

SUMMARY OF NEW LOS ALAMOS NATIONAL LABORATORY GROUNDWATER DATA LOADED IN APRIL 2010

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 4-10 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. Over time, the data that exceed the reference data have decreased substantially.

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: these are labeled (in the first column) C1 through C6 for the numbered criteria 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 more than one criterion and appear in the table multiple times. 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 on 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 4-10 Groundwater Report

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Fld QC Type Code	Fld Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std Mdl	Std Uom	Dilution Factor	Lab Qual Code	Concat Flag Code	Concat Reason Code	Anyl Meth Code	Lab Code	Comment	
C1	7	9	10/21/08	0.064	0.064	0.064	1	Sandia Canyon	Intermediate	SCI-2	548	02/08/10		UF	CS	PEST/PCB	Aroclor-1260	11096-82-5	0.064	1.00	EPA MCL	0.5	0.1	0.038	ug/L	1	J	J	J_LAB	SW-846:8082	GELC		
C1	5	5	10/09/08	0.0000011	0.0000011	0.0000011	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		UF	CS	DIOX/FUR	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	35822-46-9	0.0000011	1.00				0.0000011	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC		
C1	5	5	02/17/09	0.00000486	0.00000486	0.00000486	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-44	895	02/10/10		UF	CS	DIOX/FUR	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	35822-46-9	0.00000486	1.00				0.00000486	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC		
C1	5	6	02/25/09	0.00000835	0.00000835	0.00000835	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	UF	CS	DIOX/FUR	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	35822-46-9	0.00000835	1.00				0.00000835	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC		
C1	5	6	02/25/09	0.00000835	0.0000178	0.00001308	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	UF	CS	DIOX/FUR	Heptachlorodibenzodioxins (Total)	37871-00-4	0.00000835	0.64				0.00000835	ug/L	1				SW-846:8290	ALTC		
C1	5	6	02/25/09	0.00000835	0.0000178	0.00001308	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	UF	CS	DIOX/FUR	Heptachlorodibenzodioxins (Total)	37871-00-4	0.0000178	1.36				0.0000178	ug/L	1				SW-846:8290	ALTC		
C1	5	6	02/25/09	0.00000407	0.00000407	0.00000407	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	UF	CS	DIOX/FUR	Heptachlorodibenzofurans (Total)	38998-75-3	0.00000407	1.00				0.00000407	ug/L	1				SW-846:8290	ALTC		
C1	5	6	02/25/09	0.00000558	0.00000558	0.00000558	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	UF	CS	DIOX/FUR	Hexachlorodibenzofurans (Total)	55684-94-1	0.00000558	1.00				0.00000558	ug/L	1				SW-846:8290	ALTC		
C1	5	6	02/25/09	0.00000407	0.00000407	0.00000407	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	UF	CS	DIOX/FUR	Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	67562-39-4	0.00000407	1.00				0.00000407	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC		
C1	8	12	06/22/08	0.42	0.42	0.42	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	UF	CS	VOA	Toluene		108-88-3	0.42	1.00	NM GW STD	750	0.0	0.25	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC		
C1	15	15	06/22/05	0.055	0.055	0.055	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate Spring	Bulldog Spring	0	03/10/10	UF	CS	HEXP	3,5-Dinitroaniline		618-87-1	0.055	1.00				0.032	ug/L	1				SW-846:8321A_MOD	STSL		
