

Environmental Programs
P.O. Box 1663, MS M991
Los Alamos, New Mexico 87545
(505) 606-2337FAX (505) 665-1812

James P. Bearzi, Bureau Chief Hazardous Waste Bureau New Mexico Environment Department 2905 Rodeo Park Drive East, Building 1

Subject: Review of November 2008 Groundwater Data

Dear Mr. Bearzi:

Santa Fe, NM 87505-6303

The Los Alamos National Laboratory (LANL) Water Stewardship Project (LWSP) met on December 11, 2008, to review new groundwater data received in November 2008. At that time, several groundwater samples were identified with contaminant concentrations above the New Mexico or federal water quality standards.

The LWSP program manager notified the New Mexico Environment Department (NMED) Hazardous Waste Bureau about these findings by telephone on December 11, 2008, and followed up with an email on the same day.

The four instances of a contaminant above a standard for the first time (based on samples collected since June 14, 2007) are tabulated in the attached report. Samples collected at these locations before June 14, 2007, also contained the same contaminants at concentrations above a standard, with the following exception:

• Methylene chloride was detected at 5.38 μg/L in an unfiltered sample collected at the City of Santa Fe Buckman well no. 1; the U.S. Environmental Protection Agency maximum contaminant level is 5 μg/L. This compound is a common analytical laboratory contaminant and was found in several other groundwater and field quality control samples collected during this period.

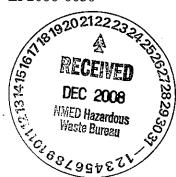
This letter is our written submission that indicates in the accompanying report and tables the chemical constituents that meet the seven screening criteria laid out in the Compliance Order on Consent (the Consent Order), modified on May 13, 2008.

We would like to notify NMED of our discovery this month that our reporting program has not correctly identified data that meet the criteria 5 and 6 of the Consent Order, modified on May 13, 2008. These two criteria require us to identify cases where constituents exceed either 2 times the background level or one-half the standard and have increased for the third consecutive sampling event. We have made it a priority to correct this programming, and as soon as this occurs we will review data collected since June 14, 2007, and notify NMED of any unreported cases where criteria 5 and 6 are met. We will also review programming for the remaining criteria at the same time to ensure our reporting is complete.



National Nuclear Security Administration
Los Alamos Site Office, MS A316
Environmental Restoration Program
Los Alamos, New Mexico 87544
(505) 667-4255/FAX (505) 606-2132

Date: December 26, 2008 Refer To: EP2008-0650



If you have questions, please contact Ardyth Simmons at (505) 665-3935 (asimmons@lanl.gov) or David Gregory at (505) 667-5808 (dgregory@doeal.gov).

Sincerely,

Michael Graham, Associate Director

Environmental Programs

Los Alamos National Laboratory

Sincerely,

David R. Gregory, Project Director

Environmental Operations
Los Alamos Site Office

MG/DG/PH/AS/DR:sm

Enclosure: Report and accompanying tables: "Summary of New Los Alamos National Laboratory

Groundwater Data Loaded in November 2008" (LA-UR-08-7795)

Cy: (w/enc.)

Neil Weber, San Ildefonso Pueblo David Rogers, EP-LWSP, MS M992 RPF, MS M707 (with two CDs) Public Reading Room, MS M992

Cy: (Letter and CD only)

Laurie King, EPA Region 6, Dallas, TX Steve Yanicak, NMED-OB, White Rock, NM Ardyth Simmons, EP-LWSP, MS M992 Mei Ding, EES-6, MS J514 Florie Caporuscio, EES-6, MS J514 Kristine Smeltz, WES-DO, MS M992 Lorrie Bonds-Lopez, EP-LWSP, MS M992 EP-LWSP File, MS M992

Cy: (w/o enc.)

Tom Skibitski, NMED-OB, Santa Fe, NM Alison Bennett, DOE-LASO (date-stamped letter emailed) Michael Graham, ADEP, MS M991 Alison M. Dorries, WES-DO, MS M992 Paul R. Huber, EP-LWSP, MS M992 IRM-RMMSO, MS A150 (date-stamped letter emailed)

SUMMARY OF NEW LOS ALAMOS NATIONAL LABORATORY GROUNDWATER DATA LOADED IN NOVEMBER 2008

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 11-08 Groundwater Report*. This table contains numerous values, often because new data 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 are expected to be reduced 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, 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 Region 6 tap water screening levels (for compounds having no other regulatory standard). In the table, the EPA Region 6 tap water screening levels 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.

Criteria 5 and 6 involve conclusions based on four consecutive samples. No results are included for these criteria in the table because few locations have been sampled a sufficient number of times since June 14, 2007, to meet the criteria.

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, 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

