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Periodic Monitoring Report for Ancho Watershed, June 10–June 15 and September 6–September 22, 2011

Prepared by the Environmental Programs Directorate

EP2012-0030

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EXECUTIVE SUMMARY

This periodic monitoring report (PMR) provides the results of two periodic monitoring events (PMEs) conducted by Los Alamos National Laboratory in the Ancho Watershed. The PMEs represent quarterly sampling events where only recently installed wells R-29 and R-30 were sampled. New characterization wells are sampled quarterly for 1 yr, after which the sampling frequency reverts to that required by the Interim Facility-Wide Groundwater Monitoring Plan (IFGMP) for that watershed. These PMEs were conducted pursuant to the 2010 IFGMP, prepared in accordance with the Compliance Order on Consent.

The two PMEs documented in this report occurred from June 10 to June 15 and September 6 to September 22, 2011, and included monitoring of groundwater wells.

This report also includes any results from previous PMEs that were unreported in their respective PMRs because validated laboratory data were not available (in some cases because of data release agreements). Any additional results from sampling that occurred outside the time frame of the current PMEs are also included in this report.

Water samples collected during these PMEs were analyzed for target analyte list metals, volatile organic compounds, cyanide, semivolatile organic compounds, pesticides, polychlorinated biphenyls, high explosives, radionuclides, low-level tritium, inorganic chemicals, perchlorate, stable isotopes, and field parameters (alkalinity, dissolved oxygen, pH, specific conductance, temperature, and turbidity).

No surface-water locations were sampled during these PMEs. No surface-water results from prior PMEs are reported in this PMR.

No groundwater results unreported from previous PME samples were above screening levels. Three groundwater results from the June PME were above screening levels.

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Acronyms and Abbreviations

AOC	area of concern
AQA	Analytical Quality Associates, Inc.
BCG	Biota Concentration Guide (DOE)
CAS	Chemical Abstracts Service
cfs	cubic feet per second
Consent Order	Compliance Order on Consent
DCG	Derived Concentration Guide (DOE)
DOE	Department of Energy (U.S.)
EPA	Environmental Protection Agency (U.S.)
GW	groundwater
HMX	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
IFGMP	Interim Facility-Wide Groundwater Monitoring Plan
LANL	Los Alamos National Laboratory
LVL	level
MCL	maximum contaminant level (EPA)
MCPA	2-methyl-4-chlorophenoxyacetic acid
MCPP	2-(4-chloro-2-methylphenoxy)propanoic acid
MDL	method detection limit
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
NTU	nephelometric turbidity unit(s)
PME	periodic monitoring event
PMR	periodic monitoring report
PQL	practical quantitation limit
QC	quality control
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RPF	Records Processing Facility
SCRN	screening
SOP	standard operating procedure
STD	standard
SWMU	solid waste management unit
TA	technical area
TNT	2,4,6-trinitrotoluene
UF	unfiltered

1.0 INTRODUCTION

This periodic monitoring report (PMR) provides documentation of quarterly groundwater monitoring conducted by Los Alamos National Laboratory (LANL or the Laboratory) in the Ancho Watershed pursuant to the Interim Facility-Wide Groundwater Monitoring Plan (IFGMP) (LANL 2010, 109830) prepared in accordance with the Compliance Order on Consent (Consent Order). These periodic monitoring events (PMEs) occurred from June 10 to June 15 and September 6 to September 22, 2011, and included quarterly sampling at two regional aquifer characterization wells, R-29 and R-30. New characterization wells are sampled quarterly for 1 yr, after which the sampling frequency reverts to that required by the IFGMP for that watershed. PMRs are typically prepared on the watersheds routine sampling frequency; semi-annually for Ancho Watershed, however, since these wells are now include in the MDA C monitoring group, they are reported here in the final PMR Ancho Watershed. This report may include results from previous PMEs that were previously unreported in their respective PMRs because validated laboratory data were not available (in some cases because of data release agreements). Any additional results from sampling that occurred outside the time frame of the June and September 2011 PMEs may also be included in this report.

Sections VIII.A and VIII.C of the Consent Order identify New Mexico Water Quality Control Commission (NMWQCC) groundwater and surface-water standards, including alternative abatement standards and U.S. Environmental Protection Agency (EPA) drinking-water maximum contaminant levels (MCLs), as cleanup levels for groundwater when corrective action is implemented. NMWQCC groundwater standards, MCLs, and EPA regional screening levels for tap water are used as screening levels for monitoring data and are provided in this report.

This report presents the following information:

- general background information on the watershed
- field-measurement monitoring results
- water-quality monitoring results
- analytical results of groundwater samples compared with screening levels
- a summary based on the data and the screening analysis

Information on radioactive materials and radionuclides, including the results of sampling and analysis of radioactive constituents, is voluntarily provided to the New Mexico Environment Department (NMED) in accordance with U.S. Department of Energy (DOE) policy.

1.1 Background

Ancho Canyon is located in the southeastern part of the Laboratory (Figure 2.0-1). Chaquehui and Frijoles Canyons, which are tributaries of Ancho Canyon, are incorporated into Ancho Canyon monitoring events in the IFGMP. Technical Area 39 (TA-39) is located on the floor of middle Ancho Canyon, and it was used for open-air testing of explosives compounds. Solid waste management units (SWMUs) and areas of concern (AOCs) at TA-39 include five firing sites, a number of landfills, and septic systems. More detailed information about TA-39's operational history and its SWMUs and AOCs can be found in the "RFI Work Plan for Operable Unit 1122" (LANL 1992, 007671) and the "RFI Work Plan for Operable Unit 1132" (LANL 1993, 015316).

TA-49 is located on a mesa in the upper part of the Ancho Canyon drainage, and part of the area drains into Water Canyon. TA-49 was used for underground hydronuclear testing in the early 1960s. The testing consisted of criticality, equation-of-state, and calibration experiments involving special nuclear materials. The testing produced large inventories of radioactive and hazardous materials, including isotopes of uranium and plutonium, lead, and beryllium; explosives such as TNT (2,4,6-trinitrotoluene), RDX (hexahydro-1,3,5-trinitro-1,3,5-triazine), and HMX (octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine); and barium nitrate. Much of this material remains in shafts on the mesa top. Further information about activities and SWMUs and AOCs at TA-49 can be found in the report "Environmental Status of Technical Area 49, Los Alamos, New Mexico" (Purtymun and Stoker 1987, 006688) and the "RFI Work Plan for Operable Unit 1144" (LANL 1992, 007670).

2.0 SCOPE OF ACTIVITIES

The PMEs for the Ancho Watershed were conducted pursuant to the 2010 IFGMP (LANL 2010, 109830).

Table 2.0-1 provides the location name, sample collection date, port name, port depth, screened interval, top and bottom screen depths, casing volume, purge volume, and base flow for each of the monitored locations. These locations are shown in Figure 2.0-1.

3.0 MONITORING RESULTS

3.1 Methods and Procedures

All methods and procedures used to perform the field activities associated with the June and September 2011 PMEs are documented in the 2010 IFGMP (LANL 2010, 109830).

3.2 Field Parameter Results

Appendix A contains the field parameter results for these PMEs and for the four previous PMEs.

3.3 Water-Level Observations

The periodic monitoring water-level data for the previous 3 yr are presented in Appendix B (on CD included with this document). For wells equipped with transducers, the reported water level is the water-level measurement taken earliest on the day of sampling. All manual measurements are reported at the time immediately before sampling. The water-level measurements taken during these PMEs are shown graphically in Figure 3.3-1. No surface-water locations were sampled during these PMEs, so there is no figure showing base-flow measurements.

3.4 Deviations from Planned Scope

Table 3.4-1 describes the fieldwork deviations from the planned scope of the June and September 2011 PMEs. There were no fieldwork deviations for the June and September PMEs. Table 3.4-2 presents a list of analytes for which the practical quantitation limits (PQLs) are greater than screening levels.

4.0 ANALYTICAL DATA RESULTS

4.1 Methods and Procedures

All methods and procedures used to perform the analytical activities of the PMEs are documented in the 2010 IFGMP (LANL 2010, 109830). Purge water is managed and characterized in accordance with waste profile form 39268, a copy of which was included in Appendix F of a previous PMR (LANL 2008, 103737) and ENV-RCRA-QP-010.2, Land Application of Groundwater. ENV-RCRA-QP-010.2 implements the NMED-approved Notice of Intent Decision Tree for land application of drilling, development, rehabilitation, and sampling purge water.

All sampling, data reviews, and data package validations were conducted using standard operating procedures (SOPs) that are part of a comprehensive quality assurance program. The quality program and procedures are available at http://www.lanl.gov/environment/all/qa.shtml. Completed chain-of-custody forms serve as an analytical request form and include the requester or owner, sample number, program code, date and time of sample collection, total number of bottles, list of analytes to be measured, bottle sizes, and preservatives for each required analysis.

The required analytical laboratory batch quality control (QC) is defined by the analytical method, the analytical statement of work, and generally accepted laboratory practices. The analytical laboratory assigns qualifiers to the data to indicate the quality of the analytical results. The laboratory batch QC was used in the secondary data-validation process to evaluate the quality of individual analytical results, evaluate the appropriateness of the analytical methodologies, and measure the routine performance of the analytical laboratory.

In addition to batch QC performed by laboratories, the Laboratory submitted field QC samples to test the overall sampling and analytical laboratory process and to spot-check for analytical problems. These results were used in secondary validation along with information provided by the analytical laboratory.

After the Laboratory receives the analytical laboratory data packages, the packages receive secondary validation by an independent contractor, Analytical Quality Associates, Inc. (AQA). AQA's reviews follow the guidelines set in the DOE model SOP for data validation, which includes reviewing the data quality and the documentation's correctness and completeness, verifying that holding times were met, and ensuring that analytical laboratory QC measures were applied, documented, and kept within contract requirements. As a result of secondary validation, a second set of qualifiers was assigned to the analytical results.

The Laboratory assigns detection status to the analytical result based on the analytical laboratory and secondary validation qualifiers. A "<" symbol indicates that, based on the qualifiers, the result was a nondetect.

4.2 Analytical Data

Appendix C presents the analytical data from these PMEs and from the four sampling events immediately before the June and September 2011 sampling events. The analytical laboratory reports (including chain-of-custody forms and data validation) are provided in Appendix F (on CD included with this document).

Appendix C contains all data collected during the June and September 2011 PMEs (i.e., all data that have been independently reviewed for conformance with Laboratory requirements) with the following constraints.

- All data
    - ❖ Data that are R-qualified (rejected because of noncompliance regarding QC acceptance criteria) during independent validation are considered unusable but are still reported.
    - ❖ Analytical laboratory QC results, including matrix spike and matrix spike duplicates, are not included in the data set.
    - ❖ Field duplicates, reanalyses, field blanks, trip blanks, equipment blanks, and results from different analytical methods are reported.
- Radionuclides
    - ❖ Cesium-137, cobalt-60, neptunium-237, potassium-40, and sodium-22 are reported (or analyzed) for the gamma spectroscopy suite.
    - ❖ Americium-241 and uranium-235 are reported only by chemical separation alpha spectroscopy. No gamma spectroscopy results are presented for these analytes.
    - ❖ Low-detection-limit tritium results greater than 3 times the 1 standard deviation total propagated analytical uncertainty are considered to be detections.
    - ❖ Otherwise, all results are reported at all locations.
- Nonradionuclides
    - ❖ All results, excluding nondetections, are reported.

The results of data screening for this PMR appear in Tables D-1 through D-5 in Appendix D. These tables show all detected analytical results for perchlorate, radionuclides, and organic compounds and all analytical results greater than half the lowest applicable screening-level values for metals and general inorganic compounds. Because uranium, gross alpha, and gross beta are usually detected in water samples and to focus on the higher measurements, the tables include only occurrences of these measurements above threshold values. (All of the detected results are included in Appendix C.) The threshold levels are 5 µg/L for uranium, 5 pCi/L for gross alpha, and 20 pCi/L for gross beta, which are lower than the respective screening levels (30 µg/L for uranium, 15 pCi/L for gross alpha, and 50 pCi/L for gross beta). The sources of screening levels with which the results are compared are listed in Table 4.2-1.

Data for PMRs are evaluated using the following screening process.

- The base-flow monitoring locations are assigned to one of two screening categories—perennial or ephemeral. Along with a hardness value, this category determines the screening levels used for data at each monitoring location. Hardness-dependent screening levels used to screen data at each base-flow monitoring location are determined using the geometric mean of hardness data (mg/L as calcium carbonate) collected from 2006 through 2010 at each location. Hardness-dependent acute and chronic criteria were used for total aluminum and dissolved cadmium, chromium, copper, lead, manganese, nickel, silver, and zinc in accordance with the requirements of 20 New Mexico Administrative Code 6.4.
- Surface-water and groundwater perchlorate data were compared with the screening level of 4 µg/L established in Section VIII.A.1.a of the Consent Order.

- Groundwater data are screened to the groundwater cleanup level (i.e., the lesser of the EPA MCL or the NMWQCC groundwater standard for an analyte).
- The NMWQCC groundwater standards apply to the dissolved (filtered) portion of specified contaminants; however, the standards for mercury, organic compounds, and nonaqueous-phase liquids apply to the total unfiltered concentrations of the contaminants. Both filtered and unfiltered sample results are compared with EPA MCLs.
- As required by the Consent Order, EPA Regional Screening Levels for Tap Water (formerly Region 6 Screening Levels for Tap Water) are used as screening levels for constituents that have no other regulatory standard and for which toxicological information is published. These screening levels are for either a cancer- or noncancer-risk type. For the cancer-risk type, the EPA screening levels are for 10^{-6} excess cancer risk. The Consent Order specifies screening with these values at a 10^{-5} (rather than 10^{-6}) excess cancer risk. Therefore, the screening levels in the tables are 10 times the EPA 10^{-6} screening values.
- The analytical results for radioactivity are compared with the DOE Biota Concentration Guides (BCGs) for surface water and Derived Concentration Guides (DCGs) for groundwater.

Table 4.2-2 provides surface-water and groundwater analytical results (by hydrogeologic zone for a specific analytical suite) that are above screening levels. Multiple detections of a particular constituent at a location were counted as one result. For example, if aluminum is detected above a screening level in both a primary sample and a field duplicate, only the highest result is shown.

Graphs in Appendix E display concentration histories of analytes for locations where the analyte was above its screening level at least once during the three most recent PMEs. The concentration of the analyte is plotted for a 3-yr period. If 3 yr of data are not available, then all available results for the analyte are plotted. When shown, the solid red lines depict applicable screening levels.

No exceedance map is included for the June and September 2011 PMEs because no analyte was above its screening level at more than one location for this round of sampling.

4.2.1 Surface Water (Base Flow)

No surface-water locations were sampled during the June and September 2011 PMEs. No surface-water results were unreported from prior PMEs.

4.2.2 Groundwater

No groundwater results unreported from prior PMEs were above screening levels.

Benzo(a)pyrene was found in an unfiltered sample collected on June 10, 2011, from regional aquifer well R-29 at a concentration above the 0.2 µg/L EPA MCL. The result was near the detection limit and estimated. This is the only detection of this compound at the well out of seven sample events. In regional aquifer well R-30, in an unfiltered sample collected on June 15, 2011, dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene were both detected at concentrations above the respective 0.029 µg/L and 0.29 µg/L EPA tap water screening levels. Both results were near the detection limit and estimated. These are the only detections of these compounds out of six sample events.

4.3 Sampling Program Modifications

No modifications to the periodic monitoring sampling for the Ancho Watershed are proposed at this time.

5.0 SUMMARY

5.1 Monitoring Results

The field parameter monitoring results are presented in Appendix A.

5.2 Analytical Results

5.2.1 Surface Water (Base Flow)

No surface-water locations were sampled during these PMEs. No surface-water results were unreported from prior PMEs.

For results above screening levels, the types of contaminants detected and their concentrations are consistent with data reported from previous monitoring events in this watershed.

5.2.2 Groundwater

No groundwater results unreported from previous PME samples were above screening levels.
Three groundwater results from the June PME were above screening levels.

For results above screening levels, except for first detections at R-29 of benzo(a)pyrene and at R-30 of dibenz(a,h)anthracene and indeno(1,2,3-cd)pyrene, the types of contaminants detected and their concentrations are consistent with data reported from previous monitoring events in this watershed.

5.3 Data Gaps

Table 3.4-1 summarizes the field deviations encountered during these PMEs. There were no fieldwork deviations for the June and September 2011 PMEs. The table provides a detailed account of sampling-event deviations.

5.4 Remediation System Monitoring

Remediation system monitoring is not applicable to Ancho Canyon because there are no systems installed in the watershed.

6.0 REFERENCES

The following list includes all documents cited in this report. Parenthetical information following each reference provides the author(s), publication date, and ER ID. This information is also included in text citations. ER IDs are assigned by the Environmental Programs Directorate's Records Processing Facility (RPF) and are used to locate the document at the RPF and, where applicable, in the master reference set.

Copies of the master reference set are maintained at the NMED Hazardous Waste Bureau and the Directorate. The set was developed to ensure that the administrative authority has all material needed to review this document, and it is updated with every document submitted to the administrative authority. Documents previously submitted to the administrative authority are not included.

LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1122," Los Alamos National Laboratory document LA-UR-92-925, Los Alamos, New Mexico. (LANL 1992, 007671)

LANL (Los Alamos National Laboratory), May 1992. "RFI Work Plan for Operable Unit 1144," Los Alamos National Laboratory document LA-UR-92-900, Los Alamos, New Mexico. (LANL 1992, 007670)

LANL (Los Alamos National Laboratory), June 1993. "RFI Work Plan for Operable Unit 1132," Los Alamos National Laboratory document LA-UR-93-768, Los Alamos, New Mexico. (LANL 1993, 015316)

LANL (Los Alamos National Laboratory), September 2008. "Periodic Monitoring Report for White Rock Watershed, April 23–April 30, 2008," Los Alamos National Laboratory document LA-UR-08-5847, Los Alamos, New Mexico. (LANL 2008, 103737)

LANL (Los Alamos National Laboratory), June 2010. "2010 Interim Facility-Wide Groundwater Monitoring Plan," Los Alamos National Laboratory document LA-UR-10-1777, Los Alamos, New Mexico. (LANL 2010, 109830)

Purtymun, W.D., and A.K. Stoker, November 1987. "Environmental Status of Technical Area 49, Los Alamos, New Mexico," Los Alamos National Laboratory report LA-11135-MS, Los Alamos, New Mexico. (Purtymun and Stoker 1987, 006688)

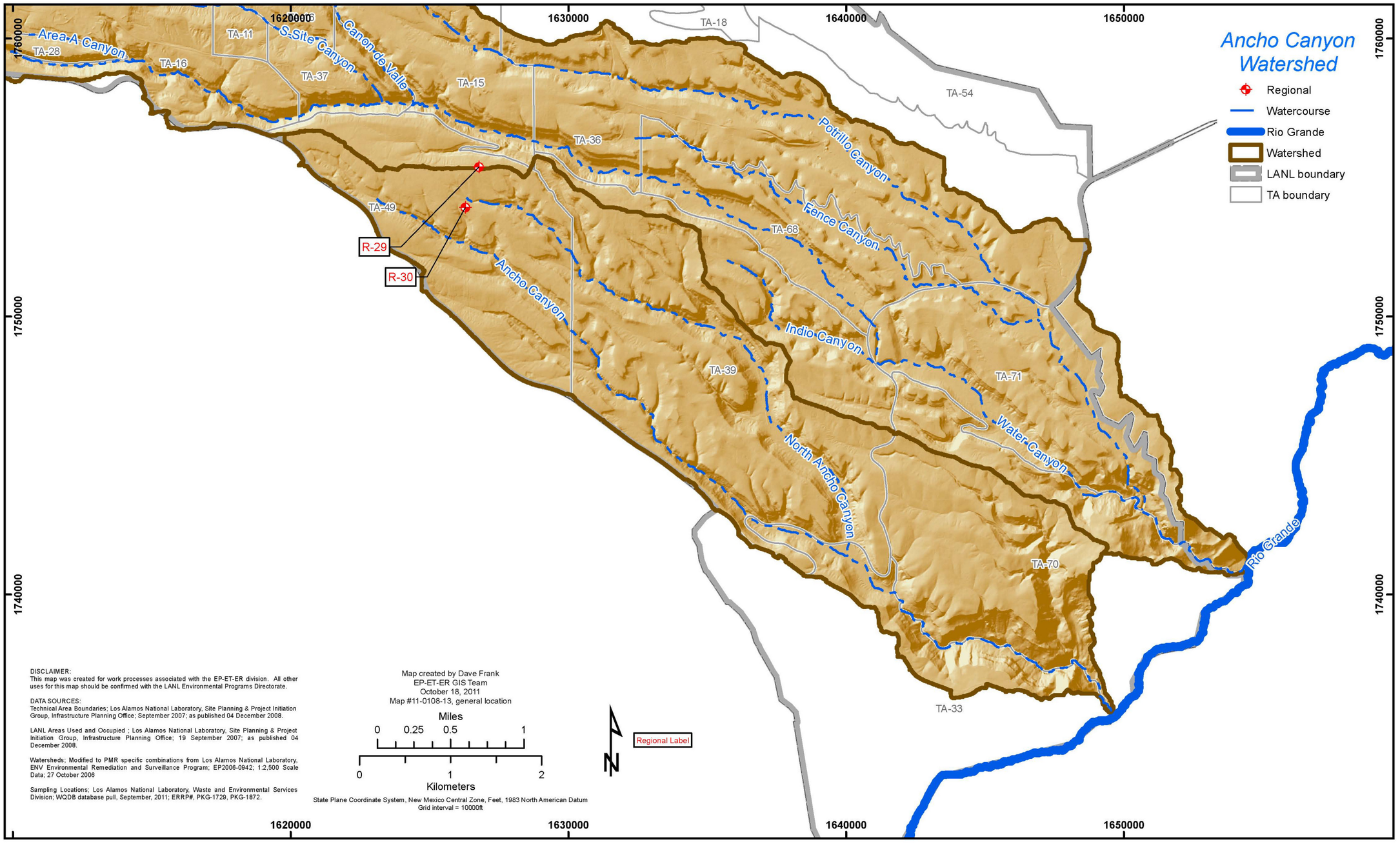


Figure 2.0-1 Locations monitored for the June and September 2011 PMEs. Some locations on this map may not have been sampled (see Table 3.4-1).

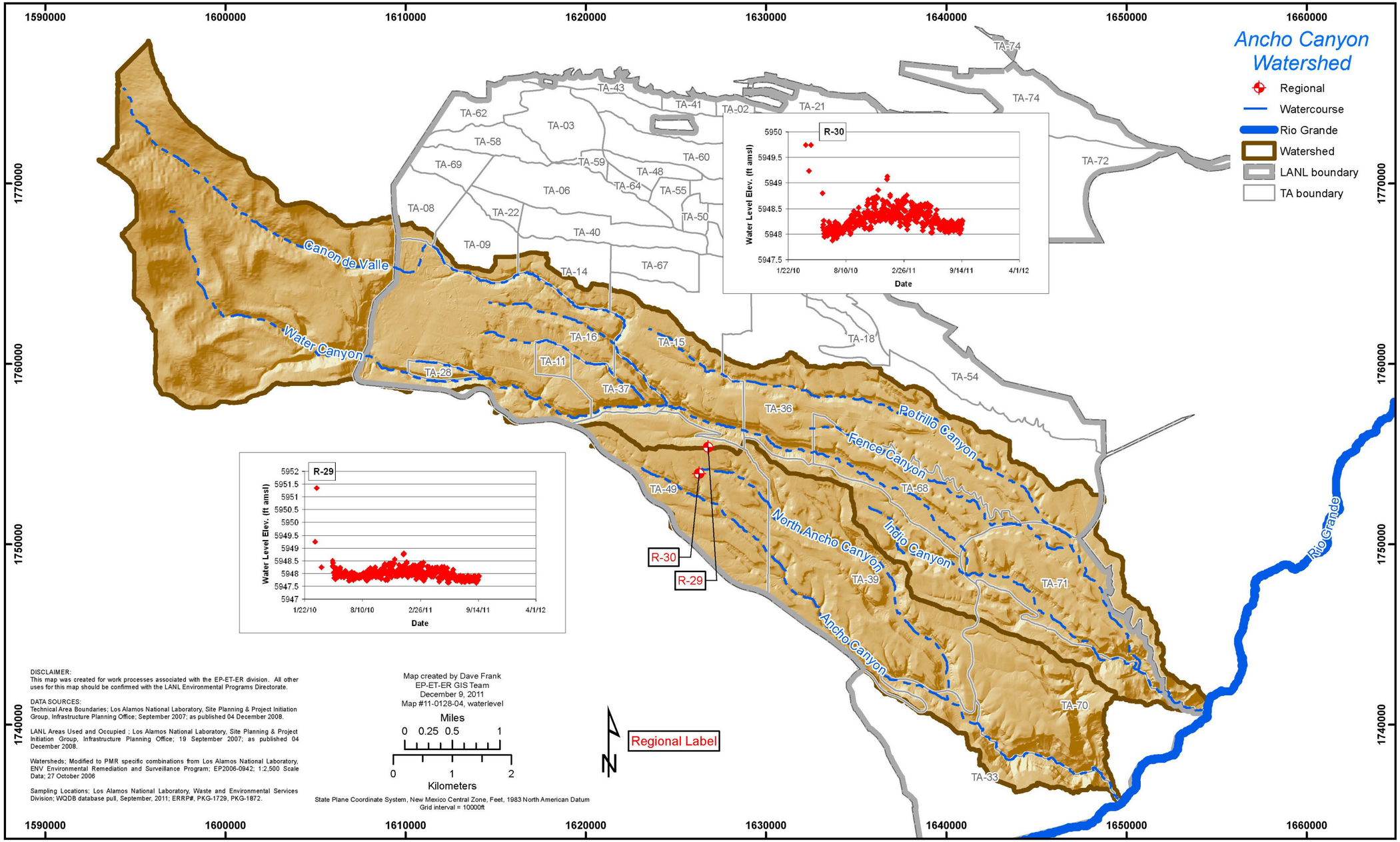


Figure 3.3-1 Groundwater elevations

Table 2.0-1
Ancho Watershed Monitoring Locations and General Information

Location	Sample Collection Date	Port Name	Port Depth (ft)	Screened Interval (ft)	Top Screen Depth (ft)	Bottom Screen Depth (ft)	Calculated Single Casing Volume (gal.)	Purge Volume (gal.)	Purge Flow (cfs)*
Regional									
R-29	06/10/11	Single	1170	10	1170	1180	40.5	179	0.014
R-30	06/15/11	Single	1140	20.9	1140	1160.9	47.9	162	0.011
R-29	09/21/11	Single	1170	10	1170	1180	40.34	215	0.00003
R-30	09/14/11	Single	1140	20.9	1140	1160.9	47.93	153	0.00002

* cfs = Cubic feet per second.

Table 3.4-1
Ancho Watershed PME Observations and Deviations

Location	Deviation	Cause	Comment
n/a*	There were no fieldwork deviations for these PMEs.	n/a	n/a

* n/a = Not applicable.

Table 3.4-2
Analytes with PQLs above Screening Levels

Analyte or CAS[a] No.	Analyte Name	MDL[b]	PQL	Screening Level	Unit	Screening-Level Type
Herbicides						
94-74-6	MCPA[c]	12	53	18	µg/L	EPA Regional Tap
93-65-2	MCPP[d]	11	53	37	µg/L	EPA Regional Tap
Metals						
Be	Beryllium	1	5	4	µg/L	EPA MCL
Semivolatile Organic Analytes						
1912-24-9	Atrazine	3	10	3	µg/L	EPA MCL
103-33-3	Azobenzene	2	10	1.3	µg/L	EPA Regional Tap
92-87-5	Benzidine	3	10	0.00094	µg/L	EPA Regional Tap
56-55-3	Benzo(a)anthracene	0.2	1	0.29	µg/L	EPA Regional Tap
50-32-8	Benzo(a)pyrene	0.2	1	0.2	µg/L	EPA MCL
205-99-2	Benzo(b)fluoranthene	0.2	1	0.29	µg/L	EPA Regional Tap
111-44-4	Bis(2-chloroethyl)ether	2	10	0.12	µg/L	EPA Regional Tap
117-81-7	Bis(2-ethylhexyl)phthalate	2	10	6	µg/L	EPA MCL
106-47-8	Chloroaniline[4-]	2	10	3.4	µg/L	EPA Regional Tap
53-70-3	Dibenz(a,h)anthracene	0.2	1	0.029	µg/L	EPA Regional Tap
91-94-1	Dichlorobenzidine[3,3'-]	2	10	1.5	µg/L	EPA Regional Tap

Table 3.4-2 (continued)

Analyte or CAS[a] No.	Analyte Name	MDL[b]	PQL	Screening Level	Unit	Screening-Level Type
534-52-1	Dinitro-2-methylphenol[4,6-]	3	10	2.9	µg/L	EPA Regional Tap
123-91-1	Dioxane[1,4-]	2	10	6.7	µg/L	EPA Regional Tap
118-74-1	Hexachlorobenzene	2	10	1	µg/L	EPA MCL
193-39-5	Indeno(1,2,3-cd)pyrene	0.2	1	0.29	µg/L	EPA Regional Tap
55-18-5	Nitrosodiethylamine[N-]	2	10	0.0014	µg/L	EPA Regional Tap
62-75-9	Nitrosodimethylamine[N-]	2	10	0.0042	µg/L	EPA Regional Tap
924-16-3	Nitroso-di-n-butylamine[N-]	3	10	0.024	µg/L	EPA Regional Tap
621-64-7	Nitroso-di-n-propylamine[N-]	2	10	0.096	µg/L	EPA Regional Tap
930-55-2	Nitrosopyrrolidine[N-]	2	10	0.32	µg/L	EPA Regional Tap
108-60-1	Oxybis(1-chloropropane)[2,2'-]	2	10	3.2	µg/L	EPA Regional Tap
87-86-5	Pentachlorophenol	2	10	1	µg/L	EPA MCL
108-95-2	Phenol	1	10	5	µg/L	NM GW STD
Volatile Organic Analytes						
107-02-8	Acrolein	1.3	5	0.042	µg/L	EPA Regional Tap
107-13-1	Acrylonitrile	1	5	0.45	µg/L	EPA Regional Tap
126-99-8	Chloro-1,3-butadiene[2-]	0.3	1	0.16	µg/L	EPA Regional Tap
96-12-8	Dibromo-3-Chloropropane[1,2-]	0.3	1	0.2	µg/L	EPA MCL
106-93-4	Dibromoethane[1,2-]	0.25	1	0.05	µg/L	EPA MCL
126-98-7	Methacrylonitrile	1	5	1	µg/L	EPA Regional Tap
75-09-2	Methylene Chloride	3	10	5	µg/L	EPA MCL
96-18-4	Trichloropropane[1,2,3-]	0.3	1	0.0072	µg/L	EPA Regional Tap

Note: This table is applicable to all samples reported in all PMRs.

[a] CAS = Chemical Abstracts Service.

[b] MDL = Method detection limit.

[c] MCPA = 2-Methyl-4-chlorophenoxyacetic acid.

[d] MCPP = 2-(4-Chloro-2-methylphenoxy)propanoic acid.

Table 4.2-1
Sources of Screening Levels for Groundwater and Surface Water at Los Alamos National Laboratory

Standard Type	Groundwater	Surface Water
DOE BCGs	n/a[a]	X[b]
DOE 100-mrem Public Dose DCG	X	n/a
DOE 4-mrem Drinking Water DCG	X	n/a
EPA MCL	X	n/a
EPA Regional Tap Water Screening Level	X	n/a
New Mexico Environmental Improvement Board Radiation Protection Standards	X	X
NMWQCC Groundwater Standard	X	n/a
NMWQCC Irrigation Standard	n/a	X
NMWQCC Livestock Watering Standard	n/a	X
NMWQCC Wildlife Habitat Standard	n/a	X
NMWQCC Aquatic Life Standards Acute	n/a	X
NMWQCC Aquatic Life Standards Chronic	n/a	X
NMWQCC Human Health Standard	n/a	X

[a] n/a = Not applicable.

[b] X = Standard applied to data screen for this report.

Table 4.2-2
Ancho Watershed Results above Screening Levels for Surface Water and Groundwater

Location	Date	Analyte	Field Preparation	Result	Unit	Screening-Level Value	Screening-Level Source
Regional Aquifer							
R-29	06/10/11	Benzo(a)pyrene	UF*	0.29	µg/L	0.2	EPA MCL
R-30	06/15/11	Dibenz(a,h)anthracene	UF	0.468	µg/L	0.029	EPA TAP SCRN LVL
R-30	06/15/11	Indeno(1,2,3-cd)pyrene	UF	0.447	µg/L	0.29	EPA TAP SCRN LVL

* UF = Unfiltered.

Appendix A

Field Parameter Results, Including Results from Previous Four Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-29	1170	09/21/11	WG[a]	Dissolved Oxygen	6.87	mg/L	CAAN-11-27010
R-29	1170	09/21/11	WG	Dissolved Oxygen	6.87	mg/L	CAAN-11-26934
R-29	1170	09/21/11	WG	Dissolved Oxygen	5.22	mg/L	CAAN-11-26932
R-29	1170	09/21/11	WG	Dissolved Oxygen	3.76	mg/L	CAAN-11-26930
R-29	1170	06/10/11	WG	Dissolved Oxygen	5.98	mg/L	CAAN-11-13955
R-29	1170	06/10/11	WG	Dissolved Oxygen	5.98	mg/L	CAAN-11-14661
R-29	1170	06/10/11	WG	Dissolved Oxygen	6	mg/L	CAAN-11-14659
R-29	1170	06/10/11	WG	Dissolved Oxygen	5.3	mg/L	CAAN-11-14657
R-29	1170	06/10/11	WG	Dissolved Oxygen	3.91	mg/L	CAAN-11-14655
R-29	1170	04/06/11	WG	Dissolved Oxygen	7.12	mg/L	CAAN-11-5485
R-29	1170	01/07/11	WG	Dissolved Oxygen	5.83	mg/L	CAAN-11-3194
R-29	1170	01/07/11	WG	Dissolved Oxygen	4.75	mg/L	CAAN-11-3199
R-29	1170	01/07/11	WG	Dissolved Oxygen	4.2	mg/L	CAAN-11-3198
R-29	1170	01/07/11	WG	Dissolved Oxygen	5.83	mg/L	CAAN-11-3197
R-29	1170	09/21/11	WG	Oxidation Reduction Potential	52.2	mV	CAAN-11-27010
R-29	1170	09/21/11	WG	Oxidation Reduction Potential	52.2	mV	CAAN-11-26934
R-29	1170	09/21/11	WG	Oxidation Reduction Potential	−22.3	mV	CAAN-11-26932
R-29	1170	09/21/11	WG	Oxidation Reduction Potential	−106.5	mV	CAAN-11-26930
R-29	1170	06/10/11	WG	Oxidation Reduction Potential	88.1	mV	CAAN-11-13955
R-29	1170	06/10/11	WG	Oxidation Reduction Potential	88.1	mV	CAAN-11-14661
R-29	1170	06/10/11	WG	Oxidation Reduction Potential	81.1	mV	CAAN-11-14659
R-29	1170	06/10/11	WG	Oxidation Reduction Potential	42.8	mV	CAAN-11-14657
R-29	1170	06/10/11	WG	Oxidation Reduction Potential	−70.5	mV	CAAN-11-14655
R-29	1170	04/06/11	WG	Oxidation Reduction Potential	16.6	mV	CAAN-11-5485
R-29	1170	01/07/11	WG	Oxidation Reduction Potential	271.2	mV	CAAN-11-3194
R-29	1170	01/07/11	WG	Oxidation Reduction Potential	319.3	mV	CAAN-11-3199
R-29	1170	01/07/11	WG	Oxidation Reduction Potential	236.1	mV	CAAN-11-3197
R-29	1170	09/21/11	WG	pH	8.26	SU[b]	CAAN-11-27010

Location	Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-29	1170	09/21/11	WG	pH	8.26	SU	CAAN-11-26934
R-29	1170	09/21/11	WG	pH	8.53	SU	CAAN-11-26932
R-29	1170	09/21/11	WG	pH	8.36	SU	CAAN-11-26930
R-29	1170	06/10/11	WG	pH	7.98	SU	CAAN-11-13955
R-29	1170	06/10/11	WG	pH	7.98	SU	CAAN-11-14661
R-29	1170	06/10/11	WG	pH	8.04	SU	CAAN-11-14659
R-29	1170	06/10/11	WG	pH	8.1	SU	CAAN-11-14657
R-29	1170	06/10/11	WG	pH	7.89	SU	CAAN-11-14655
R-29	1170	04/06/11	WG	pH	7.8	SU	CAAN-11-5485
R-29	1170	01/07/11	WG	pH	7.77	SU	CAAN-11-3194
R-29	1170	01/07/11	WG	pH	8.14	SU	CAAN-11-3199
R-29	1170	01/07/11	WG	pH	7.77	SU	CAAN-11-3198
R-29	1170	01/07/11	WG	pH	7.58	SU	CAAN-11-3197
R-29	1170	09/21/11	WG	Specific Conductance	150	µS/cm	CAAN-11-27010
R-29	1170	09/21/11	WG	Specific Conductance	150	µS/cm	CAAN-11-26934
R-29	1170	09/21/11	WG	Specific Conductance	160	µS/cm	CAAN-11-26932
R-29	1170	09/21/11	WG	Specific Conductance	189	µS/cm	CAAN-11-26930
R-29	1170	06/10/11	WG	Specific Conductance	139	µS/cm	CAAN-11-13955
R-29	1170	06/10/11	WG	Specific Conductance	139	µS/cm	CAAN-11-14661
R-29	1170	06/10/11	WG	Specific Conductance	142	µS/cm	CAAN-11-14659
R-29	1170	06/10/11	WG	Specific Conductance	147	µS/cm	CAAN-11-14657
R-29	1170	06/10/11	WG	Specific Conductance	160	µS/cm	CAAN-11-14655
R-29	1170	04/06/11	WG	Specific Conductance	139	µS/cm	CAAN-11-5485
R-29	1170	01/07/11	WG	Specific Conductance	144	µS/cm	CAAN-11-3194
R-29	1170	01/07/11	WG	Specific Conductance	150	µS/cm	CAAN-11-3199
R-29	1170	01/07/11	WG	Specific Conductance	176	µS/cm	CAAN-11-3198
R-29	1170	01/07/11	WG	Specific Conductance	161	µS/cm	CAAN-11-3197
R-29	1170	09/21/11	WG	Temperature	18.19	deg C	CAAN-11-27010

