

# DEPARTMENT OF ENERGY

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

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



AUG 2 7 2019

Dear Mr. Kieling:

Subject:

Monthly Notification of Groundwater Data Reviewed in August 2019

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 (Consent Order). Members of EM-LA and N3B met on August 15, 2019, to review groundwater data received in July 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  $1 \times 10^{-5}$ , as specified in the Consent Order.

The enclosed report was prepared using the May 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.

This report also includes analytical data from samples collected at locations within the Pueblo de San Ildefonso, which are subject to reporting at this time. These data have been reviewed by the Pueblo. This review is required under the Memorandum of Agreement dated May 28, 2014, between the DOE National Nuclear Security Administration Los Alamos Field Office and San Ildefonso Pueblo.

## 1-Day Notification

There was one instance 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 Consent Order (based on samples collected since June 14, 2007).

In an unfiltered sample collected on June 16, 2019, from intermediate perched well R-9i screen 2, phenol was measured at 6.7 µg/L, above the 5-µg/L NMWQCC groundwater standard.

# 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 given 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) 665-5046 (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 August 2019 That Meet Notification Requirements (EM2019-0334)

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

H. Burgess, Los Alamos County, Los Alamos, NM (2 copies)

cc (letter and enclosure[s] emailed):

- L. King, EPA Region 6, Dallas, TX
- R. Martinez, San Ildefonso Pueblo, NM
- D. Chavarria, Santa Clara Pueblo, NM
- D. Gomez, Los Alamos County, Los Alamos, NM
- M. Hunter, NMED
- S. Pullen, NMED
- A.C. Romero, NMED
- M. Sandoval, NMED
- S. Yanicak, NMED
- J. Buckley, LANL
- L. Dale, LANL
- B. Iacona, LANL
- W. Mairson, LANL
- J. Meadows, LANL
- E. Torres, LANL

- W. Alexander, N3B
- E. Day, N3B
- M. Ding, N3B
- M. Erwin, N3B
- E. Evered, N3B
- D. Holgerson, N3B
- L. Huntoon, N3B
- D. Katzman, N3B
- K. Lebak, N3B
- J. Legare, N3B
- F. Lockhart, N3B
- E. Lowes, N3B
- P. Maestas, N3B
- J. Moore, N3B
- G. Morgan, N3B
- L. Patten, N3B
- G. Pool, N3B
- B. Robinson, N3B
- S. Veenis, N3B
- T. Vigil, N3B
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- K. Armijo, NA-LA
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EM-LA-40AD-00485

# SUMMARY OF GROUNDWATER DATA REVIEWED IN AUGUST 2019 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 2019 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 07-19 Groundwater Report, presents results since June 14, 2007, that met the five reporting criteria as specified in the 2016 Consent Order. Table 2, NMED 07-19 Groundwater Report Addendum, presents results that exceed the 95<sup>th</sup> 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<sup>-5</sup>, as specified in the 2016 Consent Order. This report was prepared using the May 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 95<sup>th</sup> 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 represents the date that shows 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 water quality standard or MCL in the well screen interval or spring. N3B, under the U.S. Department of Energy Office of Environmental Management, 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" (February 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 95<sup>th</sup> percentile in a spring or screened interval of a well if that contaminant has not previously exceeded the 95<sup>th</sup> 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 95<sup>th</sup> 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 qualifiers 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** 

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 screen level for tap water

NTU—nephelometric turbidity unit

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-trinitroxylene

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.

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.

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.

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

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.

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 7-19 Groundwater Report

| Та            | ble 1: | NMI     | ED 7-19 Gr  | oundwa     | ater Re    | port          |            |                               |                         |          |              |            |                  |               |                      |                 |                             |             |            |               |                            |              |                  |         |         |                 |               |                      |                        |                |          |         |
|---------------|--------|---------|-------------|------------|------------|---------------|------------|-------------------------------|-------------------------|----------|--------------|------------|------------------|---------------|----------------------|-----------------|-----------------------------|-------------|------------|---------------|----------------------------|--------------|------------------|---------|---------|-----------------|---------------|----------------------|------------------------|----------------|----------|---------|
| 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            | 9      | 10      | 4/2/2001    | 1.87       | 2.41       | 2.14          | 2          | Upper<br>Los Alamos<br>Canyon | Alluvial                | LAUZ-1   | 5.35         | 6/19/2019  | FD               | UF            | INIT                 | voc             | Acetone                     | 67-64-1     | 2.41       | 1.1           | NMED A1<br>TAP SCRN<br>LVL | 14100        | 0                | 1.5     | μg/L    | 1               | J             | J J_I                | LAB                    | SW-846:8260B   | GELC     |         |
| C1            | 9      | 10      | 4/2/2001    | 1.87       | 2.41       | 2.14          | 2          | Upper<br>Los Alamos<br>Canyon | Alluvial                | LAUZ-1   | 5.35         | 6/19/2019  | REG              | UF            | INIT                 | voc             | Acetone                     | 67-64-1     | 1.87       | 0.9           | NMED A1<br>TAP SCRN<br>LVL | 14100        | 0                | 1.5     | μg/L    | 1               | J             | J J_I                | LAB                    | SW-846:8260B   | GELC     |         |
| C1            | 7      | 8       | 9/14/2000   | 1.12       | 1.19       | 1.155         | 2          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.1        | 6/26/2019  | FD               | UF            | INIT                 | voc             | Toluene                     | 108-88-3    | 1.19       | 1             | NM GW<br>STD               | 1000         | 0                | 0.3     | μg/L    | 1               |               | NQ NO                | ) ;                    | SW-846:8260B   | GELC     |         |
| C1            | 7      | 8       | 9/14/2000   | 1.12       | 1.19       | 1.155         | 2          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.1        | 6/26/2019  | REG              | UF            | INIT                 | voc             | Toluene                     | 108-88-3    | 1.12       | 1             | NM GW<br>STD               | 1000         | 0                | 0.3     | μg/L    | 1               |               | NQ NC                | ) ;                    | SW-846:8260B   | GELC     |         |
| C1            | 4      | 4       | 9/15/2000   | 5.71       | 5.71       | 5.71          | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG              | UF            | INIT                 | voc             | Acetone                     | 67-64-1     | 5.71       | 1             | NMED A1<br>TAP SCRN<br>LVL | 14100        | 0                | 1.5     | μg/L    | 1               | HJ .          | J J_I                | LAB S                  | SW-846:8260B   | GELC     |         |
| C1            | 3      | 3       | 9/15/2000   | 3.64       | 3.64       | 3.64          | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG              | UF            | INIT                 | svoc            | Bis (2-ethylhexyl)phthalate | 117-81-7    | 3.64       | 1             | EPA MCL                    | 6            | 0.6              | 0.309   | μg/L    | 1               |               | NQ NG                | ζ ;                    | SW-846:8270D   | GELC     |         |
| C1            | 4      | 4       | 9/15/2000   | 6.93       | 6.93       | 6.93          | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG              | UF            | INIT                 | voc             | Butanone[2-]                | 78-93-3     | 6.93       | 1             | NMED A1<br>TAP SCRN<br>LVL | 5560         | 0                | 1.5     | μg/L    | 1               | Н             | NQ NC                | ) ;                    | SW-846:8260B   | GELC     |         |
| C1            | 3      | 3       | 9/15/2000   | 0.34       | 0.34       | 0.34          | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG              | UF            | INIT                 | svoc            | Di-n-butylphthalate         | 84-74-2     | 0.34       | 1             | NMED A1<br>TAP SCRN<br>LVL | 885          | 0                | 0.309   | μg/L    | 1               | J .           | J J_I                | LAB                    | SW-846:8270D   | GELC     |         |
| C1            | 3      | 3       | 9/15/2000   | 5.64       | 5.64       | 5.64          | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG              | UF            | INIT                 | svoc            | Methylphenol[2-]            | 95-48-7     | 5.64       | 1             | EPA TAP<br>SCRN LVL        | 930          | 0                | 3.09    | μg/L    | 1               | J             | J J_I                | LAB S                  | SW-846:8270D   | GELC     |         |
| C1            | 1      | 1       | 6/16/2019   | 4.76       | 4.76       | 4.76          | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG              | UF            | INIT                 | svoc            | Methylphenol[3-,4-]         | 65794-96-9  | 4.76       | 1             |                            |              |                  | 3.81    | μg/L    | 1               | J             | J J_I                | LAB                    | SW-846:8270D   | GELC     |         |
|               |        |         | 9/15/2000   |            |            | 6.7           | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          |            | REG              |               |                      | svoc            | Phenol                      | 108-95-2    | 6.70       | 1             | NM GW<br>STD               |              |                  | 3.09    |         |                 | J             |                      |                        | SW-846:8270D   |          |         |
| C1            | 4      | 4       | 9/15/2000   | 371.00     | 371        | 371           | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG              | UF            | DL                   | voc             | Toluene                     | 108-88-3    | 371.00     | 1             | NM GW<br>STD               | 1000         | 0.5              | 3       | μg/L    | 10              | Н             | NQ NG                | ) ;                    | SW-846:8260B   | GELC     |         |
| C1            | 2      | 2       | 8/24/2010   | 0.54       | 0.54       | 0.54          | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG              | UF            | INIT                 | voc             | Xylene[1,3-] +Xylene[1,4-]  | Xylene[m+p] | 0.54       | 1             | NMED A1<br>TAP SCRN<br>LVL |              | 0                |         | μg/L    |                 | HJ .          | _                    | LAB                    | SW-846:8260B   | GELC     |         |
| C1            | 3      | 4       | 2/13/2019   | 0.44       | 0.44       | 0.44          | 1          | Water<br>Canyon               | Regional                | R-69 S2  | 1376         | 6/6/2019   | REG              | UF            | INIT                 | svoc            | Di-n-butylphthalate         | 84-74-2     | 0.44       | 1             | NMED A1<br>TAP SCRN<br>LVL | 885          | 0                | 0.3     | μg/L    | 1               | J             | J J_I                | LAB S                  | SW-846:8270D   | GELC     |         |

