

SUMMARY OF NEW LOS ALAMOS NATIONAL LABORATORY GROUNDWATER DATA LOADED IN JANUARY 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. This report contains results for chemical constituents that meet the seven screening criteria laid out in the Compliance Order on Consent (Consent Order), modified May 13, 2008. 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 1-12 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 are often similar to data gathered before June 14, 2007.

This table includes additional comments on the significance of the results for those that appear to be exceptional or are first-time occurrences of results based on considering monitoring data acquired before June 14, 2007 (using statistics described below).

The table contains supplemental information summarizing monitoring results obtained before June 14, 2007.

The table includes sampling date, the name of the well or spring, the location of the well or spring, the depth of the screened interval, the 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. The definitions for abbreviations in the table may be found at <http://www.lanl.gov/environment/all/racer.shtml>.

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). In the table, the EPA Regional Screening Levels for tap water are identified as being for cancer (10^{-5} excess) or noncancer risk values. The data were screened using 10 times the EPA's 10^{-6} excess cancer risk values, 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 and included below: they are labeled C1 through C6 and CA for cases where the concentration of a constituent in a well screen or spring has not previously exceeded either the New Mexico Water Quality Control Commission (NMWQCC) standard or the federal MCLs. Some data meet one or more than one 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 over a longer time frame than samples collected after June 14, 2007. 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 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

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

Start Date—sample date

Fld QC Type Code—identifies samples that are field duplicates (definitions for these and other abbreviations may be found at <http://www.lanl.gov/environment/all/racer.shtml>)

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—gives 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—the analytical result in standard measurement units

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

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

Screen Level—the value of the LVL Type/Risk Code

Exceedance Ratio—the ratio of Std Result to LVL Type/Risk Code, divided by the basis for comparison in the criterion. For example, for a criterion (such as C3) that compares the value to 1/2 the standard, a value equal to a standard has an exceedance ratio of 2.

- C1, C2, and CA refer to a screening value so the exceedance ratio compares the result directly to the screening value.
- C3, C4, and C6 refer to 1/2 of a screening value so the exceedance ratio compares the result to 1/2 the screening value.
- C5 refers to 2 times a screening value so the exceedance ratio compares the result to 2 times the screening value.

Std Mdl—the method detection limit in standard measurement units

Std UOM—the standard units of measurement

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

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

Concat Flag Code—concatenated secondary validation qualifiers produced by an independent contractor who reviews data packages, verifying, for example, that holding times were met, that all documentation is present, and that analytical laboratory quality control measures were applied, documented, and kept within contract requirements

