

## SUMMARY OF NEW LOS ALAMOS NATIONAL LABORATORY GROUNDWATER DATA LOADED IN OCTOBER 2009

### 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 10-09 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 10-09 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 OC Type Code	Fid Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Symbol	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	9	11	12/12/00	0.382	0.382	0.382	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	CDBO-6	34	08/14/09	FD	UF	CS	VOA	Chloromethane	74-87-3		0.382	1.00	EPA TAP SCRNLVL N	190	0.0	0.3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	3	5	02/22/09	21.5	21.6	21.6	2	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-44	985.3	08/17/09		UF	CS	VOA	Acetone	67-64-1		21.6	1.00	EPA TAP SCRNLVL N	22000	0.0	3.5	ug/L	1		J	V7c	SW-846:8260B	GELC	new well- high value
C1	3	5	02/22/09	21.5	21.6	21.6	2	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-44	985.3	08/17/09	FD	UF	CS	VOA	Acetone	67-64-1		21.5	1.00	EPA TAP SCRNLVL N	22000	0.0	3.5	ug/L	1		J	V7c	SW-846:8260B	GELC	new well- high value
C1	2	2	07/13/09	0.00000869	0.00000869	0.00000869	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-37	929.3	08/20/09		UF	CS	DIOX/FUR	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	35822-46-9		0.00000869	1.00				0.00000869	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC	unusual in regional aquifer
C1	2	2	07/13/09	0.00000239	0.00000239	0.00000239	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-37	929.3	08/20/09		UF	CS	DIOX/FUR	Heptachlorodibenzodioxins (Total)	37871-00-4		0.00000239	1.00				0.00000239	ug/L	1				SW-846:8290	ALTC	unusual in regional aquifer
C1	2	3	07/13/09	4.75	4.75	4.75	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-37	929.3	08/20/09	FD	UF	CS	SVOA	Dioxane[1,4-]	123-91-1		4.75	1.00	EPA TAP SCRNLVL C-5	61	0.1	2.1	ug/L	1	J	J	SV7c	SW-846:8270C	GELC	field duplicate was nondetect
C1	2	2	02/06/09	0.00000147	0.00000147	0.00000147	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-38	821.2	08/21/09		UF	CS	DIOX/FUR	Heptachlorodibenzodioxin[1,2,3,4,6,7,8-]	35822-46-9		0.00000147	1.00				0.00000147	ug/L	1	J	J	J_LAB	SW-846:8290	ALTC	unusual in regional aquifer
C1	2	2	02/06/09	0.00000315	0.00000315	0.00000315	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-38	821.2	08/21/09		UF	CS	DIOX/FUR	Heptachlorodibenzodioxins (Total)	37871-00-4		0.00000315	1.00				0.00000315	ug/L	1				SW-846:8290	ALTC	unusual in regional aquifer
C1	3	7	02/06/09	4.83	4.83	4.83	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-38	821.2	08/21/09		UF	CS	SVOA	Dioxane[1,4-]	123-91-1		4.83	1.00	EPA TAP SCRNLVL C-5	61	0.1	2.3	ug/L	1	J	J	SV7c	SW-846:8270C	GELC	near MDA L
C1	12	22	09/09/04	0.325	0.325	0.325	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate Spring	Homestead Spring	0	09/16/09		UF	CS	VOA	Chloromethane	74-87-3		0.325	1.00	EPA TAP SCRNLVL N	190	0.0	0.3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	13	17	08/31/06	2.15	2.26	2.21	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-11	27	09/04/09	FD	UF	CS	SVOA	Bis(2-ethylhexyl)phthalate	117-81-7		2.15	0.97	EPA MCL	6	0.4	2.1	ug/L	1	J	J	J_LAB	SW-846:8270C	GELC	
C1	13	17	08/31/06	2.15	2.26	2.21	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-11	27	09/04/09		UF	CS	SVOA	Bis(2-ethylhexyl)phthalate	117-81-7		2.26	1.02	EPA MCL	6	0.4	2.2	ug/L	1	J	J	J_LAB	SW-846:8270C	GELC	
C1	2	4	06/11/09	2.38	2.49	2.44	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	PCI-2	512	09/04/09	FD	UF	CS	SVOA	Bis(2-ethylhexyl)phthalate	117-81-7		2.38	0.98	EPA MCL	6	0.4	2.1	ug/L	1	J	J	J_LAB	SW-846:8270C	GELC	
C1	2	4	06/11/09	2.38	2.49	2.44	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	PCI-2	512	09/04/09		UF	CS	SVOA	Bis(2-ethylhexyl)phthalate	117-81-7		2.49	1.02	EPA MCL	6	0.4	2.4	ug/L	1	J	J	J_LAB	SW-846:8270C	GELC	
C1	2	4	06/11/09	3.81	3.81	3.81	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	PCI-2	512	09/04/09		UF	CS	VOA	Methylene Chloride	75-09-2		3.81	1.00	EPA MCL	5	0.8	3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	5	6	10/11/06	0.00722	0.00722	0.00722	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	524	09/09/09		UF	CS	PEST/PCB	Endrin Aldehyde	7421-93-4		0.00722	1.00				0.0056	ug/L	1	J	J	J_LAB	SW-846:8081A	GELC	
C1	3	3	06/24/08	3.2	3.2	3.2	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-8	9.7	09/10/09		UF	CS	VOA	Methylene Chloride	75-09-2		3.2	1.00	EPA MCL	5	0.6	3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C1	6	6	06/23/08	0.154	0.154	0.154	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	09/03/09		UF	CS	HEXP	Nitrobenzene	98-95-3		0.154	1.00	EPA TAP SCRNLVL C-5	1.2	0.1	0.1	ug/L	2	J	J	J_LAB	SW-846:8321A_MOD	GELC	first detect in R-20; sample collected after 3 mos. of cross flow with shallow screen
