



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

EMLA-2021-0083-02-001

December 17, 2020

Mr. Kevin Pierard
 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 December 2020

Dear Mr. Pierard:

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 December 3, 2020, to review groundwater data loaded or released in the Environmental Information Management System (EIM) in November 2020. 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." For comparison with EPA tap water standards, the standard's carcinogenic risk value was adjusted to 1×10^{-5} , as specified in the Consent Order.

The enclosed report was prepared using the November 2020 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.

1-Day Notification

There were three instances of a constituent detected at a concentration that exceeded the NMWQCC groundwater standard or EPA MCL at locations where that constituent has not previously been detected above the respective standard as defined in the Consent Order (based on samples collected since June 14, 2007).

In accordance with the notification provisions of the 2016 Consent Order, NMED was notified by phone on December 3, 2020, and an email was sent the same day.

An unfiltered sample collected on October 15, 2020, from the regional aquifer well R-20 screen 2 resulted in the measurement of two contaminants that exceeded corresponding screening levels. The organic compound N-nitrosodiethylamine was measured at 0.00761- $\mu\text{g/L}$, above the 0.00167- $\mu\text{g/L}$ NMED tap

water screening level. The organic compound N-nitrosodimethylamine was measured at 0.0153- $\mu\text{g/L}$, above the 0.00491- $\mu\text{g/L}$ NMED tap water screening level specified in the June 2019 Table A-1 of “Risk Assessment Guidance for Site Investigations and Remediation.”

An unfiltered sample collected on October 14, 2020, from the regional aquifer well R-55 screen 2 was measured at 0.0134 $\mu\text{g/L}$ for N-nitrosodimethylamine, above the 0.00491- $\mu\text{g/L}$ NMED tap water screening level specified in the June 2019 Table A-1 of “Risk Assessment Guidance for Site Investigations and Remediation.”

October Monthly Notification – Resampling Results

The monthly groundwater notification for data reviewed in October 2020 (EMLA-2021-0001-02-001) reported that an unfiltered field duplicate sample collected on August 1, 2020, from regional aquifer well R-29 was measured at 14.9 $\mu\text{g/L}$ for Royal Demolition Explosive (RDX [hexahydro-1,3,5-trinitro-1,3,5-triazine]), above the 9.66- $\mu\text{g/L}$ NMED tap water screening level specified in the June 2019 Table A-1 of “Risk Assessment Guidance for Site Investigations and Remediation.” This result was considered anomalous for the following reasons:

1. The accompanying regular sample result was a nondetection ($<0.0842 \mu\text{g/L}$).
2. RDX had not been historically detected at the well. All 24 previous samples collected since May 10, 2010, were nondetections.

The anomalous result prompted a subsequent resampling of the well on November 17, 2020. Resampling results for both the regular and duplicate sample were both nondetections ($<0.097 \mu\text{g/L}$). The single detection from the August 1, 2020, sample may have been subject to laboratory or field error.

15-Day Notification

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

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

Sincerely,

M Lee Bishop

Digitally signed by M Lee
Bishop
Date: 2020.12.16 11:07:47
-07'00'

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

Enclosures:

1. Summary of Groundwater Data Reviewed in December 2020 That Meet Notification Requirements (EM2020-0713)

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

Harry Burgess, 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

Steve Yanicak, NMED-DOE-OB

Michelle Hunter, NMED-SWQB

Steve Pullen, NMED-SWQB

Andrew C. Romero, NMED-SWQB

Melanie Sandoval, NMED-SWQB

Jocelyn Buckley, LANL

Leslie Dale, LANL

Brian Iacona, LANL

William Mairson, LANL

Enrique Torres, LANL

Felicia Aguilar, N3B

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

Glenn Morgan, N3B

Joseph Murdock, N3B

Bruce Robinson, N3B

Steve Veenis, N3B

Brinson Willis, N3B

Karen Armijo, NA-LA

Pete Maggiore, NA-LA

M. Lee Bishop, EM-LA

Stephen Hoffman, EM-LA

Kirk D. Lachman, 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

Pamela T. Maestas

From: Martinez, Cynthia, NMENV <cynthia.martinez1@state.nm.us>
Sent: Friday, December 18, 2020 8:30 AM
To: Pamela T. Maestas
Subject: RE: Submittal to NMED on 12/17/2020 of Monthly GW Data Review for December

Good Morning,
Received, thank you.
I will be out Monday December 21-January 5.

From: Pamela T. Maestas <pamela.maestas@em-la.doe.gov>
Sent: Thursday, December 17, 2020 11:53 AM
To: Pierard, Kevin, NMENV <Kevin.Pierard@state.nm.us>
Cc: Dhawan, Neelam, NMENV <neelam.dhawan@state.nm.us>; Krambis, Christopher, NMENV <Christopher.Krambis@state.nm.us>; Catechis, Chris, NMENV <Chris.Catechis@state.nm.us>; Briley, Siona, NMENV <Siona.Briley@state.nm.us>; Martinez, Cynthia, NMENV <cynthia.martinez1@state.nm.us>; Emily M. Day <Emily.Day@em-la.doe.gov>; Regulatory Documentation <RegDocs@EM-LA.DOE.GOV>; Willis, Brinson <Brinson.Willis@tetrattech.com>; Zoe A. Duran <zoe.duran@em-la.doe.gov>
Subject: [EXT] Submittal to NMED on 12/17/2020 of Monthly GW Data Review for December

Mr. Pierard,
Attached for submittal is a pdf of the following:

- Monthly Notification of Groundwater Data Reviewed in December 2020 (EMLA-2021-0083-02-001, letter and enclosure)

Please acknowledge receipt of this submittal by responding to this email.
Let me know if you have any questions.
Thank you.