EM2019-0334 5 August 2019

Table 1: NMED 7-19 Groundwater Report

|               |        | ED 1-19 G   | · oanan    | u.c        | P 0. C        |            |  |                         |                           |              |            |                  |           |  |                             |                  |            |                                     |              |                  |         |         |                 |               |   |                |          |         |
|---------------|--------|-------------|------------|------------|---------------|------------|--|-------------------------|---------------------------|--------------|------------|------------------|-----------|--|-----------------------------|------------------|------------|-------------------------------------|--------------|------------------|---------|---------|-----------------|---------------|---|----------------|----------|---------|
| Criteria Code | Visits | First Event | Min Detect | Max Detect | Median Detect | Num Detect | Canyon                                 | Zone                    | Location                  | Screen Depth | Start Date | Fld QC Type Code | Prep Code | Lab Sample I ype Code<br>Anyl Suite Code | Analyte Desc                | Analyte          | Std Result | Result/Median<br>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            | 5 7    | 11/15/2001  | 1.40       | 2.96       | 2.18          | 2          | Pueblo<br>Canyon                       | Regional<br>Deep        | R-5 S4                    | 859          | 7/2/2019   | REG              | UF IN     | IT SVOC                                  | Bis(2-ethylhexyl)phthalate  | 117-81-7         | 2.96       | 1.4 EPA MCL                         | 6            | 0.5              | 0.313 μ | ıg/L    | 1               | NC            | Q NQ  | SW-846:8270D   | GELC     |         |
| C1 (          | 8      | 11/15/2001  | 13.90      | 13.9       | 13.9          | 1          | Pueblo<br>Canyon                       | Regional<br>Deep        | R-5 S4                    | 859          | 7/2/2019   | REG              | UF INI    | IT VOC                                   | Toluene                     | 108-88-3         | 13.90      | 1 NM GW<br>STD                      | 1000         | 0                | ۵.3 ل   | ıg/L    | 1               | NC            | NQ  | SW-846:8260B   | GELC     |         |
| C1 8          | 8      | 2/23/2004   | 3.54       | 3.54       | 3.54          | 1          | Upper<br>Los Alamos<br>Canyon          | _                       | R-8 S2                    | 821          | 7/13/2019  | REG              | UF INI    | IT VOC                                   | Toluene                     | 108-88-3         | 3.54       | 1 NM GW<br>STD                      | 1000         | 0                | 0.3 µ   | ıg/L    | 1               | NO            | Q NQ  | SW-846:8260B   | GELC     |         |
| C2            | 1 12   | 8/29/2008   | 0.20       | 0.368      | 0.243         | 5          | Upper<br>Los Alamos<br>Canyon          | Intermediate<br>Perched | R-9i S1                   | 189          | 6/26/2019  | FD               | F IN      | IT GENINORO                              | Perchlorate                 | CIO4             | 0.37       | 1.5 LANL Int<br>BG LVL              | 0.27         | 1.4              | 0.05 µ  | ıg/L    | 1               | NC            | Q NQ  | SW-846:6850    | GELC     |         |
| C2            | 1 12   | 8/29/2008   | 0.20       | 0.368      | 0.243         | 5          | Upper<br>Los Alamos<br>Canyon          | Intermediate<br>Perched | R-9i S1                   | 189          | 6/26/2019  | REG              | F INI     | IT GENINORO                              | Perchlorate                 | CIO4             | 0.37       | 1.5 LANL Int<br>BG LVL              | 0.27         | 1.4              | 0.05 µ  | ıg/L    | 1               | NO            | Q NQ  | SW-846:6850    | GELC     |         |
| C1            | 0 11   | 10/23/2001  | 0.31       | 0.31       | 0.31          | 1          | White Rock<br>Canyon and<br>Rio Grande | Regional<br>Spring      | La Mesita<br>Spring       | 0            | 10/10/2018 | REG              | UF INI    | IT SVOC                                  | Di-n-butylphthalate         | 84-74-2          | 0.31       | 1 NMED A1<br>TAP SCRN<br>LVL        |              | 0                | 0.3 µ   | ıg/L    | 1 J             | J             | J_LAE                                       | SW-846:8270D   | GELC     |         |
| C1            | 2 13   | 10/23/2001  | 0.4        | 0.4        | 0.4           | 1          | White Rock<br>Canyon and<br>Rio Grande | -                       | La Mesita<br>Spring       | 0            | 10/10/2018 | REG              | UF INI    | IT VOC                                   | Toluene                     | 108-88-3         | 0.4        | 1 NM GW<br>STD                      | 1000         | 0                | 0.3 µ   | ıg/L    | 1 J             | J             | J_LAE                                       | SW-846:8260B   | GELC     |         |
| C1 :          | 2 2    | 10/3/2017   | 1.04       | 1.04       | 1.04          | 1          | White Rock<br>Canyon and<br>Rio Grande |                         | Lower<br>Sandia<br>Spring | 0            | 10/11/2018 | REG              | UF INI    | IT VOC                                   | Dichlorobenzene[1,3-]       | 541-73-1         | 1.04       | 1                                   |              |                  | 0.3     | ıg/L    | 1               | NO            | Q NQ  | SW-846:8260B   | GELC     |         |
| C1 :          | 2 2    | 10/3/2017   | 0.57       | 0.57       | 0.57          | 1          | White Rock<br>Canyon and<br>Rio Grande | _                       | Lower<br>Sandia<br>Spring | 0            | 10/11/2018 | REG              | UF INI    | IT VOC                                   | Toluene                     | 108-88-3         | 0.57       | 1 NM GW<br>STD                      | 1000         | 0                | ۵.3 ل   | ıg/L    | 1 J             | J             | J_LAE                                       | SW-846:8260B   | GELC     |         |
| C1 :          | 24 30  | 11/30/2005  | 0.459      | 2.85       | 2.555         | 4          | Sandia<br>Canyon                       | Regional<br>Top         | R-10a                     | 690          | 11/14/2018 | REG              | UF IN     | IT SVOC                                  | Bis(2-ethylhexyl)phthalate  | 117-81-7         | 0.459      | 0.2 EPA MCL                         | 6            | 0.1              | 0.306 µ | ıg/L    | 1 J             | J             | J_LAE                                       | SW-846:8270D   | GELC     |         |
| C1 :          | 21 25  | 6/7/2005    | 1.79       | 5.44       | 2.96          | 3          | Mortandad<br>Canyon                    | Regional<br>Top         | R-34                      | 883.7        | 11/15/2018 | REG              | UF INI    | IT VOC                                   | Acetone                     | 67-64-1          | 5.44       | 1.8 NMED A1<br>TAP SCRN<br>LVL      |              | 0                | 1.5 µ   | ıg/L    | 1 J             | J             | J_LAE                                       | SW-846:8260B   | GELC     |         |
| C2            | 1 11   | 9/15/2000   | 9.94       | 29.1       | 10.8          | 11         | Upper<br>Los Alamos<br>Canyon          | Intermediate<br>Perched | R-9i S2                   | 270          | 6/16/2019  | REG              | F INI     | IT GENINORO                              | Sodium                      | Na               | 29.10      | 2.7 LANL Int<br>BG LVL              | 18.2         | 1.6              | 0.1 r   | ng/L    | 1               | NC            | Q NQ  | SW-846:6010C   | GELC     |         |
| C2 :          | 3 4    | 2/13/2019   | 54.00      | 107        | 54.7          | 4          | Water<br>Canyon                        | Regional                | R-69 S2                   | 1376         | 6/6/2019   | REG              | F IN      | IT GENINORO                              | Alkalinity-CO3+HCO3         | ALK-CO3<br>+HCO3 | 107.00     | 2 LANL Reg<br>BG LVL                | 72.9         | 1.5              | 1.45 r  | ng/L    | 1               | NO            | Q NQ  | EPA:310.1      | GELC     |         |
| C2            | 0 10   | 11/14/2001  | 0.01       | 2.67       | 0.273         | 9          | Pueblo<br>Canyon                       | Regional<br>Deep        | R-5 S4                    | 859          |            | REG              |           |  | Nitrate-Nitrite as Nitrogen | NO3+NO2-N        | 2.67       | 9.8 LANL Reg<br>BG LVL              |              |                  | 0.17 r  | ng/L    | 10              | NO            | Q NQ  | EPA:353.2      | GELC     |         |
| C2            | 0 10   | 7/27/2006   | 0.25       | 1.46       | 0.286         | 10         | Pueblo<br>Canyon                       | Regional<br>Deep        | R-5 S4                    | 859          | 7/2/2019   | REG              |           | IT GENINORO                              |                             | CIO4             | 1.46       | 5.1 LANL Reg<br>BG LVL              | 0.414        | 3.5              | 0.05 µ  | ıg/L    | 1               |               | Q NQ  | SW-846:6850    | GELC     |         |
| C2            | 20 21  | 4/26/2005   | 0.16       | 0.47       | 0.261         | 21         | Pueblo<br>Canyon                       | Regional<br>Top         | R-2                       | 906          | 6/26/2019  | REG              | F INI     | IT GENINORO                              | Fluoride                    | F(-1)            | 0.47       | 1.8 LANL Reg<br>BG LVL              | 0.377        | 1.2              | 0.033 r | ng/L    | 1               | NO            | Q NQ  | EPA:300.0      | GELC     |         |