Location	Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-29	1170	09/21/11	WG	Temperature	18.19	deg C	CAAN-11-26934
R-29	1170	09/21/11	WG	Temperature	17.61	deg C	CAAN-11-26932
R-29	1170	09/21/11	WG	Temperature	16	deg C	CAAN-11-26930
R-29	1170	06/10/11	WG	Temperature	19.64	deg C	CAAN-11-13955
R-29	1170	06/10/11	WG	Temperature	19.64	deg C	CAAN-11-14661
R-29	1170	06/10/11	WG	Temperature	19.65	deg C	CAAN-11-14659
R-29	1170	06/10/11	WG	Temperature	19	deg C	CAAN-11-14657
R-29	1170	06/10/11	WG	Temperature	18.15	deg C	CAAN-11-14655
R-29	1170	04/06/11	WG	Temperature	18.18	deg C	CAAN-11-5485
R-29	1170	01/07/11	WG	Temperature	16.07	deg C	CAAN-11-3194
R-29	1170	01/07/11	WG	Temperature	17.75	deg C	CAAN-11-3199
R-29	1170	01/07/11	WG	Temperature	14.1	deg C	CAAN-11-3198
R-29	1170	01/07/11	WG	Temperature	18.41	deg C	CAAN-11-3197
R-29	1170	09/21/11	WG	Turbidity	13.4	NTU[c]	CAAN-11-27010
R-29	1170	09/21/11	WG	Turbidity	13.4	NTU	CAAN-11-26934
R-29	1170	09/21/11	WG	Turbidity	5.65	NTU	CAAN-11-26932
R-29	1170	09/21/11	WG	Turbidity	8.19	NTU	CAAN-11-26930
R-29	1170	06/10/11	WG	Turbidity	5.82	NTU	CAAN-11-13955
R-29	1170	06/10/11	WG	Turbidity	5.82	NTU	CAAN-11-14661
R-29	1170	06/10/11	WG	Turbidity	5.48	NTU	CAAN-11-14659
R-29	1170	06/10/11	WG	Turbidity	4.9	NTU	CAAN-11-14657
R-29	1170	06/10/11	WG	Turbidity	4.52	NTU	CAAN-11-14655
R-29	1170	04/06/11	WG	Turbidity	8.57	NTU	CAAN-11-5485
R-29	1170	01/07/11	WG	Turbidity	3.18	NTU	CAAN-11-3194
R-29	1170	01/07/11	WG	Turbidity	4.95	NTU	CAAN-11-3199
R-29	1170	01/07/11	WG	Turbidity	8.8	NTU	CAAN-11-3198
R-29	1170	01/07/11	WG	Turbidity	4.7	NTU	CAAN-11-3197
R-30	1140	09/14/11	WG	Dissolved Oxygen	8.07	mg/L	CAAN-11-27018

Location	Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-30	1140	06/15/11	WG	Dissolved Oxygen	7.1	mg/L	CAAN-11-13959
R-30	1140	04/05/11	WG	Dissolved Oxygen	8.12	mg/L	CAAN-11-5489
R-30	1140	12/03/10	WG	Dissolved Oxygen	4.25	mg/L	CAAN-11-2163
R-30	1140	09/23/10	WG	Dissolved Oxygen	7.09	mg/L	CAAN-10-25948
R-30	1140	05/19/10	WG	Dissolved Oxygen	7.04	mg/L	CAAN-10-17252
R-30	1140	09/14/11	WG	Oxidation Reduction Potential	82.3	mV	CAAN-11-27018
R-30	1140	06/15/11	WG	Oxidation Reduction Potential	184.5	mV	CAAN-11-13959
R-30	1140	04/05/11	WG	Oxidation Reduction Potential	53.7	mV	CAAN-11-5489
R-30	1140	12/03/10	WG	Oxidation Reduction Potential	7.7	mV	CAAN-11-2163
R-30	1140	09/23/10	WG	Oxidation Reduction Potential	−67.2	mV	CAAN-10-25948
R-30	1140	05/19/10	WG	Oxidation Reduction Potential	414.5	mV	CAAN-10-17252
R-30	1140	09/14/11	WG	pH	8.04	SU	CAAN-11-27018
R-30	1140	06/15/11	WG	pH	7.95	SU	CAAN-11-13959
R-30	1140	04/05/11	WG	pH	7.94	SU	CAAN-11-5489
R-30	1140	12/03/10	WG	pH	7.94	SU	CAAN-11-2163
R-30	1140	09/23/10	WG	pH	7.74	SU	CAAN-10-25948
R-30	1140	05/19/10	WG	pH	7.02	SU	CAAN-10-17252
R-30	1140	09/14/11	WG	Specific Conductance	117	µS/cm	CAAN-11-27018
R-30	1140	06/15/11	WG	Specific Conductance	121	µS/cm	CAAN-11-13959
R-30	1140	04/05/11	WG	Specific Conductance	127	µS/cm	CAAN-11-5489
R-30	1140	12/03/10	WG	Specific Conductance	120	µS/cm	CAAN-11-2163
R-30	1140	09/23/10	WG	Specific Conductance	124	µS/cm	CAAN-10-25948
R-30	1140	05/19/10	WG	Specific Conductance	122	µS/cm	CAAN-10-17252
R-30	1140	09/14/11	WG	Temperature	20.22	deg C	CAAN-11-27018
R-30	1140	06/15/11	WG	Temperature	20.34	deg C	CAAN-11-13959
R-30	1140	04/05/11	WG	Temperature	18.36	deg C	CAAN-11-5489
R-30	1140	12/03/10	WG	Temperature	19.77	deg C	CAAN-11-2163
R-30	1140	09/23/10	WG	Temperature	20.2	deg C	CAAN-10-25948

Location	Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-30	1140	05/19/10	WG	Temperature	19.97	deg C	CAAN-10-17252
R-30	1140	09/14/11	WG	Turbidity	0.7	NTU	CAAN-11-27018
R-30	1140	06/15/11	WG	Turbidity	0.98	NTU	CAAN-11-13959
R-30	1140	04/05/11	WG	Turbidity	3.62	NTU	CAAN-11-5489
R-30	1140	12/03/10	WG	Turbidity	1.44	NTU	CAAN-11-2163
R-30	1140	09/23/10	WG	Turbidity	3.24	NTU	CAAN-10-25948
R-30	1140	05/19/10	WG	Turbidity	2.54	NTU	CAAN-10-17252

[a] WG = Groundwater.

[b] SU = Standard unit.

[c] NTU = Nephelometric turbidity unit.

Appendix B

Groundwater-Elevation Measurements
(on CD included with this document)

Appendix C

Analytical Chemistry Results, Including Results from Previous Four Monitoring Events if Available

The following pages provide lists of (1) acronyms, abbreviations, symbols, and various analytical codes, (2) analytical laboratory qualifier codes, and (3) secondary validation flag codes that may be used in Appendix C. Please note that these are comprehensive lists, and this periodic monitoring report may not include all of the acronyms, abbreviations, symbols, and codes in the lists.

Acronyms and Abbreviations

Acronym, Abbreviation, or Symbol	Description
Miscellaneous	
%	percent
%D	percent difference
%R	percent recovery
<	Based on qualifiers, the result was a nondetection.
—	none
4,4'-DDD	4,4'-dichlorodiphenyldichloroethane
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
BHC	benzene hexachloride
CB	chlorobiphenyl
CCV	continuing calibration verification
CLP	Control Laboratory Program
CRDL	contract-required detection limit
DCG	Derived Concentration Guide (DOE)
DNX	dinitroso-RDX (or hexahydro-1,3-dinitroso-5-nitro-1,3,5-triazine)
DOE	Department of Energy (U.S.)
EPA	Environmental Protection Agency (U.S.)
GC	gas chromotography
GFAA	graphite furnace atomic absorption
GFPC	gas-flow proportional counter
GW	groundwater
HMX	1,3,5,7-tetranitro-1,3,5,7-tetrazocine
HPLC	high-pressure liquid chromatography
ICPAES	inductively coupled plasma atomic (optical) emission spectroscopy
ICV	initial calibration verification
IDL	instrument detection limit
LAL	lower acceptance limit
LCS	laboratory control sample
LLEE	low-level electrolytic extraction
LSC	liquid scintillation counting
Lvl	level
MCL	maximum contaminant level (EPA)
MDA	minimum detectable activity
MDC	minimum detectable concentration
MDL	method detection limit

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Miscellaneous (continued)	
MNX	mononitroso-RDX (or hexahydro-1-nitroso-3,5-dinitro-1,3,5-triazine)
MS	matrix spike
MSD	matrix spike duplicate
NM	NMWQCC
NMED	New Mexico Environmental Department
NMWQCC	New Mexico Water Quality Control Commission
PCB	polychlorinated biphenyl
PQL	practical quantitation limit
Prelim	preliminary
QC	quality control
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RF	response factor
RL	reporting limit
RPD	relative percent difference
RRF	relative response factor
Scr	screening
SSC	suspended sediment concentration
SU	standard unit
TDS	total dissolved solids
TPH-DRO	total petroleum hydrocarbons—diesel range organics
TNX	trinitroso-RDX (or hexahydro-1,3,5-trinitroso-1,3,5-triazine)
TPU	total propagated uncertainty
UAL	upper acceptance limit
Field Matrix Codes	
W	water
WG	groundwater
WM	snowmelt
WP	persistent flow
WS	base flow
WT	storm runoff
Field Prep Codes	
F	filtered
UF	unfiltered
Field QC Type Codes	
EQB	equipment rinsate blank
FB	field blank
FD	field duplicate
FR	field rinsate

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Field QC Type Codes (continued)	
FS	field split
FTB	field trip blank
FTR	field triplicate
INB	equipment blank taken during installation and not associated with a sampling event
ITB	trip blank taken during installation and not associated with a sampling event
NA	not applicable
PEB	performance evaluation blank
PEK	performance evaluation known
RES	resample
SS	special sampling event, data unique
SS-EQB	equipment blank of special sampling event, data unique
SS-FB	field blank of special sampling event, data unique
SS-FD	field duplicate of special sampling event, data unique
SS-FTB	field trip blank of special sampling event, data unique
Analytical Suite Codes	
ANION	anions
DIOX/FUR, Diox/Fur	dioxins and furans
DRO	diesel range organics
GAMMA, GAMMA_SPEC	gamma spectroscopy
Geninorg, GENINORG	general inorganics
GRO	gasoline range organics
GROSSA	gross alpha
GROSSB	gross beta
HERB	herbicides
HEXP	high explosives
INORGANIC	inorganics
ISOTOPE, Isotope	isotope ratios
METALS, Metals	metals
PCB	polychlorinated biphenyls
PCB_CONG, PCB Cong	PCB congeners
PEST	pesticides
PEST/PCB, PESTPCB	pesticides and PCBs
RAD, Rad	radiochemistry
SVOA	semivolatile organics
SVOC	semivolatile organic compounds
VOA	volatile organics
VOC	volatile organic compounds

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Lab Sample Type Codes	
CS	client sample
DL	dilution
DUP	duplicate
RE	reanalysis
REDL	reanalysis dilution
REDP	reanalysis duplicate
RI	reissue
TRP	triplicate
Lab Codes	
ALTC	Alta Analytical Laboratory, Inc., San Diego, CA
ARSL	American Radiation Services–Primary
CFA	Cape Fear Analytical, LLC, Wilmington, NC
C-INC	Isotope and Nuclear Chemistry Division (LANL)
COAST	Coastal Science Laboratories, Austin, TX
CST	Chemical Sciences and Technology Division (LANL)
EES6	Hydrology, Geochemistry, and Geology Group (LANL)
ESE	Environmental Sciences & Engineering, Inc., Gainesville, FL
FLD	measurement taken in field
GEL	General Engineering Laboratories, Inc.
GELC	General Engineering Laboratories, Inc., Charleston, SC
GEO	Geochron Laboratories, Boston, MA
HENV	Health and Environmental Laboratory (Johnson Controls, Northern New Mexico)
HUFFMAN	Huffman Laboratories, Inc., Golden, CO
KA	KEMRON Environmental Services, Inc., Vienna, VA
LVLI	Lionville Laboratory, Inc., Philadelphia, PA
PARA	Paragon Analytics, Inc., Salt Lake City, UT
PEC	Pacific Ecorisk Laboratories, Fairfield, CA
QESL	Quanterra Environmental Services, St. Louis, MO
QST	QST Environmental, Newberry, FL
RECRAP	RECRA Labnet, Lionville, PA
RFWC	Roy F. Weston, Inc., West Chester, PA
SGSW	Paradigm Analytical Laboratories, Inc., Wilmington, NC
SILENS	Stable Isotope Laboratory, Woods Hole, MA
STL2, STR	Severn Trent Laboratories, Inc., Richland, WA, (historical)
STLA	Severn Trent Laboratories, Inc., Los Angeles, CA
STSL	Severn Trent Laboratories, Inc., St. Louis, MO
SwRI	Southwest Research Institute, San Antonio, TX
UAZ	University of Arizona, Tucson
UIL	University of Illinois, Urbana-Champaign
UMTL	University of Miami Tritium Lab

Analytical Laboratory Qualifier Codes

Code	Description
*	(Inorganic)—Duplicate analysis (relative percent difference) not within control limits.
B	(Organic) —Analyte was present in the blank and the sample. (Inorganic) —Reported value was obtained from a reading that was less than the contract-required detection limit (CRDL) but greater than or equal to the instrument detection limit (IDL).
BJ	See B code and see J code.
BJP	See B code, see J code, and see P code.
BPX	(B) (Organic)—This analyte was detected in the associated laboratory method blank and the sample. (B) (Inorganic)—The result for this analyte was greater than the IDL but less than the CRDL. (P) (Pesticides/PCBs)—The quantitative results for this analyte between the primary and secondary gas chromatography (GC) columns were greater than 25% difference. (P) (SW-846 EPA Method 8310, High-Pressure Liquid Chromatography, [HPLC] Results)—The quantitative results for this analyte between the primary and secondary HPLC columns or primary and secondary HPLC detectors were greater than 40% difference. (X) (Organic/Inorganic)—The result for this analyte should be regarded as not detected.
D	The result for this analyte was reported from a dilution.
DJ	See D code and see J code.
DNA	Did not analyze because equipment was broken.
E	(Organic) Analyte exceeded the concentration range. (Inorganic) The serial dilution was exceeded.
E*	See E code and see * code.
EJ	See E code and see J code.
EJ*	See E code, see J code, and see * code.
EJN	(E) (Organic)—The result for this analyte exceeded the upper range of the instrument initial calibration curve. (E) (Inorganic) (inductively coupled plasma atomic [optical] emission spectroscopy [ICPAES])—The result for this analyte in the serial dilution analysis was outside acceptance criteria. (E) (Inorganic) (graphite furnace atomic absorption [GFAA])—The result for this analyte failed one or more Control Laboratory Program (CLP) acceptance criteria as explained in the case narrative. (J) (Organic/General Inorganics)—The result for this analyte was greater than the method detection limit (MDL) but less than the practical quantitation limit (PQL). (N) (Organic)—The reported analyte is a tentatively identified compound (TIC). (N) (Inorganic)—The result for this analyte in the matrix spike sample was outside acceptance criteria.
EN	See E code and see N code.
EN*	(E) (Organic)—The result for this analyte exceeded the upper range of the instrument initial calibration curve. (E) (Inorganic) (ICPAES)—The result for this analyte in the serial dilution analysis was outside acceptance criteria. (E) (Inorganic) (GFAA)—The result for this analyte failed one or more CLP acceptance criteria as explained in the case narrative. (N) (Organic)—The reported analyte is a TIC. (N) (Inorganic)—The result for this analyte in the matrix spike sample was outside acceptance criteria. * (Inorganic)—The result for this analyte in the laboratory replicate analysis was outside acceptance criteria.

Analytical Laboratory Qualifier Codes (continued)

Code	Description
H	(Organic/Inorganic)—The required extraction or analysis holding time for this result was exceeded.
H*	(H) (Organic/Inorganic)—The required extraction or analysis holding time for this result was exceeded. * (Organic) and (Inorganic)—The result for this analyte in the laboratory control sample analysis was outside acceptance criteria.
HJ	See H code and see J code.
HJ*	(H) (Organic/Inorganic)—The required extraction or analysis holding time for this result was exceeded. (J) (Organic/General Inorganics)—The result for this analyte was greater than the MDL but less than the PQL. * (Inorganic)—The result for this analyte in the laboratory replicate analysis was outside acceptance criteria.
INS	(d15N)—The d15N of nitrate is a signature of the nitrate present in a sample. Therefore, nitrate has to be present to have a signature. A d15N value cannot be given to a blank because the blank does not have nitrate. This is different from most analytical methods, where a blank is run with the designator “nondetect” or “detected, but below detection limit.”
J	(Inorganic)—The associated numerical value is an estimated quantity. (Organic)—The associated numerical value is an estimated quantity.
J*	See J code and see * code.
JB	See J code and see B code
JN	See J code and see N code.
JN*	See J code, see N code, and see * code.
JP	See J code and see P code.
N	(Inorganic)—Spiked sample recovery was not within control limits.
N*	See N code and see * code.
N*E	See N code, see * code, and see E code.
NE	See N code and see E code.
P	Percent difference between the results on the two columns during the analysis differed by more than 40%.
PJ	See P code and see J code.
U	The material was analyzed for but was not detected above the level of the associated numeric value.
U*	See U code and see * code.
UD	See U code and see D code.
UE	See U code and see E code.
UE*	See U code, see E code, and see * code.
UEN	See U code, see E code, and see N code.

Analytical Laboratory Qualifier Codes (continued)

Code	Description
UH	See U code and see H code.
UH*	(U) (Organic/Inorganic)—The result for this analyte was not detected at the specified reporting limit. (H) (Organic/Inorganic)—The required extraction or analysis holding time for this result was exceeded. * (Inorganic)—The result for this analyte in the laboratory replicate analysis was outside acceptance criteria.
UI	(Rad) Gamma spectroscopy result should be regarded as an uncertain identification.
UN	EPA flag (Inorganic)—Compound was analyzed for but was not detected. Spiked sample recovery was not within control limits.
UN*	EPA flag (Inorganic)—See U code, see N code, and see * code.
UUI	(Rad) Gamma spectroscopy result should be regarded as an uncertain identification, and the analytical lab assigned these gamma spectroscopy results as not detected.
X	The analytical laboratory suspects the result is a nondetect despite positive quantification results.