Pamela T. Maestas
Regulatory Documentation Manager
Newport News Nuclear BWXT-Los Alamos, LLC
c. 505-927-7882
regdocs@em-la.doe.gov



SUMMARY OF GROUNDWATER DATA REVIEWED IN DECEMBER 2020 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 2020 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 11-2020 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 11-2020 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 to identify 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
- Sampling date, name of the well or spring, location of the well or spring, depth of the screened interval, groundwater zone sampled, analytical result, detection limit, values for regulatory standards or screening levels, and analytical and secondary validation qualifiers. Additional information describing the locations and analytical data is also included. All data have been through secondary validation.

This report was prepared by comparing the data against groundwater notification criteria as defined in Section IX of the 2016 Consent Order. These criteria consider New Mexico Water Quality Control Commission (NMWQCC) groundwater standards, U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs), NMED screening levels for tap water, EPA regional screening levels for tap water, and NMED-approved background values for hydrogeological zones as set forth in the "Groundwater Background Investigation Report, Revision 5." For comparison with EPA tap water standards, the standard's carcinogenic risk value was adjusted to 1×10^{-5} , as specified in the 2016 Consent Order. This report was prepared using the November 2020 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)

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

Analyte Desc—name of analyte

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

Std Result—analytical result in standard measurement units

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

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

Screen Level—value of the LVL Type/Risk Code

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

Std MDL—method detection limit in standard measurement units

Std UOM—standard units of measurement

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

Lab 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

Anyl 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

HRMS—high-resolution 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 SCRNLVL—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-trinitroxylylene

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—General Engineering Laboratories, Inc., 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.

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.

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 >10% but <75%.