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|               | 10 1.14 | WED 7-19 Gr            | ounavi     | atol Ito   | port          |            |                               |                         |          |              |            |                  |                      |                 |                             |                  |            |               |                    |              |                  |         |         |                 |   |                      |                        |                |          |                  |
|---------------|---------|------------------------|------------|------------|---------------|------------|-------------------------------|-------------------------|----------|--------------|------------|------------------|----------------------|-----------------|-----------------------------|------------------|------------|---------------|--------------------|--------------|------------------|---------|---------|-----------------|---|----------------------|------------------------|----------------|----------|------------------|
| Criteria Code | Visits  | Samples<br>First Event | Min Detect | Max Detect | Median Detect | Num Detect | Canyon                        | Zone                    | Location | Screen Depth | Start Date | FId QC Type Code | Lab Sample Type Code | Anyl Suite Code | Analyte Desc                | Analyte          | Std Result | Result/Median | LVL Type/Risk Code | Screen Level | Exceedance Ratio | Std MDL | Std UOM | Dilution Factor | e | Validation Qualifier | Validation Reason Code | Anyl Meth Code | Lab Code | Comment          |
| C2            | 5 6     | 5/30/2001              | 0.33       | 0.513      | 0.396         | 5          | Upper<br>Los Alamos<br>Canyon | Regional<br>Top         | R-7 S3   | 896          | 6/23/2019  | REG F            | INIT                 | GENINORG        | Fluoride                    | F(-1)            | 0.51       | 1.3           | LANL Reg<br>BG LVL | 0.377        | 1.4              | 0.033   | mg/L    | 1               | N | Q N                  | Q                      | EPA:300.0      | GELC     |                  |
| СЗ            | 15 15   | 8/8/2006               | 1.86       | 7.97       | 3.98          | 11         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | METALS          | Arsenic                     | As               | 7.97       | 2             | NM GW<br>STD       | 10           | 0.8              | ?       | µg/L    | 1               | N | Q N                  | Q                      | SW-846:6020    | GELC     |                  |
| C3            | 3 3     | 9/15/2000              | 3.64       | 3.64       | 3.64          | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG UF           | INIT                 | svoc            | Bis(2-ethylhexyl)phthalate  | 117-81-7         | 3.64       | 1             | EPA MCL            | 6            | 0.6              | 0.309   | μg/L    | 1               | N | Q N                  | Q                      | SW-846:8270D   | GELC     |                  |
| C3            | 3 3     | 9/15/2000              | 6.70       | 6.7        | 6.7           | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 270          | 6/16/2019  | REG UF           | INIT                 | SVOC            | Phenol                      | 108-95-2         | 6.70       | 1             | NM GW<br>STD       | 5            | 1.3              | 3.09    | µg/L    | 1 J             | J | J_                   | _LAB                   | SW-846:8270D   | GELC     |                  |
| C3            | 11 11   | 11/14/2001             | 0.21       | 1.15       | 0.348         | 11         | Pueblo<br>Canyon              | Regional<br>Deep        | R-5 S4   | 859          | 7/2/2019   | REG F            | INIT                 | GENINORG        | Fluoride                    | F(-1)            | 1.15       | 3.3           | NM GW<br>STD       | 1.6          | 0.7              | 0.033   | mg/L    | 1               | N | Q N                  | Q                      | EPA:300.0      | GELC     |                  |
| СЗ            | 36 42   | 5/20/2011              | 2.03       | 39.1       | 19.8          | 41         | Mortandad<br>Canyon           | Regional<br>Top         | R-61 S1  | 1125         | 6/6/2019   | REG F            | INIT                 | METALS          | Chromium                    | Cr               | 39.10      | 2             | NM GW<br>STD       | 50           | 0.8              | 3       | μg/L    | 1               | N | Q N                  | Q                      | SW-846:6020    | GELC     |                  |
| C3            | 10 11   | 6/29/2006              | 0.104      | 0.104      | 0.104         | 1          | Sandia<br>Canyon              | Regional<br>Deep        | R-10 S2  | 1042         | 11/14/2018 | REG UF           | INIT                 | INORGANIC       | Cyanide (Total)             | CN(TOTAL)        | 0.104      | 1             | EPA MCL            | 0.2          | 0.5              | 0.002   | mg/L    | 1               | N | Q N                  | Q                      | EPA:335.4      | GELC     | FD was nondetect |
| СЗ            | 34 40   | 11/30/2005             | 1.6        | 5.19       | 2.325         | 22         | Sandia<br>Canyon              | Regional<br>Top         | R-10a    | 690          | 11/14/2018 | REG F            | INIT                 | METALS          | Arsenic                     | As               | 5.19       | 2.2           | EPA MCL            | 10           | 0.5              | 2       | μg/L    | 1               | N | Q N                  | Q                      | SW-846:6020    | GELC     |                  |
| C4            | 16 16   | 8/8/2006               | 141.00     | 296        | 170.5         | 16         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | GENINORG        | Alkalinity-CO3+HCO3         | ALK-CO3<br>+HCO3 | 170.00     | 1             | LANL Int<br>BG LVL | 62           | 2.7              | .45     | mg/L    | 1               | N | Q N                  | Q                      | EPA:310.1      | GELC     |                  |
| C4            | 15 15   | 8/8/2006               | 95.10      | 117        | 111           | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | METALS          | Barium                      | Ва               | 117.00     | 1.1           | LANL Int<br>BG LVL | 13.5         | 8.7              |         | μg/L    | 1               | N | Q N                  | Q                      | SW-846:6010C   | GELC     |                  |
| C4            | 15 15   | 8/8/2006               | 39.20      | 53         | 48.2          | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | GENINORG        | Calcium                     | Са               | 46.60      | 1             | LANL Int<br>BG LVL | 10.7         | 4.4              | ).05    | mg/L    | 1               | N | Q N                  | Q                      | SW-846:6010C   | GELC     |                  |
| C4            | 16 16   | 8/8/2006               | 42.5       | 50.4       | 47.1          | 16         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | GENINORG        | Chloride                    | CI(-1)           | 50         | 1.1           | LANL Int<br>BG LVL | 3.11         | 16.1             | ).67    | mg/L    | 10              | N | Q N                  | Q                      | EPA:300.0      | GELC     |                  |
| C4            | 15 15   | 8/8/2006               | 141        | 184        | 171           | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | GENINORG        | Hardness                    | HARDNESS         | 167        | 1             | LANL Int<br>BG LVL | 37.8         | 4.4              | ).453   | mg/L    | 1               | N | Q N                  | Q                      | SM:A2340B      | GELC     |                  |
| C4            | 15 15   | 8/8/2006               | 10.40      | 13.2       | 12.2          | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | GENINORG        | Magnesium                   | Mg               | 12.20      | 1             | LANL Int<br>BG LVL | 3.14         | 3.9              | ).11    | mg/L    | 1               | N | Q N                  | Q                      | SW-846:6010C   | GELC     |                  |
| C4            | 15 15   | 8/8/2006               | 7.63       | 11.4       | 9.89          | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | METALS          | Nickel                      | Ni               | 7.63       | 0.8           | LANL Int<br>BG LVL | 3.65         | 2.1              | ).6     | μg/L    | 1               | N | Q N                  | Q                      | SW-846:6020    | GELC     |                  |
| C4            | 17 17   | 5/7/2005               | 3.16       | 7.65       | 4.15          | 17         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | GENINORG        | Nitrate-Nitrite as Nitrogen | NO3+NO2-N        | 4.09       | 1             | LANL Int<br>BG LVL | 0.459        | 8.9              | 0.085   | mg/L    | 5               | N | Q N                  | Q                      | EPA:353.2      | GELC     |                  |
| C4            | 15 15   | 8/8/2006               | 8.30       | 9.23       | 8.78          | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | GENINORG        | Potassium                   | К                | 9.13       | 1             | LANL Int<br>BG LVL | 2.35         | 3.9              | 0.05    | mg/L    | 1               | N | Q N                  | Q                      | SW-846:6010C   | GELC     |                  |
| C4            | 15 15   | 8/8/2006               | 42.60      | 53         | 45.6          | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG F            | INIT                 | GENINORG        | Sodium                      | Na               | 46.70      | 1             | LANL Int<br>BG LVL | 18.2         | 2.6              | ).1     | mg/L    | 1               | N | Q N                  | Q                      | SW-846:6010C   | GELC     |                  |

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| 145           | 5 1. I <b>4</b> IV | IED 7-19 Gr | ounawe     | ater ite   | port          |            |                               |                         |          |              |            |                  |               |                      |                                      |                  |            |                                     |              |                  |         |         |                 |   |                |          |         |
|---------------|--------------------|-------------|------------|------------|---------------|------------|-------------------------------|-------------------------|----------|--------------|------------|------------------|---------------|----------------------|--------------------------------------|------------------|------------|-------------------------------------|--------------|------------------|---------|---------|-----------------|---|----------------|----------|---------|
| Criteria Code | Visits             | 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<br>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            | 15 15              | 8/8/2006    | 216.00     | 269        | 243           | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG              | F             | INIT                 | METALS Strontium                     | Sr               | 243.00     | 1 LANL Int<br>BG LVL                | 59.6         | 4.1              | 1       | μg/L    | 1               | NQ NQ   | SW-846:6010C   | GELC     |         |
| C4            | 16 16              | 8/8/2006    | 22.50      | 33         | 29.7          | 16         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG              | F             | INIT                 | GENINORG Sulfate                     | SO4(-2)          | 32.00      | 1.1 LANL Int<br>BG LVL              | 7.1          | 4.5              | 1.33    | mg/L    | 10              | NQ NQ   | EPA:300.0      | GELC     |         |
| C4            | 15 15              | 8/8/2006    | 1.17       | 3.6        | 2.83          | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG              | F             | INIT                 | GENINORG Uranium                     | U                | 2.41       | 0.9 LANL Int<br>BG LVL              | 0.992        | 2.4              | 0.067   | μg/L    | 1               | NQ NQ   | SW-846:6020    | GELC     |         |
| C4            | 17 20              | 8/10/2006   | 150.00     | 164        | 157           | 20         | Pueblo<br>Canyon              | Intermediate<br>Perched | R-3i     | 215          | 6/24/2019  | REG              | F             | INIT                 | GENINORG Alkalinity-CO3+HCO3         | ALK-CO3<br>+HCO3 | 160.00     | 1 LANL Int<br>BG LVL                | 62           | 2.6              | 1.45    | mg/L    | 1               | NQ NQ   | EPA:310.1      | GELC     |         |
|               |                    | 8/10/2006   | 94.50      | 107        | 98.25         | 18         | Pueblo<br>Canyon              | Intermediate<br>Perched | R-3i     | 215          | 6/24/2019  | REG              | F             | INIT                 | METALS Barium                        | Ва               | 96.90      | 1 LANL Int<br>BG LVL                | 13.5         | 7.2              | 1       | μg/L    | 1               | NQ NQ   | SW-846:6010C   |          |         |
|               |                    |             | 54.80      |            | 57.9          |            | Pueblo<br>Canyon              | Intermediate<br>Perched | R-3i     | 215          | 6/24/2019  | REG              |               |                      | GENINORG Calcium                     | Ca               | 56.40      | 1 LANL Int<br>BG LVL                |              |                  | 0.05    | mg/L    | 1               | NQ NQ   | SW-846:6010C   | GELC     |         |
|               |                    |             | 34.40      | 46.6       | 40.35         |            | Pueblo<br>Canyon              | Intermediate<br>Perched | R-3i     | 215          | 6/24/2019  | REG              |               |                      | GENINORG Chloride                    | CI(-1)           | 45.20      | 1.1 LANL Int<br>BG LVL              | 3.11         |                  |         | mg/L    | 10              | NQ NQ   | EPA:300.0      | GELC     |         |
|               |                    | 8/10/2006   | 179.00     | 219        | 210.5         | 18         | Pueblo<br>Canyon              | Intermediate<br>Perched | R-3i     | 215          | 6/24/2019  | REG              |               |                      | GENINORG Hardness                    | HARDNESS         | 204.00     | 1 LANL Int<br>BG LVL                |              |                  | 0.453   | mg/L    | 1               | NQ NQ   | SM:A2340B      | GELC     |         |
|               |                    | 8/10/2006   | 15.10      | 16.8       | 15.95         |            | Pueblo<br>Canyon              | Intermediate<br>Perched | R-3i     |              | 6/24/2019  | REG              |               |                      | GENINORG Magnesium                   | Mg               | 15.40      | 1 LANL Int<br>BG LVL                | 3.14         |                  |         | mg/L    | 1               | NQ NQ   | SW-846:6010C   |          |         |
| C4            | 17 20              | 8/10/2006   | 2.15       | 7.65       | 4.325         | 20         | Pueblo<br>Canyon              | Intermediate<br>Perched | R-3i     | 215          | 6/24/2019  | REG              |               |                      | GENINORG Nitrate-Nitrite as Nitrogen | NO3+NO2-N        | 3.69       | 0.9 LANL Int<br>BG LVL              | 0.459        | 8                | 0.17    | mg/L    | 10              | NQ NQ   | EPA:353.2      | GELC     |         |
|               |                    | 8/10/2006   | 0.10       | 3.45       | 2.25          | 20         | Pueblo<br>Canyon              | Intermediate<br>Perched | R-3i     |              | 6/24/2019  | REG              |               |                      | GENINORG Perchlorate                 | CIO4             | 1.55       | 0.7 LANL Int<br>BG LVL              |              |                  | 0.05    | μg/L    | 1               | NQ NQ   | SW-846:6850    | GELC     |         |
|               |                    | 8/10/2006   |            |            | 5.865         | 18         | Pueblo<br>Canyon              | Intermediate<br>Perched |          |              | 6/24/2019  | REG              |               |                      | GENINORG Potassium                   | K                | 5.23       | 0.9 LANL Int<br>BG LVL              |              |                  | 0.05    | mg/L    | 1               | NQ NQ   | SW-846:6010C   |          |         |
|               |                    | 8/10/2006   |            |            | 275           | 18         | Pueblo<br>Canyon              | Intermediate<br>Perched |          |              | 6/24/2019  | REG              |               |                      | METALS Strontium                     | Sr               | 259        | 0.9 LANL Int<br>BG LVL              | 59.6         | 4.3              | 1       | μg/L    | 1               | NQ NQ   |                | GELC     |         |
|               |                    |             | 20.1       |            |               |            | Pueblo<br>Canyon              | Intermediate<br>Perched |          |              | 6/24/2019  | REG              |               |                      | GENINORG Sulfate                     | SO4(-2)          | 28.6       | 1.1 LANL Int<br>BG LVL              | 7.1          | 4                |         | mg/L    | 10              | NQ NQ   | EPA:300.0      | GELC     |         |
|               |                    |             |            | 10.2       |               |            | Canyon                        | Intermediate<br>Perched |          |              |            | REG              |               |                      | GENINORG Uranium                     | U                | 7.19       | BG LVL                              | 0.992        |                  | 0.067   |         | 1               | NQ NQ   | SW-846:6020    | GELC     |         |
| C4            | 13 14              | 9/14/2000   | 37.4       | 72.6       | 54.9          |            | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.1        | 6/26/2019  | FD               | F             | INIT                 | METALS Barium                        | Ва               | 38.8       | 0.7 LANL Int<br>BG LVL              | 13.5         | 2.9              | 1       | µg/L    | 1               | NQ NQ   | SW-846:6010C   | GELC     |         |
| C4            | 13 14              | 9/14/2000   | 37.4       | 72.6       | 54.9          |            | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.1        | 6/26/2019  | REG              | F             | INIT                 | METALS Barium                        | Ва               | 37.4       | 0.7 LANL Int<br>BG LVL              | 13.5         | 2.8              | 1       | μg/L    | 1               | NQ NQ   | SW-846:6010C   | GELC     |         |
| C4            | 15 17              | 9/14/2000   | 24         | 54.2       | 39.05         |            | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.1        | 6/26/2019  | FD               | F             | INIT                 | GENINORG Chloride                    | CI(-1)           | 54.2       | 1.4 LANL Int<br>BG LVL              | 3.11         | 17.4             | 0.67    | mg/L    | 10              | NQ NQ   | EPA:300.0      | GELC     |         |

