

DEPARTMENT OF ENERGY

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

EMLA-23-BF170-2-1

Mr. Dave Cobrain Acting Bureau Chief Hazardous Waste Bureau New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1 Santa Fe, NM 87505-6313



March 21, 2023

Subject:

Monthly Notification of Groundwater Data Reviewed in March 2023

Dear Mr. Cobrain:

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 March 9, 2023, to review groundwater data loaded or released in the Environmental Information Management System (EIMS) 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 × 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-day oral notification was not required during the calendar month, because no contaminants were detected in a well screen interval or spring at a concentration that exceeded either the NMWQCC groundwater standard or federal MCL, at locations where such contaminants have not previously been

detected above the respective standards as defined in the Consent Order (based on samples collected since June 14, 2007).

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) or Hai Shen at (505) 709-7600 (hai.shen@em.doe.gov).

Sincerely,

ARTURO DURAN Digitally signed by ARTURO DURAN Date: 2023.03.20 12:12:36 -06'00'

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 March 2023 that Meet Notification Requirements (EM2023-0236)

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SUMMARY OF GROUNDWATER DATA REVIEWED IN MARCH 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" (IFGMP) for the 2023 monitoring year (N3B 2022, 702346) and 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, as indicated in the tables.

The report includes two tables. Table 1, NMED 2-23 Groundwater Report, presents categorical results since June 14, 2007, that met the five reporting criteria as specified in the Consent Order. Table 2, NMED 2-23 Groundwater Report Addendum, presents results that exceed the 95th percentile of those 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 also included. All data have been through secondary validation.

This report was prepared by comparing the data against groundwater notification criteria as defined in Section IX of the 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 tap water standard's carcinogenic risk values were adjusted to 1 × 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).

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

The CA value is used in the Criteria Code column of Table 1. The CA value indicates detection of a contaminant in a well screen interval or spring at a concentration that exceeds either the NMWQCC water quality standard or the EPA MCL, if that contaminant has not previously exceeded such a water quality standard at that location. N3B, under the U.S. Department of Energy Environmental Management Los Alamos Field Office, notifies NMED orally within 1 business day after review of such analytical data and also includes the data in the 15-day notification table.

15-Day Notification Requirement

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 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:

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

RC—probable reducing condition. A near-well condition likely affects some sample water quality parameter values from those of upgradient ambient water.

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-trinitroxylene

UAL—upper acceptance limit

UF-unfiltered

UOM—unit of measurement

VOC-volatile organic compound

Analytical Laboratory Codes and Qualifiers

** (lab qualifier)—A quality control analyte recovery is outside of specified acceptance criteria.

B (lab qualifier)—Target analyte was detected in the associated blank.

H (lab qualifier)—Analytical holding time was exceeded.

HE1a (validation reason code)—The quantitating internal standard area count is less than the rejection limit of the expected value.

HE4f (validation reason code)—There is evidence of cross-contamination.

HE7c (validation reason code)—The initial or continuing calibration verification recovery is outside the appropriate limits.

HE12a (validation reason code)—The laboratory control sample (LCS) percent recovery was less than the lower acceptance limit and greater than or equal to the rejection limit.

HR4g (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.

HR12a (validation reason code)—The LCS or ongoing precision and recovery sample percent recovery was less than the lower acceptance limit and greater than or equal to the rejection limit.

HR12e (validation reason code)—The matrix spike (MS) percent recovery was less than the lower control limit.

I4a (validation reason code)—The detected sample result is greater than or equal to 5 times and less than 100 times the 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 concentration of the same analyte in the associated blank.

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

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

I7h (validation reason code)—The initial or continuing calibration blank result is greater than method detection limit, and the detected sample result is greater than or equal to 5 times and less than 100 times the blank result.

19 (validation reason code)—The extraction or analytical holding time was exceeded but was less than or equal to 2 times the appropriate holding time.

I9c (validation reason code)—The non-aqueous mercury, chromium(VI), or general chemistry sample temperature was greater than 10°C upon receipt at the laboratory.

I10a (validation reason code)—The sample and the duplicate sample results are greater than or equal to 5 times the reporting limit, and the duplicate sample relative percent difference is greater than 20% for water samples and greater than 35% for soil samples, or outside of the laboratory's limits.

I10ea (validation reason code)—The sample or laboratory duplicate result is <5 times the reporting limit and the absolute difference between sample and duplicate result exceeds the limits.

I10er (validation reason code)—The sample and laboratory duplicate results are ≥5 times the reporting limit and the relative percent difference exceeds the limits.

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.

I10k (validation reason code)—Level 3 data validation identified duplicate sample issues affecting data usability.

I19 (validation reason code)—The data validator identified quality deficiencies in the reported data that require further qualification. The best value flag of the original result is also changed to N.

- J (lab qualifier)—Value is estimated.
- J (validation qualifier)—The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- J- (validation qualifier)—The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample but likely to have a low bias.
- J+ (validation qualifier)—The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample but likely to have a high bias.
- J_LAB (validation reason code)—The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL (practical quantitation limit) but greater than the MDL.

N (lab qualifier)—Spiked sample recovery is not within control limits.

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 with any other standard qualifier. The analyte is detected in the sample.

PE9—The holding time was greater than the applicable holding-time requirement and was ≤2 times the applicable holding-time requirement.

