	5.24	5.76	5.52	14	Sandia Canyon	Regional	R-71 S1[c]	1285.0	11/29/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.60	1	LANL Reg BG LVL	0.769	7.3	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	12	15	1/23/2022	3.87	5.13	4.83	15	Sandia Canyon	Regional	R-71 S2[d]	1349.7	11/29/2023	FD	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.88	1	LANL Reg BG LVL	0.769	6.3	0.0850	mg/L	5.00	—	NQ	NQ	EPA:353.2	GELC	
C4	12	15	1/23/2022	3.87	5.13	4.83	15	Sandia Canyon	Regional	R-71 S2[d]	1349.7	11/29/2023	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.94	1	LANL Reg BG LVL	0.769	6.4	0.170	mg/L	10.0	—	NQ	NQ	EPA:353.2	GELC	
C4	21	29	10/23/2001	81.1	239	94.6	29	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	FD	F	INIT	Metals	Barium	Ba	83.3	1	LANL Reg BG LVL	38.1	2.2	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	21	29	10/23/2001	81.1	239	94.6	29	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	REG	F	INIT	Metals	Barium	Ba	85.2	1	LANL Reg BG LVL	38.1	2.2	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	21	29	10/23/2001	340	665	436	29	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	FD	F	INIT	Metals	Strontium	Sr	340	1	LANL Reg BG LVL	157	2.2	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C4	21	29	10/23/2001	340	665	436	29	White Rock Canyon and Rio Grande	Regional	Sacred Spring	0	10/10/2023	REG	F	INIT	Metals	Strontium	Sr	345	1	LANL Reg BG LVL	157	2.2	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
C5	11	11	11/22/2021	411	516	470	11	Mortandad Canyon	Regional	CRPZ-5	976	12/13/2023	REG	F	INIT	Metals	Chromium	Cr	516	1	NM GW STD	50	10.3	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	
C5	104	115	3/6/2010	5.7	150	52.9	115	Mortandad Canyon	Regional	R-50 S1	1077.0	12/5/2023	REG	F	INIT	Metals	Chromium	Cr	32.3	1	NM GW STD	50	0.6	3.00	µg/L	1.00	—	NQ	NQ	SW-846:6020B	GELC	

[a] — = Lab qualifier not applicable.

[b] S1 = Screen 1.

[c] Data pertaining to a well drilled at a target angle from the vertical. Depth value represents linear feet along (down) the borehole.

[d] S2 = Screen 2.