Table 1: NMED 7-19 Groundwater Report

| ıab           | e 1: N | MED 7-19 Gi            | rounav     | ater Ke    | port          |            |                               |                         |          |              |            |                  |                                       |                 |                             |           |            |               |                    |              |                  |         |                 |               |                      |                        |                |          |         |
|---------------|--------|------------------------|------------|------------|---------------|------------|-------------------------------|-------------------------|----------|--------------|------------|------------------|---------------------------------------|-----------------|-----------------------------|-----------|------------|---------------|--------------------|--------------|------------------|---------|-----------------|---------------|----------------------|------------------------|----------------|----------|---------|
| Criteria Code | Sit    | Samples<br>First Event | Min Detect | Max Detect | Median Detect | Num Detect | Canyon                        | Zone                    | Location | Screen Depth | Start Date | Fld QC Type Code | Fld Prep Code<br>Lab Sample Type Code | Anyl Suite Code | Analyte Desc                | Analyte   | Std Result | Result/Median | LVL Type/Risk Code | Screen Level | Exceedance Ratio | Std UOM | Dilution Factor | Lab Qualifier | Validation Qualifier | Validation Reason Code | Anyl Meth Code | Lab Code | Comment |
| C4            | 15 17  | 9/14/2000              | 24         | 54.2       | 39.05         |            | Upper<br>Los Alamos<br>Canyon |                         | R-9i S1  | 189.1        | 6/26/2019  | REG F            | INIT                                  | GENINORG        | Chloride                    | CI(-1)    | 53.4       | 1.4           | LANL Int<br>BG LVL | 3.11         | 17.2 0.6         | 7 mg/L  | 10              |               | NQ                   | NQ                     | EPA:300.0      | GELC     |         |
| C4            | 13 14  | 9/14/2000              | 5.6        | 8.84       | 7.095         | 14         | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.1        | 6/26/2019  | FD F             | INIT                                  | GENINORG        | Magnesium                   | Mg        | 6.78       | 1             | LANL Int<br>BG LVL | 3.14         | 2.2 0.1          | 1 mg/L  | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| C4            | 13 14  | 9/14/2000              | 5.6        | 8.84       | 7.095         | 14         | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.1        | 6/26/2019  | REG F            | INIT                                  | GENINORG        | Magnesium                   | Mg        | 6.63       | 0.9           | LANL Int<br>BG LVL | 3.14         | 2.1 0.1          | 1 mg/L  | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| C4            | 13 14  | 9/14/2000              | 7.45       | 21         | 11            | 14         | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.1        | 6/26/2019  | FD F             | INIT                                  | METALS          | Molybdenum                  | Мо        | 8.61       | 8.0           | LANL Int<br>BG LVL | 2.9          | 3 0.2            | μg/L    | 1               |               | NQ                   | NQ                     | SW-846:6020    | GELC     |         |
| C4            | 13 14  | 9/14/2000              | 7.45       | 21         | 11            | 14         | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.1        | 6/26/2019  | REG F            | INIT                                  | METALS          | Molybdenum                  | Мо        | 8.29       | 8.0           | LANL Int<br>BG LVL | 2.9          | 2.9 0.2          | μg/L    | 1               |               | NQ                   | NQ                     | SW-846:6020    | GELC     |         |
| C4            | 13 16  | 9/15/2000              | 12.3       | 53.4       | 14.2          | 15         | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 269.6        | 6/16/2019  | REG F            | INIT                                  | GENINORG        | Chloride                    | CI(-1)    | 53.4       | 3.8           | LANL Int<br>BG LVL | 3.11         | 17.2 0.6         | 7 mg/L  | 10              |               | NQ                   | NQ                     | EPA:300.0      | GELC     |         |
| C4            | 14 19  | 4/29/2010              | 56.7       | 67.4       | 62.7          | 19         | Pueblo<br>Canyon              | Intermediate<br>Perched | TW-2Ar   | 102          | 6/21/2019  | REG F            | INIT                                  | METALS          | Barium                      | Ва        | 66.2       | 1.1           | LANL Int<br>BG LVL | 13.5         | 4.9 1            | μg/L    | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| C4            | 14 19  | 4/29/2010              | 33.3       | 43.3       | 37.4          | 19         | Pueblo<br>Canyon              | Intermediate<br>Perched | TW-2Ar   | 102          | 6/21/2019  | REG F            | INIT                                  | GENINORG        | Calcium                     | Са        | 37.6       | 1             | LANL Int<br>BG LVL | 10.7         | 3.5 0.0          | 5 mg/L  | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| C4            | 14 19  | 4/29/2010              | 40.2       | 50.8       | 44.7          | 19         | Pueblo<br>Canyon              | Intermediate<br>Perched | TW-2Ar   | 102          | 6/21/2019  | REG F            | INIT                                  | GENINORG        | Chloride                    | CI(-1)    | 42.5       | 1             | LANL Int<br>BG LVL | 3.11         | 13.7 0.6         | 7 mg/L  | 10              |               | NQ                   | NQ                     | EPA:300.0      | GELC     |         |
| C4            | 14 19  | 4/29/2010              | 108        | 137        | 122           | 19         | Pueblo<br>Canyon              | Intermediate<br>Perched | TW-2Ar   | 102          | 6/21/2019  | REG F            | INIT                                  | GENINORG        | Hardness                    | HARDNESS  | 121        | 1             | LANL Int<br>BG LVL | 37.8         | 3.2 0.4          | 53 mg/L | 1               |               | NQ                   | NQ                     | SM:A2340B      | GELC     |         |
| C4            | 14 19  | 4/29/2010              | 2.49       | 3.46       | 2.95          | 19         | Pueblo<br>Canyon              | Intermediate<br>Perched | TW-2Ar   | 102          | 6/21/2019  | REG F            | INIT                                  | GENINORG        | Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 3.46       | 1.2           | LANL Int<br>BG LVL | 0.459        | 7.5 0.1          | 7 mg/L  | 10              |               | NQ                   | NQ                     | EPA:353.2      | GELC     |         |
| C4            | 14 19  | 4/29/2010              | 175        | 231        | 205           | 19         | Pueblo<br>Canyon              | Intermediate<br>Perched | TW-2Ar   | 102          | 6/21/2019  | REG F            |                                       | METALS          | Strontium                   | Sr        | 197        | 1             | LANL Int<br>BG LVL | 59.6         | 3.3 1            | μg/L    | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
|               |        |                        |            |            | 25.5          | 19         | Pueblo<br>Canyon              | Intermediate<br>Perched |          |              | 6/21/2019  | REG F            |                                       | GENINORG        |                             | SO4(-2)   | 24.8       | 1             | BG LVL             |              | 3.5 1.3          |         | 10              |               |                      | NQ                     | EPA:300.0      | GELC     |         |
|               |        |                        | 68         |            |               | 54         | Sandia<br>Canyon              | Deep                    | R-35a    | 1            | 6/10/2019  | FD F             |                                       |                 | Barium                      | Ва        | 343        | 1             | LANL Reg<br>BG LVL |              | 9 1              | μg/L    | 1               |               |                      | NQ                     | SW-846:6010C   |          |         |
|               |        | 8/30/2007              | 68         |            | 0.0           |            | Sandia<br>Canyon              | Regional<br>Deep        | R-35a    | 1            | 6/10/2019  | REG F            |                                       | METALS          | Barium                      | Ва        | 347        | 1             | LANL Reg<br>BG LVL |              | 9.1 1            | μg/L    |                 |               |                      | NQ                     | SW-846:6010C   |          |         |
|               |        | 8/30/2007              | 5.97       |            | 6.42          |            | Sandia<br>Canyon              | Regional<br>Deep        | R-35a    | 1            | 6/10/2019  | FD F             |                                       | GENINORG        |                             | CI(-1)    | 6.52       | 1             | LANL Reg<br>BG LVL |              |                  | 67 mg/L |                 |               |                      | NQ                     | EPA:300.0      | GELC     |         |
| C4            | 49 53  | 8/30/2007              | 5.97       | 7.31       | 6.42          | 53         | Sandia<br>Canyon              | Regional<br>Deep        | R-35a    | 1013.<br>1   | 6/10/2019  | REG F            | INIT                                  | GENINORG        | Chloride                    | CI(-1)    | 6.64       | 1             | LANL Reg<br>BG LVL | 2.7          | 2.5 0.0          | 67 mg/L | 1               |               | NQ                   | NQ                     | EPA:300.0      | GELC     |         |