RE—reanalysis

REG—regular sample

SwRI—Southwest Research Institute

UF—unfiltered

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 11-20 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fid OC Type Code	Fid 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
C1	2	3	10/22/2019	0.00115	0.00115	0.00115	1	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/20/2020	REG	UF	INIT	Low-level nitrosamines	Nitroso-di-n-butylamine[N-]	924-16-3	0.00115	1.0	NMED A1 TAP SCRNLVL	0.0273	0.0	0.00047	µg/L	1		NQ	NQ	Nitrosamines:HRMS	SwRI	
C1	2	2	10/22/2019	0.179	0.179	0.179	1	Pajarito Canyon	Intermediate Perched	R-23i S2	470.2	10/20/2020	REG	UF	INIT	Low-level 1,4-dioxane	Dioxane[1,4-]	123-91-1	0.179	1.0	NMED A1 TAP SCRNLVL	4.59	0.0	0.100	µg/L	1.00	J	J	J_LAB	SW-846:8270E_SIM	GELC	
C1	2	2	10/22/2019	0.00185	0.00185	0.00185	1	Pajarito Canyon	Intermediate Perched	R-23i S2	470.2	10/20/2020	REG	UF	INIT	Low-level nitrosamines	Nitroso-di-n-butylamine[N-]	924-16-3	0.00185	1.0	NMED A1 TAP SCRNLVL	0.0273	0.1	0.00047	µg/L	1		NQ	NQ	Nitrosamines:HRMS	SwRI	
C1	2	2	10/17/2019	0.00761	0.00761	0.00761	1	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/15/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodiethylamine[N-]	55-18-5	0.00761	1.0	NMED A1 TAP SCRNLVL	0.00167	4.6	0.00018	µg/L	1		J	HE1a	Nitrosamines:HRMS	SwRI	
C1	2	2	10/17/2019	0.0153	0.0153	0.0153	1	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/15/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodimethylamine[N-]	62-75-9	0.0153	1.0	NMED A1 TAP SCRNLVL	0.00491	3.1	0.00036	µg/L	1		J	HE1a	Nitrosamines:HRMS	SwRI	
C1	11	11	03/05/2010	36.1	36.1	36.1	1	Pajarito Canyon	Regional Deep	R-49 S2	905.6	10/28/2020	REG	UF	INIT	SVOC	Benzoic acid	65-85-0	36.1	1.0	EPA TAP SCRNLVL	75,000	0.0	5.91	µg/L	1.00		NQ	NQ	SW-846:8270D	GELC	
C1	20	21	09/01/2009	1.09	1.09	1.09	1	Pajarito Canyon	Regional Deep	R-49 S2	905.6	10/28/2020	REG	UF	INIT	VOC	Methylene chloride	75-09-2	1.09	1.0	NM GW STD	5	0.2	1.00	µg/L	1.00	J	J	J_LAB	SW-846:8260B	GELC	A potential laboratory contaminant
C1	2	2	10/29/2019	0.000547	0.000547	0.000547	1	Pajarito Canyon	Regional Deep	R-49 S2	905.6	10/28/2020	REG	UF	INIT	Low-level nitrosamines	Nitroso-di-n-butylamine[N-]	924-16-3	0.000547	1.0	NMED A1 TAP SCRNLVL	0.0273	0.0	0.00047	µg/L	1		NQ	NQ	Nitrosamines:HRMS	SwRI	
C1	23	25	04/14/2010	2.37	2.37	2.37	1	Mortandad Canyon	Regional Deep	R-53 S2	959.7	10/23/2020	REG	UF	INIT	VOC	Acetone	67-64-1	2.37	1.0	NMED A1 TAP SCRNLVL	14,100	0.0	1.50	µg/L	1.00	J	J	J_LAB	SW-846:8260B	GELC	A potential laboratory contaminant
C1	15	15	04/14/2010	10.3	10.3	10.3	1	Mortandad Canyon	Regional Deep	R-53 S2	959.7	10/23/2020	REG	UF	INIT	SVOC	Benzoic acid	65-85-0	10.3	1.0	EPA TAP SCRNLVL	75,000	0.0	6.03	µg/L	1.00	J	J	J_LAB	SW-846:8270D	GELC	
C1	2	2	10/16/2019	0.000799	0.000799	0.000799	1	Mortandad Canyon	Regional Deep	R-55 S2	994.4	10/14/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodiethylamine[N-]	55-18-5	0.000799	1.0	NMED A1 TAP SCRNLVL	0.00167	0.5	0.00018	µg/L	1		J	HE1a	Nitrosamines:HRMS	SwRI	
C1	2	2	10/16/2019	0.0134	0.0134	0.0134	1	Mortandad Canyon	Regional Deep	R-55 S2	994.4	10/14/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodimethylamine[N-]	62-75-9	0.0134	1.0	NMED A1 TAP SCRNLVL	0.00491	2.7	0.00036	µg/L	1		J	HE1a	Nitrosamines:HRMS	SwRI	
C1	20	26	09/24/2001	0.56	0.56	0.56	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 4	0	10/05/2020	REG	UF	INIT	SVOC	Benzo(g,h,i)perylene	191-24-2	0.560	1.0	n/a	n/a	n/a	0.300	µg/L	1.00	J	J	J_LAB	SW-846:8270D	GELC	
C1	2	2	10/01/2019	0.000226	0.000226	0.000226	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 4	0	10/05/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodiethylamine[N-]	55-18-5	0.000226	1.0	NMED A1 TAP SCRNLVL	0.00167	0.1	0.00018	µg/L	1	J	J	J_LAB	Nitrosamines:HRMS	SwRI	
C1	2	2	10/01/2019	0.000413	0.000413	0.000413	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 4	0	10/05/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodimethylamine[N-]	62-75-9	0.000413	1.0	NMED A1 TAP SCRNLVL	0.00491	0.1	0.00036	µg/L	1	J	J	J_LAB	Nitrosamines:HRMS	SwRI	
C1	16	18	05/11/2004	9.88	18.2	14.04	2	Pajarito Canyon	Regional Top	R-20 S1	904.6	10/21/2020	REG	UF	INIT	SVOC	Benzoic acid	65-85-0	9.88	0.7	EPA TAP SCRNLVL	75,000	0.0	6.00	µg/L	1.00	J	J	J_LAB	SW-846:8270D	GELC	
C1	2	2	10/23/2019	0.00067	0.00067	0.00067	1	Pajarito Canyon	Regional Top	R-20 S1	904.6	10/21/2020	REG	UF	INIT	Low-level nitrosamines	Nitroso-di-n-butylamine[N-]	924-16-3	0.00067	1.0	NMED A1 TAP SCRNLVL	0.0273	0.0	0.00047	µg/L	1		NQ	NQ	Nitrosamines:HRMS	SwRI	
C1	2	2	10/15/2019	0.000358	0.000358	0.000358	1	Pajarito Canyon	Regional Top	R-32 S1	867.5	10/13/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodiethylamine[N-]	55-18-5	0.000358	1.0	NMED A1 TAP SCRNLVL	0.00167	0.2	0.00018	µg/L	1	J	J	HE1a	Nitrosamines:HRMS	SwRI	

