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

EMLA-2021-BF160-02-001

September 24, 2021

Mr. Ricardo Maestas
Acting Bureau Chief
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 September 2021

Dear Mr. Maestas:

This letter is the U.S. Department of Energy (DOE) Environmental Management Los Alamos Field Office (EM-LA) and Newport News Nuclear BWXT-Los Alamos, LLC (N3B) written submission in accordance with Section XXVI.D of the 2016 Compliance Order on Consent (2016 Consent Order). Members of EM-LA and N3B met on September 9, 2021, to review groundwater data loaded or released in the Environmental Information Management (EIM) 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 2016 Consent Order. These criteria consider New Mexico Water Quality Control Commission (NMWQCC) groundwater standards, U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs), New Mexico Environment Department (NMED) screening levels for tap water, EPA regional screening levels for tap water, and NMED-approved background values for hydrogeological zones as set forth in the "Groundwater Background Investigation Report, Revision 5." The EPA tap water standard's carcinogenic risk values were adjusted to 1×10^{-5}, as specified in the 2016 Consent Order.

The enclosed report was prepared using the May 2021 EPA regional screening levels for tap water; the NMWQCC groundwater standards published December 21, 2018; and the June 2019 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 a sample collected at a location within the Pueblo de San Ildefonso, which is subject to reporting at this time. These data have been reviewed by the Pueblo, as required under the memorandum of agreement dated May 28, 2014, between the DOE National Nuclear Security Administration Los Alamos Field Office and the Pueblo de San Ildefonso.

1-Day Notification

One-day notification was provided to NMED by phone on August 10, 2021, for a potential detection of cadmium in the July 20, 2021, sample at R-15. EM-LA communicated that this detection result was under review because of an inconsistency between two GEL Laboratories, LLC (GELC) results, indicating the detection may have been caused by contamination during laboratory sample preparation. GELC employs two separate methods to concurrently measure for many metals. The detected result was derived from an inductively coupled plasma mass spectrometry (ICPMS) method. The result from the other method,

inductively coupled plasma atomic emission spectroscopy (ICPAES), was a nondetection. Since that initial result, the original sample was reanalyzed, and both the ICPMS and ICPAES results came back as nondetected. The initial result has been qualified as rejected, and the result is now considered a nondetection.

Therefore, the 1-day notification was not required because there were no cases of a contaminant detected in a well-screen interval or a spring at a concentration that exceeded a water quality standard for the first time. There were no instances of a contaminant detected at a concentration that exceeded the NMWQCC groundwater standard or federal MCL at locations where contaminants have 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 the five reporting criteria requiring written notification within 15 days is provided in the enclosed report and tables.

If you have questions, please contact Steve Veenis at (505) 309-1362 (steve.veenis@em-la.doe.gov) or Hai Shen at (505) 257-7943 (hai.shen@em.doe.gov).

Sincerely,

ARTURO DURAN

Digitally signed by ARTURO DURAN
Date: 2021.09.20 12:35:21 -06'00'

Arturo Q. Duran
Compliance and Permitting Manager
Environmental Management
Los Alamos Field Office

Enclosure(s):

1. Summary of Groundwater Data Reviewed in September 2021 that Meet Notification Requirements (EM2021-0606)

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
Chris Catechis, NMED-DOE-OB/-RPD

Steve Yanicak, NMED-DOE-OB
Justin Ball, NMED-GWQB
Steve Pullen, NMED-GWQB
Andrew C. Romero, NMED-GWQB
Melanie Sandoval, NMED-GWQB
Jocelyn Buckley, LANL
Leslie Dale, LANL
Brian Iacona, LANL
William Mairson, LANL
Jennifer Payne, LANL
Enrique Torres, LANL
William Alexander, N3B
Emily Day, N3B
Mei Ding, N3B
Zoe Duran, N3B
Jeff Holland, N3B
Danny Katzman, N3B
Kim Lebak, N3B
Joseph Legare, N3B
Dana Lindsay, N3B
Pamela Maestas, N3B
Joseph Murdock, N3B
Bruce Robinson, N3B
Joseph Sena, N3B
Troy Thomson, N3B
Steve Veenis, N3B
Brinson Willis, N3B
Karen Armijo, NA-LA
Peter Maggiore, NA-LA
M. Lee Bishop, EM-LA
John Evans, EM-LA
Stephen Hoffman, EM-LA
Michael Mikolanis, EM-LA
David Nickless, EM-LA
Cheryl Rodriguez, EM-LA
Hai Shen, EM-LA
emla.docs@em.doe.gov
n3brecords@em-la.doe.gov
Public Reading Room (EPRR)
PRS website

