ERID-225507

LA-UR-12-23896
August 2012
EP2012-0185

Periodic Monitoring Report for Material Disposal Area AB Monitoring Group, February 1–February 3, 2012



Prepared by the Environmental Programs Directorate

Los Alamos National Laboratory, operated by Los Alamos National Security, LLC, for the U.S. Department of Energy under Contract No. DE-AC52-06NA25396, has prepared this document pursuant to the Compliance Order on Consent, signed March 1, 2005. The Compliance Order on Consent contains requirements for the investigation and cleanup, including corrective action, of contamination at Los Alamos National Laboratory. The U.S. government has rights to use, reproduce, and distribute this document. The public may copy and use this document without charge, provided that this notice and any statement of authorship are reproduced on all copies.

EP2012-0185

Periodic Monitoring Report for Material Disposal Area AB Monitoring Group, February 1–February 3, 2012

August 2012

Responsible project manager:

Printed Name	Signature	Title	Organization	Date
Steve Paris		Project Manager	Environmental Programs	8/24/12

Responsible LANS representative:

Printed Name	Signature	Title	Organization	Date
Michael J. Graham		Associate Director	Environmental Programs	28 Aug 12

Responsible DOE representative:

Printed Name	Signature	Title	Organization	Date
Peter Maggiore		Assistant Manager	DOE-LASO	8-30-2012

EXECUTIVE SUMMARY

This periodic monitoring report (PMR) provides the results of the fiscal year 2012, second quarter, periodic monitoring event (PME) conducted by Los Alamos National Laboratory in the Material Disposal Area (MDA) AB monitoring group. This PME was conducted pursuant to the 2011 Interim Facility-Wide Groundwater Monitoring Plan, Revision 1, prepared in accordance with the Compliance Order on Consent.

The PME documented in this report occurred from February 1 to February 3, 2012, and included monitoring of groundwater wells or well screens. 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 PME are also included in this report.

Water samples collected from various locations during this PME were analyzed for metals; volatile organic compounds; semivolatile organic compounds; high explosives; radionuclides; low-level tritium; general inorganic chemicals, including perchlorate; stable isotopes; and field parameters (alkalinity, dissolved oxygen, pH, specific conductance, temperature, and turbidity).

No surface-water locations are sampled in this monitoring group.

No results from previous sampling of PME monitoring locations are reported in this PMR. No results from groundwater samples collected during this PME were above applicable screening levels.

CONTENTS

1.0 INTRODUCTION 1
1.1 Background 1
2.0 SCOPE OF ACTIVITIES 2
3.0 MONITORING RESULTS 2
3.1 Methods and Procedures 2
3.2 Field Parameter Results 2
3.3 Groundwater Elevations and Base-Flow Observations 2
3.4 Deviations from Planned Scope 2
4.0 ANALYTICAL DATA RESULTS 2
4.1 Methods and Procedures 2
4.2 Analytical Data 3
4.2.1 Surface Water (Base Flow) 5
4.2.2 Groundwater 5
4.3 Sampling Program Modifications 5
5.0 SUMMARY 5
5.1 Monitoring Results 5
5.2 Analytical Results 5
5.2.1 Surface Water (Base Flow) 5
5.2.2 Groundwater 5
5.3 Data Gaps 5
5.4 Remediation System Monitoring 6
6.0 REFERENCES 6

Figure

Figure 2.0-1 Locations monitored for this PME. 7

Tables

Table 2.0-1 MDA AB Monitoring Group Locations and General Information 9
Table 3.4-1 MDA AB Monitoring Group PME Observations and Deviations 9
Table 3.4-2 Analytes with PQLs above Screening Levels 9
Table 4.2-1 Sources of Screening Levels for Groundwater and Surface Water at Los Alamos National Laboratory 11
Table 4.2-2 MDA AB Monitoring Group Groundwater Results above Screening Levels 11

Appendixes

Appendix A	Field Parameter Results, Including Results from Previous Four Monitoring Events if Available
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
Appendix D	Groundwater Results Greater Than Half of Screening Levels
Appendix E	Analytical Chemistry Graphs of Screening-Level Exceedances
Appendix F	Analytical Reports (on CD included with this document)

Plate

Plate 1	Groundwater elevations

Acronyms and Abbreviations

AQA	Analytical Quality Associates, Inc.
BCG	Biota Concentration Guide (DOE)
CAS	Chemical Abstracts Service
CFR	Code of Federal Regulations (U.S.)
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.)
HE	high explosives
HMX	octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
IFGMP	Interim Facility-Wide Groundwater Monitoring Plan
LANL	Los Alamos National Laboratory
MCL	maximum contaminant level (EPA)
MCPA	2-methyl-4-chlorophenoxyacetic acid
MCPP	2-(4-chloro-2-methylphenoxy)propanoic acid
MDA	material disposal area
MDL	method detection limit
NMAC	New Mexico Administrative Code
NMED	New Mexico Environment Department
NMWQCC	New Mexico Water Quality Control Commission
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
SOP	standard operating procedure
TA	technical area
TNT	trinitrotoluene(2,4,6-)

1.0 INTRODUCTION

This periodic monitoring report (PMR) provides documentation of fiscal year 2012, second quarter, annual groundwater monitoring conducted by Los Alamos National Laboratory (LANL or the Laboratory) for the Material Disposal Area (MDA) AB monitoring group pursuant to the 2011 Interim Facility-Wide Groundwater Monitoring Plan (IFGMP), Revision 1 (LANL 2011, 208811), prepared in accordance with the Compliance Order on Consent (Consent Order). This periodic monitoring event (PME) occurred from February 1 to February 3, 2012, and included sampling at groundwater wells or well screens. No results from samples collected during previous PMEs that were unreported in their respective PMRs are 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 monitoring group
- field-measurement monitoring results
- water-quality monitoring results
- screening analysis results (comparing these PME results with screening levels and results from previous reports)
- 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

The MDA AB monitoring group is located in Technical Area 49 (TA-49). TA-49, also known as the Frijoles Mesa Site, is located on a mesa in the upper portion of the Ancho Canyon drainage, and part of the TA drains into Water Canyon. The canyons in the Ancho watershed are mainly dry with little alluvial and no known intermediate groundwater.

MDA AB was the site of underground nuclear weapons component testing from 1959 to 1961 (Purtymun and Stoker 1987, 006688; LANL 1988, 223036). The tests involved insufficient high explosives (HE) and fissionable material to produce a nuclear reaction. 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: isotopes of uranium and plutonium, lead, and beryllium; HE 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 solid waste management units and areas of concern at TA-49 can be found in recent Laboratory reports (LANL 2010, 109318; LANL 2010, 109319).

2.0 SCOPE OF ACTIVITIES

The PME for the MDA AB monitoring group was conducted pursuant to the 2011 IFGMP, Revision 1 (LANL 2011, 208811).

Table 2.0-1 provides the location name, sample collection date, screened interval, top and bottom screen depths, casing volume, purge volume, and purge rate 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 PME are documented in the 2011 IFGMP, Revision 1 (LANL 2011, 208811).

3.2 Field Parameter Results

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

3.3 Groundwater Elevations and Base-Flow Observations

The periodic monitoring water-level data for the previous 2 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 were recorded immediately before sampling. The groundwater-elevation measurements are shown graphically on Plate 1. No surface-water locations are sampled for this monitoring group.

3.4 Deviations from Planned Scope

Table 3.4-1 describes the fieldwork deviations from the planned scope of the PME. 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 2011 IFGMP, Revision 1 (LANL 2011, 208811). 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 procedures are available at http://eprr.lanl.gov/oppie/service. Completed chain-of-custody forms serve as analytical request forms 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. For data collected before March 2012, validation was done by an independent contractor, Analytical Quality Associates, Inc. (AQA). After that date, validation is done by an automated process after data are loaded.

Data validation determines the quality of an analytical data set. Data validation focuses on specific quality assurance samples, such as matrix spikes, duplicates, surrogates, method banks, laboratory control samples, and holding times, which indicate the accuracy and precision of the analyses. Based on the results, data qualifiers are applied to indicate data quality issues as well as the usability of results. This process also includes a description of the reasons for any failure to meet method, procedural, or contractual requirements and an evaluation of the impact of such failure on the overall data set.

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.

Auto validation (1) ensures that the electronic data deliverable contains all the required fields, (2) verifies that results of all QC checks and procedures are within valid criteria limits, and (3) applies specific qualifiers and reason codes per the EPA's National Functional Guidelines for data review as well as the Laboratory's SOPs. Once auto validation is complete, the data are uploaded into the Laboratory's database system and the public database (http://intellusnm.com/).

The Laboratory assigns detection status to the analytical result based on the analytical laboratory and secondary validation qualifiers. A detect flag of "N" indicates that, based on the qualifiers, the result was not detected.

4.2 Analytical Data

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

Appendix C contains all data collected during the PME (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, and field blanks, trip blanks, and equipment blanks are not included in the data set.
    - ❖ Field duplicates, reanalyses, and results from different analytical methods are reported.

- Radionuclides
    - ❖ Only 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.
    - ❖ Otherwise, all results are reported at all locations.
- Nonradionuclides
    - ❖ All detected results are reported.

Data for PMRs are evaluated using the following screening process. The sources of screening levels with which the results are compared are listed in Table 4.2-1.

- 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 to 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 (NMAC) 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.
- Other groundwater data are screened to Groundwater Cleanup Levels described in Section VIII.A.1 of the Consent Order; for an individual substance, the lesser of the EPA MCL or the NMWQCC groundwater standard is used.
- If an NMWQCC standard or an MCL has not been established for a specific substance for which toxicological information is published, the EPA Regional Screening Levels for Tap Water (formerly Region 6 Screening Levels for Tap Water) are used as the Groundwater Cleanup Level. These screening levels are for either a cancer- or noncancer-risk type. The Consent Order specifies screening at a 10^{-5} excess cancer risk. The EPA screening levels are for 10^{-6} excess cancer risk, so 10 times the EPA 10^{-6} screening levels are used for screening.
- 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. EPA MCLs are applied to both filtered and unfiltered sample results.
- The analytical results for radioactivity are compared with the DOE Biota Concentration Guides (BCGs) for surface water and Derived Concentration Guides (DCGs) for groundwater.

The results of data screening for this PMR are presented in Appendix D. This appendix shows all analytical results greater than half the lowest applicable screening levels. No results were greater than half the lowest applicable screening levels for the current PME, so no results are included in Appendix D.

Table 4.2-2 provides 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 are 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 analytes from the current PME exceeded their screening level at more than one sampling location, so no maps showing concentrations are included.

4.2.1 Surface Water (Base Flow)

No surface-water locations are included in this monitoring group.

4.2.2 Groundwater

No results from previous sampling of PME monitoring locations are reported in this PMR. No results from groundwater samples collected during this PME were above applicable screening levels.

4.3 Sampling Program Modifications

No modifications to the periodic monitoring sampling for the MDA AB monitoring group 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 are included in this monitoring group.

5.2.2 Groundwater

No results from previous sampling of PME monitoring locations are reported in this PMR. No results from groundwater samples collected during this PME were above applicable screening levels.

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

5.3 Data Gaps

Table 3.4-1 summarizes the field deviations encountered during this PME. The table provides a detailed account of sampling event deviations.

5.4 Remediation System Monitoring

Remediation system monitoring is not applicable to the MDA AB monitoring group because no systems are installed in the monitoring group area.

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 1988. "Environmental Surveillance at Los Alamos During 1987," Los Alamos National Laboratory report LA-11306-ENV, Los Alamos, New Mexico. (LANL 1988, 223036)

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), May 2010. "Investigation Report for Sites at Technical Area 49 Outside the Nuclear Environmental Site Boundary," Los Alamos National Laboratory document LA-UR-10-3095, Los Alamos, New Mexico. (LANL 2010, 109318)

LANL (Los Alamos National Laboratory), May 2010. "Investigation Report for Sites at Technical Area 49 Inside the Nuclear Environmental Site Boundary," Los Alamos National Laboratory document LA-UR-10-3304, Los Alamos, New Mexico. (LANL 2010, 109319)

LANL (Los Alamos National Laboratory), December 2011. "2011 Interim Facility-Wide Groundwater Monitoring Plan, Revision 1," Los Alamos National Laboratory document LA-UR-11-6958, Los Alamos, New Mexico. (LANL 2011, 208811)

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)

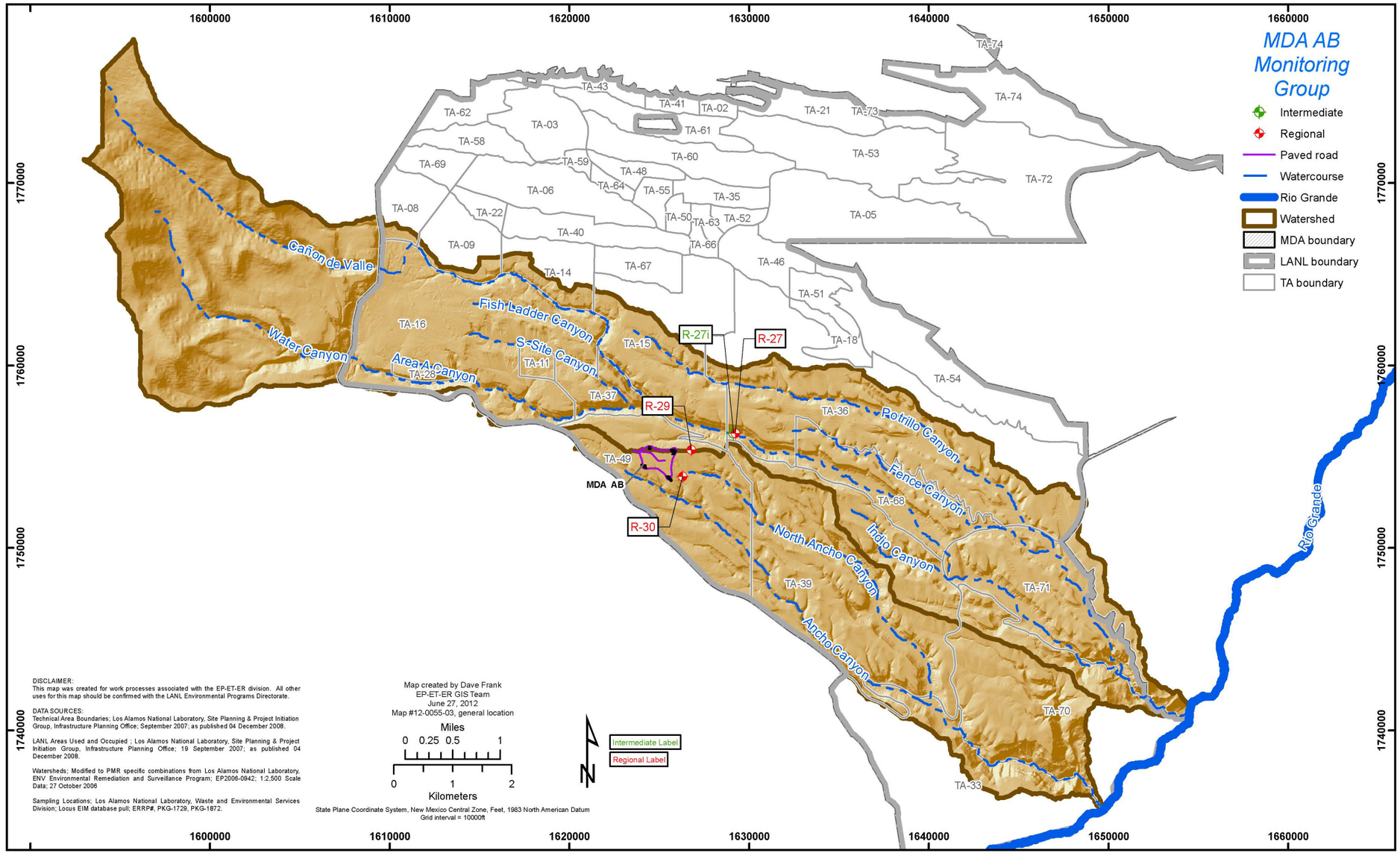


Figure 2.0-1 Locations monitored for this PME. Some locations on this map may not have been sampled (see Table 3.4-1).