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 11-08 Groundwater Report

\vdash	Samples First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Fld QC Type Code	_	Anyl Suite C	Analyte Desc	Analyte	Symbol	Std Result	Result/Median	LVL Type/Risk Code	Screen Level	Exceedance Ratio	Std Mdl	Std Uom	tion F	Concat Flag Code	Con	Anyl Meth Code	Lab Code	Comment
C1 7 9	06/26/0	1.37	2.9	2.135	2	Upper Los Alamos Canyon (includes DP Canyon)	Alluvial	LAO-3a	4.7	09/02/08 F	D UF	CS	VOA	Acetone	67-64-1		1.37	0.64	EPA TAP SCRN LVL N	5475	0.0	1.3	ug/L	1 J	J	J_LAB	SW-846:8260B	GELC	
C1 8 8	01/11/0	1.52	1.52	1.52	1	Sandia Canyon	Intermediate	SCI-1	358.4	08/19/08	UF	CS	VOA	Acetone	67-64-1		1.52	1.00	EPA TAP SCRN LVL N	5475	0.0	1.3	ug/L	1 J	J	V7c	SW-846:8260B	GELC	
C1 8 9	06/29/0	06 0.075	0.075	0.075	1	Sandia Canyon	Regional	R-10	874	05/27/08	UF	CS	PEST/PCB	Aroclor-1260	11096-82-5		0.075	1.00	EPA PRIM DW STD	0.5	0.2	0.036	ug/L	1 J	J	J_LAB	SW-846:8082	GELC	
C1 8 9	06/29/0	0.0739	0.0739	0.0739	1	Sandia Canyon	Regional	R-10	874	05/27/08	UF	CS	PEST/PCB	Aroclor-1016	12674-11-2		0.0739	1.00	EPA PRIM DW STD	0.5	0.2	0.036	ug/L	1 J	J	J_LAB	SW-846:8082	GELC	
C1 8 9	06/29/0	2.93	2.93	2.93	1	Sandia Canyon	Regional	R-10	874	11/15/07	UF	CS	VOA	Methylene Chloride	75-09-2		2.93	1.00	EPA PRIM DW STD	5	0.6	2	ug/L	1 J	J	J_LAB	SW-846:8260B	GELC	Analytical laboratory contaminant
C1 2 2		7 0.078	0.078	0.078		Sandia Canyon	Regional	R-10	1042	11/15/07			HEXP	DNX	DNX		0.078	1.00					ug/L		J	_	SW-846:8330	STSL	
C1 1 2	10/09/0	2.54	2.69	2.615	2	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	10/09/08	UF	CS	SVOA	Bis(2-ethylhexyl)phthalate	117-81-7		2.69	1.03	EPA PRIM DW STD	6	0.5	2.2	ug/L	1 J	J	SV7c	SW-846:8270C	GELC	
C1 1 2	10/09/0	08 2.54	2.69	2.615	2	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	10/09/08 F	D UF	CS	SVOA	Bis(2-ethylhexyl)phthalate	117-81-7		2.54	0.97	EPA PRIM DW STD	6	0.4	2.2	ug/L	1 J	J	SV7c	SW-846:8270C	GELC	
C1 1 2	10/09/0	0.523	0.523	0.523	1	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	10/09/08 F	D UF	CS	VOA	Toluene	108-88-3		0.523	1.00	NM GW STD	750	0.0	0.25	ug/L	1 J	J	J_LAB	SW-846:8260B	GELC	
C1 1 2	10/09/0	16.9	54.6	35.75	2	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	10/09/08 F	D UF	CS	VOA	Acetone	67-64-1		54.6	1.53	EPA TAP SCRN LVL N	5475	0.0	1.5	ug/L	1			SW-846:8260B	GELC	From drilling additives?
C1 1 2	10/09/0	16.9	54.6	35.75	2	Mortandad Canyon (includes Ten Site Canyon and Canada del Buey)	Regional	R-42	931.8	10/09/08	UF	CS	VOA	Acetone	67-64-1		16.9	0.47	EPA TAP SCRN LVL N	5475	0.0	1.5	ug/L	1			SW-846:8260B	GELC	From drilling additives?
C1 1 2	09/12/0	08 1.27	1.27	1.27	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08 F	D UF	CS	VOA	Butanone[2-]	78-93-3		1.27	1.00	EPA TAP SCRN LVL N	7064.5	0.0	1.3	ug/L	1 J	J	J_LAB	SW-846:8260B	GELC	
C1 10 16	06/27/0	06 0.504	0.504	0.504	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-10	20.6	09/18/08	UF	CS	VOA	Dichloroethane[1,2-]	107-06-2		0.504	1.00	EPA PRIM DW STD				ug/L		J	J_LAB	SW-846:8260B	GELC	
C1 10 16			0.458	0.458	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate			09/18/08			VOA	Trichloroethane[1,1,2-]	79-00-5				EPA PRIM DW STD				ug/L		J	J_LAB	SW-846:8260B	GELC	
C1 10 22			1.22	1.109	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate			09/18/08			VOA	Dichloroethane[1,2-]	107-06-2		1.22		EPA PRIM DW STD				ug/L				SW-846:8260B	GELC	
C1 10 22			1.22	1.109	2	Pajarito Canyon (includes Twomile and Threemile Canyons)				09/18/08 F				Dichloroethane[1,2-]	107-06-2				EPA PRIM DW STD				ug/L				SW-846:8260B	GELC	
C1 3 5			6.78	6.78	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate			09/16/08 F				Acetonitrile	75-05-8		6.78		EPA TAP SCRN LVL N						J	V7b	SW-846:8260B	GELC	Not in primary sample
C1 28 30			3.68	0.489	3	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16- 02656		10/07/08			VOA	Toluene	108-88-3				NM GW STD				ug/L				SW-846:8260B	GELC	
C1 28 30	03/23/0	00 2.42	13.5	2.91	5	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16- 02656	3	10/07/08	UF	CS	VOA	Acetone	67-64-1		2.42	0.83	EPA TAP SCRN LVL N	5475	0.0	1.5	ug/L	1 J	J	J_LAB	SW-846:8260B	GELC	