SUMMARY OF GROUNDWATER DATA REVIEWED IN SEPTEMBER 2021 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" for the 2021 monitoring year and contains results for contaminants and other chemical constituents that meet the five screening criteria described in Section XXVI of the 2016 Compliance Order on Consent, modified February 2017 (2016 Consent Order). The report covers groundwater samples collected from wells or springs (listed in the accompanying tables) that provide surveillance of the hydrogeological zones at Los Alamos National Laboratory, as indicated in the tables.

The report includes two tables. Table 1, NMED 8-21 Groundwater Report, presents categorical results since June 14, 2007, that met the five reporting criteria as specified in the 2016 Consent Order. Table 2, NMED 8-21 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." 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 2016 Consent Order. These criteria consider New Mexico Water Quality Control Commission (NMWQCC) groundwater standards, U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs), NMED screening levels for tap water, EPA regional screening levels for tap water, and NMED-approved background values for hydrogeological zones as set forth in the "Groundwater Background Investigation Report, Revision 5." The EPA tap water standard's carcinogenic risk values were adjusted to 1×10^{-5}, as specified in the 2016 Consent Order. This report was prepared using the May 2021 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 2019 Table A-1 of "Risk Assessment Guidance for Site Investigations and Remediation."

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

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

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 of the 2016 Consent Order. In several cases, data met more than one of the notification criteria and therefore appear in the table multiple times.

The criteria codes (the "C" stands for criterion) 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 for Site Investigations and Remediation" (June 2019); 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 criteria C2 and C4 in Table 1, respectively.

The two criteria are as follows:

XC2scr Detection of a contaminant that is a metal or other inorganic compound at a concentration above the 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 “Groundwater Background Investigation Report, Revision 5”

XC4scr Detection of a contaminant that is a metal or other inorganic compound in a spring or screened interval of a well at a concentration that for the third consecutive sampling exceeds 2 times the 95th percentile of the data set used to establish background as defined in the “Groundwater Background Investigation Report, Revision 5”

Columns 2 through 8 in both tables provide summary statistics for metals or organic/inorganic compounds by field preparation code (e.g., filtered aluminum) for samples collected since January 1, 2000, including the currently reported data. The statistics include the date of the first sampling event; the number of sampling events and samples analyzed; the number of detections; and the minimum, maximum, and median concentration for detections. This information indicates whether the new result is consistent with the range of earlier data.

The subsequent columns contain location and sampling information 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)

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

Analyte Desc—name of analyte

Analyte—chemical symbol for analyte or CAS (Chemical Abstracts Service) number for organic compounds

Std Result—analytical result in standard measurement units

Result/Median—ratio of the Std Result to the median of all detections since 2000

LVL Type/Risk Code—type of regulatory standard, screening level, or background value (indicating groundwater zone) used for comparison

Screen Level—value of the LVL Type/Risk Code

Exceedance Ratio—ratio of Std Result to LVL Type/Risk Code. In earlier versions of this report, the ratio was divided by the basis for comparison in the criterion, but that is no longer the case. For example, for a criterion (such as C3) that compares the value with one-half the standard, a value equal to a standard previously had an exceedance ratio of 2. The current report shows this ratio as 1.

Std MDL—method detection limit in standard measurement units

Std UOM—standard units of measurement

Dilution Factor—amount by which the sample was diluted to measure the concentration

Lab 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 (i.e., sample collection, additional quality control samples such as field duplicates, etc.) on the quality of the sample data

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

Analy Meth 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:

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

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

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 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)

SIM—selected ion monitoring

SVOC—semivolatile organic compound

TDS—total dissolved solids

TNX—2,4,6-trinitroxylene

UAL—upper acceptance limit

UOM—unit of measurement

VOC—volatile organic compound

Analytical Laboratory Codes and Qualifiers

∗ (lab qualifier) - (inorganic)—Duplicate analysis (relative percent difference) is not within control limits.

CFA—Cape Fear Analytical, LLC

BJ (lab qualifier)—Analyte is present in the blank, and the associated numerical value is an estimated quantity.

F—filtered

FD—field duplicate

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

GENINORG—general inorganic

H (lab qualifier)—The required extraction or analysis holding time for this result was exceeded.