C1	6	8	06/23/08	0.265	0.272	0.269	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	09/03/09	FD	UF	CS	VOA	Ethylbenzene	100-41-4		0.265	0.99	EPA MCL	700	0.0	0.25	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	first detect in R-20; sample collected after 3 mos. of cross flow with shallow screen
C1	6	8	06/23/08	0.265	0.272	0.269	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	09/03/09		UF	CS	VOA	Ethylbenzene	100-41-4		0.272	1.01	EPA MCL	700	0.0	0.25	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	first detect in R-20; sample collected after 3 mos. of cross flow with shallow screen
C1	6	8	06/23/08	0.403	0.419	0.411	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	09/03/09		UF	CS	VOA	Xylene[1,2-]	95-47-6		0.403	0.98	EPA TAP SCRNLVL N	1400	0.0	0.3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	first detect in R-20; sample collected after 3 mos. of cross flow with shallow screen



Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Fld OC Type Code	Fld Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Symbol	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
C2	8	8	12/17/07	9.7	82.3	16.3	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	METALS	Silicon Dioxide	SiO2		82.3	5.05	LANL Int BG LVL	50.72	1.6	0.053	mg/L	1				SW-846:6010B	GELC	
C2	14	14	06/27/06	0.074	1.1	0.34	13	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	METALS	Uranium	U		0.927	2.73	LANL Int BG LVL	0.72	1.3	0.05	ug/L	1				SW-846:6020	GELC	
C2	14	22	06/23/06	0.103	0.248	0.15	22	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09	FD	F	CS	GENINORG	Fluoride	F(-1)		0.248	1.65	LANL Int BG LVL	0.23	1.1	0.033	mg/L	1				EPA:300.0	GELC	highest value-lab problem?
C2	6	6	06/22/08	0.134	0.29	0.203	6	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-7c	9.7	09/14/09		F	CS	GENINORG	Fluoride	F(-1)		0.29	1.43	LANL Avl BG LVL	0.27	1.1	0.033	mg/L	1				EPA:300.0	GELC	highest value-lab problem?
C2	2	2	06/11/09	0.193	0.379	0.286	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	PCI-2	512	09/04/09		F	CS	GENINORG	Fluoride	F(-1)		0.379	1.33	LANL Int BG LVL	0.23	1.7	0.033	mg/L	1				EPA:300.0	GELC	highest value-lab problem?
C2	2	2	06/11/09	11.8	12.2	12	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	PCI-2	512	09/04/09		F	CS	GENINORG	Sodium	Na		12.2	1.02	LANL Int BG LVL	12.19	1.0	0.1	mg/L	1				SW-846:6010B	GELC	
C2	11	11	09/22/00	0.409999996	1.04	0.729999989	4	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19	909.3	09/10/09		F	CS	METALS	Cobalt	Co		1.04	1.42	LANL Int BG LVL	0.5	2.1	1	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	11	11	09/22/00	2.61	160	15.3	6	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19	909.3	09/10/09		F	CS	METALS	Manganese	Mn		2.61	0.17	LANL Int BG LVL	2	1.3	2	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	3	3	01/28/09	15.4	17.4	17.1	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	649.7	08/31/09		F	CS	GENINORG	Calcium	Ca		17.4	1.02	LANL Int BG LVL	17.31	1.0	0.05	mg/L	1				SW-846:6010B	GELC	
C2	3	3	01/28/09	0.031	0.116	0.074	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	649.7	08/31/09		F	CS	GENINORG	Total Phosphate as Phosphorus	PO4-P		0.116	1.57	LANL Int BG LVL	0.08	1.5	0.015	mg/L	1				EPA:365.4	GELC	
C2	13	18	08/28/06	0.12	1.18	0.23	15	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-18	12.5	09/02/09		F	CS	METALS	Uranium	U		1.18	5.13	LANL Avl BG LVL	1.03	1.2	0.05	ug/L	1				SW-846:6020	GELC	related to high alkalinity?
C2	2	2	01/15/09	140	140	140	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-40	849.3	09/03/09		F	CS	METALS	Iron	Fe		140	1.00	LANL Reg BG LVL	21	6.7	30	ug/L	1	*			SW-846:6010B	GELC	
C2	6	6	06/23/08	0.046	2.95	0.08	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	09/03/09		F	CS	GENINORG	Total Phosphate as Phosphorus	PO4-P		2.95	36.88	LANL Reg BG LVL	0.16	18.4	0.015	mg/L	1				EPA:365.4	GELC	unusually high value; sample collected after 3 mos. of cross flow with shallow screen
C2	2	2	06/18/09	2.16	3.89	3.03	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-49	905.6	09/01/09		F	CS	METALS	Zinc	Zn		3.89	1.28	LANL Reg BG LVL	3.89	1.0	3.3	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C2	14	21	07/14/05	0.387	0.467	0.444	21	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-23	816	09/03/09	FD	F	CS	GENINORG	Perchlorate	ClO4		0.461	1.04	LANL Reg BG LVL	0.46	1.0	0.05	ug/L	1				SW-846:6850	GELC	
C2	18	27	12/17/03	12.8	169	36.4	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-23	816	09/03/09	FD	F	CS	METALS	Iron	Fe		36.4	1.00	LANL Reg BG LVL	21	1.7	30	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C3	2	3	10/11/06	0.555	0.831	0.556	3	Sandia Canyon	Alluvial	SCA-5	55	08/05/09		F	CS	GENINORG	Fluoride	F(-1)		0.831	1.49	NM GW STD	1.6	1.0	0.033	mg/L	1				EPA:300.0	GELC	highest value-lab problem?
