

## SUMMARY OF NEW LOS ALAMOS NATIONAL LABORATORY GROUNDWATER DATA LOADED IN JULY 2012

### 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 7-12 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—identifies whether samples are filtered or unfiltered

Lab Sample Type Code—indicates whether result is a primary (customer) sample or reanalysis

Anyl Suite—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 7-12 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fid QC Type Code	Fid Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	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	Comment
C1	2	2	08/08/11	12.4	12.4	12.4	1	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	04/10/12	REG	UF	CS	SVOC	Benzoic Acid	12.4	1	EPA TAP SCRNLVL	58000	0	6.32	ug/L	1	J	J	J_LAB	SW-846:8270C	GELC	
C1	2	4	03/26/12	1.99	1.99	1.99	1	Sandia Canyon	Regional	R-62	1158.4	06/06/12	FD	UF	CS	VOC	Diethyl Ether	1.99	1	EPA TAP SCRNLVL	3100	0	0.3	ug/L	1		NQ	NQ	SW-846:8260B	GELC	
C2	4	7	09/06/11	0.12	1.57	0.479	7	Upper Los Alamos Canyon (includes DP Canyon)	Regional	R-64	1285	06/18/12	FD	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	1.05	2.2	LANL Reg BG LVL	0.89	1.2	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	a few nitrate analyses 6/18-21/12 unusually high; reanalysis was 0.23 mg/L
C2	4	7	09/06/11	0.12	1.57	0.479	7	Upper Los Alamos Canyon (includes DP Canyon)	Regional	R-64	1285	06/18/12	REG	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	1.57	3.3	LANL Reg BG LVL	0.89	1.8	0.085	mg/L	5		NQ	NQ	EPA:353.2	GELC	a few nitrate analyses 6/18-21/12 unusually high; reanalysis was 0.306 mg/L
C2	13	16	06/27/00	23.2	23.2	23.2	1	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24	04/09/12	REG	F	CS	METALS	Lead	23.2	1	LANL Avl BG LVL	0.5	46.4	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	only 1 prior F or UF detect since 1996; turb 0.24 NTU; Fe, Al, Mn all ND
C2	2	3	03/26/12	0.0449	0.0629	0.0539	2	Sandia Canyon	Regional	R-62	1158.4	06/06/12	REG	F	CS	GENINORG	Ammonia as Nitrogen	0.0629	1.2	LANL Reg BG LVL	0.05	1.3	0.017	mg/L	1		NQ	NQ	EPA:350.1	GELC	
C2	2	3	03/26/12	1.64	8.26	8.26	3	Sandia Canyon	Regional	R-62	1158.4	06/06/12	FD	F	CS	GENINORG	Chloride	8.26	1	LANL Reg BG LVL	3.57	2.3	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C2	2	3	03/26/12	1.64	8.26	8.26	3	Sandia Canyon	Regional	R-62	1158.4	06/06/12	REG	F	CS	GENINORG	Chloride	8.26	1	LANL Reg BG LVL	3.57	2.3	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C2	2	3	03/26/12	1.36	2.14	2.09	3	Sandia Canyon	Regional	R-62	1158.4	06/06/12	FD	F	CS	METALS	Molybdenum	2.09	1	LANL Reg BG LVL	2	1	0.165	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C2	2	3	03/26/12	1.36	2.14	2.09	3	Sandia Canyon	Regional	R-62	1158.4	06/06/12	REG	F	CS	METALS	Molybdenum	2.14	1	LANL Reg BG LVL	2	1.1	0.165	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C2	2	3	03/26/12	2.56	13.8	13.8	3	Sandia Canyon	Regional	R-62	1158.4	06/06/12	FD	F	CS	GENINORG	Sulfate	13.8	1	LANL Reg BG LVL	7.2	1.9	0.133	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C2	2	3	03/26/12	2.56	13.8	13.8	3	Sandia Canyon	Regional	R-62	1158.4	06/06/12	REG	F	CS	GENINORG	Sulfate	13.8	1	LANL Reg BG LVL	7.2	1.9	0.133	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C3	13	16	06/27/00	23.2	23.2	23.2	1	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24	04/09/12	REG	F	CS	METALS	Lead	23.2	1	EPA MCL	15	1.5	0.5	ug/L	1		NQ	NQ	SW-846:6020	GELC	only 1 prior F or UF detect since 1996; turb 0.24 NTU; Fe, Al, Mn all ND