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C1	2	2	10/15/2019	0.00391	0.00391	0.00391	1	Pajarito Canyon	Regional Top	R-32 S1	867.5	10/13/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodimethylamine[N-]	62-75-9	0.00391	1.0	NMED A1 TAP SCRNLVL	0.00491	0.8	0.00036	µg/L	1	J	HE1a	Nitrosamines:HRMS	SwRI		
C1	13	13	11/18/2009	11.3	11.3	11.3	1	Mortandad Canyon	Regional Top	R-37 S2	1026.0	10/15/2020	REG	UF	INIT	SVOC	Benzoic acid	65-85-0	11.3	1.0	EPA TAP SCRNLVL	75,000	0.0	6.11	µg/L	1.00	J	J	J_LAB	SW-846:8270D	GELC	
C1	2	3	10/15/2019	0.101	0.109	0.105	2	Mortandad Canyon	Regional Top	R-38	821.2	10/13/2020	FD	UF	INIT	Low-level 1,4-dioxane	Dioxane[1,4-]	123-91-1	0.101	1.0	NMED A1 TAP SCRNLVL	4.59	0.0	0.100	µg/L	1.00	J	J	J_LAB	SW-846:8270E_SIM	GELC	
C1	2	3	10/15/2019	0.101	0.109	0.105	2	Mortandad Canyon	Regional Top	R-38	821.2	10/13/2020	REG	UF	INIT	Low-level 1,4-dioxane	Dioxane[1,4-]	123-91-1	0.109	1.0	NMED A1 TAP SCRNLVL	4.59	0.0	0.100	µg/L	1.00	J	J	J_LAB	SW-846:8270E_SIM	GELC	
C1	13	14	02/26/2010	11	11	11	2	Mortandad Canyon	Regional Top	R-41 S2	965.3	10/15/2020	FD	UF	INIT	SVOC	Benzoic acid	65-85-0	11.0	1.0	EPA TAP SCRNLVL	75,000	0.0	5.86	µg/L	1.00	J	J	J_LAB	SW-846:8270D	GELC	
C1	13	14	02/26/2010	11	11	11	2	Mortandad Canyon	Regional Top	R-41 S2	965.3	10/15/2020	REG	UF	INIT	SVOC	Benzoic acid	65-85-0	11.0	1.0	EPA TAP SCRNLVL	75,000	0.0	5.99	µg/L	1.00	J	J	J_LAB	SW-846:8270D	GELC	
C1	2	3	10/17/2019	0.000183	0.000215	0.000199	2	Mortandad Canyon	Regional Top	R-41 S2	965.3	10/15/2020	FD	UF	INIT	Low-level nitrosamines	Nitrosodiethylamine[N-]	55-18-5	0.000215	1.1	NMED A1 TAP SCRNLVL	0.00167	0.1	0.00018	µg/L	1	J	J	J_LAB	Nitrosamines:HRMS	SwRI	
C1	2	3	10/17/2019	0.000183	0.000215	0.000199	2	Mortandad Canyon	Regional Top	R-41 S2	965.3	10/15/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodiethylamine[N-]	55-18-5	0.000183	0.9	NMED A1 TAP SCRNLVL	0.00167	0.1	0.00018	µg/L	1	J	J	J_LAB	Nitrosamines:HRMS	SwRI	
C1	10	12	03/03/2010	10	10	10	1	Pajarito Canyon	Regional Top	R-49 S1	845.0	10/28/2020	REG	UF	INIT	SVOC	Benzoic acid	65-85-0	10.0	1.0	EPA TAP SCRNLVL	75,000	0.0	6.00	µg/L	1.00	J	J	J_LAB	SW-846:8270D	GELC	
C1	2	2	10/16/2019	0.995	0.995	0.995	1	Mortandad Canyon	Regional Top	R-52 S1	1035.2	10/14/2020	REG	UF	INIT	PFAS	Perfluorooctanoic acid	335-67-1	0.995	1.0	NMED A1 TAP SCRNLVL	70	0.0	0.738	ng/L	1.00	J	J	J_LAB	EPA:537M	GELC	
C1	12	13	04/19/2010	10.3	10.3	10.3	1	Mortandad Canyon	Regional Top	R-53 S1	849.2	10/23/2020	REG	UF	INIT	SVOC	Benzoic acid	65-85-0	10.3	1.0	EPA TAP SCRNLVL	75,000	0.0	5.77	µg/L	1.00	J	J	J_LAB	SW-846:8270D	GELC	
C1	2	3	10/25/2019	0.000496	0.000496	0.000496	1	Mortandad Canyon	Regional Top	R-53 S1	849.2	10/23/2020	REG	UF	INIT	Low-level nitrosamines	Nitroso-di-n-butylamine[N-]	924-16-3	0.000496	1.0	NMED A1 TAP SCRNLVL	0.0273	0.0	0.00047	µg/L	1	J	J	J_LAB	Nitrosamines:HRMS	SwRI	
C1	2	2	10/16/2019	0.000184	0.000184	0.000184	1	Mortandad Canyon	Regional Top	R-55 S1	860.0	10/14/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodiethylamine[N-]	55-18-5	0.000184	1.0	NMED A1 TAP SCRNLVL	0.00167	0.1	0.00018	µg/L	1	J	J	J_LAB	Nitrosamines:HRMS	SwRI	
C1	11	12	07/13/2011	13.4	13.4	13.4	1	Pajarito Canyon	Regional Top	R-57 S1	910.0	10/16/2020	REG	UF	INIT	SVOC	Benzoic acid	65-85-0	13.4	1.0	EPA TAP SCRNLVL	75,000	0.0	6.09	µg/L	1.00	J	J	J_LAB	SW-846:8270D	GELC	
C1	2	3	08/04/2020	0.000487	0.000487	0.000487	1	Mortandad Canyon	Regional	R-70 S2	1048.0	11/09/2020	REG	UF	INIT	Low-level nitrosamines	Nitroso-di-n-butylamine[N-]	924-16-3	0.000487	1.0	NMED A1 TAP SCRNLVL	0.0273	0.0	0.00047	µg/L	1	J	J-	HE12a	Nitrosamines:HRMS	SwRI	
C2	13	14	06/25/2010	2.02	3.06	2.235	14	Pajarito Canyon	Regional Deep	R-57 S2	971.5	10/16/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	3.06	1.4	LANL Reg BG LVL	2.7	1.1	0.0670	mg/L	1.00	NQ	NQ	EPA:300.0	GELC		
C2	27	27	03/11/2004	0.462	4.28	2.15	27	Pajarito Canyon	Regional Top	R-20 S1	904.6	10/21/2020	REG	F	INIT	Metals	Magnesium	Mg	4.28	2.0	LANL Reg BG LVL	4.18	1.0	0.11	mg/L	1.00	NQ	NQ	SW-846:6010C	GELC		
C3	2	2	10/17/2019	0.00761	0.00761	0.00761	1	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/15/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodiethylamine[N-]	55-18-5	0.00761	1.0	NMED A1 TAP SCRNLVL	0.00167	4.6	0.00018	µg/L	1	J	HE1a	Nitrosamines:HRMS	SwRI		
C3	2	2	10/17/2019	0.0153	0.0153	0.0153	1	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/15/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodimethylamine[N-]	62-75-9	0.0153	1.0	NMED A1 TAP SCRNLVL	0.00491	3.1	0.00036	µg/L	1	J	HE1a	Nitrosamines:HRMS	SwRI		