Table 2.0-1
MDA AB Monitoring Group Locations and General Information

Location Name	Sample Collection Date	Screened Interval (ft)	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Calculated Single Casing Volume (gal.)	Purge Volume (gal.)	Purge Rate (cfs*)
R-27i	02/03/12	10	619	629	14.2	42.6	0.001
R-27	02/03/12	23	852	875	51.8	156	0.009
R-30	02/01/12	21	1140	1160.9	47.8	200	0.011
R-29	02/02/12	10	1170	1180	40.67	244.5	0.015

* cfs = Cubic feet per second.

Table 3.4-1
MDA AB Monitoring Group PME Observations and Deviations

Location	Deviation	Cause	Comment
n/a*	n/a	n/a	No deviations for this PME

* 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 Compounds						
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	NMWQCC Groundwater Standard
Volatile Organic Compounds						
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 Source	Standard Type	Groundwater	Surface Water
DOE Order 5400.5	DOE BCGs	n/a[a]	X[b]
DOE Order 5400.5	DOE 100-mrem Public Dose DCG	X	n/a
DOE Order 5400.5	DOE 4-mrem Drinking Water DCG	X	n/a
40 CFR[c] 141	EPA Primary Drinking Water Standard	X	n/a
EPA Regional Screening Levels for Chemical Contaminants at Superfund Sites	EPA Regional Screening Levels for Tap Water	X	n/a
20 NMAC 3.4	New Mexico Environmental Improvement Board Radiation Protection Standards	X	X
20 NMAC 6.2	NMWQCC Groundwater Standard	X	n/a
20 NMAC 6.4	NMWQCC Irrigation Standard	n/a	X
20 NMAC 6.4	NMWQCC Livestock Watering Standard	n/a	X
20 NMAC 6.4	NMWQCC Wildlife Habitat Standard	n/a	X
20 NMAC 6.4	NMWQCC Aquatic Life Standards Acute	n/a	X
20 NMAC 6.4	NMWQCC Aquatic Life Standards Chronic	n/a	X
20 NMAC 6.4	NMWQCC Human Health Standard	n/a	X

[a] n/a = Not applicable.

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

[c] CFR = Code of Federal Regulations.

Table 4.2-2
MDA AB Monitoring Group Groundwater Results above Screening Levels

Location	Date	Analyte	Field Prep Code	Result	Unit	Screening Level	Screening-Level Type
Regional Aquifer							
n/a*	n/a	No results above screening levels for this PME	n/a	n/a	n/a	n/a	n/a

*n/a = Not applicable.

Appendix A

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

Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-27	852	875	02/03/12	WG[a]	Dissolved Oxygen	7.13	mg/L	CAWA-12-2022
R-27	852	875	04/04/11	WG	Dissolved Oxygen	6.9	mg/L	CAWA-11-5100
R-27	852	875	09/14/10	WG	Dissolved Oxygen	7.02	mg/L	CAWA-10-25888
R-27	852	875	04/09/10	WG	Dissolved Oxygen	6.85	mg/L	CAWA-10-15306
R-27	852	875	10/07/09	WG	Dissolved Oxygen	6.83	mg/L	CAWA-09-14161
R-27	852	875	02/03/12	WG	Oxidation-Reduction Potential	17.1	mV	CAWA-12-2022
R-27	852	875	04/04/11	WG	Oxidation-Reduction Potential	8	mV	CAWA-11-5100
R-27	852	875	09/14/10	WG	Oxidation-Reduction Potential	397.2	mV	CAWA-10-25888
R-27	852	875	04/09/10	WG	Oxidation-Reduction Potential	78.2	mV	CAWA-10-15306
R-27	852	875	10/07/09	WG	Oxidation-Reduction Potential	112.9	mV	CAWA-09-14161
R-27	852	875	02/03/12	WG	pH	7.99	SU[b]	CAWA-12-2022
R-27	852	875	04/04/11	WG	pH	7.96	SU	CAWA-11-5100
R-27	852	875	09/14/10	WG	pH	7.71	SU	CAWA-10-25888
R-27	852	875	04/09/10	WG	pH	7.77	SU	CAWA-10-15306
R-27	852	875	10/07/09	WG	pH	7.3	SU	CAWA-09-14161
R-27	852	875	02/03/12	WG	Specific Conductance	119	µS/cm	CAWA-12-2022
R-27	852	875	04/04/11	WG	Specific Conductance	119	µS/cm	CAWA-11-5100
R-27	852	875	09/14/10	WG	Specific Conductance	121	µS/cm	CAWA-10-25888
R-27	852	875	04/09/10	WG	Specific Conductance	121	µS/cm	CAWA-10-15306
R-27	852	875	10/07/09	WG	Specific Conductance	116	µS/cm	CAWA-09-14161
R-27	852	875	02/03/12	WG	Temperature	17.29	deg C	CAWA-12-2022
R-27	852	875	04/04/11	WG	Temperature	17.1	deg C	CAWA-11-5100
R-27	852	875	09/14/10	WG	Temperature	17.45	deg C	CAWA-10-25888
R-27	852	875	04/09/10	WG	Temperature	18.27	deg C	CAWA-10-15306
R-27	852	875	04/07/09	WG	Temperature	18.7	deg C	CAWA-09-5665
R-27	852	875	02/03/12	WG	Turbidity	0.4	NTU[c]	CAWA-12-2022

Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-27	852	875	04/04/11	WG	Turbidity	0.33	NTU	CAWA-11-5100
R-27	852	875	09/14/10	WG	Turbidity	2.27	NTU	CAWA-10-25888
R-27	852	875	04/09/10	WG	Turbidity	0.27	NTU	CAWA-10-15306
R-27	852	875	10/07/09	WG	Turbidity	0.73	NTU	CAWA-09-14161
R-27i	619	629	02/03/12	WG	Dissolved Oxygen	8.16	mg/L	CAWA-12-2018
R-27i	619	629	06/20/11	WG	Dissolved Oxygen	8.1	mg/L	CAWA-11-13980
R-27i	619	629	06/20/11	WG	Dissolved Oxygen	8.08	mg/L	CAWA-11-14631
R-27i	619	629	06/20/11	WG	Dissolved Oxygen	8.12	mg/L	CAWA-11-14633
R-27i	619	629	06/20/11	WG	Dissolved Oxygen	8.1	mg/L	CAWA-11-14635
R-27i	619	629	04/04/11	WG	Dissolved Oxygen	8.09	mg/L	CAWA-11-5320
R-27i	619	629	12/01/10	WG	Dissolved Oxygen	7.65	mg/L	CAWA-11-2116
R-27i	619	629	09/20/10	WG	Dissolved Oxygen	8.35	mg/L	CAWA-10-25906
R-27i	619	629	02/03/12	WG	Oxidation-Reduction Potential	193.1	mV	CAWA-12-2018
R-27i	619	629	06/20/11	WG	Oxidation-Reduction Potential	-74.2	mV	CAWA-11-13980
R-27i	619	629	06/20/11	WG	Oxidation-Reduction Potential	-70.7	mV	CAWA-11-14631
R-27i	619	629	06/20/11	WG	Oxidation-Reduction Potential	-73	mV	CAWA-11-14633
R-27i	619	629	06/20/11	WG	Oxidation-Reduction Potential	-74.2	mV	CAWA-11-14635
R-27i	619	629	04/04/11	WG	Oxidation-Reduction Potential	210.1	mV	CAWA-11-5320
R-27i	619	629	12/01/10	WG	Oxidation-Reduction Potential	265.6	mV	CAWA-11-2116
R-27i	619	629	09/20/10	WG	Oxidation-Reduction Potential	196.4	mV	CAWA-10-25906
R-27i	619	629	02/03/12	WG	pH	7.08	SU	CAWA-12-2018
R-27i	619	629	06/20/11	WG	pH	7.1	SU	CAWA-11-13980
R-27i	619	629	06/20/11	WG	pH	7.03	SU	CAWA-11-14631
R-27i	619	629	06/20/11	WG	pH	7.08	SU	CAWA-11-14633
R-27i	619	629	06/20/11	WG	pH	7.1	SU	CAWA-11-14635
R-27i	619	629	04/04/11	WG	pH	7.07	SU	CAWA-11-5320

Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-27i	619	629	12/01/10	WG	pH	6.76	SU	CAWA-11-2116
R-27i	619	629	09/20/10	WG	pH	6.36	SU	CAWA-10-25906
R-27i	619	629	02/03/12	WG	Specific Conductance	102	µS/cm	CAWA-12-2018
R-27i	619	629	06/20/11	WG	Specific Conductance	105	µS/cm	CAWA-11-13980
R-27i	619	629	06/20/11	WG	Specific Conductance	104	µS/cm	CAWA-11-14631
R-27i	619	629	06/20/11	WG	Specific Conductance	105	µS/cm	CAWA-11-14633
R-27i	619	629	06/20/11	WG	Specific Conductance	105	µS/cm	CAWA-11-14635
R-27i	619	629	04/04/11	WG	Specific Conductance	102	µS/cm	CAWA-11-5320
R-27i	619	629	12/01/10	WG	Specific Conductance	104	µS/cm	CAWA-11-2116
R-27i	619	629	09/20/10	WG	Specific Conductance	116	µS/cm	CAWA-10-25906
R-27i	619	629	02/03/12	WG	Temperature	12.93	deg C	CAWA-12-2018
R-27i	619	629	06/20/11	WG	Temperature	13.98	deg C	CAWA-11-13980
R-27i	619	629	06/20/11	WG	Temperature	13.26	deg C	CAWA-11-14631
R-27i	619	629	06/20/11	WG	Temperature	13.74	deg C	CAWA-11-14633
R-27i	619	629	06/20/11	WG	Temperature	13.98	deg C	CAWA-11-14635
R-27i	619	629	04/04/11	WG	Temperature	13.1	deg C	CAWA-11-5320
R-27i	619	629	12/01/10	WG	Temperature	12.9	deg C	CAWA-11-2116
R-27i	619	629	09/20/10	WG	Temperature	14.41	deg C	CAWA-10-25906
R-27i	619	629	02/03/12	WG	Turbidity	0.45	NTU	CAWA-12-2018
R-27i	619	629	06/20/11	WG	Turbidity	0.48	NTU	CAWA-11-13980
R-27i	619	629	06/20/11	WG	Turbidity	0.5	NTU	CAWA-11-14631
R-27i	619	629	06/20/11	WG	Turbidity	0.4	NTU	CAWA-11-14633
R-27i	619	629	06/20/11	WG	Turbidity	0.48	NTU	CAWA-11-14635
R-27i	619	629	04/04/11	WG	Turbidity	0.41	NTU	CAWA-11-5320
R-27i	619	629	12/01/10	WG	Turbidity	0.48	NTU	CAWA-11-2116
R-27i	619	629	09/20/10	WG	Turbidity	0.6	NTU	CAWA-10-25906

Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-29	1170	1180	02/02/12	WG	Dissolved Oxygen	7.22	mg/L	CAAN-12-2024
R-29	1170	1180	09/21/11	WG	Dissolved Oxygen	3.76	mg/L	CAAN-11-26930
R-29	1170	1180	09/21/11	WG	Dissolved Oxygen	5.22	mg/L	CAAN-11-26932
R-29	1170	1180	09/21/11	WG	Dissolved Oxygen	6.87	mg/L	CAAN-11-26934
R-29	1170	1180	09/21/11	WG	Dissolved Oxygen	6.87	mg/L	CAAN-11-27010
R-29	1170	1180	06/10/11	WG	Dissolved Oxygen	5.98	mg/L	CAAN-11-13955
R-29	1170	1180	06/10/11	WG	Dissolved Oxygen	3.91	mg/L	CAAN-11-14655
R-29	1170	1180	06/10/11	WG	Dissolved Oxygen	5.3	mg/L	CAAN-11-14657
R-29	1170	1180	06/10/11	WG	Dissolved Oxygen	6	mg/L	CAAN-11-14659
R-29	1170	1180	06/10/11	WG	Dissolved Oxygen	5.98	mg/L	CAAN-11-14661
R-29	1170	1180	04/06/11	WG	Dissolved Oxygen	7.12	mg/L	CAAN-11-5485
R-29	1170	1180	01/07/11	WG	Dissolved Oxygen	5.83	mg/L	CAAN-11-3194
R-29	1170	1180	01/07/11	WG	Dissolved Oxygen	4.2	mg/L	CAAN-11-3198
R-29	1170	1180	01/07/11	WG	Dissolved Oxygen	4.75	mg/L	CAAN-11-3199
R-29	1170	1180	02/02/12	WG	Oxidation-Reduction Potential	36.2	mV	CAAN-12-2024
R-29	1170	1180	09/21/11	WG	Oxidation-Reduction Potential	-106.5	mV	CAAN-11-26930
R-29	1170	1180	09/21/11	WG	Oxidation-Reduction Potential	-22.3	mV	CAAN-11-26932
R-29	1170	1180	09/21/11	WG	Oxidation-Reduction Potential	52.2	mV	CAAN-11-26934
R-29	1170	1180	09/21/11	WG	Oxidation-Reduction Potential	52.2	mV	CAAN-11-27010
R-29	1170	1180	06/10/11	WG	Oxidation-Reduction Potential	88.1	mV	CAAN-11-13955
R-29	1170	1180	06/10/11	WG	Oxidation-Reduction Potential	-70.5	mV	CAAN-11-14655
R-29	1170	1180	06/10/11	WG	Oxidation-Reduction Potential	42.8	mV	CAAN-11-14657
R-29	1170	1180	06/10/11	WG	Oxidation-Reduction Potential	81.1	mV	CAAN-11-14659
R-29	1170	1180	06/10/11	WG	Oxidation-Reduction Potential	88.1	mV	CAAN-11-14661
R-29	1170	1180	04/06/11	WG	Oxidation-Reduction Potential	16.6	mV	CAAN-11-5485
R-29	1170	1180	01/07/11	WG	Oxidation-Reduction Potential	271.2	mV	CAAN-11-3194

Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-29	1170	1180	01/07/11	WG	Oxidation-Reduction Potential	319.3	mV	CAAN-11-3199
R-29	1170	1180	02/02/12	WG	pH	8.13	SU	CAAN-12-2024
R-29	1170	1180	09/21/11	WG	pH	8.36	SU	CAAN-11-26930
R-29	1170	1180	09/21/11	WG	pH	8.53	SU	CAAN-11-26932
R-29	1170	1180	09/21/11	WG	pH	8.26	SU	CAAN-11-26934
R-29	1170	1180	09/21/11	WG	pH	8.26	SU	CAAN-11-27010
R-29	1170	1180	06/10/11	WG	pH	7.98	SU	CAAN-11-13955
R-29	1170	1180	06/10/11	WG	pH	7.89	SU	CAAN-11-14655
R-29	1170	1180	06/10/11	WG	pH	8.1	SU	CAAN-11-14657
R-29	1170	1180	06/10/11	WG	pH	8.04	SU	CAAN-11-14659
R-29	1170	1180	06/10/11	WG	pH	7.98	SU	CAAN-11-14661
R-29	1170	1180	04/06/11	WG	pH	7.8	SU	CAAN-11-5485
R-29	1170	1180	01/07/11	WG	pH	7.77	SU	CAAN-11-3194
R-29	1170	1180	01/07/11	WG	pH	7.77	SU	CAAN-11-3198
R-29	1170	1180	01/07/11	WG	pH	8.14	SU	CAAN-11-3199
R-29	1170	1180	02/02/12	WG	Specific Conductance	133	µS/cm	CAAN-12-2024
R-29	1170	1180	09/21/11	WG	Specific Conductance	189	µS/cm	CAAN-11-26930
R-29	1170	1180	09/21/11	WG	Specific Conductance	160	µS/cm	CAAN-11-26932
R-29	1170	1180	09/21/11	WG	Specific Conductance	150	µS/cm	CAAN-11-26934
R-29	1170	1180	09/21/11	WG	Specific Conductance	150	µS/cm	CAAN-11-27010
R-29	1170	1180	06/10/11	WG	Specific Conductance	139	µS/cm	CAAN-11-13955
R-29	1170	1180	06/10/11	WG	Specific Conductance	160	µS/cm	CAAN-11-14655
R-29	1170	1180	06/10/11	WG	Specific Conductance	147	µS/cm	CAAN-11-14657
R-29	1170	1180	06/10/11	WG	Specific Conductance	142	µS/cm	CAAN-11-14659
R-29	1170	1180	06/10/11	WG	Specific Conductance	139	µS/cm	CAAN-11-14661
R-29	1170	1180	04/06/11	WG	Specific Conductance	139	µS/cm	CAAN-11-5485

Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-29	1170	1180	01/07/11	WG	Specific Conductance	144	µS/cm	CAAN-11-3194
R-29	1170	1180	01/07/11	WG	Specific Conductance	176	µS/cm	CAAN-11-3198
R-29	1170	1180	01/07/11	WG	Specific Conductance	150	µS/cm	CAAN-11-3199
R-29	1170	1180	02/02/12	WG	Temperature	18.15	deg C	CAAN-12-2024
R-29	1170	1180	09/21/11	WG	Temperature	16	deg C	CAAN-11-26930
R-29	1170	1180	09/21/11	WG	Temperature	17.61	deg C	CAAN-11-26932
R-29	1170	1180	09/21/11	WG	Temperature	18.19	deg C	CAAN-11-26934
R-29	1170	1180	09/21/11	WG	Temperature	18.19	deg C	CAAN-11-27010
R-29	1170	1180	06/10/11	WG	Temperature	19.64	deg C	CAAN-11-13955
R-29	1170	1180	06/10/11	WG	Temperature	18.15	deg C	CAAN-11-14655
R-29	1170	1180	06/10/11	WG	Temperature	19	deg C	CAAN-11-14657
R-29	1170	1180	06/10/11	WG	Temperature	19.65	deg C	CAAN-11-14659
R-29	1170	1180	06/10/11	WG	Temperature	19.64	deg C	CAAN-11-14661
R-29	1170	1180	04/06/11	WG	Temperature	18.18	deg C	CAAN-11-5485
R-29	1170	1180	01/07/11	WG	Temperature	16.07	deg C	CAAN-11-3194
R-29	1170	1180	01/07/11	WG	Temperature	14.1	deg C	CAAN-11-3198
R-29	1170	1180	01/07/11	WG	Temperature	17.75	deg C	CAAN-11-3199
R-29	1170	1180	02/02/12	WG	Turbidity	8.94	NTU	CAAN-12-2024
R-29	1170	1180	09/21/11	WG	Turbidity	8.19	NTU	CAAN-11-26930
R-29	1170	1180	09/21/11	WG	Turbidity	5.65	NTU	CAAN-11-26932
R-29	1170	1180	09/21/11	WG	Turbidity	13.4	NTU	CAAN-11-26934
R-29	1170	1180	09/21/11	WG	Turbidity	13.4	NTU	CAAN-11-27010
R-29	1170	1180	06/10/11	WG	Turbidity	5.82	NTU	CAAN-11-13955
R-29	1170	1180	06/10/11	WG	Turbidity	4.52	NTU	CAAN-11-14655
R-29	1170	1180	06/10/11	WG	Turbidity	4.9	NTU	CAAN-11-14657
R-29	1170	1180	06/10/11	WG	Turbidity	5.48	NTU	CAAN-11-14659

Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-29	1170	1180	06/10/11	WG	Turbidity	5.82	NTU	CAAN-11-14661
R-29	1170	1180	04/06/11	WG	Turbidity	8.57	NTU	CAAN-11-5485
R-29	1170	1180	01/07/11	WG	Turbidity	3.18	NTU	CAAN-11-3194
R-29	1170	1180	01/07/11	WG	Turbidity	8.8	NTU	CAAN-11-3198
R-29	1170	1180	01/07/11	WG	Turbidity	4.95	NTU	CAAN-11-3199
R-30	1140	1160.9	02/01/12	WG	Dissolved Oxygen	7.98	mg/L	CAAN-12-2031
R-30	1140	1160.9	09/14/11	WG	Dissolved Oxygen	8.07	mg/L	CAAN-11-27018
R-30	1140	1160.9	06/15/11	WG	Dissolved Oxygen	7.1	mg/L	CAAN-11-13959
R-30	1140	1160.9	04/05/11	WG	Dissolved Oxygen	8.12	mg/L	CAAN-11-5489
R-30	1140	1160.9	12/03/10	WG	Dissolved Oxygen	4.25	mg/L	CAAN-11-2163
R-30	1140	1160.9	02/01/12	WG	Oxidation-Reduction Potential	176.6	mV	CAAN-12-2031
R-30	1140	1160.9	09/14/11	WG	Oxidation-Reduction Potential	82.3	mV	CAAN-11-27018
R-30	1140	1160.9	06/15/11	WG	Oxidation-Reduction Potential	184.5	mV	CAAN-11-13959
R-30	1140	1160.9	04/05/11	WG	Oxidation-Reduction Potential	53.7	mV	CAAN-11-5489
R-30	1140	1160.9	12/03/10	WG	Oxidation-Reduction Potential	7.7	mV	CAAN-11-2163
R-30	1140	1160.9	02/01/12	WG	pH	7.97	SU	CAAN-12-2031
R-30	1140	1160.9	09/14/11	WG	pH	8.04	SU	CAAN-11-27018
R-30	1140	1160.9	06/15/11	WG	pH	7.95	SU	CAAN-11-13959
R-30	1140	1160.9	04/05/11	WG	pH	7.94	SU	CAAN-11-5489
R-30	1140	1160.9	12/03/10	WG	pH	7.94	SU	CAAN-11-2163
R-30	1140	1160.9	02/01/12	WG	Specific Conductance	117	µS/cm	CAAN-12-2031
R-30	1140	1160.9	09/14/11	WG	Specific Conductance	117	µS/cm	CAAN-11-27018
R-30	1140	1160.9	06/15/11	WG	Specific Conductance	121	µS/cm	CAAN-11-13959
R-30	1140	1160.9	04/05/11	WG	Specific Conductance	127	µS/cm	CAAN-11-5489
R-30	1140	1160.9	12/03/10	WG	Specific Conductance	120	µS/cm	CAAN-11-2163
R-30	1140	1160.9	02/01/12	WG	Temperature	20.25	deg C	CAAN-12-2031

Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)	Date	Field Matrix	Analyte	Result	Unit	Sample
R-30	1140	1160.9	09/14/11	WG	Temperature	20.22	deg C	CAAN-11-27018
R-30	1140	1160.9	06/15/11	WG	Temperature	20.34	deg C	CAAN-11-13959
R-30	1140	1160.9	04/05/11	WG	Temperature	18.36	deg C	CAAN-11-5489
R-30	1140	1160.9	12/03/10	WG	Temperature	19.77	deg C	CAAN-11-2163
R-30	1140	1160.9	02/01/12	WG	Turbidity	1.25	NTU	CAAN-12-2031
R-30	1140	1160.9	09/14/11	WG	Turbidity	0.7	NTU	CAAN-11-27018
R-30	1140	1160.9	06/15/11	WG	Turbidity	0.98	NTU	CAAN-11-13959
R-30	1140	1160.9	04/05/11	WG	Turbidity	3.62	NTU	CAAN-11-5489
R-30	1140	1160.9	12/03/10	WG	Turbidity	1.44	NTU	CAAN-11-2163

[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 terms in the lists.

Acronyms and Abbreviations

Acronym, Abbreviation, or Symbol	Description
Miscellaneous	
%	percent
%D	percent difference
%R	percent recovery
%RSD	percent relative standard deviation
<	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	chlorinated biphenyl
CCB	continuing calibration blank
CCV	continuing calibration verification
CLP	Control Laboratory Program
CRDL	contract-required detection limit
CRI	CDRL check standard
DCG	Derived Concentration Guide (DOE)
DDE	dichlorodiphenyldichloroethylene
DNX	dinitroso-RDX (or hexahydro-1,3-dinitroso-5-nitro-1,3,5-triazine)
DOE	Department of Energy (U.S.)
DQO	data quality objective
EPA	Environmental Protection Agency (U.S.)
GC	gas chromatography
GC/MS	gas chromatography/mass spectrometry
GFAA	graphite furnace atomic absorption
GFPC	gas-flow proportional counter
GW	groundwater
HH OO	Human Health—Organism Only (NMWQCC standard)
HMX	1,3,5,7-tetranitro-1,3,5,7-tetrazocine
HPLC	high-pressure liquid chromatography
ICAL	initial calibration
ICPAES	inductively coupled plasma atomic (optical) emission spectroscopy
ICV	initial calibration verification
IDL	instrument detection limit

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Miscellaneous (continued)	
IS	internal standard
LAL	lower acceptance limit
LANL	Los Alamos National Laboratory
LCS	laboratory control sample
LLEE	low-level electrolytic extraction
LOC	level of chlorination
LSC	liquid scintillation counting
Lvl	level
MCL	maximum contaminant level (EPA)
MDA	minimum detectable activity
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 Environmental Department
NMWQCC	New Mexico Water Quality Control Commission
OPR	ongoing precision recovery
PCB	polychlorinated biphenyl
PCDD	polychlorinated dibenzo-p-dioxin
PCDF	polychlorinated dibenzofuran
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
RRT	relative retention time
RT	retention time
Scr	screening
SDG	sample delivery group
SMO	Sample Management Office
SSC	suspended sediment concentration
SU	standard unit
TCDD	tetrachlorodibenzo-p-dioxin

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Miscellaneous (continued)	
TCDF	tetrachlorodibenzofuran
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
Lab Sample Type Codes	
CS	client sample
DL	dilution
DUP	duplicate
INIT	initial
RE	reanalysis
REDL	reanalysis dilution
REDP	reanalysis duplicate
RI	reissue
TRP	triplicate
Field QC Type Codes	
EQB	equipment rinsate blank
FB	field blank
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

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Field QC Type Codes (continued)	
PEK	performance evaluation known
REG	regular
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	
DIOX/FUR, Diox/Fur	dioxins and furans
DRO	diesel range organics
Geninorg, GENINORG, General Chemistry	general inorganics
GRO	gasoline range organics
HERB	herbicides
HEXP	high explosives
INORGANIC	inorganics
ISOTOPE, Isotope	isotope ratios
LCMS/MS	liquid chromatography mass spectrometry/mass spectrometry
METALS, Metals	metals
PEST/PCB, PESTPCB	pesticides and PCBs
RAD, Rad	radiochemistry
SVOC, SVOA	semivolatile organic compounds
VOC, VOA	volatile organic compounds
Detect Flag Codes	
N	no
Y	yes
Lab Codes	
ALTC	Alta Analytical Laboratory, Inc., San Diego, CA
ARSL	American Radiation Services, Inc.
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.