Secondary Validation Flag Codes

Code	Description
A	The contractually required supporting documentation for this datum is absent.
I	The calculated sums are considered incomplete because of the lack of one or more congener results.
J	The analyte is classified as detected, but the reported concentration value is expected to be more uncertain than usual.
J-	The analyte is classified as detected, but the reported concentration value is expected to be more uncertain than usual with a potential negative bias.
J+	The analyte is classified as detected, but the reported concentration value is expected to be more uncertain than usual with a potential positive bias.
JN-	Presumptive evidence of the presence of the material is at an estimated quantity with a suspected negative bias.
JN+	Presumptive evidence of the presence of the material is at an estimated quantity with a suspected positive bias.
N	There is presumptive evidence of the presence of the material.
NJ	(Organic) Analyte has been tentatively identified, and the associated numerical value is estimated based upon a 1:1 response factor to the nearest eluting internal standard.
NQ	No validation qualifier flag is associated with this result, and the analyte is classified as detected.
PM	Manual review of raw data is recommended to determine if the observed noncompliances with quality acceptance criteria adversely impact data use.

Secondary Validation Flag Codes (continued)

Code	Description
R	The reported sample result is classified as rejected because of serious noncompliances regarding quality control (QC) acceptance criteria. The presence or absence of the analyte cannot be verified based on routine validation alone.
U	The analyte is classified as not detected.
UJ	The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual.

Table C-1 Ancho Canyon Previously Unreported Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field Qc Type	Suite	Method	Analyte Desc	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	04/06/11	WG	UF	CS	—	Rad	LLEE	Tritium[a]	H-3	<	-1.56	6.07E-01	2.04E+00	—	pCi/L	U	U	11-1943	CAAN-11-5485	ARSL
R-29	1170	01/07/11	WG	UF	CS	—	Rad	LLEE	Tritium[a]	H-3	<	10.98	6.07E+00	8.33E+00	—	pCi/L	—	U	11-1123	CAAN-11-3194	ARSL
R-29	1170	12/03/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	H-3	<	8.72	5.68E+00	8.30E+00	—	pCi/L	—	U	11-851	CAAN-11-2159	ARSL
R-29	1170	05/10/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	H-3	<	1.69	6.39E-01	1.92E+00	—	pCi/L	U	U	10-3112	CAWA-10-17191	ARSL
R-30	1140	04/05/11	WG	UF	CS	—	Isotope	Deuterium Ratio	Deuterium Ratio	DELTAH-2	—	-79.20	—	—	—	permil	—	—	11-1925	CAAN-11-5489	EES6
R-30	1140	12/03/10	WG	UF	CS	—	Isotope	Deuterium Ratio	Deuterium Ratio	DELTAH-2	—	-81.57	—	—	—	permil	—	—	11-801	CAAN-11-2163	EES6
R-30	1140	09/23/10	WG	UF	CS	—	Isotope	Deuterium Ratio	Deuterium Ratio	DELTAH-2	—	-79.28	—	—	—	permil	—	—	10-4728	CAAN-10-25948	EES6
R-30	1140	05/19/10	WG	UF	CS	—	Isotope	Deuterium Ratio	Deuterium Ratio	DELTAH-2	—	-79.97	—	—	—	permil	—	—	10-3227	CAAN-10-17252	EES6
R-30	1140	04/05/11	WG	F	CS	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	N15N14	—	6.10	—	—	—	permil	—	—	11-1925	CAAN-11-5490	EES6
R-30	1140	04/05/11	WG	F	DUP	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	N15N14	—	6.10	—	—	—	permil	—	—	11-1925	CAAN-11-5490	EES6
R-30	1140	12/03/10	WG	F	CS	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	N15N14	—	4.14	—	—	—	permil	—	—	11-801	CAAN-11-2164	EES6
R-30	1140	09/23/10	WG	F	CS	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	N15N14	—	4.87	—	—	—	permil	—	—	10-4728	CAAN-10-25950	EES6
R-30	1140	09/23/10	WG	F	DUP	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	N15N14	—	5.11	—	—	—	permil	—	—	10-4728	CAAN-10-25950	EES6
R-30	1140	05/19/10	WG	F	CS	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	N15N14	—	3.77	—	—	—	permil	—	—	10-3227	CAAN-10-17253	EES6
R-30	1140	04/05/11	WG	UF	CS	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	O18O16	—	-11.28	—	—	—	permil	—	—	11-1925	CAAN-11-5489	EES6
R-30	1140	12/03/10	WG	UF	CS	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	O18O16	—	-12.17	—	—	—	permil	—	—	11-801	CAAN-11-2163	EES6
R-30	1140	09/23/10	WG	UF	CS	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	O18O16	—	-11.53	—	—	—	permil	—	—	10-4728	CAAN-10-25948	EES6
R-30	1140	05/19/10	WG	UF	CS	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	O18O16	—	-11.46	—	—	—	permil	—	—	10-3227	CAAN-10-17252	EES6
R-30	1140	04/05/11	WG	UF	CS	FD	Rad	LLEE	Tritium[a]	H-3	<	-1.60	6.07E-01	2.08E+00	—	pCi/L	U	U	11-1930	CAAN-11-5492	ARSL
R-30	1140	04/05/11	WG	UF	CS	—	Rad	LLEE	Tritium[a]	H-3	<	-1.92	7.34E-01	2.49E+00	—	pCi/L	U	U	11-1930	CAAN-11-5489	ARSL
R-30	1140	12/03/10	WG	UF	CS	FD	Rad	LLEE	Tritium[a]	H-3	<	8.84	4.95E+00	6.83E+00	—	pCi/L	—	U	11-851	CAAN-11-2680	ARSL
R-30	1140	12/03/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	H-3	<	8.53	5.56E+00	8.11E+00	—	pCi/L	—	U	11-851	CAAN-11-2163	ARSL
R-30	1140	09/23/10	WG	UF	CS	FD	Rad	LLEE	Tritium[a]	H-3	<	3.07	1.05E+00	3.07E+00	—	pCi/L	U	U	10-4761	CAAN-10-25949	ARSL
R-30	1140	09/23/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	H-3	<	1.92	6.71E-01	1.92E+00	—	pCi/L	U	U	10-4761	CAAN-10-25948	ARSL
R-30	1140	09/23/10	WG	UF	CS	FD	Rad	LLEE	Tritium[a]	H-3	<	3.07	1.05E+00	3.07E+00	—	pCi/L	U	U	10-4761	CAAN-10-25949	ARSL
R-30	1140	09/23/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	H-3	<	1.92	6.71E-01	1.92E+00	—	pCi/L	U	U	10-4761	CAAN-10-25948	ARSL
R-30	1140	05/19/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	H-3	<	-2.59	7.34E-01	2.17E+00	—	pCi/L	U	U	10-3250	CAAN-10-17252	ARSL

[a] Results, 1-sigma TPUs, and MDAs for tritium analyzed by ARSL are being reviewed.