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C3	2	2	10/16/2019	0.0134	0.0134	0.0134	1	Mortandad Canyon	Regional Deep	R-55 S2	994.4	10/14/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodimethylamine[N-]	62-75-9	0.0134	1.0	NMED A1 TAP SCRNLVL	0.00491	2.7	0.00036	µg/L	1	J	HE1a	Nitrosamines:HRMS	SwRI		
C3	2	2	10/15/2019	0.00391	0.00391	0.00391	1	Pajarito Canyon	Regional Top	R-32 S1	867.5	10/13/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodimethylamine[N-]	62-75-9	0.00391	1.0	NMED A1 TAP SCRNLVL	0.00491	0.8	0.00036	µg/L	1	J	HE1a	Nitrosamines:HRMS	SwRI		
C4	25	28	09/06/2007	8.2	77.6	55.25	28	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/20/2020	REG	F	INIT	Metals	Barium	Ba	57.5	1.0	LANL Int BG LVL	13.5	4.3	1.00	µg/L	1.00	NQ	NQ	SW-846:6010C	GELC		
C4	25	28	09/06/2007	21	39.9	28.15	28	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/20/2020	REG	F	INIT	Metals	Calcium	Ca	30.9	1.1	LANL Int BG LVL	10.7	2.9	0.05	mg/L	1.00	NQ	NQ	SW-846:6010C	GELC		
C4	25	28	09/06/2007	3.66	39.2	21.7	28	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/20/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	29.6	1.4	LANL Int BG LVL	3.11	9.5	0.335	mg/L	5.00	NQ	NQ	EPA:300.0	GELC		
C4	25	28	09/06/2007	76.4	156	110.5	28	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/20/2020	REG	F	INIT	Geninorg	Hardness	Hardness	124	1.1	LANL Int BG LVL	37.8	3.3	0.453	mg/L	1.00	NQ	NQ	SM:A2340B	GELC		
C4	25	28	09/06/2007	5.8	13.7	9.855	28	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/20/2020	REG	F	INIT	Metals	Magnesium	Mg	11.3	1.1	LANL Int BG LVL	3.14	3.6	0.11	mg/L	1.00	NQ	NQ	SW-846:6010C	GELC		
C4	25	28	09/06/2007	95.5	254	166.5	28	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/20/2020	REG	F	INIT	Metals	Strontium	Sr	196	1.2	LANL Int BG LVL	59.6	3.3	1.00	µg/L	1.00	NQ	NQ	SW-846:6010C	GELC		
C4	25	28	09/06/2007	4.82	27.5	14.75	28	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/20/2020	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	15.4	1.0	LANL Int BG LVL	7.1	2.2	0.133	mg/L	1.00	NQ	NQ	EPA:300.0	GELC		
C4	30	33	10/03/2006	6.44	9.16	7.97	33	Pajarito Canyon	Intermediate Perched	R-23i S2	470.2	10/20/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	8.46	1.1	LANL Int BG LVL	3.11	2.7	0.0670	mg/L	1.00	NQ	NQ	EPA:300.0	GELC		
C4	21	25	07/13/2009	21.2	26.2	24.6	25	Mortandad Canyon	Intermediate Perched	R-37 S1	929.3	10/19/2020	REG	F	INIT	Metals	Calcium	Ca	24.2	1.0	LANL Int BG LVL	10.7	2.3	0.05	mg/L	1.00	NQ	NQ	SW-846:6010C	GELC		
C4	21	25	07/13/2009	0.232	0.735	0.545	25	Mortandad Canyon	Intermediate Perched	R-37 S1	929.3	10/19/2020	REG	F	INIT	Geninorg	Fluoride	F(-1)	0.629	1.2	LANL Int BG LVL	0.234	2.7	0.0330	mg/L	1.00	NQ	NQ	EPA:300.0	GELC		
C4	21	25	07/13/2009	73.1	89.4	84.8	25	Mortandad Canyon	Intermediate Perched	R-37 S1	929.3	10/19/2020	REG	F	INIT	Geninorg	Hardness	Hardness	86.0	1.0	LANL Int BG LVL	37.8	2.3	0.453	mg/L	1.00	NQ	NQ	SM:A2340B	GELC		
C4	14	15	04/21/2009	5.49	7.21	6.37	15	Pajarito Canyon	Intermediate Perched	R-40 S1	751.6	10/22/2020	REG	F	INIT	Metals	Magnesium	Mg	7.21	1.1	LANL Int BG LVL	3.14	2.3	0.11	mg/L	1.00	NQ	NQ	SW-846:6010C	GELC		
C4	29	32	03/10/2004	113	253	186	32	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/15/2020	REG	F	INIT	Metals	Barium	Ba	222	1.2	LANL Reg BG LVL	38.1	5.8	1.00	µg/L	1.00	NQ	NQ	SW-846:6010C	GELC		
C4	64	72	08/30/2007	68	408	346	72	Sandia Canyon	Regional Deep	R-35a	1013.1	10/07/2020	REG	F	INIT	Metals	Barium	Ba	351	1.0	LANL Reg BG LVL	38.1	9.2	1.00	µg/L	1.00	E	NQ	SW-846:6010C	GELC		
C4	63	72	08/30/2007	5.97	7.31	6.54	72	Sandia Canyon	Regional Deep	R-35a	1013.1	10/07/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	7.23	1.1	LANL Reg BG LVL	2.7	2.7	0.0670	mg/L	1.00	NQ	NQ	EPA:300.0	GELC		
C4	64	72	08/30/2007	1.2	22.2	7.58	71	Sandia Canyon	Regional Deep	R-35a	1013.1	10/07/2020	REG	F	INIT	Metals	Nickel	Ni	12.7	1.7	LANL Reg BG LVL	2.9	4.4	0.600	µg/L	1.00	NQ	NQ	SW-846:6020B	GELC		
C4	63	67	03/05/2009	2.74	6.18	4.37	67	Mortandad Canyon	Regional Deep	R-45 S2	974.9	10/09/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	5.91	1.4	LANL Reg BG LVL	2.7	2.2	0.0670	mg/L	1.00	NQ	NQ	EPA:300.0	GELC		
C4	63	72	03/05/2009	6.1	47.6	22.4	71	Mortandad Canyon	Regional Deep	R-45 S2	974.9	10/09/2020	REG	F	INIT	Metals	Chromium	Cr	47.6	2.1	LANL Reg BG LVL	7.48	6.4	3.00	µg/L	1.00	NQ	NQ	SW-846:6020B	GELC		
C4	19	21	09/24/2001	4.35	6.18	5.03	21	White Rock Canyon and Rio Grande	Regional Spring	Spring 3	0	10/02/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	5.98	1.2	LANL Reg BG LVL	2.7	2.2	0.0670	mg/L	1.00	NQ	NQ	EPA:300.0	GELC		
C4	21	23	09/25/2000	6.17	7.74	6.66	23	White Rock Canyon and Rio Grande	Regional Spring	Spring 4	0	10/05/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.91	1.0	LANL Reg BG LVL	2.7	2.6	0.0670	mg/L	1.00	NQ	NQ	EPA:300.0	GELC		

