SUMMARY OF NEW LOS ALAMOS NATIONAL LABORATORY GROUNDWATER DATA LOADED IN MAY 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 5-10 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 5-10 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	10	12	06/07/05	0.056	0.056	0.056	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-34	883.7	02/10/10		UF	CS	PEST/PCB	Aroclor-1254	11097-69-1	0.056	1.00	EPA MCL	0.5	0.1	0.036	ug/L	1	J	J	J_LAB	SW-846:8082	GELC	likely analytical lab contamination
C1	10	12	06/07/05	0.12	0.12	0.12	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-34	883.7	02/10/10		UF	CS	PEST/PCB	Aroclor-1242	53469-21-9	0.12	1.00	EPA MCL	0.5	0.2	0.036	ug/L	1				SW-846:8082	GELC	likely analytical lab contamination
C1	5	10	02/06/09	13.3	13.3	13.3	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-38	821.2	03/12/10		UF	CS	SVOA	Diethylphthalate	84-66-2	13.3	1.00	EPA TAP SCRN LVL N	29000	0.0	2.3	ug/L	1				SW-846:8270C	GELC	not in field duplicate
C1	4	6	06/18/09	0.309	0.462	0.386	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-49	905.6	03/05/10		UF	CS	VOA	Toluene	108-88-3	0.462	1.20	NM GW STD	750	0.0	0.25	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	4	6	06/18/09	0.309	0.462	0.386	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-49	905.6	03/05/10	FD	UF	CS	VOA	Toluene	108-88-3	0.309	0.80	NM GW STD	750	0.0	0.25	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	4	6	06/18/09	4.09	4.09	4.09	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-49	905.6	03/05/10		UF	CS	VOA	Methylene Chloride	75-09-2	4.09	1.00	EPA MCL	5	0.8	3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	first detect in six samples, not in FD or FTB
C1	21	33	10/17/02	8.88	8.88	8.88	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-23	816	03/05/10		UF	CS	SVOA	Diethylphthalate	84-66-2	8.88	1.00	EPA TAP SCRN LVL N	29000	0.0	2.1	ug/L	1	J	J	J_LAB	SW-846:8270C	GELC	not in field duplicate
C1	12	16	09/24/01	1.71	1.71	1.71	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 4	0	03/24/10		UF	CS	VOA	Butanone[2-]	78-93-3	1.71	1.00	EPA TAP SCRN LVL N	7100	0.0	1.3	ug/L	1	J	J	V7c	SW-846:8260B	GELC	
C2	1	1	03/06/10	4.73	4.73	4.73	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		F	CS	GENINORG	Chloride	Cl(-1)	4.73	1.00	LANL Reg BG LVL	3.57	1.3	0.066	mg/L	1				EPA:300.0	GELC	
C2	1	1	03/06/10	4.17	4.17	4.17	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		F	CS	GENINORG	Magnesium	Mg	4.17	1.00	LANL Reg BG LVL	4.15	1.0	0.085	mg/L	1				SW-846:6010B	GELC	
C2	1	1	03/06/10	1.23	1.23	1.23	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	1.23	1.00	LANL Reg BG LVL	0.89	1.4	0.05	mg/L	5				EPA:353.2	GELC	a little above background
C2	1	1	03/06/10	7.22	7.22	7.22	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		F	CS	GENINORG	Sulfate	SO4(-2)	7.22	1.00	LANL Reg BG LVL	7.2	1.0	0.1	mg/L	1				EPA:300.0	GELC	
C2	1	1	03/06/10	0.479	0.479	0.479	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		UF	CS	GENINORG	Total Organic Carbon	TOC	0.479	1.00	LANL Reg BG LVL	0.33	1.5	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C2	1	1	03/06/10	69.7	69.7	69.7	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		F	CS	METALS	Chromium	Cr	69.7	1.00	LANL Reg BG LVL	5.75	12.1	2.5	ug/L	1				SW-846:6020	GELC	new well, first sample