C1	1	1	02/22/10	0.00000101	0.00000101	0.00000101	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-51	1030.96	02/22/10	UF	CS	DIOX/FUR	Heptachlorodibenzodioxins (Total)	37871-00-4	0.00000101	1.00						0.00000101	ug/L	1				SW-846:8290	ALTC	
C1	1	1	02/22/10	0.00000618	0.00000618	0.00000618	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-51	1030.96	02/22/10	UF	CS	DIOX/FUR	Octachlorodibenzofuran[1,2,3,4,6,7,8,9-]	39001-02-0	0.00000618	1.00						0.00000618	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC	
C1	4	5	01/15/09	0.00000054	0.00000054	0.00000054	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-40	849.3	02/23/10	UF	CS	DIOX/FUR	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	35822-46-9	0.00000054	1.00						0.00000054	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC	
C1	4	5	01/15/09	0.00000054	0.00000054	0.00000054	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-40	849.3	02/23/10	UF	CS	DIOX/FUR	Heptachlorodibenzodioxins (Total)	37871-00-4	0.00000054	1.00						0.00000054	ug/L	1				SW-846:8290	ALTC	
C1	4	5	01/15/09	0.00000395	0.00000395	0.00000395	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-40	849.3	02/23/10	UF	CS	DIOX/FUR	Heptachlorodibenzofurans (Total)	38998-75-3	0.00000395	1.00						0.00000395	ug/L	1				SW-846:8290	ALTC	
C1	4	5	01/15/09	0.00000395	0.00000395	0.00000395	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-40	849.3	02/23/10	UF	CS	DIOX/FUR	Heptachlorodibenzofuran[1,2,3,4,6,7,8-]	67562-39-4	0.00000395	1.00						0.00000395	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC	
C1	15	24	03/10/04	0.31	0.31	0.31	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	02/24/10	UF	CS	VOA	Dichloroethene[cis-1,2-]		156-59-2	0.31	1.00	EPA MCL	70	0.0	0.3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	not in FD	
C1	1	1	02/15/10	0.00000996	0.00000996	0.00000996	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10	UF	CS	DIOX/FUR	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	35822-46-9	0.00000996	1.00						0.00000996	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC	
C1	1	1	02/15/10	0.00000996	0.00000996	0.00000996	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10	UF	CS	DIOX/FUR	Heptachlorodibenzodioxins (Total)	37871-00-4	0.00000996	1.00						0.00000996	ug/L	1				SW-846:8290	ALTC	
C1	1	1	02/15/10	0.124	0.124	0.124	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10	UF	CS	HEXP	Nitrobenzene		98-95-3	0.124	1.00	EPA TAP SCR N LVL C-5	1.2	0.1	0.1	ug/L	2	J	J	J_LAB	SW-846:8321A_MOD	GELC		
C1	1	1	02/15/10	11.2	11.2	11.2	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10	UF	CS	SVOA	Bis(2-ethylhexyl)phthalate		117-81-7	11.2	1.00	EPA MCL	6	1.9	2	ug/L	1				SW-846:8270C	GELC		
C1	1	1	02/15/10	5.73	5.73	5.73	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10	UF	CS	VOA	Methyl-2-pentanone[4-]		108-10-1	5.73	1.00	EPA TAP SCR N LVL N	2000	0.0	1.3	ug/L	1				SW-846:8260B	GELC		
C1	1	1	02/15/10	8.62	8.62	8.62	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10	UF	CS	VOA	Acetone		67-64-1	8.62	1.00	EPA TAP SCR N LVL N	22000	0.0	3.5	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC		
C1	1	1	02/15/10	3.15	3.15	3.15	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10	UF	CS	VOA	Butanone[2-]		78-93-3	3.15	1.00	EPA TAP SCR N LVL N	7100	0.0	1.3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC		