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C4	21	23	09/25/2000	9.24	10.6	9.58	23	White Rock Canyon and Rio Grande	Regional Spring	Spring 4	0	10/05/2020	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	9.60	1.0	LANL Reg BG LVL	4.59	2.1	0.133	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	37	44	11/30/2005	5.62	7.09	6.095	44	Sandia Canyon	Regional Top	R-10a	690.0	08/20/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	6.46	1.1	LANL Reg BG LVL	2.7	2.4	0.0670	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	37	44	11/30/2005	0.528	14.2	1.55	42	Sandia Canyon	Regional Top	R-10a	690.0	08/20/2020	REG	F	INIT	Metals	Nickel	Ni	6.84	4.4	LANL Reg BG LVL	2.9	2.4	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	37	44	11/30/2005	9.36	12.9	10.3	44	Sandia Canyon	Regional Top	R-10a	690.0	08/20/2020	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	10.3	1.0	LANL Reg BG LVL	4.59	2.2	0.133	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	76	90	05/17/2005	2.27	7.43	5.4	90	Sandia Canyon	Regional Top	R-11	855.0	10/06/2020	REG	F	INIT	Geninorg	Nitrate-nitrite as nitrogen	NO3+NO2-N	5.78	1.1	LANL Reg BG LVL	0.769	7.5	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	76	90	05/17/2005	5.95	20.2	10.25	90	Sandia Canyon	Regional Top	R-11	855.0	10/06/2020	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	9.53	0.9	LANL Reg BG LVL	4.59	2.1	0.133	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	66	69	02/17/2009	1.99	20.3	2.43	69	Mortandad Canyon	Regional Top	R-44 S1	895.0	10/08/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	18.8	7.7	LANL Reg BG LVL	2.7	7.0	0.335	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	66	69	02/17/2009	0.536	109	6.23	42	Mortandad Canyon	Regional Top	R-44 S1	895.0	10/08/2020	REG	F	INIT	Metals	Nickel	Ni	41.2	6.6	LANL Reg BG LVL	2.9	14.2	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	66	69	02/17/2009	0.123	2.66	1.19	68	Mortandad Canyon	Regional Top	R-44 S1	895.0	10/08/2020	REG	F	INIT	Geninorg	Nitrate-nitrite as nitrogen	NO3+NO2-N	2.53	2.1	LANL Reg BG LVL	0.769	3.3	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	66	69	02/17/2009	2.76	19.9	3.55	69	Mortandad Canyon	Regional Top	R-44 S1	895.0	10/08/2020	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	18.9	5.3	LANL Reg BG LVL	4.59	4.1	0.133	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	64	69	02/28/2009	3	16.6	5.1	69	Mortandad Canyon	Regional Top	R-45 S1	880.0	10/09/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	12.5	2.5	LANL Reg BG LVL	2.7	4.6	0.134	mg/L	2.00		NQ	NQ	EPA:300.0	GELC	
C4	64	73	02/28/2009	8.4	50.7	31.4	73	Mortandad Canyon	Regional Top	R-45 S1	880.0	10/09/2020	REG	F	INIT	Metals	Chromium	Cr	16.4	0.5	LANL Reg BG LVL	7.48	2.2	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	64	69	02/28/2009	0.256	3.47	2.78	69	Mortandad Canyon	Regional Top	R-45 S1	880.0	10/09/2020	REG	F	INIT	Geninorg	Nitrate-nitrite as nitrogen	NO3+NO2-N	2.52	0.9	LANL Reg BG LVL	0.769	3.3	0.0850	mg/L	5.00		NQ	NQ	EPA:353.2	GELC	
C4	64	69	02/28/2009	4.1	17.2	7.7	69	Mortandad Canyon	Regional Top	R-45 S1	880.0	10/09/2020	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	12.7	1.6	LANL Reg BG LVL	4.59	2.8	0.133	mg/L	1.00		NQ	NQ	EPA:300.0	GELC	
C4	66	74	03/06/2010	4.68	20	9.46	74	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	FD	F	INIT	Geninorg	Chloride	Cl(-1)	18.3	1.9	LANL Reg BG LVL	2.7	6.8	0.335	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	66	74	03/06/2010	4.68	20	9.46	74	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	REG	F	INIT	Geninorg	Chloride	Cl(-1)	18.4	1.9	LANL Reg BG LVL	2.7	6.8	0.335	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	66	76	03/06/2010	26.3	150	88.4	76	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	FD	F	INIT	Metals	Chromium	Cr	45.1	0.5	LANL Reg BG LVL	7.48	6.0	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	66	76	03/06/2010	26.3	150	88.4	76	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	REG	F	INIT	Metals	Chromium	Cr	30.4	0.3	LANL Reg BG LVL	7.48	4.1	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	66	74	03/06/2010	1.51	14.6	4.535	74	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	FD	F	INIT	Metals	Nickel	Ni	6.53	1.4	LANL Reg BG LVL	2.9	2.3	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	66	74	03/06/2010	1.51	14.6	4.535	74	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	REG	F	INIT	Metals	Nickel	Ni	5.96	1.3	LANL Reg BG LVL	2.9	2.1	0.600	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	66	75	03/06/2010	0.398	2.94	2.05	75	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	FD	F	INIT	Geninorg	Nitrate-nitrite as nitrogen	NO3+NO2-N	2.57	1.3	LANL Reg BG LVL	0.769	3.3	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	66	75	03/06/2010	0.398	2.94	2.05	75	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	REG	F	INIT	Geninorg	Nitrate-nitrite as nitrogen	NO3+NO2-N	2.55	1.2	LANL Reg BG LVL	0.769	3.3	0.170	mg/L	10.0		NQ	NQ	EPA:353.2	GELC	
C4	66	74	03/06/2010	7.22	20.2	14	74	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	FD	F	INIT	Geninorg	Sulfate	SO4(-2)	18.2	1.3	LANL Reg BG LVL	4.59	4.0	0.665	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	