													e e															
Criteria Code	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date Fid QC 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	cat FI	Concat Reason Code	Anyl Meth Code	Lab Code	Comment
C1 29	36	03/23/00	0.0841	0.27	0.134	7	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16- 02658	1.9	10/08/08	UF	CS HEXP	Amino-2,6- dinitrotoluene[4-]	19406-51-0	0.174	1.30				0.13	ug/L 2	2 J	J	J_LAB	SW- 846:8321A_MOD	GELC	
C1 16	3 20	07/18/01	0.21	1.2	0.67	6	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16- 02659	1.7	10/08/08	UF	CS HEXP	DNX	DNX	0.87	1.30				0.069	ug/L ′	1	J	Н7с	SW-846:8330	STSL	
C1 16	3 20	07/18/01	0.054	2.1	0.51	9	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Alluvial	CDV-16- 02659	1.7			CS HEXP	TNX	TNX	1.7	3.33				0.082	ug/L	1	J	H0	SW-846:8330	STSL	
C1 28	3 40	03/21/00	1.48	6.1	2.8	11	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Burning Ground Spring	0			CS VOA	Acetone	67-64-1	3.43	1.23	EPA TAP SCRN LVL N	5475	0.0	1.5	ug/L ′	1 J	J	J_LAB	SW-846:8260B	GELC	
C1 28	3 40	03/21/00	1.48	6.1	2.8	11	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Burning Ground Spring	0	10/07/08 FD			Acetone	67-64-1	2.8	1.00	EPA TAP SCRN LVL N		0.0		ug/L	1 J	J	J_LAB	SW-846:8260B	GELC	
C1 44	64	01/31/00		1.9	0.68		Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate Spring	Martin Spring	0			CS HEXP	Trinitrobenzene[1,3,5-]	99-35-4	0.277		EPA TAP SCRN LVL N		0.0		ug/L 2		J	J_LAB	SW- 846:8321A_MOD		
C1 9	10	09/24/01	1.56	1.56	1.56	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 3	0	09/29/08		CS VOA	Acetone	67-64-1	1.56		EPA TAP SCRN LVL N		0.0	1.5	ug/L ′	1 J	J	V7c	SW-846:8260B	GELC	
C1 5	7	05/25/04	1.34	2.19	1.765	2	White Rock Canyon and Rio Grande	Water Supply	Buckman 1	258	07/15/08	UF	CS VOA	Acetone	67-64-1	1.34	0.76	EPA TAP SCRN LVL N	5475	0.0	1.3	ug/L	1 J	J	V7c	SW-846:8260B	GELC	
C1 5		05/25/04		5.38	5.38	1	White Rock Canyon and Rio Grande	Supply	Buckman 1		07/15/08		CS VOA	Methylene Chloride	75-09-2	5.38		EPA PRIM DW STD	5	1.1		ug/L	1			SW-846:8260B	cc	nalytical aboratory ontaminant
C1 5		05/25/04		2.2	2.2	1	White Rock Canyon and Rio Grande	Water Supply	Buckman 8		07/15/08		CS VOA	Acetone	67-64-1	2.2		EPA TAP SCRN LVL N		0.0		ug/L ′	1 J	J	V7c	SW-846:8260B	GELC	
C2 12		06/19/00		0.59	0.386	6	Pueblo Canyon (includes Acid Canyon)		PAO-4	1.97	09/04/08		CS METALS	Lead	Pb	0.59		LANL AvI BG LVL	0.5	1.2		ug/L '	1 J	J	_	SW-846:6020	GELC	
C2 12		06/19/00		0.59	0.386	6	Pueblo Canyon (includes Acid Canyon)	Alluvial	PAO-4	1.97	09/04/08 FD		CS METALS	Lead	Pb	0.56		LANL AVI BG LVL	0.5	1.1		ugiL	1 J	J	_	SW-846:6020	GELC	
C2 6	6	05/11/05	0.0516	0.093	0.0701	3	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24	08/27/08	F	CS GENINORG	Perchlorate	CIO4	0.0701	1.00	LANL AVI BG LVL	0.05	1.4	0.05	ug/L	1 J	J	J_LAB	SW-846:6850	GELC	
C2 8	10	06/27/00	10.9	10.9	10.9	1	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Alluvial	LLAO-4	5.24			CS METALS		Zn	10.9		LANL AVI BG LVL		5.5		ug/L				SW-846:6010B	GELC	
C2 8	8	07/27/01	0.108	0.185	0.1195	4		Intermediate Spring	Basalt Spring	0	08/25/08	F	CS GENINORG	Bromide	Br(-1)	0.108		LANL Int BG LVL	0.03	3.6	0.067	mg/L	1 J	J	J_LAB	EPA:300.0	GELC	
		06/27/00		1.34	0.925000015	8		Intermediate Spring	Spring	0	08/25/08	F	CS METALS	Uranium	U			LANL Int BG LVL	0.72			ug/L				SW-846:6020	GELC	
C2 7	8	10/12/06	36	46.8	41.4	2	Sandia Canyon	Regional	R-10	874	05/27/08	F	CS METALS	Iron	Fe			LVL	21	2.2	25	ug/L	1 J	J	J_LAB	SW-846:6010B	GELC	
C2 7	8	10/12/06	36	46.8	41.4	2	Sandia Canyon	Regional	R-10	874	08/13/08	F	CS METALS	Iron	Fe			LANL Reg BG LVL	21	1.7	25	ug/L	1 J	J	J_LAB	SW-846:6010B	GELC	
C2 7	8	10/12/06	36.5	36.5	36.5	1	Sandia Canyon	Regional	R-10	874	08/13/08	F	CS METALS	Tin	Sn	36.5		LANL Reg BG LVL	3.26	11.2	2.5	ug/L '	1			SW-846:6010B	ur	irst etection, nusually igh result
C2 8	8	06/29/06	26.3	44	27.95	4	Sandia Canyon	Regional	R-10	1042	05/27/08	F	CS METALS	Iron	Fe	44		LANL Reg BG LVL	21	2.1	25	ug/L	1 J	J	J_LAB	SW-846:6010B	GELC	-
C2 8	8	06/29/06	26.3	44	27.95	4	Sandia Canyon	Regional	R-10	1042	08/13/08	F	CS METALS	Iron	Fe			LANL Reg BG LVL	21	1.3	25	ug/L	1 J	J	J_LAB	SW-846:6010B	GELC	