HE1a (validation reason code)—The quantitating internal standard area count was below the lower acceptance limit.

HE12a (validation reason code)—The LCS %recovery was less than the lower acceptance limit but greater than 10%.

HJ (lab qualifier)—The required extraction or analysis holding time for this result was exceeded. The associated numerical value is an estimated quantity.

I4a (validation reason code)—The affected analyte is considered estimated and biased high because this analyte was identified in the method blank but was greater than 5 times the concentration of the affected analyte in the sample.

I4g (validation reason code)—Result less than a multiple of some secondary higher value found in field, trip, or rinsate blank.

I6a (validation reason code)— MS/MSD recovery below lower limit.

I6b (validation reason code)—The associated matrix spike recovery was above the UAL. Follow the external laboratory limits located within the associated data package.

I9b (validation reason code)—The affected analytes are regarded as rejected because the analytical holding time was exceeded.

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

I10a—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.

INIT—primary sample

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 negative 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 positive bias.

J_LAB (validation reason code)—The analytical laboratory qualified the detected result as estimated (J) because the result was less than the PQL 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.

PE12e (validation reason code)—The MS/MSD percent recovery was greater than 10% but less than 75%.

RE—reanalysis

RL—reporting limit

RPD—relative percent difference

REG—regular sample

SV7c (validation reason code)—The percent drift was above acceptance limits in the initial calibration verification (ICV) or continuing calibration verification (CCV).

SwRI—Southwest Research Institute

UF—unfiltered

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

V9b (validation reason code)—The preserved sample was analyzed outside the 14-day holding time or the unpreserved sample was analyzed outside the 7-day holding time.