PE9c (validation reason code)—The sample temperature was greater than 6°C, or the sample preservation criteria was not met, upon receipt at the laboratory.

PE12e (validation reason code)—The MS or MSD percent recovery was less than the lower acceptance limit.

SV7b (validation reason code)—The initial or continuing calibration verification relative response factor is less than the laboratory's lower limit.

SV7c (validation reason code)—The initial and/or continuing calibration verification recoveries are outside the appropriate limits.

SV8 (validation reason code)—The affected analyte is considered not detected because mass spectrum did not meet specifications.

SV9 (validation reason code)—The holding time was greater than 1 time and less than 2 times the applicable holding-time requirement.

SV12a—The laboratory control sample percent recovery is less than the lower acceptance limit and greater than or equal to the rejection limit.

SV12e—The MS percent recovery is less than the lower acceptance limit.

V7b (validation reason code)—The initial or continuing calibration verification relative response factor was less than the laboratory's lower limit.

V7k (validation reason code)—Level 3 data validation identified calibration issues affecting data usability.

REFERENCES

- 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 2-23 Groundwater Report

Tab	le 1: N	MED 2	2-23 Ground	water F	Report																											
Criterion 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	Analytical Suite Code	Analyte Description	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	Analytical Method Code	Lab Code	Comment
C2	6	6	11/4/2021	14.7	18.4	16	6	Mortandad Canyon	Regional	CRPZ-1	1122.9	1/10/2023	REG	F	INIT	Metals	Calcium	Са	18.4	1.1	LANL Reg BG LVL	17.03	1.1	0.0500	mg/L	1.00	_	NQ	NQ	SW-846:6010D	GELC	
C2	6	6	11/4/2021	58.2	71.8	62.75	6	Mortandad Canyon	Regional	CRPZ-1	1122.9	1/10/2023	REG	F	INIT	Geninorg	Hardness	Hardness	71.8	1.1	LANL Reg BG LVL	67.1	1.1	0.453	mg/L	1.00	_	NQ	NQ	SM:A2340B	GELC	
C2	6	6	11/9/2021	0.214	0.425	0.316	6	Mortandad Canyon	Regional	CRPZ-3	939.4	1/11/2023	REG	F	INIT	Geninorg	Fluoride	F(-1)	0.425	1.3	LANL Reg BG LVL	0.377	1.1	0.0330	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	6	6	11/4/2021	6.02	9.73	7.325	6	Mortandad Canyon	Regional	CRPZ-1	1122.9	1/10/2023	REG	F	INIT	Geninorg	Chloride	CI(-1)	9.73	1.3	LANL Reg BG LVL	2.7	3.6	0.0670	mg/L	1.00	_	J+	l6b	EPA:300.0	GELC	
C4	6	6	11/4/2021	72.5	128	90.35	6	Mortandad Canyon	Regional	CRPZ-1	1122.9	1/10/2023	REG	F	INIT	Metals	Chromium	Cr		1.4	LANL Reg BG LVL		17.1	3.00	μg/L	1.00	_	NQ	NQ	SW-846:6020B	GELC	