C5	14	15	03/11/09	0.869	7.67	1.53	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-46	1340	06/01/12	REG	UF	CS	GENINORG	Total Organic Carbon	0.869	0.6	LANL Reg BG LVL	0.33	2.6	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C5	10	15	03/06/10	49.8	99.8	71.2	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50 S1	1077	05/31/12	REG	F	CS	METALS	Chromium	98.3	1.4	LANL Reg BG LVL	5.75	17.1	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	50	57	03/12/01	0.78	1.79	1.29	56	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	05/29/12	REG	F	CS	GENINORG	Fluoride	1.06	0.8	LANL Avl BG LVL	0.27	3.9	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	32	37	04/28/05	7.06	47.5	23.9	37	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	05/29/12	REG	F	CS	GENINORG	Perchlorate	7.06	0.3	LANL Avl BG LVL	0.05	141.2	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	
C5	50	57	03/12/01	220	366	305	57	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	05/29/12	REG	F	CS	GENINORG	Total Dissolved Solids	286	0.9	LANL Avl BG LVL	139	2.1	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	28	29	08/07/01	0.04	0.432	0.287	29	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	05/29/12	REG	F	CS	GENINORG	Total Phosphate as Phosphorus	0.244	0.9	LANL Avl BG LVL	0.05	4.9	0.017	mg/L	1		NQ	NQ	EPA:365.4	GELC	
C5	13	15	07/26/00	143	271	170	15	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24	04/09/12	REG	F	CS	GENINORG	Alkalinity-CO3+HCO3	174	1	LANL Avl BG LVL	76	2.3	0.725	mg/L	1		NQ	NQ	EPA:310.1	GELC	
C5	13	15	06/27/00	30	48.7	36.6	15	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24	04/09/12	REG	F	CS	GENINORG	Sodium	36.5	1	LANL Avl BG LVL	15.54	2.3	0.1	mg/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	9	9	05/11/05	395	507	420	9	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24	04/09/12	REG	F	CS	METALS	Strontium	395	0.9	LANL Avl BG LVL	120	3.3	1	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	12	12	06/27/00	284	348	318.5	12	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24	04/09/12	REG	F	CS	GENINORG	Total Dissolved Solids	303	1	LANL Avl BG LVL	139	2.2	3.4	mg/L	1		NQ	NQ	EPA:160.1	GELC	
C5	13	15	06/27/00	5.8	12.7	7.6	9	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24	04/09/12	REG	F	CS	METALS	Vanadium	6.98	0.9	LANL Avl BG LVL	1	7	1	ug/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	3	3	08/08/11	33.7	52.6	38.3	3	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	04/10/12	REG	F	CS	METALS	Boron	38.3	1	LANL Int BG LVL	15.12	2.5	15	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	3	3	08/08/11	0.136	0.19	0.155	3	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	04/10/12	REG	F	CS	GENINORG	Bromide	0.19	1.2	LANL Int BG LVL	0.03	6.3	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	3	3	08/08/11	18.5	19.1	18.6	3	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	04/10/12	REG	F	CS	GENINORG	Chloride	18.5	1	LANL Int BG LVL	7.78	2.4	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	3	3	08/08/11	4.86	5.58	5.25	3	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	04/10/12	REG	F	CS	GENINORG	Perchlorate	5.25	1	LANL Int BG LVL	0.05	105	0.5	ug/L	10		NQ	NQ	SW-846:6850	GELC	3rd consecutive result above screening level
C5	3	3	08/08/11	0.363	0.438	0.382	3	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Vine Tree Spring	0	04/10/12	REG	F	CS	GENINORG	Total Phosphate as Phosphorus	0.363	1	LANL Int BG LVL	0.08	4.5	0.017	mg/L	1		NQ	NQ	EPA:365.4	GELC	
