SUMMARY OF GROUNDWATER DATA REVIEWED IN MARCH 2014 THAT MEET NOTIFICATION REQUIREMENTS

INTRODUCTION

This report provides preliminary information to the New Mexico Environment Department (NMED) concerning recent groundwater monitoring data obtained by the Los Alamos National Laboratory (the Laboratory) under its interim monitoring plan and contains results for chemical constituents that meet the seven screening criteria laid out in the Compliance Order on Consent (Consent Order). The report covers groundwater samples taken from wells or springs (listed in the accompanying table) that provide surveillance of the groundwater zones indicated in the table.

The report includes one table, *Table 1: NMED 2-14 Groundwater Report*. This table contains some values that are reported when they are detected for the first time since June 14, 2007, or are greater than other data collected since that time (as specified in the Consent Order). These reported data may be similar to data gathered before June 14, 2007.

This table includes the following:

- Additional comments on results that appear to be exceptional or based on consideration of monitoring data acquired before the current result (using statistics described below)
- Supplemental information summarizing monitoring results obtained before the current result
- 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.

In accordance with the Consent Order, the screening levels used include the U.S. Environmental Protection Agency (EPA) maximum contaminant levels (MCLs), the New Mexico groundwater standards, and the EPA Regional Screening Levels for tap water (for compounds having no other regulatory standard). The EPA Regional Screening Levels for tap water are either for cancer (10^{-6} excess risk) or noncancer risk values. The data were screened using 10 times the EPA's 10^{-6} excess cancer risk values, to achieve 10^{-5} excess cancer risk as indicated in Section VIII.A.1 of the Consent Order.

Background levels applied in Criteria 2 and 5 are the most recent NMED-approved 95% upper tolerance limits for background for each groundwater zone as set forth in the "Groundwater Background Investigation Report," prepared under Section IV.A.3.d of the Consent Order.

DESCRIPTION OF TABLE

The table is divided into separate categories that correspond to the seven screening criteria in the Consent Order. Some data meet more than one of the criteria and appear in the table multiple times. The table also presents only the instances where the results exceed criteria; therefore, not all seven criteria may appear in the table.

The criteria are as follows:

CA. The Respondents shall notify the Department orally within one business day after review of the analytical data if such data show detection of a contaminant in a well screen interval or spring at a concentration that exceeds either the NMWQCC water quality standard or the federal MCL if that contaminant has not previously exceeded such water quality standard or maximum contaminant level in such well screen interval or spring.

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 exceeds either one-half the New Mexico water quality standard or one-half the federal maximum contaminant level, or if there is no such standard for the contaminant, one-half the EPA Region 6 human health medium-specific screening level for tap water (now the EPA Regional Screening Levels 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 perchlorate in a spring or screened interval of a well at a concentration of 2 µg/L or greater if perchlorate at such concentration has not previously been detected in the spring or screened interval.

C5. 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.

C6. Detection of a contaminant in a spring or screened interval of a well at a concentration that exceeds either one-half the New Mexico water quality standard or one-half the federal MCL, and that has increased for the third consecutive sampling of that spring or screened interval.

The next seven columns of the table give information on monitoring results obtained prior to the current result. The columns provide summary statistics for the samples collected since January 1, 2000, for the same analyte and field preparation (for example, filtered samples). The information includes the date of the first sampling event included in the statistics, the numbers 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:

Hdr 1—canyon where monitoring location is found

Zone—groundwater zone sampled by monitoring location (such as alluvial spring)

Location—monitoring location name

Screen Depth—depth of top of well screen in feet (0 for springs, –1 if unknown)

Start Date—sample date

Fld QC Type Code—identifies regular samples (REG) or field duplicates (FD)

Fld Prep Code—identifies whether samples are filtered or unfiltered

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 to 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 Qual Code—analytical laboratory qualifiers indicating analytical quality of the sample

Concat Flag Code—secondary validation qualifier

Concat Reason Code—concatenated secondary validation codes explaining assignment of qualifiers