C3	2	3	07/13/09	2.33	4.66	3.5	2	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-37	929.3	08/20/09		UF	CS	SVOA	Bis(2-ethylhexyl)phthalate	117-81-7		4.66	1.33	EPA MCL	6	1.6	2.1	ug/L	1	J	J	J_LAB	SW-846:8270C	GELC	unusually high value
C3	14	14	06/27/06	0.56	18.4	2.5	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	METALS	Lead	Pb		10.6	4.24	EPA MCL	15	1.4	0.5	ug/L	1				SW-846:6020	GELC	
C3	2	4	06/11/09	3.81	3.81	3.81	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	PCI-2	512	09/04/09		UF	CS	VOA	Methylene Chloride	75-09-2		3.81	1.00	EPA MCL	5	1.5	3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C3	11	11	09/22/00	0.409	0.849	0.566	11	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19	909.3	09/10/09		F	CS	GENINORG	Fluoride	F(-1)		0.849	1.50	NM GW STD	1.6	1.1	0.033	mg/L	1				EPA:300.0	GELC	highest value-lab problem?
C3	3	3	06/24/08	3.2	3.2	3.2	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-8	9.7	09/10/09		UF	CS	VOA	Methylene Chloride	75-09-2		3.2	1.00	EPA MCL	5	1.3	3	ug/L	1	J	J	J_LAB	SW-846:8260B	GELC	
C3	6	8	06/23/08	0.371	2.6	0.479	6	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	09/03/09		UF	CS	VOA	Trichloroethene	79-01-6		2.6	5.43	EPA MCL	5	1.0	0.25	ug/L	1				SW-846:8260B	GELC	4th consecutive sample event with detection; sample collected after 3 mos. of cross flow with shallow screen

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Fld OC Type Code	Fld Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Symbol	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	8	06/18/07	0.24	0.526	0.346	7	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	GENINORG	Bromide	Br(-1)		0.24	0.69	LANL Avl BG LVL	0.07	1.7	0.066	mg/L	1				EPA:300.0	GELC	
C5	8	8	06/18/07	0.264	1.69	0.422	8	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	GENINORG	Perchlorate	CIO4		0.264	0.63	LANL Avl BG LVL	0.05	2.6	0.05	ug/L	1				SW-846:6850	GELC	
C5	8	8	06/18/07	0.543	1.07	0.909	8	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	GENINORG	Fluoride	F(-1)		0.889	0.98	LANL Avl BG LVL	0.27	1.7	0.033	mg/L	1				EPA:300.0	GELC	
C5	8	8	06/18/07	1.18	729	1.73	8	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N		1.72	0.99	LANL Avl BG LVL	0.57	1.5	0.05	mg/L	5				EPA:353.2	GELC	
C5	8	8	06/18/07	75.9	103	92.2	8	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	GENINORG	Sodium	Na		88.1	0.96	LANL Avl BG LVL	15.54	2.8	0.1	mg/L	1				SW-846:6010B	GELC	
C5	8	8	06/18/07	1.38	4.08	2.81	8	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	GENINORG	Total Phosphate as Phosphorus	PO4-P		2.72	0.97	LANL Avl BG LVL	0.05	27.2	0.075	mg/L	5	J-	l6a		EPA:365.4	GELC	
C5	8	8	06/18/07	297	400	332	8	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	GENINORG	Total Dissolved Solids	TDS		297	0.89	LANL Avl BG LVL	139	1.1	2.4	mg/L	1				EPA:160.1	GELC	
C5	8	8	06/18/07	5.2	16.2	9.9	7	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	METALS	Chromium	Cr		11.7	1.18	LANL Avl BG LVL	1	5.9	2.5	ug/L	1				SW-846:6020	GELC	
C5	8	8	06/18/07	14.5	67	34.2	8	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	METALS	Molybdenum	Mo		32.9	0.96	LANL Avl BG LVL	2	8.2	0.1	ug/L	1				SW-846:6020	GELC	
C5	8	8	06/18/07	7.6	13.7	9.8	7	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	METALS	Vanadium	V		9.76	1.00	LANL Avl BG LVL	1	4.9	1	ug/L	1				SW-846:6010B	GELC	
C5	8	8	06/18/07	2.5	198	18.2	7	Sandia Canyon	Alluvial	SCA-4	37	08/05/09		F	CS	METALS	Zinc	Zn		20.1	1.10	LANL Avl BG LVL	2	5.0	3.3	ug/L	1				SW-846:6010B	GELC	
C5	6	8	02/20/08	0.193	0.363	0.25	8	Sandia Canyon	Intermediate	R-12	459	08/05/09		F	CS	GENINORG	Perchlorate	CIO4		0.193	0.77	LANL Int BG LVL	0.05	1.9	0.05	ug/L	1	J	J	J_LAB	SW-846:6850	GELC	
C5	7	8	02/20/08	126	288	178	8	Sandia Canyon	Intermediate	R-12	459	08/05/09		F	CS	METALS	Manganese	Mn		126	0.71	LANL Int BG LVL	2	31.5	2	ug/L	1				SW-846:6010B	GELC	
C5	7	8	02/21/08	0.943	1.16	1.085	8	Sandia Canyon	Intermediate	R-12	504.5	08/05/09		F	CS	GENINORG	Perchlorate	CIO4		0.943	0.87	LANL Int BG LVL	0.05	9.4	0.05	ug/L	1				SW-846:6850	GELC	