C2	1	1	03/06/10	17.6	17.6	17.6	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		F	CS	METALS	Manganese	Mn	17.6	1.00	LANL Reg BG LVL	2.94	6.0	2	ug/L	1				SW-846:6010B	GELC	
C2	1	1	03/06/10	7.96	7.96	7.96	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		F	CS	METALS	Zinc	Zn	7.96	1.00	LANL Reg BG LVL	3.89	2.1	3.3	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	1	1	03/11/10	0.753	0.753	0.753	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1185	03/11/10		UF	CS	GENINORG	Total Organic Carbon	TOC	0.753	1.00	LANL Reg BG LVL	0.33	2.3	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C2	1	1	03/11/10	1.53	1.53	1.53	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1185	03/11/10		F	CS	METALS	Cobalt	Co	1.53	1.00	LANL Reg BG LVL	0.5	3.1	1	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	1	1	03/11/10	83.1	83.1	83.1	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1185	03/11/10		F	CS	METALS	Iron	Fe	83.1	1.00	LANL Reg BG LVL	21	4.0	30	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	1	1	03/11/10	5.04	5.04	5.04	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1185	03/11/10		F	CS	METALS	Manganese	Mn	5.04	1.00	LANL Reg BG LVL	2.94	1.7	2	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	5	5	04/01/09	0.798	3.26	1.61	5	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-41	965.3	02/26/10		F	CS	METALS	Nickel	Ni	3.26	2.02	LANL Reg BG LVL	3.09	1.1	0.5	ug/L	1				SW-846:6020	GELC	
C2	3	3	04/21/09	0.802	0.802	0.802	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	751.6	02/23/10		F	CS	METALS	Antimony	Sb	0.802	1.00	LANL Int BG LVL	0.5	1.6	0.5	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C2	9	10	10/11/06	1.05	1.05	1.05	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	524	03/08/10		F	CS	METALS	Cobalt	Co	1.05	1.00	LANL Int BG LVL	0.5	2.1	1	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	9	10	10/11/06	5.75	13.7	9.73	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	524	03/08/10		F	CS	METALS	Manganese	Mn	5.75	0.59	LANL Int BG LVL	2	2.9	2	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	9	10	10/11/06	0.588	2.5	0.97	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	524	03/08/10		F	CS	METALS	Nickel	Ni	1.11	1.14	LANL Int BG LVL	1	1.1	0.5	ug/L	1	J	J	J_LAB	SW-846:6020	GELC	
C2	1	1	02/22/10	0.955	0.955	0.955	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-51	1030.96	02/22/10		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	0.955	1.00	LANL Reg BG LVL	0.89	1.1	0.05	mg/L	5				EPA:353.2	GELC	
C2	1	1	02/22/10	283	283	283	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-51	1030.96	02/22/10		F	CS	METALS	Aluminum	Al	283	1.00	LANL Reg BG LVL	68	4.2	68	ug/L	1	*			SW-846:6010B	GELC	
C2	1	1	02/22/10	271	271	271	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-51	1030.96	02/22/10		F	CS	METALS	Iron	Fe	271	1.00	LANL Reg BG LVL	21	12.9	30	ug/L	1				SW-846:6010B	GELC	