Anyl Meth Code—analytical method number

Lab Code—analytical laboratory name

Comment—comment on the analytical result

Table 1: NMED 2-14 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Analysis 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 Qual Code	Concat Flag Code	Concat Reason Code	Anyl Meth Code	Lab Code	Comments
C2	17	21	03/06/10	12.5	12.5	12.5	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	01/15/14	FD	F	INIT	METALS	Copper	Cu	12.5	1	LANL Reg BG LVL	3	4.2	3	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C2	17	20	02/22/09	117	207	141.5	20	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-44 S2	985.3	01/13/14	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	207	1.5	LANL Reg BG LVL	191.7	1.1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	maximum; specific conductance in normal range
C2	34	39	06/07/05	0.0766	0.938	0.449	37	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-34	883.7	12/19/13	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	0.938	2.1	LANL Reg BG LVL	0.89	1.1	0.017	mg/L	1		J	I10a	EPA:353.2	GELC	
C2	14	22	10/19/00	96.5	238	126.5	22	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	FD	F	INIT	GENINORG	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	237	1.9	LANL Reg BG LVL	156.6	1.5	0.725	mg/L	1		NQ	NQ	EPA:310.1	GELC	
C2	14	22	10/19/00	96.5	238	126.5	22	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	REG	F	INIT	GENINORG	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	238	1.9	LANL Reg BG LVL	156.6	1.5	0.725	mg/L	1		NQ	NQ	EPA:310.1	GELC	
C2	9	14	07/13/05	0.121	0.13	0.1255	2	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	FD	F	INIT	GENINORG	Bromide	Br(-1)	0.13	1	LANL Reg BG LVL	0.1	1.3	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C2	9	14	07/13/05	0.121	0.13	0.1255	2	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.121	1	LANL Reg BG LVL	0.1	1.2	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C2	14	22	10/19/00	2.44	10.9	2.94	22	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	FD	F	INIT	GENINORG	Chloride	Cl(-1)	10.9	3.7	LANL Reg BG LVL	3.57	3.1	0.134	mg/L	2		NQ	NQ	EPA:300.0	GELC	
C2	14	22	10/19/00	2.44	10.9	2.94	22	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	REG	F	INIT	GENINORG	Chloride	Cl(-1)	10.6	3.6	LANL Reg BG LVL	3.57	3	0.134	mg/L	2		NQ	NQ	EPA:300.0	GELC	
C2	11	17	10/23/01	0.81	2.43	2.23	3	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	FD	F	INIT	METALS	Cobalt	Co	2.23	1	LANL Reg BG LVL	0.5	4.5	1	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	11	17	10/23/01	0.81	2.43	2.23	3	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	REG	F	INIT	METALS	Cobalt	Co	2.43	1.1	LANL Reg BG LVL	0.5	4.9	1	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	14	22	10/19/00	1.34	4.79	1.485	22	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	FD	F	INIT	GENINORG	Magnesium	Mg	4.79	3.2	LANL Reg BG LVL	4.15	1.2	0.11	mg/L	1		NQ	NQ	SW-846:6010B	GELC	
C2	14	22	10/19/00	1.34	4.79	1.485	22	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	REG	F	INIT	GENINORG	Magnesium	Mg	4.78	3.2	LANL Reg BG LVL	4.15	1.2	0.11	mg/L	1		J	I10a	SW-846:6010B	GELC	
C2	14	22	10/19/00	19.6	40.7	21.6	22	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	FD	F	INIT	GENINORG	Sodium	Na	40.3	1.9	LANL Reg BG LVL	24.5	1.6	0.1	mg/L	1		NQ	NQ	SW-846:6010B	GELC	
C2	14	22	10/19/00	19.6	40.7	21.6	22	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	REG	F	INIT	GENINORG	Sodium	Na	40.7	1.9	LANL Reg BG LVL	24.5	1.7	0.1	mg/L	1		J-	I6a	SW-846:6010B	GELC	
C2	11	17	10/23/01	403	665	436	17	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	FD	F	INIT	METALS	Strontium	Sr	653	1.5	LANL Reg BG LVL	540	1.2	1	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C2	11	17	10/23/01	403	665	436	17	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	REG	F	INIT	METALS	Strontium	Sr	665	1.5	LANL Reg BG LVL	540	1.2	1	ug/L	1		J	I10a	SW-846:6010B	GELC	
C2	11	11	10/23/01	30.9	81.4	56.15	2	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	12/17/13	REG	F	INIT	METALS	Aluminum	Al	81.4	1.4	LANL Reg BG LVL	68	1.2	68	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	11	11	09/24/01	1	1	1	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 1	0	12/11/13	REG	F	INIT	METALS	Cobalt	Co	1	1	LANL Reg BG LVL	0.5	2	1	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C3	52	59	03/12/01	241	601	311	59	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	01/21/14	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	601	1.9	NM GW STD	1000	0.6	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	confirmed by field specific conductance-twice normal range; last higher TDS in 1996