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Flt QC Type Code	Flt Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std Mdl	Std Uom	Dilution Factor	Lab Qual Code	Concat Flag Code	Concat Reason Code	Anyl Meth Code	Lab Code	Comment
C1	2	2	11/23/09	0.000000569	0.000000569	0.000000569	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-48	1500	02/17/10		UF	CS	DIOX/FUR	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	35822-46-9	0.000000569	1.00				0.000000569	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC	
C1	2	2	11/23/09	0.00000178	0.00000178	0.00000178	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-48	1500	02/17/10		UF	CS	DIOX/FUR	Heptachlorodibenzodioxins (Total)	37871-00-4	0.00000178	1.00				0.00000178	ug/L	1				SW-846:8290	ALTC	
C2	19	25	05/19/05	2.1	9.24	3.3	17	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-1	1031.1	02/11/10		F	CS	METALS	Zinc	Zn	9.24	2.80	LANL Reg BG LVL	3.89	2.4	3.3	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	6	8	05/12/04	14.1	74.8	39.8	5	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-16	863.4	02/08/10		F	CS	METALS	Iron	Fe	39.8	1.00	LANL Reg BG LVL	21	1.9	30	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	6	9	05/12/04	2.14	154	44	9	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-16	863.4	02/08/10		F	CS	METALS	Manganese	Mn	12.7	0.29	LANL Reg BG LVL	2.94	4.3	2	ug/L	1				SW-846:6010B	GELC	
C2	1	1	02/22/10	0.953	0.953	0.953	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-51	1030.96	02/22/10		UF	CS	GENINORG	Total Organic Carbon	TOC	0.953	1.00	LANL Reg BG LVL	0.33	2.9	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C2	1	1	02/15/10	1.71	1.71	1.71	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		UF	CS	GENINORG	Total Organic Carbon	TOC	1.71	1.00	LANL Reg BG LVL	0.33	5.2	0.33	mg/L	1				SW-846:9060	GELC	
C2	1	1	02/15/10	87.3	87.3	87.3	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		F	CS	METALS	Aluminum	Al	87.3	1.00	LANL Reg BG LVL	68	1.3	68	ug/L	1	JN*	J+	I6b	SW-846:6010B	GELC	
C2	1	1	02/15/10	11.1	11.1	11.1	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		F	CS	METALS	Chromium	Cr	11.1	1.00	LANL Reg BG LVL	5.75	1.9	2.5	ug/L	1	N	J-	I6a	SW-846:6020	GELC	
C2	1	1	02/15/10	133	133	133	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		F	CS	METALS	Iron	Fe	133	1.00	LANL Reg BG LVL	21	6.3	30	ug/L	1	N*	J+	I6b	SW-846:6010B	GELC	
C2	1	1	02/15/10	42.1	42.1	42.1	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		F	CS	METALS	Manganese	Mn	42.1	1.00	LANL Reg BG LVL	2.94	14.3	2	ug/L	1				SW-846:6010B	GELC	
C2	1	1	02/15/10	5.1	5.1	5.1	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		F	CS	METALS	Molybdenum	Mo	5.1	1.00	LANL Reg BG LVL	2	2.6	0.1	ug/L	1				SW-846:6020	GELC	
C2	1	1	02/15/10	8.3	8.3	8.3	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		F	CS	METALS	Nickel	Ni	8.3	1.00	LANL Reg BG LVL	3.09	2.7	0.5	ug/L	1	N	J-	I6a	SW-846:6020	GELC	
C2	1	1	02/15/10	60.5	60.5	60.5	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		F	CS	METALS	Zinc	Zn	60.5	1.00	LANL Reg BG LVL	3.89	15.6	3.3	ug/L	1				SW-846:6010B	GELC	
C2	1	1	02/21/10	0.766	0.766	0.766	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	915	02/21/10		UF	CS	GENINORG	Total Organic Carbon	TOC	0.766	1.00	LANL Reg BG LVL	0.33	2.3	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C2	2	2	11/23/09	0.797	4.34	2.569	2	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Regional	R-48	1500	02/17/10		F	CS	METALS	Nickel	Ni	4.34	1.69	LANL Reg BG LVL	3.09	1.4	0.5	ug/L	1				SW-846:6020	GELC	