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	58.9	—	—	7.30E-01	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	61.4	—	—	7.30E-01	mg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	61.2	—	—	7.30E-01	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	61.1	—	—	7.30E-01	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	57.9	—	—	7.30E-01	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	63	—	—	7.30E-01	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:350.1	Ammonia as Nitrogen	—	0.0227	—	—	1.60E-02	mg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:350.1	Ammonia as Nitrogen	<	0.0216	—	—	1.60E-02	mg/L	J	U	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:350.1	Ammonia as Nitrogen	—	0.025	—	—	1.60E-02	mg/L	J	J	11-1041	CAAN-11-3195	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	EPA:350.1	Ammonia as Nitrogen	—	0.022	—	—	1.60E-02	mg/L	J	J	11-805	CAAN-11-2160	GELC
R-29	1170	05/10/10	WG	F	CS	—	Geninorg	EPA:350.1	Ammonia as Nitrogen	<	0.032	—	—	1.60E-02	mg/L	J	U	10-3111	CAWA-10-17192	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:300.0	Bromide	—	0.0662	—	—	6.60E-02	mg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:300.0	Bromide	<	0.2	—	—	6.60E-02	mg/L	U	U	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:300.0	Bromide	<	0.2	—	—	6.60E-02	mg/L	U	U	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	EPA:300.0	Bromide	<	0.2	—	—	6.60E-02	mg/L	U	U	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	EPA:300.0	Bromide	<	0.2	—	—	6.60E-02	mg/L	U	U	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	11.2	—	—	5.00E-02	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	10.8	—	—	5.00E-02	mg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	10.5	—	—	5.00E-02	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	11.2	—	—	5.00E-02	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	11.1	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	13.1	—	—	5.00E-02	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	11.1	—	—	5.00E-02	mg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	11	—	—	5.00E-02	mg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	11.3	—	—	5.00E-02	mg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	10.9	—	—	5.00E-02	mg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	11	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	12.7	—	—	5.00E-02	mg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.76	—	—	6.60E-02	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.95	—	—	6.60E-02	mg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.99	—	—	6.60E-02	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.92	—	—	6.60E-02	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	2	—	—	6.60E-02	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	2.22	—	—	6.60E-02	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.254	—	—	3.30E-02	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.263	—	—	3.30E-02	mg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.266	—	—	3.30E-02	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.225	—	—	3.30E-02	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.233	—	—	3.30E-02	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.263	—	—	3.30E-02	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	40.2	—	—	4.50E-01	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	39	—	—	4.50E-01	mg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	39.1	—	—	4.50E-01	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	41.1	—	—	3.50E-01	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	41	—	—	3.50E-01	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	48.6	—	—	3.50E-01	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	39.8	—	—	4.50E-01	mg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	40	—	—	4.50E-01	mg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	42.2	—	—	4.50E-01	mg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	39.9	—	—	3.50E-01	mg/L	—	—	11-1041	CAAN-11-5611	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	12/03/10	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	40.6	—	—	3.50E-01	mg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	47.2	—	—	3.50E-01	mg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.95	—	—	1.10E-01	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.96	—	—	1.10E-01	mg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.1	—	—	1.10E-01	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.17	—	—	8.50E-02	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.21	—	—	8.50E-02	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.86	—	—	8.50E-02	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.95	—	—	1.10E-01	mg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.04	—	—	1.10E-01	mg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.37	—	—	1.10E-01	mg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.09	—	—	8.50E-02	mg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.19	—	—	8.50E-02	mg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.8	—	—	8.50E-02	mg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.278	—	—	5.00E-02	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.217	—	—	5.00E-02	mg/L	J	J+	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	<	0.0282	—	—	1.00E-02	mg/L	J	U	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.249	—	—	5.00E-02	mg/L	J	J-	11-1041	CAAN-11-3195	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.258	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	05/10/10	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.357	—	—	5.00E-02	mg/L	—	J	10-3111	CAWA-10-17192	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.24	—	—	5.00E-02	µg/L	—	J+	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.236	—	—	5.00E-02	µg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.256	—	—	5.00E-02	µg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.255	—	—	5.00E-02	µg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.267	—	—	5.00E-02	µg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.215	—	—	5.00E-02	µg/L	—	J+	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.33	—	—	5.00E-02	mg/L	—	J	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.19	—	—	5.00E-02	mg/L	—	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.38	—	—	5.00E-02	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.51	—	—	5.00E-02	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.56	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.69	—	—	5.00E-02	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.22	—	—	5.00E-02	mg/L	—	J	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.28	—	—	5.00E-02	mg/L	—	J	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.44	—	—	5.00E-02	mg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.43	—	—	5.00E-02	mg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.53	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.59	—	—	5.00E-02	mg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	14.7	—	—	1.00E-01	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	14.9	—	—	1.00E-01	mg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	16.4	—	—	1.00E-01	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	16	—	—	1.00E-01	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	18.5	—	—	1.00E-01	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	20	—	—	1.00E-01	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	14	—	—	1.00E-01	mg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	15	—	—	1.00E-01	mg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	16.8	—	—	1.00E-01	mg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	15.5	—	—	1.00E-01	mg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	18.9	—	—	1.00E-01	mg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	19.2	—	—	1.00E-01	mg/L	—	—	10-4727	CAAN-10-25943	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	140	—	—	1.00E+00	µS/cm	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	148	—	—	1.00E+00	µS/cm	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	149	—	—	1.00E+00	µS/cm	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	146	—	—	1.00E+00	µS/cm	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	7.45	—	—	1.00E-01	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	9.36	—	—	1.00E-01	mg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	11.2	—	—	1.00E-01	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	9.16	—	—	1.00E-01	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	15	—	—	1.00E-01	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	22.6	—	—	1.00E-01	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	120	—	—	3.40E+00	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	136	—	—	2.40E+00	mg/L	—	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	132	—	—	2.40E+00	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	156	—	—	2.40E+00	mg/L	—	J	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	153	—	—	2.40E+00	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	162	—	—	2.40E+00	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	—	0.728	—	—	3.30E-01	mg/L	J	J	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	<	1	—	—	3.30E-01	mg/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	—	0.384	—	—	3.30E-01	mg/L	J	J	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	—	0.612	—	—	3.30E-01	mg/L	J	J	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	<	0.419	—	—	3.30E-01	mg/L	J	U	11-805	CAAN-11-2159	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:365.4	Total Phosphate as Phosphorus	—	0.0398	—	—	1.50E-02	mg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:365.4	Total Phosphate as Phosphorus	<	0.0157	—	—	1.50E-02	mg/L	J	U	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:365.4	Total Phosphate as Phosphorus	<	0.05	—	—	1.50E-02	mg/L	U	U	11-1041	CAAN-11-3195	GELC
R-29	1170	12/03/10	WG	F	CS	—	Geninorg	EPA:365.4	Total Phosphate as Phosphorus	—	0.051	—	—	1.50E-02	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	05/10/10	WG	F	CS	—	Geninorg	EPA:365.4	Total Phosphate as Phosphorus	<	0.05	—	—	1.50E-02	mg/L	U	U	10-3111	CAWA-10-17192	GELC
R-29	1170	09/21/11	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.76	—	—	1.00E-02	SU	H	J-	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.94	—	—	1.00E-02	SU	H	J-	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.76	—	—	1.00E-02	SU	H	J-	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.94	—	—	1.00E-02	SU	H	J-	11-1041	CAAN-11-5612	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Isotope	Deuterium Ratio	Deuterium Ratio	—	-79.17	—	—	—	permil	—	—	11-2641	CAAN-11-13955	EES6
R-29	1170	04/06/11	WG	UF	CS	—	Isotope	Deuterium Ratio	Deuterium Ratio	—	-81.97	—	—	—	permil	—	—	11-1947	CAAN-11-5485	EES6
R-29	1170	01/07/11	WG	UF	CS	—	Isotope	Deuterium Ratio	Deuterium Ratio	—	-81.28	—	—	—	permil	—	—	11-1038	CAAN-11-3194	EES6
R-29	1170	12/03/10	WG	UF	CS	—	Isotope	Deuterium Ratio	Deuterium Ratio	—	-78.53	—	—	—	permil	—	—	11-801	CAAN-11-2159	EES6
R-29	1170	05/10/10	WG	UF	CS	—	Isotope	Deuterium Ratio	Deuterium Ratio	—	-79.04	—	—	—	permil	—	—	10-3158	CAWA-10-17191	EES6
R-29	1170	05/10/10	WG	UF	DUP	—	Isotope	Deuterium Ratio	Deuterium Ratio	—	-79.16	—	—	—	permil	—	—	10-3158	CAWA-10-17191	EES6
R-29	1170	06/10/11	WG	F	CS	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	—	4.68	—	—	—	permil	—	—	11-2641	CAAN-11-13956	EES6
R-29	1170	04/06/11	WG	F	CS	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	—	3.91	—	—	—	permil	—	—	11-1947	CAAN-11-5486	EES6
R-29	1170	01/07/11	WG	F	CS	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	—	4.30	—	—	—	permil	—	—	11-1038	CAAN-11-3195	EES6
R-29	1170	01/07/11	WG	F	DUP	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	—	4.46	—	—	—	permil	—	—	11-1038	CAAN-11-3195	EES6
R-29	1170	12/03/10	WG	F	CS	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	—	4.13	—	—	—	permil	—	—	11-801	CAAN-11-2160	EES6
R-29	1170	12/03/10	WG	F	DUP	—	Isotope	Nitrogen Ratio	N-15/N-14 Ratio	—	4.03	—	—	—	permil	—	—	11-801	CAAN-11-2160	EES6
R-29	1170	06/10/11	WG	UF	CS	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	—	-11.24	—	—	—	permil	—	—	11-2641	CAAN-11-13955	EES6
R-29	1170	04/06/11	WG	UF	CS	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	—	-11.27	—	—	—	permil	—	—	11-1947	CAAN-11-5485	EES6
R-29	1170	01/07/11	WG	UF	CS	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	—	-11.53	—	—	—	permil	—	—	11-1038	CAAN-11-3194	EES6
R-29	1170	12/03/10	WG	UF	CS	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	—	-11.64	—	—	—	permil	—	—	11-801	CAAN-11-2159	EES6
R-29	1170	05/10/10	WG	UF	CS	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	—	-11.51	—	—	—	permil	—	—	10-3158	CAWA-10-17191	EES6
R-29	1170	05/10/10	WG	UF	DUP	—	Isotope	Oxygen Ratio	O-18/O-16 Ratio	—	-11.35	—	—	—	permil	—	—	10-3158	CAWA-10-17191	EES6
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6010B	Aluminum	<	200	—	—	6.80E+01	µg/L	U	U	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6010B	Aluminum	<	200	—	—	6.80E+01	µg/L	U	U	11-1950	CAAN-11-5486	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6010B	Aluminum	<	200	—	—	6.80E+01	µg/L	U	U	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Aluminum	<	200	—	—	6.80E+01	µg/L	U	U	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Aluminum	<	200	—	—	6.80E+01	µg/L	U	U	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6010B	Aluminum	—	210	—	—	6.80E+01	µg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6010B	Aluminum	—	287	—	—	6.80E+01	µg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6010B	Aluminum	—	634	—	—	6.80E+01	µg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6010B	Aluminum	<	200	—	—	6.80E+01	µg/L	U	U	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Aluminum	—	325	—	—	6.80E+01	µg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Aluminum	—	95	—	—	6.80E+01	µg/L	J	J	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	19.6	—	—	1.00E+00	µg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	19	—	—	1.00E+00	µg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	19.1	—	—	1.00E+00	µg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	20.1	—	—	1.00E+00	µg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	21.5	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	30.8	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	21	—	—	1.00E+00	µg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	21.2	—	—	1.00E+00	µg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	22.2	—	—	1.00E+00	µg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	19.8	—	—	1.00E+00	µg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	23.3	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	32.9	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6020	Chromium	<	10	—	—	2.00E+00	µg/L	U	U	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6020	Chromium	—	2.04	—	—	2.00E+00	µg/L	J	J	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6020	Chromium	<	10	—	—	2.00E+00	µg/L	U	U	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6020	Chromium	<	10	—	—	2.50E+00	µg/L	U	U	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6020	Chromium	—	2.57	—	—	2.50E+00	µg/L	J	J	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	4.05	—	—	2.00E+00	µg/L	J	J	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	4.62	—	—	2.00E+00	µg/L	J	J	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	8.93	—	—	2.00E+00	µg/L	J	J	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6020	Chromium	<	10	—	—	2.00E+00	µg/L	U	U	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	4.64	—	—	2.50E+00	µg/L	J	J	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	3.49	—	—	2.50E+00	µg/L	J	J	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Metals	SW-846:6010B	Cobalt	—	1.16	—	—	1.00E+00	µg/L	J	J	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6010B	Cobalt	—	1.19	—	—	1.00E+00	µg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6010B	Cobalt	—	1.29	—	—	1.00E+00	µg/L	J	J	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6010B	Cobalt	—	1.09	—	—	1.00E+00	µg/L	J	J	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Cobalt	<	5	—	—	1.00E+00	µg/L	U	U	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Cobalt	—	1.25	—	—	1.00E+00	µg/L	J	J	10-4727	CAAN-10-25942	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6010B	Cobalt	<	5	—	—	1.00E+00	µg/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6010B	Cobalt	<	5	—	—	1.00E+00	µg/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6010B	Cobalt	—	1.04	—	—	1.00E+00	µg/L	J	J	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Cobalt	<	5	—	—	1.00E+00	µg/L	U	U	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Cobalt	—	1.56	—	—	1.00E+00	µg/L	J	J	10-4727	CAAN-10-25943	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6010B	Iron	—	55.3	—	—	3.00E+01	µg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6010B	Iron	<	128	—	—	3.00E+01	µg/L	—	U	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6010B	Iron	—	53.2	—	—	3.00E+01	µg/L	J	J	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Iron	—	70.7	—	—	3.00E+01	µg/L	J	J	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Iron	—	152	—	—	3.00E+01	µg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6010B	Iron	—	1080	—	—	3.00E+01	µg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6010B	Iron	—	509	—	—	3.00E+01	µg/L	—	—	11-2645	CAAN-11-13955	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6010B	Iron	—	694	—	—	3.00E+01	µg/L	—	J	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6010B	Iron	—	112	—	—	3.00E+01	µg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Iron	—	479	—	—	3.00E+01	µg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Iron	—	791	—	—	3.00E+01	µg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Metals	SW-846:6010B	Manganese	—	23.6	—	—	2.00E+00	µg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6010B	Manganese	—	28.1	—	—	2.00E+00	µg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6010B	Manganese	—	34	—	—	2.00E+00	µg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6010B	Manganese	—	47.1	—	—	2.00E+00	µg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Manganese	—	71.2	—	—	2.00E+00	µg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Manganese	—	214	—	—	2.00E+00	µg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6010B	Manganese	—	35	—	—	2.00E+00	µg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6010B	Manganese	—	36.9	—	—	2.00E+00	µg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6010B	Manganese	—	45.6	—	—	2.00E+00	µg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6010B	Manganese	—	44.3	—	—	2.00E+00	µg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Manganese	—	78.4	—	—	2.00E+00	µg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Manganese	—	223	—	—	2.00E+00	µg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	2.96	—	—	1.70E-01	µg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	2.72	—	—	1.70E-01	µg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	3.05	—	—	1.70E-01	µg/L	—	J	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	3.74	—	—	1.70E-01	µg/L	—	J	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	4.89	—	—	1.00E-01	µg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	11.5	—	—	1.00E-01	µg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	2.84	—	—	1.70E-01	µg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	2.86	—	—	1.70E-01	µg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	3.16	—	—	1.70E-01	µg/L	—	J	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	3.64	—	—	1.70E-01	µg/L	—	J	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	5.17	—	—	1.00E-01	µg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	11.1	—	—	1.00E-01	µg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	1.24	—	—	5.00E-01	µg/L	J	J	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	1.19	—	—	5.00E-01	µg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	1.22	—	—	5.00E-01	µg/L	J	J	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	1.08	—	—	5.00E-01	µg/L	J	J	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	1.25	—	—	5.00E-01	µg/L	J	J	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	2.01	—	—	5.00E-01	µg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	2.56	—	—	5.00E-01	µg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	2.73	—	—	5.00E-01	µg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	4.15	—	—	5.00E-01	µg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	1.16	—	—	5.00E-01	µg/L	J	J	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	2.42	—	—	5.00E-01	µg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	2.75	—	—	5.00E-01	µg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	64.4	—	—	5.30E-02	mg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	61.4	—	—	5.30E-02	mg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	60.4	—	—	5.30E-02	mg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	59.9	—	—	5.30E-02	mg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	60.9	—	—	5.30E-02	mg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	56.1	—	—	5.30E-02	mg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	69.2	—	—	1.00E+00	µg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	65.8	—	—	1.00E+00	µg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	64	—	—	1.00E+00	µg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	70.9	—	—	1.00E+00	µg/L	—	—	11-1041	CAAN-11-5612	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	71	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	95.3	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	66.7	—	—	1.00E+00	µg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	67.5	—	—	1.00E+00	µg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	70.3	—	—	1.00E+00	µg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	68.9	—	—	1.00E+00	µg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	72	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	93.5	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.545	—	—	6.70E-02	µg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.472	—	—	6.70E-02	µg/L	—	—	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.62	—	—	6.70E-02	µg/L	—	—	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.655	—	—	6.70E-02	µg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.727	—	—	5.00E-02	µg/L	—	—	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	1.09	—	—	5.00E-02	µg/L	—	—	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.607	—	—	6.70E-02	µg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.573	—	—	6.70E-02	µg/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.734	—	—	6.70E-02	µg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.667	—	—	6.70E-02	µg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.845	—	—	5.00E-02	µg/L	—	—	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	1.16	—	—	5.00E-02	µg/L	—	—	10-4727	CAAN-10-25943	GELC
R-29	1170	09/21/11	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	5.3	—	—	1.00E+00	µg/L	—	—	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	4.47	—	—	1.00E+00	µg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	4.24	—	—	1.00E+00	µg/L	J	J	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	5.24	—	—	1.00E+00	µg/L	—	—	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	4.71	—	—	1.00E+00	µg/L	J	J	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	3.63	—	—	1.00E+00	µg/L	J	J	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	5.99	—	—	1.00E+00	µg/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	4.93	—	—	1.00E+00	µg/L	J	J	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	4.95	—	—	1.00E+00	µg/L	J	J	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	5.23	—	—	1.00E+00	µg/L	—	—	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	4.91	—	—	1.00E+00	µg/L	J	J	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	3.86	—	—	1.00E+00	µg/L	J	J	10-4727	CAAN-10-25943	GELC
R-29	1170	06/10/11	WG	F	CS	—	Metals	SW-846:6010B	Zinc	<	10	—	—	3.30E+00	µg/L	U	U	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	CS	—	Metals	SW-846:6010B	Zinc	—	4.5	—	—	3.30E+00	µg/L	J	J	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	CS	—	Metals	SW-846:6010B	Zinc	—	6.16	—	—	3.30E+00	µg/L	J	J	11-1041	CAAN-11-5612	GELC
R-29	1170	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Zinc	<	10	—	—	3.30E+00	µg/L	U	U	11-805	CAAN-11-2160	GELC
R-29	1170	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Zinc	<	10	—	—	3.30E+00	µg/L	U	U	10-4727	CAAN-10-25942	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	—	4.79	—	—	3.30E+00	µg/L	J	J	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	—	4.98	—	—	3.30E+00	µg/L	J	J	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	—	11.2	—	—	3.30E+00	µg/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	—	3.77	—	—	3.30E+00	µg/L	J	J	11-1041	CAAN-11-5611	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	—	5.38	—	—	3.30E+00	µg/L	J	J	11-805	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	—	9.72	—	—	3.30E+00	µg/L	J	J	10-4727	CAAN-10-25943	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Actinium-228	<	-3.23	2.10E+00	1.90E+01	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	0	1.43E-03	3.60E-02	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Americium-241	<	-3.52	3.27E+00	3.30E+01	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	0.0217	3.03E-03	2.80E-02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	0.00862	2.53E-03	4.70E-02	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	-0.00295	9.33E-04	3.10E-02	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	-0.00812	1.43E-03	2.90E-02	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	05/10/10	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	0.00135	5.33E-04	2.20E-02	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Bismuth-212	<	-2.18	5.33E+00	5.40E+01	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Bismuth-214	<	1.81	1.23E+00	1.20E+01	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Cesium-134	<	-0.133	5.67E-01	5.50E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	-2.56	5.00E-01	4.30E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	-0.0529	5.00E-01	5.00E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	-1.17	5.00E-01	4.60E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	-3.26	6.00E-01	5.60E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	1.53	5.00E-01	5.10E+00	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	0.089	3.67E-01	3.50E+00	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	0.713	5.00E-01	5.00E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	5.25	6.33E-01	7.50E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	-0.831	4.67E-01	4.40E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	-2.74	5.33E-01	4.10E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	-1.22	5.67E-01	5.10E+00	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	-0.599	3.33E-01	3.00E+00	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	0.912	2.03E-01	2.00E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	0.0244	1.63E-01	2.40E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	0.995	1.57E-01	1.30E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	0.415	1.73E-01	2.10E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	0.857	2.30E-01	2.40E+00	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	3.21	3.67E-01	2.20E+00	—	pCi/L	—	U	10-3111	CAWA-10-17191	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	EPA:900	Gross beta	<	0.779	2.43E-01	2.50E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:900	Gross beta	<	0.0121	2.17E-01	2.50E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	EPA:900	Gross beta	—	3.24	3.17E-01	2.80E+00	—	pCi/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	EPA:900	Gross beta	<	1.81	2.57E-01	2.40E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	EPA:900	Gross beta	<	0.632	2.10E-01	2.20E+00	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	EPA:900	Gross beta	—	4.04	3.67E-01	2.90E+00	—	pCi/L	—	—	10-3111	CAWA-10-17191	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Lead-212	<	-7.7	1.00E+00	8.70E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Lead-214	<	-8.84	1.20E+00	1.00E+01	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	3.93	9.67E-01	9.80E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	4.54	9.33E-01	9.60E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	-4.26	1.20E+00	1.10E+01	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	-2.63	1.03E+00	1.00E+01	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	1.12	7.67E-01	7.30E+00	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	-0.00177	2.13E-03	1.80E-02	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	-4.34E-10	1.20E-03	2.20E-02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	6.25E-10	2.13E-03	3.50E-02	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	0	8.33E-04	1.90E-02	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	0.00185	6.33E-04	2.10E-02	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	0.00551	1.07E-03	2.90E-02	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	-0.00177	1.03E-03	3.40E-02	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	-0.00546	1.83E-03	3.30E-02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	1.25E-09	2.77E-03	5.10E-02	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	-0.0087	1.93E-03	3.50E-02	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	2.2E-10	1.23E-03	3.80E-02	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	-0.00184	1.07E-03	2.70E-02	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	-6.17	5.67E+00	5.80E+01	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	71.8	8.00E+00	3.50E+01	—	pCi/L	—	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	9.45	6.33E+00	6.50E+01	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	01/07/11	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	8.12	7.00E+00	7.20E+01	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	-3.51	6.00E+00	6.20E+01	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	6.72	4.67E+00	5.30E+01	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Protactinium-234m	<	36.6	6.00E+01	6.00E+02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	-1.31	5.00E-01	4.70E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	-1.29	4.33E-01	4.00E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	-0.421	5.00E-01	4.70E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	-0.396	5.33E-01	4.90E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	-4.09	4.67E-01	3.10E+00	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	-1.1	4.00E-01	3.60E+00	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	0.00329	4.67E-02	4.80E-01	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	0.207	5.00E-02	4.80E-01	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	0.157	5.33E-02	5.30E-01	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	0.0218	4.67E-02	5.00E-01	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	0.0903	4.67E-02	4.90E-01	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	-0.124	4.33E-02	4.80E-01	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Thallium-208	<	-0.191	5.33E-01	4.90E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Thorium-234	<	-133	3.33E+01	3.20E+02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	-0.89404	2.87E-01	2.91E+00	—	pCi/L	U	U	11-2731	CAAN-11-13955	ARSL
R-29	1170	04/06/11	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	-1.56457	2.02E-01	2.04E+00	—	pCi/L	U	U	11-1943	CAAN-11-5485	ARSL
R-29	1170	01/07/11	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	10.98392	2.02E+00	8.33E+00	—	pCi/L	—	U	11-1123	CAAN-11-3194	ARSL
R-29	1170	12/03/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	8.71689	1.89E+00	8.30E+00	—	pCi/L	—	U	11-851	CAAN-11-2159	ARSL
R-29	1170	05/10/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	1.69229	2.13E-01	1.92E+00	—	pCi/L	U	U	10-3112	CAWA-10-17191	ARSL
R-29	1170	09/21/11	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.348	1.33E-02	5.00E-02	—	pCi/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.246	1.07E-02	7.20E-02	—	pCi/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.339	1.37E-02	4.20E-02	—	pCi/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.389	1.30E-02	4.10E-02	—	pCi/L	—	—	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.401	1.47E-02	6.00E-02	—	pCi/L	—	—	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.746	2.37E-02	4.40E-02	—	pCi/L	—	—	10-3111	CAWA-10-17191	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	EPA:901.1	Uranium-235	<	-14.5	3.67E+00	3.20E+01	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.0168	2.53E-03	3.60E-02	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.00971	1.87E-03	4.10E-02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.0224	3.10E-03	3.40E-02	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.0206	2.47E-03	3.10E-02	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.00703	2.87E-03	3.90E-02	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.0165	2.50E-03	4.00E-02	—	pCi/L	U	U	10-3111	CAWA-10-17191	GELC
R-29	1170	09/21/11	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.193	9.00E-03	4.30E-02	—	pCi/L	—	—	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.154	7.67E-03	3.20E-02	—	pCi/L	—	—	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.287	1.23E-02	4.60E-02	—	pCi/L	—	—	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.179	7.67E-03	2.90E-02	—	pCi/L	—	—	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.259	1.10E-02	4.00E-02	—	pCi/L	—	—	11-804	CAAN-11-2159	GELC
R-29	1170	05/10/10	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.41	1.50E-02	4.00E-02	—	pCi/L	—	—	10-3111	CAWA-10-17191	GELC
R-29	1170	06/10/11	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(a)pyrene	—	0.29	—	—	2.00E-01	µg/L	J	J	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(a)pyrene	<	1.2	—	—	2.40E-01	µg/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(a)pyrene	<	1.06	—	—	2.10E-01	µg/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(a)pyrene	<	1.12	—	—	2.30E-01	µg/L	U	U	11-803	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(a)pyrene	<	1.02	—	—	2.00E-01	µg/L	U	U	10-4726	CAAN-10-25943	GELC
R-29	1170	06/10/11	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(k)fluoranthene	—	0.25	—	—	2.00E-01	µg/L	J	J	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(k)fluoranthene	<	1.2	—	—	2.40E-01	µg/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(k)fluoranthene	<	1.06	—	—	2.10E-01	µg/L	U	U	11-1041	CAAN-11-3194	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	12/03/10	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(k)fluoranthene	<	1.12	—	—	2.30E-01	µg/L	U	U	11-803	CAAN-11-2159	GELC
R-29	1170	09/23/10	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(k)fluoranthene	<	1.02	—	—	2.00E-01	µg/L	U	U	10-4726	CAAN-10-25943	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	55.3	—	—	7.30E-01	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	56.6	—	—	7.30E-01	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	54.6	—	—	7.30E-01	mg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	53.9	—	—	7.30E-01	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	53.6	—	—	7.30E-01	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	EPA:310.1	Alkalinity-CO3+HCO3	—	52.7	—	—	7.30E-01	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	10.3	—	—	5.00E-02	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	9.84	—	—	5.00E-02	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	9.48	—	—	5.00E-02	mg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	9.25	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	9.72	—	—	5.00E-02	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	SW-846:6010B	Calcium	—	9.25	—	—	5.00E-02	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	10.5	—	—	5.00E-02	mg/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	10.4	—	—	5.00E-02	mg/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	10.3	—	—	5.00E-02	mg/L	—	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	9.22	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	9.84	—	—	5.00E-02	mg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Calcium	—	9.53	—	—	5.00E-02	mg/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.56	—	—	6.60E-02	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.69	—	—	6.60E-02	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.69	—	—	6.60E-02	mg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.56	—	—	6.60E-02	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.61	—	—	6.60E-02	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	EPA:300.0	Chloride	—	1.53	—	—	6.60E-02	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.259	—	—	3.30E-02	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.247	—	—	3.30E-02	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.289	—	—	3.30E-02	mg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.232	—	—	3.30E-02	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.227	—	—	3.30E-02	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	EPA:300.0	Fluoride	—	0.182	—	—	3.30E-02	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	38.3	—	—	4.50E-01	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	36.8	—	—	4.50E-01	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	35.7	—	—	4.50E-01	mg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	34.7	—	—	3.50E-01	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	36.4	—	—	3.50E-01	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	SM:A2340B	Hardness	—	34.3	—	—	3.50E-01	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	38.8	—	—	4.50E-01	mg/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	39	—	—	4.50E-01	mg/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	38.4	—	—	4.50E-01	mg/L	—	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	34.7	—	—	3.50E-01	mg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	36.9	—	—	3.50E-01	mg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Geninorg	SM:A2340B	Hardness	—	35.2	—	—	3.50E-01	mg/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.06	—	—	1.10E-01	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.97	—	—	1.10E-01	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.92	—	—	1.10E-01	mg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.83	—	—	8.50E-02	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.95	—	—	8.50E-02	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.72	—	—	8.50E-02	mg/L	—	—	10-3230	CAAN-10-17253	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	09/14/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.06	—	—	1.10E-01	mg/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.2	—	—	1.10E-01	mg/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	3.12	—	—	1.10E-01	mg/L	—	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.84	—	—	8.50E-02	mg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.99	—	—	8.50E-02	mg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Magnesium	—	2.77	—	—	8.50E-02	mg/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.29	—	—	5.00E-02	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.665	—	—	5.00E-02	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	<	0.0287	—	—	1.00E-02	mg/L	J	U	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.271	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.47	—	—	5.00E-02	mg/L	—	J	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	EPA:353.2	Nitrate-Nitrite as Nitrogen	—	0.344	—	—	5.00E-02	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.243	—	—	5.00E-02	µg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.234	—	—	5.00E-02	µg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.255	—	—	5.00E-02	µg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.265	—	—	5.00E-02	µg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.244	—	—	5.00E-02	µg/L	—	J+	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	SW-846:6850	Perchlorate	—	0.228	—	—	5.00E-02	µg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.11	—	—	5.00E-02	mg/L	—	J	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.25	—	—	5.00E-02	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.2	—	—	5.00E-02	mg/L	—	J	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.22	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.09	—	—	5.00E-02	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.09	—	—	5.00E-02	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.12	—	—	5.00E-02	mg/L	—	J	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.34	—	—	5.00E-02	mg/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.37	—	—	5.00E-02	mg/L	—	J	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.18	—	—	5.00E-02	mg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.14	—	—	5.00E-02	mg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Potassium	—	1.19	—	—	5.00E-02	mg/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	11.2	—	—	1.00E-01	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	11.2	—	—	1.00E-01	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	11	—	—	1.00E-01	mg/L	N	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	10.7	—	—	1.00E-01	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	11.5	—	—	1.00E-01	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	SW-846:6010B	Sodium	—	12.3	—	—	1.00E-01	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	11.4	—	—	1.00E-01	mg/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	11.7	—	—	1.00E-01	mg/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	11.5	—	—	1.00E-01	mg/L	N	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	10.7	—	—	1.00E-01	mg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	11.5	—	—	1.00E-01	mg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Geninorg	SW-846:6010B	Sodium	—	11.4	—	—	1.00E-01	mg/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	122	—	—	1.00E+00	µS/cm	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	116	—	—	1.00E+00	µS/cm	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	121	—	—	1.00E+00	µS/cm	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	123	—	—	1.00E+00	µS/cm	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	123	—	—	1.00E+00	µS/cm	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	EPA:120.1	Specific Conductance	—	130	—	—	1.00E+00	µS/cm	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	2.02	—	—	1.00E-01	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	2.27	—	—	1.00E-01	mg/L	—	—	11-2670	CAAN-11-13958	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	2.46	—	—	1.00E-01	mg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	2.6	—	—	1.00E-01	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	3.4	—	—	1.00E-01	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	EPA:300.0	Sulfate	—	4.31	—	—	1.00E-01	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	116	—	—	3.40E+00	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	133	—	—	2.40E+00	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	124	—	—	2.40E+00	mg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	124	—	—	2.40E+00	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	123	—	—	2.40E+00	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	EPA:160.1	Total Dissolved Solids	—	134	—	—	2.40E+00	mg/L	—	J	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	—	0.689	—	—	3.30E-01	mg/L	J	J	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	<	1	—	—	3.30E-01	mg/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	—	1.48	—	—	3.30E-01	mg/L	—	—	11-1928	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	<	1	—	—	3.30E-01	mg/L	U	U	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Geninorg	SW-846:9060	Total Organic Carbon	—	0.706	—	—	3.30E-01	mg/L	J	J	10-4727	CAAN-10-25948	GELC
R-30	1140	09/14/11	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.66	—	—	1.00E-02	SU	H	J-	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.88	—	—	1.00E-02	SU	H	J-	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.91	—	—	1.00E-02	SU	H	J-	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.97	—	—	1.00E-02	SU	H	J-	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.94	—	—	1.00E-02	SU	H	J-	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Geninorg	EPA:150.1	pH	—	7.95	—	—	1.00E-02	SU	H	J-	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	14.5	—	—	1.00E+00	µg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	14.4	—	—	1.00E+00	µg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	13.6	—	—	1.00E+00	µg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	14.5	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	15.8	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Metals	SW-846:6010B	Barium	—	15.9	—	—	1.00E+00	µg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	14.9	—	—	1.00E+00	µg/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	15.2	—	—	1.00E+00	µg/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	14.8	—	—	1.00E+00	µg/L	—	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	14.8	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	16.5	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Metals	SW-846:6010B	Barium	—	16.8	—	—	1.00E+00	µg/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	F	CS	—	Metals	SW-846:6020	Chromium	—	4.18	—	—	2.00E+00	µg/L	J	J	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Metals	SW-846:6020	Chromium	—	3.72	—	—	2.00E+00	µg/L	J	J	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Metals	SW-846:6020	Chromium	<	10	—	—	2.50E+00	µg/L	U	U	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Metals	SW-846:6020	Chromium	—	2.8	—	—	2.50E+00	µg/L	J	J	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Metals	SW-846:6020	Chromium	—	3.81	—	—	2.50E+00	µg/L	J	J	10-3230	CAAN-10-17253	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	3.41	—	—	2.00E+00	µg/L	J	J	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	4.97	—	—	2.00E+00	µg/L	J	J	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	7.02	—	—	2.50E+00	µg/L	J	J	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	2.93	—	—	2.50E+00	µg/L	J	J	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Metals	SW-846:6020	Chromium	—	4.09	—	—	2.50E+00	µg/L	J	J	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	1.33	—	—	1.70E-01	µg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	1.33	—	—	1.70E-01	µg/L	—	J	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	1.37	—	—	1.70E-01	µg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	1.31	—	—	1.00E-01	µg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	1.26	—	—	1.00E-01	µg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Metals	SW-846:6020	Molybdenum	—	1.34	—	—	1.00E-01	µg/L	—	J	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	1.25	—	—	1.70E-01	µg/L	—	—	11-3588	CAAN-11-27018	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	06/15/11	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	1.26	—	—	1.70E-01	µg/L	—	J	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	1.29	—	—	1.70E-01	µg/L	—	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	2.41	—	—	1.00E-01	µg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	1.26	—	—	1.00E-01	µg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Metals	SW-846:6020	Molybdenum	—	1.46	—	—	1.00E-01	µg/L	—	J	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	0.722	—	—	5.00E-01	µg/L	J	J	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Metals	SW-846:6020	Nickel	<	1.46	—	—	5.00E-01	µg/L	J	U	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	1.1	—	—	5.00E-01	µg/L	J	J	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	0.618	—	—	5.00E-01	µg/L	J	J	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Metals	SW-846:6020	Nickel	—	0.609	—	—	5.00E-01	µg/L	J	J	10-3230	CAAN-10-17253	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	1.08	—	—	5.00E-01	µg/L	J	J	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Metals	SW-846:6020	Nickel	<	1.78	—	—	5.00E-01	µg/L	J	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	1.31	—	—	5.00E-01	µg/L	J	J	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	0.795	—	—	5.00E-01	µg/L	J	J	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Metals	SW-846:6020	Nickel	—	0.649	—	—	5.00E-01	µg/L	J	J	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	69.4	—	—	5.30E-02	mg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	67.4	—	—	5.30E-02	mg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	61.6	—	—	5.30E-02	mg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	63.5	—	—	5.30E-02	mg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	65.2	—	—	5.30E-02	mg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Metals	SW-846:6010B	Silicon Dioxide	—	64	—	—	5.30E-01	mg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	50.5	—	—	1.00E+00	µg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	48.1	—	—	1.00E+00	µg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	46.8	—	—	1.00E+00	µg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	45.3	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	47.9	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Metals	SW-846:6010B	Strontium	—	48.2	—	—	1.00E+00	µg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	51.3	—	—	1.00E+00	µg/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	50.8	—	—	1.00E+00	µg/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	49.4	—	—	1.00E+00	µg/L	—	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	44.9	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	48.2	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Metals	SW-846:6010B	Strontium	—	47.4	—	—	1.00E+00	µg/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.515	—	—	6.70E-02	µg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.489	—	—	6.70E-02	µg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.53	—	—	6.70E-02	µg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.5	—	—	5.00E-02	µg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Metals	SW-846:6020	Uranium	—	0.611	—	—	5.00E-02	µg/L	—	—	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Metals	SW-846:6020	Uranium	<	0.61	—	—	5.00E-02	µg/L	—	U	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.501	—	—	6.70E-02	µg/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.456	—	—	6.70E-02	µg/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.531	—	—	6.70E-02	µg/L	—	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.481	—	—	5.00E-02	µg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Metals	SW-846:6020	Uranium	—	0.588	—	—	5.00E-02	µg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Metals	SW-846:6020	Uranium	<	0.67	—	—	5.00E-02	µg/L	—	U	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	7.97	—	—	1.00E+00	µg/L	—	—	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	6.44	—	—	1.00E+00	µg/L	—	—	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	5.58	—	—	1.00E+00	µg/L	—	—	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	6.36	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	6.31	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25950	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	05/19/10	WG	F	CS	—	Metals	SW-846:6010B	Vanadium	—	6.34	—	—	1.00E+00	µg/L	—	—	10-3230	CAAN-10-17253	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	7.37	—	—	1.00E+00	µg/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	7.09	—	—	1.00E+00	µg/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	6.21	—	—	1.00E+00	µg/L	—	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	5.92	—	—	1.00E+00	µg/L	—	—	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	6.62	—	—	1.00E+00	µg/L	—	—	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Metals	SW-846:6010B	Vanadium	—	6.14	—	—	1.00E+00	µg/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	F	CS	—	Metals	SW-846:6010B	Zinc	—	3.34	—	—	3.30E+00	µg/L	J	J	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	CS	—	Metals	SW-846:6010B	Zinc	<	10	—	—	3.30E+00	µg/L	U	U	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	CS	—	Metals	SW-846:6010B	Zinc	<	10	—	—	3.30E+00	µg/L	U	U	11-805	CAAN-11-2164	GELC
R-30	1140	09/23/10	WG	F	CS	—	Metals	SW-846:6010B	Zinc	<	10	—	—	3.30E+00	µg/L	U	U	10-4727	CAAN-10-25950	GELC
R-30	1140	05/19/10	WG	F	CS	—	Metals	SW-846:6010B	Zinc	<	10	—	—	3.30E+00	µg/L	U	U	10-3230	CAAN-10-17253	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	<	10	—	—	3.30E+00	µg/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	<	10	—	—	3.30E+00	µg/L	U	U	11-805	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	—	3.68	—	—	3.30E+00	µg/L	J	J	10-4727	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Metals	SW-846:6010B	Zinc	—	5.24	—	—	3.30E+00	µg/L	J	J	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Actinium-228	<	-1.07	2.10E+00	2.00E+01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	0.00872	1.53E-03	2.90E-02	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	0.0105	1.43E-03	2.50E-02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Americium-241	<	-30	3.67E+00	3.20E+01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	0.00204	1.17E-03	3.30E-02	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	-0.00483	1.53E-03	2.70E-02	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	-0.00492	1.20E-03	3.30E-02	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	HASL-300	Americium-241	<	0.0112	1.53E-03	2.50E-02	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Bismuth-212	<	4.22	8.33E+00	8.40E+01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Bismuth-214	<	6.86	1.43E+00	1.50E+01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Cesium-134	<	-2.99	5.67E-01	4.50E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	-3.91	6.33E-01	5.50E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	3.12	5.33E-01	5.90E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	0.861	4.33E-01	4.60E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	0.0456	5.67E-01	5.60E+00	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	-1.24	5.33E-01	5.10E+00	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	EPA:901.1	Cesium-137	<	-1.6	4.33E-01	4.10E+00	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	-0.756	5.00E-01	4.60E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	-2.35	5.00E-01	3.80E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	0.535	4.00E-01	4.20E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	-0.146	5.67E-01	5.80E+00	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	2.99	6.33E-01	7.10E+00	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	EPA:901.1	Cobalt-60	<	-0.82	4.00E-01	3.60E+00	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	-0.0739	1.27E-01	2.10E+00	—	pCi/L	U	UJ	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	0.593	2.07E-01	2.30E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	0.0865	1.57E-01	2.20E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	EPA:900	Gross alpha	—	10.4	6.67E-01	2.30E+00	—	pCi/L	—	—	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	EPA:900	Gross alpha	<	0.876	2.13E-01	2.10E+00	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	EPA:900	Gross alpha	—	3.95	4.00E-01	2.20E+00	—	pCi/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	EPA:900	Gross beta	<	1.69	3.33E-01	3.40E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:900	Gross beta	<	0.128	2.73E-01	3.00E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	EPA:900	Gross beta	<	1.84	2.53E-01	2.30E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	EPA:900	Gross beta	—	6	4.00E-01	2.40E+00	—	pCi/L	—	—	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	EPA:900	Gross beta	<	0.612	2.20E-01	2.30E+00	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	05/19/10	WG	UF	CS	—	Rad	EPA:900	Gross beta	—	3.88	2.97E-01	2.00E+00	—	pCi/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Lead-212	<	-0.567	1.40E+00	1.50E+01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Lead-214	<	5.74	1.90E+00	1.40E+01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	-0.74	9.33E-01	9.00E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	0.127	9.00E-01	9.10E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	-0.931	1.00E+00	1.00E+01	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	-3.29	1.03E+00	9.50E+00	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	EPA:901.1	Neptunium-237	<	-2.18	7.67E-01	7.30E+00	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	-0.00571	1.90E-03	2.90E-02	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	-0.00207	9.67E-04	3.10E-02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	0.00458	3.33E-03	3.10E-02	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	0	7.00E-04	2.40E-02	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	-0.00341	1.00E-03	1.90E-02	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-238	<	0.00614	1.20E-03	3.20E-02	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	0.00285	2.53E-03	5.50E-02	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	-0.0062	1.53E-03	4.30E-02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	5.46E-10	1.87E-03	4.40E-02	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	0.00207	1.53E-03	4.30E-02	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	-0.0102	1.80E-03	3.30E-02	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	HASL-300	Plutonium-239/240	<	-0.00204	2.03E-03	3.00E-02	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	-41.1	5.67E+00	4.90E+01	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	-18.5	7.33E+00	6.90E+01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	-20.8	6.33E+00	6.20E+01	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	27.5	7.67E+00	8.40E+01	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	-28.4	6.33E+00	6.10E+01	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	EPA:901.1	Potassium-40	<	5.49	5.00E+00	5.80E+01	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Protactinium-234m	<	34	6.33E+01	6.90E+02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	1.26	5.67E-01	6.00E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	0.756	5.00E-01	5.30E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	0.105	4.33E-01	4.30E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	-3.39	5.67E-01	3.40E+00	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	1.77	6.00E-01	6.50E+00	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	EPA:901.1	Sodium-22	<	1.22	5.33E-01	5.40E+00	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	-0.00357	4.33E-02	4.80E-01	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	0.112	4.67E-02	4.90E-01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	-0.229	4.67E-02	5.30E-01	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	0.0261	4.67E-02	4.90E-01	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	0.0725	4.33E-02	4.70E-01	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	EPA:905.0	Strontium-90	<	-0.0454	4.33E-02	5.10E-01	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Thallium-208	<	4.09	9.00E-01	5.30E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Thorium-234	<	36	3.67E+01	3.50E+02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	-0.06386	2.34E-01	2.33E+00	—	pCi/L	U	U	11-3585	CAAN-11-27018	ARSL
R-30	1140	06/15/11	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	-0.60667	2.34E-01	2.39E+00	—	pCi/L	U	U	11-2731	CAAN-11-13959	ARSL
R-30	1140	04/05/11	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	-1.9158	2.45E-01	2.49E+00	—	pCi/L	U	U	11-1930	CAAN-11-5489	ARSL
R-30	1140	12/03/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	8.52531	1.85E+00	8.11E+00	—	pCi/L	—	U	11-851	CAAN-11-2163	ARSL
R-30	1140	09/23/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	1.9158	2.24E-01	1.92E+00	—	pCi/L	U	U	10-4761	CAAN-10-25948	ARSL
R-30	1140	05/19/10	WG	UF	CS	—	Rad	LLEE	Tritium[a]	<	-2.58633	2.45E-01	2.17E+00	—	pCi/L	U	U	10-3250	CAAN-10-17252	ARSL
R-30	1140	09/14/11	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.287	1.17E-02	5.00E-02	—	pCi/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.253	1.10E-02	7.50E-02	—	pCi/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.325	1.37E-02	4.60E-02	—	pCi/L	—	—	11-1929	CAAN-11-5489	GELC

