



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

JAN 27 2020

EMLA-2020-1238-02-001

Mr. Kevin Pierard
 Bureau Chief
 Hazardous Waste Bureau
 New Mexico Environment Department
 2905 Rodeo Park Drive East, Building 1
 Santa Fe, NM 87505-6303



Subject: Monthly Notification of Groundwater Data Reviewed in January 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 January 14, 2020, to review groundwater data received in December 2019 in accordance with Section XXVI.C of the 2016 Consent Order. 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 2019 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.

There are a significant number of analytes detected that met the reporting criteria for 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 (criteria code C1). These include per- and polyfluoroalkyl substances (PFAS), nitrosamines, and 1,4-dioxane. This notification provides the initial baseline data for the new regulatory constituents, including PFAS; focused validation and assessment of these results are ongoing. For nitrosamines, this is the first evaluation using the low method detection limits. Similarly, this is the first analytical evaluation using the low method detection limit of 0.1 µg/L for 1,4-dioxane.

N3B is updating its data management software and procedures to incorporate the annual "Interim Facility-Wide Groundwater Monitoring Plan" for the 2020 monitoring year, which incorporates new contaminants, new analytical methods, and other chemical constituents that meet the five screening

criteria described in Section XXVI of the 2016 Consent Order. Upon completion of the upgrade, N3B will conduct additional groundwater data review and submit a report for those samples collected on or after October 1, 2019, that did not meet the reporting criteria using the data management software and procedures before these could be identified with the upgrade.

1-Day Notification

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).

One-day notification was not required because there were no cases of a contaminant detected in a well screen interval or spring at a concentration that exceeded a water quality standard for the first time.

15-Day Notification

The required information for the contaminants and other chemical parameters 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.veenis@em-la.doe.gov) or Hai Shen at (505) 257-7943 (hai.shen@em.doe.gov).

Sincerely,



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

Enclosure:

1. Two hard copies with electronic files – Summary of Groundwater Data Reviewed in January 2020 That Meet Notification Requirements (EM2020-0028)

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

Neelam Dhawan, NMED
Michelle Hunter, NMED
Steve Pullen, NMED
Andrew C. Romero, NMED
Melanie Sandoval, NMED
Steve Yanicak, NMED-DOE-OB
Jocelyn Buckley, LANL
Leslie Dale, LANL
Brian Iacona, LANL
William Mairson, LANL
Jacob Meadows, LANL
Enrique Torres, LANL
William Alexander, N3B
Emily Day, N3B
Mei Ding, N3B
Erich Evered, N3B
Lori Huntoon, N3B
Danny Katzman, N3B
Joseph Legare, N3B
Dana Lindsay, N3B
Frazer Lockhart, N3B
Elizabeth Lowes, N3B
Pamela Maestas, N3B
Glenn Morgan, N3B
Bruce Robinson, N3B
Steve Veenis, N3B
Brinson Willis, N3B
Karen Armijo, NA-LA
Pete Maggiore, NA-LA
David Nickless, EM-LA
Cheryl Rodriguez, EM-LA
Hai Shen, EM-LA
n3brecords@em-la.doe.gov
Public Reading Room (EPRR)
PRS Website
emla.docs@em.doe.gov

SUMMARY OF GROUNDWATER DATA REVIEWED IN JANUARY 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 12-19 Groundwater Report, presents results since June 14, 2007, that met the five reporting criteria as specified in the 2016 Consent Order. Table 2, NMED 12-19 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 2019 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 criteria C2 and 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

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

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

Acronyms and Abbreviations

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

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

GENINORG—General inorganic

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

HEXP—high explosive

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

MDL—method detection limit

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

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

PFAS—per- and polyfluoroalkyl substances

PQL—practical quantitation limit

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

SVOC—semivolatile organic compound

TDS—total dissolved solids

TNX—2,4,6-trinitroxylenne

UAL—upper acceptance limit

UOM—units of measurement

VOC—Volatile organic compound

Analytical Laboratory Codes and Qualifiers

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

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

SwRI—Southwest Research Institute

GENINORG—general inorganic

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

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

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 12-19 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	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	1	1	10/29/2019	5.54	5.54	5.54	1	Pajarito Canyon	Intermediate Perched	03-B-13	21.5	10/29/2019	REG	UF	INIT	LCMS/MS PFAS	Perfluorooctanesulfonic acid	1763-23-1	5.54	1	NMED A1 TAP SCRN LVL	70	0.1	0.8	ng/L	1	NQ	NQ	EPA:537M	GELC	First measurement value; focused validation and assessment of the result are ongoing.	
C1	1	1	10/29/2019	3.65	3.65	3.65	1	Pajarito Canyon	Intermediate Perched	03-B-13	21.5	10/29/2019	REG	UF	INIT	LCMS/MS PFAS	Perfluorooctanoic acid	335-67-1	3.65	1	NMED A1 TAP SCRN LVL	70	0.1	0.8	ng/L	1	NQ	NQ	EPA:537M	GELC	First measurement value; focused validation and assessment of the result are ongoing.	
C1	1	1	11/13/2019	1.49	1.49	1.49	1	Mortandad Canyon	Intermediate Perched	MCOI-5	689	11/13/2019	REG	UF	INIT	LCMS/MS PFAS	Perfluorooctanoic acid	335-67-1	1.49	1	NMED A1 TAP SCRN LVL	70	0	0.72	ng/L	1	J	J	J_LAB	EPA:537M	GELC	First measurement value; focused validation and assessment of the result are ongoing.
C1	1	1	11/14/2019	0.805	0.805	0.805	1	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	UF	INIT	LCMS/MS PFAS	Perfluorooctanesulfonic acid	1763-23-1	0.805	1	NMED A1 TAP SCRN LVL	70	0	0.71	ng/L	1	J	J	J_LAB	EPA:537M	GELC	First measurement value; focused validation and assessment of the result are ongoing.
C1	12	17	9/6/2007	4.46	4.51	4.485	2	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	FD	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	4.51	1	NMED A1 TAP SCRN LVL	4.59	1	0.1	µg/L	1	NQ	NQ	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method	
C1	12	17	9/6/2007	4.46	4.51	4.485	2	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	4.46	1	NMED A1 TAP SCRN LVL	4.59	1	0.1	µg/L	1	NQ	NQ	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method	