Acronyms and Abbreviations (continued)

Acronym, Abbreviation, or Symbol	Description
Lab Codes (continued)	
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 [RPD]) 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 (MS) 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 MS sample was outside acceptance criteria. * (Inorganic)—The result for this analyte in the laboratory replicate analysis was outside acceptance criteria.
H	(Organic/Inorganic)—The required extraction or analysis holding time for this result was exceeded.

Analytical Laboratory Qualifier Codes (continued)

Code	Description
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)

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.

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.95	—	—	0.01	SU	H	J-	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.94	—	—	0.01	SU	H	J-	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.79	—	—	0.01	SU	H	J-	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	8.05	—	—	0.01	SU	H	J-	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	8.02	—	—	0.01	SU	H	J-	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.93	—	—	0.01	SU	H	J-	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.95	—	—	0.01	SU	H	J-	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	55.9	—	—	0.73	mg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	55.1	—	—	0.73	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	56.2	—	—	0.73	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	53.6	—	—	0.73	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	56.1	—	—	0.73	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	58.1	—	—	0.73	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	56.5	—	—	0.73	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.0021	0.0047	4.30E-02	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00548	0.0038	4.50E-02	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00636	0.0087	4.60E-02	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00855	0.0047	4.30E-02	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00897	0.0068	2.40E-02	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00221	0.0052	2.20E-02	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00934	0.00492	3.46E-02	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00715	0.00331	3.01E-02	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.0325	—	—	0.016	mg/L	J	J	12-726	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.0555	—	—	0.016	mg/L	—	U	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.05	—	—	0.016	mg/L	U	UJ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.155	—	—	0.016	mg/L	—	J	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.025	—	—	0.016	mg/L	J	U	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.018	—	—	0.016	mg/L	J	U	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.05	—	—	0.016	mg/L	U	UJ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	27.5	—	—	1	µg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	26.9	—	—	1	µg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	28	—	—	1	µg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Barium	Ba	Y	26.9	—	—	1	µg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	26.6	—	—	1	µg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	25.7	—	—	1	µg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Barium	Ba	Y	25.7	—	—	1	µg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	Y	0.0768	—	—	0.066	mg/L	J	J	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.9	—	—	0.05	mg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.4	—	—	0.05	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.6	—	—	0.05	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.5	—	—	0.05	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.5	—	—	0.05	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.1	—	—	0.05	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.3	—	—	0.05	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.8	1.4	4.80E+00	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.428	1.3	4.40E+00	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.595	1.2	4.00E+00	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.751	1.4	4.60E+00	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-4.01	1.5	3.70E+00	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.194	1.4	4.60E+00	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.45	0.826	2.91E+00	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.79	1.41	4.23E+00	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.56	—	—	0.066	mg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.64	—	—	0.066	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.53	—	—	0.066	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.51	—	—	0.066	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.53	—	—	0.066	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.42	—	—	0.066	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.44	—	—	0.066	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.998	1.3	5.00E+00	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.0674	1.4	4.50E+00	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.71	1.4	4.30E+00	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.714	1.2	3.80E+00	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	1.49	1.4	5.00E+00	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.761	1.4	4.20E+00	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-1.42	0.999	2.69E+00	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	2.56	1.57	5.11E+00	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.217	—	—	0.033	mg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.235	—	—	0.033	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.206	—	—	0.033	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.201	—	—	0.033	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.205	—	—	0.033	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.363	—	—	0.033	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.367	—	—	0.033	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.508	0.52	2.70E+00	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.935	0.68	2.20E+00	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.0844	0.41	1.80E+00	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	0.231	0.54	2.10E+00	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.00325	0.387	1.62E+00	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	-0.625	0.44	2.05E+00	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	03/30/07	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	Y	1.07	0.297	8.27E-01	—	pCi/L	—	J	183494	GU070300GR2720	GELC
R-27	852	03/30/07	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	Y	1.35	0.317	8.37E-01	—	pCi/L	—	J	183494	GU070300GR2701	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	-0.715	0.54	2.30E+00	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.0283	0.67	2.50E+00	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	N	0.742	0.65	2.20E+00	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.32	0.74	2.40E+00	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	6.88	1.52	3.86E+00	—	pCi/L	—	J	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	Y	3.39	0.904	2.53E+00	—	pCi/L	—	J	196605	GU071000GR2720	GELC
R-27	852	03/30/07	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	8.84	1.17	2.94E+00	—	pCi/L	—	—	183494	GU070300GR2701	GELC
R-27	852	03/30/07	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	Y	3.06	0.959	2.95E+00	—	pCi/L	—	J	183494	GU070300GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	40.3	—	—	0.45	mg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.5	—	—	0.45	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.5	—	—	0.35	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.3	—	—	0.35	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.7	—	—	0.35	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38	—	—	0.35	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.7	—	—	0.35	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.18	—	—	0.11	mg/L	—	NQ	12-727	CAWA-12-2022	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.02	—	—	0.11	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.14	—	—	0.085	mg/L	E	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.05	—	—	0.085	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.17	—	—	0.085	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.08	—	—	0.085	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.13	—	—	0.085	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.09	—	—	0.17	µg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	0.973	—	—	0.17	µg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	0.95	—	—	0.1	µg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	N	0.978	—	—	0.1	µg/L	—	U	10-2717	CAWA-10-15309	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	N	0.972	—	—	0.1	µg/L	—	U	10-2717	CAWA-10-15305	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.05	—	—	0.1	µg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1	—	—	0.1	µg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.67	2.4	8.10E+00	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.0686	2.6	8.40E+00	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	-2.69	12	3.90E+01	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	12	10	3.40E+01	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	2.68	11	3.60E+01	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	1.56	9.5	3.20E+01	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	1.01	9.15	2.83E+01	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	2.48	10.4	3.47E+01	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.295	—	—	0.05	mg/L	—	NQ	12-726	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	N	0.0289	—	—	0.01	mg/L	J	U	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.294	—	—	0.05	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.405	—	—	0.05	mg/L	—	J	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	N	0.393	—	—	0.05	mg/L	—	U	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	N	0.181	—	—	0.05	mg/L	J	U	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	N	0.183	—	—	0.05	mg/L	J	U	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.211	—	—	0.05	µg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.235	—	—	0.05	µg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.228	—	—	0.05	µg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.205	—	—	0.05	µg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	04/09/10	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.207	—	—	0.05	µg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	10/07/09	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.222	—	—	0.05	µg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.21	—	—	0.05	µg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.0155	0.0068	3.30E-02	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0	0.0028	3.10E-02	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00434	0.0043	3.60E-02	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0	0.0036	4.30E-02	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00409	0.005	3.10E-02	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00567	0.0068	2.90E-02	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00391	0.00677	3.41E-02	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.0094	0.00625	3.28E-02	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00776	0.011	3.80E-02	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0	0.0057	4.60E-02	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00217	0.0038	3.50E-02	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0	0.0036	4.20E-02	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00204	0.0054	3.50E-02	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00189	0.0042	3.20E-02	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00195	0.00338	3.20E-02	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00376	0.00651	3.08E-02	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.49	—	—	0.05	mg/L	—	NQ	12-727	CAWA-12-2022	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.34	—	—	0.05	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.43	—	—	0.05	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.33	—	—	0.05	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Potassium	K	Y	1.33	—	—	0.05	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.36	—	—	0.05	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Potassium	K	Y	1.38	—	—	0.05	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-14.4	18	6.10E+01	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	20.9	20	7.80E+01	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	32.8	20	7.40E+01	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-44.4	17	5.10E+01	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	23	18	6.90E+01	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-24.7	20	6.40E+01	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-29.7	14.7	3.62E+01	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	27.5	21.6	5.18E+01	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	71.8	—	—	0.053	mg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	66.6	—	—	0.053	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	70.6	—	—	0.053	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	70.3	—	—	0.053	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	71.2	—	—	0.053	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	64.8	—	—	0.053	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	64.7	—	—	0.053	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	10.7	—	—	0.1	mg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	10	—	—	0.1	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	10.1	—	—	0.1	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Sodium	Na	Y	11.1	—	—	0.1	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	10.7	—	—	0.1	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	10.4	—	—	0.1	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Sodium	Na	Y	10.5	—	—	0.1	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.324	1	3.90E+00	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	3.1	1.3	5.30E+00	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.112	1.4	4.60E+00	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	-2.05	1.4	4.20E+00	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	2.46	1.3	5.00E+00	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	1.37	1.4	5.20E+00	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.477	1.16	3.91E+00	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.395	1.27	4.08E+00	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	119	—	—	1	µS/cm	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	122	—	—	1	µS/cm	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	115	—	—	1	µS/cm	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	114	—	—	1	µS/cm	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	116	—	—	1	µS/cm	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	122	—	—	1	µS/cm	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	120	—	—	1	µS/cm	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	52.3	—	—	1	µg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	48.4	—	—	1	µg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	50	—	—	1	µg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	50	—	—	1	µg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Strontium	Sr	Y	51.1	—	—	1	µg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Strontium	Sr	Y	48	—	—	1	µg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	47.3	—	—	1	µg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0467	0.14	4.80E-01	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.283	0.15	4.60E-01	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.203	0.12	4.10E-01	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0363	0.13	4.50E-01	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0614	0.14	4.90E-01	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.26	0.15	4.90E-01	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.00561	0.0639	2.19E-01	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0977	0.065	2.14E-01	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.49	—	—	0.1	mg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.6	—	—	0.1	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.52	—	—	0.1	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.51	—	—	0.1	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.48	—	—	0.1	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.41	—	—	0.1	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.37	—	—	0.1	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	121	—	—	3.4	mg/L	—	J	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	122	—	—	2.4	mg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	120	—	—	2.4	mg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	139	—	—	2.4	mg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	143	—	—	2.4	mg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	112	—	—	2.4	mg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	112	—	—	2.4	mg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0564	—	—	0.015	mg/L	—	NQ	12-726	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.015	mg/L	U	U	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.045	—	—	0.015	mg/L	J	U	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.076	—	—	0.015	mg/L	—	U	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.068	—	—	0.015	mg/L	—	U	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.03	—	—	0.015	mg/L	—	U	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.03	—	—	0.015	mg/L	—	U	10-76	CAWA-09-14162	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.7	0.6	1.97E+00	—	pCi/L	U	U	12-728	CAWA-12-2023	ARSL
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	Y	3.3488	0.8694	2.22E+00	—	pCi/L	—	R	10-4590	CAWA-10-25888	ARSL
R-27	852	09/14/10	WG	UF	RE	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.127	0.7084	2.22E+00	—	pCi/L	U	U	10-4590	CAWA-10-25888	ARSL
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.1932	0.2898	2.90E-01	—	pCi/L	U	U	10-120	CAWA-09-14161	UMTL
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.322	0.2898	2.90E-01	—	pCi/L	U	U	10-120	CAWA-09-14163	UMTL
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-6.70404	1.35562	3.42E+00	—	pCi/L	U	U	09-85	CAWA-08-16059	ARSL
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-6.50762	1.34596	3.47E+00	—	pCi/L	U	U	09-85	CAWA-08-16054	ARSL
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	Generic:LLEE	Tritium	H-3	Y	-0.1932	0.2898	2.90E-01	—	pCi/L	—	—	2417	UU071000GR2720	UMTL
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	Generic:LLEE	Tritium	H-3	Y	0.0644	0.2898	2.90E-01	—	pCi/L	—	—	2417	UU071000GR2701	UMTL
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.477	—	—	0.067	µg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.521	—	—	0.067	µg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.542	—	—	0.05	µg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	N	0.497	—	—	0.05	µg/L	—	U	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	N	0.495	—	—	0.05	µg/L	—	U	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.502	—	—	0.05	µg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.494	—	—	0.05	µg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.284	0.032	5.60E-02	—	pCi/L	—	NQ	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.275	0.03	5.30E-02	—	pCi/L	—	NQ	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.277	0.031	7.20E-02	—	pCi/L	—	NQ	10-76	CAWA-09-14161	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.293	0.035	9.00E-02	—	pCi/L	—	NQ	10-76	CAWA-09-14163	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.266	0.028	6.00E-02	—	pCi/L	—	NQ	09-80	CAWA-08-16054	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.326	0.03	6.00E-02	—	pCi/L	—	NQ	09-80	CAWA-08-16059	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.34	0.0352	6.57E-02	—	pCi/L	—	—	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.277	0.0288	5.78E-02	—	pCi/L	—	—	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.012	0.0074	2.90E-02	—	pCi/L	U	U	12-727	CAWA-12-2023	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0145	0.006	2.70E-02	—	pCi/L	U	U	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0156	0.0084	4.60E-02	—	pCi/L	U	U	10-76	CAWA-09-14163	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0175	0.0076	3.70E-02	—	pCi/L	U	U	10-76	CAWA-09-14161	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.019	0.0082	3.10E-02	—	pCi/L	U	U	09-80	CAWA-08-16054	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0212	0.0068	3.10E-02	—	pCi/L	U	U	09-80	CAWA-08-16059	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0141	0.0075	3.90E-02	—	pCi/L	U	U	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0198	0.00793	3.43E-02	—	pCi/L	U	U	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.172	0.023	4.20E-02	—	pCi/L	—	NQ	12-727	CAWA-12-2023	GELC
R-27	852	09/14/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.16	0.022	2.30E-02	—	pCi/L	—	NQ	10-4589	CAWA-10-25888	GELC
R-27	852	10/07/09	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.134	0.022	5.50E-02	—	pCi/L	—	NQ	10-76	CAWA-09-14163	GELC
R-27	852	10/07/09	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.158	0.021	4.40E-02	—	pCi/L	—	NQ	10-76	CAWA-09-14161	GELC
R-27	852	10/10/08	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.164	0.019	3.30E-02	—	pCi/L	—	NQ	09-80	CAWA-08-16054	GELC
R-27	852	10/10/08	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.149	0.018	3.30E-02	—	pCi/L	—	NQ	09-80	CAWA-08-16059	GELC
R-27	852	10/26/07	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.162	0.0219	4.38E-02	—	pCi/L	—	—	196605	GU071000GR2701	GELC
R-27	852	10/26/07	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.177	0.0221	3.86E-02	—	pCi/L	—	—	196605	GU071000GR2720	GELC
R-27	852	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.76	—	—	1	µg/L	—	NQ	12-727	CAWA-12-2022	GELC
R-27	852	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.05	—	—	1	µg/L	—	NQ	11-1904	CAWA-11-5101	GELC
R-27	852	09/14/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.51	—	—	1	µg/L	—	NQ	10-4588	CAWA-10-25889	GELC
R-27	852	04/09/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.52	—	—	1	µg/L	—	NQ	10-2717	CAWA-10-15305	GELC
R-27	852	04/09/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.6	—	—	1	µg/L	—	NQ	10-2717	CAWA-10-15309	GELC
R-27	852	10/07/09	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.33	—	—	1	µg/L	—	NQ	10-76	CAWA-09-14159	GELC