Table C-2 Ancho Canyon Analytical Results and Results from the Four Previous Monitoring Events if Available

Location	Depth (ft)	Date	Field Matrix	Field Prep	Lab Sample Type	Field QC Type	Suite	Method	Analyte	Symbol	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	12/03/10	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.294	1.20E-02	5.70E-02	—	pCi/L	—	—	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.306	1.23E-02	7.40E-02	—	pCi/L	—	—	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	HASL-300	Uranium-234	—	0.373	1.33E-02	3.70E-02	—	pCi/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	EPA:901.1	Uranium-235	<	-15.2	4.33E+00	3.70E+01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.00342	1.13E-03	3.60E-02	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.0101	2.97E-03	4.30E-02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	-0.00408	2.37E-03	3.80E-02	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.00337	2.50E-03	3.80E-02	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.00682	1.60E-03	3.70E-02	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	HASL-300	Uranium-235/236	<	0.0283	3.33E-03	3.40E-02	—	pCi/L	U	U	10-3230	CAAN-10-17252	GELC
R-30	1140	09/14/11	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.133	7.67E-03	4.30E-02	—	pCi/L	—	—	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.147	7.67E-03	3.40E-02	—	pCi/L	—	—	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.175	9.33E-03	5.10E-02	—	pCi/L	—	—	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.147	7.67E-03	3.80E-02	—	pCi/L	—	—	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.176	8.33E-03	3.30E-02	—	pCi/L	—	—	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	Rad	HASL-300	Uranium-238	—	0.19	8.33E-03	3.40E-02	—	pCi/L	—	—	10-3230	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(g,h,i)perylene	—	0.489	—	—	2.10E-01	µg/L	J	J	11-2669	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(g,h,i)perylene	<	1	—	—	2.00E-01	µg/L	U	U	11-1928	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(g,h,i)perylene	<	1.06	—	—	2.10E-01	µg/L	U	U	11-803	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(g,h,i)perylene	<	1.05	—	—	2.10E-01	µg/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	SVOA	SW-846:8270C	Benzo(g,h,i)perylene	<	1	—	—	2.00E-01	µg/L	U	U	10-3229	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	UF	CS	—	SVOA	SW-846:8270C	Dibenz(a,h)anthracene	—	0.468	—	—	2.10E-01	µg/L	J	J	11-2669	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	SVOA	SW-846:8270C	Dibenz(a,h)anthracene	<	1	—	—	2.00E-01	µg/L	U	U	11-1928	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	SVOA	SW-846:8270C	Dibenz(a,h)anthracene	<	1.06	—	—	2.10E-01	µg/L	U	U	11-803	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	SVOA	SW-846:8270C	Dibenz(a,h)anthracene	<	1.05	—	—	2.10E-01	µg/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	SVOA	SW-846:8270C	Dibenz(a,h)anthracene	<	1	—	—	2.00E-01	µg/L	U	U	10-3229	CAAN-10-17252	GELC
R-30	1140	06/15/11	WG	UF	CS	—	SVOA	SW-846:8270C	Indeno(1,2,3-cd)pyrene	—	0.447	—	—	2.10E-01	µg/L	J	J	11-2669	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	CS	—	SVOA	SW-846:8270C	Indeno(1,2,3-cd)pyrene	<	1	—	—	2.00E-01	µg/L	U	U	11-1928	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	CS	—	SVOA	SW-846:8270C	Indeno(1,2,3-cd)pyrene	<	1.06	—	—	2.10E-01	µg/L	U	U	11-803	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	CS	—	SVOA	SW-846:8270C	Indeno(1,2,3-cd)pyrene	<	1.05	—	—	2.10E-01	µg/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	05/19/10	WG	UF	CS	—	SVOA	SW-846:8270C	Indeno(1,2,3-cd)pyrene	<	1	—	—	2.00E-01	µg/L	U	U	10-3229	CAAN-10-17252	GELC

[a] Results, 1-sigma TPUs, and MDAs for tritium analyzed by ARSL are being reviewed.

Appendix D

Analytical Chemistry Screening Results

The following pages provide lists of (1) acronyms, abbreviations, symbols, and various analytical codes, (2) analytical laboratory qualifier codes, and (3) secondary validation flag codes that may be used in Appendix D. Please note that these are comprehensive lists, and this periodic monitoring report may not include all of the acronyms, abbreviations, symbols, and codes in the lists.