C5	7	9	02/21/08	36	45.9	43	8	Sandia Canyon	Intermediate	R-12	504.5	08/05/09		F	CS	METALS	Manganese	Mn		36.5	0.85	LANL Int BG LVL	2	9.1	2	ug/L	1				SW-846:6010B	GELC	
C5	3	3	11/05/08	1.06	1.52	1.07	3	Sandia Canyon	Regional	R-43	903.9	08/18/09		UF	CS	GENINORG	Total Organic Carbon	TOC		1.06	0.99	LANL Reg BG LVL	0.33	1.6	0.33	mg/L	1				SW-846:9060	GELC	
C5	6	7	05/12/08	1.51	1.74	1.62	7	Sandia Canyon	Regional	R-36	766.9	08/05/09		F	CS	GENINORG	Perchlorate	CIO4		1.74	1.07	LANL Reg BG LVL	0.46	1.9	0.1	ug/L	2				SW-846:6850	GELC	
C5	6	7	05/12/08	1.51	1.74	1.62	7	Sandia Canyon	Regional	R-36	766.9	08/05/09	FD	F	CS	GENINORG	Perchlorate	CIO4		1.69	1.04	LANL Reg BG LVL	0.46	1.8	0.1	ug/L	2				SW-846:6850	GELC	
C5	6	7	05/12/08	2.22	2.46	2.4	7	Sandia Canyon	Regional	R-36	766.9	08/05/09	FD	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N		2.46	1.03	LANL Reg BG LVL	0.89	1.4	0.05	mg/L	5				EPA:353.2	GELC	
C5	6	7	05/12/08	2.22	2.46	2.4	7	Sandia Canyon	Regional	R-36	766.9	08/05/09		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N		2.4	1.00	LANL Reg BG LVL	0.89	1.4	0.05	mg/L	5				EPA:353.2	GELC	
C5	6	7	05/12/08	58.9	75.3	70.3	7	Sandia Canyon	Regional	R-36	766.9	08/05/09	FD	F	CS	METALS	Zinc	Zn		73.6	1.05	LANL Reg BG LVL	3.89	9.5	3.3	ug/L	1				SW-846:6010B	GELC	
C5	6	7	05/12/08	58.9	75.3	70.3	7	Sandia Canyon	Regional	R-36	766.9	08/05/09		F	CS	METALS	Zinc	Zn		70.3	1.00	LANL Reg BG LVL	3.89	9.0	3.3	ug/L	1				SW-846:6010B	GELC	
C5	11	11	05/03/05	6.76	24.4	18.8	11	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/17/09		F	CS	GENINORG	Perchlorate	CIO4		8.78	0.47	LANL Avl BG LVL	0.05	87.8	1	ug/L	20				SW-846:6850	GELC	
C5	16	17	08/02/01	0.664	1.18	0.937	17	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/17/09		F	CS	GENINORG	Fluoride	F(-1)		0.664	0.71	LANL Avl BG LVL	0.27	1.2	0.033	mg/L	1				EPA:300.0	GELC	
C5	15	16	08/02/01	12.1	15.7	14.2	16	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/17/09		F	CS	GENINORG	Potassium	K		14.5	1.02	LANL Avl BG LVL	5.21	1.4	0.05	mg/L	1				SW-846:6010B	GELC	
C5	15	16	08/02/01	46.3	77.4	58.1	16	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/17/09		F	CS	GENINORG	Sodium	Na		58	1.00	LANL Avl BG LVL	15.54	1.9	0.1	mg/L	1				SW-846:6010B	GELC	
C5	16	22	08/02/01	251	493	301	22	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/17/09		F	CS	GENINORG	Total Dissolved Solids	TDS		309	1.03	LANL Avl BG LVL	139	1.1	2.4	mg/L	1				EPA:160.1	GELC	
C5	15	16	08/02/01	24.9	81.3	46.5	16	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Alluvial	MCO-5	21	08/17/09		F	CS	METALS	Molybdenum	Mo		26.4	0.57	LANL Avl BG LVL	2	6.6	0.1	ug/L	1				SW-846:6020	GELC	
C5	16	24	06/15/05	0.212	0.635	0.323	22	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	GENINORG	Bromide	Br(-1)		0.603	1.87	LANL Int BG LVL	0.03	10.1	0.066	mg/L	1				EPA:300.0	GELC	
C5	16	24	06/15/05	0.212	0.635	0.323	22	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	GENINORG	Bromide	Br(-1)		0.61	1.89	LANL Int BG LVL	0.03	10.2	0.066	mg/L	1				EPA:300.0	GELC	
C5	16	24	06/15/05	42.8	68.4	49.2	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	GENINORG	Calcium	Ca		64.7	1.32	LANL Int BG LVL	17.31	1.9	0.05	mg/L	1				SW-846:6010B	GELC	



Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Fid OC Type Code	Fid Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Symbol	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	16	24	06/15/05	42.8	68.4	49.2	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	GENINORG	Calcium	Ca		63.8	1.30	LANL Int BG LVL	17.31	1.8	0.05	mg/L	1				SW-846:6010B	GELC	
C5	16	24	06/15/05	21.2	46.7	23.7	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	GENINORG	Chloride	Cl(-1)		44.7	1.89	LANL Int BG LVL	7.78	2.9	0.66	mg/L	10				EPA:300.0	GELC	values rising
C5	16	24	06/15/05	21.2	46.7	23.7	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	GENINORG	Chloride	Cl(-1)		46.7	1.97	LANL Int BG LVL	7.78	3.0	0.66	mg/L	10				EPA:300.0	GELC	values rising
C5	16	24	06/15/05	90.9	246	167.5	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	GENINORG	Perchlorate	CIO4		104	0.62	LANL Int BG LVL	0.05	1040.0	10	ug/L	200				SW-846:6850	GELC	