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

Anyl Meth Code—analytical method number

Lab Code—analytical laboratory name

Comment—a comment on the analytical result

Table 1: NMED 1-12 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port 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	19	21	05/20/05	0.34	1.17	1.1	3	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	11/15/11		UF	CS	VOA	Chloromethane	0.34	0.31	EPA TAP SCRNLVL N	190	0.0	0.3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	1	1	11/21/11	90.2	90.2	90.2	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61	1125	11/21/11		UF	CS	DRO	Total Petroleum Hydrocarbons Diesel Range Organics	90.2	1.00				54	ug/L	1	J	J	J_LAB	SW-846:8015M_EXTRACTABLE	GELC	
C1	1	1	11/18/11	89	89	89	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61	1220.4	11/18/11		UF	CS	DRO	Total Petroleum Hydrocarbons Diesel Range Organics	89	1.00				53	ug/L	1	J	J	DR12e	SW-846:8015M_EXTRACTABLE	GELC	
C1	16	20	04/13/05	0.36	0.36	0.36	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	R-26	659.3	12/09/11		UF	CS	VOA	Chloromethane	0.36	1.00	EPA TAP SCRNLVL N	190	0.0	0.3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	1	1	10/11/11	0.00000337	0.00000337	0.00000337	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 2	0	10/11/11		UF	CS	DIOX/FUR	Tetrachlorodibenzofurans (Totals)	0.00000337	1.00				0.00000109	ug/L	1	J	J	J_LAB	SW-846:8290	CFA	
C2	2	3	09/06/11	1.81	2.36	2.16	3	Upper Los Alamos Canyon (includes DP Canyon)	Regional	R-64	1285	12/08/11		F	CS	METALS	Molybdenum	2.36	1.09	LANL Reg BG LVL	2	1.2	0.17	ug/L	1				SW-846:6020	GELC	
C2	2	3	09/06/11	1.81	2.36	2.16	3	Upper Los Alamos Canyon (includes DP Canyon)	Regional	R-64	1285	12/08/11	FD	F	CS	METALS	Molybdenum	2.16	1.00	LANL Reg BG LVL	2	1.1	0.17	ug/L	1				SW-846:6020	GELC	
C2	12	14	11/05/08	3.3	4.64	3.69	14	Sandia Canyon	Regional	R-43	903.9	11/15/11		F	CS	GENINORG	Magnesium	4.64	1.26	LANL Reg BG LVL	4.15	1.1	0.11	mg/L	1				SW-846:6010B	GELC	
C2	26	32	05/17/05	5.4	14.8	7.4	31	Sandia Canyon	Regional	R-11	855	11/16/11		F	CS	METALS	Vanadium	14.8	2.00	LANL Reg BG LVL	13.41	1.1	1	ug/L	1		J	I4a	SW-846:6010B	GELC	
C2	17	18	11/10/07	76.5	88.6	81.2	18	Sandia Canyon	Regional	R-35a	1013.1	11/17/11		F	CS	METALS	Silicon Dioxide	88.6	1.09	LANL Reg BG LVL	88.5	1.0	0.053	mg/L	1				SW-846:6010B	GELC	
C2	15	17	05/12/08	162	193	173	17	Sandia Canyon	Regional	R-36	766.9	11/16/11		F	CS	GENINORG	Total Dissolved Solids	193	1.12	LANL Reg BG LVL	191.68	1.0	3.4	mg/L	1				EPA:160.1	GELC	
C2	5	5	12/16/10	2.32	5.86	4	4	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-60	1330	11/22/11		F	CS	METALS	Chromium	5.86	1.47	LANL Reg BG LVL	5.75	1.0	2	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	maximum value but estimated
C2	11	11	08/20/08	53.1	53.1	53.1	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-14	1200.6	11/08/11		F	CS	METALS	Iron	53.1	1.00	LANL Reg BG LVL	21	2.5	30	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	First detect since rehab in 2007, similar to pre-rehab values
C2	26	33	05/19/05	0.506	1.11	1.05	3	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-1	1031.1	11/18/11	FD	F	CS	METALS	Antimony	1.05	1.00	LANL Reg BG LVL	1	1.1	1	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C2	26	33	05/19/05	0.506	1.11	1.05	3	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-1	1031.1	11/18/11		F	CS	METALS	Antimony	1.11	1.06	LANL Reg BG LVL	1	1.1	1	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C2	12	12	02/17/09	3.32	4.18	3.51	12	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-44	895	11/17/11		F	CS	GENINORG	Magnesium	4.18	1.19	LANL Reg BG LVL	4.15	1.0	0.11	mg/L	1				SW-846:6010B	GELC	
C3	21	25	01/11/07	10.5	48.7	13.5	25	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	METALS	Chromium	48.7	3.61	NM GW STD	50	2.0	10	ug/L	5	J	J	J_LAB	SW-846:6020	GELC	maximum value but estimated- reanalysis 8.96
C3	15	17	05/12/08	2.06	5.14	2.27	17	Sandia Canyon	Regional	R-36	766.9	11/16/11		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	5.14	2.26	EPA MCL	10	1.0	0.1	mg/L	10				EPA:353.2	GELC	previously 2.0 to 2.7 mg/L- reanalysis requested- out of hold time