C2	1	1	02/22/10	12.2	12.2	12.2	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-51	1030.96	02/22/10		F	CS	METALS	Manganese	Mn	12.2	1.00	LANL Reg BG LVL	2.94	4.2	2	ug/L	1				SW-846:6010B	GELC	
C2	1	1	02/22/10	3.93	3.93	3.93	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-51	1030.96	02/22/10		F	CS	METALS	Zinc	Zn	3.93	1.00	LANL Reg BG LVL	3.89	1.0	3.3	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	13	17	03/10/04	1.5	7.4	2	17	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	02/24/10	FD	F	CS	METALS	Molybdenum	Mo	2	1.00	LANL Reg BG LVL	2	1.0	0.1	ug/L	1				SW-846:6020	GELC	
C2	1	1	02/21/10	6.95	6.95	6.95	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-54	915	02/21/10		F	CS	METALS	Manganese	Mn	6.95	1.00	LANL Reg BG LVL	2.94	2.4	2	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	6	7	02/19/09	1.3	2.16	1.82	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-39	859	02/26/10		F	CS	METALS	Molybdenum	Mo	2.16	1.19	LANL Reg BG LVL	2	1.1	0.1	ug/L	1				SW-846:6020	GELC	
C2	6	7	02/19/09	5.96	5.96	5.96	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-39	859	02/26/10		F	CS	METALS	Tin	Sn	5.96	1.00	LANL Reg BG LVL	3.26	1.8	2.5	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C3	1	1	03/06/10	69.7	69.7	69.7	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		F	CS	METALS	Chromium	Cr	69.7	1.00	NM GW STD	50	2.8	2.5	ug/L	1				SW-846:6020	GELC	new well, first sample
C3	4	6	06/18/09	4.09	4.09	4.09	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-49	905.6	03/05/10		UF	CS	VOA	Methylene Chloride	75-09-2	4.09	1.00	EPA MCL	5	1.6	3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	first detect in six samples, not in FD or FTB
C5	12	13	10/12/06	7.9	37.6	11.4	13	Sandia Canyon	Regional	R-10	874	02/09/10		F	CS	METALS	Zinc	Zn	15.6	1.37	LANL Reg BG LVL	3.89	2.0	3.3	ug/L	1				SW-846:6010B	GELC	
C5	14	14	06/29/06	6.6	48.7	10.4	14	Sandia Canyon	Regional	R-10	1042	02/09/10		F	CS	METALS	Zinc	Zn	11.6	1.12	LANL Reg BG LVL	3.89	1.5	3.3	ug/L	1				SW-846:6010B	GELC	
C5	5	5	04/01/09	3.89	8.69	5.34	5	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-41	965.3	02/26/10		F	CS	METALS	Molybdenum	Mo	5.13	0.96	LANL Reg BG LVL	2	1.3	0.1	ug/L	1				SW-846:6020	GELC	
C5	14	16	08/29/06	0.268	0.388	0.306	16	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-BG-1	10	02/22/10		F	CS	GENINORG	Perchlorate	ClO4	0.302	0.99	LANL Avl BG LVL	0.05	3.0	0.05	ug/L	1				SW-846:6850	GELC	
C5	8	9	06/22/08	0.251	0.353	0.302	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	F	CS	GENINORG	Perchlorate	ClO4	0.342	1.13	LANL Avl BG LVL	0.05	3.4	0.05	ug/L	1				SW-846:6850	GELC	
C5	8	9	06/22/08	0.251	0.353	0.302	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10		F	CS	GENINORG	Perchlorate	ClO4	0.353	1.17	LANL Avl BG LVL	0.05	3.5	0.05	ug/L	1				SW-846:6850	GELC	
C5	8	9	06/22/08	0.765	4.72	2.91	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.3	1.48	LANL Avl BG LVL	0.57	3.8	0.1	mg/L	10				EPA:353.2	GELC	due to road salt?
C5	8	9	06/22/08	0.765	4.72	2.91	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	4.25	1.46	LANL Avl BG LVL	0.57	3.7	0.1	mg/L	10				EPA:353.2	GELC	due to road salt?