The following pages also include secondary validation reason codes. Because there are over 400 secondary validation reason codes, this list is not comprehensive and includes only those codes used in this particular periodic monitoring report.

The secondary data validation summary is provided in Appendix F.

Acronyms and Abbreviations

Acronym, Abbreviation, or Symbol	Description
Miscellaneous	
%	percent
%D	percent difference
%R	percent recovery
<	Based on qualifiers, the result was a nondetection.
—	none
4,4'-DDD	4,4'-dichlorodiphenyldichloroethane
4,4'-DDT	4,4'-dichlorodiphenyltrichloroethane
BHC	benzene hexachloride
CB	chlorobiphenyl
CCV	continuing calibration verification
CLP	Control Laboratory Program
CRDL	contract-required detection limit
DCG	Derived Concentration Guide (DOE)
DNX	dinitroso-RDX (or hexahydro-1,3-dinitroso-5-nitro-1,3,5-triazine)
DOE	Department of Energy (U.S.)
EPA	Environmental Protection Agency (U.S.)
GC	gas chromatography
GFAA	graphite furnace atomic absorption
GFPC	gas-flow proportional counter
GW	groundwater
HMX	1,3,5,7-tetranitro-1,3,5,7-tetrazocine
HPLC	high-pressure liquid chromatography
ICPAES	inductively coupled plasma atomic (optical) emission spectroscopy
ICV	initial calibration verification
IDL	instrument detection limit
LAL	lower acceptance limit
LCS	laboratory control sample
LLEE	low-level electrolytic extraction
LSC	liquid scintillation counting
Lvl	level
MCL	maximum contaminant level (EPA)
MDA	minimum detectable activity

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Miscellaneous (continued)	
MDC	minimum detectable concentration
MDL	method detection limit
MNX	mononitroso-RDX (or hexahydro-1-nitroso-3,5-dinitro-1,3,5-triazine)
MS	matrix spike
MSD	matrix spike duplicate
NM	NMWQCC
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
PCB	polychlorinated biphenyl
PQL	practical quantitation limit
Prelim	preliminary
QC	quality control
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RF	response factor
RL	reporting limit
RPD	relative percent difference
RRF	relative response factor
Scr	screening
SSC	suspended sediment concentration
SU	standard unit
TDS	total dissolved solids
TPH-DRO	total petroleum hydrocarbons—diesel range organics
TNX	trinitroso-RDX (or hexahydro-1,3,5-trinitroso-1,3,5-triazine)
TPU	total propagated uncertainty
UAL	upper acceptance limit
Field Matrix Codes	
W	water
WG	groundwater
WM	snowmelt
WP	persistent flow
WS	base flow
WT	storm runoff
Field Prep Codes	
F	filtered
UF	unfiltered
Field QC Type Codes	
EQB	equipment rinsate blank
FB	field blank

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Field QC Type Codes (continued)	
FD	field duplicate
FR	field rinsate
FS	field split
FTB	field trip blank
FTR	field triplicate
INB	equipment blank taken during installation and not associated with a sampling event
ITB	trip blank taken during installation and not associated with a sampling event
NA	not applicable
PEB	performance evaluation blank
PEK	performance evaluation known
RES	resample
SS	special sampling event, data unique
SS-EQB	equipment blank of special sampling event, data unique
SS-FB	field blank of special sampling event, data unique
SS-FD	field duplicate of special sampling event, data unique
SS-FTB	field trip blank of special sampling event, data unique
Analytical Suite Codes	
ANION	anions
DIOX/FUR, Diox/Fur	dioxins and furans
DRO	diesel range organics
GAMMA, GAMMA_SPEC	gamma spectroscopy
Geninorg, GENINORG	general inorganics
GRO	gasoline range organics
GROSSA	gross alpha
GROSSB	gross beta
HERB	herbicides
HEXP	high explosives
INORGANIC	inorganics
ISOTOPE, Isotope	isotope ratios
METALS, Metals	metals
PCB	polychlorinated biphenyls
PCB_CONG, PCB Cong	PCB congeners
PEST	pesticides
PEST/PCB, PESTPCB	pesticides and PCBs
RAD, Rad	radiochemistry (not gamma)
SVOA	semivolatile organics
SVOC	semivolatile organic compounds
VOA	volatile organics
VOC	volatile organic compounds

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Lab Sample Type Codes	
CS	client sample
DL	dilution
DUP	duplicate
RE	reanalysis
REDL	reanalysis dilution
REDP	reanalysis duplicate
RI	reissue
TRP	triplicate
Lab Codes	
ALTC	Alta Analytical Laboratory, Inc., San Diego, CA
ARSL	American Radiation Services–Primary
CFA	Cape Fear Analytical, LLC, Wilmington, NC
C-INC	Isotope and Nuclear Chemistry Division (LANL)
COAST	Coastal Science Laboratories, Austin, TX
CST	Chemical Sciences and Technology Division (LANL)
EES6	Hydrology, Geochemistry, and Geology Group (LANL)
ESE	Environmental Sciences & Engineering, Inc., Gainesville, FL
FLD	measurement taken in field
GEL	General Engineering Laboratories, Inc.
GELC	General Engineering Laboratories, Inc., Charleston, SC
GEO	Geochron Laboratories, Boston, MA
HENV	Health and Environmental Laboratory (Johnson Controls, Northern New Mexico)
HUFFMAN	Huffman Laboratories, Inc., Golden, CO
KA	KEMRON Environmental Services, Inc., Vienna, VA
LVLI	Lionville Laboratory, Inc., Philadelphia, PA
PARA	Paragon Analytics, Inc., Salt Lake City, UT
PEC	Pacific Ecorisk Laboratories, Fairfield, CA
QESL	Quanterra Environmental Services, St. Louis, MO
QST	QST Environmental, Newberry, FL
RECRAP	RECRA Labnet, Lionville, PA
RFWC	Roy F. Weston, Inc., West Chester, PA
SGSW	Paradigm Analytical Laboratories, Inc., Wilmington, NC
SILENS	Stable Isotope Laboratory, Woods Hole, MA
STL2, STR	Severn Trent Laboratories, Inc., Richland, WA (historical)
STLA	Severn Trent Laboratories, Inc., Los Angeles, CA
STSL	Severn Trent Laboratories, Inc., St. Louis, MO
SwRI	Southwest Research Institute, San Antonio, TX
UAZ	University of Arizona, Tucson
UIL	University of Illinois, Urbana-Champaign
UMTL	University of Miami Tritium Lab

Analytical Laboratory Qualifier Codes

Code	Description
*	(Inorganic)—Duplicate analysis (relative percent difference) not within control limits.
B	(Organic) —Analyte was present in the blank and the sample. (Inorganic) —Reported value was obtained from a reading that was less than the contract-required detection limit (CRDL) but greater than or equal to the instrument detection limit (IDL).
BJ	See B code and see J code.
BJP	See B code, see J code, and see P code.
BPX	(B) (Organic)—This analyte was detected in the associated laboratory method blank and the sample. (B) (Inorganic)—The result for this analyte was greater than the IDL but less than the CRDL. (P) (Pesticides/PCBs)—The quantitative results for this analyte between the primary and secondary gas chromatography (GC) columns were greater than 25% difference. (P) (SW-846 EPA Method 8310, High-Pressure Liquid Chromatography, [HPLC] Results)—The quantitative results for this analyte between the primary and secondary HPLC columns or primary and secondary HPLC detectors were greater than 40% difference. (X) (Organic/Inorganic)—The result for this analyte should be regarded as not detected.
D	The result for this analyte was reported from a dilution.
DJ	See D code and see J code.
DNA	Did not analyze because equipment was broken.
E	(Organic) Analyte exceeded the concentration range. (Inorganic) The serial dilution was exceeded.
E*	See E code and see * code.
EJ	See E code and see J code.
EJ*	See E code, see J code, and see * code.
EJN	(E) (Organic)—The result for this analyte exceeded the upper range of the instrument initial calibration curve. (E) (Inorganic) (inductively coupled plasma atomic [optical] emission spectroscopy [ICPAES])—The result for this analyte in the serial dilution analysis was outside acceptance criteria. (E) (Inorganic) (graphite furnace atomic absorption [GFAA])—The result for this analyte failed one or more Control Laboratory Program (CLP) acceptance criteria as explained in the case narrative. (J) (Organic/General Inorganics)—The result for this analyte was greater than the method detection limit (MDL) but less than the practical quantitation limit (PQL). (N) (Organic)—The reported analyte is a tentatively identified compound (TIC). (N) (Inorganic)—The result for this analyte in the matrix spike sample was outside acceptance criteria.
EN	See E code and see N code.
EN*	(E) (Organic)—The result for this analyte exceeded the upper range of the instrument initial calibration curve. (E) (Inorganic) (ICPAES)—The result for this analyte in the serial dilution analysis was outside acceptance criteria. (E) (Inorganic) (GFAA)—The result for this analyte failed one or more CLP acceptance criteria as explained in the case narrative. (N) (Organic)—The reported analyte is a TIC. (N) (Inorganic)—The result for this analyte in the matrix spike sample was outside acceptance criteria. * (Inorganic)—The result for this analyte in the laboratory replicate analysis was outside acceptance criteria.

Analytical Laboratory Qualifier Codes (continued)

Code	Description
H	(Organic/Inorganic)—The required extraction or analysis holding time for this result was exceeded.
H*	(H) (Organic/Inorganic)—The required extraction or analysis holding time for this result was exceeded. * (Organic) and (Inorganic)—The result for this analyte in the laboratory control sample analysis was outside acceptance criteria.
HJ	See H code and see J code.
HJ*	(H) (Organic/Inorganic)—The required extraction or analysis holding time for this result was exceeded. (J) (Organic/General Inorganics)—The result for this analyte was greater than the MDL but less than the PQL. * (Inorganic)—The result for this analyte in the laboratory replicate analysis was outside acceptance criteria.
INS	(d15N)—The d15N of nitrate is a signature of the nitrate present in a sample. Therefore, nitrate has to be present to have a signature. A d15N value cannot be given to a blank because the blank does not have nitrate. This is different from most analytical methods, where a blank is run with the designator “nondetect” or “detected, but below detection limit.”
J	(Inorganic)—The associated numerical value is an estimated quantity. (Organic)—The associated numerical value is an estimated quantity.
J*	See J code and see * code.
JB	See J code and see B code
JN	See J code and see N code.
JN*	See J code, see N code, and see * code.
JP	See J code and see P code.
N	(Inorganic)—Spiked sample recovery was not within control limits.
N*	See N code and see * code.
N*E	See N code, see * code, and see E code.
NE	See N code and see E code.
P	Percent difference between the results on the two columns during the analysis differed by more than 40%.
PJ	See P code and see J code.
U	The material was analyzed for but was not detected above the level of the associated numeric value.
U*	See U code and see * code.
UD	See U code and see D code.
UE	See U code and see E code.
UE*	See U code, see E code, and see * code.
UEN	See U code, see E code, and see N code.
UH	See U code and see H code.

Analytical Laboratory Qualifier Codes (continued)

Code	Description
UH*	(U) (Organic/Inorganic)—The result for this analyte was not detected at the specified reporting limit. (H) (Organic/Inorganic)—The required extraction or analysis holding time for this result was exceeded. * (Inorganic)—The result for this analyte in the laboratory replicate analysis was outside acceptance criteria.
UI	(Rad) Gamma spectroscopy result should be regarded as an uncertain identification.
UN	EPA flag (Inorganic)—Compound was analyzed for but was not detected. Spiked sample recovery was not within control limits.
UN*	EPA flag (Inorganic)—See U code, see N code, and see * code.
UUI	(Rad) Gamma spectroscopy result should be regarded as an uncertain identification, and the analytical lab assigned these gamma spectroscopy results as not detected.
X	The analytical laboratory suspects the result is a nondetect despite positive quantification results.

Secondary Validation Flag Codes

Code	Description
A	The contractually required supporting documentation for this datum is absent.
I	The calculated sums are considered incomplete because of the lack of one or more congener results.
J	The analyte is classified as detected, but the reported concentration value is expected to be more uncertain than usual.
J-	The analyte is classified as detected, but the reported concentration value is expected to be more uncertain than usual with a potential negative bias.
J+	The analyte is classified as detected, but the reported concentration value is expected to be more uncertain than usual with a potential positive bias.
JN-	Presumptive evidence of the presence of the material is at an estimated quantity with a suspected negative bias.
JN+	Presumptive evidence of the presence of the material is at an estimated quantity with a suspected positive bias.
N	There is presumptive evidence of the presence of the material.
NJ	(Organic) Analyte has been tentatively identified, and the associated numerical value is estimated based upon a 1:1 response factor to the nearest eluting internal standard.
NQ	No validation qualifier flag is associated with this result, and the analyte is classified as detected.
PM	Manual review of raw data is recommended to determine if the observed noncompliances with quality acceptance criteria adversely impact data use.
R	The reported sample result is classified as rejected because of serious noncompliances regarding quality control (QC) acceptance criteria. The presence or absence of the analyte cannot be verified based on routine validation alone.
U	The analyte is classified as not detected.
UJ	The analyte is classified as not detected, with an expectation that the reported result is more uncertain than usual.

Secondary Validation Reason Codes

Code	Description
J_LAB	Qualification of data via data validation did not occur based on QC requirements in this procedure. Adhere to the external laboratory qualifiers found within the Form I analytical data summary sheets generated by the external laboratory.
PE12f	The matrix spike/matrix spike duplicate percent recovery was >125%. Qualify all associated detects as J+.
R5	The results for the affected analytes are considered not detected (U) because the associated sample concentration was less than or equal to the minimum detectable concentration.
R11	The results for the affected analytes should be regarded as not detected (U) because the associated sample concentration was less than 3 times the 1 sigma total propagated uncertainty.
SV7c	The initial calibration verification and/or continuing calibration verification were recovered outside the method-specific limits.

Table D-1
Ancho Canyon Previously Unreported Groundwater Tritium

Zone	Location	Well Class	Port Depth (ft)	Date	Analyte	Field Preparation Code	Lab Sample Type Code	Field QC Type Code	Symbol	Result	Uncertainty	MDA	Unit	Analytical Method Code	Lab Code	Lab Qualifier Code	Secondary Validation Flag Code	Secondary Validation Reason Code
Regional	R-29	SINGLE	1170	04/06/11	H-3	UF	CS	—*	<	−1.56	0.61	2.04352	pCi/L	Generic:Low_Level_Tritium	ARSL	U	U	R5
Regional	R-30	SINGLE	1140	04/05/11	H-3	UF	CS	FD	<	−1.60	0.61	2.07545	pCi/L	Generic:Low_Level_Tritium	ARSL	U	U	R5
Regional	R-30	SINGLE	1140	04/05/11	H-3	UF	CS	—	<	−1.92	0.73	2.49054	pCi/L	Generic:Low_Level_Tritium	ARSL	U	U	R5

Note: Results, uncertainties, and MDAs for tritium analyzed by ARSL are being reviewed.
* — = None.

Table D-2
Ancho Canyon Groundwater Radioactivity

Zone	Location	Well Class	Port Depth (ft)	Date	Analyte	Field Preparation Code	Lab Sample Type Code	Field QC Type Code	Symbol	Result	Uncertainty	MDA	Unit	Lab Code	Analytical Method Code	Lab Qualifier Code	Secondary Validation Flag Code	Secondary Validation Reason Code	DOE DCG	Ratio (Result/Screening Level)	DOE Drinking Water DCG Screening Level	Ratio (Result/Screening Level)
Regional	R-29	SINGLE	1170	06/10/11	K-40	UF	CS	—*	<	71.8	24	35	pCi/L	GELC	EPA:901.1	—	U	R11	7000	0.01	280	0.26

* — = None.

Table D-3
Ancho Canyon Groundwater Tritium

Zone	Location	Well Class	Port Depth (ft)	Date	Analyte	Field Preparation Code	Lab Sample Type Code	Field QC Type Code	Symbol	Result	Uncertainty	MDA	Unit	Analytical Method Code	Lab Code	Lab Qualifier Code	Secondary Validation Flag Code	Secondary Validation Reason Code
Regional	R-29	SINGLE	1170	06/10/11	H-3	UF	CS	—*	<	−0.89	0.86	2.90563	pCi/L	Generic:Low_Level_Tritium	ARSL	U	U	R5
Regional	R-30	SINGLE	1140	06/15/11	H-3	UF	CS	—	<	−0.61	0.70	2.39475	pCi/L	Generic:Low_Level_Tritium	ARSL	U	U	R5
Regional	R-30	SINGLE	1140	09/14/11	H-3	UF	CS	—	<	−0.06	0.70	2.33089	pCi/L	Generic:Low_Level_Tritium	ARSL	U	U	R5

Note: Results, uncertainties, and MDAs for tritium analyzed by ARSL are being reviewed.
* — = None.

Table D-4
Ancho Canyon Groundwater Perchlorate

Zone	Location	Well Class	Port Depth (ft)	Date	Field QC Type Code	Field Preparation Code	Lab Sample Type Code	Analyte	Analytical Method Code	Symbol	Result	MDL	Unit	Dilution Factor	Lab Qualifier Code	Secondary Validation Flag Code	Secondary Validation Reason Code	Lab Code
Regional	R-29	SINGLE	1170	06/10/11	—*	F	CS	ClO4	SW-846:6850	—	0.236	0.05	µg/L	1	—	—	—	GELC
Regional	R-29	SINGLE	1170	09/21/11	—	F	CS	ClO4	SW-846:6850	—	0.24	0.05	µg/L	1	—	J+	PE12f	GELC
Regional	R-30	SINGLE	1140	06/15/11	—	F	CS	ClO4	SW-846:6850	—	0.234	0.05	µg/L	1	—	—	—	GELC
Regional	R-30	SINGLE	1140	09/14/11	—	F	CS	ClO4	SW-846:6850	—	0.243	0.05	µg/L	1	—	—	—	GELC

* — = None.