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Table 1: NMED 7-19 Groundwater Report

| Tab           | 2 1: NIV | IED 7-19 Gr | oundwa     | ater Re    | port          |            |                                  |                             |          |              |            |                  |               |                      |                                      |           |                |                                      |              |                  |         |              |                 |   |                            |              |         |
|---------------|----------|-------------|------------|------------|---------------|------------|----------------------------------|-----------------------------|----------|--------------|------------|------------------|---------------|----------------------|--------------------------------------|-----------|----------------|--------------------------------------|--------------|------------------|---------|--------------|-----------------|---|----------------------------|--------------|---------|
| Criteria Code | Visits   | 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<br>Analyte Desc      | Analyte   | Std Result     | Result/Median<br>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            | 7 54     | 3/5/2009    | 6.1        | 47.4       | 18.3          | 53         | Mortandad<br>Canyon              | Regional<br>Deep            | R-45 S2  | 974.9        | 6/13/2019  | REG              | F             | INIT                 | METALS Chromium                      | Cr        | 31.3           | 1.7 LANL Reg<br>BG LVL               | 7.48         | 4.2              | 3       | μg/L         | 1               | NQ NQ   | SW-846:6020                | GELC         |         |
| C4            | 7 54     | 3/5/2009    | 6.1        | 47.4       | 18.3          | 53         | Mortandad<br>Canyon              | Regional<br>Deep            | R-45 S2  | 974.9        | 4/26/2019  | REG              | F             | INIT                 | METALS Chromium                      | Cr        | 28.2           | 1.5 LANL Reg<br>BG LVL               | 7.48         | 3.8              | 3       | μg/L         | 1               | NQ NQ   | SW-846:6020                | GELC         |         |
| C4            | 9        | 11/14/2001  | 100        | 545        | 176           | 9          | Pueblo<br>Canyon                 | Regional<br>Deep            | R-5 S4   | 858.7        | 7/2/2019   | REG              | F             | INIT                 | METALS Barium                        | Ва        | 215            | 1.2 LANL Reg<br>BG LVL               | 38.1         | 5.6              | 1       | μg/L         | 1               | NQ NQ   | SW-846:6010C               | GELC         |         |
|               |          |             | 2.27       | 7.43       | 5.35          | 73         | Sandia<br>Canyon                 | Regional<br>Top             | R-11     | 855          | 6/14/2019  | REG              |               |                      | ·                                    | NO3+NO2-N |                | BG LVL                               |              |                  |         | mg/L         | 10              | NQ NQ   | EPA:353.2                  | GELC         |         |
|               |          |             | 5.95       | 15.4       | 10.2          | 73         | Sandia<br>Canyon                 | Regional<br>Top             | R-11     | 855          | 6/14/2019  | REG              |               |                      | GENINORG Sulfate                     | SO4(-2)   | 10.1           | 1 LANL Reg<br>BG LVL                 |              |                  | 0.133   |              | 1               | NQ NQ   | EPA:300.0                  | GELC         |         |
| C4            | 9 23     | 11/15/2005  | 6.96       | 8.31       | 7.53          | 23         | Lower<br>Los Alamos<br>Canyon    | Regional<br>Top             | R-24     | 825          | 6/14/2019  | REG              | F             | INIT                 | GENINORG Chloride                    | CI(-1)    | 8.31           | 1.1 LANL Reg<br>BG LVL               | 2.7          | 3.1              | 0.067   | mg/L         | 1               | NQ NQ   | EPA:300.0                  | GELC         |         |
| C4            | 29       | 4/27/2005   | 4.67       | 7.64       | 5.49          | 29         | Pueblo<br>Canyon                 | Regional<br>Top             | R-4      | 792.9        | 6/13/2019  | FD               | F             | INIT                 | GENINORG Chloride                    | CI(-1)    | 7.57           | 1.4 LANL Reg<br>BG LVL               | 2.7          | 2.8              | 0.067   | mg/L         | 1               | NQ NQ   | EPA:300.0                  | GELC         |         |
| C4            | 29       | 4/27/2005   | 4.67       | 7.64       | 5.49          | 29         | Pueblo<br>Canyon                 | Regional<br>Top             | R-4      | 792.9        | 6/13/2019  | REG              | F             | INIT                 | GENINORG Chloride                    | CI(-1)    | 7.64           | 1.4 LANL Reg<br>BG LVL               | 2.7          | 2.8              | 0.067   | mg/L         | 1               | NQ NQ   | EPA:300.0                  | GELC         |         |
| C4            | 29       | 4/27/2005   | 1.06       | 2.32       | 1.76          | 29         | Pueblo<br>Canyon                 | Regional<br>Top             | R-4      | 792.9        | 6/13/2019  | FD               | F             | INIT                 | GENINORG Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 2.29           | 1.3 LANL Reg<br>BG LVL               | 0.769        | 3                | 0.085   | mg/L         | 5               | NQ NQ   | EPA:353.2                  | GELC         |         |
| C4            | 29       | 4/27/2005   | 1.06       | 2.32       | 1.76          | 29         | Pueblo<br>Canyon                 | Regional<br>Top             | R-4      | 793          | 6/13/2019  | REG              | F             | INIT                 | GENINORG Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 2.32           | 1.3 LANL Reg<br>BG LVL               | 0.769        | 3                | 0.085   | mg/L         | 5               | NQ NQ   | EPA:353.2                  | GELC         |         |
|               |          |             | 2.00       |            | 4.54          | 24         | Pueblo<br>Canyon                 | Regional<br>Top             | R-4      |              | 6/13/2019  | FD               |               |                      | GENINORG Perchlorate                 | CIO4      | 5.98           | 1.3 LANL Reg<br>BG LVL               |              |                  |         | μg/L         |                 | NQ NQ   | SW-846:6850                | GELC         |         |
|               |          |             | 2.00       |            | 4.54          | 24         | Pueblo<br>Canyon                 | Regional<br>Top             | R-4      | 793          | 6/13/2019  | INLO             |               |                      | GENINORG Perchlorate                 | CIO4      | 6.15           | BG LVL                               | 0.414        |                  |         | μg/L         | 4               | NQ NQ   | SW-846:6850                | GELC         |         |
|               |          |             |            |            |               |            | Mortandad<br>Canyon              | Regional<br>Top             | R-44 S1  |              | 6/18/2019  |                  |               |                      | GENINORG Chloride                    | CI(-1)    |                | 7.4 LANL Reg<br>BG LVL               |              |                  | 0.335   |              | 5               | NQ NQ   | EPA:300.0                  | GELC         |         |
|               |          |             |            | 27.8       |               |            | Mortandad<br>Canyon              | Regional<br>Top             | R-44 S1  |              | 6/18/2019  | REG              |               |                      | METALS Nickel                        | Ni        | 27.80          | 9 BG LVL                             |              | 9.6              |         | μg/L<br>"    | 1               | NQ NQ   | SW-846:6020                | GELC         |         |
|               |          |             |            |            | 1.15          |            | Mortandad<br>Canyon              | Regional<br>Top             |          |              |            | REG              |               |                      | GENINORG Nitrate-Nitrite as Nitrogen |           |                | 2.2 LANL Reg<br>BG LVL               |              |                  |         | mg/L         | 5               | NQ NQ   | EPA 300.0                  | GELC         |         |
|               |          | 2/17/2009   |            | 18.9       |               |            | Mortandad<br>Canyon              | Regional<br>Top             | R-44 S1  |              |            | REG<br>FD        |               |                      | GENINORG Sulfate  METALS Chromium    | SO4(-2)   |                | 5.1 LANL Reg<br>BG LVL               |              |                  | 0.133   |              | 1               | NQ NQ   | EPA:300.0<br>SW-846:6020   | GELC<br>GELC |         |
|               |          |             |            |            | 35.6<br>35.6  | 54<br>54   | Mortandad<br>Canyon<br>Mortandad | Regional<br>Top<br>Regional | R-45 S1  |              |            | REG              |               |                      | METALS Chromium  METALS Chromium     | Cr        | 31.00<br>35.40 | 0.9 LANL Reg<br>BG LVL<br>1 LANL Reg |              |                  |         | μg/L<br>μg/L | 1               | NQ NQ   | SW-846:6020<br>SW-846:6020 | GELC         |         |
|               |          | 2/28/2009   |            |            |               | 54         | Canyon  Mortandad                | Top  Regional               | R-45 S1  |              |            |                  |               |                      | METALS Chromium                      |           |                | BG LVL  0.9 LANL Reg                 |              |                  |         | μg/L<br>μg/L | 1               | NQ NQ   | SW-846:6020                | GELC         |         |
| 04            | 0 04     | 212012009   | 0.40       | 30.7       | 33.0          | 54         | Canyon                           | Top                         | 11-40 01 | 000          | 712012013  | NEG              |               | IIVI I               | INIL LALS OFFICIALITY                |           | 30.70          | BG LVL                               | 7.40         | +. 1             | J       | µg/L         | I               | ווע ווע   | OVV-040.0020               | GELU         |         |

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Table 1: NMED 7-19 Groundwater Report