C3	1	1	02/15/10	9.8	9.8	9.8	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		UF	CS	METALS	Lead	Pb	9.8	1.00	EPA MCL	15	1.3	0.5	ug/L	1				SW-846:6020	GELC	filtered result was 0.9 ug/L
C3	1	1	02/15/10	11.2	11.2	11.2	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		UF	CS	SVOA	Bis(2-ethylhexyl)phthalate	117-81-7	11.2	1.00	EPA MCL	6	3.7	2	ug/L	1				SW-846:8270C	GELC	
C5	14	14	01/11/07	1.04	1.53	1.26	14	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	GENINORG	Bromide	Br(-1)	1.04	0.83	LANL Int BG LVL	0.03	17.3	0.066	mg/L	1				EPA:300.0	GELC	
C5	14	16	01/11/07	67.8	87.6	77.6	15	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	GENINORG	Calcium	Ca	67.8	0.87	LANL Int BG LVL	17.31	2.0	0.05	mg/L	1				SW-846:6010B	GELC	
C5	14	14	01/11/07	82	98.7	89.4	14	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	GENINORG	Chloride	Cl(-1)	84.2	0.94	LANL Int BG LVL	7.78	5.4	0.66	mg/L	10				EPA:300.0	GELC	
C5	14	14	01/11/07	0.932	1.58	1.34	14	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	GENINORG	Perchlorate	ClO4	0.934	0.70	LANL Int BG LVL	0.05	9.3	0.1	ug/L	2				SW-846:6850	GELC	
C5	14	16	01/11/07	50.7	62.1	54.2	15	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	GENINORG	Sodium	Na	53.8	0.99	LANL Int BG LVL	12.19	2.2	0.1	mg/L	1				SW-846:6010B	GELC	
C5	14	14	01/11/07	0.404	1.01	0.809	13	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	GENINORG	Total Phosphate as Phosphorus	PO4-P	0.858	1.06	LANL Int BG LVL	0.08	5.4	0.015	mg/L	1		J	I4a	EPA:365.4	GELC	
C5	14	14	01/11/07	96.6	112	104.5	14	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	GENINORG	Sulfate	SO4(-2)	96.6	0.92	LANL Int BG LVL	40.03	1.2	1	mg/L	10				EPA:300.0	GELC	
C5	14	14	01/11/07	455	536	496	14	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	GENINORG	Total Dissolved Solids	TDS	494	1.00	LANL Int BG LVL	127	1.9	2.4	mg/L	1				EPA:160.1	GELC	
C5	14	16	01/11/07	79.8	98	93.5	14	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	METALS	Boron	B	86.5	0.93	LANL Int BG LVL	15.12	2.9	15	ug/L	1				SW-846:6010B	GELC	
C5	14	17	01/11/07	11	22.1	13.9	17	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	METALS	Chromium	Cr	13.4	0.96	LANL Int BG LVL	1	6.7	2.5	ug/L	1				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	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	Comment
C5	14	15	01/11/07	43.9	93.9	63	15	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	METALS	Molybdenum	Mo	87.9	1.40	LANL Int BG LVL	2	22.0	0.1	ug/L	1				SW-846:6020	GELC	
C5	14	14	01/11/07	4.3	8.1	5.8	14	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	METALS	Nickel	Ni	5.38	0.93	LANL Int BG LVL	1	2.7	0.5	ug/L	1				SW-846:6020	GELC	
C5	14	14	01/11/07	1.8	3.05	2.5	14	Sandia Canyon	Intermediate	SCI-1	358.4	02/05/10		F	CS	METALS	Uranium	U	2.38	0.95	LANL Int BG LVL	0.72	1.7	0.05	ug/L	1				SW-846:6020	GELC	
C5	7	17	10/21/08	471	658	562	17	Sandia Canyon	Intermediate	SCI-2	548	02/08/10		F	CS	METALS	Chromium	Cr	615	1.09	LANL Int BG LVL	1	307.5	25	ug/L	10	N			SW-846:6020	GELC	
C5	11	17	08/29/07	26.2	62.3	34.7	17	Sandia Canyon	Regional	R-35b	825.4	02/11/10		F	CS	METALS	Zinc	Zn	30.2	0.87	LANL Reg BG LVL	3.89	3.9	3.3	ug/L	1				SW-846:6010B	GELC	
C5	11	17	08/29/07	26.2	62.3	34.7	17	Sandia Canyon	Regional	R-35b	825.4	02/11/10	FD	F	CS	METALS	Zinc	Zn	32.6	0.94	LANL Reg BG LVL	3.89	4.2	3.3	ug/L	1				SW-846:6010B	GELC	