C3	11	12	09/24/01	0.78	112	8.29	9	White Rock Canyon and Rio Grande	Regional Spring	Spring 2	0	10/11/11		F	CS	METALS	Manganese	112	13.51	NM GW STD	200	1.1	2	ug/L	1				SW-846:6010B	GELC	turbidity was 1.8 NTU; some prior high Mn but usually about 10 ug/L
C5	21	22	01/11/07	88.5	121	100	22	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	GENINORG	Alkalinity-CO3+HCO3	112	1.12	LANL Int BG LVL	52	1.1	0.73	mg/L	1				EPA:310.1	GELC	
C5	21	22	01/11/07	0.838	1.53	1.14	22	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	GENINORG	Bromide	0.838	0.74	LANL Int BG LVL	0.03	14.0	0.066	mg/L	1				EPA:300.0	GELC	
C5	21	24	01/11/07	66.4	87.6	76.1	23	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	GENINORG	Calcium	70.4	0.93	LANL Int BG LVL	17.31	2.0	0.05	mg/L	1				SW-846:6010B	GELC	
C5	21	22	01/11/07	80.5	98.7	89.4	22	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	GENINORG	Chloride	97.6	1.09	LANL Int BG LVL	7.78	6.3	0.66	mg/L	10				EPA:300.0	GELC	
C5	21	22	01/11/07	0.868	1.58	1.017	22	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	GENINORG	Perchlorate	0.89	0.88	LANL Int BG LVL	0.05	8.9	0.05	ug/L	1				SW-846:6850	GELC	
C5	21	24	01/11/07	50.7	65.1	54.2	23	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	GENINORG	Sodium	57.5	1.06	LANL Int BG LVL	12.19	2.4	0.1	mg/L	1				SW-846:6010B	GELC	
C5	21	22	01/11/07	0.404	1.45	0.842	21	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	GENINORG	Total Phosphate as Phosphorus	0.842	1.00	LANL Int BG LVL	0.08	5.3	0.015	mg/L	1				EPA:365.4	GELC	
C5	21	22	01/11/07	454	536	488	22	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	GENINORG	Total Dissolved Solids	491	1.01	LANL Int BG LVL	127	1.9	3.4	mg/L	1				EPA:160.1	GELC	
C5	21	24	01/11/07	72.8	99.4	87.4	22	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	METALS	Boron	85.8	0.98	LANL Int BG LVL	15.12	2.8	15	ug/L	1				SW-846:6010B	GELC	
C5	21	25	01/11/07	10.5	48.7	13.5	25	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	METALS	Chromium	48.7	3.61	LANL Int BG LVL	1	24.4	10	ug/L	5	J	J	J_LAB	SW-846:6020	GELC	maximum value but estimated- reanalysis 8.96
C5	21	23	01/11/07	43.9	97	72	23	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	METALS	Molybdenum	77	1.07	LANL Int BG LVL	2	19.3	0.17	ug/L	1				SW-846:6020	GELC	
C5	21	22	01/11/07	4.3	50.8	5.7	22	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	METALS	Nickel	50.8	8.91	LANL Int BG LVL	1	25.4	2.5	ug/L	5				SW-846:6020	GELC	10x prior results, turbidity of 9.8 NTU in normal range- reanalysis 5.1
C5	21	22	01/11/07	1.7	3.05	2.5	22	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	METALS	Uranium	2.84	1.14	LANL Int BG LVL	0.72	2.0	0.067	ug/L	1				SW-846:6020	GELC	
C5	14	19	10/21/08	0.194	0.546	0.47	19	Sandia Canyon	Intermediate	SCI-2	548	11/14/11		F	CS	GENINORG	Bromide	0.546	1.16	LANL Int BG LVL	0.03	9.1	0.066	mg/L	1				EPA:300.0	GELC	
C5	14	21	10/21/08	59.5	71.7	65.7	21	Sandia Canyon	Intermediate	SCI-2	548	11/14/11		F	CS	GENINORG	Calcium	71.7	1.09	LANL Int BG LVL	17.31	2.1	0.05	mg/L	1				SW-846:6010B	GELC	
C5	14	19	10/21/08	53.4	67.8	57.2	19	Sandia Canyon	Intermediate	SCI-2	548	11/14/11		F	CS	GENINORG	Chloride	67.8	1.19	LANL Int BG LVL	7.78	4.4	0.33	mg/L	5				EPA:300.0	GELC	
C5	14	19	10/21/08	0.936	1.12	1.02	19	Sandia Canyon	Intermediate	SCI-2	548	11/14/11		F	CS	GENINORG	Perchlorate	1.07	1.05	LANL Int BG LVL	0.05	10.7	0.1	ug/L	2				SW-846:6850	GELC	
C5	14	21	10/21/08	13.1	16.6	14.7	19	Sandia Canyon	Intermediate	SCI-2	548	11/14/11		F	CS	GENINORG	Magnesium	16.6	1.13	LANL Int BG LVL	6.12	1.4	0.11	mg/L	1				SW-846:6010B	GELC	
C5	14	19	10/21/08	83.3	101	87.1	19	Sandia Canyon	Intermediate	SCI-2	548	11/14/11		F	CS	GENINORG	Sulfate	92.2	1.06	LANL Int BG LVL	40.03	1.2	0.5	mg/L	5				EPA:300.0	GELC	
C5	14	19	10/21/08	354	451	414	19	Sandia Canyon	Intermediate	SCI-2	548	11/14/11		F	CS	GENINORG	Total Dissolved Solids	406	0.98	LANL Int BG LVL	127	1.6	3.4	mg/L	1				EPA:160.1	GELC	
C5	14	27	10/21/08	441	658	526	27	Sandia Canyon	Intermediate	SCI-2	548	11/14/11		F	CS	METALS	Chromium	501	0.95	LANL Int BG LVL	1	250.5	10	ug/L	5				SW-846:6020	GELC	
C5	14	21	10/21/08	14.5	19.3	16.8	21	Sandia Canyon	Intermediate	SCI-2	548	11/14/11		F	CS	METALS	Nickel	17.5	1.04	LANL Int BG LVL	1	8.8	2.5	ug/L	5				SW-846:6020	GELC	
C5	14	21	10/21/08	278	350	316	21	Sandia Canyon	Intermediate																						