C5	9	11	04/26/07	0.253	0.34	0.2795	10	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Los Alamos Spring	0	04/10/12	REG	F	CS	GENINORG	Bromide	0.34	1.2	LANL Int BG LVL	0.03	11.3	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	9	11	04/26/07	33.3	36.4	34.8	11	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Los Alamos Spring	0	04/10/12	REG	F	CS	GENINORG	Calcium	35.1	1	LANL Int BG LVL	17.31	2	0.05	mg/L	1		NQ	NQ	SW-846:6010B	GELC	
C5	9	11	04/26/07	18.5	19.7	19	11	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Los Alamos Spring	0	04/10/12	REG	F	CS	GENINORG	Chloride	19.7	1	LANL Int BG LVL	7.78	2.5	0.067	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	9	11	04/26/07	3.93	5.38	4.945	10	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Los Alamos Spring	0	04/10/12	REG	F	CS	METALS	Chromium	5.38	1.1	LANL Int BG LVL	1	5.4	2	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C5	9	11	04/26/07	0.768	0.961	0.87	11	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Los Alamos Spring	0	04/10/12	REG	F	CS	GENINORG	Fluoride	0.768	0.9	LANL Int BG LVL	0.23	3.3	0.033	mg/L	1		NQ	NQ	EPA:300.0	GELC	
C5	9	11	04/26/07	1.43	1.79	1.62	11	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Los Alamos Spring	0	04/10/12	REG	F	CS	GENINORG	Perchlorate	1.79	1.1	LANL Int BG LVL	0.05	35.8	0.2	ug/L	4		NQ	NQ	SW-846:6850	GELC	
C5	9	11	04/26/07	1.53	2.8	1.8	11	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Los Alamos Spring	0	04/10/12	REG	F	CS	RAD	Uranium	2.34	1.3	LANL Int BG LVL	0.72	3.3	0.067	ug/L	1		NQ	NQ	SW-846:6020	GELC	
C5	12	18	11/05/08	2.35	32.4	5.63	15	Sandia Canyon	Regional	R-43 S1	903.9	11/15/11	REG	F	CS	METALS	Chromium	32.4	5.8	LANL Reg BG LVL	5.75	5.6	2	ug/L	1		NQ	NQ	SW-846:6020	GELC	this is a reanalysis; original estimated result of 37 ug/L was analyzed at 5x dilution
C5	19	27	08/29/07	25.2	62.3	32.6	27	Sandia Canyon	Regional	R-35b	825.4	06/06/12	REG	F	CS	METALS	Zinc	29.2	0.9	LANL Reg BG LVL	3.89	7.5	3.3	ug/L	1		NQ	NQ	SW-846:6010B	GELC	

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Screen Depth	Start Date	Fid QC Type Code	Fid Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	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	Comment
C5	19	20	08/30/07	68	380	333	20	Sandia Canyon	Regional	R-35a	1013.1	06/05/12	REG	F	CS	METALS	Barium	369	1.1	LANL Reg BG LVL	56.83	6.5	1	ug/L	1	NQ	NQ	SW-846:6010B	GELC		
C5	19	20	08/30/07	1.2	22.2	9.56	19	Sandia Canyon	Regional	R-35a	1013.1	06/05/12	REG	F	CS	METALS	Nickel	8.09	0.8	LANL Reg BG LVL	3.09	2.6	0.5	ug/L	1	NQ	NQ	SW-846:6020	GELC		
C5	16	18	03/12/08	2.06	2.71	2.28	18	Sandia Canyon	Regional	R-36	766.9	05/30/12	REG	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	2.25	1	LANL Reg BG LVL	0.89	2.5	0.085	mg/L	5	NQ	NQ	EPA:353.2	GELC	latest result consistent with earlier values and not 11/16/11 outlier result of 5.14 mg/L	
C5	18	20	03/12/08	49.1	91.1	61.8	20	Sandia Canyon	Regional	R-36	766.9	05/30/12	REG	F	CS	METALS	Zinc	49.1	0.8	LANL Reg BG LVL	3.89	12.6	3.3	ug/L	1	NQ	NQ	SW-846:6010B	GELC		
C5	16	18	03/12/08	2.06	2.71	2.28	18	Sandia Canyon	Regional	R-36	766.9	11/16/11	REG	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	2.29	1	LANL Reg BG LVL	0.89	2.6	0.085	mg/L	5	H	NQ	NQ	EPA:353.2	GELC	this is a reanalysis; original result was 5.14 mg/L
C5	26	28	06/09/05	0.083	0.157	0.131	22	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	06/04/12	REG	F	CS	GENINORG	Bromide	0.09	0.7	LANL Int BG LVL	0.03	3	0.067	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	26	33	06/09/05	1.1	6.65	3.5	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	06/04/12	REG	F	CS	METALS	Chromium	4.79	1.4	LANL Int BG LVL	1	4.8	2	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C5	26	28	06/09/05	68.7	132	90.4	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689.04	06/04/12	REG	F	CS	GENINORG	Perchlorate	68.7	0.8	LANL Int BG LVL	0.05	1374	5	ug/L	100	NQ	NQ	SW-846:6850	GELC		