C5	10	12	05/20/11	2.03	19.7	16.4	11	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S1	1125	01/23/14	REG	F	INIT	METALS	Chromium	Cr	19.7	1.2	LANL Reg BG LVL	5.75	3.4	2	ug/L	1		J	I10a	SW-846:6020	GELC	maximum, close to recent values
C5	10	12	05/20/11	11.1	1100	25.45	12	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S1	1125	01/23/14	REG	F	INIT	METALS	Manganese	Mn	15.1	0.6	LANL Reg BG LVL	2.94	5.1	2	ug/L	1		J	I10a	SW-846:6010B	GELC	up a little, was 11.1 ug/L in 11/13
C5	10	12	05/20/11	2.96	7.62	6.38	12	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S1	1125	01/23/14	REG	F	INIT	GENINORG	Perchlorate	ClO4	7.62	1.2	LANL Reg BG LVL	0.46	16.6	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	maximum, close to recent values
C5	10	12	05/20/11	1.46	27.4	8.21	12	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S1	1125	01/23/14	REG	F	INIT	GENINORG	Potassium	K	7.16	0.9	LANL Reg BG LVL	2.63	2.7	0.05	mg/L	1		J	I10a	SW-846:6010B	GELC	
C5	10	12	05/20/11	0.0531	11.8	2.97	9	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S1	1125	01/23/14	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	2.7	0.9	LANL Reg BG LVL	0.16	16.9	0.017	mg/L	1		J	I10a	EPA:365.4	GELC	below value in 11/13
C5	10	10	05/24/11	148	5590	863	9	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S2	1220.4	01/22/14	REG	F	INIT	METALS	Iron	Fe	1130	1.3	LANL Reg BG LVL	21	53.8	30	ug/L	1		J	I10a	SW-846:6010B	GELC	steady upward trend since 2/13
C5	10	10	05/24/11	22.2	908	135	10	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S2	1220.4	01/22/14	REG	F	INIT	METALS	Manganese	Mn	143	1.1	LANL Reg BG LVL	2.94	48.6	2	ug/L	1		J	I10a	SW-846:6010B	GELC	increasing since 11/12
C5	10	10	05/24/11	1.51	24.4	13	10	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S2	1220.4	01/22/14	REG	F	INIT	GENINORG	Potassium	K	13.5	1	LANL Reg BG LVL	2.63	5.1	0.05	mg/L	1		J	I10a	SW-846:6010B	GELC	
C5	10	10	05/24/11	0.573	14.7	1.495	10	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S2	1220.4	01/22/14	REG	UF	INIT	GENINORG	Total Organic Carbon	TOC	1.11	0.7	LANL Reg BG LVL	0.33	3.4	0.33	mg/L	1		NQ	NQ	SW-846:9060	GELC	
C5	10	10	05/24/11	0.0389	19.7	7.35	7	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S2	1220.4	01/22/14	REG	F	INIT	GENINORG	Total Phosphate as Phosphorus	PO4-P	7.35	1	LANL Reg BG LVL	0.16	45.9	0.085	mg/L	5		NQ	NQ	EPA:365.4	GELC	similar to value in 11/13
C5	17	23	03/06/10	49.8	114	81	23	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	01/15/14	FD	F	INIT	METALS	Chromium	Cr	114	1.4	LANL Reg BG LVL	5.75	19.8	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	new high; previous high 103 ug/L in 5/13
C5	17	23	03/06/10	49.8	114	81	23	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	01/15/14	REG	F	INIT	METALS	Chromium	Cr	112	1.4	LANL Reg BG LVL	5.75	19.5	2	ug/L	1		J	I10a	SW-846:6020	GELC	note estimated-previous high 103 ug/L in 5/13
C5	17	21	03/06/10	1.51	8.66	3.83	21	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	01/15/14	FD	F	INIT	METALS	Nickel	Ni	8.32	2.2	LANL Reg BG LVL	3.09	2.7	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	17	21	03/06/10	1.51	8.66	3.83	21	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	01/15/14	REG	F	INIT	METALS	Nickel	Ni	8.41	2.2	LANL Reg BG LVL	3.09	2.7	0.5	ug/L	1		J	I10a	SW-846:6020	GELC	
C5	17	21	03/06/10	0.44	2.46	1.08	19	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	01/15/14	FD	UF	INIT	GENINORG	Total Organic Carbon	TOC	0.824	0.8	LANL Reg BG LVL	0.33	2.5	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C5	17	21	03/06/10	0.44	2.46	1.08	19	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	01/15/14	REG	UF	INIT	GENINORG	Total Organic Carbon	TOC	0.825	0.8	LANL Reg BG LVL	0.33	2.5	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C5	17	21	02/17/09	7.34	17.5	12.8	21	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-44 S1	895	01/13/14	REG	F	INIT	METALS	Chromium	Cr	16.8	1.3	LANL Reg BG LVL	5.75	2.9	2	ug/L	1		J	I10a	SW-846:6020	GELC	
C5	28	35	04/21/05	3.3	44.3	16.1	35	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-4B	8.9	01/21/14	REG	F	INIT	GENINORG	Perchlorate	ClO4	14	0.9	LANL Avl BG LVL	0.05	280	1	ug/L	20		NQ	NQ	SW-846:6850	GELC	