R-27	852	10/07/09	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.39	—	—	1	µg/L	—	NQ	10-76	CAWA-09-14162	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.31	—	—	0.01	SU	H	J-	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.36	—	—	0.01	SU	H	J-	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.38	—	—	0.01	SU	H	J-	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.43	—	—	0.01	SU	H	J-	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.32	—	—	0.01	SU	H	J-	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	49.1	—	—	0.73	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	50.8	—	—	0.73	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	48	—	—	0.73	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	51.4	—	—	0.73	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	47.9	—	—	0.73	mg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00483	0.0034	4.90E-02	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00245	0.0054	2.60E-02	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00366	0.0037	3.00E-02	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00473	0.0028	2.90E-02	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00501	0.0039	3.50E-02	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	9.4	—	—	1	µg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	10.1	—	—	1	µg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	10	—	—	1	µg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	10	—	—	1	µg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	10.6	—	—	1	µg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	8.83	—	—	0.05	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	8.67	—	—	0.05	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	8.71	—	—	0.05	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	8.48	—	—	0.05	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	8.4	—	—	0.05	mg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.82	1.6	5.40E+00	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-3.53	1.6	4.30E+00	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.63	1.3	4.40E+00	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.705	1.9	6.00E+00	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-2.54	1.4	4.00E+00	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27i	619	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.79	—	—	0.066	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.33	—	—	0.066	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.4	—	—	0.066	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.3	—	—	0.066	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.38	—	—	0.066	mg/L	—	J+	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.861	1.4	5.60E+00	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.986	1.8	6.20E+00	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-2.2	1.4	3.90E+00	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	2.32	1.9	6.70E+00	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0	0	4.30E+00	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.219	—	—	0.033	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.167	—	—	0.033	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.214	—	—	0.033	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.177	—	—	0.033	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.165	—	—	0.033	mg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	1.02	0.68	2.20E+00	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	1.2	0.76	2.30E+00	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.343	0.46	1.80E+00	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.195	0.51	2.20E+00	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.427	0.29	2.20E+00	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.426	0.63	2.30E+00	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.237	0.76	2.80E+00	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	-0.36	0.6	2.40E+00	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	3.99	0.92	2.10E+00	—	pCi/L	—	NQ	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.801	0.65	2.20E+00	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	32.3	—	—	0.45	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	31.9	—	—	0.45	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	31.8	—	—	0.45	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	31.2	—	—	0.35	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	30.9	—	—	0.35	mg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.5	—	—	0.11	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.5	—	—	0.11	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.45	—	—	0.11	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.43	—	—	0.085	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.4	—	—	0.085	mg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.57	—	—	0.17	µg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.63	—	—	0.17	µg/L	—	J	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.53	—	—	0.17	µg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	N	1.65	—	—	0.1	µg/L	—	U	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.59	—	—	0.1	µg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	6.1	3.3	1.20E+01	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.387	2.9	9.80E+00	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.326	3.5	1.20E+01	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-3.81	2.9	8.70E+00	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	04/15/10	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	3.71	7.6	2.50E+01	—	pCi/L	U	U	10-2803	CAWA-10-15169	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.722	—	—	0.5	µg/L	J	J	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.55	—	—	0.5	µg/L	J	J	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.615	—	—	0.5	µg/L	J	J	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.787	—	—	0.5	µg/L	J	J	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	N	2	—	—	0.5	µg/L	U	U	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.09	—	—	0.05	mg/L	J	J	12-718	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	N	0.25	—	—	0.05	mg/L	U	U	11-2716	CAWA-11-13981	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27i	619	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	N	0.05	—	—	0.01	mg/L	U	U	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.086	—	—	0.05	mg/L	J	J	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.058	—	—	0.05	mg/L	J	J	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.123	—	—	0.05	µg/L	J	J	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.127	—	—	0.05	µg/L	J	J	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.13	—	—	0.05	µg/L	J	J	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.117	—	—	0.05	µg/L	J	J	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.134	—	—	0.05	µg/L	J	J	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00615	0.0044	3.90E-02	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.0046	0.0056	2.80E-02	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00943	0.0053	3.10E-02	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00742	0.0083	2.10E-02	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.0016	0.0028	1.80E-02	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.0184	0.0087	4.50E-02	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.0069	0.0052	4.20E-02	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00472	0.0058	4.60E-02	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00185	0.0049	3.80E-02	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.0112	0.0048	3.10E-02	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	0.938	—	—	0.05	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	0.92	—	—	0.05	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	0.931	—	—	0.05	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	0.88	—	—	0.05	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	0.897	—	—	0.05	mg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	27.1	18	7.10E+01	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-9.41	16	5.80E+01	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-14	18	5.80E+01	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	22.9	23	8.20E+01	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	7.6	16	5.60E+01	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	71	—	—	0.053	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	67.8	—	—	0.053	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	68.3	—	—	0.053	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	68.6	—	—	0.053	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	71.1	—	—	0.053	mg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	10.2	—	—	0.1	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	10.1	—	—	0.1	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	9.99	—	—	0.1	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	9.97	—	—	0.1	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	9.45	—	—	0.1	mg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.566	1.5	5.60E+00	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.193	1.4	4.60E+00	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.12	1.4	4.40E+00	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-2.03	2	6.10E+00	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.123	1.3	4.10E+00	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	104	—	—	1	µS/cm	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	101	—	—	1	µS/cm	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	100	—	—	1	µS/cm	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	103	—	—	1	µS/cm	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	102	—	—	1	µS/cm	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	48.7	—	—	1	µg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	46.8	—	—	1	µg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	46.5	—	—	1	µg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	48.5	—	—	1	µg/L	—	NQ	11-765	CAWA-11-2115	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	46.8	—	—	1	µg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0556	0.14	4.80E-01	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.234	0.15	4.90E-01	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.0251	0.13	5.00E-01	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.253	0.12	4.80E-01	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0946	0.13	4.80E-01	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.95	—	—	0.1	mg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.86	—	—	0.1	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.87	—	—	0.1	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.84	—	—	0.1	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.97	—	—	0.1	mg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	119	—	—	3.4	mg/L	—	J	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	110	—	—	2.4	mg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	114	—	—	2.4	mg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	120	—	—	2.4	mg/L	—	NQ	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	123	—	—	2.4	mg/L	—	J	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.473	—	—	0.33	mg/L	J	J	12-718	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	N	1	—	—	0.33	mg/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.555	—	—	0.33	mg/L	J	J	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	N	0.512	—	—	0.33	mg/L	J	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.47	—	—	0.33	mg/L	J	J	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.83	0.6	1.93E+00	—	pCi/L	U	U	12-721	CAWA-12-2018	ARSL
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.288	0.8372	2.80E+00	—	pCi/L	U	U	11-2729	CAWA-11-13980	ARSL
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.7066	0.644	2.19E+00	—	pCi/L	U	R	11-1935	CAWA-11-5320	ARSL
R-27i	619	04/04/11	WG	UF	RE	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.6118	0.644	2.19E+00	—	pCi/L	U	U	11-1935	CAWA-11-5320	ARSL
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	Y	9.8854	5.474	7.50E+00	—	pCi/L	—	R	11-850	CAWA-11-2116	ARSL
R-27i	619	12/01/10	WG	UF	RE	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	Y	3.059	0.8694	2.32E+00	—	pCi/L	—	NQ	11-850	CAWA-11-2116	ARSL
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	Y	3.5742	0.9338	2.38E+00	—	pCi/L	—	R	10-4686	CAWA-10-25906	ARSL
R-27i	619	09/20/10	WG	UF	RE	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.5778	0.7728	2.38E+00	—	pCi/L	U	U	10-4686	CAWA-10-25906	ARSL
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.24	—	—	0.067	µg/L	—	NQ	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.263	—	—	0.067	µg/L	—	NQ	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.264	—	—	0.067	µg/L	—	NQ	11-1909	CAWA-11-5321	GELC
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	N	0.297	—	—	0.05	µg/L	—	U	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.276	—	—	0.05	µg/L	—	NQ	10-4665	CAWA-10-25904	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.139	0.022	5.00E-02	—	pCi/L	—	NQ	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.165	0.029	9.60E-02	—	pCi/L	—	NQ	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.175	0.029	4.60E-02	—	pCi/L	—	NQ	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.175	0.026	5.70E-02	—	pCi/L	—	NQ	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.158	0.024	6.90E-02	—	pCi/L	—	NQ	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00807	0.0047	2.70E-02	—	pCi/L	U	U	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00859	0.0061	5.50E-02	—	pCi/L	U	U	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0	0.0041	3.80E-02	—	pCi/L	U	U	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00667	0.0067	3.70E-02	—	pCi/L	U	U	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0127	0.0064	3.50E-02	—	pCi/L	U	U	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.0827	0.015	3.80E-02	—	pCi/L	—	NQ	12-719	CAWA-12-2018	GELC
R-27i	619	06/20/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.0904	0.021	4.30E-02	—	pCi/L	—	NQ	11-2716	CAWA-11-13980	GELC
R-27i	619	04/04/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.104	0.021	5.10E-02	—	pCi/L	—	NQ	11-1909	CAWA-11-5320	GELC
R-27i	619	12/01/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.108	0.02	3.70E-02	—	pCi/L	—	NQ	11-765	CAWA-11-2116	GELC
R-27i	619	09/20/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.077	0.016	3.00E-02	—	pCi/L	—	NQ	10-4665	CAWA-10-25906	GELC
R-27i	619	02/03/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	1.91	—	—	1	µg/L	J	J	12-719	CAWA-12-2019	GELC
R-27i	619	06/20/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	1.43	—	—	1	µg/L	J	J	11-2716	CAWA-11-13981	GELC
R-27i	619	04/04/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	1.33	—	—	1	µg/L	J	J	11-1909	CAWA-11-5321	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-27i	619	12/01/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	2.45	—	—	1	µg/L	J	J	11-765	CAWA-11-2115	GELC
R-27i	619	09/20/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	1.63	—	—	1	µg/L	J	J	10-4665	CAWA-10-25904	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.95	—	—	0.01	SU	H	J-	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.76	—	—	0.01	SU	H	J-	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.94	—	—	0.01	SU	H	J-	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.76	—	—	0.01	SU	H	J-	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.94	—	—	0.01	SU	H	J-	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	54.4	—	—	0.73	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	58.9	—	—	0.73	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	61.4	—	—	0.73	mg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	61.2	—	—	0.73	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	61.1	—	—	0.73	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00184	0.013	4.40E-02	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0	0.0043	3.60E-02	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0217	0.0091	2.80E-02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00862	0.0076	4.70E-02	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00295	0.0028	3.10E-02	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.0387	—	—	0.016	mg/L	J	J	12-711	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.05	—	—	0.016	mg/L	U	U	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.0227	—	—	0.016	mg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	N	0.0216	—	—	0.016	mg/L	J	U	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:350.1	Ammonia as Nitrogen	NH3-N	Y	0.025	—	—	0.016	mg/L	J	J	11-1041	CAAN-11-3195	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	18.2	—	—	1	µg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	19.6	—	—	1	µg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	19	—	—	1	µg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	19.1	—	—	1	µg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	20.1	—	—	1	µg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	11.2	—	—	0.05	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	11.2	—	—	0.05	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.8	—	—	0.05	mg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.5	—	—	0.05	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	11.2	—	—	0.05	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.66	1.4	4.60E+00	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-2.56	1.5	4.30E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.0529	1.5	5.00E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.17	1.5	4.60E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-3.26	1.8	5.60E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.79	—	—	0.066	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.76	—	—	0.066	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.95	—	—	0.066	mg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.99	—	—	0.066	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.92	—	—	0.066	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Cobalt	Co	Y	1.42	—	—	1	µg/L	J	J	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Cobalt	Co	Y	1.16	—	—	1	µg/L	J	J	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Cobalt	Co	Y	1.19	—	—	1	µg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Cobalt	Co	Y	1.29	—	—	1	µg/L	J	J	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Cobalt	Co	Y	1.09	—	—	1	µg/L	J	J	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.00898	1.1	4.30E+00	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.713	1.5	5.00E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	5.25	1.9	7.50E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.831	1.4	4.40E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-2.74	1.6	4.10E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.248	—	—	0.033	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.254	—	—	0.033	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.263	—	—	0.033	mg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.266	—	—	0.033	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.225	—	—	0.033	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.0212	0.28	1.70E+00	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.912	0.61	2.00E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.0244	0.49	2.40E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.995	0.47	1.30E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.415	0.52	2.10E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	-0.152	0.53	2.10E+00	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.779	0.73	2.50E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.0121	0.65	2.50E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	3.24	0.95	2.80E+00	—	pCi/L	—	NQ	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.81	0.77	2.40E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	40.3	—	—	0.45	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	40.2	—	—	0.45	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39	—	—	0.45	mg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	39.1	—	—	0.45	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	41.1	—	—	0.35	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.03	—	—	0.11	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.95	—	—	0.11	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.96	—	—	0.11	mg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.1	—	—	0.11	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.17	—	—	0.085	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Manganese	Mn	Y	16.9	—	—	2	µg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Manganese	Mn	Y	23.6	—	—	2	µg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Manganese	Mn	Y	28.1	—	—	2	µg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Manganese	Mn	Y	34	—	—	2	µg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Manganese	Mn	Y	47.1	—	—	2	µg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	2.34	—	—	0.17	µg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	2.96	—	—	0.17	µg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	2.72	—	—	0.17	µg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	3.05	—	—	0.17	µg/L	—	J	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	3.74	—	—	0.17	µg/L	—	J	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.29	2.5	8.80E+00	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	3.93	2.9	9.80E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	4.54	2.8	9.60E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-4.26	3.6	1.10E+01	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	12/03/10	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-2.63	3.1	1.00E+01	—	pCi/L	U	U	11-804	CAAN-11-2159	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	1.04	—	—	0.5	µg/L	J	J	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	1.24	—	—	0.5	µg/L	J	J	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	1.19	—	—	0.5	µg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	1.22	—	—	0.5	µg/L	J	J	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	1.08	—	—	0.5	µg/L	J	J	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.299	—	—	0.05	mg/L	—	NQ	12-711	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.278	—	—	0.05	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.217	—	—	0.05	mg/L	J	J+	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	N	0.0282	—	—	0.01	mg/L	J	U	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.249	—	—	0.05	mg/L	J	J-	11-1041	CAAN-11-3195	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.233	—	—	0.05	µg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.24	—	—	0.05	µg/L	—	J+	11-3681	CAAN-11-27011	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	06/10/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.236	—	—	0.05	µg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.256	—	—	0.05	µg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.255	—	—	0.05	µg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0	0.0044	2.80E-02	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00177	0.0064	1.80E-02	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-4.34E-10	0.0036	2.20E-02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	6.25E-10	0.0064	3.50E-02	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0	0.0025	1.90E-02	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.0022	0.0038	3.20E-02	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00177	0.0031	3.40E-02	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.00546	0.0055	3.30E-02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	1.25E-09	0.0083	5.10E-02	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.0087	0.0058	3.50E-02	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.37	—	—	0.05	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.33	—	—	0.05	mg/L	—	J	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.19	—	—	0.05	mg/L	—	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.38	—	—	0.05	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.51	—	—	0.05	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	24.6	15	5.30E+01	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-6.17	17	5.80E+01	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	71.8	24	3.50E+01	—	pCi/L	—	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	9.45	19	6.50E+01	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	8.12	21	7.20E+01	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	66.8	—	—	0.053	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	64.4	—	—	0.053	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	61.4	—	—	0.053	mg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	60.4	—	—	0.053	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	59.9	—	—	0.053	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	14	—	—	0.1	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	14.7	—	—	0.1	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	14.9	—	—	0.1	mg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	16.4	—	—	0.1	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	16	—	—	0.1	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-1.43	1.4	4.70E+00	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-1.31	1.5	4.70E+00	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-1.29	1.3	4.00E+00	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.421	1.5	4.70E+00	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.396	1.6	4.90E+00	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	135	—	—	1	µS/cm	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	140	—	—	1	µS/cm	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	148	—	—	1	µS/cm	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	149	—	—	1	µS/cm	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	146	—	—	1	µS/cm	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	71.2	—	—	1	µg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	69.2	—	—	1	µg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	65.8	—	—	1	µg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	64	—	—	1	µg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	70.9	—	—	1	µg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.129	0.15	4.90E-01	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.00329	0.14	4.80E-01	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.207	0.15	4.80E-01	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.157	0.16	5.30E-01	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0218	0.14	5.00E-01	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	5.76	—	—	0.1	mg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	7.45	—	—	0.1	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	9.36	—	—	0.1	mg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	11.2	—	—	0.1	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	9.16	—	—	0.1	mg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	136	—	—	3.4	mg/L	—	J	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	120	—	—	3.4	mg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	136	—	—	2.4	mg/L	—	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	132	—	—	2.4	mg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	156	—	—	2.4	mg/L	—	J	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.387	—	—	0.33	mg/L	J	J	12-711	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.728	—	—	0.33	mg/L	J	J	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	N	1	—	—	0.33	mg/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.384	—	—	0.33	mg/L	J	J	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.612	—	—	0.33	mg/L	J	J	11-1041	CAAN-11-5611	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0477	—	—	0.015	mg/L	J	J	12-711	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0434	—	—	0.015	mg/L	J	U	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0398	—	—	0.015	mg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0157	—	—	0.015	mg/L	J	U	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.015	mg/L	U	U	11-1041	CAAN-11-3195	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.06	0.61	1.92E+00	—	pCi/L	U	U	12-714	CAAN-12-2024	ARSL
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.24	0.66	2.27E+00	—	pCi/L	U	U	11-3673	CAAN-11-27010	ARSL
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.9016	0.8694	2.93E+00	—	pCi/L	U	U	11-2731	CAAN-11-13955	ARSL
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.5778	0.6118	2.06E+00	—	pCi/L	U	R	11-1943	CAAN-11-5485	ARSL
R-29	1170	04/06/11	WG	UF	RE	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.6118	0.6118	2.06E+00	—	pCi/L	U	U	11-1943	CAAN-11-5485	ARSL
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	Y	11.0768	6.118	8.40E+00	—	pCi/L	—	R	11-1123	CAAN-11-3194	ARSL
R-29	1170	01/07/11	WG	UF	RE	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	1.9964	0.8694	2.61E+00	—	pCi/L	U	U	11-1123	CAAN-11-3194	ARSL
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.484	—	—	0.067	µg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.545	—	—	0.067	µg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.472	—	—	0.067	µg/L	—	NQ	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.62	—	—	0.067	µg/L	—	NQ	11-1950	CAAN-11-5486	GELC
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.655	—	—	0.067	µg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.279	0.032	4.90E-02	—	pCi/L	—	NQ	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.348	0.04	5.00E-02	—	pCi/L	—	NQ	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.246	0.032	7.20E-02	—	pCi/L	—	NQ	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.339	0.041	4.20E-02	—	pCi/L	—	NQ	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.389	0.039	4.10E-02	—	pCi/L	—	NQ	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0212	0.0076	2.60E-02	—	pCi/L	U	U	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0168	0.0076	3.60E-02	—	pCi/L	U	U	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00971	0.0056	4.10E-02	—	pCi/L	U	U	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0224	0.0093	3.40E-02	—	pCi/L	U	U	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0206	0.0074	3.10E-02	—	pCi/L	U	U	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.187	0.024	3.70E-02	—	pCi/L	—	NQ	12-712	CAAN-12-2024	GELC