| Table         | 1: NM  | ED 7-19 Gr  | oundw      | ater Re    | port          |            |                               |                        |                     |              |            |                  |                                       |          |                             |           |            |               |                    |              |                  |        |                 |                      |                        |                |          |                |
|---------------|--------|-------------|------------|------------|---------------|------------|-------------------------------|------------------------|---------------------|--------------|------------|------------------|---------------------------------------|----------|-----------------------------|-----------|------------|---------------|--------------------|--------------|------------------|--------|-----------------|----------------------|------------------------|----------------|----------|----------------|
| Criteria Code | Visits | First Event | Min Detect | Max Detect | Median Detect | Num Detect | Canyon                        | Zone                   | Location            | Screen Depth | Start Date | Fld QC Type Code | Fld Prep Code<br>Lab Sample Type Code | Any      | Analyte Desc                | Analyte   | Std Result | Result/Median | LVL Type/Risk Code | Screen Level | Exceedance Ratio |        | Dilution Factor | Validation Qualifier | Validation Reason Code | Anyl Meth Code | Lab Code | Comment        |
| C4 4          |        | 2/28/2009   | 0.26       | 3.47       | 2.865         | 50         | Mortandad<br>Canyon           | Regional<br>Top        | R-45 S1             | 880          | 6/13/2019  | FD F             | INIT                                  | GENINORG | Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 2.66       | 0.9           | LANL Reg<br>BG LVL | 0.769        | 3.5 0.08         | 5 mg/L | 5               | NQ                   | NQ                     | EPA:353.2      | GELC     |                |
| C4 4          | 8 50   | 2/28/2009   | 0.26       | 3.47       | 2.865         | 50         | Mortandad<br>Canyon           | Regional<br>Top        | R-45 S1             | 880          | 6/13/2019  | REG F            | INIT                                  | GENINORG | Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 2.78       | 1             | LANL Reg<br>BG LVL | 0.769        | 3.6 0.08         | 5 mg/L | 5               | NQ                   | NQ                     | EPA:353.2      | GELC     |                |
| C4 4          | 8 50   | 2/28/2009   | 0.26       | 3.47       | 2.865         | 50         | Mortandad<br>Canyon           | Regional<br>Top        | R-45 S1             | 880          | 4/26/2019  | REG F            | INIT                                  | GENINORG | Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 2.57       | 0.9           | LANL Reg<br>BG LVL | 0.769        | 3.3 0.17         | mg/L   | 10              | NQ                   | NQ                     | EPA:353.2      | GELC     |                |
| C4 !          | 2 58   | 3/6/2010    | 4.68       | 18.3       | 8.69          | 58         | Mortandad<br>Canyon           | Regional<br>Top        | R-50 S1             | 1077         | 6/17/2019  | REG F            | INIT                                  | GENINORG | Chloride                    | CI(-1)    | 17.90      | 2.1           | LANL Reg<br>BG LVL | 2.7          | 6.6 0.33         | 5 mg/L | 5               | J-                   | l9b                    | EPA:300.0      | GELC     |                |
| C4 5          | 2 60   | 3/6/2010    | 44.90      | 150        | 98.2          | 60         | Mortandad<br>Canyon           | Regional<br>Top        | R-50 S1             | 1077         | 6/17/2019  | REG F            | INIT                                  | METALS   | Chromium                    | Cr        | 44.90      | 0.5           | LANL Reg<br>BG LVL | 7.48         | 3                | µg/L   | 1               | NQ                   | NQ                     | SW-846:6020    | GELC     | Lowest to date |
| C4 !          | 2 59   | 3/6/2010    | 0.40       | 2.77       | 1.89          | 59         | Mortandad<br>Canyon           | Regional<br>Top        | R-50 S1             | 1077         | 6/17/2019  | REG F            | INIT                                  | GENINORG | Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 2.56       | 1.4           | LANL Reg<br>BG LVL | 0.769        | 3.3 0.08         | mg/L   | 5               | NQ                   | NQ                     | EPA:353.2      | GELC     |                |
| C4 !          | 2 58   | 3/6/2010    | 7.22       | 19.6       | 13.2          | 58         | Mortandad<br>Canyon           | Regional<br>Top        | R-50 S1             | 1077         | 6/17/2019  | REG F            | INIT                                  | GENINORG | Sulfate                     | SO4(-2)   | 19.10      | 1.4           | LANL Reg<br>BG LVL | 4.59         | 0.66             | mg/L   | 5               | J-                   | l9b                    | EPA:300.0      | GELC     |                |
| C4 3          | 6 42   | 5/20/2011   | 2.03       | 39.1       | 19.8          | 41         | Mortandad<br>Canyon           | Regional<br>Top        | R-61 S1             | 1125         | 6/6/2019   | REG F            | INIT                                  | METALS   | Chromium                    | Cr        | 39.10      | 2             | LANL Reg<br>BG LVL | 7.48         | 5.2 3            | μg/L   | 1               | NQ                   | NQ                     | SW-846:6020    | GELC     |                |
| C4 3          | 6 42   | 5/20/2011   | 0.43       | 2.64       | 1.975         | 42         | Mortandad<br>Canyon           | Regional<br>Top        | R-61 S1             | 1125         | 6/6/2019   | REG F            | INIT                                  | GENINORG | Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 2.44       | 1.2           | LANL Reg<br>BG LVL | 0.769        | 3.2 0.08         | 5 mg/L | 5               | NQ                   | NQ                     | EPA:353.2      | GELC     |                |
| C4 3          | 5 41   | 5/20/2011   | 2.96       | 16.2       | 10.9          | 41         | Mortandad<br>Canyon           | Regional<br>Top        | R-61 S1             | 1125         | 6/6/2019   | REG F            | INIT                                  | GENINORG | Perchlorate                 | CIO4      | 11.80      | 1.1           | LANL Reg<br>BG LVL | 0.414        | 28.5 0.5         | μg/L   | 10              | NQ                   | NQ                     | SW-846:6850    | GELC     |                |
| C4            | 6 18   | 8/8/2011    | 39.8       | 54.1       | 43.65         | 18         | Lower<br>Los Alamos<br>Canyon | Intermediate<br>Spring | Vine Tree<br>Spring | 0            | 12/13/2018 | FD F             | INIT                                  | METALS   | Barium                      | Ва        | 41.8       | 1             | LANL Int<br>BG LVL | 13.5         | 3.1 1            | μg/L   | 1               | J+                   | l4a                    | SW-846:6010C   | GELC     |                |
| C4            | 6 18   | 8/8/2011    | 39.8       | 54.1       | 43.65         | 18         | Lower<br>Los Alamos<br>Canyon | Intermediate<br>Spring | Vine Tree<br>Spring | 0            | 12/13/2018 | REG F            | INIT                                  | METALS   | Barium                      | Ва        | 39.8       | 0.9           | LANL Int<br>BG LVL | 13.5         | 2.9 1            | μg/L   | 1               | J+                   | l4a                    | SW-846:6010C   | GELC     |                |
| C4            | 6 18   | 8/8/2011    | 27.6       | 31         | 28.65         | 18         | Lower<br>Los Alamos<br>Canyon | Intermediate<br>Spring | Vine Tree<br>Spring | 0            | 12/13/2018 | FD F             | INIT                                  | GENINORG | Calcium                     | Са        | 28.7       | 1             | LANL Int<br>BG LVL | 10.7         | 2.7 0.05         | mg/L   | 1               | NQ                   | NQ                     | SW-846:6010C   | GELC     |                |
| C4            | 6 18   | 8/8/2011    | 27.6       | 31         | 28.65         | 18         | Lower<br>Los Alamos<br>Canyon | Intermediate<br>Spring | Vine Tree<br>Spring | 0            | 12/13/2018 | REG F            | INIT                                  | GENINORG | Calcium                     | Са        | 27.6       | 1             | LANL Int<br>BG LVL | 10.7         | 2.6 0.05         | mg/L   | 1               | NQ                   | NQ                     | SW-846:6010C   | GELC     |                |
| C4            | 6 18   | 8/8/2011    | 15.5       | 19.1       | 16.35         | 18         | Lower<br>Los Alamos<br>Canyon | Intermediate<br>Spring | Vine Tree<br>Spring | 0            | 12/13/2018 | FD F             | INIT                                  | GENINORG | Chloride                    | CI(-1)    | 15.8       | 1             | LANL Int<br>BG LVL | 3.11         | 5.1 0.13         | 1 mg/L | 2               | NQ                   | NQ                     | EPA:300.0      | GELC     |                |
| C4            | 6 18   | 8/8/2011    | 15.5       | 19.1       | 16.35         | 18         | Lower<br>Los Alamos<br>Canyon | Intermediate<br>Spring | Vine Tree<br>Spring | 0            | 12/13/2018 | REG F            | INIT                                  | GENINORG | Chloride                    | CI(-1)    | 16         | 1             | LANL Int<br>BG LVL | 3.11         | 5.1 0.13         | 1 mg/L | 2               | NQ                   | NQ                     | EPA:300.0      | GELC     |                |
| C4            | 6 18   | 8/8/2011    | 100        | 113        | 104           | 18         | Lower<br>Los Alamos<br>Canyon | Intermediate<br>Spring | Vine Tree<br>Spring | 0            | 12/13/2018 | FD F             | INIT                                  | GENINORG | Hardness                    | HARDNESS  | 104        | 1             | LANL Int<br>BG LVL | 37.8         | 2.8 0.45         | 3 mg/L | 1               | NQ                   | NQ                     | SM:A2340B      | GELC     |                |

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Table 1: NMED 7-19 Groundwater Report

| rabi          | € 1: NIN | /IED 7-19 Gi | ounawa     | ater Ke    | port          |            |  |                        |                     |              |            |                  |               |                      |                                      |           |            |                                     |              |                  |         |         |                 |   |                |          |         |
|---------------|----------|--------------|------------|------------|---------------|------------|--|------------------------|---------------------|--------------|------------|------------------|---------------|----------------------|--------------------------------------|-----------|------------|-------------------------------------|--------------|------------------|---------|---------|-----------------|---|----------------|----------|---------|
| Criteria Code | Visits   | 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<br>Analyte Desc      | Analyte   | Std Result | Result/Median<br>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            | 16 18    |              | 100        | 113        | 104           | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | e 0          | 12/13/2018 | REG              | F             | INIT                 | GENINORG Hardness                    | HARDNESS  |            | 1 LANL Int<br>BG LVL                | 37.8         | 2.6              |         |         | 1               | NQ NQ   | SM:A2340B      | GELC     |         |
| C4            | 6 18     | 8/8/2011     | 7.62       | 8.59       | 7.93          | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | e 0          | 12/13/2018 | FD               | F             | INIT                 | GENINORG Magnesium                   | Mg        | 7.84       | 1 LANL Int<br>BG LVL                | 3.14         | 2.5              | 0.11    | mg/L    | 1               | NQ NQ   | SW-846:6010C   | GELC     |         |
| C4            | 6 18     | 8/8/2011     | 7.62       | 8.59       | 7.93          | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | e 0          | 12/13/2018 | REG              | F             | INIT                 | GENINORG Magnesium                   | Mg        | 7.62       | 1 LANL Int<br>BG LVL                | 3.14         | 2.4              | 0.11    | mg/L    | 1               | NQ NQ   | SW-846:6010C   | GELC     |         |
| C4            | 15 17    | 8/8/2011     | 3.38       | 4.35       | 3.57          | 17         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | e 0          | 12/13/2018 | FD               | F             | INIT                 | GENINORG Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 3.47       | 1 LANL Int<br>BG LVL                | 0.459        | 7.6              | 0.17    | mg/L    | 10              | NQ NQ   | EPA:353.2      | GELC     |         |
| C4            | 15 17    | 8/8/2011     | 3.38       | 4.35       | 3.57          | 17         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | e 0          | 12/13/2018 | REG              | F             | INIT                 | GENINORG Nitrate-Nitrite as Nitrogen | NO3+NO2-N | 3.55       | 1 LANL Int<br>BG LVL                | 0.459        | 7.7              | 0.17    | mg/L    | 10              | NQ NQ   | EPA:353.2      | GELC     |         |
| C4            | 18       | 8/8/2011     | 4.86       | 6.68       | 5.76          | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | € 0          | 12/13/2018 | FD               | F             | INIT                 | GENINORG Perchlorate                 | CIO4      | 6.68       | 1.2 LANL Int<br>BG LVL              | 0.27         | 24.7             | 0.5     | μg/L    | 10              | NQ NQ   | SW-846:6850    | GELC     |         |
| C4            | 18       | 8/8/2011     | 4.86       | 6.68       | 5.76          | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | € 0          | 12/13/2018 | REG              | F             | INIT                 | GENINORG Perchlorate                 | CIO4      | 6.47       | 1.1 LANL Int<br>BG LVL              | 0.27         | 24               | 0.5     | μg/L    | 10              | NQ NQ   | SW-846:6850    | GELC     |         |
| C4            | 6 18     | 8/8/2011     | 127        | 151        | 140           | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | e 0          | 12/13/2018 | FD               | F             | INIT                 | METALS Strontium                     | Sr        | 138        | 1 LANL Int<br>BG LVL                | 59.6         | 2.3              | 1       | μg/L    | 1               | NQ NQ   | SW-846:6010C   | GELC     |         |
| C4            | 6 18     | 8/8/2011     | 127        | 151        | 140           | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | 9 0          | 12/13/2018 | REG              | F             | INIT                 | METALS Strontium                     | Sr        | 134        | 1 LANL Int<br>BG LVL                | 59.6         | 2.2              | 1       | μg/L    | 1               | NQ NQ   | SW-846:6010C   | GELC     |         |
| C4            | 6 18     | 8/8/2011     | 19.9       | 21.8       | 21.15         |            | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | 9 0          | 12/13/2018 | FD               | F             | INIT                 | GENINORG Sulfate                     | SO4(-2)   | 20.9       | 1 LANL Int<br>BG LVL                | 7.1          | 2.9              | 0.266   | mg/L    | 2               | NQ NQ   | EPA:300.0      | GELC     |         |
|               |          | 8/8/2011     | 19.9       | 21.8       |               |            | Los Alamos<br>Canyon                   |                        | Spring              |              | 12/13/2018 | REG              |               |                      | GENINORG Sulfate                     | SO4(-2)   | 21         | BG LVL                              |              |                  |         | mg/L    |                 | NQ NQ   | EPA:300.0      | GELC     |         |
|               |          | 8/8/2011     | 1.39       |            |               |            | Lower<br>Los Alamos<br>Canyon          |                        | Spring              |              | 12/13/2018 |                  |               |                      | GENINORG Uranium                     | U         | 2.21       | BG LVL                              |              |                  |         |         |                 | NQ NQ   | SW-846:6020    | GELC     |         |
|               |          | 8/8/2011     | 1.39       |            |               | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring | Vine Tree<br>Spring | e 0          | 12/13/2018 |                  |               |                      | GENINORG Uranium                     | U         | 2.21       | BG LVL                              | 0.992        |                  |         |         |                 | NQ NQ   | SW-846:6020    | GELC     |         |
| C4            | 17       | 10/23/2001   | 102        | 118        | 114           |            | White Rock<br>Canyon and<br>Rio Grande |                        | La Mesita<br>Spring | a 0          | 10/10/2018 | REG              | F             | INIT                 | METALS Barium                        | Ва        | 102        | 0.9 LANL Reg<br>BG LVL              | 38.1         | 2.7              | 1       | μg/L    | 1               | NQ NQ   | SW-846:6010C   | GELC     |         |