C2 1	13	11/30/05	4.5	6.2	5.5	10	Sandia Canyon	Regional	R-10a	690	02/19/08	F	CS METALS	Chromium	Cr	5.8	1.05	LANL Reg BG LVL	5.75	1.0	2.5	ug/L ′	1 J	J	J_LAB	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	QC T	Fld Prep Code Lab Sample Type Code	oge	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	2	2	06/25/08	0.96	0.96	0.96	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO- 7b2	10	09/13/08	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2- N		0.96	1.00 LANL AVI BG LVL	0.57	1.7	0.05	mg/L	5			EPA:353.2	GELC	
C2	2	2	06/25/08	1.8	1.8	1.8	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO- 7b2	10	09/13/08	F	CS	METALS	Chromium	Cr		1.8	1.00 LANL AVI BG LVL	1	1.8	1.5	ug/L	1 J	J	J_LAB	SW-846:6020	GELC	I
C2	1	1	09/12/08	95.8	95.8	95.8	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08	F	CS	GENINORG	Alkalinity-CO3+HCO3	ALK- CO3+HCO3		95.8	1.00 LANL AVI BG LVL	76	1.3	0.73	mg/L	1			EPA:310.1	GELC	
C2	1	1	09/12/08	8.1	8.1	8.1	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08	F	CS	GENINORG	Potassium	K		8.1	1.00 LANL Avl BG LVL	5.21		0.05		1			SW-846:6010B	GELC	I
C2	1	1	09/12/08	26.8	26.8	26.8	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08	F	CS	GENINORG	Sodium	Na		26.8	1.00 LANL AVI BG LVL	15.54	1.7	0.045	mg/L	1			SW-846:6010B	GELC	
C2	1	1	09/12/08	216	216	216	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08	F	CS	GENINORG	Total Dissolved Solids	TDS		216	1.00 LANL Avl BG LVL	139	1.6	2.4	mg/L	1			EPA:160.1	GELC	
C2	1	1	09/12/08	86.2	86.2	86.2	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08	F	CS	METALS	Barium	Ва		86.2	1.00 LANL Avl BG LVL	68.57	1.3	1	ug/L	1			SW-846:6010B	GELC	
C2	1	1	09/12/08	26.2	26.2	26.2	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08	F	CS	METALS	Manganese	Mn		26.2	1.00 LANL AvI BG LVL	2	13.1	2	ug/L	1			SW-846:6010B	GELC	
C2	1	1	09/12/08	1.4	1.4	1.4	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08	F	CS	METALS	Nickel	Ni		1.4	1.00 LANL Avl BG LVL	1	1.4	0.5	ug/L	1 J	J	J_LAB	SW-846:6020	GELC	
C2	1	1	09/12/08	147	147	147	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08	F	CS	METALS	Strontium	Sr		147	1.00 LANL Avl BG LVL	120	1.2	1	ug/L	1			SW-846:6010B	GELC	
C2	1	1	09/12/08	3.7	3.7	3.7	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	TMO-1	3.5	09/12/08	F	CS	METALS	Zinc	Zn		3.7	1.00 LANL AvI BG LVL	2	1.9	2	ug/L	1 J*	J	J_LAB	SW-846:6010B	GELC	
C2	2	2	06/24/08	0.085	0.085	0.085	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-8	9.7	09/17/08	F	CS	GENINORG	Bromide	Br(-1)		0.085	1.00 LANL Avl BG LVL	0.07	1.2	0.067	mg/L	1 J	J	J_LAB	EPA:300.0	GELC	
C2	2	2	06/24/08	0.096	0.096	0.096	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-8	9.7	09/17/08	F	CS	GENINORG	Total Phosphate as Phosphorus	PO4-P		0.096	1.00 LANL AvI BG LVL	0.05	1.9	0.024	mg/L	1			EPA:365.4	GELC	
C2	2	2	06/24/08	2.8	2.8	2.8	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-8	9.7	09/17/08	F	CS	METALS	Chromium	Cr		2.8	1.00 LANL Avl BG LVL	1	2.8	1.5	ug/L	1 J	J	J_LAB	SW-846:6020	GELC	
C2	2	2	06/24/08	1.3	1.3	1.3	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-8	9.7	09/17/08	F	CS	METALS	Vanadium	V		1.3	1.00 LANL Avl BG LVL	1	1.3		ug/L		J	J_LAB	SW-846:6010B	GELC	
	1		09/17/08		93.1	93.1	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9		09/17/08				Alkalinity-CO3+HCO3	ALK- CO3+HCO3		93.1	1.00 LANL Avi BG LVL	76		0.73					EPA:310.1	GELC	
	1		09/17/08		0.072	0.072	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9		09/17/08			GENINORG		Br(-1)		0.072	1.00 LANL Avi BG LVL	0.07		0.067			J	J_LAB	EPA:300.0	GELC	
C2	1		09/17/08		106	106	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9		09/17/08			GENINORG		CI(-1)		106	1.00 LANL Avi BG LVL	69.76		0.66					EPA:300.0	GELC	
	1		09/17/08		0.085	0.085	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9		09/17/08			GENINORG		CIO4		0.085	1.00 LANL AVI BG LVL	0.05				1 J	J	_	SW-846:6850	GELC	
C2	2	2	06/25/08	4.69	5.66	5.175	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9	6	09/17/08			GENINORG		К		5.66	1.09 LANL Avi BG LVL	5.21	1.1	0.05	mg/L	1			SW-846:6010B	GELC	
C2	2	2	06/25/08	0.102	0.102	0.102	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9	6	09/17/08	F	CS	GENINORG	Total Phosphate as Phosphorus	PO4-P		0.102	1.00 LANL AVI BG LVL	0.05	2.0	0.024	mg/L	1			EPA:365.4	GELC	