Table 1: NMED 8-21 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	Analy Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	S+3:31creen Level	Exceedance Ratio	Std MDL	Std UOM	Dilution Factor	Lab Qualifier	Validation Qualifier	Validation Reason Code	Analy Meth Code	Lab Code	Comment
C1	21	22	06/06/2002	2.55	9.4	5.975	2	Mortandad Canyon	Alluvial	MCO-7	39.0	07/26/2021	REG	UF	INIT	VOC	Acetone	67-64-1	2.55	0.4	NMED A1 TAP SCRN LVL	14100	0.0	1.74	µg/L	1.00	J	J	V7k	SW-846:8260D	GELC	
C1	22	23	06/06/2002	3.75	3.75	3.75	1	Mortandad Canyon	Alluvial	MCO-7	39.0	07/26/2021	REG	UF	INIT	VOC	Butanone[2-]	78-93-3	3.75	1.0	NMED A1 TAP SCRN LVL	5560	0.0	1.67	µg/L	1.00	J	J	V7k	SW-846:8260D	GELC	
C2	22	25	03/16/2004	0.24	0.416	0.343	25	Mortandad Canyon	Regional	R-16 S2	863.4	07/28/2021	REG	F	INIT	Geninorg	Fluoride	F(-1)	0.416	1.2	LANL Reg BG LVL	0.377	1.1	0.0330	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C2	21	27	03/19/2004	13.2	31.5	15.1	27	Mortandad Canyon	Regional	R-16 S4	1237.0	07/28/2021	REG	F	INIT	Metals	Sodium	Na	16.2	1.1	LANL Reg BG LVL	16	1.0	0.1	mg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C2	33	45	12/19/2005	2.19	2.86	2.36	45	Mortandad Canyon	Regional	R-16r	600.0	07/28/2021	FD	F	INIT	Geninorg	Chloride	Cl(-1)	2.71	1.1	LANL Reg BG LVL	2.7	1.0	0.0670	mg/L	1.00		J+	I6b	EPA:300.0	GELC	
C2	33	45	12/19/2005	2.19	2.86	2.36	45	Mortandad Canyon	Regional	R-16r	600.0	07/28/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	2.86	1.2	LANL Reg BG LVL	2.7	1.1	0.0670	mg/L	1.00		J+	I6b	EPA:300.0	GELC	
C4	63	84	06/15/2005	30.1	48.2	39.6	84	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Metals	Barium	Ba	35.5	0.9	LANL Int BG LVL	13.5	2.6	1.00	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	63	83	06/15/2005	42.8	75.5	62.5	83	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Metals	Calcium	Ca	56.7	0.9	LANL Int BG LVL	10.7	5.3	0.05	mg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	64	84	06/15/2005	21.2	64.8	53.35	84	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	48.3	0.9	LANL Int BG LVL	3.11	15.5	0.670	mg/L	10.0		NQ	NQ	EPA:300.0	GELC	
C4	64	84	06/15/2005	0.412	0.668	0.525	81	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Geninorg	Fluoride	F(-1)	0.495	0.9	LANL Int BG LVL	0.234	2.1	0.0330	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	63	83	06/15/2005	142	253	209	83	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Geninorg	Hardness	Hardness	190	0.9	LANL Int BG LVL	37.8	5.0	0.453	mg/L	1.00		NQ	NQ	SM:A2340B	GELC	
C4	63	83	06/15/2005	8.49	15.7	12.8	83	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Metals	Magnesium	Mg	11.7	0.9	LANL Int BG LVL	3.14	3.7	0.11	mg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	63	84	06/15/2005	2.9	41.8	22.55	84	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Metals	Nickel	Ni	23.6	1.0	LANL Int BG LVL	3.65	6.5	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	64	84	06/15/2005	7.62	20.4	10.85	84	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	12.9	1.2	LANL Int BG LVL	0.459	28.1	0.425	mg/L	25.0		NQ	NQ	EPA:353.2	GELC	
C4	59	75	02/26/2007	56.3	190	79.2	75	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	97.9	1.2	LANL Int BG LVL	0.27	362.6	1.00	µg/L	20.0		NQ	NQ	SW-846:6850	GELC	
C4	63	83	06/15/2005	196	339	275	83	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Metals	Strontium	Sr	250	0.9	LANL Int BG LVL	59.6	4.2	1.00	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	63	84	06/15/2005	34.7	77.6	57.35	84	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	48.2	0.8	LANL Int BG LVL	7.1	6.8	1.33	mg/L	10.0		NQ	NQ	EPA:300.0	GELC	
C4	50	64	10/21/2008	56.1	84.1	69	64	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Metals	Barium	Ba	83.0	1.2	LANL Int BG LVL	13.5	6.1	1.00	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	50	64	10/21/2008	56.1	84.1	69	64	Sandia Canyon	Intermediate	SCI-2	548.0	01/23/2020	REG	F	RI	Metals	Barium	Ba	76.6	1.1	LANL Int BG LVL	13.5	5.7	1.00	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	50	64	10/21/2008	59.5	76.3	68.1	64	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Metals	Calcium	Ca	72.1	1.1	LANL Int BG LVL	10.7	6.7	0.05	mg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	50	64	10/21/2008	59.5	76.3	68.1	64	Sandia Canyon	Intermediate	SCI-2	548.0	01/23/2020	REG	F	RI	Metals	Calcium	Ca	69	1.0	LANL Int BG LVL	10.7	6.4	0.05	mg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	50	62	10/21/2008	53.4	93	68.25	62	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	83.6	1.2	LANL Int BG LVL	3.11	26.9	1.34	mg/L	20.0		J+	I6b	EPA:300.0	GELC	
C4	50	64	10/21/2008	204	263	236	63	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Geninorg	Hardness	Hardness	251	1.1	LANL Int BG LVL	37.8	6.6	0.453	mg/L	1.00		NQ	NQ	SM:A2340B	GELC	
C4	49	62	10/21/2008	13.1	17.5	15.9	62	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Metals	Magnesium	Mg	17.4	1.1	LANL Int BG LVL	3.14	5.5	0.11	mg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	49	62	10/21/2008	13.1	17.5	15.9	62	Sandia Canyon	Intermediate	SCI-2	548.0	01/23/2020	REG	F	RI	Metals	Magnesium	Mg	16.4	1.0	LANL Int BG LVL	3.14	5.2	0.11	mg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	50	64	10/21/2008	13.6	19.6	16.55	64	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Metals	Nickel	Ni	14.7	0.9	LANL Int BG LVL	3.65	4.0	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	