C4	6	6	11/4/2021	2.66	3.15	2.88	6	Mortandad Canyon	Regional	CRPZ-1	1122.9	1/10/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.87	1	LANL Reg BG LVL			0.170	mg/L	10.0	_	NQ	NQ	EPA:353.2	GELC	
C4	6	6	11/4/2021	10.5	16.2	13.3	6	Mortandad Canyon	Regional	CRPZ-1		1/10/2023	REG		INIT	LCMS/MS	Perchlorate	CIO4	13.0		LANL Reg BG LVL			0.250	μg/L	5.00	_	NQ	NQ	SW-846:6850	GELC	
C4	6	6	11/4/2021	10.3	15.5	11.95	6	Mortandad Canyon	Ů	CRPZ-1		1/10/2023	REG		INIT	Geninorg	Sulfate	SO4(-2)	15.2		LANL Reg BG LVL		3.3	0.133	mg/L		_	J+	l6b	EPA:300.0	GELC	
C4	6	7	11/10/2021	48.1		58.4	7	Mortandad Canyon	Regional	CrPZ-2a	909.8	1/10/2023	REG		INIT	Metals	Calcium	Са	51.8		LANL Reg BG LVL	17.03		0.0500	mg/L	1.00	_	NQ	NQ	SW-846:6010D	GELC	
C4	6	7	11/10/2021	41	54.7	47.5	7	Mortandad Canyon	Regional	CrPZ-2a	909.8	1/10/2023	REG		INIT	Geninorg	Chloride	CI(-1)	41.0	0.9	LANL Reg BG LVL		15.2	1.34	mg/L	20.0	_	J+	l6b	EPA:300.0	GELC	
C4	6	7	11/10/2021	179		201	7	Mortandad Canyon	ŭ	CrPZ-2a		1/10/2023	REG		INIT	Metals	Chromium	Cr		1.3	LANL Reg BG LVL		36	3.00		1.00	_		NQ	SW-846:6020B	GELC	
C4	6	7	11/10/2021	168	221	203	7	Mortandad Canyon	Regional	CrPZ-2a	909.8	1/10/2023	REG		INIT	Geninorg	Hardness	Hardness		0.9	LANL Reg BG LVL			0.453	mg/L		_		NQ	SM:A2340B	GELC	
C4	6	7	11/10/2021	11.7	16.1	13.9	7	Mortandad Canyon	Regional	CrPZ-2a	909.8	1/10/2023	REG		INIT	Metals	Magnesium	Mg		0.9	LANL Reg BG LVL			0.11	mg/L	1.00	_		NQ	SW-846:6010D		
C4	6	7		5.98	8.24	6.85	7	Mortandad Canyon	ŭ	CrPZ-2a		1/10/2023	REG		INIT		Nickel	Ni	6.85		LANL Reg BG LVL		2.4	0.600		1.00	_		NQ	SW-846:6020B		
C4	6	7	11/10/2021			4.44	7	Mortandad Canyon	_	CrPZ-2a		1/10/2023	REG		INIT		as Nitrogen	NO3+NO2-N			LANL Reg BG LVL				mg/L				NQ	EPA:353.2	GELC	
C4	6	7	11/10/2021			0.982	7	Canyon	_	CrPZ-2a		1/10/2023	REG		INIT			CIO4	1.02		LANL Reg BG LVL			0.0500					NQ	SW-846:6850	GELC	
C4	6	7	11/10/2021	53.7		58.6	7	Mortandad Canyon					REG		INIT		Sulfate	SO4(-2)	53.7		LANL Reg BG LVL		11.7		mg/L		_	J+	l6b	EPA:300.0	GELC	
C4	6	7				0.70	7	Canyon	_	CrPZ-2a		1/10/2023	REG		INIT	Metals	Uranium	U	2.68	0.7	LANL Reg BG LVL			0.0670			_		NQ	SW-846:6020B		
C4	6	6	11/9/2021				6	Canyon		CRPZ-3		1/11/2023	REG		INIT	Ů	Chloride	CI(-1)	19.6	1	LANL Reg BG LVL		7.3	0.335	mg/L		_		NQ	EPA:300.0	GELC	
C4	6	6	11/9/2021	297	416	336.5		Mortandad Canyon	_	CRPZ-3		1/11/2023	REG		INIT	Metals	Chromium	Cr		1.1	LANL Reg BG LVL			3.00		1.00	_		NQ	SW-846:6020B		
C4	6	6	11/9/2021	5.2	5.54	5.235	6	Mortandad Canyon	Regional	CRPZ-3	939.4	1/11/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.47	1	LANL Reg BG LVL	0.769	7.1	0.170	mg/L	10.0	_	NQ	NQ	EPA:353.2	GELC	