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port 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	12	13	11/05/08	0.678	0.982	0.9	13	Sandia Canyon	Regional	R-43	903.9	11/15/11		F	CS	GENINORG	Perchlorate	0.94	1.04	LANL Reg BG LVL	0.46	1.0	0.1	ug/L	2				SW-846:6850	GELC	
C5	12	12	11/05/08	5.14	6.03	5.5	11	Sandia Canyon	Regional	R-43	903.9	11/15/11		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	5.14	0.93	LANL Reg BG LVL	0.89	2.9	0.1	mg/L	10				EPA:353.2	GELC	
C5	12	18	11/05/08	2.35	37	5.63	15	Sandia Canyon	Regional	R-43	903.9	11/15/11		F	CS	METALS	Chromium	37	6.57	LANL Reg BG LVL	5.75	3.2	10	ug/L	5	J	J	J_LAB	SW-846:6020	GELC	maximum value but estimated- reanalysis requested
C5	26	32	05/17/05	2.27	7.43	5	32	Sandia Canyon	Regional	R-11	855	11/16/11		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	2.27	0.45	LANL Reg BG LVL	0.89	1.3	0.05	mg/L	5				EPA:353.2	GELC	
C5	27	36	05/17/05	13.5	34.9	20.3	36	Sandia Canyon	Regional	R-11	855	11/16/11		F	CS	METALS	Chromium	19.1	0.94	LANL Reg BG LVL	5.75	1.7	2	ug/L	1				SW-846:6020	GELC	
C5	18	26	08/29/07	25.2	62.3	32.8	26	Sandia Canyon	Regional	R-35b	825.4	11/09/11		F	CS	METALS	Zinc	25.2	0.77	LANL Reg BG LVL	3.89	3.2	3.3	ug/L	1				SW-846:6010B	GELC	
C5	18	19	08/30/07	68	380	332	19	Sandia Canyon	Regional	R-35a	1013.1	11/17/11		F	CS	METALS	Barium	372	1.12	LANL Reg BG LVL	56.83	3.3	1	ug/L	1				SW-846:6010B	GELC	
C5	18	19	08/30/07	1.2	22.2	10.1	18	Sandia Canyon	Regional	R-35a	1013.1	11/17/11		F	CS	METALS	Nickel	9.13	0.90	LANL Reg BG LVL	3.09	1.5	0.5	ug/L	1				SW-846:6020	GELC	
C5	15	17	05/12/08	2.06	5.14	2.27	17	Sandia Canyon	Regional	R-36	766.9	11/16/11		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	5.14	2.26	LANL Reg BG LVL	0.89	2.9	0.1	mg/L	10				EPA:353.2	GELC	previously 2.0 to 2.7 mg/L- reanalysis requested- out of hold time
C5	15	17	05/12/08	49.9	75.3	62.8	17	Sandia Canyon	Regional	R-36	766.9	11/16/11		F	CS	METALS	Zinc	50.7	0.81	LANL Reg BG LVL	3.89	6.5	3.3	ug/L	1				SW-846:6010B	GELC	
C5	22	27	06/14/05	0.421	4.15	2.25	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-3	2	11/08/11		F	CS	GENINORG	Perchlorate	0.97	0.43	LANL Avl BG LVL	0.05	9.7	0.1	ug/L	2				SW-846:6850	GELC	
C5	26	33	04/21/05	3.3	44.3	16.1	33	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-4B	8.9	11/08/11		F	CS	GENINORG	Perchlorate	6.75	0.42	LANL Avl BG LVL	0.05	67.5	0.5	ug/L	10				SW-846:6850	GELC	
C5	30	35	04/27/05	4.28	31.7	19.7	35	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	11/09/11		F	CS	GENINORG	Perchlorate	4.8	0.24	LANL Avl BG LVL	0.05	48.0	0.5	ug/L	10				SW-846:6850	GELC	
C5	51	59	02/24/00	0.742	1.51	1.08	59	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	11/09/11		F	CS	GENINORG	Fluoride	0.863	0.80	LANL Avl BG LVL	0.27	1.6	0.033	mg/L	1				EPA:300.0	GELC	
C5	48	69	10/30/00	265	486	314	69	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-6	27	11/09/11		F	CS	GENINORG	Total Dissolved Solids	284	0.90	LANL Avl BG LVL	139	1.0	3.4	mg/L	1				EPA:160.1	GELC	
C5	30	35	04/28/05	7.17	47.5	24.2	35	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	11/10/11		F	CS	GENINORG	Perchlorate	7.73	0.32	LANL Avl BG LVL	0.05	77.3	1	ug/L	20				SW-846:6850	GELC	
C5	53	62	02/24/00	0.78	2.13	1.3	61	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	11/10/11		F	CS	GENINORG	Fluoride	0.933	0.72	LANL Avl BG LVL	0.27	1.7	0.033	mg/L	1				EPA:300.0	GELC	
C5	49	64	10/30/00	220	366	307	64	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-7	39	11/10/11		F	CS	GENINORG	Total Dissolved Solids	297	0.97	LANL Avl BG LVL	139	1.1	3.4	mg/L	1				EPA:160.1	GELC	