Table 1: NMED 11-20 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fid OC Type Code	Fid 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	66	74	03/06/2010	7.22	20.2	14	74	Mortandad Canyon	Regional Top	R-50 S1	1077.0	10/13/2020	REG	F	INIT	Geninorg	Sulfate	SO4(-2)	18.4	1.3	LANL Reg BG LVL	4.59	4.0	0.665	mg/L	5.00		NQ	NQ	EPA:300.0	GELC	
C4	50	57	05/20/2011	2.03	39.1	21.35	56	Mortandad Canyon	Regional Top	R-61 S1	1125.0	10/16/2020	REG	F	INIT	Metals	Chromium	Cr	33.9	1.6	LANL Reg BG LVL	7.48	4.5	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
C4	50	57	05/20/2011	0.427	2.95	2.17	57	Mortandad Canyon	Regional Top	R-61 S1	1125.0	10/16/2020	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	
C4	49	56	05/20/2011	2.96	16.2	11.7	56	Mortandad Canyon	Regional Top	R-61 S1	1125.0	10/16/2020	REG	F	INIT	Geninorg	Perchlorate	ClO4	12.0	1.0	LANL Reg BG LVL	0.414	29.0	0.500	µg/L	10.0		NQ	NQ	SW-846:6850	GELC	
C5	63	72	03/05/2009	6.1	47.6	22.4	71	Mortandad Canyon	Regional Deep	R-45 S2	974.9	10/09/2020	REG	F	INIT	Metals	Chromium	Cr	47.6	2.1	NM GW STD	50	1.0	3.00	µg/L	1.00		NQ	NQ	SW-846:6020B	GELC	
CA	2	2	10/17/2019	0.00761	0.00761	0.00761	1	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/15/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodiethylamine[N-]	55-18-5	0.00761	1.0	NMED A1 TAP SCRNLVL	0.00167	4.6	0.00018	µg/L	1		J	HE1a	Nitrosamines:HRMS	SwRI	
CA	2	2	10/17/2019	0.0153	0.0153	0.0153	1	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/15/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodimethylamine[N-]	62-75-9	0.0153	1.0	NMED A1 TAP SCRNLVL	0.00491	3.1	0.00036	µg/L	1		J	HE1a	Nitrosamines:HRMS	SwRI	
CA	2	2	10/16/2019	0.0134	0.0134	0.0134	1	Mortandad Canyon	Regional Deep	R-55 S2	994.4	10/14/2020	REG	UF	INIT	Low-level nitrosamines	Nitrosodimethylamine[N-]	62-75-9	0.0134	1.0	NMED A1 TAP SCRNLVL	0.00491	2.7	0.00036	µg/L	1		J	HE1a	Nitrosamines:HRMS	SwRI	