Table 1: NMED 8-21 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	Analy Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	S+3:31creen Level	Exceedance Ratio	Std MDL	Std UOM	Dilution Factor	Lab Qualifier	Validation Qualifier	Validation Reason Code	Analy Meth Code	Lab Code	Comment
C4	50	62	10/21/2008	2.89	5.1	4.09	62	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.37	0.8	LANL Int BG LVL	0.459	7.3	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	50	62	10/21/2008	0.83	1.12	0.9445	62	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	0.895	0.9	LANL Int BG LVL	0.27	3.3	0.0500	µg/L	1.00		NQ	NQ	SW-846:6850	GELC	
C4	50	64	10/21/2008	264	369	329	64	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Metals	Strontium	Sr	369	1.1	LANL Int BG LVL	59.6	6.2	1.00	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	50	64	10/21/2008	264	369	329	64	Sandia Canyon	Intermediate	SCI-2	548.0	01/23/2020	REG	F	RI	Metals	Strontium	Sr	331	1.0	LANL Int BG LVL	59.6	5.6	1.00	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	50	62	10/21/2008	77.9	103	88.7	62	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	91.7	1.0	LANL Int BG LVL	7.1	12.9	2.66	mg/L	20.0		J+	I6b	EPA:300.0	GELC	
C4	50	64	10/21/2008	1.2	2.56	1.855	64	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	Metals	Uranium	U	2.38	1.3	LANL Int BG LVL	0.992	2.4	0.0670	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	73	83	08/30/2007	68	408	347	83	Sandia Canyon	Regional	R-35a	1013.1	07/13/2021	REG	F	INIT	Metals	Barium	Ba	361	1.0	LANL Reg BG LVL	38.1	9.5	1.00	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
C4	72	83	08/30/2007	5.97	7.31	6.56	83	Sandia Canyon	Regional	R-35a	1013.1	07/13/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.60	1.0	LANL Reg BG LVL	2.7	2.4	0.0670	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	73	83	08/30/2007	1.2	22.2	7.685	82	Sandia Canyon	Regional	R-35a	1013.1	07/13/2021	REG	F	INIT	Metals	Nickel	Ni	9.07	1.2	LANL Reg BG LVL	2.9	3.1	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	49	54	11/10/2008	3.37	8.66	4.93	54	Sandia Canyon	Regional	R-43 S2	969.1	07/19/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	7.21	1.5	LANL Reg BG LVL	2.7	2.7	0.0670	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	49	59	11/10/2008	1.8	49.1	9.42	49	Sandia Canyon	Regional	R-43 S2	969.1	07/19/2021	REG	F	INIT	Metals	Chromium	Cr	37.8	4.0	LANL Reg BG LVL	7.48	5.1	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	49	53	11/10/2008	0.389	5.4	3.27	53	Sandia Canyon	Regional	R-43 S2	969.1	07/19/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.23	1.3	LANL Reg BG LVL	0.769	5.5	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	49	54	11/10/2008	0.411	0.953	0.7715	54	Sandia Canyon	Regional	R-43 S2	969.1	07/19/2021	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	0.924	1.2	LANL Reg BG LVL	0.414	2.2	0.0500	µg/L	1.00		NQ	NQ	SW-846:6850	GELC	