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Table 1: NMED 2-23 Groundwater Report

Table	; I. ININ	/IED 2-	23 Ground	water r	keport																								
Criterion Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Fld QC Type Code Fld Prep Code	Lab Sample Type Code	Analytical Suite Code	Analyte Description	Analyte	Std Result	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std MDL	Std UOM	Dilution Factor	Lab Qualifier	Validation Qualifier	Validation Reason Code		Lab Code	Comment
C4	6	6	11/9/2021	0.958	1.18	1.145	6	Mortandad Canyon	Regional	CRPZ-3	939.4 1/11/202	3 REG F	INIT	LCMS/MS	Perchlorate	CIO4	1.16 1	LANL Reg BG LVL	0.414	2.8	0.0500	μg/L	1.00	_	NQ	NQ SW-846:	6850	GELC	
C4	6	6	11/9/2021	27.9	32.4	30.75	6	Mortandad Canyon	Regional	CRPZ-3	939.4 1/11/202	3 REG F	INIT	Geninorg	Sulfate	SO4(-2)	32.4 1.1	LANL Reg BG LVL			0.665	mg/L		_	NQ	NQ EPA:300	.0	GELC	
C4	6	7	11/10/2021	6.31	10.1	6.68	7	Mortandad Canyon	Regional	CRPZ-4	957 1/19/202	3 REG F	INIT	Geninorg	Chloride	CI(-1)	6.98 1	LANL Reg BG LVL	2.7	2.6	0.0670	mg/L	1.00	_	J+	16b EPA:300	.0	GELC	
C4	6	7	11/10/2021	88.4	156	92.4	7	Mortandad Canyon	Regional	CRPZ-4	957 1/19/202	3 REG F	INIT	Metals	Chromium	Cr	90.1 1	LANL Reg BG LVL	7.48	12	3.00	μg/L	1.00	_	NQ	NQ SW-846	6020B	GELC	
C4	6	6	11/10/2021	4.77	5.3	5.025	6	Mortandad Canyon	Regional	CRPZ-4	957 1/19/202	3 REG F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.05 1	LANL Reg BG LVL	0.769	6.6	0.170	mg/L	10.0	_	NQ	NQ EPA:353	.2	GELC	
C4	6	7	11/10/2021	2.78	8.29	3.24	7	Mortandad Canyon	Regional	CRPZ-4	957 1/19/202	3 REG F	INIT	LCMS/MS	Perchlorate	CIO4	3.24 1	LANL Reg BG LVL	0.414	7.8	0.0500	μg/L	1.00	_	NQ	NQ SW-846	6850	GELC	
C4	6	7	11/10/2021	12.3	16.8	12.6	7	Mortandad Canyon	Regional	CRPZ-4	957 1/19/202	3 REG F	INIT	Geninorg	Sulfate	SO4(-2)	12.6 1	LANL Reg BG LVL	4.59	2.7	0.133	mg/L	1.00	_	NQ	NQ EPA:300	.0	GELC	
C4	6	6	11/22/2021	14.9	16.4	15.8	6	Mortandad Canyon	Ŭ		976 1/9/2023	REG F	INIT	Geninorg	Chloride	CI(-1)	16.4 1	LANL Reg BG LVL			0.335	mg/L		_	J+	l6b EPA:300		GELC	
C4	6	6	11/22/2021		479	466	6	Mortandad Canyon	Ů		976 1/9/2023		INIT	Metals	Chromium	Cr	470 1	LANL Reg BG LVL		62.8			1.00	_	NQ	NQ SW-846:			
C4	6	6	11/22/2021	2.88	3.21	3.11	6	Mortandad Canyon	Regional		976 1/9/2023	REG F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.21 1	LANL Reg BG LVL	0.769	4.2	0.170	mg/L	10.0	_	NQ	NQ EPA:353	.2	GELC	
C4	6	6	11/22/2021	25.8	29.2	28.15	6	Mortandad Canyon	Regional	CRPZ-5	976 1/9/2023	REG F	INIT	Geninorg	Sulfate	SO4(-2)	29.1 1	LANL Reg BG LVL	4.59	6.3	0.665	mg/L	5.00	_	J+	l6b EPA:300	.0	GELC	
C4		52					52	Sandia Canyon	Regional	R-10a	690.0 11/3/202		INIT	Geninorg	Chloride	CI(-1)	6.51 1	LANL Reg				mg/L		_	J+	14g,16 EPA:300		GELC	
C4		52 52	11/30/2005 11/30/2005	5.62 9.36	7.09	6.34	52 52	Sandia Canyon Sandia	Regional Regional	R-10a R-10a	690.0 11/3/202 690.0 11/3/202		INIT	Geninorg Geninorg	Chloride Sulfate	CI(-1) SO4(-2)	6.66 1.1 10.4 1	LANL Reg BG LVL LANL Reg		2.5	0.0670	mg/L mg/L	1.00	_	J+ NQ	14g,16 EPA:300 b RQ EPA:300		GELC GELC	
C4		52	11/30/2005				52	Canyon Sandia	Regional	R-10a	690.0 11/3/202		INIT	, ,		SO4(-2)	10.5 1	BG LVL LANL Reg				mg/L		_	NQ	NQ EPA:300		GELC	
C4	103	124	5/17/2005	2.27	9.25	5.6	124	Canyon Sandia Canyon	Regional	R-11	855.0 1/4/2023	REG F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	8.25 1.5	BG LVL LANL Reg BG LVL	0.769	10.7	0.425	mg/L	25.0	_	NQ	NQ EPA:353	.2	GELC	
C4	103	124	5/17/2005	5.95	20.2	9.705	124	Sandia Canyon	Regional	R-11	855.0 1/4/2023	REG F	INIT	Geninorg	Sulfate	SO4(-2)	10.9 1.1	LANL Reg	4.59	2.4	0.133	mg/L	1.00	_	J+	l6b EPA:300	.0	GELC	
C4	67	82	2/24/2000	1.35	3.31	2.115	82	Mortandad Canyon	Regional	R-15	958.6 1/10/202	3 REG F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.05 1	LANL Reg BG LVL	0.769	2.7	0.0850	mg/L	5.00	_	NQ	NQ EPA:353	.2	GELC	
C4	91	106	8/30/2007	68	408	348	106	Sandia Canyon	Regional	R-35a	1013.1 1/20/202	3 REG F	INIT	Metals	Barium	Ва	360 1	LANL Reg BG LVL	38.1	9.4	1.00	μg/L	1.00	_	NQ	NQ SW-846	6010D	GELC	
			8/30/2007			6.58	106	Sandia Canyon	Regional	R-35a	1013.1 1/20/202			Geninorg	Chloride	CI(-1)	6.65 1	LANL Reg BG LVL			0.0670			_	J+	l6b EPA:300		GELC	
			8/30/2007			8.36	105	Sandia Canyon	Regional	R-35a	1013.1 1/20/202			Metals	Nickel	Ni Cl(1)	10.4 1.2	BG LVL			0.600		1.00	_	NQ	NQ SW-846:			
C4	55	62	3/12/2008	4.05	6.83	6.12	62	Sandia Canyon	Regional	R-36	766.9 1/4/2023	REG F	INII	Geninorg	Chloride	CI(-1)	6.43 1.1	LANL Reg BG LVL	2.1	2.4	0.0670	mg/L	1.00		J+	I6b EPA:300	.0	GELC	