C5	8	9	06/22/08	21	50.9	35.1	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	F	CS	GENINORG	Sodium	Na	49.9	1.42	LANL Avl BG LVL	15.54	1.6	0.1	mg/L	1				SW-846:6010B	GELC	chloride was 134 mg/L, highest
C5	8	9	06/22/08	21	50.9	35.1	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10		F	CS	GENINORG	Sodium	Na	50.9	1.45	LANL Avl BG LVL	15.54	1.6	0.1	mg/L	1				SW-846:6010B	GELC	chloride was 134 mg/L, highest
C5	8	9	06/22/08	161	471	365	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	F	CS	GENINORG	Total Dissolved Solids	TDS	452	1.24	LANL Avl BG LVL	139	1.6	2.4	mg/L	1				EPA:160.1	GELC	
C5	8	9	06/22/08	161	471	365	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10		F	CS	GENINORG	Total Dissolved Solids	TDS	464	1.27	LANL Avl BG LVL	139	1.7	2.4	mg/L	1				EPA:160.1	GELC	
C5	8	9	06/22/08	88.9	305	224	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10		F	CS	METALS	Barium	Ba	298	1.33	LANL Avl BG LVL	68.57	2.2	1	ug/L	1				SW-846:6010B	GELC	due to road salt?

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
C5	8	9	06/22/08	88.9	305	224	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	F	CS	METALS	Barium	Ba	305	1.36	LANL Avl BG LVL	68.57	2.2	1	ug/L	1				SW-846:6010B	GELC	due to road salt?
C5	8	9	06/22/08	114	365	291	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10		F	CS	METALS	Strontium	Sr	350	1.20	LANL Avl BG LVL	120	1.5	1	ug/L	1				SW-846:6010B	GELC	
C5	8	9	06/22/08	114	365	291	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7a	9.7	02/23/10	FD	F	CS	METALS	Strontium	Sr	355	1.22	LANL Avl BG LVL	120	1.5	1	ug/L	1				SW-846:6010B	GELC	
C5	8	8	07/21/05	0.317	0.357	0.346	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19	909.3	02/25/10		F	CS	GENINORG	Perchlorate	ClO4	0.353	1.02	LANL Int BG LVL	0.05	3.5	0.05	ug/L	1				SW-846:6850	GELC	
C5	13	14	09/22/00	0.409	0.849	0.569	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19	909.3	02/25/10		F	CS	GENINORG	Fluoride	F(-1)	0.488	0.86	LANL Int BG LVL	0.23	1.1	0.033	mg/L	1		J-	l6a	EPA:300.0	GELC	
C5	3	3	04/21/09	45.7	400	124	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	751.6	02/23/10		F	CS	METALS	Manganese	Mn	124	1.00	LANL Int BG LVL	2	31.0	2	ug/L	1				SW-846:6010B	GELC	
C5	3	3	04/21/09	8.37	12.9	11.2	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	751.6	02/23/10		F	CS	METALS	Molybdenum	Mo	11.2	1.00	LANL Int BG LVL	2	2.8	0.1	ug/L	1				SW-846:6020	GELC	
C5	3	3	04/21/09	2.55	49.8	14.4	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	751.6	02/23/10		F	CS	METALS	Nickel	Ni	14.4	1.00	LANL Int BG LVL	1	7.2	0.5	ug/L	1				SW-846:6020	GELC	
C5	3	3	04/21/09	22.7	909	39.9	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	751.6	02/23/10		F	CS	METALS	Zinc	Zn	22.7	0.57	LANL Int BG LVL	2	5.7	3.3	ug/L	1				SW-846:6010B	GELC	
C5	10	12	09/06/07	0.07	0.145	0.13	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	400.3	03/10/10		F	CS	GENINORG	Bromide	Br(-1)	0.141	1.08	LANL Int BG LVL	0.03	2.4	0.066	mg/L	1	J	J	J_LAB	EPA:300.0	GELC	