C4	49	54	11/10/2008	3.96	11.5	7.51	54	Sandia Canyon	Regional	R-43 S2	969.1	07/19/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	10.9	1.5	LANL Reg BG LVL	4.59	2.4	0.133	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	72	76	03/05/2009	2.74	7.11	4.605	76	Mortandad Canyon	Regional	R-45 S2	974.9	07/14/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	7.11	1.5	LANL Reg BG LVL	2.7	2.6	0.0670	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	72	81	03/05/2009	6.1	57.7	26.75	80	Mortandad Canyon	Regional	R-45 S2	974.9	07/14/2021	REG	F	INIT	Metals	Chromium	Cr	57.7	2.2	LANL Reg BG LVL	7.48	7.7	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	12	13	08/04/2020	15.2	19.3	17.5	13	Mortandad Canyon	Regional	R-70 S2	1048.0	07/20/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	15.6	0.9	LANL Reg BG LVL	2.7	5.8	0.335	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	12	13	08/04/2020	188	272	246	13	Mortandad Canyon	Regional	R-70 S2	1048.0	07/20/2021	REG	F	INIT	Metals	Chromium	Cr	188	0.8	LANL Reg BG LVL	7.48	25.1	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	12	13	08/04/2020	3.57	4.06	3.78	13	Mortandad Canyon	Regional	R-70 S2	1048.0	07/20/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.78	1.0	LANL Reg BG LVL	0.769	4.9	0.0850	mg/L	5.00		NQ	NQ	EPA:353.2	GELC	
C4	12	13	08/04/2020	25.5	32.6	30.3	13	Mortandad Canyon	Regional	R-70 S2	1048.0	07/20/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	25.5	0.8	LANL Reg BG LVL	4.59	5.6	0.665	mg/L	5.00		J+	I4a	EPA:300.0	GELC	
C4	39	47	11/30/2005	5.62	7.09	6.12	47	Sandia Canyon	Regional	R-10a	690.0	05/18/2021	FD	F	INIT	Geninorg	Chloride	Cl(-1)	6.56	1.1	LANL Reg BG LVL	2.7	2.4	0.0670	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	39	47	11/30/2005	5.62	7.09	6.12	47	Sandia Canyon	Regional	R-10a	690.0	05/18/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.76	1.1	LANL Reg BG LVL	2.7	2.5	0.0670	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	39	47	11/30/2005	0.528	14.2	2	45	Sandia Canyon	Regional	R-10a	690.0	05/18/2021	FD	F	INIT	Metals	Nickel	Ni	6.83	3.4	LANL Reg BG LVL	2.9	2.4	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	39	47	11/30/2005	0.528	14.2	2	45	Sandia Canyon	Regional	R-10a	690.0	05/18/2021	REG	F	INIT	Metals	Nickel	Ni	6.67	3.3	LANL Reg BG LVL	2.9	2.3	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	39	47	11/30/2005	9.36	12.9	10.3	47	Sandia Canyon	Regional	R-10a	690.0	05/18/2021	FD	F	INIT	Geninorg	Sulfate	SO4(-2)	11.0	1.1	LANL Reg BG LVL	4.59	2.4	0.133	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	39	47	11/30/2005	9.36	12.9	10.3	47	Sandia Canyon	Regional	R-10a	690.0	05/18/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	10.7	1.0	LANL Reg BG LVL	4.59	2.3	0.133	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	85	102	05/17/2005	2.27	7.43	5.43	102	Sandia Canyon	Regional	R-11	855.0	07/21/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.73	1.1	LANL Reg BG LVL	0.769	7.5	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	85	102	05/17/2005	5.95	20.2	10.05	102	Sandia Canyon	Regional	R-11	855.0	07/21/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	9.47	0.9	LANL Reg BG LVL	4.59	2.1	0.133	mg/L	1.00		J+	I6b	EPA:300.0	GELC	
C4	61	73	02/24/2000	1.35	3.31	2.13	73	Mortandad Canyon	Regional	R-15	958.6	07/20/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.18	1.0	LANL Reg BG LVL	0.769	2.8	0.0850	mg/L	5.00		NQ	NQ	EPA:353.2	GELC	