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I ab	10 1. 141	VILD Z	-23 Ground	water i	report																											
Criterion 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	Analytical Suite Code	Analyte Description	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	Analytical Method Code	Lab Code	Comment
C4	55	63	3/12/2008	1.25	6.8	2.45	63	Sandia Canyon	Regional	R-36	766.9	1/4/2023	REG		INIT	Geninorg	Nitrate-Nitrite as Nitrogen		2.54	1	LANL Reg BG LVL	0.769		0.170		10.0	_	NQ	NQ	EPA:353.2	GELC	
C4	54	61	3/12/2008	0.845			61	Sandia Canyon	Regional	R-36	766.9	1/4/2023	REG		INIT		Perchlorate	CIO4	1.27		LANL Reg BG LVL			0.0500	. 0	1.00	_	NQ	NQ	SW-846:6850	GELC	
C4	56	65	11/5/2008	3.6	9.39	7.83	65	Sandia Canyon	Regional	R-43 S1	903.9	1/4/2023	REG		INIT	Geninorg	Chloride	CI(-1)	6.94		LANL Reg BG LVL			0.0670			_	J+	l6b	EPA:300.0	GELC	
C4	56	70	11/5/2008	2.35	223	153	67	Sandia Canyon	Regional	R-43 S1	903.9	1/4/2023	REG		INIT	Metals	Chromium	Cr		1.1	LANL Reg BG LVL			3.00	. •	1.00	_		NQ	SW-846:6020B		
C4	56	64	11/5/2008	4.63	6.15		63	Sandia Canyon	Regional	R-43 S1	903.9	1/4/2023	REG		INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N			LANL Reg BG LVL			0.170	mg/L	10.0	_	NQ	NQ	EPA:353.2	GELC	
C4	56	65	11/5/2008		21		65	Sandia Canyon	Regional	R-43 S1		1/4/2023	REG		INIT	Geninorg	Sulfate	SO4(-2)	15.1		LANL Reg BG LVL			0.133	mg/L			J+	l6b	EPA:300.0	GELC	
C4	55	61	11/10/2008	3.37	8.66		61	Sandia Canyon	Regional	R-43 S2		1/4/2023	REG		INIT	Geninorg	Chloride	CI(-1)	6.57		LANL Reg BG LVL		2.4	0.0670			_	J+	l6b	EPA:300.0	GELC	
C4	55	66	11/10/2008			13.45		Sandia Canyon	Regional	R-43 S2			REG			Metals	Chromium		28.3		LANL Reg BG LVL			3.00	. •	1.00	_		NQ	SW-846:6020B		
C4	55	60	11/10/2008	0.389	5.4	3.465	60	Sandia Canyon	Regional	R-43 S2	969.1	1/4/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N			LANL Reg BG LVL		4.8	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	55	61	11/10/2008				61	Sandia Canyon	Regional				REG		INIT	Geninorg	Sulfate	SO4(-2)	9.51		LANL Reg BG LVL			0.133	mg/L		_	J+	l6b	EPA:300.0	GELC	
C4	91	98	2/28/2009	3	21.5	5.72	98	Mortandad Canyon	Regional	R-45 S1	880.0	1/5/2023	REG	F	INIT	Geninorg	Chloride	CI(-1)	20.7	3.6	LANL Reg BG LVL	2.7	7.7	0.335	mg/L	5.00	_	NQ	NQ	EPA:300.0	GELC	
C4	91	98	2/28/2009	0.535	13.8	1.35	83	Mortandad Canyon	Regional	R-45 S1	0.088	1/5/2023	REG	F	INIT	Metals	Nickel	Ni	7.28	5.4	LANL Reg BG LVL	2.9	2.5	0.600	μg/L	1.00	_	NQ	NQ	SW-846:6020B	GELC	
C4	91	98	2/28/2009	0.256	4.1	2.865	98	Mortandad Canyon	Regional	R-45 S1	880.0	1/5/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.95	1	LANL Reg BG LVL	0.769	3.8	0.170	mg/L	10.0	_	NQ	NQ	EPA:353.2	GELC	
C4	91	98	2/28/2009	4.1	21.4	8.77	98	Mortandad Canyon	Regional	R-45 S1	880.0	1/5/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	19.5	2.2	LANL Reg BG LVL	4.59	4.2	0.665	mg/L	5.00	_	NQ	NQ	EPA:300.0	GELC	
C4	90	97	3/5/2009	2.74	8.15	4.99	97	Mortandad Canyon	Regional	R-45 S2	974.9	1/5/2023	FD	F	INIT	Geninorg	Chloride	CI(-1)	7.10	1.4	LANL Reg BG LVL	2.7	2.6	0.0670	mg/L	1.00	_	NQ	NQ	EPA:300.0	GELC	
C4	90	97	3/5/2009	2.74	8.15	4.99	97	Mortandad Canyon	Regional	R-45 S2	974.9	1/5/2023	REG	F	INIT	Geninorg	Chloride	CI(-1)	7.07	1.4	LANL Reg BG LVL	2.7	2.6	0.0670	mg/L	1.00	_	NQ	NQ	EPA:300.0	GELC	
C4	90	102	3/5/2009	6.1	69.1	31.3	101	Mortandad Canyon	Regional	R-45 S2	974.9	1/5/2023	FD	F	INIT	Metals	Chromium	Cr	58.0	1.9	LANL Reg BG LVL	7.48	7.8	3.00	μg/L	1.00	_	NQ	NQ	SW-846:6020B	GELC	
C4	90	102	3/5/2009	6.1	69.1	31.3	101	Mortandad Canyon	Regional	R-45 S2	974.9	1/5/2023	REG	F	INIT	Metals	Chromium	Cr	63.1	2	LANL Reg BG LVL	7.48	8.4	3.00	μg/L	1.00	_	NQ	NQ	SW-846:6020B	GELC	
C4	92	101	3/6/2010	4.68	22.4	13.8	101	Mortandad Canyon	Regional	R-50 S1	1077.0	1/3/2023	REG	F	INIT	Geninorg	Chloride	CI(-1)	20.6	1.5	LANL Reg BG LVL	2.7	7.6	0.335	mg/L	5.00	_	J+	l4a	EPA:300.0	GELC	
C4	93	102	3/6/2010	1.51	25.6	6.54	102	Mortandad Canyon	Regional	R-50 S1	1077.0	1/3/2023	REG	F	INIT	Metals	Nickel	Ni	10.2	1.6	LANL Reg BG LVL	2.9	3.5	0.600	μg/L	1.00	_	NQ	NQ	SW-846:6020B	GELC	
C4	93	103	3/6/2010	0.398	3.21	2.29	103	Mortandad Canyon	Regional	R-50 S1	1077.0	1/3/2023	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.93	1.3	LANL Reg BG LVL	0.769	3.8	0.170	mg/L	10.0	_	NQ	NQ	EPA:353.2	GELC	
C4	92	101	3/6/2010	7.22	21.5	16.2	101	Mortandad Canyon	Regional	R-50 S1	1077.0	1/3/2023	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	20.0	1.2	LANL Reg BG LVL	4.59	4.4	0.665	mg/L	5.00	_	NQ	NQ	EPA:300.0	GELC	
	_1	1	1	1	1	1	1	1	1	1	1	I				1	1	1	1		1	1	1				<u> </u>		1	1	1	