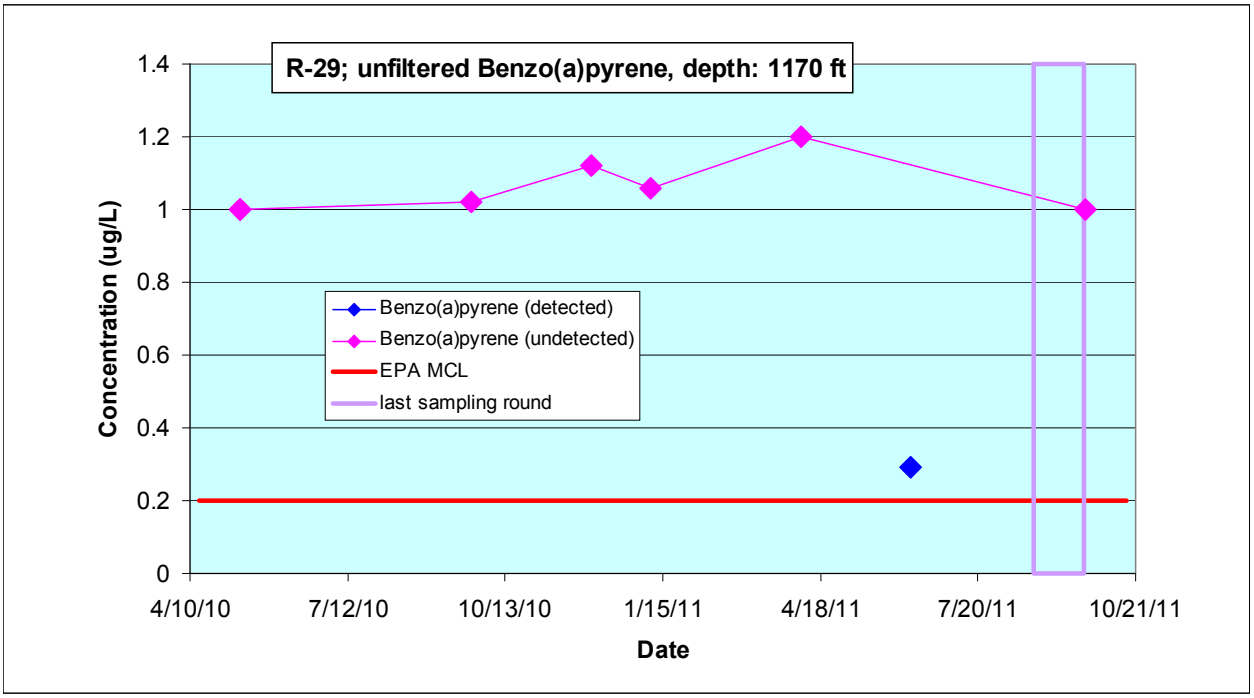
Table D-5
Ancho Canyon Groundwater Organics

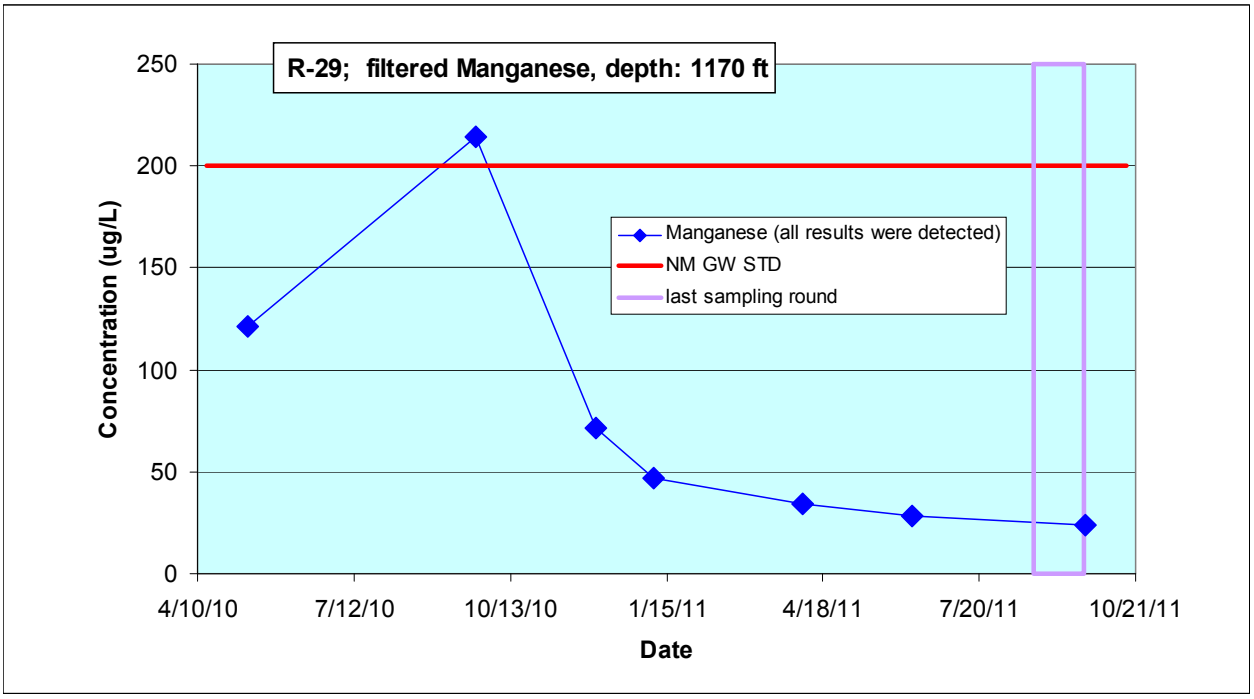
Zone	Location	Well Class	Port Depth (ft)	Date	Field QC Type Code	Field Preparation Code	Lab Sample Type Code	Sample Id	Analytical Suite Code	Analyte	Analyte	Symbol	Result	MDL	Unit	Dilution Factor	Lab Qualifier Code	Secondary Validation Flag Code	Secondary Validation Reason Code	Analytical Method Code	Lab Code	EPA MCL	Ratio (Result/Screening Level)	EPA Regional Tap Screening Level	Ratio (Result/Screening Level)	NMWQCC Groundwater Standard	Ratio (Result/Screening Level)
Regional	R-29	SINGLE	1170	06/10/11	—*	UF	CS	CAAN-11-13955	SVOA	Benzo(a)pyrene	50-32-8	—	0.29	0.2	µg/L	1	J	J	J_LAB	SW-846:8270C	GELC	0.2	1.45	0.029	10	0.7	0.41
Regional	R-29	SINGLE	1170	06/10/11	—	UF	CS	CAAN-11-13955	SVOA	Benzo(k)fluoranthene	207-08-9	—	0.25	0.2	µg/L	1	J	J	J_LAB	SW-846:8270C	GELC	—	—	2.9	0.09	—	—
Regional	R-30	SINGLE	1140	06/15/11	—	UF	CS	CAAN-11-13959	SVOA	Benzo(g,h,i)perylene	191-24-2	—	0.489	0.21	µg/L	1	J	J	J_LAB	SW-846:8270C	GELC	—	—	—	—	—	—
Regional	R-30	SINGLE	1140	06/15/11	—	UF	CS	CAAN-11-13959	SVOA	Dibenz(a,h)anthracene	53-70-3	—	0.468	0.21	µg/L	1	J	J	SV7c	SW-846:8270C	GELC	—	—	0.029	16.14	—	—
Regional	R-30	SINGLE	1140	06/15/11	—	UF	CS	CAAN-11-13959	SVOA	Indeno(1,2,3-cd)pyrene	193-39-5	—	0.447	0.21	µg/L	1	J	J	J_LAB	SW-846:8270C	GELC	—	—	0.29	1.54	—	—

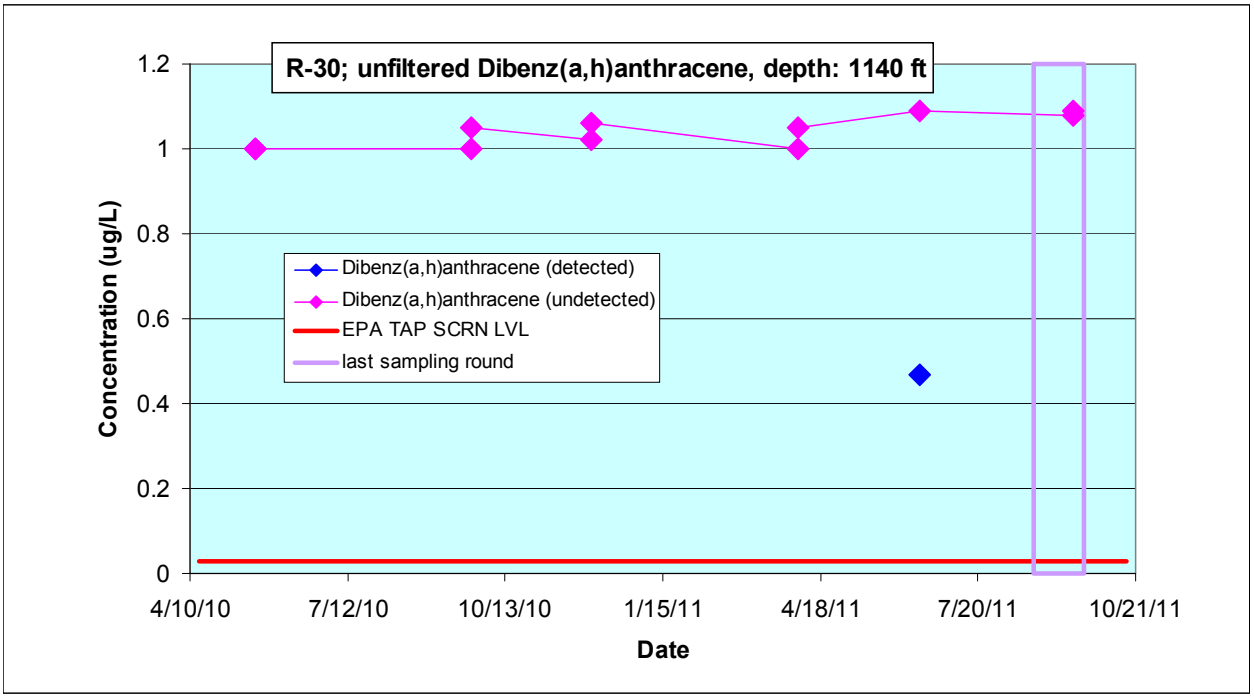
* — = None.

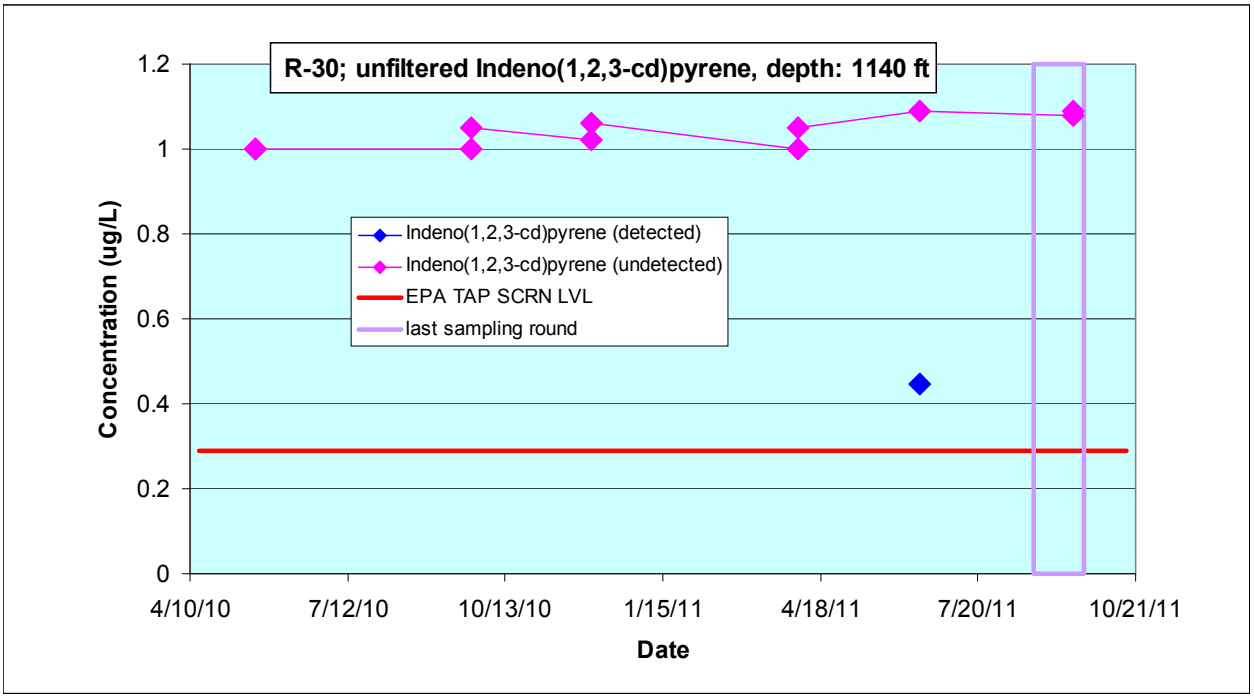
Appendix E

Analytical Chemistry Graphs of
Screening-Level Exceedances


R-29; unfiltered Benzo(a)pyrene, depth: 1170 ft
Concentration (ug/L)
1.4
1.2
1
0.8
0.6
0.4
0.2
0
Benzo(a)pyrene (detected)
Benzo(a)pyrene (undetected)
EPA MCL
last sampling round
4/10/10
7/12/10
10/13/10
1/15/11
4/18/11
7/20/11
10/21/11
Date


R-29; filtered Manganese, depth: 1170 ft
Concentration (ug/L)
250
200
150
100
50
0
Manganese (all results were detected)
NM GW STD
last sampling round
4/10/10
7/12/10
10/13/10
1/15/11
4/18/11
7/20/11
10/21/11
Date


R-30; unfiltered Dibenz(a,h)anthracene, depth: 1140 ft
Concentration (ug/L)
1.2
1
0.8
0.6
0.4
0.2
0
Dibenz(a,h)anthracene (detected)
Dibenz(a,h)anthracene (undetected)
EPA TAP SCRN LVL
last sampling round
4/10/10
7/12/10
10/13/10
1/15/11
4/18/11
7/20/11
10/21/11
Date


R-30; unfiltered Indeno(1,2,3-cd)pyrene, depth: 1140 ft
Concentration (ug/L)
1.2
1
0.8
0.6
0.4
0.2
0
Indeno(1,2,3-cd)pyrene (detected)
Indeno(1,2,3-cd)pyrene (undetected)
EPA TAP SCRN LVL
last sampling round
4/10/10
7/12/10
10/13/10
1/15/11
4/18/11
7/20/11
10/21/11
Date

Appendix F

Analytical Reports
(on CD included with this document)

CD Table of Contents

Request	Suite	Lab	Sample	Date	Location	Port Depth (ft)
11-2643	HEXP[a]	STSL[b]	CAAN-11-13955	06/10/11	R-29	1170
11-2644	DIOX/FUR[c]	CFA[d]	CAAN-11-13955	06/10/11	R-29	1170
11-2645	GENINORG[e]	GELC[f]	CAAN-11-13955	06/10/11	R-29	1170
11-2645	GENINORG	GELC	CAAN-11-13956	06/10/11	R-29	1170
11-2645	HEXP	GELC	CAAN-11-13955	06/10/11	R-29	1170
11-2645	METALS	GELC	CAAN-11-13955	06/10/11	R-29	1170
11-2645	METALS	GELC	CAAN-11-13956	06/10/11	R-29	1170
11-2645	PEST/PCB[g]	GELC	CAAN-11-13955	06/10/11	R-29	1170
11-2645	RAD[h]	GELC	CAAN-11-13955	06/10/11	R-29	1170
11-2645	SVOA[i]	GELC	CAAN-11-13955	06/10/11	R-29	1170
11-2645	VOA[j]	GELC	CAAN-11-13955	06/10/11	R-29	1170
11-2645	VOA	GELC	CAAN-11-13957	06/10/11	R-29	1170
11-2669	HEXP	GELC	CAAN-11-13959	06/15/11	R-30	1140
11-2669	PEST/PCB	GELC	CAAN-11-13959	06/15/11	R-30	1140
11-2669	SVOA	GELC	CAAN-11-13959	06/15/11	R-30	1140
11-2669	VOA	GELC	CAAN-11-13959	06/15/11	R-30	1140
11-2669	VOA	GELC	CAAN-11-13960	06/15/11	R-30	1140
11-2670	GENINORG	GELC	CAAN-11-13958	06/15/11	R-30	1140
11-2670	GENINORG	GELC	CAAN-11-13959	06/15/11	R-30	1140
11-2670	METALS	GELC	CAAN-11-13958	06/15/11	R-30	1140
11-2670	METALS	GELC	CAAN-11-13959	06/15/11	R-30	1140
11-2670	RAD	GELC	CAAN-11-13959	06/15/11	R-30	1140
11-2673	DIOX/FUR	CFA	CAAN-11-13959	06/15/11	R-30	1140
11-2674	HEXP	STSL	CAAN-11-13959	06/15/11	R-30	1140
11-2731	RAD	ARSL[k]	CAAN-11-13955	06/10/11	R-29	1170
11-2731	RAD	ARSL	CAAN-11-13959	06/15/11	R-30	1140
11-3585	RAD	ARSL	CAAN-11-27018	09/14/11	R-30	1140
11-3586	HEXP	STSL	CAAN-11-27018	09/14/11	R-30	1140
11-3587	DIOX/FUR	CFA	CAAN-11-27018	09/14/11	R-30	1140
11-3588	GENINORG	GELC	CAAN-11-27017	09/14/11	R-30	1140
11-3588	GENINORG	GELC	CAAN-11-27018	09/14/11	R-30	1140
11-3588	HEXP	GELC	CAAN-11-27018	09/14/11	R-30	1140
11-3588	METALS	GELC	CAAN-11-27017	09/14/11	R-30	1140
11-3588	METALS	GELC	CAAN-11-27018	09/14/11	R-30	1140
11-3588	PEST/PCB	GELC	CAAN-11-27018	09/14/11	R-30	1140
11-3588	RAD	GELC	CAAN-11-27018	09/14/11	R-30	1140
11-3588	SVOA	GELC	CAAN-11-27018	09/14/11	R-30	1140
11-3588	VOA	GELC	CAAN-11-27016	09/14/11	R-30	1140
11-3588	VOA	GELC	CAAN-11-27018	09/14/11	R-30	1140

Request	Suite	Lab	Sample	Date	Location	Port Depth (ft)
11-3679	HEXP	STSL	CAAN-11-27010	09/21/11	R-29	1170
11-3680	DIOX/FUR	CFA	CAAN-11-27010	09/21/11	R-29	1170
11-3681	GENINORG	GELC	CAAN-11-27010	09/21/11	R-29	1170
11-3681	GENINORG	GELC	CAAN-11-27011	09/21/11	R-29	1170
11-3681	HEXP	GELC	CAAN-11-27010	09/21/11	R-29	1170
11-3681	METALS	GELC	CAAN-11-27010	09/21/11	R-29	1170
11-3681	METALS	GELC	CAAN-11-27011	09/21/11	R-29	1170
11-3681	PEST/PCB	GELC	CAAN-11-27010	09/21/11	R-29	1170
11-3681	RAD	GELC	CAAN-11-27010	09/21/11	R-29	1170
11-3681	SVOA	GELC	CAAN-11-27010	09/21/11	R-29	1170
11-3681	VOA	GELC	CAAN-11-27010	09/21/11	R-29	1170
11-3681	VOA	GELC	CAAN-11-27012	09/21/11	R-29	1170

[a] HEXP = High explosives.

[b] STSL = Severn Trent Laboratories, Inc.

[c] DIOX/FUR = Dioxins and furans.

[d] CFA = Cape Fear Analytical, LLC.

[e] GENINORG = General inorganics.

[f] GELC = General Engineering Laboratories, Inc.

[g] PEST/PCB = Pesticides/polychlorinated biphenyls.

[h] RAD = Radionuclides.

[i] SVOA = Semivolatile organic analysis.

[j] VOA = Volatile organic analysis.

[k] ARSL = American Radiation Services─Primary.