Table 1: NMED 12-19 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	Any 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	18	21	10/3/2006	0.171	0.171	0.171	1	Pajarito Canyon	Intermediate Perched	R-23i S2	470.2	10/22/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.171	1	NMED A1 TAP SCRN LVL	4.59	0	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E-SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C1	2	2	10/29/2015	0.213	0.213	0.213	1	Pajarito Canyon	Intermediate Perched	R-40 S1	751.59	10/30/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.213	1	NMED A1 TAP SCRN LVL	4.59	0	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E-SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C1	10	12	1/11/2007	0.872	0.872	0.872	1	Sandia Canyon	Intermediate Perched	SCI-1	358.4	11/15/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.872	1	NMED A1 TAP SCRN LVL	4.59	0.2	0.1	µg/L	1	NQ	NQ	SW-846:8270E-SIM	GELC	First measurement result using low MDL = 0.1 µg/L method	
C1	9	11	10/21/2008	0.543	0.543	0.543	1	Sandia Canyon	Intermediate Perched	SCI-2	548	11/15/2019	REG	UF	INIT	SVOC	Diethylphthalate	84-66-2	0.543	1	NMED A1 TAP SCRN LVL	14800	0	0.302	µg/L	1	J	J	J_LAB	SW-846:8270D	GELC	
C1	1	1	11/15/2019	0.00021	0.00021	0.00021	1	Sandia Canyon	Intermediate Perched	SCI-2	548	11/15/2019	REG	UF	INIT	NITROSAMI NES	Nitrosodiethylamine[N-]	55-18-5	0.00021	1	NMED A1 TAP SCRN LVL	0.00167	0.1	0.00018	µg/L	1	J	J	J_LAB	Nitrosamines: HRMS	SwRI	First measurement result using low MDL = 0.00018 µg/L method; focused validation and assessment of the results are ongoing.
C1	1	1	11/15/2019	0.00136	0.00136	0.00136	1	Sandia Canyon	Intermediate Perched	SCI-2	548	11/15/2019	REG	UF	INIT	NITROSAMI NES	Nitrosodimethylamine[N-]	62-75-9	0.00136	1	NMED A1 TAP SCRN LVL	0.00491	0.3	0.00036	µg/L	1	NQ	NQ	Nitrosamines: HRMS	SwRI	First measurement result using low MDL = 0.00036 µg/L method; focused validation and assessment of the results are ongoing.	

Table 1: NMED 12-19 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	Any 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	1	1	11/15/2019	0.00059	0.000591	0.00059	1	Sandia Canyon	Intermediate Perched	SCI-2	548	11/15/2019	REG	UF	INIT	NITROSAMINES	Nitrosopyrrolidine[N-]	930-55-2	0.000591	1	NMED A1 TAP SCRN LVL	0.37	0	0.00033	µg/L	1	NQ	NQ	Nitrosamines: HRMS	SwRI	First measurement result using low MDL = 0.00033 µg/L method; focused validation and assessment of the results are ongoing.	
C1	1	1	10/17/2019	0.875	0.875	0.875	1	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/17/2019	REG	UF	INIT	LCMS/MS PFAS	Perfluorooctanesulfonic acid	1763-23-1	0.875	1		70	0	0.716	ng/L	1	J	J	J_LAB	EPA:537M	GELC	First measurement value; focused validation and assessment of the result are ongoing.
C1	16	16	6/24/2005	2.47	2.47	2.47	1	Mortandad Canyon	Regional Deep	R-33 S2	1112.4	11/6/2019	REG	UF	INIT	VOC	Acetone	67-64-1	2.47	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	1	1	11/5/2019	0.00018	0.00018	0.00018	1	Sandia Canyon	Regional Deep	R-43 S2	969.1	11/5/2019	REG	UF	INIT	NITROSAMINES	Nitrosodiethylamine[N-]	55-18-5	0.00018	1	NMED A1 TAP SCRN LVL	0.00167	0.1	0.00018	µg/L	1	J	J	J_LAB	Nitrosamines: HRMS	SwRI	First measurement result using low MDL = 0.00018 µg/L method; focused validation and assessment of the results are ongoing.
C1	8	8	7/16/2009	3.18	3.18	3.18	1	Mortandad Canyon	Regional Deep	R-45 S2	974.9	11/19/2019	REG	UF	INIT	VOC	Acetone	67-64-1	3.18	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	11	11	9/1/2009	1.09	1.09	1.09	1	Pajarito Canyon	Regional Deep	R-49 S2	905.6	10/29/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	1.09	1	EPA MCL	6	0.2	0.303	µg/L	1		NQ	NQ	SW-846:8270D	GELC	
C1	11	12	9/1/2009	0.251	0.251	0.251	1	Pajarito Canyon	Regional Deep	R-49 S2	905.6	10/29/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.251	1	NMED A1 TAP SCRN LVL	4.59	0.1	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method

Table 1: NMED 12-19 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	Any 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	9	9	5/27/2010	3.83	3.83	3.83	1	Mortandad Canyon	Regional Deep	R-50 S2	1185	11/19/2019	REG	UF	INIT	VOC	Acetone	67-64-1	3.83	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	11	13	6/18/2010	1.14	1.14	1.14	1	Pajarito Canyon	Regional Deep	R-51 S2	1030.96	10/29/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	1.14	1	EPA MCL	6	0.2	0.315	µg/L	1		NQ	NQ	SW-846:8270D	GELC	
C1	11	14	6/18/2010	0.284	0.284	0.284	1	Pajarito Canyon	Regional Deep	R-51 S2	1030.96	10/29/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.284	1	NMED A1 TAP SCRN LVL	4.59	0.1	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E-SIM	GELC	First measurement result using low MDL = 0.1 µg/L method.
C1	18	18	4/23/2010	4.12	4.12	4.12	1	Mortandad Canyon	Regional Deep	R-52 S2	1107	10/16/2019	REG	UF	INIT	VOC	Acetone	67-64-1	4.12	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	14	14	4/14/2010	0.547	0.547	0.547	1	Mortandad Canyon	Regional Deep	R-53 S2	959.7	10/25/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	0.547	1	EPA MCL	6	0.1	0.322	µg/L	1	J	J	J_LAB	SW-846:8270D	GELC	
C1	1	1	10/25/2019	0.636	0.636	0.636	1	Mortandad Canyon	Regional Deep	R-53 S2	959.7	10/25/2019	REG	UF	INIT	LCMS/MS PFAS	Perfluorooctanoic acid	335-67-1	0.636	1		70	0	0.61	ng/L	1	J	J	J_LAB	EPA:537M	GELC	First measurement value; focused validation and assessment of the result are ongoing.
C1	14	14	9/18/2006	2.44	4.66	3.55	2	White Rock Canyon and Rio Grande	Regional Spring	Spring 4AA	0	10/1/2019	REG	UF	INIT	VOC	Acetone	67-64-1	4.66	1.3	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	8	8	10/7/2003	1.27	1.27	1.27	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 5B	0	10/2/2019	REG	UF	INIT	VOC	Dichlorobenzene[1,3-]	541-73-1	1.27	1			0.3	µg/L	1		NQ	NQ	SW-846:8260B	GELC		
C1	8	8	10/7/2003	0.51	0.51	0.51	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 5B	0	10/2/2019	REG	UF	INIT	VOC	Toluene	108-88-3	0.51	1	NM GW STD	1000	0	0.3	µg/L	1	BJ	J	J_LAB	SW-846:8260B	GELC	