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Criterion Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth Start Date	Fid QC Type Code	Lab Sample Type Code	Analytical Suite Code	Analyte Description	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	Analytical Method Code	Lab Code	Comment
C4		88	5/20/2011	2.03		28.5	87	Mortandad Canyon	Regional	R-61 S1	1125.0 1/10/2023	REG F	INIT	Metals	Chromium	Cr	49.6	1.7	LANL Reg BG LVL		6.6	3.00	μg/L	1.00	_	NQ	NQ	SW-846:6020B	GELC	
C4		88	5/20/2011	0.427		2.325		Mortandad Canyon	Regional	R-61 S1	1125.0 1/10/2023	REG F		Geninorg	as Nitrogen	NO3+NO2-N			LANL Reg BG LVL				mg/L		_	NQ	NQ	EPA:353.2	GELC	
C4		87	5/20/2011		17	12.1		Mortandad Canyon	Regional	R-61 S1	1125.0 1/10/2023		INIT		Perchlorate	CIO4	11.4		LANL Reg BG LVL					5.00	_	NQ	NQ	SW-846:6850	GELC	
C4		47	3/26/2012				47	Sandia Canyon	Regional	R-62	1158.4 1/12/2023			Geninorg	Chloride	CI(-1)	16.4		LANL Reg BG LVL			0.335	mg/L		_	NQ	NQ	EPA:300.0	GELC	
C4		47	3/26/2012	0.0685		217 1.49	47	Sandia Canyon Sandia	Regional Regional	R-62 R-62	1158.4 1/12/2023 1158.4 1/12/2023	REG F		Metals Geninorg	Chromium	Cr NO3+NO2-N	289	1.3	LANL Reg BG LVL LANL Reg		38.6		μg/L mg/L	1.00	_	NQ NQ	NQ NQ	SW-846:6020B EPA:353.2	GELC GELC	
								Canyon	_						as Nitrogen				BG LVL											
C4		33	3/26/2012 8/4/2020		37.4 2.92	20.1	33	Sandia Canyon Mortandad	Regional	R-62 R-70 S1*	1158.4 1/12/2023 963.0 1/9/2023	REG F		Geninorg Geninorg	Sulfate	SO4(-2) NO3+NO2-N	28.9		LANL Reg BG LVL LANL Reg			0.665 0.0850	mg/L		_	NQ NQ	NQ NQ	EPA:300.0 EPA:353.2	GELC	
								Canyon	Regional						as Nitrogen				BG LVL											
C4		31	8/4/2020		19.3		31	Canyon	Regional	R-70 S2*	1048.0 1/9/2023	REG F		Geninorg	Chloride	CI(-1)	12.3		BG LVL			0.134	mg/L		_	J+	l6b	EPA:300.0	GELC	
C4	29	31	8/4/2020	131	272	190	31	Mortandad Canyon	Regional	R-70 S2*	1048.0 1/9/2023	REG F	INIT	Metals	Chromium	Cr	155	8.0	LANL Reg BG LVL	7.48	20.7	3.00	μg/L	1.00	_	NQ	NQ	SW-846:6020B	GELC	
C4	29	31	8/4/2020	2.59	4.06	3.57	31	Mortandad Canyon	Regional	R-70 S2*	1048.0 1/9/2023	REG F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.92	8.0	LANL Reg BG LVL	0.769	3.8	0.170	mg/L	10.0	_	NQ	NQ	EPA:353.2	GELC	
C4	29	31	8/4/2020	17.5	32.6	23.6	31	Mortandad Canyon	Regional	R-70 S2*	1048.0 1/9/2023	REG F	INIT	Geninorg	Sulfate	SO4(-2)	19.2	8.0	LANL Reg BG LVL	4.59	4.2	0.133	mg/L	1.00	_	J+	l6b	EPA:300.0	GELC	
C4	56	71			84.1	69.4	71	Sandia Canyon	Intermediate	SCI-2	548.0 1/18/2023	REG F	INIT	Metals	Barium	Ва	68.9	1	LANL Int BG LVL	13.5	5.1	1.00		1.00	_	NQ	NQ	SW-846:6010D	GELC	
C4		71	10/21/2008				71	Sandia Canyon	Intermediate		548.0 1/18/2023	REG F		Metals	Calcium	Ca	74.4		LANL Int BG LVL	10.7				1.00			NQ	SW-846:6010D		
			10/21/2008			69.2		Canyon	Intermediate		548.0 1/18/2023			Geninorg					BG LVL										GELC	
	56 55		10/21/2008			237		Sandia Canyon Sandia	Intermediate Intermediate		548.0 1/18/2023			Geninorg Metals	Hardness	Hardness	254 16.6		LANL Int BG LVL LANL Int					1.00		NQ NQ		SM:A2340B SW-846:6010D	GELC	
		71	10/21/2008					Canyon Sandia	Intermediate		548.0 1/18/2023 548.0 1/18/2023			Metals	Magnesium Nickel	Mg Ni			BG LVL					1.00		NQ NQ		SW-846:6010D SW-846:6020B		
			10/21/2008			4.07		Canyon Sandia	Intermediate		548.0 1/18/2023				Nitrate-Nitrite				BG LVL LANL Int			0.170				NQ		EPA:353.2	GELC	
			10/21/2008					Canyon Sandia	Intermediate						as Nitrogen	CIO4			BG LVL	0.27		0.0500				NQ		SW-846:6850	GELC	
		71	10/21/2008		378		71	Canyon Sandia	Intermediate		548.0 1/18/2023			Metals	Strontium	Sr		1.1	BG LVL LANL Int	59.6				1.00		NQ		SW-846:6010D		
C4		69	10/21/2008			88.5	69	Canyon Sandia	Intermediate		548.0 1/18/2023			Geninorg	Sulfate	SO4(-2)	81.3		BG LVL LANL Int			2.66		20.0				EPA:300.0	GELC	
C4	56	71	10/21/2008	1.2	2.77	1.88	71	Canyon Sandia	Intermediate	SCI-2	548.0 1/18/2023	REG F	INIT	Metals	Uranium	U	2.70	1.4		0.992	2.7	0.0670	μg/L	1.00	<u> </u>	NQ	NQ	SW-846:6020B	GELC	
				<u> </u>			<u> </u>	Canyon										1	BG LVL			1		<u> </u>						