C5	25	27	06/09/05	0.083	0.157	0.132	21	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689	11/08/11		F	CS	GENINORG	Bromide	0.14	1.06	LANL Int BG LVL	0.03	2.3	0.066	mg/L	1	J	J-	I6a	EPA:300.0	GELC	
C5	25	27	06/09/05	68.7	132	91.9	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-5	689	11/08/11		F	CS	GENINORG	Perchlorate	75.1	0.82	LANL Int BG LVL	0.05	751.0	5	ug/L	100				SW-846:6850	GELC	
C5	25	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	11/08/11		F	CS	METALS	Chromium	3.4	0.97	LANL Int BG LVL	1	1.7	2	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C5	25	38	06/15/05	0.212	0.674	0.545	36	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	GENINORG	Bromide	0.669	1.23	LANL Int BG LVL	0.03	11.2	0.066	mg/L	1				EPA:300.0	GELC	
C5	25	38	06/15/05	0.212	0.674	0.545	36	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	GENINORG	Bromide	0.658	1.21	LANL Int BG LVL	0.03	11.0	0.066	mg/L	1				EPA:300.0	GELC	
C5	25	38	06/15/05	42.8	75.5	63	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	GENINORG	Calcium	74.7	1.19	LANL Int BG LVL	17.31	2.2	0.05	mg/L	1				SW-846:6010B	GELC	
C5	25	38	06/15/05	42.8	75.5	63	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	GENINORG	Calcium	70.6	1.12	LANL Int BG LVL	17.31	2.0	0.05	mg/L	1				SW-846:6010B	GELC	
C5	25	38	06/15/05	21.2	64.8	40.3	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	GENINORG	Chloride	64.8	1.61	LANL Int BG LVL	7.78	4.2	0.33	mg/L	5				EPA:300.0	GELC	steady increase since 2007
C5	25	38	06/15/05	21.2	64.8	40.3	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	GENINORG	Chloride	64.6	1.60	LANL Int BG LVL	7.78	4.2	0.33	mg/L	5				EPA:300.0	GELC	steady increase since 2007
C5	25	38	06/15/05	63.1	246	116	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	GENINORG	Perchlorate	63.1	0.54	LANL Int BG LVL	0.05	631.0	5	ug/L	100				SW-846:6850	GELC	general decrease since 2005
C5	25	38	06/15/05	63.1	246	116	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	GENINORG	Perchlorate	63.1	0.54	LANL Int BG LVL	0.05	631.0	5	ug/L	100				SW-846:6850	GELC	general decrease since 2005
C5	25	38	06/15/05	0.412	0.635	0.537	35	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	GENINORG	Fluoride	0.547	1.02	LANL Int BG LVL	0.23	1.2	0.033	mg/L	1				EPA:300.0	GELC	
C5	25	38	06/15/05	0.412	0.635	0.537	35	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	GENINORG	Fluoride	0.539	1.00	LANL Int BG LVL	0.23	1.2	0.033	mg/L	1				EPA:300.0	GELC	
C5	25	38	06/15/05	8.49	15.7	12.65	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	GENINORG	Magnesium	15	1.19	LANL Int BG LVL	6.12	1.2	0.11	mg/L	1				SW-846:6010B	GELC	
C5	25	38	06/15/05	8.49	15.7	12.65	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	GENINORG	Magnesium	14.2	1.12	LANL Int BG LVL	6.12	1.2	0.11	mg/L	1				SW-846:6010B	GELC	
C5	25	39	06/15/05	7.67	20.4	15	39	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	8.76	0.58	LANL Int BG LVL	2.41	1.8	0.1	mg/L	10				EPA:353.2	GELC	
C5	25	39	06/15/05	7.67	20.4	15	39	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	8.93	0.60	LANL Int BG LVL	2.41	1.9	0.1	mg/L	10				EPA:353.2	GELC	
C5	25	38	06/15/05	19.5	28.3	23.6	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	GENINORG	Sodium	28.3	1.20	LANL Int BG LVL	12.19	1.2	0.1	mg/L	1				SW-846:6010B	GELC	
C5	25	38	06/15/05	19.5	28.3	23.6	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	GENINORG	Sodium	26.8	1.14	LANL Int BG LVL	12.19	1.1	0.1	mg/L	1				SW-846:6010B	GELC	
C5	25	46	06/15/05	298	497	378	46	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	GENINORG	Total Dissolved Solids	417	1.10	LANL Int BG LVL	127	1.6	3.4	mg/L	1				EPA:160.1	GELC	