Table 1: NMED 12-19 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	Any 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	15	16	9/24/2002	1.36	1.36	1.36	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 6	0	10/2/2019	REG	UF	INIT	VOC	Dichlorobenzene[1,3-]	541-73-1	1.36	1			0.3	µg/L	1		NQ	NQ	SW-846:8260B	GELC		
C1	7	7	10/7/2003	6.44	6.44	6.44	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 8A	0	10/2/2019	REG	UF	INIT	VOC	Acetone	67-64-1	6.44	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	7	8	9/25/2012	0.34	0.34	0.34	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 9	0	10/2/2019	REG	UF	INIT	VOC	Diethyl Ether	60-29-7	0.34	1	NMED A1 TAP SCRN LVL	3930	0	0.3	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	24	31	5/19/2005	1.34	2.44	1.6	3	Mortandad Canyon	Regional Top	R-1	1031.1	11/8/2019	REG	UF	INIT	VOC	Acetone	67-64-1	1.6	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	10	14	7/3/2006	0.469	0.469	0.469	1	Mortandad Canyon	Regional Top	R-15	958.6	11/8/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.469	1	NMED A1 TAP SCRN LVL	4.59	0.1	0.1	µg/L	1		NQ	NQ	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C1	16	18	3/15/2004	0.438	1.5	0.969	2	Pajarito Canyon	Regional Top	R-20 S1	904.6	10/23/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	0.438	0.5	EPA MCL	6	0.1	0.321	µg/L	1	J	J	J_LAB	SW-846:8270D	GELC	
C1	1	1	10/23/2019	0.987	0.987	0.987	1	Pajarito Canyon	Regional Top	R-20 S1	904.6	10/23/2019	REG	UF	INIT	LCMS/MS PFAS	Perfluorooctanoic acid	335-67-1	0.987	1		70	0	0.636	ng/L	1	J	J	J_LAB	EPA:537M	GELC	First measurement value; focused validation and assessment of the result are ongoing.
C1	20	24	3/31/2004	0.38	0.38	0.38	1	Mortandad Canyon	Regional Top	R-21	888.8	10/24/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	0.38	1	EPA MCL	6	0.1	0.3	µg/L	1	J	J	J_LAB	SW-846:8270D	GELC	
C1	30	39	9/24/2002	0.769	7.6	2.2	5	Pajarito Canyon	Regional Top	R-23	816	10/23/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	0.769	0.3	EPA MCL	6	0.1	0.312	µg/L	1	J	J	J_LAB	SW-846:8270D	GELC	
C1	20	24	8/29/2006	0.677	0.677	0.677	1	Pajarito Canyon	Regional Top	R-32 S1	867.5	10/15/2019	REG	UF	RE	SVOC	Dioxane[1,4-]	123-91-1	0.677	1	NMED A1 TAP SCRN LVL	4.59	0.1	0.1	µg/L	1		NQ	NQ	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method

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Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Any 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	Any Meth Code	Lab Code	Comment
C1	40	43	3/1/2004	1.08	1.08	1.08	1	Pajarito Canyon	Regional Top	R-32 S1	867.5	10/15/2019	REG	UF	INIT	VOC	Methylene Chloride	75-09-2	1.08	1	NM GW STD	5	0.2	1	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	1	1	10/15/2019	1.21	1.21	1.21	1	Pajarito Canyon	Regional Top	R-32 S1	867.5	10/15/2019	REG	UF	INIT	LCMS/MS PFAS	Perfluorooctanesulfonic acid	1763-23-1	1.21	1		70	0	0.724	ng/L	1	J	J	J_LAB	EPA:537M	GELC	First measurement value; focused validation and assessment of the result are ongoing.
C1	17	19	9/14/2005	1.97	1.97	1.97	1	Mortandad Canyon	Regional Top	R-33 S1	995.5	11/6/2019	REG	UF	INIT	VOC	Acetone	67-64-1	1.97	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	1	1	11/6/2019	0.00024	0.000238	0.00024	1	Mortandad Canyon	Regional Top	R-33 S1	995.5	11/6/2019	REG	UF	INIT	NITROSAMINES	Nitrosodiethylamine[N-]	55-18-5	0.000238	1	NMED A1 TAP SCRN LVL	0.00167	0.1	0.00018	µg/L	1	J	J	J_LAB	Nitrosamines: HRMS	SwRI	First measurement result using low MDL = 0.00018 µg/L method; focused validation and assessment of the results are ongoing.
C1	10	12	8/5/2009	2.42	2.42	2.42	1	Sandia Canyon	Regional Top	R-36	766.9	11/6/2019	REG	UF	INIT	VOC	Acetone	67-64-1	2.42	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	1	1	11/6/2019	0.00018	0.000183	0.00018	1	Sandia Canyon	Regional Top	R-36	766.9	11/6/2019	REG	UF	INIT	NITROSAMINES	Nitrosodiethylamine[N-]	55-18-5	0.000183	1	NMED A1 TAP SCRN LVL	0.00167	0.1	0.00018	µg/L	1	J	J	J_LAB	Nitrosamines: HRMS	SwRI	First measurement result using low MDL = 0.00018 µg/L method; focused validation and assessment of the results are ongoing.
C1	30	32	11/18/2009	3.02	3.02	3.02	1	Mortandad Canyon	Regional Top	R-37 S2	1026	10/17/2019	REG	UF	INIT	VOC	Acetone	67-64-1	3.02	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	

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Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Any 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	14	17	9/3/2009	0.271	0.271	0.271	1	Pajarito Canyon	Regional Top	R-40 S2	849.27	10/30/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.271	1	NMED A1 TAP SCRN LVL	4.59	0.1	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E-SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C1	32	35	4/2/2009	2.92	2.92	2.92	1	Mortandad Canyon	Regional Top	R-41 S2	965.3	10/17/2019	REG	UF	INIT	VOC	Acetone	67-64-1	2.92	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	8	11	6/19/2009	0.134	0.134	0.134	1	Sandia Canyon	Regional Top	R-43 S1	903.9	11/14/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.134	1	NMED A1 TAP SCRN LVL	4.59	0	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E-SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C1	1	1	11/19/2019	0.00048	0.000479	0.00048	1	Mortandad Canyon	Regional Top	R-45 S1	880	11/19/2019	REG	UF	INIT	NITROSAMINES	Nitroso-di-n-butylamine[N-]	924-16-3	0.000479	1	NMED A1 TAP SCRN LVL	0.0273	0	0.00047	µg/L	1	J	J	HE12g	Nitrosamines: HRMS	SWRI	First measurement result using low MDL = 0.00047 µg/L method; focused validation and assessment of the results are ongoing.
C1	1	2	11/21/2019	0.00052	0.000621	0.00057	2	Mortandad Canyon	Regional Top	R-46	1340	11/21/2019	REG	UF	INIT	NITROSAMINES	Nitrosodimethylamine[N-]	62-75-9	0.000521	0.9	NMED A1 TAP SCRN LVL	0.00491	0.1	0.00036	µg/L	1		NQ	NQ	Nitrosamines: HRMS	SwRI	First measurement result using low MDL = 0.00036 µg/L method; focused validation and assessment of the results are ongoing.