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Criterion 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	Analytical Suite Code	Analyte Description	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	Analytical Method Code	Lab Code	Comment
C5	6	6	11/4/2021	72.5	128	90.35	6	Mortandad Canyon	Regional	CRPZ-1	1122.9	1/10/2023	REG I	F	INIT	Metals	Chromium	Cr	128	1.4	NM GW STD	50	2.6	3.00	μg/L	1.00	_	NQ	NQ	SW-846:6020B	GELC	
C5	77	88	5/20/2011	2.03	51	28.5	87	Mortandad Canyon	Regional	R-61 S1	1125.0	1/10/2023	REG I	F	INIT	Metals	Chromium	Cr	49.6	1.7	NM GW STD	50	1	3.00	μg/L	1.00	_	NQ	NQ	SW-846:6020B	GELC	

^{*} Data pertaining to a well drilled at a target angle from the vertical. Depth value represents linear feet along (down) the borehole.

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Table 2: NMED 2-23 Groundwater Report Addendum

		ı	Torounawa	1	1	1	1	I				1	ı	1		1	ı	1	1		1	ı	1	1	1	1	1	1	I	1	
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	Analytical Suite Code	Analyte Description	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	Analytical Method Code	Lab Code	Comment
XC2scr	6	6	11/4/2021	2.1	3.1	2.6	2	Mortandad Canyon	Regional	CRPZ-1	1122.9	1/10/2023	REG F	INIT	Metals	Arsenic	As	3.10	1.2	Reg-Scr_95	2.7	1.1	2.00	μg/L	1.00	J	J	J_LAB	SW-846:6020B	GELC	
XC2scr	6	7	11/10/2021	2.47	3.37	2.57	3	Mortandad Canyon	Regional	CrPZ-2a	909.8	1/10/2023	REG F	INIT	Metals	Arsenic	As	3.37	1.3	Reg-Scr_95	2.7	1.2	2.00	μg/L	1.00	J	J	J_LAB	SW-846:6020B	GELC	
XC2scr	6	6	11/9/2021	1.9	1.9	1.9	1	Mortandad Canyon	Regional	CRPZ-3	939.4	1/11/2023	REG F	INIT	Metals	Cobalt	Со	1.90	1	Reg-Scr_95	1	1.9	1.00	μg/L	1.00	J	J	J_LAB	SW-846:6010D	GELC	
XC2scr	6	6	11/22/2021	2.83	2.83	2.83	1	Mortandad Canyon	Regional	CRPZ-5	976	1/9/2023	REG F	INIT	Metals	Arsenic	As	2.83	1	Reg-Scr_95	2.7	1	2.00	μg/L		J	J	J_LAB	SW-846:6020B	GELC	
XC2scr	54	63	6/27/2005	1	1.8	1.4	2	Mortandad Canyon	Regional	R-33 S1	995.5	1/11/2023	REG F	INIT	Metals	Cobalt	Со	1.80	1.3	Reg-Scr_95	1	1.8	1.00	μg/L	1.00	J	J	J_LAB	SW-846:6010D	GELC	
XC2scr	54	57	6/24/2005	1.19	1.7	1.445	2	Mortandad Canyon	Regional	R-33 S2	1112.4	1/11/2023	REG F	INIT	Metals	Cobalt	Со	1.19	8.0	Reg-Scr_95	1	1.2	1.00	μg/L	1.00	J	J	J_LAB	SW-846:6010D	GELC	
XC4scr	6	7	11/10/2021	0.372	0.57	0.52	7	Mortandad Canyon	Regional	CrPZ-2a	909.8	1/10/2023	REG F	INIT	Geninorg	Bromide	Br(-1)	0.372	0.7	Reg-Scr_95	0.067	5.6	0.0670	mg/L	1.00	_	J+	l6b	EPA:300.0	GELC	
XC4scr	6	7	11/10/2021	204	256	225	7	Mortandad Canyon	Regional	CrPZ-2a	909.8	1/10/2023	REG F	INIT	Metals	Strontium	Sr	210	0.9	Reg-Scr_95	74.4	2.8	1.00	μg/L	1.00	_	NQ	NQ	SW-846:6010D	GELC	