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Analysis 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 Qual Code	Concat Flag Code	Concat Reason Code	Anyl Meth Code	Lab Code	Comments
C5	23	28	05/24/01	0.136	0.542	0.2725	20	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-4B	8.9	01/21/14	REG	F	INIT	GENINORG	Total Kjeldahl Nitrogen	TKN	0.236	0.9	LANL Avl BG LVL	0.04	5.9	0.033	mg/L	1		NQ	NQ	EPA:351.2	GELC	
C5	51	58	03/12/01	0.674	1.51	1.05	58	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	01/21/14	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.674	0.6	LANL Avl BG LVL	0.27	2.5	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	35	40	04/27/05	3.23	31.7	17.85	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	01/21/14	REG	F	INIT	GENINORG	Perchlorate	ClO4	14.7	0.8	LANL Avl BG LVL	0.05	294	1	ug/L	20		NQ	NQ	SW-846:6850	GELC	
C5	53	60	03/12/01	0.78	1.79	1.28	59	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	01/29/14	REG	F	INIT	GENINORG	Fluoride	F(-1)	1.11	0.9	LANL Avl BG LVL	0.27	4.1	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	52	60	03/12/01	0.685	10.9	2.46	59	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	01/29/14	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.76	1.1	LANL Avl BG LVL	0.57	4.8	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C5	35	40	04/28/05	6.23	47.5	17.75	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	01/29/14	REG	F	INIT	GENINORG	Perchlorate	ClO4	11.1	0.6	LANL Avl BG LVL	0.05	222	1	ug/L	20		NQ	PE12d	SW-846:6850	GELC	
C5	22	30	10/21/08	0.194	0.683	0.5065	30	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.633	1.2	LANL Int BG LVL	0.03	21.1	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	22	32	10/21/08	59.5	71.7	66.65	32	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	GENINORG	Calcium	Ca	67.9	1	LANL Int BG LVL	17.31	3.9	0.05	mg/L	1		J-	I6a	SW-846:6010B	GELC	
C5	22	30	10/21/08	53.4	68.7	59.9	30	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	GENINORG	Chloride	Cl(-1)	68.7	1.1	LANL Int BG LVL	7.78	8.8	0.67	mg/L	10		NQ	NQ	EPA:300.0	GELC	
C5	22	37	10/21/08	390	658	506	37	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	METALS	Chromium	Cr	390	0.8	LANL Int BG LVL	1	390	2	ug/L	1		J-	I6a	SW-846:6020	GELC	minimum; decline from 637 ug/L in 11/09
C5	22	32	10/21/08	13.1	16.7	15.45	32	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	GENINORG	Magnesium	Mg	16.4	1.1	LANL Int BG LVL	6.12	2.7	0.11	mg/L	1		J	I10a	SW-846:6010B	GELC	
C5	22	32	10/21/08	14.5	19.3	16.95	32	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	METALS	Nickel	Ni	16	0.9	LANL Int BG LVL	1	16	0.5	ug/L	1		J	I10a	SW-846:6020	GELC	
C5	22	30	10/21/08	0.936	1.12	1.01	30	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	GENINORG	Perchlorate	ClO4	0.96	1	LANL Int BG LVL	0.05	19.2	0.05	ug/L	1		NQ	NQ	SW-846:6850	GELC	
C5	22	32	10/21/08	278	350	322	32	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	METALS	Strontium	Sr	339	1.1	LANL Int BG LVL	154.8	2.2	1	ug/L	1		J	I10a	SW-846:6010B	GELC	