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port 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	25	46	06/15/05	298	497	378	46	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	GENINORG	Total Dissolved Solids	401	1.06	LANL Int BG LVL	127	1.6	3.4	mg/L	1				EPA:160.1	GELC	
C5	25	38	06/15/05	25.4	51.3	34.8	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	METALS	Boron	49.6	1.43	LANL Int BG LVL	15.12	1.6	15	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	25	38	06/15/05	25.4	51.3	34.8	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	METALS	Boron	51.3	1.47	LANL Int BG LVL	15.12	1.7	15	ug/L	1				SW-846:6010B	GELC	
C5	25	41	06/15/05	29.4	65.5	46.7	41	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	METALS	Chromium	61.8	1.32	LANL Int BG LVL	1	30.9	2	ug/L	1				SW-846:6020	GELC	Cr peaks in November last 3 years
C5	25	41	06/15/05	29.4	65.5	46.7	41	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	METALS	Chromium	60.9	1.30	LANL Int BG LVL	1	30.5	2	ug/L	1				SW-846:6020	GELC	Cr peaks in November last 3 years
C5	25	38	06/15/05	6.6	26.1	12	37	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	METALS	Copper	13	1.08	LANL Int BG LVL	5.32	1.2	3	ug/L	1				SW-846:6010B	GELC	
C5	25	38	06/15/05	6.6	26.1	12	37	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	METALS	Copper	13.2	1.10	LANL Int BG LVL	5.32	1.2	3	ug/L	1				SW-846:6010B	GELC	
C5	25	38	06/15/05	2.9	39.9	8.3	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	METALS	Nickel	39.9	4.81	LANL Int BG LVL	1	20.0	0.5	ug/L	1				SW-846:6020	GELC	steady increase since 2007, turbidity <1 NTU
C5	25	38	06/15/05	2.9	39.9	8.3	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	METALS	Nickel	38.3	4.61	LANL Int BG LVL	1	19.2	0.5	ug/L	1				SW-846:6020	GELC	steady increase since 2007, turbidity <1 NTU
C5	25	38	06/15/05	196	339	275	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	METALS	Strontium	322	1.17	LANL Int BG LVL	154.76	1.0	1	ug/L	1				SW-846:6010B	GELC	
C5	25	38	06/15/05	196	339	275	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	METALS	Strontium	339	1.23	LANL Int BG LVL	154.76	1.1	1	ug/L	1				SW-846:6010B	GELC	
C5	25	38	06/15/05	23.7	288	39.3	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	METALS	Zinc	39.3	1.00	LANL Int BG LVL	2	9.8	3.3	ug/L	1				SW-846:6010B	GELC	
C5	25	38	06/15/05	23.7	288	39.3	38	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	METALS	Zinc	39.2	1.00	LANL Int BG LVL	2	9.8	3.3	ug/L	1				SW-846:6010B	GELC	
C5	13	14	03/11/09	0.902	7.67	1.845	14	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-46	1340	11/08/11		UF	CS	GENINORG	Total Organic Carbon	1.13	0.61	LANL Reg BG LVL	0.33	1.7	0.33	mg/L	1				SW-846:9060	GELC	
C5	10	11	03/11/09	2.41	5.29	3.77	7	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-46	1340	11/08/11		F	CS	METALS	Antimony	3.06	0.81	LANL Reg BG LVL	1	1.5	1	ug/L	1				SW-846:6020	GELC	
C5	26	33	05/19/05	0.64	17.7	3.3	31	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-1	1031.1	11/18/11		F	CS	METALS	Nickel	17.7	5.36	LANL Reg BG LVL	3.09	2.9	0.5	ug/L	1				SW-846:6020	GELC	
C5	26	33	05/19/05	0.64	17.7	3.3	31	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-1	1031.1	11/18/11	FD	F	CS	METALS	Nickel	17.5	5.30	LANL Reg BG LVL	3.09	2.8	0.5	ug/L	1				SW-846:6020	GELC	
C5	25	30	05/25/05	5.34	8.14	6.71	30	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-15	958.6	11/10/11		F	CS	GENINORG	Perchlorate	8.14	1.21	LANL Reg BG LVL	0.46	8.9	1	ug/L	20				SW-846:6850	GELC	general increase since 2003