C5	11	12	08/30/07	1.2	17	7.4	11	Sandia Canyon	Regional	R-35a	1013.1	02/11/10		F	CS	METALS	Nickel	Ni	17	2.30	LANL Reg BG LVL	3.09	2.8	0.5	ug/L	1				SW-846:6020	GELC	
C5	11	14	08/30/07	2.3	185	13.5	12	Sandia Canyon	Regional	R-35a	1013.1	02/11/10		F	CS	METALS	Zinc	Zn	10.8	0.80	LANL Reg BG LVL	3.89	1.4	3.3	ug/L	1				SW-846:6010B	GELC	
C5	8	10	05/12/08	0.941	6.31	1.04	9	Sandia Canyon	Regional	R-36	766.9	02/04/10		UF	CS	GENINORG	Total Organic Carbon	TOC	1.11	1.07	LANL Reg BG LVL	0.33	1.7	0.33	mg/L	1				SW-846:9060	GELC	
C5	6	7	03/11/09	1.09	7.67	3.16	7	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-46	1340	02/05/10		UF	CS	GENINORG	Total Organic Carbon	TOC	1.53	0.48	LANL Reg BG LVL	0.33	2.3	0.33	mg/L	1				SW-846:9060	GELC	
C5	19	25	05/19/05	0.64	11.2	1.7	23	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-1	1031.1	02/11/10		F	CS	METALS	Nickel	Ni	11.2	6.59	LANL Reg BG LVL	3.09	1.8	0.5	ug/L	1				SW-846:6020	GELC	
C5	18	23	05/25/05	5.34	7.38	6.54	23	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-15	958.6	02/11/10		F	CS	GENINORG	Perchlorate	ClO4	6.97	1.07	LANL Reg BG LVL	0.46	7.6	0.5	ug/L	10				SW-846:6850	GELC	
C5	22	27	02/24/00	1.89	3.31	2.25	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-15	958.6	02/11/10		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	2.1	0.93	LANL Reg BG LVL	0.89	1.2	0.05	mg/L	5				EPA:353.2	GELC	
C5	7	8	10/09/08	28.7	33.7	32	8	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		F	CS	GENINORG	Chloride	Cl(-1)	33.7	1.05	LANL Reg BG LVL	3.57	4.7	0.33	mg/L	5				EPA:300.0	GELC	
C5	7	8	10/09/08	1.18	1.38	1.28	8	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		F	CS	GENINORG	Perchlorate	ClO4	1.38	1.08	LANL Reg BG LVL	0.46	1.5	0.1	ug/L	2				SW-846:6850	GELC	
C5	7	8	10/09/08	11.1	13.2	12.6	8	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		F	CS	GENINORG	Magnesium	Mg	13.2	1.05	LANL Reg BG LVL	4.15	1.6	0.085	mg/L	1				SW-846:6010B	GELC	
C5	7	8	10/09/08	5.83	7.03	6.02	8	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	5.99	1.00	LANL Reg BG LVL	0.89	3.4	0.1	mg/L	10				EPA:353.2	GELC	
C5	7	8	10/09/08	60.6	68.6	61.6	8	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		F	CS	GENINORG	Sulfate	SO4(-2)	68.6	1.11	LANL Reg BG LVL	7.2	4.8	0.5	mg/L	5				EPA:300.0	GELC	
C5	7	8	10/09/08	1.06	2.84	1.66	8	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		UF	CS	GENINORG	Total Organic Carbon	TOC	1.5	0.90	LANL Reg BG LVL	0.33	2.3	0.33	mg/L	1				SW-846:9060	GELC	
C5	7	18	10/09/08	744	1240	856	18	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		F	CS	METALS	Chromium	Cr	894	1.04	LANL Reg BG LVL	5.75	77.7	25	ug/L	10				SW-846:6020	GELC	
C5	7	18	10/09/08	744	1240	856	18	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		F	CS	METALS	Chromium	Cr	1240	1.45	LANL Reg BG LVL	5.75	107.8	50	ug/L	20				SW-846:6020	GELC	another sample gave 894 ug/L
C5	7	8	10/09/08	8.8	23	10.4	8	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		F	CS	METALS	Nickel	Ni	23	2.21	LANL Reg BG LVL	3.09	3.7	0.5	ug/L	1				SW-846:6020	GELC	
C5	7	8	10/09/08	7.7	28.1	21.6	8	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	02/10/10		F	CS	METALS	Zinc	Zn	21.4	0.99	LANL Reg BG LVL	3.89	2.8	3.3	ug/L	1				SW-846:6010B	GELC	
CA	1	1	02/15/10	11.2	11.2	11.2	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	830	02/15/10		UF	CS	SVOA	Bis(2-ethylhexyl)phthalate	117-81-7	11.2	1.00	EPA MCL	6	1.9	2	ug/L	1				SW-846:8270C	GELC	