C5	27	40	06/15/05	25.4	51.3	34.95	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	METALS	Boron	49.9	1.4	LANL Int BG LVL	15.12	3.3	15	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	27	40	06/15/05	0.212	0.692	0.577	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	GENINORG	Bromide	0.646	1.1	LANL Int BG LVL	0.03	21.5	0.067	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C5	27	40	06/15/05	42.8	75.5	64.1	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	GENINORG	Calcium	67.8	1.1	LANL Int BG LVL	17.31	3.9	0.05	mg/L	1	NQ	NQ	SW-846:6010B	GELC		
C5	27	40	06/15/05	21.2	64.8	43.2	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	GENINORG	Chloride	60.3	1.4	LANL Int BG LVL	7.78	7.8	0.67	mg/L	10	NQ	NQ	EPA:300.0	GELC		
C5	27	43	06/15/05	29.4	65.5	47.5	43	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	METALS	Chromium	58.4	1.2	LANL Int BG LVL	1	58.4	2	ug/L	1	NQ	NQ	SW-846:6020	GELC		
C5	27	40	06/15/05	0.412	0.635	0.539	37	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	GENINORG	Fluoride	0.558	1	LANL Int BG LVL	0.23	2.4	0.033	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C5	27	40	06/15/05	8.49	15.7	12.75	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	GENINORG	Magnesium	14.3	1.1	LANL Int BG LVL	6.12	2.3	0.11	mg/L	1	NQ	NQ	SW-846:6010B	GELC		
C5	27	40	06/15/05	2.1	30.6	4.48	39	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	METALS	Manganese	5.63	1.3	LANL Int BG LVL	2	2.8	2	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	27	40	06/15/05	2.9	40.8	8.635	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	METALS	Nickel	40.8	4.7	LANL Int BG LVL	1	40.8	0.5	ug/L	1	NQ	NQ	SW-846:6020	GELC		
C5	27	40	06/15/05	7.67	20.4	13.9	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	8.33	0.6	LANL Int BG LVL	2.41	3.5	0.17	mg/L	10	NQ	NQ	EPA:353.2	GELC		
C5	27	40	06/15/05	59.4	246	103	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	GENINORG	Perchlorate	59.4	0.6	LANL Int BG LVL	0.05	1188	5	ug/L	100	NQ	NQ	SW-846:6850	GELC		
C5	27	40	06/15/05	19.5	28.3	24	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	GENINORG	Sodium	26.1	1.1	LANL Int BG LVL	12.19	2.1	0.1	mg/L	1	NQ	NQ	SW-846:6010B	GELC		
C5	27	40	06/15/05	196	339	275	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	METALS	Strontium	315	1.1	LANL Int BG LVL	154.8	2	1	ug/L	1	NQ	NQ	SW-846:6010B	GELC		
C5	27	40	06/15/05	298	497	398	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	GENINORG	Total Dissolved Solids	420	1.1	LANL Int BG LVL	127	3.3	3.4	mg/L	1	NQ	NQ	EPA:160.1	GELC		
C5	27	40	06/15/05	23.7	288	37.95	40	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	06/04/12	REG	F	CS	METALS	Zinc	33.4	0.9	LANL Int BG LVL	2	16.7	3.3	ug/L	1	NQ	NQ	SW-846:6010B	GELC		
C6	50	57	03/12/01	0.78	1.79	1.29	56	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	05/29/12	REG	F	CS	GENINORG	Fluoride	1.06	0.8	NM GW STD	1.6	0.7	0.033	mg/L	1	NQ	NQ	EPA:300.0	GELC		
C6	12	18	11/05/08	2.35	32.4	5.63	15	Sandia Canyon	Regional	R-43 S1	903.9	11/15/11	REG	F	CS	METALS	Chromium	32.4	5.8	NM GW STD	50	0.6	2	ug/L	1	NQ	NQ	SW-846:6020	GELC	this is a reanalysis; original estimated result of 37 ug/L was analyzed at 5x dilution	
CA	13	16	06/27/00	23.2	23.2	23.2	1	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24	04/09/12	REG	F	CS	METALS	Lead	23.2	1	EPA MCL	15	1.5	0.5	ug/L	1	NQ	NQ	SW-846:6020	GELC	only 1 prior F or UF detect since 1996; turb 0.24 NTU; Fe, Al, Mn all ND	