C5	14	15	10/09/08	0.102	0.226	0.193	14	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		F	CS	GENINORG	Bromide	0.221	1.15	LANL Reg BG LVL	0.1	1.1	0.066	mg/L	1				EPA:300.0	GELC	
C5	14	15	10/09/08	40.6	56.5	47.1	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		F	CS	GENINORG	Calcium	54.3	1.15	LANL Reg BG LVL	24.88	1.1	0.05	mg/L	1				SW-846:6010B	GELC	
C5	14	15	10/09/08	28.7	40.3	33.7	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		F	CS	GENINORG	Chloride	40.3	1.20	LANL Reg BG LVL	3.57	5.6	0.33	mg/L	5				EPA:300.0	GELC	general increase since 2008
C5	14	15	10/09/08	1.18	1.46	1.31	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		F	CS	GENINORG	Perchlorate	1.22	0.93	LANL Reg BG LVL	0.46	1.3	0.1	ug/L	2				SW-846:6850	GELC	
C5	14	15	10/09/08	11.1	15.7	13.2	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		F	CS	GENINORG	Magnesium	15	1.14	LANL Reg BG LVL	4.15	1.8	0.11	mg/L	1				SW-846:6010B	GELC	
C5	14	15	10/09/08	60.6	80.6	68.6	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		F	CS	GENINORG	Sulfate	75.4	1.10	LANL Reg BG LVL	7.2	5.2	0.5	mg/L	5				EPA:300.0	GELC	
C5	14	15	10/09/08	0.952	2.84	1.35	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		UF	CS	GENINORG	Total Organic Carbon	1.2	0.89	LANL Reg BG LVL	0.33	1.8	0.33	mg/L	1				SW-846:9060	GELC	
C5	14	26	10/09/08	744	1240	886	25	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		F	CS	METALS	Chromium	935	1.06	LANL Reg BG LVL	5.75	81.3	2	ug/L	1				SW-846:6020	GELC	
C5	14	15	10/09/08	8.8	29.6	20.8	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		F	CS	METALS	Nickel	20.8	1.00	LANL Reg BG LVL	3.09	3.4	0.5	ug/L	1				SW-846:6020	GELC	
C5	14	15	10/09/08	7.7	28.1	17	15	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	11/10/11		F	CS	METALS	Zinc	9.72	0.57	LANL Reg BG LVL	3.89	1.3	3.3	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	28	31	05/20/05	0.113	0.265	0.211	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	11/15/11		F	CS	GENINORG	Bromide	0.259	1.23	LANL Reg BG LVL	0.1	1.3	0.066	mg/L	1				EPA:300.0	GELC	
C5	28	31	05/20/05	21.1	35.3	29.3	31	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	11/15/11		F	CS	GENINORG	Chloride	35.3	1.20	LANL Reg BG LVL	3.57	4.9	0.33	mg/L	5		J+	I6b	EPA:300.0	GELC	general increase since 2006
C5	26	28	09/01/05	0.802	1.13	0.976	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	11/15/11		F	CS	GENINORG	Perchlorate	1.05	1.08	LANL Reg BG LVL	0.46	1.1	0.1	ug/L	2				SW-846:6850	GELC	
C5	28	31	05/20/05	8.68	12.1	10.4	31	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	11/15/11		F	CS	GENINORG	Magnesium	11.8	1.13	LANL Reg BG LVL	4.15	1.4	0.11	mg/L	1				SW-846:6010B	GELC	
C5	26	28	05/20/05	3.1	5.39	4.21	28	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	11/15/11		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	3.83	0.91	LANL Reg BG LVL	0.89	2.2	0.1	mg/L	10				EPA:353.2	GELC	
C5	28	31	05/20/05	38.1	50.7	42.9	31	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	11/15/11		F	CS	GENINORG	Sulfate	49.8	1.16	LANL Reg BG LVL	7.2	3.5	0.5	mg/L	5				EPA:300.0	GELC	
C5	29	34	05/20/05	310	472	392	33	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	11/15/11		F	CS	METALS	Chromium	455	1.16	LANL Reg BG LVL	5.75	39.6	10	ug/L	5				SW-846:6020	GELC	
C5	28	31	05/20/05	6.1	34	12.1	29	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-28	934.3	11/15/11		F	CS	METALS	Nickel	22.3	1.84	LANL Reg BG LVL	3.09	3.6	2.5	ug/L	5				SW-846:6020	GELC	