XC4scr	6	6	11/9/2021	28.5	33.5	30.45	6	Mortandad Canyon	Regional	CRPZ-3	939.4	1/11/2023	REG F	INIT	Metals	Calcium	Са	31.2	1	Reg-Scr_95	14.5	2.2	0.0500	mg/L	1.00	_	NQ	NQ	SW-846:6010D	GELC	
XC4scr	6	6	11/9/2021	101	119	109	6	Mortandad Canyon	Regional	CRPZ-3	939.4	1/11/2023	REG F	INIT	Geninorg	Hardness	Hardness	113	1	Reg-Scr_95	51	2.2	0.453	mg/L	1.00		NQ	NQ	SM:A2340B	GELC	
XC4scr	42	52	11/30/2005	161	244	195	52	Sandia Canyon	Regional	R-10a	690.0	11/3/2022	FD F	INIT	Metals	Strontium	Sr	183	0.9	Reg-Scr_95	74.4	2.5	1.00	μg/L	1.00		NQ	NQ	SW-846:6010D	GELC	
XC4scr	42	52	11/30/2005	161	244	195	52	Sandia Canyon	Regional	R-10a	690.0	11/3/2022	REG F	INIT	Metals	Strontium	Sr	185	0.9	Reg-Scr_95	74.4	2.5	1.00	μg/L	1.00		NQ	NQ	SW-846:6010D	GELC	
XC4scr	67	83	2/24/2000	2.6	18.2	11.6	80	Mortandad Canyon	Regional	R-15	958.6	1/10/2023	REG F	INIT	Metals	Chromium	Cr	14.8	1.3	Reg-Scr_95	6.6	2.2	3.00	μg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
XC4scr	91	106	8/30/2007	20.6	54.5	40.4	100	Sandia Canyon	Regional	R-35a	1013.1	1/20/2023	REG F	INIT	Metals	Boron	В	38.4	1	Reg-Scr_95	18.7	2.1	15.0	μg/L	1.00	J	J	J_LAB	SW-846:6010D	GELC	
XC4scr	91	106	8/30/2007	137	199	169	106	Sandia Canyon	Regional	R-35a	1013.1	1/20/2023	REG F	INIT	Metals	Strontium	Sr	175	1	Reg-Scr_95	74.4	2.4	1.00	μg/L	1.00	_	NQ	NQ	SW-846:6010D	GELC	
XC4scr	91	98	2/28/2009	0.0667	0.637	0.122	57	Mortandad Canyon	Regional	R-45 S1	880.0	1/5/2023	REG F	INIT	Geninorg	Bromide	Br(-1)	0.153	1.3	Reg-Scr_95	0.067	2.3	0.0670	mg/L	1.00	J	J	J_LAB	EPA:300.0	GELC	
XC4scr	92	101	3/6/2010	0.0691	0.545	0.13	79	Mortandad Canyon	Regional	R-50 S1	1077.0	1/3/2023	REG F	INIT	Geninorg	Bromide	Br(-1)	0.156	1.2	Reg-Scr_95	0.067	2.3	0.0670	mg/L	1.00	J	J	J_LAB	EPA:300.0	GELC	
XC4scr	40	47	3/26/2012	0.0706	0.248	0.1275	42	Sandia Canyon	Regional	R-62	1158.4	1/12/2023	REG F	INIT	Geninorg	Bromide	Br(-1)	0.166	1.3	Reg-Scr_95	0.067	2.5	0.0670	mg/L	1.00	J	J	J_LAB	EPA:300.0	GELC	
XC4scr	56	69	10/21/2008	0.194	0.956	0.6525	68	Sandia Canyon	Intermediate	SCI-2	548.0	1/18/2023	REG F	INIT	Geninorg	Bromide	Br(-1)	0.882	1.4	Int-Scr_95	0.0716	12.3	0.0670	mg/L	1.00	_	NQ	NQ	EPA:300.0	GELC	
XC4scr	56	76	10/21/2008	189	658	422.5	76	Sandia Canyon	Intermediate	SCI-2	548.0	1/18/2023	REG F	INIT	Metals	Chromium	Cr	189	0.4	Int-Scr_95	2.72	69.5	3.00	μg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
XC4scr	56	70	10/21/2008	354	796	429.5	70	Sandia Canyon	Intermediate	SCI-2	548.0	1/18/2023	REG F	INIT	Geninorg	Total Dissolved Solids	TDS	400	0.9	Int-Scr_95	135	3	2.38	mg/L	1.00		NQ	NQ	EPA:160.1	GELC	