C5	16	24	06/15/05	90.9	246	167.5	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	GENINORG	Perchlorate	CIO4		95.2	0.57	LANL Int BG LVL	0.05	952.0	10	ug/L	200				SW-846:6850	GELC	
C5	16	24	06/15/05	8.49	13.8	10.05	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	GENINORG	Magnesium	Mg		12.7	1.26	LANL Int BG LVL	6.12	1.0	0.085	mg/L	1				SW-846:6010B	GELC	
C5	16	24	06/15/05	8.49	13.8	10.05	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	GENINORG	Magnesium	Mg		12.8	1.27	LANL Int BG LVL	6.12	1.1	0.085	mg/L	1				SW-846:6010B	GELC	
C5	16	25	06/15/05	11.6	20.4	17.9	25	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N		11.7	0.65	LANL Int BG LVL	2.41	2.4	0.25	mg/L	25				EPA:353.2	GELC	values falling
C5	16	25	06/15/05	11.6	20.4	17.9	25	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N		11.6	0.65	LANL Int BG LVL	2.41	2.4	0.25	mg/L	25				EPA:353.2	GELC	values falling
C5	16	32	06/15/05	298	458	366	32	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	GENINORG	Total Dissolved Solids	TDS		458	1.25	LANL Int BG LVL	127	1.8	2.4	mg/L	1		J	I4a	EPA:160.1	GELC	values rising
C5	16	32	06/15/05	298	458	366	32	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	GENINORG	Total Dissolved Solids	TDS		453	1.24	LANL Int BG LVL	127	1.8	2.4	mg/L	1		J	I4a	EPA:160.1	GELC	values rising
C5	16	24	06/15/05	25.4	40.8	32.3	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	METALS	Boron	B		40.7	1.26	LANL Int BG LVL	15.12	1.4	15	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	16	24	06/15/05	25.4	40.8	32.3	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	METALS	Boron	B		40.8	1.26	LANL Int BG LVL	15.12	1.4	15	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	16	27	06/15/05	29.4	58.2	41.5	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	METALS	Chromium	Cr		47.5	1.14	LANL Int BG LVL	1	23.8	2.5	ug/L	1				SW-846:6020	GELC	
C5	16	27	06/15/05	29.4	58.2	41.5	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	METALS	Chromium	Cr		44.3	1.07	LANL Int BG LVL	1	22.2	2.5	ug/L	1				SW-846:6020	GELC	
C5	16	27	06/15/05	29.4	58.2	41.5	27	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	METALS	Chromium	Cr		44.9	1.08	LANL Int BG LVL	1	22.5	2.5	ug/L	1				SW-846:6020	GELC	
C5	16	24	06/15/05	6.6	26.1	11.3	23	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	METALS	Copper	Cu		11.6	1.03	LANL Int BG LVL	5.32	1.1	3	ug/L	1				SW-846:6010B	GELC	
C5	16	24	06/15/05	6.6	26.1	11.3	23	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	METALS	Copper	Cu		11.3	1.00	LANL Int BG LVL	5.32	1.1	3	ug/L	1				SW-846:6010B	GELC	
C5	16	24	06/15/05	2.9	12.2	5.7	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	METALS	Nickel	Ni		12.2	2.14	LANL Int BG LVL	1	6.1	0.5	ug/L	1				SW-846:6020	GELC	
C5	16	24	06/15/05	2.9	12.2	5.7	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	METALS	Nickel	Ni		11.7	2.05	LANL Int BG LVL	1	5.9	0.5	ug/L	1				SW-846:6020	GELC	
C5	16	24	06/15/05	26	288	62	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09		F	CS	METALS	Zinc	Zn		29.4	0.47	LANL Int BG LVL	2	7.4	3.3	ug/L	1				SW-846:6010B	GELC	
C5	16	24	06/15/05	26	288	62	24	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Intermediate	MCOI-6	686	08/19/09	FD	F	CS	METALS	Zinc	Zn		30.4	0.49	LANL Int BG LVL	2	7.6	3.3	ug/L	1				SW-846:6010B	GELC	
C5	3	3	02/06/09	7.93	14.4	11.1	3	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-38	821.2	08/21/09		F	CS	METALS	Manganese	Mn		7.93	0.71	LANL Reg BG LVL	2.94	1.4	2	ug/L	1	J	J	J_LAB	SW-846:6010B	GELC	
C5	3	3	02/06/09	13.7	27.5	16.3	3	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-38	821.2	08/21/09		F	CS	METALS	Nickel	Ni		13.7	0.84	LANL Reg BG LVL	3.09	2.2	0.5	ug/L	1				SW-846:6020	GELC	
C5	3	3	02/06/09	26.8	69	37.2	3	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-38	821.2	08/21/09		F	CS	METALS	Zinc	Zn		26.8	0.72	LANL Reg BG LVL	3.89	3.4	3.3	ug/L	1				SW-846:6010B	GELC	