Criteria Code Visits	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	rt Date	Fld QC Type 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	1	Dilution Factor Lab Qual Code	cat Flag	Concat Reason Code	Anyl Meth Code	Lab Code	Comment
C2 1	1	09/17/08	337	337	337	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9	6	09/17/08	F	CS	GENINORG	Total Dissolved Solids	TDS		337	1.00	LANL AvI BG LVL	139	2.4	2.4	mg/L 1				EPA:160.1	GELC	
C2 2	2	06/25/08	1.7	1.7	1.7	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9	6	09/17/08	F	CS	METALS	Chromium	Cr		1.7	1.00	LANL Avi BG LVL	1	1.7	1.5	ug/L 1	J	J	J_LAB	SW-846:6020	GELC	
C2 2	2	06/25/08	0.7	2.3	1.5	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9	6	09/17/08	F	CS	METALS	Nickel	Ni		2.3	1.53	LANL AVI BG LVL	1	2.3	0.5	ug/L 1				SW-846:6020	GELC	
C2 11	11	09/09/04	40.1	74.5	46.2	11	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate Spring	Kieling Spring	0	09/12/08	F	CS	GENINORG	Alkalinity-CO3+HCO3	ALK- CO3+HCO3		61.7	1.34	LANL Int BG LVL	52	1.2	0.73	mg/L 1				EPA:310.1	GELC	
C2 10	10	06/20/05	0.076	0.228	0.152	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate Spring	Kieling Spring	0	09/12/08	F	CS	GENINORG	Bromide	Br(-1)		0.076	0.50	LANL Int BG LVL	0.03	2.5	0.067	mg/L 1	J	J	J_LAB	EPA:300.0	GELC	
C2 11	11	09/09/04	10.8	20.3	15.8	11	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate Spring	Kieling Spring	0	09/12/08	F	CS	GENINORG	Calcium	Са		17.5	1.11	LANL Int BG LVL	17.31	1.0	0.03	mg/L 1				SW-846:6010B	GELC	
C2 9	9	08/31/06	30.4	55.5	39.2	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate Spring	Charlie's Spring	0	09/11/08	F	CS	GENINORG	Alkalinity-CO3+HCO3	ALK- CO3+HCO3		55.5	1.42	LANL Int BG LVL	52	1.1	0.73	mg/L 1				EPA:310.1	GELC	
C2 10	10	06/27/06	1.7	18.8	3.55	6	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	e 03-B-10	20.6	09/18/08	F	CS	METALS	Vanadium	V		7.1	2.00	LANL Int BG LVL	4.91	1.5	1	ug/L 1				SW-846:6010B	GELC	
C2 10	14	06/23/06	0.55	6.5	0.67	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	e 03-B-13	21.5	09/18/08 F	D F	CS	METALS	Molybdenum	Мо		2.2	3.28	LANL Int BG LVL	2	1.1	0.1	ug/L 1				SW-846:6020	GELC	
C2 10	14	06/23/06	0.55	6.5	0.67	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	e 03-B-13	21.5	09/18/08	F	cs	METALS	Molybdenum	Мо		2.2	3.28	LANL Int BG LVL	2	1.1	0.1	ug/L 1				SW-846:6020	GELC	
C2 10	14	06/23/06	1.5	25.3	4.1	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/18/08	F	CS	METALS	Vanadium	V		5.7	1.39	LANL Int BG LVL	4.91	1.2	1	ug/L 1				SW-846:6010B	GELC	
C2 10	14	06/23/06	1.5	25.3	4.1	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	e 03-B-13	21.5	09/18/08 F	D F	CS	METALS	Vanadium	V		5.4	1.32	LANL Int BG LVL	4.91	1.1	1	ug/L 1				SW-846:6010B	GELC	
C2 5	5	04/10/01	0.0725	89	74.3	5	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19	909.3	09/16/08	F	cs	GENINORG	Alkalinity-CO3+HCO3	ALK- CO3+HCO3		74.3	1.00	LANL Int BG LVL	52	1.4	0.73	mg/L 1				EPA:310.1	GELC	
C2 2	2	07/21/05	0.325	0.342	0.3335	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19	909.3	09/16/08	F	CS	GENINORG	Perchlorate	CIO4		0.342	1.03	LANL Int BG LVL	0.05	6.8	0.05	ug/L 1				SW-846:6850	GELC	
C2 7	7	09/22/00	0.409	0.71	0.513	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19		09/16/08	F		GENINORG		F(-1)		0.513	1.00	LANL Int BG LVL	0.23	2.2	0.033	mg/L 1				EPA:300.0	GELC	
C2 7				15	13.6	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-19		09/16/08	F		GENINORG		Na		13.6		LANL Int BG LVL	12.19							SW-846:6010B	GELC	
C2 5				164	151	5	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate			09/16/08	F			Total Dissolved Solids	TDS		151		LANL Int BG LVL	127			mg/L 1				EPA:160.1	GELC	
			0.539999962		1.090000004	4	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate			09/16/08	F		METALS	Chromium	Cr		2.7		LANL Int BG LVL	1			ug/L 1		J	J_LAB	SW-846:6020	GELC	
C2 1				70.7	70.7	1	(includes Twomile and Threemile Canyons)	Intermediate			09/16/08	F		METALS	Silicon Dioxide	SiO2		70.7		LVL	50.72							SW-846:6010B	GELC	
C2 7				87	44.6500001	4	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate			09/16/08	F			Zinc	Zn		3		LANL Int BG LVL	2	1.5		ug/L 1			_	SW-846:6010B	GELC	
C2 3	4	09/06/07	0.07	0.07	0.07	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	e R-23i	400.3	09/16/08	F	CS	GENINORG	Bromide	Br(-1)		0.07	1.00	LANL Int BG LVL	0.03	2.3	0.067	mg/L 1	J	J	J_LAB	EPA:300.0	GELC	