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Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Any 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	1	2	11/21/2019	0.00052	0.000621	0.00057	2	Mortandad Canyon	Regional Top	R-46	1340	11/21/2019	REG	UF	INIT	NITROSAMINES	Nitrosodimethylamine[N-]	62-75-9	0.000621	1.1	NMED A1 TAP SCRN LVL	0.00491	0.1	0.00036	µg/L	1	NQ	NQ	Nitrosamines: HRMS	SwRI	First measurement result using low MDL = 0.00036 µg/L method; focused validation and assessment of the results are ongoing.	
C1	10	12	9/1/2009	0.39	0.39	0.39	1	Pajarito Canyon	Regional Top	R-49 S1	845	10/29/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	0.39	1	EPA MCL	6	0.1	0.3	µg/L	1	J	J	J_LAB	SW-846:8270D	GELC	
C1	10	14	9/1/2009	0.209	0.224	0.2165	2	Pajarito Canyon	Regional Top	R-49 S1	845	10/29/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.224	1	NMED A1 TAP SCRN LVL	4.59	0	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C1	10	14	9/1/2009	0.209	0.224	0.2165	2	Pajarito Canyon	Regional Top	R-49 S1	845	10/29/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.209	1	NMED A1 TAP SCRN LVL	4.59	0	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C1	10	11	5/27/2010	2.76	2.76	2.76	1	Mortandad Canyon	Regional Top	R-50 S1	1077	11/19/2019	REG	UF	INIT	VOC	Acetone	67-64-1	2.76	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	8	10	5/27/2010	0.346	0.346	0.346	1	Mortandad Canyon	Regional Top	R-50 S1	1077	11/19/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.346	1	NMED A1 TAP SCRN LVL	4.59	0.1	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C1	12	14	6/18/2010	1.19	1.47	1.33	2	Pajarito Canyon	Regional Top	R-51 S1	915	10/29/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	1.19	0.9	EPA MCL	6	0.2	0.308	µg/L	1	NQ	NQ	SW-846:8270D	GELC		
C1	12	14	6/18/2010	1.19	1.47	1.33	2	Pajarito Canyon	Regional Top	R-51 S1	915	10/29/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	1.47	1.1	EPA MCL	6	0.2	0.339	µg/L	1	NQ	NQ	SW-846:8270D	GELC		
C1	12	16	6/18/2010	0.122	0.266	0.194	2	Pajarito Canyon	Regional Top	R-51 S1	915	10/29/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.266	1.4	NMED A1 TAP SCRN LVL	4.59	0.1	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method

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C1	12	16	6/18/2010	0.122	0.266	0.194	2	Pajarito Canyon	Regional Top	R-51 S1	915	10/29/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.122	0.6	NMED A1 TAP SCRN LVL	4.59	0	0.1	µg/L	1	J	J	J_LAB	SW-846:8270E-SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C1	27	29	2/3/2011	11.7	11.7	11.7	1	Mortandad Canyon	Regional Top	R-56 S1	945	10/24/2019	REG	UF	INIT	VOC	Acetone	67-64-1	11.7	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1		NQ	NQ	SW-846:8260B	GELC	
C1	9	10	2/3/2011	0.419	0.419	0.419	1	Mortandad Canyon	Regional Top	R-56 S1	945	10/24/2019	REG	UF	INIT	SVOC	Bis(2-ethylhexyl)phthalate	117-81-7	0.419	1	EPA MCL	6	0.1	0.322	µg/L	1	J	J	J_LAB	SW-846:8270D	GELC	
C1	1	1	11/15/2019	0.00018	0.000183	0.00018	1	Mortandad Canyon	Regional Top	R-60	1330	11/15/2019	REG	UF	INIT	NITROSAMINES	Nitrosodiethylamine[N-]	55-18-5	0.000183	1	NMED A1 TAP SCRN LVL	0.00167	0.1	0.00018	µg/L	1	J	J	J_LAB	Nitrosamines: HRMS	SwRI	First measurement result using low MDL = 0.00018 µg/L method; focused validation and assessment of the results are ongoing.
C1	12	18	3/26/2012	2.48	2.48	2.48	1	Sandia Canyon	Regional Top	R-62	1158.4	11/12/2019	REG	UF	INIT	VOC	Acetone	67-64-1	2.48	1	NMED A1 TAP SCRN LVL	14100	0	1.5	µg/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	12	19	3/26/2012	0.454	0.454	0.454	1	Sandia Canyon	Regional Top	R-62	1158.4	11/12/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	0.454	1	NMED A1 TAP SCRN LVL	4.59	0.1	0.1	µg/L	1		NQ	NQ	SW-846:8270E-SIM	GELC	First measurement result using low MDL = 0.1 µg/L method
C2	11	11	7/26/2000	115	163	147	11	White Rock Canyon and Rio Grande	Regional Spring	Spring 5B	0	10/2/2019	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	163	1.1	LANL Reg BG LVL	161	1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C2	13	14	9/25/2001	81.4	173	145	14	White Rock Canyon and Rio Grande	Regional Spring	Spring 6A	0	10/2/2019	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	170	1.2	LANL Reg BG LVL	161	1.1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	

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C2	16	17	9/26/2001	75.7	173	136	17	White Rock Canyon and Rio Grande	Regional Spring	Spring 9	0	10/2/2019	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	173	1.3	LANL Reg BG LVL	161	1.1	3.4	mg/L	1	NQ	NQ	EPA:160.1	GELC		
C2	16	19	3/8/2010	0.151	0.432	0.247	19	Pajarito Canyon	Regional Top	R-51 S1	915	10/29/2019	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.432	1.7	LANL Reg BG LVL	0.377	1.1	0.033	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C2	16	19	3/8/2010	0.151	0.432	0.247	19	Pajarito Canyon	Regional Top	R-51 S1	915	10/29/2019	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.432	1.7	LANL Reg BG LVL	0.377	1.1	0.033	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C2	13	15	9/9/2010	0.202	0.413	0.341	15	Mortandad Canyon	Regional Top	R-55 S1	860	10/16/2019	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.413	1.2	LANL Reg BG LVL	0.377	1.1	0.033	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C2	13	14	8/19/2010	0.239	0.486	0.313	14	Mortandad Canyon	Regional Top	R-56 S1	945	10/24/2019	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.486	1.6	LANL Reg BG LVL	0.377	1.3	0.033	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C2	19	22	12/16/2010	28.6	180	126	22	Mortandad Canyon	Regional Top	R-60	1330	11/15/2019	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	180	1.4	LANL Reg BG LVL	161	1.1	3.4	mg/L	1	NQ	NQ	EPA:160.1	GELC		
C3	12	17	9/6/2007	4.46	4.51	4.485	2	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	4.51	1	NMED A1 TAP SCRNLVL	4.59	1	0.1	µg/L	1	NQ	NQ	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method	
C3	12	17	9/6/2007	4.46	4.51	4.485	2	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	UF	INIT	SVOC	Dioxane[1,4-]	123-91-1	4.46	1	NMED A1 TAP SCRNLVL	4.59	1	0.1	µg/L	1	NQ	NQ	SW-846:8270E_SIM	GELC	First measurement result using low MDL = 0.1 µg/L method	
C4	57	77	6/15/2005	30.1	48.2	40.1	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	METALS	Barium	Ba	39.1	1	LANL Int BG LVL	13.5	2.9	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	57	77	6/15/2005	42.8	75.5	62.9	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Calcium	Ca	60.3	1	LANL Int BG LVL	10.7	5.6	0.05	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	57	77	6/15/2005	21.2	64.8	54.4	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	52.1	1	LANL Int BG LVL	3.11	16.8	0.67	mg/L	10	J+	I6b	EPA:300.0	GELC		
C4	57	77	6/15/2005	0.412	0.668	0.5265	74	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.493	0.9	LANL Int BG LVL	0.234	2.1	0.033	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C4	57	77	6/15/2005	142	253	210	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Hardness	HARDNESS	202	1	LANL Int BG LVL	37.8	5.3	0.453	mg/L	1	NQ	NQ	SM:A2340B	GELC		