Table 1: NMED 8-21 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	Analy Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	S+3:31creen Level	Exceedance Ratio	Std MDL	Std UOM	Dilution Factor	Lab Qualifier	Validation Qualifier	Validation Reason Code	Analy Meth Code	Lab Code	Comment
C4	52	61	02/28/2007	5.34	12.3	8.14	61	Mortandad Canyon	Regional	R-15	958.6	07/20/2021	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	10.7	1.3	LANL Reg BG LVL	0.414	25.8	0.500	µg/L	10.0		NQ	NQ	SW-846:6850	GELC	
C4	49	56	03/12/2008	4.05	6.83	6.095	56	Sandia Canyon	Regional	R-36	766.9	07/19/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.39	1.0	LANL Reg BG LVL	2.7	2.4	0.0670	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	49	57	03/12/2008	1.25	6.8	2.42	57	Sandia Canyon	Regional	R-36	766.9	07/19/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.79	1.2	LANL Reg BG LVL	0.769	3.6	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	48	55	03/12/2008	0.845	1.74	1.51	55	Sandia Canyon	Regional	R-36	766.9	07/19/2021	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	1.34	0.9	LANL Reg BG LVL	0.414	3.2	0.0500	µg/L	1.00		NQ	NQ	SW-846:6850	GELC	
C4	50	58	11/05/2008	3.6	9.39	8.015	58	Sandia Canyon	Regional	R-43 S1	903.9	07/19/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	8.05	1.0	LANL Reg BG LVL	2.7	3.0	0.0670	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	50	63	11/05/2008	2.35	223	126.5	60	Sandia Canyon	Regional	R-43 S1	903.9	07/19/2021	REG	F	INIT	Metals	Chromium	Cr	188	1.5	LANL Reg BG LVL	7.48	25.1	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	50	57	11/05/2008	4.67	6.15	5.355	56	Sandia Canyon	Regional	R-43 S1	903.9	07/19/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.33	1.0	LANL Reg BG LVL	0.769	6.9	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	50	58	11/05/2008	8.77	21	16.25	58	Sandia Canyon	Regional	R-43 S1	903.9	07/19/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	17.2	1.1	LANL Reg BG LVL	4.59	3.7	0.133	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	75	79	02/17/2009	1.99	21	2.61	79	Mortandad Canyon	Regional	R-44 S1	895.0	07/14/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	21.0	8.0	LANL Reg BG LVL	2.7	7.8	0.335	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	75	79	02/17/2009	0.536	109	22.8	52	Mortandad Canyon	Regional	R-44 S1	895.0	07/14/2021	REG	F	INIT	Metals	Nickel	Ni	54.0	2.4	LANL Reg BG LVL	2.9	18.6	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	75	79	02/17/2009	0.123	2.99	1.25	78	Mortandad Canyon	Regional	R-44 S1	895.0	07/14/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.99	2.4	LANL Reg BG LVL	0.769	3.9	0.0850	mg/L	5.00		NQ	NQ	EPA:353.2	GELC	
C4	75	79	02/17/2009	2.76	20.9	3.64	79	Mortandad Canyon	Regional	R-44 S1	895.0	07/14/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	20.9	5.7	LANL Reg BG LVL	4.59	4.6	0.665	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	73	78	02/28/2009	3	19.6	5.255	78	Mortandad Canyon	Regional	R-45 S1	880.0	07/14/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	19.6	3.7	LANL Reg BG LVL	2.7	7.3	0.335	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	73	78	02/28/2009	0.256	3.47	2.795	78	Mortandad Canyon	Regional	R-45 S1	880.0	07/14/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.18	1.1	LANL Reg BG LVL	0.769	4.1	0.0850	mg/L	5.00		NQ	NQ	EPA:353.2	GELC	
C4	73	78	02/28/2009	4.1	20	8.02	78	Mortandad Canyon	Regional	R-45 S1	880.0	07/14/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	20.0	2.5	LANL Reg BG LVL	4.59	4.4	0.665	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	74	82	03/06/2010	4.68	21.4	9.755	82	Mortandad Canyon	Regional	R-50 S1	1077.0	07/16/2021	REG	F	INIT	Geninorg	Chloride	Cl(-1)	20.9	2.1	LANL Reg BG LVL	2.7	7.7	0.335	mg/L	5.00		J+	I4g	EPA:300.0	GELC	
C4	75	85	03/06/2010	15.2	150	81	85	Mortandad Canyon	Regional	R-50 S1	1077.0	07/16/2021	REG	F	INIT	Metals	Chromium	Cr	15.2	0.2	LANL Reg BG LVL	7.48	2.0	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	75	83	03/06/2010	1.51	14.6	5.36	83	Mortandad Canyon	Regional	R-50 S1	1077.0	07/16/2021	REG	F	INIT	Metals	Nickel	Ni	7.13	1.3	LANL Reg BG LVL	2.9	2.5	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	75	84	03/06/2010	0.398	2.96	2.095	84	Mortandad Canyon	Regional	R-50 S1	1077.0	07/16/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.87	1.4	LANL Reg BG LVL	0.769	3.7	0.0850	mg/L	5.00		NQ	NQ	EPA:353.2	GELC	
C4	74	82	03/06/2010	7.22	20.8	14.25	82	Mortandad Canyon	Regional	R-50 S1	1077.0	07/16/2021	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	20.3	1.4	LANL Reg BG LVL	4.59	4.4	0.665	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	59	68	05/20/2011	2.03	43.9	21.7	67	Mortandad Canyon	Regional	R-61 S1	1125.0	07/15/2021	REG	F	INIT	Metals	Chromium	Cr	37.0	1.7	LANL Reg BG LVL	7.48	4.9	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	59	68	05/20/2011	0.427	2.95	2.21	68	Mortandad Canyon	Regional	R-61 S1	1125.0	07/15/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.63	1.2	LANL Reg BG LVL	0.769	3.4	0.0850	mg/L	5.00		NQ	NQ	EPA:353.2	GELC	
C4	58	67	05/20/2011	2.96	16.2	12.1	67	Mortandad Canyon	Regional	R-61 S1	1125.0	07/15/2021	REG	F	INIT	LCMS/MS	Perchlorate	ClO4	12.9	1.1	LANL Reg BG LVL	0.414	31.2	0.500	µg/L	10.0		NQ	NQ	SW-846:6850	GELC	
C4	12	13	08/04/2020	2.39	2.92	2.57	13	Mortandad Canyon	Regional	R-70 S1	963.0	07/20/2021	REG	F	INIT	Geninorg	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.54	1.0	LANL Reg BG LVL	0.769	3.3	0.0850	mg/L	5.00		NQ	NQ	EPA:353.2	GELC	