Criteria Code	Visits Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	rt Date	Fld QC 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		Concat Flag Code	Concat Reason Code	Anyl Meth Code	Lab Code	Comment
C2	9	10/03/06	6.44	8.53	7.26	9	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	470.2	09/15/08	F	cs	GENINORG	Chloride	CI(-1)		8.53	1.17	LANL Int BG LVL	7.78	1.1	0.066	mg/L 1				EPA:300.0	GELC	
C2	9	10/03/06	3.9	8	4.3	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	R-23i	470.2	09/15/08	F	cs	METALS	Vanadium	V		8	1.86	LANL Int BG LVL	4.91	1.6	1	ug/L 1				SW-846:6010B	GELC	
C2	7	09/26/00	0.135	0.495	0.2875	4	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1190.7	09/10/08	UF	cs	GENINORG	Total Organic Carbon	TOC		0.495	1.72	LANL Reg BG LVL	0.33	1.5	0.33	mg/L 1	J	J	J_LAB	SW-846:9060	GELC	
C2	7	09/26/00	1.69	32	7.9	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1190.7	09/10/08	F	cs	METALS	Manganese	Mn		7.9	1.00	LANL Reg BG LVL	2.94	2.7	2	ug/L 1	J	J	J_LAB	SW-846:6010B	GELC	
C2	1	09/15/08	0.267	0.267	0.267	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1586.1	09/15/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N		0.267	1.00	LANL Reg BG LVL	0.05	5.3	0.03	mg/L 1		J-	l6a	EPA:350.1	GELC	
C2	1	09/12/08	0.064	0.064	0.064	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1730.1	09/12/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N		0.064	1.00	LANL Reg BG LVL	0.05	1.3	0.03	mg/L 1				EPA:350.1	GELC	Drilling fluid source
C2	8	10/04/00	0.65	7.8	1.95	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1730.1	09/12/08	UF	CS	GENINORG	Total Organic Carbon	TOC		1.01	0.52	LANL Reg BG LVL	0.33	3.1	0.33	mg/L 1				SW-846:9060	GELC	
C2	2	07/28/05	0.207	0.332	0.2695	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1834.7	09/15/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N		0.207	0.77	LANL Reg BG LVL	0.05	4.1	0.03	mg/L 1		J-	l6a	EPA:350.1	GELC	Drilling fluid source
C2	10	03/11/04	0.048	0.482	0.3575	10	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	907	09/18/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N		0.058	0.16	LANL Reg BG LVL	0.05	1.2	0.03	mg/L 1				EPA:350.1	GELC	Drilling fluid source?
C2	10	03/11/04	60.3	261	122	8	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-20	907	09/18/08	F	CS	METALS	Iron	Fe		60.3	0.49	LANL Reg BG LVL	21	2.9	25	ug/L 1	J	J	J_LAB	SW-846:6010B	GELC	
C2	2	06/27/05	0.42	0.531	0.4755	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-22	907.1	09/18/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N		0.42	0.88	LANL Reg BG LVL	0.05	8.4	0.03	mg/L 1				EPA:350.1	GELC	Drilling fluid source?
C2	0 11	03/08/01	0.18	0.985	0.4	11	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-22	1273.5	09/17/08	F	CS	GENINORG	Nitrate-Nitrite as Nitrogen	NO3+NO2- N		0.985	2.46	LANL Reg BG LVL	0.89	1.1	0.05	mg/L 5				EPA:353.2	GELC	
C2	2	07/01/05	0.123	0.275	0.199	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-22	1378	09/17/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N		0.123	0.62	LANL Reg BG LVL	0.05	2.5	0.03	mg/L 1		J-	l6a	EPA:350.1	GELC	Drilling fluid source?
C2	8	03/07/01	16.4	23	18	7	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-22	1378	09/17/08	UF	CS	GENINORG	Total Organic Carbon	TOC		16.8	0.93	LANL Reg BG LVL	0.33	50.9	0.33	mg/L 1				SW-846:9060	GELC	
C2	10	04/13/05	2.1	2.1	2.1	1	Water Canyon (includes Canyon del Valle, Potrillo, and Fence Canyons)	Intermediate	R-26	659.3	10/07/08	F	CS	METALS	Nickel	Ni		2.1	1.00	LANL Int BG LVL	1	2.1	0.5	ug/L 1				SW-846:6020	GELC	
C2	9 19	01/29/02	0.243	0.71399998	0.452	9		Regional	CdV-R- 37-2	1359.3	10/08/08	UF	CS	GENINORG	Total Organic Carbon	TOC		0.381	0.84	LANL Reg BG LVL	0.33	1.2	0.33	mg/L 1	J	J	J_LAB	SW-846:9060	GELC	
C2	6	09/26/05	0.394	0.482	0.44	6		Regional Spring	Spring 3	0	09/29/08	F	CS	GENINORG	Perchlorate	CIO4		0.482		LANL Reg BG LVL	0.46	1.1	0.05	ug/L 1				SW-846:6850	GELC	
C2	9	09/26/05	0.389	0.487	0.43	9		Regional Spring	Spring 3A	0	09/29/08	FD F	CS	GENINORG	Perchlorate	CIO4		0.475	1.10	LANL Reg BG LVL	0.46	1.0	0.05	ug/L 1				SW-846:6850	GELC	
C2	9	09/26/05	0.389	0.487	0.43	9		Regional Spring	Spring 3A	0	09/29/08	F	CS	GENINORG	Perchlorate	CIO4		0.487		LANL Reg BG LVL	0.46	1.1	0.05	ug/L 1				SW-846:6850	GELC	
C2	4	09/26/05	0.424	0.468	0.431	4	White Rock Canyon	Regional Spring	Spring 3AA	0	09/29/08	F	CS	GENINORG	Perchlorate	CIO4		0.468			0.46	1.0	0.05	ug/L 1				SW-846:6850	GELC	
C2	5	10/06/03	2.39	3.08	2.73	5		Regional Spring	Spring 3AA	0	09/29/08	F	CS	GENINORG	Potassium	К		2.92	1.07	LANL Reg BG LVL	2.63	1.1	0.05	mg/L 1				SW-846:6010B	GELC	
C2	5	09/19/06	2.16	2.93	2.62	5		Regional Spring	Spring 4C	0	09/29/08	F	CS	GENINORG	Potassium	К		2.75		LANL Reg BG LVL	2.63	1.1	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	rt Date	Fld QC 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 5	5	09/18/06	2.54	2.81	2.63	5	White Rock Canyon and Rio Grande	Regional Spring	Spring 4B	0	09/29/08	F	CS	GENINORG	Potassium	К	2.74	1.04	LANL Reg BG LVL	2.63	1.0	0.05	mg/L 1				SW-846:6010B	GELC	