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C4	57	77	6/15/2005	8.49	15.7	12.9	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Magnesium	Mg	12.4	1	LANL Int BG LVL	3.14	3.9	0.11	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	57	77	6/15/2005	7.62	20.4	10.1	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	11.4	1.1	LANL Int BG LVL	0.459	24.8	0.85	mg/L	50	NQ	NQ	EPA:353.2	GELC		
C4	57	77	6/15/2005	56.3	246	81.9	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Perchlorate	ClO4	94.9	1.2	LANL Int BG LVL	0.27	351.5	5	µg/L	100	NQ	NQ	SW-846:6850	GELC		
C4	57	77	6/15/2005	196	339	276	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	METALS	Strontium	Sr	275	1	LANL Int BG LVL	59.6	4.6	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	57	77	6/15/2005	34.7	77.6	59.5	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	52.2	0.9	LANL Int BG LVL	7.1	7.4	1.33	mg/L	10	NQ	NQ	EPA:300.0	GELC		
C4	24	27	9/6/2007	8.2	77.6	54.9	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	METALS	Barium	Ba	59.7	1.1	LANL Int BG LVL	13.5	4.4	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	24	27	9/6/2007	8.2	77.6	54.9	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	METALS	Barium	Ba	59.1	1.1	LANL Int BG LVL	13.5	4.4	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	24	27	9/6/2007	21	39.9	28.1	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Calcium	Ca	30.6	1.1	LANL Int BG LVL	10.7	2.9	0.05	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	24	27	9/6/2007	21	39.9	28.1	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Calcium	Ca	30.4	1.1	LANL Int BG LVL	10.7	2.8	0.05	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	24	27	9/6/2007	3.66	39.2	21.1	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	39.2	1.9	LANL Int BG LVL	3.11	12.6	0.67	mg/L	10	J+	I6b	EPA:300.0	GELC		
C4	24	27	9/6/2007	3.66	39.2	21.1	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	39.1	1.9	LANL Int BG LVL	3.11	12.6	0.67	mg/L	10	J+	I6b	EPA:300.0	GELC		
C4	24	27	9/6/2007	76.4	156	110	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Hardness	HARDNES S	122	1.1	LANL Int BG LVL	37.8	3.2	0.453	mg/L	1	NQ	NQ	SM:A2340B	GELC		
C4	24	27	9/6/2007	76.4	156	110	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Hardness	HARDNES S	122	1.1	LANL Int BG LVL	37.8	3.2	0.453	mg/L	1	NQ	NQ	SM:A2340B	GELC		
C4	24	27	9/6/2007	5.8	13.7	9.81	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Magnesium	Mg	11.1	1.1	LANL Int BG LVL	3.14	3.5	0.11	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	24	27	9/6/2007	5.8	13.7	9.81	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Magnesium	Mg	11.1	1.1	LANL Int BG LVL	3.14	3.5	0.11	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	24	27	9/6/2007	95.5	254	165	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	METALS	Strontium	Sr	183	1.1	LANL Int BG LVL	59.6	3.1	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	24	27	9/6/2007	95.5	254	165	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	METALS	Strontium	Sr	183	1.1	LANL Int BG LVL	59.6	3.1	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	24	27	9/6/2007	4.82	27.5	14.7	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	18.7	1.3	LANL Int BG LVL	7.1	2.6	1.33	mg/L	10	J+	I6b	EPA:300.0	GELC		
C4	24	27	9/6/2007	4.82	27.5	14.7	27	Pajarito Canyon	Intermediate Perched	R-23i S1	400.3	10/22/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	18.6	1.3	LANL Int BG LVL	7.1	2.6	1.33	mg/L	10	J+	I6b	EPA:300.0	GELC		