R-29	1170	09/21/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.193	0.027	4.30E-02	—	pCi/L	—	NQ	11-3681	CAAN-11-27010	GELC
R-29	1170	06/10/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.154	0.023	3.20E-02	—	pCi/L	—	NQ	11-2645	CAAN-11-13955	GELC
R-29	1170	04/06/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.287	0.037	4.60E-02	—	pCi/L	—	NQ	11-1950	CAAN-11-5485	GELC
R-29	1170	01/07/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.179	0.023	2.90E-02	—	pCi/L	—	NQ	11-1041	CAAN-11-3194	GELC
R-29	1170	02/02/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.87	—	—	1	µg/L	—	NQ	12-712	CAAN-12-2025	GELC
R-29	1170	09/21/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.3	—	—	1	µg/L	—	NQ	11-3681	CAAN-11-27011	GELC
R-29	1170	06/10/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	4.47	—	—	1	µg/L	J	J	11-2645	CAAN-11-13956	GELC
R-29	1170	04/06/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	4.24	—	—	1	µg/L	J	J	11-1950	CAAN-11-5486	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-29	1170	01/07/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.24	—	—	1	µg/L	—	NQ	11-1041	CAAN-11-5612	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	8.04	—	—	0.01	SU	H	J-	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	8.08	—	—	0.01	SU	H	J-	12-699	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.66	—	—	0.01	SU	H	J-	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.88	—	—	0.01	SU	H	J-	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.91	—	—	0.01	SU	H	J-	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.78	—	—	0.01	SU	H	J-	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.99	—	—	0.01	SU	H	J-	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:150.1	Acidity or Alklalinity of a solution	pH	Y	7.97	—	—	0.01	SU	H	J-	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	54.9	—	—	0.73	mg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	54.9	—	—	0.73	mg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	55.3	—	—	0.73	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	56.6	—	—	0.73	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	54.6	—	—	0.73	mg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	54.6	—	—	0.73	mg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	53.9	—	—	0.73	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:310.1	Alkalinity-CO3+HCO3	ALK-CO3+HCO3	Y	54.4	—	—	0.73	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.0021	0.0056	4.30E-02	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00361	0.0036	7.30E-02	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00872	0.0046	2.90E-02	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.0105	0.0043	2.50E-02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00378	0.0038	3.10E-02	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	0.00204	0.0035	3.30E-02	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00329	0.0022	2.80E-02	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	HASL-300:AM-241	Americium-241	Am-241	N	-0.00483	0.0046	2.70E-02	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	U	U	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	Y	2.12	—	—	1.7	µg/L	J	J	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	U	U	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	U	U	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	U	U	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.7	µg/L	U	U	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.5	µg/L	U	U	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6020	Arsenic	As	N	5	—	—	1.5	µg/L	U	U	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	13.7	—	—	1	µg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Barium	Ba	Y	13.5	—	—	1	µg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	14.5	—	—	1	µg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	14.4	—	—	1	µg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	13.6	—	—	1	µg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Barium	Ba	Y	13.9	—	—	1	µg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Barium	Ba	Y	14.5	—	—	1	µg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Barium	Ba	Y	14.8	—	—	1	µg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	Y	0.0775	—	—	0.066	mg/L	J	J	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	Y	0.0721	—	—	0.066	mg/L	J	J	12-699	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Bromide	Br(-1)	N	0.2	—	—	0.066	mg/L	U	U	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10	—	—	0.05	mg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10	—	—	0.05	mg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	10.3	—	—	0.05	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	9.84	—	—	0.05	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	9.48	—	—	0.05	mg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Calcium	Ca	Y	9.53	—	—	0.05	mg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Calcium	Ca	Y	9.49	—	—	0.05	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Calcium	Ca	Y	9.25	—	—	0.05	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	EPA:901.1	Cesium-137	Cs-137	N	-0.623	1.3	4.60E+00	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	1.9	1.3	5.00E+00	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	-3.91	1.9	5.50E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	3.12	1.6	5.90E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	EPA:901.1	Cesium-137	Cs-137	N	-1.01	1.8	5.70E+00	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.861	1.3	4.60E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.435	1.5	5.00E+00	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	EPA:901.1	Cesium-137	Cs-137	N	0.0456	1.7	5.60E+00	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.61	—	—	0.066	mg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.6	—	—	0.066	mg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.56	—	—	0.066	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.69	—	—	0.066	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.7	—	—	0.066	mg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.69	—	—	0.066	mg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.56	—	—	0.066	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Chloride	Cl(-1)	Y	1.57	—	—	0.066	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	3.98	—	—	2	µg/L	J	J	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	Y	4.51	—	—	2	µg/L	J	J	12-699	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2	µg/L	U	U	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	4.18	—	—	2	µg/L	J	J	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	Y	3.17	—	—	2	µg/L	J	J	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	Y	3.72	—	—	2	µg/L	J	J	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2.5	µg/L	U	U	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Chromium	Cr	N	10	—	—	2.5	µg/L	U	U	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.529	1.2	4.50E+00	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.747	1.3	4.60E+00	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.756	1.5	4.60E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-2.35	1.5	3.80E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	0.535	1.2	4.20E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	2.97	2.2	8.40E+00	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	EPA:901.1	Cobalt-60	Co-60	N	2.48	1.4	5.50E+00	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	EPA:901.1	Cobalt-60	Co-60	N	-0.146	1.7	5.80E+00	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.245	—	—	0.033	mg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.246	—	—	0.033	mg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.259	—	—	0.033	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.247	—	—	0.033	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.313	—	—	0.033	mg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.289	—	—	0.033	mg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.232	—	—	0.033	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Fluoride	F(-1)	Y	0.207	—	—	0.033	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	1.63	0.69	1.60E+00	—	pCi/L	—	U	12-699	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.191	0.41	1.90E+00	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	-0.0739	0.38	2.10E+00	—	pCi/L	U	UJ	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.593	0.62	2.30E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	0.706	0.63	2.30E+00	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	N	0.0865	0.47	2.20E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	EPA:900	Gross alpha	GROSSA	N	0.00509	0.54	2.50E+00	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	EPA:900	Gross alpha	GROSSA	Y	10.4	2	2.30E+00	—	pCi/L	—	NQ	11-804	CAAN-11-2163	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	N	0.426	0.63	2.30E+00	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.251	0.63	2.30E+00	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.69	1	3.40E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	0.128	0.82	3.00E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	Y	4.07	0.99	2.40E+00	—	pCi/L	—	NQ	11-1929	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	N	1.84	0.76	2.30E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	EPA:900	Gross beta	GROSSB	Y	6	1.2	2.40E+00	—	pCi/L	—	NQ	11-804	CAAN-11-2163	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	EPA:900	Gross beta	GROSSB	N	0.568	0.63	2.20E+00	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	37.7	—	—	0.45	mg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	37.5	—	—	0.45	mg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	38.3	—	—	0.45	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	36.8	—	—	0.45	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	35.8	—	—	0.45	mg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	35.7	—	—	0.45	mg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	34.7	—	—	0.35	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SM:A2340B	Hardness	HARDNESS	Y	35.6	—	—	0.35	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.04	—	—	0.11	mg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.06	—	—	0.11	mg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	3.06	—	—	0.11	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.97	—	—	0.11	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.92	—	—	0.11	mg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.92	—	—	0.11	mg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.9	—	—	0.085	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Magnesium	Mg	Y	2.83	—	—	0.085	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.19	—	—	0.17	µg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.2	—	—	0.17	µg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.33	—	—	0.17	µg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.33	—	—	0.17	µg/L	—	J	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.37	—	—	0.17	µg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.42	—	—	0.17	µg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.31	—	—	0.1	µg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6020	Molybdenum	Mo	Y	1.27	—	—	0.1	µg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	-1.37	2.9	9.90E+00	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-5.04	2.9	9.10E+00	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-0.74	2.8	9.00E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.127	2.7	9.10E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	0.707	3.7	1.20E+01	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	1.18	3.1	1.00E+01	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-0.931	3	1.00E+01	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	09/23/10	WG	UF	INIT	FD	RAD	EPA:901.1	Neptunium-237	Np-237	N	3.25	3	1.10E+01	—	pCi/L	U	U	10-4726	CAAN-10-25949	GELC
R-30	1140	09/23/10	WG	UF	INIT	REG	RAD	EPA:901.1	Neptunium-237	Np-237	N	-3.29	3.1	9.50E+00	—	pCi/L	U	U	10-4726	CAAN-10-25948	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.677	—	—	0.5	µg/L	J	J	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.776	—	—	0.5	µg/L	J	J	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	N	2	—	—	0.5	µg/L	U	U	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	0.722	—	—	0.5	µg/L	J	J	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	N	1.46	—	—	0.5	µg/L	J	U	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6020	Nickel	Ni	N	1.6	—	—	0.5	µg/L	J	U	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6020	Nickel	Ni	Y	1.06	—	—	0.5	µg/L	J	J	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Nickel	Ni	Y	1.1	—	—	0.5	µg/L	J	J	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.304	—	—	0.05	mg/L	—	NQ	12-700	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.304	—	—	0.05	mg/L	—	NQ	12-700	CAAN-12-2030	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.29	—	—	0.05	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.665	—	—	0.05	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	N	0.0287	—	—	0.01	mg/L	J	U	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	N	0.0281	—	—	0.01	mg/L	J	U	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.271	—	—	0.05	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:353.2	Nitrate-Nitrite as Nitrogen	NO3+NO2-N	Y	0.271	—	—	0.05	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.24	—	—	0.05	µg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.238	—	—	0.05	µg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.243	—	—	0.05	µg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.234	—	—	0.05	µg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.257	—	—	0.05	µg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.255	—	—	0.05	µg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.25	—	—	0.05	µg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	LCMS/MS PERCHLORATE	SW-846:6850	Perchlorate	ClO4	Y	0.265	—	—	0.05	µg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00847	0.01	3.60E-02	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00913	0.012	3.80E-02	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00571	0.0057	2.90E-02	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00207	0.0029	3.10E-02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.00407	0.0064	2.70E-02	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0.00458	0.01	3.10E-02	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	0	0.0021	2.40E-02	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-238	Pu-238	N	-0.0158	0.0089	2.30E-02	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00304	0.0053	4.50E-02	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00565	0.0057	4.20E-02	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00285	0.0076	5.50E-02	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	-0.0062	0.0046	4.30E-02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	4.85E-10	0.0058	3.90E-02	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	5.46E-10	0.0056	4.40E-02	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.0119	0.0069	4.10E-02	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	HASL-300:ISOPU	Plutonium-239/240	Pu-239/240	N	0.00207	0.0046	4.30E-02	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.22	—	—	0.05	mg/L	—	J	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Potassium	K	Y	1.23	—	—	0.05	mg/L	—	J	12-699	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.11	—	—	0.05	mg/L	—	J	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.25	—	—	0.05	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Potassium	K	Y	1.24	—	—	0.05	mg/L	—	J	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.2	—	—	0.05	mg/L	—	J	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Potassium	K	Y	1.22	—	—	0.05	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Potassium	K	Y	1.22	—	—	0.05	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	-0.0833	18	6.90E+01	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	1.52	18	7.10E+01	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-41.1	17	4.90E+01	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-18.5	22	6.90E+01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	43.9	23	9.00E+01	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	-20.8	19	6.20E+01	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	EPA:901.1	Potassium-40	K-40	N	27.5	23	8.40E+01	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	EPA:901.1	Potassium-40	K-40	N	35.2	19	6.50E+01	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	69.8	—	—	0.053	mg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	69.8	—	—	0.053	mg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	69.4	—	—	0.053	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	67.4	—	—	0.053	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	61.9	—	—	0.053	mg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	61.6	—	—	0.053	mg/L	—	NQ	11-1929	CAAN-11-5490	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	64.7	—	—	0.053	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Silicon Dioxide	SiO2	Y	63.5	—	—	0.053	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Sodium	Na	Y	11.7	—	—	0.1	mg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	11.6	—	—	0.1	mg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	11.2	—	—	0.1	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	11.2	—	—	0.1	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Sodium	Na	Y	11	—	—	0.1	mg/L	N	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	11	—	—	0.1	mg/L	N	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Sodium	Na	Y	11	—	—	0.1	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Sodium	Na	Y	10.7	—	—	0.1	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-1.55	1.6	5.30E+00	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	0.793	1.2	5.00E+00	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	1.26	1.7	6.00E+00	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.756	1.5	5.30E+00	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	0.105	1.3	4.30E+00	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	-0.589	2.1	6.60E+00	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	EPA:901.1	Sodium-22	Na-22	N	-3.39	1.7	3.40E+00	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	EPA:901.1	Sodium-22	Na-22	N	-2.17	1.3	3.20E+00	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	118	—	—	1	µS/cm	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	117	—	—	1	µS/cm	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	122	—	—	1	µS/cm	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	116	—	—	1	µS/cm	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	119	—	—	1	µS/cm	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	121	—	—	1	µS/cm	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	123	—	—	1	µS/cm	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:120.1	Specific Conductance or Electrical Conductivity	SPEC_CONDC	Y	123	—	—	1	µS/cm	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Strontium	Sr	Y	50	—	—	1	µg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	50.3	—	—	1	µg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	50.5	—	—	1	µg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	48.1	—	—	1	µg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	46.8	—	—	1	µg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Strontium	Sr	Y	47.4	—	—	1	µg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Strontium	Sr	Y	45.3	—	—	1	µg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Strontium	Sr	Y	46.5	—	—	1	µg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.362	0.15	4.90E-01	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.167	0.098	4.20E-01	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.00357	0.13	4.80E-01	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.112	0.14	4.90E-01	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.00618	0.14	4.90E-01	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	-0.229	0.14	5.30E-01	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0261	0.14	4.90E-01	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	EPA:905.0	Strontium-90	Sr-90	N	0.0746	0.14	4.80E-01	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.87	—	—	0.1	mg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	1.9	—	—	0.1	mg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.02	—	—	0.1	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.27	—	—	0.1	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.46	—	—	0.1	mg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.48	—	—	0.1	mg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.6	—	—	0.1	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:300.0	Sulfate	SO4(-2)	Y	2.59	—	—	0.1	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	82.9	—	—	3.4	mg/L	—	J	12-699	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	126	—	—	3.4	mg/L	—	J	12-699	CAAN-12-2200	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	116	—	—	3.4	mg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	133	—	—	2.4	mg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	124	—	—	2.4	mg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	124	—	—	2.4	mg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	124	—	—	2.4	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:160.1	Total Dissolved Solids	TDS	Y	128	—	—	2.4	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.359	—	—	0.33	mg/L	J	J	12-700	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.349	—	—	0.33	mg/L	J	J	12-700	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	0.689	—	—	0.33	mg/L	J	J	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	N	1	—	—	0.33	mg/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	1.65	—	—	0.33	mg/L	—	NQ	11-1928	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	Y	1.48	—	—	0.33	mg/L	—	NQ	11-1928	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	N	1	—	—	0.33	mg/L	U	U	11-805	CAAN-11-2163	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	GENERAL CHEMISTRY	SW-846:9060	Total Organic Carbon	TOC	N	1	—	—	0.33	mg/L	U	U	11-805	CAAN-11-2680	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0562	—	—	0.015	mg/L	—	NQ	12-700	CAAN-12-2030	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.0356	—	—	0.015	mg/L	J	J	12-700	CAAN-12-2200	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.146	—	—	0.015	mg/L	—	U	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0332	—	—	0.015	mg/L	J	U	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.0258	—	—	0.015	mg/L	J	U	11-1929	CAAN-11-5493	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	N	0.05	—	—	0.015	mg/L	U	U	11-1929	CAAN-11-5490	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.061	—	—	0.015	mg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	GENERAL CHEMISTRY	EPA:365.4	Total Phosphate as Phosphorus	PO4-P	Y	0.077	—	—	0.015	mg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.97	0.65	2.10E+00	—	pCi/L	U	U	12-697	CAAN-12-2031	ARSL
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.37	0.64	2.15E+00	—	pCi/L	U	U	12-697	CAAN-12-2199	ARSL
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.0644	0.7084	2.35E+00	—	pCi/L	U	U	11-3585	CAAN-11-27018	ARSL
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-0.6118	0.7084	2.42E+00	—	pCi/L	U	U	11-2731	CAAN-11-13959	ARSL
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.932	0.7406	2.51E+00	—	pCi/L	U	R	11-1930	CAAN-11-5489	ARSL
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	-1.61	0.6118	2.09E+00	—	pCi/L	U	R	11-1930	CAAN-11-5492	ARSL
R-30	1140	04/05/11	WG	UF	RE	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.2576	0.6118	2.09E+00	—	pCi/L	U	U	11-1930	CAAN-11-5492	ARSL
R-30	1140	04/05/11	WG	UF	RE	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.3542	0.7406	2.51E+00	—	pCi/L	U	U	11-1930	CAAN-11-5489	ARSL
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	Y	8.5974	5.6028	8.18E+00	—	pCi/L	—	R	11-851	CAAN-11-2163	ARSL
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	Y	8.9194	4.991	6.89E+00	—	pCi/L	—	R	11-851	CAAN-11-2680	ARSL
R-30	1140	12/03/10	WG	UF	RE	REG	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.805	0.7728	2.54E+00	—	pCi/L	U	U	11-851	CAAN-11-2163	ARSL
R-30	1140	12/03/10	WG	UF	RE	FD	RAD	Generic:Low_Level_Tritium	Tritium	H-3	N	0.7084	0.644	2.13E+00	—	pCi/L	U	U	11-851	CAAN-11-2680	ARSL
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.526	—	—	0.067	µg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.527	—	—	0.067	µg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.515	—	—	0.067	µg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.489	—	—	0.067	µg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.53	—	—	0.067	µg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.523	—	—	0.067	µg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6020	Uranium	U	Y	0.472	—	—	0.05	µg/L	—	NQ	11-805	CAAN-11-2681	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6020	Uranium	U	Y	0.5	—	—	0.05	µg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.263	0.035	7.20E-02	—	pCi/L	—	NQ	12-699	CAAN-12-2199	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.249	0.038	9.00E-02	—	pCi/L	—	NQ	12-699	CAAN-12-2031	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.287	0.035	5.00E-02	—	pCi/L	—	NQ	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.253	0.033	7.50E-02	—	pCi/L	—	NQ	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.241	0.032	3.80E-02	—	pCi/L	—	NQ	11-1929	CAAN-11-5492	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.325	0.041	4.60E-02	—	pCi/L	—	NQ	11-1929	CAAN-11-5489	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.26	0.033	5.70E-02	—	pCi/L	—	NQ	11-804	CAAN-11-2680	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-234	U-234	Y	0.294	0.036	5.70E-02	—	pCi/L	—	NQ	11-804	CAAN-11-2163	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00483	0.0048	4.80E-02	—	pCi/L	U	U	12-699	CAAN-12-2031	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0193	0.0087	3.80E-02	—	pCi/L	U	U	12-699	CAAN-12-2199	GELC