Table 2: NMED 11-20 Groundwater Report Addendum

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fid OC Type Code	Fid 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	20	20	06/18/2009	11.4	22.3	15.7	3	Pajarito Canyon	Regional Deep	R-49 S2	905.6	10/28/2020	REG	F	INIT	Metals	Boron	B	22.3	1.4	Reg-Scr_95	18.7	1.2	15.0	µg/L	1.00	J	J	J_LAB	SW-846:6010C	GELC	
XC2scr	23	23	07/20/2005	3.86	16.4	10.13	2	Pajarito Canyon	Regional Top	R-20 S1	904.6	10/21/2020	REG	F	INIT	Metals	Tin	Sn	16.4	1.6	Reg-Scr_95	13	1.3	2.50	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
XC2scr	20	21	06/22/2009	0.0341	0.111	0.04055	6	Mortandad Canyon	Regional Top	R-37 S2	1026.0	10/15/2020	REG	F	INIT	Geninorg	Total phosphate as phosphorus	PO4-P	0.111	2.7	Reg-Scr_95	0.0822	1.4	0.0200	mg/L	1.00		NQ	NQ	EPA:365.4	GELC	
XC2scr	22	25	02/19/2009	83.7	83.7	83.7	1	Pajarito Canyon	Regional Top	R-39	859.0	10/21/2020	REG	F	INIT	Metals	Aluminum	Al	83.7	1.0	Reg-Scr_95	68	1.2	68.0	µg/L	1.00	J	J	J_LAB	SW-846:6010C	GELC	
XC2scr	22	25	02/19/2009	30.5	54.6	52.3	3	Pajarito Canyon	Regional Top	R-39	859.0	10/21/2020	REG	F	INIT	Metals	Iron	Fe	54.6	1.0	Reg-Scr_95	53.8	1.0	30.0	µg/L	1.00	J	J	J_LAB	SW-846:6010C	GELC	
XC4scr	29	32	03/10/2004	38.5	382	72.45	32	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/15/2020	REG	F	INIT	Metals	Manganese	Mn	71.6	1.0	Reg-Scr_95	12.1	5.9	2.00	µg/L	1.00		NQ	NQ	SW-846:6010C	GELC	
XC4scr	50	57	05/20/2011	0.0531	11.8	0.5615	54	Mortandad Canyon	Regional Top	R-61 S1	1125.0	10/16/2020	REG	F	INIT	Geninorg	Total phosphate as phosphorus	PO4-P	0.317	0.6	Reg-Scr_95	0.0822	3.9	0.0200	mg/L	1.00		NQ	NQ	EPA:365.4	GELC	