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C4	29	32	10/3/2006	6.44	9.16	7.925	32	Pajarito Canyon	Intermediate Perched	R-23i S2	470.2	10/22/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	8.68	1.1	LANL Int BG LVL	3.11	2.8	0.067	mg/L	1	J+	I6b	EPA:300.0	GELC		
C4	34	35	1/11/2007	29.9	51.3	37.2	35	Sandia Canyon	Intermediate Perched	SCI-1	358.4	11/15/2019	REG	F	INIT	METALS	Barium	Ba	32.6	0.9	LANL Int BG LVL	13.5	2.4	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	34	35	1/11/2007	47.1	87.6	69.2	35	Sandia Canyon	Intermediate Perched	SCI-1	358.4	11/15/2019	REG	F	INIT	GENINORG	Calcium	Ca	54.1	0.8	LANL Int BG LVL	10.7	5.1	0.05	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	36	39	1/11/2007	80.5	124	93.9	39	Sandia Canyon	Intermediate Perched	SCI-1	358.4	11/15/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	110	1.2	LANL Int BG LVL	3.11	35.	1.34	mg/L	20	NQ	NQ	EPA:300.0	GELC		
C4	34	35	1/11/2007	148	270	214	35	Sandia Canyon	Intermediate Perched	R-23i S6	358.4	11/15/2019	REG	F	INIT	GENINORG	Hardness	HARDNESS	170	0.8	LANL Int BG LVL	37.8	4.5	0.453	mg/L	1	NQ	NQ	SM:A2340B	GELC		
C4	34	35	1/11/2007	7.47	13	10.3	35	Sandia Canyon	Intermediate Perched	R-23i S7	358.4	11/15/2019	REG	F	INIT	GENINORG	Magnesium	Mg	8.37	0.8	LANL Int BG LVL	3.14	2.7	0.11	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	36	39	1/11/2007	0.247	4.99	2.13	39	Sandia Canyon	Intermediate Perched	R-23i S8	358.4	11/15/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	1.4	0.7	LANL Int BG LVL	0.459	3.1	0.017	mg/L	1	NQ	NQ	EPA:353.2	GELC		
C4	36	38	1/11/2007	0.613	1.58	0.917	38	Sandia Canyon	Intermediate Perched	R-23i S9	358.4	11/15/2019	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.72	0.8	LANL Int BG LVL	0.27	2.7	0.05	µg/L	1	J	PE12e	SW-846:6850	GELC		
C4	34	35	1/11/2007	50.7	65.1	56.9	35	Sandia Canyon	Intermediate Perched	R-23i S10	358.4	11/15/2019	REG	F	INIT	GENINORG	Sodium	Na	64.2	1.1	LANL Int BG LVL	18.2	3.5	0.1	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	34	35	1/11/2007	214	383	307	35	Sandia Canyon	Intermediate Perched	R-23i S11	358.4	11/15/2019	REG	F	INIT	METALS	Strontium	Sr	237	0.8	LANL Int BG LVL	59.6	4	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	36	38	1/11/2007	42	112	84.8	38	Sandia Canyon	Intermediate Perched	R-23i S12	358.4	11/15/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	49.4	0.6	LANL Int BG LVL	7.1	7	2.66	mg/L	20	NQ	NQ	EPA:300.0	GELC		
C4	44	58	10/21/2008	56.1	76.7	68.75	58	Sandia Canyon	Intermediate Perched	R-23i S13	548	11/15/2019	REG	F	INIT	METALS	Barium	Ba	75.2	1.1	LANL Int BG LVL	13.5	5.6	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	44	56	10/21/2008	53.4	93	67.2	56	Sandia Canyon	Intermediate Perched	R-23i S15	548	11/15/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	73.7	1.1	LANL Int BG LVL	3.11	23.	1.34	mg/L	20	NQ	NQ	EPA:300.0	GELC		
C4	44	58	10/21/2008	204	263	235	58	Sandia Canyon	Intermediate Perched	R-23i S16	548	11/15/2019	REG	F	INIT	GENINORG	Hardness	HARDNESS	245	1	LANL Int BG LVL	37.8	6.5	0.453	mg/L	1	NQ	NQ	SM:A2340B	GELC		
C4	43	56	10/21/2008	13.1	17.5	15.85	56	Sandia Canyon	Intermediate Perched	R-23i S17	548	11/15/2019	REG	F	INIT	GENINORG	Magnesium	Mg	16.4	1	LANL Int BG LVL	3.14	5.2	0.11	mg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	44	56	10/21/2008	2.89	5.1	4.13	56	Sandia Canyon	Intermediate Perched	R-23i S18	548	11/15/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	3.45	0.8	LANL Int BG LVL	0.459	7.5	0.17	mg/L	10	NQ	NQ	EPA:353.2	GELC		
C4	44	56	10/21/2008	0.83	1.12	0.9605	56	Sandia Canyon	Intermediate Perched	R-23i S19	548	11/15/2019	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.924	1	LANL Int BG LVL	0.27	3.4	0.05	µg/L	1	J	PE12e	SW-846:6850	GELC		
C4	44	58	10/21/2008	264	360	327.5	58	Sandia Canyon	Intermediate Perched	R-23i S20	548	11/15/2019	REG	F	INIT	METALS	Strontium	Sr	339	1	LANL Int BG LVL	59.6	5.7	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	44	56	10/21/2008	77.9	103	88.7	56	Sandia Canyon	Intermediate Perched	R-23i S21	548	11/15/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	85.8	1	LANL Int BG LVL	7.1	12.	2.66	mg/L	20	NQ	NQ	EPA:300.0	GELC		

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C4	28	31	3/10/2004	113	253	185	31	Pajarito Canyon	Regional Deep	R-23i S22	1147.1	10/17/2019	REG	F	INIT	METALS	Barium	Ba	206	1.1	LANL Reg BG LVL	38.1	5.4	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	55	60	8/30/2007	68	389	346	60	Sandia Canyon	Regional Deep	R-23i S23	1013.1	11/18/2019	REG	F	INIT	METALS	Barium	Ba	365	1.1	LANL Reg BG LVL	38.1	9.6	1	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
C4	54	59	8/30/2007	5.97	7.31	6.46	59	Sandia Canyon	Regional Deep	R-23i S24	1013.1	11/18/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	6.63	1	LANL Reg BG LVL	2.7	2.5	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C4	53	61	3/5/2009	6.1	47.4	19.5	61	Mortandad Canyon	Regional Deep	R-23i S25	974.9	11/19/2019	REG	F	INIT	INORGANIC	Chromium	Cr	35.2	1	LANL Reg BG LVL	7.48	4.7	3	µg/L	1	NQ	NQ	SW-846:6020B	GELC		
C4	18	20	9/24/2001	4.35	6.18	5.02	20	White Rock Canyon and Rio Grande	Regional Spring	R-23i S26	0	10/1/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	5.94	1.2	LANL Reg BG LVL	2.7	2.2	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C4	20	22	9/25/2000	6.17	7.74	6.595	22	White Rock Canyon and Rio Grande	Regional Spring	R-23i S27	0	10/1/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	7.19	1.1	LANL Reg BG LVL	2.7	2.7	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C4	20	22	9/25/2000	9.24	10.6	9.58	22	White Rock Canyon and Rio Grande	Regional Spring	R-23i S28	0	10/1/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	10.1	1.1	LANL Reg BG LVL	4.59	2.2	0.133	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C4	24	25	9/25/2000	4.37	6	5.15	25	White Rock Canyon and Rio Grande	Regional Spring	R-23i S29	0	10/1/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	5.86	1.1	LANL Reg BG LVL	2.7	2.2	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C4	18	19	9/27/2005	5.52	7.45	5.95	19	White Rock Canyon and Rio Grande	Regional Spring	R-23i S30	0	10/1/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	7.45	1.3	LANL Reg BG LVL	2.7	2.8	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C4	67	79	5/17/2005	2.27	7.43	5.38	79	Sandia Canyon	Regional Top	R-23i S31	855	11/18/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.37	1	LANL Reg BG LVL	0.769	7	0.17	mg/L	10	NQ	NQ	EPA:353.2	GELC		
C4	67	79	5/17/2005	5.95	20.2	10.3	79	Sandia Canyon	Regional Top	R-23i S32	855	11/18/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	10	1	LANL Reg BG LVL	4.59	2.2	0.133	mg/L	1	J+	I6b	EPA:300.0	GELC		