C5	10	12	09/06/07	6.93	36.7	28.05	12	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	400.3	03/10/10		F	CS	GENINORG	Chloride	Cl(-1)	22.3	0.80	LANL Int BG LVL	7.78	1.4	0.33	mg/L	5				EPA:300.0	GELC	
C5	10	12	09/06/07	0.11	0.249	0.181	11	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	400.3	03/10/10		F	CS	GENINORG	Perchlorate	ClO4	0.249	1.38	LANL Int BG LVL	0.05	2.5	0.05	ug/L	1				SW-846:6850	GELC	
C5	14	16	10/03/06	0.146	0.281	0.213	16	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	470.2	03/09/10		F	CS	GENINORG	Perchlorate	ClO4	0.214	1.00	LANL Int BG LVL	0.05	2.1	0.05	ug/L	1				SW-846:6850	GELC	
C5	11	12	10/11/06	0.186	0.277	0.236	12	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	524	03/08/10		F	CS	GENINORG	Perchlorate	ClO4	0.234	0.99	LANL Int BG LVL	0.05	2.3	0.05	ug/L	1				SW-846:6850	GELC	
C5	13	13	09/26/00	1.69	32	9	13	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1190.7	02/26/10		F	CS	METALS	Manganese	Mn	10.5	1.17	LANL Reg BG LVL	2.94	1.8	2	ug/L	1				SW-846:6010B	GELC	
C5	13	16	03/10/04	113	253	180	16	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	02/24/10	FD	F	CS	METALS	Barium	Ba	182	1.01	LANL Reg BG LVL	56.83	1.6	1	ug/L	1				SW-846:6010B	GELC	
C5	13	16	03/10/04	113	253	180	16	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	02/24/10		F	CS	METALS	Barium	Ba	180	1.00	LANL Reg BG LVL	56.83	1.6	1	ug/L	1				SW-846:6010B	GELC	
C5	13	17	03/10/04	47.1	392	74.3	17	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	02/24/10	FD	F	CS	METALS	Manganese	Mn	67.6	0.91	LANL Reg BG LVL	2.94	11.5	2	ug/L	1				SW-846:6010B	GELC	
C5	13	17	03/10/04	47.1	392	74.3	17	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	02/24/10		F	CS	METALS	Manganese	Mn	67.2	0.90	LANL Reg BG LVL	2.94	11.4	2	ug/L	1				SW-846:6010B	GELC	
C5	10	16	12/14/07	27.2	103	43	16	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-32	867.5	03/09/10		F	CS	METALS	Zinc	Zn	33	0.77	LANL Reg BG LVL	3.89	4.2	3.3	ug/L	1				SW-846:6010B	GELC	
C5	3	3	06/23/09	1.3	3.54	1.44	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-49	845	03/03/10		UF	CS	GENINORG	Total Organic Carbon	TOC	1.44	1.00	LANL Reg BG LVL	0.33	2.2	0.33	mg/L	1				SW-846:9060	GELC	
C5	6	10	02/05/07	0.242	0.303	0.289	10	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	CdV-16-2(i)r	850	04/01/10		F	CS	GENINORG	Perchlorate	ClO4	0.242	0.84	LANL Int BG LVL	0.05	2.4	0.05	ug/L	1				SW-846:6850	GELC	
C5	9	13	12/15/05	5.6	17	12.3	10	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	CdV-16-2(i)r	850	04/01/10		F	CS	METALS	Zinc	Zn	13.8	1.12	LANL Int BG LVL	2	3.5	3.3	ug/L	1				SW-846:6010B	GELC	
C5	8	8	08/24/05	5.4	10.9	10.1	8	Ancho Canyon	Regional	Test Well DT-5A	1172	04/13/10		F	CS	METALS	Manganese	Mn	10.8	1.07	LANL Reg BG LVL	2.94	1.8	2	ug/L	1				SW-846:6010B	GELC	
C5	8	8	08/24/05	149	228	175	8	Ancho Canyon	Regional	Test Well DT-5A	1172	04/13/10		F	CS	METALS	Zinc	Zn	149	0.85	LANL Reg BG LVL	3.89	19.2	3.3	ug/L	1				SW-846:6010B	GELC	
CA	1	1	03/06/10	69.7	69.7	69.7	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-50	1077	03/06/10		F	CS	METALS	Chromium	Cr	69.7	1.00	NM GW STD	50	1.4	2.5	ug/L	1				SW-846:6020	GELC	new well, first sample