Table 2: NMED 1-24 Groundwater Report Addendum

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth (ft)	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	11	11	11/22/2021	13.4	15.7	14.6	11	Mortandad Canyon	Regional Deep	CRPZ-5	976	12/13/2023	REG	F	INIT	Metals	Sodium	Na	15.7	1.1	Reg-Scr_95	15.3	1	0.1	mg/L	1.00	__[a]	NQ	NQ	SW-846:6010D	GELC	
XC2scr	35	37	10/9/2008	2.03	2.75	2.34	10	Mortandad Canyon	Regional Top	R-42	931.8	12/13/2023	REG	F	INIT	Metals	Arsenic	As	2.75	1.2	Reg-Scr_95	2.7	1	2.00	µg/L	1.00	J	J	J_LAB	SW-846:6020B	GELC	
XC2scr	15	16	01/9/2022	42.1	52.3	48.65	16	Mortandad Canyon	Regional Top	R-72 S1[b]	1220.0	12/12/2023	REG	F	INIT	GENINORG	Hardness	Hardness	52.3	1.1	Reg-Scr_95	51	1	0.453	mg/L	1.00	—	NQ	NQ	SM:A2340B	GELC	
XC2scr	19	26	07/13/2005	0.073	0.073	0.073	1	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/10/2023	FD	F	INIT	Metals	Mercury	Hg	0.0730	1	Reg-Scr_95	0.067	1.1	0.0670	µg/L	1.00	J	J	J_LAB	SW-846:7470A	GELC	
XC4scr	3	3	10/12/2023	0.567	0.585	0.574	3	Mortandad Canyon	Regional Top	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	General Chemistry	Bromide	Br(-1)	0.567	1	Reg-Scr_95	0.067	8.5	0.0670	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
XC4scr	11	12	11/10/2021	204	279	238.5	12	Mortandad Canyon	Regional Top	CrPZ-2a	909.8	12/1/2023	REG	F	INIT	Metals	Strontium	Sr	279	1.2	Reg-Scr_95	74.4	3.7	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	3	3	10/19/2023	0.153	0.159	0.155	3	Mortandad Canyon	Regional Top	CRPZ-3	939.4	12/19/2023	REG	F	INIT	General Chemistry	Bromide	Br(-1)	0.155	1	Reg-Scr_95	0.067	2.3	0.0670	mg/L	1.00	J	J	J_LAB	SW-846:9056A	GELC	
XC4scr	11	11	11/9/2021	28.5	35.6	33.5	11	Mortandad Canyon	Regional Top	CRPZ-3	939.4	12/19/2023	REG	F	INIT	Metals	Calcium	Ca	34.3	1	Reg-Scr_95	14.5	2.4	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	11	11	11/9/2021	101	128	119	11	Mortandad Canyon	Regional Top	CRPZ-3	939.4	12/19/2023	REG	F	INIT	GENINORG	Hardness	Hardness	123	1	Reg-Scr_95	51	2.4	0.453	mg/L	1.00	—	NQ	NQ	SM:A2340B	GELC	
XC4scr	102	121	08/30/2007	137	199	168.5	120	Sandia Canyon	Regional Deep	R-35a	1013.1	12/15/2023	FD	F	RE	Metals	Strontium	Sr	174	1	Reg-Scr_95	74.4	2.3	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	102	121	08/30/2007	137	199	168.5	120	Sandia Canyon	Regional Deep	R-35a	1013.1	12/15/2023	REG	F	INIT	Metals	Strontium	Sr	170	1	Reg-Scr_95	74.4	2.3	1.00	µg/L	1.00	—	J	I10fa	SW-846:6010D	GELC	
XC4scr	3	3	10/19/2023	0.327	0.426	0.329	3	Mortandad Canyon	Regional Top	R-42	931.8	12/13/2023	REG	F	INIT	General Chemistry	Bromide	Br(-1)	0.327	1	Reg-Scr_95	0.067	4.9	0.0670	mg/L	1.00	—	NQ	NQ	SW-846:9056A	GELC	
XC4scr	18	18	7/13/2010	0.00361	0.00814	0.00657	17	Mortandad Canyon	Regional Top	R-42	931.8	12/13/2023	REG	UF	INIT	Inorganic	Cyanide (Total)	CN(TOTAL)	0.00523	0.8	Reg-Scr_95	0.0017	3.1	0.00167	mg/L	1.00	—	NQ	NQ	SW-846:9012B	GELC	
XC4scr	34	36	10/9/2008	120	237	195.5	36	Mortandad Canyon	Regional Top	R-42	931.8	12/13/2023	REG	F	INIT	Metals	Strontium	Sr	230	1.2	Reg-Scr_95	74.4	3.1	1.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	3	4	10/11/2023	0.137	0.153	0.148	4	Mortandad Canyon	Regional Top	R-44 S1	895.0	12/11/2023	REG	F	INIT	General Chemistry	Bromide	Br(-1)	0.149	1	Reg-Scr_95	0.067	2.2	0.0670	mg/L	1.00	J	J	J_LAB	SW-846:9056A	GELC	
XC4scr	3	4	10/11/2023	0.145	0.196	0.1475	4	Mortandad Canyon	Regional Top	R-45 S1	880.0	12/6/2023	FD	F	INIT	General Chemistry	Bromide	Br(-1)	0.147	1	Reg-Scr_95	0.067	2.2	0.0670	mg/L	1.00	J	J	J_LAB	SW-846:9056A	GELC	
XC4scr	3	4	10/11/2023	0.145	0.196	0.1475	4	Mortandad Canyon	Regional Top	R-45 S1	880.0	12/6/2023	REG	F	INIT	General Chemistry	Bromide	Br(-1)	0.196	1.3	Reg-Scr_95	0.067	2.9	0.0670	mg/L	1.00	J	J	J_LAB	SW-846:9056A	GELC	
XC4scr	3	3	10/12/2023	0.147	0.153	0.149	3	Mortandad Canyon	Regional Top	R-50 S1	1077.0	12/5/2023	REG	F	INIT	General Chemistry	Bromide	Br(-1)	0.149	1	Reg-Scr_95	0.067	2.2	0.0670	mg/L	1.00	J	J	J_LAB	SW-846:9056A	GELC	
XC4scr	24	34	10/19/2000	30	68.8	35.8	34	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/10/2023	FD	F	INIT	Metals	Calcium	Ca	30.6	0.9	Reg-Scr_95	14.5	2.1	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	24	34	10/19/2000	30	68.8	35.8	34	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/10/2023	REG	F	INIT	Metals	Calcium	Ca	31.1	0.9	Reg-Scr_95	14.5	2.1	0.0500	mg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	21	29	10/23/2001	36.3	946	158	27	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/10/2023	FD	F	INIT	Metals	Iron	Fe	151	1	Reg-Scr_95	53.8	2.8	30.0	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	21	29	10/23/2001	36.3	946	158	27	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/10/2023	REG	F	INIT	Metals	Iron	Fe	221	1.4	Reg-Scr_95	53.8	4.1	30.0	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	21	29	10/23/2001	32.8	994	197	27	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/10/2023	FD	F	INIT	Metals	Manganese	Mn	79.2	0.4	Reg-Scr_95	12.1	6.5	2.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	
XC4scr	21	29	10/23/2001	32.8	994	197	27	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/10/2023	REG	F	INIT	Metals	Manganese	Mn	84.1	0.4	Reg-Scr_95	12.1	7	2.00	µg/L	1.00	—	NQ	NQ	SW-846:6010D	GELC	

[a] — = Lab qualifier not applicable.

[b] S1 = Screen 1.