MDA AB Monitoring Group 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	Analyte Code	Detect Flag	Result	1-sigma TPU	MDA	MDL	Unit	Lab Qual	2nd Qual	Request	Sample	Lab
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00342	0.0034	3.60E-02	—	pCi/L	U	U	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0101	0.0089	4.30E-02	—	pCi/L	U	U	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	-0.00408	0.0071	3.80E-02	—	pCi/L	U	U	11-1929	CAAN-11-5489	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.0201	0.0083	3.10E-02	—	pCi/L	U	U	11-1929	CAAN-11-5492	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00671	0.0082	3.80E-02	—	pCi/L	U	U	11-804	CAAN-11-2680	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-235/236	U-235/236	N	0.00337	0.0075	3.80E-02	—	pCi/L	U	U	11-804	CAAN-11-2163	GELC
R-30	1140	02/01/12	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.211	0.032	6.80E-02	—	pCi/L	—	NQ	12-699	CAAN-12-2031	GELC
R-30	1140	02/01/12	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.147	0.025	5.40E-02	—	pCi/L	—	NQ	12-699	CAAN-12-2199	GELC
R-30	1140	09/14/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.133	0.023	4.30E-02	—	pCi/L	—	NQ	11-3588	CAAN-11-27018	GELC
R-30	1140	06/15/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.147	0.023	3.40E-02	—	pCi/L	—	NQ	11-2670	CAAN-11-13959	GELC
R-30	1140	04/05/11	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.175	0.028	5.10E-02	—	pCi/L	—	NQ	11-1929	CAAN-11-5489	GELC
R-30	1140	04/05/11	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.122	0.02	4.20E-02	—	pCi/L	—	NQ	11-1929	CAAN-11-5492	GELC
R-30	1140	12/03/10	WG	UF	INIT	FD	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.195	0.027	3.80E-02	—	pCi/L	—	NQ	11-804	CAAN-11-2680	GELC
R-30	1140	12/03/10	WG	UF	INIT	REG	RAD	HASL-300:ISOU	Uranium-238	U-238	Y	0.147	0.023	3.80E-02	—	pCi/L	—	NQ	11-804	CAAN-11-2163	GELC
R-30	1140	02/01/12	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Vanadium	V	Y	6.51	—	—	1	µg/L	—	NQ	12-699	CAAN-12-2200	GELC
R-30	1140	02/01/12	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	6.74	—	—	1	µg/L	—	NQ	12-699	CAAN-12-2030	GELC
R-30	1140	09/14/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	7.97	—	—	1	µg/L	—	NQ	11-3588	CAAN-11-27017	GELC
R-30	1140	06/15/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	6.44	—	—	1	µg/L	—	NQ	11-2670	CAAN-11-13958	GELC
R-30	1140	04/05/11	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.58	—	—	1	µg/L	—	NQ	11-1929	CAAN-11-5490	GELC
R-30	1140	04/05/11	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Vanadium	V	Y	5.79	—	—	1	µg/L	—	NQ	11-1929	CAAN-11-5493	GELC
R-30	1140	12/03/10	WG	F	INIT	REG	INORGANIC	SW-846:6010B	Vanadium	V	Y	6.36	—	—	1	µg/L	—	NQ	11-805	CAAN-11-2164	GELC
R-30	1140	12/03/10	WG	F	INIT	FD	INORGANIC	SW-846:6010B	Vanadium	V	Y	6.09	—	—	1	µg/L	—	NQ	11-805	CAAN-11-2681	GELC