C2 6	6	09/27/05	0.392	0.463	0.4125	6	White Rock Canyon and Rio Grande	Regional Spring	Spring 5	0	09/30/08	F	CS	GENINORG	Perchlorate	CIO4	0.463	1.12	LANL Reg BG LVL	0.46	1.0	0.05	ug/L 1				SW-846:6850	GELC	
C2 3	3	09/26/00	4.02	4.14	4.04	3	White Rock Canyon and Rio Grande	Regional Spring	Spring 5A	0	09/30/08	F	CS	GENINORG	Chloride	CI(-1)	4.02	1.00	LANL Reg BG LVL	3.57	1.1	0.066	mg/L 1				EPA:300.0	GELC	
C2 3	3	09/26/00	2.71	3.26	2.94	3	White Rock Canyon and Rio Grande	Regional Spring	Spring 5A	0	09/30/08	F	CS	GENINORG	Potassium	K	3.26	1.11	LANL Reg BG LVL	2.63	1.2	0.05	mg/L 1				SW-846:6010B	GELC	
C2 3	3	09/26/00	19.2	25.8	22.2	3	White Rock Canyon and Rio Grande	Regional Spring	Spring 5A	0	09/30/08	F	CS	GENINORG	Sodium	Na	25.8	1.16	LANL Reg BG LVL	24.5	1.1	0.045	mg/L 1				SW-846:6010B	GELC	
C2 3	3	09/26/00	5.99	7.4	6.76	3	White Rock Canyon and Rio Grande	Regional Spring	Spring 5A	0	09/30/08			GENINORG		SO4(-2)	7.4	1.09	LANL Reg BG LVL	7.2	1.0	0.1	mg/L 1				EPA:300.0	GELC	
C2 1	1	09/30/08	1.18	1.18	1.18	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 5A	0	09/30/08	UF	CS	GENINORG	Total Organic Carbon	TOC	1.18	1.00	LANL Reg BG LVL	0.33	3.6	0.33	mg/L 1				SW-846:9060	GELC	
C2 8	9	09/26/00	133	133	133	1	White Rock Canyon and Rio Grande	Regional Spring	Ancho Spring	0	09/30/08			METALS	Iron	Fe	133	1.00	LANL Reg BG LVL	21	6.3	25	ug/L 1				SW-846:6010B	GELC	
C2 3	3	09/19/06	0.79	1.37	1.08	2	White Rock Canyon and Rio Grande	Regional Spring	Spring 8A	0	09/30/08	UF	CS	GENINORG	Total Organic Carbon	TOC	0.79	0.73	LANL Reg BG LVL	0.33	2.4	0.33	mg/L 1	J	J	J_LAB	SW-846:9060	GELC	
C2 6	6	09/26/00	30.5	43.2	36.85	2	White Rock Canyon and Rio Grande	Regional Spring	Spring 8A	0	09/30/08			METALS	Iron	Fe	30.5	0.83	LANL Reg BG LVL	21	1.5	25	ug/L 1	J	J	J_LAB	SW-846:6010B	GELC	
C2 3	3	09/19/06	0.931	1.05	0.9905	2	White Rock Canyon and Rio Grande	Regional Spring	Spring 9	0	09/30/08	UF	CS	GENINORG	Total Organic Carbon	TOC	0.931	0.94	LANL Reg BG LVL	0.33	2.8	0.33	mg/L 1	J	J	J_LAB	SW-846:9060	GELC	
C2 2	2	04/23/08	4	4	4	1	White Rock Canyon and Rio Grande	Regional Spring	Spring 9B	0	10/01/08	F	CS	METALS	Zinc	Zn	4	1.00	LANL Reg BG LVL	3.89	1.0	2	ug/L 1	J	J	J_LAB	SW-846:6010B	GELC	
C2 1	1	07/15/08	8.8	8.8	8.8	1	White Rock Canyon and Rio Grande	Water Supply	Buckman 1	258	07/15/08	F	CS	METALS	Chromium	Cr	8.8	1.00	LANL Reg BG LVL	5.75	1.5	1.5	ug/L 1				SW-846:6020	GELC	
C3 5	5	05/11/05	0.594	3.28	1.18	5	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Basalt Spring	0	08/25/08	F	CS	GENINORG	Perchlorate	CIO4	3.28	2.78	NMED GW CONS	4	1.6	0.25	ug/L 5				SW-846:6850	р	Over twice previous high results
C3 8	9	06/29/06	2.93	2.93	2.93	1	Sandia Canyon	Regional	R-10	874	11/15/07	UF	CS	VOA	Methylene Chloride	75-09-2	2.93	1.00	EPA PRIM DW STD	5	1.2	2	ug/L 1	J	J	J_LAB	SW-846:8260B	la	Analytical aboratory contaminant
C3 2	2	06/25/08	12.6	12.6	12.6	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Alluvial	PCAO-9	6	09/17/08	UF	CS	METALS	Lead	Pb	12.6	1.00	EPA PRIM DW STD	15	1.7	0.5	ug/L 1				SW-846:6020		Not in filtered sample
C3 1	0 14	06/23/06	4.5	681	37.1	14	Pajarito Canyon (includes Twomile and Threemile Canyons)	Intermediate	03-B-13	21.5	09/18/08	F	CS	METALS	Manganese	Mn	105	2.83	NM GW STD	200	1.1	2	ug/L 1				SW-846:6010B	GELC	
C3 1	1	09/15/08	0.267	0.267	0.267	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1586.1	09/15/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N	0.267		EPA TAP SCRN LVL	0.20857	2.6	0.03	mg/L 1		J-	16a	EPA:350.1		Drilling fluid source?
C3 2	2	07/28/05	0.207	0.332	0.2695	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1834.7	09/15/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N	0.207	0.77	EPA TAP SCRN LVL	0.20857	2.0	0.03	mg/L 1		J-	l6a	EPA:350.1		Drilling fluid source?
C3 2	2	06/27/05	0.42	0.531	0.4755	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-22	907.1	09/18/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N	0.42	0.88	EPA TAP SCRN LVL	0.20857	4.0	0.03	mg/L 1				EPA:350.1		Drilling fluid source?
C3 2	2	07/01/05	0.123	0.275	0.199	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-22	1378	09/17/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N	0.123	0.62	EPA TAP SCRN LVL	0.20857	1.2	0.03	mg/L 1		J-	l6a	EPA:350.1		Drilling fluid source?
C3 6	8	10/10/02	9.8	12.2	11.1	5	White Rock Canyon and Rio Grande	Water Supply	Buckman 1	258	07/15/08	UF	CS	METALS	Arsenic	As	12.2	1.10	EPA PRIM DW STD	10	2.4	1.5	ug/L 1				SW-846:6020		Similar to past values
C3 5	7	05/25/04	5.38	5.38	5.38	1	White Rock Canyon and Rio Grande		Buckman 1	258	07/15/08	UF	CS	VOA	Methylene Chloride	75-09-2	5.38	1.00	EPA PRIM DW STD	5	2.2	2	ug/L 1				SW-846:8260B	GELC A	
C4 5	5	05/11/05	0.594	3.28	1.18	5	Lower Los Alamos Canyon (San Ildefonso Pueblo)	Intermediate Spring	Basalt Spring	0	08/25/08	F	CS	GENINORG	Perchlorate	CIO4	3.28	2.78	NMED GW CONS	4	1.6	0.25	ug/L 5				SW-846:6850	GELC C	Over twice previous high results
CA 1	1	09/15/08	0.267	0.267	0.267	1	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-19	1586.1	09/15/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N	0.267	1.00	EPA TAP SCRN LVL	0.20857	1.3	0.03	mg/L 1		J-	l6a	EPA:350.1	GELC D	Drilling fluid source?