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C4	55	64	2/24/2000	1.35	3.31	2.175	64	Mortandad Canyon	Regional Top	R-23i S33	958.6	11/8/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2	0.9	LANL Reg BG LVL	0.769	2.6	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C4	51	59	5/25/2005	5.34	12.3	7.71	59	Mortandad Canyon	Regional Top	R-23i S34	958.6	11/8/2019	REG	F	INIT	GENINORG	Perchlorate	ClO4	10.6	1.4	LANL Reg BG LVL	0.414	25.6	0.5	µg/L	10		NQ	NQ	SW-846:6850	GELC	
C4	26	26	3/11/2004	23.3	125	80.55	26	Pajarito Canyon	Regional Top	R-23i S35	904.6	10/23/2019	REG	F	INIT	METALS	Barium	Ba	120	1.5	LANL Reg BG LVL	38.1	3.1	1	µg/L	1		NQ	NQ	SW-846:6010C	GELC	
C4	43	49	3/12/2008	4.05	6.83	6.04	49	Sandia Canyon	Regional Top	R-23i S36	766.9	11/6/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	6.12	1	LANL Reg BG LVL	2.7	2.3	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C4	43	50	3/12/2008	1.25	6.8	2.405	50	Sandia Canyon	Regional Top	R-23i S37	766.9	11/6/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.6	1.1	LANL Reg BG LVL	0.769	3.4	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C4	42	48	3/12/2008	0.845	1.74	1.53	48	Sandia Canyon	Regional Top	R-23i S38	766.9	11/6/2019	REG	F	INIT	GENINORG	Perchlorate	ClO4	1.31	0.9	LANL Reg BG LVL	0.414	3.2	0.05	µg/L	1		NQ	NQ	SW-846:6850	GELC	
C4	44	51	11/5/2008	3.6	9.39	7.31	51	Sandia Canyon	Regional Top	R-23i S39	903.9	11/14/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	9.03	1.2	LANL Reg BG LVL	2.7	3.3	0.067	mg/L	1	J+	I6b	EPA:300.0	GELC		
C4	44	51	11/5/2008	3.6	9.39	7.31	51	Sandia Canyon	Regional Top	R-23i S40	903.9	11/14/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	8.96	1.2	LANL Reg BG LVL	2.7	3.3	0.067	mg/L	1	J+	I6b	EPA:300.0	GELC		
C4	44	56	11/5/2008	2.35	223	74	53	Sandia Canyon	Regional Top	R-23i S41	903.9	11/14/2019	REG	F	INIT	METALS	Chromium	Cr	223	2.8	LANL Reg BG LVL	7.48	27.4	3	µg/L	1		NQ	NQ	SW-846:6020B	GELC	
C4	44	56	11/5/2008	2.35	223	74	53	Sandia Canyon	Regional Top	R-23i S42	903.9	11/14/2019	REG	F	INIT	METALS	Chromium	Cr	222	2.8	LANL Reg BG LVL	7.48	27.4	3	µg/L	1		NQ	NQ	SW-846:6020B	GELC	
C4	44	50	11/5/2008	4.9	6.15	5.38	49	Sandia Canyon	Regional Top	R-23i S43	903.9	11/14/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.01	0.9	LANL Reg BG LVL	0.769	6.5	0.17	mg/L	10		NQ	NQ	EPA:353.2	GELC	
C4	44	50	11/5/2008	4.9	6.15	5.38	49	Sandia Canyon	Regional Top	R-23i S44	903.9	11/14/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.1	0.9	LANL Reg BG LVL	0.769	6.6	0.85	mg/L	50		NQ	NQ	EPA:353.2	GELC	
C4	44	51	11/5/2008	8.77	21	15	51	Sandia Canyon	Regional Top	R-23i S45	903.9	11/14/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	18.7	1.2	LANL Reg BG LVL	4.59	4.1	0.133	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C4	44	51	11/5/2008	8.77	21	15	51	Sandia Canyon	Regional Top	R-23i S46	903.9	11/14/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	18.7	1.2	LANL Reg BG LVL	4.59	4.1	0.133	mg/L	1		NQ	NQ	EPA:300.0	GELC	

Table 1: NMED 12-19 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	Any 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	43	47	11/10/2008	3.37	7.39	4.635	47	Sandia Canyon	Regional Deep	R-23i S47	969	11/5/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	7.39	1.5	LANL Reg BG LVL	2.7	2.6	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C4	43	52	11/10/2008	1.80	32.4	6.32	52	Sandia Canyon	Regional Deep	R-23i S48	969	11/5/2019	REG	F	INIT	METALS	Chromium	Cr	32.10	5	LANL Reg BG LVL	7.48	4.2	3	µg/L	1	NQ	NQ	SW-846:6020B	GELC		
C4	43	46	11/10/2008	0.39	5.4	2.35	46	Sandia Canyon	Regional Deep	R-23i S49	969	11/5/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.18	1.6	LANL Reg BG LVL	0.769	4.9	0.17	mg/L	10	NQ	NQ	EPA:353.2	GELC		
C4	43	47	11/10/2008	0.41	0.953	0.688	47	Sandia Canyon	Regional Deep	R-23i S50	969	11/5/2019	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.90	1.3	LANL Reg BG LVL	0.414	2.2	0.05	µg/L	1	NQ	NQ	SW-846:6850	GELC		
C4	43	47	11/10/2008	3.96	10.8	6.715	47	Sandia Canyon	Regional Deep	R-23i S51	969.1	11/5/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	10.8	1.5	LANL Reg BG LVL	4.59	2.2	0.133	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C4	56	58	2/17/2009	1.99	20.3	2.39	58	Mortandad Canyon	Regional Top	R-23i S52	895	11/20/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	20.30	8.49	LANL Reg BG LVL	7.8	6.9	0.335	mg/L	5		NQ	EPA:300.0	GELC		
C4	56	58	2/17/2009	0.12	2.57	1.16	57	Mortandad Canyon	Regional Top	R-23i S53	895	11/20/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.44	2.10	LANL Reg BG LVL	0.769	3.5	0.17	mg/L	10		NQ	EPA:353.2	GELC		
C4	56	58	2/17/2009	2.76	19.8	3.45	58	Mortandad Canyon	Regional Top	R-23i S54	895	11/20/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	19.8	5.73	LANL Reg BG LVL	4.59	3.9	0.665	mg/L	5		NQ	EPA:300.0	GELC		
C4	56	62	2/28/2009	8.4	50.7	35	62	Mortandad Canyon	Regional Top	R-23i S55	880	11/19/2019	REG	F	INIT	INORGANIC	Chromium	Cr	31.9	1	LANL Reg BG LVL	7.48	4.3	3	µg/L	1	NQ	NQ	SW-846:6020B	GELC		
C4	55	58	2/28/2009	0.256	3.47	2.815	58	Mortandad Canyon	Regional Top	R-23i S56	880	11/19/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.43	0.9	LANL Reg BG LVL	0.769	3.2	0.085	mg/L	5	NQ	NQ	EPA:353.2	GELC		
C4	57	64	3/6/2010	4.68	19.6	9.185	64	Mortandad Canyon	Regional Top	R-23i S57	1077	11/19/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	19.6	2.1	LANL Reg BG LVL	2.7	7.3	0.335	mg/L	5	NQ	NQ	EPA:300.0	GELC		
C4	58	66	3/6/2010	40.5	150	43.6	66	Mortandad Canyon	Regional Top	R-23i S58	1077	11/19/2019	REG	F	INIT	INORGANIC	Chromium	Cr	40.5	0.9	LANL Reg BG LVL	7.48	5.4	3	µg/L	1	NQ	NQ	SW-846:6020B	GELC	Lowest detection to date at this location	
C4	57	65	3/6/2010	0.398	2.94	1.99	65	Mortandad Canyon	Regional Top	R-23i S59	1077	11/19/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.44	1.2	LANL Reg BG LVL	0.769	3.2	0.085	mg/L	5	NQ	NQ	EPA:353.2	GELC		
C4	57	64	3/6/2010	7.22	20.2	13.35	64	Mortandad Canyon	Regional Top	R-23i S60	1077	11/19/2019	REG	F	INIT	GENINORG	Sulfate	SO4(-2)	20.2	1.5	LANL Reg BG LVL	4.59	4.4	0.665	mg/L	5	NQ	NQ	EPA:300.0	GELC		