Table 2: NMED 7-21 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	Analy 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	Analy Meth Code	Lab Code	Comment
XC2scr	19	21	03/16/2004	0.019	0.158	0.03345	8	Mortandad Canyon	Regional	R-16 S2	863.4	07/28/2021	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.158	4.7	Reg-Scr_95	0.1	1.6	0.0170	mg/L	1.00		NQ	NQ	EPA:350.1	GELC	
XC4scr	63	84	06/15/2005	25.4	64.6	47.8	83	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	METALS	Boron	B	56.0	1.2	Int-Scr_95	16.2	3.5	15.0	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
XC4scr	63	83	06/15/2005	0.212	0.703	0.5625	80	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.403	0.7	Int-Scr_95	0.0716	5.6	0.0670	mg/L	1.00		J-	I6a	EPA:300.0	GELC	
XC4scr	63	87	06/15/2005	29.4	86.6	60.6	87	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	METALS	Chromium	Cr	58.1	1.0	Int-Scr_95	2.72	21.4	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
XC4scr	63	84	06/15/2005	3.81	26.1	8.715	82	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	METALS	Copper	Cu	9.29	1.1	Int-Scr_95	3	3.1	3.00	µg/L	1.00	J	J	J_LAB	SW-846:6010C	GELC	
XC4scr	64	84	06/15/2005	298	527	401	84	Mortandad Canyon	Intermediate	MCOI-6	686.0	07/29/2021	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	397	1.0	Int-Scr_95	135	2.9	3.40	mg/L	1.00		NQ	NQ	EPA:160.1	GELC	
XC4scr	50	62	10/21/2008	0.194	0.956	0.639	61	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.956	1.5	Int-Scr_95	0.0716	13.4	0.0670	mg/L	1.00		J+	I6b	EPA:300.0	GELC	
XC4scr	50	69	10/21/2008	234	658	433	69	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	METALS	Chromium	Cr	235	0.5	Int-Scr_95	2.72	86.4	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
XC4scr	35	41	08/04/2009	0.00368	0.009833	0.00627	41	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	UF	INIT	INORGANIC	Cyanide (Total)	CN(Total)	0.00415	0.7	Int-Scr_95	0.0017	2.4	0.00167	mg/L	1.00	J	J	J_LAB	EPA:335.4	GELC	
XC4scr	50	63	10/21/2008	354	796	429	63	Sandia Canyon	Intermediate	SCI-2	548.0	07/27/2021	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	473	1.1	Int-Scr_95	135	3.5	3.40	mg/L	1.00		NQ	NQ	EPA:160.1	GELC	
XC4scr	21	27	03/19/2004	3.74	68	44	27	Mortandad Canyon	Regional	R-16 S4	1237.0	07/28/2021	REG	F	INIT	METALS	Manganese	Mn	37.2	0.8	Reg-Scr_95	12.1	3.1	2.00	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
XC4scr	73	83	08/30/2007	20.6	54.5	39.3	77	Sandia Canyon	Regional	R-35a	1013.1	07/13/2021	REG	F	INIT	METALS	Boron	B	43.7	1.1	Reg-Scr_95	18.7	2.3	15.0	µg/L	1.00	J	J	J_LAB	SW-846:6010C	GELC	
XC4scr	75	79	02/17/2009	0.0757	0.165	0.145	34	Mortandad Canyon	Regional	R-44 S1	895.0	07/14/2021	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.159	1.1	Reg-Scr_95	0.067	2.4	0.0670	mg/L	1.00	J	J	J_LAB	EPA:300.0	GELC	
XC4scr	73	78	02/28/2009	0.0667	0.637	0.0825	37	Mortandad Canyon	Regional	R-45 S1	880.0	07/14/2021	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.142	1.7	Reg-Scr_95	0.067	2.1	0.0670	mg/L	1.00	J	J	J_LAB	EPA:300.0	GELC	
XC4scr	74	82	03/06/2010	0.0691	0.19	0.1115	62	Mortandad Canyon	Regional	R-50 S1	1077.0	07/16/2021	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.181	1.6	Reg-Scr_95	0.067	2.7	0.0670	mg/L	1.00	J	J	J_LAB	EPA:300.0	GELC	