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Fid OC Type Code	Fid Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Symbol	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	5	7	06/09/08	197	444	350	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	GENINORG	Alkalinity-CO3+HCO3	ALK-CO3+HCO3		197	0.56	LANL Avl BG LVL	76	1.3	0.73	mg/L	1				EPA:310.1	GELC	
C5	5	7	06/09/08	54.5	114	85.7	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	GENINORG	Calcium	Ca		54.5	0.64	LANL Avl BG LVL	26.36	1.0	0.05	mg/L	1				SW-846:6010B	GELC	
C5	5	7	06/09/08	0.891	1.66	1.3	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	GENINORG	Ammonia as Nitrogen	NH3-N		0.891	0.69	LANL Avl BG LVL	0.04	11.1	0.016	mg/L	1	J-	l6a	EPA:350.1	GELC		
C5	5	7	06/09/08	292	522	423	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	GENINORG	Total Dissolved Solids	TDS		292	0.69	LANL Avl BG LVL	139	1.1	2.4	mg/L	1	J	l10a	EPA:160.1	GELC		
C5	5	7	06/09/08	281	601	435	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	METALS	Barium	Ba		357	0.82	LANL Avl BG LVL	68.57	2.6	1	ug/L	1			SW-846:6010B	GELC		
C5	5	7	06/09/08	9.6	23.6	20	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	METALS	Cobalt	Co		20	1.00	LANL Avl BG LVL	0.5	20.0	1	ug/L	1			SW-846:6010B	GELC		
C5	5	7	06/09/08	6040	17500	11800	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	METALS	Manganese	Mn		9570	0.81	LANL Avl BG LVL	2	2392.5	2	ug/L	1			SW-846:6010B	GELC		
C5	5	7	06/09/08	6.8	9.74	7.7	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	METALS	Molybdenum	Mo		9.71	1.26	LANL Avl BG LVL	2	2.4	0.1	ug/L	1			SW-846:6020	GELC		
C5	5	7	06/09/08	5.8	14.9	9.7	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	METALS	Nickel	Ni		9.69	1.00	LANL Avl BG LVL	1	4.9	0.5	ug/L	1			SW-846:6020	GELC		
C5	5	7	06/09/08	379	777	577	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-5	14.7	09/02/09		F	CS	METALS	Strontium	Sr		379	0.66	LANL Avl BG LVL	120	1.6	1	ug/L	1			SW-846:6010B	GELC		
C5	13	15	08/29/06	0.268	0.388	0.306	15	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-BG-1	10	09/03/09		F	CS	GENINORG	Perchlorate	ClO4		0.306	1.00	LANL Avl BG LVL	0.05	3.1	0.05	ug/L	1			SW-846:6850	GELC		
C5	13	15	08/29/06	0.268	0.388	0.306	15	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-BG-1	10	09/03/09	FD	F	CS	GENINORG	Perchlorate	ClO4		0.306	1.00	LANL Avl BG LVL	0.05	3.1	0.05	ug/L	1			SW-846:6850	GELC		
C5	13	15	08/31/06	0.266	0.417	0.328	15	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-11	27	09/04/09		F	CS	GENINORG	Perchlorate	ClO4		0.337	1.03	LANL Avl BG LVL	0.05	3.4	0.05	ug/L	1			SW-846:6850	GELC		
C5	13	15	08/31/06	0.179	3.29	1.27	15	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-11	27	09/04/09		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N		3.29	2.59	LANL Avl BG LVL	0.57	2.9	0.1	mg/L	10			EPA:353.2	GELC	source unknown	
C5	13	17	08/31/06	0.214	0.568	0.312	17	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-9	6	09/09/09	FD	F	CS	GENINORG	Perchlorate	ClO4		0.328	1.05	LANL Avl BG LVL	0.05	3.3	0.05	ug/L	1			SW-846:6850	GELC		
C5	13	17	08/31/06	0.214	0.568	0.312	17	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-9	6	09/09/09		F	CS	GENINORG	Perchlorate	ClO4		0.326	1.04	LANL Avl BG LVL	0.05	3.3	0.05	ug/L	1			SW-846:6850	GELC		
C5	13	17	08/31/06	0.525	5.72	1.47	17	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-9	6	09/09/09	FD	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N		2.33	1.59	LANL Avl BG LVL	0.57	2.0	0.1	mg/L	10			EPA:353.2	GELC	source unknown	
C5	13	17	08/31/06	0.525	5.72	1.47	17	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-9	6	09/09/09		F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2-N		2.33	1.59	LANL Avl BG LVL	0.57	2.0	0.1	mg/L	10			EPA:353.2	GELC	source unknown	
C5	13	13	08/23/06	43.9	566	119	13	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	GENINORG	Chloride	Cl(-1)		43.9	0.37	LANL Int BG LVL	7.78	2.8	0.33	mg/L	5	J-	l6a	EPA:300.0	GELC		
C5	14	14	06/27/06	40.3	291	92.2	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	GENINORG	Sodium	Na		57.3	0.62	LANL Int BG LVL	12.19	2.4	0.1	mg/L	1			SW-846:6010B	GELC		