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Table 1: NMED 7-19 Groundwater Report

| Table         | 1. NIVII          | ED 7-19 Gr  | ounaw      | ater Ke    | port          |            |  |                         |                     |              |            |                  |               |                      |                 |                     |                  |            |               |                    |              |                  |          |         |                 |                      |                        |                |          |         |
|---------------|-------------------|-------------|------------|------------|---------------|------------|--|-------------------------|---------------------|--------------|------------|------------------|---------------|----------------------|-----------------|---------------------|------------------|------------|---------------|--------------------|--------------|------------------|----------|---------|-----------------|----------------------|------------------------|----------------|----------|---------|
| Criteria Code | Visits<br>Samples | First Event | Min Detect | Max Detect | Median Detect | Num Detect | Canyon                                 | Zone                    | Location            | Screen Depth | Start Date | FId 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 | Sta Midl | Std UOM | Dilution Factor | Validation Qualifier | Validation Reason Code | Anyl Meth Code | Lab Code | Comment |
| C4 19         | 20                | 10/19/2000  | 34.4       | 38.2       | 35.6          | 20         | White Rock<br>Canyon and<br>Rio Grande | _                       | La Mesita<br>Spring | 0            | 10/10/2018 | REG I            | F IN          | NIT (                | GENINORG        | Calcium             | Са               | 37         | 1             | LANL Reg<br>BG LVL | 17.03        | 2.2 0.0          | 5 mg     | /L 1    |                 | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| C4 19         | 20                | 10/19/2000  | 6.44       | 8.99       | 7.1           | 20         | White Rock<br>Canyon and<br>Rio Grande |                         | La Mesita<br>Spring | 0            | 10/10/2018 | REG I            | F IN          | NIT (                | GENINORG        | Chloride            | CI(-1)           | 8.99       | 1.3           | LANL Reg<br>BG LVL | 2.7          | 3.3 0.0          | 67 mg    | /L 1    |                 | NQ                   | NQ                     | EPA:300.0      | GELC     |         |
| C4 16         | 5 17              | 10/23/2001  | 735        | 852        | 805           | 17         | White Rock<br>Canyon and<br>Rio Grande |                         | La Mesita<br>Spring | 0            | 10/10/2018 | REG I            | F IN          | N TIL                | METALS          | Strontium           | Sr               | 809        | 1             | LANL Reg<br>BG LVL | 157          | 5.2 1            | μg/      | ′L 1    |                 | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| C4 19         | 20                | 10/19/2000  | 12.6       | 17         | 13.85         | 20         | White Rock<br>Canyon and<br>Rio Grande | _                       | La Mesita<br>Spring | 0            | 10/10/2018 | REG I            | F IN          | NIT (                | GENINORG        | Sulfate             | SO4(-2)          | 17         | 1.2           | LANL Reg<br>BG LVL | 4.59         | 3.7 0.1          | 33 mg    | /L 1    |                 | NQ                   | NQ                     | EPA:300.0      | GELC     |         |
| C4 15         | 5 16              | 8/24/2004   | 7.58       | 12.7       | 10.6          | 16         | White Rock<br>Canyon and<br>Rio Grande | _                       | La Mesita<br>Spring | 0            | 10/10/2018 | REG I            | F IN          | NIT (                | GENINORG        | Uranium             | U                | 7.58       | 0.7           | LANL Reg<br>BG LVL | 1.19         | 6.4 0.0          | 67 µg/   | ′L 1    |                 | NQ                   | NQ                     | SW-846:6020    | GELC     |         |
| C4 19         | 28                | 10/19/2000  | 96.5       | 238        | 130.5         | 28         | White Rock<br>Canyon and<br>Rio Grande |                         | Sacred<br>Spring    | 0            | 10/11/2018 | REG I            | F IN          | NIT (                | GENINORG        | Alkalinity-CO3+HCO3 | ALK-CO3<br>+HCO3 | 218        | 1.7           | LANL Reg<br>BG LVL | 72.9         | 3 1.4            | 5 mg     | /L 1    |                 | NQ                   | NQ                     | EPA:310.1      | GELC     |         |
| C4 16         | 3 23              | 10/23/2001  | 81.1       | 239        | 92.7          | 23         | White Rock<br>Canyon and<br>Rio Grande | _                       | Sacred<br>Spring    | 0            | 10/11/2018 | REG I            | F IN          | I TIV                | METALS          | Barium              | Ва               | 168        | 1.8           | LANL Reg<br>BG LVL | 38.1         | 4.4 1            | µg/      | ′L 1    |                 | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| C4 19         | 28                | 10/19/2000  | 30         | 68.8       | 35.8          | 28         | White Rock<br>Canyon and<br>Rio Grande | _                       | Sacred<br>Spring    | 0            | 10/11/2018 | REG I            | F IN          | NIT (                | GENINORG        | Calcium             | Са               | 62.5       | 1.7           | LANL Reg<br>BG LVL | 17.03        | 3.7 0.0          | 5 mg     | /L 1    |                 | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| C4 16         | 3 23              | 10/23/2001  | 402        | 665        | 455           | 23         | White Rock<br>Canyon and<br>Rio Grande | _                       | Sacred<br>Spring    | 0            | 10/11/2018 | REG I            | F IN          | NIT N                | METALS          | Strontium           | Sr               | 572        | 1.3           | LANL Reg<br>BG LVL | 157          | 3.6 1            | µg/      | ′L 1    |                 | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| C4 34         | 40                | 11/30/2005  | 5.62       | 7.09       | 6.05          | 40         | Sandia<br>Canyon                       | Regional<br>Top         | R-10a               | 690          | 11/14/2018 | REG I            | F IN          | NIT (                | GENINORG        | Chloride            | CI(-1)           | 6.69       | 1.1           | LANL Reg<br>BG LVL | 2.7          | 2.5 0.0          | 67 mg    | /L 1    |                 | NQ                   | NQ                     | EPA:300.0      | GELC     |         |
| C4 34         | 40                | 11/30/2005  | 0.528      | 14.2       | 1.4           | 38         | Sandia<br>Canyon                       | Regional<br>Top         | R-10a               | 690          | 11/14/2018 | REG I            | F IN          | NIT I                | METALS          | Nickel              | Ni               | 7.82       | 5.6           | LANL Reg<br>BG LVL | 2.9          | 2.7 0.6          | μg/      | ′L 1    |                 | NQ                   | NQ                     | SW-846:6020    | GELC     |         |
| C4 34         | 40                | 11/30/2005  | 9.36       | 12.9       | 10.35         | 40         | Sandia<br>Canyon                       | Regional<br>Top         | R-10a               | 690          | 11/14/2018 | REG I            | F IN          | NIT (                | GENINORG        | Sulfate             | SO4(-2)          | 10.9       | 1.1           | LANL Reg<br>BG LVL | 4.59         | 2.4 0.1          | 33 mg    | /L 1    |                 | NQ                   | NQ.                    | EPA:300.0      | GELC     |         |
| C5 34         | 40                | 11/30/2005  | 1.60       | 5.19       | 2.325         | 22         | Sandia<br>Canyon                       | Regional<br>Top         | R-10a               | 690          | 11/14/2018 | REG I            | F IN          | I TIV                | METALS          | Arsenic             | As               | 5.19       | 2.2           | EPA MCL            | 10           | 0.5 2            | μg/      | ′L 1    |                 | NQ                   | NQ                     | SW-846:6020    | GELC     |         |
| CA 3          | 3                 | 9/15/2000   | 6.70       | 6.7        | 6.7           | 1          | Upper<br>Los Alamos<br>Canyon          | Intermediate<br>Perched | R-9i S2             | 270          | 6/16/2019  | REG I            | UF IN         | NIT S                | svoc            | Phenol              | 108-95-2         | 6.70       | 1             | NM GW<br>STD       | 5            | 1.3 3.0          | 9 µg/    | 'L 1    | J               | J                    | J_LAE                  | 3 SW-846:8270D | GELC     |         |

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Table 2: NMED 7-19 Groundwater Report Addendum