C5	22	30	10/21/08	354	451	414.5	30	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	424	1	LANL Int BG LVL	127	3.3	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	22	32	10/21/08	1.2	2.15	1.54	32	Sandia Canyon	Intermediate	SCI-2	548	01/13/14	REG	F	INIT	RAD	Uranium	U	2.15	1.4	LANL Int BG LVL	0.72	3	0.067	ug/L	1		J	I10a	SW-846:6020	GELC	
C5	6	6	08/08/11	0.136	0.19	0.1505	6	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	12/17/13	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.159	1.1	LANL Int BG LVL	0.03	5.3	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	6	6	08/08/11	16	19.1	18.55	6	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	12/17/13	REG	F	INIT	GENINORG	Chloride	Cl(-1)	17.5	0.9	LANL Int BG LVL	7.78	2.2	0.335	mg/L	5		J	I10a	EPA:300.0	GELC	
C5	6	6	08/08/11	0.438	0.486	0.4625	6	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	12/17/13	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.486	1.1	LANL Int BG LVL	0.23	2.1	0.033	mg/L	1		J	I10a	EPA:300.0	GELC	
C5	6	6	08/08/11	4.86	5.66	5.43	6	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	12/17/13	REG	F	INIT	GENINORG	Perchlorate	ClO4	5.66	1	LANL Int BG LVL	0.05	113.2	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	maximum, close to recent values
C5	6	6	08/08/11	1.39	2.16	1.75	6	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	12/17/13	REG	F	INIT	RAD	Uranium	U	1.58	0.9	LANL Int BG LVL	0.72	2.2	0.067	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	11	17	10/23/01	36.3	221	102	15	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	FD	F	INIT	METALS	Iron	Fe	155	1.5	LANL Reg BG LVL	21	7.4	30	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	11	17	10/23/01	36.3	221	102	15	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	REG	F	INIT	METALS	Iron	Fe	158	1.5	LANL Reg BG LVL	21	7.5	30	ug/L	1		J	I10a	SW-846:6010B	GELC	
C5	11	17	10/23/01	32.8	994	194	15	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	FD	F	INIT	METALS	Manganese	Mn	992	5.1	LANL Reg BG LVL	2.94	337.4	2	ug/L	1		NQ	NQ	SW-846:6010B	GELC	previous high 424 ug/L in 10/10
C5	11	17	10/23/01	32.8	994	194	15	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	12/12/13	REG	F	INIT	METALS	Manganese	Mn	994	5.1	LANL Reg BG LVL	2.94	338.1	2	ug/L	1		J	I10a	SW-846:6010B	GELC	maximum; note estimated- previous high 424 ug/L in 10/10
C5	11	11	10/23/01	103	118	111	11	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	12/17/13	REG	F	INIT	METALS	Barium	Ba	115	1	LANL Reg BG LVL	56.83	2	1	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	14	14	10/19/00	1.39	2.67	2.295	14	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	12/17/13	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.67	1.2	LANL Reg BG LVL	0.89	3	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	