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port 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	12	12	02/28/09	0.256	2.61	2.005	12	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-45	880	11/16/11		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	2.4	1.20	LANL Reg BG LVL	0.89	1.4	0.05	mg/L	5				EPA:353.2	GELC	
C5	12	16	02/28/09	8.4	21.4	15.6	16	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-45	880	11/16/11		F	CS	METALS	Chromium	20.9	1.34	LANL Reg BG LVL	5.75	1.8	2	ug/L	1				SW-846:6020	GELC	highest (except 21.4 that is estimated); next highest is 17.9 ug/L; result of 11.5 ug/L at 974 ft screen is also highest
C5	3	4	05/20/11	2.96	6.54	5.93	4	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61	1125	11/21/11		F	CS	GENINORG	Perchlorate	5.9	0.99	LANL Reg BG LVL	0.46	6.4	0.5	ug/L	10				SW-846:6850	GELC	Third sample event, previously 2.9 and 6.5 ug/L
C5	3	4	05/20/11	2.96	6.54	5.93	4	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61	1125	11/21/11	FD	F	CS	GENINORG	Perchlorate	5.96	1.01	LANL Reg BG LVL	0.46	6.5	0.5	ug/L	10				SW-846:6850	GELC	Third sample event, previously 2.9 and 6.5 ug/L
C5	3	4	05/20/11	0.77	10.1	1.11	4	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61	1125	11/21/11		UF	CS	GENINORG	Total Organic Carbon	1.14	1.03	LANL Reg BG LVL	0.33	1.7	0.33	mg/L	1				SW-846:9060	GELC	
C5	3	4	05/20/11	0.77	10.1	1.11	4	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61	1125	11/21/11	FD	UF	CS	GENINORG	Total Organic Carbon	1.08	0.97	LANL Reg BG LVL	0.33	1.6	0.33	mg/L	1				SW-846:9060	GELC	
C5	3	4	05/20/11	113	1100	908	4	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61	1125	11/21/11	FD	F	CS	METALS	Manganese	914	1.01	LANL Reg BG LVL	2.94	155.4	2	ug/L	1				SW-846:6010B	GELC	Third sample event, Mn high in both screens, turbidity 1.7 NTU
C5	3	4	05/20/11	113	1100	908	4	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61	1125	11/21/11		F	CS	METALS	Manganese	902	0.99	LANL Reg BG LVL	2.94	153.4	2	ug/L	1				SW-846:6010B	GELC	Third sample event, Mn high in both screens, turbidity 1.7 NTU
C5	3	3	05/24/11	22.2	908	566	3	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-61	1220.4	11/18/11		F	CS	METALS	Manganese	566	1.00	LANL Reg BG LVL	2.94	96.3	2	ug/L	1				SW-846:6010B	GELC	Third sample event, Mn high in both screens
C5	8	13	03/06/10	49.8	89.4	69.7	13	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	11/18/11		F	CS	METALS	Chromium	89.4	1.28	LANL Reg BG LVL	5.75	7.8	2	ug/L	1				SW-846:6020	GELC	highest of 8 sample events
C5	12	16	02/17/09	7.34	14.9	12.4	16	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-44	895	11/17/11		F	CS	METALS	Chromium	14.9	1.20	LANL Reg BG LVL	5.75	1.3	2	ug/L	1				SW-846:6020	GELC	general increase since 2009
C5	16	17	09/06/07	0.11	0.323	0.243	16	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	400.3	11/04/11		F	CS	GENINORG	Perchlorate	0.296	1.22	LANL Int BG LVL	0.05	3.0	0.05	ug/L	1				SW-846:6850	GELC	
C5	8	8	02/15/10	1.08	3.08	1.9	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	11/02/11		F	CS	METALS	Cobalt	1.14	0.60	LANL Reg BG LVL	0.5	1.1	1	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	8	8	02/15/10	101	3850	1110	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	11/02/11		F	CS	METALS	Iron	689	0.62	LANL Reg BG LVL	21	16.4	30	ug/L	1				SW-846:6010B	GELC	Values generally falling since 7/10, turbidity low, < 1 NTU
C5	8	8	02/15/10	42.1	280	171.5	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	11/02/11		F	CS	METALS	Manganese	133	0.78	LANL Reg BG LVL	2.94	22.6	2	ug/L	1				SW-846:6010B	GELC	Values generally falling since 7/10, turbidity low, < 1 NTU
C5	12	15	02/01/07	0.204	0.262	0.228	15	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	R-26	659.3	12/09/11		F	CS	GENINORG	Perchlorate	0.219	0.96	LANL Int BG LVL	0.05	2.2	0.05	ug/L	1				SW-846:6850	GELC	
C5	9	14	10/23/01	36.3	221	102	11	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/14/11		F	CS	METALS	Iron	46.2	0.45	LANL Reg BG LVL	21	1.1	30	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	9	14	10/23/01	32.8	424	194	11	White Rock Canyon and Rio Grande	Regional Spring	Sacred Spring	0	10/14/11		F	CS	METALS	Manganese	152	0.78	LANL Reg BG LVL	2.94	25.9	2	ug/L	1				SW-846:6010B	GELC	
C5	8	9	08/24/04	9.8	12.7	11.8	9	White Rock Canyon and Rio Grande	Regional Spring	La Mesita Spring	0	10/12/11		F	CS	METALS	Uranium	11.4	0.97	LANL Reg BG LVL	1.9	3.0	0.067	ug/L	1				SW-846:6020	GELC	
C5	11	12	09/24/01	0.78	112	8.29	9	White Rock Canyon and Rio Grande	Regional Spring	Spring 2	0	10/11/11		F	CS	METALS	Manganese	112	13.51	LANL Reg BG LVL	2.94	19.1	2	ug/L	1				SW-846:6010B	GELC	turbidity was 1.8 NTU; some prior high Mn but usually about 10 ug/L
C6	12	18	11/05/08	2.35	37	5.63	15	Sandia Canyon	Regional	R-43	903.9	11/15/11		F	CS	METALS	Chromium	37	6.57	NM GW STD	50	1.5	10	ug/L	5	J	J	J_LAB	SW-846:6020	GELC	maximum value but estimated- reanalysis requested
C6	25	41	06/15/05	29.4	65.5	46.7	41	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11		F	CS	METALS	Chromium	61.8	1.32	NM GW STD	50	2.5	2	ug/L	1				SW-846:6020	GELC	Cr peaks in November last 3 years
C6	25	41	06/15/05	29.4	65.5	46.7	41	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	11/09/11	FD	F	CS	METALS	Chromium	60.9	1.30	NM GW STD	50	2.4	2	ug/L	1				SW-846:6020	GELC	Cr peaks in November last 3 years
C6	25	30	05/25/05	5.34	8.14	6.71	30	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-15	958.6	11/10/11		F	CS	GENINORG	Perchlorate	8.14	1.21	NM GW CONS	4	4.1	1	ug/L	20				SW-846:6850	GELC	general increase since 2003
CA	21	22	01/11/07	1.62	23.4	2.4	12	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		UF	CS	METALS	Arsenic	23.4	9.75	EPA MCL	10	2.3	8.5	ug/L	5	J	J	J_LAB	SW-846:6020	GELC	maximum value, 5x dilution, estimated-reanalysis nondetect
CA	21	22	01/11/07	1.5	16.5	2.4	9	Sandia Canyon	Intermediate	SCI-1	358.4	11/16/11		F	CS	METALS	Arsenic	16.5	6.88	EPA MCL	10	1.7	8.5	ug/L	5	J	J	J_LAB	SW-846:6020	GELC	maximum value, 5x dilution, estimated-reanalysis nondetect