| Table 2       | ININIE | י עב    | ·19 Groun   | awatei     | Repor      | t Addei       | naum       |                               |                         |          |              |            |                  |                                       |                 |                                     |           |            |               |                    |              |                  |         |         |                 |               |   |                |          |                  |
|---------------|--------|---------|-------------|------------|------------|---------------|------------|-------------------------------|-------------------------|----------|--------------|------------|------------------|---------------------------------------|-----------------|-------------------------------------|-----------|------------|---------------|--------------------|--------------|------------------|---------|---------|-----------------|---------------|---|----------------|----------|------------------|
| 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<br>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        | 15     | 15 8    | 8/8/2006    | 3.67       | 72.3       | 37.985        | 2          | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG              | F INIT                                | METALS          | Tin                                 | Sn        | 72.3       | 1.9           | Int-Scr_95         | 13           | 5.6              | 2.5     | μg/L    | 1               |               | J+ I4a                                      | SW-846:6010C   | GELC     |                  |
| XC2scr        | 9      | 10 8    | 8/29/2008   | 3          | 29         | 26.7          | 3          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.100      | 6/26/2019  | FD               | F INIT                                | METALS          | Tin                                 | Sn        | 29         | 1.1           | Int-Scr_95         | 13.0         | 2.3              | 2.50    | μg/L    | 1.00            | *             | NQ NQ                                       | SW-846:6010C   | GELC     |                  |
| XC2scr        | 9      | 10 8    | 8/29/2008   | 3.4        | 29.3       | 26.70         | 3          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S1  | 189.100      | 6/26/2019  | REG              | F INIT                                | METALS          | Tin                                 | Sn        | 26.7       | 1.0           | Int-Scr_95         | 13.00        | 2.1              | 2.50    | μg/L    | 1.0             | *             | NQ NQ                                       | SW-846:6010C   | GELC     |                  |
| XC2scr        | 11     | 15 9    | 9/15/2000   | 1          | 1          | 1             | 1          | Upper<br>Los Alamos<br>Canyon | Intermediate<br>Perched | R-9i S2  | 269.600      | 6/16/2019  | REG              | F INIT                                | METALS          | Antimony                            | Sb        | 1          | 1.0           | Int-Scr_95         | 1            | 1.2              | 1.00    | μg/L    | 1.00            | J             | J J_LAB                                     | SW-846:6020    | GELC     |                  |
| XC2scr        | 3 4    | 4 2     | 2/13/2019   | 2.8        | 14.8       | 8.8           | 2          | Water<br>Canyon               | Regional                | R-69 S2  | 1375.5       | 6/6/2019   | REG              | F INIT                                | METALS          | Tin                                 | Sn        | 14.8       | 1.7           | Reg-Scr_95         | 13           | 1.1              | 2.5     | μg/L    | 1               |               | NQ NQ                                       | SW-846:6010C   | GELC     |                  |
| XC2scr        | 50     | 54 8    | 8/30/2007   | 2.66       | 39         | 3.68          | 6          | Sandia<br>Canyon              | Regional Deep           | R-35a    | 1013.1       | 6/10/2019  | FD               | F INIT                                | METALS          | Tin                                 | Sn        | 39         | 10.6          | Reg-Scr_95         | 13           | 3                | 2.5     | μg/L    | 1               |               | J+ I4a                                      | SW-846:6010C   | GELC     |                  |
| XC2scr        | 50     | 54 8    | 8/30/2007   | 2.66       | 39         | 3.68          | 6          | Sandia<br>Canyon              | Regional Deep           | R-35a    | 1013.1       | 6/10/2019  | REG              | F INIT                                | METALS          | Tin                                 | Sn        | 35.8       | 9.7           | Reg-Scr_95         | 13           | 2.8              | 2.5     | μg/L    | 1               |               | J+ I4a                                      | SW-846:6010C   | GELC     |                  |
| XC2scr        | 52     | 57 2    | 2/22/2009   | 4.51       | 4.51       | 4.51          | 1          | Mortandad<br>Canyon           | Regional Deep           | R-44 S2  | 985.3        | 6/18/2019  | REG              | F INIT                                | METALS          | Copper                              | Cu        | 4.51       | 1             | Reg-Scr_95         | 3            | 1.5              | 3       | μg/L    | 1               | J ,           | J J_LAB                                     | SW-846:6010C   | GELC     |                  |
| XC2scr        | 8      | 8       | 11/14/2001  | 8.25       | 8.25       | 8.25          | 1          | Pueblo<br>Canyon              | Regional Deep           | R-5 S4   | 858.7        | 7/2/2019   | REG              | F INIT                                | METALS          | Copper                              | Cu        | 8.25       | 1             | Reg-Scr_95         | 3            | 2.8              | 3       | μg/L    | 1               | J             | J J_LAB                                     | SW-846:6010C   | GELC     |                  |
| XC2scr        | 9 9    | 9       | 11/14/2001  | 3.5        | 34.9       | 8.03          | 9          | Pueblo<br>Canyon              | Regional Deep           | R-5 S4   | 858.7        | 7/2/2019   | REG              | F INIT                                | METALS          | Zinc                                | Zn        | 34.9       | 4.3           | Reg-Scr_95         | 14.4         | 2.4              | 3.3     | μg/L    | 1               |               | J+ I4a                                      | SW-846:6010C   | GELC     |                  |
| XC2scr        | 52     | 54 3    | 3/11/2010   | 2.69       | 17.3       | 3.5           | 5          | Mortandad<br>Canyon           | Regional Deep           | R-50 S2  | 1185         | 6/11/2019  | REG              | F INIT                                | METALS          | Tin                                 | Sn        | 17.3       | 4.9           | Reg-Scr_95         | 13           | 1.3              | 2.5     | μg/L    | 1               |               | J+ I4a                                      | SW-846:6010C   | GELC     |                  |
| XC2scr        | 5      | 5 5     | 5/30/2001   | 30.4       | 3400       | 3080          | 5          | Upper<br>Los Alamos<br>Canyon | Regional Top            | R-7 S3   | 895.5        | 6/23/2019  | REG              | F INIT                                | METALS          | Manganese                           | Mn        | 30.4       | 0             | Reg-Scr_95         | 12.1         | 2.5              | 2       | μg/L    | 1               |               | NQ NQ                                       | SW-846:6010C   | GELC     |                  |
| XC2scr        | 1      | 1 6     | 6/23/2019   | 28.9       | 28.9       | 28.9          | 1          | Upper<br>Los Alamos<br>Canyon | Regional Top            | R-7 S3   | 895.5        | 6/23/2019  | REG              | F INIT                                | METALS          | Tin                                 | Sn        | 28.9       | 1             | Reg-Scr_95         | 13           | 2.2              | 2.5     | μg/L    | 1               |               | J+ I4a                                      | SW-846:6010C   | GELC     |                  |
| XC2scr        | 10     | 11      | 6/29/2006   | 0.104      | 0.104      | 0.104         | 1          | Sandia<br>Canyon              | Regional Deep           | R-10 S2  | 1042         | 11/14/2018 | REG              | UF INIT                               | INORGANIC       | Cyanide<br>(Total)                  | CN(TOTAL) | 0.104      | 1             | Reg-Scr_95         | 0.0017       | 61               | 0.002   | mg/L    | 1               |               | NQ NQ                                       | EPA:335.4      | GELC     | FD was nondetect |
| XC4scr        | 15     | 15      | 8/8/2006    | 212        | 252        | 234           | 15         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG              | F INIT                                | METALS          | Boron                               | В         | 252        | 1.1           | Int-Scr_95         | 16.2         | 16               | 15      | μg/L    | 1               |               | NQ NQ                                       | SW-846:6010C   | GELC     |                  |
| XC4scr        | 16     | 16      | 8/8/2006    | 331        | 403        | 369.5         | 16         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG              | F INIT                                | GENINORG        | Total<br>Dissolved<br>Solids        | TDS       | 403        | 1.1           | Int-Scr_95         | 135          | 3                | 3.4     | mg/L    | 1               |               | J+ I4a                                      | EPA:160.1      | GELC     |                  |
| XC4scr        | 17     | 17      | 5/7/2005    | 0.032      | 1.69       | 1.13          | 17         | Pueblo<br>Canyon              | Intermediate<br>Perched | POI-4    | 159          | 6/12/2019  | REG              | F INIT                                | GENINORG        | Total<br>Phosphate as<br>Phosphorus | PO4-P     | 1.09       | 1             | Int-Scr_95         | 0.178        | 6.1              | 0.02    | mg/L    | 1               |               | J+ I4a                                      | EPA:365.4      | GELC     |                  |

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Table 2: NMED 7-19 Groundwater Report Addendum

|               |        |         | - Oloum     |            |            | 1             |            | 1                                      | 1                       |                        | 1            | 1          | 1                |               |                 |                                     | 1       | 1          |               | 1                  | 1            | ,                |         |         |                 |               |                      |                        |                |          |         |
|---------------|--------|---------|-------------|------------|------------|---------------|------------|--|-------------------------|------------------------|--------------|------------|------------------|---------------|-----------------|-------------------------------------|---------|------------|---------------|--------------------|--------------|------------------|---------|---------|-----------------|---------------|----------------------|------------------------|----------------|----------|---------|
| Criteria Code | Visits | Samples | First Event | Min Detect | Max Detect | Median Detect | Num Detect | Canyon                                 | Zone                    | Location               | Screen Depth | Start Date | Fld QC Type Code | Fld Prep Code | 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 |
| XC4scr        | 16     | 18 8    | 3/10/2006   | 84.6       | 152        | 101           | 18         | Pueblo<br>Canyon                       | Intermediate<br>Perched | R-3i                   | 215.2        | 6/24/2019  | REG              | F IN          | T METALS        | Boron                               | В       | 152        | 1.5           | Int-Scr_95         | 16.2         | 9.4              | 15      | μg/L    | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| XC4scr        | 17     | 20 8    | 3/10/2006   | 251        | 437        | 325           | 20         | Pueblo<br>Canyon                       | Intermediate<br>Perched | R-3i                   | 215.2        | 6/24/2019  | REG              | F IN          | T GENINORG      | Total<br>Dissolved<br>Solids        | TDS     | 349        | 1.1           | Int-Scr_95         | 135          | 2.6              | 3.4     | mg/L    | 1               |               | NQ                   | NQ                     | EPA:160.1      | GELC     |         |
| XC4scr        | 14     | 19 4    | 1/29/2010   | 151        | 195        | 168           | 19         | Pueblo<br>Canyon                       | Intermediate<br>Perched | TW-2Ar                 | 102          | 6/21/2019  | REG              | F IN          | T METALS        | Boron                               | В       | 159        | 0.9           | Int-Scr_95         | 16.2         | 9.8              | 15      | μg/L    | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| XC4scr        | 18     | 22 1    | 1/15/2005   | 41.8       | 64         | 50.6          | 21         | Lower<br>Los Alamos<br>Canyon          | Regional Top            | R-24                   | 825          | 6/14/2019  | REG              | F IN          | T METALS        | Boron                               | В       | 45.2       | 0.9           | Reg-Scr_95         | 18.7         | 2.4              | 15      | μg/L    | 1               | J             | J                    | J_LAB                  | SW-846:6010C   | GELC     |         |
| XC4scr        | 36     | 42 5    | 5/20/2011   | 0.0531     | 11.8       | 0.686         | 39         | Mortandad<br>Canyon                    | Regional Top            | R-61 S1                | 1125         | 6/6/2019   | REG              | F IN          | T GENINORG      | Total<br>Phosphate as<br>Phosphorus | PO4-P   | 0.472      | 0.7           | Reg-Scr_95         | 0.0822       | 5.7              | 0.02    | mg/L    | 1               |               | NQ                   | NQ                     | EPA:365.4      | GELC     |         |
| XC4scr        | 16     | 18 8    | 3/8/2011    | 0.136      | 0.19       | 0.162         | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring  | Vine<br>Tree<br>Spring | 0            | 12/13/2018 | FD               | F IN          | T GENINORG      | Bromide                             | Br(-1)  | 0.183      | 1.1           | Int-Scr_95         | 0.0716       | 2.6              | 0.067   | mg/L    | 1               | J             | J                    | J_LAB                  | EPA:300.0      | GELC     |         |
| XC4scr        | 16     | 18 8    | 3/8/2011    | 0.136      | 0.19       | 0.162         | 18         | Lower<br>Los Alamos<br>Canyon          | Intermediate<br>Spring  | Vine<br>Tree<br>Spring | 0            | 12/13/2018 | REG              | F IN          | T GENINORG      | Bromide                             | Br(-1)  | 0.166      | 1             | Int-Scr_95         | 0.0716       | 2.3              | 0.067   | mg/L    | 1               | J             | J                    | J_LAB                  | EPA:300.0      | GELC     |         |
| XC4scr        | 16     | 17 1    | 0/23/2001   | 49.4       | 61.9       | 52.7          | 17         | White Rock<br>Canyon and<br>Rio Grande | Regional Spring         | La<br>Mesita<br>Spring | 0            | 10/10/2018 | REG              | F IN          | T METALS        | Boron                               | В       | 61.9       | 1.2           | Reg-Scr_95         | 18.7         | 3.3              | 15      | μg/L    | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| XC4scr        | 14     | 15 7    | 7/12/2005   | 0.092      | 0.163      | 0.137         | 13         | White Rock<br>Canyon and<br>Rio Grande | Regional Spring         | La<br>Mesita<br>Spring | 0            | 10/10/2018 | REG              | F IN          | T GENINORG      | Bromide                             | Br(-1)  | 0.137      | 1             | Reg-Scr_95         | 0.067        | 2                | 0.067   | mg/L    | 1               | J             | J                    | J_LAB                  | EPA:300.0      | GELC     |         |
| XC4scr        | 16     | 23 1    | 0/23/2001   | 36.3       | 946        | 126           | 21         | White Rock<br>Canyon and<br>Rio Grande | Regional Spring         | Sacred<br>Spring       | 0            | 10/11/2018 | REG              | F IN          | T METALS        | Iron                                | Fe      | 717        | 5.7           | Reg-Scr_95         | 53.8         | 13               | 30      | μg/L    | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |
| XC4scr        | 16     | 23 1    | 0/23/2001   | 32.8       | 994        | 197           | 21         | White Rock<br>Canyon and<br>Rio Grande | Regional Spring         | Sacred<br>Spring       | 0            | 10/11/2018 | REG              | F IN          | T METALS        | Manganese                           | Mn      | 482        | 2.4           | Reg-Scr_95         | 12.1         | 40               | 2       | μg/L    | 1               |               | NQ                   | NQ                     | SW-846:6010C   | GELC     |         |

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