C5	10	10	08/24/04	9.8	12.7	11.75	10	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	12/17/13	REG	F	INIT	RAD	Uranium	U	12.1	1	LANL Reg BG LVL	1.9	6.4	0.067	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	21	28	11/05/08	2.35	72.7	22.8	25	Sandia Canyon	Regional	R-43 S1	903.9	01/21/14	FD	F	INIT	METALS	Chromium	Cr	70.5	3.1	LANL Reg BG LVL	5.75	12.3	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	previous high 69.9 ug/L in 11/13
C5	21	28	11/05/08	2.35	72.7	22.8	25	Sandia Canyon	Regional	R-43 S1	903.9	01/21/14	REG	F	INIT	METALS	Chromium	Cr	72.7	3.2	LANL Reg BG LVL	5.75	12.6	2	ug/L	1		J	I10a	SW-846:6020	GELC	maximum; previous high 69.9 ug/L in 11/13
C5	21	22	11/05/08	5.05	6.03	5.5	21	Sandia Canyon	Regional	R-43 S1	903.9	01/21/14	FD	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.15	0.9	LANL Reg BG LVL	0.89	5.8	0.17	mg/L	10		NQ	NQ	EPA:353.2	GELC	
C5	21	22	11/05/08	5.05	6.03	5.5	21	Sandia Canyon	Regional	R-43 S1	903.9	01/21/14	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.5	1	LANL Reg BG LVL	0.89	6.2	0.17	mg/L	10		NQ	NQ	EPA:353.2	GELC	
C5	36	46	05/17/05	13.5	34.9	20.95	46	Sandia Canyon	Regional	R-11	855	01/09/14	REG	F	INIT	METALS	Chromium	Cr	24.8	1.2	LANL Reg BG LVL	5.75	4.3	2	ug/L	1		J	I10a	SW-846:6020	GELC	
C5	35	43	05/17/05	2.27	7.43	5.14	43	Sandia Canyon	Regional	R-11	855	01/09/14	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.6	1.1	LANL Reg BG LVL	0.89	6.3	0.17	mg/L	10		NQ	NQ	EPA:353.2	GELC	
C5	35	43	05/17/05	5.94	52.9	10.5	36	Sandia Canyon	Regional	R-11	855	01/09/14	REG	F	INIT	METALS	Zinc	Zn	10.6	1	LANL Reg BG LVL	3.89	2.7	3.3	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	23	31	08/29/07	23.4	62.3	32.5	31	Sandia Canyon	Regional	R-35b	825.4	01/15/14	REG	F	INIT	METALS	Zinc	Zn	23.4	0.7	LANL Reg BG LVL	3.89	6	3.3	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	23	24	08/30/07	68	389	338.5	24	Sandia Canyon	Regional	R-35a	1013.1	01/16/14	REG	F	INIT	METALS	Barium	Ba	351	1	LANL Reg BG LVL	56.83	6.2	1	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	18	21	09/06/07	3.66	37.2	21.1	21	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i S1	400.3	12/03/13	REG	F	RE	GENINORG	Chloride	Cl(-1)	36.8	1.7	LANL Int BG LVL	7.78	4.7	0.67	mg/L	10	H	NQ	NQ	EPA:300.0	GELC	
C5	34	47	06/15/05	25.4	51.9	37.7	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	METALS	Boron	B	48.8	1.3	LANL Int BG LVL	15.12	3.2	15	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	34	47	06/15/05	0.212	0.702	0.604	45	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	GENINORG	Bromide	Br(-1)	0.59	1	LANL Int BG LVL	0.03	19.7	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	34	47	06/15/05	42.8	75.5	64.5	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	GENINORG	Calcium	Ca	66.8	1	LANL Int BG LVL	17.31	3.9	0.05	mg/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	34	47	06/15/05	21.2	64.8	46.7	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	GENINORG	Chloride	Cl(-1)	60.8	1.3	LANL Int BG LVL	7.78	7.8	0.67	mg/L	10		NQ	NQ	EPA:300.0	GELC	