Criteria Code	sit	Samples	First Event	Min Detect	Max Detect	Median Detect	Num Detect	Hdr 1	Zone	Location	Port Depth	Start Date	Fld QC Type Code	Sam	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	Concat Flag Code	Concat Reason Code	Anyl Meth Code	Lab Code Comment
CA	2 2	06/2	27/05 0.4	42	0.531	0.4755	2	Pajarito Canyon (includes Twomile and Threemile Canyons)	Regional	R-22	907.1	09/18/08	F	CS	GENINORG	Ammonia as Nitrogen	NH3-N	0.42	0.88	EPA TAP SCRN LVL	0.20857	2.0	0.03	mg/L	1			EPA:350.1	GELC Drilling fluid source?
CA	6 8	10/	10/02 9.8	8	12.2	11.1		White Rock Canyon and Rio Grande	Water Supply	Buckman 1	258	07/15/08	UF	CS	METALS	Arsenic	As	12.2	1.10	EPA PRIM DW STD	10	1.2	1.5	ug/L	1			SW-846:6020	GELC Similar to past values
CA	5 7	05/2	25/04 5.3	38	5.38	5.38		White Rock Canyon and Rio Grande	Water Supply	Buckman 1	258	07/15/08	UF	CS	VOA	Methylene Chloride	75-09-2	5.38	1.00	EPA PRIM DW STD	5	1.1	2	ug/L	1			SW-846:8260B	GELC Analytical laboratory contaminant

LA-UR-08-7795 EP2008-0650