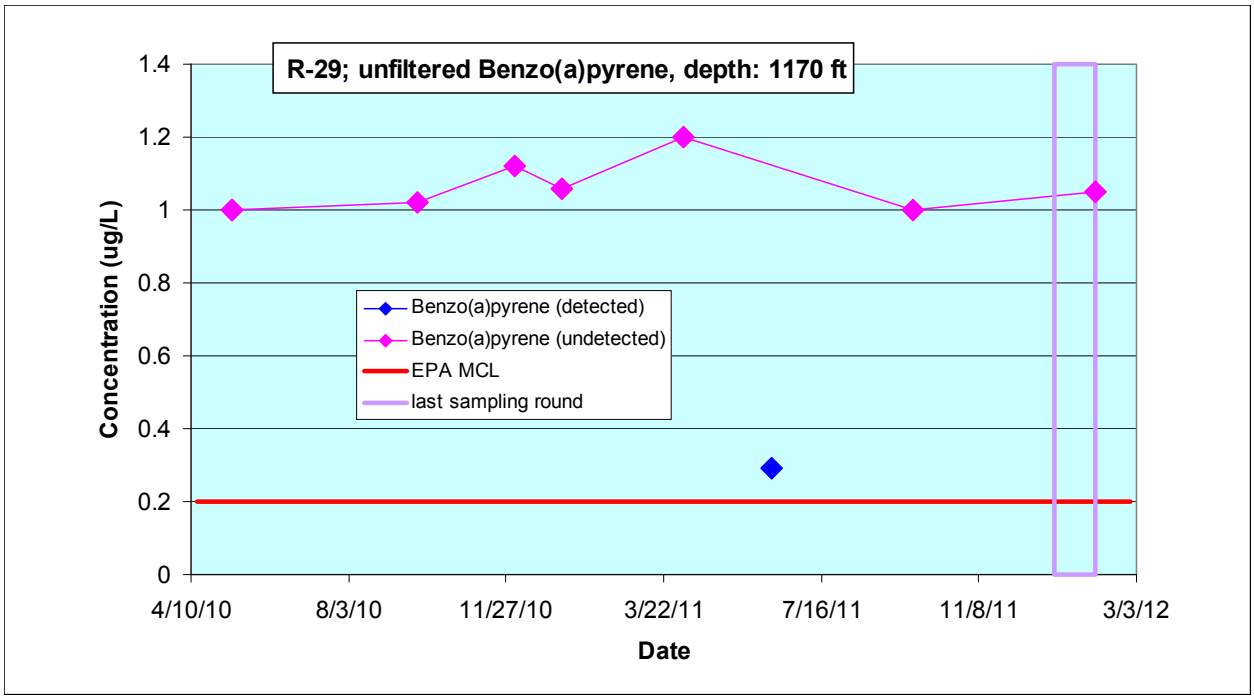
Appendix D

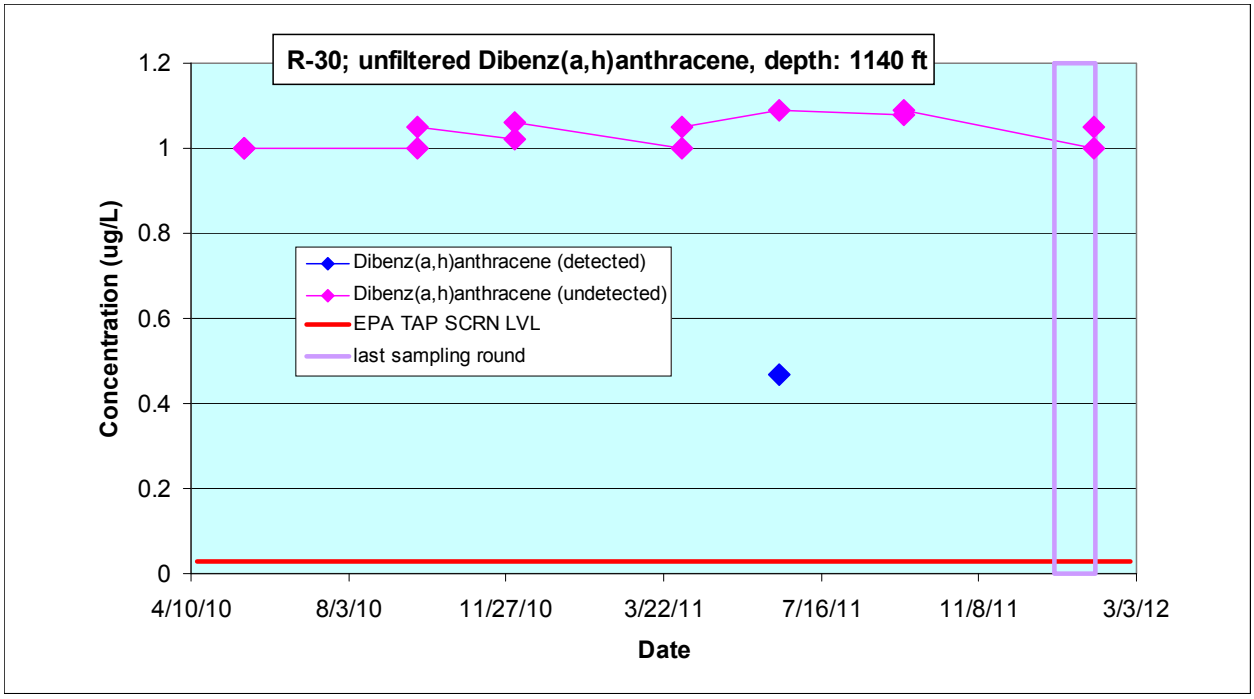
Groundwater Results Greater Than Half of Screening Levels

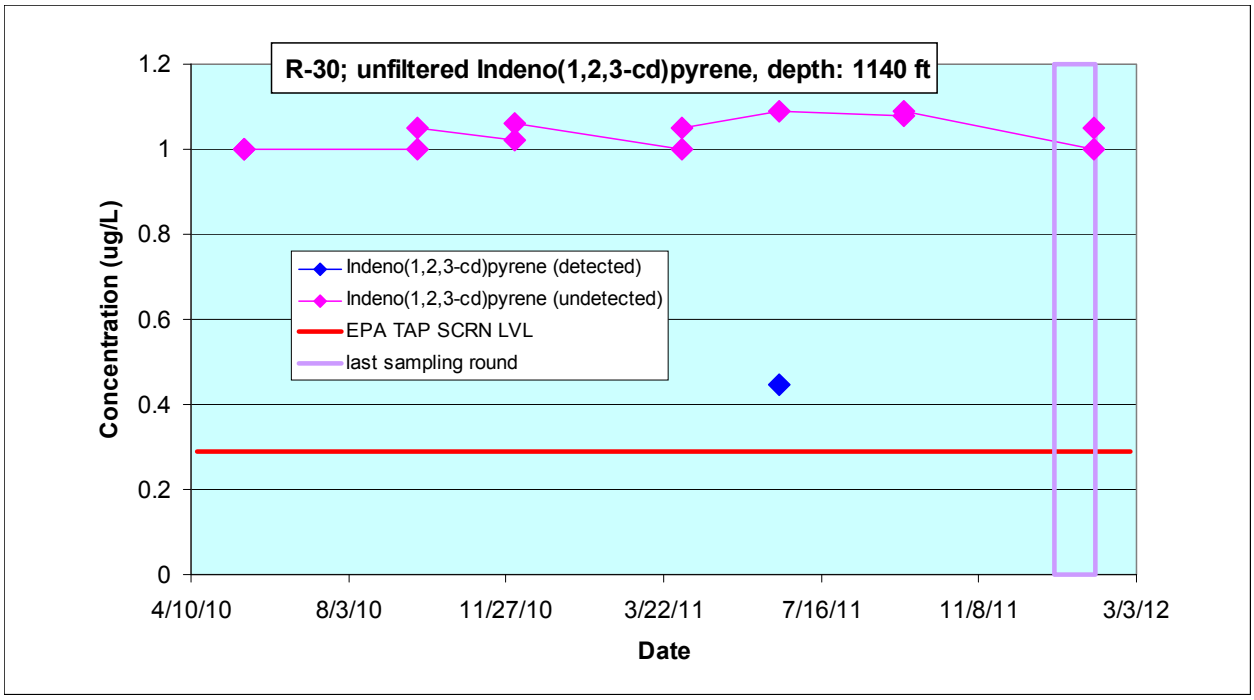
There are no results for this periodic monitoring event.

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
8/3/10
11/27/10
3/22/11
7/16/11
11/8/11
3/3/12
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
8/3/10
11/27/10
3/22/11
7/16/11
11/8/11
3/3/12
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
8/3/10
11/27/10
3/22/11
7/16/11
11/8/11
3/3/12
Date

Appendix F

Analytical Reports
(on CD included with this document)

CD Table of Contents

Chain of Custody	Category	Lab	Sample	Date	Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)
12-697	Rad[a]	ARSL[b]	CAAN-12-2031	02/01/12	R-30	1140	1160.9
12-697	Rad	ARSL	CAAN-12-2199	02/01/12	R-30	1140	1160.9
12-698	Organic	STSL[c]	CAAN-12-2031	02/01/12	R-30	1140	1160.9
12-698	Organic	STSL	CAAN-12-2199	02/01/12	R-30	1140	1160.9
12-699	Inorganic	GELC[d]	CAAN-12-2030	02/01/12	R-30	1140	1160.9
12-699	Inorganic	GELC	CAAN-12-2200	02/01/12	R-30	1140	1160.9
12-699	Rad	GELC	CAAN-12-2031	02/01/12	R-30	1140	1160.9
12-699	Rad	GELC	CAAN-12-2199	02/01/12	R-30	1140	1160.9
12-700	Inorganic	GELC	CAAN-12-2030	02/01/12	R-30	1140	1160.9
12-700	Inorganic	GELC	CAAN-12-2031	02/01/12	R-30	1140	1160.9
12-700	Inorganic	GELC	CAAN-12-2199	02/01/12	R-30	1140	1160.9
12-700	Inorganic	GELC	CAAN-12-2200	02/01/12	R-30	1140	1160.9
12-700	Organic	GELC	CAAN-12-2031	02/01/12	R-30	1140	1160.9
12-700	Organic	GELC	CAAN-12-2032	02/01/12	R-30	1140	1160.9
12-700	Organic	GELC	CAAN-12-2199	02/01/12	R-30	1140	1160.9
12-700	Organic	GELC	CAAN-12-2201	02/01/12	R-30	1140	1160.9
12-711	Inorganic	GELC	CAAN-12-2024	02/02/12	R-29	1170	1180
12-711	Inorganic	GELC	CAAN-12-2025	02/02/12	R-29	1170	1180
12-711	Organic	GELC	CAAN-12-2024	02/02/12	R-29	1170	1180
12-711	Organic	GELC	CAAN-12-2026	02/02/12	R-29	1170	1180
12-712	Inorganic	GELC	CAAN-12-2025	02/02/12	R-29	1170	1180
12-712	Rad	GELC	CAAN-12-2024	02/02/12	R-29	1170	1180
12-713	Organic	STSL	CAAN-12-2024	02/02/12	R-29	1170	1180
12-714	Rad	ARSL	CAAN-12-2024	02/02/12	R-29	1170	1180
12-718	Inorganic	GELC	CAWA-12-2018	02/03/12	R-27i	619	629
12-718	Inorganic	GELC	CAWA-12-2019	02/03/12	R-27i	619	629
12-718	Organic	GELC	CAWA-12-2018	02/03/12	R-27i	619	629
12-718	Organic	GELC	CAWA-12-2020	02/03/12	R-27i	619	629
12-719	Inorganic	GELC	CAWA-12-2019	02/03/12	R-27i	619	629
12-719	Rad	GELC	CAWA-12-2018	02/03/12	R-27i	619	629
12-720	Organic	STSL	CAWA-12-2018	02/03/12	R-27i	619	629
12-721	Rad	ARSL	CAWA-12-2018	02/03/12	R-27i	619	629
12-726	Inorganic	GELC	CAWA-12-2022	02/03/12	R-27	852	875
12-726	Inorganic	GELC	CAWA-12-2023	02/03/12	R-27	852	875
12-726	Organic	GELC	CAWA-12-2021	02/03/12	R-27	852	875
12-726	Organic	GELC	CAWA-12-2023	02/03/12	R-27	852	875
12-727	Inorganic	GELC	CAWA-12-2022	02/03/12	R-27	852	875
12-727	Rad	GELC	CAWA-12-2023	02/03/12	R-27	852	875

Chain of Custody	Category	Lab	Sample	Date	Location	Screen Top Depth (ft)	Screen Bottom Depth (ft)
12-728	Rad	ARSL	CAWA-12-2023	02/03/12	R-27	852	875
12-729	Organic	STSL	CAWA-12-2023	02/03/12	R-27	852	875

[a] Rad = Radiochemistry (not gamma).

[b] ARSL = American Radiation Services, Inc.

[c] STSL = Severn Trent Laboratories, Inc., St. Louis, MO.

[d] GELC = General Engineering Laboratories, Inc., Charleston, SC.