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Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	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	29	35	3/26/2012	1.64	18.8	9.2	35	Sandia Canyon	Regional Top	R-23i S61	1158.4	11/12/2019	REG	F	INIT	GENINORG	Chloride	Cl(-1)	18	2	LANL Reg BG LVL	2.7	6.7	0.335	mg/L	5	NQ	NQ	EPA:300.0	GELC		
C4	29	35	3/26/2012	104	311	168	35	Sandia Canyon	Regional Top	R-23i S62	1158.4	11/12/2019	REG	F	INIT	INORGANIC	Chromium	Cr	287	1.70	NM GW STD	50	5.7	3	µg/L	1	NQ	NQ	SW-846:6020B	GELC		
C4	29	35	3/26/2012	0.0685	2.25	1.34	35	Sandia Canyon	Regional Top	R-23i S63	1158.4	11/12/2019	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.08	1.6	LANL Reg BG LVL	0.769	2.7	0.085	mg/L	5	NQ	NQ	EPA:353.2	GELC		
C4	29	35	3/26/2012	0.719	0.903	0.805	35	Sandia Canyon	Regional Top	R-23i S64	1158.4	11/12/2019	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.903	1.1	LANL Reg BG LVL	0.414	2.2	0.05	µg/L	1	NQ	NQ	SW-846:6850	GELC		

Table 2: NMED 12-19 Groundwater Report Addendum

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Canyon	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std MDL	Std UOM	Dilution Factor	Lab Qualifier	Validation Qualifier	Validation Reason Code	Anyl Meth Code	Lab Code	Comment
XC2scr	55	60	8/30/2007	0.136	0.136	0.136	1	Sandia Canyon	Regional Deep	R-35a	1013.1	11/18/2019	REG	F	INIT	METALS	Mercury	Hg	0.136	1	Reg-Scr_95	0.067	2	0.067	µg/L	1	J	J	J_LAB	SW-846:7470A	GELC	Focused validation and assessment of the result are ongoing.
XC2scr	56	59	3/11/2010	4.8	4.8	4.8	1	Mortandad Canyon	Regional Deep	R-50 S2	1185	11/19/2019	REG	F	INIT	METALS	Copper	Cu	4.8	1	Reg-Scr_95	3	1.6	3	µg/L	1	J	J	J_LAB	SW-846:6010C	GELC	
XC2scr	35	38	3/31/2004	0.17	0.17	0.17	1	Mortandad Canyon	Regional Top	R-21	888.8	10/24/2019	REG	F	INIT	METALS	Mercury	Hg	0.17	1	Reg-Scr_95	0.067	2.5	0.067	µg/L	1	J	J	J_LAB	SW-846:7470A	GELC	Focused validation and assessment of the result are ongoing.
XC2scr	20	22	4/1/2009	0.0179	0.106	0.0707	5	Mortandad Canyon	Regional Top	R-41 S2	965.3	10/17/2019	REG	F	INIT	GENINORG	Ammonia as Nitrogen	NH3-N	0.106	1.5	Reg-Scr_95	0.1	1.1	0.017	mg/L	1		NQ	NQ	EPA:350.1	GELC	
XC4scr	57	77	6/15/2005	25.4	56	47	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	METALS	Boron	B	50.7	1.1	Int-Scr_95	16.2	3.1	15	µg/L	1		NQ	NQ	SW-846:6010C	GELC	
XC4scr	57	77	6/15/2005	0.212	0.703	0.571	74	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.524	0.9	Int-Scr_95	0.071	7.3	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
XC4scr	57	80	6/15/2005	29.4	86.6	60.9	80	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	INORGANIC	Chromium	Cr	66.5	1.1	Int-Scr_95	2.72	24.4	3	µg/L	1		NQ	NQ	SW-846:6020B	GELC	
XC4scr	57	77	6/15/2005	298	527	404	77	Mortandad Canyon	Intermediate Perched	MCOI-6	686	11/14/2019	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	374	0.9	Int-Scr_95	135	2.8	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
XC4scr	34	35	1/11/2007	40.8	99.4	82.6	34	Sandia Canyon	Intermediate Perched	SCI-1	358.4	11/15/2019	REG	F	INIT	METALS	Boron	B	74.6	0.9	Int-Scr_95	16.2	4.6	15	µg/L	1		NQ	NQ	SW-846:6010C	GELC	
XC4scr	34	35	1/11/2007	0.585	1.53	0.94	34	Sandia Canyon	Intermediate Perched	SCI-1	358.4	11/15/2019	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.695	0.7	Int-Scr_95	0.071	9.7	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
XC4scr	36	39	1/11/2007	357	536	481	39	Sandia Canyon	Intermediate Perched	SCI-1	358.4	11/15/2019	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	424	0.9	Int-Scr_95	135	3.1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
XC4scr	34	35	1/11/2007	0.404	1.45	0.9	34	Sandia Canyon	Intermediate Perched	SCI-1	358.4	11/15/2019	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	1.33	1.5	Int-Scr_95	0.178	7.5	0.02	mg/L	1		NQ	NQ	EPA:365.4	GELC	
XC4scr	44	56	10/21/2008	0.194	0.846	0.612	55	Sandia Canyon	Intermediate Perched	SCI-2	548	11/15/2019	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.765	1.3	Int-Scr_95	0.071	10.7	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
XC4scr	44	63	10/21/2008	265	658	440.5	63	Sandia Canyon	Intermediate Perched	SCI-2	548	11/15/2019	REG	F	INIT	METALS	Chromium	Cr	268	0.6	Int-Scr_95	2.72	101.5	3	µg/L	1		NQ	NQ	SW-846:6020B	GELC	
XC4scr	29	35	8/4/2009	0.0041	0.00983	0.00665	35	Sandia Canyon	Intermediate Perched	SCI-2	548	11/15/2019	REG	UF	INIT	INORGANIC	Cyanide (Total)	CN(TO TAL)	0.004	0.7	Int-Scr_95	0.001	2.8	0.002	mg/L	1	J	J	J_LAB	EPA:335.4	GELC	
XC4scr	44	57	10/21/2008	354	796	426	57	Sandia Canyon	Intermediate Perched	SCI-2	548	11/15/2019	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	457	1.1	Int-Scr_95	135	3.4	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	

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XC4scr	28	31	3/10/2004	38.5	382	72.7	31	Pajarito Canyon	Regional Deep	R-20 S2	1147.1	10/17/2019	REG	F	INIT	METALS	Manganese	Mn	64.4	0.9	Reg-Scr_95	12.1	5.3	2	µg/L	1	NQ	NQ	SW-846:6010C	GELC		
XC4scr	21	24	2/19/2009	3.5	88.2	23.3	15	Pajarito Canyon	Regional Top	R-39	859.03	10/23/2019	REG	F	INIT	METALS	Zinc	Zn	31.8	1.4	Reg-Scr_95	14.4	2.2	3.3	µg/L	1	J+	I4a	SW-846:6010C	GELC		
XC4scr	29	35	3/26/2012	0.0706	0.202	0.1115	30	Sandia Canyon	Regional Top	R-62	1158.4	11/12/2019	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.154	1.4	Reg-Scr_95	0.067	2.3	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	