C5	13	15	08/23/06	204	1200	371	15	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	GENINORG	Total Dissolved Solids	TDS		329	0.89	LANL Int BG LVL	127	1.3	2.4	mg/L	1			EPA:160.1	GELC		
C5	14	14	06/27/06	4.3	300	16	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	METALS	Manganese	Mn		59.3	3.71	LANL Int BG LVL	2	14.8	2	ug/L	1			SW-846:6010B	GELC		
C5	14	14	06/27/06	6.4	50.8	27.1	12	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	METALS	Zinc	Zn		37	1.37	LANL Int BG LVL	2	9.3	3.3	ug/L	1			SW-846:6010B	GELC		
C5	14	22	06/23/06	38.1	610	142	22	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09	FD	F	CS	GENINORG	Chloride	Cl(-1)		38.7	0.27	LANL Int BG LVL	7.78	2.5	0.33	mg/L	5			EPA:300.0	GELC		
C5	14	22	06/23/06	38.1	610	142	22	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09		F	CS	GENINORG	Chloride	Cl(-1)		38.1	0.27	LANL Int BG LVL	7.78	2.5	0.33	mg/L	5			EPA:300.0	GELC		

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Fid OC Type Code	Fid Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Symbol	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 Math Code	Lab Code	Comment
C5	14	22	06/23/06	44.3	347	89.7	22	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09	FD	F	CS	GENINORG	Sodium	Na		52.5	0.59	LANL Int BG LVL	12.19	2.2	0.1	mg/L	1				SW-846:6010B	GELC	
C5	14	22	06/23/06	44.3	347	89.7	22	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09		F	CS	GENINORG	Sodium	Na		52.6	0.59	LANL Int BG LVL	12.19	2.2	0.1	mg/L	1				SW-846:6010B	GELC	
C5	14	22	06/23/06	3.1	681	33.9	22	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09	FD	F	CS	METALS	Manganese	Mn		41.3	1.22	LANL Int BG LVL	2	10.3	2	ug/L	1				SW-846:6010B	GELC	
C5	14	22	06/23/06	3.1	681	33.9	22	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09		F	CS	METALS	Manganese	Mn		36.7	1.08	LANL Int BG LVL	2	9.2	2	ug/L	1				SW-846:6010B	GELC	
C5	14	22	06/23/06	0.51	20	3	18	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09	FD	F	CS	METALS	Lead	Pb		6.13	2.04	LANL Int BG LVL	0.5	6.1	0.5	ug/L	1				SW-846:6020	GELC	
C5	14	22	06/23/06	0.51	20	3	18	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09		F	CS	METALS	Lead	Pb		4.92	1.64	LANL Int BG LVL	0.5	4.9	0.5	ug/L	1				SW-846:6020	GELC	
C5	14	22	06/23/06	3.3	83.5	31.1	21	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09		F	CS	METALS	Zinc	Zn		43.6	1.40	LANL Int BG LVL	2	10.9	3.3	ug/L	1				SW-846:6010B	GELC	
C5	14	22	06/23/06	3.3	83.5	31.1	21	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09	FD	F	CS	METALS	Zinc	Zn		44.5	1.43	LANL Int BG LVL	2	11.1	3.3	ug/L	1				SW-846:6010B	GELC	
C5	6	6	07/21/05	0.317	0.357	0.334	6	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19	909.3	09/10/09		F	CS	GENINORG	Perchlorate	ClO4		0.355	1.06	LANL Int BG LVL	0.05	3.6	0.05	ug/L	1				SW-846:6850	GELC	
C5	3	3	01/28/09	106	313	209	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	649.7	08/31/09		F	CS	METALS	Manganese	Mn		313	1.50	LANL Int BG LVL	2	78.3	2	ug/L	1				SW-846:6010B	GELC	
C5	3	3	01/28/09	9.7	20.2	14	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	649.7	08/31/09		F	CS	METALS	Molybdenum	Mo		20.2	1.44	LANL Int BG LVL	2	5.1	0.1	ug/L	1				SW-846:6020	GELC	
C5	8	10	09/06/07	6.93	36.7	30.8	10	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	400.3	09/10/09		F	CS	GENINORG	Chloride	Cl(-1)		29.8	0.97	LANL Int BG LVL	7.78	1.9	0.13	mg/L	2		J+	I6b	EPA:300.0	GELC	
C5	8	10	09/06/07	0.11	0.236	0.177	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	400.3	09/10/09		F	CS	GENINORG	Perchlorate	ClO4		0.236	1.33	LANL Int BG LVL	0.05	2.4	0.05	ug/L	1				SW-846:6850	GELC	
C5	12	14	10/03/06	0.146	0.281	0.212	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	470.2	09/08/09		F	CS	GENINORG	Perchlorate	ClO4		0.237	1.12	LANL Int BG LVL	0.05	2.4	0.05	ug/L	1				SW-846:6850	GELC	
C5	9	10	10/11/06	0.186	0.277	0.236	10	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	524	09/09/09		F	CS	GENINORG	Perchlorate	ClO4		0.277	1.17	LANL Int BG LVL	0.05	2.8	0.05	ug/L	1				SW-846:6850	GELC	