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fld QC Type Code	Fld Prep Code	Analysis 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 Qual Code	Concat Flag Code	Concat Reason Code	Anyl Meth Code	Lab Code	Comments
C5	34	50	06/15/05	29.4	81.3	49.65	50	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	METALS	Chromium	Cr	72.4	1.5	LANL Int BG LVL	1	72.4	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	decline from 81.3 ug/L in 11/09
C5	34	47	06/15/05	0.412	0.635	0.538	44	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	GENINORG	Fluoride	F(-1)	0.534	1	LANL Int BG LVL	0.23	2.3	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	34	47	06/15/05	8.49	15.7	13.3	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	GENINORG	Magnesium	Mg	13.8	1	LANL Int BG LVL	6.12	2.3	0.11	mg/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	34	47	06/15/05	2.9	41.8	12.2	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	METALS	Nickel	Ni	40	3.3	LANL Int BG LVL	1	40	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	34	47	06/15/05	7.62	20.4	11.6	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	8.66	0.7	LANL Int BG LVL	2.41	3.6	0.17	mg/L	10		NQ	NQ	EPA:353.2	GELC	
C5	34	47	06/15/05	56.3	246	90.9	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	GENINORG	Perchlorate	ClO4	58.4	0.6	LANL Int BG LVL	0.05	1168	5	ug/L	100		NQ	NQ	SW-846:6850	GELC	
C5	34	47	06/15/05	19.5	28.8	25.4	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	GENINORG	Sodium	Na	27.6	1.1	LANL Int BG LVL	12.19	2.3	0.1	mg/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	34	47	06/15/05	298	497	401	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	363	0.9	LANL Int BG LVL	127	2.9	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	34	47	06/15/05	15.9	288	33.7	47	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	01/17/14	REG	F	INIT	METALS	Zinc	Zn	25.2	0.7	LANL Int BG LVL	2	12.6	3.3	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C6	10	12	05/20/11	2.96	7.62	6.38	12	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S1	1125	01/23/14	REG	F	INIT	GENINORG	Perchlorate	ClO4	7.62	1.2	Consent Order	4	1.9	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	maximum, close to recent values
C6	10	10	05/24/11	148	5590	863	9	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S2	1220.4	01/22/14	REG	F	INIT	METALS	Iron	Fe	1130	1.3	NM GW STD	1000	1.1	30	ug/L	1		J	I10a	SW-846:6010B	GELC	steady upward trend since 2/13
C6	10	10	05/24/11	22.2	908	135	10	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61 S2	1220.4	01/22/14	REG	F	INIT	METALS	Manganese	Mn	143	1.1	NM GW STD	200	0.7	2	ug/L	1		J	I10a	SW-846:6010B	GELC	increasing since 11/12
C6	35	40	04/27/05	3.23	31.7	17.85	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	01/21/14	REG	F	INIT	GENINORG	Perchlorate	ClO4	14.7	0.8	Consent Order	4	3.7	1	ug/L	20		NQ	NQ	SW-846:6850	GELC	
C6	52	59	03/12/01	241	601	311	59	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	01/21/14	REG	F	INIT	GENINORG	Total Dissolved Solids	TDS	601	1.9	NM GW STD	1000	0.6	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	confirmed by field specific conductance-twice normal range; last higher TDS in 1996
C6	6	6	08/08/11	4.86	5.66	5.43	6	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	12/17/13	REG	F	INIT	GENINORG	Perchlorate	ClO4	5.66	1	Consent Order	4	1.4	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	maximum, close to recent values
C6	21	28	11/05/08	2.35	72.7	22.8	25	Sandia Canyon	Regional	R-43 S1	903.9	01/21/14	REG	F	INIT	METALS	Chromium	Cr	72.7	3.2	NM GW STD	50	1.5	2	ug/L	1		J	I10a	SW-846:6020	GELC	maximum; previous high 69.9 ug/L in 11/13