C5	15	28	08/25/05	0.364	1.28	0.704	24	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-18	1358	09/14/09		UF	CS	GENINORG	Total Organic Carbon	TOC		0.676	0.96	LANL Reg BG LVL	0.33	1.0	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C5	15	28	08/25/05	0.364	1.28	0.704	24	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-18	1358	09/14/09	FD	UF	CS	GENINORG	Total Organic Carbon	TOC		0.793	1.13	LANL Reg BG LVL	0.33	1.2	0.33	mg/L	1	J	J	J_LAB	SW-846:9060	GELC	
C5	13	18	08/28/06	18.5	77.5	31.5	18	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-18	12.5	09/02/09		F	CS	GENINORG	Calcium	Ca		68.1	2.16	LANL Avl BG LVL	26.36	1.3	0.05	mg/L	1				SW-846:6010B	GELC	
C5	13	18	08/28/06	51.3	320	98.2	18	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-18	12.5	09/02/09		F	CS	GENINORG	Chloride	Cl(-1)		275	2.80	LANL Avl BG LVL	69.76	2.0	1.3	mg/L	20				EPA:300.0	GELC	above NM GW Std
C5	13	18	08/28/06	0.0972	0.242	0.145	18	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-18	12.5	09/02/09		F	CS	GENINORG	Perchlorate	ClO4		0.162	1.12	LANL Avl BG LVL	0.05	1.6	0.05	ug/L	1	J	J	J_LAB	SW-846:6850	GELC	
C5	13	18	08/28/06	5.8	23.5	9.7	18	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-18	12.5	09/02/09		F	CS	GENINORG	Magnesium	Mg		21.4	2.21	LANL Avl BG LVL	7.78	1.4	0.085	mg/L	1				SW-846:6010B	GELC	
C5	13	18	08/28/06	45.1	126	63.3	18	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-18	12.5	09/02/09		F	CS	GENINORG	Sodium	Na		110	1.74	LANL Avl BG LVL	15.54	3.5	0.1	mg/L	1				SW-846:6010B	GELC	
C5	13	20	08/28/06	235	798	364	20	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-18	12.5	09/02/09		F	CS	GENINORG	Total Dissolved Solids	TDS		717	1.97	LANL Avl BG LVL	139	2.6	2.4	mg/L	1		J	I10a	EPA:160.1	GELC	near NM GW Std
C5	13	18	08/28/06	103	475	174	18	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-18	12.5	09/02/09		F	CS	METALS	Barium	Ba		444	2.55	LANL Avl BG LVL	68.57	3.2	1	ug/L	1				SW-846:6010B	GELC	
C5	13	18	08/28/06	128	524	217	18	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	18-MW-18	12.5	09/02/09		F	CS	METALS	Strontium	Sr		485	2.24	LANL Avl BG LVL	120	2.0	1	ug/L	1				SW-846:6010B	GELC	

Criteria Code	Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Fld OC Type Code	Fld Prep Code	Lab Sample Type Code	Anyl Suite Code	Analyte Desc	Analyte	Symbol	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	6	6	06/21/08	11.9	27.5	17.7	6	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	904.6	09/02/09		F	CS	METALS	Manganese	Mn		11.9	0.67	LANL Reg BG LVL	2.94	2.0	2	ug/L	1			SW-846:6010B	GELC		
C5	6	6	06/23/08	113	150	133	6	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	09/03/09		F	CS	METALS	Barium	Ba		150	1.13	LANL Reg BG LVL	56.83	1.3	1	ug/L	1			SW-846:6010B	GELC	unusual high value; sample collected after 3 mos. of cross flow with shallow screen	
C5	6	6	06/23/08	47.1	72.2	61.1	6	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	1147.1	09/03/09		F	CS	METALS	Manganese	Mn		47.1	0.77	LANL Reg BG LVL	2.94	8.0	2	ug/L	1			SW-846:6010B	GELC	sample collected after 3 mos. of cross flow with shallow screen	
C5	8	14	12/14/07	27.2	103	44	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-32	867.5	08/31/09		F	CS	METALS	Zinc	Zn		27.2	0.62	LANL Reg BG LVL	3.89	3.5	3.3	ug/L	1			SW-846:6010B	GELC		
C6	14	14	06/27/06	149	26600	1585	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	METALS	Aluminum	Al		17200	10.85	NM GW STD	5000	6.9	68	ug/L	1			SW-846:6010B	GELC		
C6	14	14	06/27/06	94.3	14000	933	13	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/14/09		F	CS	METALS	Iron	Fe		10400	11.15	NM GW STD	1000	20.8	30	ug/L	1			SW-846:6010B	GELC		
C6	14	22	06/23/06	0.57	23.5	4.8	22	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09	FD	UF	CS	METALS	Lead	Pb		16.6	3.46	EPA MCL	15	2.2	0.5	ug/L	1			SW-846:6020	GELC		
C6	14	22	06/23/06	0.57	23.5	4.8	22	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/11/09		UF	CS	METALS	Lead	Pb		16.9	3.52	EPA MCL	15	2.3	0.5	ug/L	1			SW-846:6020	GELC		
CA	3	3	01/28/09	154	1320	957	3	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-40	649.7	08/31/09		F	CS	METALS	Iron	Fe		1320	1.38	NM GW STD	1000	1.3	30	ug/L	1			SW-846:6010B	GELC		